



SUMBAWA TIMUR MINING



PT LORAX
INDONESIA



Aquatic and Terrestrial

FAUNAPEDIA

In Hu'u Area



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Foreword

The Hu'u Project, operated by Sumbawa Timur Mining (STM), is located within the regencies of Dompu and Bima in the Province of Nusa Tenggara Barat on the island of Sumbawa, Indonesia. The terrestrial and aquatic ecosystem along the area of Hu'u, encompassing the forest and water area in Cempi Bay, are inhabited by diverse fauna. However, the information on the fauna species inhabiting the Hu'u area remains poorly documented. The absence of extensive scientific data available on public poses challenges for conservation, sustainable development, and environmental education.

The original idea of this book arose from the intention to address the existing knowledge gap and to ensure that the valuable information gathered by the STM, and its partner reaches a broader audience. In collaboration with Lorax Indonesia, this book aims to serve as a source of information for the public, government agencies, and university/technical institutions.

The authors from Lorax Indonesia include Agustinus Sembiring, Karizma Fahlevy, Rias Kaessari Magenta, Muchammad Iqbal Havis, Jeihaan Vanetharian.

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Jakarta, August 2024

PT. Lorax Indonesia



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1

Introduction

This book presents as a scientific catalog that meticulously compiled based on the review of existing project documentation, including studies conducted by STM and its partners. This book is a reference of aquatic and terrestrial fauna recorded within the Hu'u project area. In this regard, the order of the species within each fauna group listed follows alphabetical naming. The terrestrial coverage includes forests and freshwater basins, while the aquatic coverage includes the inner and outer coastal areas of Cempi Bay. The documentation of the fauna is mainly based on field photograph, global and local data. When sufficient documentation of fauna was not available, an appropriate illustration was used.

A total of 1,095 species including 10 critical habitat species are contained in this book. Species recorded consists of 719 aquatic fauna and 376 terrestrial faunas. The aquatic fauna includes 39 species of freshwater fish, 28 species of freshwater invertebrates, 43 genera of corals, 456 species of marine fish, 7 species of marine mammals, 5 species of turtles, and 141 species of marine invertebrates. The terrestrial fauna includes 148 species of aves (birds), 50 species of amphibians and reptiles, 26 species of mammals and 152 species of insects. Each species is thoroughly described. The information is based on rigorous research and field studies.

This book provides valuable insights into the fauna species found in Hu'u project area. Descriptions of each species were collected from online repositories and primary literature, including:

- amphibiaweb.org (AmphibiaWeb, 2024).
- coralsoftheworld.org (Veron *et al.*, 2024).
- [encyclopedia of life](http://encyclopediaoflife.org) (Parr *et al.*, 2014).
- fishbase.org (Froese and Pauly, 2024).
- gbif.org (GBIF Secretariat, 2023).
- reptile-database.org (Uetz *et al.*, 2023).
- science.ebird.org (Sullivan *et al.*, 2009).
- sealifebase.org (Palomares and Pauly, 2024).
- STM documents (Greencap, 2012; Greencap, 2015; SMEC 2019; SMEC 2020; Lorax 2023; Lorax & IPB, 2023; WSP, 2023).
- Published scientific literature.

Additional information on the international conservation and trade status of the fauna and the Indonesian protection status is also provided and is classified with the applicable standards. The standard references for conservation, trade and protection status are:

- International Union for Conservation of Nature (IUCN, 2024) status and red list.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendices.
- Minister of Environment and Forestry (MoEF) Regulation No. P.106 Year 2018 on Protected Plant and Animal (P.106).
- Minister of Marine Affairs and Fisheries of The Republic of Indonesia Decree No. 18 Year 2013 on Protection Status for Whale Shark (*Rhincodon typus*) (KP.18).
- Minister of Marine Affairs and Fisheries of The Republic of Indonesia Decree No. 4 Year 2014 on Protection Status of Manta Rays (KP.4).
- Minister of Marine Affairs and Fisheries of The Republic of Indonesia Decree No. 80 Year 2020 on Limited Protection of Eel (*Anguilla* spp.) (KP.80).

Most of species included in this book were recorded by direct observation or specimen collection. Some species were documented through participatory interviews with local stakeholders in the Hu'u coastal area and from environmental DNA (eDNA) samples collected from the waters of Cempi Bay.

2

Critical Habitat Assessment

This chapter briefly describe the preliminary Critical Habitat Assessment (CHA) for the Hu'u Project in Indonesia. It is undertaken in alignment with the requirements of the IFC PS6 (IFC 2019). This CHA aims to identify priority biodiversity features within four pre-defined Ecologically Appropriate Areas of Assessment (EAAA). Four EAAAs are used as the Project overlaps with terrestrial, freshwater, and marine habitats, and an additional marine EAAA has been defined especially for marine mammals (Figure 2.1). The CHA is based on the review of existing Project documentation, globally and locally available datasets.

IFC Performance Standard 6 (PS6) is the most widely used international biodiversity safeguard for development projects that seek alignment with leading biodiversity management practice (IFC 2012). The objectives of PS6 are to protect and conserve biodiversity, maintain benefits from ecosystem services, and promote the sustainable management of living natural resources through the adoption of practices that integrate conservation needs and development priorities.

PS6 requires projects to classify the area within which they operate into three categories: modified habitat (MH), natural habitat (NH) and critical habitat (CH) based on the extent of human modification of the ecosystem and the presence of high biodiversity values (Table 2.1).

Table 2.1 Summary of the PS6 scheme for classifying areas

Not significant		Human modification of the ecosystem	
		Significant	
High biodiversity values	Present	Critical habitat	Critical habitat
	Absent	Natural habitat	Modified habitat

Note: No universal thresholds exist for identifying NH and MH

IFC Guidance Note (GN6) provides further guidance on how to identify MH, NH and CH through well-defined criteria and thresholds (IFC 2019). Criteria to consider when assessing the presence of CH are:

- Criterion 1: Critically Endangered and Endangered species.
- Criterion 2: Endemic/Restricted Range species.
- Criterion 3: Migratory/Congregatory species.
- Criterion 4: Highly Threatened and/or Unique Ecosystems; and
- Criterion 5: Key Evolutionary Processes.

The determination of CH for Criteria 1 to 4 is based on quantitative thresholds. Criterion 5 is determined through a qualitative expert-based judgement. The identification of CH should be used at a landscape-level to consider the dynamics of the ecosystem beyond the sole project footprint. Paragraph 20 of PS6 also makes provision for legally protected and internationally recognised areas, which should be duly identified and mapped.

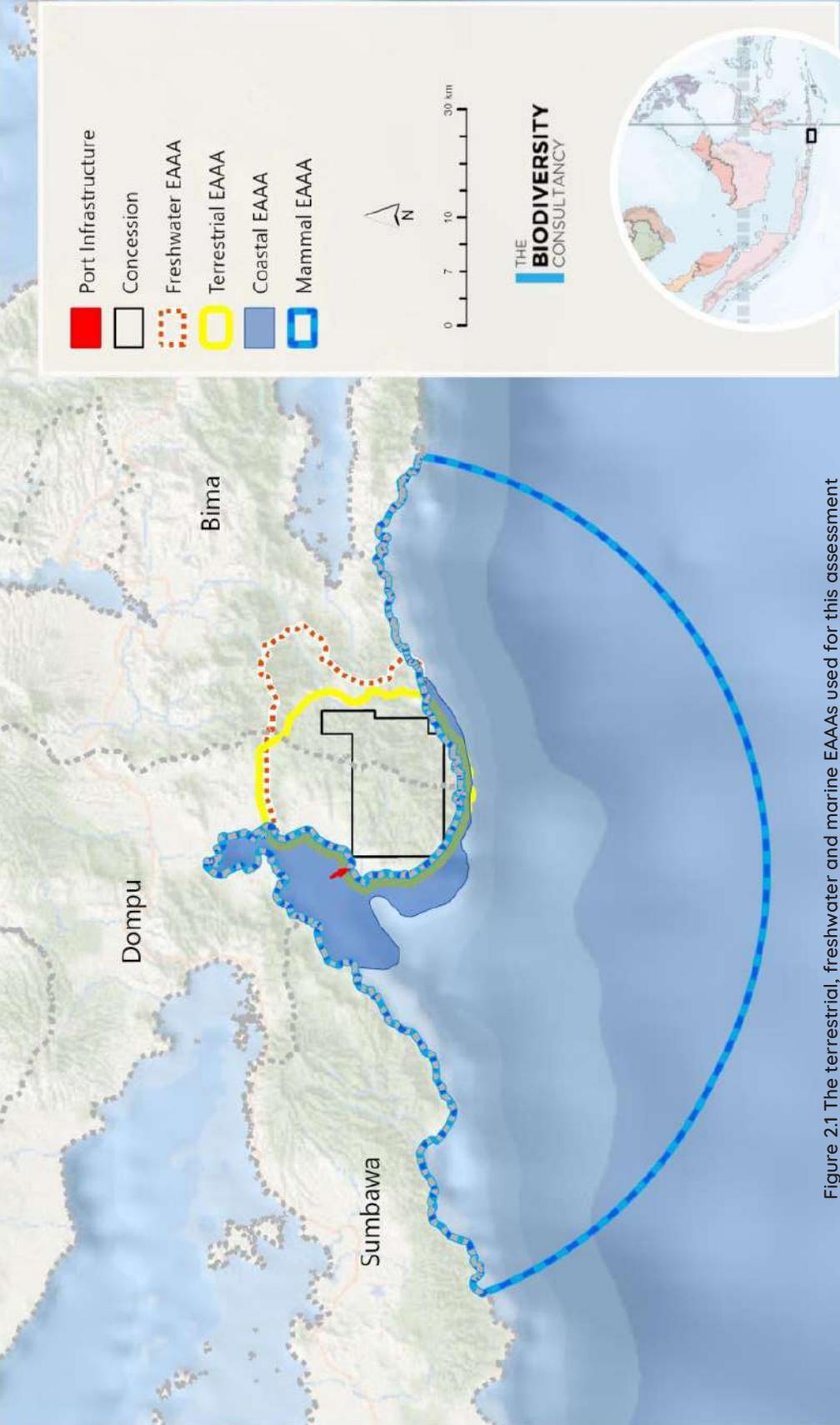


Figure 2.1 The terrestrial, freshwater and marine EAAAs used for this assessment

Table 2.2 provides a list of species that potentially qualify for critical habitat under Criterion 1 to Criterion 3.

Table 2.2 List of species that likely or possibly qualify for critical habitat based on PS6 criteria

Scientific name	Common name	IUCN status ¹	Presence in relevant EAAA ²	IFC PS6 Criteria ³
Bird				
<i>Nisaetus floris</i>	Flores Hawk-eagle	EN	Confirmed	Likely (C1a)
<i>Gracula venerata</i>	Tenggara Hill Myna	EN	Confirmed	Likely (C1a)
<i>Treron floris</i>	Flores green pigeon	VU	Unconfirmed	Possible (C3)
Turtles				
<i>Chelonia mydas</i>	Green Turtle	EN	Confirmed	Possible (C3)
<i>Eretmochelys imbricata</i>	Hawksbill Turtle	CR	Confirmed	Possible (C3)
<i>Lepidochelys olivacea</i>	Olive Ridley Turtle	VU	Unconfirmed	Possible (C3)
Shark				
<i>Rhincodon typus</i>	Whale Shark	EN	Unconfirmed	Unlikely (C1), Possible (C3)
Dolphin				
<i>Stenella longirostris</i>	Spinner Dolphin	LC	Confirmed	Possible (C3)
<i>Tursiops aduncus</i>	Indo-Pacific Bottlenose Dolphin	NT	Confirmed	Possible (C3)
<i>Tursiops truncatus</i>	Common Bottlenose Dolphin	LC	Confirmed	Possible (C3)

Notes:

- Red List (RL) status:** **CR** = Critically Endangered; **EN** = Endangered; **VU** = Vulnerable; **NT** = Near Threatened; **LC** = Least Concern; **DD** = Data Deficient; **NE** = Not Evaluated
- Presence in study area:** **Confirmed** = presence confirmed through recent field surveys; **Unconfirmed**= presence unconfirmed but considered possible given the overlap between study area and species range and/or suitability of habitats.
- Result:** **Confirmed** = sufficient evidence to support qualification as Critical Habitat under IFC PS6; **Likely** = reasonable evidence that the feature is present: (i) in the study area; and (ii) at levels that meet/approach the threshold; **Possible** = low/no evidence of effort to determine presence or absence, however if the species is found to be present in the study area at significant numbers, the area is likely to meet the threshold for qualifying as Critical Habitat.

There are some species that do not qualify for critical habitat but are nationally protected under Indonesian law and confirmed to be present in the EAAA. For the marine EAAA, as it overlaps with an Important Shark and Ray Area (ISRA), two species of rays are considered to be of stakeholder concern (Dr. Simanjuntak, pers. comm., 2024). For the terrestrial EAAA, only two mammal species and one bird species have been identified as being of stakeholder concern (Hasibuan, pers. comm., 2024). These species are listed in Table 2.3 below.

Table 2.3 Species of stakeholder concern

Scientific name	Common name	IUCN status ¹
<i>Macaca fascicularis</i>	Long tailed Macaque	EN
<i>Rusa timorensis</i>	Javan Deer	VU
<i>Geokichla interpres</i>	Chestnut-capped Thrush	EN
<i>Himantura uarnak</i>	Honeycomb stingray	EN
<i>Rhynchobatus djiddensis</i>	Giant guitarfish	CR

Notes:

¹ **Red List (RL) status:** **CR** = Critically Endangered; **EN** = Endangered; **VU** = Vulnerable; **NT** = Near Threatened; **LC** = Least Concern; **DD** = Data Deficient; **NE** = Not Evaluated

Based on the highly threatened and/or unique ecosystems in Hu'u (Criterion 4), no formal IUCN evaluations have been conducted in Indonesia. However, potential ecosystems likely falling under this criterion were identified through local expert consultations (Table 2.4). Criterion 5 addresses unique landscape features tied to evolutionary processes or genetically distinct species. In the Hu'u area, no evidence suggests such influences, so Criterion 5 is not triggered.

Table 2.4 Potential highly threatened and/or unique ecosystems in Hu'u area

Biome/EAAA	Ecosystem type	Justification
Terrestrial	Primary and secondary dryland forest ecosystem	Dryland forest have been part of an assessment of ecosystem. According to local experts these habitats are highly threatened by anthropogenic activities in the areas. However, the ecosystems do not meet the Critically Endangered (CR) or Endangered (EN) thresholds set by the IUCN Red List of Ecosystems and thus do not represent 5% of the global extent of such ecosystems. Additionally, national and regional assessments conducted by recognized entities ¹ confirm that these ecosystems do not satisfy the criteria for CH designation based on their local significance or extent. As a result, Dryland Forest ecosystems within the project area are unlikely to trigger critical habitat .
	Savanna/Grassland ecosystem	Savanna and grassland ecosystems have formed part of an ecosystem assessment. However, the ecosystems do not meet the Critically Endangered (CR) or Endangered (EN) thresholds set by the IUCN Red List of Ecosystems and thus do not represent 5% of the global extent of such ecosystems. Additionally, national and regional assessments conducted by recognized entities confirm that these ecosystems do not satisfy the criteria for CH designation based on their local significance or extent. As a result, savanna and grassland ecosystems within the project area are unlikely to trigger critical habitat .
Freshwater	Permanent upland streams	Permanent upland streams have not been part of an assessment of ecosystems. This ecosystem represents a high proportion of global stream length in steep to moderate terrains throughout the humid tropical and temperate zones. The extent of the ecosystem in the EAAA is unlikely to trigger the surface thresholds (>5%) of criterion 4, therefore it is unlikely to trigger critical habitat .
	Seasonal upland streams	Seasonal upland streams have not been part of an assessment of ecosystems. This ecosystem is represented in elevated regions in seasonal tropical, subtropical and temperate climates worldwide. The extent of the ecosystem in the EAAA is unlikely to trigger the surface thresholds (>5%) of criterion 4, therefore it is unlikely to trigger critical habitat .
	Small permanent freshwater lakes	Small permanent freshwater lakes have not been part of an assessment of ecosystems. This ecosystem is found mainly in humid-temperate and tropical regions. The extent of the ecosystem in the EAAA is unlikely to trigger the surface thresholds (>5%) of criterion 4, therefore it is unlikely to trigger critical habitat .

Table 2.4 Potential highly threatened and/or unique ecosystems in Hu'u area (Cont.)

Biome/EAAA	Ecosystem type	Justification
Marine	Mangrove ecosystem	Mangroves have been part of an assessment of ecosystem. The mangroves of the Cempi Bay and all mangrove habitats of the Western Coral Triangle have been assessed as Vulnerable ecosystems by the IUCN Red List of Ecosystems (Macintosh <i>et al.</i> 2023). According to local experts these habitats are highly threatened by anthropogenic activities in the areas. However, the extent of the mangrove ecosystem in the Cempi bay is unlikely to trigger the surface threshold of criterion 4, therefore unlikely to trigger critical habitat.
	Coral reef ecosystem	Coral reefs habitat in the bay have been surveyed, pointing out poor condition of the reef as well as key habitat for marine biodiversity, including some threatened species. However, the extent of the coral reefs in the Cempi bay is unlikely to trigger the surface threshold of criterion 4, therefore unlikely to trigger critical habitat.
	Seagrass ecosystem	The condition of the seagrass habitats have not been assessed, however the three species of seagrass identified in the bay are all under Least Concern threat level. Therefore, the seagrass ecosystem of the Cempi bay is unlikely to trigger critical habitat.

Recognized entities in Indonesia that conduct national and regional assessments include the Ministry of Environment and Forestry (KLHK) (see "National Assessment Report on Biodiversity," KLHK, <http://www.menlhk.go.id/>), Indonesian Institute of Sciences (LIPI) (see "Biodiversity and Ecosystem Assessment Reports," LIPI, <http://lipi.go.id/>), Bogor Agricultural University (IPB) (see "Research Publications and Ecosystem Assessments," IPB, <https://www.ipb.ac.id/riset>), Indonesian Biodiversity Foundation (Yayasan Kehati) (see "Biodiversity Conservation Reports," Yayasan Kehati, <http://www.kehati.orid/publications>)

3

Glossary

A

Abdomen: the body part/segment located between the thorax (or chest) and the pelvis houses several vital organs.

Acropora corals: hard corals (stony corals) that play a role in creating coral reefs (reef builder). These corals live in colonies and develop in the shape of sunshades.

Aggregate species: refer to animals that tend to group together in large numbers, often for social, reproductive, or foraging purposes.

Albino: a person or animal having a congenital absence of pigment in the skin and hair (which are white) and the eyes (which are usually pink).

Amber patch: a distinctive, coloured area on the body or wings of insects.

Amphidromous: species that regularly migrate between freshwater and the sea (in both directions), but not for the purpose of breeding.

Anadromous: species that spends portions of its life cycle in both fresh and salt waters, entering fresh water from the sea to spawn.

Anal fin: fin located on the lower back part of the body of a fish behind the excretory opening.



Anchovies: small, saltwater fish belonging to the family Engraulidae. They are commonly found in oceans worldwide and are known for their strong flavor, which comes from their high oil content.

Antennae: either of a pair of long, thin sensory appendages on the heads of insects, crustaceans, and some other arthropods.

Antennules: a small antenna, especially either of the first pair of antennae in a crustacean.

Anterior: referring to the front portion.

Arboreal: animals that spend most of their lives in trees or bushes.

Atoll: is a ring-shaped coral reef, island, or series of islets. An atoll surrounds a body of water called a lagoon.

Australasian realm: biogeographic regions, distinguished by its unique flora and fauna covers parts of the southern hemisphere and includes Eastern Indonesia, Australia, New Guinea, New Zealand, and Other Pacific Islands.

Auxillary scales: small scales superimposed on the surface of larger scales.

Aviculture: the breeding and rearing of birds.

B

Bar: elongate vertical marking.

Barbel: an elongate, fleshy, tentacle-like sensory projection, usually near the mouth.

Base: the part of a projection (e.g. fin) connected to the body.

Basial spine: spine projecting from the basis of a thoracic appendage.

Batoids: are a superorder of cartilaginous fish consisting of skates and rays, and other fish all characterized by dorsoventrally flattened bodies and large pectoral fins fused to the head.

Benthic: bottom-dwelling; living on the seabed.

Benthopelagic: inhabiting waters above but near the bottom or spending part of the time on the bottom and part of the time in the pelagic zone.

Blotch: an enlarged area or patch that is different in color from adjacent areas.

Branchiostegals: slender bones which support the gill membranes.

Brackish: waters with a salinity between that of freshwater and saltwater.

Byssus: refers to a tuft of silky fibers produced by certain mollusks, particularly bivalves, that allows them to attach to surfaces, such as rocks or substrates in marine environments.

C

Camouflage: refers to a range of adaptations and techniques used by animals, plants, and even humans to blend in with their surroundings, thereby avoiding detection by predators or prey.

Canine: a slender, conical tooth often enlarged and elongated.

Caniniformes: type of fish teeth, which are the sharp, pointed teeth that are specialized for the gripping (prehension) and tearing of food.

Carapace length: the distance from the anterior-most edge of the groove between the horns directly above the eyes to the rear edge of the top part of the carapace as measured along the mid-dorsal line of the back.

Carnivore: refers to an animal that primarily feeds on the flesh of other animals.

Catadromous: fish that migrating from freshwater to the sea to spawn. Migrations should be cyclical and predictable and cover more than 100 km.

Caudal fin: the terminal fin of a fish or cetacean located behind the caudal peduncle.

Caudal Peduncle: the posterior part of the body between the rear parts of the dorsal and anal fins, and the caudal fin.

Ciguatera poison: a type of toxin produced by certain dinoflagellates, particularly *Gambierdiscus toxicus*, which can accumulate in the flesh of reef fish.

Circumglobal: refers to something that occurs or extends around the entire globe or world. It is often used in contexts related to geography, ecology, or climate.

Clam: a type of bivalve mollusk that belongs to the class Bivalvia within the phylum Mollusca, have a two-part shell, or “valve,” that is usually symmetrical and held together by a hinge.

Class: in biological classification, or taxonomy, a class is a major rank within the hierarchy used to organize and categorize organisms based on shared characteristics and evolutionary history.

Cloaca: a single, multifunctional anatomical feature that serves as the exit for the digestive, urinary, and reproductive tracts found particularly in reptiles, birds, amphibians, and some fish.

Clupeoids: literally fish of the herring family Clupeidae (e.g., herrings, sardines) but used in a wider sense to include related families (e.g., anchovies, Engraulididae).

Colony: a community of animals or plants of one kind living close together or forming a physically connected structure.

Columella: the axis of a spiral shell.

Compressed: flattened laterally; a body shape much deeper than wide.

Concave: curved inwards (opposite of convex).

Copepods: any of a large subclass of minute crustaceans common in fresh and salt water, having no carapace, 6 pairs of thoracic legs but none on the abdomen, and a single median eye.

Continental shelf: the shelf-like part of the seabed adjacent to the coast, extending to a depth of about 200 meters.

Continental slope: the typically steep slope of the seabed bordering the continental shelf, extending to a depth of about 2,000 meters.

Convex: arched, curved outwards (opposite of concave).

Copulation: sexual intercourse.

Coremata: including hair pencils, is inflatable sacs on the apex of the abdomens as a pheromone signalling feature of the males in a few species of lepidoptera.

Corselet: a band of specialized scales encircling the pectoral region of the body.

Costa: specific vein or structural feature at the leading edge of the wing, running from the base to the tip in the wings of insects.

Critical or critically endangered (CR): a taxon is considered critically or critically endangered if it meets any of the criteria A (not evaluated) through E (vulnerable) for critically endangered and is therefore considered to be at extremely high risk of extinction in the wild.

Ctenoid scales: scales with spiny outer edges.

Cubital: specific vein or set of veins located toward the rear (posterior) part of the wing of insects.

Cycloid scales: scales with smooth edges, without spines.

D

Data deficient (DD): a taxon is considered “information deficient” when there is insufficient information to make an estimate of its extinction risk based on its distribution and population status.

Demersal: the zone or layer close to the bottom of the water.

Denticle: the tooth-like scale of elasmobranchs; placoid scale of cartilaginous fish; also called dermal denticle.

Detritus: refers to organic matter that has decomposed or broken down, including dead plant and animal material, as well as fecal matter.

Diatoms: unicellular algae with silica walls; microscopic single-celled algae which have two ornate interfitting outer shells containing silica.

Dimorphic: occurring in or representing two distinct forms.

Disc: the combined head, trunk and enlarged pectoral fins of some cartilaginous fishes with depressed bodies.

Disk width (DW): the greatest distance between the lateral tips of the pectoral fins.

Distal: the point furthest from the point of attachment to the body (for fins, etc).

Dorsal/Dorsum: the back or upper side of an organism in anatomy and biology.

Dorsal fin: fins located along the midline of the dorsal surface. It may have both spines and rays or just rays and consist of a single lobe, two lobes that are joined or separate, or a series of free spines and a lobe with rays.

E

Ectoparasite: an organism that lives on the exterior of a host and feeds on its tissues, blood, or other bodily fluids.

Elasmobranchii: a subclass of cartilaginous fish within the class Chondrichthyes. This group includes sharks, rays, and skates. characterized by having a cartilaginous skeleton rather than bone, multiple gill slits on the sides of their heads, and usually a more streamlined body adapted for swimming.

Elytra/Elytron: the hardened, shell-like forewings of beetles and some other insects that cover and protect the hind wings (wings cover).

Emarginate: concave; used to describe the posterior border of a caudal fin which is inwardly curved; a caudal fin with a slightly concave margin.

Endangered (EN): a taxon is endangered when it meets any of the criteria A (not evaluated) through E (vulnerable) for endangerment and is therefore considered to be at very high risk of extinction in the wild.

Endemic: (of a plant or animal) Native and restricted to a certain place.

Epipelagic: (or upper open ocean) is the part of the ocean that has enough sunlight for algae to utilize for photosynthesis.

Estuarine: a coastal area where freshwater from rivers or streams meets and mixes with saltwater from the ocean.

Euryhaline: nature of the animals that are resistant to high level of salinity; Able to live in waters of a wide range of salinities; opposite of stenohaline, also: water with a salinity of 30.1–40.0 p.p.t. derived from ocean salts.

Extinct (EX): a taxon is declared extinct when there is no doubt that the last individual has died. A taxon is assumed extinct when continuous surveys of known habitats over a period of time fail to find a single individual. Such surveys are conducted according to the life cycle of the species being studied.

Extinct in the wild (EW): a taxon is declared extinct in the wild, when it is known to exist only in captivity.

F

Family: a group term for classifying organisms, containing one or more related genera.

Fasciae: bands or stripes that are present on the wings of certain species.

Filter feeder: feeding by filtering out plankton or nutrients suspended in the water.

Finlets: small, separate dorsal and anal fins.

Fin rays: the supporting bony elements of fins, including spines and soft rays; all fin-supports are rays, whether segmented, unsegmented, or spinous, but sometimes the term ray is used to denote soft rays only.

Foraminifera: are classified within the domain Eukaryota and the kingdom Protista, characterized by their intricate shell-like structures, called tests.

Forewing: one of the two pairs of wings found in many winged insects, located on the anterior (front) part of the body.

Former species: refers to species name that have existed in the past but are no longer present today in taxonomic.

Forked: inwardly angular; used in describing the shape of a caudal fin which is divided into two equal lobes, the posterior border of each of which is relatively straight; a caudal fin having the shape of a two-lobed fork.

Fork length (in fish): fish length that measured from the tip of the jaw or tip of the snout with closed mouth to the center of the fork in the tail.

Freshwater habitat: an environment where organisms live in water that has a low concentration of salts, typically less than 0.5 parts per thousand. Freshwater habitats are diverse and can be categorized based on various factors such as water movement, depth, and vegetation.

Fringe: the fringe is a border of small, often hair-like structures located along the trailing edge of the wing, or sometimes around the edges of the wing veins.

Fusiform (body shape): streamlined and torpedo shaped.

G

Gastropods: a member of the class Gastropoda within the phylum Mollusca. Gastropods are one of the largest and most diverse classes of mollusks.

Geniculate antennae: a bent or hinged sharply antennae, almost like a knee or elbow joint.

Genus: a rank in the hierarchical system one level above “species” and one level below “family” used to categorize and identify organisms.

Gill: respiratory organ of many aquatic animals; a filamentous outgrowth well supplied with blood vessels at which gas exchange between water and blood occurs; an organ used for breathing or extracting oxygen from the water.

Gill rakers: bony projections along the front edge of the gill arch that help prevent food from escaping through the gill opening.

Gregarious: fond of company; sociable.

Ground colour: basic coloration of the wings or body without considering patterns or markings.

Gular flag: a specialized flap of skin (often colourful) found on the throat area of certain species.

Gulping: can refer to several behaviors of mammals related to feeding, breathing, or vocalizations.

H

Herbivores: an animal that feeds on plants.

Hermaphrodite: are organisms that possess both male and female reproductive organs, allowing them to produce both eggs and sperm.

Hindwing: the posterior pair of wings found in many winged insects, located behind the forewings.

I

Indomalayan realm: one of biogeographic realms, covers a large and diverse region of Southeast Asia and parts of South Asia.

Insectivorous: (of an animal) feeding on insects, worms, and other invertebrates.

Inshore: refers to the area of the ocean or a body of water that is close to the shore or coastline.

Insular shelves: in oceanographic terms, an “insular shelf” is that that portion of an island that is submerged and covered by relatively shallow water.

Integument (body): the largest organ of the body that forms a physical barrier between the external environment and the internal environment that it serves to protect and maintain.

Interorbital: the space on top of the head between the eyes.

Interorbital distance: the shortest distance between the eyes.

Interorbital space: area on top of head between eyes.

Intertidal: of or denoting the area of a seashore which is covered at high tide and uncovered at low tide.

Intertidal zone (or foreshore): the area above water level at low tide and underwater at high tide: in other words, the part of the littoral zone within the tidal range.

Invertebrates: any animal that lacks a vertebral column, or backbone.

J

Juveniles: the developmental stage of organisms that are not yet fully mature.

Jaws: the part of the mouth supporting the teeth.

K

Keel: lateral strengthening ridge posteriorly on the caudal peduncle or base of the caudal fin; typically found on swift-swimming fishes with a narrow caudal peduncle and a broadly lunate caudal fin; usually sharp (or fleshy).

L

Lagoon: an area of calm sea water that is separated from the ocean by a line of rock or sand.

Lateral line: a canal along the side of a fish containing pores that open into tubes supplied with sense organs sensitive to low vibrations.

Lateral line scales: the pored scales of the lateral line between the upper end of the gill opening and the base of the caudal fin.

Larvae: early developmental stage of many animals, particularly those that undergo indirect development (metamorphosis).

Lateral line (system): a system of tactile sense organs unique to aquatic vertebrates that detects movements and pressure changes in the surrounding water. It consists of mechanoreceptors called neuromasts arranged in rows or singly along the head and body.

Low risk (least concern-LC): a taxon is considered low risk, when evaluated, not meeting the criteria of Critically Endangered (CR), Endangered (EN), Vulnerable (VU), or Near Threatened (NT).

Luminescent bacteria: are a group of bacteria capable of producing light through a biochemical process known as bioluminescence.

Lunules: crescent-shaped or semi-circular markings or spots found on the wings of certain insects.

M

Mandible (in fish): the main bone of the lower jaw.

Marine habitat: various environments found in the ocean and seas, where marine organisms live and interact. Marine habitats are incredibly diverse and can be categorized based on different factors like depth, light availability, and substrate.

Marine mammals: a diverse group of mammals that are primarily adapted to life in the ocean. They include several orders of animals that rely on the marine environment for their survival.

Marine turtles: also known as sea turtles, are a group of reptiles that are primarily adapted to life in the ocean.

Masl: meters above sea level.

Mating Season: The seasonal period when a female animal's estrous cycle is active, signaling animals to mate.

Maxilla: one of the two bones that comprise each half of the upper jaw. It may bear teeth. Also called maxillary which is also the adjective: plural maxillae.

Mesopelagic: (also known as the mid or twilight pelagic zone) is a part of the pelagic zone that extends from 200 to 1,000 meters (~660 to 3,300 feet) below sea level.

Micronekton: group of relatively small but actively swimming organisms ranging in size between plankton (<2 cm), which drift with the currents, and larger nekton (>10 cm), which have the ability to swim freely without being overly affected by currents.

Migratory fish: fish species that undergo periodical migrations.

Monogamous (fish): males and females have prolonged pair bonds.

Mussel: a type of bivalve mollusk, belonging to the class Bivalvia within the phylum Mollusca, have a pair of elongated, asymmetrical shells that are typically blue-black, green, or brown, and are often more or less rounded.

N

Native: (plant or animal) of indigenous origin or growth.

Near threatened (NT): a taxon is considered near threatened if it is evaluated as not currently critical, endangered, or vulnerable but is close to qualifying or is judged to qualify as endangered in the near future.

Neritic zone (or sublittoral zone): the relatively shallow part of the ocean above the drop-off of the continental shelf, approximately 200 metres (660 ft) in depth.

Neurotoxin: is a type of toxin that specifically targets the nervous system, affecting the function of neurons and potentially leading to various neurological effects.

Nocturnal: behaviours of an organism that are active during the night rather than the day.

Nostril: external opening of the nasal organs, usually appearing as one or two pores or slits on each side of the snout.

Not evaluated (NE): a taxon is "not evaluated" when it is not evaluated for any of the IUCN criteria (DD, LC, NT, VU, EN, CR, EW, EX).

O

Oceanodromous: migrating within oceans typically between spawning and different feeding areas, as Tunas do.

Ocellus (in fish): an eye-like marking with a ring of one color surrounding a spot of another; a common color pattern in fish, aiming to confuse predators.

Octopi: plural form of octopus (cephalopod mollusks that have eight muscular arms equipped with two rows of suckers).

Offshore: refers to the area of the ocean or a body of water that is farther away from the shore or coastline.

Omnivore: an animal or person that eats food of both plant and animal origin.

Operculum: the operculum is the bony flap that protects the gills from harm. It opens and closes to allow water to pass over the gills; bony gill cover; comprised of four bones: opercle, preopercle, interopercle and subopercle.

Oviparous: producing eggs that develop and hatch outside the maternal body.

Ovoviviparous: producing eggs that hatch within the female's body.

P

Paliform lobes: part of the skeletal structure that helps support the soft tissue of the coral polyp, and they are typically located at the ends of septa.

Papilla mouth: in certain kinds of fish, particularly rays, sharks, and catfish, are small lumps of dermal tissue found in the mouth.

Papilla genital: a small, fleshy tube behind the anus in some fishes, from which the sperm or eggs are released; the sex of a fish often can be determined by the shape of its papilla.

Passerine: relating to or denoting birds of a large order distinguished by feet adapted for perching, including all songbirds.

Patagium: a membrane or skin flap that extends between the limbs of certain animals, aiding in gliding or flying.

Pectoral fin: fins situated on either side just behind a fish's head, helping to control the direction of movement during locomotion.

Pelagic (zone): the pelagic zone refers to the open, free waters away from the shore, where marine life can swim freely in any direction unhindered by topographical constraints.

Pelvic scute: refers to the scute associated with the pelvic-fin insertion

Pelvic fins or ventral fins: paired fins located on the ventral (belly) surface of fish, and are the lower of the only two sets of paired fins.

Peduncle: the base of any relatively massive anatomical member connected to the body by a narrower section; caudal peduncle: the strong swimming muscles of the tail; The narrow part of a fish's body to which the caudal or tail fin is attached.

Phytoplankton: microscopic, photosynthetic organisms that float in aquatic environments, including oceans, seas, and freshwater bodies.

Plankton: passively floating or only weakly swimming small aquatic organisms in a body of water, which drift in the ocean along with the water currents; planktonic organisms' range in size from tiny plants and animals to rather large jellyfish and salps, and include the larval stages of many fishes.

Plumage: bird's feathers.

Pods: social groups in certain species, especially marine mammals like dolphins and orcas. These pods can vary in size and structure, often consisting of family units that work together for hunting, communication, and social interaction.

Polymorph: the occurrence of different forms or morphs within a single species that can be varied in physical appearance, behaviour, or ecological roles.

Population: all the inhabitants of a particular town, area, or country.

Posterior: referring to the back part.

PRC: People's Republic of China.

Predators: organisms that hunt, capture, and consume other organisms (known as prey) for nourishment.

Premaxilla: a bone at the tip of the upper jaw.

Preoperculum: the bone at the upper front of the gill cover.

Prothorax: the foremost of the three segments in the thorax of an insect and bears the first pair of legs.

Protractile (of fish mouth): a structural arrangement of the jaws that enables the animal to protrude (extend) or withdraw the mouth at will.

Pruinescence: surface coating or appearance in insects (and other organisms) where a powdery or waxy layer gives the body a frosted or dusty appearance.

R

Reef-associated: living and feeding on or near coral reefs

Reef crest: a shallow zone characterised by highest wave energy absorbance, marking the boundary between the Reef Flat and the Reef Front.

Reef flat: an extensive area of the reef, bounded seaward by the reef crest and leeward by the back reef. The reef flat is on the sheltered side of the reef. The substrate is formed of coral rock and loose sand, and large parts may be exposed during low tides.

Reef front: a submerged, sloping area extending seaward from the Reef Crest (or Reef Flat) towards the shelf break.

Reef slope: a submerged sloping lower Fore Reef area, beginning below the natural break in reef profile or, if no break exists, beyond 18 m, and extending seaward.

Rostrum: a beaklike projection, especially a stiff snout or anterior prolongation of the head in an insect, crustacean, or cetacean.

S

Salinity: the concentration of salt in water.

Salt marsh: or salting, also known as a coastal salt marsh or a tidal marsh, is a coastal ecosystem in the upper coastal intertidal zone between land and open saltwater or brackish water that is regularly flooded by the tides. It is dominated by dense stands of salt-tolerant plants such as herbs, grasses, or low shrubs.

Scales: refer to the small, flat, plate-like structures that cover the skin of certain animals, such as fish and reptiles. They provide protection and can play a role in temperature regulation and water retention.

Schooling: refers to the behavior exhibited by certain fish species when they group together and move in a coordinated manner.

Scute: a modified scale that can be enlarged, hardened, ridged, keeled or spiny.

Seagrass: refers to flowering plants that grow in shallow marine and estuarine environments.

Semi-arboreal: animals that not only spend their lives in trees or bushes but also often descends to the ground.

Setae: hair-like or bristle-like structures found on the surface of many animals, including insects, arachnids, and various other arthropods.

Skimming: refer to a feeding behavior in which certain animals, like some fish or birds, feed on the surface of the water by taking in small organisms or particles while moving.

Snout: the part of the head in front of the eyes.

Snail: common name for a gastropod mollusk, which is a member of the class Gastropoda within the phylum Mollusca. Snails are characterized by their coiled shells (in many species), soft bodies, and a distinct head with sensory organs.

Soft dorsal fin: part of the dorsal fin supported by soft rays.

Soft ray: a fin support element that is composed of two halves (paired laterally), segmented, and usually flexible and branched; rarely, soft rays can be pointed and stiff and look like spines.

Solitary: refer to animals that prefer to live and operate alone rather than in social groups or herds.

Spatulate tail: a tail-like structure found on the hindwings of certain species that has a broad, flattened, or spoon-shaped end.

Spawner reproduction: the ways in which different species reproduce, including methods like sexual reproduction, asexual reproduction, or the dispersal of spores or seeds, which lead to the establishment of new organisms in a habitat.

Species: the most specific rank in the hierarchical system used to categorize organisms.

Spermaceti: is a waxy substance found in the head of sperm whales (and some other cetaceans).

Spine: a fin support element that is unpaired laterally, unsegmented, unbranched, and usually stiff and pointed; also refers to slender, sharply pointed bony processes not associated with fins.

Spinous dorsal fin: the anterior portion of the dorsal fin that is supported by spines.

Standard length: the length of the fish from the tip of the snout to the end of the hypurals (base of the tail fin).

Spiracles: composed of a pair of openings just behind the fish's eyes that allow it to draw oxygenated water in from above without having to bring it in through the gills.

Stingray: related to sharks and skates and are known for their distinctive flattened bodies, which are adapted for life on the ocean floor.

Substrate sediment: refers to the underlying layer of material, typically composed of particles like sand, silt, clay, or gravel, found at the bottom of a body of water, such as a river, lake, or ocean.

Subtidal: of or relating to, inhabiting, or existing in the region below the level of low tide, that is always underwater.

Subtropical water: refers to the regions situated between the tropical and temperate zones. Subtropical regions are characterized by their warm to hot climates, with distinct seasonal variations.

Supramaxilla: a small bone (or bones) lying immediately above or partially overlapping the posterior end of the maxillary bone in some fishes; often apparent only upon slitting the skin in that region.

Striae (striations): a series of ridges, furrows, or linear marks.

SVL: snout-vent length, measurement taken in herpetology from the tip of the snout to the most posterior opening of the cloacal slit (vent).

T

Taxonomy: the branch of science concerned with classification, especially of organisms; systematics.

Temperate water: refers to the oceanic regions situated between the tropical and polar zones. These regions experience moderate temperatures and distinct seasonal changes.

Termen: the outer edge or margin of the wing, particularly on the hindwing.

Thorax: an anatomy in the middle segment of the body, situated between the head and the abdomen. In insects it houses the muscles that control the wings and legs.

Tidal stream: a stream in which the effects of the tide extend far upstream (synonyms: tidal river, tidewater river, tidewater stream).

Tinge: slight or subtle colour variation or shade on the insect's wings or body.

Tornus: the part of the butterfly's wing near this corner or edge.

Total length: the longest length of the fish from the tip of the snout to the tip of the upper or lower tail fin.

Tropical water: refers to the oceanic and freshwater environments found within the tropical climate zone. This region is characterized by consistently warm temperatures.

Truncate: used to describe a caudal fin with a vertically straight terminal border and angular or slightly rounded corners; terminating abruptly, as in a cut off square.

Tubercle: a small, rounded, horn-like projections or bumps on the skin or the bone of an organism.

U

Umbones: a rounded knob or protuberance.

V

Varix: each of the ridges on the shell of a gastropod mollusk, marking a former position of the aperture.

Ventral/ Ventrum: the bottom, lower surface, or abdominal part of an organism in anatomy and biology.

Villiform: (teeth) very small close-set slender conical teeth in bands

Vomer: in bony fish, the vomers are flattened, paired, bones forming the anterior part of the roof of the mouth.

Vomerine teeth: teeth on the vomer bone along the midline of the upper jaw.

Vulnerable (VU): a taxon is considered vulnerable when the data indicates that it fits any of the criteria A to E for vulnerable or susceptible, and it is therefore considered to be facing a high risk of extinction in the wild.

W

Water quality: refers to the chemical, physical, and biological characteristics of water, particularly in relation to its suitability for a specific purpose, such as drinking, recreation, agriculture, or supporting aquatic life.

Wing cells: specific areas or compartments within an insect's wing vein that are defined by the network of veins running through the wing.

Wing vein: the network of hardened structures in an insect's wing that provide support and structure of the wing.

Z

Zooplankton: microscopic to small animals that drift or swim in the water column of oceans, seas, and freshwater bodies. A heterotrophic, meaning they consume other organisms for nutrition.

4

Potential Critical Habitat Species





Nisaetus floris

Flores Hawk-eagle – *Elang Flores*

Features:

- Total length typically ranges from 75 to 79 cm, but can vary from 71 to 82 cm.
- It is estimated a body mass of around 2 kg
- The wing chord of this species is 430 to 462 mm.



Nisaetus floris inhabits a variety of environments on Sumbawa Island, including high forests, mangrove forests, dryland forests, gallery forests, swamp forests, and areas around cultivation. It is an endemic species to the Lesser Sunda Islands in Indonesia. The presumed diet may

consist of birds, lizards, snakes, and mammals 67% of the habitat inside the EAAA is dryland forest making the EAAA a suitable habitat for this bird. *Nisaetus floris* presence was confirmed within the EAAA during the 2023 baseline survey (WSP, 2023). *Nisaetus floris* lives between 0–1,600 meters elevation which fits with the EAAA mean altitude of 337 m. The IUCN Red List status of *Nisaetus floris* is currently Endangered (EN). The overlap between the EAAA and the species’ global range is 1.04%. Since this exceeds the 0.5% threshold, the EAAA likely qualifies as critical habitat for this species under criterion 1a.





Gracula venerata

Tenggara Hill Myna - *Tiong Nusa-tenggara*

Features:

- Black with green flashes and bright yellow wattles behind the head.
- Bright orange beak, white wing patches visible in flight.
- Sound: varied screams, screeches, chirps, and whistles.



A large and rare starling, endemic to the Nusa Tenggara Islands. *Gracula venerata* occupies primary and secondary moist lowland forests, swamp forests, submontane and montane forests, dry forests, forest galleries in savanna woodlands, and farmland. Often found in pairs or

small groups flying or perched in tall trees. 67% of the habitat inside the EAAA is dryland forest making the EAAA a suitable habitat for this bird. *Gracula venerata* presence was confirmed within the EAAA during the 2023 baseline survey (WSP, 2023). *Gracula venerata* lives between 300–2,000 meters elevation which fits with the EAAA mean altitude of 337 m. The IUCN Red List status of *Gracula venerata* is currently EN. The overlap between the EAAA and the species' global range is 0.76%. Since this exceeds the 0.5% threshold, the EAAA, likely qualifies as critical habitat under criterion 1a.





Treron floris

Flores green pigeon – *Punai flores*

Features:

- Green pigeon with prominent, irregular pale markings on its wings.
- Sound is a series of soft whistles.
- Adults have mostly pale bills, while immatures have dark bills.



Treron floris, known for its nomadic behavior, roams Sumbawa Island and neighboring islands year-round. Unlike seasonal migrants, it relies on various forest ecosystems—including primary and secondary lowland forests, mangroves, and dryland forests—for sustenance, shelter, and

breeding. Sixty-seven percent of the habitat in the EAAA is dryland forest, making it suitable for the species. The presence of *Treron floris* was confirmed in the EAAA during the 2012 baseline survey, but it has not been recorded since (ENV Indonesia 2012). Further surveys during their migration are recommended to confirm their current presence. The species is listed as VU on the IUCN Red List and resides below 1,000 m altitude, aligning with the EAAA’s average altitude of 337 m. The overlap between the EAAA and the species’ global range is 1.01%, potentially qualifying the EAAA as critical habitat under criterion 3.





Chelonia mydas

Green Turtle – *Penyu Hijau*

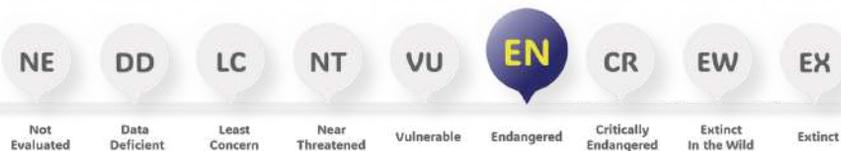
Features:

- The shell is grey to black, with brown and olive blotches or stripes, and may have yellow markings.
- Upper surfaces of the head and flippers plain dark.
- Feeds at shallow water areas.



Green turtles have been observed by fishermen. This species is also known to use Sumbawa's beaches for nesting. According to local communities, there have been nests on Matiti Beach. The green turtle is listed in CITES Appendix I and is also protected under Indonesian

regulation (P106). Considering the species' threat level and the lack of data, additional studies are needed to confirm its status within the EAAA, and it may qualify for Criterion 3.





Eretmochelys imbricata

Hawksbill Turtle – *Penyu Sisik*

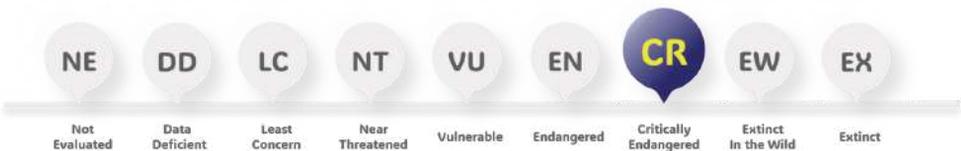
Features:

- The shell is oval-shaped with thick, overlapping scales.
- A hawk-like beak.
- It has the brightest color of all sea turtles.



Hawksbill turtle sightings have been reported by locals and fishermen near nesting sites between Nangadoro and Nisatando (Greencap 2015). In 2019, three Hawksbill turtle carcasses were observed, and in 2023, the species occurred in the coral reef ecosystem (Lorax Indonesia & Faculty of Fisheries and Marine Sciences, IPB University 2023).

While turtle nesting sites have been noted, there is no clear evidence of the species using these beaches for nesting. The Hawksbill turtle is listed in CITES Appendix I and is protected under Indonesian regulation (P.106). Given the species' threat level and data gaps, further studies are needed to confirm its status within the EAAA, and it may qualify for Criterion 3.





Lepidochelys olivacea

Olive Ridley Turtle – *Penyu Lekang*

Features:

- Olive or grayish-green, heart-shaped shell with 5–9 scale pairs.
- Omnivorous, feeding on algae, lobsters, crabs. Tunicates, mollusks, shrimps, and fish.



This species is listed in CITES Appendix I and is protected under Indonesian regulation (P.106). Commonly found in shallow coastal waters but also dives deeper than 150 meters. It often migrates along continental shelves and can form schools in the open sea. According to

fishermen, individuals have been observed, but no other evidence of presence has been recorded. Given the species' threat level and data gaps, further studies are needed to confirm its status within the EAAA, and it may qualify for Criterion 3.





Rhincodon typus

Whale Shark – *Hiu Paus*

Features:

- A large, harmless species that can grow up to 20 meters.
- A blunt-headed shark with a checkerboard pattern of yellow or white spots on a grey, bluish, or green-brown back.
- Feeds on plankton, jellyfish, and crab larvae.



The whale shark has been reported by fishermen to be present in the area, but no direct observations were recorded during scientific studies. According to the IUCN Red List database, the latest global population estimate is 7,011 individuals. To trigger Criterion 1, the EAAA would need to

host more than 0.5% of the global population, which would be at least 35 individuals. Therefore, it is unlikely to qualify for Criterion 1. The whale shark is listed in CITES Appendix II and is protected under Indonesian Regulation KP.18. Additional studies are needed to assess the EAAA’s importance for foraging and breeding, and the species may qualify for Criterion 3.





Stenella longirostris

Spinner Dolphin – *Lumba-Lumba Moncong Panjang*

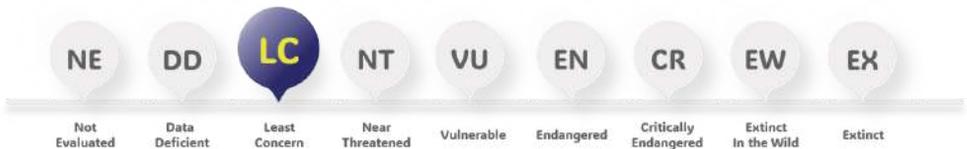
Features:

- It has a slender body, long thin beak, and pointed flippers.
- Most have a dark grey back, white underbelly, and lighter grey sides.
- Feed at night on species including small fish, shrimp, and squid.



The spinner dolphin gets its name from its habit of leaping out of the water and spinning longitudinally. Some individuals have been observed rolling over seven times before falling back into the water. It is found worldwide in tropical and warm-temperate waters. This dolphin

belongs to the Delphinidae family. Its distribution range overlaps with the EAAA, and it is listed in CITES Appendix II and protected under Indonesian regulation (P.106). Year-round sightings of the species have been reported. Further studies are needed to assess the EAAA's role in foraging and breeding, and the species may qualify for Criterion 3.





Tursiops aduncus

Indo-Pacific Bottlenose Dolphin – *Lumba-Lumba Hidung Botol*

Features:

- The dorsal surface is slate blue or dark gray, with darker flippers and lighter extremities.
- They have poor sight but a keen sense of hearing, which is important for echolocation.
- Feed on species including small fish, shrimp, and squid.



It is found worldwide in the Indian and Western Pacific Oceans. The species is listed as Near Threatened (NT) and is included in CITES Appendix II, as well as protected under Indonesian regulation (P.106). Individuals are seen year-round around Cempi Bay, and the species may qualify for Criterion 3.





Tursiops truncatus

Common Bottlenose Dolphin – *Lumba-Lumba Hidung Botol*

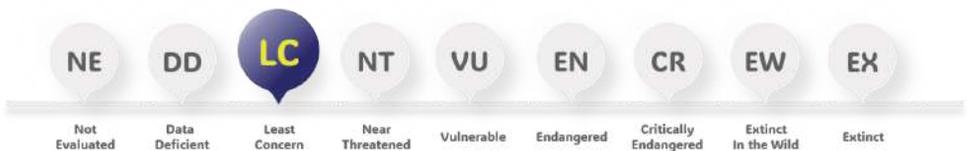
Features:

- It has a short, thick snout.
- Dolphins living nearshore are smaller and lighter in color than those offshore.
- Feed at night on species including small fish, shrimp, and squid.



This dolphin is found in temperate and tropical waters around the world. They inhabit a wide variety of habitats, including bays, gulfs, estuaries, nearshore coastal waters, the continental shelf, and far offshore in the open ocean. Bottlenose dolphins can live for at least 40 years,

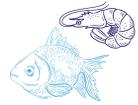
with some females living up to 60 years or more, outliving males. The species is listed as Least Concern (LC), but it is included in CITES Appendix II and protected under Indonesian regulation (P.106). Individuals are observed year-round, and the species may qualify for Criterion 3.



5

Freshwater – Estuarine Biota





5.1 Fish

1. *Acentrogobius audax*

Common Name	: Mangrove goby	
Local Name	: <i>Gobi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

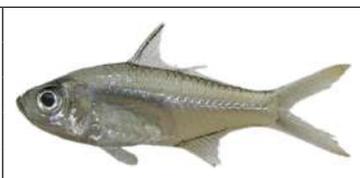
This species is one of the Gobiidae family of fish and is distributed in the Western Indian Ocean and Northwest Pacific. It inhabits freshwater and brackish water. This fish is also found in mangrove areas. The maximum length of this fish is 10 cm. It is characterized by a dark bar on the caudal peduncle. This species is carnivorous and usually feeds on small invertebrates, copepods, amphipods, and zooplankton.

2. *Acentrogobius janthinopterus*

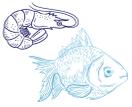
Common Name	: Robust mangrove goby	
Local Name	: <i>Gobi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Classified in the Gobiidae family, this species is well-distributed in the Western Indian Ocean and Northwest Pacific. It inhabits mud bottoms of freshwater and brackish water. This fish is also occasionally found in mangrove areas. It is characterized by a pale greyish to light brown body color with brown mottling on the back. The maximum length of this fish is 12.5 cm. This species is carnivorous and usually feeds on small invertebrates, copepods, amphipods, and zooplankton.

3. *Ambassis buruensis*

Common Name	: Buru glass perchlet	
Local Name	: <i>Sleding</i>	
IUCN	: Data deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Ambassidae family. It is commonly found in the Western Pacific. It inhabits mud bottoms of freshwater and brackish water. The adult of this fish is also found in brackish mangrove areas. This fish is



characterized by a body that is nearly transparent and covered with thin scales. The maximum length of this fish is 8.2 cm. This fish commonly feeds on small insects and other invertebrates (such as shrimp and crabs).

4. *Ambassis nalua*

Common Name	: Scalloped perchlet	
Local Name	: <i>Sleding</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Ambassidae family. This fish is well distributed in Asia and Oceania. This fish is usually found in lower freshwater area to brackish waters of bays and estuaries. The maximum length of this fish is 12.5 cm. The body is characterized by a translucent greenish brown to dusky grey with a silvery abdomen and cheeks. This species is usually feed on small insect and other invertebrates (shrimp and crab).

5. *Anabas testudineus*

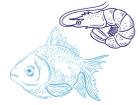
Common Name	: Climbing perch	
Local Name	: <i>Karisa</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is part of the climbing gourami family (Anabantidae). It is mostly distributed in Asia. The body color ranges from light to dark greenish, very pale on the underside, and dusky to olive on the back. It is commonly found in river canals, lakes, ponds, swamps, and estuaries. This fish is also able to survive for several days or weeks out of water if its air-breathing organs remain moist. The maximum length of this fish is 25 cm. This species is omnivorous, usually feeding on small invertebrates and macrophytic vegetation.

6. *Anguilla marmorata*

Common Name	: Giant mottled eel	
Local Name	: <i>Duna/Sidat kembang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (KP.80)	: Protected	

This species belongs to the freshwater eel family (Anguillidae) and is generally distributed in the Indo-Pacific. It inhabits the mud bottoms of freshwater and brackish waters. This fish lives in freshwater areas during the adult stage and



in estuaries during the juvenile stage (larvae). It is characterized by a mottled body color, with a maximum length of around 70 cm. This species is active at night, feeding on a wide range of prey, especially small crabs, frogs, and fish.

7. *Arothron hispidus*

Common Name	: White-spotted puffer	
Local Name	: <i>Buntal pasir</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species commonly inhabits shallow estuaries to outer reef slopes at depths of at least 50 m. This fish is also well distributed in the Indo-Pacific and Eastern Pacific. The maximum length of this fish is around 50 cm. The body is generally greenish brown with white spots. This species is carnivorous and usually feeds on algae and other small invertebrates.

8. *Arothron manilensis*

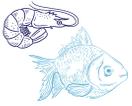
Common Name	: Narrow-lined puffer	
Local Name	: <i>Buntal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species commonly occurs in shallow estuaries with brackish water and muddy substrates. The juvenile phase of this fish is commonly found in mangroves. The body is covered with prickles and many faint dark stripes. It belongs to the Tetraodontidae family.

9. *Balitoropsis zollingeri*

Common Name	: Hillstream lizard loaches	
Local Name	: <i>Kepantoh</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Balitoridae family (river loaches) and is commonly distributed in Asia. The maximum length of this fish is around 10 cm. The color of this fish ranges from very dark to black with indistinct blotches. This fish is usually found on rocky bottoms in fast-moving waters.



10. *Butis butis*

Common Name	: Duckbill sleeper
Local Name	: <i>Kambo'o</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The tropical goby fish is commonly found in freshwater to brackish waters. This fish inhabits mangrove estuaries and the lower areas of freshwater streams. It usually lives on mud bottoms. There is a dark longitudinal line on its body. This species mainly feeds on small fish and crustaceans (crabs and shrimp).

11. *Chanos chanos*

Common Name	: Milkfish
Local Name	: <i>Bandeng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is characterized by an elongate and compressed body with a small, toothless mouth. The adult phase of this fish inhabits shallow coastal areas. This fish frequently swims into brackish waters in estuaries and freshwater streams. The larvae feed on zooplankton, while the juveniles and adults feed on cyanobacteria, soft algae, small benthic invertebrates, and even pelagic fish eggs and larvae.

12. *Clarias batrachus*

Common Name	: Philippine catfish
Local Name	: <i>Simbu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This common walking catfish is usually found in Indonesia. The adult fish inhabit lowland freshwater streams, swamps, ponds, ditches, and rice paddies. This fish can live out of water for quite some time and move short distances over land using its auxiliary breathing organs. This species is omnivorous, mainly feeding on insects, shrimp, aquatic plants, and debris.



13. *Crenimugil seheli*

Common Name	: Bluespot mullet	
Local Name	: <i>Ikan belanak/ mpole</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This catadromous fish belongs to the Mugilidae family, known as mullets, and lives in marine, brackish, and freshwater environments. It can be found in river estuaries during the juvenile phase and when feeding, while the adults migrate to the shore or coastal waters. They feed on microalgae, filamentous algae, forams, diatoms, and detritus associated with sand and mud. They are distributed around the Indo-Pacific in tropical waters.

14. *Eleotris fusca*

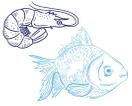
Common Name	: Dusky sleeper	
Local Name	: <i>Kambo'o</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the goby family (Eleotridae). The distribution of this fish is in the Indo-West Pacific. The body is dark brown to black in color. The maximum length of this fish is 26 cm. The adult fish are common in freshwater, in the lower reaches of streams and estuaries. The juvenile phase (young) mainly inhabits mangrove roots in saline areas (brackish water). This species is carnivorous, mainly feeding on snails, shrimp, and small crabs.

15. *Eleotris melanosoma*

Common Name	: Broadhead sleeper	
Local Name	: <i>Kambo'o</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is commonly found in Indonesia, the Philippines, Taiwan, Papua New Guinea, the Solomon Islands, and New Caledonia. The adult fish inhabits medium to large-sized rivers. This fish is also frequently found in the mud bottoms of brackish estuaries. The maximum length of this fish is 26 cm. This species is carnivorous and feeds on small invertebrates and snails.



16. *Ellochelon vaigiensis*

Common Name	: Squaretail mullet
Local Name	: <i>Tampole</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is commonly found in the lower freshwater streams to estuaries, occasionally in shallow coastal areas. This species is characterized by a robust body, with an olive-brown body color. This species feeds on phytoplankton, small algae, and detritus organisms.

17. *Gerres filamentosus*

Common Name	: Whipfin silver-biddy
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



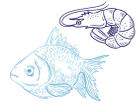
The distribution of this fish is around the Indo-West Pacific. The adults of this species are coastal inhabitants, while the juveniles are found in brackish mangrove estuaries, occasionally entering the lower freshwater rivers, lakes, and tidal creeks. This fish is a carnivore that feeds on small crustaceans (crabs and shrimps), worms, and insect larvae. The maximum length of this fish is 39 cm. The body color of this species is light grey.

18. *Giuris margaritaceus*

Common Name	: Snakehead gudgeon
Local Name	: <i>Kembokalo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is found in various habitats, including freshwater, estuaries, and mud-bottomed inshore areas. It occasionally inhabits dense aquatic vegetation. The species primarily feeds on aquatic insects, with smaller amounts of algae and plants. Its body is large with a flattened head (max length ~29 cm) and greenish-brown color with 8-10 dark bars and 3-4 dark brown to reddish strips on the lower half of its head.



19. *Glossogobius giuris*

Common Name	: Tank goby	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the goby family (Gobiidae) and is distributed in Africa, the Indian Ocean, and the western Pacific. It is common in freshwater and estuaries and sometimes enters the sea. It occurs in clear to turbid streams with rocky gravel or sandy bottoms. The maximum length of this fish is up to 50 cm. This species is cannibalistic and also feeds on small insects, crustaceans, and small fish.

20. *Kuhlia marginata*

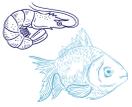
Common Name	: Dark-margined flagtail	
Local Name	: Karpe	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is primarily a freshwater species belong to the Kuhlidae family, commonly found in the rocky, unshaded, and flowing water areas. The colour of this fish is light grey with a blackish spot on dorsal and caudal fins. This species has a maximum length up to 17.9 cm.

21. *Kuhlia rupestris*

Common Name	: Rock flagtail	
Local Name	: Karpe	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Typically, this fish is a freshwater inhabitant that occasionally enters estuaries, usually in relatively fast-flowing streams. The adult fish are omnivores, mainly feeding on small fish, insects, and figs. It has a silvery (light gray) body with black bars or spots on its scales.



22. *Monopterus albus*

Common Name	: Asian swamp eel
Local Name	: <i>Belut sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Monopterus albus, an eel from the Synbranchidae family, is commonly found in freshwater and brackish environments. It grows up to 100 cm, typically around 40 cm. This scaleless eel has a red-brown body with dark flecks when juvenile. Adults live in rivers, canals, and estuaries, burrowing during dry seasons. They feed on fish, worms, crustaceans, and detritus.

23. *Neodontobutis aurarmus*

Common Name	: Mekong sleeper
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is from the Odontobutidae family, which belongs to the goby fish or freshwater sleepers. It is frequently found in marshes, swamps, and backwaters. The body color is yellow with black spots and mottling. The maximum length of this fish is up to 5 cm.

24. *Ompok hypophthalmus*

Common Name	: -
Local Name	: <i>Selais</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Siluridae family, one of the catfish families, and is well distributed in Asia (Thailand and Indonesia). It is frequently found in slowly moving waters and lakes. The maximum length of this fish is up to 30 cm.



25. *Ophiocara porocephala*

Common Name	: Northern mud gudgeon	
Local Name	: <i>Kambo'o</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is widely known as the gudgeon goby and belongs to the Butidae family. It inhabits freshwater and brackish estuaries and is frequently found in the lower courses of rivers. The maximum length of this fish is 34 cm, while the common length is 20 cm. This species is characterized by a dark head and body.

26. *Oreochromis niloticus*

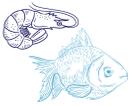
Common Name	: Nila tilapia	
Local Name	: <i>Nila</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a fish that occurs in a wide variety of freshwater habitats in Africa (Nile River). It is globally distributed for aquaculture. The males of this species are characterized by a bluish-pink color, while the females are usually brownish with a light grey color beneath the body. In general, this species is highly invasive.

27. *Oxyeleotris marmorata*

Common Name	: Marble goby	
Local Name	: <i>Kambo'o</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is well distributed in Asia. The maximum length of this fish is 65 cm, while the common length is 30 cm. It is commonly found in rivers, swamps, reservoirs, and canals. It usually feeds on small fish, shrimp, aquatic insects, snails, and crabs. This species is widely known as a commercially valuable fish.



28. *Oxyeleotris urophthalmoides*

Common Name : -	 Illustration: Eleotridae family
Local Name : Kambo'o	
IUCN : Data deficient	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

This fish is distributed in Asia and is commonly found in freshwater and brackish water areas. Widely known as gudgeon gobies, it belongs to the Butidae family. The maximum length of this fish is up to 19.8 cm. There is very limited information available on this species.

29. *Oxygaster anomalura*

Common Name : Blackline razor belly	
Local Name : Mburu	
IUCN : Least Concern	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

A freshwater fish belonging to the Xenocyprididae (East Asian minnows) family that is commonly distributed in Asia. It inhabits freshwater rivers with a complete or nearly complete forest canopy. This species mainly feeds on small insects and larvae.

30. *Pelates quadrilineatus*

Common Name : Fourlined terapon	
Local Name : Kakero	
IUCN : Least Concern	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

The characteristic of this fish is having 4 to 6 dark stripes along the sides of the body (in adult fish). This species inhabits estuaries and brackish waters. The maximum length of this fish is up to 30 cm. This species is carnivorous, mainly feeding on small fish and invertebrates (shrimp and crabs).

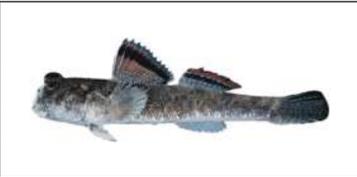


31. *Perccottus glenii*

Common Name	: Chinese sleeper	
Local Name	: <i>Kambo'o</i>	
IUCN	: Data deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

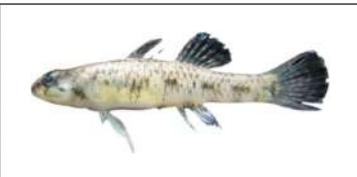
Commonly found in freshwater river and brackish estuaries in Asia. This species belongs to the freshwater sleepers family (Odontobutidae) that characterized by bright green spots on the body. The preference habitat of this species is stagnant rivers and bogs, since this fish tolerate in the poorly oxygenated water. The maximum length of this species is 25 cm. This species is a carnivore and classified as voracious predatory fish.

32. *Periophthalmus argentilineatus*

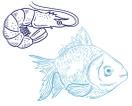
Common Name	: Barred mudskipper	
Local Name	: <i>Kenaca</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is characterized by its facultative air-breathing ability, allowing it to stay out of the water for up to 37 hours in moist conditions. This fish is capable of climbing out of the water and is actively shuttling back and forth between the water and rock pools. It is frequently found in brackish estuaries with muddy and mangrove areas.

33. *Pseudogobius poecilosoma*

Common Name	: Greenback mullet	
Local Name	: <i>Tampole</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species has a facultative air-breathing ability, allowing it to stay out of the water. Classified as a member of the Gobiidae family (Gobies), it is distributed in the Indo-West Pacific. This fish inhabits the lower streams of freshwater rivers and brackish estuary environments. Adult fish are also found in shallow coastal areas near mangroves. This species is carnivorous and feeds on small fish and invertebrates (shrimp, crabs, and snails).



34. *Schismatogobius marmoratus*

Common Name	: Bluespot mullet
Local Name	: <i>Tampole</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is found in the lower streams of freshwater rivers. This fish has a maximum length of up to 3.4 cm. Half of its body is dark brown with 1-8 black spots on the fin.

35. *Sicyopterus micrurus*

Common Name	: Clinging goby
Local Name	: -
IUCN	: Data deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is well distributed in Asia and Oceania. The adult fish inhabits freshwater rivers, mostly in fast-flowing creek environments. It is occasionally found in brackish water and shallow coastal areas. The maximum length of this fish is up to 9.5 cm.

36. *Sicyopus cf. rubicundus*

Common Name	: -
Local Name	: <i>Kambo'o</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Based on morphology and body characteristics, this species is similar to *Sicyopus rubicundus*, which is distributed in Java and Bali. This fish has a maximum length of up to 4.7 cm. It is typically a freshwater river fish found in tropical areas.



37. *Sicyopus exallisquamulus*

Common Name	: Red lipstick gobby	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Sicydiinae family, known as gobies. It is originally from the island of Halmahera in the Maluku Islands. It inhabits swift, clear, high-gradient streams with rocky and boulder-strewn bottoms in freshwater environments. It lives in demersal areas with very clear and well-oxygenated water. The maximum recorded length is 5.1 cm.

38. *Stiphodon ornatus*

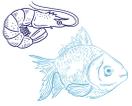
Common Name	: Rainbow Stiphodon Goby	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is commonly used as an ornamental fish. It is typically a freshwater fish found in Western Indonesia and Sulawesi. The maximum length of this fish is 5.3 cm.

39. *Stiphodon elegans*

Common Name	: -	
Local Name	: Kambo'o	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Typically, a freshwater and brackish water fish, it is commonly found in Asia, Oceania, and the Pacific Ocean. The maximum length of this fish is 5.2 cm. It inhabits clear, relatively swift river streams close to the coast.



5.2 Invertebrate

1. *Cardisoma carnifex*

Common Name	: Brown land crab	
Local Name	: <i>Kakda</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Gecarcinidae family. This crab is commonly distributed in the Indo-West Pacific. Its color ranges from brown to brownish grey. It inhabits mangroves or brackish water habitats. The larvae of this crab are released into the sea and return to the land during their developmental phase.

2. *Caridina typus*

Common Name	: Type shrimp	
Local Name	: <i>Udang</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A small freshwater shrimp distributed in the Indo-Pacific. It is typically found in the bottom substrates of tropical freshwater rivers and is commonly introduced as an ornamental shrimp in aquariums.

3. *Coenobita cavipes*

Common Name	: Land hermit crab	
Local Name	: <i>Kalikuma</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A tropical freshwater hermit crab belonging to the Coenobiidae family. This species is commonly found in freshwater rivers and occasionally on beaches. This hermit crab primarily feeds on plant and animal matter.

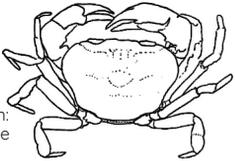


4. *Episesarma versicolor*

Common Name	: Violet vinegar crab	
Local Name	: <i>Kakda</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This crab is commonly found in the lower streams of freshwater or brackish estuaries with mangroves. The distribution of this species is in the Indo-West Pacific. The maximum length of this crab is 5 cm. This species is predominantly herbivorous.

5. *Isolopotamon cf. mahakkamense*

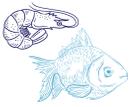
Common Name	: -	 <p>Illustration: Potamidae family</p>
Local Name	: <i>Kakda</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species' morphology resembles that of the crab species *Isolopotamon mahakkamense* from the Mahakam River, Kalimantan. This species is classified as a freshwater crab. There is very limited information available about this species.

6. *Macrobrachium acanthurus*

Common Name	: Cinnamon river shrimp	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Palaemonidae family. It inhabits freshwater, brackish estuaries, and shallow coastal environments. The preferred habitat of this species is the muddy bottoms of mangrove areas.



7. *Macrobrachium asperulum*

Common Name	: Brown arm shrimp
Local Name	: <i>Kepantoh</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The freshwater shrimp belongs to the Palaemonidae family. This shrimp has a large brown arm and is commonly introduced as an ornamental shrimp in aquarium hobbies.

8. *Macrobrachium lar*

Common Name	: Monkey river prawn
Local Name	: <i>Kepantoh</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Macrobrachium lar is a species of freshwater shrimp found throughout the Indo-West Pacific region. This species is commonly found in flowing rivers and creeks. It belongs to the long-arm shrimp family (Palaemonidae). This species is carnivorous.

9. *Macrobrachium latimanus*

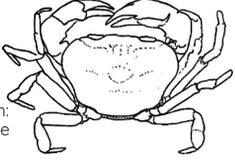
Common Name	: Mountain river prawn
Local Name	: <i>Kepantoh</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This freshwater prawn from the Palaemonidae family thrives in tropical benthic environments, inhabiting shallow waters at depths ranging from 0 to 2 meters. Commonly found in slow-moving rivers, ponds, and wetlands, it plays a crucial role in the aquatic ecosystem. This prawn is carnivorous.



10. *Malayopotamon granulatum*

Common Name	: Southeast Asian potamid crab	 <p>Illustration: Potamidae family</p>
Local Name	: <i>Kakda</i>	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This freshwater crab species, found in inland waters, belongs to the Potamidae family. Its habitat consists of relatively fast-flowing, forested streams with rocky substrates. It is also found in river streams at mountain peaks.

11. *Metapenaeus affinis*

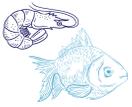
Common Name	: Jinga shrimp	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is distributed throughout the Indo-Pacific and is widely known as a highly commercial shrimp. It inhabits brackish estuaries near mangrove areas and prefers habitats with mud and sandy-mud substrates. The common length of this shrimp is 17 cm, while its maximum length can reach up to 22 cm.

12. *Metapenaeus ensis*

Common Name	: Greasyback shrimp	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is commonly found in brackish estuaries and prefers turbid waters with mud, sandy-mud, or silt substrates. It is occasionally found in seagrass beds in shallow coastal areas. This shrimp primarily feeds on phytoplankton and algae. It is commonly used as fish bait. The maximum length of female shrimp is 18.9 cm, while male shrimp is 15.4 cm.



13. *Metopograpsus frontalis*

Common Name	: Purple climber crab
Local Name	: <i>Kakda</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Metopograpsus frontalis is a species of freshwater decapod (crab) in the family Grapsidae. This crab is also found in brackish water. It has a purple coloration on its chela (claw) and prefers rocky substrates.

14. *Ocypode cordimana*

Common Name	: Smooth eyed ghost crab
Local Name	: <i>Kakda</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ocypode cordimanus is a species of crab in the family Ocypodidae, sometimes called the smooth-eyed ghost crab or smooth-handed ghost crab. It is widely distributed in the Indian Ocean and the Pacific Ocean.

15. *Palaemon concinnus*

Common Name	: Mangrove prawn
Local Name	: <i>Kepantoh</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is commonly found in freshwater, brackish estuaries with mangroves, and seawater in shallow coastal areas. Its distribution is in the Indo-Pacific region. It belongs to the Palaemonidae family.



16. *Palaemon styliferus*

Common Name	: Roshna prawn
Local Name	: <i>Kepantoh</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This shrimp is commonly found in brackish estuaries and occasionally enters freshwater. This species has high commercial value and is commonly distributed in the Indo-Pacific. This shrimp primarily feeds on small crustaceans and mangrove detritus.

17. *Parasesarma bidens*

Common Name	: Red clawed crab
Local Name	: <i>Kakda</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



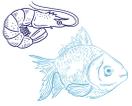
This species is part of the Sesarmidae family and is commonly found in mangrove areas. This crab has a pair of orange-red claws. Its distribution is around the regions of Asia.

18. *Parasesarma darwinense*

Common Name	: Darwin shore crab
Local Name	: <i>Kakda</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This crab prefers a habitat with a muddy bottom substrate. Its characteristic is a dark green carapace (body) with yellow-green spots. It is commonly found in mangrove estuarine areas.

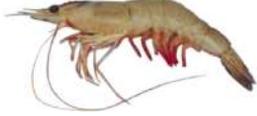


19. *Parathelphusa convexa*

Common Name	: -	
Local Name	: <i>Kakda</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Parathelphusa convexa is a species of crab native to Java and Bali, inhabiting rice paddies and freshwater rivers. Most of the time, it stays in humid areas and occasionally enters the water.

20. *Penaeus indicus*

Common Name	: Indian white prawn	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Penaeus indicus is a member of the Penaeidae family. This species is well distributed in the Indo-Pacific. The maximum length of this species is 20.5 cm. The color is typically greyish or dull green. This shrimp is commonly found in mangrove creeks with muddy bottoms and is occasionally found in sandy bottoms. This species can tolerate high salinity. Frequently, the adults live in marine environments.

21. *Penaeus monodon*

Common Name	: Giant tiger prawn	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is commonly used for aquaculture. The maximum length is up to 35 cm. This shrimp or prawn is frequently found in estuarine environments. The adult species is often found in seagrass beds in shallow coastal waters. This species mainly feeds on slow-moving organisms such as crabs and snails.



22. *Penaeus setiferus*

Common Name	: Northern white shrimp	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A freshwater and brackish shrimp species that belongs to the Penaeidae family. The maximum length is up to 22 cm. This species prefers habitats with muddy sand or clay substrates and is occasionally found at the vegetated marsh edge. It is omnivorous, mainly feeding on small plants, crabs, worms, and animal matter, including detritus.

23. *Penaeus vannamei*

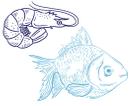
Common Name	: Whiteleg shrimp	
Local Name	: <i>Kepantoh</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The species of this shrimp is commonly introduced for aquaculture. This shrimp has a high commercial value in Indonesia. The habitat preference of this shrimp is the muddy bottom of brackish estuaries for juveniles, while adult shrimps are found in the sea.

24. *Pseudograpsus cf. setosus*

Common Name	: -	
Local Name	: <i>Kakda</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species has a similar characteristic to “*Pseudograpsus setosus*”, an endemic crab to the coasts of Chile, Ecuador, and Peru that belongs to the Varunidae family. This crab is found in brackish water with a rocky substrate. This species feeds on clams and small crabs.



25. *Sarmatium crassum*

Common Name : -	
Local Name : <i>Kakda</i>	
IUCN : Not Evaluated	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

This species is commonly found in vegetated rivers and enters brackish estuaries with mangroves. This crab can tolerate high salinity water. This crab has a grey-blue carapace (body) color with a pair of small eyes.

26. *Scylla serrata*

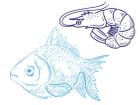
Common Name : Indo-Pacific swamp crab	
Local Name : <i>Kakda</i>	
IUCN : Data Deficient	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

The mud crab has a smooth carapace (body) with strong transverse ridges. The color of its carapace ranges from green to almost black, but its legs may be marble-colored. Its distribution is in the Indo-West Pacific areas. The recorded maximum carapace length is 25–28 cm, with a maximum weight of 2–3 kg. It inhabits oceanic waters and can also be found in mangroves and soft substrates in shallow to intertidal zones.

27. *Shinobium trapezoideum*

Common Name : -	
Local Name : <i>Kakda</i>	
IUCN : Not Evaluated	
CITES : Not Listed	
INA Reg. (P106) : Not Protected	

This freshwater crab species belongs to the Sesamidae family. The preferred habitat of this species is at the bottom of fast-flowing rivers. The distribution of this crab is in the Indo-West Pacific region.



28. *Varuna litterata*

Common Name	: Peregrine crab
Local Name	: <i>Kakda</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected

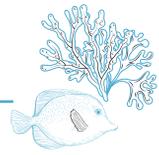


This species is a freshwater/brackish water crab that belongs to the Grapsidae family. This crab prefers slow-moving or almost stagnant bodies of water. The recorded maximum length is 5.4 cm.

6

Marine Biota





6.1 Corals

1. *Acanthastrea* sp.

Common Name	: Starry cup coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This coral is known as the cup coral. The colonies are encrusting to massive, with growth reaching up to one meter across. It belongs to the Lobophylliidae family. The corallites are either angular or circular in shape. The septa of this coral are thick near the wall of the corallite. It is commonly found in tropical reef environments. The colors are dull brown, grey, or green, and sometimes brightly colored.

2. *Acropora* sp.

Common Name	: Small polyp stony coral
Local Name	: <i>Karang tonjol</i>
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



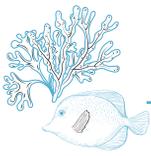
This hard coral genus is typically found in shallow coastal waters. It is widely distributed in Indonesia and belongs to the Acroporidae family. Some of its species are commonly known as table coral, elkhorn coral, and staghorn coral. It is a fast-growing coral with low resilience to environmental stress.

3. *Alveopora* sp.

Common Name	: Daisy coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Members of this genus belong to the family Acroporidae. They are often found on reef slopes in turbid waters. The polyps are always extended and tightly compacted. The colonies are either encrusting or columnar.



4. *Astrea* sp.

Common Name	: Bolder coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This genus is a taxonomically complex group of species. Previously, it was recorded as *Montastraea* sp. Currently, some species of *Montastraea* sp. have been reclassified as *Astrea* sp., *Paramontastraea* sp., and *Orbicella* sp. However, *Astrea* sp. and *Paramontastraea* sp. are the most common genera found in Indonesian reefs. The abundance of this genus is notable in reef flat areas, forming massive or submassive colonies. This coral is characterized by well-developed paliform lobes.

5. *Astreopora* sp.

Common Name	: Starflower coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



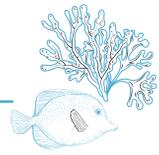
Members of this genus generally have a rounded head (dome) shape, sometimes encrusting or in the form of plates and branches. This coral occurs in the Red Sea, Indian Ocean, and Western Pacific. It is widely distributed in Indonesian reefs and commonly found in shallow coastal waters.

6. *Caulastraea* sp.

Common Name	: Candy cane coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies of this coral are usually found in shallow coastal waters. This genus belongs to the Merulinidae family. The habitat of *Caulastraea* sp. is in protected reef slopes with dominant sandy substrates. This coral forms colonies composed of trumpet-shaped polyps. Generally, it forms extensive single-species stands, often over 5 meters across.



7. *Coscinaraea* sp.

Common Name	: Wrinkle coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies are generally encrusting to submassive. The corallites are large and compact. This coral has both long and short septo-costae. The color of this coral is mostly pale brown. The members of this genus belong to the *Coscinaraeidae* family. Its habitat is in shallow reef environments.

8. *Cyphastrea* sp.

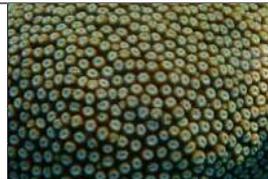
Common Name	: Lime green coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



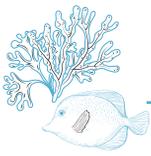
The members of this coral belong to the *Merulinidae* family. The colonies form a massive structure. This coral is commonly found in most reef environments in Indonesia.

9. *Diploastrea* sp.

Common Name	: Double-star coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies are massive and dome-shaped, reaching up to 2 meters in height and 5 meters across. The skeleton of this coral is dense. The septa are equal and thick. The tentacles extend only at night. It is commonly found in both exposed and protected reef environments. The colors are usually cream, gray, or sometimes greenish.



10. *Dipsastrea* sp.

Common Name	: Brain coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The members of *Dipsastrea* sp. (previously referred to as *Favia* sp.) are native to the Indo-Pacific region. This coral is a colonial stony coral in the Merulinidae family. It is found in shallow tropical reef habitats, with depths ranging from 0 to 40 m. It is also known as moon corals or brain corals.

11. *Duncanopsammia* sp.

Common Name	: -
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



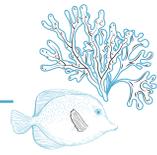
Members of the Dendrophylliidae family are found in inshore reefs at depths of 5 to 20 meters in murky water. This coral is popular in the international aquarium industry and inhabits shallow coastal waters near river outlets. These corals are characterized by large polyps.

12. *Echinophyllia* sp.

Common Name	: Chalice coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Echinophyllia sp. is an encrusting laminar (foliose) coral belonging to the Lobophyllidae family. The members of this genus are found in most reef environments, especially in the lower reef slopes. The colors of these corals are brown, green, and red. This coral resembles the *Echinopora* sp. coral. In *Echinopora* sp., the polyps are small (1/8-inch diameter), while the *Echinophyllia* sp. polyps, by comparison, are usually much larger.



13. *Echinopora* sp.

Common Name	: Calices coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This genus is a stony coral in the family Merulinidae. The colonies of this coral form a thin laminar shape (columnar/foliose). It is predominantly found in shallow reef habitats with flat substrates. The variety of colors ranges from pale to dark brown or greenish.

14. *Favites* sp.

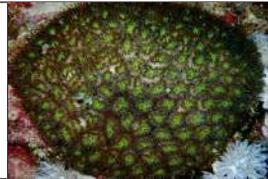
Common Name	: Pineapple coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



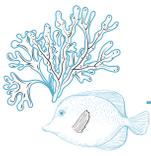
These corals are large polyp stony corals in the Merulinidae family, also known as pineapple corals. The colors of this genus are mostly dark or pale brown or green. They are highly tolerant of turbid waters and are widely distributed in Indonesia's reef environments.

15. *Galaxea* sp.

Common Name	: Galaxy coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The members of *Galaxea* sp. are abundant on reefs in the Indo-Pacific region. They belong to the Euphylliidae family. The colonies are submassive, columnar, or encrusting. The colors are usually gray, pink, green, or brown. They prefer environments in protected reef areas with low wave energy.



16. *Gardineroseris* sp.

Common Name	: Honeycomb coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies of these members are massive (reaching up to 1 m across) to encrusting, sometimes with laminar margins. They are commonly found in Indonesia, across shallow reef slopes.

17. *Goniastrea* sp.

Common Name	: Wreath coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



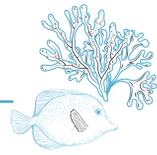
The colonies of these corals are mostly massive and are usually found in shallow coastal areas. The colors of *Goniastrea* sp. are dull green or brown. *Goniastrea* sp. morphologically resembles *Dipsastrea* sp., but has a slightly different shape.

18. *Goniopora* sp.

Common Name	: Flowerpot coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This genus is often called flowerpot coral and belongs to the Poritidae family. This coral has 24 tentacles on each polyp. The colonies consist of small branching clumps. It is commonly found in shallow, turbid water reef environments.



19. *Hydnophora* sp.

Common Name	: Horn coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



A delicate branched colony of corals, with some species having a submassive or encrusting form. It is commonly found in shallow reef environments. The tentacles of this coral are often extended both day and night. The species of this coral belong to the Merulinidae family. It has a cream or dull green color.

20. *Junceella* sp.

Common Name	: Sea whip coral
Local Name	: -
IUCN	: Not Listed
CITES	: App. II
INA Reg. (P106)	: Not Protected



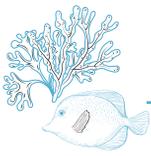
This coral has a cylindrical stem and an unbranched form. It belongs to the Ellisellidae family. The members of this genus are soft corals. This coral is widely distributed in Indonesian reef environments.

21. *Leptastrea* sp.

Common Name	: Crust coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Leptastrea sp. is a genus of reef-building stony corals widely distributed in the Indo-Pacific. These coral colonies are massive. Previously, *Leptastrea* sp. was assigned to the Faviidae family. Currently, this genus belongs to the Leptastreidae family.



22. *Leptoria* sp.

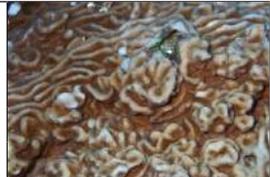
Common Name	: Close brain coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The members of this coral have a submassive or laminar growth form with an even surface and dense skeleton. The septa of some species are irregular, while in others, they are uniformly spaced and of equal size. The corallite valleys are uniform. This coral is found in the upper reef slopes and is widely distributed in Indonesia.

23. *Leptoseria* sp.

Common Name	: Wrinkle coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



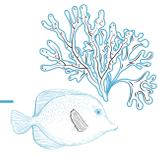
The members of this coral are also called "wrinkle corals" or "porcelain corals" and belong to the Agariciidae family. These corals mainly grow by encrusting. The color is commonly pale brown or yellow brown, often with white margins.

24. *Lobophyllia* sp.

Common Name	: Lobed brain coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Lobophyllia sp. is a genus of large-polyp corals belonging to the Lobophyllidae family. The colors range from greenish-brown, grey, to mustard. The colonies are flat and massive. This coral commonly inhabits the upper reef slopes.



25. *Millepora* sp.

Common Name	: Fire coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Millepora sp. is not a true coral; it belongs to a different taxonomic class, distinguishing it from stony hard corals and soft corals. It has defensive and highly toxic polyps that extend from its skeleton, earning it the name "fire coral." This coral is commonly found in shallow tropical seas. Its colonies can take on encrusting, branching, or sometimes submassive forms.

26. *Montipora* sp.

Common Name	: Rice coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



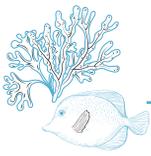
Montipora sp. corals have the smallest polyps among corals. The colonies are massive or form thick plates, which may develop into tiered structures in larger colonies. They are commonly found in shallow reef environments across Indonesia.

27. *Mycedium* sp.

Common Name	: Lettuce coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies of *Mycedium* sp. are laminar (foliose) or encrusting. The corallites are nose-shaped and face outward, with diameters of up to 15 mm. The colonies often have differently colored margins, typically in shades of brown, grey, green, or pink. This genus belongs to the Merulinidae family and is commonly found in reef environments protected from strong waves.



28. *Oulophyllia* sp.

Common Name	: Intermediate valley coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies of this coral are submassive to massive, often exceeding 1 meter in width. The septa are typically thin and slope uniformly toward the columellae, although the columellae are weakly developed. The coloration of this coral is predominantly grey with brown walls and pale cream highlights. Members of this genus belong to the Merulinidae family and are distributed throughout the Indo-Pacific, commonly found in lagoon reef environments.

29. *Pachyseris* sp.

Common Name	: Ringed plate coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



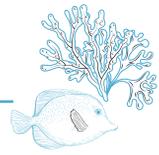
Members of *Pachyseris* sp. corals are also known as "ringed plate coral" or "elephant skin coral." These corals are small polyp stony corals belonging to the Pachyseridae family. *Pachyseris* sp. thrives in environments with strong water flow and is commonly found in shallow coastal waters with high sunlight intensity.

30. *Pavona* sp.

Common Name	: Cactus coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



These corals are found in shallow reef waters and are widely distributed in tropical countries across the Indo-Pacific region. Most colonies are yellow, often with shades of green or brown. The colonies can be encrusting, massive, or foliose. Members of these corals belong to the Agariciidae family.



31. *Physogyra* sp.

Common Name	: Pearl bubble coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



These corals are found in shallow reef waters and belong to the Plerogyridae family. The colonies are generally massive. During the day, the entire colony surface is covered with grape-shaped organs (vesicles), which retract when disturbed.

32. *Platygyra* sp.

Common Name	: Closed polyp brain coral
Local Name	: <i>Karang otak</i>
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



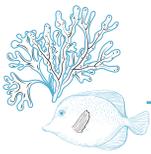
This genus is a large polyp stony coral commonly referred to as Brain Corals. It is usually found in the back reef area. The colonies are massive and often have bright colors such as brown, grey, or green.

33. *Pleuractis* sp.

Common Name	: Mushroom coral
Local Name	: <i>Karang piring cembung</i>
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected

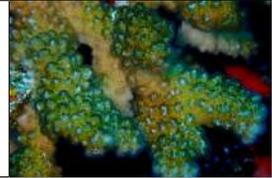


This hard coral is also known as “plate coral” or “mushroom coral.” It is a solitary coral species that belongs to the Fungiidae family and is commonly found growing in shallow coastal waters.



34. *Pocillopora* sp.

Common Name	: Brush coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies are clump-branching, reaching up to several meters across. These corals form compact and sturdy branches in exposed habitats with strong waves, while they develop thin branches in protected habitats. They occur in all shallow water habitats.

35. *Polyphyllia* sp.

Common Name	: Feather coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



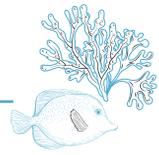
This solitary or free-living coral belongs to the Fungiidae family. The colonies occasionally form Y, T, or X shapes. The tentacles are usually extended during the day. The color variation ranges from grey, greenish, and cream, with white tentacle tips. It is commonly found on reef slopes.

36. *Porites* sp.

Common Name	: Hump coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



The colonies are massive and submassive, growing up to 4 meters across. The colors are cream, yellow, and bright hues in shallow water. This coral belongs to the Poritidae family. It is commonly found in Indonesian reef habitats.



37. *Psammocora* sp.

Common Name	: Cat's paw coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This coral colony exhibits various growth forms, including flattened branches, encrusting, massive, and submassive. The corallite structures are fine and shallow, giving the surface a smooth appearance. Its colors vary from pale dark gray to dark brown. It is commonly found in shallow reef environments with soft substrates.

38. *Sandalolitha* sp.

Common Name	: Plate coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



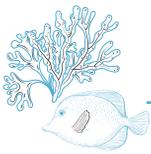
Members of this coral genus are large, free-living, and dome-shaped with a heavily constructed structure. The corallites are compact, and the tentacles extend only at night. *Sandalolitha* sp. is common in most reef habitats in Indonesia. Its colors are usually pale or dark brown, sometimes green with purple margins.

39. *Sarcophyton* sp.

Common Name	: Toadstool mushroom coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Sarcophyton sp. is a genus of soft corals belonging to the family Sarcophytidae. It is a common coral found in Indonesian waters. Its colors range from bright brown to pale yellow.



40. *Sinularia* sp.

Common Name	: Leather coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



This coral belongs to the soft coral genus *Sinularia*, which is part of the family Sinulariidae. *Sinularia* sp. includes a variety of species; some form large branching stalks, while others take on cabbage-like shapes. It is commonly found in tropical reef environments.

41. *Tubipora* sp.

Common Name	: Organ pipe coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



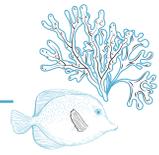
This coral belongs to the Tubiporidae family, a group of soft corals. It is not a true coral, but it produces aragonite, which functions similarly to a hard coral skeleton for reef-building. It has long, parallel, upright polyps.

42. *Turbinaria* sp.

Common Name	: Ruffled ridge coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not protected



Members of *Turbinaria* sp. belong to the Dendrophyllidae family. These corals are widely distributed in Indonesia and are found in large colonies in shallow waters. This genus is also tolerant of turbid water.

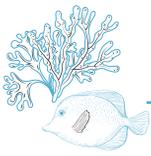


43. *Zoanthus* sp.

Common Name	: Button coral
Local Name	: -
IUCN	: -
CITES	: App. II
INA Reg. (P106)	: Not Protected



Zoanthus sp. is not a true coral; it belongs to a different order than hard and soft corals. However, it is still part of the same phylum as corals (Cnidaria). Colonies of *Zoanthus* sp. commonly occur on intertidal rocks along the coast and are usually found in shallow reef zones of tropical regions.



