

FIELD IDENTIFICATION GUIDE TO THE LIVING MARINE RESOURCES OF KENYA



Cover: Illustration by Emanuela D'Antoni (FAO, Rome)

FAO SPECIES IDENTIFICATION GUIDE FOR FISHERY PURPOSES

FIELD IDENTIFICATION GUIDE TO THE LIVING MARINE RESOURCES OF KENYA

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PREPARATION OF THIS DOCUMENT

This field guide was prepared under the direction of the FishFinder Programme, Marine and Inland Fisheries Services (FIRF) of the Food and Agriculture Organization of the United Nations (FAO). Valuable collaboration was given by the Kenya Marine and Fisheries Research Institute (KMFRI) of Mombasa, Kenya.

The initial draft was initiated in 2009 following an agreement between FAO and KMFRI. In December 2009, the authors started collecting information for the compilation of this guide by means of interviews with fisheries stakeholders on local names and catch methods in the Islands of the Lamu District; similar interviews were also conducted in the Districts of Malindi, Kilifi, Mombasa and Kwale. Information collected through interviews and sampling was augmented with literature with the bulk coming from FAO Species Identification Sheets for Fisheries Purposes, which led to the production of a first draft in February 2010. This Guide is not meant to be considered a complete checklist but a comprehensive list of marine and brackish-water commercial fish species that occur in Kenya waters. It is aimed at being a reference guide for fishery officers, fishers and local scientists to help improve recording, assessment and conservation of marine resources.

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ABSTRACT

This field guide covers the major resource groups likely to be encountered in the fisheries of Kenya. This includes shrimps, lobsters, crabs, bivalves, gastropods, cephalopods, sea cucumbers, sharks, batoid fishes, bony fishes, and sea turtles. Each resource group is introduced by a general section on technical terms and measurements pertinent to that group and an illustrated guide to orders and families of the group. The more important species are described in a subsequent guide that includes scientific nomenclature, FAO names in English and French (where available), local names used in Kenya, diagnostic features, one or more illustrations, maximum size, and notes on fisheries and habitat. Colour plates for a large number of the species are included. The guide is fully indexed and a list of further literature is appended.

FOREWORD

This publication documents the major marine and brackish-water resource groups likely to be encountered in the fisheries of Kenya, which should provide fishery workers, students, environmentalists, sport fishers and tourists visiting the Kenya coast with a user-friendly tool for the correct identification of the species occurring in our part of the Indian Ocean.

The field guide, of course, was prepared with a lot of input by many fisheries stakeholders who provided information on local names and catch methods in the Districts of Lamu, Malindi, Kilifi, Mombasa and Kwale at the Kenya Coast; their input augmented by sampling and literature review.

As we are all aware, the fishery resources of the Kenyan Exclusive Economic Zone (EEZ) are not well known. As such, this guide may be considered as a tentative checklist of the marine and brackish water fish species of commercial value occurring in Kenya waters. Since there are considerable gaps in our knowledge on the biology, ecology and fishery status of species in this part of the Indian Ocean, it is our hope that the authors together with the efforts of partners and colleagues will produce a future, more complete and comprehensive checklist of Kenya fish fauna.

The publication comes at a time when the Government of Kenya is giving marine fisheries a lot of attention. To this end, Kenya has developed an Ocean and Fisheries Policy (2008) which forms the basis of a new Fisheries Management and Conservation Bill 2012. As part of this endeavour, an Ocean and Fisheries Council of Ministers has been established with a view to encouraging effective information sharing on sustainable development of our Economic Exclusive Zone. Undoubtedly, this guide will find space in the lives of Kenyans, our visitors and friends from all over the world.

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Thanks to Ms. Luigia Sforza for preparing a first InDesign draft of this Field Guide. Thanks for the illustrations that have been made available by the South African Institute for Aquatic Biodiversity (SAIAB), a research facility of the National Research Foundation. These illustrations are copyright and have been produced by illustrators employed by SAIAB over time.

Many thanks to Mr. O. Gon and Mr. W. Holleman, senior Aquatic Biologist and Research Associate, respectively, of the South African Institute for Aquatic Biodiversity, Grahamstown, South Africa for critically reviewing the final draft, and for their precious suggestions and useful information. Thanks to Mr. Dave Ebert, Research Faculty of the Moss Landing Marine Laboratories, Moss Landing, California, United States of America, for reviewing the Sharks and Batoids sections. Thanks to Mr. Nicolas Bailly, Project Manager for FishBase, and Scientific Adviser for SeaLifeBase, for reviewing the taxonomy of the included groups.

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INTRODUCTION

The Republic of Kenya, has a coastline of about 640 Km extending from 1°41'S to 4°30'S latitude and forming part of the western border of the Indian Ocean marine eco-region (Fig. 1). It is characterized by the presence of a continuous fringing coral reef commonly distributed at depths between 16 and 40 meters. Mangrove forests occur in many estuaries and deltas, while sea grass beds are distributed between the mangrove and reef areas. The Kenyan marine habitats support a wide variety of species, most of which are harvested by artisanal fishers, mostly operating between the shoreline and the reef. With the exception of mangrove swamps, which have been studied in detail, there is currently limited taxonomical information on the marine biota of Kenya, so that species lists for coastal and pelagic environments are known to be incomplete.

The description of assemblages at high levels of taxonomic resolution (species) is logistically difficult and requires a high level of expertise. Attempts to identify the extraordinary variety of individual species entering the fisheries are strictly related to the quality of the taxonomic information available to fishery workers. This becomes particularly true for the

identification of numerous tropical, subtropical and unconventional species in the absence of training of personnel responsible for the collection of such data in the field and of an up-to-date taxonomic literature. Although Caddy & Garibaldi (2000) found that 65.9% of the total capture production reported to the FAO for 1996 was at the species level, it was also observed a great difference between temperate areas, with 90% at the species level, and tropical areas, where it was often lower than 40%. In this direction, the FAO FishFinder programme (formerly, SIDP) provides and disseminates tools to facilitate species identification in fisheries and, in so doing, improve fisheries data quality. Misidentification of species has become a high risk in fishery operations. Failure to identify species or erroneous species identifications still represent one of the most serious handicaps in the collection of meaningful data by species in tropical and subtropical waters (Fischer, 1989).

This field guide is aimed at national fishery workers in need of quick identification of species in markets and landing places for the specific purpose of improving statistical and other fisheries data by species. Moreover, it is intended to be a baseline for monitoring and

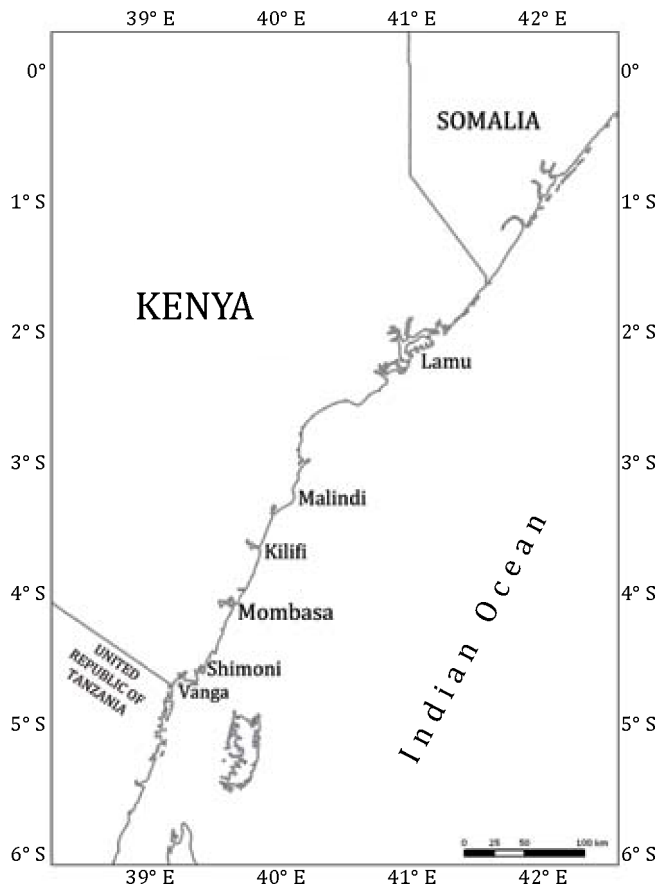


Fig. 1 Map of Kenya showing the main landing sites

updating information on relevant species which have still never been officially recorded in Kenya waters, but have been observed in neighboring countries, and are thus likely to occur:

Physical Features

The Kenya coast has a narrow continental shelf which in many places is less than 4 km wide, while it widens on the northern part and has a rough bottom topography of coral formation. This shallow water area is broken only by the river estuaries discharging into the Indian Ocean at Vanga, Mombasa, Mtwapa, Mida Creek, the Sabaki River mouth, the Tana River and the extensive Lamu archipelagos. The coastline is very irregular, indented and fronted by several islands of which the larger are in the northern part (Lamu, Manda, Pate and Kiwayuu). Between the northern islands there are many reefs and shoaling coral reefs that may extend for 8–10 km offshore. The northern islands have high sandhills on their seaward sides, but elsewhere the islands are fringed with mangroves. Mombasa Island and Funzi Island are found on the southern coast of Kenya. The Malindi and Mombasa areas have long sandy beaches and low overhanging coral cliffs associated with scrubs and bushes, fringed by coral reefs extending in some places to a maximum of 5 km offshore. The seaward coast near Mombasa area is very flat but around the island itself there are many creeks and mangrove swamps. The southern area of the Mombasa coast has overhanging cliffs, coral points and sandy beaches (Ochumba, 1983).

Oceanography

The Kenya coast is characterized by a weather regime influenced by the Inter-Tropical Convergence Zone (ITCZ), an area of the atmosphere above the earth's surface where two air-streams (the North East and South East Trade Winds) converge. This low pressure zone moves north and south of the equator according to the movement of the sun, creating two distinct seasons, the northeast and southeast monsoons (McClanahan, 1988), which alter sea temperatures, rainfall, wind and sea conditions. The northeast monsoon (NE) which prevails from November to March is characterized by weaker winds and higher air temperatures (> 30°C) than the southern monsoon (SE) that prevails from June to September and is marked by lower air temperatures (approximately 25°C) as well as strong winds and is occasionally associated with events such as cyclones and storms (McClanahan, 1988). The SE monsoon's meteorological parameters are characterized by high cloud cover, rainfall, river discharge, terrestrial runoff and wind energy while solar insolation and temperatures are low and oceanographic conditions are characterized by cool waters, a deep thermocline, high water-column mixing and wave energy, fast currents, low salinity and high phosphorus. These parameters are reversed during the NE monsoon. The inter-monsoon periods occur in the months of March/April and October/November and are the calmest. June and July are the windiest months while March, April and November experience the

lowest and most variable wind speeds (McClanahan, 1988). The NE Monsoon comes with the Somali counter current, a current which creates an upwelling in the upper reaches on the North Kenya Banks, subsequently creating a lavish fishing ground along the North Coast. The Somali counter current converges with the East African Coast current moving offshore forming the Equatorial counter current. The turbulence thereof enhances primary productivity and thereby forming a fertile fishing ground (McClanahan, 1988). During the SE Monsoon, the flow of the East African coastal current is increased and its range extends further north, becoming the Somali current.

Tides

Kenyan coastal waters are characterized by semi-diurnal tides or rather about two tidal cycles for every 24 hour period. With the exception of limited periods of the year, the levels of high and low water of each successive tide differ considerably from the corresponding tide before and the tide following. The tides can thus be defined as mixed semi-diurnal tides. The tidal range in Kenya is 4 m which is relatively large for a tropical coastline (Brakel, 1982). The reference port for tidal observations is Kilindini (Port of Mombasa). Tidal range for Malindi is 2.0 m for neap tide and 2.9 m for spring tide. There is a lag in the tidal state which increases with distance moving north along the Kenyan coast. Deviations from the predictions in tide tables are influenced by barometric pressure, onshore winds and oceanic swell. However, the lowest tides occur persistently during the NE Monsoon since they combine with the prevailing winds to drive water offshore (UNEP, 1998).

Sea temperature and salinity

Sea surface temperature and salinity vary with the monsoon season. The highest temperatures of 28–29°C occur after the NE Monsoon in March and April. The lowest sea surface temperature occurs in August and September with a minimum of 24°C.

In coastal waters, the lowest salinities occur at the onset of the SE Monsoon when discharge, cloud cover and rainfall are high; highest salinities occur during NE Monsoon when air temperatures and solar insolation are high and rainfall and discharge low (McClanahan, 1988). Sea currents influence as well salinity. During the SE Monsoon the shifting of ocean currents brings Pacific Ocean water of high salinity into the South Equatorial Current while during the NE Monsoon the South Equatorial Current draws water of low salinity from the Malay Archipelago. These changes in turn result in changing salinities of the East African Coastal Current waters. As can be expected, offshore waters are influenced mainly by the oceanic currents and surface water salinities in Kenyan coastal waters vary from a minimum of 34.5 ‰ to a maximum of 35.4 ‰ (UNEP, 1998).

Coastal Habitats

Different tropical marine and wetland habitats occur

along the coast of Kenya including coral reefs, sea grass beds, mangroves, and salt marshes (UNEP, 1998).

Coral reefs

Kenya coral reefs are divided into two main areas: a fairly continuous 200 Km fringing reef in the south extending from Malindi to Shimoni broken up by creeks that drain coastal rivers, with a shallow lagoon along its length and, patch reefs (exposed and protected) and fore reef slopes in the north of Lamu to the Somali border. Both areas are interspersed with sand, seagrass and algae beds.

Coral diversity is high, with 112 species of hard corals identified in Kenya and Tanzania (Sheppard, 1999) and 28 species of soft corals in Kenya (Samoilys, 1988). Kenya's coral reefs were severely impacted by the 1998 El Nino bleaching event, which resulted in the widespread bleaching and mortality of 50–90% of its reefs (Wilkinson, 1998).

Being accessible in most weather conditions during both monsoon seasons, lagoons and fore-reef areas are heavily utilized by fishers.

Mangrove forests

There are twelve patches of mangrove forests along the Kenya coast, with a total area estimated to be between 53,000 and 61,000 ha, with 67% occurring in the Lamu district and 10% each in the Kilifi and Kwale Districts (Government of Kenya, 2009). Mangrove forests are nutrient-rich environments which support a variety of food chains and function as a nursery and feeding ground for fish and invertebrates. Many of these species spend part of their life cycle in coral reefs, seagrasses and open waters. Mangrove trees are also important for shoreline stabilization, and provide resources for both rural and urban coastal populations (Government of Kenya, 2009).

Rocky shores and substrates

The Kenya coastline from Ngomeni southwards, and the islands from Lamu northwards is made up of fossil Pleistocene reef rock formations, resulting in large areas of intertidal reef platform below cliffs of 4–6 m in height. The cliffs are in the upper intertidal and exposed to the air for most of the tidal cycle, and thus have sparse biological communities (Ruwa, 1984, 1996). The rocky platforms below the cliffs are inundated by the tides twice a day, resulting in a strong zonation of fauna and flora. Because of their accessibility at low tide, rocky shores and intertidal platforms have been the focus of numerous ecological and taxonomic studies, as well as exploitation and extraction (Government of Kenya, 2009).

Seagrass beds

Seagrasses occur in extensive beds that cover the largest proportion of shallow reef slopes, and form an important habitat for many species living in them and in adjacent systems. Twelve seagrass species are found in Kenya, with *Thalassondendron ciliatum*, which forms monospecific stands, being the dominant one. Its canopy

structure provides habitat for small and juvenile fish and invertebrates. Seagrass beds are important foraging grounds for endangered species such as dugongs and marine turtles as well as important habitats for fish species like rabbitfish, surgeonfish and parrotfish. Various species of shellfish and sea cucumbers are also found in seagrass beds (Government of Kenya, 2009).

Soft-bottom habitats

Sandy sub-tidal habitats dominate the shoreline from Malindi to Lamu, supplied with sediment from the Tana and Sabaki rivers to the south, and extensive creek systems to the north. Kenya's soft-substrate communities are not well known, but support significant shrimp and bottom fish populations. There is an active trawling industry exploiting these habitats, particularly from Malindi northwards to Ungwana Bay, at the mouth of the Tana river (Government of Kenya, 2009).

Pelagic zone

Beyond the continental shelf, at depths ranging from 200 m and deeper, is the pelagic zone, where productivity is limited by light and nutrients. Primary and secondary productivity in this zone is heavily influenced by the monsoons, being lower during the rough SE Monsoon and higher during the calmer NE Monsoon. Large schools of migratory pelagic stocks abound in the offshore waters of Kenya (Government of Kenya, 2009).

Fishery

Most fishing in Kenya is artisanal, with a little industrial fishing by prawn trawlers. The deep sea (Exclusive Economic Zone, EEZ) fishery resources are currently exploited by Distant Waters Fishing Nations (DWFN) through a licensing system, and only a small quantity of catch from the EEZ is landed in Kenya, primarily tuna for export. The local fishers lack the capacity to exploit deeper water resources.

Artisanal fishing activities are undertaken by 10,276 fishers, of which 9,600 are boat fishers using 2,368 boats and 675 are foot fishers (Government of Kenya, 2006). Of the fishing crafts along the coast, 135 are motorized, 991 use paddles while 1,179 use sails for propulsion. The most common fishing gears are gillnets, traditional traps, seine nets, long lines, hooks and line and traps. Fishing in the territorial waters is carried out by 2 trawlers, which fish for shrimp, although they also harvest large quantities of by-catch, some of which is discarded. Annual marine fish production from artisanal fishery in Kenya from 1980 to 2005 show a high of 9,972 t in 1990 and a low of 4,336 t in 1993. For most of the period, production fluctuated between 6,000 and almost 10,000 t. Overfishing in inshore areas has continued to cause a decline in fish catches, while the deeper territorial waters remain underexploited due to the lack of deep sea fishing capacity by the local fishers (FAO, 2007).

Sport fishing

Kenya enjoys a reputation as one of the world's great big game sports fishing destinations. Kenya's marine waters

contain most of the major target game species, primarily billfishes, especially sailfish, swordfishes, the marlins, sharks and some tunas. Sport fishers are registered in the several sport-fishing clubs, which coordinate the fishing activity and record data. The peak sport fishing season is in September to March. The popular sport fishing areas are Malindi, Watamu, Shimoni and Lamu. In 2005, 30 sport-fishing clubs were registered (FAO, 2007).

Species included in this guide

This guide is designed as a practical tool for all fisheries workers within Kenya, particularly those who are confronted with the daily task of collecting fisheries statistics and other data by species on landing points, fish markets, fish on transit, on board commercial and research vessels. It is also aimed at creating taxonomic interest among fisheries students so as to improve the number of taxonomists in the country.

The guide includes those marine and brackish-water species of bony fishes, batoid fishes, sharks, lobsters, shrimps, sea cucumbers, cephalopods, molluscs and marine turtles, considered to be as regular components of the catches along the Kenyan coast. It also includes those species which are known to occur in Kenya neighboring countries, but have still not been officially recorded in Kenya waters. **These are marked with an asterisk beside the scientific name.** In case of a first record of one of these species, the user can follow the instructions here provided regarding its preservation and description and/or contact the FishFinder Programme.

Preservation of specimens

Preserved fish specimens are central to documenting and describing global biodiversity over time. Worldwide, museum and university collections provide irreplaceable resources and have an enduring role in taxonomic, ecological, biogeographical, and evolutionary studies. It is therefore important that the correct preservation procedures be followed to ensure the quality and longevity of preserved fish specimens.

Specimens should be rinsed in water to clean off any mud or sand. Then, if possible, they should be immediately placed in 10% formalin solution upon capture (this is made by combining 1 part full strength formalin with 9 parts clean water). Fish specimens should be fixed in a natural posture, with the body straightened and mouth closed prior to fixation. The specimens should be placed head first into a wide-mouthed jar filled with enough formalin solution to cover the fish. Before fixing large specimens it is advisable to inject formalin into the body cavity (through the vent) or to make a lateral incision on the right side of the body cavity to allow the fixative into the body cavity. This is particularly important with large herbivorous fishes, as their guts will rapidly deteriorate.

Formalin is the best available fixative and is widely available from pharmacies worldwide. However, it contains formaldehyde, a hazardous chemical, so it is highly toxic and its fumes should not be inhaled. Rubber gloves should be worn while using formalin or handling formalin-fixed specimens. If you get formalin on your skin or in your eyes wash it off with large amounts

of water. Always use formalin outdoors or in a well-ventilated area.

Specimens usually have to be left in formalin to be fixed for a week or slightly more if larger than 10 cm. Subsequently they should be soaked for a day or two in clean freshwater before being transferred to 70–75% alcohol for long-term preservation. Alcohol is usually safe to handle, but can cause irritation to the skin in cases of prolonged contact and is highly flammable. Always rinse hands thoroughly with water after working with alcohol. Industrial alcohol is toxic and should never be drunk. Receptacles containing alcohol should always be properly and clearly labelled. Alcohol is prone to rapid evaporation, and receptacles holding it should be securely covered at all times, and not be opened unnecessarily (M.L.J. Stiassny, in litt.).

Presentation and format

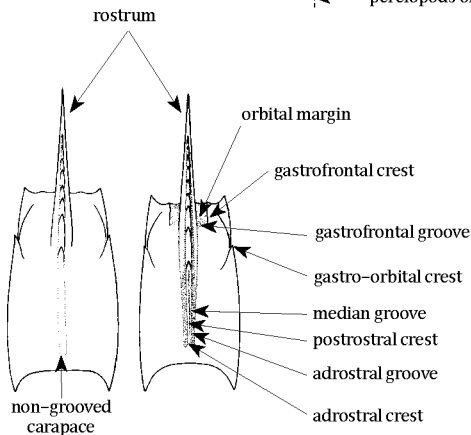
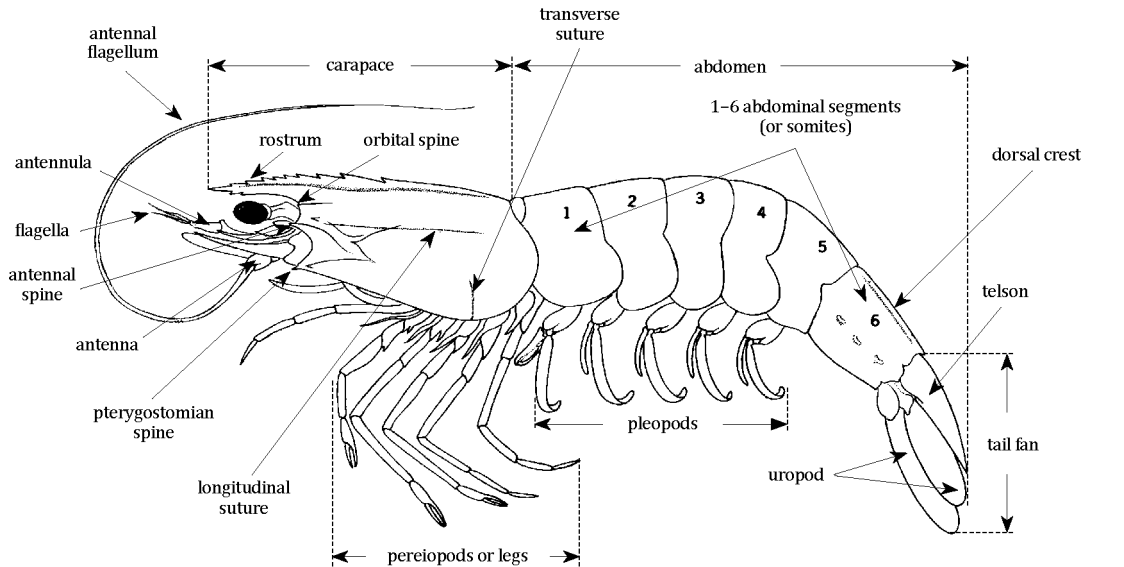
Our leading idea was to produce a compact and easily manageable guide that would be at the reach of fishery workers at all levels. Consequently, the guide had to be based largely on illustrations, while the text was kept as succinct as possible. This obviously implies certain limitations of the guide for an accurate identification of all species. It is therefore recommended, in case of any doubt, that the regional sets of FAO Species Identification sheets for the Western Indian Ocean (Fischer & Bianchi, 1984) and/or the taxonomic literature cited in this guide be consulted, being more comprehensive in species coverage and giving much more detailed account of the diagnostic characters of each species.

Each of the major taxonomic groups is introduced by a schematic illustration of the main body parts of a typical representative species and some measurements and technical terms of general use to fishery workers. Families (block letters at upper right corner of the sheets) are arranged in phylogenetic (systematic) order. The arrangement of species within a family is alphabetical by genus and species. Text for each species is restricted to information on names: scientific names; FAO names in English (En) and French (Fr) (where available) and local names in Swahili (where available). The letters in brackets following local names indicate the localities from where the names were obtained: South (S) for Mombasa (M) and Kwale (K) districts; North (N), which includes the Districts of Lamu and Kilifi. The local names included are those gathered in the course of the field work for this project. It is hoped that other local names will be added directly on the sheets by users and communicated to Fisheries offices or FAO. The size is expressed usually as total length, unless otherwise specified as fork length (FL), standard length (SL), or disc width (DW) for batoids. Moreover, information on catch methods and habitat is provided. All information on species identification is summarized as it is meant to supplement species illustrations as a means of quick species identification and reference in the field.

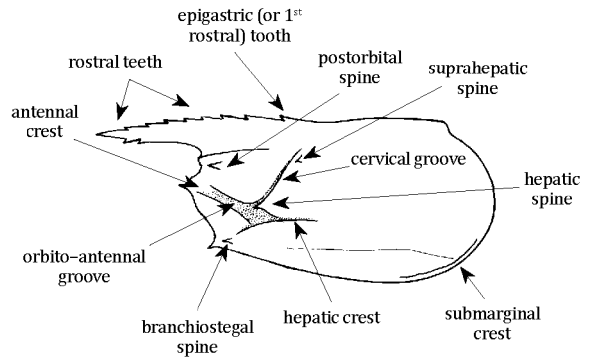
SHRIMPS AND PRAWNS

The "Guide to Suborders and Families" includes 2 suborders and 7 families, while the "Guide to Species" includes 25 species. The families Penaeidae and Aristeidae are of great commercial value on the local and international market (except those of small size). They also form the food of many fishes and play a major role in food relationships and ecology in both lagoons and the sea. Some are used as baits both live and dead. Two Palaemonid shrimps, *Macrobrachium rude* (Heller, 1862) and *Nematopalaemon tenuipes* (Henderson, 1893) are of moderate interest in capture fisheries.

TECHNICAL TERMS AND MEASUREMENTS



carapace dorsal view



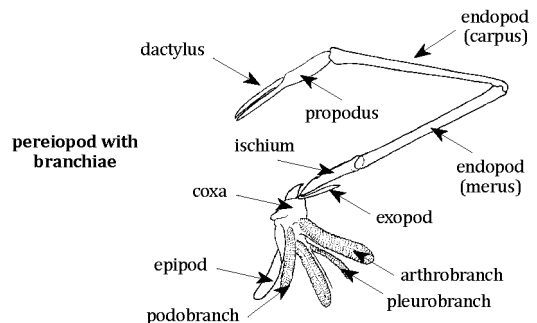
carapace lateral view



telson with movable spines



telson without movable spines

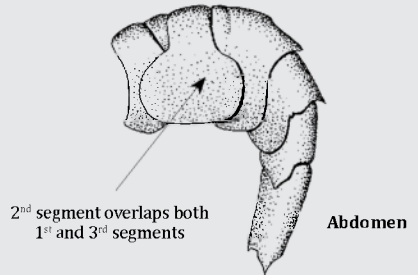


pereopod with branchiae

GUIDE TO SUBORDERS AND FAMILIES

Suborder CARIDEA – Caridean shrimps

Pleuron of second abdominal segment overlapping those of first and third segment. First two pairs of thoracic legs, or only the second, ending in a pincer; the last three pairs with a simple claw. Eggs carried by the female.

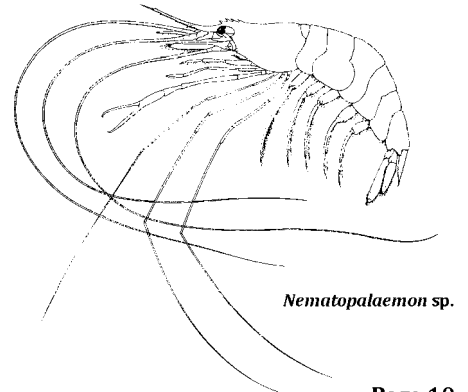
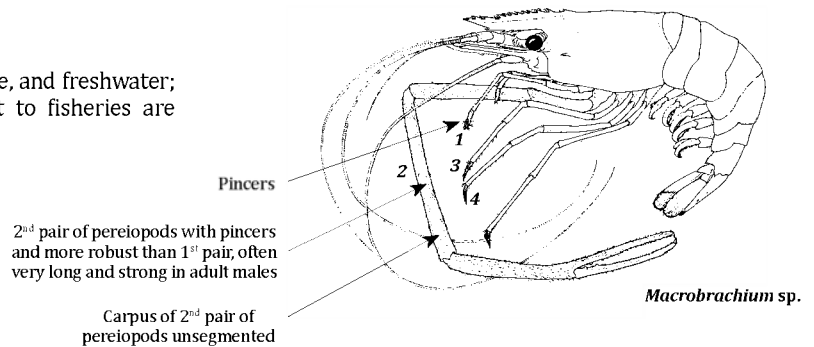


PALAEMONIDAE

Page 9

Palaemonid shrimps

To about 34 cm. Marine, estuarine, and freshwater; benthic. Two species of interest to fisheries are included in the Guide to Species.

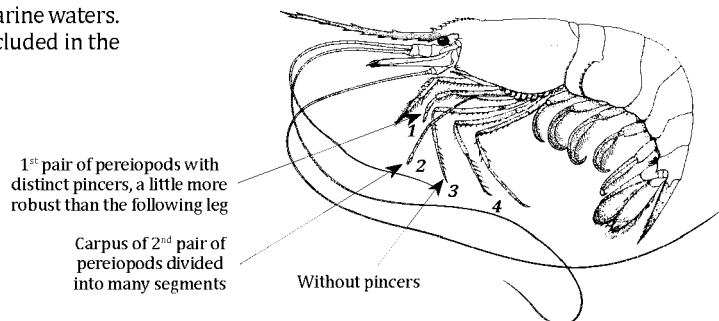


HIPPOLYTIDAE

Page 10

Cock shrimps

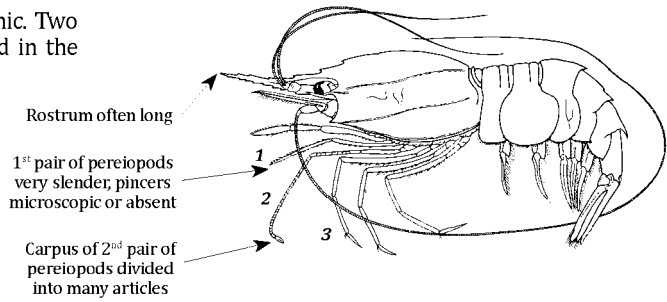
To about 8 cm. Shallow marine and estuarine waters. One species of interest to fisheries is included in the Guide to Species.



PANDALIDAE

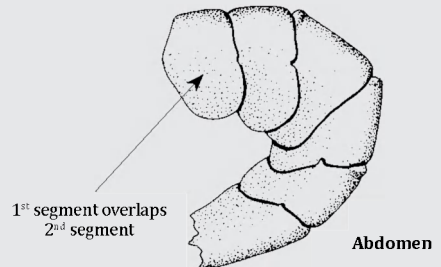
Pandalid shrimps

To about 15 cm. Marine, deep water; benthic. Two species of interest to fisheries are included in the Guide to Species.



Suborder PENAEOIDEA – Penaeid shrimps

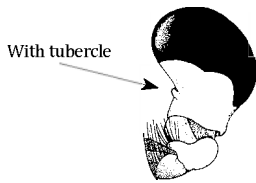
Pleuron of second abdominal segment overlapping that of third segment only; pincer of first 3 pairs of thoracic legs equal or sub-equal. Eggs carried by the female.



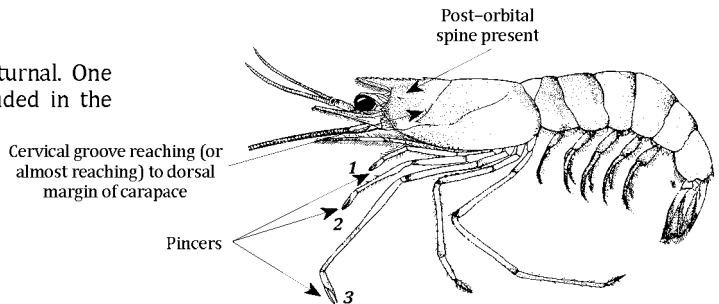
SOLENO CERIDAE

Solenocerid shrimps

To about 14 cm. Marine, benthic, nocturnal. One species of interest to fisheries is included in the Guide to Species.



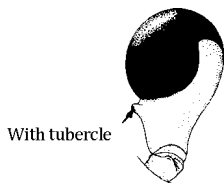
Eyestalk



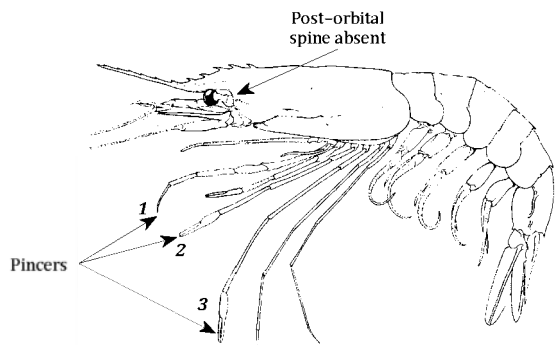
ARISTEIDAE

Aristeid shrimps

To about 33 cm. Marine, deep water; benthic. Two species of interest to fisheries are included in the Guide to Species.



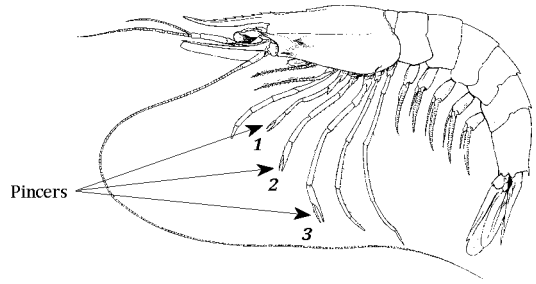
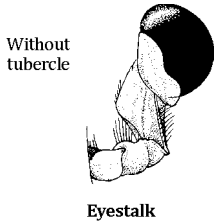
Eyestalk



PENAEIDAE

Penaeid shrimps

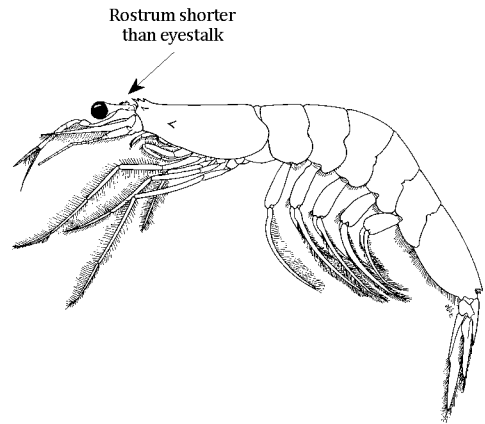
To about 35 cm. Marine and estuarine, benthic. Sixteen species of interest to fisheries are included in the Guide to Species.



SERGESTIDAE

Sergestid shrimps

To about 48 cm. Marine and brackish waters; benthic. One species of interest to fisheries is included in the Guide to Species.



PALAEMONIDAE

Palaemonid shrimps

***Macrobrachium rude* (Heller, 1862)**

FAO names: Hairy river prawn (En)
Bouquet velu (Fr)

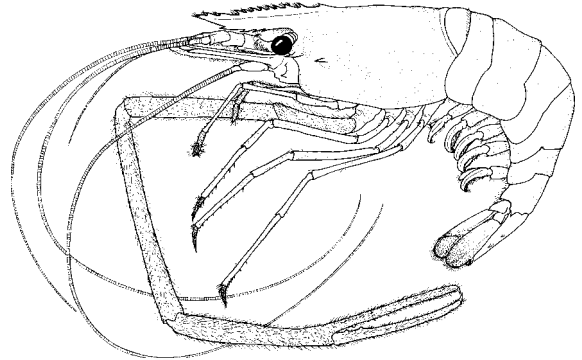
Local name(s): N: Kambamajibaridi; S: Kamba (M/K).

Habitat: Fresh and brackish waters; clear streams and rivers; returns to the sea to release larvae.

Fisheries: Traps, Cast nets, Seines, Set nets.

Distinctive Characters: Rostrum straight and rather long with 10–17 dorsal teeth and 3–8 ventral teeth; hepatic spine situated at lower level than antennal spine, not placed on same horizontal line; posterior margin of telson distinct, with 2 pairs of spines.

Colour: Translucent, with the large legs of the male rather uniformly dark reddish-brown; tips of pereiopods and distal half of uropods dark brownish.



Size: To 13 cm (TL)

***Nematopalaemon tenuipes* (Henderson, 1893)**

FAO names: Spider prawn (En)
Bouquet araignée (Fr)

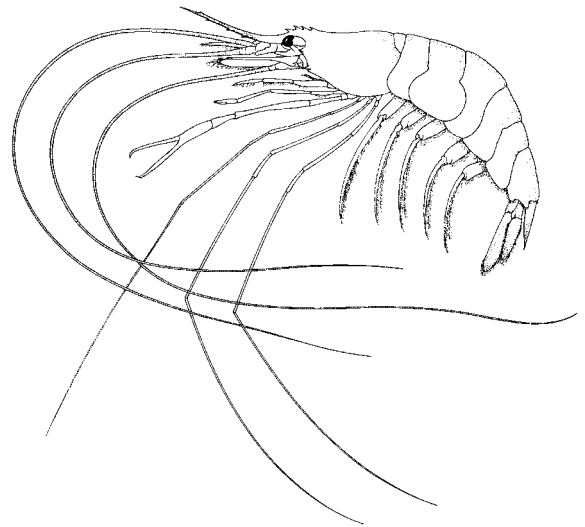
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Shallow coastal waters to rather deeper ones, also in estuarine and brackish waters.

Fisheries: Stake traps, Shore seines, Boat seines, Cast nets.

Distinctive Characters: Rostrum long and slender with 4–7 teeth over the eye; most of distal part of dorsal margin toothless, save for a small sub-distal tooth; ventral margin with 2 to 6 teeth; 2nd pair of pereiopods longer and stronger than 1st, fingers of pincer longer than palm, the latter slightly swollen; dactyls of 3rd to 5th pairs of pereiopods extremely long and thin, far longer than propodus and carpus combined.

Colour: Whitish translucent with distal part of rostrum dark reddish-brown; some reddish-brown on antennae, antennules and distal margins of uropods and telson; also a reddish-brown spot on base of uropods.



Size: To 7.6 cm (males), 8.2 cm (females)(TL)

HIPPOLYTIDAE

Cock shrimps

***Exhippolysmata ensirostris* (Kemp, 1914)**

Local name(s): N: Kamba; S: Kamba (M/K).

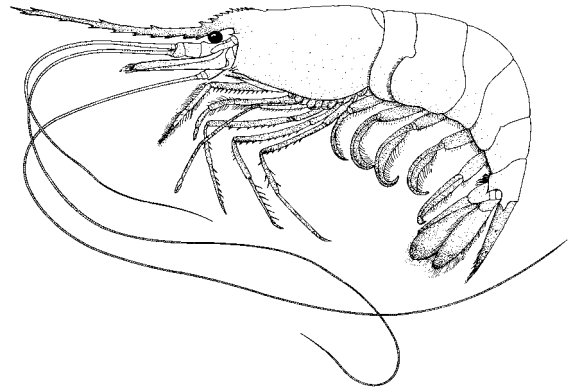
Habitat: Sand and mud bottoms in shallow waters.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 3–4 widely spaced dorsal teeth and an elevated crest of 7–12 closed spaced teeth; 7–16 more or less equally spaced ventral teeth; abdominal segments dorsally smooth, without spines; pleura of 5th segment sharply pointed; telson with a long, pointed teeth, with or without a pair of small distolateral spines; 2nd pair of pereopods with small pincers.

Colour: Whitish or pinkish with the appendages, especially the 3rd maxillipeds, pleopods and uropods, red, often dark-red; rostrum and flagella also reddish.

FAO names: Hunter shrimp (En)
Bouc chasseur (Fr)



Size: To 8 cm (TL)

PANDALIDAE

Pandalid shrimps

***Heterocarpus laevigatus* Bate, 1888**

Local name(s): N: Kamba; S: Kamba (M/K).

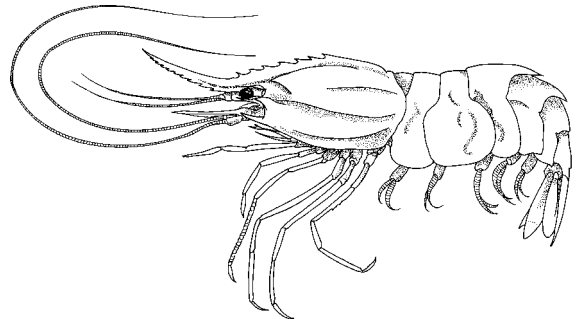
Habitat: Sand bottoms or sand-mud bottoms from 302 m to 1156 m

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 1 dorsal tooth on its base, and 7-9 ventral teeth; pterigostomial spine larger than the antennal spine; carapace dorsally carinate with 5 teeth, with 2 lateral carinae well developed, the postorbital and branchiostegal carinae reach the posterior part of the carapace, and the antennal carina is short and restricted to the basis of the antennal spine.

Colour: Pink to orange with red vertical stripes on the abdomen and segment joints.

FAO names: Smooth nylon shrimp (En)
Crevette nylon inerme (Fr)



Size: To 18 cm (TL)

***Heterocarpus woodmasoni* Alcock, 1901**

Local name(s): N: Kamba; S: Kamba (M/K).

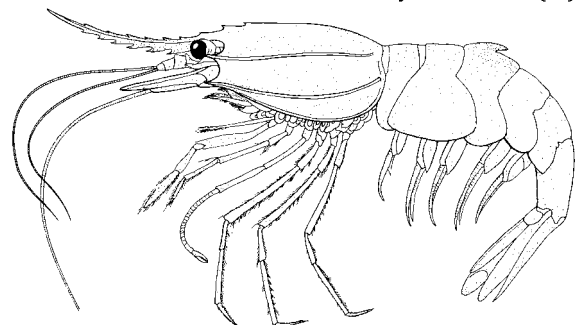
Habitat: Mud bottoms from 290 m to 640 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace with 2 longitudinal crests on each side, extending over the full length of carapace; rostrum long, slightly curved, with 9–11 dorsal and 6–9 ventral teeth; a conspicuous elevated sharp tooth at middle of dorsal crest of 3rd segment; 6th segment with 2 sub-median dorsal crests.

Colour: Pink to red, with a very conspicuous, rounded, dark spot on the postero-dorsal area of the 3rd abdominal segment, including the dorsal tooth.

FAO names: Indian nylon shrimp (En)
Crevette nylon indienne (Fr)



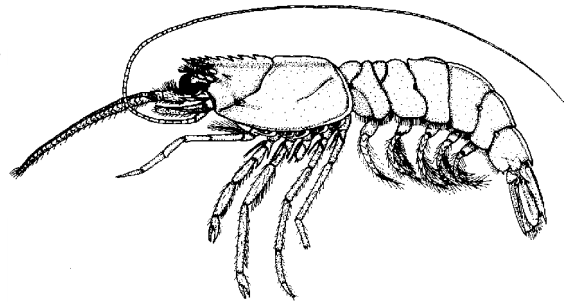
Size: To 13 cm (males), 15 cm (females)(TL)

SOLENOCERIDAE

Solenocerid shrimps

Solenocera choprai Nataraj, 1945

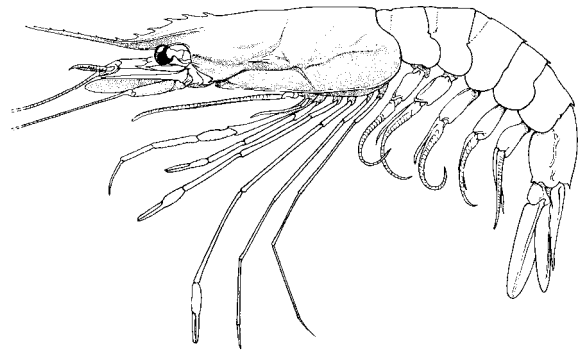
FAO names: Ridgeback shrimp (En)

Local name(s): N: Kamba; S: Kamba (M/K).**Habitat:** Soft bottoms from 75 m to 110 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Body hairless except at base of rostrum where it is distinctly pubescent; rostrum with 6–9 dorsal teeth; post-rostral crest markedly elevated and laminose, reaching posterior margin of carapace and interrupted by a notch just ahead of cervical groove; post-orbital spine present.**Colour:** Body, pereopods and pleopods red; antennae banded dark red and white; uropods dark red, except for some white areas.

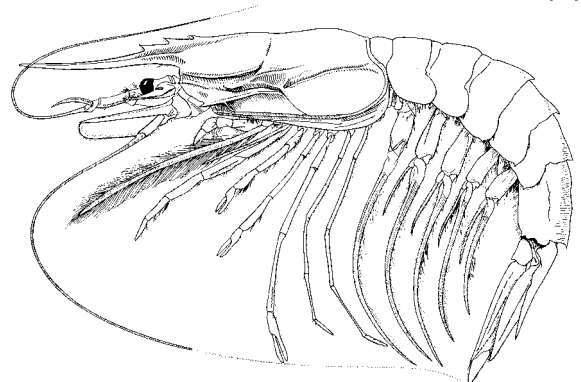
Size: To 9.5 cm (males), 13 cm (females)(TL)

ARISTEIDAE

Aristeid shrimps

Aristaeomorpha foliacea (Risso, 1827) *FAO names: Giant red shrimp (En)
Gambon rouge (Fr)**Local name(s):** N: Kamba; S: Kamba (M/K).**Habitat:** Mud bottoms from 250 m to 1000 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Rostrum long in females, shorter in males, with 4–10 dorsal teeth; hepatic spine present and strong; telson with 4 pairs of movable spines.**Colour:** Body red scarlet.

Size: To 17 cm (males), 22.5 cm (females)(TL)

Aristaeopsis edwardsiana (Johnson, 1868) *FAO names: Scarlet shrimp (En)
Gambon écarlate (Fr)**Local name(s):** N: Kamba; S: Kamba (M/K).**Habitat:** Mud bottoms from 270 m to 1850 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Rostrum with 3 dorsal teeth; hepatic spine absent; cervical sulcus almost reaching dorsal midline; exopod of 2nd maxilliped long, covered with hair.**Colour:** Dark red.

Size: To 19 cm (males), 33 cm (females)(TL)

PENAEIDAE

Penaeid shrimps

***Fenneropenaeus indicus* (Milne Edwards, 1837)**

Local name(s): N: Kamba; S: Kamba (M/K).

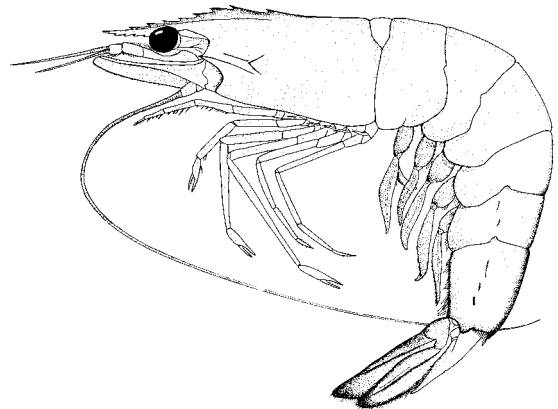
Habitat: Shelf areas from the coastline to 90 m.

Fisheries: Bottom trawls, Drift nets, Set nets, Gill nets.

Distinctive Characters: Carapace hairless; rostrum slender and long, with 7–9 teeth on dorsal and 4–6 teeth on ventral margin; adrostral crest and groove extending as far as or just beyond epigastric tooth; petasma with distomedian projections over hanging distal margin of costae.

Colour: Body pale pink to yellowish, semi-translucent, with olive-green to grey-blue speckles; rostral and mid dorsal abdominal crests mostly brown, but reddish at the base.

FAO names: Indian white prawn (En)
Crevette royale blanche (Fr)



Size: To 18.4 cm (males), 23 cm (females)(TL)

***Marsupenaeus japonicus* (Bate, 1888)**

Local name(s): N: Kamba; S: Kamba (M/K).

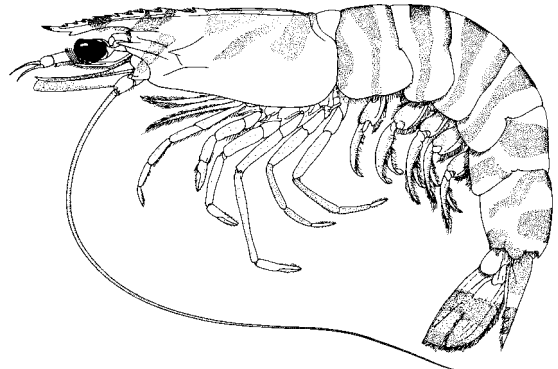
Habitat: Shelf areas from the coastline to 90 m.

Fisheries: Bottom trawls, Set nets, Gill nets.

Distinctive Characters: Carapace smooth; rostrum with 9–11 dorsal teeth and 1 ventral tooth; gastro-frontal crest present; gastro-frontal groove bifurcate posteriorly; hepatic crest almost horizontal to base of antennal crest and from there sloping antero-ventrally; telson armed with 3 pairs of movable spines.

Colour: Body pale yellow to pink with red-brown to dark brown transverse bands; rostrum banded; carapace with anterolateral and dorsal patches and 2 bands, last abdominal band not reaching ventral margin; pereopods yellow proximally, blue or bluish distally, their basal part white.

FAO names: Kuruma prawn (En)
Crevette kuruma (Fr)



Size: To 20 cm (males), 23.5 cm (females)(TL)

***Melicertus canaliculatus* (Olivier, 1811)**

Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Coastline to deep waters down to 50 m.

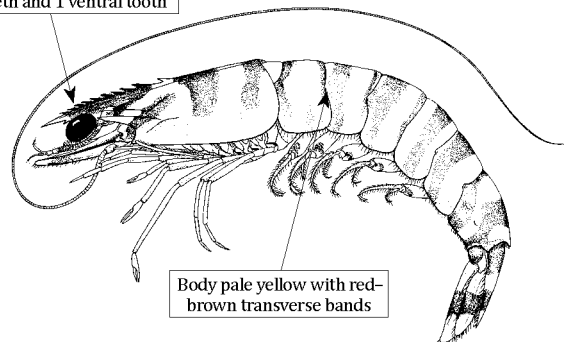
Fisheries: Bottom trawls, Stake traps, Bag nets.

Distinctive Characters: Carapace smooth; adrostral crest and groove long, extending almost to posterior margin of carapace, the groove wide; post-rostral crest well developed as far back as adrostral groove, with a deep median groove throughout its length; telson lacking lateral spines.

Colour: Rostrum brown, tip cream-coloured; carapace with 2 dorsal bands perpendicular to axis of body and a 3rd one leaning antero-ventrally and reaching anterior margin of carapace; pereopods yellow, tips bluish or pinkish; pleopods yellow with brown and white spots at bases.

FAO names: Witch prawn (En)
Crevette sorciere (Fr)

Rostrum with 9–11 dorsal teeth and 1 ventral tooth



Body pale yellow with red-brown transverse bands

Size: To 14.5 cm (males), 18.2 cm (females)(TL)

Melicertus latisulcatus (Kishinouye, 1896)

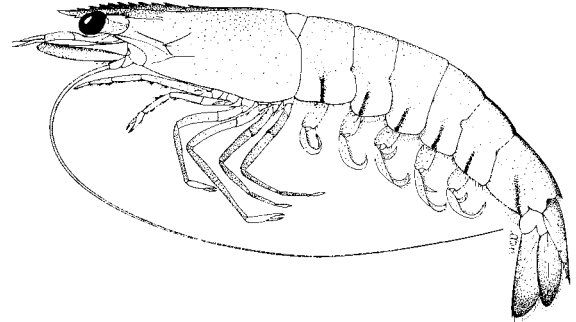
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: From the coastline down to 80 m on sand or mud bottoms.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace smooth; rostrum with 9–12 dorsal teeth and 1 ventral tooth; adrostral crest and groove long, extending almost to posterior margin of carapace; gastro–frontal crest present; gastro–frontal groove bifurcate posteriorly; hepatic crest almost horizontal to base of antennal crest and from there sloping antero–ventrally; telson armed with 3 pairs of movable spines.

Colour: Body pale yellow to brown; antennal, rostral, post–rostral and mid–dorsal abdominal crests dark brown; pleura of first 5 abdominal segments each with a short vertical red or brown stripe; a diagonal stripe of the same colour may be present on last segment.



Size: To 16.2 cm (males), 20 cm (females)(TL)

Melicertus marginatus (Randall, 1840)

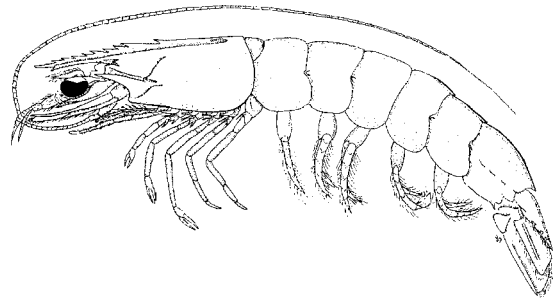
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Sand or mud–sand bottoms, from the coastline to 300 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 8–10 dorsal teeth and 1–2 ventral teeth; adrostral crest and groove extending almost to posterior border of carapace; telson with 3 pairs of movable spines.

Colour: No information.



FAO names: Aloha prawn (En)
Crevette aloha (Fr)

Size: To 20.5 cm (TL)

Metapenaeus monoceros (Fabricius, 1798)

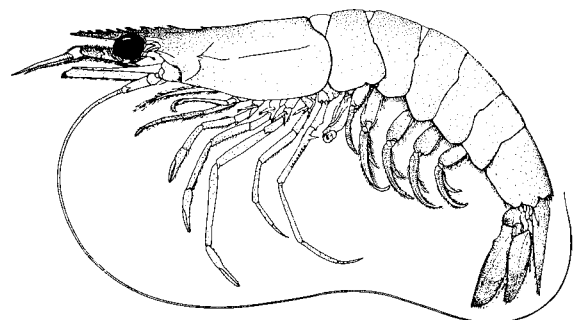
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: From the coastline down to deeper waters, on mud, sand or silt bottoms. Maximum depth 70 m.

Fisheries: Bottom trawls, Boat Seines, Shore lines, Gill nets.

Distinctive Characters: Body pubescent on dorsal part of carapace and abdominal patches; rostrum armed with 9–12 dorsal teeth and no ventral teeth; telson armed only with spinules.

Colour: Body pink, green–greyish or whitish with brown specks; rostral and mid–dorsal abdominal crests brown; antennae red; pereopods and pleopods of same colour as body, distal part of uropods purple–blue, external margin of exopods red.



FAO names: Speckled shrimp (En)
Crevette mouchetée (Fr)

Size: To 15 cm (males), 20 cm (females)(TL)

***Metapenaeus stebbingi* Nobili, 1904**

FAO names: Peregrine shrimp (En)
Crevette faucon (Fr)

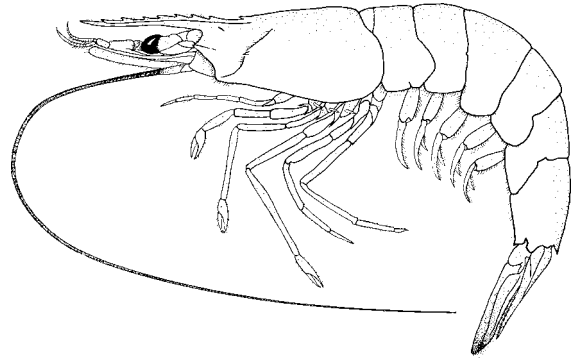
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Soft bottoms from the shore down to deeper waters. Maximum depth 90 m.

Fisheries: Bottom trawls, Stake traps, Cast nets, Seines.

Distinctive Characters: Almost entire body hairless; rostrum armed with 7–10 teeth along entire dorsal margin reaching or exceeding distal margin of antennular peduncle; telson armed on each side with a row of small and movable spines.

Colour: Body, pereopods and pleopods white to creamy-yellow with grey and rust coloured specks; antennae and distal part of uropods rusty colour to grey-purplish.



Size: To 11 cm (males), 14 cm (females)(TL)

***Parapenaeopsis acclivirostris* Alcock, 1905**

FAO names: Hawknose shrimp (En)
Crevette aquiline (Fr)

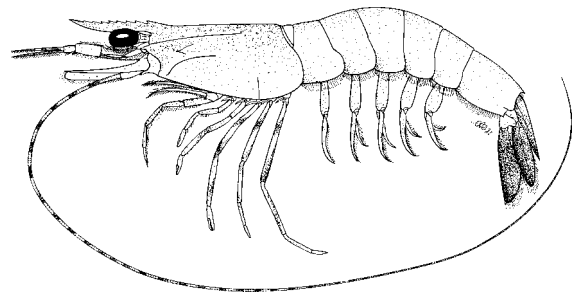
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: From the coastline down to rather deeper waters. Maximum depth 50 m.

Fisheries: Bottom trawls, Gill nets, Seines.

Distinctive Characters: Rostrum nearly straight uplifted and armed with 6–9 teeth along the entire dorsal margin and no ventral teeth; lateral lobes of petasma without wing-like projections; telson unarmed.

Colour: Pale with dull red specks on carapace; antennal flagella and pereopods banded with dark pink; pleopods orangish; uropods and telson dark red.



Size: To 4.7 cm (males), 7.3 cm (females)(TL)

Parapenaeus fissurus* (Bate, 1881)

FAO names: Neptune rose shrimp (En)
Crevette neptune (Fr)

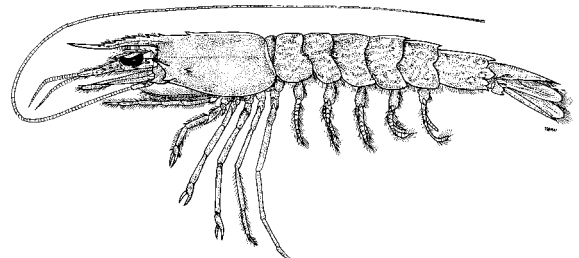
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Sand and mud bottoms from 50 m to 274 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 6–8 dorsal teeth and no ventral teeth; longitudinal suture not easily detectable unless dried on surface; branchiostegal spine present; telson armed with 1 pair of fixed lateral spines.

Colour: No information.



Size: To 7.8 cm (males), 10.7 cm (females)(TL)

Parapenaeus investigatoris* Alcock & Anderson, 1899

FAO names: Explorer rose shrimp (En)
Crevette rose chercheuse (Fr)

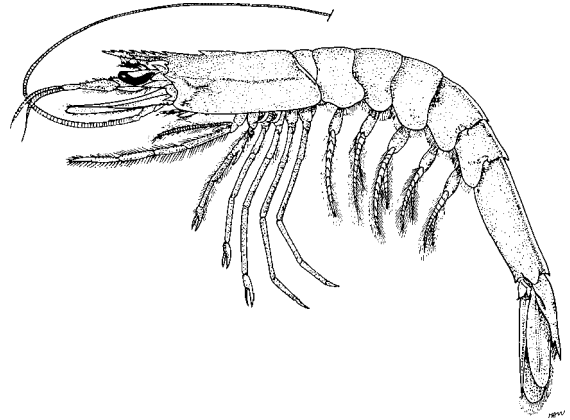
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Deep waters from 220 m to 1240 m.

Fisheries: Bottom trawls.

Distinctive Characters: Rostrum with 6–7 dorsal teeth and no ventral teeth; longitudinal suture distinct; branchiostegal spine present; telson armed with 1 pair of fixed lateral spines.

Colour: No information.



Size: To 7.6 cm (males), 8.2 cm (females)(TL)

Parapenaeus longipes* Alcock, 1905

FAO names: Flamingo shrimp (En)
Crevette flamand (Fr)

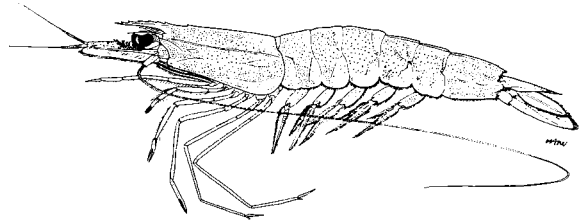
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Rather deep waters from 10 m to 90 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body hairless; rostrum slightly curved downward and armed with 6–7 dorsal teeth and no ventral teeth; branchiostegal spine absent; no trace of hepatic crest; longitudinal suture present; antennular flagella shorter than carapace; telson armed with 1 pair of fixed lateral spines.

Colour: Pink to whitish, speckled with pink chromatophores; a red spot on distomedian part of outer uropods.



Size: To 7.6 cm (males), 7.9 cm (females)(TL)

***Penaeopsis balssi* Ivanov & Hassan, 1976**

FAO names: Scythe shrimp (En)
Crevette faux (Fr)

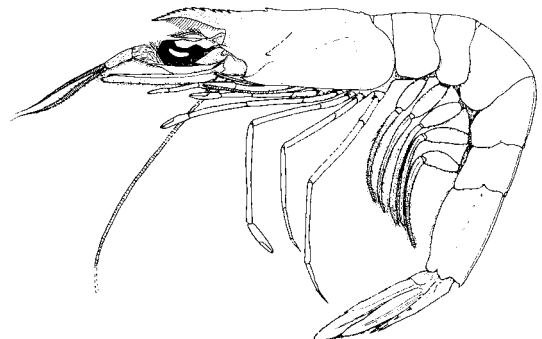
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Soft sand and mud bottoms from 280 m to 980 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body hairless; rostrum usually markedly curved and short with 9–13 dorsal teeth; cervical and hepatic crests and grooves well defined; no longitudinal suture; telson armed with a pair of fixed lateral spines and 2 pairs of small movable spines.

Colour: Frozen specimens are red to pinkish.



Size: To 12.8 cm (males), 15 cm (females)(TL)

Penaeus monodon Fabricius, 1798

FAO names: Giant tiger prawn (En)
Crevette geante tigrée (Fr)

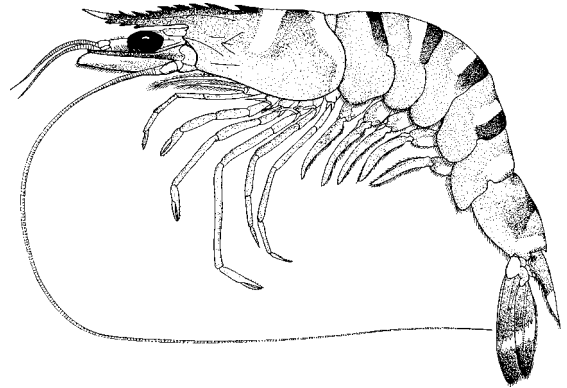
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: From the coastline to about 150 m on sand or mud bottoms; juveniles in mangrove swamps.

Fisheries: Bottom trawls, Boat seines, Shore seines.

Distinctive Characters: Carapace smooth; rostrum with 7–8 dorsal teeth and 3–4 ventral teeth; post-rostral crest well developed, almost reaching posterior margin of carapace; gastro-orbital crest very prominent, ending above middle of hepatic crest; hepatic crest straight, almost horizontal distinctly separated from base of antennal crest.

Colour: Body green–grey to brown, sometimes reddish or bluish; dorso–posterior margin of carapace generally cream yellow; often a transverse band of the same colour near middle of carapace; abdomen with dark brown to dark grey and pale yellow dorsal transverse bands.



Size: To 27 cm (males), 34 cm (females)(TL)

Penaeus semisulcatus De Haan, 1844

FAO names: Green tiger prawn (En)
Crevette tigrée verte (Fr)

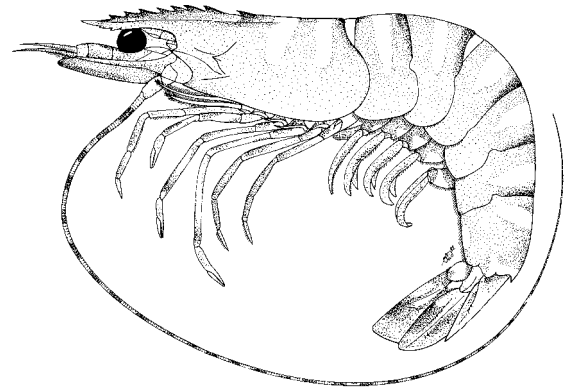
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Continental shelf from the coastline down to 130 m, on mud or sand bottoms.

Fisheries: Bottom trawls, Drift nets, Boat seines, Beach seines.

Distinctive Characters: Carapace smooth; rostrum with 5–8 dorsal teeth and 2–4 ventral teeth; adrostral crest and groove extending beyond epigastric tooth; post-rostral crest almost reaching posterior margin of carapace, with a distinct median groove; gastro-frontal crest absent; hepatic crest straight, sloping antero–ventrally; 5th pereopod with exopod.

Colour: Body pale brown, sometimes greenish; carapace often with 2 yellow–cream dorsal transverse bands; abdomen with brown–grey and pale yellow dorsal transverse bands; antennae banded white and brown.



Size: To 18 cm (males), 23 cm (females)(TL)

Trachysalambria curvirostris (Stimpson, 1860)

FAO names: Southern rough shrimp (En)
Crevette gambri archée (Fr)

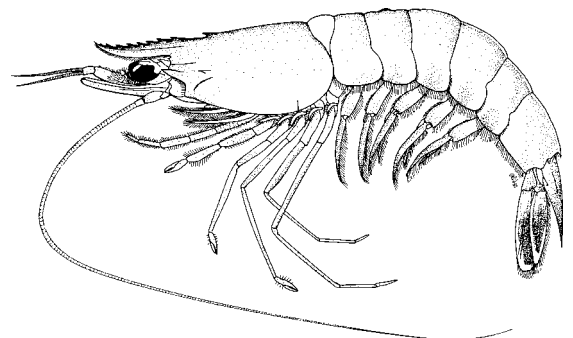
Local name(s): N: Kamba; S: Kamba (M/K).

Habitat: Found on sand and mud bottoms from 10 m to 300 m.

Fisheries: Bottom trawls, Gillnets.

Distinctive Characters: Entire body densely pubescent; rostrum armed with 7–11 dorsal teeth and no ventral teeth; hepatic groove discernible; telson armed with 3–4 pairs of small movable lateral spines sub–equal in size; longitudinal suture short.

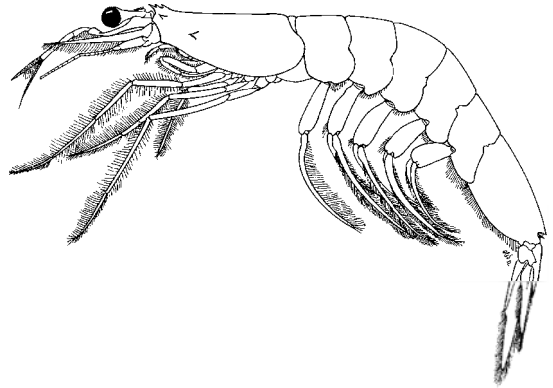
Colour: Body pink to reddish–brown, sometimes whitish on sides; abdominal crest whitish; pereopods white with some pink; pleopods white with red or reddish–brown patches; uropods bright red to reddish–brown, sometimes dark brown with distinct white margins.



Size: To 8.1 cm (males), 10.5 cm (females)(TL)

SERGESTIDAE

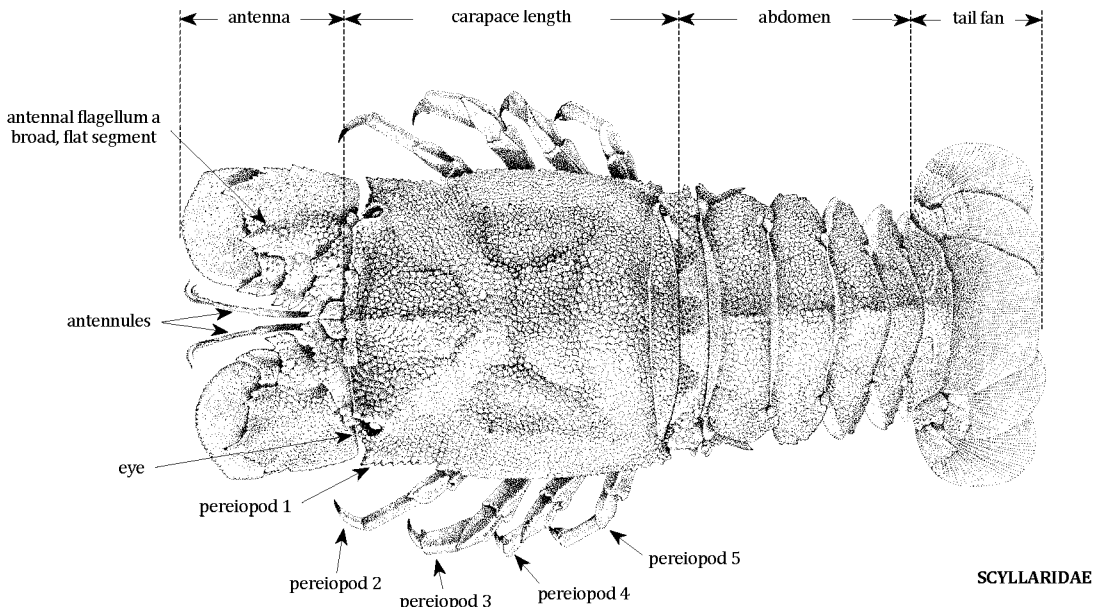
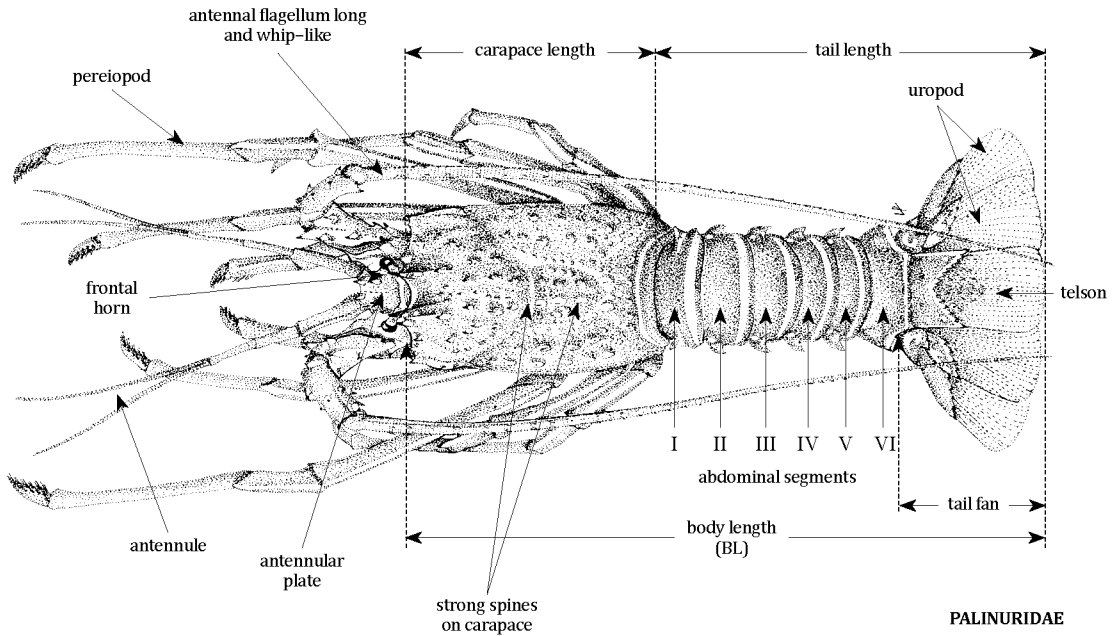
Sergestid shrimps

Acetes erythraeus Nobili, 1905**FAO names:** Tsivakihini paste shrimp (En)
Crevette tsivakihini (Fr)**Local name(s):** N: Kamba; S: Kamba (M/K).**Habitat:** Marine and brackish habitats on mud or sand bottoms down to 55 m.**Fisheries:** Bag nets, Seines, Push nets, Bottom trawls.**Distinctive Characters:** Rostrum, which has two dorsal denticles or teeth, is shorter than eyes; first 3 pereopods elongated and no 4th and 5th pereopods; females larger than males.**Colour:** In life, whole body almost transparent; milky or yellowish when dead.**Size:** To 48 cm (TL)

LOBSTERS

All species are of high commercial value locally and internationally. Five species occur in reasonable numbers in Kenya: *Panulirus homarus*, *Panulirus ornatus*, *Panulirus versicolor*, *Panulirus penicillatus* and *Panulirus longipes*. These are caught along the coast by the artisanal fishing fleet. Landings of these species are highest in the north coast particularly the Islands of Lamu District. The fishery has been declining, but currently the fishermen are only allowed to land the ungravid and the young weighing more than 250 g. One species, *Puerulus angulatus*, is caught by the industrial fishing fleet in off-shore waters, as well as members of the family Scyllaridae. The latter are also caught as by-catch by shallow water prawn trawling but are commercially unimportant, utilized as food fish by local people.

TECHNICAL TERMS AND MEASUREMENTS

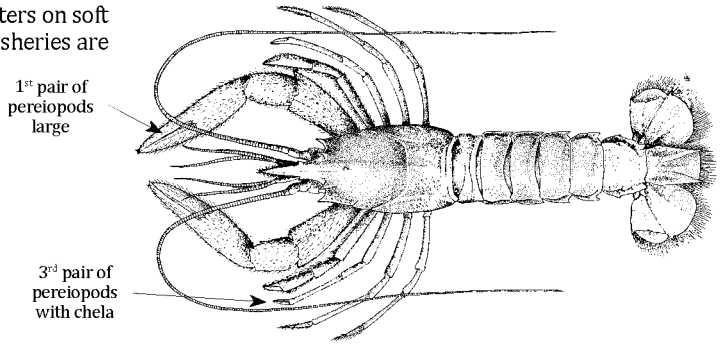


GUIDE TO FAMILIES

NEPHROPIDAE

True lobsters

To about 15 cm. Marine, mainly deep waters on soft substrates. Three species of interest to fisheries are included in the Guide to Species.

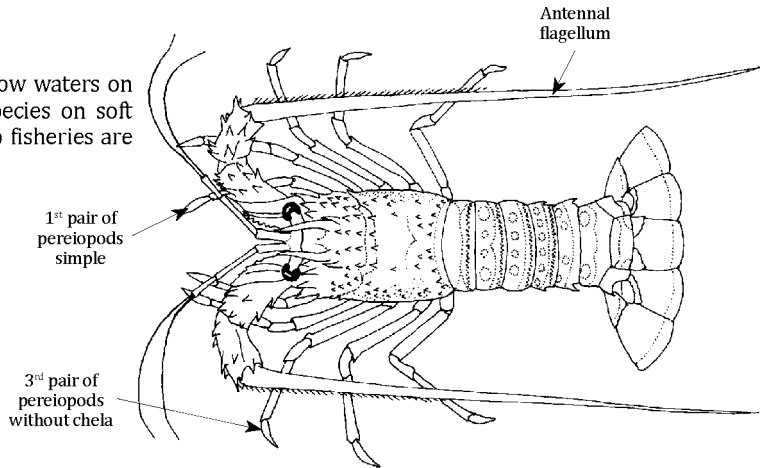
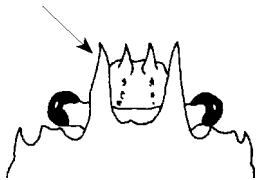


PALINURIDAE

Spiny lobsters

To about 50 cm. Marine, mostly shallow waters on coral and sand stone reefs, some species on soft substrata. Seven species of interest to fisheries are included in the Guide to Species.

Frontal horns

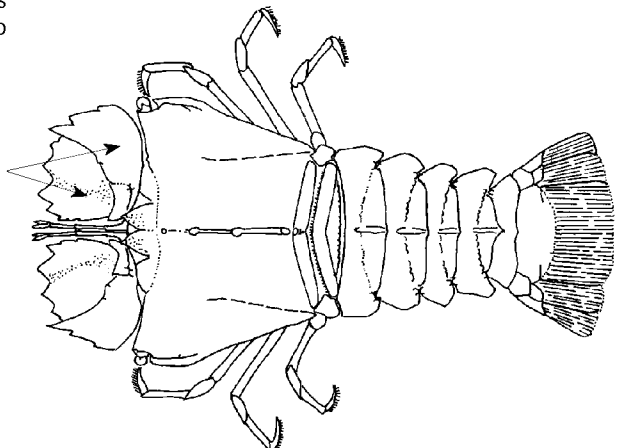


SCYLLARIDAE

Slipper lobsters

To about 25 cm. Marine, shallow and deep waters down to 484 m; benthic. Five species of interest to fisheries are included in the Guide to Species.

Antennal flagellum scale-like



NEPHROPIDAE

True lobsters

***Metanephrops andamanicus* (Wood–Mason, 1891)**

FAO names: Andaman lobster (En)
Langoustine Andamane (Fr)

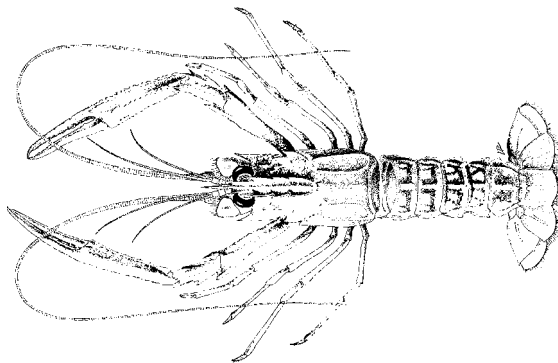
Local name(s): N: Kambamawe; S: Kambamawe (M/K).

Habitat: Hard and mud substrates between 250 m and 750 m, but usually between 300 m and 450 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace smooth between ridges with large spines; post-rostral carinae with 3 teeth; chelae of first pereiopods heavily ridged and spinulose, without large spines; no prominent basal spine on outer edge of movable finger of large chela; inner margin of merus of 1st pereiopod weakly spinulose; raised parts of dorsal surface of abdominal somites smooth and naked; 2nd to 5th abdominal somites with marked dorso-median carina, flanked by a pair of conspicuous longitudinal grooves.

Colour: Orange or red, with pink bands on chelae.



Size: To 21 cm, common 18 cm (BL)

***Metanephrops mozambicus* Macpherson, 1990**

FAO names: African lobster (En)
Langoustine du Mozambique (Fr)

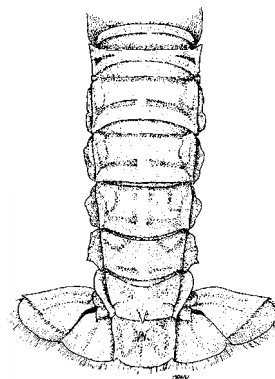
Local name(s): N: Kambamawe; S: Kambamawe (M/K).

Habitat: Hard and mud substrates from 200 m to 750 m, most common between 400 and 500 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace smooth between ridges with large spines; post-rostral carinae with three teeth; chelae of first pereiopods heavily ridged and spinulose, without large spines; no prominent basal spine on outer edge of movable finger of large chela; inner margin of merus of first pereiopod weakly spinulose; surface of abdominal tergites conspicuously sculptured; spine in middle of lateral margin of sixth abdominal somite short, tip far from postero-lateral margin of somite.

Colour: Generally orange or pink.



Size: To 21 cm, common 18 cm (BL)

***Nephropsis stewarti* Wood–Mason, 1872**

FAO names: Indian Ocean lobsterette (En)
Langoustine indienne (Fr)

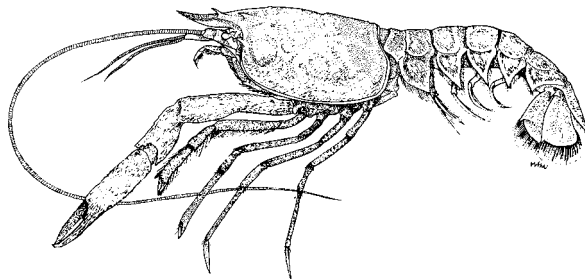
Local name(s): N: Kambamawe; S: Kambamawe (M/K).

Habitat: Mud substrates from 170 m to 1060 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body cylindrical pubescent; carapace granular, with a well developed median rostrum armed with 1 pair of lateral spines; a single spine behind each eye; eyes very small, lacking pigments; tail with a well developed fan, the outer blade of which shows a transverse fissure; first 3 pairs of legs ending in true pincers; first pair rather stout with short and very hairy (woolly) fingers.

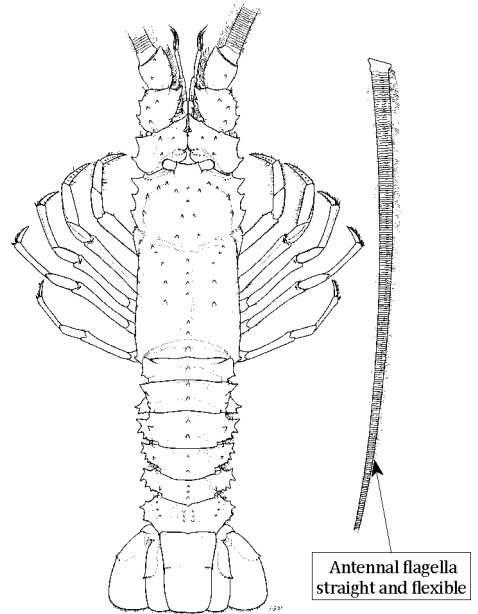
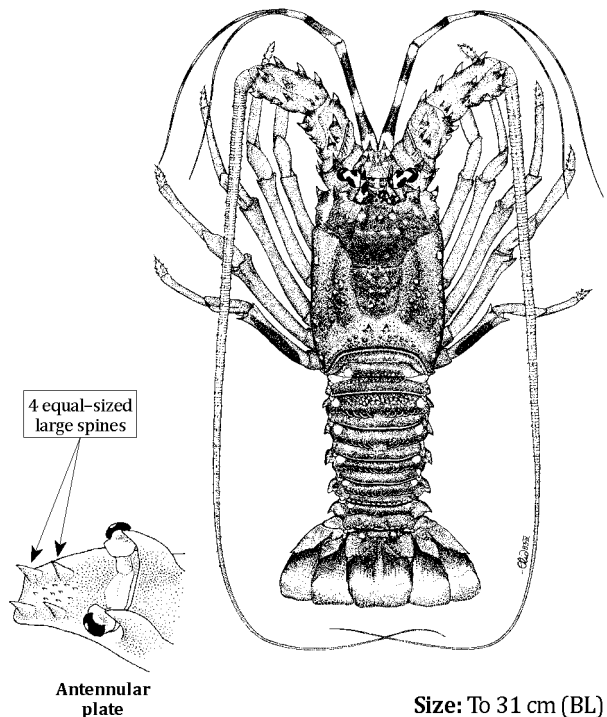
Colour: Generally pink or red.



Size: To 15 cm (TL), common 10 cm (BL)

PALINURIDAE

Spiny lobsters

Linuparus somniosus Berry & George, 1972**Local name(s):** N: Kambamawe; S: Kambamawe (M/K).**Habitat:** Rough substrates with sand and mud from 216 m to 375 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Carapace angular dorsally, with 1 median and 2 lateral longitudinal crests behind the cervical groove, each crest with tubercles; posterior groove of carapace wide in the middle, narrow laterally; 2 or 4 pointed lobes between the eyes; surface of carapace with numerous small granules and larger tubercles; antennules slightly over reaching antennal peduncle; antennae long; base of antennae touching each other; antennular plate very small, covered by a stridulating organ; tail powerful; each abdominal segment with at most 1 transverse groove and on each side a longitudinal, tuberculate crest over the bases of the pleura; first 5 segments with a median crest bearing 1 or 2 large and some small tubercles; legs 1 to 4 without pincers.**Colour:** Reddish-brown dorsally; laterally and ventrally mostly whitish; antennal flagella dirty white.**FAO names:** African spear lobster (En)
Langouste javelot d' Afrique (Fr)**Size:** To 35 cm (BL)***Panulirus homarus*** (Linnaeus, 1758)**Local name(s):** N: Kamba springi; S: Kambamawe (M/K).**Habitat:** Inhabits shallow waters among rocks, often in the surf zone. Maximum depth 90 m.**Fisheries:** Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop nets by divers, Spears.**Distinctive Characters:** Carapace rounded, covered with numerous spines of various sizes; flagella of antennules longer than peduncle; rostrum absent; bases of antennae separated by a broad antennular plate bearing 2 equal, well separated pairs of principal spines and scattered smaller spines in between; each abdominal segment with a transverse groove, sometimes interrupted in the middle, its anterior margins formed into shallow scallops; legs 1 to 4 without pincers.**Colour:** Dark greenish to blackish with numerous, very small white spots especially distinct on posterior half of abdomen, without transverse bands; antennules banded with white and green; legs with distinct spots and stripes white.**FAO names:** Scalloped spiny lobster (En)
Langouste festonnée (Fr)**Size:** To 31 cm (BL)

Panulirus longipes (A. Milne Edwards, 1868)

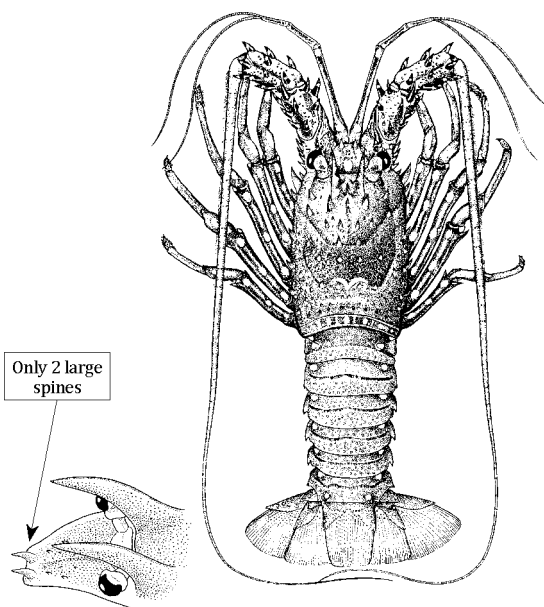
Local name(s): N: Kamba mwilo; S: Kambamawe (M/K).

Habitat: Inhabits clear or slightly turbid waters in shallow rocky areas and on coral reefs; nocturnal. Maximum depth 18 m.

Fisheries: Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop nets by divers, Spears.

Distinctive Characters: Carapace rounded covered with numerous spines of varying size; flagella of antennules longer than peduncles; rostrum absent; bases of antennae separated by a broad antennular plate; each abdominal segment with a complete transverse groove joining the pleural groove; legs 1 to 4 without pincers.

Colour: Ground colour variable from brown through blue to indigo; carapace and tail covered with numerous medium-sized pale spots and a central darker region on the carapace; antennal and antennular flagella cross-banded; legs with white spots and yellow lines in between.



Antennular plate

Size: To 30 cm, common 20–25 cm (BL)

Panulirus ornatus (Fabricius, 1798)

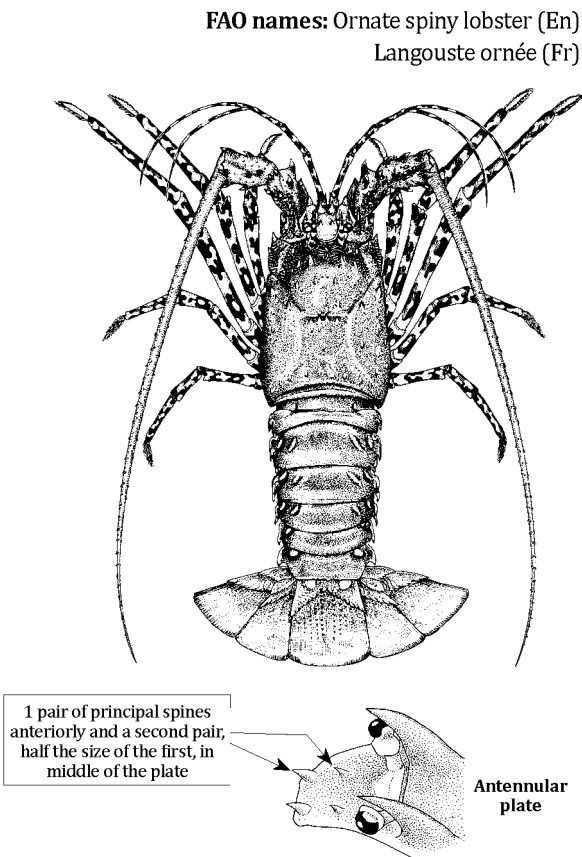
Local name(s): N: Kamba mwani; S: Kambamawe (M/K).

Habitat: Inhabits shallow, sometimes slightly turbid coastal waters usually on sand and mud substrates, but also on coral reefs and rocky bottoms. Maximum depth 8 m.

Fisheries: Traps, Gill nets, Cast nets, Lobster pots, Hand and scoop net by divers, Spears.

Distinctive Characters: Carapace rounded, covered with numerous spines and tubercles of different sizes; flagella of antennules longer than antennular peduncles; bases of antennae separated by a broad antennular plate; each abdominal segment smooth without a transverse groove; legs without pincers.

Colour: Bluish or greenish spines on yellow carapace; anterior part of carapace and near the bases of the frontal horns and the anterior spines with a vermicular pattern of pale and dark lines; abdomen with a broad, dark transverse band over the middle of the segments, each segment with a large pale spot on sides and an additional oblique elongate mark higher up on the 2nd, 3rd and 4th segments; no transverse white band along posterior margin of the segments; antennular flagella banded; legs with distinct, sharply defined dark and pale blotches.



Antennular plate

Size: To 50 cm, common 30.5 cm (BL)

FAO names: Longlegged spiny lobster (En)
Langouste diabolotin (Fr)

FAO names: Ornate spiny lobster (En)
Langouste ornée (Fr)

Panulirus penicillatus (Olivier, 1791)

Local name(s): N: Kamba kijiwe; S: Kambamawe (M/K).

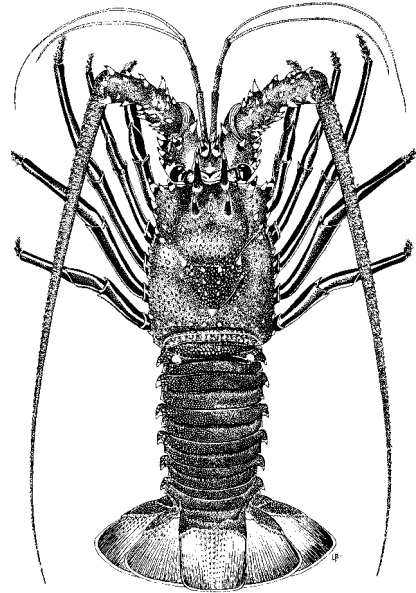
Habitat: Clear shallow waters over rocky substrates down to 4 m; nocturnal.

Fisheries: Hand and scoop nets by divers, Spears, Trammel nets.

Distinctive Characters: Carapace rounded covered with numerous spines and nodules of various size; flagella of antennules longer than antennular peduncle; rostrum absent; bases of antennae separated by a broad antennular plate bearing 2 pairs of almost equal principal spines joined at their bases, their tips diverging; each abdominal segment with a transverse groove not joining the pleural groove; anterior legs 1 to 4 without pincers.

Colour: Ground colour ranging from yellow-green through brown-green to blue black or dark reddish brown, with many cream spots on upper surface of carapace, and many tiny pale spots on abdomen; antennular flagella uniform green or brown; legs with fine or broader longitudinal white to yellow stripes; males are usually darker than females.

FAO names: Pronghorn spiny lobster (En)
Langouste fourchette (Fr)



Size: To 40 cm, common 35 cm (BL)

Panulirus versicolor (Latreille, 1804)

Local name(s): N: Kambakurabu/Kamba kasuri; S: Kambamawe (M/K).

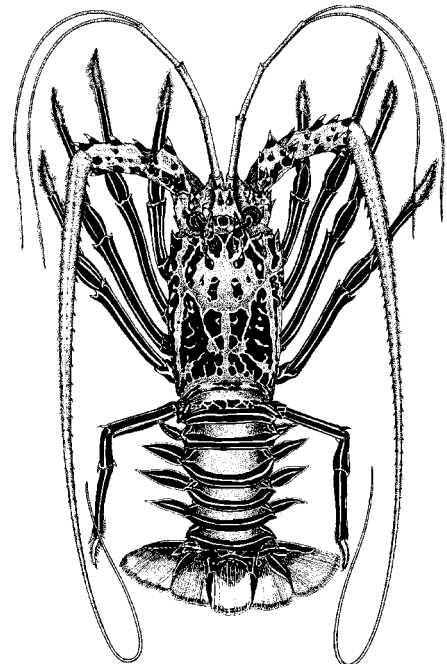
Habitat: Shallow waters, from the sub-littoral zone down to 15 m, on coral reefs, often on the seaward edges of the reef plateau; nocturnal.

Fisheries: Hand and scoop nets by divers, Spears, Trammel nets.

Distinctive Characters: Carapace rounded, covered with numerous spines of various sizes; flagella of antennules longer than antennular peduncle; rostrum absent; bases of antennae separated by a broad antennular space bearing 2 pairs of unequal and separate principal spines; abdominal segments without transverse grooves; legs 1 to 4 without pincers.

Colour: Green-blue with a distinctive pattern of blue-black patches and white lines on carapace; a transverse band of white, bordered by 2 black lines across each abdominal segment; legs and antennules longitudinally striped; bases of antennae bright pink, not extending onto antennular plate.

FAO names: Painted spiny lobster (En)
Langouste barriolée (Fr)



Size: To 40 cm, common 30 cm (BL)

***Puerulus angulatus* (Bate, 1888)**

Local name(s): N: Kambamawe; S: Kambamawe (M/K).

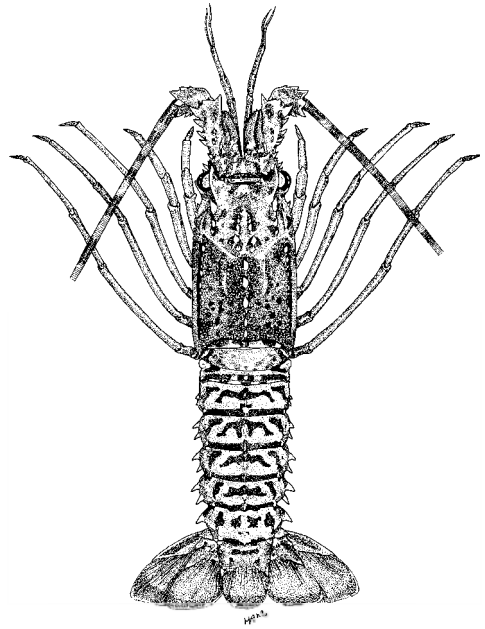
Habitat: Sand or mud substrates from 274 m to 536 m.

Fisheries: Off-shore bottom trawls.

Distinctive Characters: Post-orbital spine absent; three or more teeth between the frontal horns and the cervical groove; median keel of carapace with 3 post-cervical and 2 intestinal teeth; tubercles of carapace usually distinct and not obscured by the pubescence; eyes small, longer than broad; 5th pereopod of male not chelate.

Colour: Light orange overall; pereopods white; bands on abdomen.

FAO names: Banded whip lobster (En)
Langouste fouet bandée (Fr)



Size: Common around 21 cm (BL)

SCYLLARIDAE

Slipper lobsters

***Scyllarides squammosus* (H. Milne-Edwards, 1837)**

Local name(s): N: Kamba mzuka; S: Kambamawe (M/K).

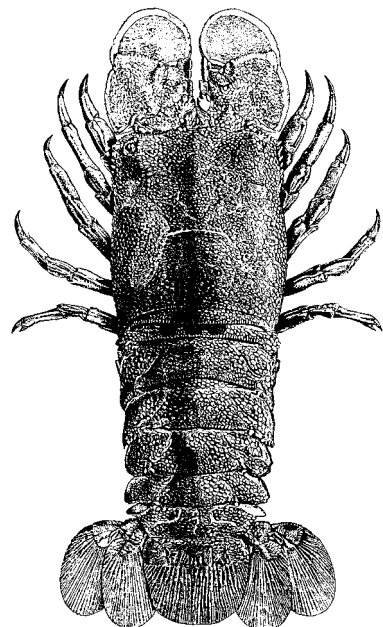
Habitat: Reefs and rocky areas from 20 m to 50 m.

Fisheries: Hand by divers, Traps, Bottom trawls.

Distinctive Characters: Inner orbital angle with two strong pointed teeth, which are larger than any of the tubercles on that margin; grooves on the carapace distinct; lateral margin of the carapace with a cervical incision only; anterior margin of the carapace between the eye and the anterolateral margin, convex; outline of posterior margin of the pleura of the 2nd abdominal somite straight or evenly convex; median carinae present on abdominal somites.

Colour: Body reddish, marbled with brown or grey; first abdominal segment bearing dorsally 3 large red spots, the median of which is up twice as wide as the other two; the spots are often somewhat fused anteriorly, but always distinct posteriorly; legs not distinctly banded; antennules brownish.

FAO names: Blunt slipper lobster (En)
Cigale grenue (Fr)



Size: To 40 cm (BL)

***Scyllarides tridacnophaga* Holthuis, 1967**

Local name(s): N: Kamba mzuka; S: Kamba (M/K).

Habitat: Shallow waters from 5 m to 112 m.

Fisheries: Bottom trawls.

Distinctive Characters: Cervical groove narrow and shallow in its median area; cardiac knob thereby very little pronounced; pre-gastric tooth distinctly two-topped; carpus of the first pereiopod with a distinct dorsal groove and without a conspicuous basal swelling; central spot on first abdominal somite sharply defined, as distinct as laterals; outline of pleura of 2nd abdominal somite broadly rounded; median ridges on 2nd to 4th abdominal somite, sharp and distinctly set off from rest of surface; 4th abdominal somite of adult specimens not conspicuously higher than the 3rd.

Colour: Body reddish-brown.

FAO names: Clamkiller slipper lobster (En)



Size: To 30 cm (BL)

***Scyllarus batei* Holthuis, 1946**

Local name(s): N: Kamba mzuka; S: Kamba (M/K).

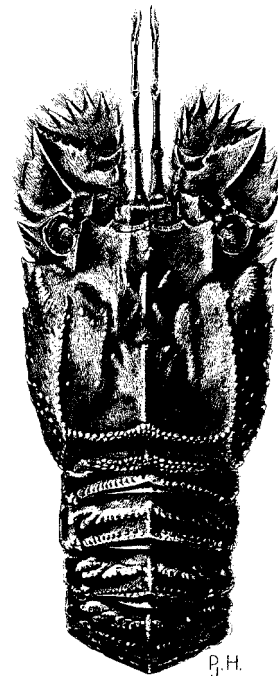
Habitat: Sand and mud substrates from 160 m to 484 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace rectangular, about as long as broad, with 2 shallow incisions on the lateral margin, the anterior one the deepest; dorsal surface with 3 rather sharp longitudinal keels, the median keel with 3 teeth, one behind and two before the cervical groove; surface of carapace with distinct pubescence, tubercles numerous on the ridges, scarce in between; antennae large, paddle-shaped, each with two large and some small segments; the anterior large segment with 6 or 7 sharp triangular teeth; posterior large segments dorsally with a single sharp oblique carina; abdomen with a rather sharp high median carina and, on each segment, 1 or 2 transverse carinae with high or squamiform tubercles; hardly any arborescent ornamentation on the segments.

Colour: Pale brown with the ridges and tubercles pale purple; a rather conspicuous red spot in each postero-lateral angle of the carapace.

FAO names: Soft locust lobster (En)
Cigale douce (Fr)



Size: To 7 cm (BL)

Scyllarus rugosus H. Milne-Edwards, 1837

Local name(s): N: Kamba mzuka; S: Kamba (M/K).

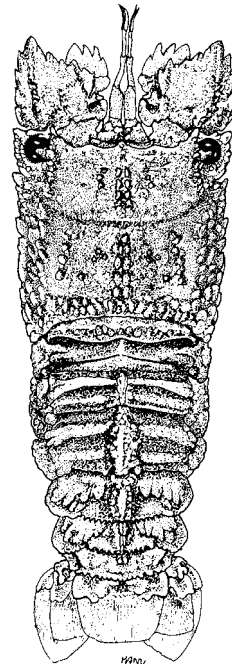
Habitat: Usually occurs on sand and mud bottoms, mainly from 20 m to 60 m.

Fisheries: Bottom trawls.

Distinctive Characters: Carapace with a median teeth before the cervical groove which is blunt and inconspicuous; the rostral tooth is reduced to a tubercle, the pre-gastric tooth is replaced by a double row of 1 or 2 tubercles and a few inconspicuous median tubercles; the gastric tooth is the most conspicuous, broad and blunt and bears a double row of tubercles; the surface of the carapace is very uneven and has high tubercles; 4th antennal segment has a sharp and high oblique median carina; outside the carina the upper surface of the segment shows a row of tubercles.

Colour: Dorsal surface of body greyish or purplish-brown with darker spots; the distal segment of the antenna is often lighter; the first abdominal somite shows dorsally often a dark blue colour.

FAO names: Hunchback locust lobster (En)



Size: To 6 cm (BL)

Thenus orientalis (Lund, 1793)

Local name(s): N: Kamba mzuka; S: Kamba (M/K).

Habitat: Mud and sand bottoms from 8 m to 100 m.

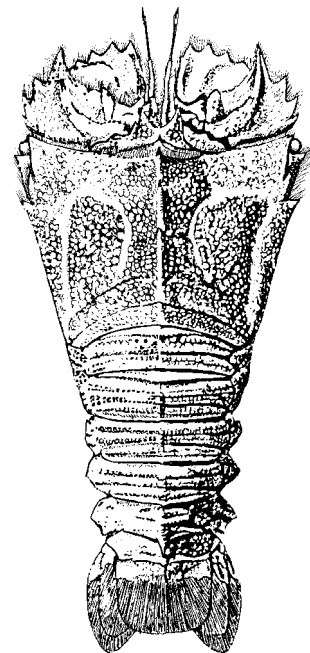
Fisheries: Bottom trawls.

Distinctive Characters: Carapace flat, wide in front, distinctly narrowing posteriorly; lateral margins straight, with only 2 teeth, one at the end, the other in the anterior 1/4; posterior 3/4 without teeth; anterior tooth forming part of the orbit which is situated at the anterolateral angle of carapace; upper surface of carapace with numerous small granules and a median carina with 3 sharp teeth; a sharp tooth behind the orbit; anterior large segment of antenna with 3 sharp triangular teeth on inner half of distal margin; some small teeth at either side of these posterior large segments ending in a large sharply-pointed, inward-curved tooth; outer margin with 3 smaller teeth; abdomen granular with transverse grooves over middle of each segment; 5th segment with a sharp spiniform tooth in the middle of posterior margin.

Colour: Pale yellowish-brown with the granules of a darker brown; tips of the teeth whitish; tail fan with a yellow tinge.

Remarks: Of major importance to fisheries.

FAO names: Flathead locust lobster (En)
Cigale raquette (Fr)

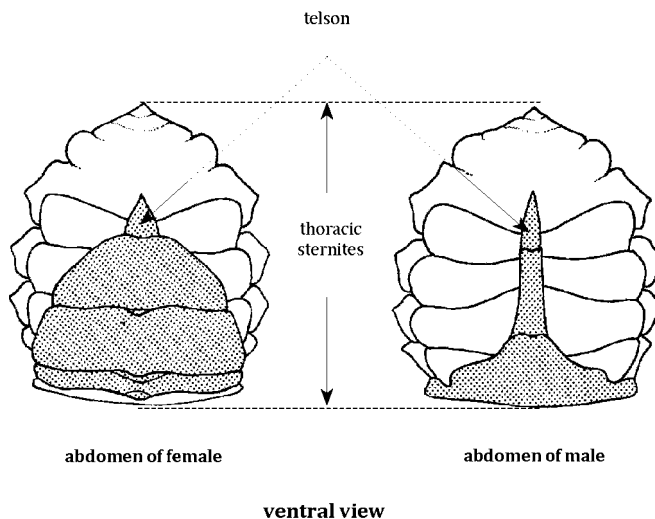
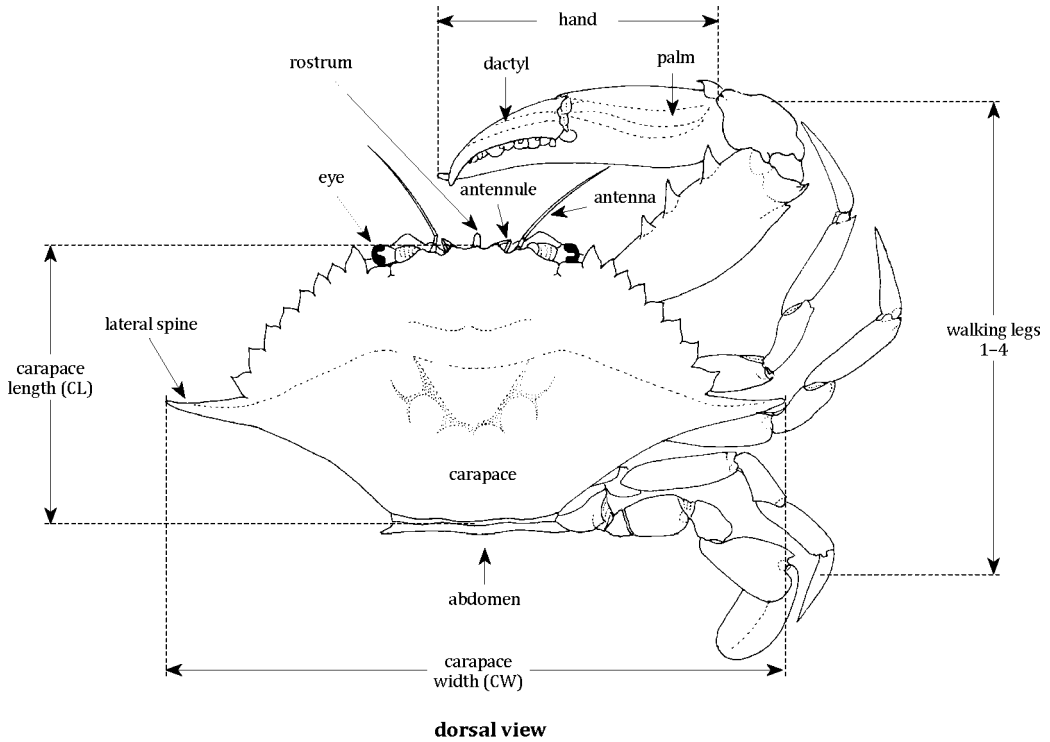


Size: To 25 cm (BL)

CRABS

Many species of crabs occur in Kenya, but only a few species are considered important to fisheries. Three species, all belonging to the family Portunidae, have been included in the Guide to Species: *Scylla serrata* (Forsskål, 1755), *Portunus pelagicus* (Linnaeus, 1766) and *Thalamita crenata* (H. Milne-Edwards, 1834). *Scylla serrata* is the largest of the three crabs and is the most preferred for consumption (Provenzano, 1985).

TECHNICAL TERMS AND MEASUREMENTS



PORTUNIDAE

Swimming crabs

Portunus pelagicus (Linnaeus, 1758)

FAO names: Blue swimming crab (En)
Etrille bleue (Fr)

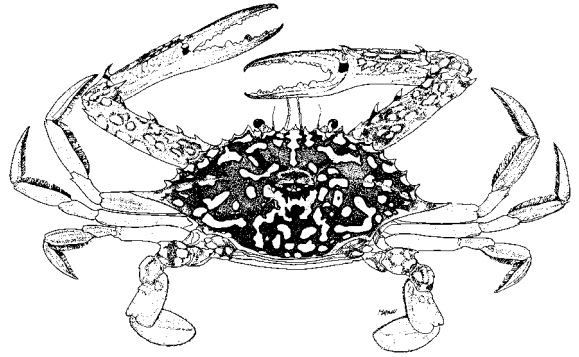
Local name(s): N: Kaa kiukizi/Mswete; S: Kaa (M/K).

Habitat: Very abundant in sub-littoral mud or sand substrates from 5 m to 30 m; enters estuaries and lagoons seasonally in large numbers.

Fisheries: Traps, Spears, Set nets, Baited sticks, Bottom trawls.

Distinctive Characters: Carapace rough to granulose with regions discernible; front with 4 acutely triangular teeth; 9 teeth on each anterolateral margin; chelae elongate (more in males than in females) with conical tooth at the base of fingers; 3 spines on the inner margin of the merus; legs laterally flattened to varying degrees, last 2 segments of last pair paddle-like.

Colour: Males coloured with blue markings, females dull green.



Size: To 17 cm (CW), 7.6 (CL)

Scylla serrata (Forsskål, 1775)

FAO names: Indo-Pacific swamp crab (En)
Crabe de palétuviers (Fr)

Local name(s): N: Kaa mondokoko/Kaa domodo; S: Kaa (M/K).

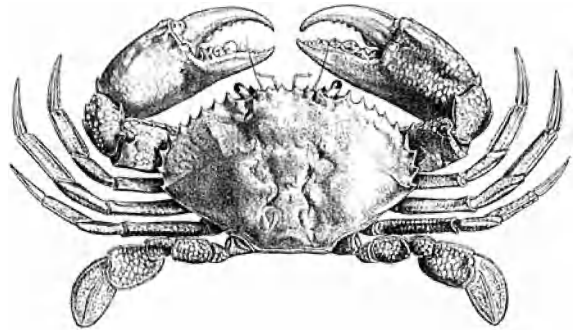
Habitat: Shallow coastal waters with soft substrates; enters mangrove forests to moult and mate. Maximum depth 20 m.

Fisheries: Baited sticks, Set nets, Bottom trawls.

Remarks: Burrows in soft muddy bottoms, emerging at sunset; migrates to offshore during spawning periods (up to 50 km).

Distinctive Characters: Nine spines on either side of the eyes; stout swimming legs at the rear part of the body.

Colour: Greyish-green to purple-brown with small white spots.



Size: To 22 cm (CW), 14 cm (CL)

Thalamita crenata (H. Milne-Edwards, 1834)

FAO names: Crenate swimming crab (En)

Local name(s): N: Kaa kijiwe/Gonda; S: Kaa (M/K).

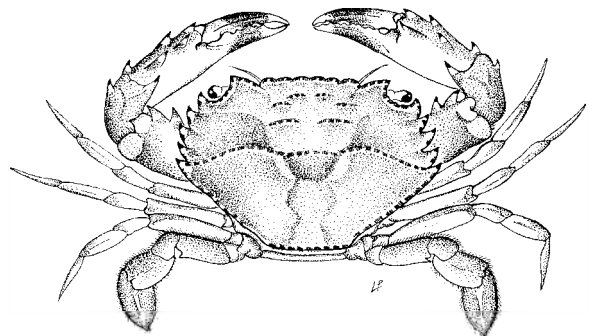
Habitat: Eulittoral in mud areas such as mangroves.

Fisheries: Baited sticks, Scoop nets.

Remarks: Of little interest to fisheries on the account of their small sizes; eaten by local people, flesh excellent.

Distinctive Characters: Surface of carapace smooth, ridges low but distinct; front with 6 equal-sized, rounded lobes.

Colour: Dark to olive green overall.

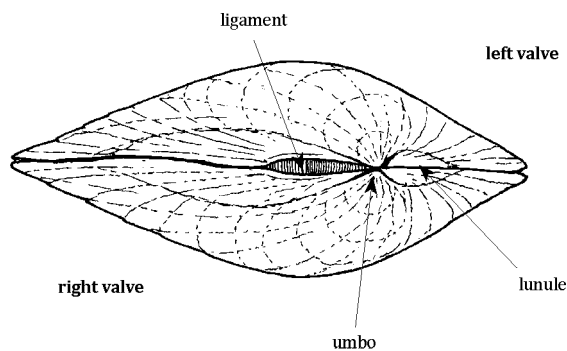
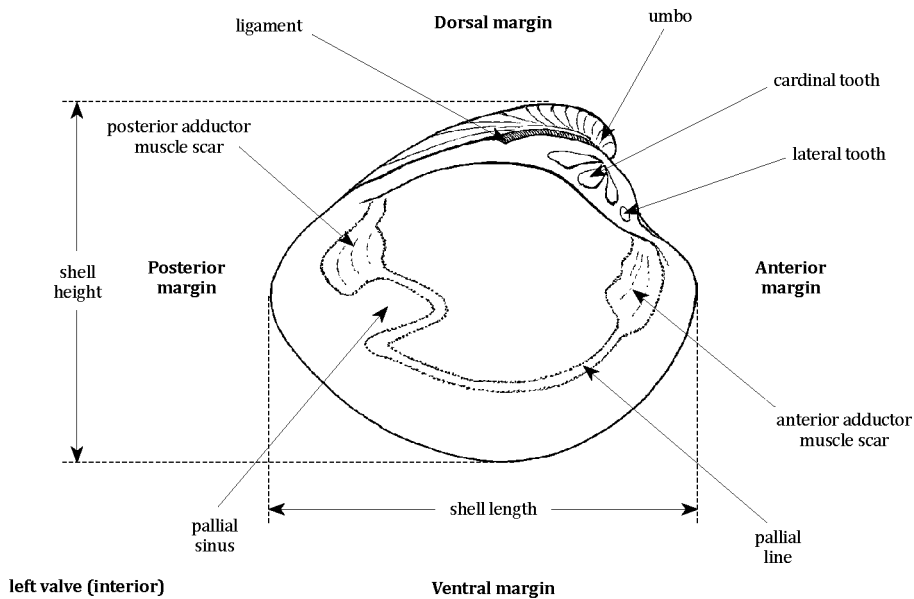


Size: To 8 cm (CW)

BIVALVES

Coastal species are of great interest to fisheries and have potential for exportation for eating purposes. Bivalves are caught mainly by divers and are also fished for pearls. Their flesh is of excellent quality. Since oysters remain alive out of the water for over 12 hours, they may be exported to far destinations when still alive. Moreover, some species are collected for their nacreous shell and ability to develop pearls. The shell can be used in the mother of pearl industry. The "Guide to Families" and "Guide to Species" include 5 families and 10 species, respectively.