6.2 Marine Fish

1. *Ablennes hians*

Common Name	: Flat needlefish	
Local Name	: <i>Sleding</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The distribution of this fish is from the tropical and warm temperate waters to the Atlantic. Inhabits oceanic waters but is often found near islands. This species is also found in low-salinity water (estuaries) and coastal rivers. Occurs in large schools. This fish mainly feeds on small fishes. The colours are dark bluish and silvery-white.

2. *Abudefduf bengalensis*

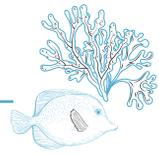
Common Name	: Bengal sergeant	
Local Name	: <i>Giru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The distribution of this fish is in the Western Pacific. Commonly found in the coral reef habitats in shallow water. This fish feeds on algae, gastropods, and small crabs. This fish belongs to the Pomacentridae family, also referred to Bengal sergeant fish.

3. *Abudefduf sexfasciatus*

Common Name	: Scissortail sergeant	
Local Name	: <i>Giru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Pomacentridae family, widely distributed in the Indo-Pacific. The adult fish usually inhabit the inshore and offshore coral or rocky reefs. Sometimes, it is found in shallow coastal reef flats or crests. This fish feeds on zooplankton and algae.



4. *Abudefduf sordidus*

Common Name	: Blackspot sergeant	
Local Name	: <i>Giru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The *Abudefduf sordidus* found in warm tropical waters, prevalent throughout the Indo-Pacific region, including the Red Sea, East Africa, the Indian Ocean islands, and the Pacific Ocean. They prefer shallow reef environments with abundant hiding places among corals and rocky outcrops. Its body is oval-shaped and compressed laterally, adorned with bold vertical stripes that alternate between dark and light shades.

5. *Abudefduf vaigiensis*

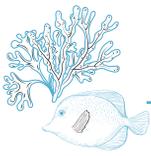
Common Name	: Indo-Pacific sergeant	
Local Name	: <i>Giru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is commonly known as the Indo-Pacific sergeant, belongs to the Pomacentridae family. This species can be found residing in shallow coral reefs and lagoons, seeking refuge among coral heads and rocks. It favors locations with plenty of hiding spots and structures to seek safety in case of danger. The body is typically yellow to brownish yellow with five vertical black bars or lines.

6. *Acanthocybium solandri*

Common Name	: Wahoo	
Local Name	: <i>Tenggiri laki</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The *Acanthocybium solandri*, also referred to wahoo, is a streamlined and formidable pelagic species inhabiting tropical and subtropical oceans. They prefer warm, clear waters and are commonly associated with oceanic islands and coral reefs. Wahoo can grow to impressive lengths, often reaching up to 2.5 meters in exceptional cases, with an average weight ranging from 15 to 30 kilograms. This fish is predators, primarily feeding on smaller fish such as mackerel, squid, and occasionally crustaceans.



7. *Acanthopagrus latus*

Common Name	: Yellowfin seabream
Local Name	: <i>Tera Tuta</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Acanthopagrus latus, commonly referred to Yellowfin seabream, is a species of fish that belongs to the Sparidae family. This fish species can be found in the estuaries and shallow coastal reefs. These fish typically have a silvery body with fins that have a yellowish hue, hence their name. They are known to consume crustaceans, mollusks, and small fish.

8. *Acanthopagrus schlegelii*

Common Name	: Blackhead seabream
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



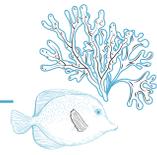
Acanthopagrus schlegelii, also referred to as the blackhead seabream, is a fish species in the Sparidae family. Typically has a streamlined body with a slightly compressed shape. It is characterized by a distinctive black spot or mark on its head. The adults of this species can reach lengths of up to about 40 centimeters, although sizes can vary depending on habitat and environmental conditions. These fish are found in coastal waters and estuaries of the Indo-West Pacific region. They prefer shallow waters and are often associated with rocky or sandy bottoms.

9. *Acanthurus auranticavus*

Common Name	: Orange-socket surgeonfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Commonly known as the orange-socket surgeonfish, is a species of surgeonfish belonging to the family Acanthuridae. This species is known for its oval-shaped body and unique coloration. Its body exhibits a vibrant orange yellow with blue patterns on the face and around the eyes.

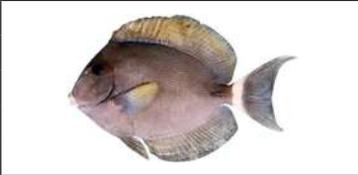


10. *Acanthurus blochii*

Common Name	: Ringtail surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

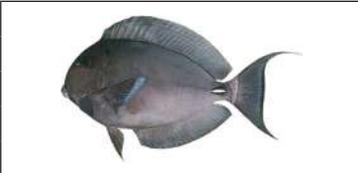
This species is widespread throughout the tropical and subtropical waters of the Indo-Pacific region. Adult *Acanthurus blochii* can grow up to about 30 centimeters in length, though they are typically smaller in the wild. Inhabits coral reefs and rocky areas with corals, often found in shallow coastal waters and lagoons. They prefer areas with clear water and moderate currents. This fish is herbivorous, primarily feeding on algae and detritus found on coral reefs.

11. *Acanthurus grammoptilus*

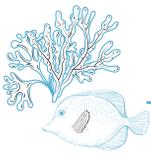
Common Name	: Finelined surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Acanthurus grammoptilus, belongs to Acanthuridae family, is widely distributed across the tropical and subtropical waters of the Indo-Pacific region. Adults of this species typically reach lengths of up to 35 centimeters, although they are often observed smaller in their natural habitat. They are commonly found inhabiting coral reefs and areas with rocky substrates. This surgeonfish is herbivorous, predominantly feeding on algae and detritus that accumulate on coral reefs.

12. *Acanthurus leucocheilus*

Common Name	: Palelipped surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Achanturidae family. This fish is commonly found inhabiting coral reefs and rocky areas with corals, often frequenting shallow coastal waters and lagoons. *Acanthurus leucocheilus* prefers habitats characterized by clear water and moderate currents. This species is herbivorous, primarily feeding on algae and detritus.



13. *Acanthurus mata*

Common Name	: Elongate surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Acanthuridae family. They exhibit a distinct color pattern, often featuring a yellowish body with a brown colour with longitudinal blue lines on head and body, also a yellow area behind the eye. The adults fish inhabit steep slopes in the vicinity of coral reefs. This fish often found in turbid water. Like many other surgeonfish, this species is herbivore.

14. *Acanthurus nigricans*

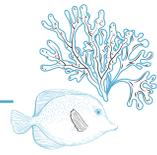
Common Name	: Whitecheek surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Acanthurus nigricans, commonly known as the Whitecheek surgeonfish, inhabits various hard substrate areas within clear lagoons and seaward reefs. They are found at depths ranging from the lower surge zone. This fish is herbivorous, primarily feeding on filamentous algae. These surgeonfish can be solitary or found in groups, displaying monogamous behavior, and are often observed seeking refuge among large corals.

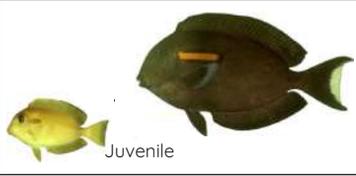
15. *Acanthurus nigrofuscus*

Common Name	: Brown surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is commonly known as the Brown surgeonfish, belongs to the Acanthuridae family. Typically found in the tropical waters of the Indo-Pacific region. *Acanthurus nigrofuscus* is characterized by its sleek, elongated body typical of surgeonfish, with a dark brown to blackish coloration. Mainly feed on algae.

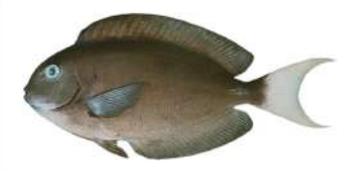


16. *Acanthurus olivaceus*

Common Name	: Orangespot surgeonfish	 <p>Juvenile</p>
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Commonly known as the orange spot surgeonfish, it belongs to the Acanthuridae family. The physical appearance of this fish during the juvenile phase is yellow body color, while in the adult phase, it varies from brownish green to olive green with a hint of yellow on the sides. This fish is an herbivore, typically observed in small groups or singly, foraging during the day.

17. *Acanthurus thompsoni*

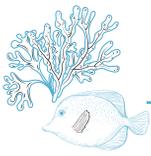
Common Name	: Thompson's surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Acanthuridae family. The body colour is uniformly brown to dark brown. This species occasionally occurs in the reef slopes. This species is mainly feeds on zooplankton. The maximum length of this fish is up to 27 cm.

18. *Acanthurus triostegus*

Common Name	: Convict surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Acanthuridae family. It has a white body colour with vertical narrow black lines. The adult fish are found in the hard substrates of coral reefs, while the juveniles commonly occur in tide pools. This fish is herbivore, primarily feeds on algae. Occasionally found in large schools. The maximum length of this fish is up to 27 cm.



19. *Aethaloperca rogaa*

Common Name	: Redmouth grouper
Local Name	: <i>Katoko</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Commonly known as “Redmouth grouper”, belongs to Epinephelidae family. The adults of this species are commonly found in coastal reefs and lagoons, often in silty habitats near caves and reef crevices. This fish is carnivore, they primarily feed on small fish. The body color ranges from dark brown to black, sometimes with an orange tint, and often has a light vertical bar on the side of the abdomen.

20. *Alepes djedaba*

Common Name	: Shrimp scad
Local Name	: <i>Baga</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



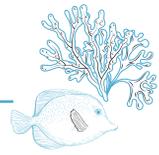
This species belongs to Carangidae family. The adult of this fish often congregates in large schools near coastal reefs, exhibiting a diet composed mainly of shrimps, copepods, decapod larvae, other crustacean larvae, and small fish. It can reach a maximum length of 40.0 cm, with a common length typically around 25.0 cm. Its range covers the Indo-Pacific region, spanning from the Red Sea and East Africa to the Hawaiian Islands in the Pacific Ocean.

21. *Alepes kleinii*

Common Name	: Razorbelly scad
Local Name	: –
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Alepes kleinii is a reef-associated marine scad found throughout the Indo-West Pacific region. The adults of this species are commonly observed inshore and in coastal waters across its range, where they primarily feed on planktonic crustaceans and larval fishes. The common length of this fish is 14 cm, with maximum length up to 18 cm. The scad displays a greyish green to bluish-grey colour, turning silvery below, and is distinguished by a large black spot located on the upper part of its gill cover. This fish belongs to Carangidae family.



22. *Alopias pelagicus*

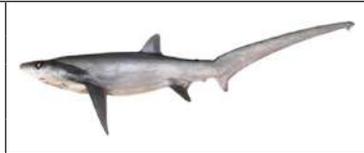
Common Name	: Pelagic thresher shark
Local Name	: <i>Hiu tikus pelagis</i>
IUCN	: Endangered
CITES	: App. II
INA Reg. (P106)	: Not Protected



Species of shark belongs to Alopiidae family. Inhabits in the open ocean but sometimes comes closer to the shore. It's found in both shallow and deeper waters, from near the surface down to about 152 meters deep. It usually stays near the surface but often go deeper in warmer tropical waters and even enter lagoons surrounded by coral reefs. It catches its prey by stunning them with its tail. This species is typically feeding on small fish and squid. When it reproduces, the embryos rely on a yolk sac and other nutrients provided by the mother's eggs.

23. *Alopias superciliosus*

Common Name	: Bigeye thresher shark
Local Name	: <i>Hiu perontok mata besar</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



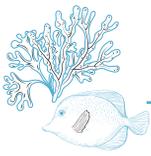
Alopias superciliosus, belonging to the family Alopiidae, can reach a maximum length of 488 cm. It inhabits coastal waters over continental shelves, nearshore in shallow waters, as well as far offshore in the open ocean. This species is oceanic and pelagic, and it can be observed near the sea bottom at depths ranging from 1 to over 500 meters. It has been recorded at depths of at least 500 meters. *Alopias superciliosus* primarily feeds on pelagic fishes.

24. *Alopias vulpinus*

Common Name	: Thresher
Local Name	: <i>Hiu rubah laut</i>
IUCN	: Vulnerable
CITES	: App. II
INA Reg. (P106)	: Not Protected



Alopias vulpinus, commonly known as the thresher shark, is easily identifiable by its elongated upper caudal fin, which it uses to immobilize prey, usually smaller schooling fish. These sharks are known for their speed and agility, often breaching the water's surface. This shark is a pelagic species found in both coastal and oceanic waters. The adults typically inhabit the continental shelf, while juveniles reside in coastal bays. Mostly seen on the surface but can live at depths of up to 1,800 feet (550 m).



25. *Amblygaster leiogaster*

Common Name	: Smoothbelly sardinella
Local Name	: <i>Sembulak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The smoothbelly sardinella (*Amblygaster leiogaster*), also called the blue sardine is a marine fish in the herring family Clupeidae. It lives in reef-associated waters and is found from the Indo-West Pacific to southwestern Australia. This can grow up to 23 cm long. The belly is rounded with less noticeable scutes. The smoothbelly sardinella feeds mainly on zooplankton.

26. *Amblygaster sirm*

Common Name	: Spotted sardinella
Local Name	: <i>Sembulak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



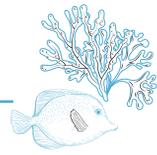
Amblygaster sirm is a pelagic, schooling fish found in coastal waters and lagoons at depths of 1-75 meters. Primarily feeds on copepods, larvae, and phytoplankton. Commonly used as bait in tuna fisheries, this marine and brackish species is associated with reefs. It can grow up to 27 cm and can live up to 8 years.

27. *Ammodytes hexapterus*

Common Name	: Pacific sand lance
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Pacific sand lance (*Ammodytes hexapterus*) belongs to the family Ammodytidae. This species forms large schools near the surface, both inshore and offshore, and can also bury itself in sand. This species feeds on zooplankton. This fish is marine and brackish, benthopelagic, and oceanodromous species. It can grow to maximum length of 30 cm, with a common length of 17 cm.



28. *Amphiprion clarkii*

Common Name	: Yellowtail clownfish	
Local Name	: <i>Ikan badut</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The yellowtail clownfish (*Amphiprion clarkii*) inhabits lagoons and outer reef slopes. This omnivorous species is oviparous, with males guarding and aerating the elliptical, demersal eggs that adhere to the substrate. They are monogamous and form distinct pairs during breeding. Yellowtail clownfish are associated with various anemones.

29. *Amphiprion polymnus*

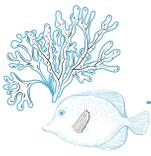
Common Name	: Saddleback clownfish	
Local Name	: <i>Ikan badut</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Amphiprion polymnus, commonly known as the saddleback clownfish, belongs to Pomacentridae family. The adults are typically found in silty lagoons. This species is monogamous and exhibits protandrous hermaphroditism, meaning individuals first mature as males and can later become females. This fish forms a symbiotic relationship with sea anemones, specifically *Heteractis crispa* and *Stichodactyla haddoni*, offering protection and benefiting from the anemones' stinging tentacles.

30. *Andamia tetradactylus*

Common Name	: Four-fingered lipsucker	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Andamia tetradactylus, belonging to the family Blenniidae, is a tropical marine fish found in demersal zones. It resides on rocks in the surf line, constantly washed by sprays or breakers. This species can reach up to 12 cm in total length. This species exhibits facultative air-breathing capabilities, the ability to adapt to both aquatic and aerial respiration.



31. *Antigonia rubicunda*

Common Name	: Rosy deepsea boarfish	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Antigonia rubicunda, a member of the family Antigonidae, is found in the Western Pacific, specifically in regions such as the Okinawa Trough, Indonesia, tropical Australia, and New Zealand. This species inhabits the continental shelf and continental slope. It reaches a maximum length of approximately 10.6 cm.

32. *Aphareus rutilans*

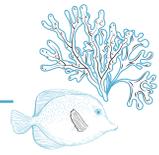
Common Name	: Rusty jobfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Aphareus rutilans, commonly known as the Rusty jobfish. It has a slender, flat body shape with a prominent lower jaw. The front part of its mouth is fixed in place by a membrane, and its teeth are very tiny, particularly in older adults. These fish inhabit reefs and rocky bottoms, ranging to depths of at least 100 meters. They are found in both pelagic and benthopelagic waters, where they primarily prey on fishes, squids, and crustaceans.

33. *Apolemichthys trimaculatus*

Common Name	: Threespot angelfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A reef-associated marine fish of the Pomacanthidae family. This fish is non-migratory. It resides in both lagoon and seaward reefs, favoring areas near coral, and feeds primarily on sponges and tunicates. Juveniles are secretive and typically found below 25 meters, while adults form small, loosely organized groups at moderate depths. This fish can grow up to 26 cm.



34. *Aprion virescens*

Common Name	: Green jobfish	
Local Name	: <i>Katamba guntur</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Commonly known as the Green jobfish, belongs to the Lutjanidae family. It can reach up to 112 cm in length, with a typical size around 90 cm. This species is known for its long and sturdy body, featuring a noticeable horizontal groove beneath its nostrils. Its jaws have rows of teeth, with strong canines at the front. The adults fish are found in deep lagoons, channels, and seaward reefs. They are often solitary but can also be seen in groups. Their diet consists mainly of fishes, along with shrimps, crabs, cephalopods, and planktonic organisms.

35. *Argyrops spinifer*

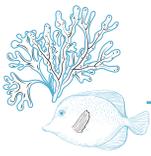
Common Name	: King soldierbream	
Local Name	: <i>Keburi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Marine fish that commonly known as the King soldierbream, belongs to the Sparidae family. This species is characterized by its deep body, which becomes more compressed and less deep as it grows. This species is found on various types of seabeds. The young fish typically inhabit the very shallow waters of sheltered bays, while larger individuals are found in deeper waters. They primarily feed on benthic invertebrates, mainly mollusks.

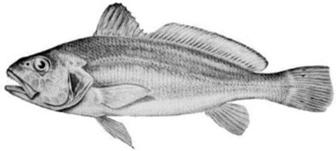
36. *Arothron stellatus*

Common Name	: Stellate puffer	
Local Name	: <i>Buntal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Arothron stellatus, belonging to the Tetraodontidae family, is a marine and brackish water species associated with reefs. It can reach a maximum length of 120 cm, with a common length of about 54.0 cm. The juveniles are typically found in sandy inner reefs, while adults prefer clear lagoons and seaward reefs. *Arothron stellatus* is considered the giant among puffers, reaching lengths well over a meter.



37. *Aspericorvina jubata*

Common Name	: Prickly croaker	
Local Name	: <i>Gelama</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a member of the Sciaenidae family, inhabits both marine and freshwater environments in tropical regions. The distribution of this fish is in Indo-Pacific. It is found in shallow coastal waters, estuaries, and rivers. The maximum length is 16 cm. The common length for this species is approximately 12.5 cm.

38. *Assessor flavissimus*

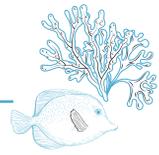
Common Name	: Yellow devilfish	
Local Name	: <i>Giru kuning</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Assessor flavissimus, commonly known as the yellow devilfish, belongs to the Plesiopidae family. This marine, reef-associated species is typically found near reefs. It reaches a maximum length of 6.0 cm. The Yellow devilfish is characterized by its bright yellow body, a reddish-orange stripe extending from the eye to the upper edge of the gill cover, and a submarginal reddish-orange band on the dorsal and anal fins.

39. *Assessor macneilli*

Common Name	: Blue devilfish	
Local Name	: <i>Giru biru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Commonly known as the blue devilfish, is a member of the Plesiopidae family. This species is closely associated with reefs, typically inhabiting lagoon and seaward reefs at depths between 2 and 20 meters. The adults are often found aggregating in caves. A unique aspect of the Blue Devilfish's reproductive behavior is that males incubate the egg mass in their mouths, providing protection and ensuring the development of the eggs until they hatch.



40. *Astronesthes indicus*

Common Name	: Black snaggletooth	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A member of the Stomiidae family. This species is a striking deep-sea fish, reaching up to 21 cm in length. Known for its black body, it features large bioluminescent patches on its operculum, interoperculum, and lower jaw. These patches help it communicate, camouflage, and attract prey in its dark habitat below 500 meters. As a skilled predator, it feeds on midwater fish and crustaceans using its sharp teeth and glowing lure.

41. *Atherion elymus*

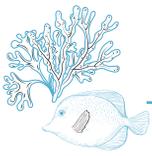
Common Name	: Bearded silverside	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish also preferred to as the Bearded silverside, belongs to the Atherionidae family. Primarily distributed in the Western Pacific. This small fish reaches a maximum length of 6.4 cm. It has a characteristic of a mouth that is barely protractile with thin lips. This species is notable for their tendency to form loose aggregations in environments such as tide pools, rocky shorelines, and reef margins.

42. *Atule mate*

Common Name	: Yellowtail scad	
Local Name	: <i>Baga</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Atule mate is known as the yellowtail scad, this fish is found in marine, brackish, and reef-associated habitats. It can reach a maximum length of 30 cm. The adults, of this species are commonly found inhabiting mangroves and coastal bays, where they navigate pelagic waters. They exhibit social behavior, forming schools that extend up to depths of about 50 meters in nearshore waters or can be found solitary.



43. *Aurigequula fasciata*

Common Name	: Striped ponyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Aurigequula fasciata is a notable species found predominantly in coastal waters of the Indo-West Pacific region. It belongs to Leiognathidae family. This fish can reach a maximum length of 21 cm. Notable for its adaptability, it can thrive in semi-enclosed seas and estuaries due to its euryhaline nature. Often forms schools in nearshore waters and feeds on polychaetes, small crustaceans, and small fish.

44. *Auxis rochei*

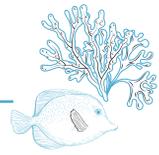
Common Name	: Bullet tuna	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This mackerel fish is highly migratory species with Atlantic, Indian, and Pacific (Western) distribution. Belongs to Scombridae family. The adults are principally caught in coastal waters and around islands and form schooling. Feed on small fishes, particularly anchovies, crustaceans (especially crab and stomatopod larvae) and squids. The abundance of this species is high, therefore it considered as an important element of the food web, particularly as forage for other species of commercial interest.

45. *Auxis thazard*

Common Name	: Frigate tuna	
Local Name	: <i>Tongkol</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Auxis thazard, known as the frigate tuna, is a robust and streamlined fish from the Scombridae family. This fish can reach a maximum length of 65 cm. It has small, conical teeth arranged in a single series. Inhabits epipelagic zones of neritic and oceanic waters. This species feeds on small fish, squids, and planktonic crustaceans, such as megalops and stomatopod larvae.



46. *Balistapus undulatus*

Common Name	: Orange-lined triggerfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish also referred as as the orange-lined triggerfish, belongs to the Balistidae family. This species can grow up to of 30 cm length. This reef-associated species is typically found in coral-rich areas of deep lagoons and seaward reefs, from the lower surge zone to depths of at least 50 meters. The adults are territorial and feed on a diverse array of benthic organisms, including algae, echinoderms, fishes, mollusks, tunicates, sponges, and hydrozoans.

47. *Balistoides conspicillum*

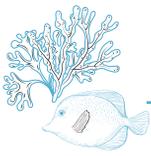
Common Name	: Clown triggerfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Balistidae family, reaches a maximum length of 50 cm. It has a unique color pattern with large white spots on its belly, black spots on a yellow background on its back, and a yellow snout with a white or yellowish band across the snout in front of the eye. Inhabiting clear coastal to outer reef environments, it is typically found on seaward reefs adjacent to steep drop-offs. This solitary species primarily feeds on sea urchins, crabs and other crustaceans, mollusks, and tunicates.

48. *Balistoides viridescens*

Common Name	: Titan triggerfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The largest triggerfish species, belongs to the Balistidae family. It can reach a maximum length of 75 cm. This marine, reef-associated fish is found in lagoons and reefs. The juveniles are often associated with isolated patches of branching coral or rubble in shallow, sandy protected areas, while adults occur singly or in pairs on the slopes of deep lagoons or seaward reefs. This fish primarily feeds on sea urchins, coral, crabs, other crustaceans, mollusks, and tube worms. A notable feature of this species is the deep groove before its eye.



49. *Bathygobius fuscus*

Common Name	: Dusky frillgoby
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to the Gobiidae family and reaches a maximum length of 12 cm. It is distinguished by its pale yellowish-brown coloration with large, irregular dark brown blotches on its body. Primarily inhabiting shallow rocky areas, it is commonly found in coastal regions. It also occurs in estuaries, tidal zones, and occasionally ventures into freshwater streams. Its diet includes crustaceans, fish, and algae.

50. *Benthoosema fibulatum*

Common Name	: Spinycheek lanternfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



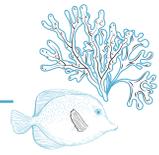
This fish is bathypelagic, meaning it lives in deep ocean waters. It belongs to the Myctophidae family and can grow up to 10 cm long. It is found in the upper 200 meters of the ocean during the night. In nearshore areas, it lives at depths ranging from 0 to 856 meters. It can sometimes be seen during dark nights on slopes near very deep water.

51. *Benthoosema pterotum*

Common Name	: Skinnycheek lanternfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Myctophidae family and is found in the Indo-West Pacific region. It is a marine, benthopelagic species that lives at depths ranging from 10 to 300 meters. Growing up to 7 cm in length, it primarily feeds at night, consuming mainly copepods and various crustacean larvae.



52. *Bodianus dictynna*

Common Name	: Redfin hogfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Labridae family and is always associated with living coral reefs. The juveniles are often found near black coral and gorgonians. They primarily feed on benthic invertebrates, such as mollusks and crustaceans. Additionally, juveniles play an important role by removing parasites from other fish. This species can reach a maximum length of 14.4 cm.

53. *Bodianus mesothorax*

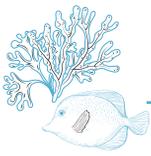
Common Name	: Splitlevel hogfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Labridae family and is reef-associated. Adults inhabit coral-rich outer reef slopes at depths ranging from 5 to over 20 meters, often near caves. Juveniles are typically found within caves, while adults swim openly but usually stay close to the substrate. The species can reach a maximum length of 25 cm. Juveniles are distinguished by their yellow spots, while adults feature well-defined black bands separating the light and dark portions of their bodies.

54. *Bodianus tanyokidus*

Common Name	: -	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a member of the Labridae family and is typically found in marine, reef-associated environments. It can grow up to a maximum length of 17.7 cm. The fish has a slender body that is predominantly banana yellow, complemented by a subtle pink mask on its face.



55. *Bolbometopon muricatum*

Common Name	: Green humphead parrotfish
Local Name	: <i>Ikan kakatua hijau</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Scaridae family. Juveniles typically inhabit lagoons, while adults are found in clear outer lagoons and seaward reefs at depths of up to 30 meters. They are usually observed in small groups, feeding on benthic algae, live corals, and shellfish. The adults are characterized by a prominent bump on the forehead.

56. *Bolinichthys indicus*

Common Name	: Lanternfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



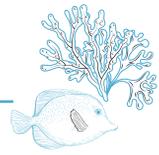
Belonging to the Myctophidae family, this species can reach a maximum length of 4.6 cm. These fish are primarily found in high-oceanic and mesopelagic zones, inhabiting depths of 500 to 900 meters during the day and moving to shallower waters of 25 to 300 meters at night. There is notable variation in size across different depths.

57. *Bothus pantherinus*

Common Name	: Leopard flounder
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine fish, a member of the Bothidae family, thrives in reef-associated environments throughout the Indo-Pacific region. It can grow up to 39 cm long and prefers habitats characterized by sandy or silty sand, as well as muddy bottoms on inner reef flats and seaward reefs. Juveniles are commonly found in tide pools. Their diet consists mainly of benthic animals. Their upper side has dark spots, blotches, and rings on both the body and median fins.



58. *Brachirus orientalis*

Common Name	: Oriental sole	
Local Name	: <i>Londesabae</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

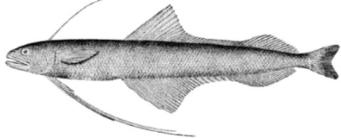
This species belongs to the Soleidae family. It thrives in marine, freshwater, and brackish habitats, reaching lengths up to 38 cm, with a common length around 12 cm. These fish prefer shallow sand and mud bottoms in coastal waters and sometimes venture into brackish environments. They primarily feed on bottom-dwelling invertebrates, especially small crustaceans. They are commonly found in the Indo-West Pacific region.

59. *Branchiostegus japonicus*

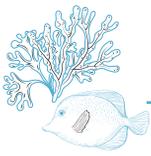
Common Name	: Horsehead tilefish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Latilidae family, known as a marine demersal species, predominantly found in the Western Pacific region. It typically reaches a maximum length of 46 cm, with a common length around 35 cm. These fish inhabit the sublittoral zone, where they prefer sandy mud bottoms.

60. *Bregmaceros arabicus*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a member of the Bregmacerotidae family, found in marine habitats, particularly in the pelagic-neritic regions. It inhabits temperate zones and reaches a maximum length of 5.0 cm. The species has been recorded from the Arabian Sea and the northern Indian Ocean. Nonetheless, additional research is needed to confirm its taxonomic status.



61. *Bregmaceros atlanticus*

Common Name	: Antenna codlet
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The antenna codlet, *Bregmaceros atlanticus*, belongs to the Bregmacerotidae family and is a marine, pelagic-oceanic, oceanodromous fish. It typically inhabits oceanic environments, where it can be found at great depths. This species has a medium-sized head, big eyes, and a rounded nose. This fish primarily feeds on zooplankton and phytoplankton, with a particular preference for crustaceans.

62. *Caesio caerulaurea*

Common Name	: Blue and gold fusilier
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



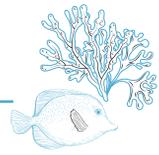
This species belongs to the Caesionidae family and is associated with marine reefs in the Indo-West Pacific. It can reach a maximum length of 45.4 cm. Adults typically form schools in deep lagoons and along seaward reefs in coastal areas, often mixing with other species of fusiliers. The body color of this fish is characterized by a bluish upper body and a lower body that ranges from white to pale bluish.

63. *Caesio cuning*

Common Name	: Redbelly yellowtail fusilier
Local Name	: Kareposo
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Caesionidae family and can reach a maximum length of 60 cm. It is often found in silty areas with low visibility at depths of 1–30 meters. Typically inhabiting coastal regions, it prefers rocky and coral reef environments. The fish forms schools in midwater and primarily feeds on zooplankton.



64. *Caesio teres*

Common Name	: Yellow and blueback fusilier	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine, reef-associated fish from the Caesionidae family is found in the Indo-West Pacific and can grow up to 40 cm in length. The adults fish are primarily found around coral reefs, especially in coralline lagoons. They feed on zooplankton in large midwater groups and often form schools with other caesionids. The fish has a blue body with a bright yellow caudal fin.

65. *Callionymus enneactis*

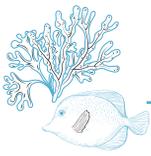
Common Name	: Mangrove dragonet	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a member of the Callionymidae family. It is typically found in marine and brackish waters, often associated with reefs. Its habitat ranges from sand and mud bottoms in brackish mangrove areas to depths of up to 15 meters in coral reef lagoons. This species is primarily distributed in the Western Pacific region.

66. *Calotomus carolinus*

Common Name	: Carolines parrotfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The fish belongs to the Scaridae family, commonly found in the Indo-Pacific and Eastern Pacific regions. It can reach a maximum length of 54.0 cm. This species inhabits subtidal reef flats, lagoons, and seaward reefs at depths of up to 27 meters. It thrives in coral, rubble, seagrass, and weedy areas. Its diet primarily consists of a variety of benthic encrusting algae, as well as seagrasses.



67. *Cantherhines fronticinctus*

Common Name	: Spectacled filefish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is a member of the Monacanthidae family. It is a marine, reef-associated species found at depths ranging from 1 to 43 meters in the Indo-West Pacific. The fish can reach a maximum length of 25 cm and is generally uncommon. It is typically found in seaward reefs and harbors, usually inhabiting rich coral environments with various mixed-invertebrate habitats. Its diet consists of benthic organisms.

68. *Caragobius urolepis*

Common Name	: Scaleless worm goby
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



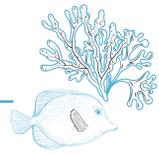
The fish belongs to the Gobiidae family and can be found in marine, freshwater, and brackish environments. It is a demersal and amphidromous species typically found in tropical regions of the Indo-West Pacific. The fish is distinguished by its greenish body and yellowish fins. Often occurring on mud bottoms in estuaries and the tidal parts of rivers and creeks. Its diet consists of small crustaceans and other benthic invertebrates.

69. *Carangoides armatus*

Common Name	: Longfin trevally
Local Name	: <i>Bengkolo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish, belonging to the Carangidae family, lives in marine and brackish waters and is often found around reefs. It thrives at depths ranging from 1 to 59 meters and can grow up to 58 cm long. As adults, they are typically seen in coastal waters near corals and rocks, as well as in shallow lagoons. The juveniles, however, sometimes venture into estuaries. This species tends to live alone on inshore reefs.



70. *Carangoides fulvoguttatus*

Common Name	: Yellowspotted trevally	
Local Name	: <i>Bengkolo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Carangidae family and is found in the marine and reef-associated environments of the Indo-West Pacific region. It can grow up to 120 cm in length. The adults prefer rocky and coral reef areas but are also found on offshore. They are often seen solitary or in small to large schools and primarily feed on small invertebrates and fish.

71. *Carangoides praeustus*

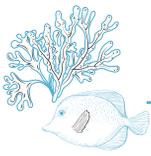
Common Name	: Brownback trevally	
Local Name	: <i>Raja Kabolah</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is part of the Carangidae family and inhabits marine environments. It is demersal, meaning it lives near the ocean floor, and is oceanodromous, meaning it migrates within the ocean. Found in the Indo-West Pacific region, this fish can grow up to 29 cm long. As adults, they are typically found in coastal waters.

72. *Carangoides chrysophrys*

Common Name	: Longnose trevally	
Local Name	: <i>Bengkolo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Carangidae family. It can grow up to 72 cm long. It has a silvery color with a greenish tint on its back and a distinctive black spot on its gill cover (operculum). Adults are typically found in the open waters of coastal reefs, while juveniles are often found in inshore areas, including estuaries. They usually travel in small groups and inhabit marine and brackish waters, often associated with reefs.



73. *Caranx bartholomaei*

Common Name	: Yellow jack
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Carangidae family and is found in marine, reef-associated environments at depths ranging from 0 to 50 meters. It can reach a maximum length of 100 cm, with a common length of around 50 cm. Adults prefer offshore reefs, while juveniles are often found near the shore on seagrass beds. These fish are generally solitary but can sometimes be seen in small groups. They primarily feed on small fish.

74. *Caranx ignobilis*

Common Name	: Giant trevally
Local Name	: <i>Bengkolo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



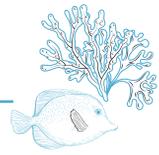
This fish is members of the Carangidae family and is found in marine, brackish, and reef-associated environments across the Indo-Pacific region. The adults have a silvery grey to black color on their head and body, usually lighter below, with fins that are typically uniformly grey to black. The adults live in pelagic zones over sand and rock, while juveniles are found in estuaries. They feed on crustaceans, such as crabs and spiny lobsters, and fish, primarily at night.

75. *Caranx melampygus*

Common Name	: Bluefin trevally
Local Name	: <i>Bengkolo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Carangidae family. Inhabits marine, brackish, and reef-associated environments at depths ranging from 0 to 190 meters. It can grow up to 117 cm long. The adults have a brassy head and upper body, with a blue tint and covered in small blue-black spots. Typically seen solitary or occasionally in schools. Adults are pelagic, living in coastal and oceanic waters associated with reefs. Juveniles are found seasonally in shallow sandy inshore waters and rivers. Primarily feed on other fish and crustaceans.



76. *Caranx papuensis*

Common Name	: Brassy trevally	
Local Name	: <i>Bengkolo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Carangidae family, this fish thrives in marine and brackish waters, often associated with reefs. It can reach lengths of up to 88 cm. The coloration ranges from brassy to yellowish green on its back, transitioning to a silvery hue on its sides, adorned with scattered dark spots. These fish inhabit lagoon and seaward reefs, and on occasion, they often enter rivers. They swim above the seabed and are either solitary or form schools. Their diet primarily consists of other fish, and they are highly regarded as food fish.

77. *Caranx sexfasciatus*

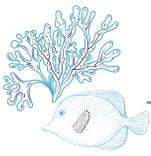
Common Name	: Bigeye trevally	
Local Name	: <i>Bengkolo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish from the Carangidae family inhabits Indo-Pacific waters, including marine, freshwater, and brackish environments, and is often found near reefs. It can reach lengths of up to 120 cm. The adults are commonly seen in coastal and oceanic waters, swimming pelagically at depths ranging from 1 to 96 meters. They typically gather in large schools during the day but solitary at night, focusing on a diet of fish, squids, and crustaceans.

78. *Caranx tille*

Common Name	: Tille trevally	
Local Name	: <i>Bengkolo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Carangidae family, this fish thrives in marine environments, specifically reef-associated areas, at depths ranging from 30 to 120 meters in the Indo-West Pacific region. It can grow up to 80 cm long. The adults prefer coastal waters near coral reefs and rocks, where they feed on fish and crustaceans. They are typically solitary or found in small groups in the vicinity of reefs.



79. *Centropyge bicolor*

Common Name	: Bicolor angelfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is part of Pomacanthidae family. Found in marine environments, typically inhabits reef-associated areas at depths ranging from 1 to 25 meters. It can reach a maximum length of 15 cm. These fish are commonly found in lagoons, channels, or protected seaward reef slopes, as well as in coral and rubble areas. They are often seen in pairs or small groups and feed on algae, small crustaceans, and worms.

80. *Centropyge eibli*

Common Name	: Blacktail angelfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



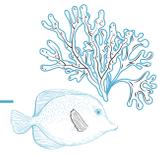
This fish belongs to Pomacanthidae. Commonly found in the eastern Indian Ocean, primarily inhabiting rocky areas of seaward reefs and thriving in rich coral environments. It typically lives in reef-associated areas at depths ranging from 3 to 30 meters. This fish is herbivore, feeds primarily on algae.

81. *Centropyge ferrugatus*

Common Name	: Rusty angelfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Pomacanthidae family and is found in the tropical Western Pacific. It inhabits marine, reef-associated environments at depths ranging from 6 to 30 meters. It can reach a maximum length of 10 cm. It prefers seaward rocky reefs and rubble areas, particularly those with extensive algal growth. These fish are usually solitary or found in small groups.



82. *Centropyge vlorikii*

Common Name	: Pearlscale angelfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The fish, a member of the Pomacanthidae family, is a marine species typically found in reef-associated environments at depths ranging from 0 to 30 meters. The maximum length is 12 cm. This species inhabits lagoons and seaward reefs, particularly favoring coral-rich areas. Its diet primarily consists of algae, which it grazes on within its vibrant reef habitat.

83. *Cephalopholis aitha*

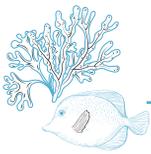
Common Name	: Rusty hind	
Local Name	: <i>Londekala</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to Epinephelidae family. Commonly known as Rusty hind. This species is marine fish that typically found in reef-associated environments within a depth range of 5 to 33 meters. This species is distributed in the Western Pacific. It can grow up to a maximum length of 25 cm. It is characterized by its distinctive reddish-brown color. These fish predominantly inhabit protected or silty reef areas.

84. *Cephalopholis argus*

Common Name	: Peacock hind	
Local Name	: <i>Katoko lumpur</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, part of the Epinephelidae family, is found throughout the Indo-Pacific region and can grow up to 60 cm in length. Adults live in a range of coral habitats, both benthic and benthopelagic, from tide pools to depths of at least 40 meters, favoring the 1 to 10 meter reef zone. In contrast, juveniles prefer shallow, protected coral reefs. Their diet consists mainly of other fish and crustaceans.



85. *Cephalopholis formosa*

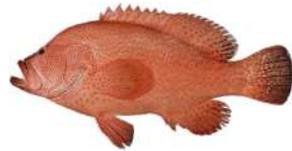
Common Name	: Bluelined hind
Local Name	: <i>Katoko</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Belonging to the Epinephelidae family, this marine species is reef-associated and found throughout the Indo-West Pacific region. It is characterized by a dark brown to yellowish brown color with narrow blue stripes and has ctenoid scales covering its body, including the abdomen. This fish prefers a solitary.

86. *Cephalopholis sonnerati*

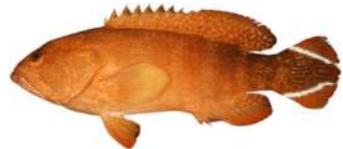
Common Name	: Tomato hind
Local Name	: <i>Katoko</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



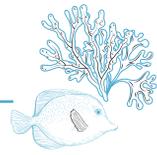
Belonging to the Epinephelidae family, this species is reef-associated and can reach a maximum length of 57 cm. The adults, typically found in the Pacific Ocean, display a pale reddish to yellowish brown color, covered with numerous small brownish red or dark brown spots on their head, body, and fins. The juveniles are dark reddish brown to nearly black. Adults inhabit lagoon reefs, outer reef slopes, and coastal areas with rocky substrates, while juveniles are usually found near sponges or coral heads. Their diet consists of small fishes and crustaceans.

87. *Cephalopholis urodeta*

Common Name	: Darkfin hind
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Belonging to the Epinephelidae family, this marine species is reef-associated and can be found at depths ranging from 0 to 60 meters. This species is characterized by its coloration, with the front part of its body being reddish brown and the back part dark brown. Adults inhabit clear, shallow waters of outer reef areas, including lagoons, back-reef areas, and reef-tops. These fish are solitary individuals and primarily feed on small fishes and crustaceans.



88. *Chaetodon auriga*

Common Name	: Threadfin butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is part of the Chaetodontidae family. Inhabits reef-associated environments in the Indo-Pacific region. It can reach up to 25 cm in length. It primarily feeds on polychaetes, sea anemones, coral polyps, and algae by tearing pieces off them. It can be found in a wide range of habitats, from healthy coral reefs to rubble-covered areas, at depths of 0 to 60 meters.

89. *Chaetodon decussatus*

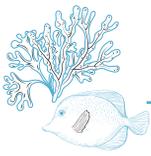
Common Name	: Indian vagabond butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Chaetodontidae family, inhabits marine, reef-associated environments, and can grow up to 20 cm in length. It is typically found on rich coral reefs, as well as in rubble and rocky areas. Its diet mainly consists of algae and coral polyps, although in captivity, it will accept a wide variety of foods.

90. *Chaetodon kleinii*

Common Name	: Sunburst butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Chaetodontidae family and is reef-associated, occurring throughout the Indo-Pacific region at depths from 0 to 90 meters. It can reach a maximum length of 15 cm. The body is yellowish-brown with two broad white vertical bars: one extending from near the origin of the dorsal spine and the other from the middle of the back. It is commonly found in deeper lagoons, channels, and seaward reefs. This species is omnivorous and primarily feeds on soft coral polyps.



91. *Chaetodon lunulatus*

Common Name	: Oval butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

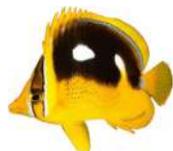
This fish is a member of Chaetodontidae. This species is reef-associated, inhabiting the Pacific Ocean at depths ranging from 0 to 60 meters. It can grow up to 26.7 cm in length. The body is often characterized by its striking coloration and patterns. This species exclusively feeds on live corals, making it highly specialized in its diet. It is commonly found in both shallow and deeper reef areas, including lagoons and seaward reefs.

92. *Chaetodon melannotus*

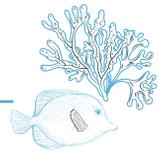
Common Name	: Blackback butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Chaetodontidae family. This species is reef-associated and can grow up to 25 cm in length. It is usually solitary or found in pairs in coral-rich areas of reef flats, lagoons, and seaward reefs at depths ranging from 2 to 20 meters. Juveniles are typically found inshore. The fish often travels in pairs or small groups and primarily feeds on soft and hard coral polyps.

93. *Chaetodon quadrimaculatus*

Common Name	: Fourspot butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a part of the Chaetodontidae family. It inhabits the Pacific Ocean and can grow up to 16 cm in length. Found almost exclusively on exposed seaward reefs, this benthopelagic species primarily feeds on the polyps of *Pocillopora* corals. It is typically solitary or found in pairs.



94. *Chaetodon rafflesii*

Common Name	: Latticed butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Chaetodontidae family, is reef-associated, and found in the Indo-Pacific region at depths ranging from 0 to 15 meters. It can grow up to 18 cm in length. Notable features include a dark black spot sometimes present under the spinous portion of the dorsal fin and a black bar running across the eye. The diet consists of sea anemones, polychaetes, and octocorallian and scleractinian coral polyps.

95. *Chaetodon tricinctus*

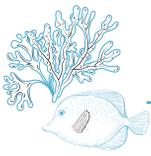
Common Name	: Three-striped butterflyfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Distributed in the Southwest Pacific, this reef-associated fish belongs to the Chaetodontidae family. It inhabits coral-rich areas of lagoon and seaward reefs at depths ranging from 3 to 15 meters. This species can reach a maximum length of 15 cm and typically occurs in small groups. It is oviparous and monogamous.

96. *Chaetodon trifascialis*

Common Name	: Chevron butterflyfish	
Local Name	: -	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Chaetodontidae family and is reef-associated in the Indo-Pacific region. It can reach a maximum length of 18 cm and is found at depths ranging from 0 to 30 meters. It is closely associated with tabular and branching *Acropora corals*, feeding on their polyps and mucus. The fish is typically solitary or found in pairs.



97. *Chaetodon vagabundus*

Common Name	: Vagabond butterflyfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish, a member of the Chaetodontidae family, is associated with reefs in the Indo-Pacific region. It can grow up to 23 cm in length and is found at depths ranging from 0 to 30 meters. Adults are frequently seen in reef flats, lagoons, seaward reefs, and occasionally in murky waters affected by freshwater runoff. Often moving in pairs. Its diet is diverse, including algae, coral polyps, crustaceans, and worms.

98. *Cheilinus chlorourus*

Common Name	: Floral wrasse
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



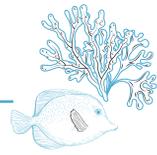
Belonging to the Labridae family, this fish is found in the Indo-Pacific region at depths ranging from 1 to 30 meters. Adults typically inhabit lagoon and coastal reefs, particularly in areas with a mix of sand, rubble, and coral, and occasionally in grassy areas. Their diet primarily consists of benthic invertebrates, including mollusks and crustaceans. This species can grow up to 45 cm in length.

99. *Cheilio inermis*

Common Name	: Cigar wrasse
Local Name	: -
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This reef-associated fish, part of the Labridae family, is found in the Indo-Pacific region at depths ranging from 1 to 30 meters. It can grow up to 50 cm in length. The coloration of this species varies and can include green, brown, orange-brown, or yellow, often with narrow broken black stripes that are typically absent in larger males. The fish is usually solitary, with juveniles being secretive in seagrass habitats. Its diet mainly consists of crustaceans, mollusks, and sea urchins.



100. *Cheilodipterus macrodon*

Common Name	: Large toothed cardinalfish	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Apogonidae family and is commonly found in reef-associated areas of the Indo-Pacific region, typically at depths ranging from 0 to 100 meters. It can grow up to a maximum length of 25 cm. Adults are usually found in pairs or small groups of multiple pairs, while juveniles are either solitary or found in small groups. Its diet mainly consists of small fish. This fish is characterized by its pale grey color and eight red-brown stripes along its side.

101. *Chirocentrus dorab*

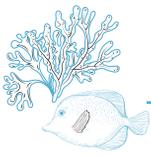
Common Name	: Dorab wolf-herring	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Chirocentridae family, this fish is found in the Indo-Pacific region. It can reach a maximum length of 100 cm, though it commonly measures around 60 cm. It occurs inshore, including in brackish waters, and primarily feeds on small fish and crustaceans.

102. *Chirocentrus nudus*

Common Name	: Whitefin wolf-herring	
Local Name	: <i>Londe lira</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A member of the Chirocentridae family, lives in the open waters of coastal regions in the Indo-West Pacific, from the shoreline down to depths of approximately 0 to 150 meters. It primarily feeds on small fish and crustaceans.



103. *Chlorurus bowersi*

Common Name	: Bower's parrotfish
Local Name	: <i>Ikan kakatua Bower</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Scaridae famil. It is commonly found in reef environments in the Western Pacific, typically at depths between 2 and 20 meters. It can grow up to 40 cm in length and is often found in channel and lagoon reef slopes within areas abundant in coral. This species is known to be solitary in nature.

104. *Chlorurus japanensis*

Common Name	: Palecheek parrotfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



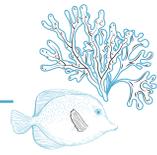
This fish belongs to the Scaridae family and is reef-associated, living at depths between 0 and 20 meters. It can grow up to 56.2 cm long. The males are distinctly bicolored, with a purple-brown front half and a pale-yellow back half, while females are entirely dark brown with a red-orange tail. It inhabits seaward coral reefs and rocky reefs, as well as inner reefs rich in coral. This species feeds on benthic algae.

105. *Chromis dimidiata*

Common Name	: Chocolatedip chromis
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a member of the Pomacentridae family and can grow up to 9 cm in length. Adults are typically found in lagoon and seaward reefs, where they gather in large groups on the reef tops and upper slopes. Despite their abundance, they are often observed solitary near the ocean floor at depths between 1 and 36 meters.



106. *Cirrhilabrus cyanopleura*

Common Name	: Blueside wrasse	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a member of the Labridae family and is commonly found in reef environments. It tends to gather in groups 1 to 2 meters above coral or rocky surfaces near the borders of lagoons, channels, and outer reef inclines, at depths between 2 and 30 meters. Mainly feeds on zooplankton. Sometimes forms large schools. The males display more intricate and vibrant coloration compared to the juvenile phase or female.

107. *Cirripectes imitator*

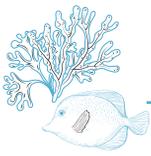
Common Name	: Imitator blenny	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Widely known as imitator blenny, a member of the Blenniidae family. This fish is a tropical reef-associated fish that commonly found at depths ranging from 0 to 10 meters. It exhibits a dark brown coloration. This fish belongs to a genus known for facultative air-breathing. The adults typically inhabit shallow coral and rocky reefs. It can reach a maximum length of 9.3 cm.

108. *Coilia mystus*

Common Name	: Osbeck's grenadier anchovy	
Local Name	: -	
IUCN	: Endangered	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

There is limited literature on this species. Belonging to the Engraulidae family (anchovies), this fish commonly occurs in freshwater, brackish, and shallow coastal water environments. These fish can reach 21 cm in length.



109. *Cololabis saira*

Common Name	: Pacific saury	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a member of the Scomberesocidae family. It thrives in marine habitats. This fish is a pelagic species that lives in the depth ranging from 0 to 230 meters. It can grow up to 40 cm. The colour is dark green to blue on its dorsal side and a silvery shade underneath. The adult individuals are commonly seen offshore near the water surface, frequently congregating in groups. The juveniles are often found in seaweed areas. Their diet mainly consists of small crustaceans, fish eggs, and larvae.

110. *Conger erebennus*

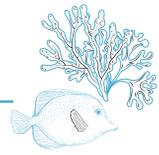
Common Name	: -	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Congridae family. Its length reaches up to 134 cm. There is very limited literature available on this species. It thrives in marine environments, specifically in temperate areas.

111. *Coris pictoides*

Common Name	: Blackstripe coris	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Labridae family and is a marine reef-associated species. It is commonly found around small coral heads in silty sand-rubble areas and tends to occur in small groups on sandy or muddy substrates. This fish generally inhabits depths ranging from 9 to 55 meters and can reach a maximum length of 15 cm. Additionally, it is known to enter shallow estuaries.



112. *Ctenochaetus striatus*

Common Name	: Striated surgeonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a member of the Acanthuridae family. Common reef-associated fish in lagoons and seaward reefs across the Indo-Pacific region. Distributed at depths between 0 and 60 meters. It can reach a maximum length of 26 cm and is recognized by its deep, compressed body with a color pattern that ranges from dark olive to yellowish brown, adorned with blue or blue-grey lines and small orange spots on the head. The species primarily feeds on algae and diatoms.

113. *Cubiceps whiteleggii*

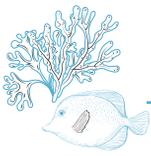
Common Name	: Shadow driftfish	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Nomeidae family, this fish can reach a maximum length of 21 cm. Its color is light to dark brown, with darker fins and a blue eye. Adults are typically found in deep water on continental slopes, while juveniles inhabit mid-water layers. Their diet primarily consists of tunicates (salps).

114. *Cymbacephalus bosschei*

Common Name	: Smalleyed flathead	
Local Name	: <i>Uta Nggefa</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a member of the Platycephalidae family. Commonly found in shallow coastal areas (reef flats), throughout the Western Central Pacific. It inhabits depths ranging from 10 to 50 meters. It can reach a maximum length of 45 cm, with a common length of around 35 cm. This fish is characterized by a pale brownish to greenish-brown flathead, mottled with darker blotches, spots, and speckles.



115. *Cynoglossus arel*

Common Name	: Largescale tonguesole
Local Name	: <i>Uta Nggefa</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to the Cynoglossidae family. It can be found in marine and brackish environments. This fish prefers muddy and sandy bottoms and is distributed across the continental shelf at depths ranging from 9 to 125 meters. It can grow up to 40 cm, with a common length of around 30 cm. Additionally, the fish enters estuaries and tidal rivers and primarily feeds on bottom-living invertebrates.

116. *Cynoglossus bilineatus*

Common Name	: Fourlined tonguesole
Local Name	: <i>Pelaserae panjang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



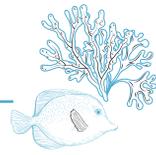
Part of the Cynoglossidae family. This fish is found in the Indo-West Pacific region. It inhabits brackish and demersal environments, typically in coastal areas and estuaries, and can be found at depths ranging from 10 to 400 meters. Occasionally enter the river. It can reach a maximum length of 44 cm and is commonly found on muddy and sandy bottoms environments. Its diet mainly consists of benthic invertebrates.

117. *Cynoglossus puncticeps*

Common Name	: Speckled tonguesole
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is commonly distributed in brackish and shallow coastal areas ranging from 1 to 140 meters. Occasionally found in the lower courses of flowing rivers and estuaries. It inhabits sandy and muddy bottoms. This species primarily feeds on benthic invertebrates. It can reach a maximum length of 35 cm. This species belongs to the Cynoglossidae family.



118. *Cypselurus oligolepis*

Common Name	: Largescale flyingfish	
Local Name	: <i>Utakamoa</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Found in the Indo-West Pacific region, this species inhabits near-shore surface waters at depths ranging from 0 to 20 m. This species is never spreads to the open sea. It primarily feeds on zooplankton and small. It can grow a maximum length of 27.7 cm. This species belongs to the Exocoetidae family.

119. *Dascyllus trimaculatus*

Common Name	: Threespot dascyllus	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

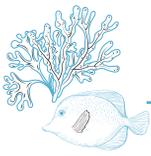
This species is reef-associated fish. It is found in depths ranging from 0 to 55 meters. Belonging to the Pomacentridae family, the adults live in coral and rocky reefs, while juveniles are often commensal with large sea anemones, sea urchins, or small coral heads. Characterized by their overall black coloration with bluish scale centers, a white spot on the forehead and upper sides, and black fins. The species can reach a maximum length of 14 cm. Its diet includes algae, copepods, and other planktonic crustaceans.

120. *Decapterus akaadsi*

Common Name	: -	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Illustration: *Decapterus* sp.

Belonging to the Carangidae family, this pelagic-oceanic species is typically found along the shelf edge in the Western Pacific. The adults inhabit subtropical waters and can reach a maximum length of 30 cm.



121. *Decapterus macarellus*

Common Name	: Mackerel scad
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This pelagic-oceanic species is commonly found along the shelf edge in the Western Pacific. Adults can grow up to 46 cm, with a common length of 30 cm. They inhabit subtropical waters, ranging in depth from 0 to 400 meters, though they are generally caught between 40 and 200 meters. This fish displays a bluish-green coloration with a silvery underside. Their diet primarily consists of zooplankton. This species belongs to the Carangidae family.

122. *Decapterus macrosoma*

Common Name	: Shortfin scad
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



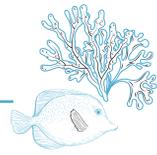
Belonging to pelagic schooling species, this fish is found at depths ranging from 20 to 214 meters in the Indo-Pacific and Southeast Atlantic regions. It can reach a maximum length of 35 cm. While it is mostly pelagic, it is occasionally seen in small groups along reef slopes adjacent to deep water. The adults mainly feed on small invertebrates. This fish is a member of Carangidae family.

123. *Decapterus maruadsi*

Common Name	: Japanese scad
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Carangidae family. The adults of this species are found in the sublittoral zone and may enter semi-enclosed sea areas. They are generally found at depths ranging from 0 to 20 meters and can reach a maximum length of 30 cm.



124. *Dentex angolensis*

Common Name	: Angolan dentex	
Local Name	: -	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is found at depths ranging from 15 to 300 meters. Literature on its distribution is limited, however, this fish is generally found in the Eastern Atlantic. It inhabits various bottom types on the continental shelf and slope. This fish mainly feeds on crustaceans, fish, and occasionally mollusks and worms.

125. *Dentex tumifrons*

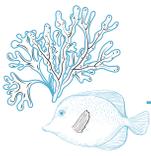
Common Name	: Yellowback seabream	
Local Name	: <i>Ambangan merah</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Sparidae family and is found at depths of 30–350 m. It typically measures 20 cm but can reach 35 cm. It has 12 dorsal spines, 10 dorsal soft rays, 3 anal spines, and 9 anal soft rays. The first and second dorsal spines are shorter than the extended third and fourth spines. Pectoral fin rays are usually 15. It lacks scales on the preopercular flange, it has scattered cobalt blue spots. It lives on muddy and muddy-sandy bottoms, feeding on benthic invertebrates and fish.

126. *Deveximentum indicium*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This tropical fish species is commonly found in marine and brackish waters of the Western Pacific. It reaches a maximum length of 8.8 cm and has a silvery body with a light blue back and paler sides. This species belongs to the Leiognathidae family.



127. *Diaphus aliciae*

Common Name	: -
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected

Illustration: *Diaphus* sp.

This fish belongs to the Lanternfish family (Myctophidae). It is known to inhabit depths of up to 489 meters and is found in high-oceanic and mesopelagic zones. It can grow up to a maximum length of 6.0 cm. There is very limited information available regarding this species.

128. *Diaphus chrysorhynchus*

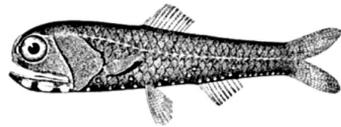
Common Name	: Golden-nosed lantern fish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



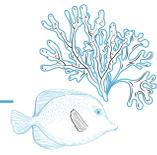
There is very limited literature available on this species. This species belongs to Myctophidae family, part of Lanternfishes. They can reach a maximum length of 1.1 cm and are found in nearshore areas. Their depth range extends from 0 to 190 meters at night and from 418 to 960 meters during the day.

129. *Diaphus regani*

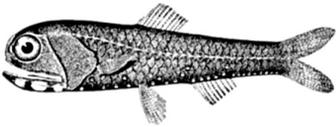
Common Name	: Regan's lanternfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected

Illustration: *Diaphus* sp.

There is very limited literature on this species. This lanternfish is part of the Myctophidae family. It is distributed around the Indo-West Pacific region and can grow up to 1.4 cm in length. This fish inhabits depths of up to 750 meters.



130. *Diaphus suborbitalis*

Common Name	: -	 <p>Illustration: <i>Diaphus</i> sp.</p>
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This lanternfish belongs to the Myctophidae family. The literature on this species is very limited. It is a pelagic-oceanic species found at depths ranging from 387 to 1,537 meters in the Indo-West Pacific region. It can grow up to 7.3 cm in length.

131. *Diaphus watasei*

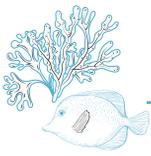
Common Name	: Watases lanternfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Commonly known as lanternfish, this species belongs to the Myctophidae family. It is found over continental shelves and slopes at depths ranging from 100 to 2,005 meters. Widely distributed throughout the Indo-West Pacific region, these fish can reach a maximum length of 17 cm. Detailed literature on many species within this family remains limited.

132. *Diodon hystrix*

Common Name	: Spot-fin porcupinefish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Porcupinefishes (Diodontidae) family, this reef-associated species inhabits depths ranging from 2 to 50 meters. It can reach a maximum length of 91 cm, with a common length of around 40 cm. The fish has a robust body covered with long, sharp spines that fold backward when not inflated. Its teeth are united in each jaw without a central division. This species is solitary and nocturnal, feeding on hard-shelled invertebrates such as sea urchins, gastropods, and hermit crabs.



133. *Diodon Liturosus*

Common Name	: Black-blotched porcupinefish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This reef-associated species from the Diodontidae family inhabits reef edges and slopes at depths of 1 to 90 meters, typically between 15 and 30 meters. During the day, it hides in caves, ledges, or beneath plate corals, sometimes found as deep as 40 meters. Nocturnal by nature, it forages at night, feeding primarily on crustaceans and mollusks. Juveniles are found in lagoons and estuaries. Solitary in behavior, this species is not commonly marketed commercially.

134. *Dipterygonotus balteatus*

Common Name	: Mottled fusilier
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



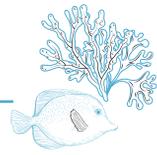
This fusilier fish belongs to the Caesionidae family. It is primarily found in near-shore pelagic environments but often swims in open water away from reefs. It inhabits depths ranging from 37 to 91 meters and can grow up to 14 cm in length. Feeding mainly on zooplankton. This species is also an important bait fish for tuna in certain regions.

135. *Dischistodus prosopotaenia*

Common Name	: Mottled fusilier
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to the damselfish's family (Pomacentridae). It is typically found in brackish and reef-associated environments, with a depth range of 1 to 12 meters. It can grow up to 18.5 cm in length and is often encountered either solitary or in groups.



136. *Drepane longimana*

Common Name	: Concertina fish	
Local Name	: <i>Ro'o mbau</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Part of the sicklefishes family (Drepaneidae), this species is found in the Indo-West Pacific region. It inhabits inshore areas, including sand or mud bottoms, reefs, estuaries, and harbors, at depths of less than 50 meters. It can grow up to 50 cm in length. The species feeds primarily on benthic invertebrates.

137. *Drepane punctata*

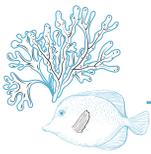
Common Name	: Spotted sicklefish	
Local Name	: <i>Ro'o mbau</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the sicklefishes family (Drepaneidae), this species inhabits a range of inshore environments such as sand or mud bottoms, reefs, estuaries, and harbors. It is frequently found near coral and rock reefs and feeds mainly on invertebrates and benthic fish. The species can grow up to 50 cm in length, with an average length of around 25 cm. Its coloration is typically silvery with a greenish hue on the upper part.

138. *Dussumieria acuta*

Common Name	: Rainbow sardine	
Local Name	: <i>Sembula (Tembang)</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This sardine fish belongs to the Dussumieriidae family. It is found in the Indo-West Pacific region and can inhabit marine, freshwater, and brackish environments. This species typically lives at depths ranging from 10 to 20 meters and can reach a maximum length of 20 cm.



139. *Dussumieria elopsoides*

Common Name	: Rainbow sardine	
Local Name	: <i>Sembula (Tembang)</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, known as the slender rainbow sardine, belongs to the Dussumieriidae family in the Clupeiformes order. It inhabits marine pelagic-neritic environments at depths of 0–50 meters. Reaching a standard length of 20–25 cm (common length: 14–15 cm), it has a slender, compressed body with a rounded belly and a single pelvic scute. Dorsal and anal fins have 16–18 and 14–18 soft rays, respectively. Pelvic fins are more advanced, and the pelvic scute is “W”-shaped. This sardine is typically found in coastal and pelagic waters.

140. *Enchelynassa canina*

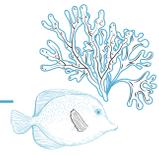
Common Name	: Longfang moray	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The Longfang moray, from the Muraenidae family in the Anguilliformes order, is a reef-associated fish found at depths of 1–30 meters. It lives in rocky areas with strong surges, like outer reef flats and reef fronts, and is very secretive during the day. It feeds on fish and octopus, usually at night. It may bite if provoked. The body is brownish, with a grey belly. Habitats include reefs, offshore coasts, lagoons, mixed reef-sand areas, and tide pools.

141. *Echidna polyzona*

Common Name	: Slender rainbow sardine	
Local Name	: <i>Sembula (Tembang)</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a marine and reef-associated fish from the Muraenidae family in the Anguilliformes order. It inhabits depths of 2–20 meters. The body is grey with fine pale barring, and in juveniles, 25–30 dark brown bars with narrow white interspaces. The bars become obscure with age, with large adults appearing mottled brown. The mouth's corner is dark brown, and the head is lighter, often yellowish with dark blotches. It lives in reef flats, shallow lagoons, and seaward reefs, feeding mainly on small crustaceans day and night.



142. *Elagatis bipinnulata*

Common Name	: Rainbow sardine	
Local Name	: <i>Sembula (Tembang)</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish, from the Carangidae family, lives in reefs and is found at depths of 0–150 meters. It can grow up to 180 cm long (usually about 90 cm). The body is long and thin, without scutes near the tail, and has a small fin with two rays at the end of the soft dorsal and anal fins. It is dark olive-blue or green on top, white underneath, with blue and yellow stripes on the sides. Adults live in ocean and coastal waters, mainly feeds on invertebrates and small fish.

143. *Elops hawaiiensis*

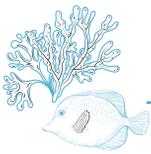
Common Name	: Hawaiian ladyfish	
Local Name	: <i>Bandeng</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Elopidae family, in the Elopiformes order. It is a long, slender, silvery species with a single dorsal fin, a forked tail, a large eye, and a large mouth. Its body is covered with tiny scales, and its caudal fin is large, deeply forked, bluish green above, and silvery on the sides with plain whitish or yellowish fins. It frequents lagoons, bays, estuaries, and mangroves, sometimes entering freshwater but not far inland. Active swimmers, they travel in schools and feed on fish and crustaceans. Juveniles are found in salt marshes and tidal streams.

144. *Encrasicholina heteroloba*

Common Name	: Shorthead anchovy	
Local Name	: <i>Teri kepala pendek</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This small pelagic fish from the Engraulidae family is found offshore and migrates in schools. It has a slender, cylindrical body with 4–6 needle-like spines before the pelvic fin, a medium to large head, pointed snout, large eyes, and a slightly slanted mouth. The body is silvery white with a vertical band, light blue dorsal and caudal fins. It filters plankton for food and is preyed upon by larger fish like tuna and mackerel.



145. *Encrasicholina punctifer*

Common Name	: Buccaneer anchovy	
Local Name	: <i>Teri Bukaner</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is reef-associated and oceanodromous, found in the water column at depths of 5–35 meters. It schools and is commonly seen inshore, in oceanic waters, and occasionally in large atoll lagoons or deep bays. The fish has a slender, slightly rounded body with a medium to large head, pointed snout, large eyes, and a slightly slanted mouth. Its small, thin, round scales cover a silvery white, slightly transparent body with a vertical band, and the dorsal and caudal fins are light blue. This fish belongs to Engraulidae family.

146. *Engraulis japonicus*

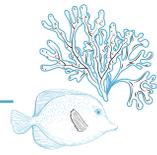
Common Name	: Japanese anchovy	
Local Name	: <i>Teri Jepang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish has an elongated, cylindrical body that is slightly flattened on the sides with a round abdomen and no ribbed scales. It features two large scales at the base of the tail fin, a slightly larger head, large eyes, and a rounded snout. Its large, antero-inferior mouth has the upper jaw protruding beyond the lower jaw. Covered in small, thin, round scales with no lateral lines, it has a forked caudal fin, a blue-black back, and a silvery-white belly with a wide blue-black band. This fish mainly feeds on copepods.

147. *Enneapterygius theostoma*

Common Name	: Triplefin blenny	
Local Name	: <i>Ikan blenni</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish from the Tripterygiidae family lives at depths of 0 to 21 meters. Its first dorsal fin is as high or higher than the second. Females are white with 4–5 brownish-red bars, while males are black with two white bars below where the second and third dorsal fins meet, extending to the tail. The caudal fin has alternating white and reddish-brown stripes. Adults live in rocky areas and feed on algae. The larvae are planktonic and found mainly in shallow, nearshore waters.



148. *Enneapterygius similis*

Common Name	: Masked Threefins	
Local Name	: <i>Ikan kadal karang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish belongs to Tripterygiidae family. It found at depths of 0-13 meters, has distinct coloring. Males are red in the front and dark in the back, with a dark mask on the lower head, dense spots on the cheek, chest, and pectoral fin base, and a white triangular bar behind the second and third dorsal fins. Females are greyish green with pinkish scale edges, a dark bar across the eyes, and white dorsal bars with spots. They inhabit coral reefs, rocky shores, surf channels, and tide pools with abundant algae and low surf.

149. *Enneapterygius tutuilae*

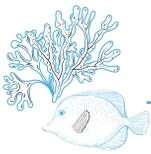
Common Name	: Highfin Threefin	
Local Name	: <i>Ikan sirip tiga</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, a triplefin fish from the Tripterygiidae family, has a tall white first dorsal fin in males. Large individuals often have a dark spot on the second dorsal fin, connected to a band with about five darker bars, and a red snout and lower head. The lateral lines are divided, the pelvic fin is dusky with no barred pattern, and the anal fin has 6-8 blackish vertical bars. Adults live in reef habitats like sponges, intertidal pools, corals, and rocks, feeding on zooplankton.

150. *Epinephelus areolatus*

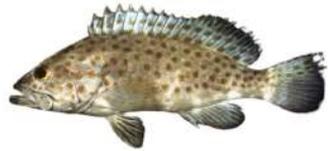
Common Name	: Areolate grouper	
Local Name	: <i>Katoko</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Serranidae family. Reef-associated fish found at depths of 6-200 m near reefs. It has a dorsal fin with 11 spines and 15-17 soft rays, and a caudal fin that changes shape with age. The pale body colour is covered with brown or yellow spots that increase with growth. It inhabits seagrass beds or fine sediment bottoms. This species is feeds on fish, prawns, and crabs.



151. *Epinephelus bleekeri*

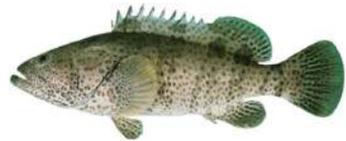
Common Name	: Duskytail grouper
Local Name	: Ikan kerapu lumpur/ babunyai
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A grouper fish from the subfamily of Epinephelinae and the family of Serranidae. Distributed around Indo-West Pacific area of tropical water. Characterized by brown color, and red to dark brown spots on head, body and fins. Also recognized by the bluish lower half of the caudal fin and the lack of spots there compared to the upper half. This solitary fish occurs on shallow banks, soft substrate, silty coastal reefs and estuaries. The length of this fish can grow up to 76 cm.

152. *Epinephelus coioides*

Common Name	: Orangespotted grouper
Local Name	: Katoko
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



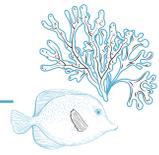
This grouper is a reef-associated fish belonging to the Serranidae family, found at depths of 1-100 m and growing up to 120 cm. It has 11 dorsal spines, 13-16 dorsal soft rays, 3 anal spines, and 8 anal soft rays. Distinct features include a straight or convex upper operculum edge and rough lateral body scales. Its tan body has small reddish-brown spots and faint dark bars. It feeds on small fishes, shrimps, and crabs.

153. *Epinephelus fasciatus*

Common Name	: Blacktip grouper
Local Name	: Kerapu sendok
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a reef-associated grouper from the Serranidae family. It is found at depths of 4-160 m, typically seen at 20-45 m. It can reach a maximum length of 52 cm, commonly 22 cm. It has 11 dorsal spines, 15-17 dorsal soft rays, 3 anal spines, and 8 anal soft rays. Characteristics include a straight upper operculum edge and variable coloration from pale greenish grey to scarlet. It inhabits outer reef slopes, bays, and lagoons, feeding on crabs, fishes, and shrimps day and night.



154. *Epinephelus faveatus*

Common Name	: Barred-chest grouper	
Local Name	: <i>Katoko</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish belongs to the Serranidae family. It is found at depths of 1-125 m and can reach a maximum length of 32 cm. It has 11 dorsal spines, 16-18 soft dorsal rays, 3 anal spines, and 8 soft anal rays. The body is whitish or pale grey with numerous close-set brown spots, and it features cycloid scales and a rounded caudal fin. It inhabits shallow waters over coral reefs or rocky substrates, feeding mainly on crabs and small fishes.

155. *Epinephelus lanceolatus*

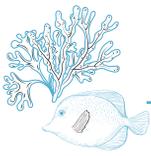
Common Name	: Giant grouper	
Local Name	: <i>Kerapu kertang</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Serranidae. This fish is found at depths of 1-200 m. It can reach up to 270 cm, commonly around 190 cm. It has 11 dorsal spines, 14-16 soft dorsal rays, 3 anal spines, and 8 soft anal rays. The upper edge of the operculum is convex, with short pelvic fins and a rounded caudal fin. Small juveniles are yellow with black areas, while the adults are dark brown with black spots. It inhabits coral reefs, caves, wrecks, and estuaries, feeding on lobsters, fish, and crustaceans. Large individuals may be ciguatoxic.

156. *Epinephelus longispinis*

Common Name	: Longspine grouper	
Local Name	: <i>Katoko</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, from the Serranidae family, lives at depths of 1 to 70 meters and can reach up to 55 cm in length. It has 11 dorsal spines, 16-17 soft dorsal spines, 3 anal spines, and 8 anal soft spines. It is characterized by a greyish-brown body with pale blotches and scattered brown spots, a dorsal fin with dark blotches, and ctenoid scales (except on the nape, thorax, and lower abdomen). This solitary grouper prefers coral reefs and rocky areas, occasionally feeding on crustaceans, with rare consumption of small fish, squids, and pelecypods.



157. *Epinephelus macrospilos*

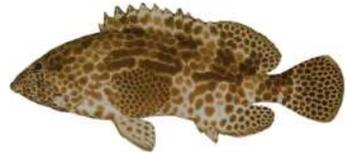
Common Name	: Longspine grouper
Local Name	: <i>Katoko</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This grouper is found at depths of 3 to 44 meters. This fish is member of Serranidae family. It can grow up to 55 cm long. It has 11 dorsal spines, 15–17 soft dorsal spines, 3 anal spines, and 8 anal soft spines. Characterized by a pale greyish body with dark brown to orange-brown spots, it has large dark blotches on the body and fins, with narrow white to yellow margins on the soft dorsal, anal, and caudal fins. It is found in lagoon and seaward reefs, feeds mainly on crustaceans, fish, octopuses, and squid, and is solitary.

158. *Epinephelus merra*

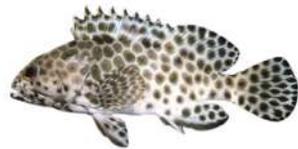
Common Name	: Honeycomb grouper
Local Name	: <i>Kerapu musang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



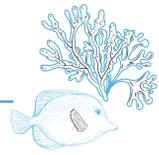
This grouper inhabits depths of 0 to 50 meters and can grow up to 37 cm long. It has 11 dorsal spines, 15–17 soft dorsal spines, 3 anal spines, and 8 anal soft spines. Its pale body is marked with dark brown or reddish-brown spots, with distinct black spots on the pectoral fins. This solitary fish is found in coastal and offshore reefs, common in shallow lagoons and seaward reefs, and feeds on crustaceans and fish. This species belongs to Serranidae family.

159. *Epinephelus quoyanus*

Common Name	: Longfin grouper
Local Name	: <i>Ikan kerapu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This grouper fish belong to Serranidae family who distributed around Western Pacific ocean. Inhabits inshore silty reefs. Feeds on shrimps, small fishes, worms and crabs. Distinguished by the whitish color and numerous large close-set hexagonal to roundish dark brown to blackish spots. on the head, body and fins with The enlarged fleshy pectoral fins appear to have resulted from its habit of sitting on the substrate. This fish has potential ciguatera poisoning causes.



160. *Erythrocles schlegelii*

Common Name	: Japanese rubyfish	
Local Name	: <i>Kurisi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is from the Emmelichthyidae family. It can grow up to 72 cm in length. It has 11 dorsal spines, 10-12 dorsal soft spines, 3 anal spines, and 9-10 anal soft spines. This demersal fish lives at depths of 100 to 500 meters, typically between 215 and 300 meters. It has few or no teeth, a deeply notched but continuous dorsal fin, and is colored bluish grey on top, silvery white with a pinkish tinge below, with reddish-orange caudal and pectoral fins. It inhabits the continental shelf and feeds mainly on shrimp and small fish.

161. *Escualosa thoracata*

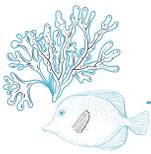
Common Name	: White sardine	
Local Name	: <i>Pangkah</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Dorosomatidae family. It can live in freshwater or brackish waters at depths of 0 to 50 meters. It has no spines, with 13-21 dorsal soft rays and 14-19 anal soft rays. It can grow up to 10 cm in standard length. The belly is strongly keeled, and it features an almost rectangular second supramaxilla and a bright silver stripe along the flank. It forms schools in shallow waters, with juveniles entering rivers before returning to the sea, feeding on zooplankton and phytoplankton.

162. *Etelis coruscans*

Common Name	: Flame snapper	
Local Name	: <i>Rahiang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This snapper fish (Lutjanidae family) is reef-associated, found at depths of 45 to 400 meters. It can grow up to 120 cm. It has 10 dorsal spines, 11 dorsal soft rays, 3 anal spines, and 8 anal soft rays. The dorsal fin is deeply notched, and the caudal fin is deeply bifurcated with tapered edges. Its body is bright red with a lighter abdomen, and it feeds on small fish, squids, and crustaceans.



163. *Ethmidium maculatum*

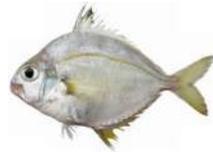
Common Name	: Pacific menhaden
Local Name	: <i>Sarden</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This pelagic-neritic fish belongs to the Clupeidae family and lives at depths of 0–50 m. The adults typically reach 25 cm, with a maximum of 31 cm. They lack dorsal and anal spines but have 12–15 anal soft rays. Notable characteristics include scutes along the back and belly, a notched upper jaw, fine gill rakers, and a short anal fin. They have a dark spot behind the gill cover and series of oval spots along the flank. Found in coastal waters, they form large schools and feed on phytoplankton, zooplankton, small fish, and crustaceans.

164. *Eubleekeria jonesi*

Common Name	: Jones' pony fish
Local Name	: <i>Petek jones</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



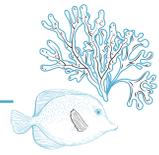
Belonging to the Leiognathidae family, this marine-demersal fish reaches a maximum length of 14 cm. Characteristics include a scaleless cheek, mostly scaled anterior dorsolateral body with a naked nape area, and a smooth lower margin of the inner preopercular ridge. The fish has no scales between pelvic keels and a grayish blotch on the spinous dorsal fin. It inhabits shallow coastal waters with sand and mud bottoms, forming large schools and occasionally entering river mouths. It primarily feeds on plankton, especially copepods.

165. *Eubleekeria splendens*

Common Name	: Splendid ponyfish
Local Name	: <i>Kadapa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Leiognathidae family and can reach a maximum length of 23 cm. It has 8 dorsal spines, 16 dorsal soft rays, 3 anal spines, and 14 anal soft rays. Distinctive characteristics include a scaleless cheek, a nearly fully scaled anterior dorsolateral body without a naked area on the nape, and no scales between the pelvic keels. The second spines of the dorsal and anal fins are robust. It has a distinctive black dorsal fin membrane with serrated third and fourth spines. Mainly feeds on phytoplankton, especially diatoms.



166. *Eumegistus illustris*

Common Name	: Brilliant pomfret	
Local Name	: <i>Krisamukti</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Bramidae family and inhabits epipelagic to mesopelagic waters, up to 620 m deep. It can reach a standard length of 55 cm and a total length of 70 cm. The body is compressed and deep, with a flat area between the pelvic fins. It has a large, moderately deep head with a blunt, short snout and a superior mouth extending below the eye. The scales are large, cycloid, and spineless, with 50 scales along the lateral line. The caudal fin is rounded in juveniles and forked in adults. It feeds mainly on micronecton.

167. *Euthynnus affinis*

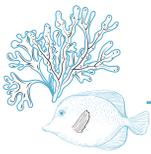
Common Name	: Kawakawa	
Local Name	: <i>Tongkol komo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a member of the Scombridae family. This species is oceanodromous fish found at depths of 0–200 m. It can grow up to 100 cm. It has 10–15 dorsal spines, 11–15 dorsal soft rays, no anal spines, and 11–15 anal soft rays. The fish has elongate body with small conical teeth and a strongly concave first dorsal fin. The second dorsal fin is lower and followed by 8–10 finlets. It has a dark blue back with stripes. Found in open waters near shore, it forms large schools and feeds on small fish, squid, crustaceans, and zooplankton.

168. *Eviota punctulata*

Common Name	: Dotted dwarfgoby	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This goby fish, from the Gobiidae family, is reef-associated and found at depths of 1–29 m. It has a maximum standard length of 2.1 cm and features 7 dorsal spines, 8–10 dorsal soft rays, 1 anal spine, and 7–8 anal soft rays. Key traits include branched pectoral-fin rays, the fifth pelvic-fin ray being 10–20% of the fourth ray, and no postocular spot or dark spot on the caudal fin. Its caudal fin has strong, scattered dark spots. It inhabits sheltered reefs and prefers substrates like dead reef, silt, and fine sand.

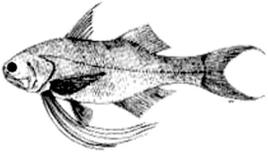


169. *Ferdauia orthogrammus*

Common Name	: -	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Ferdauia orthogrammus belongs to Carangidae family. This species is marine and reef-associated fish, and they can be found in the wide depth range (0–170 m). It has dorsal spines (total): 9; dorsal soft spines (total): 28–31; anal spines: 3; and anal soft rays: 24–26. Adults are pelagic and are abundant around oceanic islands while not found in neritic areas. May be encountered in solitary, pairs or small schools. Feed on small crustaceans in the sand.

170. *Filimanus hexanema*

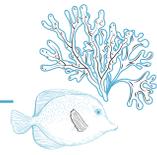
Common Name	: Javanese threadfin	
Local Name	: <i>Ngodo ilu</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the Polynemidae family. It can grow up to 10–16 cm. It has an inferior mouth, a deeply forked caudal fin, 11–12 dorsal rays, and six long pectoral filaments. Its body is dusky yellow or green above and silvery below. Found in shallow waters up to 30 m deep with muddy and sandy-silty substrates, it is euryhaline, tolerating a wide range of salinity levels. It feeds primarily on crustaceans and smaller fish.

171. *Filimanus perplexa*

Common Name	: Splendid threadfin	
Local Name	: <i>Ikan Jenggot</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Polynemidae family. It has a flattened body shape with fins fawn to yellow color. It has seven pectoral filaments. Base of pectoral filaments white, becoming light brown on posterior tips; pectoral fin with scattered melanophores. Body moderately deep, strongly compressed. Similar with *F. hexanema*, they feed on various small crustaceans and fishes. They are euryhaline, that can tolerate a wide range of salinity levels allowing to enter estuaries and even rivers.



172. *Fistularia commersonii*

Common Name	: Bluespotted cornetfish	
Local Name	: <i>Remang-remang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This cornetfish, belonging to the *Fistulariidae* family, is reef-associated and found at depths of 0–130 meters. It has 14–17 dorsal and 14–16 anal soft rays, with a vertically flattened body and a long, whiplike tail filament. The fish is green dorsally, fading to silvery white ventrally, with blue stripes or spots on its back. Its dorsal and anal fins are orange, becoming transparent at the base. It inhabits reefs and sandy bottoms near reefs, feeding on small fish, shrimp, and squid, either alone or in schools.

173. *Forcipiger flavissimus*

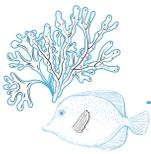
Common Name	: Yellow Longnose butterfly fish	
Local Name	: <i>Kepe-kepe monyong asli</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This butterflyfish belongs to the *Chaetodontidae* family. Typically found on exposed seaward reefs but also inhabits lagoon reefs at depths of 0–145 meters. It is reef-associated, non-migratory, and can grow up to 22 cm. The fish has 12–13 dorsal spines, 19–25 dorsal soft rays, 3 anal spines, and 17–19 anal soft rays. It is benthopelagic, often found alone or in small groups. Adults are usually in pairs. It feeds on various animal prey, favoring echinoderm tube feet, sea urchin pedicellaria, and polychaete. This fish is monogamous with oviparous reproduction.

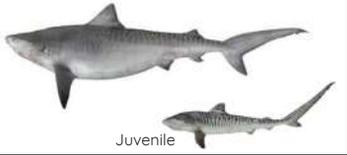
174. *Forcipiger longirostris*

Common Name	: Longnose butterflyfish	
Local Name	: <i>Kepe-kepe monyong biasa</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This butterfly fish belonging to *Chaetodontidae* family is generally inhabited seaward reefs to depths greater than 60 m. This fish is benthopelagic, monogamous and oviparous. The fish has 10–11 dorsal spines, 24–28 dorsal soft rays, 3 anal spines, and 17–20 anal soft rays. Feeds mainly on whole organisms such as small crustaceans. Usually seen in pairs. Forms pairs during breeding. Sometimes dark brown instead of yellow. Commonly, the body length reach 22 cm (maximum).



175. *Galeocerdo cuvier*

Common Name	: Tiger shark	
Local Name	: <i>Hiu macan</i>	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

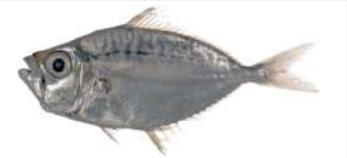
This species is part of the Carcharhinidae family, inhabits depths of 0-800 meters, typically 0-140 meters. Adults can reach 750 cm in length. It has vertical tiger stripes, a broad snout, and large, saw-edged teeth. The shark is dark grey with fading bars as it ages. Found near continental shelves, estuaries, and lagoons, it feeds on various prey, including sharks, marine mammals, and carrion. Ovoviviparous with litters of 10-82, it's valued for meat, fins, hide, and liver oil.

176. *Gazza achlamys*

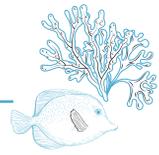
Common Name	: -	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This smalltoothed ponyfish belongs to Leiognathidae family, lives in coastal waters at depths of 20-40 meters. This demersal species feeds near the sea bottom. It can grow up to 17 cm. It has 8 dorsal spines, 16 dorsal soft rays, 3 anal spines, and 14 anal soft rays. Its body is bluish dorsally and silvery-white ventrally, with a black membrane on the spinous dorsal fin. Found over sandy or muddy bottoms, it feeds on small fish, crustaceans, and polychaetes, forming schools. Commonly sold fresh, dried, or processed into fishmeal.

177. *Gazza minuta*

Common Name	: Toothpony	
Local Name	: <i>Bebete</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This cornetfish from the Fistulariidae family and *Gazza minuta* from the Leiognathidae family inhabit depths of 10-100 meters. These demersal fish, typically around 15 cm, have 8 dorsal spines, 15-17 dorsal soft rays, and 13-14 anal soft rays. Their bodies are bluish dorsally and silvery-white ventrally, with dusky dorsal and yellowish caudal fins. They are found in shallow coastal waters, feeding on small fish, shrimp, and polychaetes. Commonly sold fresh, dried, or processed into fishmeal.



178. *Gempylus serpens*

Common Name	: Snake mackerel	
Local Name	: <i>Makerel ular</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The snake mackerel, part of the Gempylidae family, is an oceanodromous fish found at depths of 0–600 meters, typically 0–200 meters. It grows up to 100 cm, commonly 60 cm. With 27–33 dorsal spines, 10–14 dorsal soft rays, and 10–12 anal soft rays, its body is elongated, compressed, and uniformly dark brown. This species has a large mouth with fang-like teeth and two lateral lines. Adults migrate to the surface at night, feeding on fish, cephalopods, and crustaceans. Males mature at 43 cm, females at 50 cm.

179. *Gerres decacanthus*

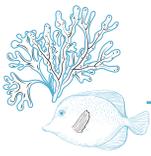
Common Name	: Small Chinese silver-biddy	
Local Name	: <i>Kapas-kapas</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Gerreidae family. This species is benthopelagic fish that found at depths of 1–10 meters. It can reach a standard length of 9.1 cm. It has a protractile mouth and 34–37 lateral line scales. Common in shallow coastal waters and freshwater basins, it inhabits sandy and muddy areas. The fish has 9–10 dorsal spines, 9–10 dorsal soft rays, 3 anal spines, and 7 anal soft rays. Its body is silvery with somewhat pointed caudal fin lobes.

180. *Gerres erythrourus*

Common Name	: Deep-bodied mojarra	
Local Name	: <i>Kabance</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is from the Gerreidae family. It inhabits coastal waters up to 40 meters deep. It has a dorsal fin with 9 spines and 10 rays, with the 2nd dorsal spine not elongating, and pectoral fins extending past the 1st anal-fin spine. Its body features fine dark lines along scale rows, with yellow anal and pelvic fins. Typically, 25 cm in length, reaching up to 30 cm, it is found in estuaries and coastal lagoons. The fish forms schools on sandy bottoms, with juveniles feeding on zooplankton and adults on small polychaetes, bivalves, crustaceans, and fish.



181. *Girella mezinga*

Common Name	: Nibbler
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to Kyphosidae family. This fish can grow up to 45 cm. Its body is flattened on the sides, and slightly convex on the head. It has a small mouth, a single dorsal fin with 14 spines and 12-14 soft rays, and an anal fin with 3 spines and 11 soft rays. The body is dark bluish grey to greenish grey above and silvery below, with a bright yellow vertical band when alive. Found in coastal and estuarine areas on hard substrates, it feeds on algae and small crustaceans.

182. *Girella punctata*

Common Name	: Largescale blackfish
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



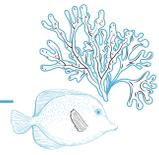
This species, a member of the Kyphosidae family, has an flattened body with a straight outline along the back of its head. The fish has large comb scales on its body, with no scales on the snout and only half of the gill cover covered with fine scales. It has a dorsal fin with 14-15 spines and 12-15 rays, an anal fin with 3 spines and 11-13 rays, and 21 soft rays in the pectoral fin. The body length can reach 50 cm, with maturity at 39 cm. Found in coastal and estuarine areas on hard substrates, it feeds on algae and small crustaceans.

183. *Gnathanodon speciosus*

Common Name	: Golden trevally
Local Name	: <i>Sancara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Carangidae species has an oval body with flat, high sides and small eyes. The maxilla extends below the eye edge, with toothless jaws in adults and tiny teeth in juveniles. The body is covered in small, round scales, and the chest is fully scaled. The lateral line begins below the 8th-9th ray of the second dorsal fin. It features 7-11 black horizontal bands on a silvery white to yellow body, with yellow fins and a black-edged tail. Inhabits shallow coastal waters up to 40 meters, forming schools and often swimming near large fish.



184. *Gymnocranius elongatus*

Common Name	: Forktail large-eye bream
Local Name	: <i>Katamba</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Gymnocranius elongatus belongs to Lethrinidae family. This demersal, non-migratory fish typically inhabits coastal and offshore waters at depths of 50–100 m. It reaches 25–35 cm in length and has an elongated, oblong body. The dorsal fin has 10 spines and 10 rays, while the anal fin has 3 spines and 10 rays. The fish has large eyes, a convex interorbital space, and a silver body with brown bars. It feeds mainly on bottom-dwelling crustaceans, cephalopods, and small fish, living on sandy or muddy bottoms near reefs.

185. *Gymnocranius griseus*

Common Name	: Grey large-eye bream
Local Name	: <i>Gulamah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



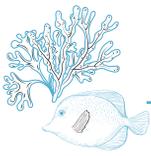
Gymnocranius griseus, a reef-associated, non-migratory fish from the Lethrinidae family, is found at depths of 15–80 m. It grows up to 35 cm, with a common length of 25 cm, and reaches sexual maturity at 15–17 cm. The body is slightly elongated and oval, with large eyes and canine teeth in both jaws. The silvery white to gray body may have 5–8 vertical dark bars. This species inhabits coastal bays, sandy areas, and outer reef edges, feeding primarily on bottom-dwelling invertebrates and small fish.

186. *Gymnosarda unicolor*

Common Name	: Dogtooth tuna
Local Name	: <i>Mambulo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a part of the Scombrinae subfamily in the Scombridae family. Oceanodromous fish that found at depths of 0–250 m. It has an elongated, moderately compressed body, reaching 190 cm in length (up to 250 cm fork length). The large head has a protruding snout, and the mouth contains numerous conical teeth. The species features two dorsal fins followed by 6–7 finlets, a strongly undulating lateral line, and a silvery body with blue-black upper sides. It inhabits coral reefs, is mostly solitary, and preys on small fish and crustaceans.



187. *Gymnothorax chilospilus*

Common Name	: Lipspot moray	
Local Name	: Moray	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The Lipspot moray, part of the Muraenidae family, is a marine, reef-associated fish found at depths of 1–45 m, typically under 5 m. It has an elongated, cylindrical body rarely exceeding 52 cm in length, with a flattened tail and round snout. The body color varies from yellowish brown to dark brown with diverse markings. This carnivorous species inhabits shallow coastal reefs, with juveniles in intertidal zones. Females mature at under 20 cm, already containing eggs. At night, its body color often fades.

188. *Gymnothorax niphostigmus*

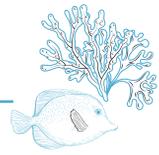
Common Name	: Snowflake-patched moray	
Local Name	: Remang	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This moray belongs to Muraenidae family. This demersal species can grow up to 90 cm and is found at depths of 35–150 m. It has a moderately high dorsal fin that starts before the gill opening, a terminal mouth, and almost uniserial caniniform teeth. Smaller individuals may have 1–2 larger inner maxillary canines. The body and fins are dark brown with white snowflake-like patches. The anal fin edge is white, while the dorsal and caudal fin edges are darker. This moray lives on deep coral reef seabeds and preys on benthic fish.

189. *Gymnothorax richardsonii*

Common Name	: Richardson's moray	
Local Name	: Moray	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Gymnothorax richardsonii belongs to Muraenidae family. This moray inhabits reef ecosystems at depths of 1–15 m and can grow up to 35 cm. It has 114–116 vertebrae, an elongated cylindrical body, and a flattened tail. Its live coloration is greenish brown with irregular dark bands, a lighter chin and throat, and white lip pore margins. It is often found in shallow lagoons and seaward reefs, hiding under loose coral pieces, and feeds on small fish and crustaceans.



190. *Gymnothorax thyrsoideus*

Common Name	: Greyface moray	
Local Name	: <i>Moray pipi abu-abu</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

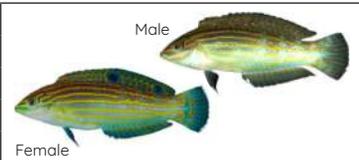
This reef-associated eel, belonging to the Muraenidae family, is found in reef waters at depths of 1–35 m. It typically grows to 40 cm but can reach up to 73 cm, with 129–134 vertebrae. The eel has biserial vomerine teeth and a yellowish-brown body covered in small dark brown spots, except for the darker, spot-free head. It inhabits shallow tidal pools, coral crevices, and turbid lagoon waters. It feeds on crustaceans, small fish, and octopi, often found in pairs or small groups.

191. *Gymnothorax undulatus*

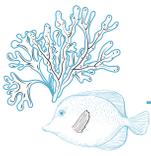
Common Name	: Undulated moray	
Local Name	: <i>Kerondong</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This moray eel, from the Muraenidae family, inhabits depths of 1–110 m and is primarily reef-associated but also enters brackish waters. It can grow up to 150 cm and has an elongated, cylindrical body. The dorsal fin starts between the oral cleft and gill opening, with 131–133 vertebrae. Its body color ranges from blackish to greenish brown with wavy whitish lines, a darker snout, and a yellowish-green top of the head. Common in reef flats and lagoons, it is nocturnal, feeding on fish, octopi, and possibly crustaceans, and is known to be aggressive.

192. *Halichoeres cosmetus*

Common Name	: Adorned wrasse	
Local Name	: <i>Ikan kosmetik</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Labridae family fish is typically found solitary or in small groups at depths of 2–31 m within coral reefs. It has 9 dorsal spines, 11 dorsal soft rays, 3 anal spines, and 11 anal soft rays, reaching a maximum length of 13 cm. Its body is turquoise blue with orange stripes. Males are greenish with 6–7 orange stripes and 3–4 pale green stripes, while females and juveniles have black spots edged with white on their dorsal fins. This carnivorous species primarily feeds on small crustaceans and zooplankton.



193. *Halichoeres hartzfeldii*

Common Name	: Hartzfeld's wrasse
Local Name	: <i>Pelo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This reef-associated Labridae fish is found at depths of 10–70 m, reaching up to 20 cm in length. The head lacks scales, and the fins have no sheath scales. It has 9 dorsal spines, 11 soft rays, and 3 anal spines. Body color varies by size and sex: males are green with colorful markings, females have a yellow stripe, and juveniles are off-white with a yellow band. Preferring seaward reefs with sandy or mixed substrates, this diurnal species feeds on benthic animals and buries itself in sand at night.

194. *Halichoeres hortulanus*

Common Name	: Checkerboard wrasse
Local Name	: <i>Pelo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



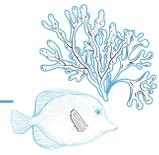
Halichoeres hortulanus, a reef-associated fish from the Labridae family. It inhabits depths of 0–35 m and can reach a length of 27 cm. It has an elongated body, a long-pointed snout, and small scales behind the eyes. Dorsal fins have 9 spines and 11 soft rays; anal fins have 3 spines and 11 soft rays. Color varies by age and gender, with distinct patterns in juveniles, females, and males. Found in coastal coral reefs, it hunts hard-shelled invertebrates during the day and sleeps in the sand at night.

195. *Halichoeres leucoxanthus*

Common Name	: Canarytop wrasse
Local Name	: <i>Pelo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This reef-associated fish from the Labridae family is typically found at depths of 15–50 m. It can reach a maximum length of 12 cm. It has a thin, elongated body with a terminal mouth, and is easily recognized by its bright yellow and white coloration. Juveniles are entirely bright yellow with two black ocelli on the dorsal fin and one on the caudal peduncle. As they mature, they develop a white belly, yellow back, and an additional ocellus on the dorsal fin.



196. *Halichoeres nebulosus*

Common Name	: Nebulous wrasse	
Local Name	: <i>Pelo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish from the Labridae family is found in shallow waters up to 40 m deep and can grow up to 12 cm. It has 9 dorsal spines, 11 dorsal soft rays, 3 anal spines, and 11 anal soft rays. Its large round scales are smaller on the chest, with none on the cheeks. Males have a diagonal pink band below the eye, while females have a brighter pink belly patch. Often seen in groups on reefs and rocky shores, it feeds on small crustaceans.

197. *Halichoeres nigrescens*

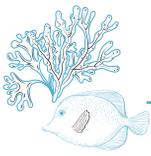
Common Name	: Bubblefin wrasse	
Local Name	: <i>Pelo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish from the Labridae family is commonly found in shallow waters (3–10 m). Its body length can reach 7–14 cm. It has an elongated body, a small mouth with canine teeth, and distinctive fin counts: 9 dorsal spines, 12 dorsal soft rays, 3 anal spines, and 11–12 anal soft rays. Males are green with lavender bands and dark spots, while females are dark greenish brown with white spots. It inhabits weedy rocky shorelines and feeds on fish eggs and benthic invertebrates.

198. *Halichoeres trimaculatus*

Common Name	: Threespot wrasse	
Local Name	: <i>Corak rantai</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Labridae family. This reef-associated fish is found in shallow waters (2–30 m) and grows up to 27 cm. It has an elongated body, small mouth with four canine teeth, and large round scales. Fin counts include 9 dorsal spines, 11 dorsal soft rays, 3 anal spines, and 10–11 anal soft rays. Females are light yellow with red stripes near the eyes, while males are greenish yellow with black spots. It inhabits sandy reef flats, lagoons, and semi-protected reefs, feeding on invertebrates, fish eggs, and small fish.



199. *Harpadon microchir*

Common Name	: Bombay-duck	
Local Name	: <i>Puso</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish from the Synodontidae family. This species is commonly found at depths of 400–600 m on muddy-sand continental shelves. It can reach a maximum length of 70 cm. The fish has an elongated, soft body, thicker at the front and thinner toward the back, with a large, non-protractile mouth. The front is scaleless, while the back has small, easily shed scales. It has 13–14 dorsal fin rays, 14–16 anal fin rays, and a forked caudal fin. It preys on small fish and crustaceans.

200. *Helcogramma inclinata*

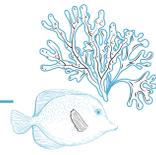
Common Name	: Triangle triplefin	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish from the Tripterygiidae family is found in shallow waters (0–9 m) and grows up to 4.6 cm. It inhabits rocky shores and surge channels with sparse coral growth. The dorsal fin has 15–19 spines and 9–11 soft rays; the anal fin has 1 spine and 18–22 soft rays. Males have a black lower head, while females have six horizontal bands. Eggs are anchored in algae, and larvae are planktonic. It feeds on algae and zooplankton.

201. *Helcogramma maldivensis*

Common Name	: Maldives triplefin	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish from Tripterygiidae family inhabits shallow coastal waters (0–10 m) and grows up to 2.8 cm. It has 15–17 dorsal spines, 9–11 dorsal soft rays, 1 anal spine, and 17–21 anal soft rays. Its pelvic fin has 1 spine and 2 soft rays, with segmented rays partially united by a membrane. Males are reddish with bluish spots and streaks; females are paler with translucent fins. Total lateral scales: 36–38.



202. *Helcogramma striata*

Common Name	: Striped triplefin	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish from the Tripterygiidae family is found in intertidal waters (0–30 m, usually 0–10 m). It can reach up to 4.5 cm in length. It has 16–18 dorsal spines, 10–12 dorsal soft rays, 1 anal spine, and 19–21 anal soft rays. The head, neck, pectoral fin base, and abdomen are scaleless; the body has small ctenoscales. It is white with two red longitudinal bands and three thin white vertical lines. Adults live in clear coastal reefs, feeding on zooplankton.

203. *Hemigaleus microstoma*

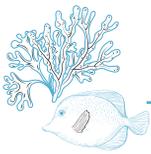
Common Name	: Sicklefins weasel shark	
Local Name	: <i>Hiu kacang</i>	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal shark from the Hemigaleidae family is small and slender. Commonly found in tropical seas up to 170 m deep. It can grow to 115 cm in length. The body is elongated and compressed posteriorly, with a flattened, broadly rounded head. Gill slits are short, about 1.3 times the horizontal eye length. The mouth is short with non-protruding teeth. The second dorsal fin is about two-thirds the size of the first and slightly ahead of the anal fin. Its color is light grey or bronze. It feeds mainly on cephalopods and crustaceans.

204. *Hemiglyphidodon plagiometopon*

Common Name	: Lagoon damselfish	
Local Name	: <i>Tibo</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The lagoon damselfish from the Pomacentridae family is found in coral reefs and lagoons at depths of 1–20 m. It has an oval, flattened body up to 18 cm long, with a slightly long, pointed muzzle and large upward-facing eyes. The mouth is small with notched teeth, and the body has comb scales with 14–17 perforated scales along the lateral line. It has a single dorsal fin with 13 spines and 14–15 rays, and an almost truncate caudal fin. Adults are dark brown, while juveniles are yellow orange. They feed on algae in protected reef areas.



205. *Hemiramphus far*

Common Name	: Black-barred halfbeak
Local Name	: <i>Sunduk</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is a member of the Hemiramphidae family, is a reef-associated, euryhaline fish found in shallow coastal waters up to 6 meters deep. It grows up to 45 cm, with a flattened body, a short triangular upper jaw, and a beak-like lower jaw. Its dorsal and anal fins are posterior, and it has 12–15 dorsal soft rays and 10–12 anal soft rays. The fish is bluish on top and silvery on the sides, with a longer lower lobe on the caudal fin. It forms schools and feeds mainly on seagrasses.

206. *Hemiramphus lutkei*

Common Name	: Lutke's halfbeak
Local Name	: <i>Oras</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



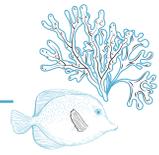
This Hemiramphidae fish is a reef-associated, euryhaline species that enters brackish waters. It reaches up to 40 cm, commonly 25 cm, and matures at 22–24 cm. It lacks fin spines, with posterior dorsal and anal fins, and has 12–15 dorsal and 10–13 anal soft rays. It features a beak-like lower jaw, a short, triangular upper jaw, and long pectoral fins, with no spots or bars. Found in coastal, vegetated waters, it feeds on seaweed as an adult and zooplankton, green algae, and diatoms as a juvenile.

207. *Heniochus acuminatus*

Common Name	: Pennant coralfish
Local Name	: <i>Lencang kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Chaetodontidae fish, found in reef and brackish waters, ranges from 2–170 m deep, commonly 15–75 m. It grows up to 25 cm with a flat, slightly triangular body and a short, pointed snout. It has 11–12 dorsal spines, 24–27 soft rays, and 3 anal spines with 17–19 soft rays. The body is silvery white with two black bands, and its dorsal and caudal fins have yellow rays. It lives in deep lagoons and reef slopes, feeding on plankton and sometimes cleaning other fish.



208. *Heteropriacanthus cruentatus*

Common Name	: Glasseye	
Local Name	: <i>Mangla</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Priacanthidae fish inhabits reefs at depths of 3–300 m (usually 3–35 m), growing up to 50 cm. It has an oval, flattened body with large eyes and a nearly vertical mouth. The fish features rough, solid comb scales and 63–81 lateral line scales. It has a dorsal fin with 10 spines and 11–13 soft rays, and an anal fin with 3 spines and 13–14 soft rays. The bright red or pink body has large red spots and small dark spots on the fins. It feeds on octopus, shrimp, crabs, and small fish.

209. *Hilsa kelee*

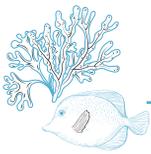
Common Name	: Kelee shad	
Local Name	: <i>Killi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Dorosomatidae species is anadromous and tolerates low salinities, inhabiting coastal and estuarine waters. It grows up to 35 cm (common length 16–17 cm) and matures at 15 cm. The body is deep and compressed with a distinct keel of scutes on the belly. It has a terminal mouth and a black spot behind the upper operculum. The upper jaw has a median notch, and there are small triangular scales above the pectoral fin axil. It feeds on diatoms, dinoflagellates, copepods, larvae, prawns, amphipods, and polychaetes.

210. *Himantura uarnak*

Common Name	: Honeycomb stingray	
Local Name	: <i>Pari macan</i>	
IUCN	: Endangered	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This ray is a brackish-reef species found at 20–50 m depth. It can reach a 200 cm disc width (common 45 cm) and is characterized by a light brown disc with dark spots and form a reticulated pattern in adults. It has a pointed snout, white underside, and a long, slender tail marked with black and white bands. The tail usually has one medium-sized sting. This ray inhabits sandy beaches, shallow estuaries, lagoons, and coral reefs, feeding on small fish, bivalves, crabs, shrimp, worms, and jellyfish. This species belongs to Dasyatidae family.



211. *Hologymnosus doliatus*

Common Name	: Pastel ringwrasse
Local Name	: <i>Ikan Lembain</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hologymnosus doliatus, a reef-associated fish in the Labridae family, is found at depths of 1–35 m, typically 5–30 m. It grows up to 50 cm, with a common length of 30–38 cm. This slender fish has a steeply sloping lateral line, 9 dorsal fin spines, and 12 soft rays. Juveniles are white with orange-red stripes, while females are green, blue, or pink with orange-brown bands. Males are light blue green to light red with distinctive blue or violet bands. It inhabits coral reef surfaces, feeding on small fish, shrimp, polychaetes, and starfish.

212. *Hyporhamphus quoyi*

Common Name	: Quoy's garfish
Local Name	: <i>Julung-julung</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



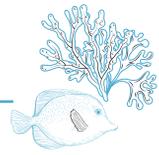
Hyporhamphus quoyi, a member of the Hemiramphidae family, inhabits coastal and estuarine waters up to 30 m deep, and can also be found in tide-influenced rivers. It typically reaches a length of 30–31 cm. The species has a distinctive prolonged, beak-like lower jaw and a short upper jaw. Its fins lack spines; the dorsal fin has 14–17 soft rays, and the anal fin has 13–17 soft rays. The caudal fin is forked, with a longer lower lobe. This fish forms schools and feeds on small crustaceans.

213. *Ilisha melastoma*

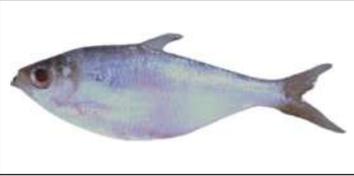
Common Name	: Indian ilisha
Local Name	: <i>Puput</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ilisha melastoma is a member of Pristigasteridae family and is an aphidromous fish. This species can be found in depth range of 0–50 m. The maximum length of this fish is approximately of 22 cm (in standard length). Body moderately deep. Eye large, lower jaw projecting and it has one tall and short-based dorsal fin on middle of back. There are sharp scutes on its belly. Vertical striae on scales continuous over surface. This species commonly occurs in coastal waters but enters estuaries. Feeds on plankton (probably small crustaceans, etc.).



214. *Ilisha sirishae*

Common Name	: Lobejaw ilisha	
Local Name	: <i>Puput</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

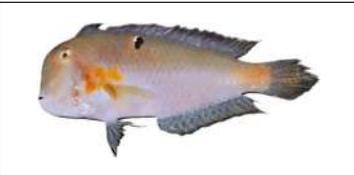
This fish is a member of the Pristigasteridae family, is found at depths of 0–50 m and can grow up to 23 cm. This anadromous fish tolerates low salinity and has a moderately slender body with 28–29 belly scutes, a large eye, and a protruding lower jaw. The dorsal fin originates near or before the body's midpoint, while the anal fin starts just behind the dorsal fin. It is commonly found inshore and in estuaries, feeding on planktonic crustaceans.

215. *Ilisha striatula*

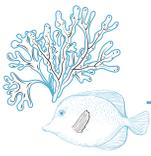
Common Name	: Banded ilisha	
Local Name	: <i>Lajan</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Pristigasteridae family, this anadromous fish is found at depths of 0–50 m and grows up to 18 cm. It tolerates low salinity and has a moderately deep body, small pelvic fins, and a long anal fin with 40–47 rays. The belly has 26–29 scutes. It features a large eye, a projecting lower jaw, and a dorsal fin origin slightly before the body's midpoint. The anal fin starts below the last dorsal fin ray. It commonly inhabits coastal waters and likely enters estuaries.

216. *Iniistius evides*

Common Name	: Western pacific razorfishes	
Local Name	: –	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Labridae family, this benthopelagic fish is found at depths of 5–18 m and grows up to 20 cm. It has an elongated, flattened body, a steep forehead, a short snout, and small eyes. The canine teeth overlap when the mouth is closed. It has a dorsal fin with 9 spines and 12 rays, an anal fin with 3 spines and 12 rays, and 12 pectoral rays. Its light brown body features a black dorsal spot. It lives in sandy areas near shallow reefs and hides in the sand at night.



217. *Iso hawaiiensis*

Common Name	: Hawaiian surf sardine
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the family Isonidae. The species can be found at depth range of 0–2 m. Maximum body length is 5 cm. Teeth in jaws restricted to first third along free edge of premaxilla. Dorsal edge of opercle without notch. Dorsal spines 5–7; dorsal soft rays 14–16; anal spines 1; and anal soft rays: 20–25. Inhabits rough surf and waves around rocky headlands and reefs. Nothing is known of the biology of this species.

218. *Istiblennius edentulus*

Common Name	: Rippled blenny
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



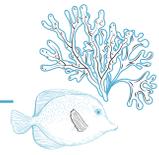
Belonging to the Blenniidae family, this reef-associated and brackish water fish is found at depths of 0–5 m, with a maximum length of 16 cm. It has an elongated, slightly flattened body with a blunt head. Males have a cap membrane on their head, while females do not. The dorsal fin has 12–13 spines and 19–21 soft rays, and the anal fin has 2 spines and 21–23 soft rays. Males are dark with bands and pale stripes, while females are paler with spotted bands. They inhabit areas with large rubble and feed on filamentous algae.

219. *Istigobius decoratus*

Common Name	: Decorated goby
Local Name	: Gobi
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Istigobius decoratus, a reef-associated fish in the Gobiidae family, is found at depths of 1–25 m and grows up to 13 cm. It has 7 dorsal spines, 10–11 dorsal soft rays, 1 anal spine, and 9–11 anal soft rays. The fish features small black and orange dots on its body, with larger black dots along the lateral line. Males have a darkly pigmented genital papilla, while females' papilla is truncated. It commonly inhabits coral sand areas of reef lagoons and reefs.



220. *Johnius belangerii*

Common Name	: Belanger's croaker
Local Name	: <i>Gelama</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This brackish, demersal fish from the Sciaenidae family is found at depths of 1–40 m and grows up to 30 cm. It has an elongated body with a small, nearly horizontal mouth. The fish features 10–11 dorsal spines, 27–31 soft rays, and 5–6 black spots on a grayish-brown body. It inhabits shallow coastal waters and estuaries, feeding on benthic organisms. Nocturnal, it makes loud clicking sounds during reproduction, resembling a frog's croak.

221. *Johnius amblycephalus*

Common Name	: Bearded croaker
Local Name	: <i>Gelama</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



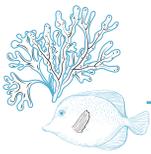
This species of the Sciaenidae family is an amphidromous fish found in coastal and estuarine waters at depths of 1–40 m. It grows up to 25 cm (common length: 15 cm) with an elongated, flattened body, a steep snout, and a blunt barbel on the chin. The dorsal fin has 10 spines and 24 rays, while the anal fin has 2 spines and 7 rays. Dark brown with silvery white on the lower body, it inhabits shallow sandy and muddy waters, feeding on benthic organisms. This fish is nocturnal and carnivorous.

222. *Johnius borneensis*

Common Name	: Sharpnose hammer croaker
Local Name	: <i>Kerong</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This amphidromous fish from the Sciaenidae family inhabits coastal and estuarine waters at depths of 1–130 m, reaching up to 35 cm (commonly 15 cm). It has a moderately long, compressed body, a pointed snout, and a large, slanting mouth. The fish is dusky mauve above, silver-white below, with pale yellow fins and a black-tipped dorsal fin. Found over muddy or sandy bottoms, it feeds on small crustaceans and benthic organisms, making it a target of extensive fisheries.



223. *Katsuwonus pelamis*

Common Name	: Skipjack tuna
Local Name	: <i>Kocala</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This pelagic fish from the Scombridae family inhabits depths of 0–260 m. It has a fusiform, elongated body, small conical teeth in a single row, and two dorsal fins. The fish features 14–16 dorsal spines, 14–15 soft rays, and no anal spines. Its back is dark purplish-blue, while the belly is silvery with 4–6 dark bands. Typically found in offshore waters, it often swarms near floating objects, sharks, and whales. Cannibalistic, it feeds on fish, crustaceans, cephalopods, and mollusks.

224. *Kopua japonica*

Common Name	: Japanese deepwater clingfish
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



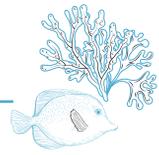
This Gobiesocidae species is found at depths of 225–228 m and grows up to 3 cm in standard length. It has a robust, sub-cylindrical body that is laterally compressed at the posterior, large eyes with a narrow interorbital, and a somewhat depressed head. The skin is smooth and scaleless. It has no fin spines; the dorsal fin has 6 rays, and the anal fin has 5 rays. Its fresh coloration includes pale cream-white with reddish-orange bars, yellowish bands on a pink-orange background, and translucent orange fins.

225. *Kuhlia mugil*

Common Name	: Barred flagtail
Local Name	: <i>Ekor bendera</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Kuhlidae fish, found in depths of 3–18 m, grows up to 40 cm (commonly 20 cm). It has an elongated, compressed body, large eyes, and an oblique mouth with a projecting lower jaw. It features 10 dorsal spines, 10–11 dorsal soft rays, 3 anal spines, and 10–12 anal soft rays. Its coloration is silvery with a blackish snout, white caudal fin with dark stripes, and dusky dorsal fin bands. It forms schools along rocky shorelines, feeds on crustaceans and small fish at night, and is found in tide pools and estuaries, but not in freshwater.



226. *Kyphosus vaigiensis*

Common Name	: Brassy chub	
Local Name	: Ele	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, a member of the Kyphosidae family in the Centrarchiformes order, is a reef-associated fish found at depths of 0–40 m. It can reach up to 70 cm in length, with a common size of 50 cm. The body is elongated and oval, with silvery, bluish coloration and golden horizontal lines. The dorsal spines number 10–11, and the anal spines 3. It inhabits surf-swept outer reef flats, lagoons, and seaward reefs, often found near the shore, with juveniles in open ocean flatsam. Adults are omnivorous.

227. *Labroides dimidiatus*

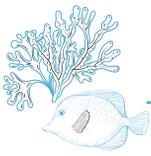
Common Name	: Bluestreak cleaner wrasse	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish, a member of the Labridae family, inhabits coral reefs at depths of 1–20 meters. Known as the “fish doctor,” it reaches up to 14 cm in length and cleans parasites from other fish. Its body is elongated with flat sides, a conical head, and small, pointed teeth. The fish has a distinctive black band running from the mouth to the caudal fin. It feeds on parasites and diseased tissue, benefiting both itself and its host.

228. *Lactarius lactarius*

Common Name	: False trevally	
Local Name	: Mambe	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is part of the Lactariidae family. This fish is found in coastal waters connected to estuaries at depths of 15–100 m. It can grow up to 40 cm, though it's often seen at 30 cm, reaching sexual maturity at 15 cm. The body is elongated with flat sides, and a large, oblique mouth with sharp teeth. It has 8–9 dorsal spines, 20–22 dorsal soft rays, and 3 anal spines. Silvery in color with pale yellowish fins, it primarily feeds on benthic invertebrates and small fish in soft-bottom waters.



229. *Lagocephalus sceleratus*

Common Name	: Silver-cheeked toadfish	
Local Name	: <i>Buntal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish, part of the Tetraodontidae family, is found at depths of 18–100 m and grows up to 110 cm, though commonly around 40 cm. It has a long, cylindrical body that tapers toward a conical caudal peduncle. The caudal fin is broad and crescent shaped. The fish is greenish with brown or black spots, a silver band from mouth to caudal fin, and a white belly. Inhabiting offshore reefs with sandy bottoms, it feeds on mollusks, crustaceans, echinoderms, and fish. This species contains tetrodotoxin, which can cause food poisoning.

230. *Lampanyctus cf turneri*

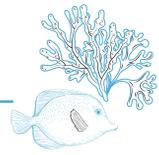
Common Name	: Lanternfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This lanternfish belongs to Myctophidae family. This species is typically found at depths of 200–830 m and can grow up to 7 cm in length. It has a slender, flattened body with easily shed scales, large eyes, and a prominent snout. The dorsal fin, with 13–15 soft rays, is located mid-body, while the anal fin has 16–20 soft rays. The caudal fin is forked. Active day and night, it swims vertically, inhabiting deeper waters by day and ascending to 200 m at night to feed on crustaceans like shrimp.

231. *Lamprogrammus niger*

Common Name	: Cusk eel	
Local Name	: <i>Brotula</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This deep-water eel from the Ophidiidae family is found at depths of 740–2,000 m. Males can grow up to 200 cm, though more commonly reach 31–70 cm. The body is compressed, tapering from head to tail, with a large terminal mouth and granular teeth. Covered in small, easily shed scales, the eel has a well-developed lateral line and lacks pelvic fins. Dorsal soft rays number 105–115, and anal soft rays 84–91. Smaller eels inhabit meso- to bathypelagic zones.



232. *Lates calcarifer*

Common Name	: Barramundi	
Local Name	: <i>Tetaahan</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This diadromous fish from the Latidae family is found at depths of 10–40 m and can reach up to 200 cm in length, though 150 cm is more common. It matures at 29–60 cm. The elongated, compressed body has a deep caudal peduncle, a pointed head, and a large, slightly oblique mouth with villiform teeth. It has a rounded caudal fin and large ctenoid scales. This fish inhabits coastal waters, estuaries, and lagoons, moving between rivers and estuaries to spawn. It feeds on fish and crustaceans.

233. *Leiognathus equula*

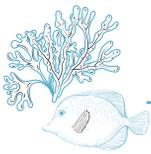
Common Name	: Common ponyfish	
Local Name	: <i>Bebete</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Leiognathidae family. This species is found at depths of 10–110 m. It grows up to 28 cm, though 18 cm is more typical. The body is deep, compressed, and humped, with a downward-pointing mouth and 61–66 tubed scales on the lateral line. It has 8 dorsal spines, 15–16 dorsal soft rays, 3 anal spines, and 14–15 anal soft rays. Adults are greyish on the back, silvery on the belly, and often have a dark saddle on the caudal peduncle. It lives in river mouths, muddy inshore areas, and mangroves, feeding on small invertebrates and fish.

234. *Leiuranus semicinctus*

Common Name	: Saddled snake-eel	
Local Name	: <i>Aer parang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated eel from the Ophichthidae family is found at depths of 0–70 m, usually 0–10 m. It can reach 66 cm in length. The eel has a short head, small pectoral fins, a small eye, and a pointed snout. Its anus is mid-body, with the anal fin positioned closely behind it. The body is white to yellow with 25–30 black saddles. It inhabits sandy areas and seagrass beds on lagoon and seaward reefs, using its stiff tail to burrow quickly into the sand when threatened. It feeds on sand-dwelling fish, crabs, and prawns.



235. *Lepadichthys frenatus*

Common Name	: Bridled Clingfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to the Gobiesocidae family. It is found at depths of 1–6 m. As a reef-associated species, it typically grows to less than 8 cm. Its body is slender and cylindrical, compressed at the caudal peduncle. The dorsal, anal, and caudal fins are connected by membranes, with no fin spines. It has 15–17 dorsal soft rays and 12–15 anal soft rays. Its color ranges from pale grey to pink or orange, with a dark stripe from the snout through the eye. It inhabits rocky shores and coral reefs, often under sea urchins, and breeds through distinct pairing.

236. *Leptoscarus vaigiensis*

Common Name	: Marbled parrotfish
Local Name	: <i>Lama</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



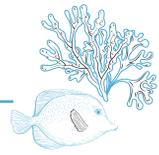
This species belongs to Scaridae family. It can reach 35 cm and is found at depths of 1–15 m. It has an elongate body with fused, beak-like teeth; mature males have 1–4 canines on the upper plates. The dorsal fin has 9 spines and 10 soft rays, while the anal fin has 3 spines and 9 soft rays. Its fresh coloration is greenish or olive brown with mottling and a white stripe in males. It inhabits seagrass and algal-covered hard substrates, feeds on seagrasses and algae, and spawns in shallow water on the falling tide.

237. *Lepturacanthus savala*

Common Name	: Savalai hairtail
Local Name	: <i>Cuale</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Found at depths of 1–100 m, this benthopelagic fish from the Trichiuridae family can grow up to 100 cm. It has a common length of 70 cm. It features 3–4 dorsal spines, 110–120 dorsal soft rays, and lacks pelvic and caudal fins, with a reduced anal fin of spinules. The lateral line runs closer to the ventral side. Its coloration is steely blue with metallic reflections, a white tapering part, and black jaw tips. It inhabits coastal waters, often near the surface at night, and feeds on small fish and crustaceans.



238. *Lethrinus harak*

Common Name	: Thumbprint emperor	
Local Name	: <i>Lencam</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This reef-associated fish, found at 1–20 m depth, typically measures up to 55 cm. It has a moderately deep body, a slightly convex dorsal profile near the eye. It has 10 dorsal spines, 9 dorsal soft rays, 3 anal spines, and 8 anal soft rays. The body is olive or grey above, silvery white below, with a large dark spot below the lateral line. The caudal fin is reddish or orange, and the pelvic. It is often found alone or in small groups in shallow sandy, coral rubble, mangrove, and seagrass areas, feeding on various invertebrates and small fish.

239. *Lethrinus lentjan*

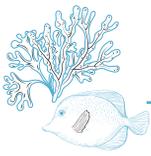
Common Name	: Pink ear emperor	
Local Name	: <i>Dana</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is found at 10–90 m depth, grows up to 52 cm but is usually around 40 cm. It has a slender, moderately deep body with a straight dorsal profile and short snout. It has 10 dorsal spines, 9 dorsal soft rays, 3 anal spines, and 8 anal soft rays. The color ranges from greenish or grey above to white below, with variously colored fins. It inhabits sandy coastal areas, lagoons, and coral reefs, with juveniles in shallow areas and adults in deeper waters. Its diet includes crustaceans, mollusks, and small fish. This fish belongs to Lethrinidae family.

240. *Lethrinus olivaceus*

Common Name	: Longface emperor	
Local Name	: <i>Lencam</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish from the Lethrinidae family can grow up to 100 cm. It has a moderately slender, elongate body with a nearly straight or slightly bumped dorsal profile. It has 10 dorsal spines, 9 dorsal soft rays, 3 anal spines, and 8 anal soft rays, with the third or fourth dorsal spine being the longest. The lateral line has 46–48 scales. Its color is grey with a lighter underside and irregular dark blotches. Found in sandy coastal areas and reef slopes. It feeds on fish, crustaceans, and cephalopods. Juveniles are commonly seen in shallow sandy areas.



241. *Lethrinus ornatus*

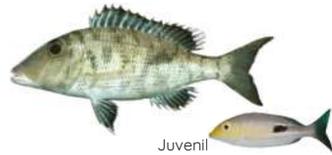
Common Name	: Ornate emperor
Local Name	: <i>Jangka</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish mainly found at 5–30 m depth, grows to about 45 cm. It has an elongated and relatively deep body. The mouth is inferior with canines and villous teeth. It has a single dorsal fin with 10 spines and 9 soft rays, and a bifurcated caudal fin. The body is dusky whitish with orange stripes and features red edges on the operculum and preoperculum. Found in sandy and soft bottoms that adjacent to reefs, it usually forms small groups. It feeds on crustaceans, mollusks, echinoderms, polychaetes, and small fish. This fish belongs to Lethrinidae family.

242. *Lethrinus semicinctus*

Common Name	: Black blotch emperor
Local Name	: <i>Lencam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



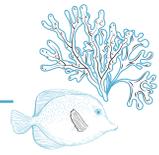
This Lethrinidae fish, found at 4–35 m depth, grows up to 35 cm, typically around 29 cm. It has a compressed, elongate body with large eyes near the dorsal side and a convex dorsal profile. Its mouth is inferior with canine and villous teeth, and the cheek is scaleless. It has a single dorsal fin, high pectoral fins, thoracic pelvic fins, and a forked caudal fin. The body is brown with irregular black spots, and fins are pale or pinkish. It inhabits shallow seagrass beds, reef flats, lagoons, and sandy areas near reefs, feeding on invertebrates and small fish.

243. *Lethrinus xanthochilus*

Common Name	: Yellowlip emperor
Local Name	: <i>Lencam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species distribution is at the depths of 3–150 m. It can grow up to 70 cm. It has an elongated, oblong body with a short, blunt muzzle and large eyes near the dorsal side. The inferior mouth has canine and villous teeth, and the cheek and pectoral fin base are scaleless. It has a bifurcated caudal fin with pointed lobes. Its color is grayish yellow with dark spots and red base spots on the pectoral fins. It feeds on crustaceans, fish, and echinoderms and is usually seen solitary or in small groups. This fish belongs to Lethrinidae family.



244. *Luciogobius parvulus*

Common Name	: Earthworm gobie	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species inhabits various environments, from intertidal zones to depths of 20–50 m. It is a member of the Gobiidae family and typically grows between 2 and 7 cm. The body is elongated and cylindrical, with a terminal mouth where the maxilla extends to the rear of the eye and a more prominent lower jaw. It has small conical teeth and rounded pectoral fins. Its coloration is yellowish white with dense dark brown spots, especially at the caudal peduncle. Pectoral and anal fins are transparent, and it burrows in moist pebble sediment.

245. *Lutjanus argentimaculatus*

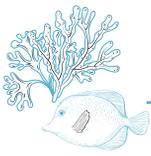
Common Name	: Mangrove red snapper	
Local Name	: <i>Kakap</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is found at depths of 1 to 120 m. The common length of this fish is around 56 cm. It has an oblong, compressed body with a straight or slightly concave forehead, pointed snout, and granular teeth. The caudal fin is slightly emarginate or truncate. Its color ranges from greenish brown to reddish, with juveniles showing whitish bars and blue lines. It preys on fish, crustaceans, gastropods, and cephalopods, inhabiting mangroves and rocky areas, with juveniles migrating to deeper reefs. This species belongs to Lutjanidae family.

246. *Lutjanus bengalensis*

Common Name	: Bengal snapper	
Local Name	: <i>Badur</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is distributed at depths around 10–30 m. The length of this species can reach 30 cm. The body of this fish is elongated oval, with a curved dorsal edge. It has canines in both jaws and large ctenoid scales. The caudal fin is concave, and the dorsal fin has 11 spines and 13–14 soft rays. The back is yellow with blue bands and brown edges, while the abdomen is pink. This species belongs to Lutjanidae family. The adults inhabit coral and rocky reefs, feeding on fish and crustaceans, and may form small groups around rocky areas.

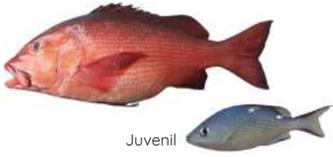


247. *Lutjanus biguttatus*

Common Name	: Two-spot banded snapper	
Local Name	: <i>Kamonca</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

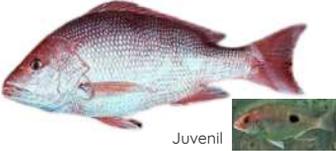
Commonly found at depths of 3–36 m. This species can reach up to 25 cm. It has a low, gently sloping snout profile and scales on the back that rise obliquely above the lateral line. With 11 dorsal spines, 12 soft rays, 3 anal spines, and 8 anal rays. It belongs to the Lutjanidae family. The coloration of this fish includes a dark brown upper body with a broad white band, dusky brown lower body, and yellow suffusion. Adults inhabit coral reefs and outer slopes, often forming large schools or being solitary, feeding on small fish and crustaceans.

248. *Lutjanus bohar*

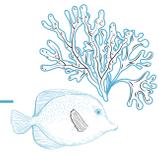
Common Name	: Two-spot red snapper	
Local Name	: <i>Katamba</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Lutjanidae snapper inhabits 4–180 m depths, usually 10–70 m. It can reach 90 cm, commonly around 76 cm. The body is elongated with a curved dorsal edge, evenly spaced eyes, and canines on both jaws. It has 10 dorsal spines, 13–14 soft rays, 3 anal spines, and 8 anal rays. The forked caudal fin and auburn body, darker on the back, are distinctive. Juveniles have silvery spots near the dorsal fin. Found in coral reefs and lagoons, it feeds on fish and crustaceans.

249. *Lutjanus campechanus*

Common Name	: Northern red snapper	
Local Name	: <i>Kakap</i>	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This snapper from the Lutjanidae family is found at 10–190 m, commonly 30–130 m. It grows to 100 cm, usually around 60 cm. The body is tall and compressed with a large mouth and conical teeth. Scales cover the body, cheeks, and operculum, with rows above the lateral line. It has 10 dorsal spines, 14 soft rays, 3 anal spines, and 8–9 anal rays. Adults are dark pink to red, juveniles may have a dark spot. They live over deep reefs and rocky bottoms, feeding on fish, shrimp, crabs, and cephalopods.



250. *Lutjanus carponotatus*

Common Name	: Spanish flag snapper	
Local Name	: <i>Kakap</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Lutjanidae species thrives in depths of 1–80 m, often in schools of 20–30. It grows up to 40 cm, with a moderately deep body, slightly pointed snout, and a steep head profile. It has 10 dorsal spines, 14–16 dorsal soft rays, 3 anal spines, and 9 anal soft rays. Its coloration includes blue gray with white or yellowish ventral sides and orange or yellow stripes. Juveniles have distinctive white and dark stripes. Found in coral reefs, it feeds on various reef fish and crustaceans.

251. *Lutjanus decussatus*

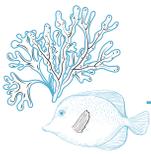
Common Name	: Checkered snapper	
Local Name	: <i>Jangka</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A member of the Lutjanidae family. This species is a reef associated fish found at depths of 0–50 m. Males grow to 35 cm, with a common length of 25 cm and maturity at around 18 cm. The body is elongated and moderately deep with a crescentic vomerine tooth patch. It has 10 dorsal spines, 13–14 dorsal soft rays, 3 anal spines, and 8–9 anal soft rays. Its coloration includes a whitish body with a checkerboard pattern and a black spot at the caudal fin base. Found inshore and offshore, it feeds on small fish and crustaceans.

252. *Lutjanus dodecacanthoides*

Common Name	: Sunbeam snapper	
Local Name	: <i>Kamonca</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of the Lutjanidae family, this fish inhabits depths of 1–30 m. Males reach up to 30 cm. It has a steeply sloped dorsal head profile, large eyes, and a smooth, toothless tongue. The body features oblique scale rows above the lateral line, with 12 dorsal spines, 12–13 dorsal soft rays, 3 anal spines, and 8 anal soft rays. Its coloration includes a brownish back, pink-silver sides with yellow-orange stripes, and yellow fins with reddish margins. Found in shallow coral reefs, it feeds on fish and crustaceans.



253. *Lutjanus ehrenbergii*

Common Name	: Ehrenberg's snapper
Local Name	: <i>Katamba</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species from the Lutjanidae family. This fish is found at depths of 1–20 m, often in large schools. Males reach 35 cm, commonly 20 cm, and mature at 20 cm. It has a moderately deep body, with a truncate to slightly emarginate caudal fin and parallel scale rows. It has 10 dorsal spines, 13–14 dorsal soft rays, 3 anal spines, and 7–9 anal soft rays. Its coloration includes dark brown on top, whitish-silver sides, and yellow stripes. Adults inhabit very shallow coastal areas; juveniles may enter freshwater, feeding on small fish and invertebrates.

254. *Lutjanus fulviflamma*

Common Name	: Dory snapper
Local Name	: <i>Kamonca</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



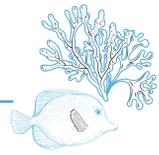
This snapper is a species from the Lutjanidae family. Found at depths of 3–35 m in the Indian and Pacific Oceans. Males reach up to 50 cm, commonly 30 cm, maturing at 16 cm (males) and 18 cm (females). The elongated, compressed body is dark yellow to greenish yellow with silvery pink ventral sides and features 6–7 yellow stripes and a large black blotch. Inhabits coastal coral reefs; juveniles may be in mangrove estuaries. Feeds on small fish and crustaceans.

255. *Lutjanus fulvus*

Common Name	: Blacktail snapper
Local Name	: <i>Kakinta</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Commonly found at 2–75 m depths. It grows over 20 cm, with females larger. Maturity is at 22.5 cm for females and 20.7 cm for males. The body is elongated, with a curved dorsal edge and prominent operculum notch. It has fine teeth, large ctenoid scales, and distinct fins: 10 dorsal spines, 14 dorsal rays, 3 anal spines, and 8 anal rays. Color: reddish brown back, silvery white abdomen, yellow lines on the sides, and various fin colors. Inhabits coral reefs, lagoons, and occasionally mangroves. Feeds on fish and crustaceans, mainly at night.



256. *Lutjanus gibbus*

Common Name	: Humpback red snapper	
Local Name	: <i>Katamba</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Found at depths of 1–150 m. This species has a long, tall, oval body with a steep back and multiple fine teeth, including outer rows slightly enlarged and 2–4 canines at the front of the maxilla. Its size can reach 45 cm length. It has 10 dorsal spines, 13–14 dorsal rays, 3 anal spines, and 8 anal rays. This fish belongs to the Lutjanidae family. Juveniles are light gray with bands and black patches; adults are bright red with darker fins. They inhabit coral reefs or mixed reef-sand areas and feed on fish and invertebrates.

257. *Lutjanus kasmira*

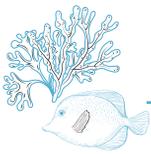
Common Name	: Common bluestripe snapper	
Local Name	: <i>Sasangeh</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Distributed in the Indian Ocean to the central Pacific. Found at 3–265 m, usually 30–150 m. This species can reach 40 cm but is commonly 25 cm. Body is elongated and oval. Covered in stenotype scales, with fine scales on fin bases. Dorsal spines: 10; dorsal rays: 14–15; anal spines: 3; anal rays: 7–8. Caudal fin is concave. Bright yellow body with reddish abdomen, 4 blue bands, and black spot. Fins are yellow with black edges. Adults live in coral reefs, juveniles in seagrass beds. Feeds on fish, crustaceans, cephalopods, and algae.

258. *Lutjanus lemniscatus*

Common Name	: Yellowstreaked snapper	
Local Name	: <i>Kotoha</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish inhabits 2–80 m depths. The length of this fish is up to 65 cm (common length: 35 cm). It has a steep dorsal profile and oblique scale rows. Features: 10 dorsal spines, 13–14 dorsal rays, 3 anal spines, 8 anal rays. Color: gray-brown or olive above, whitish below; fins are dusky with white margins. Juveniles have a black band, large juveniles a black stripe. Adults are pinkish brown with a dusky tail. Found in offshore reefs, muddy habitats, and near coral reefs. Feeds on fish and benthic invertebrates.



259. *Lutjanus lutjanus*

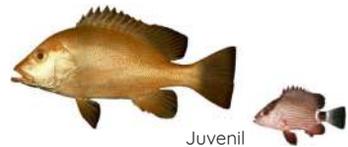
Common Name	: Bigeye snapper
Local Name	: <i>Gorara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Species of the family Lutjanidae. Found at 0–96 m depths, often in large schools of over 100. Maximum size is 30 cm (common 20 cm). Body is elongated with a gently sloping head profile. Features: 10–12 dorsal spines, 12 dorsal rays, 3 anal spines, 8 anal rays. Color: pale brown above, yellowish silver below, with a broad yellow stripe from eye to caudal fin. Inhabits shallow rocky and coral reefs, with adults found offshore.

260. *Lutjanus malabaricus*

Common Name	: Malabar blood snapper
Local Name	: <i>Kakap</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



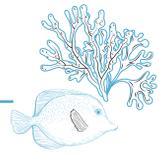
This snapper is commonly found at depths of 12–100 meters. Belonging to Lutjanidae family, it can grow up to 100 cm. It has a deep body, a large mouth, and a truncate caudal fin. Dorsal spines number 11, with 12–14 soft rays; anal spines are 3 with 8–9 soft rays. Adults are red or red orange with lighter undersides and reddish fins. Juveniles have a brown or black band from the jaw to the dorsal fin and a black band across the caudal peduncle. They inhabit coastal reefs and deeper waters, feeding on fish, crustaceans, and other invertebrates, mostly at night.

261. *Lutjanus rivulatus*

Common Name	: Blubberlip snapper
Local Name	: <i>Kampo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This snapper lives in rocky marine waters from 5 to 100 meters deep, often solitary or in small groups of 10–20 individuals. It grows up to 80 cm, commonly 60 cm. It has a deep body, steeply sloped head, and pointed anal fin. Adults have thick lips, 10 dorsal spines, 15–16 dorsal soft rays, 3 anal spines, and 8 anal soft rays. They are yellowish green to brown with yellow margins on fins. Adults are found on deep coastal slopes, while juveniles are in shallow reef flats near freshwater run-offs. They feed on fish, cephalopods, and crustaceans.



262. *Lutjanus rufolineatus*

Common Name	: Yellow-lined snapper	
Local Name	: <i>Badur</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Lutjanidae snapper is found at 15–50 meters, occasionally down to 200 meters. It swims in large reef-associated groups and grows up to 30 cm. It has a moderately deep body, emarginate caudal fin, and oblique scale rows. Key features: 11 dorsal spines, 13–14 dorsal soft rays, 3 anal spines, 8 anal soft rays. Color ranges from grey to pink with 10–12 faint yellow stripes, a black spot below the dorsal fin, and yellowish pectoral fins. It feeds on fish, shrimp, crabs, crustaceans, and cephalopods.

263. *Malacanthus latovittatus*

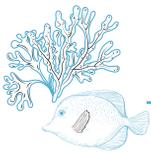
Common Name	: Blue blanquillo	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a reef-associated fish belongs to Malacanthidae. It found at 5–65 meters, usually 20–65 meters. Its length typically reaches 35 cm. It has an elongate body, 15–20% of its standard length in depth. Jaws extend to below the anterior nostril. Features include 4 dorsal spines, 43–47 dorsal soft rays, 1 anal spine, and 37–40 anal soft rays. It has 116–132 pored lateral-line scales. Color: blue head, bluish-grey body with a black stripe, and a dark caudal fin with a white blotch. It lives in rubble burrows and feeds on benthic animals.

264. *Megalaspis cordyla*

Common Name	: Torpedo scad	
Local Name	: <i>Bongkoh</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This pelagic and reef-associated fish lives at 20–100 meters, growing up to 80 cm, commonly 45 cm. It matures at 22 cm (females) and 26 cm (males). Characteristics include 9 dorsal spines, 18–20 dorsal soft rays, 3 anal spines, and 16–17 anal soft rays. It has a bluish-green body, silvery sides, a large black opercular spot, and dark caudal fin. Primarily oceanic and pelagic, it feeds on fish and is rarely found on reefs. It belongs to Carangidae family.



265. *Megalops cyprinoides*

Common Name	: Torpedo scad
Local Name	: <i>Bongkoh</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This amphidromous fish migrates between freshwater and marine environments, found in seas, river mouths, and mangroves. Adults are marine, while juveniles inhabit rivers and lagoons. It grows up to 150 cm, commonly 30-45 cm. The body is deep and compressed with large scales, no fin spines, and 16-21 dorsal and 23-31 anal soft rays. It has a modified swim bladder for air breathing. Color is greenish blue above and silver on the sides. It is diurnal, predatory, and breeds offshore. This fish belongs to Megalopidae family.

266. *Melichthys vidua*

Common Name	: Indo-Pacific tarpon
Local Name	: <i>Bulan-bulan</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



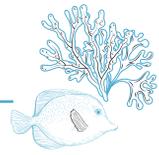
This Balistidae fish lives in reef waters at depths of 0-60 m, reaching up to 40 cm. It has 3 dorsal spines, 31-35 dorsal soft rays, and 28-31 anal soft rays. Juveniles have dark lines near the eyes and fins. Adults are dark brown with yellowish snout and pectoral fins, white dorsal and anal fins with black edges, and a pink caudal fin base. It forms small schools, prefers areas with strong currents, and feeds mainly on algae, detritus, and invertebrates.

267. *Mene maculata*

Common Name	: Moonfish
Local Name	: <i>Kempar pati</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Belonging to Menidae family, this species is a reef-associated fish that found at 50-200 m depth. Frequently seen in brackish waters. It grows up to 30 cm with a deep, triangular, scaleless body. The small, upturned mouth and forked caudal fin are distinctive. It has 3-4 dorsal spines, 40-45 dorsal soft rays, and 30-33 anal soft rays. The body is metallic blue above, silvery below, with dark spots along the lateral line. It lives in coastal waters and feeds on benthic invertebrates.



268. *Mobula birostris*

Common Name	: Giant manta ray	
Local Name	: <i>Pari Manta</i>	
IUCN	: Endangered	
CITES	: App. II	
INA Reg. (KP. 4)	: Protected	

The taxonomic name of this ray was previously known as *Manta birostris*. This ray species belongs to the Mobulidae family. It has an extremely broad head with long head fins. The tail is usually without a spine. The colors are blackish on the upper sides, with white shoulder patches. The tail is like a short whip shaped.

269. *Monocentris japonica*

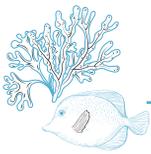
Common Name	: Pinecone fish	
Local Name	: <i>Ikan nanas</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Belonging to the Monocentridae family, this fish resembles a pinecone due to its large, plate-like scales. It lives at depths of 2–200 m. It has 5–7 dorsal spines, 10–12 dorsal soft rays, and 9–11 anal soft rays. The yellow body is armored with black-edged scales, and the lower jaw has light-producing organs. Found in rocky reef caves, it forms schools, with adults at 20–200 m and juveniles in shallower waters.

270. *Monodactylus argenteus*

Common Name	: Silver moony	
Local Name	: <i>Gebal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish lives in marine, brackish, and freshwater areas up to 12 m deep. It can grow up to 27 cm. The body is oval, deep, and compressed, with a small mouth and conical teeth. It has 7–8 dorsal spines, 27–31 dorsal soft rays, 3 anal spines, and 27–32 anal soft rays. Adults are bright silver with yellow and dusky dorsal fins. Juveniles are more colorful with yellow dorsal fins and two black head bands. Found in mangrove estuaries, it feeds on plankton and detritus. This species belongs to Monodactylidae family.



271. *Mugil cephalus*

Common Name	: Flathead grey mullet
Local Name	: <i>Belanak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This mullet fish is a strong, euryhaline swimmer, forming cohesive schools in coastal waters, tidal rivers, and estuaries at 0–10 m depth. It typically reaches 50 cm but can grow up to 100 cm. The body is stout and slightly compressed, with a broad head and well-developed adipose eyelid. It has 5 dorsal spines, 7–9 dorsal soft rays, 3 anal spines, and 8–9 anal soft rays. Olive-green above with silvery flanks and dark stripes, it feeds on zooplankton, benthic organisms, detritus, and algae. This species belongs to Mugilidae.

272. *Mulloidichthys vanicolensis*

Common Name	: Yellowfin goatfish
Local Name	: <i>Jenggotan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



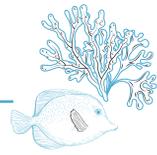
Belonging to the goatfish family (Mullidae), this species is a reef-associated fish found at depths of 1–113 m, typically 25 cm long, reaching up to 38 cm. It has two dorsal fins, a moderately elongated, compressed body, and two long barbels under its chin. The body is whitish to pink with a yellow stripe edged in pale blue. It inhabits sandy bottoms of reef flats and lagoons, forming large daytime aggregations and feeding on small worms and crustaceans at night.

273. *Muraenesox bagio*

Common Name	: Common pike conger
Local Name	: <i>Pucuk nipah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This eel belongs to the Muraenesocidae family and is commonly found in marine and estuarine areas. It can reach up to 200 cm in size. It has a robust, eel-shaped body, long snout, large mouth, and prominent teeth. This nocturnal fish mainly feeds on benthic fish and crustaceans and is known to attack when captured.



274. *Myctophum lychnobium*

Common Name	: Nightlight lanternfish	
Local Name	: <i>Ikan lentera</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Myctophum lychnobium is a species of Actinopterygian marine fish (fish with ray fins) of the family Myctophidae (lanternfishes). Length of this species caught in 1994 is 3.8 cm (standard length, SL), but the size can reach to approximately of 12 cm. This mesopelagic fish can be found at depth range of 0–1,000 m. Dorsal soft rays: 13; and anal soft rays: 18. Exposed margins of scales strongly ctenoid. Body color very dark brown (or black in preservative).

275. *Myctophum orientale*

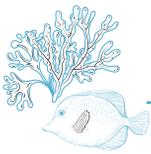
Common Name	: Oriental Lantern Fish	
Local Name	: <i>Ikan lentera</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a lanternfish in the family Myctophidae. This fish belongs to the mesopelagic species that found at deep waters. It has a robust body, reaching up to 7.8 cm in length, with a height about 27% of its length. The fish has rounded opercle edges with no serration and lacks fin spines. It has 12–13 dorsal soft rays and 17–19 anal soft rays. At night, it ascends to surface waters, using bioluminescence to attract attention, and feeds on zooplankton.

276. *Naso annulatus*

Common Name	: Whitemargin unicornfish	
Local Name	: <i>Kapasan</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Reef fish belongs to Acanthuridae family that found at 1–60 m depth. It can grow up to 100 cm and is one of the largest *Naso* species. It has an oval, compressed body with a prominent horn, 5 dorsal spines, 28–29 dorsal soft rays, 2 anal spines, and 27–28 anal soft rays. Adults have elongated caudal filaments and change color from olive-brown to pale blue. Juveniles have white margins on fins and a dark caudal fin. They feed on zooplankton and algae and are found in shallow lagoons and outer reefs, often in small groups.



277. *Naso lituratus*

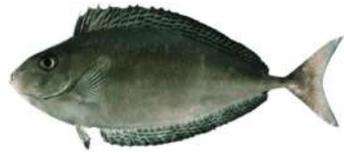
Common Name	: Orangespine unicornfish
Local Name	: <i>Kapasan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A reef-associated fish in the Acanthuridae family. It lives at 0–90 m depths, typically 5–30 m. It can reach 46 cm in standard length. It has 6 dorsal spines, 26–29 dorsal fin rays, 2 anal spines, 27–30 anal fin rays, and 17 pectoral rays. Its body is brown to bluish gray with a yellowish ventral side, and it has dark bands on the opercle and preopercle. The caudal fin is truncated in juveniles and emarginated in adults. Found in coral and rocky reefs, it feeds on brown algae and is usually seen in small groups.

278. *Naso thynnoides*

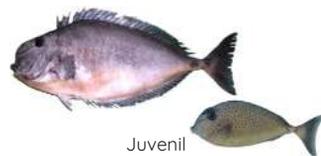
Common Name	: Oneknife unicornfish
Local Name	: <i>Kapasan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



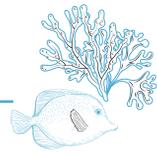
This species is member of Acanthuridae family. This is reef-associated fish, that can be found in coastal waters with depth range of 2–40 m. It has 4 dorsal spines, 28–30 dorsal soft rays, 2 anal spines, and 27 anal soft rays. The body is elongate-ovate with even dorsal and anal profiles and a single, semicircular peduncular keel. It is typically seen in steep outer lagoons and seaward reef slopes, often in large schools, feeding mainly on zooplankton and algae.

279. *Naso tuberosus*

Common Name	: Humnose unicornfish
Local Name	: <i>Kapasan</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This unicornfish belongs to the family Acanthuridae. The species can be found in brackish and reefs waters with depth range of 3–40 m. It has an elongated, laterally compressed body. They have 5 dorsal spines, 26–29 dorsal soft rays, 2 anal spines, and 26–28 anal soft rays. Adults has a bulging head protuberance and a weakly convex dorsal profile. The caudal fin is emarginate in juveniles and slightly emarginate in adults. The fish is grey with black spots and has a large black spot near the pectoral fin base. It primarily feeds on green algae.



280. *Naso unicornis*

Common Name	: Bluespine unicornis	
Local Name	: <i>Ikan Pogot/Botana</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Distributed in Indo-Pacific: East Africa to the Hawaiian, north to southern Japan, south to Lord Howe and Rapa Islands. The special characteristic of this fish has a horn on forehead. The adults inhabit channels, moats, lagoon and seaward reefs with strong surge until 180 m of depth, while juveniles inhabit shallow protected bays. Mainly diurnal, feed on coarse leafy brown algae like sargassum.

281. *Naso vlamingii*

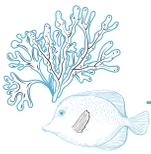
Common Name	: Bignose unicornfish	
Local Name	: <i>Ikan botana/unicorn hidung besar</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This one of the Surgeonfish or Unicornfish is a marine-reef associated. It inhabits deep lagoon and seaward reefs, and distributed in Indo-pacific globally. It forms mid-water aggregations off steep slopes during the day to feed on zooplankton, however this fish is categorized as omnivorous. This fish has vertical blue lines which break up into small blue spots dorsally and ventrally on side of the body, and also has broad blue band on side of head. This fish has the ability to show or hide its blue markings.

282. *Nealotus tripes*

Common Name	: Black snake mackerel	
Local Name	: <i>Ikan makarel</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Gempylidae fish is distributed in Atlantic, Indian, and Pacific water. It inhabits deep ocean water, in epipelagic to mesopelagic area, while migrating to the surface layer at night. It characterized by its large mouth with fang-like teeth. The body color is blackish brown and the fins of dorsal-anal are pale brown. It feeds on myctophids and other small fishes, squid and crustaceans. The common length of the mature fish is 15 cm.



283. *Negaprion acutidens*

Common Name	: Sicklefim lemon shark
Local Name	: <i>Ikan hiu lemon</i>
IUCN	: Endangered
CITES	: App.II
INA Reg. (P106)	: Not Protected



This cartilaginous shark fish belong to Carcharhinidae family and known as ikan hiu lemon in Indonesia. A reef-associated fish, which inhabits brackish and marine water until depth of 92 m. The body is yellowish-brown in colour, hence its named 'lemon' causes the colour is paler along the ventral surface. It feeds on smaller sharks, stingrays and on benthic bony fishes. This aggressive shark is distributed globally in Indo-Pacific water.

284. *Nematalosa come*

Common Name	: Western Pacific gizzard shad
Local Name	: <i>Ikan selanget</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



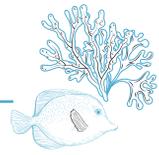
This fish belongs to Dorosomatidae family, also known as sardinellas group. It inhabits pelagic-neritic area of marine water and distributed around Western Pacific water. The common length recorded is 16.5 cm, and maximum length is 21 cm. This fish is characterized by a dark spot behind gill opening, and a very elongated last dorsal spine. It is a filter feeder and feeds on planktons.

285. *Nemateleotris magnifica*

Common Name	: Fire goby
Local Name	: <i>Ikan roket antena/roket merah/bunglon api</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Microdesmidae fish has a yellow colour head, white anterior, and pinkish to orange-red posterior. The dorsal, anal, and caudal fins are highlighted in black. By its unique coloration and its body shape, this fish is high commercial for aquarium/ornamental needs. This marine-reef associated fish inhabits benthic area and feeds zooplankton, copepods, and crustacean larvae. It has habit of flicking its pennant-like first dorsal fin back and forth.



286. *Neomerinthe erostris*

Common Name	: Round scorpionfish	
Local Name	: <i>Ikan lepu</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This benthopelagic fish known as *ikan lepu* in Indonesia, it belongs to Scorpaenidae family. It inhabits marine water until depth of 505 m, and widely distributed in Indo-West Pacific Ocean. Its body strongly variegated, mainly brownish red with reddish white blotches. The eyes are large and the diameter is greater than snout length. This fish can be dangerous to human due to its venomous dorsal, anal, and pelvic spines.

287. *Nesiarchus nasutus*

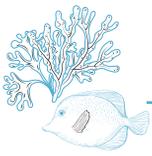
Common Name	: Black gemfish	
Local Name	: <i>Ikan layur laut lepas</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Gempylidae fish, known as snake mackerel fish. In Indonesia, this fish called as *ikan layur*. The adult inhabits benthopelagic to mesopelagic ocean layer, while the larvae and juvenile inhabits epipelagic to mesopelagic layer. Generally, this fish can live until 1200 m depth of water. It feeds on squid, fish and crustaceans. The body is fairly elongate and strongly compressed with violet tint colour. The common length is 80 cm, while the maximum length recorded is 130 cm.

288. *Netuma thalassina*

Common Name	: Giant catfish	
Local Name	: <i>Ikan manyung</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This sea catfish belongs to Ariidae and known as *ikan manyung* in Sumbawa even in all Indonesia area. Distributed in Indo-West Pacific globally. Main habitat is marine water until depth of 195 m, but also found in brackish-estuaries water. It feeds mainly on crabs, prawns, mantis shrimp, and also on fishes and mollusks. This fish possesses sharp and stout dorsal and pectoral spines, covered by poisonous mucus and capable of inflicting painful wounds to human.



289. *Neotrygon kuhlii*

Common Name	: Blue-spotted stingray
Local Name	: <i>Pari</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Blue-spotted stingray, a member of the Dasyatidae family, is found in the Southwest Pacific at depths of 0 to 170 meters. This solitary stingray, which lives on sandy bottoms near rocky or coral reefs, has a reddish-brown to greenish body with blue and black spots, a dark band across its eyes, and a long tail with black and white stripes at the end. It possesses two venomous spines on its tail capable of inflicting extremely painful injuries. This stingray primarily feeds on crabs and shrimps.

290. *Nibea coibor*

Common Name	: Croaker fish
Local Name	: <i>Ikan gulama/gerot</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



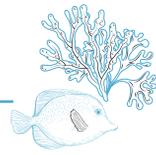
This fish belongs to the Sciaenidae family and mainly distributed in tropical water of Eastern Indian Ocean and Western Pacific. It is a predatory marine fish which is high tolerance to harsh conditions. It inhabits marine and brackish water in demersal area. In Indonesia this fish called *ikan gulama/gerot*. This fast-growing fish has high nutrition and high collagen. In china, this fish has high economic value due to its collagen content by its swim bladder.

291. *Nibea soldado*

Common Name	: Soldier croaker
Local Name	: <i>Ikan blama</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Sciaenidae fish is distributed in Indo-West Pacific. The adult inhabits shallow coastal waters, while the juveniles occur in brackish estuaries, often in turbid river, therefore this fish categorized as amphidromous. It feeds on small fishes and invertebrates. By its physical characteristic, if the *N. coibor* has reddish colour of fins, this *N. soldado* has blueish colour of fins. The maximum length recorded is 60 cm, while the common length is 40 cm.



292. *Novaculichthys taeniourus*

Common Name	: Rockmover wrasse	
Local Name	: <i>Ikan keeling pemindah batu</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish belongs to Labridae family. It inhabits semi-exposed reef flats and lagoon seaward reefs. Usually found in pairs and typically turn or shift pieces of rubble or debris by its mouth to expose the target prey. Therefore, it called by 'Rockmover wrasse'. It feeds on mollusk, sea urchin, polychaete, and crab. The juvenile of this fish has unique body by its long extended dorsal fin spines, and it moves imitate the drifting masses of algae. It distributed in Indo Pacific and Eastern Pacific.

293. *Ocyurus chrysurus*

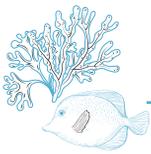
Common Name	: Yellowtail snapper	
Local Name	: <i>Ikan kakap sawo/ ekor kuning</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish belongs to Lutjanidae family. It inhabits coastal water usually in depth range of 10–70 m. Characterized by a prominent mid-lateral yellow band running from the snout to the caudal fin base, also the yellow dorsal and caudal fins. It feeds primarily on plankton, but also the other benthic animal such as fishes, crustaceans, worms, gastropods and cephalopods.

294. *Odonus niger*

Common Name	: Redtoothed triggerfish	
Local Name	: <i>Ikan pogot/triger biru</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The species is known to live in marine environments. It inhabits reefs or along slopes that are subject to strong currents, at a depth of 5–40 m. It is distributed in the Indo-Pacific waters. It forms aggregations or large schools. It feeds on zooplankton and sponges. This fish is more popular as an aquarium fish rather than commercial fish. The common length of this fish is 30 cm, while the maximum recorded is 50 cm.



295. *Opisthopterus tardoore*

Common Name	: Tardoore/ Longfin shad	
Local Name	: Ikan beliak mata	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This amphidromous fish belongs to Pristigasteridae family, distributed globally in Indo West Pacific of tropical water. It found in coastal shore and also in estuaries. It feeds on small biota such as mysids, pseudodiaptomus, copepod eggs, crustaceans, other eggs and larvae, and small fishes. The characteristic of the body is the mouth pointing obliquely upward. The maximum length recorded is 23 cm.

296. *Osteomugil perusii*

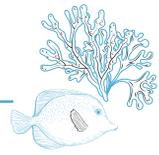
Common Name	: Longfinned mullet	
Local Name	: Ikan belanak	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Mugilidae family, distributed in Indo-West Pacific tropical water. It inhabits brackish and marine environment, found in shoals over mudflats. The coloration of the body is greenish dorsall, silvery in flanks and abdomen, gold spot on operculum, fins dusky, and dark spot at pectoral fin base. The common length of this oviparous fish is 15 cm, while the maximum length recorded is 25 cm.

297. *Ostorhinchus cookii*

Common Name	: Cook's cardinalfish	
Local Name	: Ikan kardinal	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef associated fish belongs to Apogonidae family. This fish is nocturnal species, which found in rocky areas and coral reefs during the day. It inhabits subtidal zone to depths of 10 m. This species distinguished by whitish body with 5 to 6 stripes of dark brown to yellowish colour and by presence of dark spot at middle of caudal fin base merged with midlateral stripe. The maximum length recorded is only 10 cm.



298. *Ostorhinchus doederleini*

Common Name	: Doederlein's cardinalfish	
Local Name	: <i>Ikan kardinal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Apogonidae fish is distributed in Western Pacific. A marine reef-associated fish, occurs in rocky areas near shore and abundant on ledges until depth of 10 m. Like the other cardinal fish, this species is also nocturnal and found solitary except during breeding. Distinguished by pinkish brown body with four dark brown stripes on lateral surface of body. The third stripe posteriorly not reaching the black spot-on caudal fin base. The maximum length recorded is only 14 cm.

299. *Ostorhinchus holotaenia*

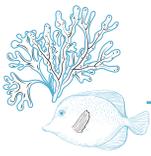
Common Name	: Copperstriped cardinalfish	
Local Name	: <i>Ikan kardinal</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef associated fish belongs to Apogonidae family. This fish is nocturnal species, which found in coastal area. The maximum length recorded for this species is only 8 cm. It can live until 35 m of depth in tropical water. It distributed in Indo-West Pacific area. Distinguished by six yellow brown (copper-like) stripes laterally on the body. The fourth stripe barred the eye at its centre and then extended to the end of the caudal fin. Usually found forms aggregations.

300. *Ostorhinchus semilineatus*

Common Name	: Half-lined cardinal	
Local Name	: <i>Ikan kardinal</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is one of the cardinalfishes, it belongs to Apogonidae family. A little different with the other genus of *Ostorhinchus*, this species can live until 100 m of marine water. However, this species still occurs in brackish water. It distributed in Western Pacific of tropical water. The maximum length recorded is 12 cm. Distinguished by pale reddish upperbody and silvery-white below, and with narrow black stripe from the upper rear of the eye to the rear of the second dorsal fin.



301. *Otolithes ruber*

Common Name	: Tigertooth croaker
Local Name	: <i>Ikan gelik/Gelama</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This amphidromous fish belongs to Sciaenidae family. It inhabits marine and brackish of tropical water, in depth range of 10–40 m. It distributed throughout the Indian Ocean along the east coast of Africa and the West Pacific Ocean. This demersal fish is carnivorous which feeds on fishes, prawns, and other invertebrates. The common length of this species is 40 cm, and can grow maximum until 90 cm.

302. *Parablennius atabey*

Common Name	: Yatabe blenny
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



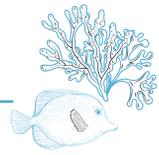
This fish belongs to Blenniidae family, and this fish has facultative air-breathing. It inhabits marine environment in demersal area, the adults commonly found in rocky shore area. The larvae is planktonic, often found in shallow, coastal waters. This small fish can grow maximum only to 9 cm length. The body colour is extremely variable, but the supraorbital cirrus is its characteristic. The male has longer S. cirrus than the female.

303. *Parajulis poecilepterus*

Common Name	: Multicolorfin rainbowfish
Local Name	: <i>Ikan pelangi</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Labridae family, which known as in Wrasse fishes group. This marine demersal fish is found near the shore, rocky, coral reefs, and over the pebble bottoms. Distinguished by small yellow dots all over its body and with the lateral black thick line from head to the caudal fin base. The maximum length recorded is 34 cm. It distributed in Northwest Pacific area. This species is popular as a game fish and commercially trade as an aquarium fish.



304. *Parapercis clathrata*

Common Name	: Latticed sandperch	
Local Name	: <i>Ikan toto</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef associated fish belongs to Puinguipedidae family or known as Sandperches fish. It inhabits both clear lagoon, seaward reefs, open areas of sand, and rubble-rocky surfaces, until depth of 100 m. The body colour of the dorsal surface is reddish-brown, belly whitish, head with brown patches, cheeks with many small black spots and prominent eye spots on the nape. This species occurs in tropical marine waters of the Indo-Pacific.

305. *Parapercis hexophtalma*

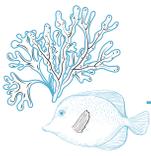
Common Name	: Speckled sandperch	
Local Name	: <i>Ikan jabingan tokek</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef associated fish belongs to Pinguipedidae family. It inhabits sand and rubble bottoms of shallow lagoon and protected seaward reefs, it can live until 25 m depth of tropical water. Distributed throughout Indo-Pacific area. The body colour is white and has brownish small spots all over body. It easily identified by the large black blotch on the tail. The common length of this species is 18 cm, while the maximum length recorded is 29 cm.

306. *Parapercis millepunctata*

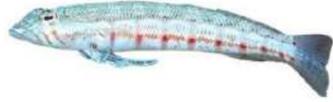
Common Name	: Black dotted sand perch	
Local Name	: <i>Ikan jabingan tokek</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Pinguipedidae fish inhabits seaward reefs, usually on patches of rubble or pavement between corals. Distributed in Indo-Pacific tropical water, in depth range of 3–50 m. The maximum length of this marine-reef associated fish is 18. It recognized by the busy blotched pattern over the back, close-set series of brown to orange blotches behind the eyes on top of the head, and white blotch on the tail. It usually found in solitary or in small groups.



307. *Parapercis multiplicata*

Common Name	: Redbarred sandperch
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine-reef associated fish belongs to Pinguipedidae family. Mainly occurs at moderate depth on open rubble reef flats, but also occurs in more shallow water on outer reef habitats. It can live in depth range of 4–40 m. This species distinguished by the double lines of dashes over the back and body whitish with 8 narrow red bars, each containing 2 dark spots. It usually found in solitary or in small groups.

308. *Paraplagusia bilineata*

Common Name	: Doublelined tonguesole
Local Name	: <i>Ikan lidah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



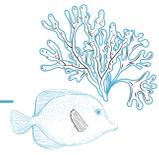
This demersal species belongs to Cynoglossidae family which known as Toungefishes. The body characteristic of this fish flattened, drop-shaped, has small eyes, and has long dorsal and anal fins that join with the tail fin. It usually found on mud and sand bottoms of the ocean continental shelf. It also found in brackish water such shallow estuarine and tidal rivers. The common length of this fish is 25 cm, while the maximum length recorded is 31.6 cm.

309. *Parapriacanthus ransonneti*

Common Name	: Golden sweeper
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine-reef associated fish belongs to Pempheridae family. It inhabits coastal and offshore reefs in depth range of 3–30 m. Its body is semi-transparent with silvery pink bullseye colour and a greenish-gold head and eye. An indistinct dark streak along the upper side from the upper part of the gill and disappearing below the posterior end of the dorsal fin. This fish feeds crustacean, larvae, and polychaetas.



310. *Parexocoetus brachypterus*

Common Name	: Sailfin flyingfish	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This oceanodramous fish belongs to Exocoetidae family. This species has the ability to leaping out of the water and gliding for considerable distances above the surface in order to evade predators. By characteristic, its body is iridescent greenish blue dorsally, silvery white ventrally. It inhabits coastal water in depth range of 0–20 m of pelagic-neritic area. The common length of this fish is 16 cm and the maximum length recorded is 20 cm.

311. *Parexocoetus mento*

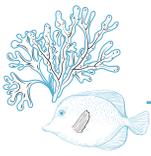
Common Name	: African sailfin flyingfish	
Local Name	: <i>Ikan terbang</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Exocoetidae family which known as Flyingfish. As the typical of other members of its family, it has the ability to jump out of the water and glide on hypertrophied fins. This species distinguished by its length of the pectoral fin is reaching back beyond the anal fin base. It inhabits near-shore surface of seawater. The maximum length recorded is 11 cm. Most of this species will die after a single spawning.

312. *Parupeneus heptacanthus*

Common Name	: Cinnabar goatfish	
Local Name	: <i>Ikan biji angka</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish belongs to Mullidae family, known as Goatfishes. It distributed in Indo-West Pacific water, and usually occurs singly or in small groups over muddy, sandy, rubble of seaward reefs or seagrass of lagoon. The body characteristic is brownish yellow to light red and the edges of the scales darker shading to silvery white ventrally. Dorsal body scales often with a pale blue or pearly spot. The maximum length recorded is 36 cm.



313. *Parupeneus indicus*

Common Name	: Indian goatfish
Local Name	: <i>Ikan kadio/ jenggot</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Mullidae fish is distributed in Indo-Pacific Ocean. It inhabits shallow sandy of coastal and inner lagoon reefs until depth of 30 m. It occurs singly or in schools. This marine-reef associated fish feeds in benthic invertebrates such as small crabs, amphipods, shrimps, small octopuses, polychaete worms, including small fishes. It known for its greenish white overall body with a yellow blotch on each side and a black spot in front of the tail. It can grow until maximum length of 45 cm.

314. *Parupeneus macronemus*

Common Name	: Long-barbel goatfish
Local Name	: <i>Ikan jenggot/ biji nangka</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



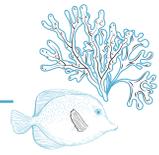
This marine-reef associated fish belongs to Mullidae family. It distributed in Indo-West Pacific and inhabits lagoon and seaward reefs until depth of 40 m. Usually seen solitary on sandy or weedy bottoms of water. This fish is distinguished by body colour of gray to grayish red dorsally, whitish to pink ventrally. It has a black stripe from eye along lateral line to anterior part of caudal peduncle. The common length of this fish is 20 cm.

315. *Parupeneus multifasciatus*

Common Name	: Manybar goatfish
Local Name	: <i>Ikan jenggot/ kadio</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This benthopelagic fish belongs to Mullidae family. It can live until 161 m of tropical water, which inhabits reef flats and shallow lagoons. It usually found over sand patches, rubble, limestone, and corals. This goatfish primarily feeds small crabs and shrimps during the day. The body colour characteristic is pale greyish to brownish red with alternating dusky-red to blackish and white bars of varying widths, and a dark bar behind the eye.



316. *Pempheris adusta*

Common Name	: Dusky sweeper	
Local Name	: <i>Ikan sliding</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Pempheridae family, whoh known as Sweepers fish. This marine-reef associated fish abundantly distributed in the Indian Ocean to the Pacific. It forms aggregation in caves or crevices of coral reefs by day. It feeds zooplankton at nighttime. This fish can be distinguished by bright yellow ring encircling pupil and a faint blackish spot of the pectoral fin base. The maximum length recorded of this fish is 17 cm.

317. *Pempheris vanicolensis*

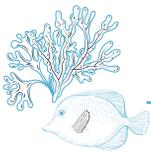
Common Name	: Vanikoro sweeper	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef associated fish belongs to Pempheridae family. It distributed in Indo-West Pacific, and inhabits shallow rocky water and coral reef area until depth of 25 m. This fish disperses at night to feed on crustaceans and polychaeta worms. The body colour characteristic is the greenish shine over the back and most of the head. Anal fin with distinctly black margin and pectoral fins yellow without black basal spot.

318. *Pempheris xanthoptera*

Common Name	: -	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish belongs to Pempheridae family. It inhabits coral reef area, distributed in Northwest Pacific globally. As like the other genus of Pempheridae, this species is also nocturnal. The maximum length recorded is 15 cm. This fish is edible and consumed because of the good taste, but some fish are trade for aquaria needs.



319. *Pennahia aneus*

Common Name	: Donkey croaker	
Local Name	: <i>Ikan gulama/samgeh</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Sciaenidae family. It distributed in Indo-West Pacific, and it inhabits inshore waters down to depth of 60 m. This fish feeds on small crustaceans, benthic worms and small fishes. The common length of this species is 20 cm, while the maximum recorded is 30 cm. The body characteristic can be distinguished by smooth scales cycloid on head and flanks and diffused dusky blotch at nape.

320. *Periophthalmus argentilineatus*

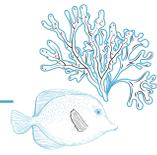
Common Name	: Barred mudskipper	
Local Name	: <i>Ikan glodok</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Oxudercidae family, known as Mudskippers, fish. It inhabits marine, freshwater, and brackish water in range of 0-1 m of depth. It able to climb out of water until 37 hours, in mangrove swamps and burrowing into intertidal mud banks. This facultative air-breathing fish is actively shuttling back and forth between rock pools and air. It feeds on worms, crustaceans, and insects. The maturity length of this fish is 5 cm.

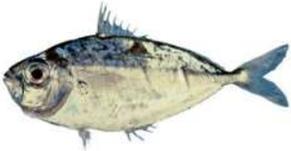
321. *Pemperis oualensis*

Common Name	: Blackspot sweeper	
Local Name	: <i>Ikan geudebang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish belongs to Pempheridae family. Inhabits clear, shallow lagoon, and seaward reef of marine water, and distributed throughout Indo-Pacific water. This fish feeds on benthic biota, planktonic crustaceans, small invertebrates, and fishes at night, while at night it forms aggregations in caves. The colour of the body is copper-brown with blackspot at pectoral fin base; therefore, this fish is also known as copper sweeper.



322. *Photopectoralis aureus*

Common Name	: Golden ponyfish	
Local Name	: <i>Ikan petek</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish belongs to Leiognathidae family, known as ponyfishes or slipmouths. It inhabits marine and brackish water, usually found at the offshore of coastal water. Globally, it distributed in Western Pacific of tropical water. It distinguished by protruding forward mouth and silvery colour of the upper half body with irregular grey-brown blotch and marbling. The common length of this fish is 6 cm.

323. *Pinjalo lewisi*

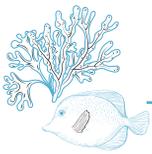
Common Name	: Slender pinjalo	
Local Name	: <i>Ikan kakap</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish belongs to Lutjanidae family, known as snapper fish. It inhabits reefs and rocky bottoms of marine tropical water, in depth range of 20–150 m. It feeds on benthic and planktonic invertebrates, also the small fishes. The body colour of this fish is reddish to reddish orange pinjalo usually with a pale spot on the upper part of the caudal peduncle. The colour can either rapidly fade or intensify.

324. *Pinjalo pinjalo*

Common Name	: Pinjalo	
Local Name	: <i>Ikan kakap</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Lutjanidae family, which lives in tropical water in depth range of 15–100 m. The adult inhabits reefs and rocky bottoms. It feeds on benthic and planktonic invertebrates, and possibly small fishes. This fish is distributed in Indo-West Pacific globally. The upper sides of body colour is pinkish yellow to lavender shading to pinkish or white below, fins with yellow pigment. The common length of this fish is 30 cm.



325. *Planiliza macrolepis*

Common Name	: Largescale mullet
Local Name	: <i>Ikan belanak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This demersal fish belongs to Mugilidae family, known as mullets fish. Categorized as catadromous, which mainly lives at freshwater or brackish water and it is spawning at marine water. It usually found form schools and found in larger aggregations during spawning. It feeds on small algae, diatoms, forams, benthic polychaetes, crustaceans, mollusks, and organic matter and detritus. The maturity length is 23 cm.

326. *Planiliza subviridis*

Common Name	: Greenback mullet
Local Name	: <i>Ikan belanak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



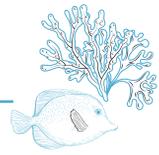
This fish is included as Mugilidae family. As the other mullet fish, this species is also categorized as catadromous. It forms schools around 20–30 individuals in shallow coastal waters and enters lagoons, estuaries, and fresh water to feed. Feed on small algae and benthic detrital material taken in with sand and mud. This fish is widely consumed by the public due to the high nutritional value.

327. *Plectorhinchus flavomaculatus*

Common Name	: Lemonfish
Local Name	: <i>Ikan kakap balong/ kaneke</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine associated reef-fish belongs to Haemulidae family. It distributed globally in Indo West Pacific of tropical water. It inhabits coastal inshore waters near sheltered reefs, lagoons, sandbanks and seagrass areas in depth of 2–80 m. It feeds on small fishes and crustaceans. This fish categorized as oviparous, by distinct pairing during breeding. The body colour of the adult is bluish grey, while the juveniles have golden or rusty orange stripes along the body that break into a reticulate pattern.



328. *Plectorhinchus gibbosus*

Common Name	: Harry hotlips	
Local Name	: <i>Ikan kakap putih/ kaci kakap</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Haemulidae family. It inhabits marine, freshwater, and brackish water. The small juvenile occurs along sheltered sandy shorelines where they mimic a dead leaf by drifting on their sides, while the adult mainly occurs in protected inshore reefs to deep offshore. The body characteristic is stocky silver-grey, dark face, large rubbery lips, dark crease on cheek at start of gill cover which also has a black margin, and dark rear fins. This fish has potential of ciguatera poisoning if being consumed.

329. *Plectorhinchus lessonii*

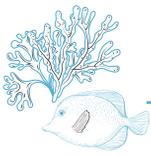
Common Name	: Lesson's thicklip	
Local Name	: <i>Ikan kumpili/kumpele</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This solitary fish belongs to Haemulidae family. It inhabits inner and outer reef lagoons, usually in caves along steep slopes. The juveniles found in shallow lagoons or protected shallow reefs. It distributed in Western Pacific of tropical water in depth range of 1–35 m. This fish has four wide dark stripes from snout to tail, with more stripes on head. The belly is pale unmarked, while the anal and tail fins has large black spots. The maximum length of this fish is 40 cm.

330. *Plectorhinchus lineatus*

Common Name	: Yellowbanded sweetlips	
Local Name	: <i>Ikan kumpele sirip kuning</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This nocturnal fish belongs to Haemulidae family. It feeds benthic invertebrates at night and conspicuously rests during the day. It usually found in deep inner to outer reef habitats. Occurs singly or in aggregations, while the juveniles is solitary. Colour of juveniles with few horizontal to slightly oblique dark brown bands which subdivide with age until the body appears to be dark chocolate brown above, with a network of fine white lines running up and back.



331. *Plectorhinchus schotaf*

Common Name	: Minstrel sweetlips
Local Name	: <i>Ikan baronang hitam/kaci-kaci</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Haemulidae family. It found around rocks and corals from the surf zone to a depth of 80 m, while the juveniles occur in tide pools. It distributed in Indo-West Pacific of tropical in marine and brackish water. The maximum length recorded of this fish is 80 cm, while the common length is 60 cm. The body colour is brownish gray, paler ventrally, and upper part of opercular membrane is red in adults.

332. *Plectorhinchus vittatus*

Common Name	: Indian Ocean oriental sweetlips
Local Name	: <i>Ikan kumpele liris kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



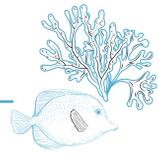
This fish belongs to Haemulidae, which distributed globally in Indo West Pacific of tropical water. It inhabits coral reefs and inshore rocky reefs. The juvenile is solitary, and the adult may be solitary or occurs in aggregation. The body characteristic is has broad black stripes covering all of body, including belly, from snout to tail. Pectoral and pelvic fins plain yellow with dark red or black patch at base, dorsal, anal and tail fins yellow with black spots, and yellow snout.

333. *Plectroglyphidodon altus*

Common Name	: Japanese gregory
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Pomacentridae family, which known as Damselfishes. The body colour is medium brown, sometimes with slight diffusion of yellow. The edges of scales are narrowly bordered with dusky brown. The suborbital is lavender or blue and the lips are pale gray. It inhabits rocky reefs in depth range of 5-20 m. The maximum length recorded of this oviparous fish is 15 cm.



334. *Plectroglyphidodon dickii*

Common Name	: Blackbar devil/ Dick's damsel	
Local Name	: -	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Pomacentridae family, which known as Damselfishes. It inhabits coral-rich and surge areas of clear lagoon-seaward reefs in depth range of 2-12 m. It distributed globally in Indo-Pacific. This non-migratory fish feeds on filamentous algae, small benthic invertebrates, and small fishes. The colour of this fish is dusky yellow to brown with a black bar across the rear of the body, white caudal peduncle and tail, yellow pectoral fins, and a dark margin on the scales.

335. *Plectroglyphidodon leucozonus*

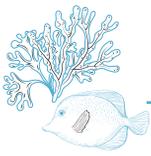
Common Name	: Singlebar devil	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Pomacentridae family, which known as Damselfishes. It distributed globally in Indo-Pacific of tropical water in shallow depth of 2-4 m. The adult inhabits surge-swept shorelines and seaward reef margins. The juvenile occurs in intertidal reef crest. This oviparous fish feeds on benthic algae. The body colour is brown with pale crossbar often missing in mature specimens, and dark spot at base of soft dorsal fin.

336. *Plectropomus maculatus*

Common Name	: Spotted coralgroupers	
Local Name	: <i>Kerapu sunu/ katoko</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Ephinephelidae family, known as grouper. It distributed in Western Pacific of tropical water in depth range of 5-50 m. It found in protected coastal reef in mixed algae and coral habitat, while the juveniles found in shallow water. This solitary fish is forming aggregations during migrates over short distances to spawn. The colour characteristic of this fish is the blue spots elongating into streaks on head, diminishing in size towards tail.



337. *Plicofollis nella*

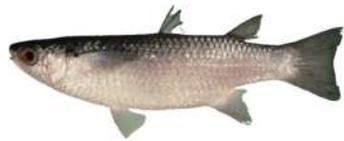
Common Name	: Smooth-headed catfish
Local Name	: <i>Ikan manyung/ kepala lunak</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Ariidae family which known as sea catfishes. It distributed in Western Pacific of tropical water. It usually found in coastal water and estuaries. The catfish feeds mainly on sea urchins. The maximum length recorded is 47 cm. The body is silvery colour, brownish dorsally, and all fins blackish or dusky. It is quick-moving, may be dangerous to humans or traumatogenic.

338. *Plicomugil labiosus*

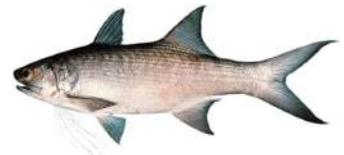
Common Name	: Hornlip mullet
Local Name	: <i>Ikan belanak</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



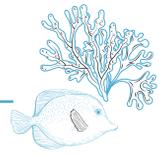
This fish is one of the Mugilidae family. It has a silvery robust body covered with finely ctenoid scales with a distinct small black spot at upper base of pectoral fins. Characterized by thickened upper lip, with small papillae at edge of lip, and the lower lip is thin possesses a distinct fringed edge. It found in reef flats and shallow lagoon reefs of coastal water, and also near freshwater run-offs. It usually found swimming at the surface forms schools. The common length recorded is 20 cm.

339. *Polydactylus plebeius*

Common Name	: Striped threadfin
Local Name	: <i>Ikan kuro/ bandang/ sumbal</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Polynemidae family, known as threadfins and a native species of the Indo-Pacific. It occurs over muddy substrates on the continental shelf, in estuaries and off coastal beaches down to depths no greater than 122 metres. It feeds on small crustaceans, fishes and other benthic organisms. The head and upper flanks of the body are silver with a slight blackish tinge. The colour lightens on the lower flanks and the underside is white. The snout is semi-transparent.



340. *Polydactylus microstomus*

Common Name	: Smallmouth threadfin	
Local Name	: <i>Ikan senangin</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Polynemidae family, known as threadfins. The species inhabits turbid coastal waters, estuaries, and mangrove creeks as well as mangrove-lined rivers in depth range of 2–55 m. It distributed globally in Eastern Indian Ocean and Western Pacific. The colour in of the head and upper sides of trunk-tinged yellowish silver, becoming lighter silver on lower sides. Posterior margins of first and second dorsal fins and caudal fin slightly blackish.

341. *Pomacanthus imperator*

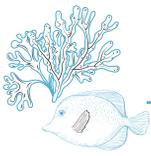
Common Name	: Emperor angelfish	
Local Name	: <i>Ikan angel</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish is one of the Pomacanthidae family. It inhabits areas of rich coral growth on clear lagoon, channel, or seaward reefs. It distributed globally in Indo-Pacific of 1–100 m depth range. This fish feeds on sponges, tunicated, and other encrusting organisms. This fish shows a marked difference between the juveniles and the adults, the adult is striped with blue and yellow horizontal, while the juvenile has a dark blue body marked with white concentric curving lines.

342. *Pomacanthus semicirculatus*

Common Name	: Semicircle angelfish	
Local Name	: <i>Ikan angel koran/kambing ungu</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine reef-associated fish is one of the Pomacanthidae family. Distributed in Indo-West Pacific. Juveniles inhabit shallow protected areas, while, adults prefer coastal reefs with heavy coral growth. Generally solitary or in pairs. Feeds on sponges, tunicates, and algae. The adults are brownish green in colour with the scales edged in blue creating a blue speckling over the body and tail. The juveniles in contrast, are blue-black marked from top to bottom with narrow white stripes.



343. *Pomacentrus adelus*

Common Name	: Obscure damsel
Local Name	: <i>Ikan podangan</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine reef-associated fish is one of the Pomacentridae family. It inhabits lagoon, coastal, and seaward reefs in depth range of 2–8 m. Distributed in Western Pacific. Categorized as oviparous, distinct pairing during breeding. The eggs are adhered to the substrate and the males will guard and aerate the eggs. The colour of its body is dark brown to orangy-brown damselfish with a small dark “ear” spot, a golden iris, and often a blue-ringed ocellus on the rear of the dorsal fin.

344. *Pomacentrus alleni*

Common Name	: Andaman damsel
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



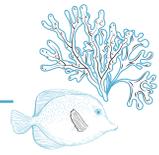
This non-migratory fish belongs to Pomacentridae family. A marine reef-associated fish who inhabits rubble and dead reef of outer slopes and inshore areas. Usually in small groups along the edges of reef to sand. This fish has a neon blue colour and yellow anal fin with a broad black streak along the lower part of the caudal fin. Distributed around Eastern Indian Ocean in depth range of 3–15 m. The maximum size only reaches up to 6 cm.

345. *Pomacentrus amboinensis*

Common Name	: Ambon damsel
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine-reef associated fish belongs to Pomacentridae family. Distributed around Western Pacific in depth range of 2–40 m. An ubiquitous fish that found in lagoons, coastal reefs, passages and outer reef slopes. Feed primarily on algae, but also takes zooplankton. A yellow to pale mauve fish with darker scale margins, a spot at the top of gill cover and another spot on the upper pectoral fin base. Juveniles have an ocellus or false ‘eye spot’ on the rear of the dorsal fin.



346. *Pomacentrus auriventris*

Common Name	: Goldbelly damsel
Local Name	: <i>Ikan podangan biasa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine reef-associated fish is one of the Pomacentridae family. A neon blue colour and yellow underside from pectoral fin to tail with small dark earspot. This fish distributed around Western Central Pacific in depth range of 0–35 m. The adults mainly inhabit inner reef slopes with mixed rubble, coral and algae. They aggregate close to the bottom. Categorized as oviparous, distinct pairing during breeding. The eggs will adhere to the substrate and males will guard and aerate the eggs.

347. *Pomacentrus bankanensis*

Common Name	: Speckled damselfish
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



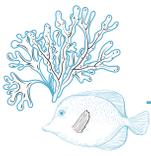
This Pomacentridae fish is inhabits reef flats, passages, outer reef slopes, amongst coarse, rubble or rock. Distributed globally around Western Pacific in depth range of 0–32 m. Feeds primarily on pelagic materials, such as copepods, isopods, and tunicates and opportunistically algae. The body has brown colour with a white tail base beginning in an abrupt straight line, ocellus on rear dorsal fin, dark earspot, and fine black spot at pectoral fin base.

348. *Pomacentrus coelestis*

Common Name	: Neon damselfish
Local Name	: <i>Ikan podangan biasa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A brilliant neon blue damselfish with a yellowish tail, and blue or yellow pelvic and anal fins. It has purple spots above the yellow parts. This fish belongs to Pomacentridae family who inhabits lagoon and seaward reefs, close to the bottom among rubble beds. Feeds on zooplankton and to a lesser extent on benthic algae. It distributed globally around Eastern Indian Ocean and Western Central Pacific in depth range of 1–20 m.



349. *Pomacentrus chrysurus*

Common Name	: Whitetail damsel
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine-reef fish is a species of damselfish in the family Pomacentridae. It has dark blue-grey body, gold-rimmed eye and white or transparent tail. On the dorsal fin, there is a black spot with blue light outline. Adults inhabit sandy areas of lagoons and inshore reefs around rock or coral outcrops. Feed primarily on algae. Distributed around Western Pacific globally in shallow water of 0–5 m depths. It can grow up maximum to 9 cm.

350. *Pomacentrus lepidogenys*

Common Name	: Scaly damsel
Local Name	: <i>Ikan betok laut</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



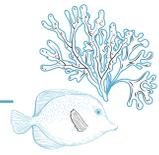
This fish belongs to Pomacentridae family. The colour is pale silvery body, sometimes with yellow shade on upper side and yellow colour of dorsal, anal and tail fins. Distributed around Indo West Pacific in depth range of 1–12 m. Adults inhabit lagoons, passages, and outer reef slopes. Feeds on zooplankton in the water column, a short distance from the bottom. It occurs singly or in small groups. This species known listed in IUCN as Near Threatened.