TECHNICAL TERMS AND MEASUREMENTS



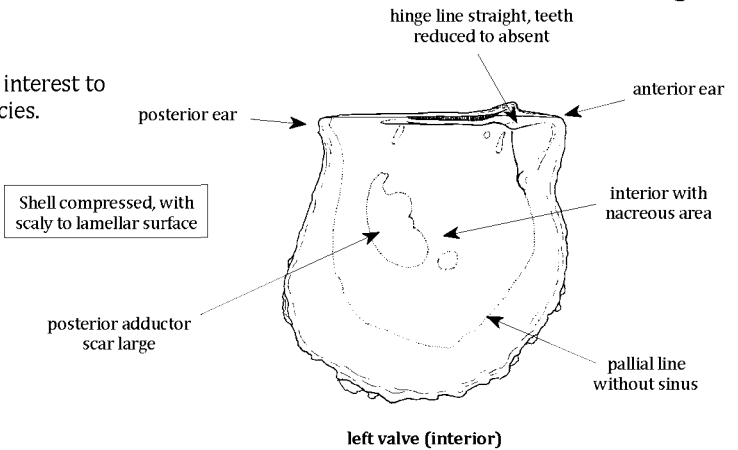
- Adductor muscle:** Muscle connecting the two valves of a shell, tending to draw them together.
- Byssus:** Clump of horny threads spun by the foot, by which a Bivalve can anchor to a hard substrate.
- Chomata:** Small denticles and corresponding pits located on the inner margin of the valves (Ostreidae and Gryphaeidae).
- Hinge:** Top interlocking margin of the valves, often with shelly projections (teeth) and corresponding recesses (sockets).
- Ligament:** Horny, elastic structure joining the two valves dorsally.
- Mantle:** Fleshy sheet surrounding vital organs and composed of two lobes, one lining and secreting each valve.
- Muscle scar:** Impression marking the place of attachment of a muscle inside the shell.
- Pallial line:** A line near the internal margin of valve, marking the site of attachment of the mantle edge.
- Umbo:** The first formed part of a valve, usually above the hinge.

GUIDE TO FAMILIES

PTERIIDAE

Pearl oysters

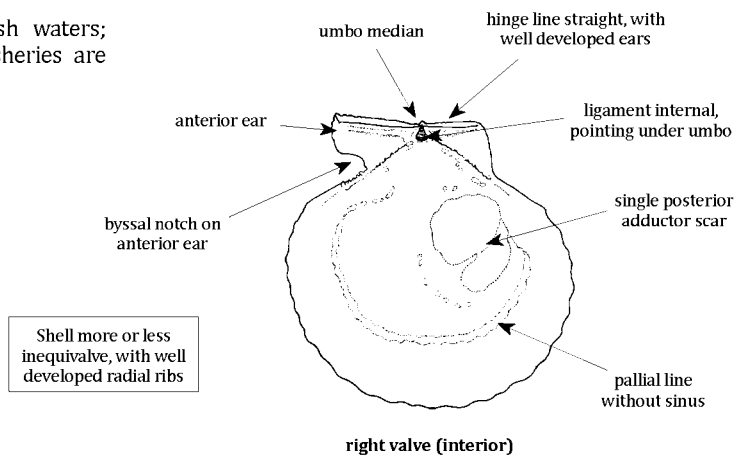
To about 20 cm. Marine. Two species of interest to fisheries are included in the Guide to Species.



PECTINIDAE

Scallops

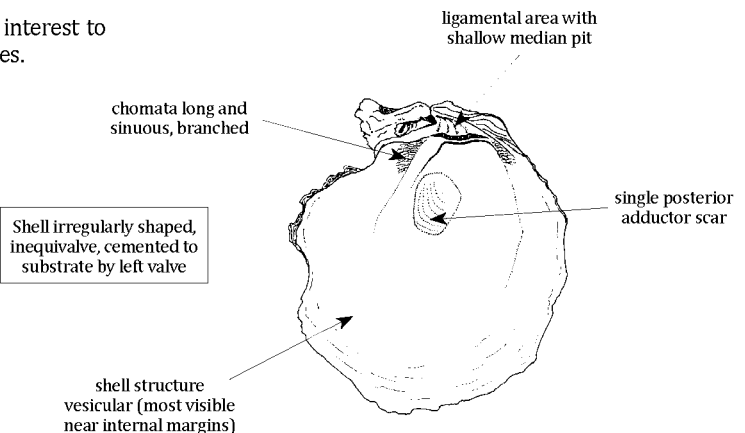
To about 11 cm. Marine and brackish waters; benthic. Two species of interest to fisheries are included in the Guide to Species.



GRYPHAEIDAE

Honeycomb oysters

To about 30 cm. Marine. One species of interest to fisheries is included in the Guide to Species.



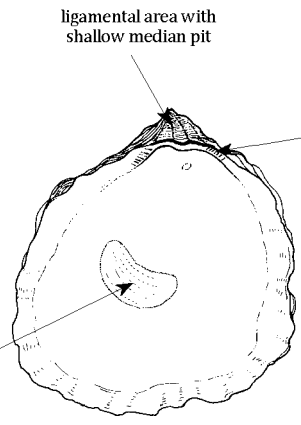
OSTREIDAE

Oysters

To about 20 cm. Marine and estuarine. Three species of interest to fisheries are included in the Guide to Species.

Shell irregularly shaped, inequivalve, cemented to substrate by left valve

single posterior adductor scar



chomata when present, simple and short

TRIDACNIDAE

Giant clams

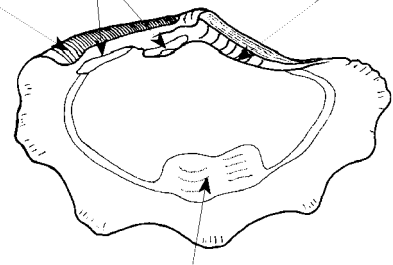
To about 35 cm. Marine. Two species of interest to fisheries are included in the Guide to Species.

Shell thick and heavy, with strong radial folds

ligament external

two ridge-like teeth

byssal gape plicate, near the umbo



single posterior adductor scar; associated a foot retractor scar

PTERIIDAE

Pinctada margaritifera (Linnaeus, 1758)

Local name(s): N: Shaza; S: Shaza (M/K).

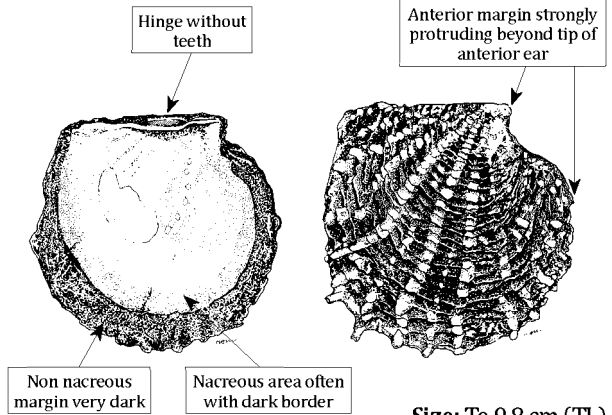
Habitat: Gregarious species often forming natural beds in littoral and sub-littoral zones, attached by byssus, at least in the young stages.

Fisheries: Hands and knife.

Distinctive Characters: Shell rather thick and large, sub-circular in outline; outer surface of valves, when not worn, with densely set, flattened, imbricating concentric scales and moderately long, parallel-sided and flattened spines with tapering or rounded ends; spines lying relatively flat on surface of valves, arranged in radial rows and often strongly projecting on shell margins.

Colour: Outside greyish brown or grey, with radial stripes of white spots.

FAO names: Black-lip pearl oyster (En)
Pintadine à lèvres noire (Fr)



Size: To 9.8 cm (TL)

Pinctada radiata (Leach, 1814) *

Local name(s): N: Shaza; S: Shaza (M/K).

Habitat: Byssally attached to seagrass leaves, rocks, dead corals and various hard objects often forming natural banks from low tide levels to slightly deeper waters. Maximum depth 30 m.

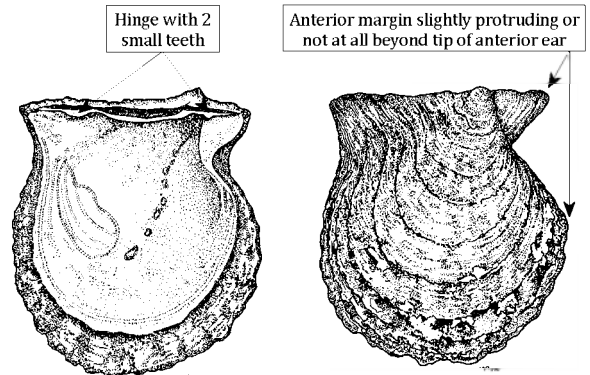
Fisheries: Hands and knife.

Distinctive Characters: Shell rather thin and small; outer surface of shell, with densely set, appressed and flattened, imbricating concentric scales and moderately small, radially projecting spines mostly preserved towards the margins.

Colour: Outside tan to brown or reddish, often with darker radial bands.

Remarks: Collected for its edible muscle, nacreous shell and ability to develop pearls.

FAO names: Rayed pearl oyster (En)
Pintadine radiée (Fr)



Size: To 9.5 cm (SH)

PECTINIDAE

Chlamys senatoria (Gmelin, 1791)

Local name(s): N: Shaza; S: Shaza (M/K).

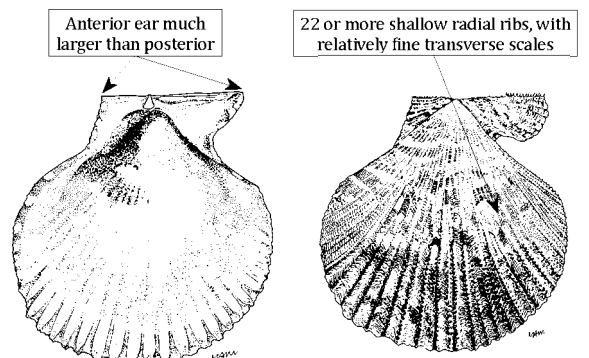
Habitat: Attached by byssus to hard elements, usually in sandy to muddy bottoms with gravel, coral and shell debris or rocks littoral and sub-littoral zones.

Fisheries: Hands and knife.

Distinctive Characters: Shell solid, medium sized, higher than long and rounded-ovate in outline; both valves convex and subequal, the right (lower) valve a little flatter than the left (upper) valve; interior shiny, with low, rounded radial ribs corresponding to the outer sculpture.

Colour: Yellow to reddish brown with creamy patches.

FAO names: Senatorial scallop (En)
Pétiole sénateur (Fr)



Size: To 8 cm (SH)

***Gloripallium pallium* (Linnaeus, 1758)**

Local name(s): N: Shaza; S: Shaza (M/K).

Habitat: Attached by byssus under coral heads and rocks in the intertidal and littoral zones, to about 30 m.

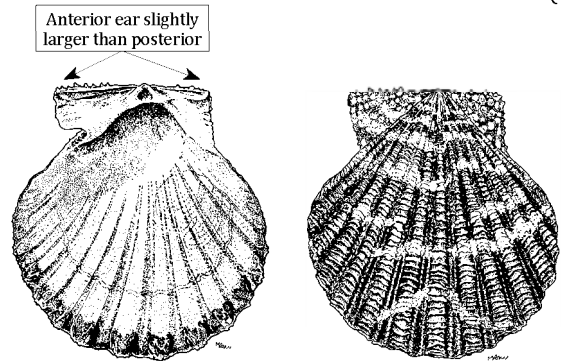
Fisheries: Hands and knife.

Distinctive Characters: About 13 large radial ribs, with strongly projecting transverse lamellae.

Colour: Various shades of deep reddish purple, with roughly concentric whitish maculations.

FAO names: Royal cloak scallop (En)

Pétoncle manteau (Fr)



Size: To 11 cm (SH)

GRYPHAEIDAE***Hyotissa hyotis* (Linnaeus, 1758)**

Local name(s): N: Shaza; S: Shaza (M/K).

Habitat: Cemented to hard substrate, mostly in coral reefs areas and in littoral to shallow sub-tidal zones.

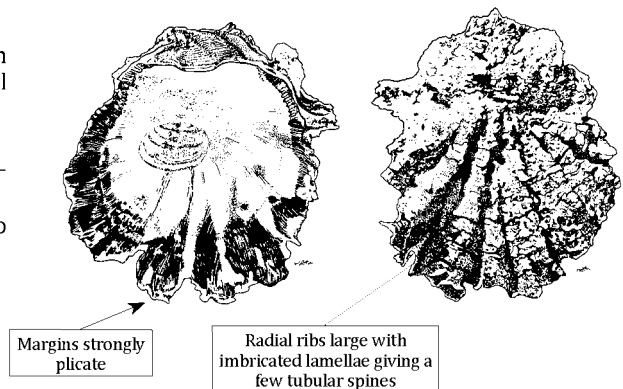
Fisheries: Hands and knife.

Distinctive Characters: Shell large and thick, sub-orbicular in outline.

Colour: Interior milky-white, becoming brown to black on periphery.

FAO names: Honeycomb oyster (En)

Pycnodonte géante (Fr)



Size: To 30 cm (SH)

OSTREIDAE***Lopha cristagalli* (Linnaeus, 1758)**

Local name(s): N: Shaza; S: Shaza (M/K).

Habitat: Attached to rocks or corals by clasping spines of the left valve from the intertidal zone to about 30 m.

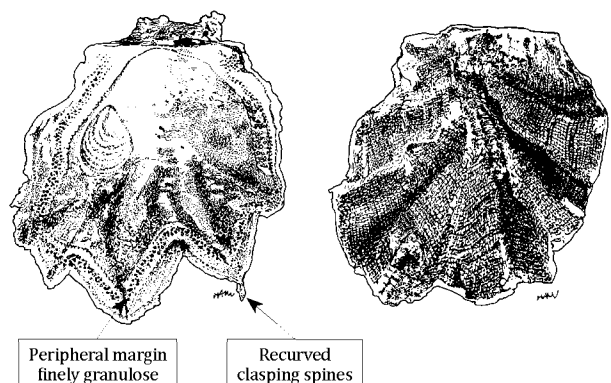
Fisheries: Hands and knife.

Distinctive Characters: Surface roughened by many small rounded protuberances; a few sharp-edged radial folds; peripheral margin finely granulate; recurved clasping spines.

Colour: Dull brown to deep purple.

FAO names: Cock's comb oyster (En)

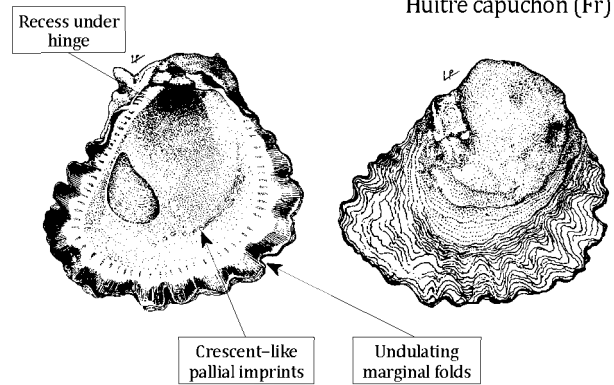
Huître crête-de-coq (Fr)



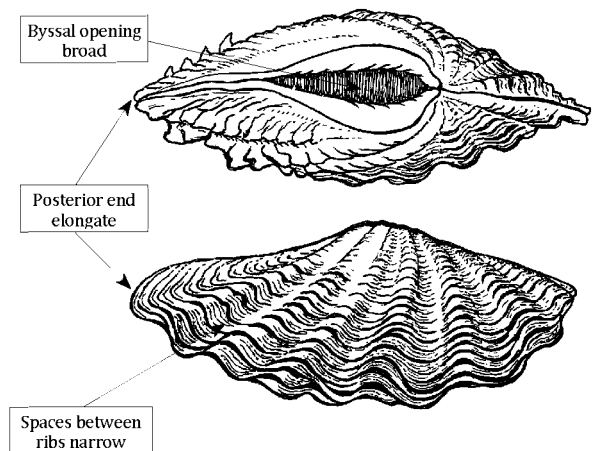
Size: To 20 cm (SH)

Saccostrea cucullata* (Born, 1778)*Local name(s):** N: Shaza; S: Shaza (M/K).**Habitat:** Attached to various hard substrates in marine to estuarine environments in shallow waters; gregarious species often forming dense colonies.**Fisheries:** Hands and knife.**Distinctive Characters:** Shell exceedingly variable in shape; chomata well developed.**Colour:** Internal margins deep purple to black.**FAO names:** Hooded oyster (En)

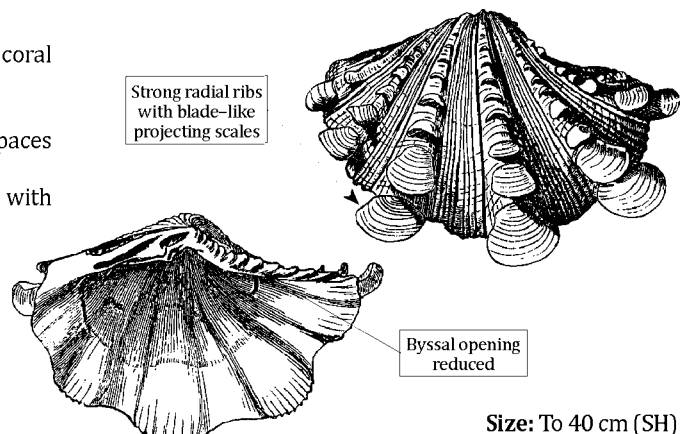
Huître capuchon (Fr)

**Size:** To 20 cm (SH)**TRIDACNIDAE*****Tridacna maxima* (Röding, 1798)****Local name(s):** N: Shaza; S: Shaza (M/K).**Habitat:** Occurs on reefs, particularly embedded in corals, in littoral and shallow subtidal waters.**Fisheries:** Caught by hands.**Distinctive Characters:** Umbones situated anteriorly; stout scaly radial ribs.**Colour:** Greyish-white, often tinged with yellow or orange.**FAO names:** Elongate giant clam (En)

Bénitier allongé (Fr)

**Size:** To 35 cm (SH)***Tridacna squamosa* Lamarck, 1819****Local name(s):** N: Shaza; S: Shaza (M/K)**Habitat:** Attached by byssus to the surface of coral reefs, in littoral and shallow waters.**Fisheries:** Caught by hands.**Distinctive Characters:** Umbo submedian; spaces between ribs large; shell sub equilateral.**Colour:** Greyish white, sometimes tinged with orange.**FAO names:** Fluted giant clam (En)

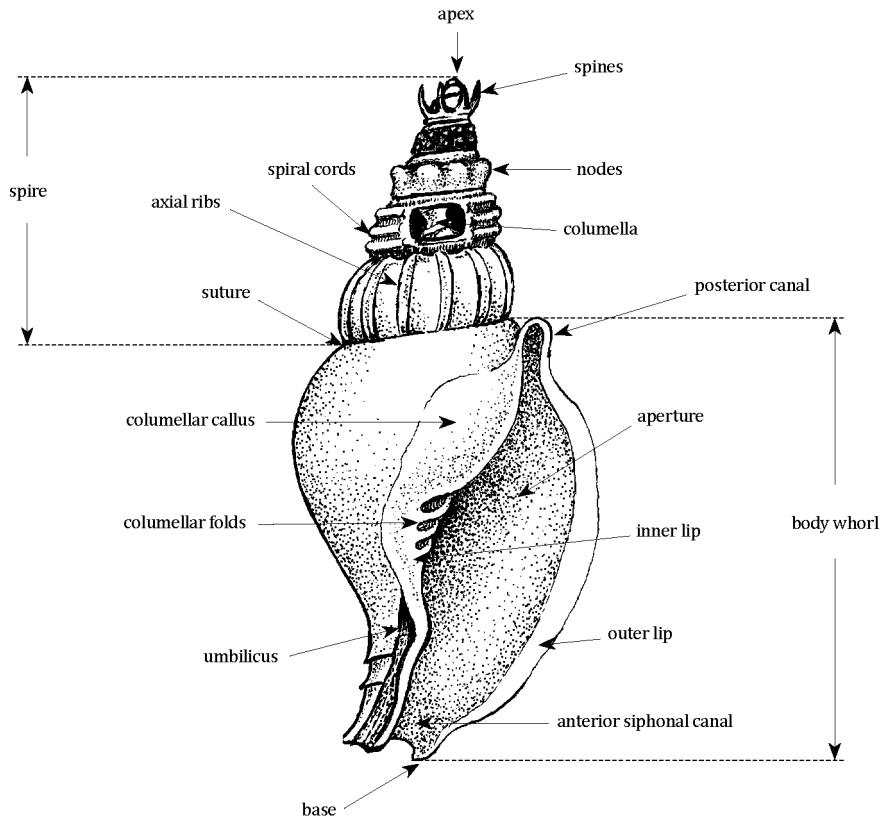
Bénitier écailléux (Fr)

**Size:** To 40 cm (SH)

GASTROPODS

Several marine gastropod species are commercially important in Kenya and are collected locally by artisanal fishermen for food, as bait and for the shell market. The “Guide to Families” and “Guide to Species” include 4 families and 6 species, respectively.

TECHNICAL TERMS AND MEASUREMENTS



ventral view of a composite shell

Aperture: Opening of shell, at the last formed margin; in a spiral shell, the margin nearer to the coiling axis forms the inner lip, and the opposite margin the outer lip.

Base: Lower part of the shell, anterior to level of periphery of body whorl.

Body whorl: The largest, last turn of the spiral in a coiled shell.

Callus: Thick secondary deposit of lime, generally shiny and porcellaneous.

Columella: Coiling axis of shell, forming the lower part of inner lip.

Nucleus: Earliest formed part of the operculum.

Operculum: Horny or calcareous part attached to the foot, sealing aperture when animal retracts within the shell.

Sculpture: Relief pattern on shell surface. When parallel to the curve of whorls, sculptural elements are spiral; when parallel to the coiling axis, they are axial.

Shoulder: Distinct spiral angulation of a whorl.

Siphonal canal: Trough-like or tubular extension of aperture anteriorly, for inclosure of a fleshy siphon.

Spire: All the whorls of a shell, except the last one.

Suture: Spiral line or groove of shell surface, where adjacent whorls meet.

Umbilicus: Opening at base of shell made around the coiling axis when columella is hollow.

Varix (pl. varices): Axial rib-like thickening of the outer surface of shell, representing a previous growth halt during which the outer lip of aperture thickened.

GUIDE TO FAMILIES

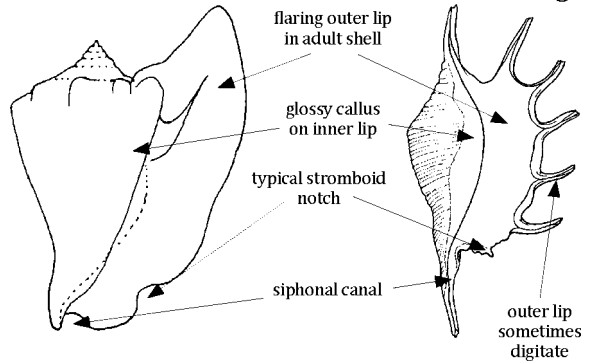
STROMBIDAE

Page 37

Conchs

To about 45 cm. Marine. Two species of interest to fisheries are included in the Guide to Species.

thick and corneous, hook-shaped

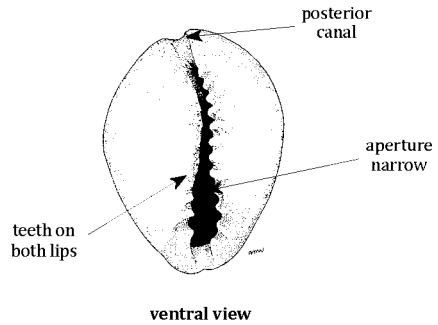
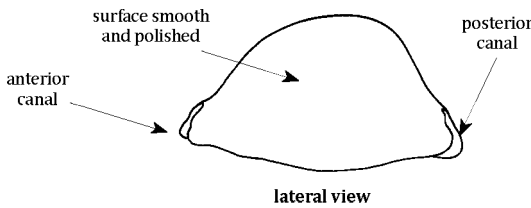


CYPRAEIDAE

Page 37

Cowries

To about 20 cm. Marine. Two species of interest to fisheries are included in the Guide to Species.

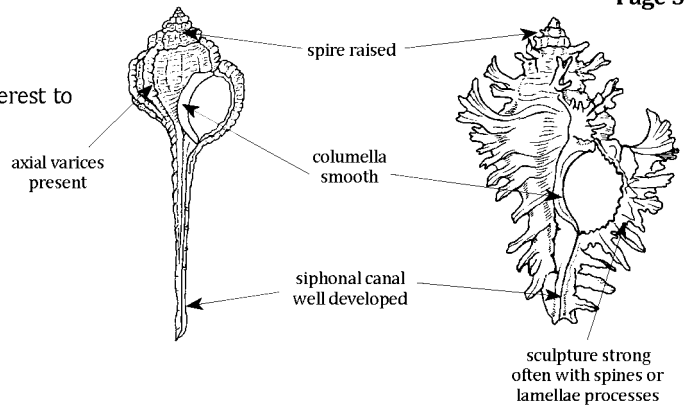


MURICIDAE

Page 38

Murex shells

To about 30 cm. Marine. One species of interest to fisheries is included in the Guide to Species.



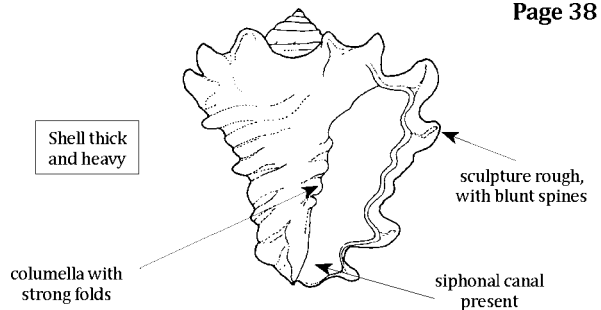
TURBINELLIDAE

Page 38

Vase shells

To about 15 cm. Marine. One species of interest to fisheries is included in the Guide to Species.

Shell thick and heavy



STROMBIDAE

Lambis lambis (Linnaeus, 1758)

Local name(s): N: Dodo viadha; S: Dodo (M/K).

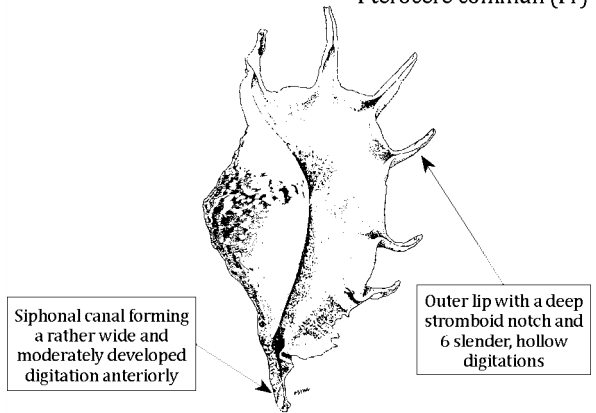
Habitat: Common on reef flats and on coral-rubble bottoms or in mangrove areas, usually associated with fine red algae on which it feeds.

Fisheries: Caught by hands.

Distinctive Characters: Shell large, thick and heavy, with a moderately high, pointed spire; spire whorls slightly concave on their apical half, with fine spiral threads and a row of relatively small knobs on the sharply angulate shoulder; dorsal side of body whorl rough, with low, irregular spiral cords and 2 or 3 spiral rows of blunt tubercles, forming large knobs on the shoulder.

Colour: Outer coloration of shell variable, cream to tan, often with various patterns of brown, purplish-tan, or bluish-black.

FAO names: Common spider conch (En)
Ptérocère commun (Fr)



Size: To 29 cm, common 18 cm (SL)

Lambis truncata (Humphrey, 1786)

Local name(s): N: Dodo viadha; S: Dodo (M/K).

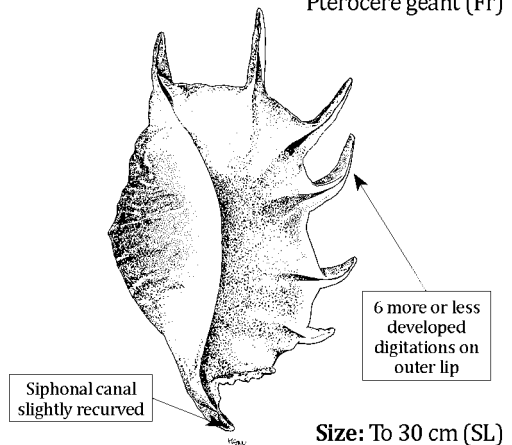
Habitat: Occurs in shallow waters of coastal reef flats, mainly on sandy, algal, and coral rubble bottoms.

Fisheries: Caught by hands.

Distinctive Characters: Strong knobs on spire whorls; aperture and lips smooth, stromboid notch shallow.

Colour: Outer shell creamy tan to dark-brown; only slightly mottled; aperture and lips creamy pink.

FAO names: Giant spider conch (En)
Ptérocère géant (Fr)



Size: To 30 cm (SL)

CYPRAEIDAE

Lyncina lynx (Linnaeus, 1758)

Local name(s): N & S: No information.

Habitat: Mostly found under coral slabs and stones or half exposed in crevices; often found in small groups.

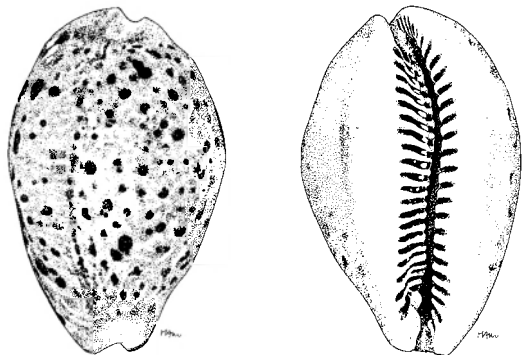
Fisheries: Caught by hands.

Distinctive Characters: Aperture long and narrow, with several white teeth and a bright reddish spacing.

Colour: Dorsal surface generally pale brown, pale purple or grey, densely covered with small and large dark brown or purple dots; the large spots are extended to the edges; the base is white or pale brown.

Remarks: Collected for food and for its shell.

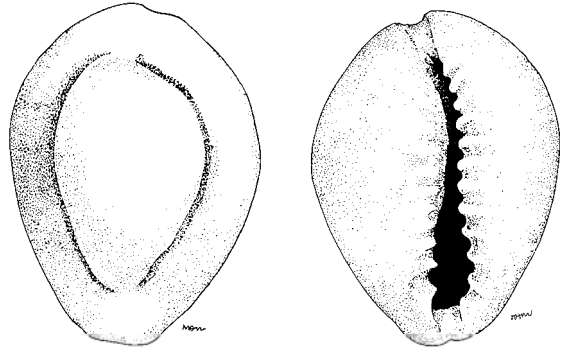
FAO names: Lynx cowrie (En)



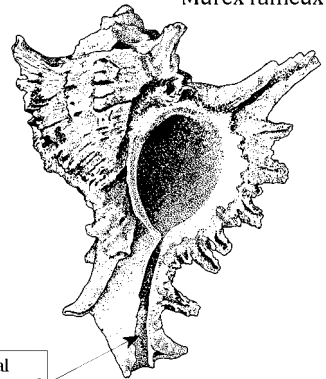
Size: To 9 cm (SL)

Monetaria annulus (Linnaeus, 1758)

FAO names: Gold ring cowrie (En)

Local name(s): N & S: No information.**Habitat:** Widespread in shallow waters, occurring in every kind of habitat, even sandy bottoms; most common in shallow tidal pools under vegetation and stones.**Fisheries:** Caught by hands.**Remarks:** Mainly collected for shellcraft.**Distinctive Characters:** Strong teeth, with slight ridges on columella.**Colour:** Cream-white, yellowish or greyish with a conspicuous golden ring.

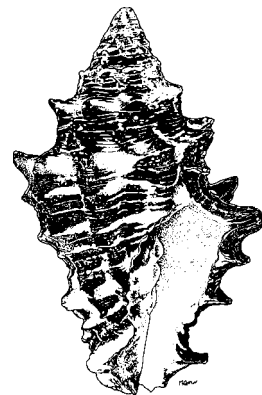
Size: To 4 cm (SL)

MURICIDAE***Chicoreus ramosus*** (Linnaeus, 1758)FAO names: Ramose mureux (En)
Murex rameux (Fr)**Local name(s):** N: Fondo koa; S: Dodo (M/K).**Habitat:** Muddy gravel and coarse sand bottoms of coral reef flats, in littoral zones and shallow sub-tidal waters.**Fisheries:** Caught by hands.**Distinctive Characters:** Three axial varices per whorl; each with strong, frond-like spines.**Colour:** White to light brown, often with scattered brown flecks between varices; aperture white, suffused with pink to orange-red on lips.**Remarks:** Collected by local fishermen for food and used as bait.

Size: To 33 cm (SL)

TURBINELLIDAE***Vasum ceramicum*** (Linnaeus, 1758)

FAO names: Ceram vase (En)

Local name(s): N: Fondo koa; S: Dodo (M/K).**Habitat:** On shallow reefs; intertidal and shallow sublittoral zones, to a depth of about 20 m.**Fisheries:** Caught by hand; the flesh is used as food or as bait by fishermen, and the thick shell as a source of lime; it is also sold for shell collections.**Distinctive Characters:** Shell elongated with a long siphonal canal and only three strong columella folds.**Colour:** Usually white-grey, often partially obscured by a dark thin organic coating (periostracum).

Size: To 16 cm (SL)

CEPHALOPODS

All species of octopus, squid and cuttlefish are eaten locally and are of commercial importance, also used as bait for various fish species & lobsters. The "Guide to Orders" and "Guide to Species" include three orders and 17 species, respectively.

TECHNICAL TERMS AND MEASUREMENTS AND GUIDE TO ORDERS

Order SEPIOIDEA - Cuttlefishes

Sepion (internal shell) large, chalky, rigid; 8 arms and 2 retractile tentacles.

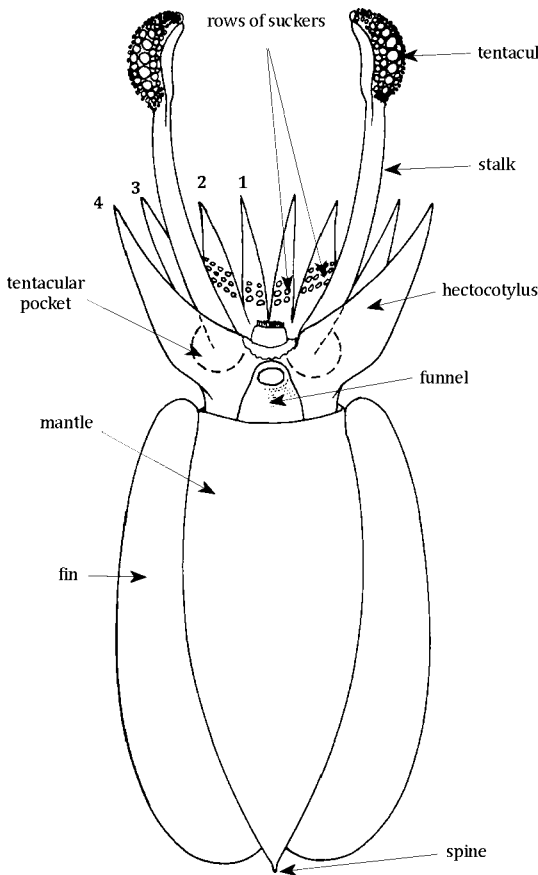
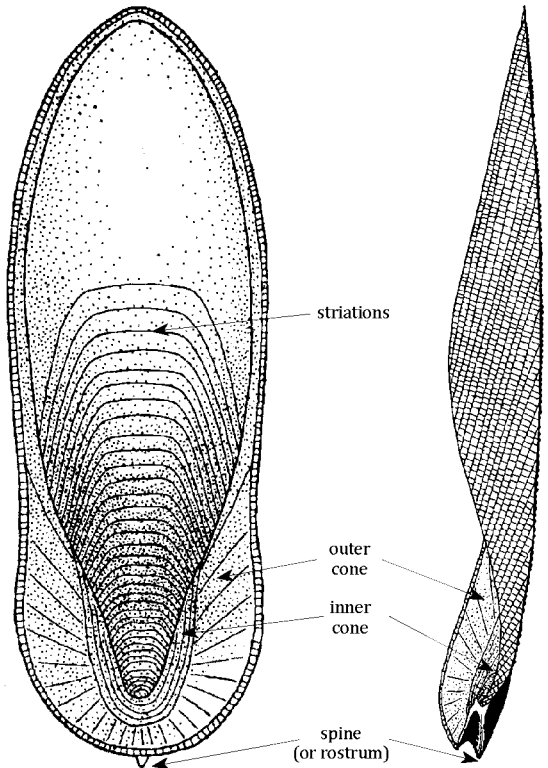


diagram of basic cuttlefish features (ventral view)



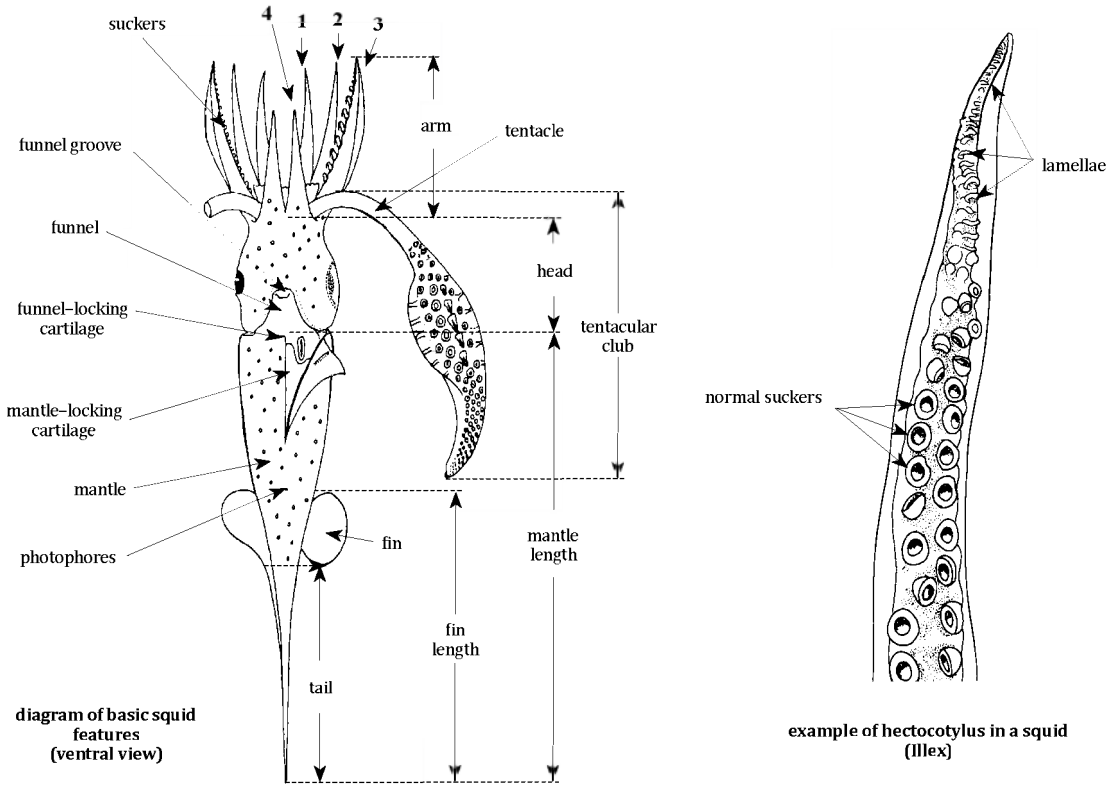
ventral view

lateral view

cuttlebone

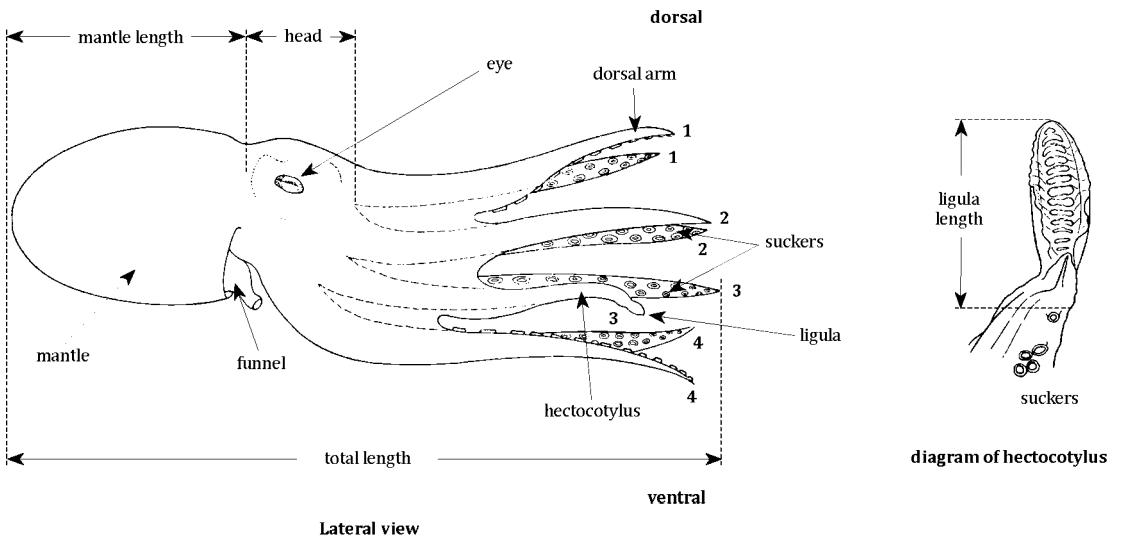
Order TEUTHOIDEA - Squids

Gladius (internal shell) chitinous, flexible, pen-shaped; 8 arms and 2 non-retractile tentacles.



Order OCTOPODA - Octopuses and Argonauts

Internal shell reduced or absent; 8 arms, no tentacles.



SEPIIDAE

Cuttlefishes

***Sepia latimanus* Quoy & Gaimard, 1832**

FAO names: Broadclub cuttlefish (En)
Seiche grandes mains (Fr)

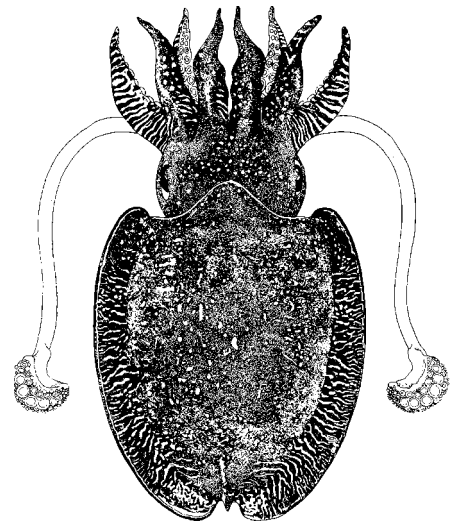
Local name(s): N: Dome; S: Dome (M/K).

Habitat: Coral reefs down to 30 m.

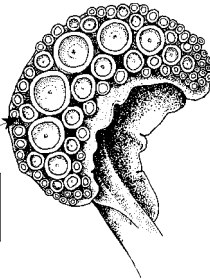
Fisheries: Set nets, Hand lines, Spears.

Distinctive Characters: Tentacular clubs half-moon shaped, their protective membranes fused at base, completely surrounding sucker-bearing surface; a deep cleft or groove between swimming keel and dorsal protective membrane nearly separates sucker-bearing area from stalk.

Colour: Light brown, yellowish or dark brown, with whitish mottle, blotches or spots; arms have longitudinal white bands on their margins that appear as broad white blotches when the arms are extended.



Dorsal view



Tentacular club with 5 or 6 suckers in transverse rows, a few median ones enlarged

Tentacular club

Size: To 50 cm (ML)

Sepia pharaonis* Ehrenberg, 1831

FAO names: Pharaoh cuttlefish (En)
Seiche pharaon (Fr)

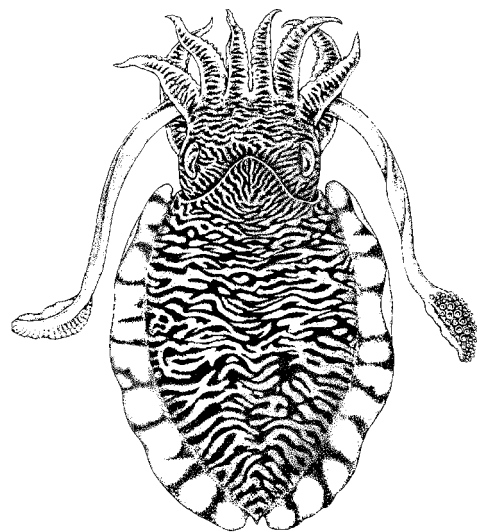
Local name(s): N: Dome; S: Dome (M/K).

Habitat: Neritic, demersal, from the coastline to 110 m; during the reproductive season, when the species migrates shoreward, more abundant in depths around 40 m.

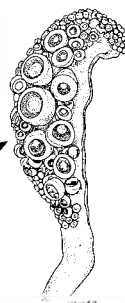
Fisheries: Bottom trawls, Trolling gears.

Distinctive Characters: Mantle broad; hectocotylus present on left ventral arm with 10 to 12 rows of normal size suckers proximally, 6 rows of reduced suckers medially; suckers of hectocotylus in 2 dorsal series are much smaller than those in 2 ventral series.

Colour: Pale brownish or reddish purple; head and arms with transverse zebra-stripe pattern; dorsal mantle has white blotches or spots and has a transverse zebra-stripe pattern.



Dorsal view



8 suckers in transverse rows with 5 or 6 median ones (3rd and 4th in the series) quite enlarged

Tentacular club

Size: To 43 cm (males), 33 cm (females)(ML)

***Sepia prashadi* Winkworth, 1936**

Local name(s): N: Dome; S: Dome (M/K).

Habitat: Neritic, demersal, from the shoreline to about 40 m.

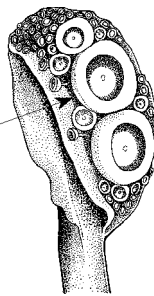
Fisheries: Bottom trawls.

Distinctive Characters: Fins slightly shorter than mantle, its anterior margin reaching level of anterior margin of eye; hectocotylus present on left ventral arm with 4 rows of normal size suckers proximally, 12 to 14 rows of reduced suckers medially.

Colour: Dorsal mantle has transverse zebra-stripe pattern in breeding males.

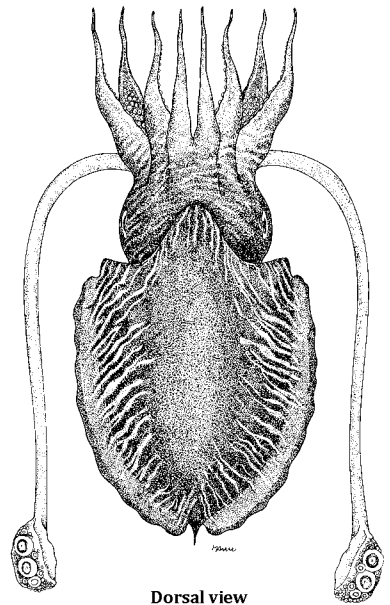
Remarks: Of major interest to fisheries, important by-catch in prawn trawling.

8 suckers forming oblique series; 2-3 median suckers greatly enlarged



Tentacular club

FAO names: Hooded cuttlefish (En)
Seiche capuchon (Fr)



Dorsal view

Size: To 14 cm (ML)

Sepia trygonina* (Rochebrune, 1884)

Local name(s): N: Dome; S: Dome (M/K).

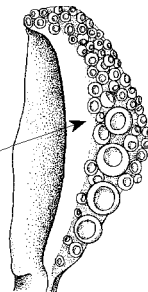
Habitat: Demersal occurring from 35 m to 415 m.

Fisheries: Bottom trawls.

Distinctive Characters: Mantle elongate, narrow, bluntly tapered posteriorly; fins narrow; tentacular clubs short, with a well developed swimming keel extending proximally beyond the base of the club.

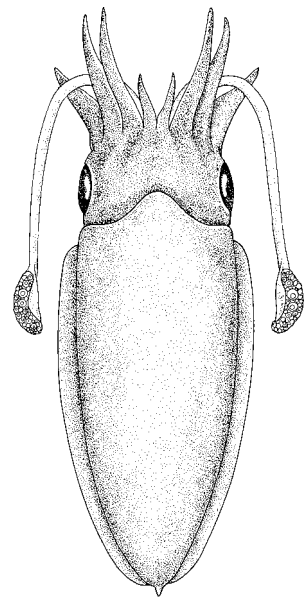
Colour: Purplish brown; base of fins in males with a dark purple band; adjacent to band (or partially on it) is a series of small oval or circular cream-coloured patches, often raised as low tubercles.

8 suckers in oblique, transverse rows; about 5 suckers in 3rd longitudinal series greatly enlarged



Tentacular club

FAO names: Trident cuttlefish (En)
Seiche trident (Fr)



Dorsal view

Size: To 14 cm (ML)

***Sepia zanzibarica* Pfeffer, 1884 ***

FAO names: Zanzibar cuttlefish (En)

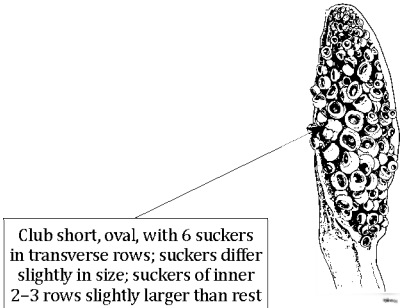
Local name(s): N: Dome; S: Dome (M/K).

Habitat: Occurs between 20 and 125 m.

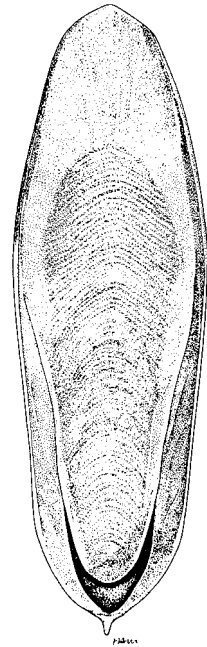
Fisheries: Bottom trawls.

Distinctive Characters: Hectocotylus present on left ventral arm with 6 rows of reduced suckers medially, then normal size suckers distally to arm tip; reduced suckers much smaller than normal arm suckers; cuttlebone outline oblong, bone bluntly rounded anteriorly and posteriorly, strongly recurved ventrally.

Colour: No information.



Tentacular club



Cuttlebone

Size: To 25 cm (ML)

LOLIGINIDAE

Inshore squids

***Sepioteuthis lessoniana* Férussac, 1831 ***

FAO names: Bigfin reef squid (En)

Local name(s): N: Dome; S: Dome (M/K).

Habitat: Neritic, occurring from the surface down a maximum depth of at least 100 m.

Fisheries: Seines, Lured hooks, Bottom trawls.

Distinctive Characters: Mantle long, robust, length of fin about 100% of mantle length; tentacular clubs long, expanded.

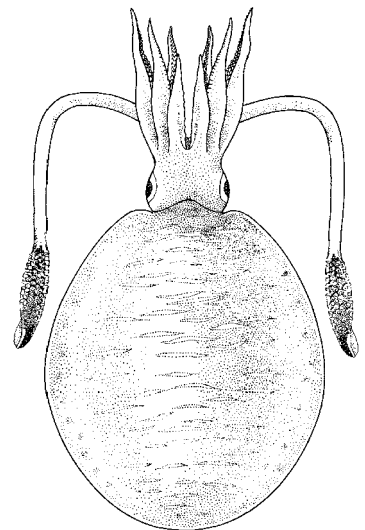
Colour: Brown on the back, with white spots and stripes, variously shaped; young specimens are usually more iridescent.



Left arm IV of male hectocotylized



Tentacular club



Dorsal view

Size: To 42 cm (males), 38 cm (females)(ML)

***Uroteuthis duvaucelii* (d'Orbigny, 1835)**

Local name(s): N: Ngisi; S: Ngisi mwanzi (M/K).

Habitat: A neritic shallow water species occurring from 30 m to 170 m; forms large aggregations during the spawning season.

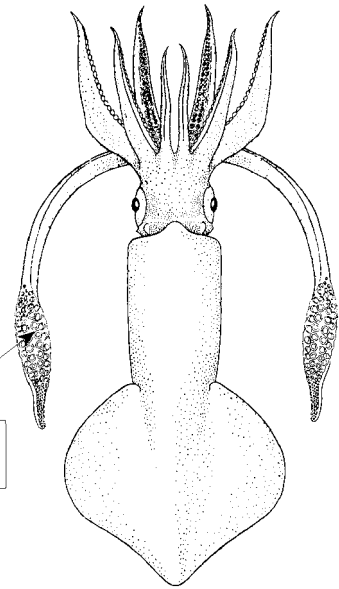
Fisheries: Bottom trawls, Seines.

Distinctive Characters: Mantle relatively short and stout; fins rhombic their length slightly over 50% of mantle length; tentacular clubs expanded, large, up to 45–50% of mantle length.

Colour: No information.

FAO names: Indian squid (En)

Calmar indien (Fr)



Four rows of suckers,
with 2 rows of large
papillae

Dorsal view

Size: To 30 cm (ML)

ONYCHOTEUTHIDAE***Onychoteuthis banksii* (Leach, 1817)**

Local name(s): N: Ngisi; S: Ngisi (M/K).

Habitat: An oceanic species occurring from the surface to about 150 m; it may also be found as deep as 800 m.

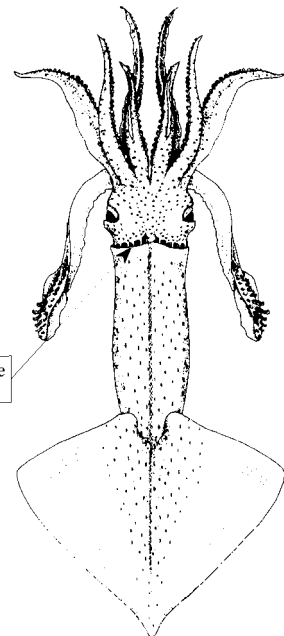
Fisheries: Deep nets.

Remarks: Not exploited at present.

Distinctive Characters: Mantle robust; no marginal rows of suckers; gladius visible as a dark line through the skin along middle line of mantle.

Colour: No information.

FAO names: Common clubhook squid (En)



9–11 flap-like
folds

19–23 large, claw-like
hooks in 2 rows



Tentacular club

Dorsal view

Size: To 30 cm (ML)

OMMASTREPHIDAE

Sthenoteuthis oualaniensis (Lesson, 1830)

Local name(s): N: Ngisi; S: Ngisi (M/K).

Habitat: Oceanic occurring from the surface to probably a maximum depth of 1000 m.

Fisheries: Not exploited at the moment

Distinctive Characters: Mantle muscular, conical posteriorly; 2 rows of suckers on tentacular club; a large, oval photophoric patch on antero-dorsal surface of mantle.

Colour: No information.

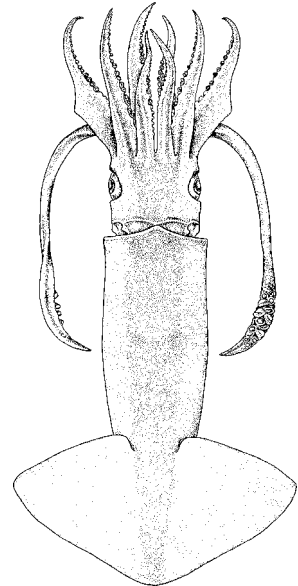


Tentacular club



Left arm IV of male
hectocotylized

FAO names: Purpleback flying squid (En)
Encornet bande violette (Fr)



Dorsal view

Size: To 35 cm (ML)

THYSANOTEUTHIDAE

Thysanoteuthis rhombus Troschel, 1857

Local name(s): N: Ngisi; S: Ngisi (M/K).

Habitat: An epipelagic, oceanic species.

Fisheries: Not exploited at the moment.

Distinctive Characters: Mantle thick, muscular, tapering to a blunt tip posteriorly; fins long, broad, rhombic occupying the entire length of mantle; arms with 2 rows of suckers; buccal connectives attached to ventral borders of arms IV.

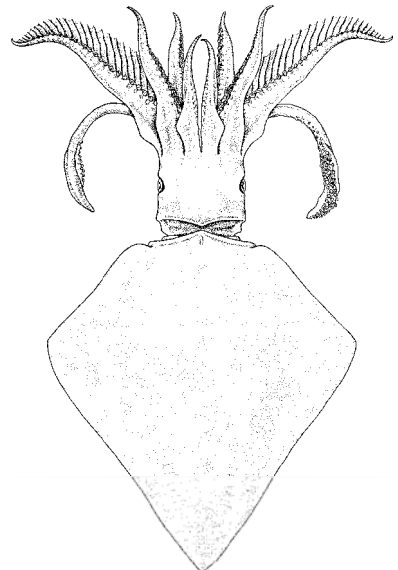
Colour: No information.