351. *Pomacentrus moluccensis*

Common Name	: Lemon damsel
Local Name	: <i>Ikan betok kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of bony fish in the family Pomacentridae, from the Western Pacific Ocean. Bright yellow colour with fins and tail opaque yellow rather than semi-transparent. It has Small blue ear spot and black axil spot. Adult inhabits clear lagoon and seaward reefs among branching corals. It occurs in small aggregations. Feeds mainly on algae and planktonic crustaceans. Maximum size reaches up to 9 cm.



352. *Pomacentrus philippinus*

Common Name	: Philippine damsel	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Pomacentridae family. It has distinct dark scale edges and large black spot-on pectoral fin base. Body usually charcoal or black, sometimes with yellow or white tail and rear edges of dorsal and anal fins. It distributed globally around Indo-West Pacific in depth range of 1–20 m. The Adult occurs in lagoons, steep-sided channels, and seaward reefs. Usually found in groups and it can form large aggregations. Maximum size can reach up to 10 cm.

353. *Pomadasys argenteus*

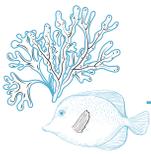
Common Name	: Silver grunt	
Local Name	: <i>Ikan gerot-gerot</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This demersal fish is one of the Haemulidae family. It inhabits marine, freshwater, and brackish water in depth range of 15–115 m. It distributed globally in Indo-West Pacific of tropical water. The body colour is silver, mauve to fawn above, white below. The juvenile has numerous spots aligned horizontally or fused into horizontal lines, while the adult is plain or with scattered charcoal scale spots on back and upper sides. The common length is 25 cm, and the maximum length recorded is 70 cm.

354. *Pomadasys kaakan*

Common Name	: Javelin grunter	
Local Name	: <i>Ikan gerot-gerot/ roto</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a marine-reef fish that belongs to Haemulidae family. It lives at marine and brackish water until depth of 75 m. It inhabits turbid inshore waters with sandy to muddy bottoms. It feeds on crustaceans and fish. The juveniles are bright silvery green dorsally, golden silver on the flanks and has no fewer than 12 indistinct vertical bars. The adults are plain golden green dorsally and silver ventrally with the bars and dorsal fin spots being indistinct or absent. The common length is 50 cm, and the maximum length is 80 cm.



355. *Pomadasys quadrilineatus*

Common Name	: Yellow-lined grunter
Local Name	: <i>Ikan gerot-gerot</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Haemulidae family. This fish found from depth less than 30 m in pelagic-neritic zone. It distributed around Northwest Pacific Ocean. This fish characterized by having five separate and goldish-yellow stripes on the body with the third stripe not meeting the fourth stripe. No dark blotch on the upper opercle but with a yellow stripe when alive. This oviparous fish has maximum length recorded at 12.3 cm.

356. *Priacanthus hamrur*

Common Name	: Moontail bullseye
Local Name	: <i>Ikan swanggi/serindang/uta kala</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



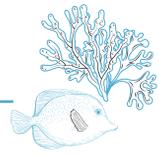
This fish belongs to Priacanthidae family known as bigeyes or catalufas fish. Colour of body entirely red or capable of quickly changing to silvery with about 6 red bars or large spots on upper side. It found in outer reef slopes and deep lagoon pinnacles from 8 to at least 80 m. Feeds on small fish, crustaceans, and other small invertebrates. This marine reef-fish distributed globally in Indo-Pacific of tropical water. Found in small aggregation and/or in schools.

357. *Priacanthus sagittarius*

Common Name	: Arrow bulleye
Local Name	: <i>Ikan swanggi/temenggong</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish is one of the Priacanthidae family known as bigeyes or catalufas fish. It distributed globally around Indo-West Pacific. This fish inhabits demersal zone in sheltered reefs in moderate depths, usually in caves or under coral plates may also be found in rocky and open areas. The colour is reddish silvery or pale yellowish with gray mottling and the iris of the eye pink to bright red. This solitary fish has maximum length at 35 cm.



358. *Prionurus scalprum*

Common Name	: Scalpel sawtail	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a marine ray-finned fish belonging to the family Acanthuridae, the surgeonfishes. Distributed globally around Northwest Pacific in depth range of 2–20 m. Often found in groups in marine reef and surge rocky areas. Body roundish when juvenile and becoming ovate with age. Forehead without rostral prominence even in adult. This fish has venom gland which categorized as venomous to human. The length can reach up to 50 cm.

359. *Pristipomoides filamentosus*

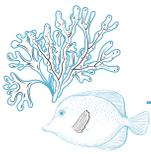
Common Name	: Crimson jobfish	
Local Name	: <i>Ikan kurisi/gurisi/ wahime</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a ray-finned fish, a snapper belonging to the family Lutjanidae. Colour characteristic is variable, ranging from brownish to lavender or reddish purple with narrow yellow lines and blue dots on the snout and interorbital space. This benthopelagic fish inhabits rocky bottoms of deep-water ocean in depth range of 180–270 m. Feeds on small fishes, shrimps, crabs, amphipods, ascidians and salps. Distributed globally in Indo-Pacific.

360. *Pristipomoides typus*

Common Name	: Sharptooth jobfish	
Local Name	: <i>Ikan anggola/ kurisi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Lutjanidae family which known as snappers fish. It found in tropical and sub-tropical deep waters in depth range of 40–120 m. Distributed globally in Eastern Indian Ocean and Western Pacific. It lives in schools and inhabits areas of hard, rocky and uneven sea floor. They feed on benthic invertebrates and fishes. The overall body colour is pinkish red with the crown marked with horizontal wavy lines and spots which are brownish yellow in colour.



361. *Pristis microdon*

Common Name	: Largetooth sawfish
Local Name	: <i>Ikan hiu gergaji</i>
IUCN	: Not Evaluated
CITES	: App. I
INA Reg. (P106)	: Not Protected



This elasmobranchii fish belongs to Pristidae family which known as sawfishes. Characterized by a heavily bodied with a short but massive saw which is broad-based, strongly tapering and with 14–22 very large teeth on each side. The saw is used for grubbing and attacking prey as well as for defense. Inhabits sandy or muddy bottoms of shallow coastal waters, estuaries, river mouths, and freshwater rivers and lakes. The common length is 500 cm.

362. *Prognichthys sealei*

Common Name	: Sailor flyingfish
Local Name	: <i>Ikan terbang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



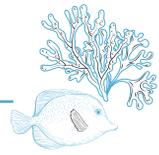
This fish belongs to Exocoetidae family known as flyingfishes. It lives in marine pelagic-oceanic at the depth range 0–20 m, categorized as oceanodromous. Distributed globally around Indo-Pacific of tropical water. It is blue-grey colour at the upper head and upper body and silvery below. The dorsal fin is white with grey rays and tail fin dark violet. It can leap out of the water and glides for considerable distances above the surface with its fins. The maximum length is 19.0 cm.

363. *Promethichthys prometheus*

Common Name	: Roudi escolar
Local Name	: <i>Ikan tenggiri laut dalam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This snake mackerel fish belongs to Gempylidae family. It lives in benthopelagic of ocean deep water at the depth of 300–400 m. Distributed around tropical and warm temperate waters of all oceans. The maximum length can reach up to 100 but the common length is 40 cm. Known migrates to midwater at night. It feeds on fishes, cephalopods and crustaceans. This fish has been reported to carry the ciguatera toxin if being consumed.



364. *Pseudanthias hypselosoma*

Common Name	: Stocky anthias
Local Name	: <i>Ikan gadis dempak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Anthiidae family. Included as marine reef-associated fish, it usually occurs in groups on well-protected reefs, lagoons, bays at the depth of 6–50 m, also on inshore. Distributed around Indo Pacific of tropical water. The body colour is plain pink to orange, but the male has red spot-on dorsal fin and rounded caudal fins, while the female has indented caudal fin with red tips. The common length is 15 cm.

365. *Pseudanthias squamipinnis*

Common Name	: Sea goldie
Local Name	: <i>Ikan anthias ekor kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



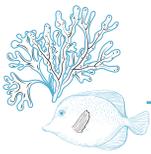
This marine reef fish is one of the Anthiidae family. Inhabits above coral outcrops or patch reefs of clear lagoons, channels, or outer reef slopes in depth range of 0–55 m. Distributed globally around Indo-West Pacific. Usually forms large aggregations and feeds on zooplankton. The male characteristic has yellow spots on body scales, crimson spot-on pectoral fin and extended dorsal fin ray. While female is orange body colour with violet edged red-orange-coloured cheeks stripes.

366. *Pseudobalistes flavimarginatus*

Common Name	: Yellowmargin triggerfish
Local Name	: <i>Ikan jebung</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Balistidae family known as Triggerfishes. It lives in marine and brackish water at the depth of 2–80 m. Inhabits coastal to inner reefs and estuaries, often found on lagoon slope and floor. Distributed around Indo-Pacific Ocean. Feeds on tips of coral branches, gastropods, crustaceans, foraminiferans, tunicates and sea urchins. It has been reported to carry the ciguatera toxin. The adults are solitary or in pairs, while the juveniles form small aggregations.



367. *Pseudodax mollucanus*

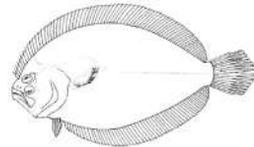
Common Name	: Chiseltooth wrasse
Local Name	: <i>Ikan damak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is one of the Labridae fish. It distributed globally around Indo Pacific. It inhabits clear channels and seaward reefs, while the juvenile is commonly found along drop-offs below 18 m. Adults are solitary and feed on algae and small invertebrates. This fish characterized by white mouth with red and yellow lips, and blue lines extending down operculum below mouth. The maximum length is 30 cm.

368. *Pseudorhombus malayanus*

Common Name	: Malayan flounder
Local Name	: <i>Ikan sebelah/ terabis</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



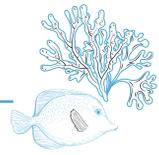
This fish belongs to Paralichthyidae family known as Large-tooth flounders group. This demersal fish lives in depth range 20–27 m, feeds on benthic organisms. Found on the muddy and sandy trawling grounds of the continental shelf. Body has brownish colour and a small dark blotch at junction of straight and curved parts of lateral line. Body deep ovoid. It distributed globally in Indo-West Pacific Ocean. The common length of this fish is 20 cm.

369. *Pteragogus cryptus*

Common Name	: Cryptic wrasse
Local Name	: –
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Labridae family known as Wrasses group. It is a marine reef-associated fish who lives at the depth range of 2–67 m. Distributed globally in Indo-West Pacific. It characterized by having 10 dorsal spines, lacks distinct vertical barring or longitudinal lines, and has yellow or reddish edged ocellus on the gill cover. A secretive fish always found hides in coral reefs. It feeds on benthic invertebrates. The maximum length is 9.5 cm.



370. *Pterocaesio tile*

Common Name	: Dark-banded fusilier	
Local Name	: <i>Ikan lolosi merah</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a species of marine ray-finned fish, a fusilier belonging to the family Caesionidae. Distributed globally in Indo-Pacific at the depth of 0–60 m. This species is distinguished by the lateral line covered for most of its length by a black stripe also has a brilliant light blue zone below black stripe. Ranges widely around coral reefs. Feeds on zooplankton in midwater aggregations. The common length is 21 cm.

371. *Pterois antennata*

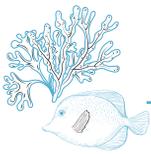
Common Name	: Broadbarred firefish	
Local Name	: <i>Ikan lepu ayam</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a marine ray-finned fish belonging to the Scorpaenidae family. It lives at the depth range of 2–86 m in tropical water. Distributed globally in Indo-Pacific. Occurs in lagoon and seaward reefs, hides in crevices under rocks and coral formations during the day and hunts at night. The body colour is reddish to tan with many dark bars on body, median fins with scattered dark spots. It feeds on shrimps and crabs. This fish is venomous by its spines.

372. *Pycnochromis margaritifer*

Common Name	: Bicolor chromis	
Local Name	: <i>Ikan betok hitam/ putri bali</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This non-migratory fish belongs to Pomacentridae family known as Damselfishes. It distributed around Pacific Ocean of tropical water at the depth range of 0–30 m. The adult is usually seen singly or in small groups on coastal reefs, amongst mixed algae-coral reef or rocky reefs. While the juvenil is found on exposed seaward reefs. It feeds on zooplankton. This fish can be distinguished by a vertical transition of dark brown greyish and white that dividing the body colour.



373. *Rastrelliger brachysoma*

Common Name	: Short mackerel
Local Name	: <i>Ikan kembung perempuan/ruma</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Scombridae family. It lives in marine and brackish water in epipelagic zone at depth range of 15–200 m. This fish tolerates reduced salinities in estuarine and areas where surface temperature range between 20° and 30°C. It forms schools of equally sized individuals. The body colour is silvery with yellowish black edge spinous dorsal fin, and dusky of pectoral and pelvic fins. It feeds microzooplankton. This fish categorized as vulnerable status by IUCN.

374. *Rastrelliger faughni*

Common Name	: Island mackerel
Local Name	: <i>Ikan kembung/ ruma</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



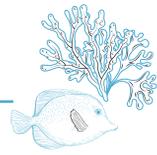
This fish belongs to Scombridae family. It lives at the depth of 2–150 m in waters where surface temperatures above 17°C. Distributed globally around Indo-West Pacific. Distinguished by a black blotch behind pectoral fin base. The belly is yellowish silver, has two to six large spots at the base of the first dorsal fin. Forms schools of equally sized individuals. Feeds on the largest zooplankton organisms. This fish categorized as vulnerable status by IUCN.

375. *Rastrelliger kanagurta*

Common Name	: Indian mackerel
Local Name	: <i>Ikan kembung lelaki/ ruma</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Scombridae family. Distributed globally around Indo-West Pacific in depth range 20–90 m. This fish has thin dark longitudinal bands on the upper part of the body, which may be golden on fresh specimens. There is also a black spot on the body near the lower margin of the pectoral fin. Found in some turbid plankton-rich waters. Feeds on phytoplankton and small zooplankton. The common length of this fish is 25 cm, and the maximum length is 36 cm.



376. *Rexea prometheoides*

Common Name	: Royal escolar	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is one of the Gempylidae family, known as snake mackerels fish group. It lives in benthopelagic at depth range of 135–540 m. Distributed globally in Indo-West Pacific of tropical water. The body colour is grayish with silvery tint and the fins is hyaline except for the black blotch on the fin membranes between the first and the third first dorsal spines. It feeds on fishes, crustaceans, and cephalopods. The maximum length of this fish is 40.

377. *Rhabdamia gracilis*

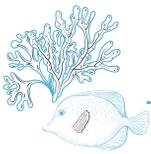
Common Name	: Luminous cardinalfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Apogonidae family known as Cardinalfishes group. Distributed globally in Indo-West Pacific at the depth range of 3–91 m of tropical water. Inhabits lagoon and coastal reefs, among corals and rocks. Feeds during the day in currents above reefs as well as at night. The body colour is bluish longitudinal stripe on the middle of the body and translucent white silvery on head and abdomen; caudal peduncle sometimes with a posteriorly placed black spot.

378. *Rhynchobatus djiddensis*

Common Name	: Giant guitarfish	
Local Name	: <i>Hlu pandu</i>	
IUCN	: Critically Endangered	
CITES	: App. II	
INA Reg. (P106) (KP.86)	: Not Protected	

This stingray is large species in the family of Rhinidae. It lives in marine inshore and brackish water at the depth of 1–75 m. Distributed globally in Western Indian Ocean. It has large black eyespots on the pectoral bases, a distinctive black cross between the eyes, and rows of small white spots on the upper body. Despite not having any cutting teeth, this species is a known predator of stingrays that feeds on crabs, lobsters, bivalves, small fishes and squids.



379. *Sardinella brachysoma*

Common Name	: Deepbody sardinella
Local Name	: <i>Ikan tembang/lemuru/sembula</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Dorosomatidae known as gizzard shads and sardinellas group. Distributed globally in Indo-West Pacific at the depth range of 0–50 m. The common length of this fish is 12 cm, maximum can reach only to 13 cm. Distinguished by deep body shape and has 29 to 32 total scutes. Vertical striae on scales overlapping or sometimes continuous at center of scale. It usually found forms schools in coastal of tropical water.

380. *Sardinella gibbosa*

Common Name	: Goldstripe sardinella
Local Name	: <i>Ikan tembang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



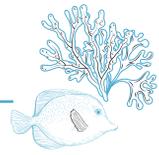
This fish belongs to Teleostei class and Dorosomatidae family. Lives in marine pelagic-neritic at the depth of 10–70 m. Forms schools in coastal waters. Adults feed on phytoplankton and zooplankton, juveniles predominantly prefer crustaceans expanding to include phytoplankton in the diet as their length increases. A golden mid-lateral line down flank with dusky dorsal and caudal fin margins. The common length is 15 cm. This fish is important in fisheries throughout Southeast Asia.

381. *Sardinella lemuru*

Common Name	: Bali sardinella
Local Name	: <i>Ikan lemuru</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Teleostei class and Dorosomatidae family. Lives in pelagic-neritic at depth range of 15–100 m. Adults form large schools in coastal waters, particularly in the Bali Strait upwelling. Found in sheltered bays and lagoons. They feed on phytoplankton and zooplankton, chiefly copepods. A faint golden spot behind gill opening, followed by a faint golden mid-lateral line. This species of sardinella is categorized as Near Threatened status by IUCN.



382. *Sargocentron caudimaculatum*

Common Name	: Silverspot squirrelfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Holocentridae family known as squirrelfishes group. A marine reef-associated fish distributed globally in Indo-Pacific at depth range of 2–40 m. Usually found in reef areas, lagoons, and drop-offs. Distinguished by red colour head and body, silver edges of scales, and silvery white spot anterodorsally on caudal peduncle. Categorized as nocturnal fish, it feeds mainly on benthic crabs and shrimps.

383. *Sargocentron praslin*

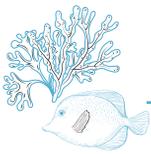
Common Name	: Dark-striped squirrelfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Holocentridae family known as squirrelfishes group. A marine reef-associated fish who lives at the depth of 1–20 m. Inhabits reef flats and shallow protected reefs, often in dead reef areas. It is very secretive during the day. Distributed globally in Indo-West Pacific. Body colour is dark brown to brownish red stripes, alternating with silvery white stripes. The common length of this fish is 20 cm.

384. *Sargocentron rubrum*

Common Name	: Redcoat	
Local Name	: Ikan lolong batu/teraloa	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Holocentridae family known as squirrelfishes group. A marine reef-associated fish who lives at the depth range of 1–84 m of subtropical water. Found in strong current areas such as coastal reefs silty reefs or wrecks in lagoons, bays, or harbors. Feeds mainly on benthic crabs, shrimps, and small fishes. Body with subequal stripes of brownish red and silvery white, spinous dorsal dark red with a large whitish blotch in middle. This species is venomous.



385. *Saurida tumbil*

Common Name	: Greater lizardfish
Local Name	: <i>Ikan beloso/ree rato</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Teleostei class and Synodontidae family. An amphidromous fish who found on muddy bottoms and trawling grounds. Adults feed on fishes, crustaceans, and squids. Distributed globally in Indo-West Pacific Ocean. The body of this fish is cigar-shaped, rounded or slightly compressed, and the head pointed depressed. Color is generally brown above and silver below. The length of this fish mostly in range of 19–35 cm.

386. *Scarus forsteni*

Common Name	: Forsten's parrotfish
Local Name	: <i>Ikan kakatua</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



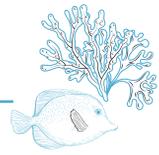
This fish belongs to Teleostei class and Scaridae family, known as parrotfishes group. A marine reef-associated fish who lives on exposed outer lagoon, seaward reefs, rich coral habitats. Found at depth range of 3–30 m in tropical water. Distributed globally around Pacific Ocean. Generally found in solitary not in aggregation. Feeds on benthic algae. The maximum length is 55 cm.

387. *Scarus ghobban*

Common Name	: Blue-barred parrotfish
Local Name	: <i>Ikan kakatua</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Scaridae family. It lives in marine and brackish water at the depth of 1–90 m. The adult inhabits lagoon and seaward reefs, juvenile is found inshore on algae reef. Feed by scraping algae from rocks and corals. Distributed globally in Indo-Pacific and Eastern Pacific. Colour of male is dark reddish brown with a bright green dot from mouth through eye. Female is red on head, belly and fins, side with wavy black, white stripes, and dark green bands around the mouth and eye.



388. *Scarus hypselopterus*

Common Name	: Yellow-tail parrotfish	
Local Name	: <i>Ikan kakatua</i>	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Scaridae family. A marine reef-associated who lives at depth range 10–30 m in tropical water. Distributed globally in Indo-Pacific. It inhabits coastal and outer reefs with dense coral cover, oftenly found in silty habitats. Categorized as near threatened status by IUCN. Maximum length is 31 cm. This fish is possessing a uniformly pale brown color with distinct yellowish caudal fin, and adjacent caudal peduncle with thin white stripes on abdomen.

389. *Scarus psittacus*

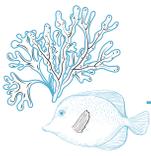
Common Name	: Common parrotfish	
Local Name	: <i>Ikan kakatua</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a parrotfish, in the family Scaridae. A reef-associated fish who lives at the depth range of 2–25 m of tropical water. This benthopelagic species is distributed globally around Indo-Pacific, it found over corals. Colour of male is green to pale brownish with salmon pink or bluish scale margins, a lavender-grey snout, while colour of female is overall reddish brown to grey, usually pale snout. This fish has potential ciguatera poisoning causes.

390. *Scarus rivulatus*

Common Name	: Rivulated parrotfish	
Local Name	: <i>Ikan kakatua</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Scaridae family. It inhabits rocky and coral reefs from tidal pools, silty coastal, offshore areas to 20 m deep. A reef-associated fish who lives at the depth range of 1–30 m. Distributed globally in Western Pacific. Grazes on benthic algae and corals. Males can be easily recognised by the orange patch on the cheek and gill cover, and pale green pectoral fins. Female is grey to greyish-brown or lilac-greyish with two pales stripes along the belly.



391. *Scatophagus argus*

Common Name	: Spotted scat
Local Name	: <i>Ikan kiper</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Scatophagidae family. It lives demersal water at depth range 0–5 m. Inhabits harbors, natural embayments, brackish estuaries and the lower reaches of freshwater streams, frequently occurring among mangroves. Feeds on worms, crustaceans, insects and plant matter. Distributed globally in Indo-Pacifi. The common length is 20 cm. Ground colour greenish. Juvenile with a few large roundish blotches. In large adult, spots may be faint and restricted to dorsal part of flanks.

392. *Scolopsis affinis*

Common Name	: Peters' monocle bream
Local Name	: <i>Ikan jangki timun</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



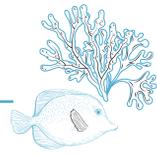
This fish belongs to Teleostei class and Nemipteridae family. A marine reef-associated fish who lives at depth range 3–60 m in tropical. Inhabits sheltered lagoons on sandy or muddy bottoms close to reefs. Distributed globally in Western Pacific. The common length is 15 cm, and maximum length is 24 cm. Occurs singly or in small aggregations. The body colour is silvery-white, and top of head and snout dusky grey. An indistinct bluish stripe between eyes.

393. *Scolopsis aurata*

Common Name	: Yellowstripe monocle bream
Local Name	: <i>Ikan jangki timun</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Nemipteridae family. Marine reef-associated fish who lives at depth range of 1–30 m in tropical water. Occurs close to reefs. Adult at moderate depths in small, loose groups. Juvenile solitary and in sheltered bays along reef edges with rubble or coarse sand. Distributed globally in Indian Ocean. The common length is 18 cm. Body colour is silvery-white and dusky blue on back. A narrow pale bluish stripe joining eyes behind nostrils.



394. *Scolopsis bilineata*

Common Name	: Two-lined monocle bream	
Local Name	: <i>Ikan aoloumang/delik</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef fish belongs to Nemipteridae family. It distributed globally around Indo-West Pacific in the depth range 1–25 m of tropical water. Adults occur on most reef habitats and juveniles inshore or in lagoons or rubble zones. Occurs singly or in small aggregations. Colour dark grey on head and back with diagonal, black-edged white band. This fish feeds on small fishes and benthic invertebrates. The common length of this species is 13 cm.

395. *Scolopsis monogramma*

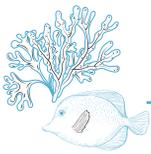
Common Name	: Monogrammed monocle bream	
Local Name	: <i>Ikan jangki timun</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef fish belongs to Nemipteridae family. This species has colour of black to gold stripe on side starting from eye and widening behind pectoral fin. It distributed globally around Indo-West Pacific Ocean in the depth range of 2–50 m of the tropical water. The common length is 18 cm. It occurs on sand bottoms close to reefs and in silty habitats. Occurs solitary or in small groups. Feeds on small fishes, crustaceans, mollusks and polychaete worms.

396. *Scolopsis xenochrous*

Common Name	: Oblique-barred monocle bream	
Local Name	: –	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine-reef fish belongs to Nemipteridae family. This species distinguished by the greyish-brown upper body, silvery-white below. A pearly-blue streak from behind eye along dorsal fin base. Inhabits coastal waters around rocky-rubble and seaweed areas of coral reefs, outer slopes and lagoons in the depth range of 5–50 m tropical water. It feeds mainly on benthic crustaceans. The common length is 14 cm, and the maximum length is 22 cm.



397. *Scomber japonicus*

Common Name	: Chub mackerel	
Local Name	: <i>Ikan salem/makerel pasifik</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is one of the Scombridae family. An oceanodromous fish who lives at depth range of 0–300 m. This species is migrating and globally distributed in the Indo-Pacific Ocean. The adult stays near the bottom during the day and go up to the open water at night where they feed on copepods and other crustaceans, fishes and squids. This fish capable on camouflaging itself to stay hidden from its predators. It has a dorsal pattern very similar to the light pattern of the waves and sun.

398. *Scomberoides commersonianus*

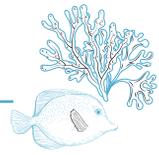
Common Name	: Talang queenfish	
Local Name	: <i>Ikan talang-talang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This amphidromous fish belongs to Scomberoidinae family. It lives in coastal waters, frequently near reefs and offshore islands. Occasionally found in estuaries. Distributed globally in Indo-West Pacific of tropical water. The common length is 90 cm. It feeds on fishes, cephalopods, small invertebrates and other pelagic prey. This fish has a single row of 5–6 large dark silvery spots or blotches running along the flanks over the lateral line.

399. *Scomberoides lysan*

Common Name	: Doublespotted queenfish	
Local Name	: <i>Ikan talang/tari</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Carangidae family, distributed globally in Indo-Pacific. Found only in relatively clear waters of seaward reefs (adult) and shallow inshore or brackish waters (juvenile). Mainly found in solitary but sometimes form small loose groups. The max length of this fish is 110 cm. The adults fish feed on small fishes and crustaceans, while juveniles feed on scales and epidermal tissues torn from other schooling fishes.



400. *Scomberoides tala*

Common Name	: Barred queenfish	
Local Name	: <i>Ikan talang/tari</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Carangidae family. It distributed globally in Indo-West Pacific of tropical water in the depth of 10–13 m. The maximum length of this fish is 70 cm. The adult of this fish is inhabiting inshore waters. It mainly feeds on other fishes. Characterized by having spots on sides elongate vertically, forming short bars in adults. Usually seen swimming solitary in surface waters.

401. *Scomberomorus commerson*

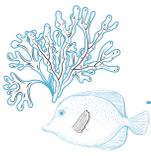
Common Name	: Narrow-barred Spanish mackerel	
Local Name	: <i>Tenggiri</i>	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Scombridae family. An oceanodromous fish who lives at depth range of 10–70 m in tropical water. Distributed globally in Indo-West Pacific. The common length is 120 cm. Colour of back is iridescent blue-grey, sides silver with bluish reflections, marked with numerous thin, wavy vertical bands. Feeds primarily on small fishes like anchovies, clupeids, carangids, also squids and penaeoid shrimps. Usually hunts solitary.

402. *Scorpaenopsis venosa*

Common Name	: Raggy scorpionfish	
Local Name	: <i>Ikan lepu</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Teleostei class and Scorpaenidae family. A marine reef-associated fish who inhabits coastal reef, protected areas of bays or lagoons at the depth range of 2–95 m. Distributed globally in Indo-West Pacific. Adults are best recognized by the tiny light-blue ocelli scattered over the body, and dark triangle below the eye. Usually camouflaged in areas of algae, seagrass or sponge. This fish has venomous spines.



403. *Selar crumenophthalmus*

Common Name	: Bigeye scad
Local Name	: <i>Ikan selar bentong</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Carangidae family is lives at depth range of 0–170 m. Adults prefer clear oceanic waters around islands to neritic waters. Occasionally in turbid waters of pelagic zone. The maximum length is 70 cm. Individuals travel in compact groups of hundreds of thousands of fish. Active at night to feed on small shrimps, benthic invertebrates, and forams when inshore, and zooplankton and fish larvae when offshore. This fish has potential of ciguatera poisoning if being consumed.

404. *Selaroides leptolepis*

Common Name	: Yellowstripe scad
Local Name	: <i>Ikan selar kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



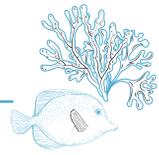
This amphidromous fish belongs to Carangidae family. Adults occurs in inshore waters of the continental shelf. It forms large demersal schools over soft bottom habitats at depths shallower than 50 m. Sometimes they ascend into freshwater reaches like the freshwater tidal zone. Distributed globally in Indo-West Pacific of tropical water. The maximum length recorded of this fish is 22 cm, and the body colour is metallic blue to blue-green colour above grading to a silvery white below.

405. *Seriola dumerili*

Common Name	: Greater amberjack
Local Name	: <i>Ikan kuwe batu/bangkolo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This oceanodromous fish belongs to Carangidae family. It distributed Circumglobal at the depth of 18–72 m. The maximum length can reach up to 190 cm. Bluish grey or olivaceous above, silvery white below with amber stripe along midside of body. Adults found in deep seaward reefs, feeds primarily on fishes such as the bigeye scad, also on invertebrates. This fish has potential of ciguatera poisoning if being consumed.



406. *Sicyopterus japonicus*

Common Name	: -	
Local Name	: <i>Ikan mungkus</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Gobiidae fish is a native freshwater fish from Madagascar to the Pacific islands. Inhabits fast-flowing streams could be considered to be an indicator species of stream pollution because they only grow in streams of high-water quality. It feeds on adhesive algae. It has a long larval marine phase, achieving the oceanic planktonic larvae stage at approximately 5–8 months.

407. *Siganus canaliculatus*

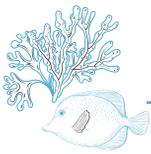
Common Name	: White-spotted spinefoot	
Local Name	: <i>Ikan baronang lingkis/sancara</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Rabbitfishes belong to Siganidae family. It inhabits inshore, algae reefs, estuaries and in large lagoons with algae-rubble habitats. It usually forms very large schools. Distributed globally in Indo-West Pacific. The maximum length recorded is 40 cm. Colour of body is highly variable, greenish grey to yellow brown with numerous pearly blues to whitish spots. This fish is herbivorous, feeds on benthic algae and to some extent on seagrass.

408. *Siganus guttatus*

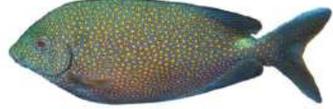
Common Name	: Orange-spotted spinefoot	
Local Name	: <i>Ikan baronang tompel/totol</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Siganidae family who lives at marine, brackish, reef area at depth range of 0–25 m. Distributed around Eastern Indian Ocean and Western Pacific of tropical water. It has dusky blue dorsally, silvery below, and a bright yellow spot adjacent to last few rays of dorsal fin. It Inhabits turbid inshore reefs among mangroves, tolerates or even prefers low salinities. Feeds on benthic algae. Unlike other siganids, this species is reported to be active at night.



409. *Siganus punctatus*

Common Name	: Goldspotted spinefoot
Local Name	: <i>Ikan baronang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Siganidae family known as rabbitfishes. Distributed globally around Western Pacific Ocean of tropical water. It inhabits clear lagoons and seaward reefs, but the juvenile inhabits shallow estuaries. The juvenile lives in schools of up to 50 fishes in size of 15–22 cm. Similar with the other siganus fish, it is herbivore feeds on benthic algae. The common length is 30 cm, and the maximum is 40 cm. Known as venomous fish by its spines.

410. *Siganus spinus*

Common Name	: Little spinefoot
Local Name	: <i>Ikan baronang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



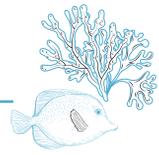
This fish belongs to Siganidae family known as rabbitfishes. Distributed globally around Western Pacific Ocean of tropical water in depth of 1–50 m. The species can adopt several camouflage patterns involving off-white, pale gray to blackish, and various shades of brown. If the spines stout, pungent, venomous. The adult inhabits shallow coral reef flats and rivers, while the juvenile inhabits corals with the algae grown colour. The common length is 18 cm.

411. *Siganus virgatus*

Common Name	: Barhead spinefoot
Local Name	: <i>Ikan baronang/semadar biasa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Siganidae family known as rabbitfishes. Distributed globally around Indo-West Pacific Ocean of tropical water, usually in depth of 1–20 m. The body colour is pale with a silvery white belly. There are two wide diagonal dark bands on the head and the anterior part of body. Inhabits shallow coastal waters, around hard coral reefs and sandy area with patches of rock and soft coral, tolerant of murky waters. It has venomous spines.



412. *Sillago sihama*

Common Name	: Silver sillago	
Local Name	: <i>Ikan rejung/saboka</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Sillaginidae family. An amphidromous fish who inhabits beaches, sandbars, mangrove creeks, estuaries, and it also found in freshwater. Feed mainly on polychaeta worms, small prawns, shrimps, amphipods. This fish is oviparous, and the larvae and juveniles are pelagic feeding on planktonic. The common length is 20 cm, the maximum recorded is 31 cm.

413. *Siphamia majimai*

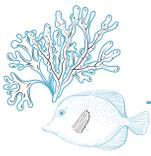
Common Name	: Striped siphonfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Apogonidae family known as Cardinalfishes. A reef-associated fish who lives at depth range of 1-18 m. Occurs in small groups, also found in sheltered reefs and adjacent sand, rubble and rocky bottoms. Distributed globally in Western Pacific water. The maximum length is 3.5 cm. Its body uniformly black and all fins are pinkish yellowish except for pectoral. A luminous organ is present inside the translucent thorax muscles, containing symbiotic luminescent bacteria.

414. *Sphyaena barracuda*

Common Name	: Great barracuda	
Local Name	: <i>Ikan barakuda/sua</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Sphyaenidae family. A reef-associated fish who is also lives at brackish water. Distributed globally in Indo pacific and Western Atlantic. The common length is 140 cm. The body colour is silvery with many oblique dark bars on upper half of body that do not cross lateral line. Juvenil with a series of large dark blotches irregularly arranged on sides of body. Feeds on fishes, cephalopods, shrimps. It is quick-moving, may be dangerous to humans or traumatogenic.



415. *Sphyraena obtusata*

Common Name	: Obstusata barracuda
Local Name	: Ikan barakuda
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Sphyraenidae family. It inhabits bays, estuaries, seagrass beds, and rocky reefs. A schooling species who distributed in Indo-Pacific water. It feeds mainly on fishes. Exhibits diurnal behavior. The body characteristic is elongate head long and pointed, with large mouth large and horizontal. The colour is generally green above and silvery below. The common length is 30 cm and the maximum length is 55 cm.

416. *Sphyraena pinguis*

Common Name	: Red barracuda
Local Name	: Ikan barakuda/lengko
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



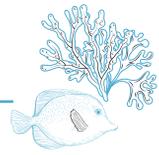
This fish belongs to Sphyraenidae family who lives in near shore on substrates of mud, sandy mud or rock bottoms zone, at depth range of 3–6 m. It distributed globally around Northwest Pacific of tropical water. The maximum length is 50 cm. It usually forms large schools in the ocean. The colour characteristic is silvery with a single yellowish stripe on sides just below lateral line, caudal fin mostly yellowish. This fish is predator, its feeds on fishes.

417. *Sphyraena putnamae*

Common Name	: Sawtooth barracuda
Local Name	: Ikan barakuda/kacangan/sua
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish belongs to Sphyraenidae family who lives at depth of 3–20 m. Found near prominent current-swept lagoons or seaward reefs. A silvery-grey fading to silvery-white below, with many dark bars along the side that cross the lateral line, and blackish caudal fin without white tips. A reef-associated who distributed globally in Indo-West Pacific of tropical water. The common length is 60. cm. Nocturnally active but occurring in relatively large schools during the day.



418. *Spratelloides delicatulus*

Common Name	: Delicate round herring	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A silvery blue sprat becoming silvery-white below with no silver midlateral stripe along the side, and four dark streaks along the basal caudal-fin rays. It belongs to Spratelloididae family. A schooling species who lives in relatively clear coastal waters, lagoons, and along reef margins. Feeds near surface on plankton. The maximum length is 7 cm. Distributed globally in Indo-Pacific water. Known as oviparous fish.

419. *Stolephorus baganensis*

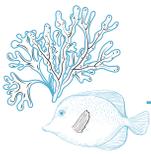
Common Name	: Bagan anchovy	
Local Name	: <i>Ikan teri/teri nasi</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This anchovy belongs to Engraulidae family. Distributed globally in Indo-Pacific and Eastern Indian Oceans. It inhabits coastal waters, but perhaps able to tolerate lowered salinities. Body colour is semi-translucent with a broad silver stripe middlaterally and a double pigment line on dorsum posterior to dorsal fin. Its maximum size is 9 cm. Refers to fishes that regularly migrate between freshwater and the sea, in both directions.

420. *Stolephorus brachycephalus*

Common Name	: Broadhead anchovy	
Local Name	: <i>Ikan teri</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of ray-finned fish in the family Engraulidae. It is distributed globally in the western-central Pacific Ocean. Found in pelagic-neritic at the depth range of 0–50 m of tropical water. Mostly found forms schooling at pelagic water. The body characterized by having a belly little rounded, with four or five small needle-like pre-pelvic scutes. a dark line before dorsal fin.

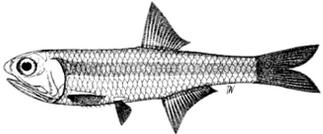


421. *Stolephorus indicus*

Common Name	: Indian anchovy	
Local Name	: <i>Ikan teri jengki</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This anchovies fish belongs to Engraulidae family. It lives in coastal and brackish water pelagic-neritic; A schooling species who is oceanodromous. Distributed in Indian Ocean at the depth of 20–50 in tropical water. The common length is 12.0 cm. It feeds most likely on zooplankton. Body colour is light transparent and fleshy brown, with a silver stripe down flank. It has no dark pigment lines on back between head and dorsal fin.

422. *Stolephorus insularis*

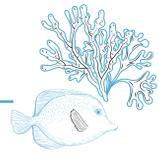
Common Name	: Hardenberg's anchovy	
Local Name	: <i>Ikan teri jengki/teri hitam</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This anchovies fish belongs to Engraulidae family. It lives migrating within oceans at depth range of 0–50 m. Migrations should be cyclical and predictable and cover more than 100 km. Distributed globally in Indo-Pacific and Western Pacific of tropical water. The maximum length is 8 cm. It has compressed and a double pigment line on back behind dorsal fin. The tail is deep yellow typically between spawning and different feeding areas, as tuna fish do.

423. *Sufflamen fraenatum*

Common Name	: Masked triggerfish	
Local Name	: <i>Ikan sango</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This oceanodromous fish belongs to the Balistidae family and lives over sand and rubble patches of seaward reefs at depths ranging from 8 to 186 meters. It is distributed throughout the Indo-Pacific. The common recorded length is 26.0 cm. Juveniles are sand-colored with numerous thin black pinstripes, while adults have an oblique yellow band extending from the corner of the mouth backward and another under the chin. They feed on echinoids, fish, mollusks, tunicates, crustaceans, algae, worms, foraminiferans, and detritus.



424. *Synanceia verrucosa*

Common Name	: Stonefish	
Local Name	: Ikan batu	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the Synanceiidae family, known as stonefishes. It is a reef-associated and non-migratory fish that lives at depths ranging from 0 to 30 meters. Its body coloration matches its surroundings, providing excellent camouflage among the substrate, sometimes even covered with algae. This solitary species feeds on fish and crustaceans. The dorsal fin has two grooves that act as syringes for venom, and its sting is painful and can be fatal. It is categorized as the world's most venomous fish.

425. *Terapon jarbua*

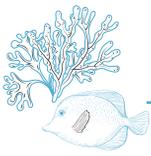
Common Name	: Jarbua terapon	
Local Name	: Ikan kerong-kerong	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is distributed in Indo-Pacific waters. It spawns in the sea and juveniles will migrate into the freshwater. The eggs are guarded and fanned by the male parent. The juveniles are commonly found in sandy intertidal areas and/or tidal areas. Feeding on fishes, insects, algae, and sand-dwelling invertebrates. The body colour is silvery white with 3-4 curved stripes from the nape to the hind part of the body.

426. *Terapon theraps*

Common Name	: Largescaled terapon	
Local Name	: Ikan kerong-kerong	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Terapontidae family. It lives in marine, freshwater, brackish water. A reef-associated fish who distributed in Indo-West Pacific of tropical water. The maximum length is 30 cm. The colour is dusky green above, white below, and an iridescent sheen at body, head and fins. Four longitudinal brown stripes extend on the upper side from the head. A large prominent black blotch is on the distal of the dorsal fin.



427. *Thalassoma hardwicke*

Common Name	: Sixbar wrasse
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This wrasse species belongs to the family of Labridae, a native to the Indian Ocean and the western Pacific Ocean. A reef-associated fish and a non-migratory who lives at depth range of 0–15 m. Color pattern remains pale green with 6 dark bars. Head with pink bands radiating from eye in large adults. Occurs in small, loose groups. It feeds on benthic and planktonic crustaceans, small fishes, and foraminiferans.

428. *Thalassoma janseni*

Common Name	: Jahnson's wrasse
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



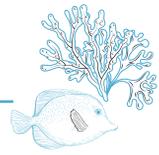
This fish species belongs to Labridae family. A marine reef-associated and a non-migratory fish who lives at the depth range of 1–15 m in tropical water. Distributed globally in Indo-West Pacific. Large juveniles and females are mostly black with a single white band and white area below the head to the anus. Males retain the white central band but is more yellow. Occurs in groups in exposed crests of seaward and lagoon reefs.

429. *Thryssa baelama*

Common Name	: Baelama anchovy
Local Name	: <i>Ikan lampa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This anchovy belongs to the Engraulidae family. It lives in marine and brackish waters at depths ranging from 0 to 50 meters in tropical regions. It is globally distributed across the Indo-Pacific and Western Central Pacific. Its body is not strongly compressed, and the belly is rounded before the pelvic fins. It presumably forms schools and is mostly found inshore in bays, lagoons, harbors, mangrove pools, and estuaries, tolerating lowered salinities. The maximum recorded length is 16 cm.



430. *Thryssa encrasicholoides*

Common Name	: False baelama anchovy	
Local Name	: <i>Ikan tori</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This ray-finned fish belongs to the family of Engraulidae. It is found in the all marine, brackish and freshwater water at the depth range of 0–50 m. Distributed around Indo-Pacific and western Pacific. The maximum length recorded is 10.7 cm. The body characteristic closely related to *Thryssa baelama*, as its common name. The different only whereby the small structural aspects such as more caudal vertebrae.

431. *Thryssa hamiltonii*

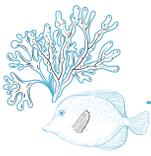
Common Name	: Hamilton's thryssa	
Local Name	: <i>Ikan bills/ cangkang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to the family of Engraulidae. An amphidromous who lives at depth of 10–13 m in the coastal pelagic area. Presumably forms schooling when in inshore and when entering an estuary. Distributed globally in Indo-Pacific Ocean. The maximum length recorded is 27 cm. Body characteristic distinguished by a dark blotch behind upper part of gill opening. This fish is a crustacivore, and the dietary is adjusting as this fish growing up.

432. *Thryssa kammalensis*

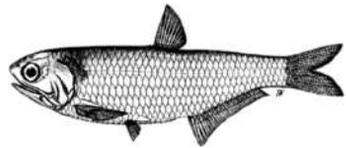
Common Name	: Kammal thryssa	
Local Name	: -	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The Anchovies fish from the family of Engraulidae. Lives at marine and brackish environment in the pelagic-neritic area. Usually found at the depth range of 1–20 m in tropical water. This fish characterized by having a diffuse dark saddle on nape and the snout acute equal to eye diameter. A carnivorous predator and planktonic feeder with a wide variety of prey items such as arrowworms, copepods, crab larvae, shrimps larvae, and fish eggs.



433. *Thryssa kammalenoides*

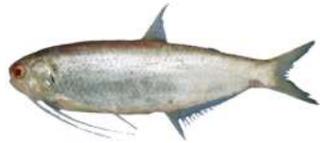
Common Name	: Godavari thryssa
Local Name	: -
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This fish distributed globally around Indian Ocean, extended to northeastern coast of India. Known as Anchovies fish belongs to Engraulidae family. This amphidromous fish is inhabiting marine, coastal, brackish, entering estuaries like other species of *Thryssa* species. The characteristic is a compressed body, snout blunt less than eye diameter. A dark saddle on nape, extending to areas behind upper part of gill opening.

434. *Thryssa setirostris*

Common Name	: Longjaw thryssa
Local Name	: <i>Ikan bulu ayam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



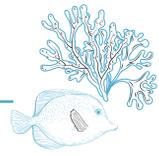
This species is included in anchovies group that belongs to Engraulidae family. Distributed around Indo-Pacific of tropical water at the depth of 1-20 m. Occurring mostly close inshore, entering bays and estuaries, presumably in schooling. Body fairly compressed, snout bluntly rounded. It feeds mainly on crustaceans. The maximum length recorded is 18 cm and the common length is 15 cm.

435. *Thunnus albacares*

Common Name	: Yellowfin tuna
Local Name	: <i>Ikan tuna ekor kuning</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This oceanodromous fish belongs to Scombridae family. It can live in depth range of 1-250 m in tropical and subtropical seas worldwide but absent from the Mediterranean Sea. It is highly migratory species. It is sensitive to low concentrations of oxygen, therefore is not usually caught below 250 m in the tropics. Colour of back is metallic dark blue changing through yellow to silver on belly dorsal and anal finlets bright yellow.



436. *Thunnus obesus*

Common Name	: Bigeye tuna	
Local Name	: <i>Ikan tuna mata besar</i>	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish inhabits a marine environment in a pelagic-oceanic area. An oceanodromous fish which found usually in-depth range of 0–500 m. The global distribution is in the Atlantic, Indian and Pacific in tropical and subtropical water. The maximum length recorded is 250 cm and the standard size is 180 cm. Adults stay in deeper waters, while eggs and larvae are pelagic. During the day and at night, they feed on a wide variety of fish, cephalopods, and crustaceans.

437. *Trachinotus baillonii*

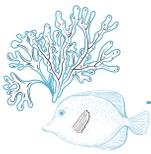
Common Name	: Small spotted dart	
Local Name	: <i>Ikan lowang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A reef-associated fish belongs to Carangidae family. It has silvery-blue to greyish dart becoming silvery-white below, with 1 to 6 relatively small black spots along the lateral line. Lives at depth range of 0–3 m in the marine and brackish water. They always move in schools at the edge of the surf near the reef, usually in pairs or small groups in surface of waters. They feed on small fishes. Distributed globally in Indo-Pacific. The common length of this fish is 35 cm.

438. *Trachinotus blochii*

Common Name	: Snubnose pompano	
Local Name	: <i>Ikan lowang biasa</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Carangidae family. Distributed globally in Indio-Pacific of tropical water. Usually found at depth range of 1–7 m, Juveniles inhabit sandy shorelines and shallow bays near river mouths in small schools while adults solitary inhabit clear seaward coral and rock reefs. The Adults feed primarily on sand mollusks and other hard-shelled invertebrates. This fish has potential of ciguatera poisoning if being consumed.



439. *Trachurus japonicus*

Common Name	: Japanese jack mackerel
Local Name	: <i>Ikan makarel</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This oceanodromous fish belongs to Carangidae family who lives at 50–275 m. Distributed in Northwest-Pacific and Pacific Ocean off the coast of southeast Asia. The adults occur on continental waters, while juveniles associate with drifting seaweed. It is greyish blue on its back, a silver color on its underside, with a black blotch over the gills, has no finlets and the entire lateral line with scutes. They feed mainly on small crustaceans such as copepods, as well as shrimp and small fish.

440. *Triacanthus biaculeatus*

Common Name	: Short-nosed tripodfish
Local Name	: <i>Ikan cupang-cupang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



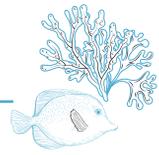
A demersal fish who belongs to Triacanthidae family. It inhabits sandy or muddy flat in coastal and estuarine waters at the depth range of 0–60 m. Distributed globally in Indo-West Pacific water. It feeds on benthic invertebrates. A dusky silver tripodfish becoming paler below, with a very dark membrane on the spinous dorsal fin between the first and third spines. The maximum length recorded is 30 cm.

441. *Triaenodon obesus*

Common Name	: Whitetip reef shark
Local Name	: <i>Ikan hiu karang sirip putih</i>
IUCN	: Vulnerable
CITES	: App. II
INA Reg. (P106)	: Not Protected



This shark is one of the Carcharchinidae family known as requiem sharks. Usually found at the tropical water around Indo-Pacific and Eastern Pacific. The common length of this small shark is 160 cm. It is a slender shark with an extremely short, broad snout, oval eyes. The body colour is gray above, lighter below and sometimes with dark spots on sides. More active at night or during slack tide in areas of strong currents. Rarely reported to attack humans but is potentially dangerous.



442. *Trichiurus japonicus*

Common Name	: Largehead hairtail	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is one of the most commercially important fishes in the western North Pacific. This benthopelagic fish a member of the Trichiuridae family. Inhabits tropical and temperate water in continental shelves and shallow coastal waters. This species is in high trophic level predators that play a key role in the marine food web, as they control lower trophic level species such as fish, shrimp, and squid. Categorized as opportunistic carnivorous feeding on available dietary species.

443. *Trichiurus lepturus*

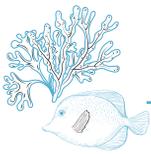
Common Name	: Largehead hairtail	
Local Name	: <i>Ikan layur/ jariwa</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is abundant in tropical and temperate oceans throughout the world. A silvery steel blue in color, turning silvery gray after death. The fins are generally semi-transparent and may have a yellowish tinge. This benthopelagic fish belongs to Trichiuridae family. An amphidromous who inhabits muddy bottom of shallow coastal waters and often enter estuaries. Large adults usually feed near the surface during the daytime and migrate to the bottom at night.

444. *Tylosurus acus*

Common Name	: Agujon needlefish	
Local Name	: <i>Ikan kacang</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species from the Belonidae family, known as needlefish. It is a marine reef-associated fish with a dark blue upper body, silvery white underside, and a blue stripe along the flank. It is distinguished by its elongated, relatively slender, rounded body, and both jaws are highly prolonged. The common recorded length is 90 cm. It inhabits oceanic and neritic waters and feeds on small fish. This fish is quick-moving and may be dangerous to humans.



445. *Tylosurus crocodilus*

Common Name	: Hound needlefish	
Local Name	: <i>Ikan kacangang/caroang/kamano</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

An oceanodromous fish who lives at depth range of 0–13 m. Distributed globally in Indo-West Pacific, Western Atlantic, and Eastern Atlantic. It found over lagoon and seaward reefs. The body has dark bluish green colour above and silvery below. This fish belongs to Belontiidae family and considered to be dangerous, and feared by fishermen because of their size and tendency to leap out of the water, which may causing puncture wounds with their beaks.

446. *Upeneus itoui*

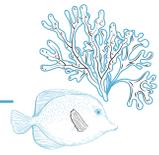
Common Name	: Oriental Goatfish	
Local Name	: <i>Ikan kuniran</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Mullidae family, known as a goatfish. It distributed globally around Northwest Pacific southern of Japan. This demersal fish inhabits only marine environmental at the depth of 23–27 m. It can be easily distinguished by lacking teeth on the ectopterygoids. The latter has a dark brown saddle-like spot on the caudal peduncle just posterior to the second dorsal fin and three dark bands on the caudal-fin upper lobe.

447. *Upeneus subvittatus*

Common Name	: Deep-water goatfish	
Local Name	: <i>Ikan jenggot</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

One of the goatfish from Mullidae family. It is a demersal fish who inhabits sandy and muddy areas in coastal waters. Seen in small groups in about 15 m depth but can lives until 120 m of depth. Distributed globally around Western Pacific, Japan to Indonesia. The colour characteristic is plain, with silvery sides, a barred caudal fin and rounded snout. There are different common names used, such as “silver goatfish” in Indonesia and “deep-water goatfish” in Japan.



448. *Upeneus sulphureus*

Common Name	: Sulphur goatfish	
Local Name	: <i>Ikan kuniran/ kadio</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species from Mullidae family with two orange-yellow bands extend from the head to the caudal peduncle. This fish is distributed in Indo-West Pacific, inhabit sandy muddy bottom of coastal waters and estuaries. It found in group schooling and can live until 90 m of depth. Migrating within oceans typically between spawning and different feeding areas. Migrations cover more than 100 km. The common length of this fish is 20 cm.

449. *Upeneus tragula*

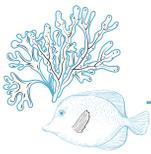
Common Name	: Freckled goatfish	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish species belongs to Mullidae family who lives at depth range of 0-42 m. It distributed globally around Eastern Indian Ocean to Western Pacific. It has a whitish or tan coloured goatfish with yellow chin barbels, a dark yellowish to brown stripe from the snout to the upper part of the caudal-fin base. Usually found on sandy bottoms in nearshore areas by solitary. Maximum length recorded of this fish is 30 cm.

450. *Uropterygius micropterus*

Common Name	: Tidepool snake moray	
Local Name	: <i>Ikan moray</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species of fish known as moray fish that belongs to Muraenidae family. A yellowish to brown moray with a web-like network of fine dark lines. It lives at marine and brackish of tropical water at the depth of 0-3 m. Distributed globally in Indo-Pacific. Abundant on rubble areas of intertidal reef flats hallow reefs including tide pools. Feeds on small crustaceans and probably on small fishes as well. Maximum length recorded of this fish is 37 cm.



451. *Valenciennesa wardii*

Common Name	: Ward's sleeper	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish is a species of goby, a native to the Indian Ocean and the western Pacific Ocean, but it extremely rare in Indo-Pacific. Inhabits coastal bays and inner reefs of sandy substrate, usually on deep silty slopes from about 15 meters down. Found mostly in pairs. Characterized by pale grey to whitish body color with three brown bars on side, blue-white band below eye, and first dorsal fin with ocellated black spot. The maximum length recorded is 15 cm.

452. *Variola albimarginata*

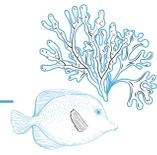
Common Name	: White-edged lyretail	
Local Name	: Ikan kerapu/ katoko ekor bulan	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A reddish grouper covered in blue spots, with pale upper and lower margins on caudal fin, a lunate tail with a narrow white margin. It belongs to Epinephelidae family who distributed globally in Indo-Pacific of tropical water. Inhabits seaward reefs, while the juvenile found on algae, soft coral, and above the substrates. It found solitary or in small group. It is a carnivore who feeds fishes. The length can reach up to 65 cm.

453. *Xenojulis margaritacea*

Common Name	: Finspot wrasse	
Local Name	: Ikan payangga	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This fish belongs to Labridae family known as wrasses fish. A reef associated fish who inhabits shallow water with dense of coral growth on coral rubble, sand, and weedy areas. Distributed globally in Western Pacific of tropical water. Ground color of male body is burgundy, becoming paler ventrally and head irregularly striped with green and burgundy. While females is pale with 5 irregular dusky bars on side of body. Maximum length is only 10 cm.



454. *Xiphias gladius*

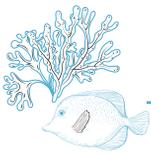
Common Name	: Swordfish	
Local Name	: <i>Ikan todak/ pedang</i>	
IUCN	: Near Threatened	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A large, powerful oceanic predator with a long cylindrical, tapering body, and an extremely long flattened sword-like bill to slash prey. It belongs to Xiphiidae family, distributed worldwide in Atlantic, Indian, and Pacific. This fish has blackish-brown colour above, fading to a lighter brown on the underside. It oceanodromous but sometimes found in coastal. The maximum length recorded is 455 cm, while the common length is 300 cm.

455. *Zanclus cornutus*

Common Name	: Moorish idol	
Local Name	: <i>Ikan moris/ bendera</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A common inhabitant of tropical to subtropical reefs and lagoons. Distributed globally in Indo-Pacific and Eastern Pacific. This fish belongs to Zanclidae family and stand out in contrasting bands of black, white, and yellow colour. Generally encountered in small groups of 2 or 3 individuals. Adults occur singly, in pairs and occasionally are seen in large schools. The common length is 21 cm.



6.3 Marine Mammals

1. *Balaenoptera borealis*

Common Name	: Sei whale
Local Name	: <i>Paus sei</i>
IUCN	: Endangered
CITES	: App. I
INA Reg. (P106)	: Protected



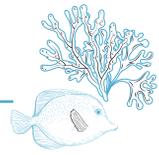
This baleen whale belongs to the Balaenopteridae family and is the fourth-largest rorqual after the blue, fin, and humpback whales. It has a global distribution, ranging from 0–342 m in depth, and is found in coastal, shelf, and oceanic waters. It feeds by skimming and gulping and is usually seen in pods of 2 to 5. Its body is dark steel gray with irregular light gray to white markings on the ventral surface or lower front body.

2. *Balaenoptera musculus*

Common Name	: Blue whale
Local Name	: <i>Paus biru</i>
IUCN	: Endangered
CITES	: App. I
INA Reg. (P106)	: Protected



This whale belongs to the Balaenopteridae family and is the largest animal ever, weighing around 150 tons and exceeding 30 m in length. Known as the sulfur-bottom whale due to algae (diatoms) that tint some individuals yellow, it feeds almost exclusively on krill and is found in all oceans except the Arctic.



3. *Dugong dugon*

Common Name	: Dugong
Local Name	: <i>Dugong/ duyung</i>
IUCN	: Vulnerable
CITES	: App. I
INA Reg. (P106)	: Protected



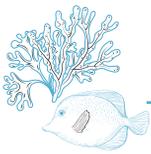
This species is the only living member of the Dugongidae family. Dugongs inhabit coastal waters in limited areas of the Indian and western Pacific Oceans. They resemble a cross between a rotund dolphin and a walrus, with a body, flippers, and fluke similar to a dolphin but lacking a dorsal fin. Their mammarys somewhat resemble human breasts. Dugongs feed primarily on seagrasses but may also consume benthic invertebrates.

4. *Physeter macrocephalus*

Common Name	: Sperm whale
Local Name	: <i>Paus sperma</i>
IUCN	: Vulnerable
CITES	: App. I
INA Reg. (P106)	: Protected



This whale, the largest toothed whale in the Physeteridae family, has one of the widest global distributions. Named after the waxy spermaceti in its head, which aids in sound focusing, it is mostly dark gray with occasional white belly patches. Females live in groups of 10-30, while males leave at around six years old.



6.4 Marine Turtles

1. *Caretta caretta*

Common Name	: Loggerhead seaturtle
Local Name	: <i>Penyu bromo/ tempayan</i>
IUCN	: Vulnerable
CITES	: App. I
INA Reg. (P106)	: Protected



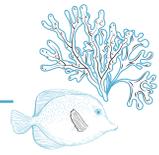
This seaturtle belongs to Cheloniidae family. It has large head, which support its powerful jaw muscles that enable to feed on hard-shelled prey, such as whelks and conch. The carapace is slightly heart-shaped and reddish-brown in adults and sub-adults, while the bottom shell is generally a pale yellowish colour. It usually lives at depth of 0–40 m and it found worldwide. This migratory biota inhabits convergent fronts continental shores of warm seas and brackish water estuaries.

2. *Dermochelys coriacea*

Common Name	: Leatherback sea turtle
Local Name	: <i>Penyu belimbing</i>
IUCN	: Vulnerable
CITES	: App. I
INA Reg. (P106)	: Protected



This species is the largest sea turtle in the world and the only sea turtle that has lack scales and a hard shell. Color is uniformly dark with five longitudinal ridges. A highly migratory biota who can swimming over 10,000 miles a year between nesting and foraging grounds. The widest global distribution of any reptile, with nesting mainly on tropical or subtropical beaches. except the Arctic and Antarctic, Its main prey are gelatinous invertebrates, mainly jellyfish and salps. Known as solitary creature.



6.5 Invertebrates

1. *Actaeodes tomentosus*

Common Name	: -	
Local Name	: <i>Kepiting</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine crab is a native to the Indo-Pacific Ocean and the Red Sea and documented for the first time in the Mediterranean Sea. It is the most common species on intertidal coral reefs. Widely distributed throughout the Indo-Pacific region. This species belongs to Xanthidae family and Malacostraca class. It is listed among the toxic coral reef crabs; it has the same neurotoxin present in Tetraodontiformes fish.

2. *Actinopyga bannwarthi*

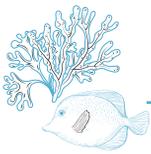
Common Name	: -	
Local Name	: <i>Teripang</i>	
IUCN	: Data Deficient	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This seacucumber belongs to Holothuriidae family, class of Holothuroidea. It mostly found in shallow-waters at the depth of 0-100 m of a wide circum-tropical belt. It ingests sand and feeds on the microorganisms and organic matter in the sand. The colour is uniform dark chocolate brown dorsally and light brown to yellow with no white patches devoid of tube feet on the lateral and dorsal surfaces of the body.

3. *Actinopyga echinites*

Common Name	: Deep-water redfish	
Local Name	: <i>Teripang</i>	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a sea cucumber belongs to Holothuriidae family. It inhabits moderately shallow waters, often in sandy areas interspersed with coral rubble. This species is primarily found on reef flats of fringing and lagoon-islet reefs. It is also abundant in seagrass beds, as well as on rubble and compact flats substrates. *Actinopyga echinites* is a detritivore, feeding primarily on organic matter and sediment particles found on the seafloor.



4. *Actinopyga mauritiana*

Common Name	: Surf redfish
Local Name	: <i>Teripang</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to Holothuriidae family. It prefers coral habitats and typically inhabits shallow waters, rarely venturing beyond depths of 20 meters. It is commonly found on outer reef flats of barrier reefs and fringing reefs exposed to strong currents. Additionally, it can be found in subtidal reefs and sandy lagoons, occasionally appearing in seagrass beds and attached to coral stones. It is active both during the day and at night, feeding on detritus that accumulates on hard reef substrates.

5. *Actinopyga miliaris*

Common Name	: Hairy blackfish
Local Name	: <i>Teripang</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



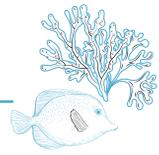
This sea cucumber is inhabiting moderately shallow waters. This species prefers reef flats found in fringing and lagoon reefs rather than barrier reefs. It is abundant in sandy beds and seagrass habitats. Its diet consists mainly of epiphytes and seagrass leaves. This species exhibits a gregarious nature and is typically found at depths less than 30 meters among rocks and boulders.

6. *Aliculastrum cylindricum*

Common Name	: Cylindrical atys
Local Name	: <i>Siput</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of gastropods that belonging to the family of Haminoeidae. Found in shallow waters in sand substrate among the algae. It is herbivorous, feeding mainly on diatoms and green algae. Distributed around Indo-Pacific of tropical water, at the depth range of 45–50 m. Maximum length is 30 mm. The colour of the shell is milky white under yellow or orange periostracum. It is thick and robust, and dark dots densely all over body.



7. *Amathina tricarinata*

Common Name	: Common Amathina	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a small sea snail, marine heterobranch gastropod mollusc in the family of Amathinidae. It has cap-shaped and patelliform thick shell that bears three pronounced longitudinal ridges, usually living in the sublittoral zone often as an ectoparasite on large bivalves. Found in subtidal areas, and under stones, also found living on large bivalves. It distributed globally in Indo-Pacific and Mediterranean Sea.

8. *Amphibalanus amphitrite*

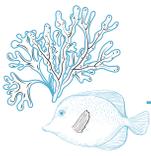
Common Name	: Purple acorn barnacle	
Local Name	: <i>Teritip</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is an acorn barnacle in the Balanidae family, who is native to the Indo-West Pacific Ocean and it has been spread around the world for centuries by ship biofouling. It lives sessile found on hard natural surfaces. The surface of the test has vertical ribbing with a diamond-shaped operculum protected by a movable lid formed from two triangular plates. It is hermaphrodite biota and has male-female reproductive organs.

9. *Anadara inaequalvis*

Common Name	: Inequivalve ark	
Local Name	: <i>Kerang bulu/ jago</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This Bivalvia species belongs to Arcidae family. The shell is thick and solid, inflated, inequilateral, roughly quadrate in shape with arcuate ventral margin and obliquely truncate posterior margin. The outside of shell is white in under side and the blackish brown in the periostracum. Inner side of the shell is whitish. It distributed globally in Indo-West Pacific, and it inhabits in bays and coastal lagoons of fine muddy sand bottoms.



10. *Anadara pilula*

Common Name	: Pill Ark	
Local Name	: <i>Kerang gelatik</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to the family of Arcidae which has an important economic value in Indonesia, the highest consumed after *Anadara granosa*. This clam distributed globally in Indo-Pacific water. A filter and deposit feeder who can controls phytoplankton abundances in its habitat area. This clam also fed by other gastropods such as *Natica maculosa*, *Thais carinifera*, birds, and ray.

11. *Astralium rhodostomum*

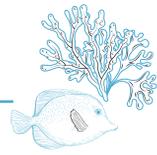
Common Name	: Rosemouth star shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A sea snail of marine gastropod mollusk in the family of Turbinidae. The length of the shell varies between 16 mm and 55 mm. distinguished by the following characters: the whorls are flat, not arched, in the middle. The superior nodules are situated near to the suture. They are hemi-spherical and solid. The body whorl has but a single row of nodules. This species occurs in the Indo-West Pacific and off East India, the Philippines and Australia.

12. *Bathytormus radiatus*

Common Name	: Barbatia ark clam	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This bivalve species is one of the Crassatellidae family. The former name of this saltwater clam is *Crassatella radiata*, but then updated to *Bathytormus radiatus*. It distributed globally in Western Indian Ocean of tropical water. It found burrowing in sandy substrate in shallow water of offshore. The shell shape is asymmetric, curved, very inequilateral, vividly radiated, and the posterior is pointed.



13. *Bulla vernicosa*

Common Name	: Jujube Bulla	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species has a strongly inflated brown shell spotted with white and streaked with darker brown. It belongs to Bullidae family, distributed globally in Indo-Pacific, from South Africa to Hawaii. A common species found in protected to moderately exposed mixed habitats at the depth below 15 m. It is nocturnal, burying itself in sand or concealing itself under rocks during the day.

14. *Calliostoma tranquebaricum*

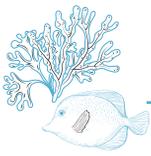
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of sea snail, a marine gastropod mollusk in the family of Calliostomatidae. The size of the shell varies between 10 mm and 18.5 mm. The imperforate, solid shell has a conical shape. Pale coloured, almost white, minutely tessellated on the ribs with light brown. This species is easily recognized by the low-conical form, the finely sculptured flat whorls, edged at periphery and its sutures by a pair of strong lirae.

15. *Trochita helicoidea*

Common Name	: Slipper snail	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of sea snail, a marine gastropod mollusk in the family of Calyptraeidae, the slipper snails or slipper limpets, cup-and-saucer snails, and Chinese hat snails. The former name is *Calyptraea helicoidea*. This species is original from South African. It inhabits inshore water with high nutrient. The *Trochita* genus has been associated with upwelling water area.



16. *Canarium mutabile*

Common Name	: Variable stromb
Local Name	: <i>Siput laut</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea snail, a marine gastropod mollusk in the family of Strombidae. It has white based colour, and brown markings organized to form irregular flames, more intense along several spiral bands. Distributed globally in Indo-West Pacific: India, Philippines, and French Polynesia. Shell with a moderately high spire and a large, slightly inflated body whorl. A gonochoric and broadcast spawners. All Strombus species are herbivorous, feeding on algae.

17. *Capitulum mitella*

Common Name	: Japanese goose barnacle
Local Name	: <i>Teritip</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



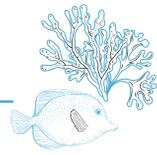
A sessile marine stalked barnacle, the only species in the genus and belongs to Thecostraca class and Pollicipedidae family. It has a short leathery stalk or peduncle supporting an upper region or capitulum, the whole being up to 5 cm long. It inhabits the littoral zone, distributed globally around Indo-West Pacific. Mantle cavity serves as a substrate for the obligate nemertean worm symbiont living inside and feeding on the eggs being brooded there. This barnacle can be eaten by human.

18. *Carpilius maculatus*

Common Name	: Clown crab
Local Name	: <i>Kepiting plongkor</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of crab in the Carpiliidae family. It easily identified by the presence of eleven bright red spots located on its cream to pink-colored carapace. Marginal levels of toxicity were detected in this species which may be poisonous to eat. Inhabits coral reef area and benthic of subtidal tropical water. Distributed globally around Indo-Pacific. The maximum length is 18 cm.



19. *Cellana radiata*

Common Name	: Rayed wheel limpet	
Local Name	: <i>Limpet</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of predatory sea snail, a marine gastropod mollusk in the Nacellidae family. The shell has numerous, rather flat, granular ridges of varying height. The color of the shell is grayish white to dark brown, with the ribs somewhat darker. The interior is pale white and iridescent. The markings of the muscles contrast with a dark gray color. This limpet distributed globally around Central Pacific of tropical water.

20. *Cellana testudinaria*

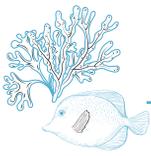
Common Name	: Turtle limpet	
Local Name	: <i>Limpet tropis</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of sea snail, a marine gastropod mollusk in the family of Nacellidae. The shell is semi-translucent, solid, regular, and large. Outline rounded-ovate. Outside of shell greenish to yellowish brown; aperture with continuous brown margin; inside color bluish silver. Distributed around Indo-West Pacific, found on rocky intertidal shores. The common length is 7.5 cm, the maximum length can reach up to 9 cm.

21. *Clypeomorus petrosa chemnitziana*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A sub-species of sea snail, a marine gastropod mollusk in the family of Cerithiidae, from the species name of *Cerithium chemnitzianum*. Characterized by a turreted, pupiform shell with 10 weakly sculptured whorls. Wavy suture deeply incised. Frequent grooved spiral lines and relatively smooth sculpture. Shell is white with yellow bands and black dotted lines. This species has been recorded from Southern Japan, the Ryukyus, to the Philippines and Indonesia.



22. *Cerithium coralium*

Common Name	: Corallium cerith	
Local Name	: <i>Siput gonggong</i>	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of sea snail, a marine gastropod mollusk in the family of Cerithiidae. Found in mud flats. Commonly associated with various Potamididae. Distributed globally in Indo-West Pacific, inhabits in tropical water at depths of 0-2 m. Deposit feeder, lives in areas of high organic content. Stomach contents consist of microalgae, filamentous algae, macro algae, vascular plant material and diatoms comprising detritus in this habitat.

23. *Cerithium scabridum*

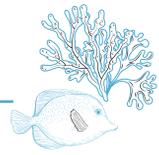
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species initially reported from the Red Sea, the Persian Gulf, and the West and East coasts of India. It is easily distinguished by the contrasted color pattern of white and dark brown mottles on the cords and the general brown-whitish color of the shell. The height of the shell ranges between 12 and 20 mm and strong knobs with some varices on the spire characterize the sculpture. Lives in depth of 1-2 m deep and covered with an algal mat.

24. *Charybdis anisodon*

Common Name	: Twospined arm swimming crab	
Local Name	: <i>Keu</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This malacostraca species is belong to Portunidae family. Distributed globally in Indo-West Pacific of tropical area. It lives in muddy substrates to a depth of 25 m. this crab known as a bycatch species of *Portunus pelagicus*. Body and legs olive green. Claws olive green on the outside, orange on the inside and towards the pincers which has white tips. Body somewhat fan-shaped with 6 spines on the sides.



25. *Charybdis (Charybdis) feriata*

Common Name	: Crucifix crab	
Local Name	: <i>Rajungan karang</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A portunid crab species widely distributed in the Indo-Pacific. It usually occurs sublittorally on muddy and sandy bottoms, as well as on rocky and stony coasts including coral reef flats, at depths of approximately 10–60 m. It has distinctive pattern of longitudinal stripes of maroon and white, usually with distinct white cross on median part of gastric region; legs and pincers with numerous scattered with white spots.

26. *Charybdis natator*

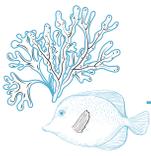
Common Name	: Ridged swimming crab	
Local Name	: <i>Rajungan batik</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This crab species belongs to Portunidae family. The carapace densely covered with very short pubescence which is absent on several distinct transverse granulated ridges in anterior half. It has orangish red colour overall, with ridges on carapace and legs dark and reddish brown. It can reach a maximum of 17 cm carapace width. This species distributed globally in Indo-West Pacific of tropical area.

27. *Chthamalus malayensis*

Common Name	: Acorn barnacle	
Local Name	: <i>Teritip</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of common intertidal acorn barnacle in the family of Chthamalidae. It widely distributed throughout the Indo West Pacific. Distribution pattern related to the higher tolerance to heat stress, or avoidance of competition with *Tetraclita* species. Body length is 3–10 mm and base membranous. Shell elongated oval/shield-shaped, shell white to grey with 6 plates. Inner surface of parietes smooth and white-grey to pale-violet.



28. *Cibotocola lunata*

Common Name	: Shell-Clinging mussel
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A Bivalvia species of mussels in the family of Mytilidae. Former species name is *Congerina lunata*. Sedentary animals, mainly attached to hard substrates by their well-developed byssus, sometimes nestlers, coral and rock borers, or associated with ascidians. Lives in shallow water in marine environment. The shell equivalve generally elongate-ovate often with a narrow byssal gape at ventral margin. It has a sexual reproduction.

29. *Circe scripta*

Common Name	: Script venus
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



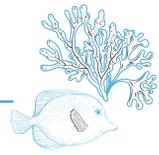
This Bivalvia belongs to the Veneridae family. It is distributed globally in Indo-West Pacific of tropical water. It inhabits intertidal and shallow sublittoral levels. It is a sand burrower in shallow depth of water, which lives at 0–25 m. A suspension feeder clam. The maximum length recorded is 5 cm. Usually it has white, cream, tan or pale-grey with varying dark markings colour, covered with concentric ridges.

30. *Clypeomorus bifasciata*

Common Name	: Double banded creeper
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea snail, a marine gastropod mollusk in the family of Cerithiidae. Occasionally it is found on soft substrata in marine water and occurs in dense populations on rocky substrata in the high intertidal zone. Its egg commonly deposited on the undersides of rocks, while the larvae is a free swimmer. A herbivorous snail which grazes on microalgae associated with hard substrata. Distribution area is Western Pacific and Indian Ocean.



31. *Clypeomorus petrosa*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This marine snail belongs to Cherithiidae family. Characterized by a turreted, pupiform shell with 10 weakly sculptured whorls. Wavy suture deeply incised. The shell is white with yellow bands and black dotted lines. It is a tropical herbivore, found living under rocks in the intertidal and usually occurs in large cerithiid aggregations. It distributed in Western-Central Pacific.

32. *Clypeomorus subbrevicula*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



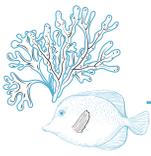
A species of sea snail, a marine gastropod mollusk in the family of Cerithiidae. Former species name is *Cerithium subbreviculum*. It can live on rocky shores and sandy shores. This species of is common on rocky coasts, it adapts and fits into such an environment. It can be found in crevice to avoid heat and dryness. Distributed globally in Western Central Pacific of tropical water. The maximum length recorded is 2.5 cm.

33. *Conasprella viminea*

Common Name	: Wickerwork cone
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea snail, a marine gastropod mollusk in the family of Conidae. Like all species within the genus Conasprella, these cone snails are predatory and venomous. A vermivorous species which prey on worms. They are capable of stinging humans. The maximum length recorded is 4.3 cm. Distributed globally in Indo-West Pacific of tropical water. It lives in depth range of 20–40 m.



34. *Conus coronatus*

Common Name	: Coronated cone	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is from the family of Conidae. It inhabits the intertidal rocky shores in the mid-tidal zone. It has venomous toxin to paralyze its prey which feed on eunicid and nereid polychaete worms. It deposits its egg capsules on hard substrata, where it found aggregated and paired in large numbers during the breeding season. The colour is light, mottled pinkish blue with brown dots and blotches.

35. *Conus furvus*

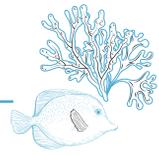
Common Name	: Dark/carpenter cone	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of predatory sea snail, a marine gastropod mollusk in the family of Conidae. The ground color of the shell is pale brown, with fine close lines of chestnut-brown, and one or two paler bands. Distributed globally Indo-Pacific water. It can live until 60 m of depths. A vermivore dietary habit snails like other Conus species.

36. *Conus leopardus*

Common Name	: Leopard cone	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species belongs to Conidae family. Distributed globally in Indo-Pacific of tropical water. Known as vermivore, but this species is unique in that it is the only Conus species known to prey exclusively on the hemichordate *Ptychodera flava*. The maximum length of this snail can reach up to 22 cm. The shells sit usually half burried in sandy-mud at the depth range of 0–20 m.



37. *Conus miliaris*

Common Name	: Miliaris cone	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This conus snail is a worm hunting cone snail belongs to Conidae family. Major habitats of this species is low intertidal benches and shallow subtidal reef platforms with substrate of fine-sand or rubble-and-sand-filled depressions, algal-sand turf on reef limestone. It typically inactive during the day, thus tends to use the sand microhabitats as refuges or protected sites. Feeding occurs at night, preys exclusively on polychaete annelids.

38. *Conus musicus*

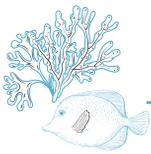
Common Name	: Music cone	
Local Name	: -	
IUCN	: Least Concern	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

It is a species of sea snail, a marine gastropod mollusk in the family of Conidae. The color of the shell is whitish, with light ash-violet broad bands and narrow revolving lines of chocolate, broken up into short lines and spots. It inhabits tropical reef environments throughout the world. The cone snail is venomous predators and has developed biochemical arsenal to rapidly immobilize their prey, and capable of stinging humans.

39. *Coralliophila squamosissima*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This marine snail belongs to Muricidae family, the murex snails or rock snails. Former species name is *Rhizochilus (Coralliophila) squamosissimus*. It distributed globally around Indo-West Pacific of tropical water. The spiral ribs are scaled and the imbrications being very close together. This marine snail is originally found from New Zealand. This species is a non-broadcast spawner. Life cycle does not include trocophore stage.



40. *Corbula ovalina*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This mollusc clam belongs to Corbulidae family of the class of Bivalvia. The former name of this clam is *Corbula crassa*. The shell is subtrigonal and inflated. The length is reach up to 24 mm. The periostracum is dull, heavy, adherent, and has light to dark brown colour. Distributed globally in Eastern Indo-West Pacific, inhabits sandy muddy bottom of intertidal and infralittoral. Lives at 0–55 m of depth.

41. *Cymbiola nobilis*

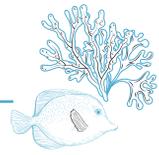
Common Name	: Noble volute	
Local Name	: <i>Kilah/ siput batik</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A member of the class Gastropoda in the family of *Volutidae*. The shell colour may be beige, orange or yellow with a zig-zag red or brown pattern. Sometimes these shells are completely black. The fleshy body of the snail is black with bright yellow or orange spots. The species is widely distributed in tropical and subtropical seas. It produced a pineapple-like egg mass and attached to a hard substrate such as other bivalves.

42. *Monetaria annulus*

Common Name	: Gold ring cowrie	
Local Name	: <i>Kerang congklak</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is commonly found in the size range of 3–4 cm. Widespread in the shallow water, occurring in every kind of habitat such as seagrass beds, and rocky shores and coral reefs. Members of the family Cypraeidae, which primarily carnivores. The shell of this species is mostly off-white or pale yellowish in color, and it has two yellow or orange stripes along the upper sides. The former name of this species is *Cypraea annulus*.



43. *Erronea pallida*

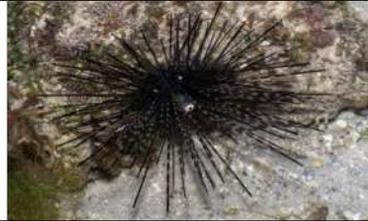
Common Name	: Pale Cowry
Local Name	: <i>Kerang congklak</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea snail, a cowry, a marine gastropod mollusk in the family Cypræidae. The shell size varies between 13 mm and 34 mm. The dorsum surface is usually pale brown or greyish, with a darker brown area in the middle, while the base is whitish. It can be found under rocks in turbid or muddy waters at intertidal depth. It distributed around Indo-West Pacific of tropical water.

44. *Diadema setosum*

Common Name	: Porcupine sea urchin
Local Name	: <i>Bulu babi</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



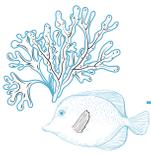
A species of long-spined sea urchin belonging to the family of Diadematidae. Body is covered with long spines, with many shorter spines in between. Spines are black or dark purple, with the long ones often black-and-white banded, or white in color. Five bright white or blue spots are present on the test. Common in the sublittoral fringe around protected rocky coastlines. Found on muddy substrate. Grazes on encrusting algae over hard substrates at night.

45. *Echinothrix diadema*

Common Name	: Blue-black sea urchin
Local Name	: <i>Bulu babi</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of tropical sea urchin, member of the Diadematidae family. The former name of this species is *Diadema spinosum*. It is generally black or blue-black in colour, and the spines show a blue sheen in the light. Occurs in shallow coral and coral rubble areas at depths of 1 to 40 m. An herbivore and a nocturnal feeding behavior. Known to graze organic material and adults may also feed on live hard corals.



46. *Diodora sieboldii*

Common Name	: The key hole limpet
Local Name	: <i>Limpet</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This is a species of sea snail, a marine gastropod mollusk in the family of Fissurellidae, the keyhole limpets and slit limpets. Individuals can grow to 13.8 mm. This limpet is commonly found in the intertidal area. It is herbivores and use the radula to scrape algae from rocks. Water for respiration and excretion is drawn in under the edge of the shell and exits through the keyhole at and/or near the apex.

47. *Latona faba*

Common Name	: Pacific bean Donax
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



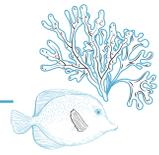
This clam species belongs to Donacidae family, the former species name is *Donax faba*. Shell thick, compressed, trigonal-ovate in outline, to about 25 mm long. The surface smooth and has variable colour such as white, cream, brown, green, grey, purple. Interior white, often with tinted yellow or with purplish blotches, to purple. Inhabits Intertidal, shallowly buried in sand of wave swept sandy beaches, migrating between the high and low tide. Distributed globally in Indo West Pacific.

48. *Echinolittorina vidua*

Common Name	: Granulate periwinkle
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A marine gastropod mollusc in the family of Littorinidae, the winkles or periwinkles. Former species name is *Littona vidua*. It found on open rock surfaces high on the shore in winter, but the majority migrate downshore in summer, it abundant in the high shore and splash zone. Shell ovate conical, usually strong and without an umbilicus. Distributed globally only in Southeast asea in tropical water. Herbivores, feeding on algae which are grazed with a powerful radula.



49. *Echinometra mathaei*

Common Name	: Rock-boring urchin
Local Name	: <i>Bulu babi</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This sea urchin belongs to Echinoidea family. It lives burrowing in subtidal area with hard rocky substrates of tropical water, and it is also found on fore-reefs associating with coral reef communities. This species uses its spines and teeth to move. The colour is quite variable, but the test is usually a dark colour. The spines are sometimes green and purple with purple tips. This sea urchin can be distinguished from other species by a characteristic pale ring at the base of each spine.

50. *Engina alveolata*

Common Name	: Handsome Engina
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



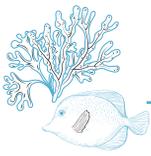
A species of sea snail, a marine gastropod mollusk in the family of Pisaniiidae. This species is a non-broadcast spawner, and life cycle does not include trocophore stage. Distributed globally in Western Central Pacific. Maximum length recorded is 2 cm. Shell globose, ovate-conical to fusiform in shape, generally with a high spire and large body whorl. Outer surface smooth or with axial and spiral elements of sculpture.

51. *Engina mendicaria*

Common Name	: Bumble bee snail
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea snail, a marine gastropod mollusk in the family of Pisaniiidae. Former species name is *Voluta mendicaria*. This snail distributed around Indo-West Pacific, inhabits tropical water of 2–4 m depth range. The shells size varies between 10 mm and 20 mm. This shell shows a white or yellowish background with a few transversal black bands and resembles the yellow and black pattern similar with wasps and bees.



52. *Erronea caurica*

Common Name	: Thick-edged cowry	
Local Name	: <i>Kerang congklak</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species has former name of *Cypraea caurica*, it is a species of sea snail, a cowry, a marine gastropod mollusk in the family of Cypraeidae, the cowries. It can reach up to 5 cm in length with thick-edged cowry shell shape that elongated and a light brown or yellowish basic color, and a pinkish underside and brown spots on the edge. It occurs in large numbers over the majority of the tropical Indo-Pacific region, except Hawaii and southeastern Polynesia.

53. *Euchelus atratus*

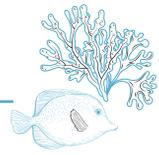
Common Name	: Blackish margarite	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is a sea snail, a marine gastropod mollusk in the Chilodontidae family of Seguenzioidea superfamily. Distributed around Indo-West Pacific of tropical water. The size of the shell varies between 5 mm and 21 mm. The solid, umbilicate shell has a globose-conic shape. Its color is black, brown, or grayish-pink, either unicolored or tessellated with dark spots. The conic spire is short. It is a gonochoric and broadcast spawners.

54. *Euplica scripta*

Common Name	: Dotted dove shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is certainly very common and widespread in the tropical and warm temperate Indo-Pacific Ocean. A species of sea snail, a marine gastropod mollusk in the family of Columbellidae. Shell solid, fawn with white-brown spots or axial zigzag brown lines, sometimes restricted to 2 darker brown spiral bands. The interior is white. Inhabits intertidal and shallow subtidal, under rocks and on seagrass and algae.



55. *Gafrarium divaricatum*

Common Name	: Forked Venus	
Local Name	: Kerang	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This clam is distributed in Indo-West Pacific, from East and South Africa to Philippines, also north to Japan and south to Malaysia. They usually burrow themselves on sand around the intertidal or subtidal areas. Shell circular with a slight pointed tip, thick and heavy with fine ribs parallel to the shell edge. The shell colour is white usually with a pattern of thin dark lines perpendicular to the shell edges.

56. *Gari crassula*

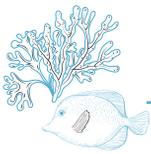
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This clam belongs to Psammobiidae family. The maximum length is 40 mm. Surface smooth, covered with a thick, persistent, flakey greenish brown periostracum. The interior is dull, usually uniformly deep violet, particularly in juveniles. It mostly found in high densities at the estuarine sections. It occurs globally in tropical and warm subtropical water in depth of 0 to 4 m. This species could be mistaken for *G. elongata* (Lamarck), but this species is less elongate and fragile.

57. *Gibberulus gibberulus*

Common Name	: Gibbose conch	
Local Name	: Siput gonggong	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

A species of sea snail, a marine gastropod mollusk in the family of Strombidae, the true conchs. Former species name is *Strombus gibberulus*. It typically inhabits sandy subtidal areas, coral reef flats, muddy lagoon bottoms, and seagrass beds, and grazes on detritus and algae. This gregarious species found across most of the Indo-Pacific. The shell can reach a length of 7 cm, The length varies by geographic location and is a sexually dimorphic trait.



58. *Gonodactylellus viridis*

Common Name	: Smasher/Green Mantis Shrimp
Local Name	: <i>Udang mantis</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a mantis shrimp from Gonodactylidae family of Crustacea class. The former name is *Gonodactylellus chiragra*. Body characteristic is conspicuous green color when live. Colour faded with traces of green marbling on the telson and uropods and with rows of small dark green spots on posterior margin. This mantis has hammerlike claws to smash prey or hard material. Distributed in Indo-West Pacific. It inhabits shallow waters and reef flats of tropical water.

59. *Hastula bacillus*

Common Name	: Venomous auger snail
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



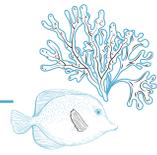
A species of sea snail, a marine gastropod in the family of Terebridae. It inhabits sandy surf beaches in the intertidal surf zone, where animals are exposed between waves. It feeds upon spionid polychaetes. This species possesses a foregut anatomy unlike that of any other gastropod. An elongate arborescent muscular organ, known as the accessory proboscis structure. It also has a pair of salivary glands and a well-developed venom gland with muscular bulb.

60. *Holothuria (Microthele) fuscogilva*

Common Name	: White teatfish
Local Name	: <i>Teripang susu putih</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This sea cucumber belongs to Holothuriidae family. It categorized as deposit feeder. It distributed globally in Indo-Pacific Ocean in shallow waters near islands and around coral reefs. Juvenile cucumbers live in shallower waters such as inter-tidal zones and then migrate to deeper waters as they mature. Body is sub oval, stout, firm and rigid, arched dorsally and flattened ventrally.



61. *Holothuria (Metriatyla) lessoni*

Common Name	: Golden sandfish
Local Name	: <i>Teripang</i>
IUCN	: Endangered
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



A species of sea cucumber in the family of Holothuriidae. This sea cucumber distributed in the Indo-West Pacific. Found on inner reef flats, coastal lagoons, seagrass beds, or sandflats at depths of 0 to 30 m. During specific time of the day, it buries in sand or muddy sand. This species has a spiny rim and irregular rods. The typical coloration pattern for this sea cucumber varies from uniformly black to brownish, sometimes with distinct black patches surrounded.

62. *Holothuria scabra*

Common Name	: Sandfish
Local Name	: <i>Teripang pasir</i>
IUCN	: Endangered
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



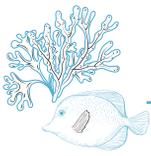
This sea cucumber belongs to Holothuriidae family. It is distributed in Indo-Pacific areas. They are reef associated and can be found in silty sand, but also can be found in the near of low saline areas and on seagrass beds. The main food of this species is detritus which assimilates organic matter from muddy sandy sediments. A bivium whitish to dark brown colour, occasionally with dark transverse markings. They are an endangered species according to the IUCN Red List.

63. *Lottia mesoleuca*

Common Name	: Marine Limpets
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lottia mesoleuca is a species of sea snail that belongs to the family of Lottiidae. It is commonly known as a true limpet and is found in the intertidal and subtidal zones of rocky coastlines along the eastern Pacific Ocean, ranging from Alaska to Baja California. It is a vital member of intertidal communities, as it serves as a significant food source for many predators, including sea stars, crabs, and birds. Furthermore, they play a crucial role in maintaining the ecological balance of intertidal ecosystems by regulating the growth of microalgae.



64. *Lottia pelta*

Common Name	: Shield Limpet	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The *Lottia pelta* shell has a width that ranges from 2.5 to 5.4 cm and is broadly elliptical to oval. It is moderately elevated, with a slightly convex side and the apex tilted towards the front. The shell is grayish with irregular radial stripes, which change in color and morphology when the species moves among substrata. The species found on kelp holdfasts have darker shells with obscure ribbing. The shell structure preserves the ontogenetic record of its past habitats.

65. *Lottia scutum*

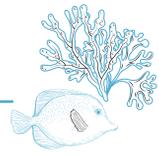
Common Name	: Plate Limpet	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Lottia scutum is a type of limpet that has a broad, flat shell and can grow up to 60 millimeters long. Its apex is located near the front, and the anterior slope is smooth and convex with inconspicuous riblets. The color of *Lottia scutum* varies from grey to tan, with whitish spots and rays. One can easily distinguish it from other species by its golden-brown cephalic tentacles which are present on its head.

66. *Lunella cinerea*

Common Name	: Smooth Moon Turban	
Local Name	: Sorban Bulan Halus	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The shell of this species ranges in size from 20 mm to 50 mm. It has a solid, depressed-globose shape with a strong spiral sculpture, and an obtuse spire. The suture is slightly undulating. The five whorls are spirally lirate and have lirulae in the interstices. This species is found in the tropical Indo-West Pacific, off the Andaman Islands and Nicobar Islands, the Philippines, the Red Sea, and off the coast of Australia, including Northern Territory, Queensland, and Western Australia.



67. *Lyncina carneola*

Common Name	: Carnelian Cowrie	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

These cowries can grow up to 30–80 millimeters (1.2–3.1 inches) in length and have a rounded shape. They have a pale orange-brown color with some transverse bands. This species is found in the seas off Aldabra, Chagos, the Comores, the East Coast of South Africa, Eritrea, Kenya, Madagascar, the Mascarene Basin, Mauritius, Mozambique, the Red Sea, Réunion, the Seychelles, Somalia, and Tanzania.

68. *Mactra maculata*

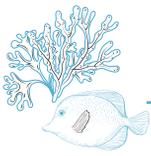
Common Name	: Maculated troughshell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Mactra maculata is a species of mussels in the family Mactridae. They are organisms that modify the surface layer. These animals can reach a size of 7.5 cm, reproduce sexually, and are facultatively mobile.

69. *Mactra violacea*

Common Name	: Violet duck clam	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species is identified by its smooth-shelled, suspension-feeding, shallow-burrowing bivalves, which have a triangular pit in the hinge where the internal ligament is located. These bivalves are usually found in the Indo-West Pacific region, ranging from the eastern Indian Ocean to Indonesia and the Philippines. They are known to inhabit shallow sandy substrates.



70. *Menathais tuberosa*

Common Name	: Humped rock shell	
Local Name	: <i>Cangkang batu bungkok</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Menathais tuberosa, commonly known as Humped rock shell or humped rocksnail, is a species of sea snail in the family Muricidae, the murex snails or rock snails. The size of an adult shell varies between 17 mm and 50 mm. This species occurs in the Indian Ocean off Madagascar and Tanzania, also in the southwestern and central Pacific Ocean off Tonga.

71. *Metapenaeus dobsoni*

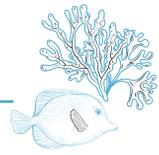
Common Name	: Kadal shrimp/Poovalan shrimp	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Metapenaeus dobsoni has a pale yellow to brownish and red coloured body. It has a double curved rostrum. Poovalan shrimps are found in the coastal regions of India and in some other countries like Sri Lanka, Malaysia, Philippines, and New Guinea. The total length of female species is around 36–130 mm and that for males is around 41–120 mm. The average sex ratio, in this case, is around 1:1.5 (M:F). Males have a basal spine and two tubercles on the merus on the last thoracic leg.