4 rows of
suckers

Tentacular club

FAO names: Diamondback squid (En)
Chipiloua commun (Fr)



Dorsal view

Size: To 100 cm (ML)

OCTOPODIDAE

Octopuses

***Callistoctopus macropus* (Risso, 1826)**

Local name(s): N: Pweza; S: Pweza (M/K).

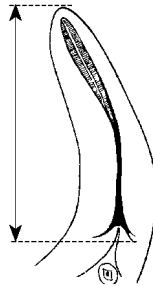
Habitat: A benthic shallow-water species occurring in coral reefs, reef flats and on open bottoms.

Fisheries: Spears, Hooks and Line, Lured hooks, Traps, Bottom trawls.

Distinctive Characters: Arms I longest and stout.

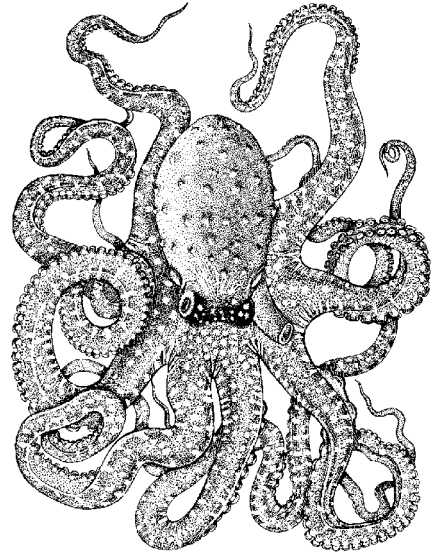
Colour: White spots on reddish background.

Ligula tubular up to 14% of arm length



Tip of hectocotylized right arm III of male

FAO names: Whitespotted octopus (En)
Poulpe tacheté (Fr)



Dorsal view

Size: To 150 cm (TL)

***Octopus aegina* Gray, 1849**

Local name(s): N: Pweza; S: Pweza (M/K).

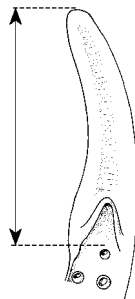
Habitat: A benthic species, common on the continental shelf from 30 m to about 120 m.

Fisheries: Traps, Hooks and Line, Spears.

Distinctive Characters: Dorsal arms shorter than ventral arms; ligula short, with a very shallow groove, 5–8% of arm length; single cirrus over eye.

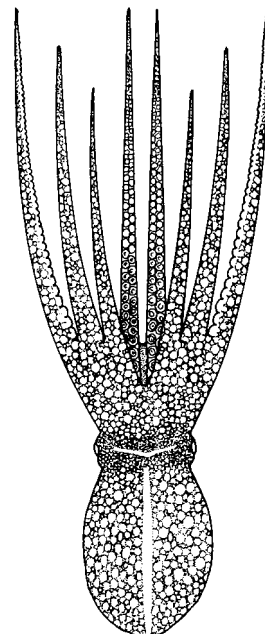
Colour: No information.

Ligula short, with very shallow groove, 5–8% of arm length



Tip of hectocotylized right arm III of male

FAO names: Sandbird octopus (En)
Poulpe de sables (Fr)



Dorsal view

Size: To 10 cm (ML), 30 cm (TL)

***Octopus cyanea* Gray, 1849**

FAO names: Big blue octopus (En)

Local name(s): N: Pweza; S: Pweza (M/K).

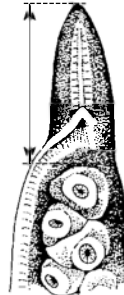
Habitat: A benthic species occurring in shallow waters on coral reefs.

Fisheries: Traps and Spears (at night using light attraction devices).

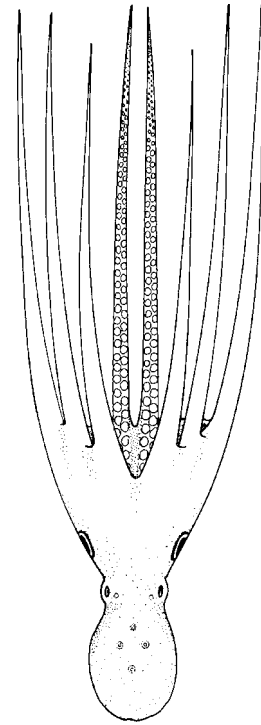
Distinctive Characters: Arms subequal in length; 1 large cirrus and 2 smaller tubercles over eye.

Colour: Mantle mottled, reticulate, arms with purple-brown blotches.

Ligula short, 0.4-1.4% of arm length

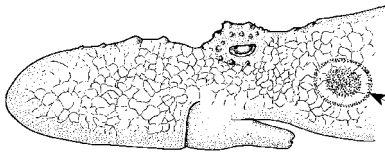


Tip of hectocotylized right arm III of male



Dorsal view

A ringed ocellus on each side between eye and arms III and IV.



Lateral view of head and body

Size: To 16 cm (ML)

***Octopus vulgaris* Cuvier 1797**

FAO names: Common octopus (En)
Pieuve (Fr)

Local name(s): N: Pweza; S: Pweza (M/K).

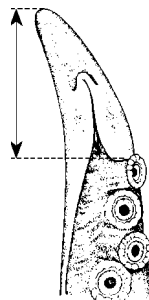
Habitat: From the coastline to the outer edge of the continental shelf down to 200 m; over rocks on coral reefs and sea grass beds.

Fisheries: Spears, Hooks and line, Bottom trawls.

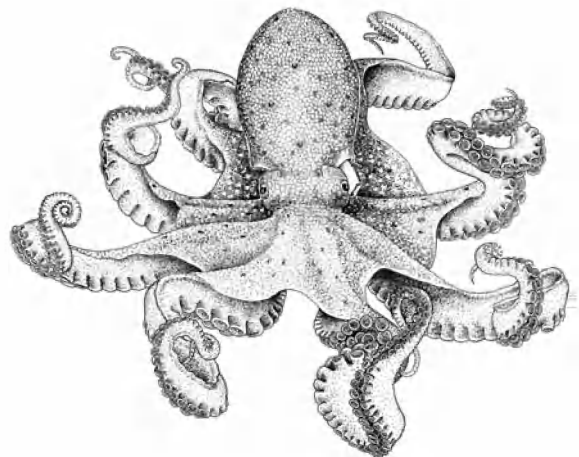
Distinctive Characters: Arms stout, about equal in length and thickness; two rows of suckers on arms.

Colour: Grey, yellow, brown and green; changes colour to hide from predators.

Ligula spoon-shaped less than 2.5% of arm length



Tip of hectocotylized right arm III of male

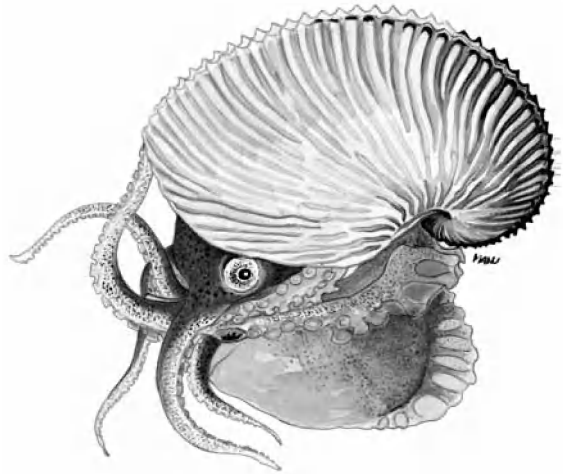


Dorsal view

Size: To 130 cm (males), 120 cm (females)(TL)

ARGONAUTIDAE

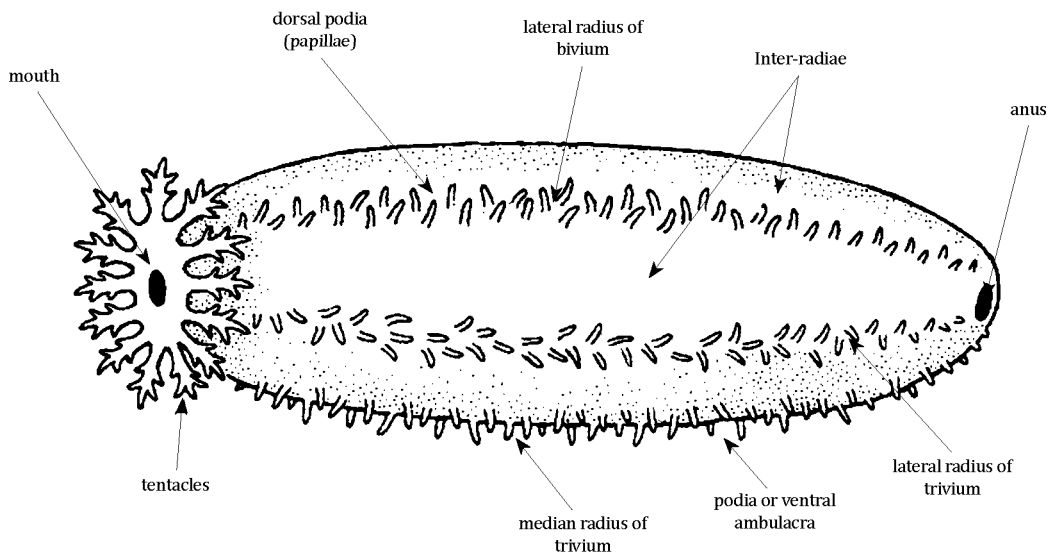
Argonauts

Argonauta argo Linnaeus, 1758**FAO names:** Greater argonaut (En)
Argonaute papier (Fr)**Local name(s):** N: Pweza; S: Pweza (M/K).**Habitat:** An epipelagic, oceanic species occurring in near surface waters.**Fisheries:** Bottom trawls.**Distinctive Characters:** Males minute; females shell white, covered by the membrane of 1st pair of arms; head small, eyes prominent; 1st and 2nd arms subequal.**Colour:** Body of females purple-blue to wine-red from above, light from below; extended 1st arm flap purple-red; shell, porcelain-white, early section and nodules on the keel dark brown; males with many small chromatophores.**Size:** To 30 cm (female), 1.5–2 cm (dwarf male)(TL)

SEA CUCUMBERS

The sea cucumber fishery is an important source of livelihood to many households in the coast of Kenya (Conand et al., 2006), although they are not eaten by local people. There are several commercially important sea cucumber species in Kenya. In the southern coast, *Holoturia scabra* is the most commonly landed species, followed by *Stichopus hermani* and *Holoturia nobilis*. Sea cucumber catches have significantly decreased over the years. Some low-value species are increasingly getting important to fishers' catches to make up for the decrease in the size and quantities of high value species.

TECHNICAL TERMS AND MEASUREMENTS



Sea cucumbers have an orally-aborally elongated body. The body is formed like a short or long cylinder, with the mouth (at the anterior end) encircled by tentacles, and the anus (at the posterior end) often edged by papillae. The pentamerous symmetry is sometimes recognizable by the presence of 5 meridional ambulacra bearing podia. Sea cucumbers often lay on the substrate with their ventral surface or trivium, formed by the radii A, B, and E in the Carpenter system for orientation. This creeping sole bears the locomotory podia, while on the dorsal surface, or bivium, the podia are often represented by papillae. Consequently, a secondary bilateral symmetry is evident. The mouth is terminal or displaced dorsally, surrounded by a thin buccal membrane, and generally bordered by a circle of tentacles.

HOLOTHURIIDAE

Sea cucumbers

Actinopyga mauritiana (Quoy & Gaimard, 1833)

Local name(s): N: Jongoo; S: Jongoo (M/K).

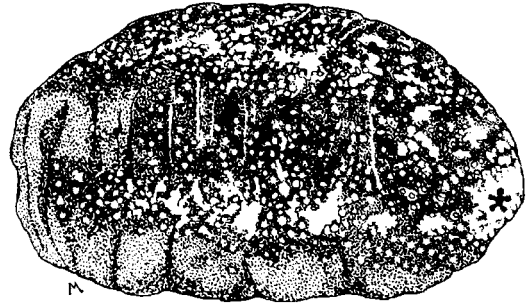
Habitat: Benthic, neritic in great abundance in sand stone and dead corals close to luxuriant coral reefs.

Fisheries: Hands.

Distinctive characters: Body arched dorsally (bivium) and flattened ventrally (trivium); bivium sometimes wrinkled, wider in the middle and tapering towards both ends; papillae on bivium long and slender; podia numerous on trivium; mouth ventral, surrounded by 25 short and stout tentacles.

Colour: In life, when contracted is deep chocolate brown with crevices bordered with a light grey border; uniformly deep brown immediately surrounding cloaca; grey below.

FAO names: Surf redfish (En)
Holothurie brune des brisants (Fr)



Size: To 35 cm, common 20 cm

Holothuria nobilis (Selenka, 1867)

Local name(s): N: Jongoo; S: Jongoo (M/K).

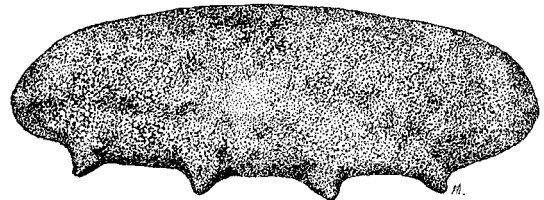
Habitat: Benthic, neritic less common in deeper water surf reddish on sand stone and dead corals down to 20 m.

Fisheries: Hands.

Distinctive characters: Body sub oval, stout, firm and rigid, arched dorsally (bivium), and flattened ventrally (trivium); bivium with characteristic large lateral papillae (teats) and often covered by sand; podia on trivium stout, arranged irregularly; mouth ventral, surrounded by 2 rows of black papillae and 20 stout tentacles.

Colour: In life, dark chocolate brown with large raised white areas adjacent to sole; tube feet milk white but background brown.

FAO names: Black teatfish (En)
Holothurie noire à mamelles (Fr)



Size: To 60 cm, common 37 cm

Holothuria scabra Jaeger, 1833

Local name(s): N: Jongoo jeupe; S: Jongoo (M/K).

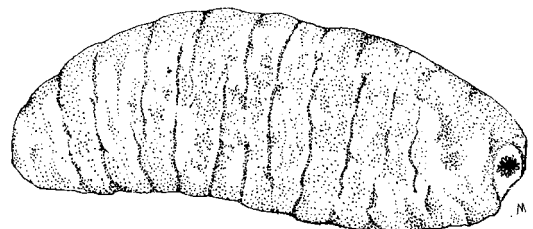
Habitat: Benthic, neritic, abundant on mud, sand and sea grass beds from 2 m to 70 m.

Fisheries: Hands.

Distinctive characters: Body oval, arched dorsally (bivium) and flattened ventrally (trivium); bivium with characteristic wrinkles, covered by sediment when the animal is coming out of the bottom; bivium with small papillae within black dots, and black podia; podia on trivium arranged irregularly; mouth ventral, surrounded by a collar of papillae and 20 short and stout tentacles.

Colour: In life, brown with small white spots dorsally, or a few pale blotches; sides becoming pale and sole milky white.

FAO names: Sand fish (En)

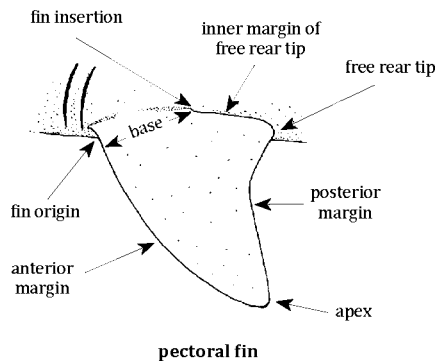
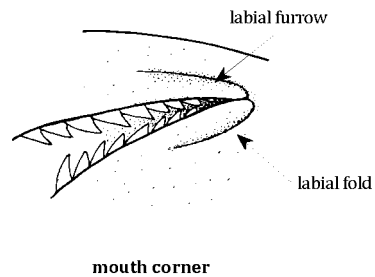
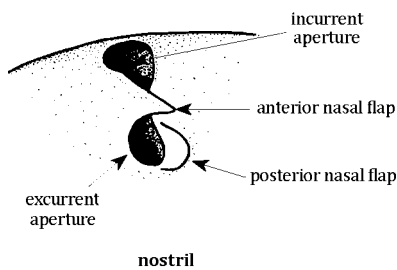
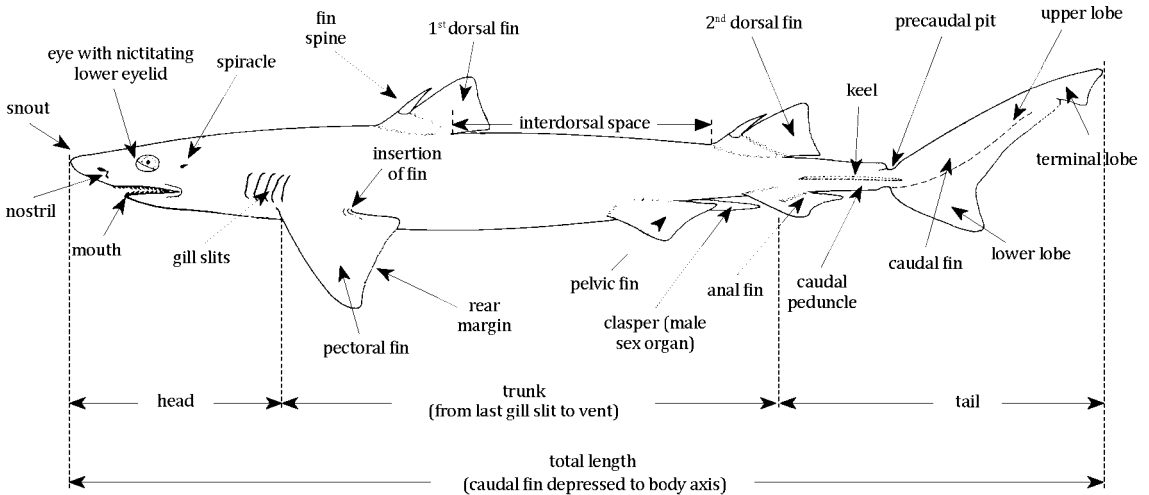


Size: To 40 cm, common 22 cm

SHARKS

The guide to “Orders and Families” includes a total of 4 orders and 13 families of sharks known to occur in Kenya. These are arranged by order using the classification adopted by Eschmeyer & Fricke (2011) which best reflects current use. Page numbers refer to those families that are treated in more detail in the species identification guide. The “Guide to Species” includes 38 species considered to be of current or potential use in fisheries or are caught as by-catch by various gears of the Kenya fishing fleet.

TECHNICAL TERMS AND MEASUREMENTS



GUIDE TO ORDERS AND FAMILIES

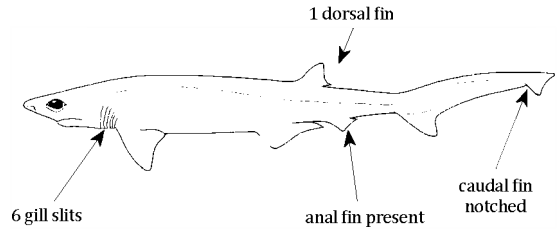
Order HEXANCHIFORMES – Frilled and Cow sharks

Six or 7 pairs of gill slits; single dorsal fin; anal fin present.

HEXANCHIDAE

Cow sharks

To 1.8 m. Mainly demersal, from depths of 90 m to 600 m. Of little interest to fisheries. Marine. One species, *Hexanchus nakamurai* Teng, 1962 is present in Kenya waters.



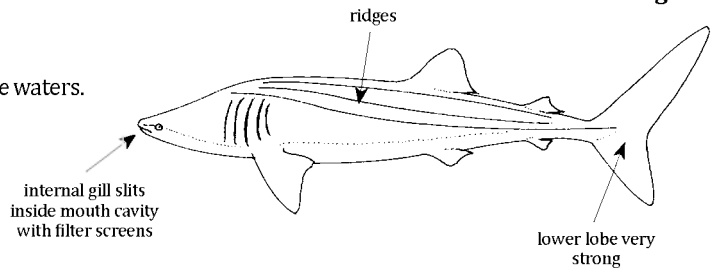
Order ORECTOLOBIFORMES – Carpet sharks

Five pairs of gill slits, often the 5th overlapping the 4th; 2 dorsal fins without spines; mouth transverse, well in front of eyes, usually with barbels (*Rhincodon typus* with broad head and wide mouth).

RHINCODONTIDAE

Whale shark

Possibly to 18 m. Epipelagic, in- and offshore waters. A single species worldwide.

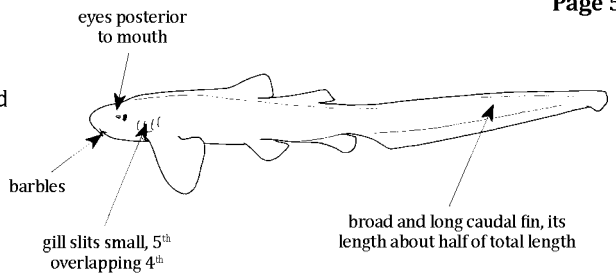


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STEGOSTOMATIDAE

Zebra sharks

Possibly to 3.5 m. Demersal on continental and insular shelves. A single species worldwide.

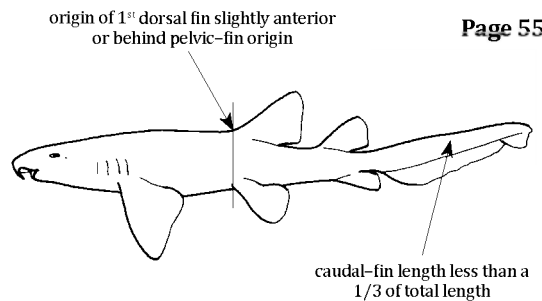


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INGLYMOSTOMATIDAE

Nurse sharks

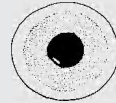
To 3.2 m. Demersal from the intertidal zone to a depth of at least 70 m. Two species of interest to fisheries are included in the Guide to Species.



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Order LAMNIFORMES – Mackerel sharks and allies

Five pairs of gill slits; 2 dorsal fins without spines; anal fin present; mouth strongly arched, extending well behind eyes; no movable nictitating eyelid; intestinal valve of ring type.



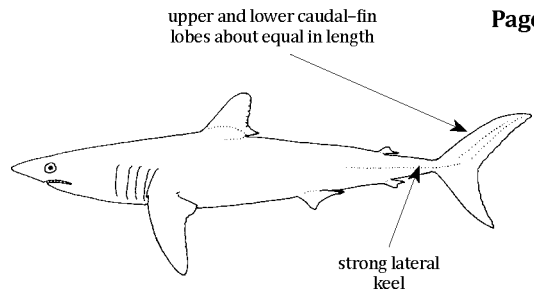
no movable nictitating eyelid

Page 56

LAMNIDAE

Mackerel sharks

To 8 m. Mainly epipelagic, from the surface to depths of at least 152 m. Two species are included in the Guide to Species.

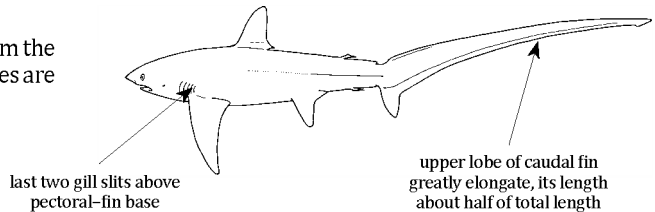


Page 57

ALOPIIDAE

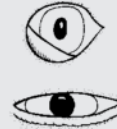
Thresher sharks

To 5.5 m. Pelagic, but also near the bottom, from the surface to depths of at least 500 m. Three species are included in the Guide to Species.



Order CARCHARHINIFORMES – Ground sharks and allies

Five pairs of gill slits; 2 dorsal fins without spines; anal fin present; mouth arched, extending behind anterior end of eyes; a movable nictitating eyelid; intestinal valve of scroll or spiral type.



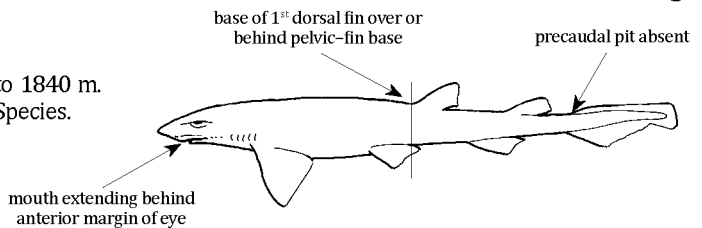
movable nictitating eyelid

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SCYLORHINIDAE

Cat sharks

To 1 m. Demersal, from depths of 37 m to 1840 m. Two species are included in the Guide to Species.

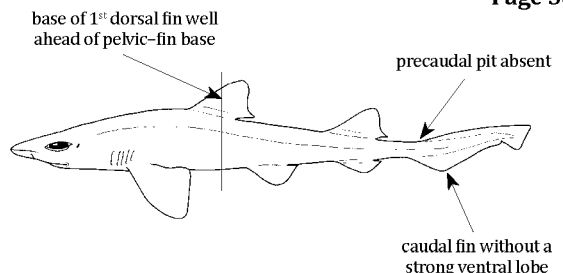


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PROSCYLLIIDAE

Finback catsharks

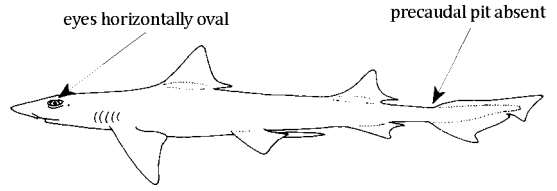
To 46 cm. Demersal, from depths of 70 m to 766 m. One species is included in the Guide to Species.



TRIAKIDAE

Houndsharks

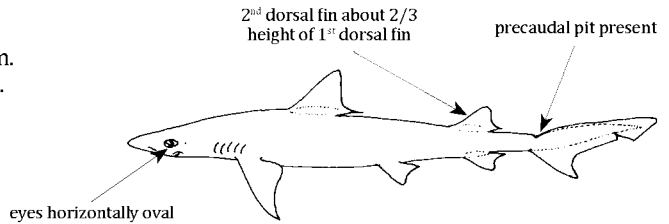
To 1.5 m. Demersal, from the intertidal region down to a depth of at least 1000 m. Two species are included in the Guide to Species.



HEMIGALEIDAE

Weasel sharks

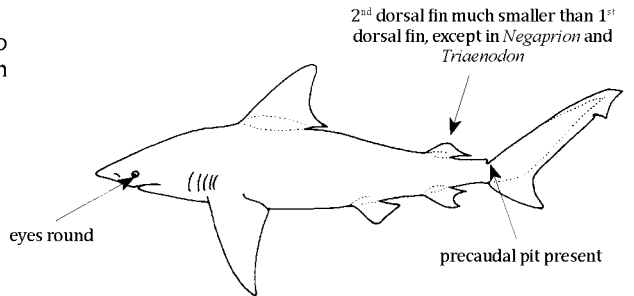
To 2.4 m. Demersal, from depths of 1 m to 30 m. One species is included in the Guide to Species.



CARCHARHINIDAE

Requiem sharks

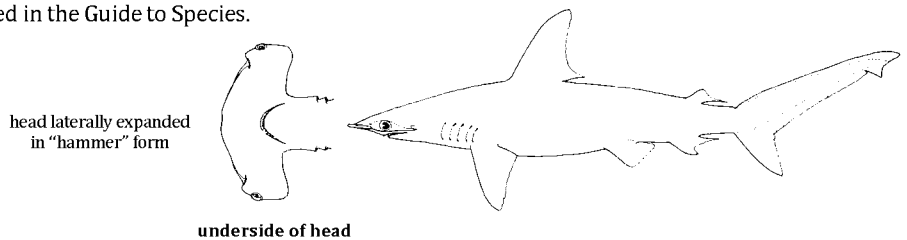
To 4 m. Demersal to epipelagic, from the surface to a depth of 800 m. Nineteen species are included in the Guide to Species.



SPHYRNIDAE

Hammerhead sharks

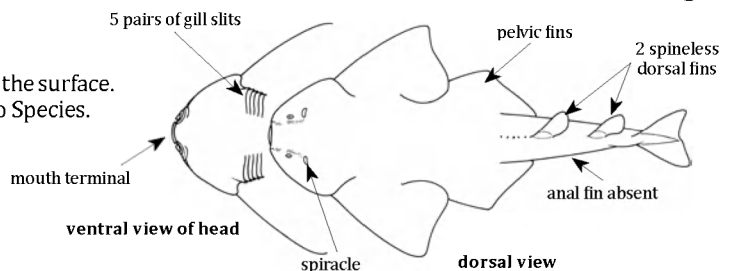
To 6 m. Coastal and oceanic waters, near the surface. Two species are included in the Guide to Species.



SQUATINIDAE

Angel sharks

To 6 m. Coastal and oceanic waters, near the surface. Two species are included in the Guide to Species.



RHINCODONTIDAE

Whale shark

Rhincodon typus Smith, 1828

Local name(s): N: Papa zambarani; S: Papa zambarani (M), Papa nyamrami (K).

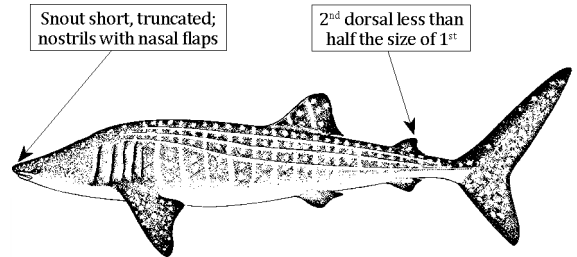
Habitat: Pelagic often near the surface down to 980 m.

Fisheries: Floating gillnets.

Distinctive Characters: Anal fin present; caudal fin with a strong lower lobe but no sub-terminal notch; caudal peduncle depressed with a strong keel on each side; upper pre-caudal pit present.

Colour: Dark grey, reddish or greenish-grey above, with white or yellow spots and transverse stripes; white or yellowish below.

FAO names: Whale shark (En)
Requin baleine (Fr)



Size: To 12 m, possibly to 21 m (TL)

STEGOSTOMATIDAE

Zebra sharks

Stegostoma fasciatum (Hermann, 1783)

Local name(s): N: Papa kiharehare, Papa guigui; S: Papa usingizi (M), Papa chui (K).

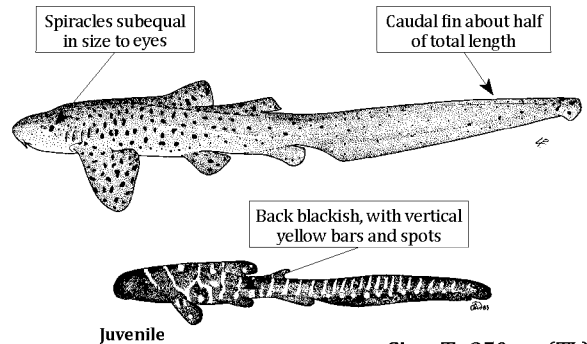
Habitat: Inshore, very common on coral reefs.

Fisheries: Bottom trawls, Gillnets, Longlines.

Distinctive Characters: Anal fin present, rounded with a deep sub-terminal notch but with the lower lobe hardly developed; caudal peduncle not strongly depressed, without lateral keels or pre-caudal pits, but with interdorsal ridges.

Colour: Sub-adults and adults with scattered dark spots on a yellowish background, shading into the whitish ventral surfaces.

FAO names: Zebra shark (En)
Requin zèbre (Fr)



Size: To 350 cm (TL)

GINGLYMOSTOMATIDAE

Nurse sharks

Nebrius ferrugineus (Lesson, 1831)

Local name(s): N: Papa guigui; S: Papa usingizi (M), Papa kingagu (K).

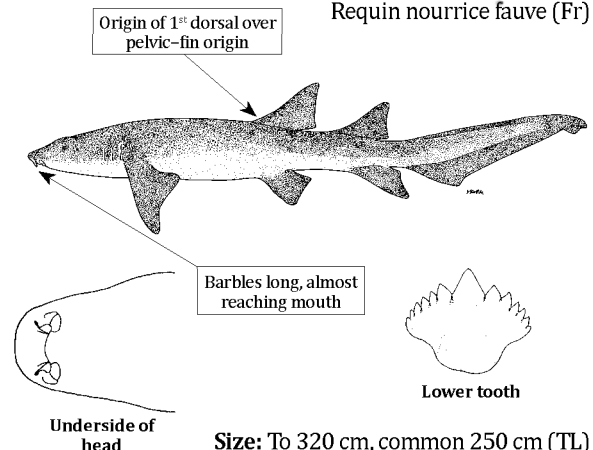
Habitat: Demersal in shallow waters on coral and rocky reefs, in lagoons and on sand flats down to 70 m.

Fisheries: Gillnets, Lines.

Distinctive Characters: Snout very short, and broadly rounded or truncated; caudal fin about 1/3 of total length, strongly notched, ventral lobe weak to short; caudal peduncle not strongly depressed, with no lateral keels or pre-caudal pits, no interdorsal ridges.

Colour: No colour pattern, tan above, lighter below; fins slightly dusky.

FAO names: Tawny nurse shark (En)
Requin nourrice fauve (Fr)



Size: To 320 cm, common 250 cm (TL)

***Pseudoginglymostoma brevicaudatum* (Günther, 1867)**

Local name(s): N: Papa ove, Papa guigui; S: Papa usingizi (M), Papa kingagu (K).

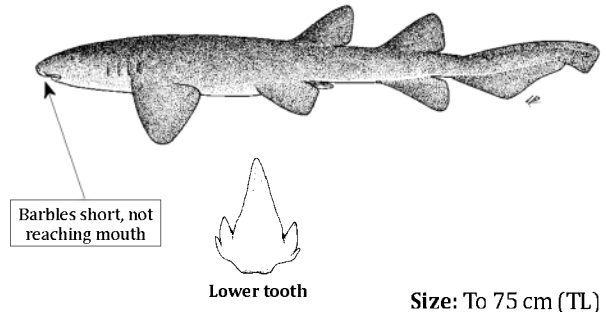
Habitat: A sluggish, bottom-dwelling shallow water shark.

Fisheries: Gillnets, Lines, Shallow trawls.

Distinctive Characters: Two dorsal fins both with rounded apices; origin of 1st dorsal over middle of pelvic fin; caudal fin about 1/5 of total length, strongly notched with ventral lobe hardly developed; caudal peduncle not strongly depressed, with no lateral keels or precaudal pits, no interdorsal ridges.

Colour: No colour pattern, dark-brown above, lighter below.

FAO names: Short-tail nurse shark (En)
Requin nourrice à queue courte (Fr)

**LAMNIDAE****Makos*****Carcharodon carcharias* (Linnaeus, 1758)**

Local name(s): N & S: No information.

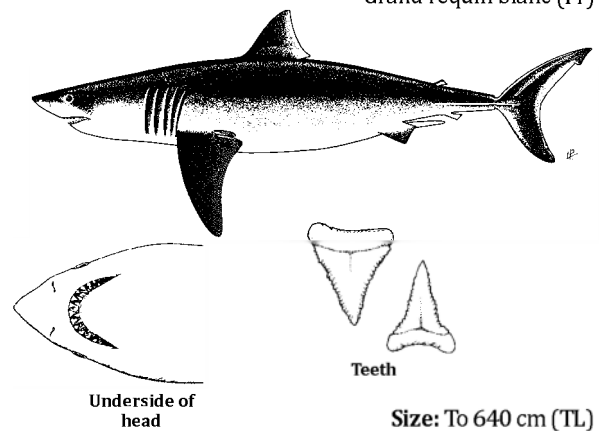
Habitat: Coastal and offshore from the surface down to the bottom in epicontinental waters.

Fisheries: Caught as by-catch of various fishing gears.

Distinctive Characters: A huge, spindle-shaped shark with conspicuous black eyes; a blunt, conical snout and large, triangular, saw-edged teeth; long gill slits; 1st dorsal-fin origin usually over the pectoral-fin inner margins; strong keels on caudal peduncle; no secondary keels on caudal-fin base; caudal fin crescentic.

Colour: Lead-grey to brown or black above, lighter on sides, and abruptly white below; black spot at rear of pectoral-fin base.

FAO names: Great white shark (En)
Grand requin blanc (Fr)

***Isurus oxyrinchus* Rafinesque, 1810**

Local name(s): N: Papa meu; S: Papa mako (M), Papa (K).

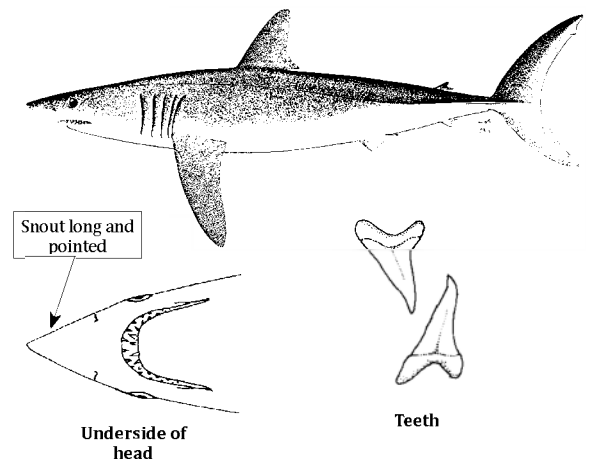
Habitat: Pelagic in oceanic and coastal waters, usually near the surface.

Fisheries: Longlines, Hooks and Lines, Gillnets.

Distinctive Characters: Two very unequal dorsal fins, the 1st comparatively large; pectoral fins moderately long and falcate, caudal fin lunate, its lower lobe strongly developed; caudal peduncle very much flattened, but expanded laterally with a prominent keel on each side extending well out to caudal fin.

Colour: Back and sides grey-blue, occasionally deep blue; belly white.

FAO names: Shortfin mako (En)
Taupe bleu (Fr)



Size: To 400 cm, common 200 cm (TL)

ALOPIIDAE

Thresher sharks

***Alopias pelagicus* Nakamura, 1935**

FAO names: Pelagic thresher (En)
Renard pélagique (Fr)

Local name(s): N: Papa; S: Papa (M/K).

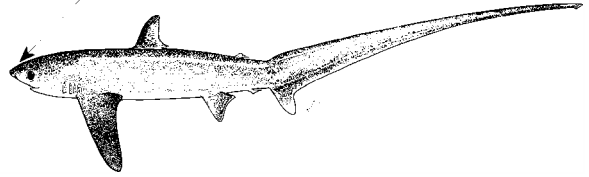
Habitat: Oceanic, epipelagic, caught near shore where shelf is narrow. Maximum depth 150 m.

Fisheries: Longlines, Drift nets.

Distinctive Characters: A large shark; two dorsal fins the 1st moderately large and about equidistant between pectoral and pelvic-fin bases; 2nd dorsal fin minute; pectoral fins narrow, long and nearly straight.

Colour: Bluish or grey above, white below, with a silvery sheen in gill regions, white on belly; base of pectoral fin dark.

Head strongly arched between eyes, with no or an inconspicuous horizontal groove



Size: To 330 cm (TL)

***Alopias superciliosus* Lowe, 1841**

FAO names: Bigeye thresher (En)
Renard à gros yeux (Fr)

Local name(s): N: Papa; S: Papa (M/K).

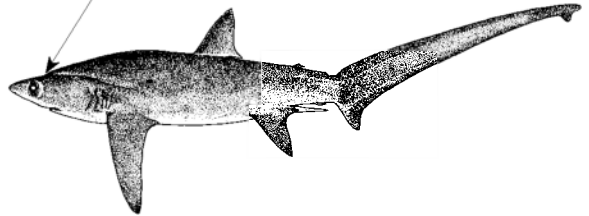
Habitat: Oceanic and coastal waters down to 500 m.

Fisheries: Longlines, Fixed bottom and pelagic gillnets, Bottom trawls.

Distinctive characters: Upper pre-caudal pit present but caudal keel absent; two dorsal fins the 1st moderately large and located in front of the pelvic fin origins, closer to the pelvic fins than to the pectorals; 2nd dorsal fin minute, positioned well ahead of the small anal fin; pectoral fins narrow.

Colour: Purplish-grey above, cream below, posterior edges of pectoral, pelvic fins and 1st dorsal fin dusky; light colour on abdomen.

Deep horizontal groove on nape from the level of mouth to pectoral fins



Size: To 470 cm (TL)

***Alopias vulpinus* (Bonnaterre, 1788)**

FAO names: Thresher (En)
Renard (Fr)

Local name(s): N: Papa; S: Papa (M/K).

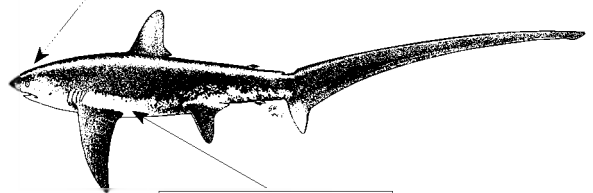
Habitat: Coastal over the continental and insular shelves and epipelagic far from land.

Fisheries: Longlines.

Distinctive Characters: Pectoral fin long, falcate and narrow tipped; two dorsal fins the 1st moderately large with its base ahead of fin bases; 2nd dorsal fin minute and positioned just in front of the small anal fin.

Colour: Brown, grey-white or blackish on back and underside of snout, lighter on sides; white dots sometimes present on pectoral, pelvic and caudal fin tips.

Forehead arched, without grooves



White area extends from the abdomen over the fins

Size: To 550 cm (TL)

SCYLIORHINIDAE

Catsharks

Holohalaelurus grennian Human, 2006

FAO names: Grinning Izak catshark (En)
Holbiche sourire (Fr)

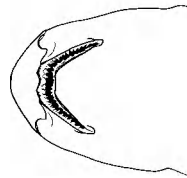
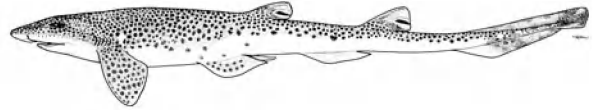
Local name(s): N & S: No information.

Habitat: Demersal from 238 m to 353 m.

Fisheries: May be by-catch in bottom trawl fisheries.

Distinctive Characters: Broad head; no labial furrows, nostrils separate from each other and mouth and without barbels or nasoral grooves; dorso-lateral gill slits; dorsal fins subequal in size; 1st dorsal-fin origin about over pelvic fin insertion; 2nd dorsal-fin origin about over anal fin free rear tip.

Colour: Dorsal surface background colour yellowish-brown with numerous small brown spots; large white spot above pectoral-fin insertion; characteristic narrow dark horizontal stripe on both dorsal fins.



Underside of head

Size: To 27.3 cm (male), 20.6 (female) (TL)

Holohalaelurus melanostigma (Norman, 1939)

FAO names: Crying Izak (En)
Holbiche pleureuse (Fr)

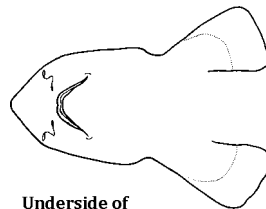
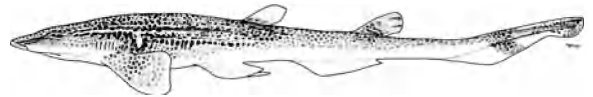
Local name(s): N & S: No information.

Habitat: Bathy-demersal from 607 m to 658 m.

Fisheries: May be by-catch in bottom trawl fisheries.

Distinctive Characters: Denticles on dorsal midline slightly enlarged, from a point level to the pectoral-fin origin on the dorsal midline to the 1st dorsal-fin origin; no enlarged denticles on the dorsal surface of the pectoral fins; no club-shaped papillae on the distal tip of the clasper; buccal papillae in mouth inconspicuous.

Colour: Large brown spots, stripes and blotches on a dull grey-brown background; a distinct tear line marking from the anterior of the orbit to the lateral margin of the snout.



Underside of head

Size: To 38.4 cm (TL)

PROSCYLLIIDAE

Finback catsharks

Eridacnis radcliffei Smith, 1913

FAO names: Pigmy ribbontail catshark (En)
Requin-chat pygmé (Fr)

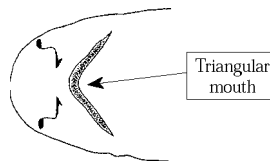
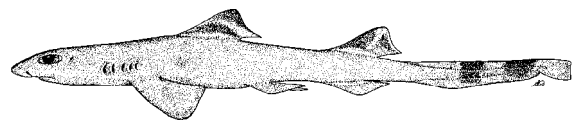
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Benthic, often over mud bottoms, on the upper continental and insular slopes and outer shelves from 71 m to 766 m.

Fisheries: Bottom trawls.

Distinctive Characters: First dorsal fin over abdomen and slightly closer to pelvic fins than pectoral fins; labial furrows rudimentary or absent; long narrow, ribbon-like caudal fin; dorsal fins fairly large and high.

Colour: Caudal fin with long, prominent dark banding; long and dark markings on dorsal fins.



Underside of head

Size: To 24 cm (TL)

TRIAKIDAE

Houndsharks – Smoothhounds – Topes

***Hypogaleus hyugaensis* (Miyosi, 1939)**

Local name(s): N & S: No information.

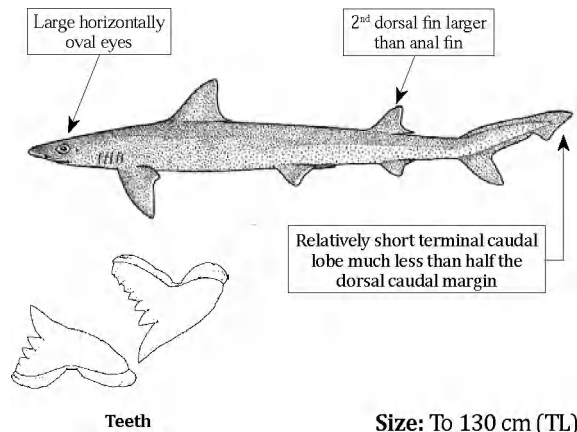
Habitat: Continental shelf and uppermost slope from 40 m to 230 m, near the bottom.

Fisheries: Non-utilized by-catch of offshore trawl fisheries for prawns.

Distinctive Characters: A slender, moderately long-nosed shark with vestigial anterior nasal flaps; angular mouth; moderately long upper labial furrows; bladelike compressed teeth with oblique cusps and distal cusplets in both jaws.

Colour: Dull grey dorsally, paler below; front part of snout slightly dusky.

FAO names: Blacktip tope (En)
Requin-hà élégant (Fr)

***Mustelus manazo* Bleeker, 1855**

Local name(s): N & S: No information.

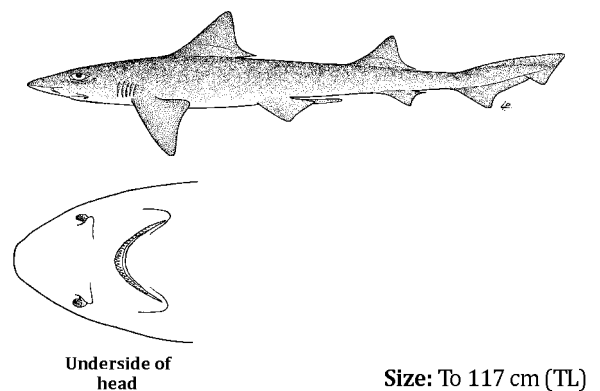
Habitat: Intertidal and subtidal zones, commonly close inshore, especially on mud and sand bottoms.

Fisheries: No information.

Distinctive Characters: Body fairly slender; relatively narrow internarial space; buccopharyngeal denticles covering almost entire oral cavity; unfringed dorsal fins; relatively small pectoral and pelvic fins.

Colour: Uniform gray or gray-brown above, light below, usually with numerous white spots but no dark spots or dark bars.

FAO names: Starspotted smooth-hound (En)
Émissole étoilée (Fr)

***Mustelus mosis* Hemprich & Ehrenberg, 1899**

Local name(s): N: Papa; S: Papa (M/K).

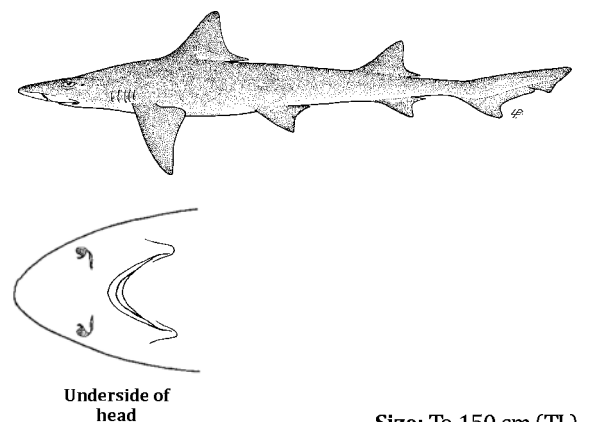
Habitat: Bottom dwelling in inshore and offshore waters, also on coral reefs.

Fisheries: Bottom trawls, Bottom and floating gillnets, Line gears.

Distinctive Characters: Snout relatively long and narrowly rounded; broad nasal flaps not reaching mouth, labial furrows moderately long; caudal fin with lower lobe short in adults and hardly developed in young; interdorsal ridge present; caudal peduncle without keel or precaudal pits.

Colour: Back and sides plain grey or grey-brown, underside cream-white, no spots on sides.

FAO names: Arabian smooth-hound (En)
Emissole d'Arabie (Fr)



HEMIGALEIDAE

Weasel sharks

***Hemipristis elongata* Klunzinger, 1871**

Local name(s): N: Papa; S: Papa (M/K).

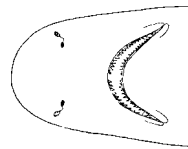
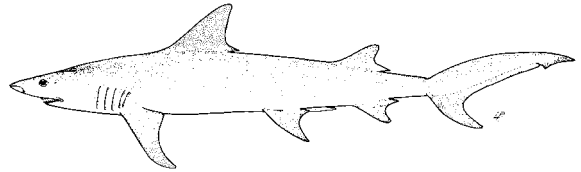
Habitat: Occurs in coastal waters.

Fisheries: Floating and fixed gillnets, Floating long lines.

Distinctive Characters: Snout long, bluntly rounded; labial furrows moderately long and easily seen; large curved, saw-edged teeth in the upper jaw, and hooked lower teeth protruding from mouth; 1st dorsal fin moderately large with a pointed apex, 2nd dorsal fin high; no pre-anal ridges; no keels on caudal peduncle.

Colour: Grey or grey-brown above, lighter below, no prominent markings.

FAO names: Snaggletooth shark (En)
Milandre chicor (Fr)



Underside of head



Lower tooth

Size: To 240 cm (TL)

CARCHARHINIDAE

Requiem sharks

***Carcharhinus albimarginatus* (Rüppell, 1837)**

Local name(s): N: Papa; S: Papa (M/K).

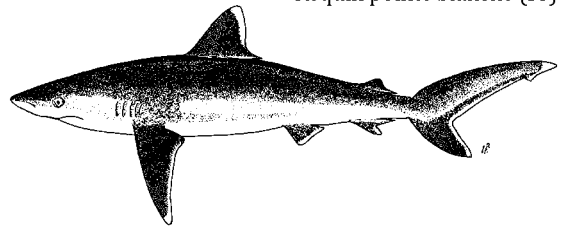
Habitat: Inshore and offshore from the surface to deeper waters. Maximum depth 800 m.

Fisheries: Lines, Gillnets.

Distinctive Characters: Snout moderately long; first dorsal fin and pectoral fins angular, and not expanded; upper teeth triangular; a dermal ridge present between dorsal fins.

Colour: Dorsal surface dark grey or greyish brown, ventral surface white; all fins have conspicuous white tips at posterior margins.

FAO names: Silvertip shark (En)
Requin pointe blanche (Fr)



Underside of head



Teeth

Size: To 300 cm

***Carcharhinus amblyrhynchos* (Bleeker, 1856)**

Local name(s): N: Papa; S: Papa (M/K).

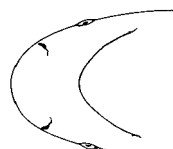
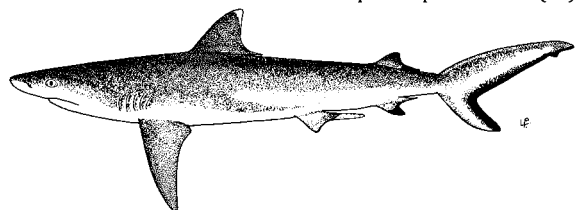
Habitat: Inshore and offshore waters, on coral reefs from the surface down to 140 m.

Fisheries: Line gears, Gillnets.

Distinctive Characters: Snout broadly rounded, labial furrows very short, anterior flaps very low; 1st dorsal fin moderately high with pointed or narrowly rounded apex; no ridge between dorsal fins or occasionally a weak one.

Colour: Dark grey or bronze above, white below; 1st dorsal fin with a white tip, 2nd dorsal and anal fins dusky or black-tipped; caudal fin with a conspicuous broad black margin.

FAO names: Blacktail reef shark (En)
Requin à queue noire (Fr)



Underside of head



Teeth

Size: To 255 cm (TL)

Carcharhinus amboinensis (Müller & Henle, 1839)

FAO names: Pigeye shark (En)
Requin balestine (Fr)

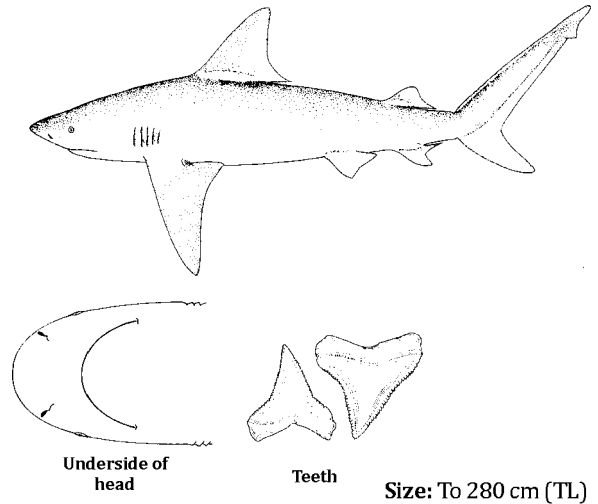
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Inshore and offshore, from the surface to the bottom.

Fisheries: Longlines, Drifting gillnets.

Distinctive Characters: Snout short and abruptly rounded; eyes small; large, triangular, saw-edged upper teeth; 1st dorsal fin at least 3.2 or more times higher than 2nd dorsal fin; no dermal ridge between dorsal fins.

Colour: Grey above, light below; tips of fins darker in young, fading in adults.

***Carcharhinus falciformis*** (Müller & Henle, 1839)

FAO names: Silky shark (En)
Requin soyeux (Fr)

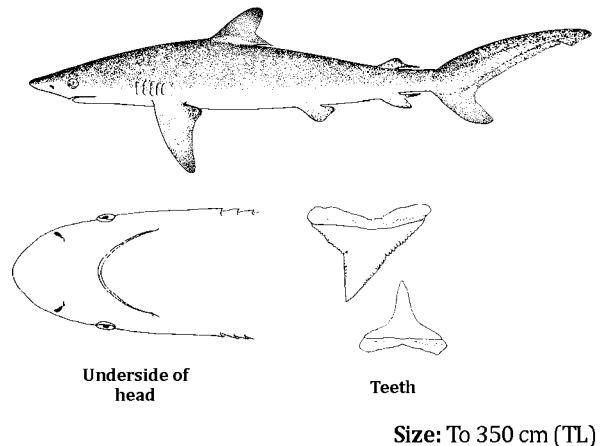
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal and oceanic, common near slopes, from the surface to deeper waters down to 500 m.

Fisheries: Longlines, Handlines, Gillnets.

Distinctive Characters: A large, slim shark with large eyes, small jaws, and oblique-cusped teeth with serrations; snout narrowly rounded, equal to or slightly shorter than mouth width; 1st dorsal fin falcate and moderate-sized; origin of 1st dorsal fin behind pectoral fins; interdorsal ridge present between the dorsal fins.

Colour: Back dark-grey, greyish or bluish-black (in life) belly greyish or white; no conspicuous markings.

***Carcharhinus leucas*** (Müller & Henle, 1839)

FAO names: Bull shark (En)
Requin bouledogne (Fr)

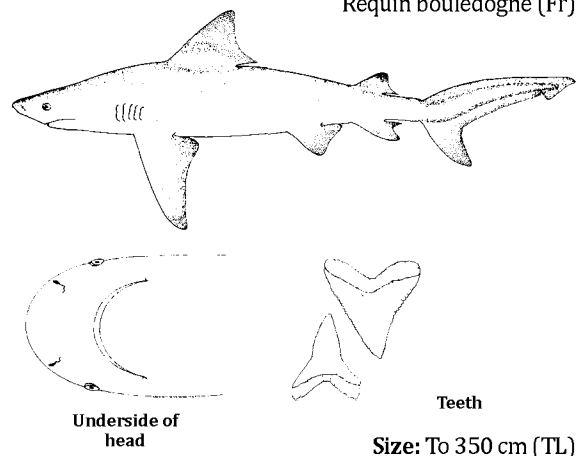
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal, estuarine, riverine and lacustrine waters, usually found close inshore in marine habitats from 1 m to 152 m.

Fisheries: Gillnets, Longlines.

Distinctive Characters: Stout shark; teeth in the upper jaw are upright, strongly serrated, triangular and broad at their bases, while in the lower jaw they are more slender and pointed; snout very short and bluntly rounded; labial folds very short; 1st dorsal fin less than 3 times higher than 2nd dorsal fin; no interdorsal ridge between dorsal fins.