72. *Metapenaeus monoceros*

Common Name	: Speckled shrimp	
Local Name	: <i>Udang dogol</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The adult prawns are commonly known as brown shrimp or speckled shrimp due to their pale grey body with dark brown spots. Males usually grow up to 15 centimeters (5.9 inches) in length, while females can grow up to 20 centimeters (7.9 inches). Although the maximum recorded weight of these prawns is 170 grams (6.0 ounces), most individuals weigh less than 30 grams (1.1 ounces). They are native to the Indo-West Pacific region, including the African coast from Durban to the Red Sea and areas around India.



73. *Microeuraphia withersi*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Microeuraphia withersi is a species of barnacles that has a narrow scutum. The width-to-height ratio of this species ranges from 0.8 to 1.4 cm. It has been found in various locations including the Philippines, Indonesia, Singapore, Vietnam, Hongkong, Australia, Madagascar, and India.

74. *Monetaria annulus*

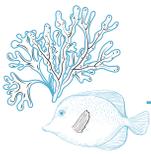
Common Name	: Ring cowrie	
Local Name	: Cowrie <i>cincin emas</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species has a shell ranging from 9 mm to 50 mm, usually off-white or pale yellowish, with two yellow or orange stripes. It can be found in the Red Sea, Indian Ocean, and tropical Pacific Ocean, including Aldabra, Chagos, Comores, South Africa, Kenya, Madagascar, Mauritius, Mozambique, Réunion, Seychelles, Somalia, Yemen, Oman, Maldives, India, Sri Lanka, Hawaii, and Galápagos islands.

75. *Monilea callifera*

Common Name	: Shrewd trochid	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The size of an adult shell varies between 12 mm and 24 mm. Its color is whitish or yellowish, with radiating maculations or stripes above; the base unicolored or obliquely striped with the stripes often interrupted. This marine species occurs in the intertidal and subtidal zones along the shores of Australia, Philippines, New Caledonia, Japan, India, Sri Lanka, the Andaman Islands.



76. *Monodonta canalifera*

Common Name	: Canal monodont	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The size of the shell varies between 18 mm and 30 mm. The shell is similar to the *Monodonta australis*, but with more convex, rounded whorls, upon the last of which the spiral lirae become more or less obsolete. The color is reddish, purplish, or green, the lirae usually articulated with white, but sometimes uncolored. This marine species occurs in the Red Sea and in the Western Pacific.

77. *Monoplex nicobaricus*

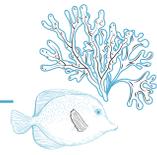
Common Name	: Goldmouth triton	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Monoplex nicobaricus is a species of medium-sized predatory sea snail, a tropical marine gastropod mollusk in the family Cymatiidae. This species of marine snail has a wide distribution and lives in the Indo-Pacific and Western Atlantic oceans. The maximum recorded shell length is 90 mm. The minimum recorded depth is at the surface and the maximum recorded depth is 36 m (118 ft).

78. *Monoplex vespaceus*

Common Name	: Dwarf hairy triton	
Local Name	: <i>Triton berbulu kerdil</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The common name of this species is dwarf hairy triton, is a species of predatory sea snail, a marine gastropod mollusk in the family Cymatiidae. This species has a wide distribution and is found in the Atlantic Ocean, Indian Ocean, Indo-West Pacific, Red Sea, Gulf of Mexico and Caribbean Sea. The shell size varies between 16 mm and 60 mm. The maximum recorded shell length is 41 mm. Minimum recorded depth is 4.5 m and the maximum recorded depth is 4.5 m.



79. *Muricodrupa anaxares*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Muricodrupa anaxares is a species of sea snail, a marine gastropod mollusk in the family Muricidae, the murex snails or rock snails. This species is found at rocky shores in the Red Sea, in the Indian Ocean off Aldabra, Chagos, Kenya, Madagascar, the Mascarene Basin and Tanzania and in the Indo-West Pacific; off Australia (Northern Territory, Queensland, Western Australia). The shell size varies between 13 mm and 26 mm.

80. *Morula biconica*

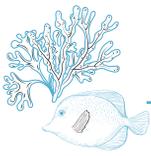
Common Name	: Biconic rock shell	
Local Name	: <i>Cangkang batu biconic</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Morula biconical is a species of sea snail, a marine gastropod mollusk in the family Muricidae, the murex snails or rock snails. The shell size varies between 13 mm and 30 mm. This species is found in the Indian Ocean along Réunion, Madagascar, the Mascarene Basin and in the Indo-West Pacific.

81. *Morula uva*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Morula uva is a marine gastropod mollusk found in the tropical Indo-Pacific. They have a shell that can be white or purple with dark tubercles. Their size and length can vary. They are scavengers and predators, feeding on other marine gastropod mollusks and small species. They compete with *Drupa ricinus* in boulder zone habitats while feeding on *Denropoma*. In mid-reef flat rocky substratum, they mainly feed on small individuals or small species of the herbivorous gastropod family Cerithiidae.



82. *Murex concinnus*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Murex concinnus is a species of large predatory sea snail, a marine gastropod mollusk in the family Muricidae, the rock snails or murex snails. This species lives in the intertidal or shallow subtidal zone, among rocks and corals.

83. *Myurellopsis paucistriata*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



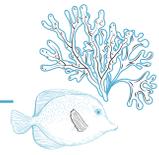
Myurellopsis paucistriata is a species of sea snail, a predatory marine gastropod mollusc in the family Terebridae, the auger snails. This marine species occurs off Papua New Guinea and Fiji. These snails are sand-dwelling carnivores which live in warmer waters.

84. *Naria erosa*

Common Name	: Eroded cowry
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The shell of these quite common cowries reaches on average 32–38 millimetres (1.3–1.5 in) in length, with a maximum size of 75 millimetres (3.0 in) and a minimum adult size of 15 millimetres (0.59 in). This species and its subspecies occur in the Indian Ocean as well in the Western Pacific Ocean (Malaysia, Australia, Philippines, Polynesia, and Hawaii). These cowries live in warm tropical waters, on shallow intertidal reefs or in lagoons at about 2–10 metres (6 ft 7 in–32 ft 10 in) of depth. They feed only at dawn or dusk.



85. *Nassaria pusilla*

Common Name	: Nassa mud snails	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nassaria pusilla is a species of sea snail, a marine gastropod mollusk in the family Nassariidae, the Nassa mud snails or dog whelks. The maximum length of the shell is around 25 mm. This species occurs in Western Central Pacific: Philippines.

86. *Nassarius glans*

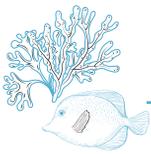
Common Name	: Acorn dog whelk	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nassarius glans is a species of sea snail that belongs to the family Nassariidae, also known as the Nassa mud snails or dog whelks. This marine gastropod mollusk can be found in the Red Sea and the Indian Ocean off the coast of Réunion, Mauritius, and the Mascarene Basin. The shell of this snail is ovate and conical, with a length that varies between 15 mm and 50 mm. The shell is thin, smooth, and has a whitish ground color with dark red spots. The lower whorl has a very large spot of the same tint, but deeper.

87. *Nassarius livescens*

Common Name	: Nassa mud snails	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nassarius livescens is a species of sea snail, a marine gastropod mollusk in the family Nassariidae, the Nassa mud snails or dog whelks. The length of the shell varies between 16 mm and 30 mm. This species occurs in the Indian Ocean off Madagascar and the Mascarene Basin, in the Pacific Ocean off Japan and Indonesia.



88. *Nerita atramentosa*

Common Name	: Black nerite	
Local Name	: <i>Nerites hitam</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita atramentosa, which is also known as the black nerite, is a type of medium-sized sea snail belonging to the family *Neritidae*. The size of the shell varies between 12 mm and 32 mm. This nerite is endemic to the southern coastlands of Australia, including South Australia, southern Western Australia, Victoria and Tasmania. They are typically found on intertidal rocks in the mid to upper intertidal zone. To feed, they scrape epilithic algae using their radula. However, reef crabs are known to prey upon these snails.

89. *Nerita costata*

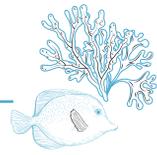
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita costata is a species of sea snail, a marine gastropod mollusk in the family *Neritidae*. It can be found in Indo-West Pacific in tropical waters in the middle and upper intertidal zones. They are gregarious herbivores.

90. *Nerita exuvia*

Common Name	: Snakeskin nerite	
Local Name	: <i>Nerite kulit ular</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita exuvia, common name the “snakeskin nerite”, is a medium-sized species of sea snail, a marine gastropod mollusc in the family *Neritidae*, the nerites. Species of *Nerita* can be found worldwide in tropical waters in the middle and upper intertidal zones. They are gregarious herbivores.



91. *Nerita ocellata*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita ocellata is a species of snails in the family nerites. They are detritivores. Individuals can grow to 16 mm. They have sexual reproduction. Species of *Nerita* can be found worldwide in tropical waters in the middle and upper intertidal zones. They are gregarious herbivores.

92. *Nerita oryzae*

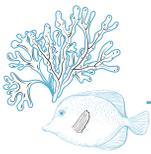
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita oryzae is a species of sea snail, a marine gastropod mollusc in the family *Neritidae*, the nerites. This species can be found in marine intertidal and rocky shores of Western India. They are gregarious herbivores.

93. *Nerita plicata*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Nerita plicata is a species of tropical sea snail that can be found in the Indo-West Pacific region. The *Nerita plicata* is characterized by its 30 mm shell height with its width being about the same. Their exterior is generally dull white or pink with ribs sometimes being black. This species lives high up in the intertidal zone, on rocks. The *Nerita plicata* reproduces through copulation between male and female. After mating, females will deposit egg capsules which will eventually hatch into larvae.



94. *Oliva todosina*

Common Name	: Pretty olive
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Oliva todosina, common name the pretty olive, is a species of sea snail, a marine gastropod mollusk in the family Olividae. The length of the shell varies between 14 mm and 28 mm. This marine species occurs off Madagascar and in the Bay of Bengal, also off Japan, Micronesia and Polynesia.

95. *Panulirus homarus*

Common Name	: Scalloped spiny lobster
Local Name	: <i>Lobster Pasir</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



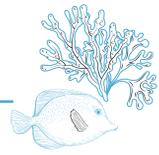
Panulirus homarus is a species of spiny lobster that lives along the coasts of the Indian and Pacific Oceans. It lives in shallow water, and feeds on the brown mussel *Perna perna*. It typically grows to a length of 20–25 cm (7.9–9.8 in). *Panulirus homarus* lives in shallow water, usually 1–5 metres (3 ft 3 in–16 ft 5 in) deep, including among rocks in the surf zone, but occasionally up to 90 m (300 ft), and in turbid water. *Panulirus homarus* is nocturnal and gregarious.

96. *Patelloida striata*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Patelloida striata is a species of sea snail, a true limpet, a marine gastropod mollusk in the family Lottiidae, one of the families of true limpets. The length of the shell attains 30.4 mm. This marine species occurs off Indonesia.



97. *Penaeus indicus*

Common Name	: Indian white prawn	
Local Name	: <i>Udang india</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The Indian white prawn is one of the major commercial prawn species of the world. It is found in the Indo-West Pacific from eastern and south-eastern Africa, through India, Malaysia and Indonesia to southern China and northern Australia. Adult shrimp grow to a length of about 22 cm (9 in) and live on the seabed to depths of about 90 m (300 ft).

98. *Penaeus merguensis*

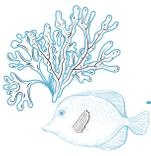
Common Name	: Banana prawn	
Local Name	: <i>Udang jerbung</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The color of this species is creamy yellow with occasional speckles of brown, olive green, or light green pigments. The antennules have brown bands, while the antennae are brown but not banded. The legs and pleopods are yellowish with hints of brown or pink, and the uropods have combinations of yellowish-green and brownish shades. The upper margin of the rostrum is fringed with brown in fully grown individuals. This species can be found in Indo-West Pacific: from Kenya and the Persian Gulf to Hong Kong and Australia.

99. *Penaeus monodon*

Common Name	: Giant tiger prawn	
Local Name	: <i>Udang windu</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This shrimp is a marine crustacean that is widely reared for food. Females can reach about 33 cm (13 in) long but are typically 25–30 cm (10–12 in) long and weigh 200–320 g (7–11 oz); males are slightly smaller at 20–25 cm (8–10 in) long and weighing 100–170 g (3.5–6.0 oz). This species is usually found in the Indo-Pacific region and can be seen on the eastern coast of Africa and the Arabian Peninsula, as well as in Southeast Asia, the Pacific Ocean, and even in northern Australia.



100. *Phyllidia varicosa*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Phyllidia varicosa is a species of sea slug, a dorid nudibranch, a shell-less marine gastropod mollusc in the family Phyllidiidae. This species is widely distributed throughout the Indo-West Pacific Oceans including the central Pacific and the Red Sea. This is a large species growing to at least 115 mm. It can be distinguished by its numerous (3 to 6), longitudinal, tuberculate notal ridges. The ridge and bases of the tubercles are a blue-grey colour. The tubercles are capped in yellow. The foot sole has a black longitudinal foot stripe.

101. *Pirenella cingulata*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



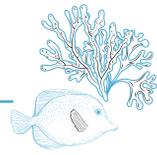
Pirenella cingulata is a species of medium-sized sea snails or mud snails, marine gastropod mollusks in the family Potamididae, the horn snails. It can be found in Indo-Pacific coast and Hormozgan Province in Iran.

102. *Placamen lamellatum*

Common Name	: Wooden venus
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The shell is small, solid, and thick with a trigonal-ovate shape. It has a rounded ventral margin and a narrow, indistinct lunule. There are around six thin, well-developed concentric lamellae that are turned upwards at their outer edges. The hinge has three cardinal teeth but lacks anterior lateral teeth. The pallial sinus is distinct, making it easy to see. The outer margin is thick and rounded, while the interior has muscle scars.



103. *Plicopurpura eudeli*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Plicopurpura eudeli is a species of sea snail, a marine gastropod mollusk in the family Muricidae, the murex snails or rock snails. This species is a predator sea snail. The shells do not have a varix, but strong axial sculpture is often present.

104. *Polinices flemingianus*

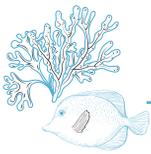
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Polinices flemingianus is a species of predatory sea snail, a marine gastropod mollusk in the family Naticidae, the moon snails. This species is distributed in the Indian Ocean along Aldabra, Chagos, and the Mascarene Basin.

105. *Polinices powisianus*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Polinices powisianus is a species of predatory sea snail, a marine gastropod mollusk in the family Naticidae. This species mostly found in Australia, Indonesia, Japan, and Philippines. They are often seen ploughing along in the sand, searching for bivalvic and other prey, resulting in countersunk boreholes.



106. *Portunus pelagicus*

Common Name	: Blue swimming crab
Local Name	: <i>Rajungan biru</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Portunus pelagicus is a species of large crab found in the Indo-Pacific, including off the coasts Indonesia, Malaysia, Cambodia, Thailand, the Philippines, and Vietnam; and in the intertidal estuaries around most of Australia and east to New Caledonia. The males are bright blue in color with white spots and with characteristically long chelipeds, while the females have a duller green/brown, with a more rounded carapace. The carapace can be up to 20 centimetres (7.9 in) wide.

107. *Portunus sanguinolentus*

Common Name	: Three-spot swimming crab
Local Name	: <i>Rajungan bintang</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



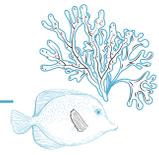
The three-spot swimming crab, also called the blood-spotted swimming crab or red-spotted swimming crab, is a large crab found in the estuaries of Indian and West Pacific Oceanic countries. This crab is widely spread throughout the world and can grow up to 15–20 cm. Its carapace is broad and has a greyish green color with three red spots in the back. The three-spot swimming crab primarily eats meat and is commonly found in marine waters and intertidal zones. Juvenile crabs usually live in sandy or muddy substrates.

108. *Portunus trituberculatus*

Common Name	: Gazami crab
Local Name	: <i>Kepeating gazami</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Portunus trituberculatus, also known as the gazami crab, Asian blue crab or horse crab, is the most widely fished species of crab in the world. It is the world's most heavily fished crab species, with over 300,000 tonnes being caught annually, 98% of it off the coast of China. This is because it is considered highly nutritious, especially in regard to crab cream (roe). *Portunus trituberculatus* is found off the coasts of Korea, Japan, China, and Taiwan. The carapace may reach 15 centimetres (5.9 in) wide, and 7 cm (2.8 in) from front to back.



109. *Pseudovertagus nobilis*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Pseudovertagus nobilis is a species of sea snail, a marine gastropod mollusk in the family Cerithiidae, the ceriths. This species occurs in the Indian Ocean off Madagascar. They are found on sandy bottoms, reef flats or coral reef rock covered with sand and algae in the sublittoral zone of warm or temperate waters.

110. *Pterygia scabricula*

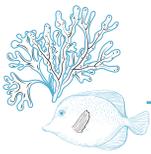
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Pterygia scabricula is a species of sea snail, a marine gastropod mollusk in the family Mitridae, the miters or miter snails. This marine species occurs off Madagascar, Japan, Western Samoa. They are carnivorous predators. Their elongated proboscis aids in reaching and capturing prey (worms, small crustaceans, and other molluscs). They play a role in enriching marine ecosystems by contributing to the regulation of prey populations.

111. *Reishia bitubercularis*

Common Name	: Bituberculate rock shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Reishia bitubercularis, common names bituberculate rock shell, bituberculate rock snail, chestnut rock shell, is a species of sea snail, a marine gastropod mollusk, in the family Muricidae, the murex snails or rock snails. This marine species occurs off the Philippines.



112. *Rhinoclavis kochi*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Rhinoclavis kochi is a species of sea snail, a marine gastropod mollusk in the family Cerithiidae. Members of the family Cerithiidae are herbivore-deposit feeders. This species is medium to large size, measuring between 2 and 3½ inches. It has a sturdy and thick body with a regular conical spire that is very high and turreted.

113. *Saccostrea cucullata*

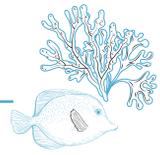
Common Name	: Hooded oyster	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Saccostrea cucullata, commonly known as the hooded oyster or Natal rock oyster, can be found in the Indo-Pacific Ocean. In the Mediterranean, it usually grows up to 4 to 6 cm (1.6 to 2.4 in) in size, while in the Pacific Ocean, it can grow up to twice that size. As a filter feeder, it pumps water through its gills and extracts phytoplankton. However, in waters that are polluted, it tends to accumulate heavy metals in its tissues. For this reason, it can be used as a bioindicator for monitoring pollution.

114. *Scylla paramamosain*

Common Name	: Green mud crab	
Local Name	: <i>Kepiting bakau</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Scylla paramamosain or also known as green mangrove crab (green mangrove crab, green mud crab) is a type of mangrove crab that is widespread in Southeast Asia, especially in the northern part of the South China Sea coast and parts of Java. Mangrove crabs are large, the maximum carapace width (male animals) is around 20 cm and weighs up to 2 kg. The habitat of green mangrove crabs is mainly rocky beaches, near coral reefs, and mangrove forests.



115. *Semicassis angasi*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The shell of *Semicassis angasi* has light, rounded whorls with spiral ribs and grooves on the spire, and a smooth body whorl with slight spiral threads on the shoulder and grooves at the base. The columella and columellar shield are strongly plicate with a lobe extending onto the anterior fasciole. The outer lip is toothed, and the color can be white, fawn or pink. It can grow up to 54 mm and is only found in Australia from the Kimberley to Sydney.

116. *Semiricinula muricoides*

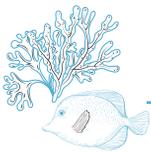
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Semiricinula muricoides is a species of sea snail, a marine gastropod mollusk in the family Muricidae, the murex snails or rock snails. This marine species occurs off New Zealand. Individuals can grow to 29.5 mm. They have sexual reproduction.

117. *Serratina perplexa*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Serratina perplexa is a species of marine bivalve molluscs in the family Tellinidae. Its body size is 2.0–200 mm. This species is a deposit feeder. The species in Tellinids family have rounded or oval, elongated shells, much flattened. The two valves are connected by a large external ligament. The two separate siphons are exceptionally long, sometimes several times the length of the shell. These siphons have a characteristic cruciform muscle at their base.



118. *Siliqua inflexa*

Common Name	: -	
Local Name	: Kerang	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This species, belonging to the Bivalvia class and Pharidae family, features a smooth internal shell surface. Its shell is elongate and ovate, with a distinct long, oval shape. This marine bivalve inhabits benthic environments in tropical regions.

119. *Siphonaria normalis*

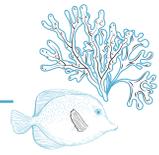
Common Name	: The False 'Opihi	
Local Name	: Keong Palsu	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

These False limpets are characterized by a ribbed shell with brown and white coloration. Though they can grow up to 20 mm in length, they are usually smaller in size in Hawaii. *Siphonaria normalis* is widely distributed throughout the Indo-Pacific and can be found in rocky intertidal zones along the coastlines of these regions. They do not live under the water but need to be in areas that are wet constantly from the ocean. The species lays egg masses in a spiral formation and the hatched eggs produce juvenile *Siphonaria normalis*.

120. *Stichopus herrmanni*

Common Name	: Curryfish herrmanni	
Local Name	: Teripang emas	
IUCN	: Vulnerable	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

This sea cucumber species belong to Stichopodidae family. It lives in benthic at depth range of 0–30 m (Ref. 81020). Distributed around Indo-West Pacific Ocean. It grazes on organic materials. The body is cylindrical with a flat sole. The body wall is rough and wrinkled, without large swellings but with orange-brown papillae. The colour is variable, in some locations being greyish-brown, greenish-brown, or sandy-brown, while in others being mustard-yellow, orange-brown or green and brown.



121. *Strigatella scutulata*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Strigatella scutulata is a species of sea snail, a marine gastropod mollusk in the family Mitridae, the miters or miter snails. This species originates from the Samar, Philippines. They are carnivorous predators. Their elongated proboscis aids in reaching and capturing prey (worms, small crustaceans, and other molluscs). They play a role in enriching marine ecosystems by contributing to the regulation of prey populations.

122. *Synapta maculata*

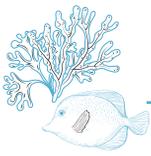
Common Name	: Snake sea cucumber	
Local Name	: <i>Teripang ular</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Synapta maculata, the snake sea cucumber, is a species of sea cucumber in the family Synaptidae. It is found in shallow waters in the tropical Indo-Pacific Ocean. Sometimes growing as long as 3 m (10 ft), it is one of the longest sea cucumbers in the world. Its colouring is variable, being some shade of yellowish-brown with wide longitudinal stripes and patches of darker colour.

123. *Tectus fenestratus*

Common Name	: Black Tectus Snail	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

The shell of this marine species has a conical shape with a size that varies between 17 mm and 50 mm. It is solid and imperforate, and its color can be white or grayish, with green, brown or olive spots. The base of the shell is unicolored in white, and the apex is sharp. It has 9-11 whorls and can be found in the Central and West Pacific Ocean, Indo-china, Indo-Malaysia, Papua New Guinea, New Caledonia, and Australia (Northern Territory, Queensland, Western Australia).



124. *Tegollarca granosa*

Common Name	: Blood clam	
Local Name	: <i>Kerang dara</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Tegollarca granosa (also known as *Anadara granosa*) is a species of ark clam known as the blood cockle or blood clam due to the red haemoglobin liquid inside the soft tissues. It is found throughout the Indo-Pacific region from the eastern coast of South Africa northwards and eastwards to Southeast Asia, Australia, Polynesia, and up to northern Japan. It lives mainly in the intertidal zone at one to two metres water depth, burrowed down into sand or mud. Adult size is about 5 to 6 cm long and 4 to 5 cm wide.

125. *Tegula pfeifferi*

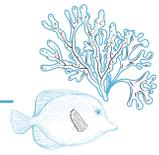
Common Name	: Pfeiffer's Top Shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Tegula pfeifferi is a species of sea snail, a marine gastropod mollusk in the family Tegulidae. *Tegula pfeifferi* is more commonly known as "Pfeiffer's Top Shell". The height of the shell is 30 mm, its diameter 33 mm. The solid, umbilicate shell has a conical shape with an acutely angled periphery. It is dark purplish or brownish-purple and obliquely striate; the base radiately striate or streaked with white.

126. *Tegulaplex hululensis*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Tegulaplex hululensis is well known species and widely but discontinuously distributed throughout the Indo-West Pacific. Its body size is around 13–14 mm. It commonly found in the habitat of rocky shores, rock coasts, rocky hard seabeds, and stony soils. It consumes algae as its food.



127. *Tellinides timorensis*

Common Name	: Timor tellin	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Tellina timorensis has a thin, round, elongated shell with a slightly tapered base. It can be found in Indo-West Pacific: from Sri Lanka to the Philippines; north to southern Japan and south to southeast Indonesia. The common length is 3.5 cm with a maximum length of 6 cm.

128. *Terebra triseriata*

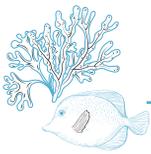
Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Terebra triseriata is a species of sea snail, a marine gastropod mollusk in the family Terebridae, the auger snails. This species occurs in the Indian Ocean off the Mascarene Basin. They are carnivorous, feeding on marine worms. They are collectively termed toxoglossa (poison tooth), based on their mode of feeding. They have a harpoon-like radula, which is used to inject venom and paralyze their prey.

129. *Thais tricolorata*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Thais tricolorata is a species of sea snail, a marine gastropod mollusk, in the family Muricidae, the murex snails or rock snails. The length of the shell attains 27.3 mm. This marine species occurs off Madagascar.



130. *Thelenota ananas*

Common Name	: Prickly redfish
Local Name	: <i>Teripang nanas</i>
IUCN	: Endangered
CITES	: App. II
INA Reg. (P106)	: Not Protected



This seacucumber belong to Holothuroidea family. It lives at 0–50 m depth of sandy bottom. Distributed globally in Indo-Pacific Ocean excluding Hawaii. It feeds exclusively on calcareous alga of *Halimeda* sp. The maximum length can reach up to 80 cm, but the common length is 45 cm. Its body is yellowish-brown or tan, resembling the texture and appearance of a pineapple. This species has endangered status by IUCN and listed in App.II by CITES.

131. *Todaropsis eblanae*

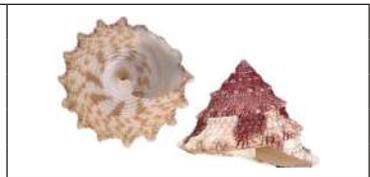
Common Name	: Lesser flying squid
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



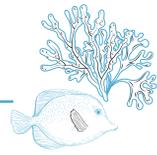
Todaropsis eblanae, also known as the lesser flying squid, is a species of short-finned squid in the monotypic genus *Todaropsis* of the family Ommastrephidae. A relatively small squid between 13–22 centimetres (5.1–8.7 in) in length with a large, broad head. The males grow to a maximum mantle length of 16.0 cm and the females to a maximum mantle length of 27 centimetres (11 in). This species is associated with muddy substrates.

132. *Trochus histrio*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Trochus histrio is a species of snails in the family top snails. Individuals can grow to 25.1 mm. They have sexual reproduction. Sea snails in the genus *Trochus* have large, thick, solid shells that have a broadly conical spire and a flat to convex base. The periphery is angulated. The outer and basal lips are smooth within. The columella has a strong fold above, ending in an obtuse tooth below.



133. *Trochus maculatus*

Common Name	: Maculated top shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Trochus maculatus, common name the maculated top shell, is a species of sea snail, a marine gastropod mollusk in the family Trochidae, the top snails. The size of the shell varies between 25 mm and 65 mm. *T. maculatus* occurs in the Red Sea, the Indo-Pacific Ocean, and Australia (Northern Territory, Queensland, Western Australia).

134. *Trochus nigropunctatus*

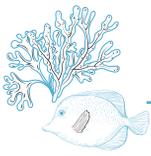
Common Name	: The black-spotted topshell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Trochus nigropunctatus, common name the black-spotted topshell, is a species of sea snail, a marine gastropod mollusk in the family Trochidae, the top snails. The shell is rather largely, excavately umbilicated, and shortly conical. Its color is ashgreen, obliquely flamed with black. This marine species occurs off Indo-Malaysia, Oceania, the Philippines, and Australia (Northern Territory, Queensland, Western Australia).

135. *Trochus radiatus*

Common Name	: Radiate top shell	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Trochus radiatus, common name the radiate top shell, is a species of sea snail, a marine gastropod mollusk in the family Trochidae, the top snails. The thick, rather solid, trochoidal shell has a moderately elevated spire and is false-umbilicate. Its length varies between 17 mm and 40 mm. This species occurs on intertidal rock boulders in the Indian Ocean off Madagascar and in the Western Pacific.



136. *Turbo sandwicensis*

Common Name	: Hawaiian top shell
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Turbo sandwicensis, common name the Hawaiian top shell, is a species of sea snail, a marine gastropod mollusk in the family Turbinidae, the turban snails. The color pattern of the shell is green, marbled and variegated with dark brownish red. This species occurs in the Pacific Ocean off Hawaii. *Turbo Sandwicensis* lives in shallow coastal waters of the Hawaiian Islands and can be found under rocks at a depth of approximately 60 feet.

137. *Turbo setosus*

Common Name	: The rough turban
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



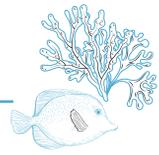
Turbo setosus, common name the rough turban, is a species of sea snail, marine gastropod mollusk in the family Turbinidae. The length of the shell varies between 22 mm and 80 mm. The solid, imperforate shell has an ovate-pointed shape. Its color pattern is whitish, or greenish, maculated with brown and olive. This species occurs in the Indian Ocean off Madagascar, the Mascarene Basin and Mauritius; in the Central and Southwest Pacific; off Australia.

138. *Turricula nelliae*

Common Name	: -
Local Name	: -
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Turricula nelliae is a species of sea snail, a marine gastropod mollusk in the family Clavatulidae. The size of an adult shell varies between 30 mm and 40 mm. The turreted shell has a fusiform shape. It contains 12 strongly excavated whorls. This species has a wide distribution in the Indian Ocean, and from China to Australia (Northern Territory, Queensland, Western Australia).



139. *Turricula tornata*

Common Name	: The turned turrid	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Turricula tornata, common name the turned turrid, is a species of sea snail, a marine gastropod mollusk in the family Clavatulidae. The size of an adult shell varies between 60 mm and 75 mm. The shell is smooth and ivory-like. The lower portion of body whorl shows revolving striae. The upper portion of the whorls are broadly, concavely channeled. This species has a wide distribution: from the Red Sea to Thailand and the Western Pacific.

140. *Umbonium vestiarium*

Common Name	: The button tops	
Local Name	: <i>Siput kancing</i>	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Umbonium vestiarium, common name the button tops, is a species of sea snail, a marine gastropod mollusk in the family Trochidae, the top snails. The solid, rounded shells are up to 2 cm wide. They are similar to *Oxysteles* but are more flattened and show a glossy, highly variable and colourfully patterned exterior. They can be found on eulittoral sand in Indo-Pacific.

141. *Unedogemmula indica*

Common Name	: -	
Local Name	: -	
IUCN	: Not Evaluated	
CITES	: Not Listed	
INA Reg. (P106)	: Not Protected	

Unedogemmula indica, common name the Indian turrid, is a species of sea snail, a marine gastropod mollusk in the family Turridae, the turrids. The size of an adult shell varies between 35 mm and 90 mm. This marine species occurs in the Mascarene Basin and off Madagascar, off Sri Lanka, the Philippines, in the South China Sea, off Australia and the Fiji Islands.

7

Terrestrial Fauna





7.1 Aves

1. *Accipiter fasciatus*

Common Name	: Brown Goshawk
Local Name	: <i>Elang-alap cokelat</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The brown goshawk is a medium-sized bird of prey in the family Accipitridae found in Australia and surrounding islands. The body length is 40–55 cm; the wingspan is 75–95 cm. Females are noticeably larger: adult males weigh 220 g (7.8 oz), and adult females, 355 g (12.5 oz). The brown goshawk is widespread through Australia, Wallacea, New Guinea, New Caledonia, Vanuatu, and Fiji. Brown goshawks feed mainly on other medium-sized birds, while small mammals such as rats and rabbits are also taken.

2. *Accipiter gularis*

Common Name	: Japanese Sparrowhawk
Local Name	: <i>Elang-alap jepang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



This species is a small raptor with broader and rounder wings and a shorter tail. Its total length measures 23–30 cm. Both sexes have a stripe across the throat, but its more obvious in the female. Adult male Japanese sparrowhawks measure between 23–30 cm in length with a wingspan measuring 46–58 cm and weigh 92–142 grams. Adult females are larger than their male counterparts, weighing around 111–193 cm. It inhabits many forest types such as deciduous, coniferous and mixed, at elevations up to 1,800 meters but usually below 1,000 meters.



3. *Accipiter hiogaster*

Common Name	: Variable Goshawk
Local Name	: <i>Elang-alap Kelabu</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The variable goshawk (*Accipiter hiogaster*) is a bird of prey native to Indonesia, Papua New Guinea, and the Solomon Islands. It is a medium-sized bird of prey, common on forest edges in the lowlands and foothills. There are three different colour forms. The most common form with granite grey upperparts and reddish brown below, plus completely grey and completely white forms. Targets prey from a perch.

4. *Accipiter novaehollandiae*

Common Name	: Grey Goshawk
Local Name	: <i>Elang-alap Kelabu</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The grey goshawk is a strongly built, medium-sized bird of prey in the family Accipitridae that is found in eastern and northern Australia. Grey goshawks are the largest *Accipiter* on mainland Australia, at about 40 to 55 cm long, with wingspans of 70 to 110 cm. Females weigh about 720 g on average while males average 355 g. Their preferred habitats are forests, tall woodlands, and timbered watercourses. Grey goshawks often seem to vary their prey selection opportunistically. However, the most frequent prey type is most often birds.

5. *Accipiter soloensis*

Common Name	: Chinese Sparrowhawk
Local Name	: <i>Elang-alap Cina</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Chinese sparrowhawk (*Accipiter soloensis*) is a bird of prey in the family Accipitridae. It breeds in Southeast China, Taiwan, Korea, and Siberia; winters in Indonesia and Philippines, passing through the rest of Southeast Asia. It lives mainly in forests but sometimes lives on edges. It sometimes migrates in small groups. It is 30–36 cm in length, with the female larger than the male. In its breeding range, it feeds mainly on frogs, but will take lizards and other small invertebrates as well. It occasionally eats small birds and mice.



6. *Actitis hypoleucos*

Common Name	: Common Sandpiper
Local Name	: <i>Trinil pantai</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common sandpiper (*Actitis hypoleucos*) is a small Palearctic wader. The adult is 18–20 cm long with a 32–35 cm wingspan. This species breeds across most of temperate and subtropical Europe and Asia and migrates to Africa, southern Asia, and Australia in winter. It forages by sight on the ground or in shallow water, picking up small food items such as insects, crustaceans, and other invertebrates; it may even catch insects in flight.

7. *Aerodramus fuciphagus*

Common Name	: Edible-nest Swiftlet
Local Name	: <i>Walet sarang-putih</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The edible-nest swiftlet, generally with a body length of 14cm, is a medium-sized representative of the salangans. It weighs 15 to 18 grams, and the wings are long and narrow. This species is present in the Andamans, in the coasts of South-East Asia and in the Indonesian Archipelago. It feeds over a range of habitats from coastal areas to the mountains, occurring up to 2,800 masl on Sumatra and Borneo. These birds generally occur above forests, the forest edge, but also in open country. Their diet consists of flying insects that are caught on the wing.

8. *Aerodramus vanikorensis*

Common Name	: Uniform swiftlet
Local Name	: <i>Walet polos</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The uniform swiftlet, (*Aerodramus vanikorensis*), also known as the Vanikoro swiftlet or lowland swiftlet, is a gregarious, medium-sized swiftlet with a shallowly forked tail. The colouring is dark grey-brown, darker on the upperparts with somewhat paler underparts, especially on chin and throat. This species is widespread from the Philippines through Wallacea, New Guinea, and Melanesia. It forages for flying insects primarily in lowland forests and open areas.



9. *Alcedo atthis*

Common Name	: Common Kingfisher
Local Name	: <i>Raja-udang eurasia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This sparrow-sized bird has the typical short-tailed, large-headed kingfisher profile; it has blue upperparts, orange underparts and a long bill. It feeds mainly on fish, caught by diving, and has special visual adaptations to enable it to see prey under water. It is about 16 cm long with a wingspan of 25 cm and weighs 34–46 grams.

10. *Alcedo coerulescens*

Common Name	: Cerulean Kingfisher
Local Name	: <i>Raja-udang biru</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The cerulean kingfisher is a small kingfisher with a length of 13 cm. The upperparts are a range of shades of blue with white lores and a prominent white patch on each side of the neck. The underparts are white with an azure-blue breast-band. The bill is blackish, and the legs are dark brown. It is native to Sumatra, Java, the Kangean Islands, Bali, Lombok and Sumbawa, all in Indonesia. It is a resident species that inhabits low-lying areas near streams, canals, flooded paddy-fields, and tidal estuaries.

11. *Amaurornis phoenicurus*

Common Name	: White-breasted Waterhen
Local Name	: <i>Kareo padi</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The white-breasted waterhen is a waterbird of the rail and crane family, Rallidae, that is widely distributed across South and Southeast Asia. Their breeding habitat is marshes across tropical Asia from Pakistan east to Indonesia. Adult, white-breasted waterhens have mainly dark grey upperparts and flanks, and a white face, neck and breast. The lower belly and undertail are cinnamon or white coloured. Although most often found near freshwater, they are also found near brackish water and even the seashore when there is no freshwater.



12. *Charadrius alexandrinus*

Common Name	: Kentish Plover
Local Name	: <i>Cerek tilli</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Kentish plover is a small shorebird weighing around 40 g as an adult. Both male and female birds have black bills and dark legs, however adults have dimorphic plumage. Kentish plovers have an extremely wide geographical distribution, and their habitats vary not just spatially but environmentally too. They are known to reside and breed in multiple types of habitats, from desert with ground temperatures reaching 50 °C to tundra. The distribution of this species' breeding areas covers Europe, Asia, and Africa.

13. *Charadrius javanicus*

Common Name	: Javan Plover
Local Name	: <i>Cerek jawa</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The Javan plover (*Charadrius javanicus*) is a bird species in the family Charadriidae. It is relatively small plain plover, found from Java east through the Lesser Sundas. This species is endemic to Indonesia, where it inhabits sandy shores and intertidal mudflats. Breeding adults have orange tinging behind the eye and around the collar. Juvenile is similar to non-breeding adult but has pale-fringed upper body feathers.

14. *Charadrius peronii*

Common Name	: Malaysian Plover
Local Name	: <i>Cerek malaysia</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Malaysian plover is 15 cm (5.9 in) in length. The male can be recognized by a thin black band around the neck; the female has a thin brown band. Its legs are pale. Its voice is a soft twit. It occasionally visits estuaries, seawalls, and mudflats as well.



15. *Anthreptes malacensis*

Common Name	: Brown-throated Sunbird
Local Name	: <i>Burung-madu Kelapa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The brown-throated sunbird (*Anthreptes malacensis*), also known as the plain-throated sunbird, is a species of bird in the family Nectariniidae. It is found in a wide range of semi-open habitats in south-east Asia, ranging from Myanmar to the Lesser Sundas and west Philippines. This species is medium sized and has relatively short beaks, common throughout most of their range in open forests, forest edges and urban areas.

16. *Anthus rufulus*

Common Name	: Paddyfield Pipit
Local Name	: <i>Pipit sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The paddyfield pipit or Oriental pipit (*Anthus rufulus*) is a small passerine bird in the pipit and wagtail family. It is a resident (non-migratory) breeder in open scrub, grassland, and cultivation in southern Asia east to the Philippines. Although among the few breeding pipits in the Asian region, identification becomes difficult in winter when several other species migrate into the region. The taxonomy of the species is complex and has undergone considerable changes.

17. *Aplonis minor*

Common Name	: Short-tailed Starling
Local Name	: <i>Perling Kecil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The short-tailed starling (*Aplonis minor*) is a species of starling in the family Sturnidae. It is found in Indonesia and the Philippines. Its natural habitats are subtropical or tropical moist lowland forests and subtropical or tropical moist montane forests. It gives various scratchy, high-pitched, metallic notes, as well as high descending “seep” notes.



18. *Apus pacificus*

Common Name	: Pacific Swift
Local Name	: <i>Kapinis Laut</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Pacific swift (*Apus pacificus*) is a species of bird that is part of the Swift family. It breeds in eastern Asia. It is strongly migratory, spending the northern hemisphere's winter in Southeast Asia and Australia. It is found in a wide range of climatic zones and habitats. It breeds in sheltered locations such as caves, natural rock crevices, or under the roofs of houses. At 17–18 cm in length, the Pacific swift is the largest of the *Apus* swifts. It has a 43 to 54 cm wingspan. Females are slightly heavier than males, averaging 44.5 g against 42.5 g.

19. *Ardea cinerea*

Common Name	: Grey Heron
Local Name	: <i>Cangak abu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The grey heron is a long-legged wading bird of the heron family, Ardeidae, native throughout temperate Europe and Asia, and parts of Africa. It is resident in much of its range, but some populations from the more northern parts migrate southwards in autumn. A bird of wetland areas, it can be seen around lakes, rivers, ponds, marshes and on the seacoast. It feeds mostly on aquatic creatures which it catches after standing stationary beside or in the water or stalking its prey through the shallows. Standing up to 1 metre tall, adults weigh from 1 to 2 kg.

20. *Ardea ibis*

Common Name	: Cattle Egret
Local Name	: <i>Kuntul kerbau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The cattle egret is a stocky heron with an 88–96 cm wingspan; it is 46–56 cm long and weighs 270–512 g. Originally native to parts of Asia, Africa, and Europe, it has undergone a rapid expansion in its distribution and successfully colonised much of the rest of the world in the last century. It can be seen in places like grasslands, farmlands, and wetlands. They usually follow cattle or other large animals to catch insects and small animals that are scared away by them. Some populations are migratory, and others show postbreeding dispersal.



21. *Ardeola speciosa*

Common Name	: Javan Pond-heron
Local Name	: <i>Blekok sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Javan pond heron (*Ardeola speciosa*) is a wading bird of the heron family, found in shallow fresh and salt-water wetlands in Southeast Asia. Its diet comprises insects, fish, and crabs. The Javan pond heron is typically 45 cm long with white wings, a yellow bill with a black tip, yellow eyes and legs. Its overall colour is orange, slaty and white during mating season, and brown and flecked with white out of the mating season.

22. *Arenaria interpres*

Common Name	: Ruddy Turnstone
Local Name	: <i>Trinil Pembalik-batu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The ruddy turnstone (*Arenaria interpres*) is a small cosmopolitan wading bird, one of two species of turnstone in the genus *Arenaria*. It is a highly migratory bird, breeding in northern parts of Eurasia and North America and flying south to winter on coastlines almost worldwide. It is a fairly small and stocky bird, 22–24 cm long with a wingspan of 50–57 cm and a weight of 85–150 g. The ruddy turnstone has a varied diet including carrion, eggs, fish and plant material but it feeds mainly on invertebrates.

23. *Artamus leucorhyn*

Common Name	: White-breasted Woodswallow
Local Name	: <i>Kekep babi</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The white-breasted woodswallow (*Artamus leucorhyn*) is a medium-sized passerine bird that breeds from the Andaman Islands east through Indonesia and northern Australia. It can be found in forests, open woodlands, and semi-arid plains, with a mixture of vegetation including shrubs, mangroves, forest clearings, and grasses, often near watercourses. They are insectivores primarily feeding on insects caught on the wings in flight or from a perch, and occasionally feeding on the nectar of flowers.



24. *Aviceda subcristata*

Common Name	: Pacific Baza
Local Name	: <i>Baza pasifik</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The Pacific baza (*Aviceda subcristata*), also known as the crested hawk, crested baza, and Pacific cuckoo-falcon, is a slender, medium-sized species of hawk in the family Accipitridae. It is mostly grey, brown, and white coloured and grows to a length of 35–46 centimetres. It is an omnivore and usually does not migrate. It lives in Australia, Indonesia, Papua New Guinea, Solomon Islands, and East Timor, in forests, savannas, and freshwater bodies.

25. *Butorides striata*

Common Name	: Striated heron
Local Name	: <i>Kokokan laut</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The striated heron is 35–48 cm in length, weighs 130–250 g, and has a wingspan of 52–60 cm. The sexes are alike. The plumage is varying variable, even sometimes within the same race. Adults have a blue-grey back and wings, white underparts, a black cap, a dark line extending from the bill to under the eye, and short yellow legs. Juveniles are browner above and streaked below. They mainly eat small fish, frogs, and aquatic insects.

26. *Cacomantis sepulcralis*

Common Name	: Sunda Brush Cuckoo
Local Name	: <i>Wiwik uncuing</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The rusty-breasted cuckoo (*Cacomantis sepulcralis*) is a species of cuckoo in the family Cuculidae. It is found in Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Its natural habitat is subtropical or tropical moist lowland forests. It is sometimes considered a subspecies of the brush cuckoo.



27. *Calidris alba*

Common Name	: Sanderling
Local Name	: <i>Kedidi putih</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The sanderling (*Calidris alba*) is a small wading bird. This species is a small plump sandpiper, 18–20 cm in length. Its weight ranges from 40–100 g. The sanderling breeds in the High Arctic areas of North America, Europe and Asia. It is a complete migrant, travelling between 3,000 to 10,000 km (1,900 to 6,200 mi) from its breeding grounds to its wintering sites. Sanderlings feed on invertebrate prey buried in the sand in the upper intertidal zone.

28. *Caloenas nicobarica*

Common Name	: Nicobar Pigeon
Local Name	: <i>Junai emas</i>
IUCN	: Near Threatened
CITES	: App. I
INA Reg. (P106)	: Protected



The Nicobar pigeon or Nicobar dove (*Caloenas nicobarica*) is a bird found on small islands and in coastal regions from the Andaman and Nicobar Islands, India, east through the Indonesian Archipelago, to the Solomons and Palau. It is a large pigeon, measuring 40 cm (16 in) in length. The head is grey, like the upper neck plumage, which turns into green and copper hackles. The tail is very short and pure white. The rest of its plumage is metallic green.

29. *Caprimulgus affinis*

Common Name	: Savanna Nightjar
Local Name	: <i>Cabak kota</i>
IUCN	: Least Concern
CITES	: App II
INA Reg. (P106)	: Protected



The savanna nightjar sometimes also allied nightjar or Franklin's nightjar, (*Caprimulgus affinis*) is a species of nightjar found in South and Southeast Asia. Its habitat is open forest and areas with scrub. Its length is about 25 cm, with a wingspan of 64 cm and a body weight of 54–110g. The upperparts are brownish-grey and vermiculated, with pale brown speckles. The underparts are brown, with bars.



30. *Caprimulgus macrurus*

Common Name	: Large-tailed Nightjar
Local Name	: <i>Cabak maling</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The large-tailed nightjar (*Caprimulgus macrurus*) is a species of nightjar in the family Caprimulgidae. It is found along the southern Himalayan foothills, eastern South Asia, Southeast Asia and northern Australia. Its natural habitats are subtropical or tropical moist lowland forest, subtropical or tropical mangrove forest, and subtropical or tropical moist montane forest.

31. *Caridonax fulgidus*

Common Name	: White-rumped Kingfisher
Local Name	: <i>Cekakak Tunggir-putih</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The white-rumped kingfisher or glittering kingfisher (*Caridonax fulgidus*) is a species of bird in the family Alcedinidae. It is monotypic within the genus *Caridonax*. It is endemic to Indonesia, where its natural habitats are subtropical or tropical moist lowland forest and subtropical or tropical moist montane forest. It is dark blue all over, except its underside and rump, which are white. It has a red bill and feet. Its eyes are dark brown.

32. *Cecropis daurica*

Common Name	: Red-rumped Swallow
Local Name	: <i>Layang-layang merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The red-rumped swallow (*Cecropis daurica*) is a small passerine bird in the swallow family. It breeds in open hilly country of temperate southern Europe and Asia from Portugal and Spain to Japan, India, Sri Lanka, and tropical Africa. The Indian and African birds are resident, but European and other Asian birds are migratory. These swallows are usually found over grassland where they hawk insects. They may sometimes take advantage of grass fires and grazing cattle that flush insects into the air.



33. *Cecropis nigricans*

Common Name	: Tree Martin
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The tree martin is a member of the swallow family of passerine birds. It breeds in Australia, mostly south of latitude 20°S and on Timor Island. It is migratory, wintering through most of Australia, New Guinea, Indonesia east of the Wallace Line and the Solomon Islands. It is a vagrant to New Zealand, where it has bred, and New Caledonia.

34. *Cecropis striolata*

Common Name	: Striated Swallow
Local Name	: <i>Layang-layang Loreng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The striated swallow is a species of swallow found in open, often hilly, areas with clearings and cultivation across Southeast Asia to north-eastern India and Taiwan. The striated swallow is 19 cm long with a deeply forked tail. It has blue upperparts other than a reddish collar (sometimes absent) and streaked chestnut rump. The face and underparts are white with heavy dark streaking. The striated swallow feeds low over the ground or at cliff faces on flying insects. It will feed with other swallow species.

35. *Centropus bengalensis*

Common Name	: Lesser Coucal
Local Name	: <i>Bubut alang-alang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The lesser coucal (*Centropus bengalensis*) is a species of cuckoo in the family Cuculidae. It has a wide distribution range that overlaps with several other similar species. The habitat in which it is found is often marshy land with grass and tree cover. The species is widely distributed west from the Indian subcontinent extending east across Southeast Asia.



36. *Ceyx erithaca*

Common Name	: Black-backed dwarf kingfisher
Local Name	: <i>Udang merah api</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-backed dwarf kingfisher (*Ceyx erithaca*), also known as the three-toed kingfisher, is a pocket-sized bird in the family Alcedinidae. This tropical kingfisher is a partial migrant that is endemic to parts of the Indian Subcontinent and Mainland Southeast Asia. It resides in lowland forests, typically near streams or ponds, where it feeds upon insects, spiders, worms, crabs, fish, frogs, and lizards. It is easily distinguishable from other birds in its range due to its red bill, yellow-orange underparts, lilac-rufous upperparts, and blue-black back.

37. *Ceyx rufidorsa*

Common Name	: Rufous-backed Dwarf-kingfisher
Local Name	: <i>Udang Punggung-merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The rufous-backed dwarf kingfisher (*Ceyx rufidorsa*) is a small bird in the kingfisher family Alcedinidae that is found in parts of Maritime Southeast Asia. This tropical kingfisher is easily distinguishable from other birds in its range due to its red bill, yellow-orange underparts, lilac-rufous upperparts, and rufous back. It resides in lowland forests, typically near streams or ponds, where it feeds upon insects, spiders, worms, crabs, fish, frogs, and lizards.

38. *Chalcophaps indica*

Common Name	: Asian Emerald Dove
Local Name	: <i>Delimukan zamrud</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The emerald dove or common emerald dove, also called Asian emerald dove and grey-capped emerald dove, is a widespread resident breeding pigeon native to the tropical and subtropical parts of the Indian Subcontinent and Southeast Asia. The common emerald dove is a stocky, medium-sized pigeon, typically 23–27 cm in length. This is a common species in tropical forests and similar dense wet woodlands, farms and mangroves. They eat seeds and fruits of a wide variety of plants and are generally tame and approachable.



39. *Chrysococcyx basalis*

Common Name	: Horsfield's Bronze Cuckoo
Local Name	: <i>Kedasi australia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Horsfield's bronze cuckoo (*Chrysococcyx basalis*) is a small cuckoo in the family Cuculidae. Its size averages 22g and is distinguished by its green and bronze iridescent colouring on its back and incomplete brown barring from neck to tail. Horsfield's bronze cuckoo can be distinguished from other bronze cuckoos by its white eyebrow and brown eye stripe. The Horsfield's bronze cuckoo is common throughout Australia preferring the drier open woodlands away from forested areas.

40. *Ciconia episcopus*

Common Name	: Woolly-necked Stork
Local Name	: <i>Bangau sandang-lawe</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Asian woolly-necked stork or Asian woollyneck (*Ciconia episcopus*) is a species of large wading bird in the stork family Ciconiidae. The woolly-necked stork is a medium-sized stork at 75–92 cm tall. It breeds singly, or in small loose colonies. It is distributed in a wide variety of habitats including marshes in forests, agricultural areas, and freshwater wetlands. It is a widespread tropical species which breeds in Asia, from India to Indonesia.

41. *Cinnyris jugularis*

Common Name	: Olive-backed Sunbird
Local Name	: <i>Burung madu Sriganti</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The garden sunbird, previously known as the olive-backed sunbird, is a species of passerine bird in the family Nectariniidae that is found in the Philippines except on the Palawan Island group. It is a small, brightly coloured bird with olive-green plumage on the wings and back with a bright yellow chest. They are 10–11.4 cm; male 6.7–11.9 g, female 6–10 g. It has a long downward-curved bill it uses for taking nectar and capturing insects. It is primarily nectarivorous, but will take insects and spiders, particularly when feeding chicks.



42. *Cinnyris ornatus*

Common Name	: Ornate Sunbird
Local Name	: <i>Burung matahari hias</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The ornate sunbird (*Cinnyris ornatus*) is a species of bird in the sunbird family Nectariniidae that is endemic to Mainland Southeast Asia, Sumatra, Java, Borneo and the Lesser Sunda Islands. The ornate sunbird is 10–11.4 cm in length. The male weighs 6.7–11.9 g, the female 6–10 g. The species is sexual dimorphic. It forages either singly or in small groups. The diet mainly consists of small insects, spiders, nectar and small fruit.

43. *Cinnyris solaris*

Common Name	: Flame-breasted Sunbird
Local Name	: <i>Burung madu Matari</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The flame-breasted sunbird (*Cinnyris solaris*) is a species of bird in the family Nectariniidae. It is found on Timor and other islands, primarily in the Indonesian province of Nusa Tenggara Timur. Its natural habitat is subtropical or tropical moist lowland forests. This species small in size (around 11 cm).

44. *Circaetus gallicus*

Common Name	: Short-toed Snake-eagle
Local Name	: <i>Elang ular jari pendek</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The short-toed snake eagle, also known as the short-toed eagle, is a medium-sized bird of prey in the family Accipitridae. These are relatively large snake eagles. Adults are 59 to 70 cm long with a 162 to 195 cm wingspan and weigh 1.2–2.3 kg, an average weight for the species is about 1.7 kg. This species found throughout the Mediterranean basin, into Russia and the Middle East, and parts of Western Asia, and in the Indian Subcontinent and further east in some Indonesian islands.



45. *Cisticola juncidis*

Common Name	: Zitting Cisticola
Local Name	: Cici Padi
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The zitting cisticola or streaked fantail warbler (*Cisticola juncidis*) is a widely distributed Old World warbler whose breeding range includes southern Europe, Africa (outside the deserts and rainforest), and southern Asia down to northern Australia. The zitting cisticola is 10 to 12 cm in length. This species is found mainly in grassland habitats, often near water. Most populations are resident, but some East Asian populations migrate south to warmer areas in winter.

46. *Collocalia esculenta*

Common Name	: Glossy Swiftlet
Local Name	: Walet Sapi
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The glossy swiftlet (*Collocalia esculenta*) is a species of swift in the family Apodidae. The glossy swiftlet is known from Indonesia, Timor, Brunei, Christmas Island, Philippines, Papua New Guinea, the Solomon Islands, Vanuatu and New Caledonia. It is a vagrant to Australia. It is 9 to 11.5 cm in length. Its voice is a soft twittering. It is seen flying over forests, streams, rivers, and roads catching insects in flight.

47. *Collocalia sumbawae*

Common Name	: Tenggara Swiftlet
Local Name	: Burung walet Tenggara
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Tenggara swiftlet (*Collocalia sumbawae*) is a small bird in the swift family Apodidae. It is endemic to the western Lesser Sunda Islands of Indonesia. Its natural habitat is subtropical or tropical moist lowland forests. It was previously considered a subspecies of the glossy swiftlet. The Tenggara swiftlet is 9-10 cm in length with a square tail.



48. *Columba vitiensis*

Common Name	: Metallic Pigeon
Local Name	: <i>Merpati hutan metalik</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The metallic pigeon, (*Columba vitiensis*) also known as white-throated pigeon, is a medium-sized, up to 37 cm long, bird in the family Columbidae. The metallic pigeon is distributed to tropical forests of eastern Indonesia, the Philippines, New Guinea, Solomon Islands, Fiji, New Caledonia, Samoa and surrounding southwest Pacific islands.

49. *Coracina personata*

Common Name	: Wallacean Cuckooshrike
Local Name	: <i>Kepudangsungu Topeng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Wallacean cuckooshrike (*Coracina personata*) is a species of bird in the family Campephagidae. It is found in the Lesser Sunda Islands and the Kai Islands. It is endemic to Indonesia. Its natural habitat is subtropical or tropical moist lowland forest.

50. *Cuculus saturatus*

Common Name	: Oriental Cuckoo
Local Name	: <i>Kangkok ranting</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cuculus saturatus, better well known as the Himalayan cuckoo or Oriental cuckoo, is a brooding parasitic bird that is part of the Cuculidae family. The species breeds from the Himalayas eastward to southern China and Taiwan. It migrates to southeast Asia and the Greater Sunda Islands for the winter. Their size approximately 30–35 cm and 70–140 g. The diet of a Himalayan cuckoo consists mainly of insects—especially caterpillars.



51. *Dicaeum agile*

Common Name	: Thick-billed Flowerpecker
Local Name	: <i>Cabai gesit</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The thick-billed flowerpecker (*Dicaeum agile*) is a tiny bird in the flowerpecker group. They feed predominantly on fruits and are active birds that are mainly seen in the tops of trees in forests. It is a resident bird with a wide distribution across tropical southern Asia from India east to Indonesia and Timor with several populations recognized as subspecies some of which are sometimes treated as full species. This species flowerpecker is about 10 cm long and has a dark stout beak and short tail.

52. *Dicaeum annae*

Common Name	: Golden-rumped Flowerpecker
Local Name	: <i>Cabai emas</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The golden-rumped flowerpecker (*Dicaeum annae*) is a species of bird in the family Dicaeidae. It is endemic to the Lesser Sunda Islands. Its natural habitat is subtropical or tropical moist lowland forest.

53. *Dicaeum igniferum*

Common Name	: Black-fronted Flowerpecker
Local Name	: <i>Cabai dahi hitam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-fronted flowerpecker (*Dicaeum igniferum*) is a species of bird in the family Dicaeidae. It is endemic to the Lesser Sunda Islands in Indonesia. Its natural habitats are subtropical or tropical moist lowland forest and subtropical or tropical moist montane forest.



54. *Dicrurus bimaensis*

Common Name	: Wallacean Drongo (Flores)
Local Name	: <i>Srigunting wallacea</i> (Flores)
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Dicrurus densus bimaensis is a subspecies of *Dicrurus densus* birds in the family Dicruridae. They rely on flight to move around. It can be found in Sumbawa, Komodo, Rinca, Flores, Pantar, Alor, and Gunungapi Island.

55. *Dicrurus densus*

Common Name	: Wallacean Drongo
Local Name	: <i>Srigunting Walacea</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Wallacean drongo or Greater Wallacean drongo (*Dicrurus densus*) is a species of bird in the family Dicruridae. It can be found in the countries of Indonesia and East Timor. Its natural habitats are subtropical or tropical moist lowland forests, subtropical or tropical mangrove forests, and subtropical or tropical moist montane forests. The Wallacean drongo has a very large range and does not approach the thresholds for Vulnerable under the range size criterion. Its extent of occurrence is greater than 20,000 km².

56. *Ducula aenea*

Common Name	: Green Imperial Pigeon
Local Name	: <i>Pergam Hijau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The green imperial pigeon (*Ducula aenea*) is a large forest pigeon. The large range extends from Nepal, southern India and Sri Lanka eastwards to southern China, Indonesia and the Philippines. It is a large, plump pigeon, 45 centimetres in length. Its back, wings and tail are metallic green. The head and underparts are white, apart from maroon undertail coverts.



57. *Ducula lacernulata*

Common Name	: Dark-backed Imperial Pigeon
Local Name	: Pergam punggung hitam
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The dark-backed imperial pigeon (*Ducula lacernulata*) is a species of bird in the family Columbidae. It is endemic to the Lesser Sunda Islands. Its natural habitats are subtropical or tropical moist lowland forests and subtropical or tropical moist montane forests. It has a large body (45 cm). It is very dark in color with a pinkish gray head, neck and lower body.

58. *Edolisoma dohertyi*

Common Name	: Pale-shouldered Cicadabird
Local Name	: Kepudangsungu sumba
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The pale-shouldered cicadabird or Sumba cicadabird is a species of bird in the family Campephagidae. It is endemic to the Lesser Sunda Islands of Indonesia. Its natural habitats are subtropical or tropical moist lowland forest and subtropical or tropical moist montane forest.

59. *Egretta garzetta*

Common Name	: Little Egret
Local Name	: Kuntul kecil
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The little egret (*Egretta garzetta*) is a species of small heron in the family Ardeidae. It is a white bird with a slender black beak, long black legs and, in the western race, yellow feet. As an aquatic bird, it feeds in shallow water and on land, consuming a variety of small creatures.



60. *Egretta sacra*

Common Name	: Pacific Reef-egret
Local Name	: Kuntul karang
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Pacific reef heron (*Egretta sacra*), also known as the eastern reef heron or eastern reef egret, is a species of heron found throughout southern Asia and Oceania. It occurs in two colour morphs with either slaty grey or pure white plumage. The sexes are similar in appearance. Pacific reef herons are medium-sized herons, reaching 57 to 66 cm in length. They have a wingspan of between 90 and 110 cm and reach an average weight of 400 g. Their food sources are made up predominantly of varieties of ocean-based fish, crustaceans, molluscs, and worms.

61. *Elanus caeruleus*

Common Name	: Black-winged Kite
Local Name	: Elang tikus
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The black-winged kite, also called the black-shouldered kite, is a small bird of prey that hunts during the day. It is known for its unique ability to hover over grasslands, similar to kestrels. Although it primarily lives on plains, it can also be found on grassy hills in higher elevation areas of Asia. It doesn't migrate but moves for weather and food. It mainly eats large insects like grasshoppers and crickets, as well as lizards and rodents. Sometimes it also eats injured birds, small snakes, and frogs.

62. *Falco moluccensis*

Common Name	: Spotted Kestrel
Local Name	: Alap-alap sapi
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The spotted kestrel (*Falco moluccensis*) is also known as the Moluccan kestrel. They are distributed throughout Indonesia. Spotted kestrels measure 26–32 cm from head to tail, with a wingspan of 59–71 cm. On average, spotted kestrels weigh 162 g. The spotted kestrel feeds primarily on small mammals, birds (mostly waterfowl and doves), lizards, and insects.



63. *Falco peregrinus*

Common Name	: Peregrine Falcon
Local Name	: <i>Alap-alap Kawah</i>
IUCN	: Least Concern
CITES	: App. I
INA Reg. (P106)	: Protected



The peregrine falcon, also known simply as the peregrine, is a cosmopolitan bird of prey in the family Falconidae. It can reach over 320 km/h during its characteristic hunting stoop, making it the fastest member of the animal kingdom. Its diet consists almost exclusively of medium-sized birds, but the peregrine sometimes hunts small mammals, small reptiles, or even insects. It has a body length of 34 to 58 cm and a wingspan from 74 to 120 cm. Males weigh 330 to 1,000 g and the noticeably larger females weigh 700 to 1,500 g (25–53 oz).

64. *Ficedula dumetoria*

Common Name	: Rufous-chested flycatcher
Local Name	: Sikatan dada-merah
IUCN	: Least Concern
CITES	: Not listed
INA Reg. (P106)	: Not protected



The rufous-chested flycatcher (*Ficedula dumetoria*) is a species of bird in the family Muscicapidae. It is found in Brunei, Indonesia, Malaysia, and Thailand. Its natural habitats are subtropical or tropical moist lowland forests and subtropical or tropical moist montane forests. It is insectivorous. This species can be found in foothill and mountain forests, foraging in dense low undergrowth, usually alone or in pairs.

65. *Ficedula timorensis*

Common Name	: Black-banded Flycatcher
Local Name	: <i>Sikatan timor</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-banded flycatcher (*Ficedula timorensis*), also known as the Timor flycatcher, is a species of bird in the family Muscicapidae. It is endemic to Timor Island. The natural habitat of the species is lowland monsoon forests and hill forests up to 1,200 m.



66. *Gallinago megala*

Common Name	: Swinhoe's Snipe
Local Name	: <i>Berkik Rawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Swinhoe's snipe, (*Gallinago megala*), also known as forest snipe or Chinese snipe, is a medium-sized (length 27–29 cm, wingspan 38–44 cm, weight 120 gm), long-billed, migratory wader. It breeds mainly in central and southern Siberia and Mongolia. The entire population migrates and spends the non-breeding season principally in eastern and southern India, Sri Lanka, south-eastern China, Southeast Asia, and New Guinea. Their food is mainly small invertebrates including earthworms, mollusks, and insects.

67. *Gallirallus striatus*

Common Name	: Slaty-Breasted Rail
Local Name	: <i>Mandar-padi sintar</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The habitat is the same as Kareo Padi. However, it is more dominant in only one lake area. Often camouflaged in the undergrowth and often invisible. This bird is very sensitive to human presence.

68. *Gallus varius*

Common Name	: Green Junglefowl
Local Name	: <i>Ayam hutan hijau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Green junglefowl is a medium-sized (up to 75 cm long) bird in the pheasant family Phasianidae. It is endemic to Java, Bali, Lombok, Komodo, Flores, Rinca, and small islands linking Java with Flores, Indonesia. It is found from a natural altitude of 0–2000 m in subtropical/tropical lowland moist forest, shrubland, and arable land, and has been seen flying from island to island in its native range, where it lives and breeds along coastal areas.



69. *Geoffroyus geoffroyi*

Common Name	: Red-cheek Parrot
Local Name	: <i>Nuri pipi merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The red-cheeked parrot is a species of parrot in the family Psittaculidae found in Indonesia, Papua New Guinea and the tip of northern Queensland, Australia. Its natural habitats are subtropical or tropical dry forests, subtropical or tropical moist lowland forests, and subtropical or tropical mangrove forests. They live along streams and in forests. Typical body dimensions are height 250 mm, length 203 mm, and wingspan 135 to 155 mm. They forage for food and their diet consists of seeds, fruits (mainly figs), blossoms, and nectar.

70. *Geokichla dohertyi*

Common Name	: Chestnut-backed Thrush
Local Name	: <i>Anis Nusa-tenggara</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The chestnut-backed thrush (*Geokichla dohertyi*) is a ground thrush species endemic to Lombok, Timor and the Lesser Sunda Islands in Indonesia. They are a relatively small type of bird because they have a body length of around 16 to 18 cm. The species is rapidly declining, and it is already extinct on Lombok and possibly on Lesser Sunda. This species' food consists of insects, worms, small spiders and others.

71. *Geokichla interpres*

Common Name	: Chestnut-capped Thrush
Local Name	: <i>Anis kembang</i>
IUCN	: Endangered
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The chestnut-capped thrush (*Geokichla interpres*) lives in forests and woodlands of Southeast Asia. It is a songbird species in the family Turdidae. The chestnut-capped thrush has a black back and a white belly with black spots. As its common name suggests, it has a chestnut cap. Its face is black with a white mark on the cheeks and another on the lores. It can be found in forest areas from the lowlands to the foot of the mountains. More often foraging on the ground, but also visiting fruit-bearing trees.



72. *Geopelia maugeus*

Common Name	: Barred Dove
Local Name	: <i>Perkutut loreng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The barred dove (*Geopelia maugeus*) is a small dove that is native and endemic to the Lesser Sunda Islands in Indonesia. It is closely related to the zebra dove of southeast Asia and the peaceful dove of Australia and New Guinea. It inhabits scrub, cultivated land and woodland edges in lowland areas. It is found on Sumbawa, Flores, Sumba, Timor, the Tanimbar Islands, the Kei Islands, and other smaller islands.

73. *Gerygone sulphurea*

Common Name	: Golden-bellied Gerygone
Local Name	: <i>Remetuk laut</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The golden-bellied gerygone (*Gerygone sulphurea*) is a species of bird in the family Acanthizidae. It is found in Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Its natural habitats are subtropical or tropical moist lowland forest and subtropical or tropical mangrove forest. Body length is about 9.5 cm. The upper body is grayish olive brown, and the lower body is pale yellow. The throat is yellow, contrasting with the sides of the head.

74. *Gracula religiosa*

Common Name	: Common Hill Myna
Local Name	: <i>Tiong emas/Beo</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The common hill myna (*Gracula religiosa*), sometimes spelled “mynah” and formerly simply known as the hill myna or myna bird, is the myna most commonly sighted in aviculture, where it is often simply referred to by the latter two names. At about 29 cm in length, it is somewhat larger than the common myna. Like most starlings, the hill myna is fairly omnivorous, eating fruit, nectar, and insects.



75. *Halcyon chloris*

Common Name	: Collared Kingfisher
Local Name	: <i>Cekakak sungai</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The collared kingfisher is a medium-sized kingfisher belonging to the subfamily Halcyoninae, the tree kingfishers. It has a wide range extending from the Red Sea across southern Asia to Polynesia. It is mostly found in coastal areas, particularly in mangrove swamps. It also inhabits farmland, open woodland, grassland, and gardens. The collared kingfisher is 23 to 25 cm long and the male weighs 51 to 90 g, while the female weighs 54–100 g. Small crabs and shrimps are the favored food in coastal regions but a wide variety of other animals are eaten.

76. *Halcyon sancta*

Common Name	: Sacred Kingfisher
Local Name	: <i>Cekakak suci</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The sacred kingfisher is a medium-sized woodland kingfisher that occurs in mangroves, woodlands, forests, and river valleys in Australia, New Zealand, and other parts of the western Pacific. The sacred kingfisher is mostly blue green to turquoise above with white underparts and collar feathers, a black mask, and buff lores. Adults are 20–23 cm long. Males weigh 28–61 g and females 28–56 g. The sacred kingfisher feeds on a wide variety of invertebrates, small crustaceans, fish, frogs, small rodents, and reptiles.

77. *Haliaeetus leucogaster*

Common Name	: White-bellied Sea Eagle
Local Name	: <i>Elang laut perut putih</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The white-bellied sea eagle, also known as the white-breasted sea eagle, is a large diurnal bird of prey in the family Accipitridae. Like many raptors, the female is larger than the male, and can measure up to 90 cm long with a wingspan of up to 2.2 m and weigh 4.5 kg. They are resident from India and Sri Lanka through Southeast Asia to Australia on coasts and major waterways, the white-bellied sea eagle breeds and hunts near water, and fish form around half of its diet. It also consumes carrion and a wide variety of animals.



78. *Haliastur indus*

Common Name	: Brahminy Kite
Local Name	: <i>Elang bondol</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The brahminy kite (*Haliastur indus*) is a medium-sized bird of prey in the family Accipitridae. They are found in the Indian subcontinent, Southeast Asia, and Australia. They are found mainly on the coast and in inland wetlands, where they feed on dead fish and other prey. Adults have a reddish-brown body plumage contrasting with their white head and breast which make them easy to distinguish from other birds of prey. It is primarily a scavenger, feeding mainly on dead fish and crabs, but occasionally hunts live prey such as hares and bats.

79. *Heleia crassirostris*

Common Name	: Thick-billed Heleia
Local Name	: <i>Opior Paruh-tebal</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The thick-billed heleia is a species of bird in the family Zosteropidae. It is a songbird with a distinctive head pattern. The upper body is dark olive, while the lower body is pure white, with the dark type contrasting with the pale eyes and white forehead extending into dark spots on the crown. Its natural habitats are dry and moist forests in the Indonesian islands of Sumbawa and Flores.

80. *Heleia dohertyi*

Common Name	: Crested White-eye
Local Name	: <i>Opior Jambul</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The crested white-eye or crested ibon (*Heleia dohertyi*) is a species of bird in the family Zosteropidae. it is an easy to recognize small songbird, with an olive upper body, a bright yellow lower body, and a distinctive head pattern: a dark brown crest with faint white spots, a black patch between the beak and the eye, and white eyebrows. It is endemic to the Lesser Sunda Islands (Sumbawa and Flores). Its natural habitats are subtropical or tropical moist lowland forest and subtropical or tropical moist montane forest.



81. *Heleia wallacei*

Common Name	: Wallace's Heleia
Local Name	: <i>Kacamata Wallacea</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The yellow-ringed white-eye (*Heleia wallacei*) is a species of bird in the family Zosteropidae. It is a small green songbird, with a bright yellow head and a distinctive orange forehead patch. It is found in the Lesser Sunda Islands. Its natural habitat is subtropical or tropical moist lowland forest.

82. *Hieraetus kienerii*

Common Name	: Rufous-bellied Eagle
Local Name	: <i>Elang perut karat</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The rufous-bellied eagle or rufous-bellied hawk-eagle is a bird of prey in the family Accipitridae that is found in the forested regions of tropical Asia. Rufous-bellied eagles are usually seen in flight, soaring high over the forest canopy. They dive to capture prey that can include birds and mammals in the air, canopy, or forest floor.

83. *Hirundo javanica*

Common Name	: Pacific Swallow
Local Name	: <i>Layang-layang batu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hirundo javanica is a subspecies of the Pacific swallow (*Hirundo tahitica*) in geographic range: Andamans and Myanmar to Indochina, Sundas, Wallacea, and Philippines. This species is a small swallow at 13 cm in length. It is a fast flyer and feeds on insects, especially flies, while airborne.



84. *Hirundo rustica*

Common Name	: Barn Swallow
Local Name	: <i>Layang-layang api</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The barn swallow (*Hirundo rustica*) is the most widespread species of swallow in the world, occurring on all continents, with vagrants reported even in Antarctica. It appears to have the largest natural distribution of any of the world's passerines, ranging over 251 million square kilometres globally. The adult male barn swallow of the nominate subspecies *H. r. rustica* is 17–19 cm long including 2–7 cm of elongated outer tail feathers. It has a wingspan of 32–34.5 cm and weighs 16–22 g.

85. *Hirundo striolata*

Common Name	: Striated Swallow
Local Name	: <i>Layang-layang loreng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The striated swallow is a species of swallow found in open, often hilly, areas with clearings and cultivation across Southeast Asia to north-eastern India and Taiwan. The striated swallow is 19 cm long with a deeply forked tail. The sexes are alike, but juveniles are duller and browner, with a paler rump and shorter outer tail feathers. The striated swallow feeds low over the ground or at cliff faces on flying insects. It has a slow buoyant flight compared to the barn swallow. It will feed with other swallow species.

86. *Hirundo tahitica*

Common Name	: Pacific Swallow
Local Name	: <i>Layang-layang batu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Pacific swallow (*Hirundo tahitica*) is a small passerine bird in the swallow family. It breeds in tropical southern Asia and the islands of the south Pacific. It is resident apart from some local seasonal movements. This bird is associated with coasts but is increasingly spreading to forested uplands. This species is a small swallow at 13 d south-eastern Asia. The adult male black-naped monarch is about 16 cm long and is mainly pale azure-blue apart from a whitish lower



belly. It has a black nape and a narrow black gorget. The female is duller and lacks the black markings. Its wings and back are greyish brown. This species is usually found in thick forests and other well-wooded habitats.

87. *Hypothymis azurea*

Common Name	: Black-capped Monarch
Local Name	: <i>Kehicap ranting</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-naped monarch or black-naped blue flycatcher is a slim and agile passerine bird belonging to the family of monarch flycatchers found in southern and south-eastern Asia. The adult male black-naped monarch is about 16 cm long and is mainly pale azure-blue apart from a whitish lower belly. It has a black nape and a narrow black gorget. The female is duller and lacks the black markings. Its wings and back are greyish brown. This species is usually found in thick forests and other wellwooded habitats.

88. *Ixobrychus cinnamomeus*

Common Name	: Cinnamon Bittern
Local Name	: <i>Bambangan merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The cinnamon bittern (*Ixobrychus cinnamomeus*) or chestnut bittern is a small Old-World bittern, breeding in tropical and subtropical Asia from India east to China and Indonesia. It is mainly resident, but some northern birds migrate short distances. It is a small species at 38 cm (15 in) length, though it is one of the larger *Ixobrychus* bitterns. Cinnamon bitterns feed on insects, fish and amphibians.

89. *Lalage sueurii*

Common Name	: White-shouldered Triller
Local Name	: <i>Kapasan sayap-putih</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The white-shouldered triller (*Lalage sueurii*) is a passerine bird belonging to the triller genus *Lalage* in the cuckoo-shrike family Campephagidae. It is found in Indonesia and East Timor. It is a fairly small bird, 17 centimetres in length. The bill is grey with a black tip and the legs and feet are black. It inhabits open woodland, savannas and agricultural land in dry, lowland areas. It feeds on insects, often swooping down from a perch to catch them on the ground.



90. *Lanius schach*

Common Name	: Long-tailed Shrike
Local Name	: <i>Bentet kelabu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The long-tailed shrike or rufous-backed shrike (*Lanius schach*) is a member of the bird family Laniidae, the shrikes. They are found widely distributed across Asia and there are variations in plumage across the range. It is found mainly in scrub and open habitats. It takes a wide variety of animal prey. On occasion, they have been noted capturing fish from a stream. They also take small snakes. It sometimes indulges in kleptoparasites and takes prey from other birds. It also captures flying insects in the air.

91. *Lichmera limbata*

Common Name	: Indonesian Honeyeater
Local Name	: <i>Isapmadu Indonesia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Indonesian honeyeater belongs to the honeyeaters, a group of birds found mainly in Australia and New Guinea, which have highly developed brush-tipped tongues adapted for nectar feeding. It is a medium-small brownish bird, with yellow-olive panels in the tail and wing, and a yellow tuft behind the eye. It can be found in Bali and Lesser Sundas to Flores and Timor.

92. *Lonchura molucca*

Common Name	: Black-faced Munia
Local Name	: <i>Bondol taruk</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-faced munia (*Lonchura molucca*) is a species of estrildid finch found in Indonesia and East Timor. It occurs in a wide range of habitats including artificial landscapes (e.g. parks and gardens), forest, grassland and savannah. It is a seed-eating bird and is found in small flocks in grassy areas.



93. *Lonchura pallida*

Common Name	: Pale-headed Munia
Local Name	: <i>Bondol Kepala-pucat</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The pale-headed munia (*Lonchura pallida*) is a species of estrildid finch found in Indonesia. It is found in artificial landscapes, subtropical and tropical lowlands, dry shrubland and grassland habitat. Its upper body is a thick chestnut brown, with a reddish tail and a pale, peach-orange underbody.

94. *Lonchura punctulata*

Common Name	: Scaly-breasted Munia
Local Name	: <i>Bondol Peking</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The scaly-breasted munia or spotted munia (*Lonchura punctulata*), known in the pet trade as nutmeg mannikin or spice finch, is a sparrow-sized estrildid finch native to tropical Asia. This munia eats mainly grass seeds apart from berries and small insects. The species is endemic to Asia and occurs from India and Sri Lanka east to Indonesia and the Philippines. The scaly-breasted munia is about 11-12 centimetres long and weighs 12-16 grams.

95. *Lophotriorchis kienerii*

Common Name	: Rufous-bellied Eagle
Local Name	: <i>Elang Perut-karat</i>
IUCN	: Near Threatened
CITES	: App. II
INA Reg. (P106)	: Protected



The rufous-bellied eagle or rufous-bellied hawk-eagle (*Lophotriorchis kienerii*) is a bird of prey in the family Accipitridae that is found in southern and south-eastern Asia and its range also extends to Sulawesi. This species is associated mainly with hill forests. Rufous-bellied eagles are usually seen in flight, soaring high over the forest canopy. They dive to capture prey that can include birds and mammals in the air, canopy, or forest floor.



96. *Macropygia emiliana*

Common Name	: Ruddy Cuckoo Dove
Local Name	: <i>Uncal buau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The ruddy cuckoo-dove (*Macropygia emiliana*) is a species of bird in the family Columbidae. It is a medium-sized, reddish-brown cuckoo-dove, found in Brunei, Indonesia, and Malaysia. The ruddy cuckoo-dove is a medium-sized, reddish-brown dove, that measures 30 to 37 cm in length.

97. *Megapodius reinwardt*

Common Name	: Orange-footed Scrubfowl
Local Name	: <i>Gosong Kaki-merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The orange-footed scrubfowl (*Megapodius reinwardt*), also known as orange-footed megapode or just scrubfowl, is a small megapode of the family Megapodiidae native to many islands in the Lesser Sunda Islands as well as southern New Guinea and northern Australia. The orange-footed scrubfowl feeds on seeds, fallen fruit and terrestrial invertebrates.

98. *Merops ornatus*

Common Name	: Rainbow Bee-eater
Local Name	: <i>Kirik-kirik australia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The rainbow bee-eater is a near passerine bird in the bee-eater family Meropidae. They are brilliantly coloured birds that grow to be 23–28 cm in length, including the elongated tail feathers, and weighing 20–33 g. They can be found during the summer in forested areas in most of southern Australia, excluding Tasmania. They migrate north during the winter into northern Australia, New Guinea, and some of the southern islands of Indonesia. They also may be found in open woodlands, beaches, dunes, cliffs, mangroves, and farmlands.



99. *Merops philippinus*

Common Name	: Blue-tailed Bee-eater
Local Name	: Kirik-kirik Laut
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The blue-tailed bee-eater (*Merops philippinus*) is a near passerine bird in the bee-eater family Meropidae. It is widely distributed across South and Southeast Asia where many populations are strongly migratory and seen seasonally in many parts but breeding colonially in small areas across their range, mostly in river valleys, where they nest by tunneling into loamy sand banks. They are seen mostly in open habitats close to water.

100. *Numenius phaeopus*

Common Name	: Whimbrel
Local Name	: Gajahan pengala
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Eurasian or common whimbrel is a wader in the large family Scolopacidae. It is one of the most widespread of the curlews, breeding across much of subarctic Asia and Europe as far south as Scotland. It is a large wader, though mid-sized as a member of the curlew genus. It is 37–47 cm in length, 75–90 cm in wingspan, and 270–493 g in weight. This species feeds by probing soft mud for small invertebrates and by picking small crabs and similar prey off the surface.

101. *Nycticorax nycticorax*

Common Name	: Black-crowned Night Heron
Local Name	: Kowak-malam abu
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-crowned night-heron (*Nycticorax nycticorax*), or black-capped night-heron, commonly shortened to just night-heron in Eurasia, is a medium-sized heron found throughout a large part of the world, including parts of Europe, Asia, and North and South America. The breeding habitat is fresh and salt-water wetlands throughout much of the world. It is 58–66 cm in length, 115–118 cm in wingspan, and 726–1,015 g in weight.



102. *Oriolus chinensis*

Common Name	: Black-capped Oriole
Local Name	: <i>Kepudang kuduk hitam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-naped oriole (*Oriolus chinensis*) is a passerine bird in the oriole family that is found in many parts of Asia. It is medium-sized and overall golden with a strong pinkish bill and a broad black mask and nape. It is found in forests, gardens and plantations. It feeds on berries and insects in the canopy. They can sometimes be nest predators on smaller birds.

103. *Otus magicus*

Common Name	: Moluccan Scops-Owl
Local Name	: <i>Celepuk Maluku</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



The Moluccan scops owl (*Otus magicus*) is a fascinating owl species found in the Maluku and Lesser Sunda Islands of Indonesia. This small owl has a distinctive appearance, with tufted ears, a black facial border, yellow eyes, and prominent black stripes on its pale underparts. Its intricately patterned upper body is especially eye-catching, featuring striking white wing markings that make it stand out even in the dense forests and plantations where it resides.

104. *Otus silvicola*

Common Name	: Wallace's Scops-owl
Local Name	: <i>Celepuk wallacea</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



Wallace's scops owl (*Otus silvicola*) is endemic to the Sumbawa and Flores islands, in the Lesser Sundas chain of Indonesia. It can be found in forested areas, agricultural lands (plantations and secondary growth), houses' backyards, and bamboo thickets. This strictly nocturnal owl has a mostly brown plumage, long ear tufts, bright yellow eyes, and strong underparts streaking. The adult can average 23 to 27 cm in length and weigh about 210g. It can be recognized through its vocalization, which resembles the swishing sound of a sword.



105. *Pachycephala calliope*

Common Name	: Yellow-throated whistler
Local Name	: <i>Kancilan leher-kuning</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The yellow-throated whistler is a species of bird in the family Pachycephalidae. It is endemic to central and south-eastern Wallacea, where it ranges from Timor east to the Tanimbars and north to Seram and Banggai. The sound varies, in the form of a loud whistle which sometimes ends with a shrill note.

106. *Pachycephala fulvotincta*

Common Name	: Rufous-bellied Whistler
Local Name	: <i>Kancilan dada-karat</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The rusty-breasted whistler (*Pachycephala fulvotincta*), also known as the fulvous-tinted whistler, is a species of bird in the family Pachycephalidae. It is endemic to Indonesia, where it ranges from Java east to Alor and north to the Selayar Islands. Compared to other members of the golden whistler group, the rusty-breasted whistler is relatively small, and males have a white throat and a rust-tinged chest, except in the subspecies *teysmanni* from Selayar Islands where the plumage of the male is female-like.

107. *Pachycephala nudigula*

Common Name	: Bre-throated Whistler
Local Name	: <i>Kancilan flores</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The bare-throated whistler (*Pachycephala nudigula*) is a species of bird in the family Pachycephalidae. It is endemic to the Lesser Sundas. Its natural habitats are subtropical or tropical dry forests, subtropical or tropical moist lowland forests, and subtropical or tropical moist montane forests. This bird has black feathers on the head, while the feathers on the wings and tail are green. Meanwhile, the feathers on the underside of its body are slightly yellowish, and it has a black beak with a white stripe in the middle.



108. *Pachycephala pectoralis*

Common Name	: Golden Whistler
Local Name	: <i>Kancilan emas</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Australian golden whistler (*Pachycephala pectoralis*) or golden whistler, is a species of bird found in forest, woodland, mallee, mangrove and scrub in Australia (except the interior and most of the north). Most populations are resident, but some in south-eastern Australia migrate north during the winter. It can be found in almost any wooded habitat, especially dense forests. It eats berries, insects, spiders, and other small arthropods.

109. *Pachyglossa obsoleta*

Common Name	: Tenggara Flowerpecker
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The tenggara flowerpecker is a part of flowerpecker family, a group of passerines tropical southern Asia and Australasia from India east to the Philippines and south to Australia. The species within this family used to be a part of *Dicaeum*.

110. *Passer montanus*

Common Name	: Eurasian Tree Sparrow
Local Name	: <i>Burung Gereja Erasia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Eurasian tree sparrow is a passerine bird in the sparrow family with a rich chestnut crown and nape and a black patch on each pure white cheek. The sexes are similarly plumaged, and young birds are a duller version of the adult. This sparrow breeds over most of temperate Eurasia and Southeast Asia, where it is known as the tree sparrow. The Eurasian tree sparrow is 12.5–14 cm long, with a wingspan of about 21 cm and a weight of 24 g. The Eurasian tree sparrow is a predominantly seed and grain-eating bird which feeds on the ground in flocks.



111. *Pelargopsis capensis*

Common Name	: Stork-billed Kingfisher
Local Name	: <i>Pekaka emas</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The stork-billed kingfisher (*Pelargopsis capensis*) is a tree kingfisher which is widely but sparsely distributed in the tropical Indian subcontinent and Southeast Asia, from India to Indonesia. This kingfisher is resident throughout its range. It is a very large kingfisher, measuring 35 cm in length. It lives in a variety of well-wooded habitats near lakes, rivers, or coasts. It is territorial and will chase away eagles and other large predators. This species hunts fish, frogs, crabs, rodents and young birds.

112. *Pericrocotus lansbergei*

Common Name	: Flores Minivet
Local Name	: <i>Sepah kerdil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The little minivet (*Pericrocotus lansbergei*), also known as the Flores minivet, is a species of bird in the family Campephagidae. It is endemic to Indonesia. Its natural habitat is subtropical or tropical moist lowland forest. It is a small, long-tailed songbird that perches upright.

113. *Pernis ptilorhynchus*

Common Name	: Crested Honey buzzard
Local Name	: <i>Sikepmadu Asia</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The crested honey buzzard is a bird of prey in the family Accipitridae, which also includes many other diurnal raptors such as kites, eagles, and harriers. As a medium-sized raptor, their size ranges between 57–60 cm (22–24 in). They are also known as the Oriental, Asiatic, or Eastern honey buzzard. The name is derived from its diet, which consists mainly of the larvae of bees and wasps extracted from honeycombs.



114. *Pernis ruficollis*

Common Name	: Crested Honey buzzard
Local Name	: <i>Sikepmadu Asia</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pernis ruficollis is a subspecies of *Pernis ptilorhynchus* in the breeding range of India and Sri Lanka to Myanmar, Vietnam, and SW China. The crested honey buzzard is a specialist feeder, living mainly on the larvae of social bees and wasps, and eating bits of comb and honey. It takes other small insect prey such as cicadas. It occasionally eats small birds, reptiles, and frogs like other raptors.

115. *Phalacrocorax melanoleucos*

Common Name	: Little Pied Cormorant
Local Name	: <i>Pecuk-padi belang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The little pied cormorant is a common Australasian waterbird, found around the coasts, islands, estuaries, and inland waters of Australia, New Guinea, New Zealand, Timor-Leste, and Indonesia, and around the islands of the south-western Pacific and the subantarctic. It is a small, short-billed cormorant measuring 56–58 cm and usually black above and white below with a yellow bill and small crest. The little pied cormorant is a benthic feeder, it finds its prey on the sea floor.

116. *Philemon buceroides*

Common Name	: Helmeted Friarbird
Local Name	: <i>Cikukua Tanduk</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The helmeted friarbird (*Philemon buceroides*) is part of the Meliphagidae family. The bird ranges from 32 to 36 cm weighing in at 127–179 g for males and 92–112 g for females. The average male measures about 38 cm. It is most prominently abundant in the Northern Territory coasts of Australia and Indonesia. The



specific habitat of the friarbird varies based on the subspecies; however, they are mainly found in subtropical or tropical dry forests, lowland forests, and mangrove forests. They eat a variety of food include nectar, fruits and seeds.

117. *Phylloscopus borealis*

Common Name	: Arctic Leaf Warbler
Local Name	: Cikrak Kutub
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Arctic warbler (*Phylloscopus borealis*) is a widespread leaf warbler in birch or mixed birch forest near water throughout its breeding range in Fennoscandia and the northern Palearctic. It has established a foothold in North America, breeding in Alaska. This warbler is strongly migratory, the entire population winters in southeast Asia. This small passerine is insectivorous.

118. *Picoides moluccensis*

Common Name	: Sunda Pygmy Woodpecker
Local Name	: Caladi tilik
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Sunda pygmy woodpecker is a species of bird in the family Picidae. It is found in Brunei, Indonesia, Malaysia, and Singapore. Some taxonomic authorities continue to place this species in the genus Dendrocopos or Picoides. This is a small woodpecker with an overall length of around 13 cm. Its natural habitats are subtropical or tropical moist lowland forest, subtropical or tropical mangrove forest, and subtropical or tropical moist montane forest.

119. *Pitta concinna*

Common Name	: Ornate Pitta
Local Name	: Paak laus-utara
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The ornate pitta (*Pitta concinna*) is a species of bird in the family Pittidae. It is found in Indonesia. Its natural habitat is subtropical or tropical moist lowland forest. It is threatened by habitat loss. Its upper body is bright green with shiny blue shoulder patches and crests and a black head with striking pale eyebrows. The lower body is golden brown with a black and bright red belly.



120. *Pitta elegans*

Common Name	: Elegant Pitta
Local Name	: Paok Laus
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The elegant pitta (*Pitta elegans*) is a species of passerine bird in the pitta family Pittidae. It is endemic to Indonesia, where it is found in the Lesser Sunda Islands and Moluccas. Its natural habitats are tropical dry forests and tropical moist lowland forests. It is 19 cm long and weighs 47–77 g.

121. *Ploceus manyar*

Common Name	: Streaked Weaver
Local Name	: Manyar Jambul
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The streaked weaver (*Ploceus manyar*) is a species of weaver bird found in South Asia and South-east Asia in the countries of Bangladesh, Bhutan, Cambodia, China, Egypt, India, Indonesia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Thailand, Vietnam and also introduced in Qatar and United Arab Emirates (UAE). These are not as common as the baya weaver but are similar looking but have streaked underparts. They nest in small colonies often in reed beds near water bodies.

122. *Ploceus philippinus*

Common Name	: Baya Weaver
Local Name	: Manyar tempua
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The baya weaver is a weaverbird found across the Indian Subcontinent and Southeast Asia. Flocks of these birds are found in grasslands, cultivated areas, scrub and secondary growth and they are best known for their hanging retort shaped nests woven from leaves. These nest colonies are usually found on thorny trees or palm fronds and the nests are often built near water or hanging over water where predators cannot reach easily. They are sparrow sized (15 cm) in length.



123. *Pluvialis fulva*

Common Name	: Pacific Golden-Plover
Local Name	: <i>Cerek Kernyut</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Pacific golden plover is a migratory shorebird that breeds during summer in Alaska and Siberia. During nonbreeding season, this medium-sized plover migrates widely across the Pacific. Adults are about 25 cm long with a wingspan averaging 61 cm. At their lightest, fat free, the birds weigh around 135 g. In March, the birds begin gaining weight. Before leaving for their Arctic breeding grounds, the birds weigh about 198 g. It eats insects, spiders, mollusks, crustaceans, and small reptiles, as well as berries, leaves, and seeds.

124. *Pluvialis squatarola*

Common Name	: Grey Plover
Local Name	: <i>Cerek besar</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The grey plover or black-bellied plover is a large plover breeding in Arctic regions. It is a long-distance migrant, with a nearly worldwide coastal distribution when not breeding. It is 27–30 cm long with a wingspan of 71–83 cm and a weight of 190–280 g (up to 345 g in preparation for migration). The food consists of small molluscs, polychaete worms, crustaceans, and insects.

125. *Poliolimnas cinereus*

Common Name	: White-browed Crake
Local Name	: <i>Tikusan alis-putih</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The white-browed crake (*Poliolimnas cinereus*) is a species of bird in the family Rallidae. It is found in Australia, Brunei, Cambodia, Fiji, Hong Kong, Indonesia, Japan, India, Malaysia, Micronesia, New Caledonia, Palau, Papua New Guinea, the Philippines, Samoa, Singapore, Solomon Islands, Thailand, and Vanuatu. Its natural habitat is subtropical or tropical mangrove forests.