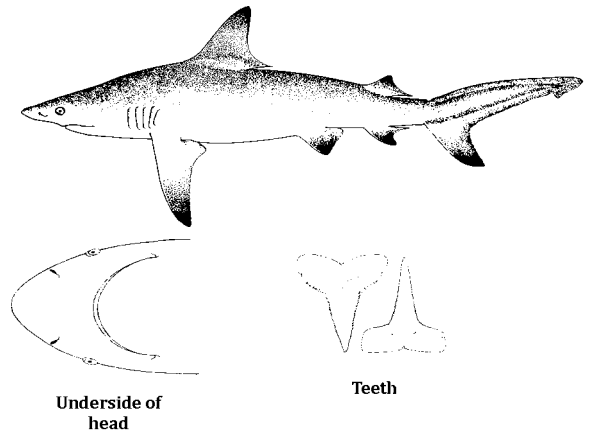
Colour: Back greyish, belly white, tips of fins dusky especially in young individuals.



***Carcharhinus limbatus* (Müller & Henle, 1839)**

FAO names: Blacktip shark (En)

Requin bordé (Fr)

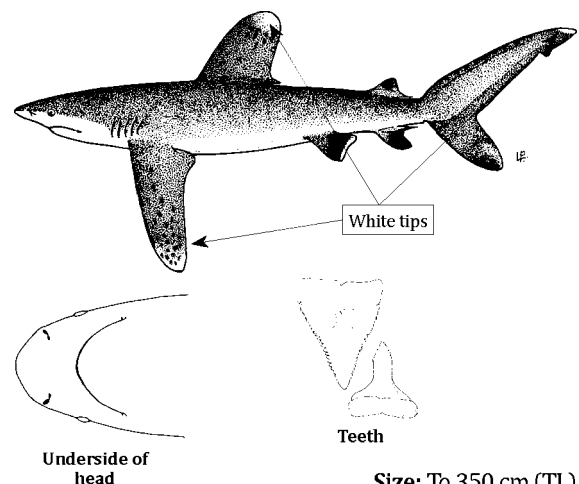
Local name(s): N: Papa; S: Papa (M/K).**Habitat:** Coastal and offshore but not truly oceanic species.**Fisheries:** Floating longlines, Floating gillnets.**Distinctive Characters:** Snout moderately long, its length about equal to mouth width; upper labial furrows short; long gill slits; erect, narrow-cusped upper teeth; origin of 1st dorsal fin over pectoral fins; no interdorsal ridge between dorsal fins.**Colour:** Grey or grey-brown above, white or yellowish-white below; a dark band along each side; tips of pelvic fins with a black spot; tips of dorsal, anal, pectorals and lower lobe of caudal fin usually black or dusky in young individuals, fading with growth.

Size: To 275 cm, common 150 cm (TL)

***Carcharhinus longimanus* (Poey, 1861)**

FAO names: Oceanic whitetip shark (En)

Requin océanique (Fr)

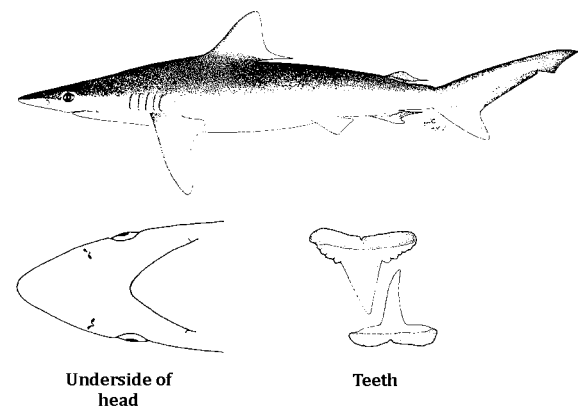
Local name(s): N: Papa; S: Papa (M/K).**Habitat:** Oceanic, epipelagic mostly far offshore but occasionally in coastal waters.**Fisheries:** Floating and Bottom gillnets, Longlines.**Distinctive Characters:** Snout short and broadly rounded; 1st dorsal fin noticeably large with a very broadly rounded apex; pectoral fins long and broadly rounded; usually a low interdorsal ridge present between dorsal fins.**Colour:** Back usually dark grey with a bronze tinge or bluish; belly whitish or with a yellow tinge; ventral surface of pelvic fins, apices of anal, 2nd dorsal fin and ventral lobe of caudal fin often with black spots; also black or dusky saddle-marks in front of 2nd dorsal fin.

Size: To 350 cm (TL)

***Carcharhinus macroti* (Müller & Henle, 1839)**

FAO names: Hardnose shark (En)

Requin à nez rude (Fr)

Local name(s): N: Papa; S: Papa (M/K).**Habitat:** Inshore and offshore continental waters.**Fisheries:** Floating gillnets, Bottom gillnets, Longlines.**Distinctive Characters:** Hyper-calcified rostrum; small pectoral fins; a small 1st dorsal fin with an extremely long rear tip and a small low 2nd dorsal fin with a long rear tip; no interdorsal ridge.**Colour:** Grey or grey-brown above, white below, fins with light edges but not conspicuously marked; light flank marks not conspicuous.

Size: To 100 cm (TL)

Carcharhinus melanopterus (Quoy & Gaimard, 1824)

FAO names: Blacktip reef shark (En)
Requin pointes noires (Fr)

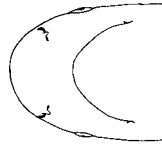
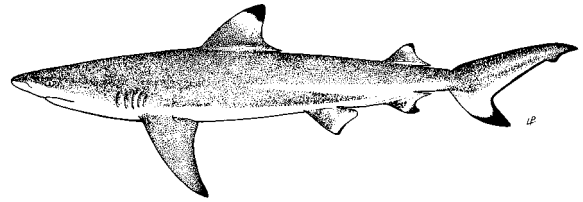
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Inshore and sometimes offshore, on continental and insular shelves.

Fisheries: Longlines, Gillnets.

Distinctive Characters: Snout very short and bluntly rounded; 1st dorsal fin moderately large, 2nd dorsal fin moderately high; no dermal ridge between dorsal fins.

Colour: Yellow–brown above, white below; all fins conspicuous with black or dark brown tips also anterior and posterior dark edging on pectoral fins and upper lobe of caudal fin; a prominent black tip of 1st dorsal fin set off abruptly by a light band below it; a conspicuous dark band on flanks, extending rearward to pelvic fins



Underside of head



Teeth

Size: To 200 cm (TL)

Carcharhinus plumbeus (Nardo, 1827)

FAO names: Sandbar shark (En)
Requin gris (Fr)

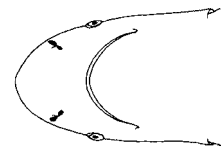
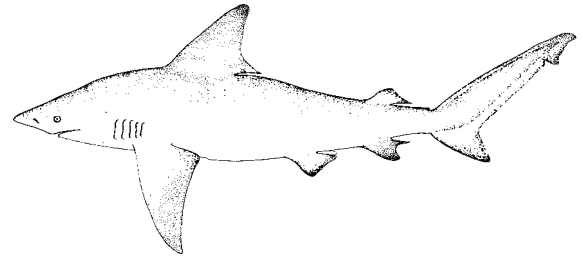
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal pelagic, on continental and insular shelves and deeper waters adjacent to them. Maximum depth 280 m.

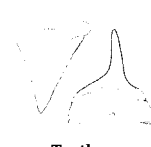
Fisheries: Longlines, Hooks and Line, Bottom gillnets.

Distinctive Characters: A stout shark with a moderately long, rounded snout; high, triangular, saw-edged upper teeth; origin of 1st dorsal fin over pectoral fins; 1st dorsal fin triangular extremely tall and semi-falcate; dermal ridge present between dorsal fins.

Colour: Black grey or rarely brown, belly whitish; no conspicuous markings; fins plain or with slightly dusky tips.



Underside of head



Teeth

Size: To 250 cm (TL)

Carcharhinus sealei (Pietschmann, 1913)

FAO names: Blackspot shark (En)
Requin à tache noir (Fr)

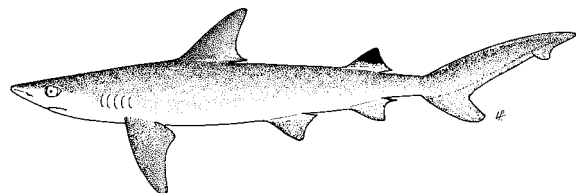
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal from the surf line down to 40 m.

Fisheries: Line gears, Gillnets.

Distinctive Characters: A small, slender shark with a long, rounded snout, large oval eyes, and oblique-cusped teeth; 1st dorsal fin moderately high; interdorsal ridge present or absent.

Colour: Greyish or grey–brown above, white below; flanks with small dark spots; tip of 2nd dorsal fin with a black blotch.



Underside of head



Teeth

Size: To 95 cm (TL)

***Carcharhinus sorrah* (Müller & Henle, 1839)**

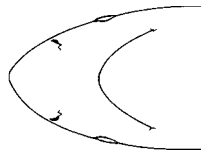
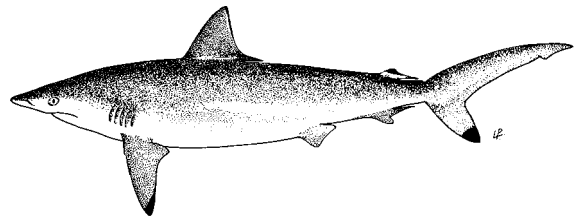
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Inshore waters often around coral reefs, sometimes offshore from the surface to rather deeper waters. Maximum depth 140 m.

Fisheries: Floating gillnets, Longlines.

Distinctive Characters: Snout moderately pointed, labial furrows short; 1st dorsal fin with a narrowly rounded apex, 2nd dorsal fin low, with a long rear tip; a dermal ridge present between dorsal-fin bases.

Colour: Grey or grey-brown, white on belly; fins and lower caudal-fin lobe with conspicuous black tips; 1st dorsal and upper caudal-fin lobes with black edging; conspicuous white band on flanks.



Underside of head



Teeth

Size: To 160 cm (TL)

***Galeocerdo cuvier* (Péron & Lesueur, 1822)**

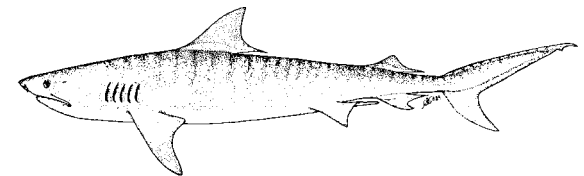
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Inshore and offshore waters near the surface and bottom.

Fisheries: Floating gillnets, Bottom gillnets, Lines.

Distinctive Characters: Upper labial furrows very long, extending to front of eye; spiracles present; snout short and bluntly rounded; a low rounded keel on each side of the caudal peduncle.

Colour: Back dark-grey or greyish-brown with dark brown or black rectangular spots often forming bars on sides of the fins but fading with growth.



Underside of head



Teeth

Size: To 740 cm, common 400 cm (TL)

***Loxodon macrorhinus* Müller & Henle, 1839**

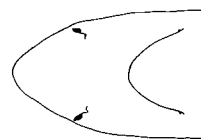
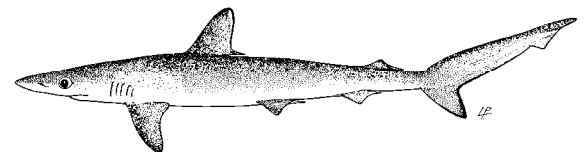
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal clean waters, near the surface and bottom, from 7 m to 80 m.

Fisheries: Floating gillnets, Bottom gillnets.

Distinctive Characters: Snout long, labial furrows very short; big eyes with rear notches; oblique-cusped teeth with smooth edges; 2nd dorsal fin small, low and behind larger anal fin; interdorsal ridge rudimentary or absent.

Colour: Grey above, pale below; fins with pale edges (transparent in life) caudal and 1st dorsal fin with a narrow dark margin; 1st dorsal also has a dusky tip.



Underside of head



Teeth

Size: To 98 cm (TL)

FAO names: Spot-tail shark (En)

Requin à queue tachetée (Fr)

FAO names: Tiger shark (En)

Requin tigre commun (Fr)

FAO names: Sliteye shark (En)

Requin sagrin (Fr)

***Negaprion acutidens* (Rüppell, 1837)**

Local name(s): N: Papa; S: Papa (M/K).

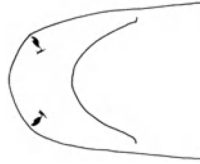
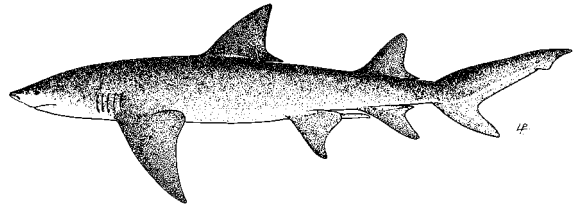
Habitat: Shallow inshore and offshore waters near the bottom often around coral reefs and sand plateaus down to 23 m.

Fisheries: Floating gillnets, Bottom gillnets, Lines.

Distinctive Characters: Snout short shorter than mouth width; origin of 1st dorsal fin over or behind free rear tips of pectoral fins; 2nd dorsal fin nearly as large as the 1st dorsal fin; pectoral fins broad and strongly falcate; pelvic fins falcate; no dermal ridge between dorsal fins.

Colour: Yellowish-brown above, paler below.

FAO names: Sicklefim lemon shark (En)
Requin limon faucille (Fr)



Underside of head



Teeth

Size: To 380 cm (TL)

***Prionace glauca* (Linnaeus, 1758)**

Local name(s): N: Papa; S: Papa (M/K).

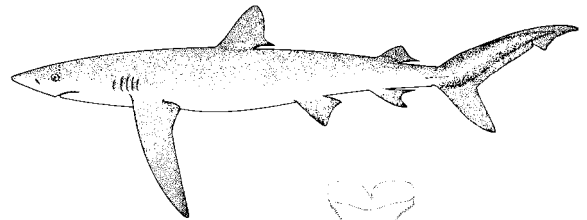
Habitat: Oceanic, epipelagic, usually near the surface.

Fisheries: Pelagic longlines.

Distinctive Characters: A slim, graceful blue shark with a long, conical snout, large eyes, and curved triangular upper teeth with saw edges; pectoral fins long and pointed; a weak keel present on sides of caudal peduncle; no dermal ridge between dorsal fins.

Colour: Dark blue on back, bright blue on sides, white below, fading to purple-blackish after death; tips of pectoral and anal fins dusky.

FAO names: Blue shark (En)
Peau bleue (Fr)



Underside of head



Teeth

Size: To 385 cm (TL)

***Rhizoprionodon acutus* (Rüppell, 1837)**

Local name(s): N: Papa; S: Papa (M/K).

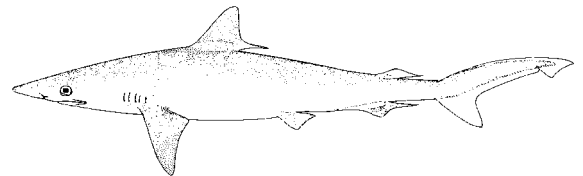
Habitat: Inshore and offshore, from the surf line down to 200 m.

Fisheries: Longlines, Gillnets, Bottom trawls.

Distinctive Characters: A small shark with a long, narrow snout; big eyes without notches; long labial furrows and oblique-cusped teeth which may be smooth-edged or weakly serrated; origin of 1st dorsal fin over or posterior to pectoral fins; 2nd dorsal fin smaller than anal fin.

Colour: Grey or greyish-brown above, white below; dorsal and anal fins slightly darker than back.

FAO names: Milk shark (En)
Requin à museau pointu (Fr)



Underside of head



Teeth

Size: To 180 cm, common 110 cm (TL)

***Scoliodon laticaudus* Müller & Henle, 1838**

Local name(s): N: Papa; S: Papa (M/K).

Habitat: Rocky substrates of coastal waters and lower reaches of tropical rivers.

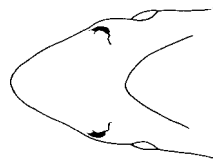
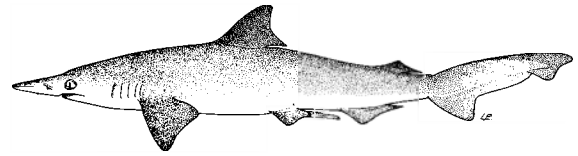
Fisheries: Hooks and Line, Longlines, Floating gillnets, Bottom gillnets, Traps.

Distinctive Characters: Snout tip not upturned and knob-like; nasal flaps sub-triangular; labial furrows rather short; origin of 1st dorsal fin over or slightly in front of pelvics and with a spine; 2nd dorsal fin with no spine and smaller than 1st.

Colour: Grey-brown above, light below, sometimes with obscure saddle bands; all fins with light margins.

FAO names: Spadenose shark (En)

Requin épée (Fr)



Underside of head



Lower tooth

Size: To 100 cm (TL)

***Triaenodon obesus* (Rüppell, 1837)**

Local name(s): N: Papa; S: Papa (M/K).

Habitat: Coastal clear waters and offshore islands, very common within coral reefs, lying inside crevices.

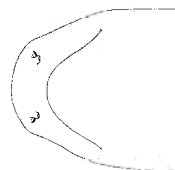
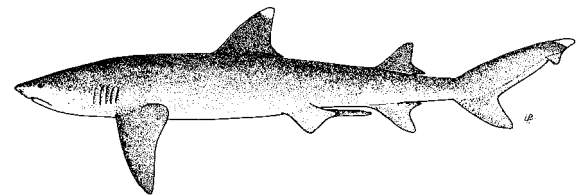
Fisheries: Floating and Bottom gillnets.

Distinctive Characters: Snout very short and broadly rounded; labial furrows very short; nasal flaps form a tube; eyes with a posterior notch; no dermal ridge between dorsal fins and no keels on caudal peduncle.

Colour: Grey-brown above, sometimes with dark spots on sides; 1st dorsal and caudal lobes with white tips; 2nd dorsal and caudal lobes often white-tipped; ventral surface cream-white.

FAO names: Whitetip reef shark (En)

Requin à pointes blanches du lagon (Fr)



Underside of head



Teeth

Size: To 215 cm, common 160 cm (TL)

SPHYRNIDAE**Hammerhead sharks*****Sphyrna lewini* (Griffith & Smith, 1834)**

Local name(s): N: Papa mbingusi; S: Papa pengusi (M/K).

Habitat: Inshore, offshore and semi-oceanic waters.

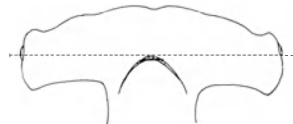
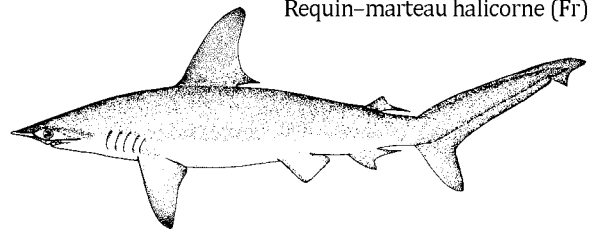
Fisheries: Longlines, Gillnets.

Distinctive Characters: Anterior contour broadly arched or convex in young, moderately so in adults; 1st dorsal fin high, moderately falcate, 2nd dorsal small; pectoral fins short and broad; pelvic fin with a nearly straight posterior margin.

Colour: Greyish brown or olivaceous above, shading to white below; pectoral fins tipped grey or black ventrally.

FAO names: Scalloped hammerhead (En)

Requin-marteau halicorne (Fr)



Underside of head

Posterior margin of eyes at about level of front of mouth

Size: To 420 cm, common 370 cm (TL)

***Sphyrna mokarran* (Rüppell, 1837)**

FAO names: Great hammerhead (En)
Grand requin-marteau (Fr)

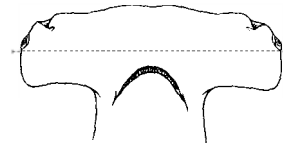
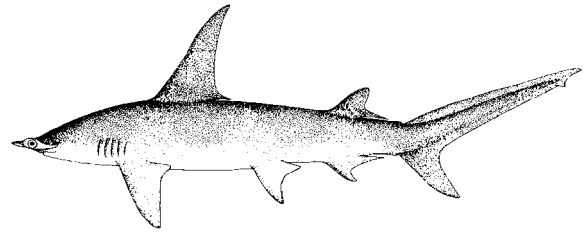
Local name(s): N: Papa mbingusi; S: Papa pengusi (M/K).

Habitat: Semi-oceanic also in inshore waters, often found around and on coral reefs.

Fisheries: Floating gillnets, Floating long lines.

Distinctive Characters: A notch at the center of the head; anterior margin nearly straight, mouth broadly arched; 1st dorsal fin very high, strongly falcate; 2nd dorsal fin moderately large, with a rather short inner margin; pectoral fins short and broad; pelvic fins with a deeply concave posterior margin.

Colour: Grey or grey-brown above, paler below; fins with dusky tips in young.



Underside of head

Posterior margin of eye well anterior to front of mouth

Size: To 600 cm (TL)

SQUATINIDAE

Angel sharks – Sand devils

***Squatina africana* Regan, 1908**

FAO names: African angelshark (En)
Ange de mer africain (Fr)

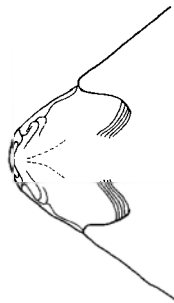
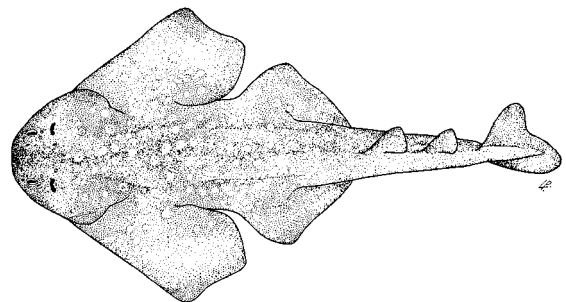
Local name(s): N: Papa; S: Papa (M/K).

Habitat: Benthic from the surf line to the intertidal zone down to 430 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body and head greatly depressed; eyes moderately large, with a distinct neck at pectoral-fin origin; eyes moderately large; 1st dorsal-fin origin opposite or slightly posterior to free rear tips of pelvic fins; 2nd dorsal fin about as long as 1st; anal fin absent; caudal fin short, its lower lobe longer than the upper; caudal peduncle with a pair of short keels and a weak upper pre-caudal pit.

Colour: Brown above; back with a series of bold white spots marbled with brown.



Underside of head



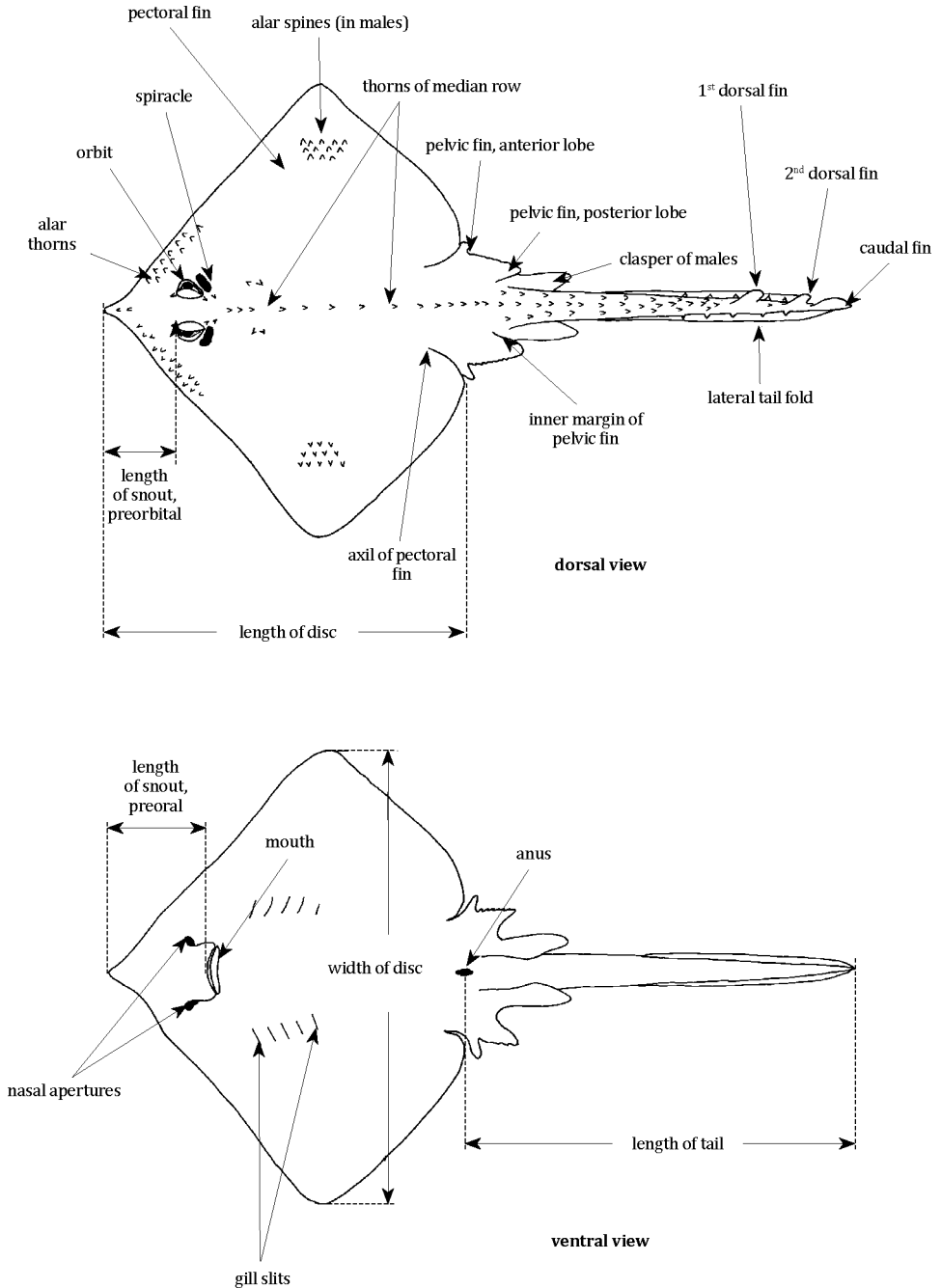
Teeth

Size: To 120 cm (TL)

BATOID FISHES

The "Guide to Orders and Families", includes a total of 4 Orders and 7 Families. The latter are arranged by order using the classification adopted by Eschmeyer & Fricke (2011) which best reflects current use. Page numbers refer to those families that are treated in more detail in the species identification guide. The "Guide to Species", includes 19 species belonging to 7 families.

TECHNICAL TERMS AND MEASUREMENTS



GUIDE TO ORDERS AND FAMILIES

Order PRISTIFORMES – Sawfishes

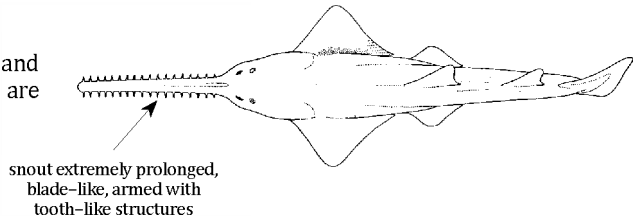
Body shark-like with a saw-like elongated snout bearing a row of strong lateral teeth on each side.

PRISTIDAE

Page 72

Sawfishes

To 7.3 m. Demersal in shallow marine waters and estuaries, enters freshwaters. Two species are included in the Guide to Species.



Order TORPEDINIFORMES – Electric rays

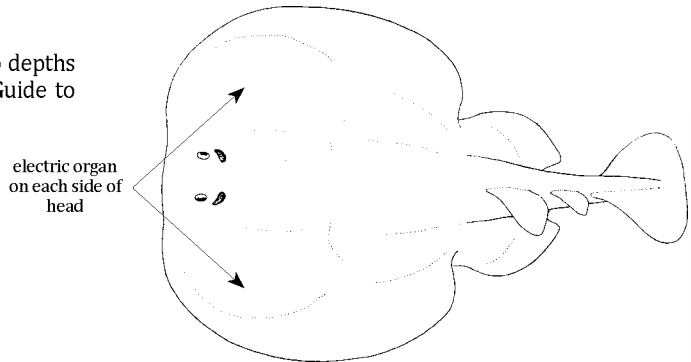
Pectoral fins greatly expanded and fused with head and trunk, forming a large oval disc; tail stout, without a spine. A large electric organ on each side of head, usually visible through the skin as a pattern of hexagonal markings.

TORPEDINIDAE

Page 72

Electric rays

To 1.3 m. Demersal, from shallow waters to depths of 200 m. One species is included in the Guide to Species.



Order RAJIFORMES – Guitarfishes and Skates

Body elongate and shark-like with pectoral fins expanded and fused with head and trunk; tail stout not marked off from body, and without a spine.

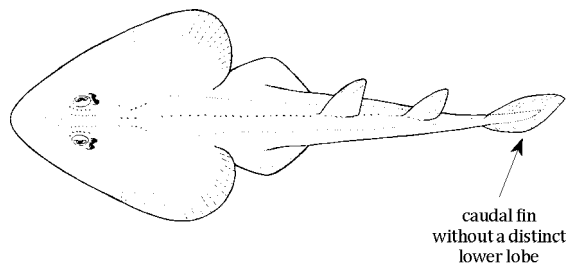
RHINOBATIDAE

Page 73

Guitarfishes

To 3 m. Demersal, in shallow coastal waters. Two species are included in the Guide to Species.

body elongate and shark-like



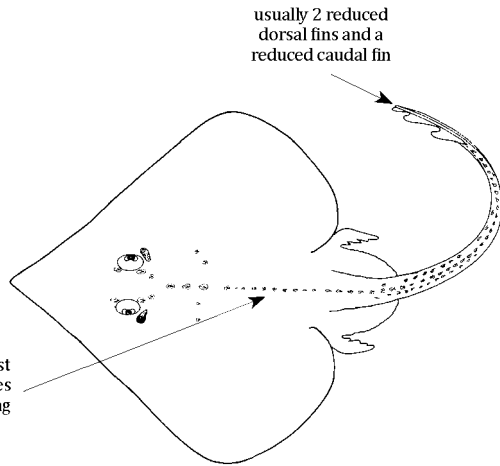
RAJIDAE

Skates

To 65 cm TL. Demersal, rare in tropical shallow waters or near coral reefs. One species is included in the Guide to Species.

disc quadrangular to rhomboidal; mouth transverse to arched, with numerous teeth; 5 pairs of ventral gill slits

skin prickly in most species, the prickles often in a row along midline of back



Order MYLIOBATIFORMES - Stingrays - Butterfly rays - Manta rays
Pectoral disc rhomboid, oval, or triangular in outline, elaborated into shaped wings in some forms; tail moderately stout to very slender; most species have one or more saw-edged spines or stings on the dorsal surface of the tail.

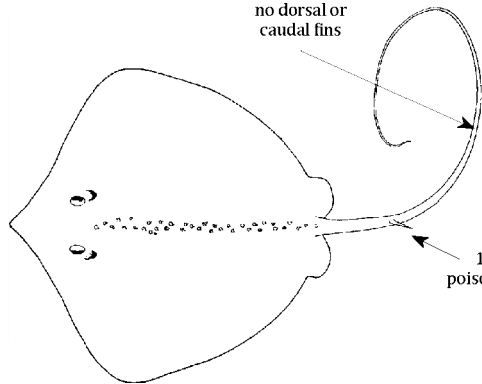
DASYATIDAE

Stingrays

To 2 m disc width. Demersal, in coastal marine waters, enters freshwaters. Seven species are included in the Guide to Species.

no dorsal or caudal fins

1 or more poisonous spines



GYMNURIDAE

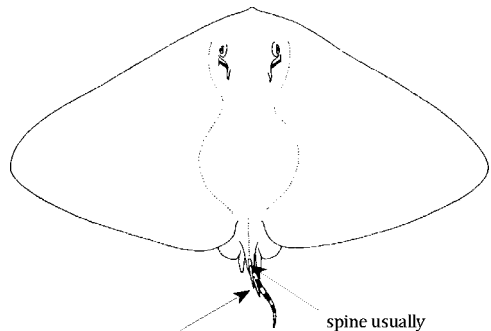
Butterfly rays

To 2.5 m disc width. Demersal, inshore waters and offshore banks. One species is included in the Guide to Species.

disc at least 1.5 times broader than long

tail slender shorter than disc

spine usually present

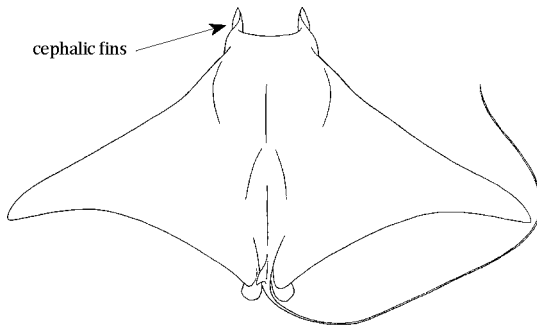


MYLIOBATIDAE

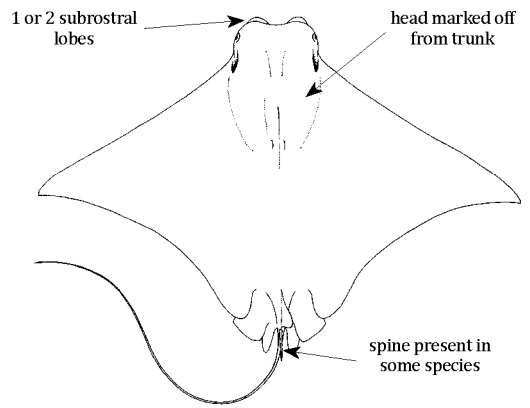
Eagle rays - Cownose rays - Manta rays - Devil rays

Myliobatinae: to 2.3 m disc width; demersal, but often swim above the bottom in coastal waters. Two species are included in the Guide to Species.

Mobulinae: at least 6.7 m disc width; pelagic, in coastal and oceanic waters. Three species are included in the Guide to Species.



Mobulinae



spine present in some species

Myliobatinae

PRISTIDAE

Sawfishes

Pristis pectinata Latham, 1794

Local name(s): N: Papa busefu, Papa upanga; S: Papa upanga (M/K).

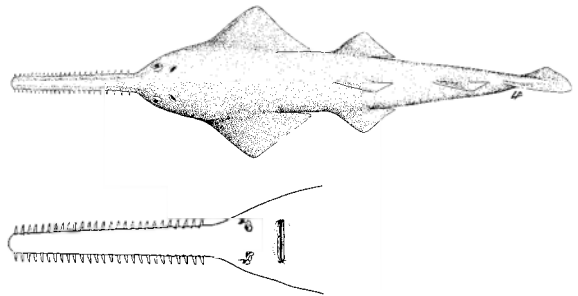
Habitat: Shallow bays, lagoons and estuaries; enters freshwater.

Fisheries: Bottom trawls, Lines.

Distinctive Characters: Long, flat, blade-like rostrum with 24 to 32 pairs of evenly spaced teeth along edges; caudal fin large and oblique with no lower lobe.

Colour: Dark grey to blackish above, white to yellowish below.

FAO names: Smalltooth sawfish (En)
Poisson-scie tident (Fr)



Underside of head

Size: To 760 cm

Pristis zijsron Bleeker, 1851

Local name(s): N: Papa busefu, Papa upanga; S: Papa upanga (M/K).

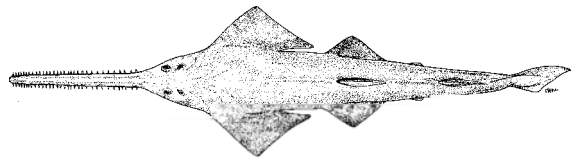
Habitat: Shallow waters; enters freshwater.

Fisheries: Bottom trawls, Lines.

Distinctive Characters: Rostral teeth of basal pairs distinctly more spaced than anterior pairs; sub-caudal lobe absent.

Colour: Greenish-grey above, white below.

FAO names: Longcomb sawfish (En)



Size: To 730 cm

TORPEDINIDAE

Electric rays

Torpedo sinuspersici Olfers, 1831

Local name(s): N: Shepwa kifiza mkono; S: Taa (M), Taa (K).

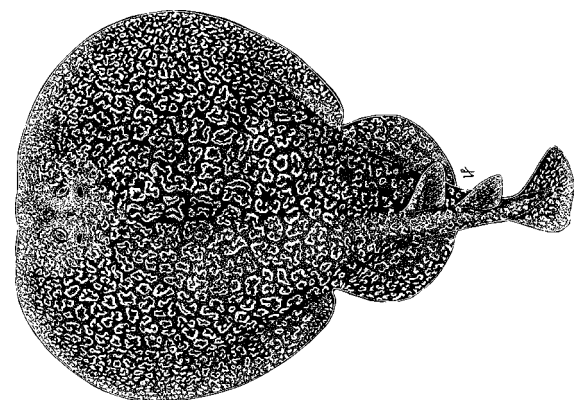
Habitat: Inshore waters over sandy bottoms down to 200 m.

Fisheries: Bottom trawls, Hooks and Line.

Distinctive Characters: Eyes smaller than spiracles; at least half of the 1st dorsal fin behind posterior end of pelvic-fin base; small caudal fin; papillae around the spiracles.

Colour: Bright colour pattern of cream or golden circles and irregular marks on dark red, brown or blackish background dorsally.

FAO names: Variable torpedo ray (En)



Size: To 90 cm (DW), 130 cm (TL)

RHINOBATIDAE

Guitarfishes– Shovelnose rays

Rhina ancylostoma Bloch & Schneider, 1801

Local name(s): N: Papa kiharere; S: Papa wame (M), Papa usingizi (K).

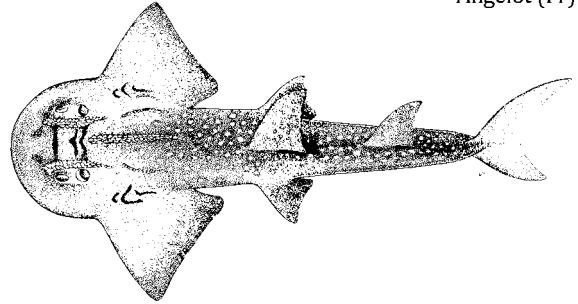
Habitat: Inhabits coastal areas and on coral reefs, close inshore from 3 m to 90 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout rounded; heavy ridges with greatly enlarged denticles on back, over eyes and spiracles.

Colour: Grey above, white below; numerous white spots dorsally on fins, body and tail; black spots on head and shoulders but no eyespots or ocelli.

FAO names: Bowmouth guitarfish (En)
Angelot (Fr)



Size: To 270 cm (TL)

Rhynchobatus djiddensis (Forsskål, 1775)

Local name(s): N: Papa kiharere/Simbe; S: Papa wame (M), Papa usingizi (K).

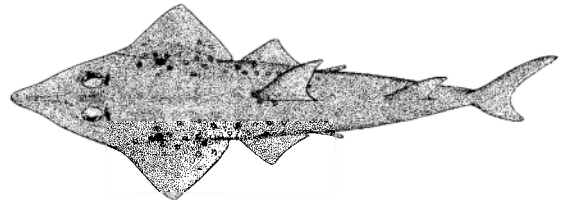
Habitat: Coral reefs, close inshore down to 50 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout pointed and lower caudal lobe short; mouth small and containing flattened, pavement-like teeth.

Colour: Olive-green above, white below; large black eyespots on pectoral-fin bases; a distinctive black cross between the eyes, and rows of small white spots on upper body.

FAO names: Giant guitarfish (En)
Poisson paille à pois (Fr)



Size: To 300 cm (TL)

RAJIDAE

Skates

Raja miraletus Linnaeus, 1758

Local name(s): N & S: No information.

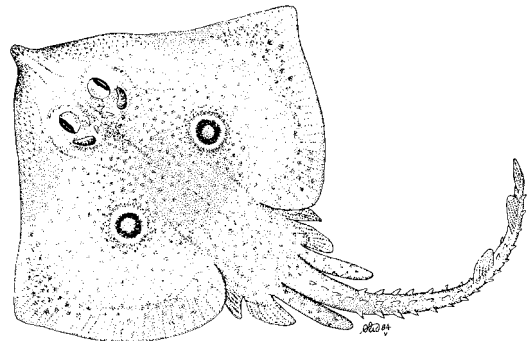
Habitat: Soft bottoms of the shelf and the uppermost slope from 17 to 300 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout short and bluntly pointed; disc angular; upper surface prickly only in young, nearly smooth in adults; underside smooth.

Colour: Upper surface ochre to reddish-brown with scattered dark spots, underside white; two bright blue eye-spots centered on the pectoral bases; may have a small dark spot on tip of snout.

FAO names: Brown ray (En)
Raie miroir (Fr)



Size: To 64 cm (TL)

DASYATIDAE

Stingrays

Himantura gerrardi (Gray, 1851)

FAO names: Sharpnose stingray (En)

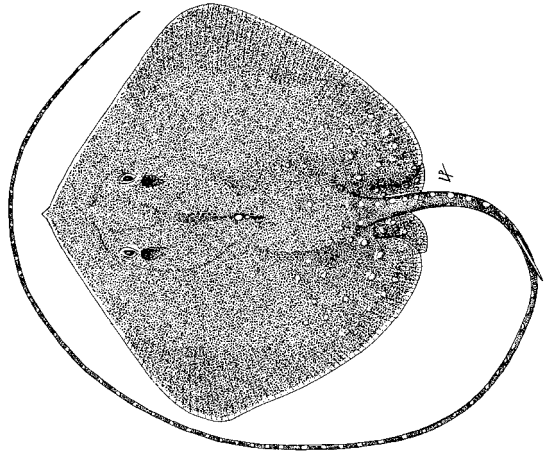
Local name(s): N: Shepwa yedatuvi; S: Taa nyenga, Taa karuwe (K).

Habitat: Shallow inshore waters over sandy and muddy bottoms down to 50 m.

Fisheries: Lines, Seines, Bottom trawls.

Distinctive Characters: Disc slightly wider than long, mostly naked, with a mid-dorsal band of small flattened denticles in adults, extending on to tail base; tail several times longer than disc without upper or lower folds.

Colour: Light brown above, white below; numerous transverse bands of dark and light brown on tail (may be obscure on large individuals).



Size: To 200 cm (TL)

Himantura uarnak (Gmelin, 1789)

FAO names: Honeycomb stingray (En)

Pastenague léopard (Fr)

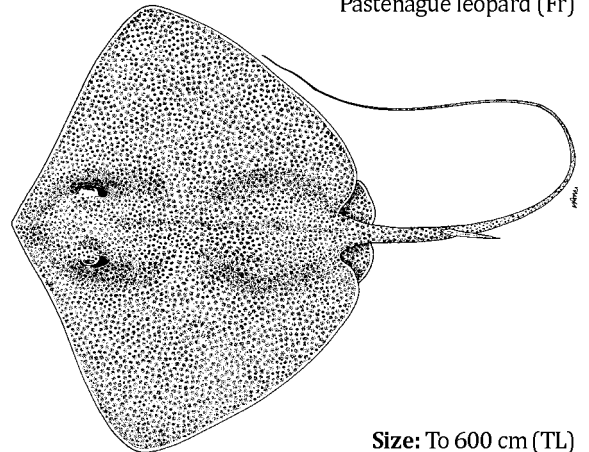
Local name(s): N: Shepwa tuvi; S: Taa chui (M), Taa karuwe(K).

Habitat: Coastal environments down to 50 m.

Fisheries: Lines.

Distinctive Characters: Snout sharply pointed; disc with narrowly rounded outer corners; tail long, slender and nearly 3 times body length when intact, with no caudal finfolds; disc slightly wider than long, without thorns but with band of flat denticles along midback (in adults); usually 1 medium-sized sting on tail.

Colour: Conspicuous dark spots on a light brown disc; spots well-spaced in young but crowded to form a reticulated pattern in adults, white ventrally; tail marked with bands of black and white.



Size: To 600 cm (TL)

Neotrygon kuhlii (Müller & Henle, 1841)

FAO names: Blue-spotted stingray (En)

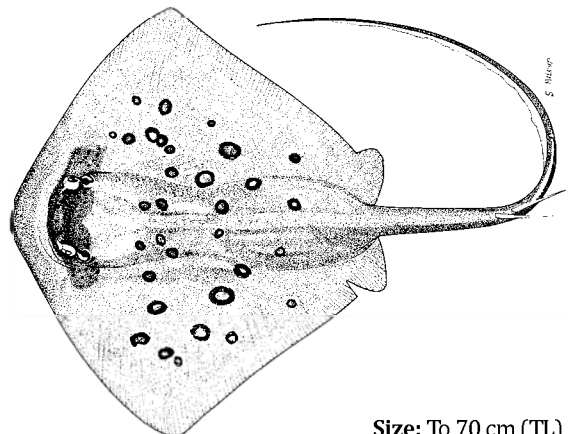
Local name(s): N: Shepwa yeda; S: Taa nyenga, Taa karuwe (K).

Habitat: Rather deep coastal waters down to 90 m.

Fisheries: Lines, Bottom trawls.

Distinctive Characters: Snout very short and broadly angular; disc slightly wider than long, largely naked; tail naked, length equal to, or slightly greater than disc; a small dorsal finfold above the ventral fold; lower tail fold slender.

Colour: Disc reddish-brown with blue centered bright ocelli and scattered black spots dorsally, white ventrally; tail with conspicuous black and white rings.



Size: To 70 cm (TL)

***Pastinachus sephen* (Forsskål, 1775)**

Local name(s): N: Shepwa shepwekuti; S: Taa (M), Taa maji (K).

Habitat: Coastal waters in lagoons, reef flats, and reef faces and estuaries down to 60 m.

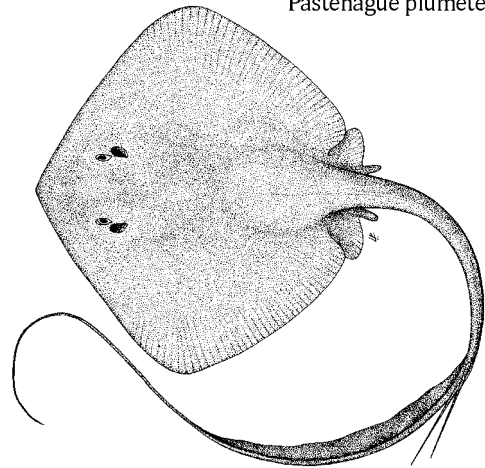
Fisheries: Bottom trawls.

Distinctive Characters: A large, plain, dark stingray with an angular snout and pectoral disc; tail long and broad-based, less than twice body length, and with no upper caudal finfold but with high lower caudal finfold, 2 to 3 times of tail depth but not reaching tail tip; no large thorns; 1 or 2 long stings on tail, further behind tail base than in most stingrays.

Colour: Disc dark-brown or black above, white below; tail black with no conspicuous markings.

FAO names: Cowtail stingray (En)

Pastenague plumetée (Fr)



Size: To 180 cm (DW), 300 cm (TL)

***Taeniura lymma* (Forsskål, 1775)**

Local name(s): N: Shepwa nundwi, Shepwa mawe; S: Taa (M), Taa maji (K).

Habitat: Sandy bottoms of coastal waters down to 20 m.

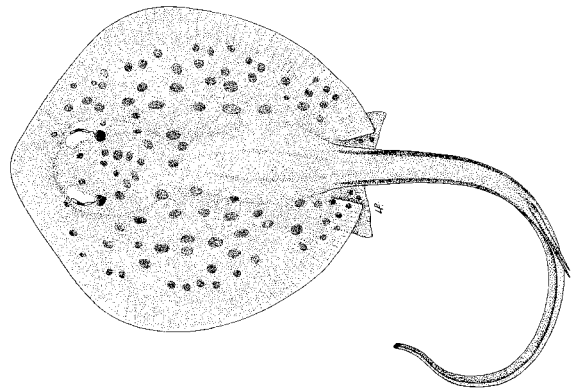
Fisheries: Lines.

Distinctive Characters: Snout rounded and angular, disc with broadly rounded outer corners; tail stout, tapering and less than twice body length when intact, with a broad lower caudal finfold reaching the tail tip; disc with no large thorns but with small, flat denticles along midback (in adults); usually 1 medium-sized sting on tail further behind base than in most stingrays.

Colour: Golden-brown with blue spots on disc and 2 broad blue bands on tail.

FAO names: Bluespotted ribbontail ray (En)

Pastenague queue à ruban (Fr)



Size: To 30 cm (DW), 70 cm (TL)

***Taeniura meyeni* Müller & Henle, 1841**

Local name(s): N: Shepwa kuti; S: Taa (M), Taa maji (K).

Habitat: Benthic around coral reef habitats and on sand substrates from the surf zone to 439 m.

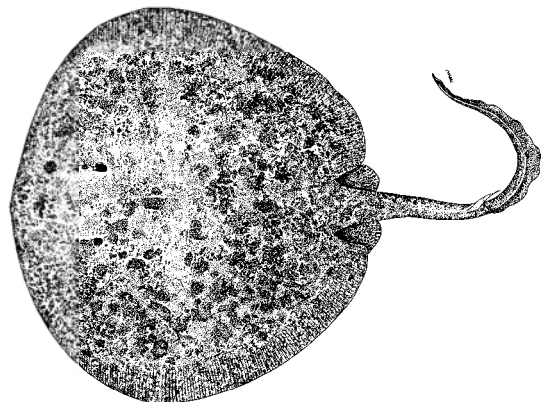
Fisheries: Lines, Bottom trawls.

Distinctive Characters: Body flattened into round disc; small mouth with pavement-like teeth; venomous barbs near base of tail, which is hardly longer than disc; lower tail-fold prominent extending to tail tip.

Colour: Golden-brown with blue spots on disc and 2 bands on tail.

FAO names: Round ribbontail ray (En)

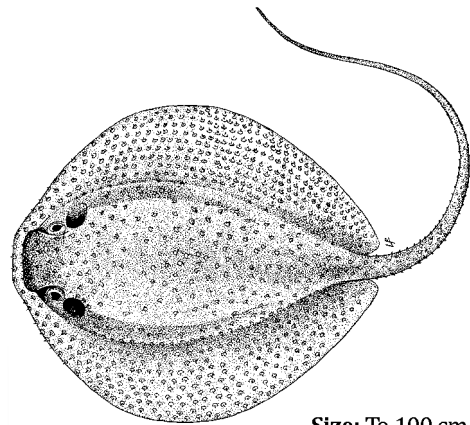
Pastenague éventail (Fr)



Size: To 180 cm (DW), 330 cm (TL)

***Urogymnus asperrimus* (Bloch & Schneider, 1801)**

FAO names: Porcupine ray (En)

Local name(s): N: Shepwa; S: Taa (M/K).**Habitat:** Demersal, in inshore waters.**Fisheries:** Lines, Bottom trawls.**Distinctive Characters:** A heavily armored stingray lacking a venomous barb; young with large, flat denticles on upper surface, and large juveniles and adults with additional sharp conical thorns and small pointed denticles; very thick elongated disc with broadly rounded outer corners; snout broadly rounded and tail slender, about as long as body and without finfolds.**Colour:** Disc light grey or whitish above, white below; tail tip blackish.

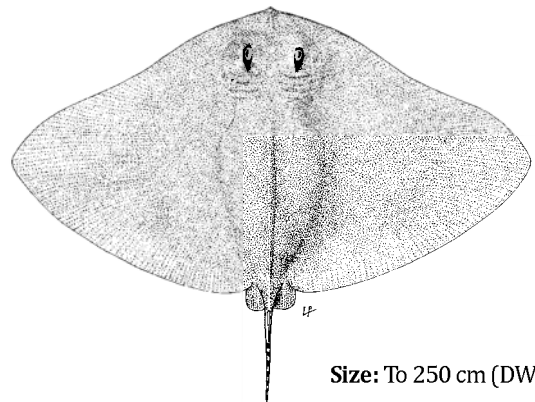
Size: To 100 cm (DW)

GYMNURIDAE

Butterfly rays

***Gymnura poecilura* (Shaw, 1804)**

FAO names: Long-tailed butterfly ray (En)

Local name(s): N: Shepwa ngozi; S: Taa (M/K).**Habitat:** Offshore waters, on sandy bottoms and banks.**Fisheries:** Bottom trawls, Trammel nets.**Distinctive Characters:** No tentacles at rear angle of spiracle; tail spine usually present; tail relatively short.**Colour:** Tail distinctly cross-banded.

Size: To 250 cm (DW)

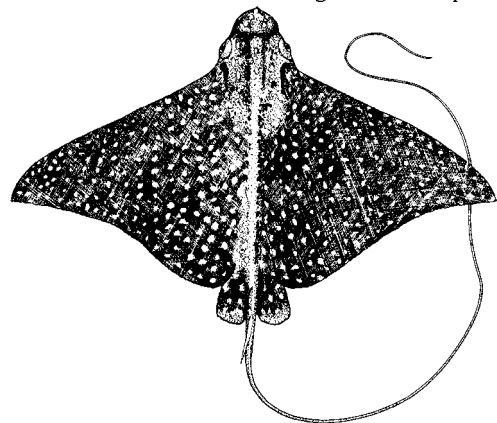
MYLIOBATIDAE

Eagle rays – Cownose rays – Manta rays – Devil rays

***Aetobatus narinari* (Euphrasen, 1790)**

FAO names: Spotted eagle ray (En)

Aigle de mer léopard (Fr)

Local name(s): N: Shepwa chenga/Kipungu/Kipungu ndege/Shitezi; S: Kipungu (M/K).**Habitat:** Coastal waters, down to 60 m.**Fisheries:** Hooks and Line, Harpoons.**Distinctive Characters:** Snout flat and rounded like a duck's bill; a thick head, and a pectoral disc with sharply curved, angular corners, and no caudal fin; jaws usually with a single row of flat, chevron-shaped teeth; each tooth a crescent-shaped plate joined into a band.**Colour:** Disc blue or black above with numerous white spots or rings on a dark background; white below.

Size: To 300 cm (DW), 880 cm (TL)

***Manta birostris* (Walbaum, 1792)**

Local name(s): N: Shepwa chenga; S: Taa tenga (M), Taa pinjo (K).

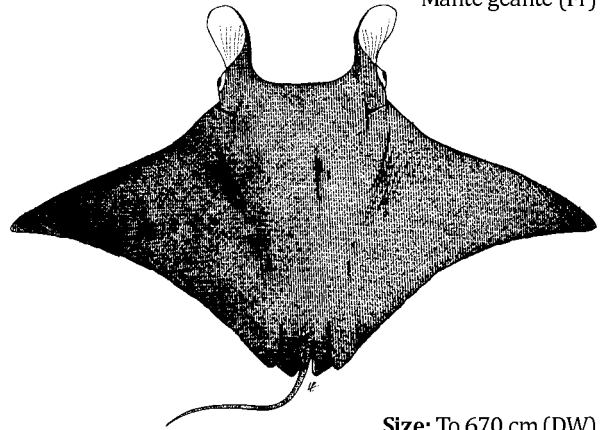
Habitat: Pelagic, in coastal and oceanic waters.

Fisheries: Lines.

Distinctive Characters: A giant ray having an extremely broad head with long head fins and a terminal mouth; upper surface of disc covered with denticles, and tail usually without a spine.

Colour: Reddish or greenish-brown to black above, often with white patches on shoulders; underside white, edged with grey.

FAO names: Giant manta (En)
Mante géante (Fr)



Size: To 670 cm (DW)

***Mobula eregoodootenkee* (Bleeker, 1859)**

Local name(s): N: Shepwa; S: Taa tenga (M), Taa pinjo (K).

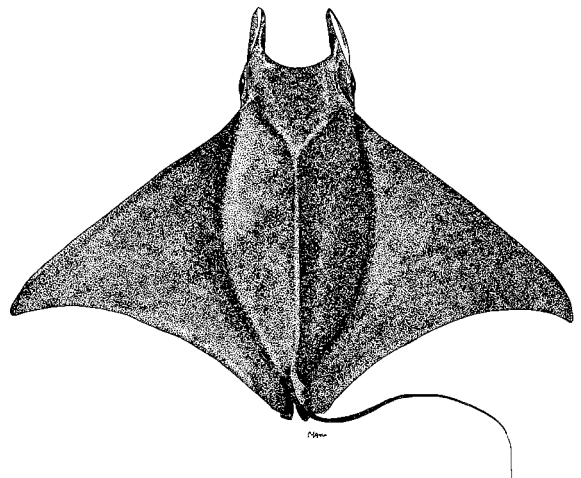
Habitat: Pelagic, in coastal and oceanic waters.

Fisheries: Lines, Gillnets, Harpoons.

Distinctive Characters: Large protruding flaps in front of mouth; disc wide and wing-like; small dorsal fin at base of tail which has rudimentary or no spines; mouth on lower surface of head, teeth minute; head and cephalic fins elongate; cephalic fin length more than 16% of disc width.

Colour: Brownish-grey above, whitish below; underside of pectorals with semicircular black blotch along middle of anterior edge.

FAO names: Longhorned mobula (En)



Size: To 100 cm (DW)

***Mobula kuhlii* (Müller & Henle, 1841)**

Local name(s): N: Shepwa chenga; S: Taa tenga (M), Taa pinjo mweuzi (K).

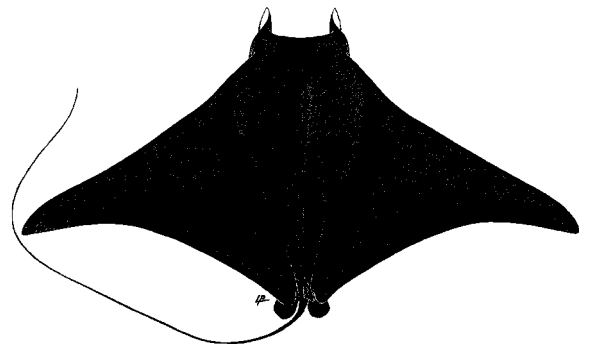
Habitat: Pelagic, occurs in coastal and oceanic waters.

Fisheries: Lines, Gillnets, Harpoons.

Distinctive Character: Large protruding flaps in front of mouth; disc wide and wing-like; small dorsal fin at base of a slender tail with or without rudimentary spines; mouth on lower surface of head; teeth minute; cephalic fin length less than 16% of disc width.

Colour: Grey-brown to blue black above, white below.

FAO names: Lesser devilray (En)
Petit diable (Fr)



Size: To 100 cm (DW)

***Rhinoptera javanica* Müller & Henle, 1841**

Local name(s): N: Chenga, Kipungu, Kedu; S: Kipungu (M/K).

Habitat: Occurs in coastal waters, gregarious, often occurring in large numbers.

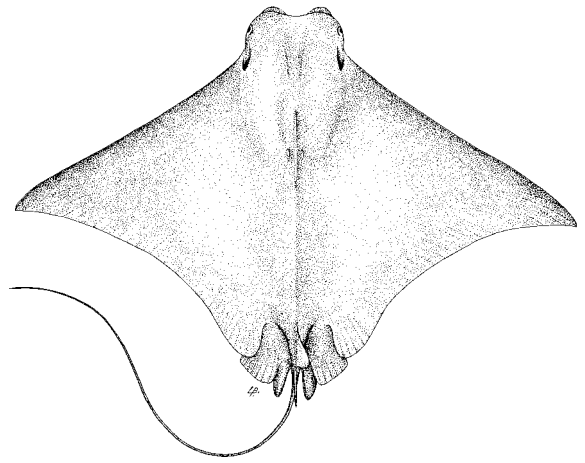
Fisheries: Hooks and Line, Shore Seines, Set nets, Bottom trawls.

Distinctive Characters: Apices of disc strongly falcate; tail about length of disc, tail spine present; subrostral lobes present.

Colour: Disc plain brown above, white below; no conspicuous markings.

FAO names: Flapnose ray (En)

Mourine javanaise (Fr)

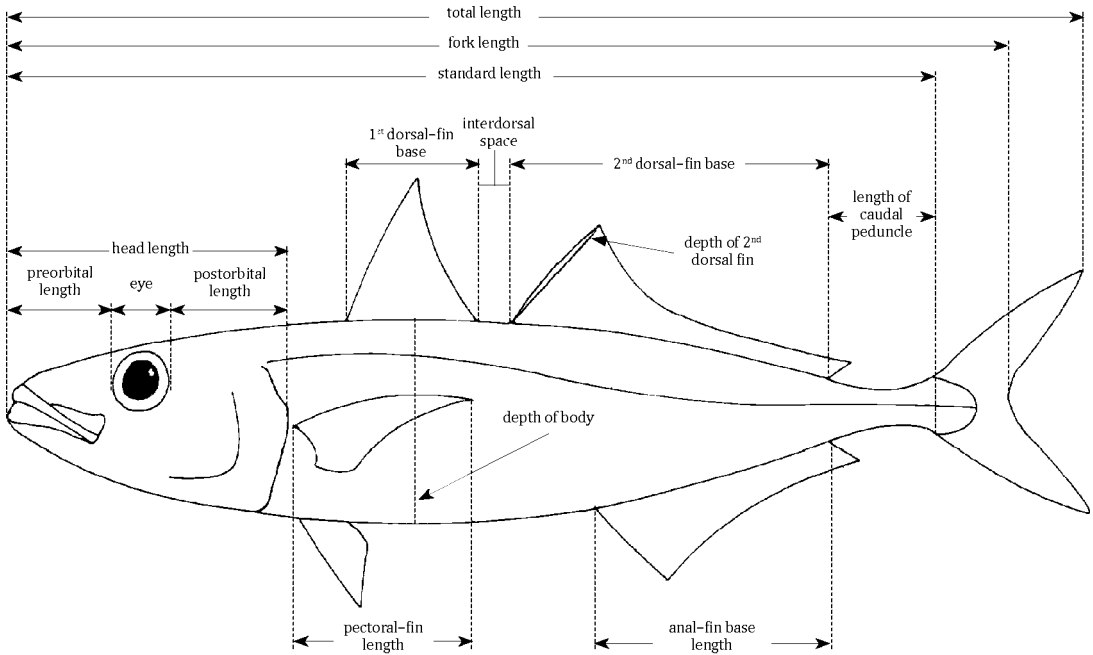


Size: To 150 cm (DW)

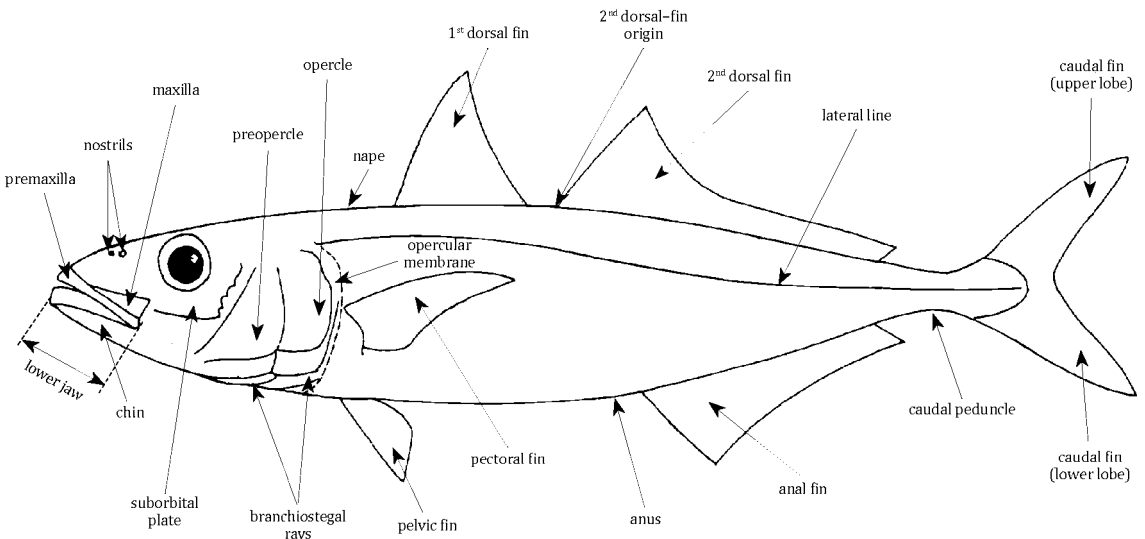
BONY FISHES

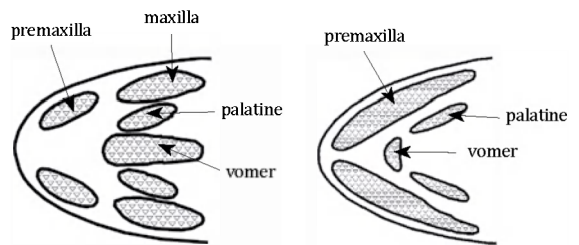
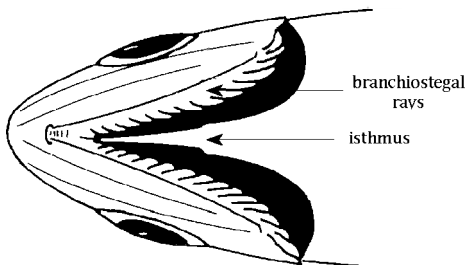
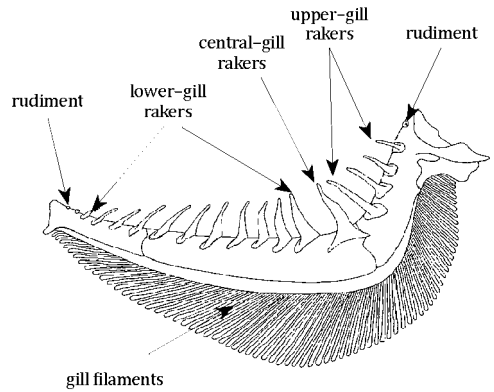
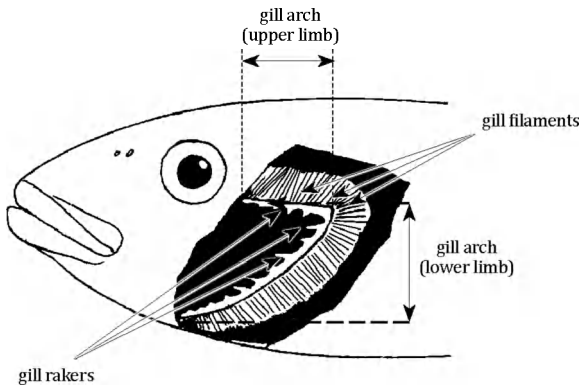
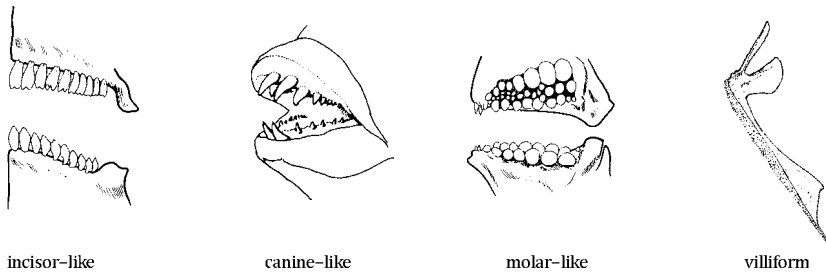
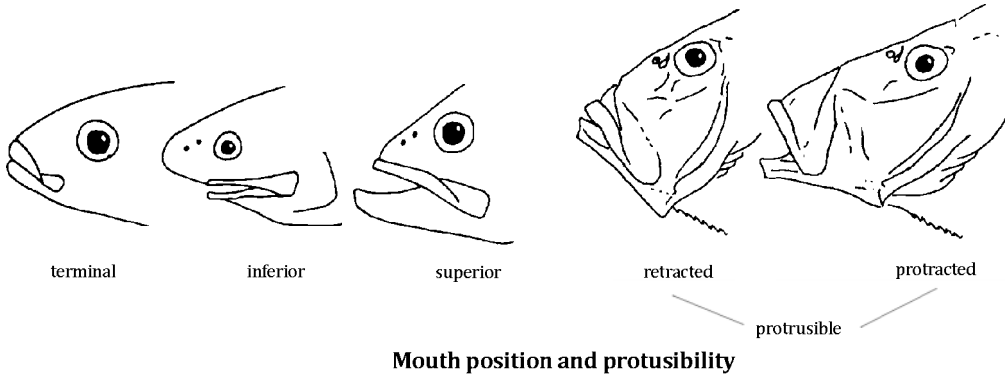
The “Guide to Orders and Families”, includes a total of 28 Orders and 160 Families. These are arranged by order (and suborder in the case of some Perciformes) using the classification adopted by Eschmeyer & Fricke (2011) which best reflects current use. Page numbers refer to those families that are treated in more detail in the species identification guide. The “Guide to Species”, includes 633 species belonging to 95 families. **Not all species present in the guide have been officially recorded in Kenya waters, but having been reported in neighboring countries, such as Somalia and Tanzania, were considered likely to occur in Kenya. These are marked with an asterisk besides the scientific name.** In case of a first record of one of these species, the user can follow the instructions present in the introduction regarding its preservation and/or contact the FishFinder Programme.

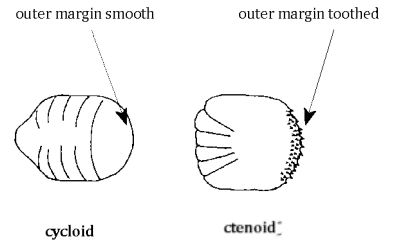
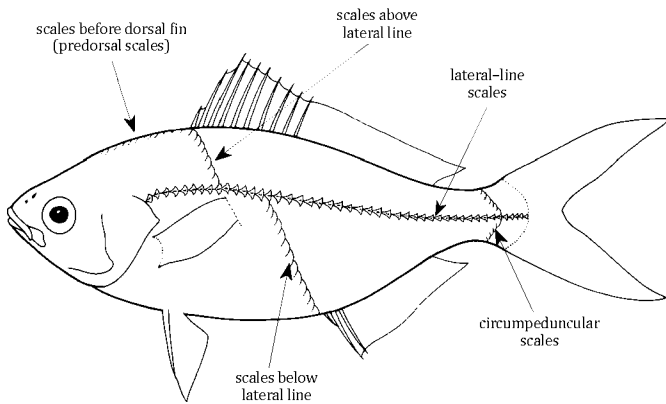
TECHNICAL TERMS AND MEASUREMENTS



General Nomenclature of the External Morphology

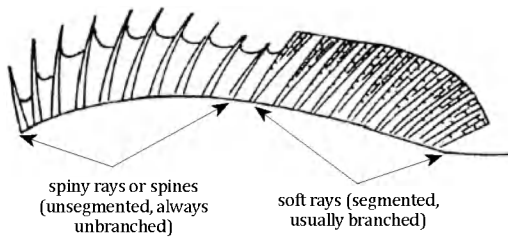




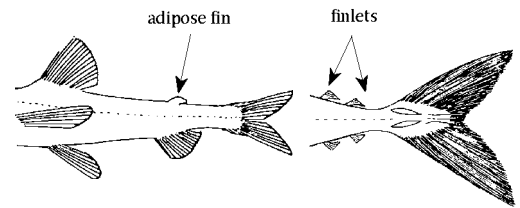


Schematic examples of typical scales

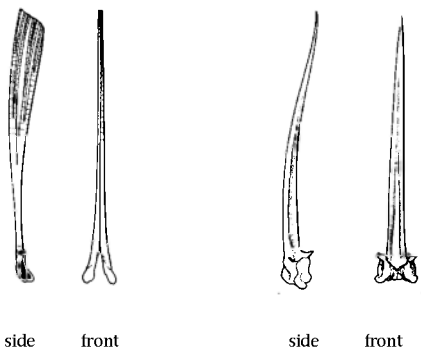
Common scale counts



Example of a continuous dorsal fin of a spiny-rayed fish



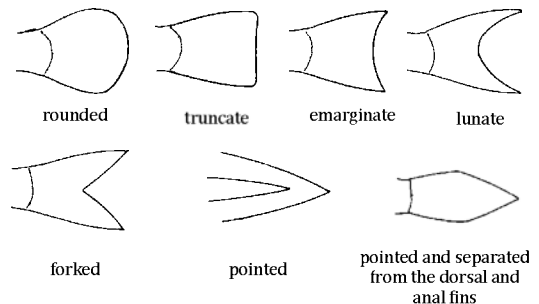
Accessory dorsal and anal fins: adipose fin and finlets



soft rays (branched, segments, 2 halves)

spines (solid)

Construction of fin rays



Most common types of caudal fins

GUIDE TO ORDERS AND FAMILIES

Order ELOPIFORMES – Tarpons and allies

Fin spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; lateral line present; 23–25 branchiostegal rays; upper jaw extending past eye; tip of snout not overhanging mouth; colour silvery.

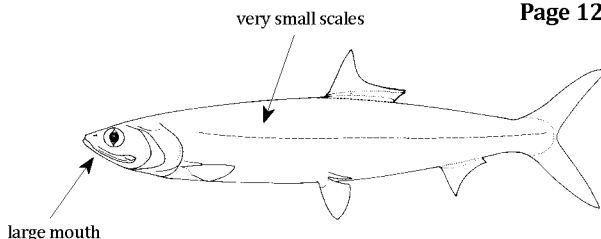
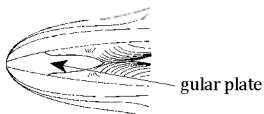
ELOPIDAE

Page 121

Ladyfishes

To 90 cm. Coastal marine waters and estuaries; pelagic. A single species included in the Guide to Species.

underside of head



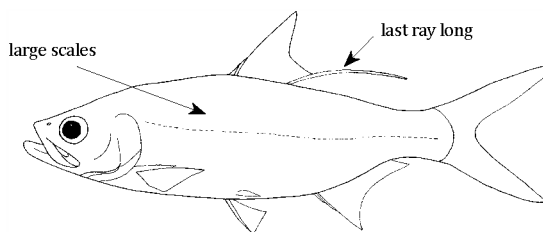
MEGALOPIDAE

Page 121

Tarpons

To 55 cm. Coastal marine waters and estuaries; pelagic. A single species included in the Guide to Species.

underside of head



Order ALBULIFORMES – Bonefishes

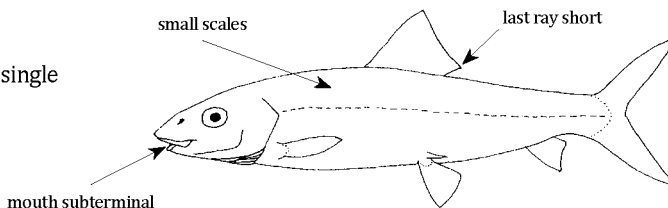
Fin spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; lateral line present; 6–16 branchiostegal rays; upper jaw not extending as far as front of eye; tip of snout overhanging mouth; colour silvery.

ALBULIDAE

Page 121

Bonefishes

To 100 cm. Coastal marine waters; pelagic. A single species included in the Guide to Species.



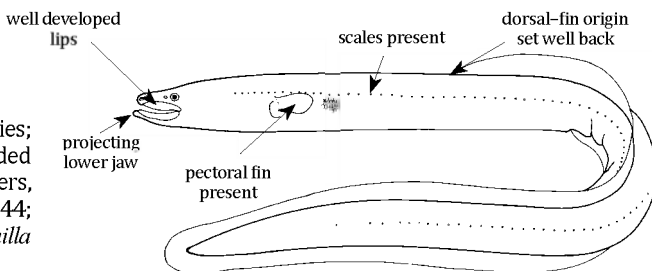
Order ANGUILLIFORMES – Eels

Body very elongate; fin spines absent; usually scaleless.

ANGUILLIDAE

Freshwater eels

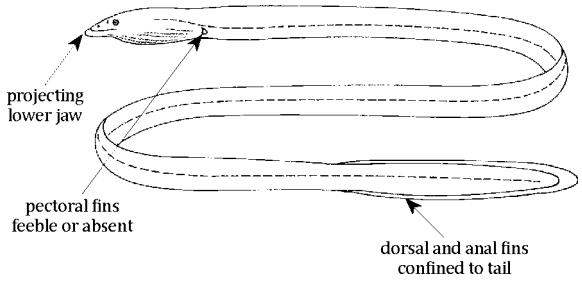
To 120 cm. Mainly freshwater, but enter estuaries; benthic. Of interest to fisheries. Four species recorded in Kenya waters: *Anguilla bengalensis labiata* (Peters, 1852); *Anguilla bicolor bicolor* McClelland, 1844; *Anguilla marmorata* Quoy & Gaimard, 1824; *Anguilla mossambica* (Peters, 1852).



MORINGUIDAE

Spaghetti eels

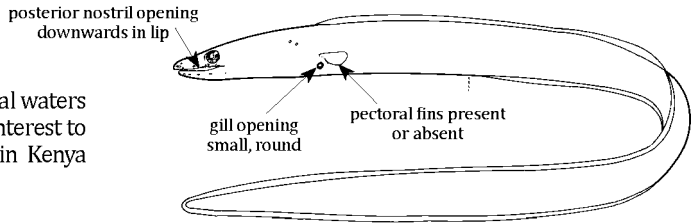
To 50 cm. Marine; mostly inshore waters; benthic, burrowing by day, but pelagic at night. Of no interest to fisheries. Three species recorded in Kenya waters: *Moringua ferruginea* Bliss, 1883; *Moringua javanica* (Kaup, 1856); *Moringua microchir* Bleeker, 1853.



CHLOPSIDAE

False morays

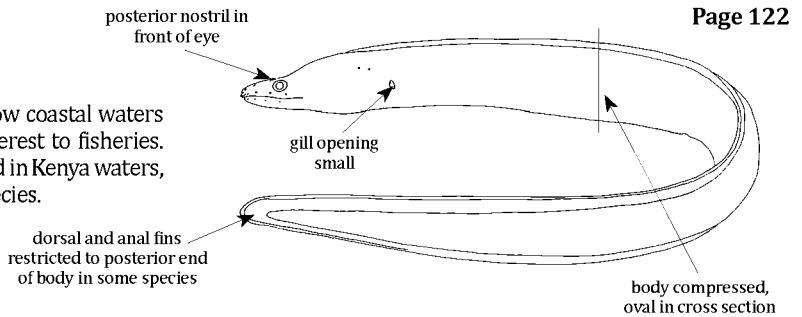
To about 50 cm. Marine; from shallow coastal waters to depths of at least 300 m; benthic. Of no interest to fisheries. One species has been recorded in Kenya waters: *Chlopsis dentatus* (Seale, 1917).



MURAENIDAE

Morays

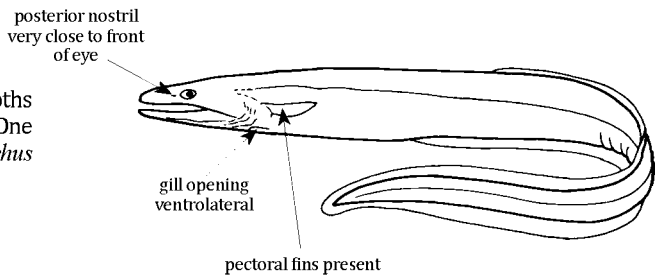
To 400 cm. Marine; mostly in shallow coastal waters to depths of 165 m; benthic. Of interest to fisheries. Eighteen species have been recorded in Kenya waters, and are included in the Guide to Species.



SYNAPHOBRANCHIDAE

Cutthroat eels

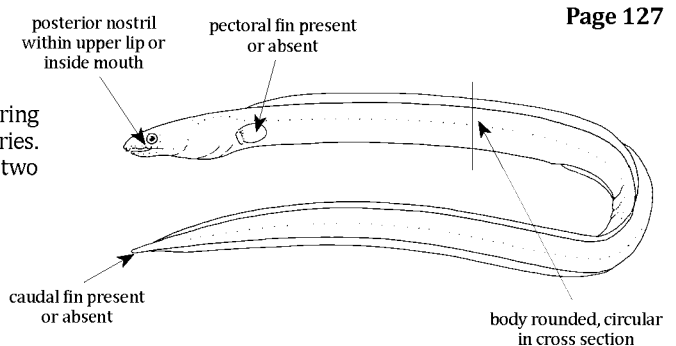
To about 100 cm. Marine; from costal waters to depths of 4000 m; benthic. Of no interest to fisheries. One species is present in Kenya waters: *Synaphobranchus kaupii* Johnson, 1862.



OPHICHTHIDAE

Snake eels

To 100 cm. Marine and estuarine, one species entering freshwater; benthic. Of limited interest to fisheries. Six species have been recorded in Kenya waters, two of which are included in the Guide to Species.

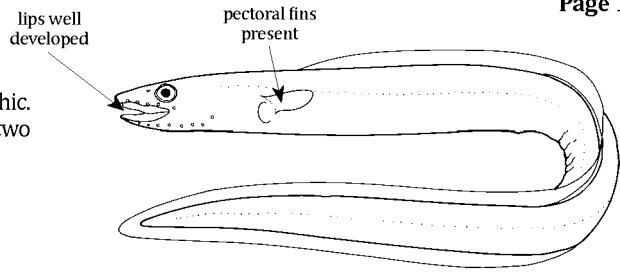


CONGRIDAE

Page 127

Conger eels

To 80 cm. Marine, coral reefs, and mud banks; benthic. Of interest to fisheries. Many species, of which two are included in the Guide to Species.

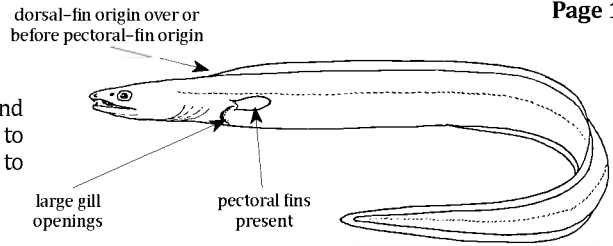
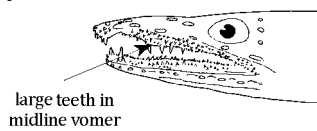


MURAENESOCIDAE

Page 128

Pike congers

To 250 cm. Marine, shallow coastal waters and estuaries to a depth of 100 m; benthic. Of interest to fisheries. Two species are included in the Guide to Species.



Order CLUPEIFORMES – Herrings and allies

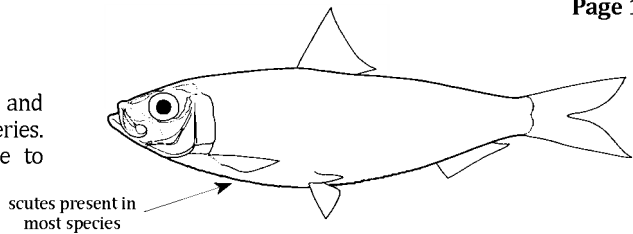
Fin spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; lateral line absent; a row of scutes along ventral profile (except *Chirocentridae*, some *Clupeidae* and some *Engraulidae*); colour silvery.

CLUPEIDAE

Page 129

Sardines – Sardinellas

To 25 cm. Coastal marine waters, estuaries and freshwater; mainly pelagic. Of interest to fisheries. Seventeen species are included in the Guide to Species.

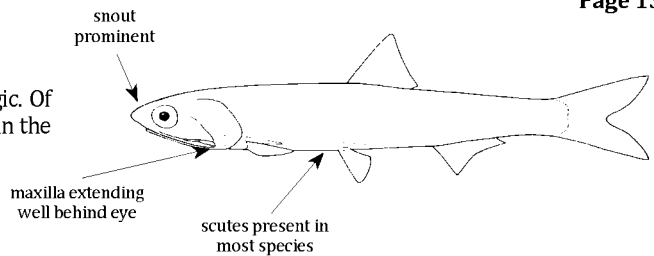


ENGRAULIDAE

Page 133

Anchovies

To 18 cm. Coastal marine waters, mainly pelagic. Of interest to fisheries. Nine species are included in the Guide to Species.

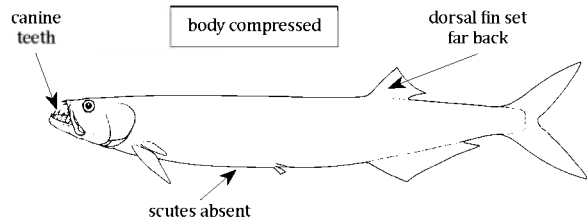


CHIROCENTRIDAE

Page 135

Wolf-herrings

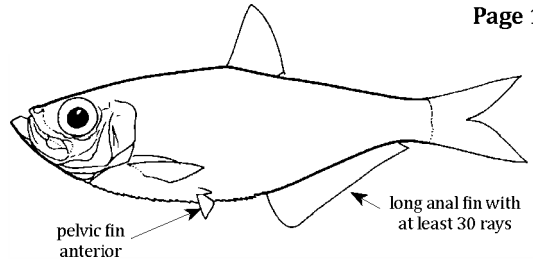
To 100 cm. Coastal marine waters, mainly pelagic. Of interest to fisheries. Two species are included in the Guide to Species.



PRISTIGASTERIDAE

Pristigasterids

To 20 cm. Coastal marine waters, mainly pelagic. Of interest to fisheries. One species included in the Guide to Species.



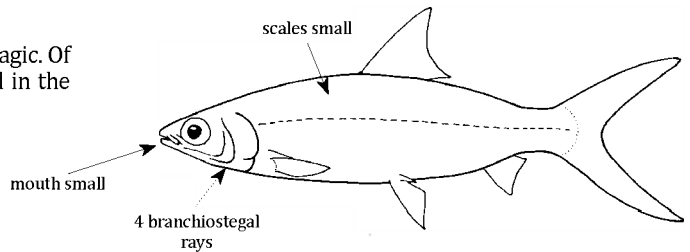
Order GONORHYNCHIFORMES – Milkfish and allies

Fin spines absent; a single dorsal fin located above middle of body; pelvic fins in abdominal position; lateral line present; 4 branchiostegal rays; mouth small, jaws toothless or teeth reduced; colour silvery.

CHANIDAE

Milkfish

To 180 cm. Marine and estuarine waters; pelagic. Of interest to fisheries. One species is included in the Guide to Species.



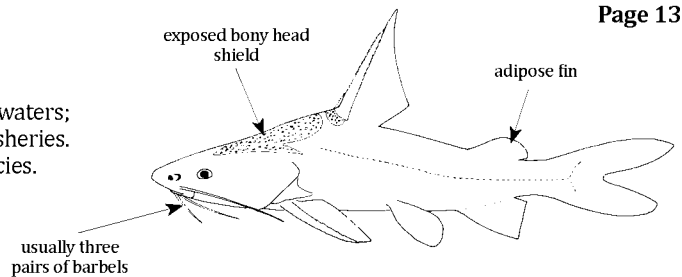
Order SILURIFORMES – Catfishes

Barbels present around mouth; a strong spine usually present at front of dorsal and pectoral fins; an adipose fin often present; scales absent, but a bony head shield often present.

ARIIDAE

Sea catfishes

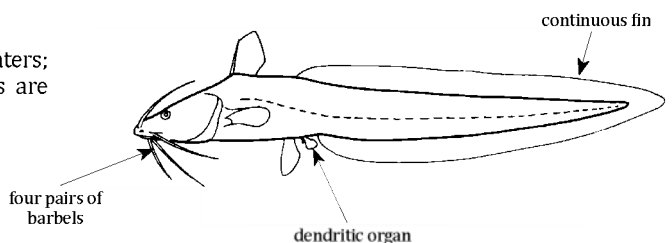
To 180 cm. Coastal marine and estuarine waters; also freshwaters; benthic. Of interest to fisheries. Five species are included in the Guide to Species.



PLOTOSIDAE

Eel catfishes

To 40 cm. Marine, entering brackish and freshwaters; benthic. Of interest to fisheries. Two species are included in the Guide to Species.



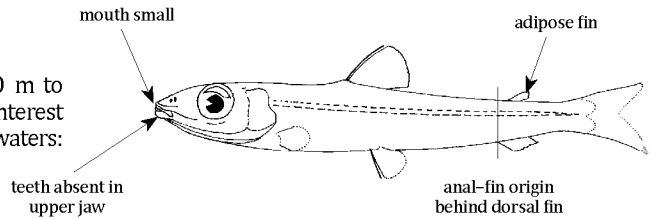
Order OSMERIFORMES - Argentines and allies

A diverse assemblage of families characterized by the inclusion of the maxilla in the gape of mouth; fin spines absent; adipose fin often present.

ARGENTINIDAE

Argentines

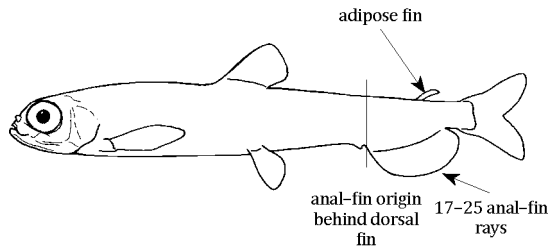
To about 40 cm. Marine, from depths of 80 m to 400 m; benthopelagic and pelagic. Of no interest to fisheries. One species recorded in Kenya waters: *Argentina euchus* Cohen, 1961.



BATHYLAGIDAE

Deepsea smelts

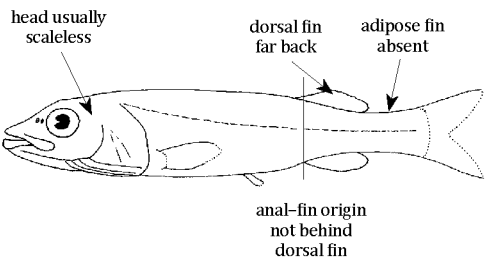
To about 20 cm. Marine, from the surface down to below 200 m; epipelagic to bathypelagic. Of no interest to fisheries. Probably two species occur in Kenya waters, even if never recorded: *Dolicholagus longirostris* (Maul, 1948); *Melanolagus bericoides* (Borodin, 1929).



ALEPOCEPHALIDAE

Slickheads

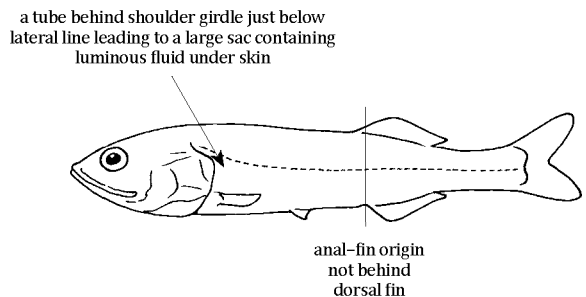
To about 70 cm. Marine, usually at depths of below 1000 m. Of no interest to fisheries. Perhaps several species, but no official records.



PLATYTROCTIDAE

Tube shoulders

To about 20 cm. Marine, between depths of 200 m and 4000 m; meso- and bathypelagic. Of no interest to fisheries. Perhaps several species, but no official records.



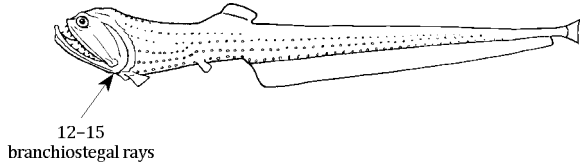
Order STOMIIFORMES - Hatchetfishes - Viperfishes and allies

Deepsea fishes, having light organs (photophores); chin barbels present in some; premaxilla and maxilla both with teeth, and included in gape of mouth; ventral adipose fin present in some.

GONOSTOMATIDAE

Bristlemouths

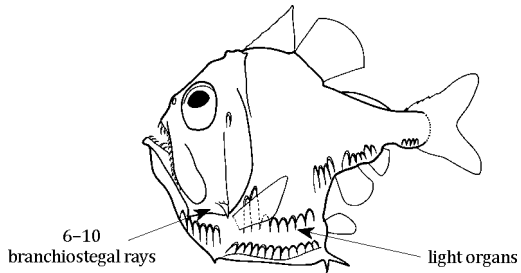
To about 25 cm. Marine, mostly deeper waters at depths below 200 m; meso- and bathypelagic. Of no interest to fisheries. Perhaps several species, but only three species recorded in Kenya waters: *Cyclothone alba* Brauer, 1906, *Cyclothone pallida* Brauer, 1902, *Cyclothone signata* Garman, 1899.



STERNOPTYCHIDAE

Marine hatchetfishes

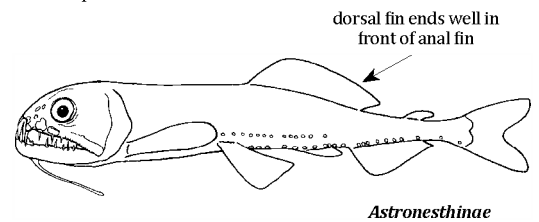
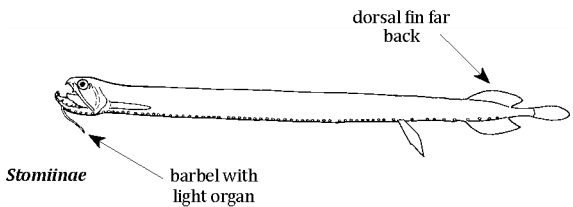
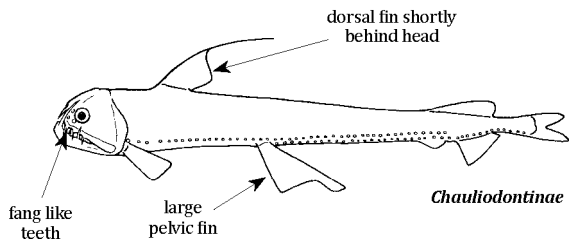
To 20 cm. Marine, from the surface to depths below 300 m; meso- and bathypelagic. Of no interest to fisheries. Three species recorded in Kenya waters: *Polyipnus bruuni* Harold, 1994, *Polyipnus matsubarai* Schultz, 1961, *Polyipnus meteori* Kotthaus, 1967.



STOMIIDAE

Barbeled dragonfishes

To about 40 cm. Marine, deep water, often migrating to near-surface at night. Of no interest to fisheries. Several species recorded in Kenya waters.



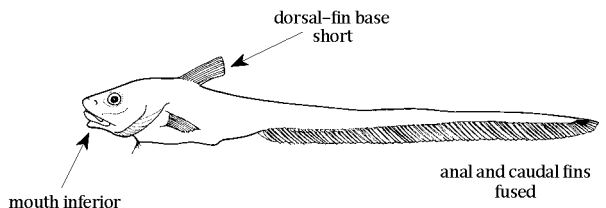
Order ATELEOPODIFORMES - Jellynose fishes

Caudal fin reduced, united with the long anal fin; pelvic fin of adults with single ray on throat (young specimens and *Guentherus* have several rays, and the pelvics of the latter are behind the pectorals).

ATELEOPODIDAE

Jellynose fishes

To 180 cm. Marine, from depths of about 200 m to 660 m; benthopelagic. Of no interest to fisheries. One species occurs in the western Indian Ocean: *Ateleopus natalensis* Regan, 1921.



Order AULOPIFORMES – Greeneyes – Lizardfishes and allies

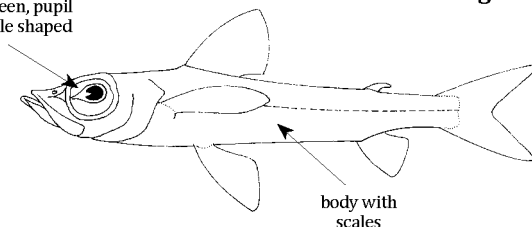
Premaxilla forming the gape of the mouth (maxilla excluded); upper jaw not protrusible; adipose fin present; caudal fin forked.

CHLOROPHTHALMIDAE

Greeneyes

To 17 cm. Deep water, from depths of 150 m to 379 m; benthic. Often in great abundance and of potential interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.

eyes green, pupil key-hole shaped



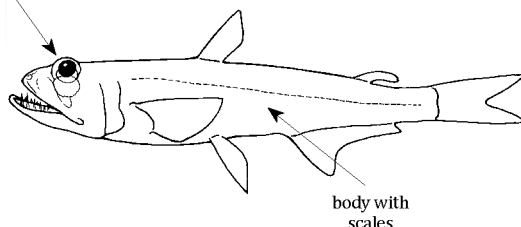
Page 138

SCOPELARCHIDAE

Pearleyes

To 13 cm. Marine, from the surface to depths below 2300 m; mostly below 300 m; meso- and bathypelagic. Of no interest to fisheries. Several species recorded in Kenya waters.

eye tubular

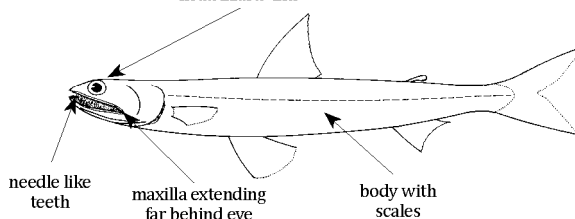


SYNODONTIDAE

Lizardfishes

To 50 cm. Marine, from shallow waters to depths of 200 m, benthic. Of interest to fisheries. Eight species included in the Guide to Species.

head lizard-like



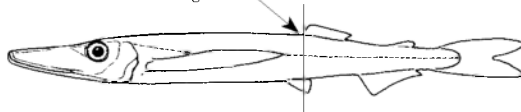
Page 139

PARALEPIDIDAE

Barracudinas

To 13 cm. Marine, deep water, often migrating to near-surface at night. Of no interest to fisheries. Several species recorded in Kenya waters.

dorsal-fin origin behind middle of standard length

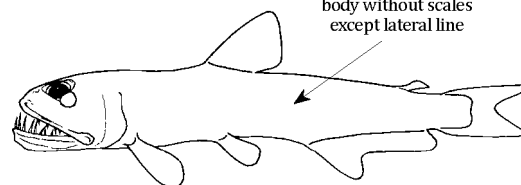


EVERMANNELLIDAE

Sabertooth fishes

To 12 cm. Marine, often migrating to near-surface at night; mesopelagic. Of no interest to fisheries. Perhaps four species occur in Kenya waters but no official records.

body without scales except lateral line



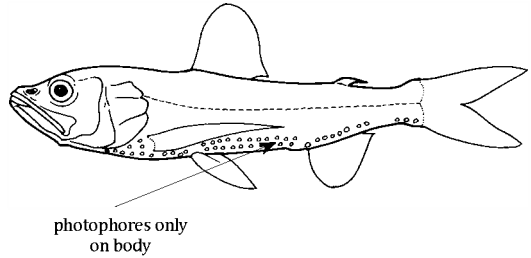
Order MYCTOPHIFORMES - Lanternfishes and allies

Fin spines absent; adipose fin present; light organs (photophores) sometimes present; deep sea fishes.

NEOSCOPELIDAE

Blackchins

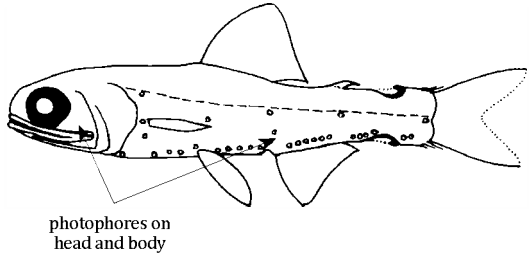
To about 30 cm. Marine, from the surface to depths below 500 m; pelagic or benthopelagic. Of no interest to fisheries. One species occurs in Kenya waters: *Neoscopeles macrolepidotus* Johnson, 1863.



MYCTOPHIDAE

Lanternfishes

To 30 cm. From the surface (at night) to depths below 2000 m; mesopelagic to bathypelagic. Of little interest to fisheries. Several species occur in Kenya waters.



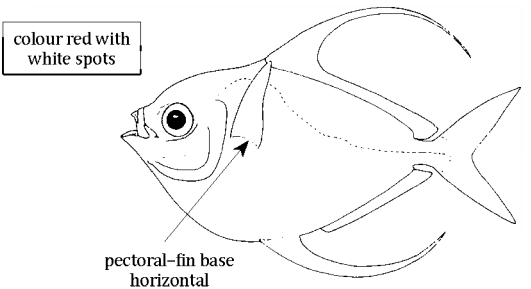
Order LAMPRIFORMES - Opahs and allies

A diverse group of often strange looking fishes. No true spines in fins; pelvic fins under bases of pectorals.

LAMPRIDAE

Opahs

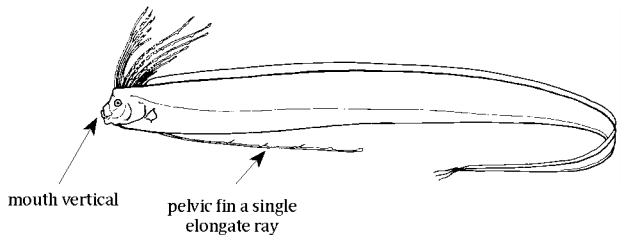
To 180 cm. Marine, well offshore; epipelagic. Of little interest to fisheries, but flesh excellent. One species in the Indian Ocean: *Lampris guttatus* (Brünnich, 1788).



REGALECIDAE

Oarfishes

To at least 700 cm. Marine, from the surface to a depth of 1000 m; epi- to mesopelagic. Of no interest to fisheries. Possibly one species: *Regalecus glesne* Ascanius, 1772.

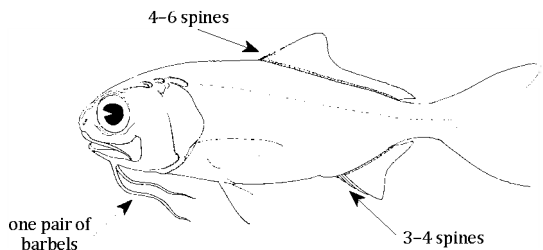


Order POLYMIXIIFORMES - Beardfishes

POLYMIXIIDAE

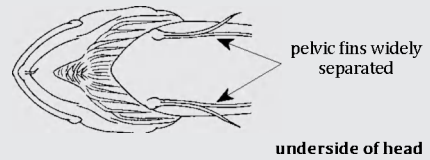
Beardfishes

To about 35 cm. Marine, from depths of about 100 m to 650 m; benthic. Of no interest to fisheries. One species occurs in Kenya waters: *Polymixia berndti* Gilbert, 1905.



Order GADIFORMES – Cods – Hakes

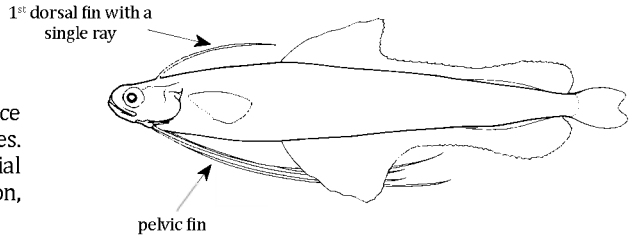
No sharp spines in fins (except in dorsal fin of some macrourids); pelvic fins below or anterior to pectoral fins and widely separated from each other, usually entire, but reduced to filaments in some species; barbels often present on chin.



BREGMACEROTIDAE

Codlets

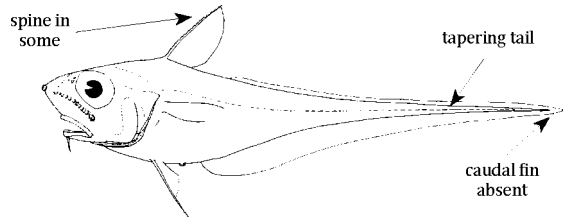
To 10 cm, but usually smaller. Marine, from the surface to depths of 2000 m; pelagic. Of no interest to fisheries. Perhaps three species occur in Kenya waters. Official record only for *Bregmaceros maclellandi* Thompson, 1840.



MACROURIDAE

Grenadiers

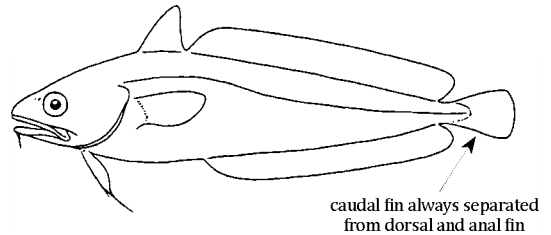
To 52 cm. Marine, from depths between 200 m and 1000 m; benthopelagic. Of no interest to fisheries. Numerous species in the Indian Ocean. Four species recorded in Kenya waters, three of which are included in the Guide to Species.



MORIDAE

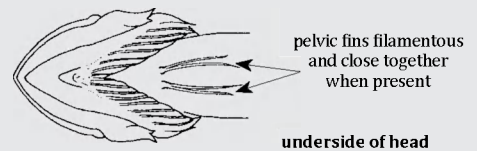
Morid cods

To about 25 cm. Marine, in deeper waters; benthopelagic. Of no interest to fisheries. Numerous species in the Indian Ocean. Three species recorded in Kenya waters



Order OPHIDIIFORMES – Cusk eels – Brotulas

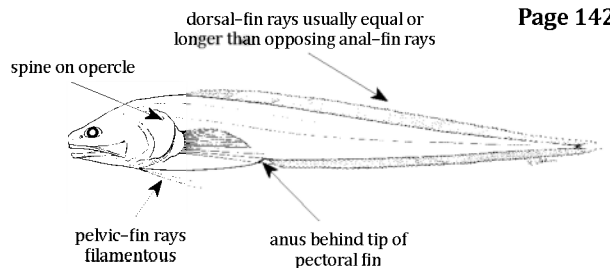
No sharp spines in fins; pelvic fins absent in some species; when present these fins are placed anterior to pectoral fins, sometimes far forward on underside of head; they are always close together and filamentous, each with not more than 2 rays; caudal fin separate or joined to dorsal and anal fins; snout without barbels.



OPHIDIIDAE

Cusk eels

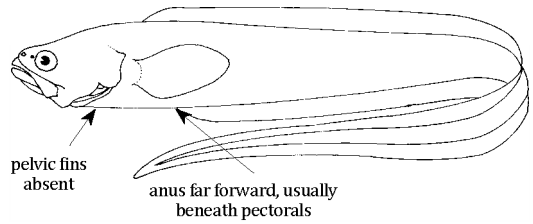
To 50 cm. Marine, at depths of 650 m; benthic. Of no interest to fisheries. Perhaps several species occur in Kenya waters. Official records only for *Neobythites kenyaensis* Nielsen, 1995 and *Brotula multibarbata* Temminck & Schlegel, 1846, the latter included in the Guide to Species.



CARAPIDAE

Pearlfishes

To about 20 cm. Marine, shallow coastal waters; benthic. Living as commensals in holothurians, molluscs and ascidians, which they enter tail first. Of no interest to fisheries. Numerous species in the Indian Ocean. Three species recorded in Kenya waters.



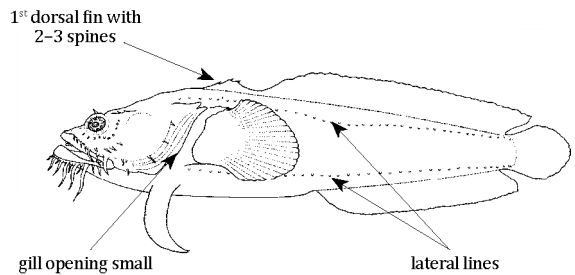
Order BATRACHOIDIFORMES - Toadfishes

Head large and depressed, body compressed; two dorsal fins, the 1st with 2 or 3 spines; pelvic fins under throat; gill openings restricted to sides of head; one to several lateral lines on body.

BATRACHOIDIDAE

Toadfishes

To about 20 cm. Coastal waters; benthic. Of no interest to fisheries. Five species occur in the Indian Ocean. No information for Kenya waters.



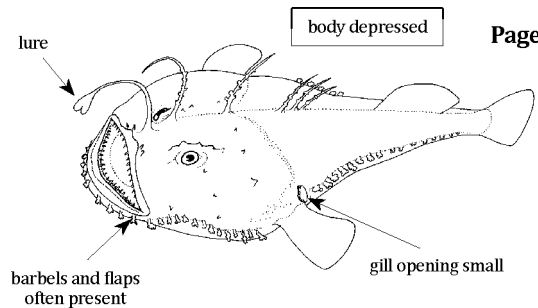
Order LOPHIIFORMES - Anglerfishes and allies

Body globulose or depressed; 1st spine of dorsal fin modified to form a 'fishing pole'; gill openings small and circular, usually located below or behind pectoral fins.

LOPHIIDAE

Goosefishes

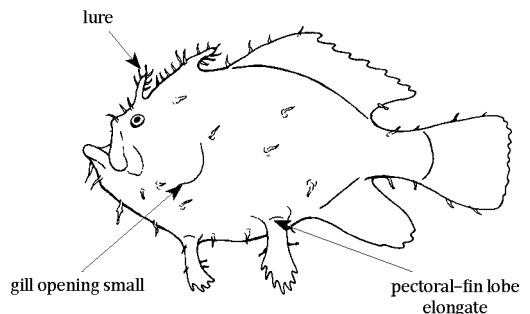
To 45 cm. Marine, mainly deep water, at depths between 50 m and 500 m. Of little interest to fisheries. Two species occur in Kenya waters, and are included in the Guide to Species.



ANTENNARIDAE

Frogfishes

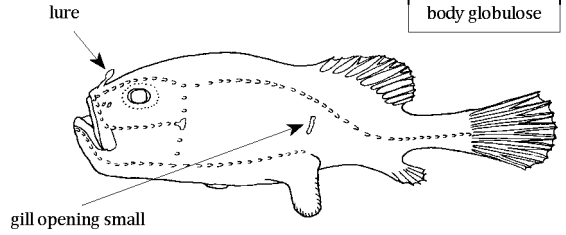
To 25 cm. Marine, coastal and surface waters to a depth of 100 m; mostly benthic. Of little interest to fisheries. Several species occur in Kenya waters.



CHAUNACIDAE

Sea tods

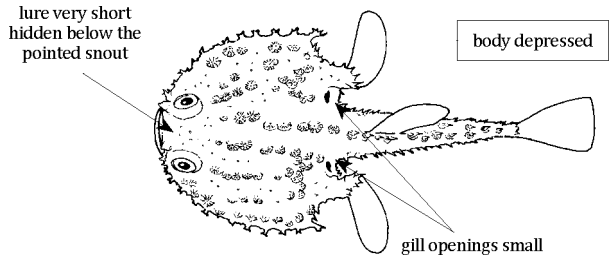
To about 45 cm. Marine, offshore waters in depths between 300 m and 1000 m; benthic. Of no interest to fisheries. Two species occur in Kenya waters: *Chaunax penicillatus* McCulloch, 1915 and *Chaunax pictus* Lowe, 1846.



OGCOEPHALIDAE

Batfishes

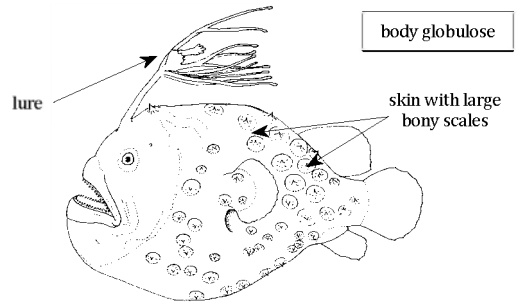
To 20 cm. Marine, coastal and deep waters to at least 2000 m; benthic. Of no interest to fisheries. Several species occur in the Indian Ocean. Only one species recorded in Kenya waters: *Malthopsis lutea* Alcock, 1891.



HIMANTOLOPHIDAE

Footballfishes

To about 60 cm. Marine, from near the surface to depths below 500 m, pelagic. Of no interest to fisheries. Two species occur in the Indian Ocean. No records in Kenya waters.



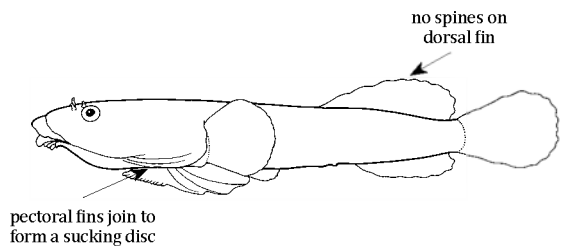
Order GOBIESOCIFORMES - Clingfishes

Pectoral fins joined to form an adhesive disc on ventral surface of body at juncture of head and body; a single dorsal fin without spines.

GOBIESOCIDAE

Clingfishes

To 15 cm, but most species less than 8 cm. Marine, entering also estuaries and freshwater; benthic. Of no interest to fisheries. Two species recorded in Kenya waters.



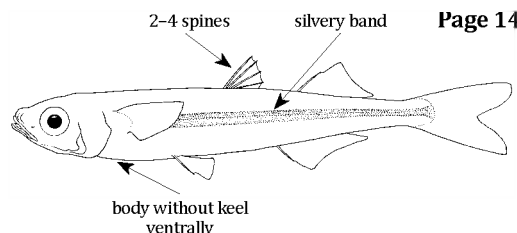
Order ATHERINIFORMES - Silversides and allies

Small fishes; 2 well separated dorsal fins, the 1st spiny, but often inconspicuous; a silvery stripe on sides.

ATHERINIDAE

Silversides

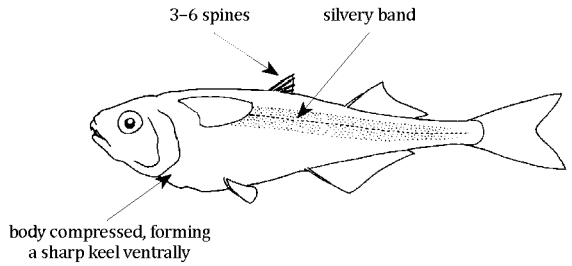
To 15 cm. Coastal marine waters, estuaries, coastal lagoons; pelagic. Of little interest to fisheries. Four species occur in Kenya waters, and are included in the Guide to Species.



NOTOCHEIRIDAE

Surf sardines

To about 9 cm. Marine, coastal surf waters. Of no interest to fisheries. One species occurs in the western Indian Ocean: *Iso natalensis* Regan, 1919.

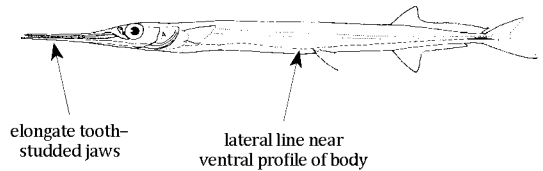


Order BELONIFORMES - Flyingfishes and allies
 Either snout beak-like with upper or lower jaws greatly prolonged, or with enlarged, wing-like pectoral, and sometimes also pelvic fins; lateral line near ventral profile of body; a single dorsal fin consisting of soft rays; pelvic fins abdominal.

BELONIDAE

Needlefishes

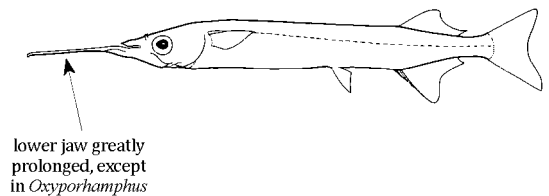
To about 150 cm. Marine, coastal and offshore waters, some entering estuaries and even freshwater; generally pelagic, swimming near the surface. Of interest to fisheries. Four species recorded in Kenya waters, 1 in neighboring countries, all included in the Guide to Species.