126. *Ptilinopus melanospilus*

Common Name	: Black-naped Fruit-Dove
Local Name	: <i>Walik Kembang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black-naped fruit dove, also known as the black-headed fruit dove, is a medium-sized, up to 24 cm long, green fruit dove with yellowish bill and iris. The male has a pale grey head with a black nape, yellow throat, and golden yellow and pink undertail coverts. The plumage of the female and the young is entirely green. The black-naped fruit dove is distributed in Indonesia (in Java, Lesser Sunda Islands and Sulawesi), Malaysia and the Philippines. It inhabits the lowland and hill forests. The diet consists mainly of various fruits, figs, and berries.

127. *Pycnonotus aurigaster*

Common Name	: Sooty-headed Bulbul
Local Name	: <i>Cucak kutilang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The sooty-headed bulbul (*Pycnonotus aurigaster*) is a species of songbird in the Bulbul family, Pycnonotidae. It is found in south-eastern Asia. Its natural habitat is subtropical or tropical moist lowland forests. It is a medium-sized songbird measuring between 18 and 21 centimetres in length.

128. *Rhipidura diluta*

Common Name	: Trumpeting Fantail
Local Name	: <i>Kipasan flores</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The brown-capped fantail (*Rhipidura diluta*) is a species of bird in the family Rhipiduridae. It is found in the Lesser Sunda Islands (Sumbawa and Flores). Its natural habitats are subtropical or tropical moist lowland forests and subtropical or tropical moist montane forests.



129. *Saxicola caprata*

Common Name	: Pied Bushchat
Local Name	: <i>Decu belang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The pied bush chat (*Saxicola caprata*) is a small passerine bird found ranging from West Asia and Central Asia to the Indian subcontinent and Southeast Asia. About sixteen subspecies are recognized through its wide range with many island forms. It is a familiar bird of countryside and open scrub or grassland where it is found perched at the top of short thorn trees or other shrubs, looking out for insect prey.

130. *Spilopelia chinensis*

Common Name	: Spotted Dove
Local Name	: <i>Tekukur biasa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The spotted dove or eastern spotted dove (*Spilopelia chinensis*) is a small and somewhat long-tailed pigeon that is a common resident breeding bird across its native range on the Indian subcontinent and in East and Southeast Asia. The ground colour of this long and slim dove is rosy buff below shading into grey on the head and belly. The length ranges from 28 to 32 cm. It is found across a range of habitats including woodland, scrub, farmland and habitation.

131. *Sugomel lombokium*

Common Name	: Scaly-crowned Honeyeater
Local Name	: <i>Isap madu topi sisik</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The scaly-crowned honeyeater (*Sugomel lombokium*) is a species of bird in the family Meliphagidae. It is endemic to Indonesia, where it occurs in the Lesser Sunda Islands. Its natural habitats are subtropical or tropical moist lowland forests and subtropical or tropical moist montane forests. Prior to 2022, it was classified in the genus *Lichmera* as *Lichmera lombokia*. However, the International Ornithological Congress reclassified it into the genus *Sugomel*.



132. *Surniculus lugubris*

Common Name	: Square-tailed Drongo Cuckoo
Local Name	: <i>Kedasi hitam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The square-tailed drongo-cuckoo (*Surniculus lugubris*) is a species of cuckoo that resembles a black drongo. The species in its restricted sense is found along the Himalayas extending east into Southeast Asia. It has a medium-sized body (23 cm). The feathers are all shiny black. This bird is a type of bird that eats caterpillars, spiders, beetles, other insects, fruit which has a habitat in forests, forest edges, bushes, lowlands spread up to a height of 900 m above sea level.

133. *Taeniopygia guttata*

Common Name	: Sunda Zebra Finch
Local Name	: <i>Pipit zebra</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Sunda zebra finch (*Taeniopygia guttata*) is a species of bird in the family Estrildidae. It is found in the Lesser Sunda Islands of Indonesia, from Lombok to Timor. They are seedeaters that travel in large flocks.

134. *Terpsiphone affinis*

Common Name	: Blyth's Paradise Flycatcher
Local Name	: <i>Seriwang timur</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Blyth's paradise flycatcher (*Terpsiphone affinis*), also called the oriental paradise flycatcher, is a species of bird in the family Monarchidae. It is native from southern China to Sumatra and Melanesia.



135. *Terpsiphone floris*

Common Name	: Tenggara Paradise-flycatcher
Local Name	: <i>Seriwang nusa tenggara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Tenggara paradise flycatcher (*Terpsiphone floris*) is a species of bird in the family Monarchidae. It is native to Sumbawa, Alor, Lomblen and Flores islands in the Lesser Sundas.

136. *Terpsiphone paradisi*

Common Name	: Indian Paradise-flycatcher
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Indian paradise flycatcher (*Terpsiphone paradisi*) is a medium-sized bird found across Asia. Adults measure 19–22 cm in length, with glossy black heads, black crowns, and crests. Their bills are sturdy and round, and their eyes black. Females have a rufous back, greyish throat, and underparts, with wings 86–92 mm long. Young males resemble females but have a black throat and blue eye rings.

137. *Tesia everetti*

Common Name	: Russet-capped Tesia
Local Name	: <i>Tesia timor</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The russet-capped tesia (*Tesia everetti*) is a species of Old-World warbler in the family Cettiidae. It is found only in Indonesia. This species is active in forest understory vegetation, forest edges and thickets at the foot of hills and mountains, more often seen alone.



138. *Thalasseus bergii*

Common Name	: Greater Crested Tern
Local Name	: <i>Dara-laut Jambul</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The greater crested tern is a tern in the family Laridae that nests in dense colonies on coastlines and islands in the tropical and subtropical Old World. It is a large tern with a long (5.4–6.5 cm) yellow bill, black legs, and a glossy black crest that is noticeably shaggy at its rear. This species occurs in tropical and warm temperate coastal parts of the Old World from South Africa around the Indian Ocean to the Pacific and Australia. The nests are located on low-lying sandy, rocky, or coral islands, sometimes amongst stunted shrubs, often without any shelter at all.

139. *Tringa brevipes*

Common Name	: Gray-tailed Tattler
Local Name	: <i>Trinil Ekor-kelabu</i>
IUCN	: Near Threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The grey-tailed tattler also known as the Siberian tattler or Polynesian tattler, is a small shorebird in the family Scolopacidae. The upper parts, underwings, face and neck are grey, and the belly is white. They have short yellowish legs and a bill with a pale base and dark tip. Its breeding habitat is stony riverbeds in northeast Siberia. It nests on the ground, but these birds will perch in trees. These birds forage on the ground or water, picking up food by sight. They eat insects, crustaceans, and other invertebrates.

140. *Tringa glareola*

Common Name	: Wood Sandpiper
Local Name	: <i>Trinil semak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The wood sandpiper (*Tringa glareola*) is a small wader. This Eurasian species is the smallest of the shanks, which are mid-sized long-legged waders of the family Scolopacidae. It breeds in subarctic wetlands from the Scottish Highlands



across Europe and then east across the Palearctic. They migrate to Africa, Southern Asia, particularly India, and Australia. This bird is usually found on freshwater during migration and wintering. They forage by probing in shallow water or on wet mud, and mainly eat insects and similar small prey.

141. *Tringa nebularia*

Common Name	: Common Greenshank
Local Name	: <i>Trinil kaki-hijau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common greenshank (*Tringa nebularia*) is a wader in the large family Scolopacidae. This is a subarctic bird, breeding from northern Scotland eastwards across northern Europe and east across the Palearctic. It is a migratory species, wintering in Africa, the Indian subcontinent, and Australasia, usually on fresh water. It breeds on dry ground near marshy areas, laying about four eggs in a ground scrape. Like most waders, they feed on small invertebrates but will also take small fish and amphibians.

142. *Turnix maculosa*

Common Name	: Red-backed Buttonquail
Local Name	: <i>Gemak total</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The red-backed buttonquail is a species of bird in the family Turnicidae. It is found in Australia, Indonesia, Papua New Guinea, the Philippines, and the Solomon Islands. It is a small stocky bird with round-tipped wings and a short tail. The length varies between 12 and 16 cm. The female is larger than the male and weighs between 32 and 51 g to the male's 23 to 39 g. It mostly inhabits rough, tussocky grassland, woods, and cropped land. It feeds on the seeds of grasses and sedges, other seeds, green plant matter, and insects.



143. *Turnix suscitator*

Common Name	: Barred Buttonquail
Local Name	: <i>Gemak loreng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The barred buttonquail or common bustard-quail (*Turnix suscitator*) is a buttonquail, one of a small family of birds which resemble, but are not closely related to, the true quails. This species is resident from India across tropical Asia to south China, Indonesia and the Philippines. It is found in most habitats except dense forest and desert, in particular, scrub jungle, light deciduous forest and farmlands.

144. *Yungipicus nanus*

Common Name	: Brown-capped Pygmy Woodpecker
Local Name	: <i>Caladi Tiliik</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The brown-capped pygmy woodpecker or Indian pygmy woodpecker (*Yungipicus nanus*) is a species of very small woodpecker found in Nepal, India and Sri Lanka. It is a small brown and white woodpecker with distinctive, pink-rimmed white irises. Barred brown and white above, lightly streaked dirty white below. Tail spotted white. Paler brown crown (edged red in male) and eyestripes contrasting with white supercilia and cheeks.

145. *Zosterops chloris*

Common Name	: Lemmon-bellied White-eye
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lemmon-bellied White-eye of Zosteropidae family is endemic to Indonesia, where it found on a number of islands from the Sunda Strait to the Aru Islands. This bird's natural habitats are in subtropical or tropical moist lowland forests and mangrove forests. This species sized about 11 cm characterized by yellow belly, white eyes, olive yellowish upper body, and pale lemon yellow on the underparts. This bird eats a variety of insects, berries, and nectar.



7.2 Reptiles & Amphibian

1. *Ahaetulla mycterizans*

Common Name	: Malayan Vine Snake
Local Name	: <i>Ular-pucuk melayu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This snake is mildly venomous belonging to Colubridae family. Characterized by uniform leaf green to dark green, from the head and body to the tail. Its body length reaches 1.1 m. This snake is distributed in southern Thailand, the Malay Peninsula, Singapore, and Indonesia (Sumatra, Java, and the surrounding islands). The main prey of this snake are tree lizards, small lizards, and small frogs/toads.

2. *Ahaetulla prasina*

Common Name	: Gunther's Whip Snake
Local Name	: <i>Ular gadung</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Gunther's Whip Snake from Colubridae family characterized by varies color from light brown to dull yellow-green and often a startling fluorescent green for adult. Its body length can reach 2 m but commonly found in 1-1.5 m. This species has a wide distribution in Asia. This snake is mildly venomous but is not considered a threat to humans. The main prey of this snake are vertebrates, including small nesting birds, lizards, and frogs.

3. *Cerberus cf. rynchops*

Common Name	: South Asian Bockadam
Local Name	: <i>Bockadam India</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This is a mildly venomous species classified as Homalopsidae family. The dorsal part is grey colored with black stripes while the ventrum is beige colored with dark grey or blackish spots. Its maximum body length for most species is less than 1.2 m. This species found in India, Bangladesh, Myanmar,



Thailand, and northwestern Malaysia. The eastern limit of its distribution with *Cerberus schneiderii* is uncertain. The main prey of this snake are small fish and sometimes it also eats eels.

4. *Cerberus schneiderii*

Common Name	: Schneider's Bockadam
Local Name	: <i>Ular tambak</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species from Homalopsidae family is mildly venomous. The dorsal colour is greyish brown, and the ventral surface brown with white patches or cream-colored and mottled. Its body length is ranged from 0.6-1.2 m. This species found in coastal areas of Vietnam, Cambodia, Thailand, Peninsular Malaysia, Singapore, the Philippines and the whole of Indonesia (excluding New Guinea). This snake feed on fish and invertebrates.

5. *Coelognathus subradiatus*

Common Name	: Sunda rat-snake
Local Name	: <i>Ular-tikus nusa tenggara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This snake is non-venomous from Colubridae family. The dorsal part is yellowish-brown to olive with four small stripes or a saddle pattern or may have both. Its body length can reach 2 m. This species is endemic to the Nusa Tenggara islands, including the islands of Lombok, Sumbawa, Sumba, Komodo, Flores, Enggano, Alor, Roti, Semau, Timor, Wetar, and Timor. Beside rats as its main prey, this snake also preys on lizards, birds, baby birds or small bats.

6. *Cylindrophis opisthorhodus*

Common Name	: Island pipe snake
Local Name	: <i>Ular-pipa flores</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Classified in Cylindrophiiidae family (non-venomous). This species is endemic to Indonesia (Lombok, Sumbawa, Flores, Komodo). Characterized by pale brown or buff, with small black spots irregularly on its dorsum. The head is yellowish, much spotted with black. Ventrally white and black colored with continuous or



broken bars with alternating pattern, which are connected on the sides. The maximum length of this snake is approximately 85.7 cm. However, it is quite rare that it exceeds 50 cm.

7. *Cylindrophis ruffus*

Common Name	: Red-tailed pipe snake
Local Name	: <i>Ular pipa ekor merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a non-venomous snake from Cylindrophidae family found in Southeast Asia. Characterized by a bright red or orange striped pattern found on both sides of the body, from neck to tail. The maximum length of this snake can reach 100 cm. However, most of this species are often found are no more than 70 cm. Its main prey is insect larvae, lizards, baby mice, earthworms and small eels.

8. *Cyrtodactylus cf. fumosus*

Common Name	: Tamarind Bent-toed Gecko
Local Name	: <i>Tokek jari-lengkung Tamarind</i>
IUCN	: Data deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Gecko from Gekkonidae family is endemic to Indonesia particularly believed to be restricted to Sulawesi. This species can reach SVL of approximately 78 mm and a tail length of 65 mm. It has flat and smooth (unkeeled) dorsal tubercles in 4-7 irregularly arranged longitudinal rows at midbody.

9. *Cyrtodactylus cf. marmoratus*

Common Name	: Marbled bow-fingered gecko
Local Name	: <i>Tokek jari-lengkung Jawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The marbled bow-fingered gecko from Gekkonidae family is nocturnal and believed to be only distributed in Java and Bali. The average size of this species is 76 mm for SVL/Snout-Vent Length and 72 mm for the tail. These geckos live mainly in lowland forests in trees and between rocks. The dorsum is light brown with large dark brown spots on the back, sometimes it connected to form transverse bands. The dark patterns on the top of the head are irregular, with dark streaks extending across the temples.



10. *Cyrtodactylus darmandvillei*

Common Name	: Darmandville Bow-fingered Gecko
Local Name	: <i>Tokek jari-lengkung Darmandville</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This gecko from Gekkonidae family is endemic to Indonesia particularly found on islands of Flores, Komodo, Lombok, Pulau Kalao, and Sumbawa. It has SVL of approximately 85 mm and a tail length of 100 mm. Natural habitats of this gecko are in forest and freshwater wetlands, at altitudes from sea level to 650 masl. The base colour is light brown to buff, and the dorsal part is adorned with irregular, blotchy, dark brown bands that continue to the tail. There is a dark brown band behind the eye.

11. *Dendrelaphis inornatus*

Common Name	: Lesser Sunda Bronzeback
Local Name	: <i>Ular tali</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This medium sized slender and a long slender tail Colubrid Snakes is endemic to Indonesia particularly to Lesser Sunda Islands. This non-venomous species has large eyes. The two sides black striped dark red upper body with blue or light green or white spots and light green or yellow lower body parts are bordered with yellow or lime green stripes. This snake is semi-arboreal, and its total length can reach 100 cm.

12. *Dendrelaphis pictus*

Common Name	: Painted Bronzeback
Local Name	: <i>Ular tambang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This medium sized slender Colubrid Snakes is distributed in Asia (PRC and Hongkong), and Southeast Asia. This semi-arboreal snake is non-venomous with total length approximately 90 cm but, can reach 140 cm. its commonly found in brownish upper body, with bronze at the top of the body and one or two thin blackish lines. Both of which are separated by a thick beige or yellowish line. The underside of the body is cream or pale yellow.



13. *Draco boschmai*

Common Name	: Boschma's gliding lizard
Local Name	: <i>Kadal naga terbang boschmai</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Boschma's Gliding Lizard is belonging to Agamidae family endemic to Lesser Sunda islands. It's characterized by dark brown patagium (wing membrane) with lighter and darker mottling. It has triangular bright yellow with darker mottling towards the base for male, and small and bluish for female. This species can reach SVL of approximately 89 mm.

14. *Draco volans*

Common Name	: Common Flying Dragon
Local Name	: <i>Cekibar</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This Lizard from Agamidae family is endemic to Southeast Asia. This species can reach total length (SVL + tail) of approximately 220 mm. It's characterized by bright orange patagium with dark banding for male while for female has irregular markings. The males have a pointed yellow gular flag, whilst females have a small, mottled, bluish gular flag.

15. *Duttaphrynus melanostictus*

Common Name	: Asian Common Toad
Local Name	: <i>Bangkong kolong</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Duttaphrynus melanostictus from Bufonidae family is a widespread throughout South-East Asia, southern China, and as far west as India and Pakistan. Its regular size in SVL is 11.5 cm for females and 8.5 cm for males, but it could exceed 15 cm for female (found in Pakistan). The Dorsum is uniform grey of various shades, brown or reddish with dark spots. The ventrum is uniform dirty white, speckled with light brown on chin and throat.



16. *Emoia cf. similis*

Common Name	: Dunn's emo skink
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Emoia similis is a species of skink in the family Scincidae endemic to Indonesia (Komodo, Padar, Rinca, and Flores). It's characterized by brownish-black, brown, or brownish-gray color above, with two pronounced lateral stripes exist flanking a broad relatively unpatroned pale dorsum. This species sized in SVL of approximately 42 mm for male and 39 mm for female.

17. *Eutropis multifasciata*

Common Name	: Common Mabuya
Local Name	: <i>Kadal kebun</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This skink is belonging to Scincidae family. Characterized by shiny brownish green base body colour with slippery cycloid scales, and yellowish or orange stripes pattern of on the right and left sides of its body. This skink is usually found in low bushes or hidden in lush trees. The total body length can reach 30 cm (13 cm for SVL). This species is usually prey more on small insects (ants, termites, and flies) and small sized reptiles (small frog and small/newborn lizard).

18. *Fejervarya cancrivora*

Common Name	: Crab-eating frog
Local Name	: <i>Kodok sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Crab-eating frog from Dicroglossidae family characterized by Color varies from brown, or greenish brown, to gray, with irregular darker bars scattered on the lips and hindlimbs. The ventral part is whitish, sometimes with scattered darker markings. This species can reach SVL up to 10.7 cm for females and up to 8.0 cm for males. This species is distributed in Brunei Darussalam, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Singapore, Thailand, Vietnam, and Guam.



19. *Fejervarya limnocharis*

Common Name	: Boie's Wart Frog
Local Name	: <i>Kodok tegalan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Boie's Wart frog or field frog from Dicroglossidae family is distributed within Bangladesh, Brunei Darussalam, Cambodia, Hong Kong, India, Indonesia, Japan, Laos, Macau, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Taiwan, Thailand, Vietnam, and Guam. It's characterized by gray brown or olive above, sometimes suffused with bright carmine; a V-shaped dark mark between eyes, and ventrum white. This species in SVL is up to 6.0 cm for females and up to 5.0 cm for males.

20. *Fejervarya verruculosa*

Common Name	: Sundas Wart Frog
Local Name	: <i>Katak kutil Sundas</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Fejervarya verruculosa is a species of frog from Dicroglossidae family. It is endemic to the Lesser Sunda Islands of Indonesia and East Timor. This species is morphologically identified by the brown to dark brown dorsum with dark pigmented blotches around raised furrows. Ventrums colour variable, ranging from off white to dark brown. This species in SVL is up to 7.5 cm for females and up to 5.6 cm for males.

21. *Gehyra mutilata*

Common Name	: Stump-toed Gecko
Local Name	: <i>Cecak gula</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species belongs to Gekkonidae family characterized by light yellow, cream, brown or grey. body colour and relatively thick tail is oval in cross-section and has an absence of spine. *Gehyra mutilata* is distributed widely throughout Southeast Asia including Myanmar, Thailand, Malaysia, Singapore and most of Indonesia. Its range extends across the Pacific to Hawaii and Mexico. This species sized in SVL of approximately 60 mm.



22. *Gekko gekko*

Common Name	: Tokay Gecko
Local Name	: <i>Tokek rumah</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



This medium-sized lizard belongs to Gekkonidae family characterized by skins with warty colour variations of skin, from bluish to brownish grey, decorated with red to orange spots all over its body. This lizard widely distributed species from Bangladesh, northeastern India, Nepal, Bhutan, Southern China, Taiwan throughout Southeast Asia, from Myanmar, Laos, Thailand, Cambodia, Vietnam, Peninsular Malaysia, Philippines, Singapore, Indonesia (excluding Papua). The maximum body length in SVL can reach 300 mm.

23. *Hemidactylus frenatus*

Common Name	: Common House Gecko
Local Name	: <i>Cecak kayu</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Common House Gecko from Gekkonidae family is the most common species of house gecko that widespread in all countries of Southeast Asia. Its colour and patterning are highly variable, typically it is various shades of brown or grey or may be pale yellowish with darker speckles and other markings, which may include a dark stripe behind the eye that may extend onto the flanks. This species sized in SVL of approximately 61 mm for males and 54 mm for females.

24. *Hemidactylus platyurus*

Common Name	: Flat-tailed house gecko
Local Name	: <i>Cecak tembok</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hemidactylus platyurus from Gekkonidae family is one of the common house geckos in Southeast Asia. these geckos are widespread, from Nepal, Bhutan, northern and eastern India, Sri Lanka, Myanmar, Vietnam, Thailand, the Malay Peninsula to Indonesia, Philippines, China and introduced to Florida, United States. It is sized in SVL of approximately 60 mm and is identified by the flat tail, fringed with loose skin. Colour and markings can vary from plain grey, to an attractive pattern of dark brown stripes or diamonds along the spine.



25. *Hemiphyllodactylus typus*

Common Name	: Indo-pacific slender gecko
Local Name	: <i>Tokek Cebol</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species from Gekkonidae family characterized by its body colour varies from reddish brown to medium brown, and its tail is generally paler, being cream to yellowish brown. Its body is slender and its tail slightly shorter than the body. It is sized in SVL of approximately 50 mm. This gecko distribution widespread ranging from the Indian Subcontinent (including Sri Lanka), throughout Southeast Asia to New Guinea and many islands in the Pacific Ocean.

26. *Indosylvirana cf. nicobariensis*

Common Name	: Nicobar Island Frog
Local Name	: <i>Kongkang jangkrik</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Nicobar Island Frog from Ranidae family that previously referred as *Hylarana nicobariensis* has a wide distribution, covering the Nicobar Islands (India), Thailand, Malay Peninsula, Sumatra, Java, Bali, Kalimantan, and Palawan (Philippines). The back and legs are usually light to dark brown, with some darker patterns around the crotch. Sometimes there are two slightly blurred lines parallel to the spine. This slender frog, for adult males sized in 35–45 mm and adult females 45–50 mm SVL.

27. *Ingerophrynus biporcatus*

Common Name	: Crested Toad
Local Name	: <i>Kodok-puru hutan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ingerophrynus biporcatus (Bufonidae) is a medium-sized frog that for males sized between 55–70 mm SVL, while females 60–80 mm SVL. This species has back brownish, greyish or blackish, with brownish streaks. There are also specimens that are reddish brown, with a row of pink nodules behind the parotoid. Sometimes it has several black spots on the back are located asymmetrically. This species has a limited distribution in western Indonesia, from Lampung of Sumatra, Java, Bali and Lombok. It's Introduced to Sulawesi.



28. *Kaloula baleata*

Common Name	: Muller's Narrow-mouthed Frog
Local Name	: <i>Belentung</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This frog is a species of narrow-mouthed toad of Microhylidae family whereas native to India (Andaman Islands), southern Thailand, Malay Peninsula, Sumatra, Borneo, Java, Bali, Nusa Tenggara, and Sulawesi. Characterized by brown, golden brown, blackish brown or dark greyish dorsal, sometimes with symmetrical patterns. The ventral is purplish brown with whitish spots, or vice versa, whitish grey with dark blackish spots. Adult males have a SVL of up to 60 mm and females are slightly larger up to 65–66 mm.

29. *Lamprolepis smaragdina*

Common Name	: Emerald Skink
Local Name	: <i>Kadal pohon zamrud</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Emerald Skink is an arboreal lizard from Scincidae family. Identified by vibrant green, bluish or brown colour throughout, with a slightly paler belly. sometimes spotted with pale or dark spots, and sometimes with a pale band along each flank. This species mostly occurs in eastern Indonesia, ranging from Lombok and Sulawesi to New Guinea. It also occurs in the Philippines and Taiwan. It is sized in SVL of approximately 100 mm.

30. *Limnonectes dammermani*

Common Name	: Dammerman's wart frog
Local Name	: <i>Bangkong dammerman</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Limnonectes dammermani is a species of frogs in the family Dicroglossidae endemic to the Lesser Sunda Islands of Indonesia, where it can be found on Flores, Sumbawa, and Lombok. The abdomen widens from the head towards the cloaca, the hind legs are longer than the front legs. The skin texture tends to be wrinkled with tubercles. Adult toads are dark brown to brownish dorsum, with black or brown nodules.



31. *Limnonectes kadarsani*

Common Name	: Asian Black-spined Toad
Local Name	: <i>Bangkong kadarsan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This frog from the family Dicroglossidae is endemic to Lesser Sunda Islands of Indonesia. Specifically, from Lombok, Sumbawa, Flores, and Adonara. The skin texture is smooth, but wrinkled, with tubercles along the side of the body. The dorsum is reddish-brown or greyish-brown coloured. The ventral surface is lighter and dusted with grey. The adult males have SVL up to 120 mm and females are slightly smaller up to 107 mm.

32. *Limnonectes cf. microdiscus*

Common Name	: Indonesia Wart Frog
Local Name	: <i>Bangkong kerdil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Limnonectes microdiscus is a frog in the family Dicroglossidae that is endemic to Java and southern Sumatra of Indonesia. The adult males can reach SVL up to 35 mm and for females can reach the double size of the males in SVL. This species has an inverted “V” mark on its brown dorsum, with the small and slender body.

33. *Litoria* sp.

Common Name	: Tree Frog
Local Name	: <i>Katak pohon</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The species within the genus *Litoria* (Hylidae family) are variable in appearance. The dark coloured frogs are generally terrestrial and or infrequently, climb whilst the green species are usually arboreal, with sometimes to the ground to breed. They have pads on their fingers and toes. These frogs are native to Australia, the Bismarck Archipelago, the Solomon Islands, New Guinea, the Lesser Sunda Islands, and the Moluccan Islands. It regular sized is approximately 31–37 mm.



34. *Lycodon capucinus*

Common Name	: Island Wolf Snake
Local Name	: <i>Ular cecak</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lycodon capucinus from Colubridae family is a non-venomous snake. Its is relatively slender, and its flattened head is larger than its body that reaches 760 mm. The dorsum is reddish brown or blackish in colour, with white to yellowish patches. Its flattened head has a whitish motif on the back of the neck/nape. The ventrum is pale whitish. This species is widely distributed to Southeast Asia. In Indonesia this snake is distributed to Sumatra, Borneo, Java, Bali, Sulawesi and the Lesser Sunda Islands.

35. *Lycodon subcinctus*

Common Name	: White-Banded Wolf Snake
Local Name	: <i>Ular Cecak Belang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This species is a non-venomous snake from Colubridae family. This species occurs in all countries of Southeast Asia from mainland Myanmar to Indonesia, including Timor-Leste. It also ranges to eastern China. Juveniles and half-grown specimens are adorned with numerous widely spaced pale bands, either white or cream whilst, for adult specimens banding may be totally absent. The maximum size for this species could reach 102 cm.

36. *Malayopython reticulatus*

Common Name	: Reticulated Python
Local Name	: <i>Sanca kembang</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



This non-venomous snake is distributed in mainland Southeast Asia, and most islands of the Indo-Malayan Archipelago. Outside the region it reportedly occurs in parts of Assam (northeast India) and Bangladesh. Its greatest size can slightly exceed 10 m but at size in 5 to 7 m is considered to be large. This snake characterized by a clear zig-zag arrangement of black lines interspersed with yellow-brown and dark brown or medium grey patches, with minor areas of white.



37. *Microhyla achatina*

Common Name	: Javan Chorus Frog
Local Name	: <i>Percil jawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Javan Chorus Frog occurs in Indonesia and is endemic to Java. This species has smooth yellowish-brown skin with dark sides and a pair of black stripes on the back and light vertebral stripe is also present in some individuals. Males of this species have a SVL of approximately 20 mm and the females are slightly larger with a SVL up to 25 mm.

38. *Naja sputatrix*

Common Name	: Javan spitting cobra
Local Name	: <i>Ular-sendok jawa</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



Naja sputatrix is a species of cobra in the family Elapidae, found in the Lesser Sunda Islands of Indonesia, including Java, Bali, Lombok, Sumbawa, Flores, Komodo, and Lombok. This highly venomous species is sized approximately 1.3 m in average and can reach 1.85 m in maximum. The adults are usually uniform yellowish, brown or blackish in colour, while juveniles often have throat bands and lateral throat spots. Specimens do not always have hood marks. but when there is a mark, it is most often chevron-shaped.

39. *Occidozyga cf. floresiana*

Common Name	: Flores Oriental Frog
Local Name	: <i>Bancet flores</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Occidozyga floresiana is a rare species of frog in the family Dicroglossidae. It is endemic to Flores, Indonesia. But it was seen firstly outside the Flores in Lombok in 2011. Its natural habitats are wetlands, swamps, freshwater marshes, intermittent freshwater marshes, and seasonally flooded agricultural land about 1,000 masl. There is not much information about this species because it is rarely found in its habitat and this species is declared vulnerable by IUCN.



40. *Oligodon bitorquatus*

Common Name	: Javanese mountain kukri snake
Local Name	: <i>Ular kukri gunung Jawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Oligodon bitorquatus is a non-venomous of snake in the family Colubridae, endemic to Indonesia, including Java, Bali, and Sumbawa whilst uncertain in Sumatera. It has a small body approximately 45 cm in average. The dorsal part of the body is dark brown, purple or greyish brown with small red or yellow spots, arranged to form stripes, forehead with dark stripes and yellow or grey stripes. The ventral part is orange featured with black spots or patches.

41. *Oreophryne jeffersoniana*

Common Name	: Komodo cross frog
Local Name	: <i>Katak-mini Komodo</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



This frog species of the family Microhylidae is endemic to lesser Sunda Islands of Indonesia. It's characterized by belly finely granular, dorsally tan coloured, warts marked or outlined with black, a fine dark mid-dorsal line and X-mark on the scapular region. This Species is very close to *O. monticola*, similar in shoulder girdle and differing in smaller size (max. 18.5 mm).

42. *Oreophryne monticola*

Common Name	: Lombok cross frog
Local Name	: <i>Katak-mini-Lombok</i>
IUCN	: Endangered
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Oreophryne monticola is a species of frog in the family Microhylidae and is endemic to Bali and Lombok of Indonesia. This small frog, never usually more than 25 mm long. Dorsally, individuals from Bali were dark or light brown or red-brown, whilst from Lombok were brick red with black-spots, light to dark brown, grey with thin mid-dorsal line, brackish brown, yellow mottled with black spots. The venter colour of the Bali and Lombok frogs are varying from dark brown, orange, brick orange, to uniformly black.



43. *Papurana florensis*

Common Name	: Floresian Frog
Local Name	: <i>Kongkang flores</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Papurana florensis of Ranidae family also known as *Hylarana florensis* and *Rana florensis* is a species that is only distributed on the islands of Lombok, Sumbawa and Flores. Characterized by dominant yellowish colour. The abdomen getting smaller from the head towards the cloaca. The swimming membranes are full, and the fingertips are equipped with adhesive part to stick to leaves or other parts of plants.

44. *Polypedates leucomystax*

Common Name	: Striped tree frog
Local Name	: <i>Katak-pohon bergaris</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Polypedates leucomystax is a shrub frog species in the family Rhacophoridae. Its small to medium-sized approximately 55 mm in SVL for Males and 75 mm for females. This species occurs in parts of Myanmar, throughout southern Thailand, Peninsular Malaysia, Singapore, Sumatra, Java, Borneo and Sulawesi, and parts of the Philippines. Its ground colour is a variable shade of brown, ranging from pale brown to yellow-brown, reddish brown, grey-brown, or dark brown.

45. *Psammodynastes pulverulentus*

Common Name	: Common Mock Viper
Local Name	: <i>Ular viper tiruan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common mock viper is a species of mildly venomous snake native to Asia as it widely distributed from Bangladesh, Myanmar, Cambodia, China, north-eastern India, Bhutan, Indonesia, Laos, Malaysia, Nepal, the Philippines, Taiwan, Thailand, and Vietnam. This medium sized snake (Max 77 cm) is dorsally light to dark brown or greyish, with a bifurcating pattern on the head and Light-dark brown stripes extend along the body, punctuated by small black with a white spot. The ventral is pale, speckled with brown.



46. *Rhacophorus reinwardtii*

Common Name	: Reinwardti's Tree Frog
Local Name	: <i>Katak-terbang jawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Reinwardti's Tree Frog is a species of frog in the family Rhacophoridae. This species is a medium to large-sized tree frog with SVL of 55.4–79.6 mm for females, while for males ranged from 41.6–52.5 mm. Currently it is believed that its distribution is only limited (endemic) to the island of Java, Indonesia. The dorsal surface is a dark green with dark spots, fading into a golden yellow on the flank. The side also has a black band with turquoise blue spots. The ventral of the frog is pure white.

47. *Sphenomorphus melanopogon*

Common Name	: Lesser Sunda Dark-throated Skink
Local Name	: <i>Kadal sunda leher hitam</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Sphenomorphus melanopogon is a species of skink from Scincidae family which found on many islands of the Lesser Sundas (Nusa Tenggara) of Indonesia includes the islands of Sumbawa, Sumba, Komodo (and Rinca), Flores and Timor. The dark throat is well-developed and appears more common in males, Where the dark throat is absent, the throat appears from very pale to creamy yellow. This species is sized approximately 68 mm in SVL and 190 mm in total length.

48. *Subdoluseps bowringii*

Common Name	: Christmas Island Grass-Skink
Local Name	: <i>Kadal-pasir bowring</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Christmas Island Grass-skink from Scincidae family that formerly referred as *Lygosoma bowringii* is widely distributed in India (Andaman Islands), Myanmar, Thailand, Laos, Cambodia, Vietnam, southern China, Malaysia, Singapore, Borneo, Sumatra, Java, Sulawesi and the Philippines. This species is



characterised by its small size, slender body, and tiny limbs. The dorsal surface is brownish grey, the sides speckled, and the ventral surface mottled yellow. It is sized in SVL of approximately 60 mm and can reach 120 mm in total length.

49. *Trimeresurus insularis*

Common Name	: White-lipped Island Pitviper
Local Name	: <i>Ular viper timur</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



White-lipped Island Pit viper is a venomous species from Viperidae family found in eastern Java and the Lesser Sunda Islands of Indonesia. Their colour patterns are often found to be green or a blue-green colour with specific populations even containing yellow variants as well. It's characterized by red brown on the tail and with pale areas on the lips. This snake could reach 100 cm in total length.

50. *Varanus salvator*

Common Name	: Common Water Monitor
Local Name	: <i>Biawak air tawar</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



Varanus salvator is a large lizard from Varanidae family native to South and Southeast Asia. In Indonesia its distributed to Sumatra, Borneo, Java, lesser Sundas, Riau Archipelago, and Sulawesi. This species characterized by rough and slightly skin raised with black or indigo body colour featured with spots and pale-yellow dots from the top of the head, back, to the base of the tail. The abdomen and neck are paler with dark patches. Its averaged total length is approximately 1.8 m and can reach 3 m.



7.3 Mammals

1. *Bos javanicus domesticus*

Common Name	: Bali Cattle
Local Name	: <i>Sapi bali</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bali cattle have a hump, a white rump patch, white stockings, and white extending under the belly. Females are reddish-yellow, and males are reddish brown, turning to a dark brown with maturity. Body weights of male average from 335 to 363 kilograms, while females average from 211 kilograms to 242 kilograms. They are noted for their remarkable ability to grow on low-quality fodder and their high fertility.

2. *Bubalus bubalis*

Common Name	: Domestic water buffalo
Local Name	: <i>Kerbau</i>
IUCN	: Not Evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The water buffalo, also called the domestic water buffalo, is a large bovid originating in the Indian subcontinent and Southeast Asia. Two extant types are recognized, based on morphological and behavioural criteria: the river buffalo and the swamp buffalo. The skin of the river buffalo is black, but some specimens may have dark, slate-coloured skin. Swamp buffaloes have a grey skin at birth, which becomes slate blue later. Albinoids are present in some populations. They range in weight from 300–550 kg.

3. *Crocidura monticola*

Common Name	: Sunda shrew
Local Name	: <i>Cucurut kecil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Sunda shrew (*Crocidura monticola*) is a species of mammal in the family Soricidae found in Indonesia and Malaysia. It is found in the forest floor of the rainforest. It is an omnivore and feeds mostly on plants and leaves that fall from the emergent and the canopy layers. It is 25 cm long and weighs less than 8 g.



4. *Cynopterus brachyotis*

Common Name	: Lesser Short-nosed Fruit Bat
Local Name	: <i>Codot krawar</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The lesser short-nosed fruit bat (*Cynopterus brachyotis*) is a species of megabat within the family Pteropodidae. It is a small bat that lives in South Asia and Southeast Asia. It weighs between 21 and 32 grams, and measures 70 to 127 mm. It occurs in many types of habitats, but most frequently in disturbed forest, including lower montane forest and tropical lowland rain forest, plus gardens, mangroves, and vegetation on beaches.

5. *Cynopterus nusatenggara*

Common Name	: Nusatenggara Short-nosed Fruit Bat
Local Name	: <i>Codot Nusatenggara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Nusatenggara short-nosed fruit bat, scientifically known as *Cynopterus nusatenggara*, is a medium-sized megabat species belonging to the family Pteropodidae. These bats are native to Indonesia and are characterized by their brown fur and lack of white ear rims or wing digits. They have a body length of approximately 88 mm, a 5 mm tail, 18 mm ears, 13 mm hindfeet, and a forearm length ranging from 55 to 64 mm. They typically range from 24 to 37 g, with males averaging around 27.9 g and females averaging around 29.9 g.

6. *Cynopterus sphinx*

Common Name	: Greater Short-nosed Fruit Bat
Local Name	: <i>Codot barong</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The greater short-nosed fruit bat (*Cynopterus sphinx*), or short-nosed Indian fruit bat, is a species of megabat in the family Pteropodidae found in South and Southeast Asia. Their upper parts are brown to greyish brown with paler under parts. The fur is very fine and silky. The wingspan of the adult is about 48 cm. Juveniles are lighter than adults. Average forearm length is 70.2 mm, with a range of 64–79 mm. It is common in tropical forests and areas where fruit crops are cultivated. They can also be found in grasslands and mangrove forests.



7. *Dobsonia peronii*

Common Name	: Western naked-backed fruit bat
Local Name	: <i>Kelelawar kubu nusa tenggara</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The western naked-backed fruit bat (*Dobsonia peronii*) is a species of megabat in the family Pteropodidae. It is endemic to Indonesia. Its natural habitat is subtropical or tropical dry forests. Western Naked-backed Fruit Bats eat fruits of *Borassus* (Arecaceae), *Muntingia* (Muntingiaceae), and *Ficus* (Moraceae). They commonly feed from the same trees visited by Geoffroy's Rousettes (*Rousettus amplexicaudatus*) and Wallacean Gray Flying Foxes (*Pteropus griseus*).

8. *Eonycteris spelaea*

Common Name	: Cave nectar bat
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The cave nectar bat (*Eonycteris spelaea*) is a species of megabat within the genus *Eonycteris*. The upper parts of the cave nectar bat are greyish brown to dark brown to black. The underparts are paler, and the neck is sometimes yellowish brown. The muzzle of this bat is elongated, and particularly adapted for drinking nectar. The head and body length measures 8.5-11 cm, the tail length is about 1.5-1.8 cm, and the forearm length measures 6-7 cm. The cave nectar bat is found in primary forests and in disturbed and agricultural areas.

9. *Hipposideros diadema*

Common Name	: Diadem leaf-nosed bat
Local Name	: <i>Kelelawar berhidung daun mahkota</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The diadem leaf-nosed bat or diadem roundleaf bat (*Hipposideros diadema*) is one of the most widespread species of bat in the family Hipposideridae. It is found in Australia, Indonesia, Malaysia, Myanmar, the Philippines, Thailand, and Vietnam. These bats are nocturnal and gregarious. They congregate and live in groups that can be as large as two to three thousand individuals. Not on an individual level, but as a colony, there seems to be some territoriality exhibited.



10. *Hystrix javanica*

Common Name	: Javan Porcupine
Local Name	: <i>Landak Jawa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Javan porcupine also known as Sunda porcupine (*Hystrix javanica*) is a species of rodent in the family Hystricidae. It is endemic to Indonesia. Due to the popularity of the hunting and consumption of the Javan porcupine as an aphrodisiac, the Ministry of Environment and Forestry in Indonesia has listed this species as a protected animal as of June 2018. The distinctive physical characteristics of the Javanese porcupine are that its body is covered with fine hair (like the hair of other mammals), tactile hairs and spines.

11. *Macaca fascicularis*

Common Name	: Long-Tailed Macaque
Local Name	: <i>Monyet ekor panjang</i>
IUCN	: Endangered
CITES	: App. II
INA Reg. (P106)	: Not Protected



The long-tailed macaque (*Macaca fascicularis*) is a cercopithecine primate native to Southeast Asia. The body length of the adult, which varies among subspecies, is 38–55 cm with relatively short arms and legs. Males are considerably larger than females, weighing 5–9 kg compared to the 3–6 kg of females. The tail is longer than the body, typically 40–65 cm, which is used for balance when they jump distances up to 5 m. The upper parts of the body are dark brown with light golden-brown tips. The under parts are light grey with a dark grey/brown tail.

12. *Macroglossus minimus*

Common Name	: Long-tongued nectar bat
Local Name	: <i>Cecadu pisang Kecil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The long-tongued nectar bat is a species of megabat. *M. minimus* is one of the smallest species in the family Pteropodidae, with an average length of 60–85 mm. It has a reddish-brown colouring with relatively long hair compared to the



other species. The hair on the abdomen is a lighter colour, and a dark brown stripe runs bilaterally down the top of the head and back. Its wide geographical range includes Thailand, Peninsular Malaysia, southern Philippines, Java, Borneo, New Guinea, the Solomon Islands, and northern Australia.

13. *Megaderma spasma*

Common Name	: Lesser false vampire bat
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The lesser false vampire bat (*Megaderma spasma*) is a bat found in South Asia and Southeast Asia from Sri Lanka and India in the west to Indonesia and the Philippines in the east. They live in caves and tree hollows. They are insectivorous. The lesser false vampire bat has a wingspan of up to 30 cm and have a head-and-body length of around 10 cm. Their forearms are normally around 7 cm. Their body colour ranges from grey, brown to blue, brown. This bat usually roosts in a group of 3-30 individuals.

14. *Miniopterus australis*

Common Name	: Little bent-wing bat
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The little bent-wing bat is a species of vesper bat in the family Miniopteridae. It inhabits the subtropical coastal regions of Indonesia, Philippines, New Guinea, and Australia. It lacks a nose leaf. It appears grayish black, but changes color during the year to a fawnish-brown. It weighs 7 to 8 g and has a total length of 86 to 96 mm. Males and females are relatively the same size and weight, except for pregnant females who will gain 2 to 3 g. The tail is just as long as the head and body together (43 to 48 mm), and the haired patagium covers most of the tail.



15. *Murina florum*

Common Name	: Flute-nosed Bat
Local Name	: <i>Kelelawar berhidung seruling</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The flute-nosed bat is a vespertilionid bat with an unusually shaped nose, the tubular nostrils facing outward from the end of the muzzle. They occur in the north of the Australian state of Queensland, in Indonesia, and on Papua New Guinea. The pelt is thick, and hair is long, mid-grey at the front and reddish or brownish grey across the back. The measurements for the species are forearm 33–36 mm, the head and body combined are 47–57 mm, tibia 31–37 mm, length from base to tip of ear is 14–15 mm. The weight ranges from 6–9 grams.

16. *Myotis adversus*

Common Name	: Large-footed bat
Local Name	: <i>Kelelawar berkaki besar</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The large-footed bat, large-footed mouse-eared bat, or large-footed myotis (*Myotis adversus*) is a species of vesper bat (family *Vespertilionidae*). It can be found in the following countries: Australia, Indonesia, Malaysia, Papua New Guinea, Singapore, Solomon Islands, Taiwan, Vanuatu, and possibly Vietnam. They are known to roost in caves and tunnels. They can be found in lowland forests around bodies of water such as streams and lakes.

17. *Paradoxurus hermaphroditus*

Common Name	: Common Palm Civet
Local Name	: <i>Musang luwak</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Not Protected



The Asian palm civet (*Paradoxurus hermaphroditus*), also called common palm civet, is a viverrid native to South and Southeast Asia. Its stocky body is covered with coarse, shaggy hair that is usually greyish in colour. It has a white mask across the forehead, a small white patch under each eye, a white spot on each side of the nostrils, and a narrow dark line between the eyes. Its head-to-body length is about 53 cm with a 48 cm long unringed tail. It weighs 2–5 kg. It is an omnivore feeding foremost on fruits such as berries and pulpy fruits.



18. *Rattus argentiventer*

Common Name	: Ricefield rat
Local Name	: <i>Tikus Sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Rattus argentiventer is a rat that is easily found in rural and urban areas throughout Southeast Asia and Asia. Medium-sized mice, tend to be smaller than sewer mice, with a length of 30–40 cm (including tail). Hair color is yellowish brown. The belly is gray with white edges. The name *argentiventer* means “silver-bellied”. The tail is brown. This species lives in rice fields, fields and grasslands, where it obtains its favorite food in the form of rice grains, corn or grass.

19. *Rattus exulans*

Common Name	: Polynesian rat
Local Name	: <i>Tikus huma</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Polynesian rat originates from Southeast Asia and has spread throughout many of the Polynesian islands. This animal has large and curled ears, a long snout, brown/black fur with a barge belly, but has comparatively small feet. They have long, slender bodies, which reach a length of over 6 inches (15 cm) from nose to tip of tail. *Rattus exulans* is a nocturnal omnivorous species: it eats seeds, fruit, leaves, bark, insects, earthworms, spiders, lizards, bird eggs and those that have hatched.

20. *Rattus tanezumi*

Common Name	: Oriental house rat
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The oriental house rat is widespread in Southeast Asia and East Asia, south to the Indonesian Archipelago. This rat is medium sized with a head and body length of 105–215 mm, and a tail between 120–230 mm. Body weight ranges from 100–200 grams. Its back feathers are usually brown, but the color can vary from dark brown to grayish brown or reddish brown. This animal is an opportunistic omnivore and an agricultural pest of crops such as rice, coconuts, bananas and corn.



21. *Rhinolophus affinis*

Common Name	: Intermediate horseshoe bat
Local Name	: <i>Prok-bruk hutan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The intermediate horseshoe bat (*Rhinolophus affinis*) is a bat species of the family Rhinolophidae (“nose crest”) that is very widespread throughout much of the Indian subcontinent, southern and central China and Southeast Asia. The intermediate horseshoe bat has a total length of 58–63 mm, with a forearm length of 46–56 mm. Individuals weigh approximately 12–15 g. It is found at elevations from 290–2,000 m (950–6,560 ft) above sea level.

22. *Rhinolophus arcuatus*

Common Name	: Arcuate horseshoe bat
Local Name	: -
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The arcuate horseshoe bat (*Rhinolophus arcuatus*) is a species of bat in the family Rhinolophidae. It is found in Indonesia, Malaysia, Papua New Guinea, and the Philippines. It has been documented at elevations from sea level to 1,600 m (5,200 ft) above sea level. It is nocturnal, roosting in sheltered places during the day such as limestone caves. At night it forages for its insect prey by gleaning them off substrates and aerial hawking.

23. *Rhinolophus keyensis*

Common Name	: Insular Horseshoe Bat
Local Name	: <i>Prok-bruk kai</i>
IUCN	: Data Deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The insular horseshoe bat (*Rhinolophus keyensis*) is a species of bat in the family Rhinolophidae. It is endemic to Indonesia. Its length from head to body is 35.4–46.6 mm, ear 14–20 mm, hindfoot 5.9–8.4 mm, and the forearm 35.8–44.9 mm. The dorsal pelage is blackish brown (sometimes russet), whereas ventral pelage is lighter drab brown.



24. *Rousettus amplexicaudatus*

Common Name	: Geoffroy's Rousette
Local Name	: <i>Codot nyap biasa</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Geoffroy's rousette is a species of megabat found in Southeast Asia and the Malesia region of Oceania. This bat has sensitive hearing and good eyesight, which helps it to navigate well, especially at night. It can be identified by its grey-brown upper part, darker on top of the head, and its paler underpart, usually greyish brown. Besides producing a distinctive, audible clicking call, the most distinguishable figure of this bat is its wings. It is attached to the sides of the back and separated by a broad fur band.

25. *Rusa timorensis*

Common Name	: Timor deer
Local Name	: <i>Rusa timor</i>
IUCN	: Vulnerable
CITES	: Not Listed
INA Reg. (P106)	: Protected



The Javan rusa or Sunda sambar (*Rusa timorensis*) is a large deer species native to Indonesia and East Timor. The Javan rusa is dark blackish brown and has a gray forehead. Its back is almost black, the underparts and inner thighs are yellowish brown. The abdomen is lighter brown, and the tail tuft is dark blackish brown. Males are bigger than females; head-to-body length varies from 142 to 185 cm, with a 20 cm tail. Males weigh 152-160 kg, female about 74 kg. Javan rusa mainly feed on grass, leaves, and fallen fruit.

26. *Sus scrofa*

Common Name	: Wild Boar
Local Name	: <i>Babi hutan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The wild boar (*Sus scrofa*) is a suid native to much of Eurasia and North Africa and has been introduced to the Americas and Oceania. The species is now one of the widest-ranging mammals in the world, as well as the most widespread suiform. The wild boar is a bulky, massively built suid with short and relatively thin legs. This species can run at a maximum speed of 40 km/h (25 mph) and jump at a height of 140-150 cm. The wild boar is a highly versatile omnivore, whose diversity in choice of food is comparable to that of humans.



7.4 Insect

1. *Acalolepta* sp.

Common Name	: Flat-faced longhorns beetle
Local Name	: <i>Kumbang Longhorn Berwajah Datar</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Acalolepta is a genus of longhorned beetles from the family Cerambycidae. This genus is consisting of 289 species and subspecies (252 species + 37 non-nominal subspecies). It's sized approximately 12–25 mm. Most species are characterized by its antennae that is equal or longer than its body. Its species are found across most of South, Southeast Asia, southern parts of East Asia, and Oceania including New Guinea, New Caledonia and East coast of Australia.

2. *Acherontia lachesis*

Common Name	: Greater death's head hawkmoth
Local Name	: <i>Ngengat kepala maut</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Greater death's head hawkmoth is a large moth (up to 132 mm wingspan) from Sphingidae family characterized by the present on the edge of skull-like mark with red hair upper side of the thorax. This species is widely distributed almost in the entire Oriental region, from Pakistan to the Philippines, and from southern Japan and the southern Russian Far East to Indonesia and New Guinea. Dominantly coloured brown yellowish and the hindwings upper side has a big black patch in the basal half.

3. *Acraea terpsicore*

Common Name	: Tawny coster
Local Name	: <i>Kupu coster kuning kecoklatan</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Acraea terpsicore is a small leathery-winged butterfly (53–64 mm) from Nymphalidae family. This species can be found in India, Sri Lanka, Indonesia, Maldives to Myanmar, Thailand, Laos, Cambodia, Vietnam, Bangladesh, Malaysia, Singapore, and Australia. It has dark orange upper wings in males



and brownish yellow in females. The forewing and hindwing have black spots across the cells. In the edges of the costa and termen are black. The edge of the hindwing's termen is lined with a black line that has a series of small white spots.

4. *Adisura marginalis*

Common Name	: New pod borer
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



New pod borer is a species of moth belongs to Noctuidae family. This species found in Myanmar, India, Malaysia, the Philippines, Thailand, Vietnam and Indonesia, as well as in Queensland and Western of Australia. The adult moths are pale yellow, with a pink border around each forewing, and a brown border around each hindwing. The wingspan is sized approximately 2.5 cm.

5. *Adoretus* sp.

Common Name	: Rose beetles
Local Name	: <i>Kumbang malam Adoretus</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Adoretus is a very large genus with around 460 known species from Scarabaeidae family. They are widely distributed around the globe, from Europe, Africa, Asia, Southeast Asia and Australasia/Oceanic regions. This beetle's body is elongated oval with small body length ranged in 10–12 mm. Its Body colour brown, covered with numerous white/cream setae.

6. *Agape chloropyga*

Common Name	: Yellow tiger moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Agape chloropyga, moth belongs to the family Erebidae can be found in Thailand, Malaysia, Indonesia, New Guinea and eastern Australia. This species is also found in Nepal and Solomon Islands. Five orange dots can be seen on each of the adult moths' yellow forewings. The last abdominal segment is dark blue, and the bodies are yellow with black stripes in between the segments. The moth's wingspan measures roughly 60 mm.



7. *Agrionoptera insignis*

Common Name	: Red Swampdragons
Local Name	: <i>Capung-Tengger Loreng</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Agrionoptera insignis dragonfly of the Libellulidae family is the species that occurring from the northernmost point in southern Japan to the southernmost point on the east coast of Australia, spanning India and much of eastern Asia to Oceania. Males can reach up to 41 mm in length, while females can reach up to 43 mm. The thorax has mottling of yellow and is metallic green. The eyes have a yellow and brown hue. Most of the abdomen is red, with a black tip. The female's abdomen has a duller hue.

8. *Allotinus unicolor*

Common Name	: Lesser darkie
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The lesser darkie is a butterfly belonging to the Lycaenidae family. This species is prevalent throughout Southeast Asia, ranging Myanmar, Thailand, Cambodia, Malaysia, Singapore to Indonesia. The butterfly's underside is variable while its upper side is reddish brown. The undersides are usually white to light brownish grey with darker brown markings. Compared to females, males have a more mark on the forewing. The hind wings of females are more clearly serrated.

9. *Amata huebneri*

Common Name	: Hübner's wasp moth
Local Name	: <i>Ngengat tawon</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Amata huebneri is a species of moth in the family Erebididae. This species can be found in northern Australia and Queensland, as well as practically almost all Southeast Asia, including Java, Bali, Kalimantan, and Singapore. Adults have transparent windows in their wings and a black abdomen with stripes of yellow. This makes it can mimic a wasp. This mimicry may provide some protection against predators like birds. The forewings are nearly double the size of the hindwings.



10. *Amerila astreus*

Common Name	: Amerila moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Amerila astreus belongs to the Erebididae family. It can be found in the Oriental region, which includes India and Sri Lanka up to New Guinea. The forewings of the adult moth are translucent, with a black spot at the base, a small square area near the middle, and large pupal areas at the wingtip. The hindwings are off-white with dark wingtips. The head and thorax are white, with two black spots on each segment. The abdomen and legs are scarlet coloured.

11. *Ammatho* sp.

Common Name	: Ammatho moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ammatho is a genus with around 8 subgenera from erebid moths (Erebidae family). It is found in Cambodia, China, Nepal, Thailand, Peninsular Malaysia and Indonesia. This is a frequent species that is found in forested and disturbed habitats in the lowlands and more rarely up to about 2,000 m. The specimen found in Hu'u is reddish orange with a pattern of thick crossed dark brown lines, thus showing a bright orange diamond shape on the forewings.

12. *Appias albina*

Common Name	: Common albatross butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common albatross is a small butterfly of the family Pieridae. It is found in south and southeast Asia to Australia. This species displays sexual dimorphism, with the upper wings of the males butterfly are white, occasionally bordered by black. The females butterfly can have white or yellow upper wings with a broader black border. The underside of the wings can range from pale to dark yellow, particularly in the females. The wingspan typically measures between 60 and 74 mm.



13. *Appias lyncida*

Common Name	: Chocolate albatross butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The chocolate albatross is a butterfly of the family Pieridae, which is found in south and southeast Asia. The wingspan of this species is 55 to 70 mm. Males have white upperparts with brown or black edges and bright lemon underparts with chocolate-coloured markings. Females are white and dark brown with thick clouds. This butterfly is a forest butterfly and prefers high ground where it is accustomed to an altitude of 910 m.

14. *Artaxa* sp.

Common Name	: Artaxa moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Artaxa is a genus of tussock moths in the family Erebidae. This species widely distributed but mostly found in sundaland from Pakistan at the westernmost and North Korea at the northernmost to Indonesia. However, this genus also found in Rusia, New Guinea and several countries in Africa. The specimen at Hu'u found with yellow wings, the hindwing paler than the forewing, the latter with two pale fasciae medially with black spots towards the apex of the forewing.

15. *Aspidimorpha miliaris*

Common Name	: Asian spotted tortoise beetle
Local Name	: <i>Kumbang kura-kura Asia</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Aspidimorpha miliaris is a beetle belonging to the family Chrysomelidae. This beetle grows to approximately 15 mm long. It is commonly seen in Southeast Asia, Taiwan, and India. It also can be found in Nepal, Bhutan, Bangladesh, and China. The beetle has an oval body shape with flat sides, making it a turtle-like appearance. Interestingly, this beetle has a bright colour covering its wings, body, and head. Some beetles have spots and patterns on their outer shell that can be confused with ladybugs.



16. *Attacus atlas*

Common Name	: Atlas moth
Local Name	: <i>Ngengat Gajah</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Atlas moth, belonging to the Saturniidae family, is a large moth that can be found across tropical and subtropical Southeast Asia. With a wingspan that can reach up to 24 cm, its body appears relatively small in comparison. The upper side of its wings showcases a reddish-brown hue adorned with intricate patterns of black, white, pink, and purple lines. Additionally, each of the four wings features triangular, scale-less windows outlined in black. On the other hand, the undersides of the wings exhibit a lighter shade.

17. *Bassarona teuta*

Common Name	: Banded marquis
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bassarona teuta is a species of nymphalid butterfly (Nymphalidae). It can reach a wingspan of 60–80 mm. The upperside of the wings is dark brown, with a discal band composed of a continuous series of cream-colored spots. A small spot is present near the apex of the forewings. The underside of the wings is pale brown. This species can be found in India (Assam & Andamans), Myanmar, Malaysia (P. Tioman & Langkawi) Thailand, Indonesia (Java, Sumatra, Borneo, Batu Islands, Nias, Flores, Natuna Islands), and Philippines (Palawan).

18. *Bastilla joviana*

Common Name	: Bastilla moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bastilla joviana is a moth of the family Noctuidae. It is found from the Oriental region to the Moluccas and in New Guinea and Australia. It is also present in South Africa. The distinguishing characteristic of this moth is its forewing appearance, which features a black triangle that extends from the base to almost the middle of the wings. This triangle is divided by a medial white bar and is separated from the costa by a wide strip of pale grey-brown colour.



19. *Bibasis sena*

Common Name	: Orange tailed awlet
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The orange-tailed awlet is part of the Hesperidae family and can be found in countries of Sri Lanka, India, Myanmar, Cambodia, Thailand, Laos, Vietnam, Hainan, Malay peninsula, Indonesia (Borneo, Java, Kangean, Bali, Lombok, Bawean, Sumba, Sumbawa), and Philippines. The hindwings have an orange fringe, and the abdomen has a hint of orange at the back. The underside of the wings (45 to 50 mm wingspan) is dark brown with white patches, a large white central patch on the forewings, and a broad pure white discal band on the hindwings.

20. *Bocana* sp.

Common Name	: Bocana moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bocana is a genus of moths with around 18 known species from the family Erebidae. It is found in tropics region, from India, Southeast Asia, to Queensland of Australia, Samoa, New Caledonia, and Introduced in Hawaii. The wings are blackish brown, with a hint of grey. The forewing has a blackish discal mark that is often centred by a white spot. The underside is similar, but the hindwing discal mark is equally as prominent, or more than that of the forewing.

21. *Bolboceratidae* sp.

Common Name	: Earth-boring dung beetles
Local Name	: <i>Kumbang tanah</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bolboceratidae is a large family of 40 genera and 400 species known within the order *Coleoptera*. Beetles in this family typically have a robust and compact body, often with a glossy or matte black to brown coloration. They are medium to large-sized beetles, with some species reaching lengths of 5–24 mm. These beetles are found primarily in tropical and subtropical regions worldwide.



22. *Borbo cinnara*

Common Name	: Rice swift
Local Name	: <i>Kupu-kupu coklat</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Borbo cinnara is a butterfly belonging to the family HesperIIDae. It is found in Sri Lanka, India, Taiwan, Australia, and Southeast Asia including Indonesia. The upper side of the wings is brown with a yellowish green base. The forewing has a yellow spot and clear spots, and two spots in the cell. Sometimes, it may not be present. The hindwing has a few faints clear spots, but no cell spot. On the underside, the wings are yellowish brown with greenish scales. The hindwing has also white spots. Adult butterflies have a wingspan of 30–34 mm.

23. *Carriola ecnomoda*

Common Name	: Carriola moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Carriola ecnomoda is a moth of the family Erebidae. It is found in Southeast Asia, mostly in Sundaland of Indonesia and the Philippines. Males have brown borders around a medium-sized central window on each wing, along with a clear patch between it and the tip. On the other hand, females have grey borders around larger clear areas that also encompass the satellite patches.

24. *Castalius rosimon*

Common Name	: Common pierrot
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Common Pierrot is a small butterfly belongs to the Lycaenidae family. It's found in Sri Lanka, Bangladesh, India, Myanmar, Malaysia and Indonesia (Sumatra, Kalimantan, Java, Bali, Bangka, Timor, Wetar, Kissar, Sumbawa and Sulawesi). It has white upper wings with black spots and blackish brown edges, the basal area of both wings is pale blue and shiny. The underside of the wings is white with black spots, black stripes and prominent black stripes on the sub-basalts of both wings. The wingspan is ranged from 28 to 32 mm.



25. *Catharsius* sp.

Common Name	: Dung beetles
Local Name	: <i>Kumbang kotoran</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Catharsius is a genus of dung beetles in the Scarabaeidae family. There are around 100 species of these beetles, ranging from medium to large in size (15–50 mm). They are usually black or brown in color and can be found in tropical regions of Africa and Asia. *Catharsius* are typically short and round, with horns on the head and front body of males, and sometimes females. They are commonly found in grasslands and pastures, and occasionally in forests, where they feed on the dung of large mammals.

26. *Catopsilia scylla*

Common Name	: Orange migrant
Local Name	: <i>Kupu Kertas Kuning</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Orange migrant is a species of butterfly that distributed from Myanmar, Cambodia, Philippines, Thailand, and Vietnam, along the Malay Peninsula, across Java and Sumatra, and over northern Australia and also introduced in Sri Lanka. The males display white forewings bordered in black, and cadmium-yellow hindwings, typically adorned with black spots along the edges. Females are similar but have an additional group of black spots on the forewing, which frequently blend to create a dark ring. Adult butterflies are sized approximately 60–65 mm.

27. *Cepora iudith*

Common Name	: Orange gull
Local Name	: –
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Orange Gull is a butterfly of the family Pieridae. It is found in Southeast Asia (Indonesia [Java, Sumatra, Borneo], Myanmar, Malaysia, Langkawi, Singapore, Thailand, Philippines). This butterfly is easily recognized by bright yellow orange at ternal half of upper hindwings. Female has darker veins and broader black borders and additional square spot in mid-space 9 of forewings. Its wingspan is ranged about 45–55 mm.



28. *Cepora julia calliparga*

Common Name	: Julia Calliparga gull
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cepora julia is a butterfly in the family Pieridae. It is found on Sumba and Sumbawa Indonesia. Its size ranges from about 50 to 60 mm (typical of genus *Cepora*). The underside wings are typically a pale yellowish or cream color with faint markings whilst the upper wings are predominantly white with black markings consist of spots and lines.

29. *Cepora nerissa*

Common Name	: Common gull
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cepora nerissa is a butterfly of the family Pieridae. It is a small to medium-sized with wingspan of 40–50 mm. The male upper side is white, with dark at apex of forewings, dark veins and a black spot. The underside is pale or dark yellow especially at base of hind wings and coastal area of forewings. Female is similar, but with broader and darker markings. This species is native to Sri Lanka, India, China, southeast Asia, including Indonesia.

30. *Cethosia cf. tambora*

Common Name	: Tambora lacewing
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cethosia tambora is a species of butterfly belonging to the family Nymphalidae, which is found in Southeast Asia, specifically in Indonesia. It is known for its red-orange upper wings adorned with black markings and white spots. The underside is typically a lighter shade with a pale orange or reddish-brown colour with less pronounced markings compared to the bold patterns on the upper wings. It has a wingspan ranging from about 50 to 60 mm (typical of genus *Cethosia*).



31. *Chlaenius* sp.

Common Name	: Vivid metallic ground beetle
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Chlaenius is a large and diverse genus of ground beetle (family Carabidae) includes numerous species roughly 1,000 species found worldwide. It sized around 8–23 mm characterized by their robust bodies and strong legs, which are adapted for running on the ground. They vary in size and coloration depending on the species, but many have metallic or iridescent coloration on their bodies.

32. *Chorodna* cf. *strixaria*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Chorodna strixaria is a moth of the family Geometridae. It is found in India, Vietnam, Indonesia, the Philippines, the Moluccas, New Guinea, Australia and Sri Lanka. Its wingspan could reach 80 mm. The adult moth is greyish brown, with wavy lines on each forewing separating a pale costal half from the darker hind half. The hindwings have a dark brown pattern.

33. *Cleora* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cleora is a genus of moths in the family Geometridae with roughly 200 species. The distribution is widespread across countries such as India, Sri Lanka, Thailand, Malaysia, Indonesia, Papua New Guinea, Australia, and various parts of Africa, America, and Europe. The wingspan of *Cleora* moths typically ranges from about 15 to 40 mm. these moths often have slender bodies and wings that can exhibit various patterns and colors for their adaptability and ability to blend into their natural environments.



34. *Cnaphalocrocis* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cnaphalocrocis is a genus of moths of the family Crambidae. It is found in south-east Asia, where it has been recorded from Sri Lanka, India, Malaysia, Indonesia and Philippines. This moths often exhibit various shades of brown, gray, or sometimes greenish hues. Their wings may feature intricate patterns of lines, spots, or bands. They are typically small to medium-sized with a wingspan ranging from about 20 to 30 mm.

35. *Comostola pyrrhoga*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Comostola pyrrhoga is a moth of the family Geometridae. It is found in the Indo-Australian tropics from India, Sri Lanka to Taiwan, and east including Indonesia to Vanuatu, New Caledonia, northern Australia and Norfolk Island. The wingspan is about 15–18 mm. Its upper wings are bright emerald-green coloured and whitish underwings. Both wings have orange reddish outer margin, with black scales and spots irrorated (sprinkled) with silver.

36. *Copera marginipes*

Common Name	: Yellow Featherlegs
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Yellow Featherlegs is a species of damselfly in the family Platycnemididae. It is native and common to Asia (Bangladesh, China, Hongkong, India, Indonesia, Laos, Macao, Malaysia, Myanmar, Nepal, Sri Lanka, Taiwan, Thailand, Vietnam). Its thorax is black on dorsum with a yellow mid-dorsal carina and a narrow greenish-yellow humeral stripe, and the legs are bright yellow. The body length is ranged about 28–31 mm.



37. *Cotachena cf. hicana*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cotachena hicana is a moth in the family Crambidae. It is found in Australia and introduced in India, Sri Lanka, Thailand, Indonesia and Solomon Island. The adult moth is pale grey or brown coloured, with dark squiggly lines on each wing enclosing paler areas. The wingspan is about 20 mm.

38. *Cretonotos gangis*

Common Name	: Baphomet Moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Baphomet moth is a species of arctiine moth from the Erebidae family can found Southeast Asia and Australia. Adults have white hindwings and brown forewings, each with a dark streak. The abdomen is red or, more rarely, yellow. Males have four large, grey-coloured coremata behind them, which can exceed the length of the abdomen when inflated. This species has a wingspan of approximately 4 cm.

39. *Cretonotos transiens*

Common Name	: Clouded Tiger Moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cretonotos transiens is a species of moth in the family Erebidae. This species is found in China, Taiwan, Japan, eastern Afghanistan, Pakistan, India, Bangladesh, Nepal, Bhutan, Myanmar, Malaysia, Philippines, Indonesia (Borneo, Bali and Lombok). The grey wings (paler in the female), with three black discal dots and a whitish costa on the forewing, are distinctive. The abdomen is yellow with black maculation. Adult males possess inflatable coremata for dispersing pheromones. Its wingspan is sized approximately 52 mm.



40. *Cupha erymanthis*

Common Name	: The rustic
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cupha erymanthis, is a species from Nymphalidae family found in forested areas of tropical South Asia and Southeast Asia. The males and females are identical. The upperside of the rustic is ochraceous light brown. Its forewing displays some loop-like, slender, dark cellular markings with a broad. The underside of the wing is much paler. The discal band on the forewing is pale, and the black lunules on the apical area are replaced by pale brownish ochre. The wingspan is ranged from 50–60 mm.

41. *Curculionidae* sp.

Common Name	: True Weevil
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The *Curculionidae* are a family of weevils, commonly called snout beetles or true weevils. They are one of the largest animal families with 6,800 genera and 83,000 species described worldwide. Adult *Curculionidae* are readily distinguished by their unique head, which is elongated into a snout, and by their geniculate antennae. Its species size ranged from 1 to 35 mm.

42. *Cyrestis nais*

Common Name	: Map butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Cyrestis nais is a butterfly belongs to the Nymphalidae family. This species found in Indonesia. The upperside wings are brown with prominent black lines and white markings that resemble a map. The underside has a mottled brown and white pattern. It has a wingspan ranging from about 50 to 60 mm.



43. *Danaus chrysippus*

Common Name	: Plain Tiger butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The plain tiger is a medium-sized butterfly widespread in Asia, Australia and Africa. It belongs to the brush-footed butterfly family Nymphalidae. It has a wingspan ranging from about 28 to 32 mm. This species has a black body with white spots, the upper abdomen is yellowish to whitish yellow. The wings are brownish yellow, the upper side is lighter than the lower side. The forewings have a wide black border with a series of white spots. The males are smaller and lighter in colour than the females.

44. *Danaus genutia*

Common Name	: Common Tiger butterfly
Local Name	: <i>Kupu-kupu harimau biasa</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common tiger is a butterfly belongs to the family Nymphalidae. It's distributed in Asia across India, Sri Lanka, Myanmar, Thailand, China, Malaysia, Indonesia (Kalimantan, Sumatra, and Java), Papua New Guinea, and northeastern Australia. Its wingspan ranging from 70 to 100 mm It has brownish yellow wings with veins marked with a wide black band. The edges of the wings are black with two rows of white spots. The underside of the wings resembles the upper side but is paler in colour.

45. *Danaus melanippus haruhasa*

Common Name	: Black veined tiger butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Danaus melanippus haruhasa is a subspecies of butterfly belonging to the family Nymphalidae. It has a wingspan of around 70 to 85 mm. The upper side of the wings is predominantly brown and sometimes with orange, featured with white spots and bold black veins. The underside of the wings is generally lighter in colour compared to the upper side. This subspecies is found in Indonesia particularly at Lesser Sunda Islands.



46. *Delias oraia*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Delias oraia is a butterfly in the family Pieridae. It is found in the Australasian realm particularly in Indonesia. Its appearance, typically featuring predominantly white upper wings for males but with broader black margins for the females. The underside wings featured with broader black margins and yellowish tint with orange markings on the hind wings. The wingspan of this species ranges from about 45 to 55 mm.

47. *Delias periboea*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Delias periboea is a butterfly in the family Pieridae found in both the Indomalayan realm and the Australasian realm. The wingspan ranges from about 45 to 55 mm. Adult featured with white with black markings upper side wings. The forewings have black borders and a black spot near the center. The hindwings also feature yellowish tint with more orange markings compared with *D. oraia*.

48. *Deudorix epijarbas*

Common Name	: Cornelian butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The cornelian butterfly is a species of Lycaenidae family found in south and southeast Asia from India to Fiji, including Indonesia, and Australia. Male's upper side wings is scarlet red. It has forewing with broad black costal and outer marginal borders and hindwing with the thinner costa. Female's upper side is fulvous brown. The forewing featured with some fulvous suffusion below the median vein and the hindwing with the abdominal fold pale. The wingspan of *Deudorix epijarbas* ranges from about 25 to 35 mm.



49. *Diplacodes trivialis*

Common Name	: Chalky Percher
Local Name	: <i>Capung-Tengger biru</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Chalky percher is a species of dragonfly in the family Libellulidae. It is found in Seychelles, Oman, United Arab Emirates, China, Japan, India, Maldives, Southeast Asia, and southwards to New Guinea and Australia. Adults typically have about 40–45 mm of wingspan and 25–30 mm of total body length. The male is blue in colour and as it matures, pruinose develops, and it becomes powdery blue in colour while Female has pale green yellowish markings on its black body.

50. *Discolampa ethion*

Common Name	: Banded blue Pierrot
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The banded blue Pierrot is a contrastingly marked butterfly belongs to the blues or family Lycaenidae that found in India, Sri Lanka, Myanmar, Cambodia, Thailand, Laos, Vietnam, Philippines, Malay Peninsula, Singapore and Indonesia. The upper wings are a deep shade of blue with a white band along the inner edge, while the front costa edges and the terminal edges of the two front wings are black. On the underside wings are white with a ribbon-like stripe and jet-black spots. This species is typically about 2–3 cm in wingspan.

51. *Drepanosticta berlandi*

Common Name	: -
Local Name	: -
IUCN	: Data deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Drepanosticta berlandi is a species of damselfly belonging to the family Platynemididae. They are found in parts of Southeast Asia including Indonesia. Damselflies in the genus *Drepanosticta* are generally small to medium-sized. They typically have slender bodies. Specific about this species has the coloration of the thorax, which can vary and often include shades of green and blue. Its body length ranges from about 25 to 30 mm.



52. *Dura* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Dura is a genus of tussock moths in the family Erebidae. They are commonly found in tropical and subtropical region as in Peninsular Malaysia, Sumatra, Bali, and Borneo. Moths in this genus typically has robust bodies and broad wings. The ground colour is pure white, the forewing with delicate faint fawn fasciation. The wingspan of moths in this genus can ranging from approximately 30 to 70 mm.

53. *Eoophyla* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Eoophyla is a genus of moths of the family Crambidae. Its primarily found in tropical and subtropical regions, particularly in Asia including Indonesia. This moths often have slender bodies and relatively narrow wings. Their wingspan typically ranges from about 15 to 40 mm. Its coloration in wings is shades of yellowish brown with white-grey translucent window and sometimes with black spot with white dot markings at the hindwings.

54. *Episparis exprimens*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Episparis exprimens is a species of moths in the family Erebidae. It found in India, Myanmar, Sri Lanka, Thailand, Malaysia, Philippines, and Indonesia (Sundaland, Sumbawa, Sulawesi, Seram). The adult moth typically has a wingspan of around 30 to 40 mm. The forewings are usually pale yellowish-brown with a pattern of reddish-brown and dark brown markings. The hindwings are yellowish-brown with a darker marginal band.



55. *Eudocima cocalus*

Common Name	: Cocalus fruit piercing moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The *Cocalus* fruit piercing moth belongs to the Erebidae family. It can be found in the north-eastern Himalayas, Sundaland Indonesia, and east to Queensland, Australia and the Solomons. The male moth's forewing has a concave distal ripple-mark, while the hindwings are pale-yellow and lack an inner black lunule. Female moths can be identified by large whitish blotches on the forewing discally, ante medially, and tornally. This moth usually has a wingspan ranging from 70 to 100 mm.

56. *Eudocima homaena*

Common Name	: Homaena fruit piercing moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Eudocima homaena is a moth of the family Erebidae. It is found in the Nicobars India, Sri Lanka, Myanmar, Taiwan, Peninsular Malaysia, Indonesia, the Philippines and Christmas Island. Its wingspan is about 80 mm. Males have it variegated and transversely rippled purplish brown. Females have a similar ground colour, but the pattern is more irregular and is disrupted by a broad green streak much but with a more angular shape.

57. *Eudocima srivijayana*

Common Name	: Srivijayan fruit piercing moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Srivijayan fruit piercing the moth of the Erebidae family which can be found in Sundaland, Sulawesi, Sumba, Flores, Timor in Indonesia, and the Philippines. Male moths have rufous brown forewings with curved concave fasciae, while their hindwings are orange with a black border. Female moths have more obscurely variegated, blackish, speckled forewings without definite fasciation, and a similar pattern in their hindwings. The wingspan of an adult moth ranges from 60 to 90 mm.



58. *Eumelea* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Eumelea is a genus of moths in the family Geometridae found Austro-Malayan subregions and throughout China, India, Sri Lanka and Myanmar. The moths are yellow or orange. They have dark red speckles and two indistinct red complete or incomplete curved oblique bands right across each wing. The males are generally rather redder than the females. The moths have a wingspan of about 40 mm.

59. *Euphaea lara*

Common Name	: Lara Damselfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Euphaea lara, a damselfly species from the Euphaeidae family, can be spotted in different regions of Southeast Asia, notably Indonesia. This species is easily recognizable by its yellow-brown body and wings. Its compound eyes are black, and its antennae are short. The thorax and abdomen display a yellow to old brown colour with black stripes. Adult *Euphaea lara* typically have a body length ranging from 40 to 50 mm and a wingspan of about 50 to 60 mm.

60. *Euploea climena*

Common Name	: Climena crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Euploea climena, a butterfly belonging to the Nymphalidae (brush-footed butterflies) family, can be found in Indomalayan and Australasian realms. The upper side of adult butterflies from this species is characterized by a dark brown colour, while the hindwings transition to white towards the edges. Similarly, the undersides display a resemblance but feature light bluish white spots beneath each wing. It has a wingspan ranging from 60 to 80 mm.



61. *Euploea eleusina*

Common Name	: Vollenhov's crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Vollenhov's crow, is a butterfly in the family Nymphalidae. It is found in the Indomalayan realm and the Australasian realm. This butterfly typically has dark brown or black upper wings with cream-white spots and streaks. The under wings of the wings is typically lighter in colour compared to the upper wings. The wingspan of this species ranged from about 60 to 80 mm.

62. *Euploea eunice*

Common Name	: Blue-banded king crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Blue-banded king crow is a butterfly species classified under the Nymphalidae family, native to the Indomalayan realm. Identified by its brown-black upper wings adorned with blue spots at the tips of veins 1-6, as well as a distinct blue line in the cell area. On the underside of the wings, a lighter brown-black hue is present with two rows of small blue dots encircling the edges. This species typically boasts a wingspan ranging from 65 to 85 mm.

63. *Euploea phaenareta eucala*

Common Name	: The king crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Euploea phaenareta eucala, a butterfly subspecies from the Nymphalidae family, is indigenous to the islands of Sumbawa, Flores, and Sumba in Indonesia. Its upper wings are a dark brown hue adorned with discal, post-discal, and submarginal spots in whitish tones with a hint of purple. The hind wings feature whitish spots at the apex. The underside of the wings mirrors the colour and pattern of the upper side. Its wingspan falls within the range of 90 to 105 mm.



64. *Euploea sylvester*

Common Name	: Double-branded crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The double-branded crow butterfly can be in South Asia, Southeast Asia, and certain areas of Australia. It is classified under the Nymphalidae family. The adult butterflies have wings that are either dark brown or black, featuring unique white or cream-colored bands and patterns. On the upper side of their wings, two prominent white bands can be seen spanning both the forewings and hindwings. Additionally, the males have additional pale elliptical marks on their forewings. These butterflies can have a wingspan of up to 70 mm.

65. *Euploea tulliolus*

Common Name	: Dwarf crow butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The dwarf crow, is a species of butterfly native to the Solomon Islands, Malaysia, Taiwan, Vietnam, Singapore, and Australia, classified under the Nymphalidae family. With a wingspan ranging from 40 to 80 mm, this butterfly showcases dark brown or black wings adorned with unique white or pale yellowish spots and patterns. The upper side of its wings may exhibit a slight sheen or glossiness under certain lighting conditions. The underside of the wings of *Euploea tulliolus* is generally lighter than the upper side.

66. *Eurema blanda*

Common Name	: Three-spot grass yellow butterfly
Local Name	: <i>Kupu-kupu belerang bintik-tiga</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The three-spot grass yellow, a small butterfly belonging to the Pieridae family, can be found in Sri Lanka, India, and southeast Asia. *Eurema blanda* usually has a wingspan ranging from 30 to 45 mm, showcasing bright yellow wings with unique black markings. Each wing's upper side typically displays three black spots arranged in a triangular fashion near the edges, while the underside wings are lighter and less vibrant. The black markings may differ based on geographical region and individual variances.



67. *Eurema lombokiana*

Common Name	: Lombok grass yellow butterfly
Local Name	: <i>Kupu-kupu belerang Lombok</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Lombok grass yellow, a small butterfly belonging to the Pieridae family, can be found in Lombok, Sumbawa, and Flores of Indonesia. *E. lombokiana* likely exhibits predominantly yellow with black markings on the upper side while on the underside is typically lighter and more subdued. They typically have a wingspan ranging from around 30 to 50 mm.

68. *Everes lacturnus*

Common Name	: The Indian Cupid butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Indian Cupid is a small butterfly found in the Australasian and Indomalayan realms that belongs to the Lycaenidae family. Males have a purple-blue upperwings while the females have pale brown upperwings. The underside of the wings is silvery gray with a bright reddish orange patch on the tornus of hindwing. This species has a pair of filamentous tails. Its wingspan sized from 60–75 mm.

69. *Gerania cf. bosci*

Common Name	: Wood crane longhorn beetle
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Gerania bosci, a beetle species in the family Cerambycidae, is native to Asia. It is commonly found in India, Myanmar, Laos, Thailand, Vietnam, Malaysia, Cambodia, and Indonesia, specifically in Sumatra, Java, Bali, Lombok, and Timor. The body color of this species varies from bright yellow to nearly white, adorned with large brown or black spots and markings, and it has bluish-black legs. *G. bosci* is characterized by its unusually long, spider-like legs and can grow to a length of approximately 70–80 mm.



70. *Glyphodes stolalis*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Glyphodes stolalis, a member of the Crambidae family, can be located in Cameroon, the Comoros, D.R. of Congo, Kenya, Réunion island, Madagascar, Seychelles, South Africa, Gambia, Uganda, Zimbabwe, China, India, Indonesia, Sri Lanka, Japan, Taiwan, Thailand, and Australia. These moths exhibit wings that are light brown in colour, adorned with white and purple markings bordered by dark brown. With a wingspan of approximately 30 mm.

71. *Gonodontis cf. pallida*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Gonodontis pallida is a moth in the family Geometridae found in Indian Subregion, Taiwan, Philippines, Sulawesi, S. Moluccas, Sundaland, Christmas Island. It has slender and long body with wingspans ranging from around 25 to 40 mm. The forewings and hindwings generally have a delicate, pale or whitish appearance with faint lines or bands.

72. *Graphium agamemnon*

Common Name	: Tailed jay butterfly
Local Name	: <i>Kupu-kupu bintik hijau</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The tailed jay, a butterfly primarily found in the swallowtail (Papilionidae) family, is distributed in India, Nepal, Sri Lanka, Bangladesh, Myanmar, Thailand, Laos, Cambodia, Brunei, Malaysia, Singapore, Indonesia, Papua New Guinea, and Australia. It has a wingspan ranging from 60 to 75 mm. The upper wings are black with varying sized green apple spots, while the underside features a purple-brown base with green patches and red spots on the hindwings, with a short tail on 4 veins. The female possesses a longer tail compared to the male.



73. *Graphium doson*

Common Name	: Common jay butterfly
Local Name	: <i>Kupu-kupu sirsak</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Common jay (50–65 mm wingspan) is a butterfly in the Papilionidae family. It can be found in India, Sri Lanka, China, Japan, Korea, Vietnam, Laos, Cambodia, Philippines, Malaysia, Indonesia (Borneo, Sumatra, Sulawesi, Java). It has black forewings with broad, bluish-green macular bands that extend from the sub-apical area of the forewings to the basal areas of the hind wings. The underside of the wings also has the same spot pattern, but larger and silvery green, with the dark brown base colour and additional red and black spots on the hind wings.

74. *Hebomoia glaucippe*

Common Name	: The great orange-tip butterfly
Local Name	: –
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The great orange-tip is a butterfly belonging to the family Pieridae, that is the yellows and whites. It is found in India, Sri Lanka, China, Japan, the Philippines, and Indonesia (Sumatra, Kalimantan, Sulawesi, Java and Timor). Its wingspans ranging from around 50–65 mm. This species has creamy white forewings, black apex and terminal margins. On the apex there is a reddish orange mark that is crossed by a black line. The underside wings look like pale brown dry leaves.

75. *Hemithea* sp.

Common Name	: –
Local Name	: –
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hemithea is a genus of moths in the family Geometridae. Members of this genus are widely distributed and can be found in Europe, Asia (Including Indonesia), Africa, and Americas. They are often medium-sized moths (20 mm to 40 mm wingspan) with flat wings at rest condition. It has dentate white fasciae, often with the green colour deepened adjacent to them.



76. *Hydrillodes* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hydrillodes moths belong to the Erebidae family and are commonly found in Asia (including Indonesia), Africa, Australia, and the Americas. They come in various colours such as brown, grey, white, orange, and yellow. Their wings can have lines, spots, and other markings that help them blend in with their surroundings. The wingspan of *Hydrillodes* moths usually measures between 20 to 40 mm.

77. *Hypochrosis hyadaria*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hypochrosis hyadaria is a moth in the family Geometridae. The species has a wide range from India, Sri Lanka, through Southeast Asia including Indonesia. The wingspan of the males is up to 52 mm and the females are up to 64 mm. The body is a pale red, with a purplish tinge or sometimes warm pale grey with a pale greenish tinge. Both wings are finely and lightly striated with darker brown grey.

78. *Hypolimnas bolina*

Common Name	: The Great Eggfly
Local Name	: <i>Kupu-kupu telur</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The great eggfly butterfly is part of the Nymphalidae family found from Madagascar to Asia (including Indonesia) and Australia. *H. bolina* has a high degree of sexual dimorphism, female individuals usually mimic many morphologies. The male butterfly has jet black upper wings with three pairs of white spots surrounded by purple, two on the forewing and one on the hindwing. The upper wing of the female butterfly is brownish black and has no spots, the edges have white markings. Its wingspan sized from 50–85 mm.



79. *Hypomecis* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Hypomecis is a genus of moth belonging to the Geometridae family. It is predominantly found in the Northern Hemisphere such as Europe, Asia, and North America. These moths are medium sized, with wingspans that fall within the range of 20 to 40 mm. The adult moths are known for showcasing elaborate patterns on their wings, which may differ among species but commonly feature hues of brown, grey, and white, occasionally with subtle patterns or markings.

80. *Ideopsis juventa*

Common Name	: Gray glassy tiger butterfly
Local Name	: <i>Kupu-kupu harimau</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The grey glassy tiger is a species of butterfly in the Nymphalidae family that is found in Australia, Papua New Guinea, and Southeast Asia, including Indonesia. It has black wings decorated with elongated or rounded dark grey. There are two rows of circular white dots along the edges of the wings and a pair of longitudinal white stripes that flank the body. Its wingspan approximately from 60 to 70 mm.

81. *Idionyx cf. murcia*

Common Name	: -
Local Name	: -
IUCN	: Data deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Idionyx murcia is a species of dragonflies in the family Synthemistidae that is primarily distributed in Australia. This damselfly can exhibit a wide range of colours and patterns, often with metallic hues or bright colours such as blue, green, or red. This species typically ranges in size from about 30 mm to 40 mm (typical of genus *Idionyx*) in total length.



82. *Ischnura senegalensis*

Common Name	: Tropical Bluetail dragonfly
Local Name	: <i>Capung jarum sawah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ischnura senegalensis is a widespread damselfly of the family Coenagrionidae. It is native from Africa, through the Middle East, to Southern, Eastern, and Southeast Asia. It is a small damselfly with black capped bluish green eyes. Its thorax is black on dorsum and greenish blue on the sides. Its abdomen is black on dorsum. The green on thorax and abdomen may turn to blue in both male and female when aged. It has length up to 31 mm, and wingspan can reach 40 mm.

83. *Ischyja manlia*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ischyja manlia is a species of moth of the family Noctuidae. It is found in the Indian subregion, Sri Lanka, Myanmar, Thailand, China, Japan, Indonesia (Sundaland, Sulawesi, Southern Moluccas), Korea, Australia and Palau. The wingspan of the male ranges from 80 to 100 mm and female with 96–112 mm. Forewings pale or dark red brown or olive brown, irrorated (sprinkled) with dark specks. Hindwings are very dark red brown and there is greyish with dark stripe at near anal angle.

84. *Jamides* sp.

Common Name	: Cerulean butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ceruleans are a type of butterflies in the Lycaenidae family. They can be found in the Indomalayan, Palearctic, and Australasian realms. Their wingspan can range from 24 to 28 mm. The male has dark blue upper wings, while the female is pale blue with spots on the edge of the hind wings. Both have wide black borders on their wings. The underside of the wing is reddish brown with white and black markings, and the hind wings have white-tipped tails.



85. *Junonia atlites*

Common Name	: Grey pansy butterfly
Local Name	: <i>Kupu-kupu merak abu</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Junonia atlites is a species of butterfly belongs to family Nymphalidae found in India, Nepal, Thailand, Cambodia, South China, Philippines, West Malaysia, western and central Indonesia. Its wingspan ranged from 50–60 mm. It has pale greyish upper wings and dark brown stripes on the discal and submarginal. On the post-discal front and rear wings there is a series of orange eye spots surrounded by black. The underside of the wings is the same as the upper side, but the colour is paler.

86. *Junonia erigone*

Common Name	: Pansy butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Junonia erigone, a butterfly species from the Nymphalidae family, can be found in Indonesia and New Guinea. The adult butterflies have brown wings with darker brown outer halves, marked by cream spots and a blue centred orange eye spot. The hind half of each forewing has two deep orange bars, while the hindwings are brown with a wavy orange marginal line and small blue eyespots. The underside is similar to the upper surfaces, with three orange bars on each forewing and mottled red brown hindwings. The wingspan is approximately 50 mm.

87. *Lampides boeticus*

Common Name	: Long-tailed blue butterfly
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lampides boeticus is a small butterfly that belongs to the Lycaenidae family. It can be found in Europe, Africa, South Asia, Southeast Asia, and Australia. Its wingspan ranged from 25–32 mm. The male has a dull purple-blue upper wing with two spots on the upper side of the hind wing, the female is brown with a



pale blue wing base. The underside of the wing is pale yellowish brown with transverse white fasciae, black tornal spots crowned with orange with turquoise patches, and long white-tipped tail on the hind wings.

88. *Leptosia nina*

Common Name	: The Psyche butterfly
Local Name	: <i>Kupu Kerai Payung</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The psyche is a small butterfly with wingspan ranged from 35–45 mm from the family Pieridae and is found in Indian subcontinent, southeast Asia and Australia. The upper sides of the wings are white with black apical borders and black subapical spots. The underside of the wings is white with irregular stripes of pale green. It is flying slow and gentle with the body bobs up and down as it beats its wings.

89. *Lexias aegle*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lexias aegle, a butterfly species from the Nymphalidae family, can be found primarily across Southeast Asia. It is known for its large size and striking appearance with wingspan from approximately 80 to 110 mm. The upper side exhibits shades of brown with prominent white spots and bands. The underside is generally lighter and more subdued compared to the upper side.

90. *Lymantria* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Lymantria is a genus of moths are found in various regions including Europe, Japan, India, Sri Lanka, Myanmar, Java, and Celebes. They have forewings that are usually dull-coloured, ranging from brown and grey to reddish-brown or white in some species. The hindwings are lighter in colour and may have different patterns. Adult *Lymantria* moths typically have a wingspan of 30 to 60 mm.



91. *Macrotoma* sp.

Common Name	: Longhorn Beetle
Local Name	: <i>Kumbang tanduk panjang</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Macrotoma is a genus of beetle belonging to the family Cerambycidae (Longhorn Beetles). These beetles are known for their long bodies and antennae, which can be as long as or longer than their bodies. They are found mainly in tropical and subtropical regions around the world. Their bodies can range from 10 to 40 mm in length. They have long, cylindrical bodies and come in a variety of colors, including brown, black, gray, and more vibrant hues in some species.

92. *Maruca vitrata*

Common Name	: Bean pod borer
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Bean pod borer, a species of moth belonging to the family Crambidae. It's found primarily in tropical and subtropical regions around the world, particularly in Africa, Asia, Australia, and parts of the Americas. Adult moths of *M. vitrata* have a wingspan of about 15–20 mm and are typically greyish brown with white translucent windows and a pattern of darker markings. It is considered a major pest. The caterpillars do the damage by bore into the pods and eat the seeds and also damage to the buds, flowers, and leaves.

93. *Melanitis leda*

Common Name	: Common evening brown
Local Name	: <i>Kupu ilalang</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common evening brown is a common species of butterfly from Nymphalidae family found in Africa, South Asia and South-east Asia extending to parts of Australia. The upper wing side is dark brown with large black patches on the subapical, two black spots surrounded by orange brown with white in the center. The underside of the wings is yellowish or grey with fine lines dark brown, the colour varies depending on the wet or dry season. It has a wingspan of about 60–70 mm.



94. *Micronia* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Micronia is a genus of moths from family Uraniidae (Swallowtail Moth). The species of this genus are found in India, Sri Lanka, Indonesia and Papua New Guinea. They have three strong transverse grey fasciae on each ring. The hindwing tail and its black spot are symmetric. The species is variable in the cream to grey tone, while occasional specimens have the underside white rather than grey. Moths in this genus typically have a wingspan ranging from 20 to 50 mm.

95. *Mocis frugalis*

Common Name	: Sugarcane looper moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Mocis frugalis, the sugarcane looper, is a moth of the family Erebidae. It is found in West African countries, Asia, and the Pacific including Indonesia, China, French Polynesia, and India. Adult moth is brown with a variable marking including a diagonal dark line with a pale edge across each wing, and a small black dot near the base on the hind margin of each forewing. Its wingspan is about 40 mm.