HEMIRAMPHIDAE

Halfbeaks

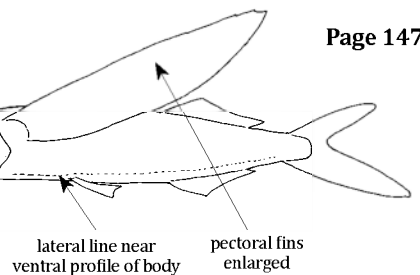
To 44 cm. Marine, coastal and offshore waters, some entering estuaries and even freshwater; generally pelagic, swimming near the surface. Of interest to fisheries. Four species recorded in Kenya waters, 1 in neighboring countries, all included in the Guide to Species.



EXOCOETIDAE

Flyingfishes

To 30 cm. Marine, pelagic in surface waters; capable of jumping out of the water and gliding for long distances. Of little interest to fisheries. Twelve species occur in Kenya waters, all included in the Guide to Species.



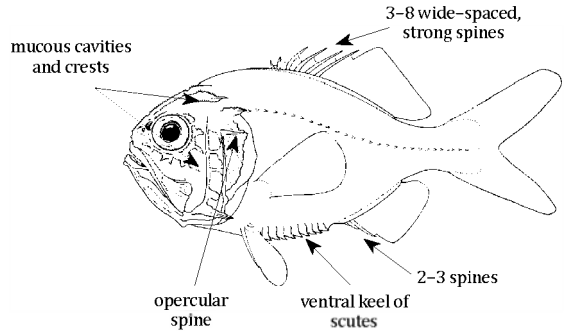
Order BERYCIFORMES – Squirrelfishes and allies

Head with spines and crests well developed; fin spines well developed; scales heavy and strongly ctenoid (rough).

TRACHICHTHYIDAE

Slimeheads

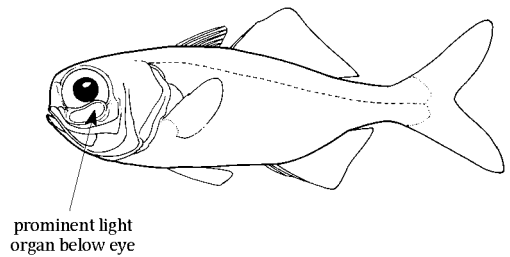
To about 60 cm. Marine, from depths of about 100 m to 1000 m, rarely below 600 m; benthic. Of little interest to fisheries. Probably several species.



ANOMALOPIDAE

Lanterneye fishes

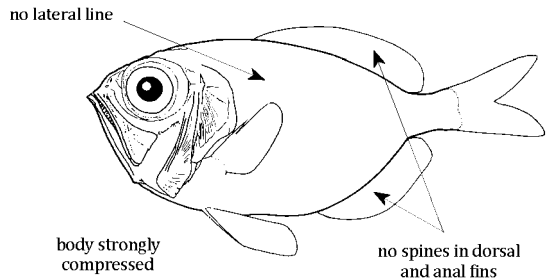
To 30 cm. Marine, from shallow waters at night to depths below 100 m; benthic. Of no interest to fisheries. One species in western Indian Ocean, never recorded in Kenya waters: *Photoblepharon steinitzi* Abe & Haneda, 1973.



DIRETMIDAE

Spinyfins

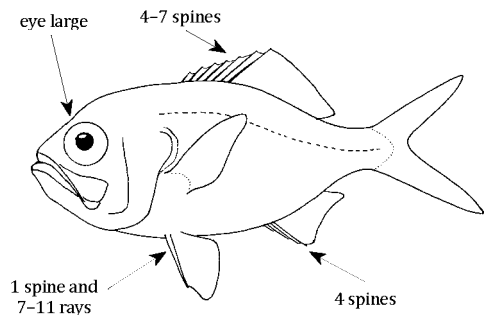
To 15 cm. Marine, from depths of 500 m to 700 m; benthic. Of no interest to fisheries. One species occurs in Kenya waters: *Diretmus argenteus* Johnson, 1864.



BERYCIDAE

Alfonsinos

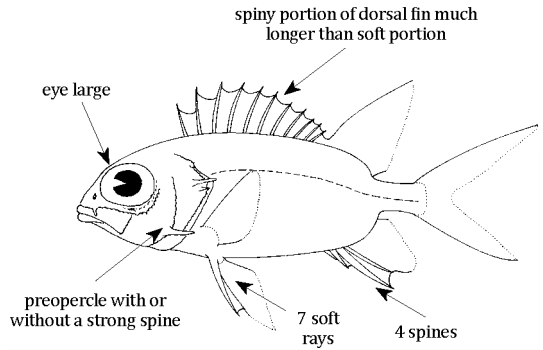
To 70 cm. Marine, from depths of 200 m to 600 m; bathypelagic. Of little interest to fisheries. Two species occur in the western Indian Ocean, one of which has been recorded in Kenya waters and is included in the Guide to Species.



HOLOCENTRIDAE

Squirrelfishes – Soldierfishes

To 45 cm. Marine, from shallow coastal waters to depths below 200 m; benthic. Of little interest to fisheries. Eleven species have been recorded in Kenya waters, six species in neighboring countries, all of which are included in the Guide to Species.



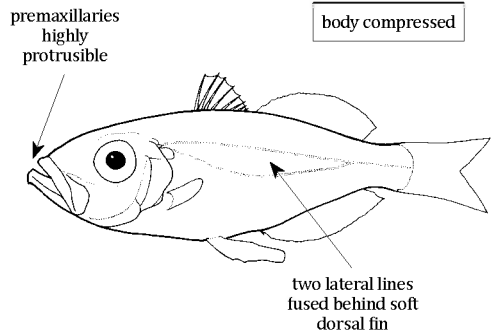
Order ZEIFORMES – Dories and allies

Body usually compressed and deep; jaws greatly distensible; prominent spines in anterior part of dorsal fin.

PARAZENIDAE

Parazens

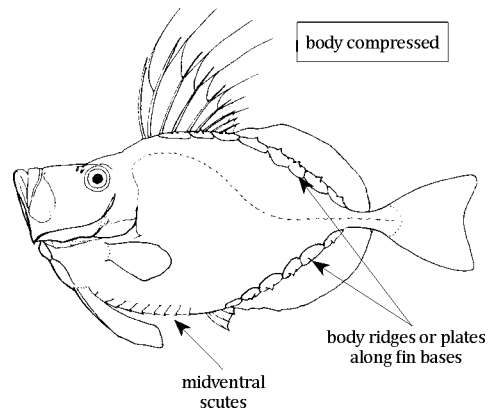
To 30 cm. Marine, outer continental slope, from depths of 150 m to 730 m. Of no interest to fisheries. One species recorded in neighboring countries and included in the Guide to Species.



ZEIDAE

Dories

To 70 cm. Marine, outer continental slope, from depths of 90 m to 300 m. Of little interest to fisheries, but flesh excellent. One species recorded in Kenya waters and included in the Guide to Species.



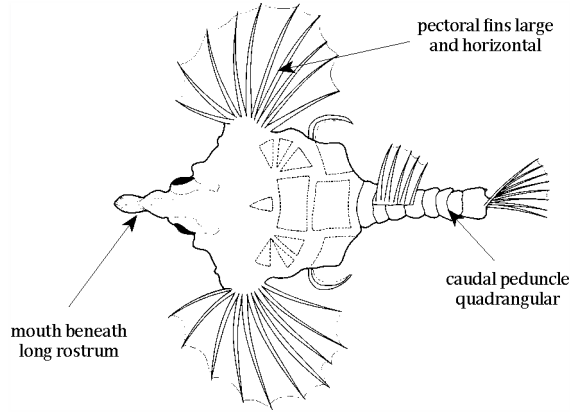
Order GASTEROSTEIFORMES - Seamoths and Sticklebacks

Reduced number of branchiostegal rays (1-5); small mouth, often tubular; body covered with armor of dermal plates in most members.

PEGASIDAE

Seamoths

To about 16 cm. Marine, coastal waters; benthic. Of no interest to fisheries. One species recorded in neighboring countries: *Eurypegasis draconis* (Linnaeus, 1766).



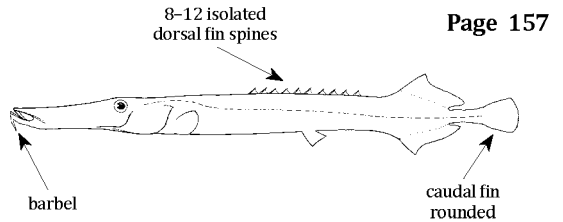
Order SYGNATHIFORMES - Pipefishes and allies

Body elongate, snout tube-like, mouth small; scales sometimes modified to form series of body plates.

AULOSTOMIDAE

Trumpetfishes

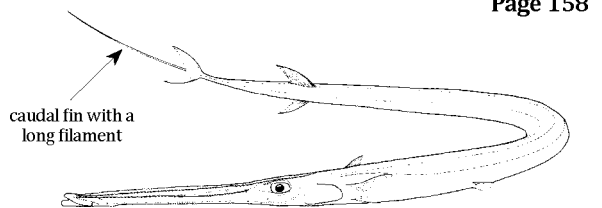
To about 75 cm. Marine, shallow coastal waters. Of little interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.



FISTULARIIDAE

Cornetfishes - Flutemouths

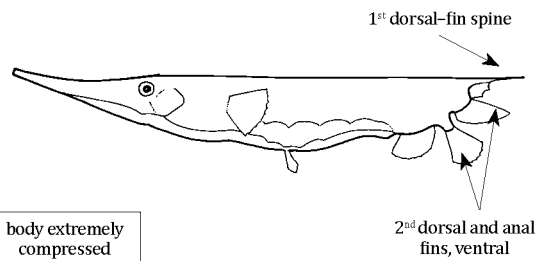
To about 200 cm. Marine, shallow coastal waters. Of little interest to fisheries, but flesh excellent. Two species recorded in Kenya waters both included in the Guide to Species.



CENTRISCIDAE

Snipefishes and Shrimpfishes

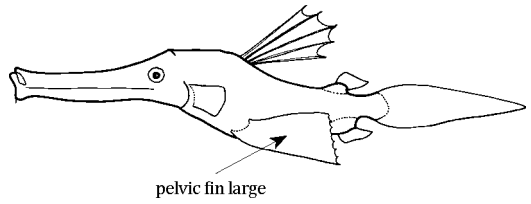
To about 20 cm. Coastal marine waters to depths of 80 m. Of no interest to fisheries. Two species occur in Kenya waters: *Aeoliscus punctulatus* (Bianconi, 1854); *Aeoliscus strigatus* (Günther, 1861).



SOLENOTOMIDAE

Ghost pipefishes

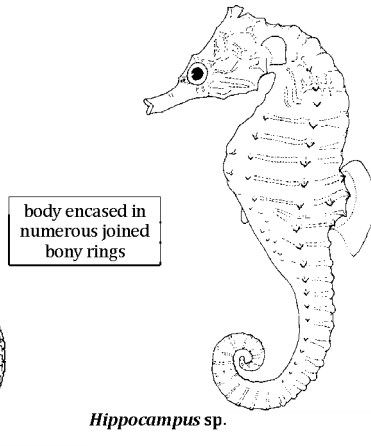
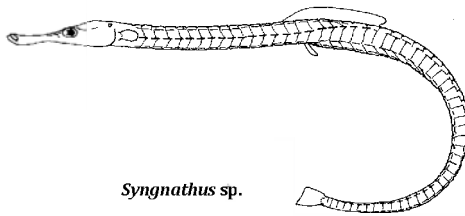
To about 15 cm. Marine, coastal waters. Of no interest to fisheries. One species recorded in Kenya waters: *Solenostomus cyanopterus* Bleeker, 1854.



SYNGNATHIDAE

Pipefishes and Seahorses

To about 30 cm. Coastal marine waters to depths of about 90 m, littoral pools, lagoons, estuaries, and freshwater; mostly benthic. Of no interest to fisheries, some species of interest of aquarium trade. Many species recorded in Kenya waters.

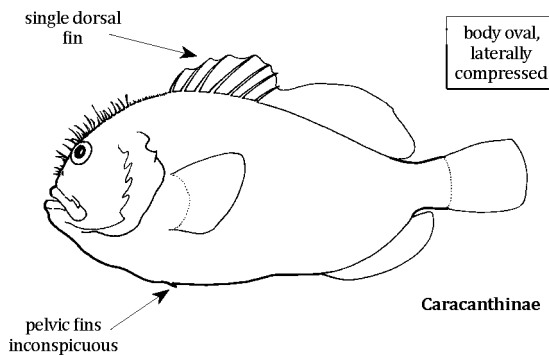
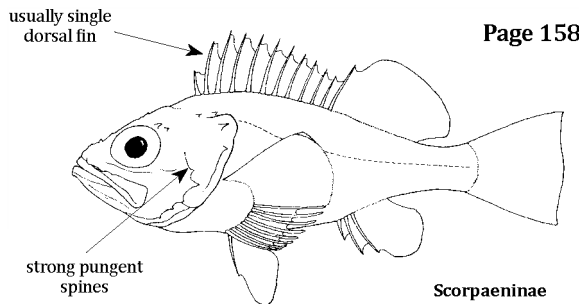


Order SCORPAENIFORMES - Scorpionfishes and allies
Cheeks with a bony strut (posterior extension of suborbital bone to preopercle), usually well developed spines on head and prominent spines in dorsal fin; pectoral fins usually rounded, sometimes greatly enlarged; membranes between lower rays often incised; caudal fin rarely forked.

SCORPAENIDAE

Scorpionfishes - Rockfishes - Velvetfishes

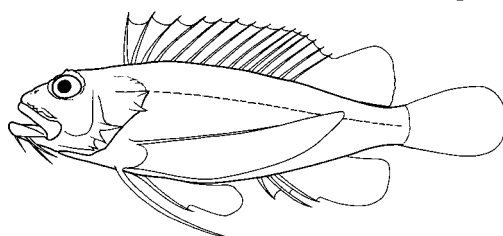
To 40 cm. Marine, from the coastline to depths of 400 m; benthic. Of interest to fisheries. Nineteen species occur in Kenya waters, eleven of which are included in the Guide to Species.



APISTIDAE

Wasp scorpionfishes

To about 20 cm. Marine. Of no interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.

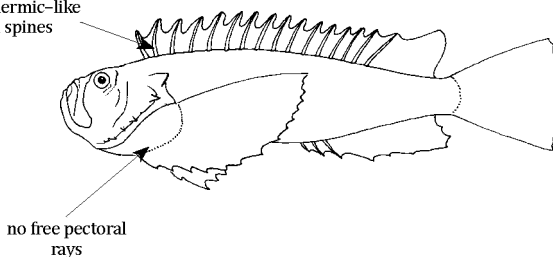


SYNANCEIIDAE

Stonefish

To about 40 cm. Marine, coastal waters. Of no interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.

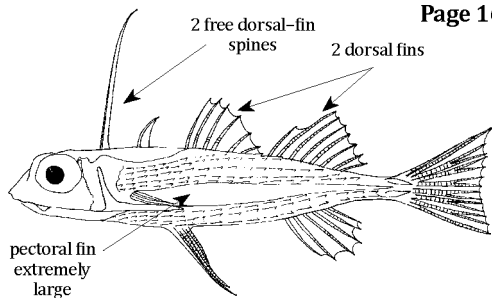
Venom glands present near base of hypodermic-like dorsal-fin spines



DACTYLOPTERIDAE

Flying gurnards

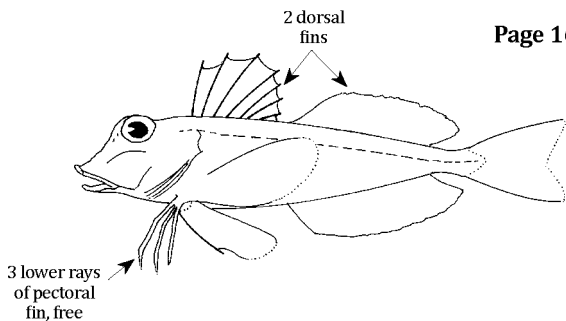
To 40 cm. Marine, shallow coastal waters; benthic. Of no interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.



TRIGLIDAE

Gurnards

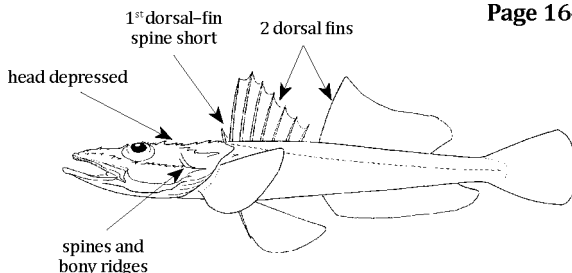
To about 16 cm. Marine coastal and deeper waters; benthic. Of little interest to fisheries. Four species occur in Kenya waters, three of which are included in the Guide to Species.



PLATYCEPHALIDAE

Spiny flatheads

To 100 cm. Marine, on sand and mud bottoms down to a depth of about 70 m. Of little interest to fisheries. Five species recorded in Kenya waters, one in neighboring countries, all included in the Guide to Species.



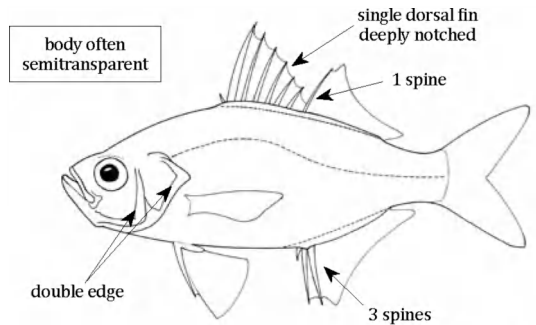
Order PERCIFORMES: PERCOIDEI – Perch-like fishes

Shape extremely variable; either two dorsal fins, or one dorsal fin with anterior elements being sharp spines; pelvic fins usually with one spine and five soft rays, placed well forward on ventral surface of body; maxillary bone not included in gape of mouth, but dorsal to the tooth-bearing premaxilla.

AMBASSIDAE

Asiatic glassfishes

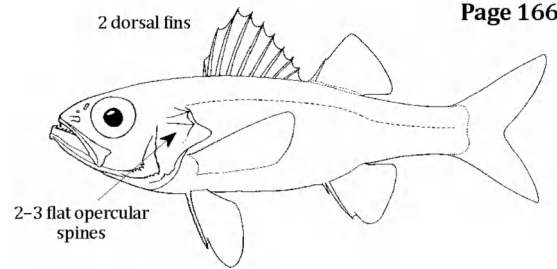
To about 15 cm. Shallow coastal waters and estuaries, entering freshwater. Of no interest to fisheries. Three species occur in Kenya waters: *Ambassis gymnocephalus* (Lacepède, 1802); *Ambassis natalensis* Gilchrist & Thompson, 1908; *Ambassis productus* Guichenot, 1866.



ACROPOMATIDAE

Lanternbellies

To 30 cm. Marine, from depths of 100 m to 600 m; benthic. Of little interest to fisheries. Three species occur in Kenya waters and are included in the Guide to Species.

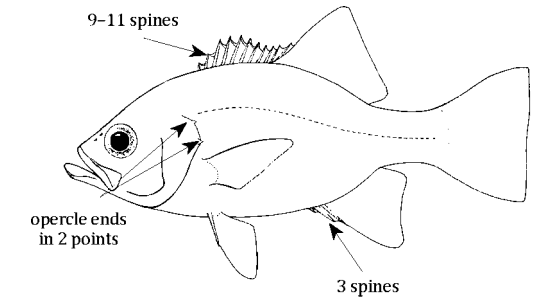


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DINOPERCIDAE

Cavebasses

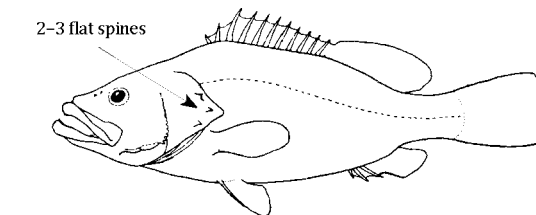
To 65 cm. Marine, on rocky reefs to depths beyond 50 m; benthic. Of no interest to fisheries. A single species occurs in Kenya waters: *Dinoperca petersi* (Day, 1875).



SERRANIDAE

Groupers – Seabasses – Rockcods – Hinds – Combers – Coral trouts – Lyretails – Soapfishes

To 250 cm. Marine, from the coastline to depths beyond 380 m; also estuarine; mostly benthic; a large and diverse family. Of major interest to fisheries. Fifty-five species occur in Kenya waters, 47 of which are included in the Guide to Species.

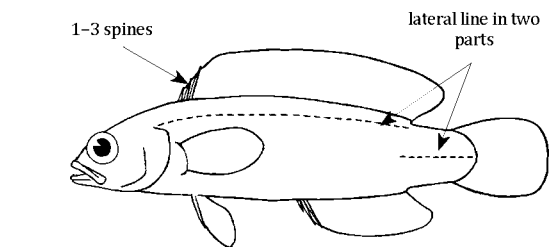


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PSEUDOCROMIDAE

Dottybacks

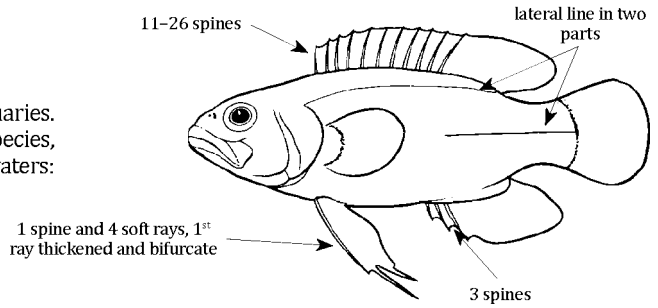
To about 10 cm, but most species less than 5 cm. Shallow coastal waters, especially coral reefs to depths of about 100 m; benthic. Of interest to the aquarium trade. Ten species have been recorded in Kenya waters.



PLESIOPIDAE

Roundheads

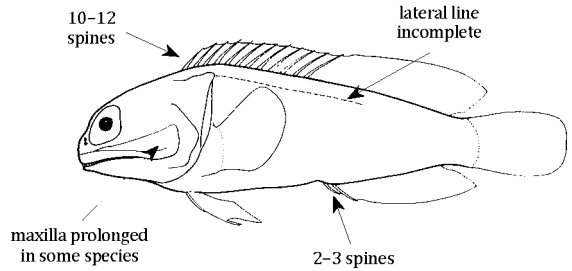
To about 25 cm. Marine coastal waters and estuaries. Of no interest to fisheries. Perhaps several species, but only one species recorded in Kenya waters: *Plesiops coeruleolineatus* Rüppell, 1835.



OPISTOGNATHIDAE

Jawfishes

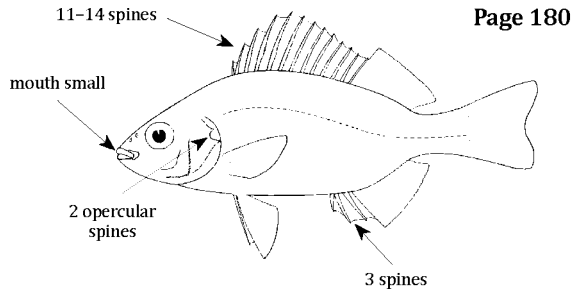
To about 35 cm, but most species smaller than 11 cm. Marine, in shallow waters to depths of 200 m; benthic on sandy bottoms. Of no interest to fisheries. Ten species occur in the western Indian Ocean; one recorded in Kenya waters: *Opistognathus margaretae* Smith-Vaniz, 1983.



TERAPONTIDAE

Grunters

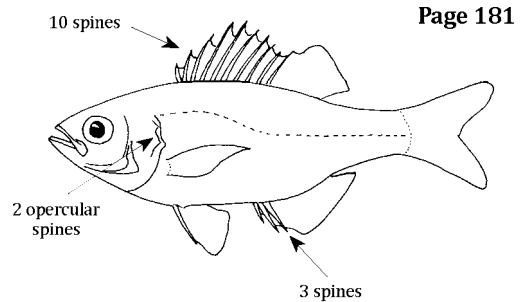
To about 30 cm. Marine, coastal waters and estuaries. Of little interest to fisheries. Four species recorded in Kenya waters and included in the Guide to Species.



KUHLIIDAE

Aholeholes

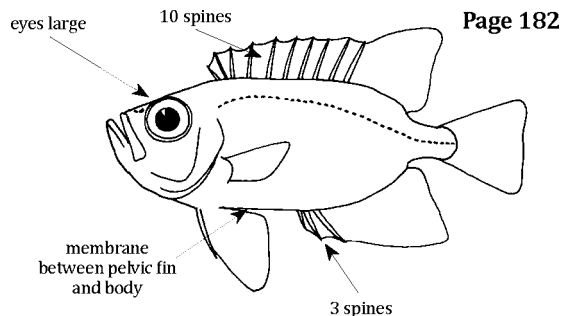
To 40 cm. Marine coastal waters, estuaries, and entering freshwater. Of little interest to fisheries. Two species recorded in Kenya waters and included in the Guide to Species.



PRIACANTHIDAE

Bigeyes

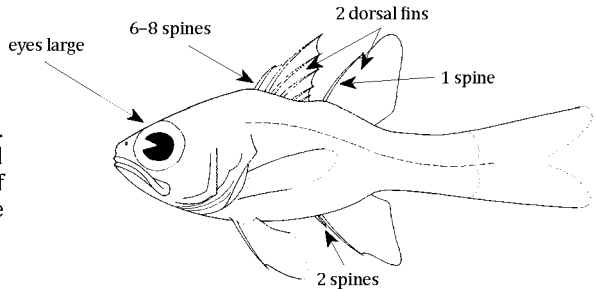
To 50 cm. Marine, from the coastline to a depth of about 200 m; benthic. Of little interest to fisheries. One species has been recorded in Kenya waters; five in neighboring countries.



APOGONIDAE

Cardinalfishes

To about 20 cm, but most species less than 12 cm. Shallow coastal waters, and some in brackish and freshwater; benthic and benthopelagic at night. Of interest to the aquarium trade. Several species have been recorded in Kenya waters.

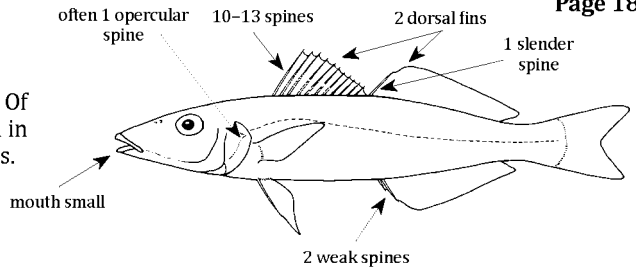


Page 184

SILLAGINIDAE

Smelt-whiting

To 35 cm. Marine coastal waters and estuaries. Of little interest to fisheries. Three species recorded in Kenya waters and included in the Guide to Species.

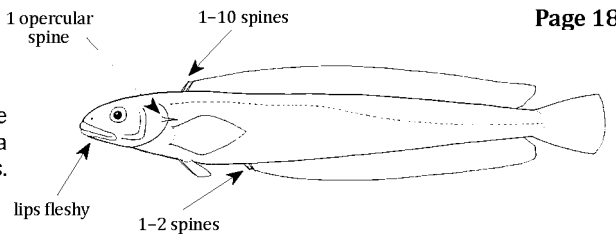


Page 185

MALACANTHIDAE

Tilefishes

To 45 cm. Marine, coastal waters; benthic. Of little interest to fisheries. Four species recorded in Kenya waters, one of which included in the Guide to Species.

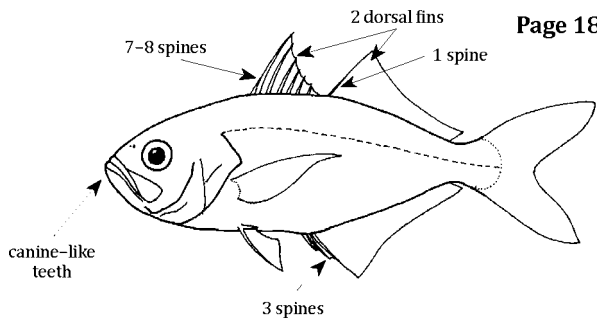


Page 185

LACTARIIDAE

False trevallies

To 40 cm. Marine coastal waters. Of little interest to fisheries. One species occurs in Kenya neighboring countries and is included in the Guide to Species.

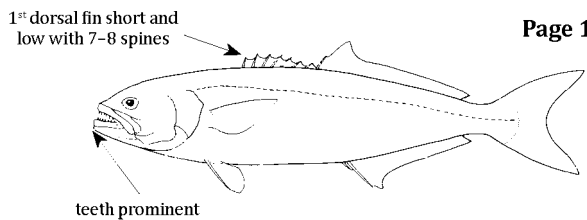


Page 185

POMATOMIDAE

Bluefishes

To 130 cm. Marine, brackish; pelagic-oceanic; oceanodromous. Of major interest to fisheries. One species circumglobal and included in the Guide to Species.

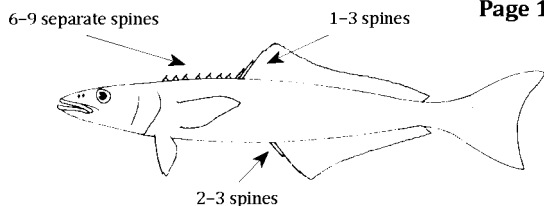


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RACHYCENTRIDAE

Cobias

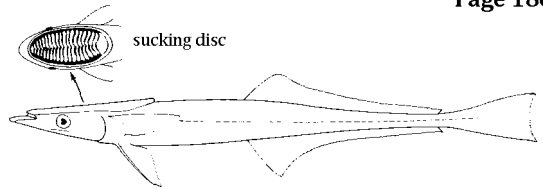
To 200 cm. Marine, pelagic in coastal waters, occasionally in estuaries. Of interest to fisheries. One species present in Kenya waters and included in the Guide to Species.



ECHENEIDAE

Remoras - Sharksuckers

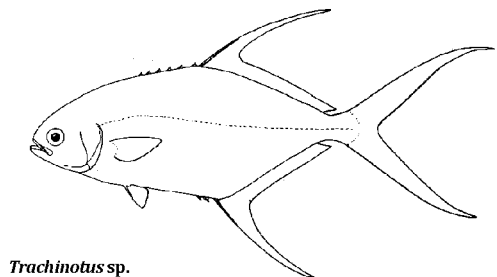
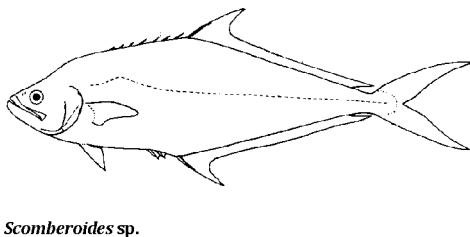
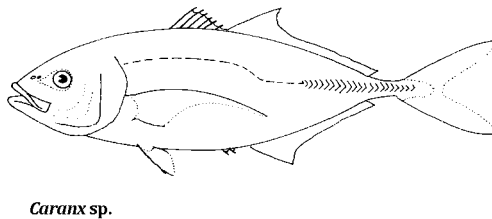
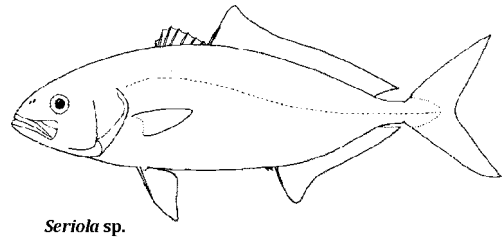
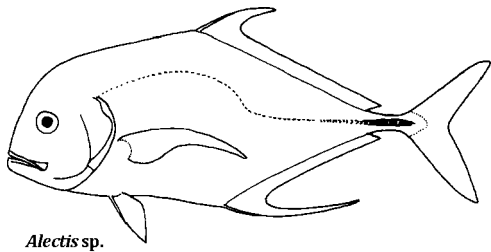
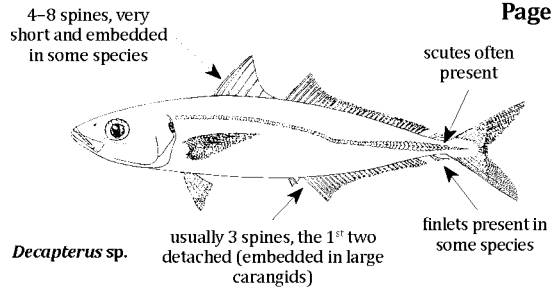
To about 90 cm. Marine, pelagic; attach to larger marine animals such as sharks, turtles, and marine mammals. Of no interest to fisheries. Eight species worldwide, one of which recorded in Kenya waters and included in the Guide to Species.



CARANGIDAE

Jacks - Trevallies - Scads - Queen-fishes - Runners - Pompanos

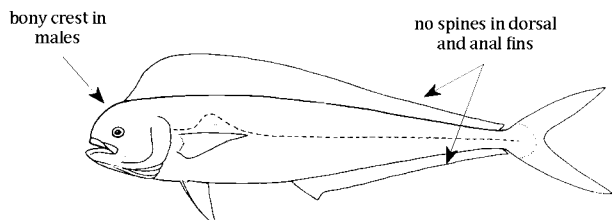
To about 165 cm. Marine, from coastal waters to a depth of 200 m; a few species entering brackish waters; coastal pelagic or oceanic pelagic; a large and diverse family. Of major interest to fisheries. Forty-five species recorded in Kenya waters and included in the Guide to Species.



CORYPHAENIDAE

Dolphinfishes

To 200 cm. Marine, oceanic pelagic, but sometimes close to the coast. Of major interest to fisheries. Two species recorded in Kenya waters and included in the Guide to Species.

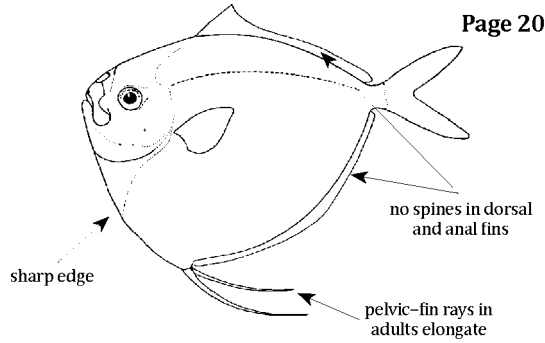


MENIDAE

Page 202

Moonfishes

To 24 cm. Marine, coastal waters, entering estuaries. Of no interest to fisheries. A single species recorded in Kenya waters.

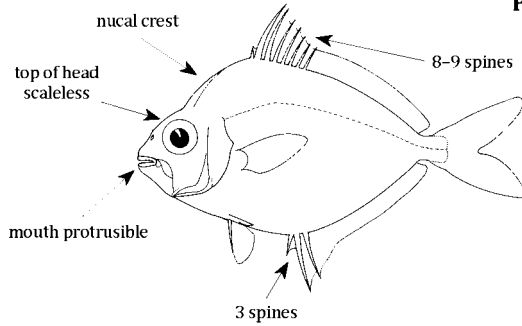


LEIOGNATHIDAE

Page 202

Ponyfishes - Slipmouths - Tooth-ponies

To 21 cm. Marine, coastal waters, to a depth of 25 m and estuaries; schooling; benthic. Of no interest to fisheries. Seven species recorded in Kenya waters, two in neighboring countries, all included in the Guide to Species.

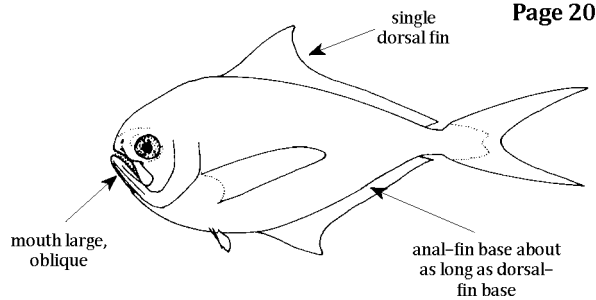


BRAMIDAE

Page 205

Pomfrets

To about 60 cm. Marine, epipelagic. Of interest to fisheries. Two species recorded in Kenya waters, one of which included in the Guide to Species.

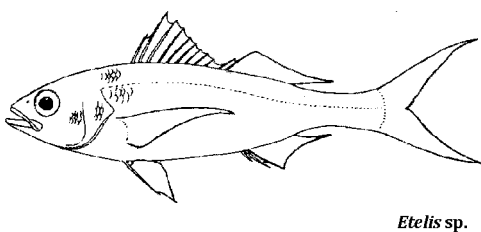
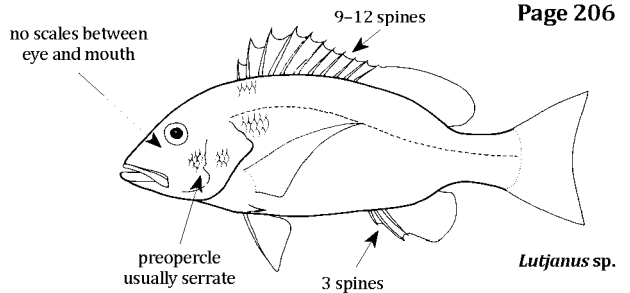


LUTJANIDAE

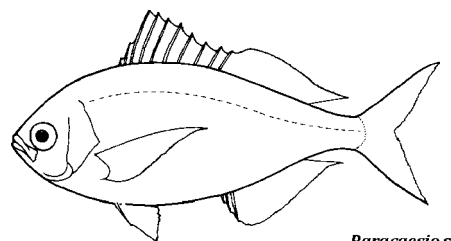
Page 206

Snappers

To 120 cm. Mostly marine, from the coastline to a depth of 360 m; some species enters estuaries and even rivers; benthic. Of interest to fisheries. Twenty-six species recorded in Kenya waters and included in the Guide to Species.



Etelis sp.

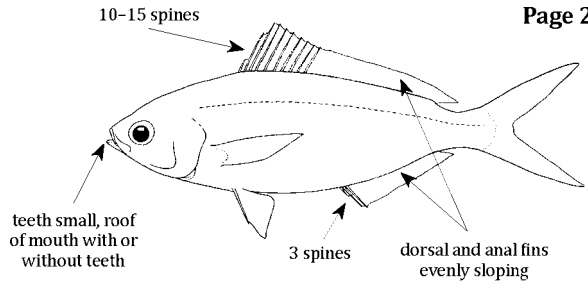
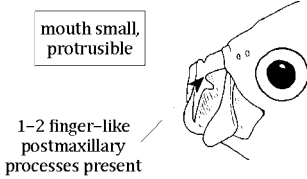


Paracaesio sp.

CAESIONIDAE

Fusiliers

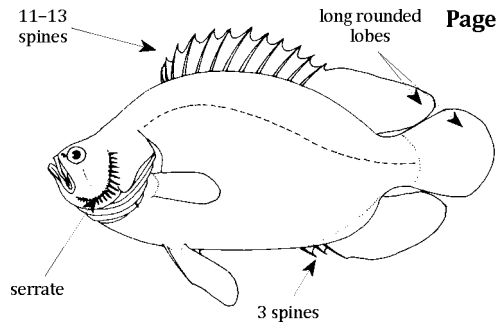
To about 40 cm. Marine, coastal waters, associated with reefs, to a depth of about 60 m; pelagic. Of little interest to fisheries. Twelve species have been recorded in Kenya waters, one in neighboring countries, all included in the Guide to Species.



LOBOTIDAE

Tripletails

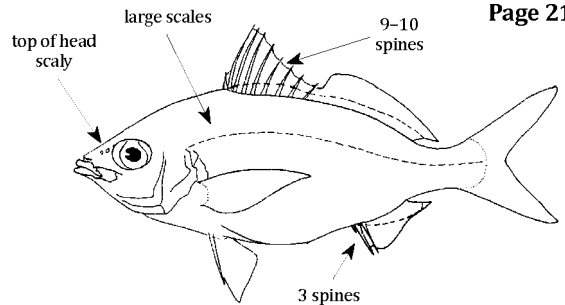
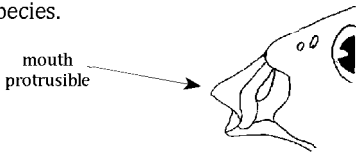
To 100 cm. Marine, oceanic-pelagic, drifting near the surface. Of no interest to fisheries. A single species recorded in Kenya waters, included in the Guide to Species.



GERREIDAE

Silverbiddies - Mojarras

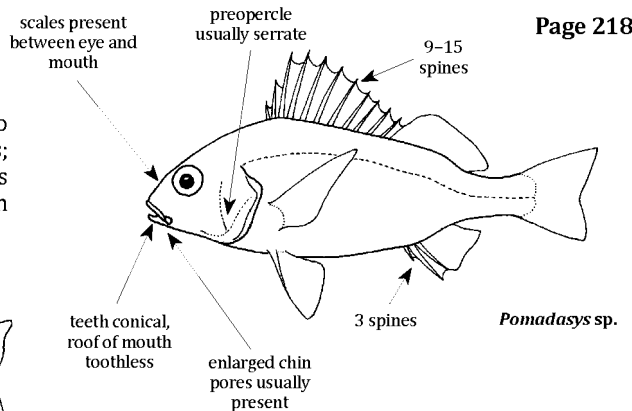
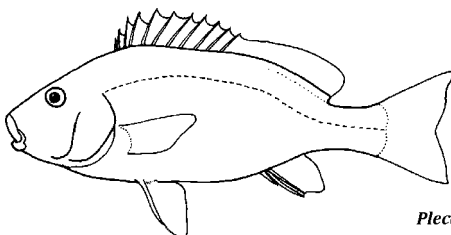
To 35 cm. Coastal marine waters to depths of about 60 m; also estuaries, coastal lagoons and freshwater; benthic. Of no interest to fisheries. Four species recorded in Kenya waters, included in the Guide to Species.



HAEMULIDAE

Grunts - Sweetlips - Rubberlips

To 90 cm. Mostly marine, from the coastline to a depth of about 200 m, and in brackish waters; benthic. Of interest to fisheries. Twenty-two species recorded in Kenya waters, 20 of which have been included in the Guide to Species.

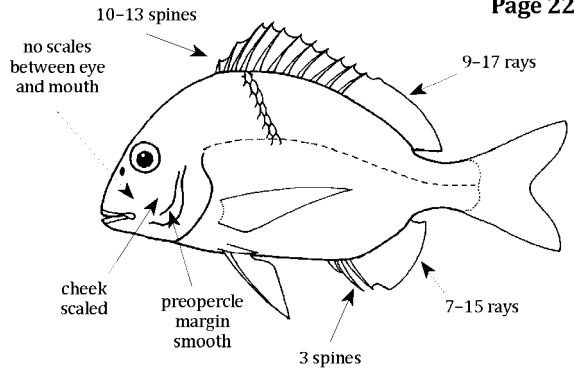
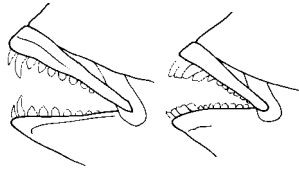


SPARIDAE

Porgies – Seabreams – Pinfishes

To 90 cm. Marine, coastal waters, to a depth of about 150 m; occasionally entering estuaries; benthic. Of major interest to fisheries. Fourteen species have been recorded in Kenya waters, 10 of which have been included in the Guide to Species.

teeth canine-like, conical or incisor-like, molars often present, roof of mouth toothless

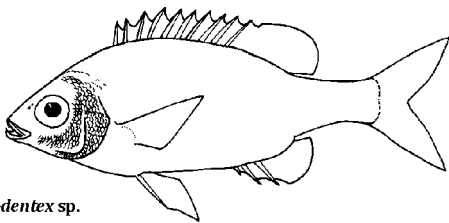
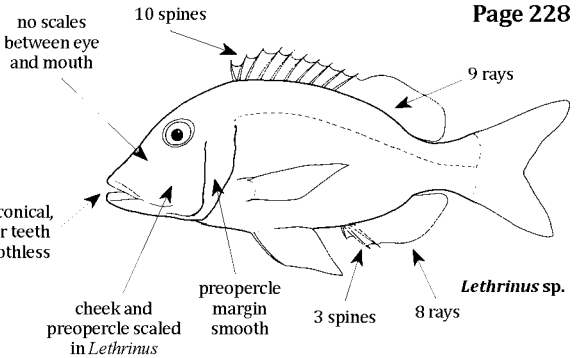


LETHRINIDAE

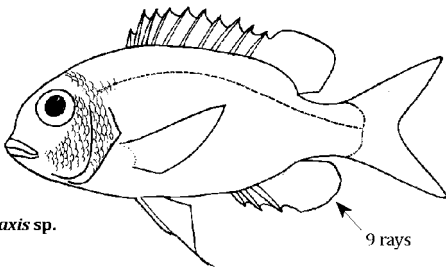
Emperors – Scavengers

To 100 cm. Coastal marine waters to depths of about 185 m; benthic. Of interest to fisheries. Sixteen species recorded in Kenya waters, included in the Guide to Species.

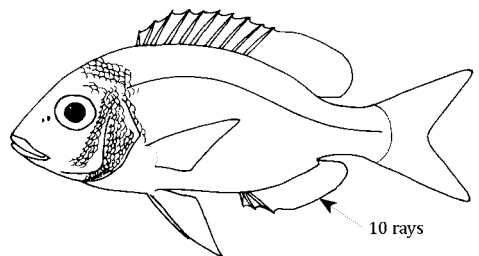
outer teeth canine-like or conical, molars often present, inner teeth villiform, roof of mouth toothless



Gnathodentex sp.



Monotaxis sp.

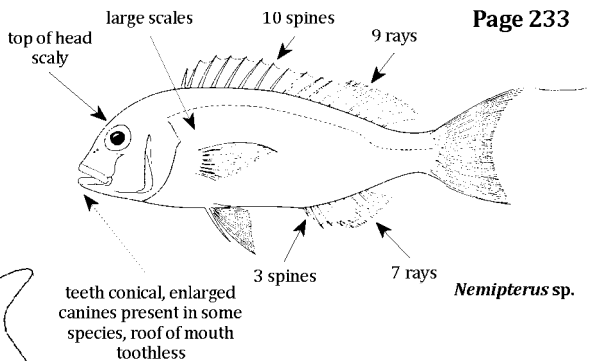


Gymnocranius sp.

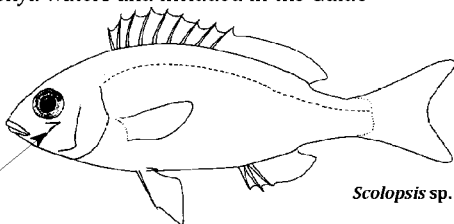
NEMIPTERIDAE

Threadfin breams – Monocle breams – Dwarf monocle breams

To 30 cm. Coastal marine waters to depths of about 400 m; benthic. Of interest to fisheries. Nine species recorded in Kenya waters and included in the Guide to Species.



suborbital spine present in some species

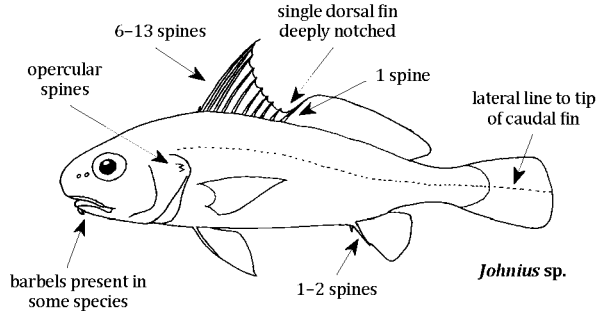
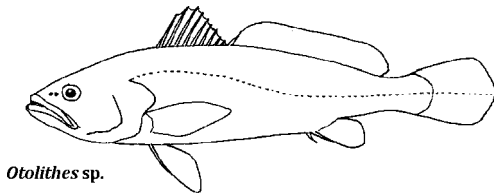


Scolopsis sp.

SCIAENIDAE

Croakers - Drums - Meagres - Weakfishes

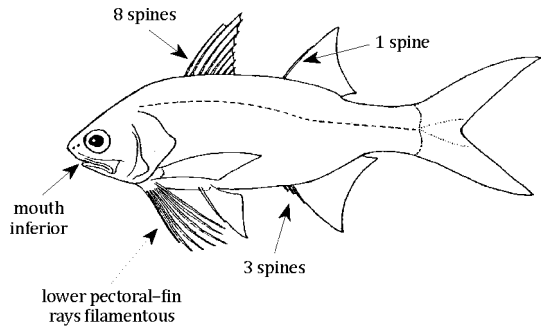
To 80 cm. Marine, from coastal waters to a depth of about 100 m; benthic. Of interest to fisheries. Five species recorded in Kenya waters, included in the Guide to Species.



POLYNEMIDAE

Threadfins

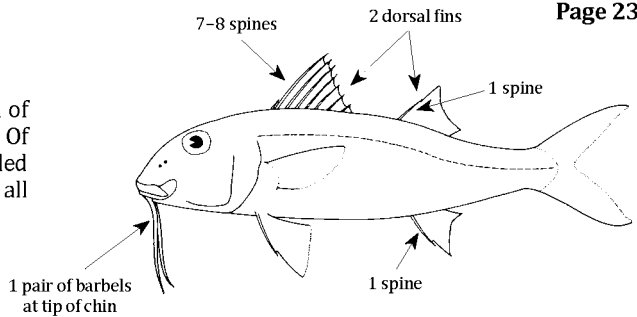
To 45 cm. Coastal marine waters, estuaries and coastal lagoons; fresh river mouths; benthic. Of little interest to fisheries. Two species recorded in Kenya waters.



MULLIDAE

Goatfishes - Red mullets

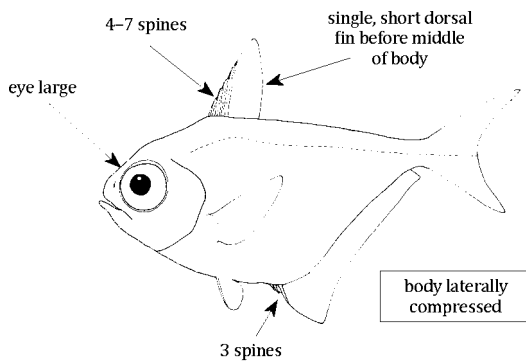
To 50 cm. Marine, from the coastline to a depth of about 100 m; occasionally in estuaries; benthic. Of interest to fisheries. Seventeen species recorded in Kenya waters, 1 in neighboring countries, all included in the Guide to Species.



PEMPHERIDAE

Sweepers

To about 17 cm. Coastal marine waters. Of no interest to fisheries. Perhaps several species in Kenya waters.



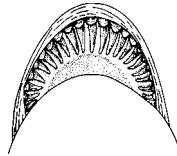
KYPHOSIDAE

Seachubs - Rudderfishes - Stonebreams

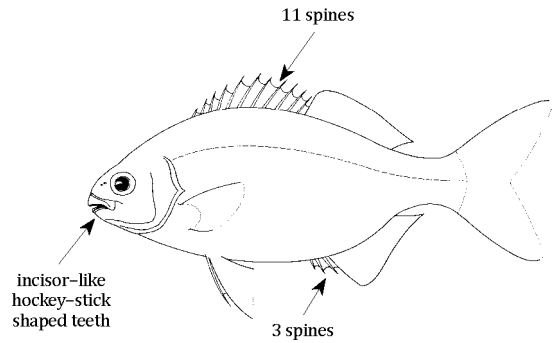
To 75 cm. Marine reef areas; benthic. Of interest to fisheries. Three species recorded in Kenya waters, included in the Guide to Species.



individual tooth
lateral view



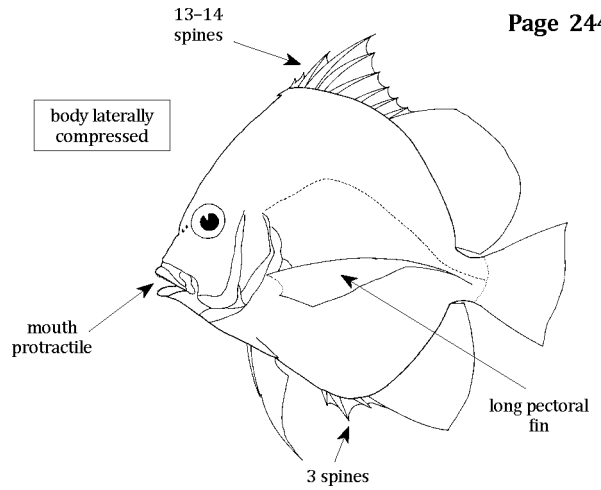
upper jaw viewed
from below



DREPANEIDAE

Sicklefishes

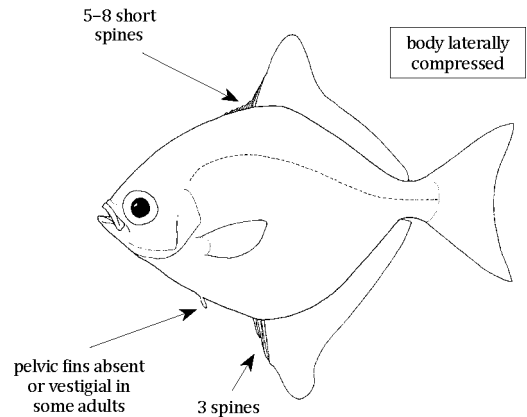
To 40 cm. Marine, mud banks, to a depth of 40 m; benthic. Of interest to fisheries. One species recorded in Kenya waters, included in the Guide to Species.



MONODACTYLIDAE

Moonies

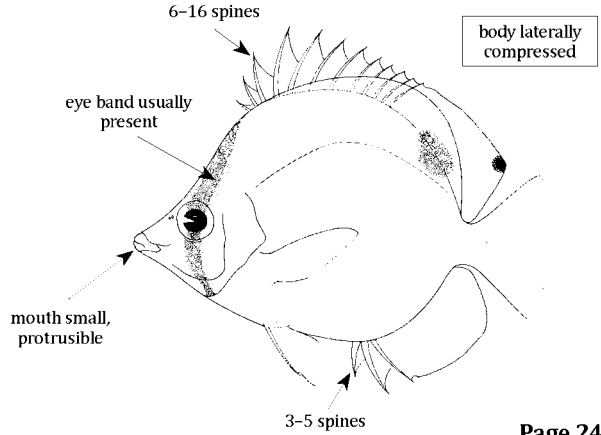
To 25 cm. Marine, coastal waters, estuaries and entering freshwater. Of little interest to fisheries. Two species recorded in Kenya waters, included in the Guide to Species.



CHAETODONTIDAE

Butterflyfishes

To about 20 cm. Marine, usually in shallow waters but occasionally to a depth of about 100 m; benthic. Of no interest to fisheries; some species of interest of the aquarium trade. Several species recorded in Kenya waters.

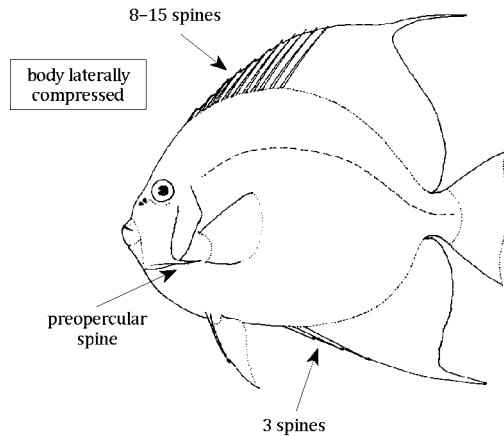


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POMACANTHIDAE

Angelfishes

To 50 cm. Marine, from the coastline to a depth of about 70 m; benthic. Of no interest to fisheries; some species of interest of the aquarium trade. Six species recorded in Kenya waters, one in neighboring countries, all included in the Guide to Species.

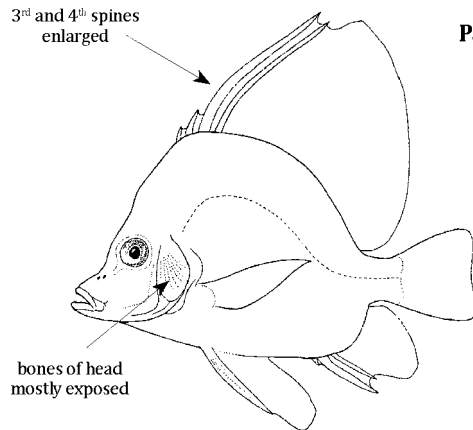


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PENTACEROTIDAE

Armorheads

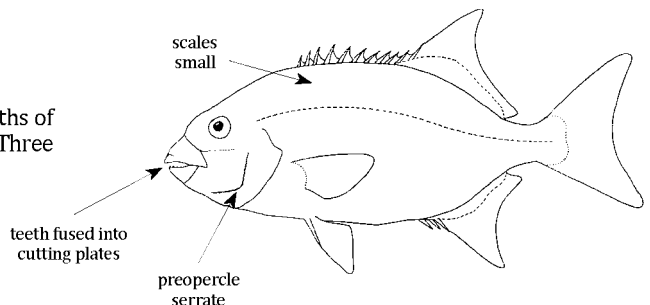
To 35 cm. Marine, on the continental shelf and slope at depths of about 400 m; benthic. Of no interest to fisheries. One species occurs in neighboring countries, and is included in the Guide to Species.