96. *Moduza procris*

Common Name	: The commander butterfly
Local Name	: <i>Kupu Procris</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Moduza procris, the commander is a medium-sized (Wingspan from 60–65 mm) butterfly from Nymphalidae family found in South Asia and Southeast Asia. It has dark reddish-brown upper wings crossed by a wide band of white macula, wide white spots on the forewing cells to the mid-dorsum of the hindwings. There are white spots on the forewings, two series of black submarginal and postdiscal spots on the hindwings. The undersides of the wings are dark reddish brown, but the bottoms of the wings are pale greenish grey.



97. *Nacaduba kurava*

Common Name	: Transparent six-line blue butterfly
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Nacaduba kurava, the transparent six-line blue is a species of butterfly in the family Lycaenidae found in Asia and Australia. The male butterflies are purple on top, while the females are white with a blue sheen and a broad black costa and margin. Both male and female butterflies have a thin tail at the tornus of each hind wing. On the underside, they are pale grey with a white patch under each wing, multiple arcs of white dashes, and a black spot beside each tail. Their wingspan is around 25 mm.

98. *Neptis hylas*

Common Name	: Common Sailor butterfly
Local Name	: <i>Kupu-kupu zebra hitam putih</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Neptis hylas, the common sailor is a butterfly species of Nymphalidae family found in the Indian subcontinent and southeast Asia. The wingspan measures between 40 and 50 mm. The upper wings display black-and-white stripes with a scaly stripe on the forewings featuring subtle “breaks”. The undersides of the forewings are golden brown, with a white discal band bordered by a black stripe. The antennae, head, and abdomen are black, while the chest, and lower abdomen are blackish white.

99. *Neurothemis fluctuans*

Common Name	: Red Grasshawk dragonfly
Local Name	: <i>Capung sayap merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Neurothemis fluctuans is a species of dragonfly in the family Libellulidae. It is widespread in many Asian countries including Indonesia. Males have brownish-red thorax and abdomen. Wings are almost entirely brownish red except the tips and a thin tapering clear band around the hind margin from about its midpoint. Females are duller in colour and has clear wings. Its body size ranged in 30–34 mm and the hindwing is ranged from 22 to 25 mm.



100. *Neurothemis ramburii*

Common Name	: Red parasol dragonfly
Local Name	: <i>Capung jala lekuk</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Neurothemis ramburii, a species of dragonfly in the family Libellulidae. It is distributed in Malaysia, Indonesia, Philippines, Taiwan, Brunei Darussalam, and Papua New Guinea. It is red in colour with clear transparent on the tip of the wings. There is one cross vein in the cubital area of hind wings. Females are as deeply coloured as males. The immature individual has yellow pterostigma and greenish yellow abdomen. *N. ramburii* has a body length around 36 mm and hindwing 26 mm.

101. *Nososticta emphylla*

Common Name	: -
Local Name	: -
IUCN	: Data deficient
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Nososticta emphylla, a species of damselfly in the family Platynemididae found Southeast Asia particularly in regions of. They are known for their slender bodies and the colour of the light pattern as bluish white with greenish and yellowish hues, or deep reddish-purple, violet, ventrally gradually turning to citron-yellow on the thorax. Their size can vary slightly, but they generally have a body length ranging from about 25 to 30 mm. This species is solitary but, sometimes seen in pairs, flying along river flows.

102. *Nososticta selysii*

Common Name	: -
Local Name	: <i>Lawai Jingga</i>
IUCN	: Near threatened
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Nososticta selysii is a species of damselfly belonging to the family Platynemididae found in parts of Southeast Asia, specifically in Indonesia. Its typically ranges from around 25 to 30 mm. The head is blackish orange, the thorax is predominantly orange and also has black stripes, the abdomen is black, and the foliation is orange. This species is often found in swamps, rivers and waters in the mountains.



103. *Ophthalmis milete*

Common Name	: Dayflying Moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ophthalmis milete is a species of moth belonging to the family Noctuidae found in Sumatra, Java, Lesser Sundas, Sulawesi, *S. moluccas*; on Pulo Laut, an island at the south of Borneo. The abdomen is black with white ribbons and the tail has bright yellow hair. The thorax and the back of the head have black and white hair, with a bright yellow collar hair. The upper and lower wings are black, with three rows of white marks on the upper wings and two rows on the lower wings, surrounded by blue. The wingspan ranges from 60 to 70 mm.

104. *Oreta* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Oreta is a genus of moths belonging to the family Drepaninae. It is found in parts of South Asia, Southeast Asia, and North America. Many species moths feature muted earth tones such as browns, greys, and greens. The wings are often display a mix of colours and patterns. The forewings may have darker markings or bands against a lighter background, while the hindwings can be more uniformly coloured. Its wingspan is ranged 30–37 mm.

105. *Orthetrum chrysis*

Common Name	: The Spine-tufted skimmer, Crimson-tailed marsh Hawk, or brown-backed red marsh hawk
Local Name	: <i>Capung hellikopter</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The Spine-tufted skimmer, a species of dragonfly in the family Libellulidae. It is widespread in India and Southeast Asia including Indonesia. It is a medium sized dragonfly (Body length for males up to 48 mm and for females is up to 42 mm) with dark thorax and blood-red abdomen. It looks very similar to *O. pruinosum* in shape and size; but can be distinguished by the colour of the abdomen. The abdomen of the female is ochreous brown.



106. *Orthetrum glaucum*

Common Name	: Blue Marsh Hawk dragonfly
Local Name	: <i>Capung Sambar Biru</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Orthetrum glaucum is an Asian dragonfly species belongs to Libellulidae family, common across much of tropical and subtropical Asia including Indonesia. Males have greenish blue eyes, dark blue thorax and light blue abdomen with the last two segments darkened. Small patch found at the base of hindwing. Female is light brown with greyish-blue eyes. They have typically a body length ranging from about 36 to 43 mm.

107. *Orthetrum pruinosum*

Common Name	: Crimson-Tailed Marsh Hawk dragonfly
Local Name	: <i>Capung Sambar Merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The crimson-tailed marsh hawk, a species of dragonfly in the family Libellulidae. It is a widespread species occurring from west India to Japan and south to Java and the Sunda Islands of Indonesia. It is a medium-sized dragonfly (45–55 mm in body length) with dark thorax with slight purple and purplish crimson red coloured abdomen. Young males have red abdomen as in *O. chrysis*. Females of both species look similar.

108. *Orthetrum sabina*

Common Name	: Green Marsh Hawk dragonfly
Local Name	: <i>Capung-Sambar Hijau</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Orthetrum sabina is a species of dragonfly in the family Libellulidae that is widespread from south-eastern Europe and North Africa to Japan and south to Australia and Micronesia. The body length is ranged in 43–48 mm and wingspan from 30–36 mm. Its thorax is green-yellow with black band on the lateral side and black feet. The abdomen is slim with black and white in colour. The eyes are green.



109. *Orthetrum testaceum*

Common Name	: Orange Skimmer dragonfly
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Orthetrum testaceum, the Orange Skimmer is an Asian freshwater dragonfly species belonging to the family Libellulidae. Its widespread throughout India, Indonesia, Malaysia, Philippines, Singapore and Thailand. This species can reach a body length of about 43–48 mm. Males have orange-brown thorax and red abdomen. Eyes are light brownish grey. Presence of an amber patch at the base of the hindwing. Females are yellowish brown with clear base at the hindwing.

110. *Pachliopta adamas*

Common Name	: The red-bodied swallowtails butterfly
Local Name	: <i>Kupu kupu Mawar Sunda kecil</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pachliopta adamas is a swallowtail butterfly belonging to the family Papilionidae. It is found in India (Bawan), and Indonesia (Java, Lesser Sunda, and Enggano island). It's characterized by the upper side generally exhibits a combination of black, white, and red hues and the underside is lighter in colour and may have a different arrangement of markings on the hind wings. Adult butterflies of this species have a wingspan ranging from about 80 to 100 mm.

111. *Panagaeus* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Panagaeus is a genus in the beetle family Carabidae native to the Holarctic (including Europe), the Near East, and North Africa, as well as Central and South America. This genus generally, have a shiny black or dark brown coloration with orange markings that vary between species. Specimen in Hu'u found with four orange spots on the elytra (wing covers). The size can range from about 5 to 15 mm.



112. *Pantala flavescens*

Common Name	: Globe Skimmer
Local Name	: <i>Capung ciwet</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The globe skimmer is a wide-ranging dragonfly of the family Libellulidae. It is considered to be the most widespread dragonfly on the globe although rare in Europe, with good population on every continent except Antarctica. The dragonfly measures up to 4.5 cm in body length, with wingspan between 7.2 cm and 8.4 cm. Its head's front side is reddish yellow, while the thorax is typically golden yellow with dark, hairy lines. Some species have a brown or olive-coloured thorax, and the abdomen matches the colour of the thorax.

113. *Papilio demolion*

Common Name	: The Banded Swallowtail
Local Name	: <i>Kupu-kupu jeruk</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Papilio demolion, the banded swallowtail, is a species butterfly belonging to the family Papilionidae. They are distributed in Brunei, Cambodia, Laos, Singapore, Thailand and Vietnam. The upper hindwings are black with pale greenish bands from the forewings to the center of the dorsum. The underside has a pale greenish macular band and at the hindwings has greenish spots and black eye spots with orange-red in the tornal area. There is a long spatula-shaped tail behind the wing. Its wingspan ranged from 75–95 mm.

114. *Papilio helenus*

Common Name	: Sulawesi Red Helen
Local Name	: <i>Kupu-kupu helen merah</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The red Helen is a large swallowtail butterfly (family Papilionidae) found in forests of southern India and parts of southeast Asia including Indonesia. It has generally black wings with wingspan from 8 to 12 mm. The upper side, there is a big white spot on the hindwing. This spot is not visible when the butterfly is resting, but it stands out when it is flying. There is also a dusty white stripe on the forewings, and a row of red crescent-shaped markings on the sub-margins of the hindwings. The underside of the wings looks the same as the top.



115. *Papilio memnon*

Common Name	: The great Mormon
Local Name	: <i>Kupu-kupu jeruk besar</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The great Mormon is a large butterfly native to India, Nepal, Bangladesh, Myanmar, China, Taiwan, Japan, Thailand, Laos, Vietnam, Malaysia and Indonesia belongs to Papilionidae family. Its wingspan ranged from 110–135 mm. It has black upper wings with bluish dusty stripes. Black lower wings with bluish stripes, red on wing bases, red patches on the tornal. The colour pattern of this species is very various, recorded 4 forms of colour patterns in males and 26 forms in females, this is due to polymorphism for mimicry.

116. *Papilio peranthus*

Common Name	: Swift Peacock Swallowtail
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Papilio peranthus, is a butterfly of the family Papilionidae. It is found in Indonesia (including Java, Sulawesi and the Lesser Sunda Islands). *P. peranthus* is a monomorphic, making it hard to distinguish the males and females. Its upper wings are dark brown or black with bluish-green, while the underside is lighter with black spots outlined in orange and blue. This butterfly has a wingspan of 70–90 mm, and its hind wings have a pair of tails.

117. *Papilio polytes*

Common Name	: The Common Mormon
Local Name	: <i>Kupu-kupu limau kecil</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common Mormon is a common species of swallowtail butterfly (family Papilionidae) widely distributed across Asia including Indonesia (except Maluku and Irian Jaya). Its wingspan ranged from 70–85 mm. They have a black upper wing with a large whitish yellow band along the hindwings. The underside of



Male's wings has a series of yellow to red submarginal lunulas on the hindwings. The female butterfly is polymorphic, with several forms to mimic the common rose and the crimson rose. This species has a spatulate tail on the hindwings.

118. *Paragymnopleurus* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Paragymnopleurus is a genus of beetles belonging to the family Scarabaeidae. Species have been recorded from Asia. *Paragymnopleurus* are medium-sized (10–30 mm), powerful scarab beetles, often black with a metallic lustre. The head is broad and shovel-shaped, the body short and broad. The pronotum is at least as wide as the elytra, which lack dotted stripes.

119. *Parasarpa hollandi*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Parasarpa hollandi is a species of butterfly in the family Nymphalidae ranges from Lombok to Timor Island. It's generally having a wingspan ranging from about 50 to 60 mm. The upper wing is usually a rich brown or dark brown, with orange and white markings that form intricate patterns at the forewings. The hindwings often have a similar colour scheme with additional patterns. The underside of the wings is often a light brown or beige compared with upper wings.

120. *Pareronia valeria*

Common Name	: The Common Wanderer
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pareronia valeria is a medium-sized butterfly of the family Pieridae and is found in India and Southeast Asia. It has a wingspan of 65–80 mm. Male butterfly has a pale blue forewing with black veins/stripes. The underside of the wings is pale blue. Female butterfly has black upper wings with bluish white markings, the underside is similar to the upper side, but the basic colour is dull blackish.



121. *Pelopidas mathias*

Common Name	: The Small Branded Swift skipper
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The small-branded swift is a butterfly belonging to the family HesperIIDae. It is found throughout much of South, Southeast and East Asia. It is also present in tropical Africa and Arabia. Male *Pelopidas methias* have olive brown upper flanks, forewings have 2 small yellowish spots at the end of the cell and 3 before the apex. The female individual has 5 discal spots on the forewings and 4 or 5 on the hindwings. The underside of the wings is paler. Its wingspan ranged from 30–32 mm.

122. *Perisyntrocha* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Perisyntrocha is a genus of moths of the family Crambidae, native to tropical and subtropical areas, including parts of Southeast Asia and the Pacific Islands. Typically, the wingspan of moths in this genus ranges from about 20 to 30 mm. It's often displayed a whites, creams, and browns including stripes, spots, and mottling.

123. *Phaedyma columella*

Common Name	: The Short Banded Sailor
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Neptis columella, the short, banded sailor is a species of Nymphalidae family found in South and Southeast Asia. It has upper wings which are dark brown to black with white patches. On the forewings there is a narrow and short white cell line, with elongated spots. On the hind wing there is a broad disc band. The underside of the wings is yellowish brown with the same marking as the upper side. Its wingspan ranged from 55–65 mm.



124. *Phyllocharis cf. undulata*

Common Name	: Leaf Beetle
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Phyllocharis undulata is a species of Chrysomelidae family, native to Southeast Asia. It is found in Laos, Cambodia, Vietnam, Peninsular Malaysia, Singapore, and Indonesia (Java, Lombok and Timor). Its head is yellow in colour, and it has brown compound eye. There is a blueish antenna with 11 segments. The middle part of the thorax is blue while the other side is yellow. It has blueish and yellow elytra. This species sized in approximately 8–9 mm.

125. *Phyllodes verhuelli*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Phyllodes verhuelli is a moth in the family Erebidae. The species can be found in lowland forests in Sundaland, southern Myanmar and the Philippines. The forewings are brownish grey with sinuous reniform marking. The hindwings are black with a large pink and white patch at the tornus. Moths in this family often have a wingspan ranging from about 10 to 30 mm.

126. *Pingasa chlora*

Common Name	: White Looper Moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pingasa chlora, the white looper moth is a species of the family Geometridae found in Sundaland, the Philippines, Sulawesi and from the Moluccas to Queensland, Australia. The adult moths have mottled pale green or grey wings, with two dark zig-zag lines across each forewing, and one across each hindwing. The underside is nearly white, with broad black submarginal bands, and a dark dash near the middle of each forewing costa. The wingspan is 35–40 mm.



127. *Pingasa ruginaria*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pingasa ruginaria is a species of moth of the family Geometridae. It is found in India, south-east Asia, the Ryukyu Islands and Sundaland. It has a wingspan ranging from approximately 20 to 40 mm. This species resembles a range of earthy or muted tones, such as shades of brown, grey, or beige. These colours often feature intricate patterns, such as lines or spots. The underside is yellow white coloured with broad black submarginal bands.

128. *Polyura athamas*

Common Name	: The Common Nawab
Local Name	: <i>Kupu Ekor Gunting</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common nawab is a species belongs to the Nymphalidae family. Found in India, Nepal, Sri Lanka, Bhutan, Tibet, Myanmar, Thailand, Malaysia, Vietnam, China, Laos, Cambodia, Taiwan, Brunei, Kalimantan, Philippines, Sumatra, Sulawesi, Java, Lombok and Timor. The wingspan ranged from 64–85 mm. *P. athamas* has dark brown or black upper wings with pale yellow spots, sometimes with a greenish tinge. The underside of the wings is light green with a wide margin of light brown. It has two tails on the hindwings.

129. *Polyura cf. alphius*

Common Name	: Staudinger's Nawab
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Polyura alphius, is a butterfly in the family Nymphalidae found on Timor and Sulawesi. Its wingspan typically approximately 80 mm. It is often displaying vibrant colours and patterns. The forewings of upper side are usually brown or dark with prominent white or cream markings, while the hindwings can be more colourful with contrasting patterns and extended into tail-like projections. The underside is typically a pale, light brown or greyish colour.



130. *Potamarcha congener*

Common Name	: Yellow-Tailed Ashy Skimmer
Local Name	: <i>Capung Jemur Tarum</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The yellow-tailed ashy skimmer or swampwatcher is a species of dragonfly in the family Libellulidae found in South Asia, South-East Asia, and Oceania, including India, Indonesia, China, Australia, and Vietnam. *P. congener* is a medium-sized dragonfly with a bluish black thorax and yellow tail with black markings. Its hindwing sized about 33–37 mm for female and about 33–35 mm for male.

131. *Prosotas nora*

Common Name	: Common lineblue
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common lineblue is a species of Lycaenidae family found in Asia to Australia including India, Indonesia, New Guinea, Philippines, Taiwan, Thailand, and Queensland. The adult butterflies have a small tail at each hindwing. The adult male is brown with a purple sheen on top. The females are brown with an arc of black spots along the margin of each hindwing ending in a big spot by the tail. The underside wings are fawn, with multiple arcs of white dashes, and with a black spot beside the tail of each hindwing. The wingspan is about 20 mm.

132. *Pseudagrion pilidorsum declaratum*

Common Name	: Red Sprite
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pseudagrion pilidorsum declaratum is a sub-species of damselfly belonging to the family Coenagrionidae found in Indonesia. The male damselfly is bright red with black pattern on the abdomen. It also has a red head, same goes for its face and eyes. Different from males, the females are brown in color. It is generally small to medium-sized for about 25–35 mm in body length.



133. *Psilogamma discistriga*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Psilogamma discistriga is a moth of the family Sphingidae. It is found in South Asia and South-East Asia including Indonesia. The wingspan of is ranged from about 60 to 80 mm. These moths have a distinctive appearance with a forewing that typically features a range of colours from brown to reddish-brown with darker lines and bands. The hindwings are usually monotone in dark brown colour.

134. *Pterostichus* sp.

Common Name	: Blackclock Ground Beetle
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Pterostichus is a genus of ground beetles in the family Carabidae. It has over 2,000 species with wide distribution covering various regions throughout the globe. This genus is medium-sized beetles ranging from 5.5 to 21 mm. They often have a robust, oval body shape with a range of colours, including black, brown, or metallic hues. Their coloration can be quite variable depending on the species.

135. *Ramadasa pavo*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Ramadasa pavo is a moth of the family Noctuidae. It is found in south-east Asia, including Sumatra, Borneo, Sabah, Sulawesi, Thailand, Sri Lanka, India, and China. The wingspan is 45 mm in male and 50 mm in female. The head and thorax are covered in grey and brown scales. The forewings have a greyish base with brown mottling. There is a slanted black line in the middle, with a reddish tint on its outer side. The outer area is a light chestnut colour. The hindwings are yellowish orange.



136. *Rapala iarbus*

Common Name	: Common Red Flash
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The common red flash is a species of Lycaenidae family found in South and Southeast Asia. It has red-orange upper wings with costal side and distal front wings are dark brown, female is dull copper brown. The underside of the wing is pale grey, having a pale brown post-discal band that is white on the outside. The hind wing has a prominent black spot with an orange crown in space 2. This species has a white tipped tail at the end of the 2nd vein, white legs and black stripes. Its wingspan ranged from 32–37 mm.

137. *Rhincocypha pagenstecheri*

Common Name	: -
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Rhincocypha pagenstecheri is a species of Chlorocyphidae family found in Indonesia. The adults typically exhibit striking colours and patterns. They often have vivid metallic red, greens and blues with distinctive markings. Males are generally more brightly coloured compared to females. The wings are usually transparent with intricate venation and with huge black/dark tip on each wing.

138. *Scopula* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Scopula is a genus of moths in the family Geometridae widespread globally. These moths are characterized by their slender bodies and broad wings. Many species have muted colours such as browns, white, greys, and tans with intricate patterns of lines, stripes, or spots, which can be quite striking. Scopula moths typically have a wingspan ranging from about 20–33 mm.



139. *Spoladea recurvalis*

Common Name	: Beet webworm moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Spoladea recurvalis, the beet webworm moth is a species of moth of the family Crambidae. It is found worldwide. The wingspan is 22–24 mm. Forewing dark brown or grey with broad white median band beginning at inner margin and terminating in “fishhook” shape before reaching costa. The larvae do the damage, and when numerous can defoliate crops rapidly. They also attack, flowers and pods.

140. *Tetrathemis irregularis*

Common Name	: Rainforest Elf
Local Name	: <i>Capung-Tengger Peri-Hutan</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Tetrathemis irregularis is a species of dragonfly in the family Libellulidae. It is inhabiting rainforest streams in north-eastern Australia and Southeast Asia, including Indonesia. It is a tiny to small, slender dragonfly with wingspan of about 40–50 mm. it characterized by black and yellow colour on abdomen and thorax. The wings is clear or pale base with wingtips.

141. *Theretra oldenlandiae*

Common Name	: White-banded Hunter Hawkmoth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Theretra oldenlandiae, the white-banded hunter hawkmoth is a moth of the family Sphingidae. Is found in India, Sri Lanka, China, Borneo, Japan, the Philippines, Thailand, and Australia. It's sized about 60 mm in wingspan. The adult moth is brown, with a light stripe edged with dark brown extending from the hind margin to the tip of each forewing. The hind margin is sinuously curved. The moth has a pair of white stripes running along its back from its nose to its tail.



142. *Tirumala limniace*

Common Name	: The Blue Tiger butterfly
Local Name	: <i>Kupu-kupu harimau biru</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Tirumala limniace, the blue tiger is a species of butterfly that belongs to the brush-footed butterfly family (Nymphalidae) found in South Asia, and Southeast Asia. It has black upper wings with pale blueish markings, the underside is much lighter. The forewing cells have basal streaks and irregular distal points, the hind wing cells are blueish with a slight black colour remaining. Its wingspan can extent more than 30 mm.

143. *Tridrepana cf. fulvata*

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Tridrepana fulvata is a moth in the family Drepanidae found in China, India, Myanmar, Malaysia, and Indonesia. This is a common species of lowland forest. This species is bright yellow coloured with rufous shading restricted to fine, irregular fasciae and a conspicuous patch just posterior to the white forewing discal spots. Its wingspan is 30–38 mm for males and 32.5–45 mm for females.

144. *Trigonodes hyppasia*

Common Name	: Triangles moth
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Trigonodes hyppasia, the triangles is a moth in the family Erebidae. It is found throughout Borneo, Fiji, India, Maldives, Nepal, Sri Lanka, São Tomé and Príncipe, Taiwan, Thailand, Zimbabwe, northern Australia, and most of African countries. The adult moth has brown forewings each with two pale-edged blackish triangles that together form a triangle outlined in white and has plain brown hindwings. It has a wingspan of about 30 mm.



145. *Trithemis festiva*

Common Name	: Black Stream Glider
Local Name	: <i>Capung sambar tarum</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



The black stream glider is a species of dragonfly in the family Libellulidae. It is a widespread species, occurring from Greece, Cyprus and Turkey, throughout Asia to New Guinea. It is a medium-sized dragonfly (Hind wing: 26–32 mm). The male, the frontal area appears darker purplish grey. The thorax is black, covered with purple pruinescence, which helps it appear deep blue. The female looks brown in the front and extends above. Thorax is greenish yellow to olivaceous, with the presence of a medial dark brown lateral stripe.

146. *Trithemis lilacina*

Common Name	: Lilac Dropwing
Local Name	: -
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Trithemis lilacina, the lilac dropwing is a species of dragonfly in the family Libellulidae found in Indonesia. The males typically have a vibrant lilac or pinkish-purple hue on their wings and bodies. Their wings are often translucent with a lilac tint. Females and younger individuals can be less vividly coloured, often exhibiting more subdued tones such as pale to yellowish colour. The wingspan could reach about 60 mm.

147. *Troides haliphron*

Common Name	: Haliphron Birdwing
Local Name	: <i>Kupu-kupu raja haliphron</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



The haliphron birdwing, is a butterfly of Papilionidae family confined to Sulawesi and the lesser Sunda Islands. Its wingspan sized from 100–140 mm. The forewings ground colour of males is black with white shading bordered veins and the hindwings are ground colour black with a golden band in the discal area of the wing. The females ground colour is brown. The veins are bordered by white shading. There is a yellow area with dark veins on the hindwings. The abdomen is dark brown with yellow spots on the underside.



148. *Troides helena*

Common Name	: Black-and-gold Birdwing
Local Name	: <i>Kupu-kupu raja helena</i>
IUCN	: Least Concern
CITES	: App. II
INA Reg. (P106)	: Protected



Troides helena is a butterfly belonging to the family Papilionidae. It is widespread in Sumatra, Java, Bali, West Nusa Tenggara, Kalimantan, Sulawesi and also in northern India to Malaysia, Singapore and Australia. This species features black forewings with grey stripes on the upper side, which are more noticeable in females. The back wings are golden yellow with black lines and edges. The underside is similar. Its wingspan could reach 140–170 mm.

149. *Vindula dejone*

Common Name	: Malay Cruiser butterfly
Local Name	: <i>Kupu-kupu Penjelajah Melayu</i>
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Vindula dejone, the Malay cruiser is a butterfly from the family Nymphalidae found in Southeast Asia. The males have golden orange forewings with broad, pale post-discal bands on both wings. The hindwings are marked with a dark sub-marginal stripe and eyespot. The female butterfly has grey upper wings with a prominent white post-discal band, and on the hindwings, there is orange ringed eyespot. This species has a short, pointed tail at the hind wing. Its wingspan ranged from 70–80 mm.

150. *Vitessa* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Vitessa is a genus of moth belongs to the family Pyralidae found in India, Bangladesh, Myanmar, Thailand, Vietnam, Sri Lanka, Indonesia, New Guinea, and northern Australia. This moth known for their varied and often intricate wing patterns. These moths are black and white, with yellow on the head, thorax, and bases of the wings. The moths have a wingspan of about 40 mm.



151. *Xyleutes* sp.

Common Name	: -
Local Name	: -
IUCN	: Not evaluated
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Xyleutes is a genus of moths belonging to the family Cossidae found in India, Southeast Asia, Sundaland, Philippines, Sulawesi, Moluccas, New Guinea, and Australia. They have black thorax and a bone white ground colour to the evenly reticulate forewings. Their wing coloration and patterns can vary, often including shades of brown, grey, or white, with intricate patterns. The wingspan is about 40–64 mm.

152. *Zyxomma obtusum*

Common Name	: White Duskdater dragonfly
Local Name	: <i>Capung-Sambar Putih</i>
IUCN	: Least Concern
CITES	: Not Listed
INA Reg. (P106)	: Not Protected



Zyxomma obtusum, the white duskdater dragonfly is a dragonfly in the family Libellulidae found in Southeast Asia, India, Japan, and Australia. The wingspan could reach 80 mm. The male dragonfly has a white or pale body with darker markings, while the female tends to have a more subdued colour palette, often brownish or yellowish with less pronounced markings. The wings are typically clear with a slight iridescence and may have dark markings or bands.

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Appendix

Taxon (Species/Genus)	Reference Photo	Author/Year
1. Potential Critical Habitat Species		
<i>Nisaetus floris</i>	https://inaturalist.ala.org.au/photos/21314656	Yovie Jehabut, 2018
<i>Gracula venerata</i>	https://birdsoftheworld.org/bow/species/cohmyrn2/cur/introduction?media=photos	Simon Van Der Meulen, 2015
<i>Treron floris</i>	https://macaulaylibrary.org/asset/205960321	Lars Petersson
<i>Chelonia mydas</i>	https://www.inaturalist.org/photos/355070655	Bryan Ramdeen, 2024
<i>Eretmochelys imbricata</i>	https://www.inaturalist.org/photos/1375632	Iván Cumpián, 2012
<i>Lepidochelys olivacea</i>	https://www.inaturalist.org/photos/178886820	Moovendankings, 2022
<i>Rhinocodon typus</i>	https://www.inaturalist.org/photos/300450835	Paul Sorensen 2008
<i>Stenella longirostris</i>	https://www.inaturalist.org/photos/276877559	Nathan Cook, 2023
<i>Tursiops aduncus</i>	https://www.inaturalist.org/photos/289838970	Anarid, 2021
<i>Tursiops truncatus</i>	https://www.inaturalist.org/photos/211066160	Rafi Amar, 2019
2. Freshwater Fish		
<i>Acentrogobius audax</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=8860&win=uploaded	Mansor Mat Isa
<i>Acentrogobius janthinopterus</i>	Dianne J. Bray, <i>Acentrogobius janthinopterus</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/60	Rick Winterbottom / Fishwise Professional
<i>Ambassis buruensis</i>	https://fishdb.sinica.edu.tw/eng/showpic.php?filename=NMNSF00410&science=Ambassis%20buruensis	Lab Of Fish Ecol. And Evo., Brcas
<i>Ambassis nalua</i>	Dianne J. Bray, <i>Ambassis nalua</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/4648	Jeffrey T. Williams / Smithsonian Institution, National Museum of Natural History, Division of Fishes.
<i>Anabas testudineus</i>	https://id.m.wikipedia.org/wiki/Berkas:Anabas_testudineus.png	Sahat Ratmuangkhwang, 2012
<i>Anguilla marmorata</i>	https://www.inaturalist.org/observations/44358544	Mahomed Desai
<i>Arothron hispidus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=10&ID=5425&what=species	Randall, J.E., 1997
<i>Arothron manilensis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=7187&what=species	Randall, J.E., 1997
<i>Balitoropsis zollingeri</i>	Florida Museum of Natural History Ichthyology, sous licence http://creativecommons.org/licenses/by-nc/4.0/	Florida Museum of Natural History Ichthyology
<i>Butis butis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=8035&what=species	Ratmuangkhwang, S.
<i>Chanos chanos</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=80&what=species	Randall, J.E., 1997
<i>Clarias batrachus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=16&ID=3054&what=species	Reyes, R.B.
<i>Crenimugil seheli</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=5659&what=species	Randall, J.E., 1997

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Eleotris fusca</i>	Martin F. Gomon & Dianne J. Bray, <i>Eleotris fusca</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/4141	Jeffrey T. Williams / 2006 Moorea Biocode
<i>Eleotris melanosoma</i>	Martin F. Gomon, <i>Eleotris melanosoma</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/1164	Dinh D. Tran, Fimsea
<i>Ellochelon vaigiensis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=5656&what=species	Randall, J.E., 1997
<i>Gerres filamentosus</i>	https://fishbase.se/photos/UploadedBy.php?autoctr=26905&win=uploaded	Raju Saravanan
<i>Giuris margaritaceus</i>	http://bins.boldsystems.org/index.php/Public_RecordView?processid=BIFKJ346-19	Nicolas Hubert
<i>Glossogobius giuris</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=12&ID=4833&what=species	Reyes, R.B.
<i>Kuhlia marginata</i>	Martin F. Gomon & Dianne J. Bray, <i>Kuhlia marginata</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/4458	Yuichi Kano, Fimsea / Http://Ffish.Asia
<i>Kuhlia rupestris</i>	Gomon M.F. & Bray, D.J. 2020, <i>Kuhlia rupestris</i> in Fishes of Australia, accessed 21 Aug 2024, https://fishesofaustralia.net.au/home/species/4456	Yuichi Kano, Fimsea / Http://Ffish.Asia
<i>Monopterus albus</i>	https://www.inaturalist.org/observations/42734529	sushantmore
<i>Neodontobutis aurarmus</i>	http://www.siamensis.org/species_index?nid=7825#7825--Species%20:%20Neodontobutis%20aurarmus	Nonn Panitvaong
<i>Ompok hypophthalmus</i>	https://www.fao.org/fishery/docs/CDrom/AwarnessAgrBiodiv/fishes/Pis051A.pdf	Fao
<i>Ophiocara porocephala</i>	https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/027dd6b8-6f0f-493b-9a23-630b77522354	Australian National Fish Collection Images, Csiro
<i>Oreochromis niloticus</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=46257&win=uploaded	Cyrus Rumisha
<i>Oxyleotris marmorata</i>	Chan, Jeffery C. F., Tsang, Alphonse H. F., Yau, Sze-man, Hui, Tommy C. H., Lau, Anthony, Tan, Heok Hui, Low, Bi Wei, Dudgeon, David & Liew, Jia Huan, 2023, The non-native freshwater fishes of Hong Kong: diversity, distributions, and origins, <i>Raffles Bulletin of Zoology</i> 71, pp. 128-168 : 140	Chan et al., 2023
<i>Oxyleotris urophthalmoides</i>	https://commons.wikimedia.org/wiki/File:FMIB_45730_Philypnodon_grandiceps.jpeg	Edgar Ravenswood Waite
<i>Oxygaster anomalura</i>	https://www.gbif.org/occurrence/3712719620	Faridmuzaki
<i>Pelates quadrilineatus</i>	Dianne J. Bray, <i>Pelates quadrilineatus</i> in Fishes of Australia, accessed 19 Apr 2024, https://fishesofaustralia.net.au/home/species/697	Australian National Fish Collection, Csiro
<i>Perccottus glenii</i>	https://commons.wikimedia.org/wiki/File:Percottus_glenii_2009_G1.jpg	George Chernilevsky
<i>Periophthalmus argentilineatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=7480&what=species	Randall, J.E., 1997
<i>Pseudogobius poecilosoma</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=25093&what=species	Ratmuangkhwang, S.
<i>Schismatogobius marmoratus</i>	https://media.leibniz-lib.de/eaurls/image/130276/full/full/0/ICH-066060_S.jpg	Lib - Leibniz-Institut Zur Analyse Des Biodiversitätswandels
<i>Sicyopterus micrurus</i>	https://eol.org/pages/341739	Nicolas Hubert

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Sicyopus cf. rubicundus</i>	Keith P, Hadiaty R, Busson F, Hubert N. 2014. A new species of <i>Sicyopus</i> (Gobiidae) from Java and Bali. <i>Cybiurn</i> 38 (3): 173-178. DOI: 10.26028/cybiurn/2014-383-002.	Keith Et Al., 2014
<i>Sicyopterus exallissquamulus</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=30410&win=uploaded	Laurent Pasteur
<i>Stiphodon ornatus</i>	https://www.aquariumglaser.de/en/25-perchlike-fishes/stiphodon-ornatus-2/	Frank Schäfer
<i>Stiphodon elegans</i>	https://eol.org/pages/46576774	Moorea Biocode
3. Freshwater Invertebrates		
<i>Cardisoma carnifex</i>	https://www.crustaceology.com/product/cardisoma-carnifex-3	Guido & Philippe Poppe
<i>Caridina typus</i>	https://www.marinespecies.org/aphia.php?p=image&pic=151117&tid=582125	Fujita Et Al., 2016;
<i>Coenobita cavipes</i>	https://www.inaturalist.org/photos/20859463	Chang, Jack, Chih-Wei
<i>Episesarma versicolor</i>	https://www.crabdatabase.info/en/crabs/brachyura/eubrachyura/thoracotremata/grapsoidae/sesarmidae/episesarma/episesarma-versicolor-1699	Mos Nattapat
<i>Isolapotamon cf. mahakkamense</i>	McFarlane, D., Lundberg, J., & Christenson, K. (2011). New records of crabs from the caves of Gunung Mulu National Park, Sarawak, with a field key to the cavernicolous taxa of Northern Sarawak. <i>Speleobiology Notes</i> , 3(1), 11-18	Mcfarlane Et Al., 2011
<i>Macrobrachium acanthurus</i>	https://gallery.nanfa.org/v/members/zooxanthellae/shrimps/Macrobrachium-acanthurus.html?g2_imageViewsIndex=2	Nanfa-North American Native Fishes Association
<i>Macrobrachium asperulum</i>	https://www.inaturalist.org/photos/404600182	Lsh_63329
<i>Macrobrachium lar</i>	Lorax Indonesia. 2022. Pani Project Environmental Baseline Study: Aquatic Ecology and Water Quality (May 2022). Lorax, Jakarta, Indonesia.	Lorax, 2022
<i>Macrobrachium latimanus</i>	https://www.inaturalist.org/observations/27377019	Valentin de Mazancourt
<i>Malayopotamon granulatum</i>	McFarlane, D., Lundberg, J., & Christenson, K. (2011). New records of crabs from the caves of Gunung Mulu National Park, Sarawak, with a field key to the cavernicolous taxa of Northern Sarawak. <i>Speleobiology Notes</i> , 3(1), 11-18	Mcfarlane Et Al., 2011
<i>Metapenaeus affinis</i>	https://www.inaturalist.org/photos/225241311	Zayn Al-Najm
<i>Metapenaeus ensis</i>	https://commons.wikimedia.org/wiki/File:Yoshiebi1206.jpg	ふうけ - Fuuke
<i>Metopograpsus frontalis</i>	https://www.inaturalist.org/photos/18604643	Ondrej Radosta
<i>Ocypode cordimana</i>	https://uk.inaturalist.org/photos/2849510	Jakob Fahr
<i>Palaemon concinnus</i>	https://crust.biodiv.tw/showpic.php	Taiwan Large Crustacean Database
<i>Palaemon styliferus</i>	Zare P, Ghasemi E, Sarfaraz S. 2010. The First Record of <i>Exopalaemon styliferus</i> (H. Milne-Edwards, 1840) (Decapoda: Caridea: Palaemonidae) from Iran. <i>Turkish Journal of Fisheries and Aquatic Sciences</i> , 10: 523-525. DOI: 10.4194/trjfas.2010.0412	Zare Et Al., 2010
<i>Parasesarma bidens</i>	https://inaturalist.ca/photos/60889580	Huichuntung
<i>Parasesarma darwinensis</i>	https://ranong.myspecies.info/category/clade/flora-and-fauna/crustacea/decapoda/brachyura/sesarmidae/perisesarma-darwinensis	Gordon Paterson
<i>Parathelphusa convexa</i>	https://www.inaturalist.org/photos/251546595	Pandu Ilmi Prastyanto

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Penaeus indicus</i>	https://www.nucleomeinfo.com/iso-sequencing-of-indian-white-shrimp-penaeus-indicus/	Icar-Ciba Chennai
<i>Penaeus monodon</i>	Wakida-Kusunoki, A. T., Rojas-González, R. I., González-Cruz, A., Amador del Ángel, L. E., Sánchez-Cruz, J.L., & López-Tellex, N. A. (2016). Presence of giant tiger shrimp <i>Penaeus monodon</i> Fabricius, 1798 on the Mexican coast of the Gulf of Mexico. <i>Bioinvasions Records</i> , 2(4), 325-328.	Et Al., 2016
<i>Penaeus setiferus</i>	https://seahistory.org/sea-history-for-kids/white-shrimp/	-
<i>Penaeus vannamei</i>	https://www.inaturalist.org/photos/1441420	José Francisco Colorado-Dapa
<i>Pseudograpsus cf. setosus</i>	https://uk.inaturalist.org/photos/175236908	Sdyangung
<i>Sarmatium crassum</i>	Bhat, M., Rivonker, C., Patel, K., & Trivedi, J. (2021). First confirmed record of <i>Sarmatium crassum</i> Dana, 1851 (Crustacea: Decapoda: Sesamidae) from India. <i>Nauplius</i> , 29, e2021042.	Bhat Et Al., 2021
<i>Scylla serrata</i>	https://www.inaturalist.org/photos/334712474	Scott Edmunds
<i>Shinobium trapezoideum</i>	https://inaturalist.ca/photos/29206960	李政璋
<i>Varuna litterata</i>	https://www.inaturalist.org/photos/43973009	Ondrej Radosta
4. Coral		
<i>Acanthastrea</i> sp.	https://www.inaturalist.org/photos/157235611	Pierre-Louis Stenger
<i>Acropora</i> sp.	https://www.inaturalist.org/photos/150454169	Jean-Paul Boerekamps
<i>Alveopora</i> sp.	https://www.inaturalist.org/photos/349980659	Akubikonoha
<i>Astrea</i> sp.	https://www.inaturalist.org/photos/396009972	Debra Baker
<i>Astreopora</i> sp.	https://www.inaturalist.org/observations/142588081	Jean-Paul Boerekamps
<i>Caulastrea</i> sp.	https://www.inaturalist.org/photos/292886642	Debra Baker
<i>Coscinaraea</i> sp.	https://www.inaturalist.org/photos/151441322	Jean-Paul Boerekamps
<i>Cyphastrea</i> sp.	https://www.inaturalist.org/photos/92102963	Damien Brouste
<i>Diploastrea</i> sp.	https://www.inaturalist.org/photos/243480311	Jean-Paul Boerekamps
<i>Dipsastrea</i> sp.	https://www.inaturalist.org/photos/247206057	Stewart Clarke
<i>Duncanopsammia</i> sp.	https://www.inaturalist.org/photos/383793795	Debra Baker
<i>Echinophyllia</i> sp.	https://www.inaturalist.org/photos/94953621	Damien Brouste
<i>Echinopora</i> sp.	https://www.inaturalist.org/photos/243482238	Jean-Paul Boerekamps
<i>Favites</i> sp.	https://www.inaturalist.org/photos/148344263	Jean-Paul Boerekamps
<i>Galaxea</i> sp.	https://www.inaturalist.org/photos/234368778	Jean-Paul Boerekamps
<i>Gardineroseris</i> sp.	https://www.inaturalist.org/observations/236475690	Jean-Paul Boerekamps
<i>Goniastrea</i> sp.	https://www.inaturalist.org/photos/260382189	Ingo Rogalla
<i>Goniopora</i> sp.	https://www.inaturalist.org/photos/25525341	Shuchen_Huang
<i>Hydnophora</i> sp.	https://www.inaturalist.org/photos/151373373	Jean-Paul Boerekamps
<i>Junceella</i> sp.	https://www.inaturalist.org/photos/51282168	Anne Hoggett
<i>Leptastrea</i> sp.	https://www.inaturalist.org/photos/420706523	Jean-Paul Boerekamps
<i>Leptaria</i> sp.	https://www.inaturalist.org/photos/303472183	Jean-Paul Boerekamps
<i>Leptoseris</i> sp.	https://www.inaturalist.org/photos/168342875	Jean-Paul Boerekamps
<i>Lobophyllia</i> sp.	https://www.inaturalist.org/photos/91945250	Damien Brouste
<i>Millepora</i> sp.	https://www.inaturalist.org/photos/189606066	Dan Schofield
<i>Montipora</i> sp.	https://www.inaturalist.org/photos/232866746	D. Torres-Pulliza
<i>Mycedium</i> sp.	https://www.inaturalist.org/photos/420706561	Jean-Paul Boerekamps

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Oulophyllia</i> sp.	https://www.inaturalist.org/photos/241583730	Jean-Paul Boerekamps
<i>Pachyseris</i> sp.	https://www.inaturalist.org/photos/337125586	Jean-Paul Boerekamps
<i>Pavona</i> sp.	https://www.inaturalist.org/photos/305359108	Jean-Paul Boerekamps
<i>Physogyra</i> sp.	https://www.inaturalist.org/photos/332676927	Mark Rosenstein
<i>Platygyra</i> sp.	https://www.inaturalist.org/photos/104139420	Robin White
<i>Pleuractis</i> sp.	https://www.inaturalist.org/photos/244496962	Jean-Paul Boerekamps
<i>Pocillopora</i> sp.	https://www.inaturalist.org/photos/419991166	Jean-Paul Boerekamps
<i>Polyphyllia</i> sp.	https://www.inaturalist.org/photos/287417102	Debra Baker
<i>Porites</i> sp.	https://www.inaturalist.org/photos/241602744	Jean-Paul Boerekamps
<i>Psammocora</i> sp.	https://www.inaturalist.org/photos/419960864	Jean-Paul Boerekamps
<i>Sandalolitha</i> sp.	https://www.inaturalist.org/photos/70842155	Anne Hoggett
<i>Sarcophyton</i> sp.	https://www.inaturalist.org/photos/201842726	Giancarlo
<i>Sinularia</i> sp.	https://www.inaturalist.org/photos/162873709	New Heaven Reef Conservation Program
<i>Tubipora</i> sp.	https://www.inaturalist.org/photos/7536255	Claudia Pogoreutz
<i>Turbinaria</i> sp.	https://www.inaturalist.org/photos/149336047	Jean-Paul Boerekamps
<i>Zoanthus</i> sp.	https://www.inaturalist.org/photos/336192063	Debra Baker

5. Marine Fish

<i>Ablennes hians</i>	https://fishesofaustralia.net.au/home/species/2090	Australian National Fish Collection, CSIRO
<i>Abudefduf bengalensis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=6517&what=species	Randall, J.E., 1997
<i>Abudefduf sexfasciatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=8&ID=5688&what=species	Randall, J.E., 1997
<i>Abudefduf sordidus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=5689&what=species	Randall, J.E., 1997
<i>Abudefduf vaigiensis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=16&ID=6630&what=species	Randall, J.E., 1997
<i>Acanthocybium solandri</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=28777&win=uploaded	Gianemilio Rusconi
<i>Acanthopagrus latus</i>	https://fishesofaustralia.net.au/home/species/675	Barry Hutchins / Western Australian Museum.
<i>Acanthopagrus schlegelii</i>	https://www.inaturalist.org/photos/297645637	Seokinyang
<i>Acanthurus auranticavus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=4748&what=species	Randall, J.E., 1997
<i>Acanthurus blochii</i>	https://fishesofaustralia.net.au/home/species/1022	Erik Schlogl
<i>Acanthurus grammoptilus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=4749&what=species	Randall, J.E., 1997
<i>Acanthurus leucocheilus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=4741&what=species	Randall, J.E., 1997
<i>Acanthurus mata</i>	https://www.inaturalist.org/photos/15715526	Tony Rebelo
<i>Acanthurus nigricans</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=29182&win=uploaded	Francois Libert, 2016
<i>Acanthurus nigrofuscus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=4739&what=species	Randall, J.E., 1997
<i>Acanthurus olivaceus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=4744&what=species	Randall, J.E., 1997

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Acanthurus thompsoni</i>	https://fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=4734&what=species	Randall, J.E., 1997
<i>Acanthurus triostegus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=1260&what=species	Randall, J.E., 1997
<i>Aethaloperca rogaa</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=6441&what=species	Randall, J.E., 1997
<i>Alepes djedaba</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=1889&what=species	Randall, J.E., 1997
<i>Alepes kleinii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=1903&what=species	Randall, J.E., 1997
<i>Alopias pelagicus</i>	https://fishesofaustralia.net.au/Home/species/3257	Australian National Fish Collection, Csiro.
<i>Alopias superciliosus</i>	https://fishesofaustralia.net.au/home/species/1849	Australian National Fish Collection, Csiro.
<i>Alopias vulpinus</i>	https://fishesofaustralia.net.au/home/species/1850	Australian National Fish Collection, Csiro.
<i>Amblygaster leiogaster</i>	https://commons.wikimedia.org/wiki/File:Amblygaster_leiogaster.jpg	Bedo
<i>Amblygaster sirm</i>	http://commons.wikimedia.org/wiki/File:Amblygaster_sirm.jpg	Sahat Ratmuangkhwang
<i>Ammodytes hexapterus</i>	https://www.inaturalist.org/photos/311419327	Cameron Eckert
<i>Amphiprion clarkii</i>	https://fishesofaustralia.net.au/home/species/316	Graham Edgar / Reef Life Survey.
<i>Amphiprion polymnus</i>	https://fishesofaustralia.net.au/home/species/318	Australian National Fish Collection, Csiro.
<i>Andamia tetradactylus</i>	https://www.inaturalist.org/photos/261582695	Engelbertwaldmann
<i>Antigonia rubicunda</i>	https://www.inaturalist.org/photos/181298679	Ken Graham
<i>Aphareus rutilans</i>	https://fishesofaustralia.net.au/home/species/1236	Australian National Fish Collection, Csiro.
<i>Apolemichthys trimaculatus</i>	https://uk.inaturalist.org/photos/197978	Mark Rosenstien
<i>Aprion virescens</i>	https://fishesofaustralia.net.au/home/species/1237	Australian National Fish Collection, Csiro.
<i>Argyrops spinifer</i>	https://fishesofaustralia.net.au/home/species/677	Australian National Fish Collection, Csiro.
<i>Arothron stellatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=6526&what=species	Randall, J.E., 1997
<i>Aspericorvina jubata</i>	https://fishesofaustralia.net.au/Home/family/101	Ogilby 1908 Descriptions Of New Queensland Fishes
<i>Assessor flavissimus</i>	https://www.inaturalist.org/photos/331936978	Mark Rosenstien
<i>Assessor macneilli</i>	https://www.inaturalist.org/photos/258693434	Sylvain Le Bris
<i>Astronesthes indicus</i>	https://fishesofaustralia.net.au/home/species/4545	Museum Of Comparative Zoology, Harvard University
<i>Atherion elymus</i>	https://fishesofaustralia.net.au/home/species/4099	Gerald R. Allen
<i>Atule mate</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=1893&what=species	Randall, J.E., 1997
<i>Aurigequula fasciata</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=29093&win=uploaded	Sahat Ratmuangkhwang
<i>Auxis rochei</i>	https://fishesofaustralia.net.au/home/species/717	Randall, J.E., 1997

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Auxis thazard</i>	https://fishesofaustralia.net.au/Home/species/718	Australian National Fish Collection, Csiro.
<i>Balistapus undulatus</i>	https://www.inaturalist.org/photos/380211509	Francois Libert
<i>Balistoides conspicillum</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=2300&what=species	Randall, J.E., 1997
<i>Balistoides viridescens</i>	https://www.fishbase.de/photos/PicturesSummary.php?resultPage=8&ID=6026&what=species	Randall, J.E., 1997
<i>Bathygobius fuscus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=7201&what=species	Randall, J.E., 1997
<i>Benthoosema fibulatum</i>	https://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=41451&win=uploaded	Hamid Badar Osmany
<i>Benthoosema pterotum</i>	https://www.inaturalist.org/taxa/95730-Benthoosema-pterotum	Ukwaj
<i>Bodianus dictynna</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=64242&what=species	Randall, J.E., 1997
<i>Bodianus mesothorax</i>	https://fishesofaustralia.net.au/home/species/215	Australian National Fish Collection, Csiro
<i>Bodianus tanyokidus</i>	https://fishdb.sinica.edu.tw/chi/specimenpic.php?pic=http://fishdb.sinica.edu.tw/images/ASIZP/500dpi/ASIZP0802471.jpg&asiz=ASIZP0802471&id=ASIZP0802471	Jiang Weiquan, The Fish Database Of Taiwan
<i>Bolbometopon muricatum</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=5537&what=species	Randall, J.E., 1997
<i>Bolinichthys indicus</i>	https://www.gbif.org/species/2405803	Saiae183-14 Lateral
<i>Bothus pantherinus</i>	https://fishesofaustralia.net.au/home/species/4687	Australian National Fish Collection, Csiro
<i>Brachirus orientalis</i>	https://fishesofaustralia.net.au/home/species/4730	Randall, J.E., 1997
<i>Branchiostegus japonicus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=4593&what=species	Randall, J.E., 1997
<i>Bregmaceros arabicus</i>	https://commons.wikimedia.org/wiki/File:Bregmaceros_atlanticus.jpg	G. Brown Goode And Tarleton H. Bean
<i>Bregmaceros atlanticus</i>	https://fishesofaustralia.net.au/home/species/4571	Brandi Noble / NOAA/Nmfs Mississippi Laboratory.
<i>Caesio caerulea</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=918&what=species	Randall, J.E., 1997
<i>Caesio cunning</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=919&what=species	Randall, J.E., 1997
<i>Caesio teres</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=35196&win=uploaded	Jiangguo Du
<i>Callionymus enneactis</i>	https://fishesofaustralia.net.au/home/species/52	Randall, J.E., 1997
<i>Calotomus carolinus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=4355&what=species	Randall, J.E., 1997
<i>Cantherhines fronticinctus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=7842&what=species	Randall, J.E., 1998
<i>Caragobius urolepis</i>	https://www.inaturalist.org/photos/30113855	Abner Bucol
<i>Carangoides armatus</i>	http://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=46263&win=uploaded	Dia Abdelsalam Yousuf
<i>Carangoides fulvoguttatus</i>	https://fishesofaustralia.net.au/home/species/4261	Australian National Fish Collection, Csiro
<i>Carangoides praeustus</i>	https://fishbase.se/photos/UploadedBy.php?autoctr=19180&win=uploaded	Sahat Ratmuangkhwang

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<i>Carangoides chrysophrys</i>	https://fishesofaustralia.net.au/home/species/4258	Australian National Fish Collection, Csiro
<i>Caranx bartholomaei</i>	https://www.inaturalist.org/photos/148936707	Daniel Pinelli
<i>Caranx ignobilis</i>	https://fishesofaustralia.net.au/home/species/4268	Australian National Fish Collection, Csiro
<i>Caranx melampygus</i>	https://www.inaturalist.org/photos/279565403	Cristian M. Galván Villa
<i>Caranx papuensis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6360&what=species	Randall, J.E., 1997
<i>Caranx sexfasciatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=1917&what=species	Randall, J.E., 1997
<i>Caranx tille</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=1928&what=species	Randall, J.E., 1997
<i>Centropyge bicolor</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=29210&win=uploaded	Karen Honeycutt
<i>Centropyge eibli</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=10870&what=species	Randall, J.E., 1997
<i>Centropyge ferrugatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=6667&what=species	Randall, J.E., 1997
<i>Centropyge vlorkii</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=5447&what=species	Randall, J.E., 1997
<i>Cephalopholis aitha</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=6442&what=species	Randall, J.E., 1997
<i>Cephalopholis argus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6396&what=species	Randall, J.E., 1997
<i>Cephalopholis formosa</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6446&what=species	Randall, J.E., 1997
<i>Cephalopholis sonnerati</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=6454&what=species	Randall, J.E., 1997
<i>Cephalopholis urodeta</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6456&what=species	Randall, J.E., 1997
<i>Chaetodon auriga</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=11&ID=5557&what=species	Randall, J.E., 1997
<i>Chaetodon decussatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=10352&what=species	Randall, J.E., 1997
<i>Chaetodon kleinii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=5446&what=species	Randall, J.E., 1997
<i>Chaetodon lunulatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=10&ID=14300&what=species	Randall, J.E., 1997
<i>Chaetodon melannotus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=5566&what=species	Randall, J.E., 1997
<i>Chaetodon quadrimaculatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=5572&what=species	Malaer, P.
<i>Chaetodon rafflesii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=5573&what=species	Randall, J.E., 1997
<i>Chaetodon tricinctus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=6636&what=species	Randall, J.E., 1997
<i>Chaetodon trifasciatis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=5578&what=species	Randall, J.E., 1997
<i>Chaetodon vagabundus</i>	https://www.inaturalist.org/photos/84610286	Joseph_Dibattista
<i>Cheilinus chlorourus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=20&ID=5598&what=species	Randall, J.E., 1997

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Cheilio inermis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=5623&what=species	Randall, J.E., 1997
<i>Cheilodipterus macrodon</i>	https://www.fishbase.de/photos/PicturesSummary.php?resultPage=8&ID=5781&what=species	Randall, J.E., 1997
<i>Chirocentrus dorab</i>	https://fishesofaustralia.net.au/home/species/2081	Australian National Fish Collection, Csiro.
<i>Chirocentrus nudus</i>	https://fishesofaustralia.net.au/home/species/3623	Randall, J.E., 1997
<i>Chlorurus bowersi</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=5542&what=species	Randall, J.E., 1997
<i>Chlorurus japanensis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=4978&what=species	Randall, J.E., 1997
<i>Chromis dimidiata</i>	https://www.inaturalist.org/photos/11908899	Nikolai Vladimirov
<i>Cirrhilabrus cyanopleura</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=5106&what=species & https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=5106&what=species	Randall, J.E., 1997
<i>Cirripectes imitator</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=4393&what=species	Randall, J.E., 1997
<i>Coilia mystus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=629&what=species	Cafs
<i>Cololabis saira</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=25304&win=uploaded	Hamid Badar Osmany
<i>Conger erebennus</i>	https://ffish.asia/?page=specimen&pid=55450	Ffish.Asia
<i>Coris pictoides</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=5107&what=species	Randall, J.E., 1997
<i>Ctenochaetus striatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=1262&what=species	Randall, J.E., 1997
<i>Cubiceps whiteleggii</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=30219&win=uploaded	Viji V
<i>Cymbacephalus bosschei</i>	https://fishesofaustralia.net.au/home/species/2175	Australian National Fish Collection, Csiro
<i>Cynoglossus arel</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=7523&what=species	Randall, J.E., 1997
<i>Cynoglossus bilineatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=5455&what=species	Randall, J.E., 1997
<i>Cynoglossus puncticeps</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=4807&what=species	Randall, J.E., 1997
<i>Cypselurus oligolepis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=15365&what=species	Randall, J.E., 1997
<i>Dascyllus trimaculatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=13&ID=5112&what=species	Randall, J.E., 1997
<i>Decapterus akaadsi</i>	https://fishesofaustralia.net.au/home/genus/413	Fao / Fishbase
<i>Decapterus macarellus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=993&what=species	Randall, J.E., 1997
<i>Decapterus macrosoma</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=29085&win=uploaded	Sahat Ratmuangkhwang
<i>Decapterus maruadsi</i>	https://www.inaturalist.org/photos/8363556	H.T.Cheng
<i>Dentex angolensis</i>	https://www.inaturalist.org/photos/61433014	Karim Haddad
<i>Dentex tumifrons</i>	https://www.fishbase.de/Summary/SpeciesSummary.php?id=4710&lang=bahasa ; https://www.marinespecies.org/aphia.php?p=taxdetails&id=273967	Randall, J.E., 1997

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<i>Deveximentum indicium</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=24263&win=uploaded	D.G.R. Wiadnya
<i>Diaphus aliciae</i>	https://inaturalist.ca/photos/111878386	Noaa
<i>Diaphus chryisorhynchus</i>	https://v3.boldsystems.org/index.php/Taxbrowser_Taxonpage?taxid=665806	Smithsonian Institution National Museum Of Natural History
<i>Diaphus regani</i>	https://inaturalist.ca/photos/111878386	Noaa
<i>Diaphus suborbitalis</i>	https://inaturalist.ca/photos/111878386	Noaa
<i>Diaphus watasei</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=11383&win=uploaded	Renju Ravi, Cochín
<i>Diodon hystrix</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=1022&what=species	Randall, J.E., 1997
<i>Diodon liturosus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=6552&what=species	Randall, J.E., 1997
<i>Dipterygonotus balteatus</i>	http://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=29099&win=uploaded	Sahat Ratmuangkhwang
<i>Dischistodus prosopotaenia</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=8&ID=6608&what=species	Randall, J.E., 1997
<i>Drepane longimana</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=7692&what=species	Randall, J.E., 1997
<i>Drepane punctata</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=18067&win=uploaded	Hamid Badar Osmany
<i>Dussumieria acuta</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=1453&what=species	Randall, J.E., 1997
<i>Dussumieria elopsoides</i>	https://fishbase.mnhn.fr/summary/Dussumieria-elopsoides.html ; https://fishesofaustralia.net.au/home/species/3980	Reyes, R.B., 2017
<i>Echidna canina</i>	https://www.fishbase.se/FieldGuide/FieldGuideSummary.php?genusname=Enchelynassa&speciesname=canina&code=392	K.H. Loh Et Al, 2012
<i>Echidna polyzona</i>	https://www.marinespecies.org/aphia.php?p=taxdetails&id=217467	Randall, J.E., 1982
<i>Elagatis bipinnulata</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=412&what=species	Randall, J.E., 1997
<i>Elops hawaiiensis</i>	Elops hawaiiensis (fishesofaustralia.net.au) ; https://www.melekperikanan.com/2020/09/ikan-bulan-bulan-atau-hawaiian-giant.html	Dinh D. Tran, 2008
<i>Encrasicholina heteroloba</i>	https://fishbase.mnhn.fr/summary/Encrasicholina-heteroloba.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=380974 ; https://www.gbif.org/occurrence/1019730295	P. Pruvost, 2013
<i>Encrasicholina punctifer</i>	https://fishbase.mnhn.fr/summary/Encrasicholina-punctifer.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=380975 ; https://fishesofaustralia.net.au/home/species/3770	Bray, D.J., Csiro, 2024
<i>Engraulis japonicus</i>	https://fishbase.mnhn.fr/summary/Engraulis-japonicus.html ; http://www.knock.ne.jp/cgi-bin/fishdetail.cgi?code=28650 ; https://www.gbif.org/occurrence/1265268471	S. Goto; South African Institute For Aquatic Biodiversity
<i>Enneapterygius theostoma</i>	https://www.fishbase.se/photos/PicturesSummary.php?ID=23564&what=species&showAll=yes	Randall, J.E., 1997
<i>Enneapterygius similis</i>	https://fishesofaustralia.net.au/home/species/1123#summary	Ian Shaw, 2012; 2013

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<i>Enneapterygius tutuilae</i>	https://fishbase.se/photos/PicturesSummary.php?&ID=47045&what=species&showAll=yes	Randall, J.E., 1997
<i>Epinephelus areolatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?&ID=5367&what=species&showAll=yes ; https://www.melekperikanan.com/2021/05/ikan-kerapu-macan-gerape-bandi-atau.html	Randall, J.E., 1997
<i>Epinephelus bleekeri</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=7333&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Epinephelus coioides</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=6465&what=species	Randall, J.E., 1997
<i>Epinephelus fasciatus</i>	https://fishider.org/id/guide/osteichthyes/serranidae/epinephelus/epinephelus-fasciatus ; https://www.fishbase.se/photos/PicturesSummary.php?resultPage=11&ID=5348&what=species	Randall, J.E., 1997
<i>Epinephelus faveatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=4&ID=7344&what=species	Randall, J.E., 1997
<i>Epinephelus lanceolatus</i>	https://fishider.org/id/guide/osteichthyes/serranidae/epinephelus/epinephelus-lanceolatus ; https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=6468#	Hamid B. Osmany, 2013
<i>Epinephelus longispinis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=7352&what=species	Randall, J.E., 1997
<i>Epinephelus macrospilus</i>	https://fishesofaustralia.net.au/home/species/4509 ; https://www.fishbase.se/photos/PicturesSummary.php?&ID=6661&what=species&showAll=yes	Csiri; Randall, J.E., 1997
<i>Epinephelus merra</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=4923&what=species ; https://www.melekperikanan.com/2021/11/ikan-kurisi-jepang-atau-japanese.html	Randall, J.E., 1997
<i>Epinephelus quoyanus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=10&ID=6475&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Erythrocles schlegelii</i>	https://fishbase.mnhn.fr/summary/Erythrocles-schlegelii.html ; https://www.melekperikanan.com/2021/11/ikan-kurisi-jepang-atau-japanese.html	Hamid B. Osmany, 2014
<i>Escualosa thoracata</i>	https://fishbase.mnhn.fr/summary/Escualosa-thoracata.html	Hamid B. Osmany, 2013
<i>Etelis coruscans</i>	https://fishbase.mnhn.fr/summary/Etelis-coruscans.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382094	N.Rault, 2009
<i>Ethmidium maculatum</i>	https://fishbase.mnhn.fr/summary/Ethmidium-maculatum.html	Daniel O.Villalba, 2010
<i>Eubleekeria jonesi</i>	https://fishbase.mnhn.fr/summary/Eubleekeria-jonesi.html ; https://biocache.ala.org.au/occurrences/400733c4-d593-435e-94ac-2eb93b5dbaa5	Australian National Fish Collection, Csiri
<i>Eubleekeria splendens</i>	https://fishbase.mnhn.fr/summary/Eubleekeria-splendens.html	Hamid B. Osmany, 2009
<i>Eumegistus illustris</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=23469&what=species	Randall, J.E., 1997
<i>Euthynnus affinis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=96&what=species	Randall, J.E., 1997
<i>Eviota punctulata</i>	https://fishbase.mnhn.fr/summary/Eviota-punctulata.html	Randall, J.E., 1997
<i>Ferdauia orthogrammus</i>	https://fishider.org/en/guide/osteichthyes/carangidae/ferdauia/carangoides-orthogrammus ; https://fishbase.mnhn.fr/photos/PicturesSummary.php?TRPP=999999&id=1909&what=species&showAll=yes	Randall, J.E., 1997

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<i>Filimanus hexanema</i>	https://repository.ub.ac.id/eprint/4697/51/BAB%20IV.pdf ; https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=14516	Motomura.H, 2004
<i>Filimanus perplexa</i>	https://v3.boldsystems.org/index.php/Taxbrowser_Taxonpage?taxid=191670 ; https://www.melekperikanan.com/2022/04/ikan-senangin-kurau-atau-splendid.html	Gery Purnomo A.S, 2022
<i>Fistularia commersonii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=10&ID=5444&what=species ; https://www.researchgate.net/publication/231960861_New_records_of_the_lessepsian_fish_Fistularia_commersonii_Osteichthyes_Fistulariidae_from_the_central_Tyrrhenian_Sea_signs_of_an_incoming_colonization	Psomadakis, Et.AL, 2009
<i>Forcipiger flavissimus</i>	https://www.fishbase.de/summary/SpeciesSummary.php?id=5584&lang=bahasa ; https://www.fishbase.de/photos/PicturesSummary.php?resultPage=9&ID=5584&what=species	Randall, J.E., 1997
<i>Forcipiger longirostris</i>	https://fishbase.mnhn.fr/summary/5585 ; https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=8&ID=5585&what=species	Randall, J.E., 1997
<i>Galeocerdo cuvier</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=886# ; https://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=18804&win=uploaded	Csiro & Hamid B. Osmany, 2013
<i>Gazza achlamys</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=5797&what=species	Randall, J.E., 1997
<i>Gazza minuta</i>	https://www.marinespecies.org/aphia.php?p=taxdetails&id=218451 ; https://fishesofaustralia.net.au/home/species/529	Jeffrey T. Williams, 2017
<i>Gempylus serpens</i>	https://fishbase.mnhn.fr/summary/Gempylus-serpens.html ; https://fishider.org/id/guide/osteichthyes/gempyliidae/gempylus-serpens ; https://fishesofaustralia.net.au/home/species/2529	Fishes Of Australia, 2024
<i>Gerres decacanthus</i>	https://v3.boldsystems.org/index.php/Taxbrowser_Taxonpage?taxid=951365 ; https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=55175&what=species	Fao
<i>Gerres erythrouros</i>	https://fishbase.mnhn.fr/summary/5800 ; https://fishesofaustralia.net.au/home/species/446 ; https://fishbase.mnhn.fr/photos/PicturesSummary.php?&ID=5800&what=species&showAll=yes	Randall, J.E., 1997
<i>Girella mezinga</i>	https://fishbase.mnhn.fr/summary/Girella-mezinga.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=381911 ; https://catalog.digitalarchives.tw/item/00/3f/ff/df.html	Mzli, 2008
<i>Girella punctata</i>	https://fishdb.sinica.edu.tw/eng/species.php?id=381912 ; file:///C:/Users/yanur/Documents/07%20Hu'u%20Project/Preliminary%20CHA/Template_Faunapedia/SPecies_Photo/Girella%20punctata-July%2025.pdf	Umi.K Et.AL, 2021
<i>Gnathanodon speciosus</i>	https://nas.erusgs.gov/queries/FactSheet.aspx?speciesID=3568 ; https://fishbase.mnhn.fr/summary/gnathanodon-speciosus	J.E. Randall, Bishop Museum
<i>Gymnocranius elongatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=8084&what=species ; https://fishdb.sinica.edu.tw/eng/showpic.php?filename=a718-01&science=Gymnocranius%20elongatus	Lab Of Fish Ecol. And Evo., Brcas, 2024
<i>Gymnocranius griseus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=1833&what=species ; https://fishdb.sinica.edu.tw/eng/species.php?id=382066	Lab Of Fish Ecol. And Evo., Brcas, 2024

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<i>Gymnosarda unicolor</i>	https://fishider.org/id/guide/osteichthyes/scombridae/gymnosarda-unicolor ; https://fishdb.sinica.edu.tw/eng/species.php?id=382488	Csiro
<i>Gymnothorax chilospilus</i>	https://fishbase.mnhn.fr/summary/Gymnothorax-chilospilus.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=380751	Randall, J.E., 1997
<i>Gymnothorax niphostigmus</i>	https://fishbase.mnhn.fr/summary/Gymnothorax-niphostigmus.html ; https://fishdb.sinica.edu.tw/chi/showpic.php?filename=F079_Gynip_u0&science=Gymnothorax%20niphostigmus	Shao G., 1993
<i>Gymnothorax richardsonii</i>	https://fishbase.mnhn.fr/summary/Gymnothorax-richardsonii.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=380774	Lab Of Fish Ecol. And Evo., Brcas
<i>Gymnothorax thyrsoideus</i>	https://fishbase.mnhn.fr/summary/Gymnothorax-thyrsoideus.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=380776	Randall, J.E., 1997
<i>Gymnothorax undulatus</i>	https://fishbase.mnhn.fr/summary/Gymnothorax-undulatus.html ; https://fishesofaustralia.net.au/Home/species/3818	Randall, J.E., 1997
<i>Halichoeres cosmetus</i>	https://fishbase.mnhn.fr/summary/Halichoeres-cosmetus.html	Randall, J.E., 1997
<i>Halichoeres hartzfeldii</i>	https://fishbase.mnhn.fr/summary/Halichoeres-hartzfeldii.html ; https://www.melekperikanan.com/2022/08/ikan-pelo-atau-checkerboard-wrasse.html	Melekperikanan.Com, 2019
<i>Halichoeres hortulanus</i>	https://fishbase.mnhn.fr/summary/Halichoeres-hortulanus.html ; https://www.melekperikanan.com/2022/08/ikan-pelo-keeling-perak-atau-goldstripe.html	Randall, J.E., 1997
<i>Halichoeres leucoxanthus</i>	https://fishbase.mnhn.fr/summary/Halichoeres-leucoxanthus.html ; https://uk.inaturalist.org/taxa/102051-Halichoeres-leucoxanthus	Randall, J.E., 1997
<i>Halichoeres nebulosus</i>	https://fishbase.mnhn.fr/summary/Halichoeres-nebulosus.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=381975	Randall, J.E., 1997
<i>Halichoeres nigrescens</i>	https://fishbase.mnhn.fr/summary/58179 ; https://ikanlautasliindonesia.blogspot.com/search?q=Halichoeres+nigrescens ; https://uk.inaturalist.org/taxa/102063-Halichoeres-nebulosus	Randall, J.E., 1997
<i>Halichoeres trimaculatus</i>	https://fishbase.mnhn.fr/summary/5634 ; https://australian.museum/learn/animals/fishes/threespot-wrasse-halichoeres-trimaculatus/	Randall, J.E., 1997
<i>Harpadon microchir</i>	https://gyorui1a.com/page-14/page-453/page-1942/mizutengu/ ; https://fishdb.sinica.edu.tw/eng/species.php?id=380838 ; https://fishbase.mnhn.fr/summary/Harpadon-microchir.html	Reyes, R.B., 2007
<i>Helcogramma inclinata</i>	https://fishbase.mnhn.fr/summary/Helcogramma-inclinata.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=383409 ; https://en.m.wikipedia.org/wiki/File:Helcogramma_inclinata_-_ZooKeys-216-057-g003b.jpeg	Chiang, M. C., 2012
<i>Helcogramma maldivensis</i>	https://fishbase.mnhn.fr/summary/25691 ; http://souslesmers.free.fr/f.php?e=948 ; https://www.inaturalist.org/photos/298724816	Joe. D.V, 2003; Josylai, 2023
<i>Helcogramma striata</i>	https://fishbase.mnhn.fr/summary/Helcogramma-striata.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=382676	Randall, J.E., 1997; Jiangguo D., 2018

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<i>Hemigaleus microstoma</i>	https://fishbase.mnhn.fr/summary/Hemigaleus-microstoma.html	Randall, J.E., 1997
<i>Hemiglyphidodon plagiometopon</i>	https://fishbase.mnhn.fr/summary/Hemiglyphidodon-plagiometopon.html ; https://www.melekperikanan.com/2022/10/ikan-tibok-padi-padi-atau-lagoon.html	Randall, J.E., 1997
<i>Hemiramphus far</i>	https://fishbase.mnhn.fr/summary/Hemiramphus-far.html ; https://www.melekperikanan.com/2021/02/ikan-julung-julung-oras-kacang-kacang.html	Randall, J.E., 1997
<i>Hemiramphus lutkei</i>	https://fishbase.mnhn.fr/summary/Hemiramphus-lutkei.html ; https://www.melekperikanan.com/2021/02/ikan-julung-julung-oras-atau-lutkes.html	Randall, J.E., 1997
<i>Heniochus acuminatus</i>	https://fishbase.mnhn.fr/summary/Heniochus-acuminatus.html ; https://www.melekperikanan.com/2022/06/ikan-karang-lencang-kuning-layaran.html	Randall, J.E., 1997
<i>Heteropriacanthus cruentatus</i>	https://fishbase.mnhn.fr/summary/1150 ; https://www.melekperikanan.com/2021/08/ikan-mangla-atau-glasseye.html	Randall, J.E., 1997
<i>Hilsa kelee</i>	https://fishbase.mnhn.fr/summary/Hilsa-kelee.html ; https://www.melekperikanan.com/2020/10/ikan-mata-belo-atau-kelee-shad-hilsa.html	Hamid B. Osmany, 2016
<i>Himantura uarnak</i>	https://fishbase.mnhn.fr/summary/Himantura-uarnak.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=383152	Randall, J.E., 1997
<i>Hologymnosus doliatus</i>	https://fishbase.mnhn.fr/summary/Hologymnosus-doliatus.html ; https://www.melekperikanan.com/2022/08/ikan-lembain-atau-pastel-ringwasse.html	Randall, J.E., 1997
<i>Hyporhamphus quoyi</i>	https://fishbase.mnhn.fr/summary/Hyporhamphus-quoyi.html ; https://www.melekperikanan.com/2021/02/ikan-oras-julung-julung-cang-cing-atau.html	White, W.T.P. Et. Al., 2013
<i>Ilisha melastoma</i>	https://fishbase.mnhn.fr/summary/Ilisha-melastoma.html ; https://www.melekperikanan.com/2020/11/ikan-mata-lebar-kemprit-atau-indian.html	Hamid B. Osmany, 2014
<i>Ilisha sirishae</i>	https://v3.boldsystems.org/Index.php/Taxbrowser_Taxonpage?taxid=971750 ; https://fishbase.mnhn.fr/summary/1637	Arif. M.K, 2020
<i>Ilisha striatula</i>	https://fishbase.mnhn.fr/summary/Ilisha-striatula.html ; https://www.melekperikanan.com/2020/11/ikan-kemprit-mata-lebar-atau-banded.html	White, W.T.P. Et. Al., 2013
<i>Iniistius evides</i>	https://fishbase.mnhn.fr/summary/66411 ; https://www.reeflex.net/tiere/12052_Iniistius_evides.htm ; https://fishdb.sinica.edu.tw/chi/species.php?id=395693	Randall, J.E., 1997
<i>Iso hawaiiensis</i>	https://fishbase.mnhn.fr/summary/Iso-hawaiiensis.html	Randall, J.E., 1997
<i>Istiblennius edentulus</i>	https://fishbase.mnhn.fr/summary/Istiblennius-edentulus.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=381428 ; http://fishbarb.criobe.pf/displayimage.php?album=search&cat=0&pid=532#top_display_media	Randall, J.E., 1997
<i>Istigobius decoratus</i>	https://fishbase.mnhn.fr/summary/Istigobius-decoratus.html ; https://baliwildlife.com/id/ensiklopedia/biota-laut/ikan-bersirip/ikan-goby/decorated-sandgoby-istigobius-decoratus/	Randall, J.E., 1997
<i>Johnius belangerii</i>	https://fishbase.mnhn.fr/summary/Johnius-belangerii.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382469	Hamid B. Osmany, 2016
<i>Johnius amblycephalus</i>	https://fishbase.mnhn.fr/summary/7785 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382468	Hamid B. Osmany, 2010

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<i>Johnius borneensis</i>	https://www.fishbase.se/summary/Johnius-borneensis.html ; https://www.melekperikanan.com/2022/04/ikan-diles-atau-river-croaker-johnius.html ; https://ejournal.unib.ac.id/jurnalenggano/article/view/12197/pdf	Randall, J.E., 1997
<i>Katsuwonus pelamis</i>	https://www.fishbase.se/summary/Katsuwonus-pelamis.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382489	Randall, J.E., 1997
<i>Kopua japonica</i>	https://www.fishbase.se/summary/Kopua-japonica.html ; https://www.researchgate.net/publication/259151242_A_new_species_of_deepwater_clingfish_genus_Kopua_Gobiesociformes_Gobiesocidae_from_the_East_China_Sea_-_an_example_of_antitropicality	M. Okamoto, 2012
<i>Kuhlia mugil</i>	https://www.fishbase.se/summary/Kuhlia-mugil.html ; https://fishesofaustralia.net.au/home/species/4457	Randall, J.E., 1997
<i>Kyphosus vaigiensis</i>	https://www.fishbase.se/summary/Kyphosus-vaigiensis.html ; https://www.melekperikanan.com/2022/07/ikan-elak-grandang-atau-lowfin-chub.html	Randall, J.E., 1997
<i>Labroides dimidiatus</i>	https://www.fishbase.se/summary/Labroides-dimidiatus.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=381992	Randall, J.E., 1997
<i>Lactarius lactarius</i>	https://www.fishbase.se/summary/Lactarius-lactarius.html ; https://www.melekperikanan.com/2021/08/ikan-susu-ikan-lemah-atau-false.html	Hamid B. Osmany, 2013
<i>Lagocephalus sceleratus</i>	https://www.fishbase.se/summary/4761 ; https://fishdb.sinica.edu.tw/chi/species.php?id=383035	Justine, J.L., 2008; Hamid B. Osmany, 2013
<i>Lampanyctus turneri</i>	https://fishesofaustralia.net.au/home/genus/768 ; https://fishesofaustralia.net.au/home/species/4035 ; https://fishdb.sinica.edu.tw/chi/species.php?id=381216	Museums Victoria, 2024
<i>Lamprogrammus niger</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=8974#	Fayakun, S. Et.Al, 2012
<i>Lates calcarifer</i>	https://www.fishbase.se/summary/Lates-calcarifer.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=381561	Lab Of Fish Ecol. And Evo., Brcas
<i>Leiognathus equula</i>	https://www.fishbase.se/summary/Leiognathus-equula.html	Randall, J.E., 1997
<i>Leiuranus semicinctus</i>	https://www.fishbase.se/summary/Leiuranus-semicinctus.html ; https://www.reefimages.com/Fishes/Eels/Segar-2010-07-2127-single ; https://fishesofaustralia.net.au/home/species/2896	Randall, J.E., 1997
<i>Lepadichthys frenatus</i>	https://www.fishbase.se/summary/Lepadichthys-frenatus.html ; https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/225fe367-a132-4ffb-a76c-91f2c1cab823	Ala.Org.Au, 2024
<i>Leptoscarus vaigiensis</i>	https://www.fishbase.se/summary/Leptoscarus-vaigiensis.html ; https://www.melekperikanan.com/2022/09/ikan-lembain-anglu-kleng-lama-atau.html	Randall, J.E., 1997
<i>Lepturacanthus savaia</i>	https://www.fishbase.se/summary/8314 ; https://kvknorthgoa.icar.gov.in/fishdb/fishdetails.php?file=/marine/pelagic.csv&fishid=5	Icar, 2024
<i>Lethrinus harak</i>	https://www.fishbase.se/summary/1851 ; https://www.melekperikanan.com/2022/02/ikan-tambak-belah-tompel-tambak-ijo.html	Randall, J.E., 1997; Paul Asman, 2021
<i>Lethrinus lentjan</i>	https://www.fishbase.se/summary/1863 ; https://www.melekperikanan.com/2022/02/ikan-tambak-pasir-lencam-atau-pinkear.html	Randall, J.E., 1997

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<i>Lethrinus olivaceus</i>	https://www.fishbase.se/summary/1864 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382073 ; https://www.melekperikanan.com/2022/02/ikan-tambak-mongcong-lencam-atau.html	Wilson, G. G, 1998; Randall, J.E., 1997
<i>Lethrinus ornatus</i>	https://fishbase.mnhn.fr/summary/1866 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382076	Csiri; Wilson, G. G, 1998
<i>Lethrinus semicinctus</i>	https://fishbase.mnhn.fr/summary/1849 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382079 ; https://www.melekperikanan.com/2022/02/ikan-ketambak-lencam-atau-blackblotch.html	Randall, J.E., 1997
<i>Lethrinus xanthochilus</i>	https://fishbase.mnhn.fr/summary/1852 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382081 ; https://www.melekperikanan.com/2022/02/ikan-ketambak-ikan-pit-lencam-atau.html	Randall, J.E., 1997
<i>Luciogobius parvulus</i>	https://fishbase.mnhn.fr/summary/Luciogobius-parvulus.html ; https://cavefishes.org.uk/bibliography-record.php?id=4468 ; chrome-extension://efaidnbmnllipqcpjpcplcfndmkaj/https://www.museum.kagoshima-u.ac.jp/ichthy/INHFJ_2021_012_001.pdf	Taiki Ito And Daiki Okumura. 2021
<i>Lutjanus argentimaculatus</i>	https://fishbase.mnhn.fr/summary/Lutjanus-argentimaculatus.html ; https://www.melekperikanan.com/2021/11/ikan-kakap-merah-jarang-gigi-ganggrang.html	Randall, J.E., 1997
<i>Lutjanus bengalensis</i>	https://fishbase.mnhn.fr/summary/Lutjanus-bengalensis.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382098	Randall, J.E., 1997
<i>Lutjanus biguttatus</i>	https://fishbase.mnhn.fr/summary/Lutjanus-biguttatus.html ; https://www.melekperikanan.com/2021/11/ikan-kakap-merah-tanda-tanda-pasir-atau.html	White Et.Al, 2013
<i>Lutjanus bohar</i>	https://fishbase.mnhn.fr/summary/Lutjanus-bohar.html ; https://en.wikipedia.org/wiki/Lutjanus_bohar#/media/File:Lutjanus_bohar,_juv%C3%A9nile.jpg	Philippe B, 2011; Mohammed R. Parvej, 2020
<i>Lutjanus campechanus</i>	https://fishbase.mnhn.fr/summary/1423 ; https://www.floridamuseum.ufl.edu/discover-fish/species-profiles/lutjanus-campechanus/	Florida Museum, 2024
<i>Lutjanus carponotatus</i>	https://fishbase.mnhn.fr/summary/1424 ; https://www.melekperikanan.com/2021/11/ikan-kakap-ekor-kuning-atau-spanish.html	Randall, J.E., 1997
<i>Lutjanus decussatus</i>	https://fishbase.mnhn.fr/summary/Lutjanus-decussatus.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382102	Reyes, R.B. 2008
<i>Lutjanus dodecacanthoides</i>	https://fishbase.mnhn.fr/summary/354 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382103	Randall, J.E., 1997
<i>Lutjanus ehrenbergii</i>	https://fishbase.mnhn.fr/summary/793 ; https://www.melekperikanan.com/2021/11/ikan-kakap-ekor-kuning-atau-ehrenbergs.html	Hamid B. Osmany, 2016
<i>Lutjanus fulviflamma</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=11&ID=261&what=species	Reyes, R.B. 2017
<i>Lutjanus fulvus</i>	https://fishbase.mnhn.fr/summary/262 ; https://fishider.org/id/guide/osteichthyes/lutjanidae/lutjanus/lutjanus-fulvus	Randall, J.E., 1997
<i>Lutjanus gibbus</i>	https://fishbase.mnhn.fr/summary/Lutjanus-gibbus.html ; https://fishdb.sinica.edu.tw/chi/species.php?id=382108	Randall, J.E., 1997
<i>Lutjanus kasmira</i>	https://fishbase.mnhn.fr/summary/156 ; https://fishdb.sinica.edu.tw/chi/species.php?id=382110	Randall, J.E., 1997

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<i>Lutjanus lemniscatus</i>	https://fishbase.mnhn.fr/summary/157 ; https://www.melekperikanan.com/2021/11/ikan-jarang-gigi-cablikan-atau-darktail.html	Randall, J.E., 1997
<i>Lutjanus lutjanus</i>	https://fishbase.mnhn.fr/summary/159 ; https://www.melekperikanan.com/2021/11/ikan-kembang-waru-badur-gorara-gigi.html	Randall, J.E., 1997
<i>Lutjanus malabaricus</i>	https://fishbase.mnhn.fr/summary/162 ; https://fishider.org/id/guide/osteichthyes/lutjanidae/lutjanus/lutjanus-malabaricus	Randall, J.E., 1997
<i>Lutjanus rivulatus</i>	https://fishbase.mnhn.fr/summary/173 ; https://seatizens.sc/species/lutjanus-rivulatus-cuvier-1828/	Shankaragouda, 2012; Randall, J.E., 1997
<i>Lutjanus rufolineatus</i>	https://www.fishbase.mnhn.fr/summary/25063 ; https://www.melekperikanan.com/2021/11/ikan-badur-atau-goldenlined-snapper.html	Randall, J.E., 1997
<i>Malacanthus latovittatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=5796&what=species	Randall, J.E., 1997
<i>Megalaspis cordyla</i>	https://www.fishbase.se/summary/384 ; https://www.melekperikanan.com/2021/09/ikan-bongkoh-bongkoh-selar-tengkek.html	Randall, J.E., 1997
<i>Megalops cyprinoides</i>	https://www.fishbase.se/summary/Megalops-cyprinoides.html ; https://www.melekperikanan.com/2020/09/ikan-bulan-bulan-atau-indopacific.html	Randall, J.E., 1997
<i>Melichthys vidua</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=5838&what=species	Randall, J.E., 1997
<i>Mene maculata</i>	https://www.fishbase.se/summary/Mene-maculata.html ; https://www.melekperikanan.com/2021/10/ikan-kempar-pati-eteman-kekek-jawa-atau.html	Randall, J.E., 1997
<i>Manta birostris</i>	https://fishider.org/id/guide/elasmobranchii/mobulidae/mobula-birostris	Fishider 2024;Csiro
<i>Monocentris japonica</i>	https://www.fishbase.se/summary/8183 ; https://fishdb.sinica.edu.tw/eng/species.php?id=380940 ; https://www.thoughtco.com/pinecone-fish-profile-2291572	Randall, J.E., 1997
<i>Monodactylus argenteus</i>	https://www.fishbase.se/summary/5807 ; https://www.melekperikanan.com/2022/05/ikan-gebal-atau-silver-mono.html ; https://upload.wikimedia.org/wikipedia/commons/5/55/Silver_Moony.jpg	Hamid B. Osmany, 2013; Ratmuangkhwang, S. 2010
<i>Mugil cephalus</i>	https://www.fishbase.se/summary/Mugil-cephalus.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=381182	Randall, J.E., 1997
<i>Mulloidichthys vanicolensis</i>	https://www.fishbase.se/summary/5984 ; https://fishdb.sinica.edu.tw/eng/species.php?id=382165	Randall, J.E., 1997
<i>Muraenesox bagio</i>	https://www.fishbase.se/summary/Muraenesox-bagio.html ; https://fishdb.sinica.edu.tw/eng/species.php?id=380735	Lin, James Et.Al 2013
<i>Myctophum lychnobium</i>	https://www.gbif.org/species/2405892 ; https://fishbase.mnhn.fr/summary/Myctophum-lychnobium.html ; https://mczbase.mcz.harvard.edu/name/Myctophum%20lychnobium	Museum Of Comparative Zoology, Harvard University, 1995
<i>Myctophum orientale</i>	https://www.gbif.org/species/2405893 ; https://images.ala.org.au/image/1bfe5811-760f-4243-9aeb-370ef4a039de	C.H. Gilbert, 1913
<i>Naso annulatus</i>	https://www.fishbase.se/summary/6019 ; https://www.fishbase.se/photos/PicturesSummary.php?&ID=6019&what=species&showAll=yes	Randall, J.E., 1997; Fishes Of Australia 2024
<i>Naso lituratus</i>	https://www.fishbase.se/summary/1264	Randall, J.E., 1997

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<i>Naso thynnoides</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?&ID=6932&what=species&showAll=yes	Randall, J.E., 1997
<i>Naso tuberosus</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=6023 ; https://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=46077&win=uploaded	Hamid B. Osmany, 2013
<i>Naso unicornis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=1265&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Naso vlamingii</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=6024&what=species	B. Alenda. 2012
<i>Nealotus tripes</i>	https://www.inaturalist.org/photos/180336769	Ken Graham
<i>Negaprion acutidens</i>	https://fishbase.se/photos/UploadedBy.php?autoctr=19307&win=uploaded	Hamid Badar Osmany 2013
<i>Nematalosa come</i>	https://fishdb.sinica.edu.tw/taxon/380959-fishdb	Taiwan Fish Database
<i>Nemateleotris magnifica</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=6629&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Neomerinthe erostris</i>	https://fishesofaustralia.net.au/home/species/2689	Karen Gowlett
<i>Nesiarchus nasutus</i>	https://fishesofaustralia.net.au/home/species/2531	Schultz, S., Nesiarchus Nasutus In Fishes Of Australia, Accessed 01 Sep 2024, https:// Fishesofaustralia.Net.Au/ Home/Species/2531
<i>Netuma thalassina</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=10220#	Hamid Badar Osmany, 2021
<i>Neotrygon kuhlii</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=20088&win=uploaded	Sahat Ratmuangkhwang
<i>Nibeia coibor</i>	Chromosome-level genome assembly of <i>Nibeia coibor</i> using PacBio HiFi reads and Hi-C technologies	Dinaer Yekefenhazi, Qiwei He, Xiaopeng Wang, Wei Han, Chaowei Song & Wanbo Li
<i>Nibeia soldado</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=8309&what=species	Randall, J.E., 1997
<i>Novaculichthys taeniourus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=5610&what=species	Randall, J.E., 1997
<i>Ocyurus chrysurus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=188&what=species	Randall, J.E., 1997
<i>Odonus niger</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=1311&what=species	B. Alenda. , 2005
<i>Opisthopterus tardoore</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=1652#	Raju Saravanan, 2016
<i>Osteomugil perusii</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=53923#	Sahat Ratmuangkhwang, 2018
<i>Ostorhinchus cookii</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=11&ID=9240&what=species	Randall, J.E., 1997
<i>Ostorhinchus doederleini</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=17&ID=8587&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Ostorhinchus holotaenia</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=46445&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Ostorhinchus semillineatus</i>	https://fishesofaustralia.net.au/home/species/1606	National Museum Of Natural Science / Digital Taiwan

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<i>Otolithes ruber</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=4824&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Parablennius yatabei</i>	https://www.inaturalist.org/photos/270456991	Yah_Japan, 2023
<i>Parajulis poecilepterus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=5372&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Parapercis clathrata</i>	https://fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=6561&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Parapercis hexophtalma</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=7866&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Parapercis millepunctata</i>	https://fishesofaustralia.net.au/home/species/749	Jeffrey T. Williams / Smithsonian Institution, National Museum of Natural History, Department of Vertebrate Zoology, Division of Fishes
<i>Parapercis multiplicata</i>	https://inaturalist.nz/photos/258857457	Sylvain Le Bris, 2013
<i>Paraplagusia bilineata</i>	https://fishbase.mnhn.fr/photos/thumbnaillsummary.php?ID=522#	Hamid Badar Osmany, 2016
<i>Parapriacanthus ransonneti</i>	https://collections.nmnh.si.edu/search/fishes/?ark=ark:65665/30010613af7cb42339bf55a434eabfb04	Jeffrey T. Williams, 1998
<i>Parexocoetus brachypterus</i>	https://www.gbif.org/occurrence/4080508553	Benoit Segerer, 2023
<i>Parexocoetus mento</i>	http://fishillust.com/Parexocoetus_mento?ckattempt=2	State Natural Science Collections Of Bavaria
<i>Parupeneus heptacanthus</i>	https://fishesofaustralia.net.au/home/species/590	An Opalescent Goatfish, Parupeneus Heptacanthus, At Karang Asem, Bali, Indonesia, August 2015. Source: Mark Rosenstein / Inaturalist.Org. License: Cc By Attribution- Noncommercial- Sharealike, 2015
<i>Parupeneus indicus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=5992	Hamid Badar Osmany, 2013
<i>Parupeneus macronemus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=7878	R.Saravanan, 2013
<i>Parupeneus multifasciatus</i>	https://fishesofaustralia.net.au/home/species/592	
<i>Pempheris adusta</i>	https://www.gbif.org/occurrence/1253300309	Lesley Clements, 2015
<i>Pempheris vanicolensis</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=10350#	Sahat Ratmuangkhwang, 2016
<i>Pempheris xanthoptera</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=23477&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pennahia aneus</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=13664#	Hamid Badar Osmany, 2016
<i>Periophthalmus argentilineatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=7480&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Phempheris oualensis</i>	https://fishesofaustralia.net.au/home/species/531	Randall, J.E., 1997. Randall'S Tank Photos

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<i>Photopectoralis aureus</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=41613&win=uploaded	Australian National Fish Collection, Csiro
<i>Pinjalo lewisi</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=3&ID=8430&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Pinjalo pinjalo</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=196&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Planiliza macrolepis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=3&ID=4816&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Planiliza subviridis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=6&ID=4819&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectorhinchus flavomaculatus</i>	https://www.fishbase.de/photos/PicturesSummary.php?resultPage=7&ID=7625&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectorhinchus gibbosus</i>	https://www.fishbase.de/photos/UploadedBy.php?autoctr=19002&win=uploaded	Hb. Osmany, 2013
<i>Plectorhinchus lessonii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=50052&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectorhinchus lineatus</i>	https://www.fishbase.de/photos/UploadedBy.php?autoctr=9230&win=uploaded	Jim Greenfield
<i>Plectorhinchus schotaf</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=25575&win=uploaded	Hb. Osmany, 2015, 2015
<i>Plectorhinchus vittatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=15&ID=25706&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectroglyphidodon altus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=4343&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectroglyphidodon dickii</i>	https://fishbase.de/photos/PicturesSummary.php?resultPage=6&ID=5709&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectroglyphidodon leucozonus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=5713&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plectropomus maculatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=4886&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Plicofollis nella</i>	https://helloocean.nmmba.gov.tw/nmmba_front/SpecimenDetail.aspx?id=57695	Zeng Y.C, 2022; Kailola, P.J, 1999
<i>Plicomugil labiosus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=5657&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Polydactylus plebeius</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=2&ID=7901&what=species	Randall, J.E., 1997. Randall'S Tank Photos
<i>Polydactylus microstoma</i>	https://www.gbif.org/occurrence/1317927553	Jeffrey T. Williams, 2015
<i>Pomacanthus imperator</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=19&ID=6504&what=species	Randall, J.E., 1997 ;R. Saravanan, 2017
<i>Pomacanthus semicirculatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=17&ID=5663&what=species	Randall, J.E., 1997
<i>Pomacentrus adelus</i>	https://fishesofaustralia.net.au/home/species/2334	Ian S., 2015
<i>Pomacentrus alleni</i>	https://fishesofaustralia.net.au/Home/species/4954	Gerald R. Allen, 2013
<i>Pomacentrus amboinensis</i>	https://www.inaturalist.org/photos/148259844	Marine Explorer, Dr John Turnbull, 2021
<i>Pomacentrus auriventris</i>	https://www.inaturalist.org/photos/234972902	François Libert, 2015
<i>Pomacentrus bankanensis</i>	https://www.inaturalist.org/photos/287162084	Pete Mcgee, 2023
<i>Pomacentrus coelestis</i>	https://www.inaturalist.org/photos/236391905	François Libert, 2017
<i>Pomacentrus chrysurus</i>	https://fishesofaustralia.net.au/home/species/2340	Rick Winterbottom
<i>Pomacentrus lepidogenys</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6620&what=species	Randall, J.E., 1997. Randall'S Tank Photos

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Pomacentrus moluccensis</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=5724#	Jim Greenfield
<i>Pomacentrus philippinus</i>	https://fishesofaustralia.net.au/home/species/2351	Rickard Zerpe
<i>Pomadasys argenteus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=399&what=species	Reyes, R.B., 2017
<i>Pomadasys kaakan</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=6006#	K. Kadharsa, 2011
<i>Pomadasys quadrilineatus</i>	https://catalog.digitalarchives.tw/item/00/26/4c/3b.html	Jiang Weiquan, Fisheries Experimental Institute, Council of Agriculture, Executive Yuan
<i>Priacanthus hamrur</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=5791&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Priacanthus sagittarius</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=9913#	S.Ramachandran
<i>Prionurus scalprum</i>	https://www.reeflex.net/tiere/6613_Prionurus_scalprum.htm	Andiv, 2016
<i>Pristipomoides filamentosus</i>	https://fishesofaustralia.net.au/home/species/574	Jeffrey T. Williams
<i>Pristipomoides typus</i>	https://fishesofaustralia.net.au/home/species/2478	Jeffrey T. Williams
<i>Pristis microdon</i>	https://fishbase.mnhn.fr/photos/UploadedBy.php?autoctr=13394&win=uploaded	Trevor Mayer, 2005
<i>Prognichthys sealei</i>	https://mexico.inaturalist.org/photos/267410498	Ken Chamberlain, 2023
<i>Promethichthys prometheus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=3&ID=5008&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pseudanthias hypselosoma</i>	https://fishesofaustralia.net.au/home/species/1724	Sally Polack
<i>Pseudanthias squamipinnis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=6568&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Pseudobalistes flavimarginatus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=6027&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pseudodax mollucanus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=5594&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Pseudorhombus malayanus</i>	https://fishbase.de/photos/PicturesSummary.php?TRPP=999999&id=1368&what=species&show All=yes	De Bruin, G.H.P., B.C. Russell And A. Bogusch, Purposes. The Marine Fishery Resources Of Sri Fao Species Identification Field Guide For Fishery Lanka. 1995
<i>Pteragogus cryptus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=5620&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pterocaesio tile</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=939&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pterois antennata</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=9&ID=4914&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Pycnochromis margaritifer</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=5675&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Rastrelliger brachysoma</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=109&what=species	Reyes, R.B., 2013

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<i>Rastrelliger faughni</i>	https://fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=110&what=species	Reyes, R.B., 2008
<i>Rastrelliger kanagurta</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=111#	Kudus Kadharsa, Ponnuel Mohanchander, 2013
<i>Rexea prometheoides</i>	https://www.gbif.org/occurrence/2420006684	Australian National Fish Collection Images
<i>Rhabdamia gracilis</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=5747&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Rhynchobatus djiddensis</i>	https://www.gbif.org/occurrence/1838363340	Rowanwatpringle, 2014
<i>Sardinella brachysoma</i>	https://fishesofaustralia.net.au/home/species/3987	
<i>Sardinella gibbosa</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=1508&what=species	Reyes, R.B., 2013
<i>Sardinella lemuru</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=1510&what=species	Reyes, R.B., 2013
<i>Sargocentron caudimaculatum</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=4907&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Sargocentron praslin</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=7714#	Raju Saravanan, 2010
<i>Sargocentron rubrum</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=6625#	Hamid Badar Osmany, 2017
<i>Saurida tumbil</i>	https://fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=6479&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scarus forsteni</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=2&ID=5545&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Scarus ghobban</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=1&ID=5548&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Scarus hypselopterus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=12707&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Scarus psittacus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=5553&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scarus rivulatus</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=4969#	Jiangguo Du, 2018
<i>Scatophagus argus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=4698&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scolopsis affinis</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=11&ID=5890&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scolopsis aurata</i>	https://fishbase.se/photos/PicturesSummary.php?resultPage=4&ID=5884&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scolopsis bilineata</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=8&ID=5885&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scolopsis monogramma</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=5879#	Jiangguo Du, 2018
<i>Scolopsis xenochrous</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=5882#	Jim Greenfield, 2017
<i>Scomber japonicus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=117&what=species	Randall, J.E., 1997 Randall'S Tank Photos.

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Scomberoides commersonianus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=1950&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scomberoides lysan</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=1951#	Hamid Badar Osmany, 2013
<i>Scomberoides tala</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=1952#	Hamid Badar Osmany, 2008
<i>Scomberomorus commerson</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=121&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Scorpaenopsis venosa</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=7919&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Selar crumenophthalmus</i>	https://www.fishbase.se/photos/UploadedBy.php?autocr=36543&win=uploaded	César Meiners-Mandujano, 2010
<i>Selaroides leptolepis</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=388#	Hamid Badar Osmany, 2013
<i>Seriola dumerilli</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=11&ID=1005&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Sicyopterus japonicus</i>	https://www.gbif.org/occurrence/3456102268	Erickrab, 2021
<i>Siganus canaliculatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=4456&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Siganus guttatus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=4588#	Markevich A.I., 2015
<i>Siganus punctatus</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=4621#	Pauline Walsh Jacobson, 2001
<i>Siganus spinus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=4457&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Siganus virgatus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=7&ID=4624&what=species	Reyes Rb. , 2011
<i>Sillago sihama</i>	https://www.inaturalist.org/observations/1413869	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Siphamia majimai</i>	https://fishesofaustralia.net.au/home/species/3686	Puffy Yukke=
<i>Sphyraena barracuda</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=10&ID=1235&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Sphyraena obtusata</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=4493&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Sphyraena pinguis</i>	https://www.inaturalist.org/photos/28360967	H.T.Cheng, 2018
<i>Sphyraena putnamae</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=7938#	Muhammad Moazzam Khan, 2014
<i>Spratelloides delicatulus</i>	https://www.si.edu/object/spratelloides-delicatulus%3Anmnhvz_14109204	Williams Et All, 2022
<i>Stolephorus baganensis</i>	Taxonomic status of seven nominal species of the anchovy genus <i>Stolephorus</i> described by Delsman (1931), Hardenberg (1933), and Dutt and Babu Rao (1959), with redescriptions of <i>Stolephorus tri</i> (Bleeker 1852) and <i>Stolephorus waitei</i> Jordan and Seale 1926 (Clupeiformes: Engraulidae). Hata H, Layoue S, Motomura H. 67(2020): 7 - 38	
<i>Stolephorus brachycephalus</i>	https://fishbase.de/photos/PicturesSummary.php?TRPP=999999&id=1690&what=species&show All=yes	Whitehead, P.J.P., G.J. Nelson And T. Wongratana, 1988.
<i>Stolephorus indicus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=569&what=species	Reyes, R.B., 2013

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Stolephorus insularis</i>	https://www.fishbase.se/references/FBRefSummary.php?ID=11298	De Bruin, G.H.P., B.C. Russell And A. Bogusch, 1995 Srilanka
<i>Sufflamen fraenatum</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=5&ID=1312&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Synanceia verrucosa</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=5825&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Terapon jarbua</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=5&ID=4458&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Terapon theraps</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=3&ID=4829&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Thalassoma hardwicke</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=5643&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Thalassoma janseni</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=8&ID=5644&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Thryssa baelama</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=582&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Thryssa encrasicholoides</i>	Hata, H., & Koeda, K. (2020). <i>Thrissina encrasicholoides</i> (Actinopterygii: Clupeiformes: Engraulidae): First and northernmost records of <i>Thrissina encrasicholoides</i> from Taiwan. <i>Acta Ichthyologica et Piscatoria</i> , 50(1), 107-111.	
<i>Thryssa hamiltonii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=589&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Thryssa kammalensis</i>	https://fishdb.sinica.edu.tw/eng/species.php?id=380984	Lab Of Fish Ecol. And Evo, Brcas
<i>Thryssa kammalensoides</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=591&what=species	Fao
<i>Thryssa setirostris</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=599#	Hamid Badar Osmany, 2013
<i>Thunnus albacares</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=17444&win=uploaded	Muhammad Moazzam Khan 2013
<i>Thunnus obesus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=146#	Hamid Badar Osmany, 2016
<i>Trachinotus bailloni</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=6&ID=1978&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Trachinotus blochii</i>	https://www.inaturalist.org/photos/184467879	Yah_Japan 2015
<i>Trachurus japonicus</i>	https://www.inaturalist.org/photos/109815808	Re_Nebel 2021
<i>Triacanthus biaculeatus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=4562#	Dr. G. B. Purushottama
<i>Triaenodon obesus</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=9&ID=907&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Trichiurus japonicus</i>	He, X., Luo, Z., Zhao, C., Huang, L., Yan, Y., & Kang, B. 2022. Species composition, growth, and trophic traits of hairtail (Trichiuridae), the most productive fish in Chinese marine fishery. <i>Animals</i> , 12(3078).	He et al., 2022
<i>Trichiurus lepturus</i>	https://fishesofaustralia.net.au/home/species/2562	Bray, D.J. 2018.
<i>Tylosurus acus</i>	https://www.fishbase.se/photos/UploadedBy.php?autoctr=36555&win=uploaded	César Meiners-Mandujano 2009
<i>Tylosurus crocodilus</i>	https://artedi.nrm.se/nrmfish/imgfind.php?Category=catalogNumber&FormData=53726	Ichthyology Database Of The Swedish Museum Of Natural History 2006

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Upeneus itoui</i>	Yamashita, M., Golani, D., & Motomura, H. 2011. A new species of <i>Upeneus</i> (Perciformes: Mullidae) from southern Japan. <i>Zootaxa</i> , 3107, 47-58	Yamashita et al., 2011
<i>Upeneus subvittatus</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=13019#	Landro M. Guamel, 2023
<i>Upeneus sulphureus</i>	https://fishbase.mnhn.fr/photos/ThumbnailsSummary.php?ID=4445#	Hoang Ngoc Thao, 2020
<i>Upeneus tragula</i>	https://www.inaturalist.org/photos/351288618	Thomas Menut 2024
<i>Uropterygius micropterus</i>	Smith, David G., Bogorodsky, Sergey V., Mal, Ahmad O. & Alpermann, Tilman J. 2019. Review of the moray eels (Anguilliformes: Muraenidae) of the Red Sea, with description of a new species, <i>Zootaxa</i> 4704 (1), pp. 1-87 : 69-70	K. Hatooka
<i>Valenciennea wardii</i>	https://www.fishbase.se/photos/PicturesSummary.php?resultPage=3&ID=12615&what=species	Randall, J.E., 1997 Randall'S Tank Photos.
<i>Variola albimarginata</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=1&ID=6478&what=species	Randall, J.E., 1997 Randall'S Underwater Photos.
<i>Xenojulis margaritacea</i>	https://fishesofaustralia.net.au/home/species/292	Alex Hoschke
<i>Xiphias gladius</i>	https://www.fishbase.se/photos/ThumbnailsSummary.php?ID=226#	Hamid Badar Osmany, 2018
<i>Zanclus cornutus</i>	https://fishbase.mnhn.fr/photos/PicturesSummary.php?resultPage=7&ID=5950&what=species	Reef Fishes Of Oman. Field R. 2002.
6. Marine Mammal		
<i>Balaenoptera borealis</i>	https://www.inaturalist.org/photos/244137043	Ritaleitao, 2022
<i>Balaenoptera musculus</i>	https://www.inaturalist.org/observations/87356579	Azure27014, 2021
<i>Dugong dugon</i>	https://www.inaturalist.org/photos/49026381	Ivan Samra, 2018
<i>Physeter macrocephalus</i>	https://www.inaturalist.org/observations/148355209	Wayne and Pam Osborn, 2009
7. Turtles		
<i>Caretta caretta</i>	https://www.inaturalist.org/photos/176774111	Roberto Pillon, 2016
<i>Dermodochelys coriacea</i>	https://www.inaturalist.org/photos/247854737	Azure27014, 2022
8. Marine Invertebrates		
<i>Actaeodes tomentosus</i>	Ghanem, R., & Ben Souissi, J. 2020. Additional record of the alien crab <i>Actaeodes tomentosus</i> (Brachyura: Xanthidae: Actaeinae) from Tunisian marine waters. <i>Annales: Series Historia Naturalis</i> , 30, 99-104.	Ghanem R and Souissi JB, 2020.
<i>Actinopyga bannwarthi</i>	Samyn, Y., Vandenspiegel, D., & Massin, C. 2006. A new Indo-West Pacific species of <i>Actinopyga</i> (Holothuroidea: Aspidochirotida: Holothuriidae). <i>Zootaxa</i> , 1138(1), 53. https://doi.org/10.11646/zootaxa.1138.1.3	ZMH E. 5902
<i>Actinopyga echinites</i>	https://commons.wikimedia.org/wiki/File:Actinopyga_echinites.jpg	François Michonneau
<i>Actinopyga mauritiana</i>	https://www.sealifebase.se/tools/uploadphoto/uploads/SL_3522.jpg	Gianemilio Rusconi
<i>Actinopyga millaris</i>	https://www.inaturalist.org/photos/253714724	Claire Goiran
<i>Aliculastrum cylindricum</i>	https://www.inaturalist.org/photos/180656212	
<i>Amathina tricarinata</i>	https://commons.wikimedia.org/wiki/File:Amathina_tricarinata_01.JPG	H. Zell, 2013
<i>Amphibalanus amphitrite</i>	-	-
<i>Anadara inaequalis</i>	https://www.gbif.org/occurrence/2570124782	Bruguère, 1789)

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Anadara pilula</i>	https://www.inaturalist.org/photos/43139111	Matthew Connors
<i>Astraliium rhodostomum</i>	https://inaturalist.ala.org.au/photos/344120842	Ukwkaj 1983
<i>Bathytormus radiatus</i>	https://www.inaturalist.org/photos/270721216	Gawain 2023
<i>Bulla vernicosa</i>	https://commons.wikimedia.org/wiki/File:Bulla_vernicosa_01.JPG	H. Zell, 2012
<i>Calliostoma tranquebaricum</i>	https://www.gbif.org/occurrence/2570129281	Slieker F J A, Van Der Es H, Andeweg R, Langeveld B W, Schnörr S, 2023
<i>Trochita helicoidea</i>	https://commons.wikimedia.org/wiki/File:Calyptraea_helicoidea_01.JPG	H. Zell, 2017
<i>Canarium mutabile</i>	https://commons.wikimedia.org/wiki/File:Canarium_mutabile_01.jpg	H. Zell, 2017
<i>Capitulum mitella</i>	https://uk.inaturalist.org/photos/180760254	Doyeon Kim, 2022
<i>Carpilius maculatus</i>	https://uk.inaturalist.org/photos/174257464	Pierre_Mascar, 2021
<i>Cellana radiata</i>	https://commons.wikimedia.org/wiki/File:Cellana_radiata_radiata_01.JPG	H. Zell, 2013
<i>Cellana testudinaria</i>	https://commons.wikimedia.org/wiki/File:Cellana_testudinaria_01.JPG	H. Zell, 2013
<i>Cerithium petrosa chemnitzianum</i>	Rajendra, S., & Chandrakasan, S. 2021. New records of two gastropods (Mollusca: Gastropoda) from Indian waters. <i>Journal of Conchology</i> , 44(2).	Rajendra, S., & Chandrakasan, S. 2021
<i>Cerithium coralium</i>	Vian, L. W., Nilamani, N., Sharuddin, S. F. F., Woo, S. P., Ilias, N., Yasin, Z., & Hwai, A. T. S. 2022. Diversity and distribution of molluscs (Gastropoda and Bivalvia) in the seagrass beds at Pulau Gazumbo, Penang, Malaysia. <i>Journal of Survey in Fisheries Sciences</i> , 9(1), 79-95.	Vian et al., 2022
<i>Cerithium scabridum</i>	Albano, P. G., & Trono, D., 2008. Record of the alien species <i>Cerithium scabridum</i> Philippi, 1848 (Gastropoda: Cerithiidae) from Otranto, southern Adriatic Sea. <i>Bollettino Malacologico</i> , 44(1-4), 1-4.	Albano, P. G., & Trono, D., 2008
<i>Charybdis anisodon</i>	https://www.gbif.org/occurrence/4133727041	Budak, 2023
<i>Charybdis (charybdis) feriata</i>	Pinto, C., Lanteri, L., Olmi, E., Rasore, N., Roppo Valente, G., & Garibaldi, F. 2023. A swallow doesn't make a summer: The case of <i>Charybdis (Charybdis) feriata</i> (Linnaeus, 1758) in the western Mediterranean Sea. <i>BioInvasions Records</i> , 12(1), 223-233.	Pinto et al., 2023
<i>Charybdis natator</i>	https://www.inaturalist.org/photos/5823225	Budak, 2016
<i>Chthamalus malayensis</i>	Pochai, A., Kingtong, S., Sukparangsi, W., & Khachonpitsak, S. 2017. The diversity of acorn barnacles (Cirripedia, Balanomorpha) across Thailand's coasts: The Andaman Sea and the Gulf of Thailand. <i>Zoosystematics and Evolution</i> , 93(1)	Pochai et al., 2017
<i>Cibotocola lunata</i>	https://www.inaturalist.org/photos/150408432	Matthew Connors, 2018
<i>Circe scripta</i>	https://www.inaturalist.org/observations/165467773	Doreen, 2023
<i>Clypeomorus bifasciata</i>	https://en.wikipedia.org/wiki/Clypeomorus_bifasciata#/media/File:Clypeomorus_bifasciata_bifasciata_01.JPG	H Zell, 2017
<i>Clypeomorus petrosa</i>	https://www.inaturalist.org/photos/156034768	Adrian Gale 2021
<i>Clypeomorus subbrevicula</i>	https://en.wikipedia.org/wiki/Clypeomorus_subbrevicula#/media/File:Clypeomorus_subbrevicula_01.JPG	H Zell, 2018
<i>Conasprella viminea</i>	https://www.inaturalist.org/taxa/1318718-Conasprella-viminea/browse_photos?photo_license=cc-by-nc	Fabrice Prugnaud, 2015

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<i>Conus coronatus</i>	https://inaturalist.ala.org.au/observations/67452328	Takaaki Hattori
<i>Conus furvus</i>	https://www.inaturalist.org/observations/36548293	Donna Pomeroy
<i>Conus leopardus</i>	https://www.inaturalist.org/observations/61471109	Takaaki Hattori
<i>Conus millaris</i>	https://commons.wikimedia.org/wiki/File:Conus_millaris_001.jpg	Jan Delsing
<i>Conus musicus</i>	https://www.inaturalist.org/observations/109751110	uwkwaj
<i>Coralliophila squamosissima</i>	https://www.inaturalist.org/guide_taxa/899473	Andrew Spurgeon
<i>Corbula ovalina</i>	https://www.gbif.org/occurrence/2570163846	Joop Trausel, Frans Slieker
<i>Cymbiola nobilis</i>	https://en.wikipedia.org/wiki/Cymbiola_nobilis#/media/File:Cymbiola_nobilis_01.jpg	H Zell, 2016
<i>Monetaria annulus</i>	https://inaturalist.ala.org.au/photos/379826618	Robin Gwen Agarwal, 2024
<i>Erronea pallida</i>	https://www.gbif.org/occurrence/2573958821	Gaurav Patil, 2019
<i>Diadema setosum</i>	https://uk.inaturalist.org/photos/365685548	Budak, 2024
<i>Echinothrix diadema</i>	https://www.inaturalist.org/photos/13595458	Damon Tighe, 2018
<i>Diodora sieboldi</i>	https://www.inaturalist.org/observations/148804568	Doyeon Kim
<i>Latona faba</i>	https://inaturalist.nz/photos/380080025	Gawain, 2024
<i>Echinolittorina vidua</i>	https://www.inaturalist.org/observations/66687593	Adrian Gale
<i>Echinometra mathaei</i>	https://uk.inaturalist.org/observations/153424987	Cricket Rasket
<i>Engina alveolata</i>	https://commons.wikimedia.org/wiki/File:Engina_alveolata_02.JPG	H.Zell, 2019
<i>Engina mendicaria</i>	https://commons.wikimedia.org/wiki/File:Engina_mendicaria_01.JPG	H.Zell, 2018
<i>Erronea caurica</i>	https://www.inaturalist.org/observations/51461292	Takaaki Hattori
<i>Euchelus atratus</i>	https://commons.wikimedia.org/wiki/File:Euchelus_atratus_01.JPG	H. Zell , 2017
<i>Euplica scripta</i>	https://www.inaturalist.org/photos/256910971	Se Lena
<i>Gafrarium divaricatum</i>	https://www.gbif.org/occurrence/2433415041	Florida Museum Of Natural History
<i>Gari crassula</i>	Willan, R. C. 1993. Taxonomic revision of the family Psammobiidae (Bivalvia: Tellinoidea) in the Australian and New Zealand region. Records of the Australian Museum, Supplement, 18, 1-152	Willan, R.C., 1993
<i>Gibberulus gibberulus</i>	https://uk.inaturalist.org/photos/346399258	vrebizant
<i>Gonodactylellus viridis</i>	Jayabarathi, R., Anandavelu, I., & Padmavati, G. 2013. First report of the Green Mantis Shrimp <i>Gonodactylellus viridis</i> (Serène, 1954) (Crustacea: Stomatopoda) from seagrass habitat of the South Andaman coast, India. <i>Journal of Threatened Taxa</i> , 5(10), 4517-4520.	Jayabarathi et al., 2013
<i>Hastula bacillus</i>	https://en.wikipedia.org/wiki/Hastula_bacillus#/media/File:Hastula_bacillus_01.jpg	H Zell, 2022
<i>Holothuria (Microthele) fuscogilva</i>	Paderanga, O. R. T., Leopardas, V. E., Nob, C. J. R., Antinero, A. T., Natingga, K. G., Evasco, A. C. Jr., Manulat-Moscoso, S. L., Empron, J. L. G., Calala, L. R., Quiñones, M. B., Dela Rosa, H. K. T., Aspe, N. M., & Uy, W. H. 2023. Notes on the distribution and abundance of White Teatfish - <i>Holothuria fuscogilva</i> Cherrbonnier, 1980 - at White Island, Philippines. SPC Beche-de-mer Information Bulletin, (43).	Paderanga et al., 2023

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<i>Holothuria (Metriatyla) lessoni</i>	https://bie.ala.org.au/species/https://biodiversity.org.au/afd/taxa/a6aa95e7-b509-4e10-a720-63c99f027648	Anne Hoggett, 2020
<i>Holothuria scabra</i>	https://uk.inaturalist.org/photos/23231256	Budak, 2016
<i>Lottia mesoleuca</i>	https://www.marinespecies.org/aphia.php?p=taxdetails&id=456599#images	Joop Trausel & Frans Slieker, 1977
<i>Lottia pelta</i>	https://en.wikipedia.org/wiki/Lottia_pelta	H. Zell, 2019
<i>Lottia scutum</i>	https://www.inaturalist.org/taxa/129962-Lottia-scutum	Rolandwirth,
<i>Lunella cinerea</i>	https://www.gbif.org/occurrence/4120841456	Dorisreef,
<i>Lyncina carneola</i>	https://en.wikipedia.org/wiki/Lyncina_carneola#/media/File:Lyncina_carneola_01.JPG	H. Zell, 2013
<i>Mactra maculata</i>	https://www.gbif.org/species/4588370	Yx_Kuri,
<i>Mactra violacea</i>	https://www.biolb.cz/en/image/id289662/	Jan Delsing, 2016
<i>Menathais tuberosa</i>	https://en.wikipedia.org/wiki/Menathais_tuberosa#/media/File:Menathais_tuberosa_01.jpg	H. Zell, 2021
<i>Metapenaeus dobsoni</i>	https://www.sealifebase.ca/photos/UploadedBy.php?autoctr=3977&win=uploaded	Aungkyaw Htet, 2015
<i>Metapenaeus monoceros</i>	https://www.sealifebase.ca/Photos/ThumbnailsSummary.php?Genus=Metapenaeus&Species=monoceros	Shaker Shaheen, 2017
<i>Microeuraphia withersi</i>	https://www.inaturalist.org/taxa/482643-Microeuraphia-withersi/browse_photos?photo_license=cc-by	Thomas Mesaglio, 2023
<i>Monetaria annulus</i>	https://en.wikipedia.org/wiki/Monetaria_annulus#/media/File:Monetaria_annulus_0011.JPG	Bin im Garten, 2011
<i>Monilea callifera</i>	https://en.wikipedia.org/wiki/Monilea_callifera#/media/File:Monilea_callifera_001.jpg	Jan Delsing, 2011
<i>Monodonta canalifera</i>	https://en.wikipedia.org/wiki/Monodonta_canalifera#/media/File:Monodonta_canalifera_01.JPG	H. Zell, 2014
<i>Monoplex nicobaricus</i>	https://en.wikipedia.org/wiki/Monoplex_nicobaricus#/media/File:Monoplex_nicobaricus.jpg	Shellnut, 2012
<i>Monoplex vespaceus</i>	https://www.gbif.org/occurrence/2570167662	Joop Trausel & Frans Slieker, 2023
<i>Morula anaxares</i>	https://ranong.myspecies.info/sites/ranong.myspecies.info/files/Morula%20anaxares.jpg	Gordon Paterson,
<i>Morula biconica</i>	https://www.marinespecies.org/aphia.php?p=taxdetails&id=600715#images	Joop Trausel & Frans Slieker,
<i>Morula uva</i>	https://en.wikipedia.org/wiki/Morula_uva#/media/File:Morula_uva.jpg	Philippe Bourjau, 2010
<i>Murex concinnus</i>	https://eol.org/pages/4832699	Houart, Roland,
<i>Myurellopsis paucistriata</i>	https://en.wikipedia.org/wiki/Myurellopsis_paucistriata#/media/File:Myurella_paucistriata_(MNHN-IM-2013-46905).jpeg	Walliang C., 2020
<i>Naria erosa</i>	https://en.wikipedia.org/wiki/Naria_erosa#/media/File:Erosaria_erosa_chlorizans_01.JPG	H. Zell, 2012
<i>Nassaria pusilla</i>	https://www.litosphera.com/nassaria-fusififormis-conoperculo-b4ba/	Sowerby, 1859
<i>Nassarius glans</i>	https://en.wikipedia.org/wiki/File:Nassarius_glans_glans_01.JPG	H. Zell, 2020
<i>Nassarius livescens</i>	https://en.wikipedia.org/wiki/Nassarius_livescens#/media/File:Nassarius_livescens_01.JPG	H. Zell, 2014
<i>Nerita atramentosa</i>	https://en.wikipedia.org/wiki/Nerita_atramentosa#/media/File:Nerita_atramentosa_(9274056004).jpg	Harry Rose, 2013

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<i>Nerita costata</i>	https://en.wikipedia.org/wiki/Nerita_costata#/media/File:Nerita_costata_01.JPG	H. Zell, 2018
<i>Nerita exuvia</i>	https://en.wikipedia.org/wiki/Nerita_exuvia#/media/File:Nerita_exuvia_01.JPG	H. Zell, 2013
<i>Nerita ocellata</i>	https://neritopsine.myspecies.info/taxonomy/term/178	Eichhorst, Thomas,
<i>Nerita oryzarum</i>	https://commons.wikimedia.org/wiki/File:Nerita_oryzarum_02.JPG	H. Zell, 2013
<i>Nerita plicata</i>	https://en.wikipedia.org/wiki/Nerita_plicata#/media/File:Nerita_plicata_01.JPG	H. Zell, 2012
<i>Oliva todosina</i>	https://en.wikipedia.org/wiki/File:Oliva_todosina_01.JPG	H. Zell, 2016
<i>Panulirus homarus</i>	https://la.wikipedia.org/wiki/Panulirus_homarus#/media/Fasciculus:Panulirus_homarus_(MNHN-IU-2011-8955).jpeg	Corbari & Poupin, 2002
<i>Patelloida striata</i>	https://en.wikipedia.org/wiki/Patelloida_striata	H. Zell, 2016
<i>Penaeus indicus</i>	https://www.nucleomeinfo.com/iso-sequencing-of-indian-white-shrimp-penaeus-indicus/	Icar-Ciba Chennai, 2021
<i>Penaeus merguensis</i>	https://fish.gov.au/2014-Reports/Banana_Prawn	James Larcombea, Mervi Kangasb And Brad Zellerc,
<i>Penaeus monodon</i>	https://ispweb.pcaarrd.dost.gov.ph/tiger-shrimp-penaeus-monodon-genomics-program/	Serd Personnel Editor, 2022
<i>Phyllidia varicosa</i>	https://en.wikipedia.org/wiki/Phyllidia_varicosa	Nick Hobgood, 2006
<i>Pirenella cingulata</i>	https://en.wikipedia.org/wiki/Pirenella_cingulata#/media/File:Cerithidea_cingulata_01.JPG	H. Zell, 2013
<i>Placamen lamellatum</i>	https://marinebiodiversity.org.bd/species/placamen-lamellatum/	Gbif, 2023
<i>Plicopurpura eudeli</i>	http://www.animalbase.uni-goettingen.de/zooweb/servlet/AnimalBase/home/picture?id=11918	Raymond Huet, 2010
<i>Polinices flemingianus</i>	https://en.wikipedia.org/wiki/Polinices_flemingianus#/media/File:Polinices_flemingianus_01.JPG	H. Zell, 2020
<i>Polinices powisianus</i>	https://commons.wikimedia.org/wiki/File:Polinices_powisianus_01.JPG	H. Zell, 2013
<i>Portunus pelagicus</i>	https://id.wikipedia.org/wiki/Rajungan_biasa#/media/Berkas:Portunus_pelagicus_male.jpg	Self, 2008
<i>Portunus sanguinolentus</i>	https://en.wikipedia.org/wiki/Portunus_sanguinolentus#/media/File:Portunus_sanguinolentus.jpg	Self, 2010
<i>Portunus trituberculatus</i>	https://en.wikipedia.org/wiki/File:Portunus_trituberculatus.gif	Magnus Manske, 2011
<i>Pseudovertagus nobilis</i>	https://search.museums.ualberta.ca/7-61526	University Of Alberta Museums, 1992
<i>Pterygia scabricula</i>	https://en.wikipedia.org/wiki/Pterygia_scabricula#/media/File:Pterygia_scabricula_001.jpg	Jan Delsing, 2009
<i>Reishia bitubercularis</i>	https://www.biolib.cz/en/image/id327043/	Jan Delsing, 2017
<i>Rhinoclavus kochi</i>	https://en.wikipedia.org/wiki/Rhinoclavus_kochi#/media/File:Rhinoclavus_kochi_01.JPG	H. Zell, 2013
<i>Saccostrea cucullata</i>	https://animalia.bio/saccostrea-glomerata	Pelagic, 2023
<i>Scylla paramamosain</i>	https://en.wikipedia.org/wiki/Scylla_paramamosain#/media/File:Scyl_param_180225-5311834_mrd.JPG	Wibowo Djatmiko, 2018
<i>Semicassis angasi</i>	https://commons.wikimedia.org/wiki/File:Semicassis_angasi_(MNHN-IM-2000-4151).jpeg	Christian Ferrer , 2020

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<i>Semiricinula muricoides</i>	https://en.wikipedia.org/wiki/Semiricinula_muricoides#/media/File:Semiricinula_muricoides_(MNHN-IM-2009-2814).jpeg	Lozouet Pierre, 2020
<i>Serratina perplexa</i>	https://gbmolluscatypes.ac.uk/specimens/345	Mr Sylvanus Charles Thorpe Hanley B.A., F.L.S., 2012
<i>Siliqua inflexa</i>	https://malacopics.nl/showimage.php?malacopicname=Pharidae&image=Neosiliqua%20winteriana.jpg	Joop Trausel & Frans Slieker, 1991
<i>Siphonaria normalis</i>	https://en.wikipedia.org/wiki/Siphonaria_normalis	ShellNut , 2012
<i>Stichopus herrmanni</i>	https://uk.inaturalist.org/photos/362816767	Momaz, 2024
<i>Strigatella scutulata</i>	https://en.wikipedia.org/wiki/Strigatella_scutulata	H. Zell, 2019
<i>Synapta maculata</i>	https://inaturalist.ala.org.au/taxa/63514-Synapta-maculata	Ray Turnbull , 2024
<i>Tectus fenestratus</i>	https://en.wikipedia.org/wiki/Tectus_fenestratus	H. Zell, 2016
<i>Tegollarca granosa</i>	https://en-m-wikipedia-org.translate.goog/wiki/File:Tegillarca_granosa_(MNHN-IM-2009-2370).jpeg?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=tc	Lozouet Pierre, 2020
<i>Tegula pfeifferi</i>	https://en.wikipedia.org/wiki/Tegula_pfeifferi#/media/File:Tegula_pfeifferi_002.jpg	G.W. Tryon, 1889
<i>Tegulaplax hululensis</i>	https://ala-images.s3.ap-southeast-2.amazonaws.com/store/5/c/3/6/eeb7b299-38f4-47c7-ae04-f6ae1c3663c5/thumbnail_large	Queensland Museum, 2024
<i>Tellinides timorensis</i>	https://www.gbif.org/occurrence/2570119467	Joop Trausel & Frans Slieker, 2023
<i>Terebra triseriata</i>	https://www.gbif.org/occurrence/2570129904	Joop Trausel & Frans Slieker, 2023
<i>Thais tricolorata</i>	https://en.wikipedia.org/wiki/Thais_tricolorata#/media/File:Thais_tricolorata_(MNHN-IM-2000-23785).jpeg	Manuel Caballer, 2020
<i>Thelenota ananas</i>	https://Uk.Inaturalist.Org/Photos/247668097	Sylvain Le Bris
<i>Todaropsis eblanae</i>	https://en.wikipedia.org/wiki/Todaropsis_eblanae#/media/File:Lesser_Flying_Squid_-_Todaropsis_eblanae.jpg	Hans Hillewaert, 2008
<i>Trochus histrio</i>	https://eol.org/pages/4795008	Femorale, 2007
<i>Trochus maculatus</i>	https://en.wikipedia.org/wiki/Trochus_maculatus#/media/File:Trochus_maculatus_01.JPG	H. Zell, 2013
<i>Trochus nigropunctatus</i>	https://en.wikipedia.org/wiki/Trochus_nigropunctatus#/media/File:Trochus_nigropunctatus_001.jpg	Jan Delsing, 2014
<i>Trochus radiatus</i>	https://en.wikipedia.org/wiki/Trochus_radiatus#/media/File:Trochus_radiatus_01.JPG	H. Zell, 2014
<i>Turbo sandwicensis</i>	https://en.wikipedia.org/wiki/Turbo_sandwicensis	Jan Delsing, 2010
<i>Turbo setosus</i>	https://www.biolib.cz/en/image/id366825/	Jan Delsing, 2019
<i>Turricula nelliae</i>	https://en.wikipedia.org/wiki/Turricula_nelliae#/media/File:Turricula_nelliae_spuria_01.JPG	H. Zell, 2019
<i>Turricula tornata</i>	https://en.wikipedia.org/wiki/Turricula_tornata#/media/File:Turricula_tornata_003.jpg	Jan Delsing, 2016
<i>Umboonium vestiarium</i>	https://en.wikipedia.org/wiki/Umboonium_vestiarium#/media/File:Umboonium_vestiarium_01.JPG	H. Zell, 2015
<i>Unedogemmula indica</i>	https://en.wikipedia.org/wiki/Unedogemmula_indica#/media/File:Lophiotoma_indica_001.jpg	Jan Delsing, 2011

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9. Bird		
<i>Accipiter fasciatus</i>	https://www.inaturalist.org/photos/162040220	Anthony Paul, 2021
<i>Accipiter gularis</i>	https://www.inaturalist.org/photos/212657133	Belvedere04, 2022
<i>Accipiter hiogaster</i>	https://inaturalist.ala.org.au/photos/334736204	Ahmad Yasin Chumaedi, 2023
<i>Accipiter novaehollandiae</i>	https://inaturalist.ala.org.au/observations/230420942	Jens Sommer-Knudsen, 2023
<i>Accipiter soloensis</i>	https://inaturalist.ala.org.au/photos/15811956	Tan Kok Hui, 2018
<i>Actitis hypoleucos</i>	https://id.wikipedia.org/wiki/Trinil_pantai	Marek Szczepanek, 2006
<i>Aerodramus fuciphagus</i>	https://en.wikipedia.org/wiki/Edible-nest_swiftlet#/media/File:Apodidae_-_Aerodramus_fuciphagus_(Edible-nest_swiftlet).JPG	Hectonichus, 2022
<i>Aerodramus vanikorensis</i>	https://www.inaturalist.org/photos/314585371	Avocat, 2023
<i>Alcedo atthis</i>	https://species.wikimedia.org/wiki/File:Alcedo_atthis_-_England-8.jpg	Magnus Manske, 2012
<i>Alcedo coerulescens</i>	https://en.wikipedia.org/wiki/Cerulean_kingfisher#/media/File:Cerulean_Kingfisher_0A2A1617.jpg	Jj Harrison, 2023
<i>Amaurornis phoenicurus</i>	https://species.wikimedia.org/wiki/Amaurornis_phoenicurus	Jj Harrison, 2013
<i>Charadrius alexandrinus</i>	https://en.wikipedia.org/wiki/File:Kentish_Plover_Charadrius_alexandrinus,_India.jpg	Davidvraju, 2014
<i>Charadrius javanicus</i>	https://id.m.wikipedia.org/wiki/Berkas:Charadrius_javanicus_South_Lumajang_East_Java_Indonesia_181228-P900352_jtg.jpg	Wibowo Djatmiko, 2018
<i>Charadrius peronii</i>	https://en.wikipedia.org/wiki/Malaysian_plover#/media/File:Charadrius_peronii_-_Laem_Pak_Bia.jpg	Jj Harrison, 2012
<i>Anthreptes malacensis</i>	https://en.wikipedia.org/wiki/Brown-throated_sunbird#/media/File:0A2A7371_Brown-throated_Sunbird.jpg	Jj Harrison, 2022
<i>Anthus rufulus</i>	https://www.thainationalparks.com/species/paddyfield-pipit	J.M. Garg,
<i>Aplonis minor</i>	https://www.inaturalist.org/photos/271802277	Jan Ebr & Ivana Ebrová, 2023
<i>Apus pacificus</i>	https://www.inaturalist.org/taxa/202491-Apus-pacificus/browse_photos?photo_license=cc-by	Kym Nicolson, 2019
<i>Ardea cinerea</i>	https://depositphotos.com/id/photos/ardea-cinerea.html	Ondrejprosimsky, 2018
<i>Ardea ibis</i>	https://commons.wikimedia.org/wiki/File:Bubulcus_ibis_coromandus.JPG#/media/File:Bubulcus_ibis_coromandus_eating.JPG	Alpsdake, 2012
<i>Ardeola speciosa</i>	https://id.wikipedia.org/wiki/Blekok_sawah#/media/Berkas:Blekok_Sawah_(Ardeola_speciosa).jpg	A.Baihaqi, 2013
<i>Arenaria interpres</i>	https://id.m.wikipedia.org/wiki/Berkas:Arenaria_interpres_(habitus).jpg	Hans Hillewaert, 2011
<i>Artamus leucorhynchus</i>	https://en.wikipedia.org/wiki/White-breasted_woodswallow	Jj Harrison, 2011
<i>Aviceda subcristata</i>	https://guatemala.inaturalist.org/photos/344441106	Martin Rady, 2024
<i>Butorides striata</i>	https://en.wikipedia.org/wiki/Striated_heron	Jj Harrison, 2020
<i>Cacomantis sepulcralis</i>	https://observation.org/photos/18702124/	Lieven De Temmerman, 2018

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<i>Calidris alba</i>	https://en.wikipedia.org/wiki/Sanderling#Description	Mdf , 2005
<i>Caloenas nicobarica</i>	https://uk.inaturalist.org/taxa/3643-Caloenas-nicobarica/browse_photos?photo_license=cc-by	WichYanan (Jay) Limparungpatthanakij, 2023
<i>Caprimulgus affinis</i>	https://www.inaturalist.org/photos/327121669	Tommy Hui, 2017
<i>Caprimulgus macrurus</i>	https://id.wikipedia.org/wiki/Cabak_maling#/media/Berkas:Caprimulgus_macrurus.jpg	Natureatyourbackyard, 2007
<i>Caridonax fulgidus</i>	https://en.wikipedia.org/wiki/File:Glittering_Kingfisher.jpg	Abdul Azis Gizan, 2018
<i>Cecropis daurica</i>	https://id.wikipedia.org/wiki/Layang-layang_gua#/media/Berkas:Red-rumped_Swallow_(Cecropis_daurica)_Photograph_by_Shantanu_Kuveskar.jpg	Shantanu Kuveskar, 2017
<i>Cecropis nigricans</i>	https://en.wikipedia.org/wiki/Tree_martin#/media/File:Tree_Martin_(4468433245).jpg	Peter Jacobs, 2010
<i>Cecropis striolata</i>	https://picturebirdai.com/wiki/Cecropis_striolata.html	Ayuwat Jearwattanakanok,
<i>Centropus bengalensis</i>	https://id.wikipedia.org/wiki/Bubut_alang-alang#/media/Berkas:Lesser-coucal.jpg	Yathin Sk, 2006
<i>Ceyx erithaca</i>	https://en.wikipedia.org/wiki/Black-backed_dwarf_kingfisher#/media/File:Black-backed_Dwarf_Kingfisher.jpg	Rajkimar99, 2023
<i>Ceyx rufidorsa</i>	https://en.wikipedia.org/wiki/Rufous-backed_dwarf_kingfisher#/media/File:Rufous-backed_Dwarf-Kingfisher_0A2A6720.jpg	Jj Harrison, 2023
<i>Chalcophaps indica</i>	https://en.wikipedia.org/wiki/Common_emerald_dove#/media/File:Emerald_Dove_(Chalcophaps_indica_indica).jpg	Lip Kee Yap, 2008
<i>Chrysococcyx basalis</i>	https://en.wikipedia.org/wiki/Horsfield%27s_bronze_cuckoo#/media/File:Horsfield's_Bronze_Cuckoo_0A2A3435.jpg	Jj Harrison, 2022
<i>Ciconia episcopus</i>	https://en.wikipedia.org/wiki/Asian_woolly-necked_stork#/media/File:%E0%A4%B9%E0%A4%9C%E0%A4%BF_%E0%A4%B2%E0%A4%95_%E0%A4%B2%E0%A4%95,_woolly-necked_stork.jpg	Kiranjotsingh, 2012
<i>Cinnyris jugularis</i>	https://en.wikipedia.org/wiki/Garden_sunbird#/media/File:Olive-backed_Sunbird_male,_Misamis_Oriental,_Philippines_1.jpg	Domzjuniorwildlife, 2021
<i>Cinnyris ornatus</i>	https://en.wikipedia.org/wiki/Ornate_sunbird#/media/File:Cinnyris_jugularis_-_Kent_Ridge_Park.jpg	Jj Harrison, 2019
<i>Cinnyris solaris</i>	https://www.inaturalist.org/photos/308067668	Emskakoon, 2023
<i>Circaetus gallicus</i>	https://id.wikipedia.org/wiki/Elang-ular_jari-pendek#/media/Berkas:PikiWiki_Israel_43227_Wildlife_and_Plants_of_Israel.JPG	Lehava Kiryat Shmona Pikiwiki Israel, 2013
<i>Cisticola juncidis</i>	https://id.wikipedia.org/wiki/Cici_padi#/media/Berkas:Zitting_Cisticola_(Breeding_plumage)_I_-_Kolkata_IMG_5046.jpg	J.M.Garg, 2006
<i>Collocalia esculenta</i>	https://br.wikipedia.org/wiki/Collocalia_esculenta#/media/Restr:Glossy_Swiftlet_(Collocalia_esculenta).jpg	Lip Ke, 2010
<i>Collocalia sumbawae</i>	https://www.inaturalist.org/photos/45118284	Deny Wahyudi, 2019
<i>Columba vitiensis</i>	https://inaturalist.ala.org.au/photos/127406276	Bird Explorers, 2013
<i>Coracina personata</i>	https://uk.inaturalist.org/photos/203765190	Mitch Rose, 2022
<i>Cuculus saturatus</i>	https://commons.wikimedia.org/wiki/Cuculus_saturatus	Ron Knight, 2007

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<i>Dicaeum agile</i>	https://en.wikipedia.org/wiki/Thick-billed_flowerpecker#/media/File:Dicaeum_agile_modestum_-_Kaeng_Krochan.jpg	Jj Harrison, 2011
<i>Dicaeum annae</i>	https://commons.wikimedia.org/wiki/File:Dicaeum_annaee	Llywelyn2000, 2014 jpg
<i>Dicaeum igniferum</i>	https://www.inaturalist.org/photos/10114915	Yovie Jehabut, 2017
<i>Dicrurus densus bimaensis</i>	https://www.inaturalist.org/photos/26738880	Yovie Jehabut, 2016
<i>Dicrurus densus</i>	https://uk.inaturalist.org/photos/16075250	Julius Simonelli, 2018
<i>Ducula aenea</i>	https://en.wikipedia.org/wiki/Green_imperial_pigeon#/media/File:DuculaAenea.JPG	Earthshine., 2011
<i>Ducula lacernulata</i>	https://id.wikipedia.org/wiki/Pergam_punggung-hitam#/media/Berkas:Dark-backed_Imperial_Pigeon.jpg	Francesco Veronesi, 2016
<i>Edolisoma dohertyi</i>	https://inaturalist.nz/photos/26736664	Yovie Jehabut, 2018
<i>Egretta garzetta</i>	https://www.inaturalist.org/photos/108514937	Fotis-Samaritakis, 2019
<i>Egretta sacra</i>	https://en.wikipedia.org/wiki/Pacific_reef_heron#/media/File:Egretta_sacra.jpg	Jj Harrison, 2011
<i>Elanus caeruleus</i>	https://en.wikipedia.org/wiki/Black-winged_kite#/media/File:Black-shouldered_Kite_(Elanus_caeruleus)_in_Hyderabad_W_IMG_4418.jpg	J.M.Garg, 2008
<i>Falco maluccensis</i>	https://www.inaturalist.org/photos/265398491	Tim Forrester, 2018
<i>Falco peregrinus</i>	https://id.m.wikipedia.org/wiki/Berkas:Falco_peregrinus_-_01.jpg	Carlos Delgado, 2014
<i>Ficedula dumetoria</i>	https://guatemala.inaturalist.org/photos/241124023	Piyapong, 2022
<i>Ficedula timorensis</i>	https://www.inaturalist.org/photos/56939541	Yovie Jehabut, 2019
<i>Gallinago megala</i>	https://www.inaturalist.org/photos/2762756	Kim, Hyun-Toe, 2006
<i>Gallirallus striatus</i>	https://id.wikipedia.org/wiki/Mandar-padi_sintar	Devonpike, 2013
<i>Gallus varius</i>	https://id.m.wikipedia.org/wiki/Berkas:Ayam-hutan-hijau-gallus-varius-jantan.jpg	Datin Ksdæ, 2021
<i>Geoffroyus geoffroyi</i>	https://en.wikipedia.org/wiki/Red-cheeked_parrot#/media/File:Geoffroyus_geoffroyi_-_Papua_New_Guinea-6_CR0P.jpg	Markharper1, 2008
<i>Geokichla dohertyi</i>	https://id.wikipedia.org/wiki/Anis_nusa_tenggara	Bardrock, 2012
<i>Geokichla interpres</i>	https://inaturalist.ca/photos/133481351	Ingakuyt Sa-Ar, 2020
<i>Geopelia maugeus</i>	https://en.wikipedia.org/wiki/Barred_dove	Charles J. Sharp, 2015
<i>Gerygone sulphurea</i>	https://www.birdforum.net/opus/Golden-bellied_Gerygone	Avian Seeker, 2011
<i>Gracula religiosa</i>	https://en.wikipedia.org/wiki/Common_hill_myna#/media/File:Common_Hill_Myna,_Satchari_NP,_Bangladesh_1.jpg	Nafis Ameen, 2019
<i>Halcyon chloris</i>	https://en.wikipedia.org/wiki/Collared_kingfisher	Jj Harrison, 2011
<i>Halcyon sancta</i>	https://en.wikipedia.org/wiki/Sacred_kingfisher#/media/File:Todiramphus_sanctus_-_Wonga.jpg	Jj Harrison, 2011
<i>Haliaeetus leucogaster</i>	https://en.wikipedia.org/wiki/White-bellied_sea_eagle	Jj Harrison, 2022
<i>Haliastur indus</i>	https://en.wikipedia.org/wiki/Brahminy_kite	Charles J. Sharp, 2022
<i>Heleia crassirostris</i>	https://uk.inaturalist.org/photos/21292045	Yovie Jehabut, 2018
<i>Heleia dohertyi</i>	https://www.inaturalist.org/photos/26729240	Yovie Jehabut, 2018
<i>Heleia wallacei</i>	https://id.wikipedia.org/wiki/Opior_wallaceae#/media/Berkas:Yellow-ringed_White-eye_(Zosterops_wallacei)_ (8074129047)_ (cropped).jpg	Ron Knight, 2006

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<i>Hieraaetus kienerii</i>	https://id.wikipedia.org/wiki/Elang_perut-karat#/media/Berkas:Elang-Perut-Karat-by-alimadura.jpg	Ali Madura, 2018
<i>Hirundo javanica</i>	https://www.inaturalist.org/photos/418622702	Nik Borrow, 2024
<i>Hirundo rustica</i>	https://en.wikipedia.org/wiki/Barn_swallow#/media/File:BarnSwallow_cajay.jpg	Jj Cadiz, Cajay, 2008
<i>Hirundo striolata</i>	https://species.wikimedia.org/wiki/Cecropis_striolata#/media/File:Cecropis_striolata,_Kulon_Progo_Regency,_Yogyakarta,_Java_1.jpg	Panjigusti, 2020
<i>Hirundo tahitica</i>	https://commons.wikimedia.org/wiki/File:Hirundo_tahitica.jpg	Johnny Wee, 2006
<i>Hypothymis azurea</i>	https://en.wikipedia.org/wiki/Black-naped_monarch	Jj Harrison, 2013
<i>Ixobrychus cinnamomeus</i>	https://en.wikipedia.org/wiki/Cinnamon_bittern#/media/File:Cinnamon_bittern.jpg	Cipramod, 2016
<i>Lalage sueurii</i>	https://uk.inaturalist.org/photos/77748091	Nmrvelj, 2020
<i>Lanius schach</i>	https://id.m.wikipedia.org/wiki/Berkas:Long-tailed_Shrike_%28Lanius_schach-_race_tricolor%29_in_Kolkata_W_IMG_3434.jpg	J.M.Garg, 2007
<i>Lichmera limbata</i>	https://commons.wikimedia.org/wiki/File:Indonesian_Honeyeater_(Lichmera_limbata)_-_Flickr_-_Lip_Kee_(3).jpg	Lip Kee, 2010
<i>Lonchura molucca</i>	https://en.wikipedia.org/wiki/Black-faced_munia#Description	Gallo71, 2008
<i>Lonchura pallida</i>	https://id.wikipedia.org/wiki/Bondol_kepala-pucat#/media/Berkas:Pale-headed_Munia_-_Sulawesi_MG_5795_(22595325609).jpg	Francesco Veronesi , 2010
<i>Lonchura punctulata</i>	https://en.wikipedia.org/wiki/Scaly-breasted_munia	Yathin S Krishnappa, 2004
<i>Lophotriorchis kienerii</i>	https://www.inaturalist.org/photos/309579080	Dixon Lau, 2023
<i>Macropygia emiliana</i>	https://id.wikipedia.org/wiki/Uncal_buau#/media/Berkas:Macropygia_emiliana_(Ruddy_Cuckoo_Dove)8.jpg	Charles Lam, 2005
<i>Megapodius reinwardt</i>	https://inaturalist.ala.org.au/photos/291184027	Torbjorn Von Strokirch, 2023
<i>Merops ornatus</i>	https://inaturalist.ala.org.au/photos/97053178	Michael Hains, 2020
<i>Merops philippinus</i>	https://id.wikipedia.org/wiki/Kirik-kirik_laut#/media/Berkas:SL_Bundala_NP_asv2020-01_img08.jpg	A.Savin, 2020
<i>Numenius phaeopus</i>	https://en.wikipedia.org/wiki/Eurasian_whimbrel#/media/File:Whimbrel_Numenius_phaeopus.jpg	Andreas Treppe, 2011
<i>Nycticorax nycticorax</i>	https://www.inaturalist.org/taxa/4981-Nycticorax-nycticorax	Kyle Nessen, 2019
<i>Oriolus chinensis</i>	https://id.wikipedia.org/wiki/Kepodang_kuduk-hitam	Natureatyourbackyard, 2007
<i>Otus magicus</i>	https://en.wikipedia.org/wiki/Moluccan_scops_owl#/media/File:Moluccan_Scops-Owl_0A2A8306.jpg	Jj Harrison, 2024
<i>Otus silvicola</i>	https://uk.inaturalist.org/photos/62702629	Nmoorhatch, 2019
<i>Pachycephala calliope</i>	https://www.inaturalist.org/photos/189999856	Mitch Rose, 2022
<i>Pachycephala fulvotincta</i>	https://www.inaturalist.org/photos/91949350	Mehd Halaouate, 2013
<i>Pachycephala nudigula</i>	https://www.inaturalist.org/photos/8520707	Yovie Jehabut, 2016
<i>Pachycephala pectoralis</i>	https://commons.wikimedia.org/wiki/File:Pachycephala_pectoralis_young_1.jpg	Jj Harrison, 2020
<i>Pachyglossa obsoleta</i>	https://pbase.com/lagerqvist/image/166595674	Markus Lagerqvist,

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<i>Passer montanus</i>	https://en.wikipedia.org/wiki/Eurasian_tree_sparrow	Laitche, 2007
<i>Pelargopsis capensis</i>	https://en.wikipedia.org/wiki/Stork-billed_kingfisher	J.M.Garg , 2006
<i>Pericrocotus lansbergei</i>	https://en.wikipedia.org/wiki/Little_minivet#/media/File:Little_Minivet_(Pericrocotus_lansbergei).jpg	Ron Knight, 2006
<i>Pernis ptilorhynchus</i>	https://www.inaturalist.org/photos/29856588	Imran Shah, 2018
<i>Pernis ruficollis</i>	https://en.wikipedia.org/wiki/Crested_honey_buzzard#/media/File:Crested_Honey_Buzzard_(Oriental_Honey-buzzard)_IMG_3364.jpg	Selvaganesh17, 2017
<i>Phalacrocorax melanoleucos</i>	https://en.wikipedia.org/wiki/Little_pied_cormorant	Jj Harrison, 2009
<i>Philemon buceroides</i>	https://war.wikipedia.org/wiki/Philemon_buceroides	Jj Harrison, 2011
<i>Phylloscopus borealis</i>	https://en.wikipedia.org/wiki/Arctic_warbler	Arctic Warbler, 2009
<i>Picoides moluccensis</i>	https://id.wikipedia.org/wiki/Caladi_titik	Lip Kee Yap, 2007
<i>Pitta concinna</i>	https://en.wikipedia.org/wiki/Ornate_pitta	Panjigusti, 2019
<i>Pitta elegans</i>	https://en.wikipedia.org/wiki/Elegant_pitta	Abdul Azis Gizan, 2018
<i>Ploceus manyar</i>	https://en.wikipedia.org/wiki/Streaked_weaver#/media/File:Ploceus_manyar.JPG	Pkspks, 2015
<i>Ploceus philippinus</i>	https://en.wikipedia.org/wiki/Baya_weaver	Shantanu Kuveskar, 2016
<i>Pluvialis fulva</i>	https://en.wikipedia.org/wiki/Pacific_golden_plover	Jj Harrison, 2013
<i>Pluvialis squatarola</i>	https://www.inaturalist.org/photos/104076066	Garth Harwood, 2020
<i>Poliolimnas cinereus</i>	https://en.wikipedia.org/wiki/White-browed_crake	Jj Harrison, 2011
<i>Ptilinopus melanospilus</i>	https://en.wikipedia.org/wiki/Black-naped_fruit_dove	Devin Morris, 2021
<i>Pycnonotus aurigaster</i>	https://en.m.wikipedia.org/wiki/File:Pycnonotus_aurigaster,_Sooty-headed_bulbul_(juvenile)_-_Huai_Kha_Khaeng_(20786239631).jpg	Rushen, 2015
<i>Rhipidura diluta</i>	https://inaturalist.nz/photos/242796028	Panjigusti, 2019
<i>Saxiola caprata</i>	https://en.wikipedia.org/wiki/Pied_bush_chat	Pjeganathan, 2011
<i>Spilopelia chinensis</i>	https://id.wikipedia.org/wiki/Tekukur_biasa	John Mosesso, Jr, 2002
<i>Sugomel lombokium</i>	https://www.inaturalist.org/photos/331092846	Forest Botial-Jarvis, 2023
<i>Surniculus lugubris</i>	https://en.wikipedia.org/wiki/Square-tailed_drongo-cuckoo#/media/File:Square-tailed_Drongo-Cuckoo_2.jpg	Tonycastro, 2016
<i>Taeniopygia guttata</i>	https://commons.wikimedia.org/wiki/File:Taeniopygia_guttata_-_Bird_Kingdom.jpg	The Cosmonaut, 2019
<i>Terpsiphone affinis</i>	https://www.inaturalist.org/photos/367149056	Benjamynweil, 2024
<i>Terpsiphone floris</i>	https://www.inaturalist.org/photos/26789294	Yovie Jehabut, 2018
<i>Terpsiphone paradisi</i>	https://www.inaturalist.org/observations/191935785	James Eaton, 2022
<i>Tesia everetti</i>	https://www.inaturalist.org/photos/30483467	Yovie Jehabut, 2018
<i>Thalasseus bergii</i>	https://en.wikipedia.org/wiki/Greater_crested_tern	Glen Fergus, 2007
<i>Tringa brevipes</i>	https://en.wikipedia.org/wiki/Grey-tailed_tattler	Jj Harrison, 2011
<i>Tringa glareola</i>	https://id.wikipedia.org/wiki/Trinil_semak	Nilanjanb, 2012
<i>Tringa nebularia</i>	https://id.wikipedia.org/wiki/Trinil_kaki-hijau#/media/Berkas:Tringa_nebularia_-_Laem_Phak_Bia.jpg	Jj , 2011
<i>Turnix maculosa</i>	https://uk.inaturalist.org/photos/203997091	Charles Dove, 2022
<i>Turnix suscitator</i>	https://en.wikipedia.org/wiki/Barred_buttonquail	Shantanu Kuveskar, 2014
<i>Yungipicus nanus</i>	https://uk.inaturalist.org/photos/250557055	Afsar Nayakkan, 2022
<i>Zosterops chloris</i>	https://www.inaturalist.org/observations/229609735 (mehdh,2024)	Mehd Halauate, 2024

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10. Reptiles & Amphibian		
<i>Ahaetulla mycterizans</i>	Biodiversity Baseline Studies and Action Plan; DWA_3726.JPG	Wsp, 2023
<i>Ahaetulla prasina</i>	https://www.flickr.com/photos/tontantravel/15765601347/in/photolist-CQqSeq-CB8wiP-q29Q1T-ezDaxP-q28Rba-EWGgKp-q1V72G-dJMoUv	Tontantravel, 2014
<i>Cerberus rynchops</i>	https://www.inaturalist.org/observations/201799066 (sangeeth_mendis, 2024)	Sangeeth Mendis, 2024
<i>Cerberus schneiderii</i>	https://www.inaturalist.org/observations/182648767 (muangpaisuetrong, 2023)	Muangpaisuetrong, 2023
<i>Coelognathus subradiatus</i>	https://www.inaturalist.org/observations/116637 (herpguy, 2009)	Paul Freed, 2009
<i>Cylindrophis opisthorhodus</i>	https://www.inaturalist.org/observations/10229714 (mark027, 2005)	Mark Schellekens, 2005
<i>Cylindrophis ruffus</i>	https://www.inaturalist.org/observations/207542083 (akhsanbaihaqi, 2023)	Akhsan Baihaqi, 2023
<i>Cyrtodactylus cf. fumosus</i>	https://www.inaturalist.org/observations/4936743 (fatahabib92, 2014)	Fatahabib92, 2014
<i>Cyrtodactylus cf. marmoratus</i>	https://www.inaturalist.org/observations/20318101 (aswadandriyanto)	Aswad Andriyanto, 2019
<i>Cyrtodactylus darmandvillei</i>	Biodiversity Baseline Studies and Action Plan; _MG_0004.JPG	Wsp, 2023
<i>Dendrelaphis inornatus</i>	Biodiversity Baseline Studies and Action Plan; DWA_4330.JPG	Wsp, 2023
<i>Dendrelaphis pictus</i>	https://www.inaturalist.org/observations/4956052 (herukurniawan48, 2015)	Herukurniawan48, 2015
<i>Draco boschmai</i>	https://uk.inaturalist.org/observations/148751752 (boogan_boy, 2023) https://uk.inaturalist.org/observations/103062866 (islamul, 2021)	Boogan_Boy, 2023 Islamul, 2021
<i>Draco volans</i>	https://www.inaturalist.org/observations/52663190 (sonylin, 2020) https://www.inaturalist.org/observations/112126379 (isnanditaputrir, 2022)	Sony Lin, 2020 Isnandita Putri Reychan, 2022
<i>Duttaphrynus melanostictus</i>	https://www.inaturalist.org/observations/222232470 (randomwild, 2024)	Justin Philbois, 2024
<i>Emoia cf. similis</i>	Biodiversity Baseline Studies and Action Plan; _MG_0171.JPG	Wsp, 2023
<i>Eutropis multifasciata</i>	https://www.inaturalist.org/observations/199688723 (victor0001)	Victor Heng, 2024
<i>Fejervarya cancrivora</i>	https://www.inaturalist.org/observations/215690225 (max_tibby)	Max Tibby, 2024
<i>Fejervarya limnocharis</i>	file:///C:/Users/yanur/Documents/07%20Hu'u%20Project/Preliminary%20CHA/Template_Faunapedia/SPecies_Photo/EvolSyst_article_27020.pdf; https://www.inaturalist.org/photos/62581576 (nomascus); https://www.inaturalist.org/photos/149570035 (albertkang)	Alexander. H EtAl, 2018; Nomascus, 2010; Albertkang, 2021
<i>Fejervarya verruculosa</i>	file:///C:/Users/yanur/Documents/07%20Hu'u%20Project/Preliminary%20CHA/Template_Faunapedia/SPecies_Photo/EcologyandEvolution-2022-Hasan-Pos tmatingisolationandevolutionaryrelationshipsamongF ejervaryaspeciesfrom.pdf; https://www.inaturalist.org/photos/378454035	Hasan. M. EtAl, 2022; Colintrainor, 2024

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<i>Gehyra mutilata</i>	Biodiversity Baseline Studies and Action Plan DWA_6579. JPG; https://www.inaturalist.org/photos/162895051 (knotsnake); https://www.inaturalist.org/photos/326860409 (ramdani)	Wsp, 2023; Knotsnake, 2020; Ramdani, 2020
<i>Gekko gecko</i>	https://www.inaturalist.org/observations/123169567 (tzulunhung); https://www.inaturalist.org/photos/360700980 (charleyhese)	Tzu-Lun Hung, 2022; Charleyhese, 2024;
<i>Hemidactylus frenatus</i>	Biodiversity Baseline Studies and Action Plan DWA_3997. JPG; https://www.inaturalist.org/observations/71419146 (lifeisamazing); https://www.inaturalist.org/photos/377069462 ; https://www.inaturalist.org/photos/164041154	Wsp, 2023; Lifeisamazing, 2021; Emanuele. S, 2024; Dbocanumenthe, 2021
<i>Hemidactylus platyurus</i>	https://www.inaturalist.org/observations/11672453 (substanz); https://www.inaturalist.org/photos/105755930 (fajardarwis)	Portioid, 2024; Fajardarwis, 2020
<i>Hemiphyllodactylus typus</i>	https://inaturalist.nz/observations/61570356 (ian_dugdale); https://www.inaturalist.org/photos/103113301 (tzulunhung)	Budak, 2014; Tzulunhung, 2018
<i>Indosylvirana cf. nicobariensis</i>	https://www.inaturalist.org/observations/25206709 (neymark)	Leonid A. Neymark, 2018
<i>Ingerophrynus biporcatus</i>	https://commons.wikimedia.org/wiki/File:Bufo_biporc_M_050409_015_tdp.jpg (W.A. Djatmiko)	W.A. Djatmiko, 2005
<i>Kaloula baleata</i>	https://www.inaturalist.org/observations/196417790 (liu-rui-wei)	Liu Rui Wei, 2023
<i>Lamprolepis smaragdina</i>	https://www.inaturalist.org/observations/210615250 (jonodashper)	Jono Dashper, 2024
<i>Limnonectes dammermani</i>	https://inaturalist.lu/photos/104920318 (Imran Sadewo,S. Si.)	Imran Sadewo,S.Si., 2020
<i>Limnonectes kadarsani</i>	https://uk.inaturalist.org/observations/102960953 (sadewo65)	Imran Sadewo,S.Si., 2021
<i>Limnonectes cf. microdiscus</i>	https://uk.inaturalist.org/photos/33442195 ; https://uk.inaturalist.org/photos/7511927	Selvianaaprilianingsih , 2019; Ganjar Cahyadi, 2016
<i>Litoria sp.</i>	Biodiversity Baseline Studies and Action Plan; DWA_4726. JPG Biodiversity Baseline Studies and Action Plan; DWA_4736. JPG	Wsp, 2023
<i>Lycodon capucinus</i>	https://www.inaturalist.org/photos/24898638 ; https://www.inaturalist.org/photos/298758603	Matthewkwan, 2018; Alexericsonlee, 2023
<i>Lycodon subcinctus</i>	https://www.inaturalist.org/photos/109823206 ; https://www.inaturalist.org/photos/224135323	Jan Vršovský, 2014; Jorge_Abad, 2022
<i>Malayopython reticulatus</i>	https://www.inaturalist.org/observations/181156739 (thepazzzzz)	Phakawat Kittikhunodom, 2022
<i>Microhyla Achatina</i>	https://www.inaturalist.org/photos/6019602 ; https://www.inaturalist.org/photos/5997355	Fatahabib92, 2016; Farits_Alhadi, 2016
<i>Naja sputatrix</i>	https://www.inaturalist.org/photos/381362309 ; https://www.inaturalist.org/photos/62717937	Max_Tibby, 2024; Manderson80, 2018
<i>Occidozyga cf. floresiana</i>	https://issuu.com/faunaflora/docs/update-23 (Flora & Fauna International Update No.23, May 2014/ fauna-flora.org/update)	Flora & Fauna International , 2014
<i>Oligodon bitorquatus</i>	https://www.inaturalist.org/observations/81265745 (fhadlikennedi); https://www.inaturalist.org/photos/40600343	Fhadlikennedi, 2021; Disteira, 2016;

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Oreophryne jeffersoniana</i>	Biodiversity Baseline Studies and Action Plan _MG_9880.JPG; https://www.inaturalist.org/photos/239463491	Wsp, 2023; Auzansukaton, 2022
<i>Oreophryne monticola</i>	https://en.wikipedia.org/wiki/File:Oreophryne_monticola.jpeg https://www.inaturalist.ca/photos/219854944 (yudiii)	Sean Reilly, 2018; Yudiisiii, 2022
<i>Papurana florensis</i>	https://inaturalist.nz/photos/239463701 (auzansukaton); https://en.wikipedia.org/wiki/File:Hylarana_florensis#/media/File:Hylarana_florensis.jpeg	Auzansukaton, 2022; Sean Reilly, 2011
<i>Polypedates leucomystax</i>	Biodiversity Baseline Studies and Action Plan DWA_6502.JPG; https://www.inaturalist.org/photos/55419562	Wsp, 2023; Gancw1, 2019
<i>Psammodynastes pulverulentus</i>	https://www.inaturalist.org/observations/128009932 ; https://www.inaturalist.org/observations/230263680	Liujimfood, 2024; Hoàng Long, 2022
<i>Rhacophorus reinwardtii</i>	https://www.inaturalist.org/observations/66029346 (ona_noerwana)	Ona Noerwana, 2020
<i>Sphenomorphus melanopogon</i>	https://www.inaturalist.org/observations/39525108 (manderson80)	Matt, 2020
<i>Subdoluseps bowringii</i>	https://www.inaturalist.org/observations/225286115 (resdwikelana)	A. Restu Dwikelana, 2024
<i>Trimeresurus insularis</i>	Biodiversity Baseline Studies and Action Plan; DWA_5831.JPG	Wsp, 2023
<i>Varanus salvator</i>	https://www.inaturalist.org/observations/53242816 (sohkamyung)	Soh Kam Yung, 2020

11. Mammal

<i>Bos javanicus domesticus</i>	https://id.wikipedia.org/wiki/Sapi_bali#/media/Berkas:Banteng_Domesticated_Bali_Bull.PNG	Gsarwa, 2011
<i>Bubalus bubalis</i>	https://commons.wikimedia.org/wiki/File:Asian_water_buffalo_(Bubalus_bubalis)_Yala.jpg	Charles J. Sharp , 2022
<i>Crociodura monticola</i>	https://id.wikipedia.org/wiki/Celurut_Sunda#/media/Berkas:Sunda_Shrew_(13890530895).jpg	Mike Prince, 2014
<i>Cynopterus brachyotis</i>	https://en.wikipedia.org/wiki/Lesser_short-nosed_fruit_bat	Anton 17, 2012
<i>Cynopterus nusatenggara</i>	https://www.inaturalist.org/photos/118518595	Samuel Lee, 2021
<i>Cynopterus sphinx</i>	https://indiabiodiversity.org/observation/show/14863533	Harikrishnan S., 2020
<i>Dobsonia peronii</i>	https://inaturalist.ala.org.au/photos/336778183	James Eaton, 2022
<i>Eonycteris spelaea</i>	https://uk.inaturalist.org/photos/241173394	Thanyarat Sukruan, 2022
<i>Hipposideros diadema</i>	https://uk.inaturalist.org/photos/295220198	Charley Hesse, 2023
<i>Hystrix javanica</i>	https://id.wikipedia.org/wiki/Landak_Jawa#/media/Berkas:Landak_Jawa_Hystrix_javanica.JPG	Sakurai Midori , 2007
<i>Macaca fascicularis</i>	https://id.wikipedia.org/wiki/Monyet_kra#/media/Berkas:Ngarai_Sianok_sumatran_monkey.jpg	Sakurai Midori, 2005
<i>Macroglossus minimus</i>	https://uk.inaturalist.org/photos/65374581	Ganjar Cahyadi, 2015
<i>Megaderma spasma</i>	https://www.thainationalparks.com/species/lesser-false-vampire-bat	Thai National Park, 2024
<i>Miniopterus australis</i>	https://en.wikipedia.org/wiki/Little_bent-wing_bat#/media/File:Little_bent-wing_bats.jpg	Glen Fergus , 2008
<i>Murina florium</i>	https://inaturalist.nz/photos/7926710	Colin Trainor, 1998
<i>Myotis adversus</i>	https://en.wikipedia.org/wiki/Large-footed_bat#/media/File:Naturalis_Biodiversity_Center_-_RMNH.MAM.52789b_ven_-_Myotis_adversus_-_skin.jpeg	Naturalis Biodiversity Center, 2015
<i>Paradoxurus hermaphroditus</i>	https://www.inaturalist.org/photos/11172495	Pfaucher, 2016

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Rattus argentiventer</i>	https://www.inaturalist.org/photos/356964584	Sam Hambly, 2024
<i>Rattus exulans</i>	https://id.wikipedia.org/wiki/Tikus_polinesia#/media/Berkas:Pacific_rat.jpg	Cliff , 2007
<i>Rattus tanezumi</i>	https://uk.inaturalist.org/photos/342528654	Sam Hambly, 2023
<i>Rhinolophus affinis</i>	https://inaturalist.ca/photos/87983038	Manuel Ruedi, 2011
<i>Rhinolophus arcuatus</i>	https://en.wikipedia.org/wiki/Arcuate_horseshoe_bat#/media/File:Kelawar_ladam2.jpg	Tabdulla, 2006
<i>Rhinolophus keyensis</i>	https://www.inaturalist.org/photos/109108426	Manuel Ruedi, 2010
<i>Rousettus amplexicaudatus</i>	https://www.inaturalist.org/photos/334099399	Venkat Sankar, 2023
<i>Rusa timorensis</i>	https://www.inaturalist.org/photos/62665772	Nmoorhatch, 2019
<i>Sus scrofa</i>	https://id.wikipedia.org/wiki/Babi_celeng#/media/Berkas:Wild_Boar_Habitat_3.jpg	Richard Bartz, Munich, 2007
12. Insect		
<i>Acalolepta</i> sp.	https://www.inaturalist.org/observations/217439062 (yunglunlin)	Yung-Lun Lin, 2024
<i>Acherontia lachesis</i>	https://www.inaturalist.org/observations/151616323 (hardeepgazdar)	Hardeep Gazdar, 2023
<i>Acraea terpsicore</i>	https://www.inaturalist.org/observations/122662909 (samimsky)	Samim.Wildlife, 2022
<i>Adisura marginalis</i>	https://www.inaturalist.org/observations/9831338 (jasonalexander)	Jason Alexander, 2013
<i>Adoretus</i> sp.	https://www.inaturalist.org/photos/49499902 (budak)	Budak, 2019
<i>Agape chloropyga</i>	https://uk.inaturalist.org/observations/150400861 (alekcarcz)	Alekcarcz, 2023
<i>Agrionoptera insignis</i>	Biodiversity Baseline Studies and Action Plan; DWA_6136.jpg	Wsp, 2023
<i>Allotinus unicolor</i>	Biodiversity Baseline Studies and Action Plan; DWA_4522.jpg	Wsp, 2023
<i>Amata huebneri</i>	https://www.inaturalist.org/observations/21211118 (mark027)	Mark Schellekens, 2012
<i>Amerila astreus</i>	https://www.inaturalist.org/observations/36060775 (dbeadle)	Dbeadle, 2012
<i>Ammatho</i> sp.	https://inaturalist.nz/observations/166553019 (dave_sargeant)	Dave_Sargeant, 2023
<i>Appias albina</i>	Biodiversity Baseline Studies and Action Plan; DWA_4654.jpg	Wsp, 2023
<i>Appias lycinda</i>	https://uk.inaturalist.org/observations/105714594 (gancw1)	Cheongweei Gan, 2009
<i>Artaxa</i> sp.	Biodiversity Baseline Studies and Action Plan; DWA_6903.jpg	Wsp, 2023
<i>Aspidimorpha miliaris</i>	Biodiversity Baseline Studies and Action Plan; Aspidimorpha sp.jpg	Wsp, 2023
<i>Attacus atlas</i>	https://www.inaturalist.org/observations/223260003 (anmer08802)	Anmer08802, 2010
<i>Bassarona teuta</i>	https://www.inaturalist.org/observations/125116258 (petereric) https://www.inaturalist.org/observations/37294197 (kaithefishguy)	Peter Ericsson, 2022 Yi-Kai Tea, 2017

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<i>Bastilla joviana</i>	https://www.inaturalist.org/observations/151898635 (orthoptera-jp)	Orthoptera-Jp, 2023
<i>Bibasis sena</i>	https://www.inaturalist.org/observations/165821896 (elavarasan_mm)	Elavarasan M, 2023
<i>Bocana</i> sp.	https://www.inaturalist.org/observations/32332276 (amila_sumanapala)	Amila P Sumanapala, 2019
<i>Bolboceratidae</i> sp	https://www.inaturalist.org/observations/92049458 (johnmorgan)	John Morgan, 2021
<i>Borbo cinnara</i>	Biodiversity Baseline Studies and Action Plan; DWA_6092.jpg	Wsp, 2023
<i>Carriola ecnomoda</i>	https://www.inaturalist.org/observations/10181276 (mark027)	Mark Schellekens, 2023
<i>Castalius rosimon</i>	https://www.inaturalist.org/observations/201264675 (selwynq) https://www.inaturalist.org/observations/129919156 (elavarasan_mm)	Selwynq, 2024 Elavarasan M, 2022
<i>Catharsius</i> sp.	https://www.inaturalist.org/observations/156570038 (neowildlife)	Ivan Neo, 2023
<i>Catopsilia scylla</i>	Biodiversity Baseline Studies and Action Plan; DWA_4218.jpg https://www.inaturalist.org/observations/145185761 (dawnborchardt)	Wsp, 2023 Dawnborchardt, 2020
<i>Cepora iudith</i>	https://www.inaturalist.org/observations/178817771 (gancw1)	Cheongweei Gan, 2017
<i>Cepora julia calliparga</i>	Biodiversity Baseline Studies and Action Plan; IMG_4112.jpg	Wsp, 2023
<i>Cepora nerissa</i>	Biodiversity Baseline Studies and Action Plan; IMG_4106.jpg	Wsp, 2023
<i>Cethosia cf. tambora</i>	https://www.inaturalist.org/observations/19852857 (yoviejehabut)	Yovie Jehabut, 2019
<i>Chlaenius</i> sp	https://www.inaturalist.org/observations/138002015 (ciel_512)	Ciel_512, 2022
<i>Chorodna cf. strixaria</i>	https://www.inaturalist.org/observations/61375525 (albertkang)	Albert Kang, 2017
<i>Cleora</i> sp.	Biodiversity Baseline Studies and Action Plan; DWA_5475.jpg	Wsp, 2023
<i>Cnaphalocrocis</i> sp.	https://www.inaturalist.org/observations/197538157 (shaveen_madushka)	Shaveen Madushka, 2024
<i>Comostola pyrrhoga</i>	https://www.inaturalist.org/observations/14019697 (papiliosih)	Licheng Shih, 2018
<i>Copera marginipes</i>	https://www.inaturalist.org/photos/165302744 (Budak)	Budak, 2013
<i>Cotachena cf. hicana</i>	https://www.inaturalist.org/observations/105355643 (domf)	Domf, 2021
<i>Creatonotos gangis</i>	https://www.inaturalist.org/observations/54376529 (vinitapuniasangwan)	Vinita Punia Sangwan, 2013
<i>Creatonotos transiens</i>	https://www.inaturalist.org/observations/121201693 (dave_sargeant) https://www.inaturalist.org/observations/211338650 (dentatemoths)	Dave_Sargeant, 2022 Dentatemoth, 2024
<i>Cupha erymanthis</i>	https://www.inaturalist.org/observations/183192006 (paintedstork)	Praveen J, 2006
<i>Curculionidae</i> sp.	https://www.inaturalist.org/observations/192468230 (rodrigodepes)	Rodrigo Depes, 2023

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<i>Cyrestis nais</i>	https://www.inaturalist.org/observations/111976932 (mroseup)	Mitch Rose, 2022
<i>Danaus chrysippus</i>	https://www.inaturalist.org/observations/62479605 (rameshshenai)	Ramesh Shenai Jr., 2020
<i>Danaus genutia</i>	https://www.flickr.com/photos/tariquesani/3928468904/ (Tarique Sani)	Tarique Sani, 2009
<i>Danaus melanippus haruhasa</i>	Biodiversity Baseline Studies and Action Plan; DWA_4974.jpg	Wsp, 2023
<i>Delias oraia</i>	Biodiversity Baseline Studies and Action Plan; DWA_6668.jpg	Wsp, 2023
<i>Delias periboaea</i>	https://www.inaturalist.org/observations/29627147 (gancw1)	Cheongweei Gan, 2019
<i>Deudorix epjarbas</i>	https://www.inaturalist.org/observations/147180754 (gancw1)	Cheongweei Gan, 2023
<i>Diplacodes trivialis</i>	https://www.inaturalist.org/observations/169770358 (kcss)	Kcss, 2023
<i>Discolampa ethion</i>	https://www.inaturalist.org/observations/124521168 (kinbutterflies)	Kinbutterflies, 2021
<i>Drepanosticta berlandi</i>	https://www.inaturalist.org/observations/18471142 (denywahyudi)	Deny Wahyudi, 2017
<i>Dura</i> sp.	https://www.inaturalist.org/observations/34106494 (dhfischer)	Dhfischer, 2019
<i>Eoophyla</i> sp.	https://www.inaturalist.org/observations/91941675 (benoit_segerer)	Benoit Segerer, 2014
<i>Episparis exprimens</i>	https://www.inaturalist.org/observations/10466701 (brunodurand)	Bruno Durand, 2018
<i>Eudocima cocalus</i>	https://www.inaturalist.org/observations/200794993 (davidgwhite)	David White, 2023
<i>Eudocima homaena</i>	https://www.inaturalist.org/observations/190746697 (hemant_ogale)	Takaaki Hattori, 2019
<i>Eudocima srivijayana</i>	https://www.inaturalist.org/observations/119983751 (albertkang)	Albert Kang, 2022
<i>Eumelea</i> sp.	https://www.inaturalist.org/observations/19418143 (gancw1)	Cheongweei Gan, 2019
<i>Euphaea lara</i>	https://www.inaturalist.org/observations/112135685 (mehdh)	Mehd Halaouate, 2022
<i>Euploea climena</i>	https://www.inaturalist.org/observations/106965124 (mehdh)	Mehd Halaouate, 2005
<i>Euploea eleusina</i>	https://www.inaturalist.org/observations/204407933 (kol_pinesangkang)	Nur Herjayanti, 2023
<i>Euploea eunice</i>	https://www.inaturalist.org/observations/144009881 (chenjacy)	Jacy Chen, 2022
<i>Euploea phaenareta eucala</i>	https://www.inaturalist.org/observations/150387276 (ganjarcahyadi)	Ganjar Cahyadi, 2023
<i>Euploea sylvester</i>	https://www.inaturalist.org/observations/142520818 (prakalathand)	Prakalathand, 2018
<i>Euploea tulliolus</i>	https://www.inaturalist.org/observations/63895329 (blackdogto)	Blackdogto, 2019
<i>Eurema blanda</i>	https://www.inaturalist.org/observations/160360517 (nuwan)	Nuwan Chathuranga, 2023
<i>Eurema lombokiana</i>	https://www.biolib.cz/en/taxonimage/id501891/ (Tomáš Vrána)	Tomáš Vrána, 2019

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Everes lacturnus</i>	https://www.inaturalist.org/observations/174815365 (gancw1)	Cheongweei Gan, 2014
<i>Gerania cf. bosci</i>	https://www.inaturalist.org/observations/109736299 (woraphot)	Woraphot Bunkhwarndi, 2022
<i>Glyphodes stolalis</i>	https://www.inaturalist.org/observations/95227612 (bonpradhan)	Bon Pradhan, 2021
<i>Gonodontis cf. pallida</i>	https://www.inaturalist.org/observations/82174049 (kt_ton)	Khemthong Tonsakulrungruang, 2021
<i>Graphium agagemnon</i>	https://www.inaturalist.org/observations/188151029 (htcheungnicky)	Htcheungnicky, 2023
<i>Graphium doson</i>	https://www.inaturalist.org/observations/29055296 (anil_kumar_verma) https://www.inaturalist.org/observations/199778689 (soenkebonde)	Anil Kumar Verma, 2019 Fishhead, 2024
<i>Hebomoia glaucippe</i>	https://www.inaturalist.org/observations/56306625 (udayagashe)	Uday Agashe, 2018
<i>Hemithea</i> sp.	https://www.inaturalist.org/observations/187363580 (stephenluk)	Stephen Luk, 2023
<i>Hydrillodes</i> sp.	https://www.inaturalist.org/observations/119879738 (pkyeung)	Pk Yeung, 2022
<i>Hypochrosia hyadaria</i>	https://www.inaturalist.org/observations/4628134 (budak)	Budak, 2016
<i>Hypolimnas bolina</i>	https://www.inaturalist.org/observations/16651547 (wklegend)	Wklegend, 2016
<i>Hypomecis</i> sp.	https://www.inaturalist.org/observations/77397345 (heikindai_87)	Heikindai_87, 2015
<i>Ideopsis juvena</i>	https://www.inaturalist.org/observations/171943192 (gancw1)	Cheongweei Gan, 2023
<i>Idionyx cf. murcia</i>	Biodiversity Baseline Studies and Action Plan; DWA_6636.jpg	Wsp, 2023
<i>Ischnura senegalensis</i>	https://www.inaturalist.org/observations/158024971 (charnebornman)	Charné Bornman, 2023
<i>Ischyja manlia</i>	Biodiversity Baseline Studies and Action Plan; DWA_5408.jpg	Wsp, 2023
<i>Jamides</i> sp.	https://www.inaturalist.org/observations/62018105 (dhfischer)	Dhfischer, 2021
<i>Junonia atlites</i>	https://www.inaturalist.org/observations/9512090 (supergan)	Brian Fisher, 2015
<i>Junonia erigone</i>	https://www.inaturalist.org/observations/37524922 (gancw1)	Cheongweei Gan, 2019
<i>Lampides boeticus</i>	https://www.inaturalist.org/observations/151622818 (r-ziebarth)	R. Ziebarth, 2020
<i>Leptasia nina</i>	https://www.inaturalist.org/observations/64033992 (jayarakesh)	Jayarakesh, 2020
<i>Lexias aegle</i>	https://inaturalist.nz/observations/31529230 (denywahyudi)	Deny Wahyudi, 2016
<i>Lymantria</i> sp.	https://commons.wikimedia.org/wiki/File:Lymantria_monacha_Buchstein01.JPG (Kurt Kulac)	Kurt Kulac, 2011
<i>Macrotoma</i> sp.	https://www.inaturalist.org/observations/15725479 (simontonge)	Simon Tonge, 2015
<i>Maruca vitrata</i>	https://www.inaturalist.org/observations/17495532 (tiwane)	Tony Iwane, 2018

Taxon (Species/Genus)	Reference Photo	Author/Year
<i>Melanitis leda</i>	https://www.inaturalist.org/observations/203335343 (jugalpatel) https://www.inaturalist.org/observations/42488376 (danipaul)	Jugal Patel, 2015 Dani Paul, 2019
<i>Micronia</i> sp.	Biodiversity Baseline Studies and Action Plan; DWA_4763.jpg	Wsp, 2023
<i>Mocis frugalis</i>	https://www.inaturalist.org/observations/99064346 (birdexplorers)	Bird Explorers, 2021
<i>Moduza procris</i>	https://www.inaturalist.org/observations/146027343 (gancw1)	Cheongweei Gan, 2022
<i>Nacaduba kurava</i>	https://www.inaturalist.org/observations/175173872 (ljk1410)	Ljk1410, 2023
<i>Neptis hylas</i>	https://www.inaturalist.org/observations/74239732 (milind_bhakare)	Shriram Bhakare, 2017
<i>Neurothemis fluctuans</i>	https://www.inaturalist.org/observations/4784023 (erlandreflingnielsen)	Erland Refling Nielsen, 2013
<i>Neurothemis ramburii</i>	https://www.inaturalist.org/observations/133307137 (twan3253)	Tim, 2022
<i>Nososticta emphylla</i>	https://www.inaturalist.org/observations/18895230 (denywahyudi)	Deny Wahyudi, 2015
<i>Nososticta selysii</i>	https://www.inaturalist.org/observations/18897195 (denywahyudi)	Deny Wahyudi, 2015
<i>Ophthalmis milete</i>	https://www.inaturalist.org/observations/226855465 (manggetotok)	Amirudin Agus Nursalim, 2024
<i>Oreta</i> sp.	https://www.inaturalist.org/observations/20873985 (sk2)	Sk2, 2019
<i>Orthetrum chrysis</i>	https://www.inaturalist.org/observations/5451543 (budak)	Budak, 2017
<i>Orthetrum glaucum</i>	https://www.inaturalist.org/observations/17186430 (doggy0406)	Hong, 2017
<i>Orthetrum pruinosum</i>	https://www.inaturalist.org/observations/59786362 (chenjacy)	Jacy Chen, 2020
<i>Orthetrum sabina</i>	https://www.inaturalist.org/observations/138453716 (budak)	Budak, 2022
<i>Orthetrum testaceum</i>	https://www.inaturalist.org/observations/4495378 (erlandreflingnielsen)	Erland Refling Nielsen, 2013
<i>Pachliopta adamas</i>	https://www.inaturalist.org/observations/146684418 (resdwikelana)	A. Restu Dwikelana, 2023
<i>Panagaeus</i> sp.	https://www.inaturalist.org/observations/122050512 (runebjerre)	Rune Bjerre, 2022
<i>Pantala flavescens</i>	https://www.inaturalist.org/observations/45946764 (ahmeddomarr)	Omar Haroon, 2019
<i>Papilio demolion</i>	https://www.inaturalist.org/observations/112391985 (gancw1) https://www.inaturalist.org/observations/105156916 (gancw1)	Cheongweei Gan, 2011, 2008
<i>Papilio helenus</i>	https://www.inaturalist.org/observations/106229938 (gancw1)	Cheongweei Gan, 2010
<i>Papilio memnon</i>	https://www.inaturalist.org/observations/131203291 (gancw1)	Cheongweei Gan, 2022
<i>Papilio peranthus</i>	https://www.inaturalist.org/observations/218239024 (manggetotok) https://www.inaturalist.org/observations/19439590 (fmiqbal)	Amirudin Agus Nursalim, 2024 Faisal Muhamad Iqbal, 2017

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<i>Papilio polytes</i>	https://www.inaturalist.org/observations/144971635 (mkn123)	Min Khant Naing, 2022
<i>Paragymnopleurus</i> sp.	https://www.inaturalist.org/observations/118112057 (papilioasih)	Licheng Shih, 2022
<i>Parasarpa hollandi</i>	Biodiversity Baseline Studies and Action Plan; DWA_4642.jpg	Wsp, 2023
<i>Pareronia valeria</i>	https://www.inaturalist.org/observations/106007633 (gancw1)	Cheongweei Gan, 2009
<i>Pelopidas mathias</i>	https://www.inaturalist.org/observations/186398541 (gancw1)	Cheongweei Gan, 2015
<i>Perisyntrocha</i> sp.	https://www.inaturalist.org/observations/7617931 (flyingswallow123)	Flyingswallow123, 2012
<i>Phaedyma columella</i>	https://www.inaturalist.org/observations/95527899 (gancw1)	Cheongweei Gan, 2006
<i>Phyllocharis cf. undulata</i>	https://www.inaturalist.org/observations/227456975 (nannup151)	Nannup151, 2024
<i>Phyllodes verhuelli</i>	https://www.inaturalist.org/observations/137754498 (Phyllodes verhuelli)	Songkran Thongon, 2022
<i>Pingasa chlora</i>	https://www.inaturalist.org/observations/145295854 (peterwatts165)	Peter And Shelly, 2022
<i>Pingasa ruginaria</i>	https://www.inaturalist.org/observations/35843942 (dhfischer)	Dhfischer, 2019
<i>Polyura athamas</i>	https://www.inaturalist.org/observations/101511329 (jackychiangmai)	Jacky Cudon, 2021
<i>Polyura cf. Alpius</i>	https://www.inaturalist.org/observations/180694432 (cccril)	Cccrll, 2020
<i>Potamarcha congener</i>	https://www.inaturalist.org/observations/191252518 (sunnyjosef)	Sunnyjosef, 2023
<i>Prosotas nora</i>	https://www.inaturalist.org/observations/97757675 (haneesh)	Haneesh K M, 2021
<i>Pseudagrion pilidorsum declaratum</i>	https://www.inaturalist.org/observations/19650727 (denywahyudi)	Deny Wahyudi, 2018
<i>Psilogramma discistriga</i>	https://www.inaturalist.org/observations/143550536 (gancw1)	Cheongweei Gan, 2011
<i>Pterostichus</i> sp.	https://www.inaturalist.org/observations/229197352 (alexis_orion)	Alexis, 2024
<i>Ramadasa pavo</i>	https://www.inaturalist.org/observations/198877699 (gancw1)	Cheongweei Gan, 2010
<i>Rapala iarbus</i>	https://www.inaturalist.org/observations/179315530 (gancw1)	Cheongweei Gan, 2014
<i>Rhinocypha pagenstecheri</i>	https://www.inaturalist.org/observations/69873049 (wildan_ardani)	Wildan R. Ardani, 2016
<i>Scapula</i> sp.	https://www.inaturalist.org/observations/129875061 (Sabine-g)	Sabine-G, 2022
<i>Spoladea recurvalis</i>	https://www.inaturalist.org/observations/92894048 (bsmouse)	Bsmouse (돌꽃사람), 2021
<i>Tetrathemis irregularis</i>	https://www.inaturalist.org/observations/205491211 (squiresk)	Kai Squires, 2024
<i>Theretra oldenlandiae</i>	https://www.inaturalist.org/observations/54393029 (se1)	Se Lena, 2020
<i>Tirumala limniace</i>	https://www.inaturalist.org/observations/84947243 (leaf0605)	Leaf0605 Yèzi (葉子), 2021

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<i>Tridrepana cf. fulvata</i>	https://www.inaturalist.org/observations/40674969 (budak)	Budak, 2020
<i>Trigonodes hyppasia</i>	https://www.inaturalist.org/observations/97368428 (haneesh)	Haneesh K M, 2021
<i>Trithemis festiva</i>	https://www.inaturalist.org/observations/18443066 (denywahyudi)	Deny Wahyudi, 2018
<i>Trithemis lilacina</i>	https://www.inaturalist.org/observations/106106039 (mroseup)	Mitch Rose, 2022
<i>Troides haliphron</i>	https://www.inaturalist.org/observations/37154311 (kaiethefishguy)	Yi-Kai Tea, 2019
<i>Troides helena</i>	https://www.inaturalist.org/observations/90760637 (meenavathyam)	Meenav, 2021
<i>Vindula dejone</i>	https://www.inaturalist.org/observations/126431980 (gancw1)	Cheongweel Gan, 2009
<i>Vitessa</i> sp.	https://www.inaturalist.org/observations/87491700 (kt_ton)	Khemthong Tonsakulrungruang, 2021
<i>Xyleutes</i> sp.	https://www.inaturalist.org/observations/83348114 (dhfischer)	Dhfischer, 2016
<i>Zyxomma obtusum</i>	https://www.inaturalist.org/observations/51394994 (joseph_judy)	Joseph Marvin Jansen, 2020

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