OPLEGNATHIDAE

Knifejaws

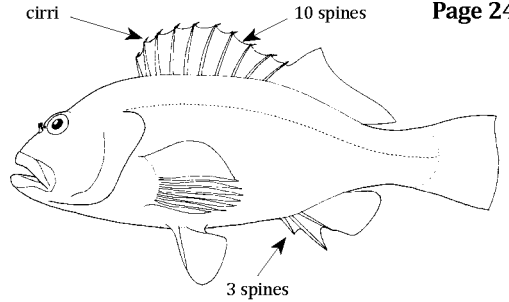
To 30 cm. Marine, from shallow waters to depths of 150 m; benthic. Of little interest to fisheries. Three species occur in the western Indian Ocean.



CIRRHITIDAE

Hawkfishes - Curleyfins

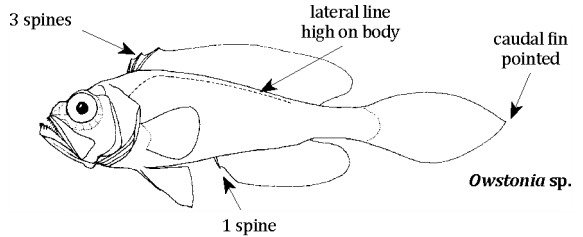
To 30 cm. Marine, from shallow waters to depths of 120 m; benthic. Smaller species of some interest to the aquarium trade. Of no interest to fisheries. Three species occur in Kenya waters and are included in the Guide to Species.



CEPOLIDAE

Bandfishes

To about 52 cm. Marine, from shallow waters to a depth of about 475 m; benthic. Of no interest to fisheries. One species recorded in Kenya waters: *Owstonia weberi* (Gilchrist, 1922).

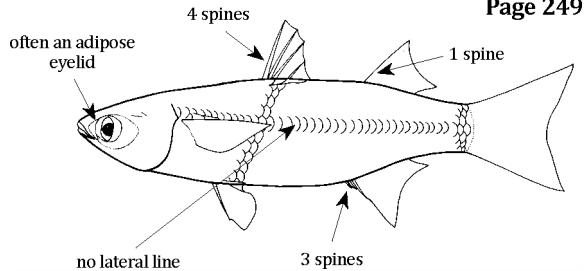


Order PERCIFORMES: MUGILOIDEI - Mulletts
Body elongate; head flattened; mouth small; pectoral fins high on body; 2 dorsal fins; sides silvery; no lateral line.

MUGILIDAE

Mulletts

To 90 cm. Coastal marine, estuaries and freshwater, at shallow depths (less than 20 m); mostly benthic in food habits, but usually swim near the surface. Of interest to fisheries. Nine species recorded in Kenya waters and included in the Guide to Species.

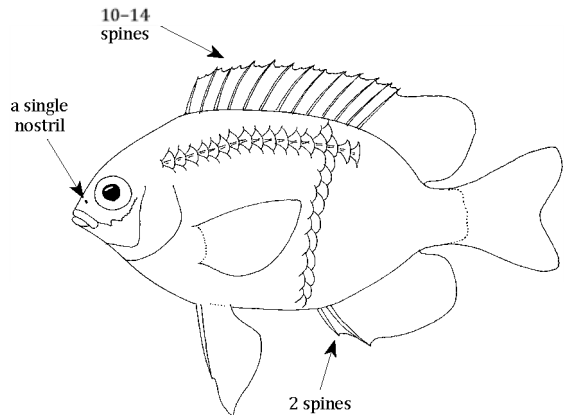


Order PERCIFORMES: LABROIDEI - Wrasses and allies
Well developed teeth, coalesced into plates in the Scaridae; scales usually large and cycloid (smooth); body compressed; usually colourful species.

POMACENTRIDAE

Damsel-fishes

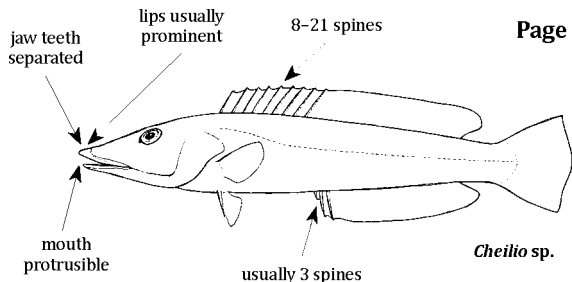
To about 25 cm, but most species smaller than 5 cm. Coastal marine waters and estuaries; mostly benthic. Of no interest to fisheries, some species of interest of the aquarium trade. Several species recorded in Kenya waters.



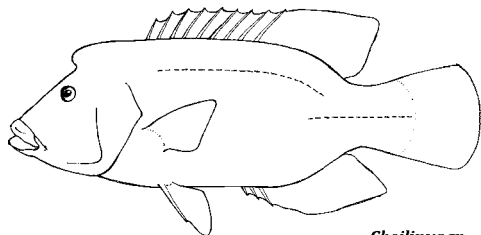
LABRIDAE

Wrasses - Hogfishes - Coris - Tuskfishes

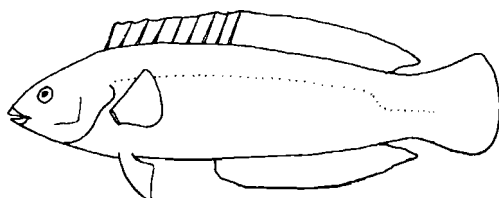
To about 200 cm, but most species smaller than 25 cm. Coastal marine waters to a depth of about 160 m; benthic. Of interest to fisheries. A large and diverse group; 58 species have been included in the Guide to Species.



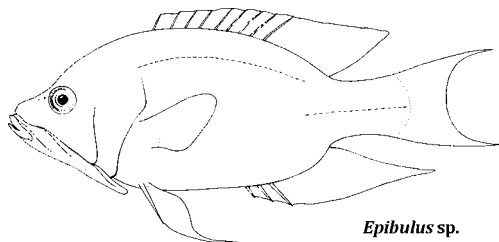
Cheilio sp.



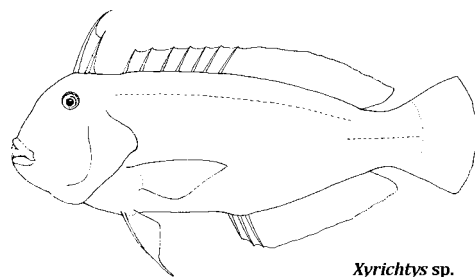
Cheilinus sp.



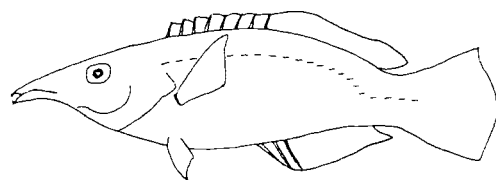
Coris sp.



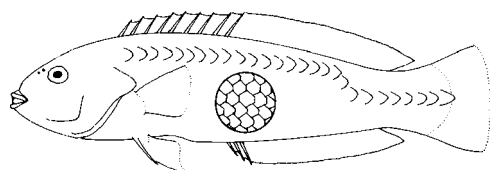
Epibulus sp.



Xyrichtys sp.



Gomphosus sp.

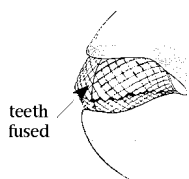


Halichoeres sp.

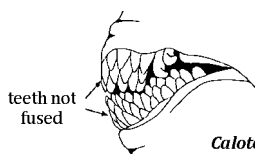
SCARIDAE

Parrotfishes

To 120 cm. Marine, in shallow waters rarely below 60 m; benthic. Of major interest to fisheries; 21 species have been included in the Guide to Species.

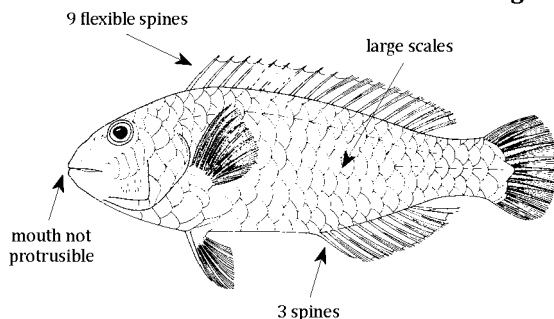


teeth fused



teeth not fused

Calotomus sp.



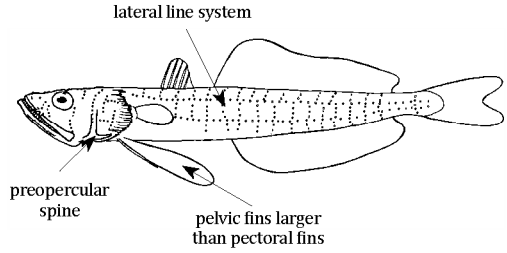
Order PERCIFORMES: TRACHINOIDEI - Weeverfishes and allies

A diverse assemblage of families difficult to characterize as a group.

CHAMPSODONTIDAE

Crocodile toothfishes

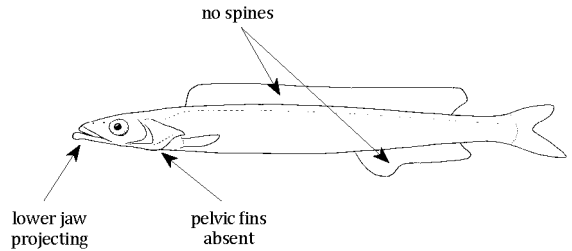
To about 20 cm. Marine, from surface at night to a depth of 500 m, mesopelagic. Of no interest to fisheries. One species recorded in Kenya waters: *Champsodon capensis* Regan, 1908.



AMMODYTIDAE

Sand lances

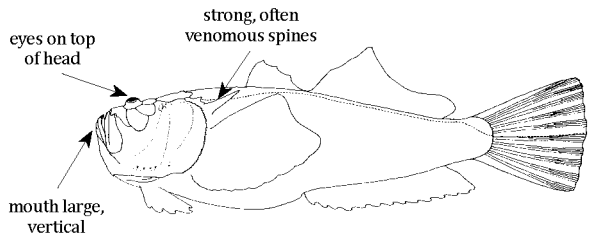
To about 30 cm. Marine, from coastline to a depth of about 50 m; benthic or pelagic. Of no interest to fisheries, used as bait. Possibly one species: *Ammodytoides xanthops* Randall & Heemstra, 2008.



URANOSCOPIDAE

Stargazers

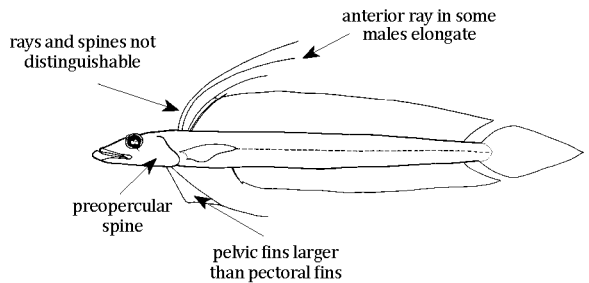
To about 60 cm. Marine and estuarine; benthic to a depth of 500 m, mesopelagic. Of no interest to fisheries. Several species occur in Kenya waters.



TRICHONOTIDAE

Sanddivers

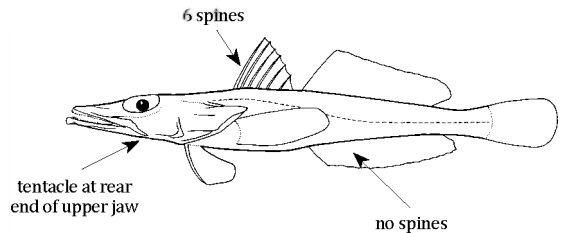
To about 18 cm. Marine, coastal waters; benthic. Of no interest to fisheries. No species recorded in Kenya waters.



PERCOPHIDAE

Duckbills

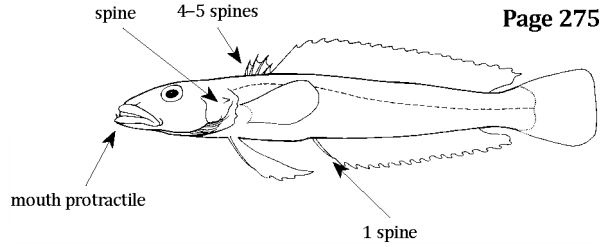
To about 25 cm. Marine, from depths of about 250 m; benthic. Of no interest to fisheries. Possibly one species in Kenya waters: *Pteropsaron natalensis* (Nelson, 1982).



PINGUIPEDIDAE

Grubfishes

To about 30 cm. Marine, coastal waters; benthic. Of little interest to fisheries. One species recorded in Kenya waters, one species in neighboring countries, both included in the Guide to Species.



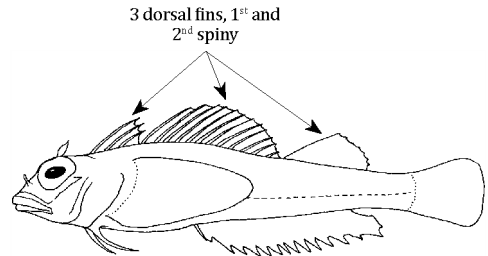
Order PERCIFORMES: BLENNIOIDEI – Blennies and allies

Dorsal fin long; pelvic fins reduced, with 1 hidden spine and 2 to 4 soft rays, located ahead of pectoral fins; tentacles often present on head; 2 anal-fin spines (one of them often difficult to see).

TRIPTERYGIIDAE

Triplefins

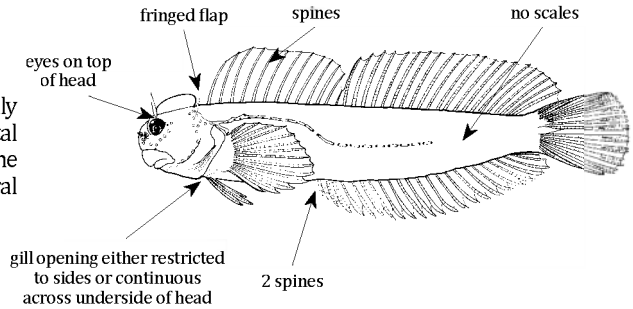
To about 6 cm. Marine, in shallow coastal waters; benthic. Of no interest to fisheries. Several species occur in the western Indian Ocean; three species recorded in Kenya waters: *Enneapterygius elegans* (Peters, 1876); *Enneapterygius fasciatus* (Weber, 1909); *Helcogramma fuscopinna* Holleman, 1982.



BLENNIIDAE

Blennies

To about 20 cm. Marine, in coastal waters, usually at depths less than 20 m; also estuaries and coastal lagoons; benthic. Of no interest to fisheries; some species of interest to the aquarium trade. Several species recorded in Kenya waters.



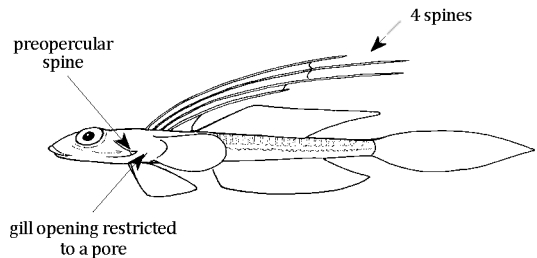
Order PERCIFORMES: CALLIONYMOIDEI – Dragonets

A sharp preopercular spine; a small gill opening on upper part of head; size usually less than 25 cm.

CALLIONYMIDAE

Dragonets

To about 25 cm. Marine, mainly from coastal reefs; benthic. Of no interest to fisheries; some species of interest to the aquarium trade. Two species recorded in Kenya waters, one of which included in the Guide to Species.



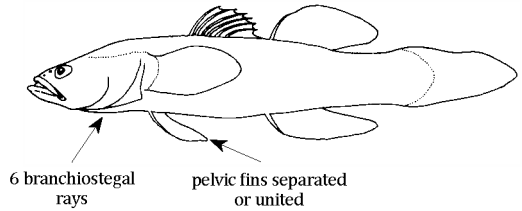
Order PERCIFORMES: GOBIOIDEI - Gobies and allies

Usually small fishes with pelvic fins either very close together or united into a single cup-like structure.

ELEOTRIDAE

Sleepers

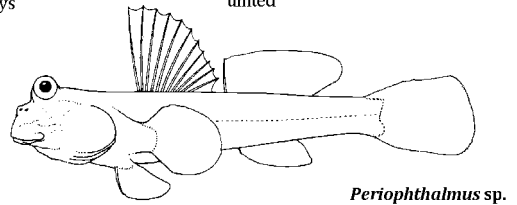
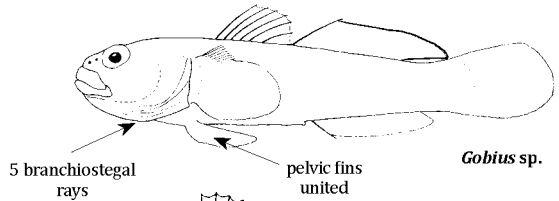
To about 30 cm. Adults generally in freshwater, but entering brackish and coastal marine waters; benthic. Of no interest to fisheries. Three species recorded in Kenya waters: *Butis butis* (Hamilton, 1822); *Eleotris fusca* (Forster, 1801); *Ophiocara porocephala* (Valenciennes, 1837).



GOBIIDAE

Gobies

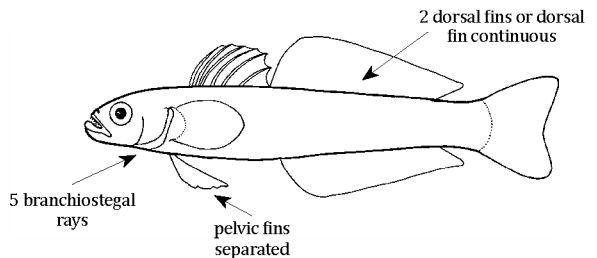
To about 30 cm, but most species below 10 cm. Marine and brackish waters and some in freshwaters; usually in shallow waters, but a few species to a depth of below 150 m; benthic. The largest family of fishes. Of no interest to fisheries. Several species recorded in Kenya waters.



MICRODESMIDAE

Wormfishes - Dartfishes

To 28 cm. Marine, in shallow coastal waters; benthic. Of no interest to fisheries. One species recorded in Kenya waters: *Ptereleotris evides* (Jordan & Hubbs, 1925).



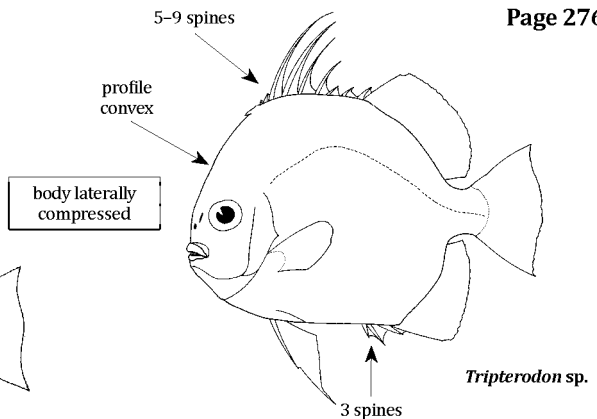
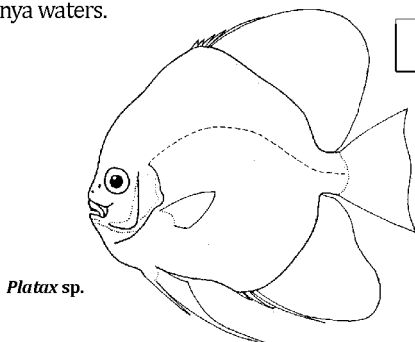
Order PERCIFORMES: ACANTHUROIDEI - Surgeonfishes and allies

Small scales; some species have strong, moveable, forward-projecting spine(s) mid-laterally on caudal peduncle.

EPHIPPIDAE

Spadefishes - Batfishes

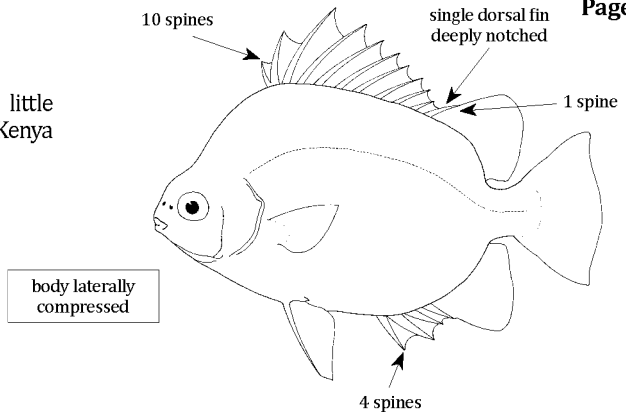
To 75 cm. Marine, shallow waters on mud banks; benthic. Of little interest to fisheries. Four species recorded in Kenya waters.



SCATOPHAGIDAE

Scats

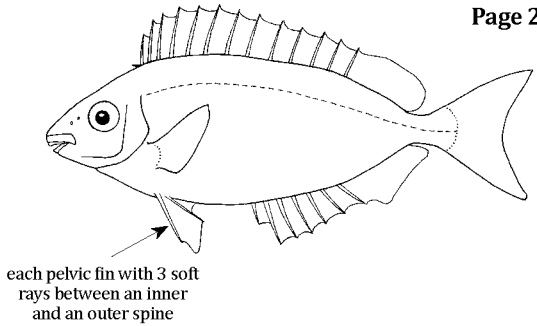
To about 30 cm. Marine and estuarine. Of little interest to fisheries. One species recorded in Kenya waters, and included in the Guide to Species.



SIGANIDAE

Rabbitfishes

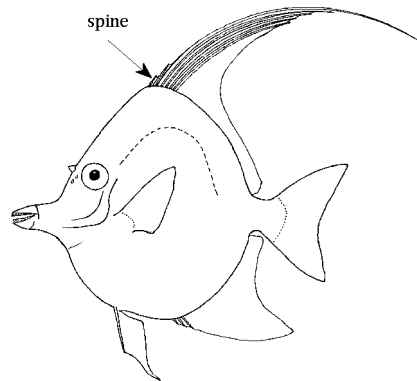
To 45 cm. Marine, coastal waters around reefs. Of major interest to fisheries. Six species recorded in Kenya waters and included in the Guide to Species.



ZANCLIDAE

Moorish idol

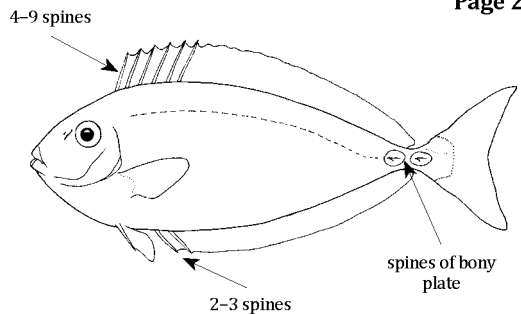
To about 20 cm. Marine, coral reefs waters; benthic. Of no interest to fisheries. One species recorded in Kenya waters: *Zanclus cornutus* (Linnaeus, 1758).



ACANTHURIDAE

Surgeonfishes - Tangs - Unicornfishes

To about 70 cm. Marine, in shallow waters associated with reefs, usually at a depth of less than 50 m; benthic. Of interest to fisheries. Twenty-one species recorded in Kenya waters, four in neighboring countries, all included in the Guide to Species.



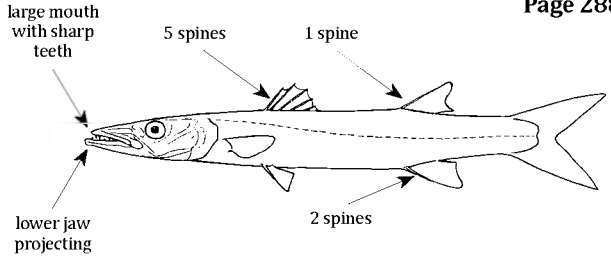
Order PERCIFORMES: SPHYRAENOIDEI - Barracudas

Body elongate, generally silvery on sides; head and snout both very long; teeth strong; two dorsal fins.

SPHYRAENIDAE

Barracudas

To 180 cm. Marine, from coastal waters to a depth of about 100 m; pelagic neritic. Of interest to fisheries. Six species recorded in Kenya waters, one in neighboring countries, all included in the Guide to Species.



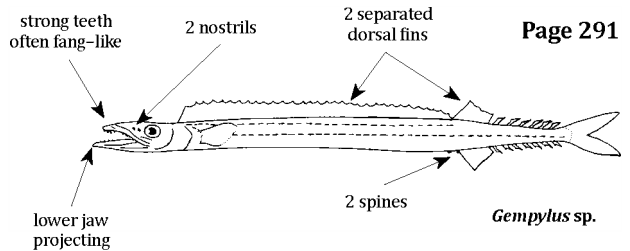
Order PERCIFORMES: SCOMBROIDEI - Tunas and allies

Finlets usually present at posterior ends of dorsal and anal fins; 1 to 3 keels on either side of caudal peduncle (except in most species of Gempylidae).

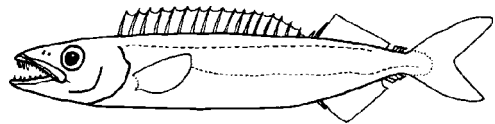
GEMPYLIDAE

Snake mackerels - Barracoutas - Escolars - Oilfishes

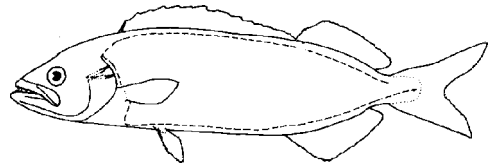
To about 200 cm. Marine, from the surface (at night) to depths below 600 m; pelagic. Of interest to fisheries. Six species recorded in Kenya waters, 1 in neighboring countries, all included in the Guide to Species.



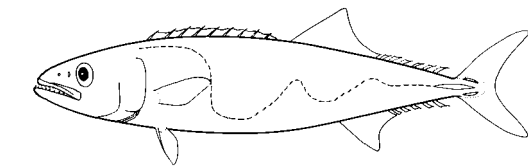
Gempylus sp.



Rexea sp.



Neopinnula sp.

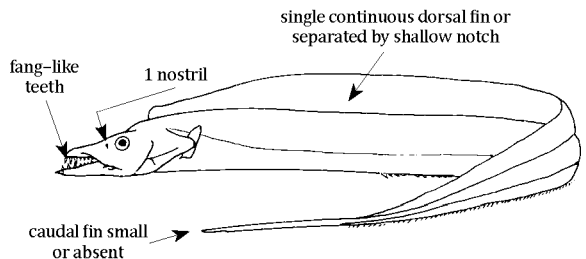


Lepidocybium sp.

TRICHIURIDAE

Cutlassfishes - Hairtailfishes - Frostfishes - Scabbardfishes

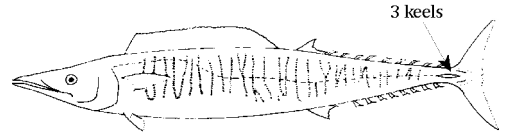
To 120 cm. Marine, from the surface (mainly at night) to depths below 1000 m; benthic and pelagic. Of interest to fisheries. One species recorded in Kenya waters.



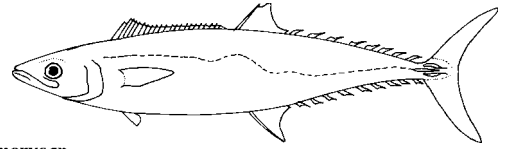
SCOMBRIDAE

Albacores – Bonitos – Kawakawas – Mackerels – Seerfishes – Tunas – Wahoos

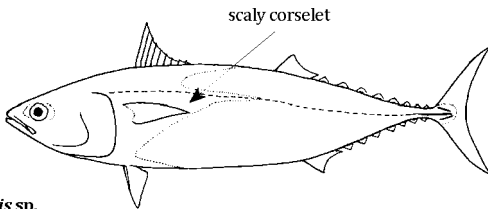
To 250 cm. Marine, from surface waters to depths below 200 m; pelagic. Of major interest to fisheries. Twelve species recorded in Kenya waters, two in neighboring countries, all included in the Guide to Species.



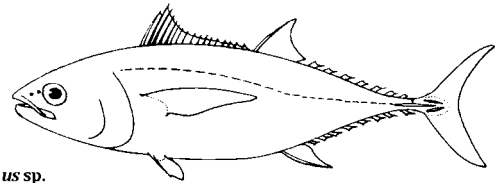
Acanthocybium sp.



Scomberomorus sp.



Auxis sp.



Thunnus sp.

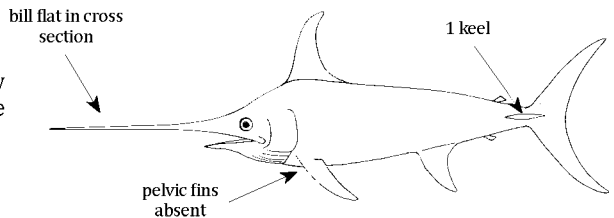
Order PERCIFORMES: XIPHIOIDEI – Billfishes

Characterized by the prolongation of the upper jaw, much beyond the lower jaw into a long rostrum which is flat and swordlike (swordfish) or rounded and spearlike (sailfishes, spearfishes and marlins).

XIPHIIDAE

Swordfishes

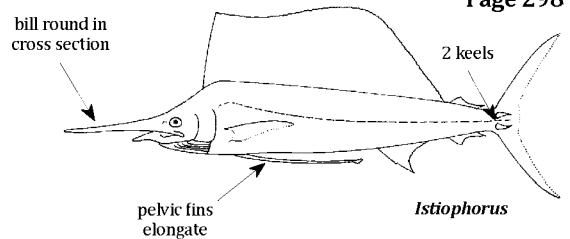
To 445 cm. Marine, from the surface to depths below 800 m; pelagic. Of major interest to fisheries. A single species worldwide, included in the Guide to Species.



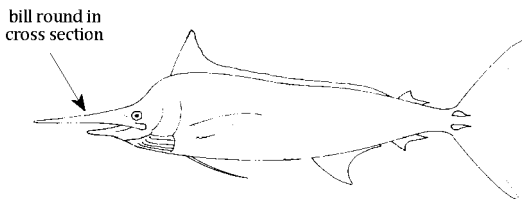
ISTIOPHORIDAE

Marlins – Sailfishes – Spearfishes

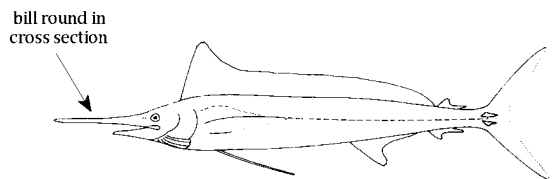
To 460 cm. Marine, pelagic oceanic, usually above the thermocline. Of major interest to fisheries. Five species recorded in Kenya waters, included in the Guide to Species.



Istiophorus



Makaira



Tetrapturus

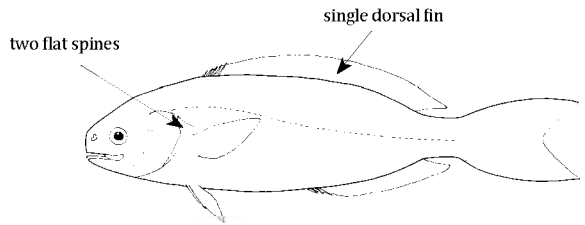
Order PERCIFORMES: STROMATEOIDEI - Harvestfishes and allies

Shape variable; snout blunt and thick; toothed saccular outgrowths (pharyngeal sacs) present in the gullet immediately behind the last gill arch; teeth small, approximately uniserial.

CENTROLOPHIDAE

Ruffs

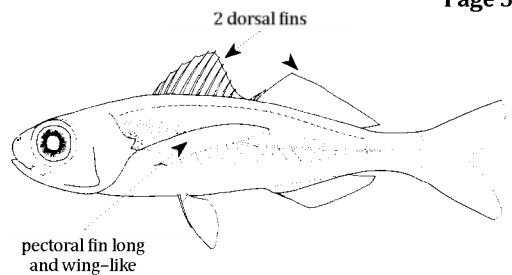
To 20 cm. Marine, between depths of 250 m and 300 m; mesopelagic to demersal. Of little interest to fisheries. One species recorded in Kenya waters.



NOMEIDAE

Man-of-war fishes

To 18 cm. Marine, deeper waters of the continental slope; epi- and mesopelagic. Of little interest to fisheries. One species recorded in Kenya waters, one in neighboring countries, both included in the Guide to Species.

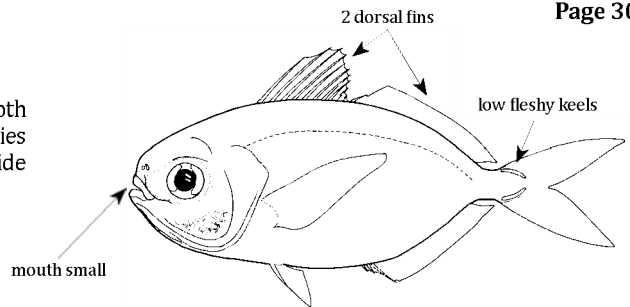


Page 300

ARIOMMATIDAE

Ariommas - Driftfishes

To 250 cm. Marine, continental waters, to a depth of 300 m. Of little interest to fisheries. One species recorded in Kenya waters, and included in the Guide to Species.



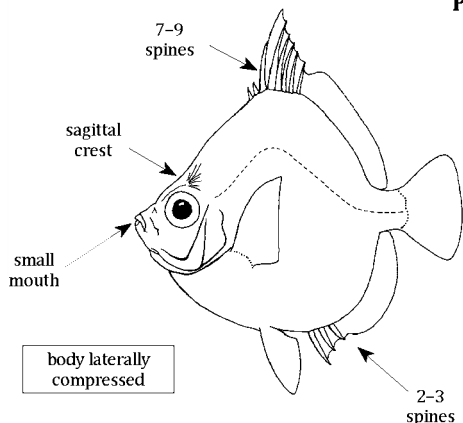
Page 300

Order PERCIFORMES: CAPROIDEI - Boarfishes

CAPROIDAE

Boarfishes

To 22 cm. Marine, from depths of 65 m to 600 m. Of no interest to fisheries. One species recorded in Kenya waters.



Page 301

Order PLEURONECTIFORMES - Flatfishes

Flattened body shape; eyes present on one side of body only.

PSETTODIDAE

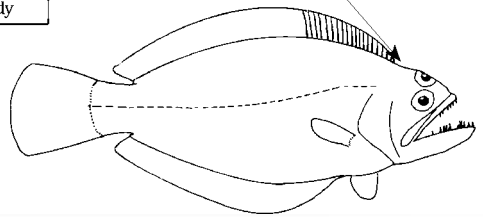
Spiny turbot

To 60 cm. Marine, coastal waters to depths of 100 m. Of interest to fisheries. One species recorded in Kenya waters and included in the Guide to Species.

eyes on left or right side of body

dorsal-fin origin posterior to position of eye

Page 301



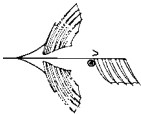
PARALICHTHYIDAE

Short pelvic flounders

To about 35 cm. Marine, coastal waters to depths of 200 m. Of little interest to fisheries. Two species recorded in Kenya waters, and included in the Guide to Species.

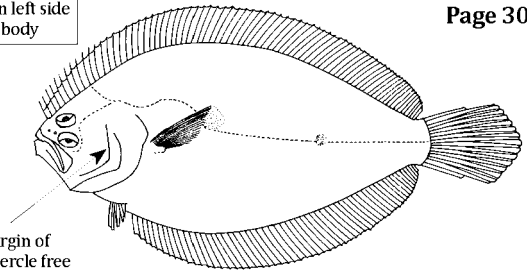
eyes on left side of body

Page 301



pelvic-fin bases nearly symmetrical

margin of preopercle free



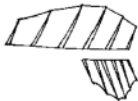
BOTHIDAE

Lefteye flounders

To about 40 cm. Marine, from the coastline to a depth of about 600 m; benthic. Of little interest to fisheries. Eight species recorded in Kenya waters, six of which are included in the Guide to Species.

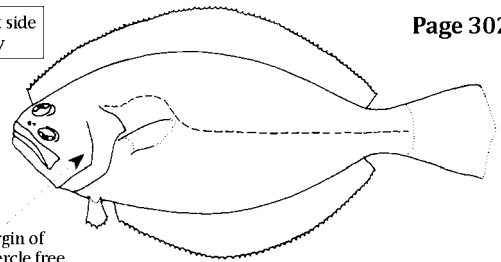
eyes on left side of body

Page 302



pelvic-fin base on eyed side longer

margin of preopercle free



PLEURONECTIDAE

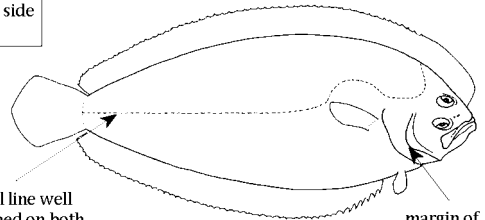
Righteye flounders

To 17 cm. Marine, continental waters, to a depth of 300 m. Of little interest to fisheries. One species recorded in Kenya waters.

eyes on right side of body

lateral line well developed on both sides of body

margin of preopercle free



SAMARIDAE

Crested flounders

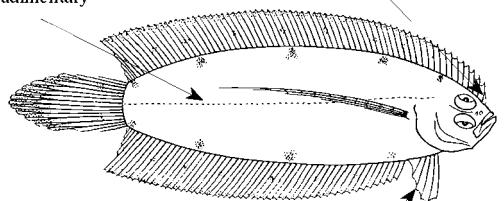
To 22 cm. Marine, primarily in deep waters; benthic. Of no interest to fisheries. One species recorded in Kenya waters; one in neighboring countries.

lateral line well developed or rudimentary

dorsal-fin origin in front of eyes

Page 304

pelvic fins symmetrical

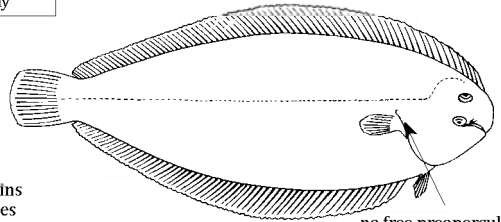


SOLEIDAE

Soles

To 32 cm. Marine, shallow coastal waters; some species in estuaries; benthic. Of interest to fisheries. Two species recorded in Kenya waters, one in neighboring countries, all included in the Guide to Species.

eyes on right side of body



pectoral fins sometimes absent

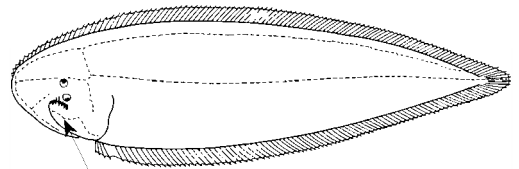
no free preopercular margin

CYNOGLOSSIDAE

Tonguesoles

To 46 cm. Marine, from shallow coastal waters to depths of about 200 m. Of little interest to fisheries. Six species recorded in Kenya waters, five of which are included in the Guide to Species.

eyes on left side of body



no free preopercular margin

pectoral fins absent

Order TETRAODONTIFORMES – Pufferfishes and allies

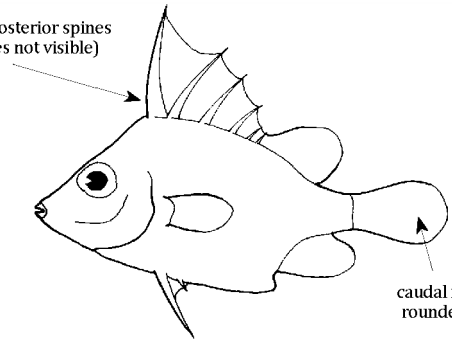
Pelvic fins absent or strongly reduced; a small mouth with strong teeth, frequently coalesced into a biting plate; a small gill opening; skin thick or rough, sometimes with prickles, spines or scaly plates.

TRIACANTHODIDAE

Spikefishes

To 25 cm. Marine, between depths of 30 m and 300 m; benthic. Of no interest to fisheries. Two species recorded in Kenya waters: *Bathyphylax bombifrons* Myers, 1934; *Macrorhamphosodes uradoi* (Kamohara, 1933).

6 spines (posterior spines sometimes not visible)



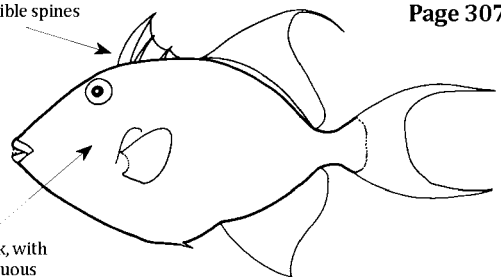
caudal fin rounded

BALISTIDAE

Triggerfishes and Durgons

To about 70 cm. Marine, from the coastline to a depth of about 100 m; mostly benthic, a few benthopelagic. Of interest to fisheries. Fourteen species recorded in Kenya waters; three in neighboring countries, all included in the Guide to Species.

3 visible spines

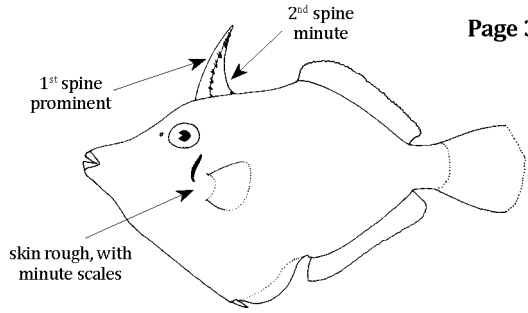


skin thick, with conspicuous plate-like scales

MONACANTHIDAE

Filefishes - Leatherjackets

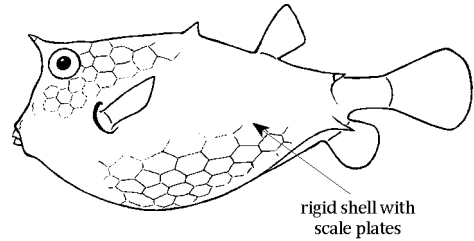
To 100 cm, but most smaller than 10 cm. Marine, from the coastline to a depth of about 100 m; mostly benthic. Of no interest to fisheries. Seven species recorded in Kenya waters, four of which included in the Guide of Species; four species in neighboring countries.



OSTRACIDAE

Boxfishes - Cowfishes

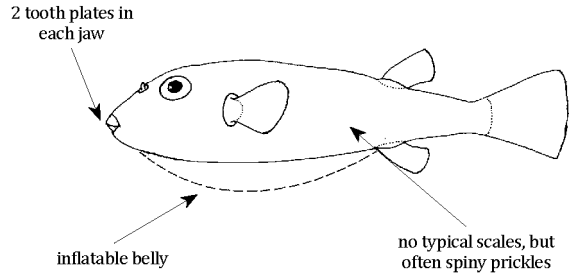
To 50 cm. Marine, from the coast to a depth of about 100 m; benthic. Of no interest to fisheries, but of interest of the aquarium trade. Five species recorded in Kenya waters.



TETRAODONTIDAE

Puffers

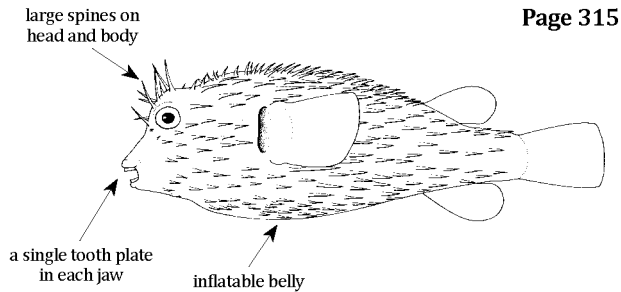
To about 100 cm. Coastal marine waters, estuaries, brackish lagoons, and occasionally freshwater; from the coastline to a depth of about 180 m; benthic. Poisonous and not eaten. Several species recorded in Kenya waters.



DIODONTIDAE

Porcupinefishes

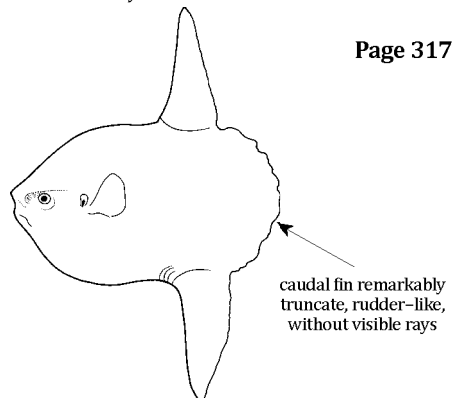
To 60 cm. Marine, from the coastline to a depth of about 100 m; mostly benthic. Of no interest to fisheries. Three species recorded in Kenya waters, three in neighboring countries, all included in the Guide to Species.



MOLIDAE

Molas - Ocean sunfishes - Headfishes

To 300 cm or more. Marine, from the surface to a depth of about 360 m; pelagic oceanic. Of little interest to fisheries. Three species worldwide.



ELOPIDAE

Ladyfishes – Tenpounders

***Elops machnata* (Forsskål, 1775)**

FAO names: Tenpounder (En)

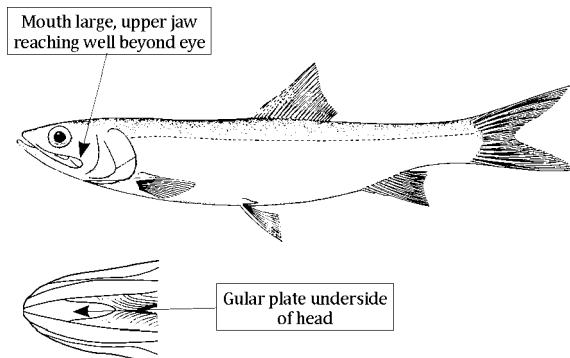
Local name(s): N: Ipawa; S: Makamekuzia (M), Kopani (K).

Habitat: Pelagic in coastal waters entering lagoons and estuaries.

Fisheries: Trolling lines, Gillnets, Handlines, Bottom trawls.

Distinctive Characters: Teeth on jaws villiform; no spines in fins; single dorsal fin with 20–27 rays, its origin a little behind mid-point of body; anal fin short, with 14–17 rays, its origin well behind dorsal-fin base; pelvic fin little, in front of dorsal-fin origin.

Colour: Back blue–grey, sides silvery with a yellow tinge; fins faint yellow.



Size: To 100 cm, common 50 cm

MEGALOPIDAE

Tarpons

***Megalops cyprinoides* (Broussonet, 1782)** (Plate I, 1)FAO names: Indo–Pacific tarpon (En)
Tarpon Indo–Pacifique (Fr)

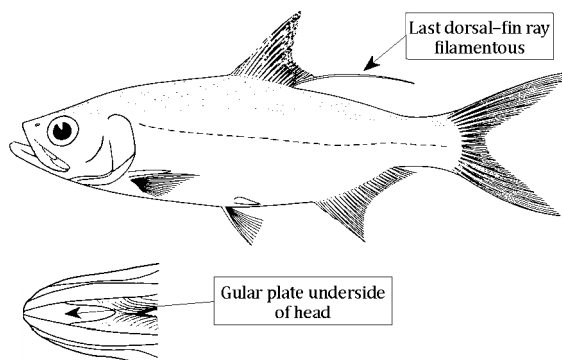
Local name(s): N: Ipawa; S: Makamekuzia (M), Kopani (K).

Habitat: Pelagic in coastal waters entering lagoons and estuaries.

Fisheries: Trolling lines, Seines, Gillnets, Handlines, Bottom trawls.

Distinctive Characters: Lower jaw projecting; fins lacking spines; dorsal-fin origin at about midpoint of body; anal-fin origin a little behind end of dorsal-fin base; 26–27 branchiostegal rays; large scales, 30–40 on lateral line.

Colour: Back blue–green, flanks silvery.



Size: To 100 cm, common 30 cm

ALBULIDAE

Bonfishes

***Albula vulpes* (Linnaeus, 1758)**FAO names: Bonfish (En)
Banane de mer (Fr)

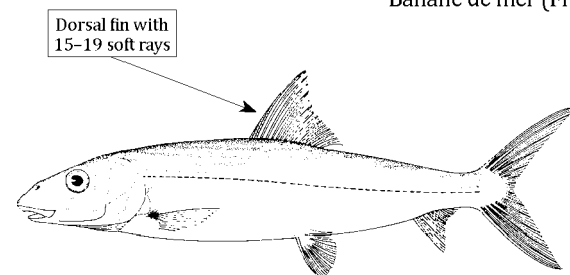
Local name(s): N: Nyimbwi; S: Nyimbi (M), Mkizi mume (K).

Habitat: Inshore, shallow waters on sandy and muddy bottoms.

Fisheries: Gillnets, Hooks and Line, Cast nets.

Distinctive Characters: Upper jaw short, 3.05–3.25 in head length; lower jaw angular, with a pointed symphysis; a single long scale on each side of membrane between each ray of dorsal and anal fins; 63–69 scales in lateral line.

Colour: Sides bright silvery; back blue–green to olive; belly pale whitish.



Size: To 104 cm, common 35 cm

MURAENIDAE**Morays*****Echidna nebulosa* (Ahl, 1789)**

Local name(s): N: Mkunga; S: Mkunga (M), Mkunga samaki (K).

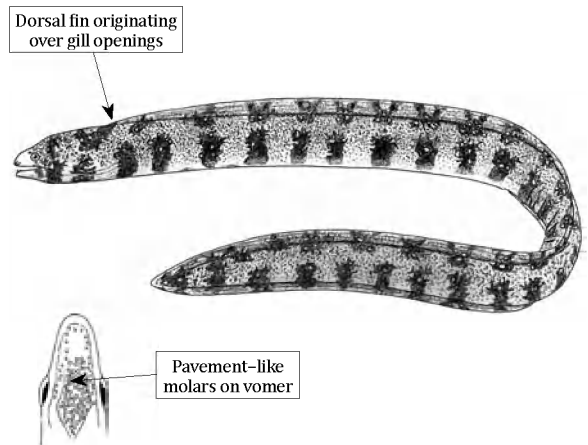
Habitat: Shallow reef areas from 2 m to 48 m.

Fisheries: Lines, Traps, Gillnets, Seines.

Distinctive Characters: Pectoral and pelvic fins absent; teeth conical and granular in 2 rows on jaws, but all teeth more conical in young; no obvious lateral line, reduced to two pores above and before gill opening which is a difficult mid lateral hole or slit.

Colour: Variable, but typically yellowish with 2 or 3 longitudinal series of darker, star-shaped blotches along the body, each with a yellow centre; the spots variably combined to form vertical bands; smaller spots and mottling between the starry blotches.

FAO names: Snowflake moray(En)



Size: To 100 cm, common 50 cm

***Echidna polyzona* (Richardson, 1845)**

Local name(s): N: Mkunga wimbi; S: Mkunga wimbi (M), Mkunga nyono (K).

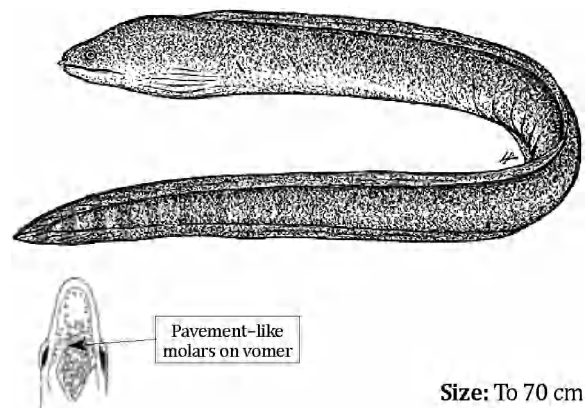
Habitat: Benthic in shallow waters among rocks and coral heads.

Fisheries: Lines, Traps, Gillnets, Seines.

Distinctive Characters: No canines; 5 irregular rows of conical teeth at front of upper jaw; lower jaw with 2-4 rows of teeth, anterior ones conical, posterior molariform; all teeth much smaller than vomerine teeth.

Colour: Body with 25-30 contrasting dark and pale bars, conspicuous in young, becoming mottled dark and indistinct with age, remaining most distinct near end of tail.

FAO names: Barred moray (En)



Size: To 70 cm

***Gymnomuraena zebra* (Shaw, 1797)**

Local name(s): N: Mkunga ndovu; S: Mkunga ndovu (M), Mkunga nyoka (K).

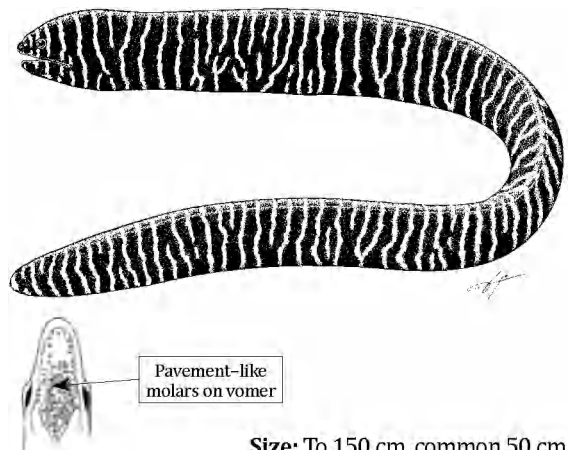
Habitat: Benthic in shallow creeks from 10 m to 50 m.

Fisheries: Lines, Traps, Gillnets, Seines.

Distinctive Characters: Anus well behind midpoint of body; pectoral and pelvic fins absent; no obvious lateral line, reduced to 2 pores above and before gill opening; teeth molariform in 2-3 rows on jaws, 5-6 on palate.

Colour: Body velvety, blackish-brown, with 25 (young individuals) to 100 (adults) narrow white to yellowish bars.

FAO names: Zebra moray (En)



Size: To 150 cm, common 50 cm

Gymnothorax favagineus Bloch & Schneider, 1801

FAO names: Laced moray (En)

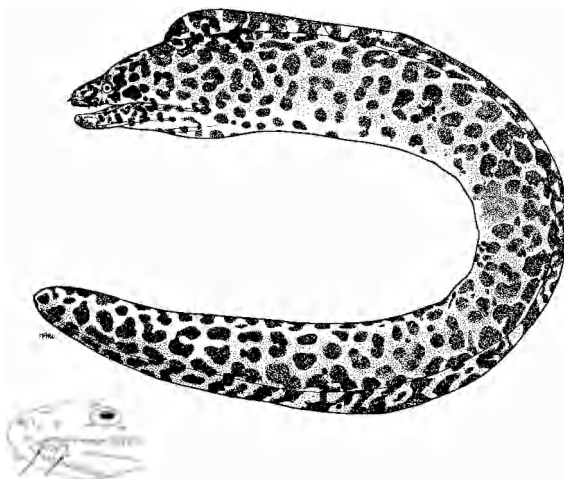
Local name(s): N: Mkunga chui; S: Mkunga chui (M/K).

Habitat: Benthic in shallow waters on coral and rocky reefs from 5 m to 40 m.

Fisheries: Hooks and Line, Spears, Traps.

Distinctive Characters: Dorsal-fin origin on head; front of jaws usually with 4 large canines on each side, the more posterior much smaller.

Colour: Basically white with black blotches and interspaces forming a honeycomb pattern; some individuals have a near black overall appearance; blotches variable between individuals and size, often in relation to habitat: those in clear coral reefs usually have proportionally less black than those found in turbid waters.



Intermaxillary teeth in 1 row

Size: To 300 cm

Gymnothorax flavimarginatus (Rüppell, 1830)

(Plate 1, 2)

FAO names: Yellow-edged moray (En)

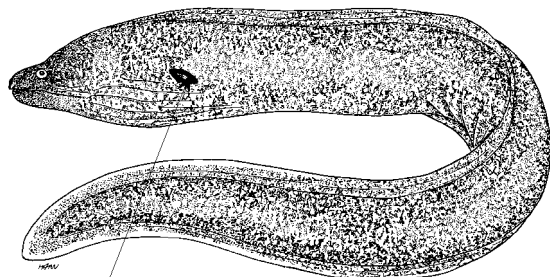
Local name(s): N: Mkungu; S: Mkunga (M/K).

Habitat: Coral and rock reefs, from 3 m to 150 m.

Fisheries: Hooks and Line, Spears, Traps.

Distinctive Characters: One row of 1–3 canines at the front center of upper jaw; sides of top jaw with 2 rows of teeth, the outer one larger at front of upper jaw.

Colour: Reddish eyes; body yellowish, densely mottled with dark brown; front of head purplish-grey; posterior margins of fins yellow-green.



Gill opening in a black blotch

Size: To at least 125 cm

Gymnothorax griseus (Lacepède, 1803)

FAO names: Geometric moray (En)

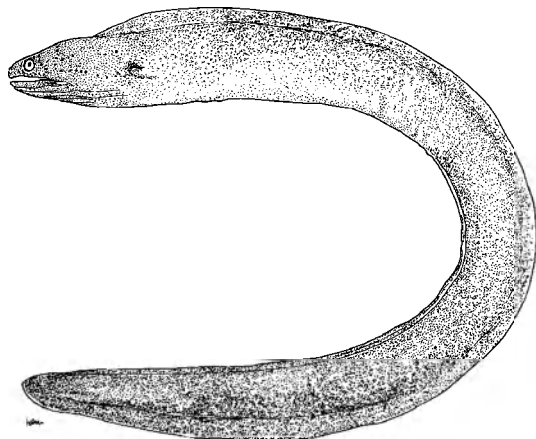
Local name(s): N: Mkunga; S: Mkunga (M/K).

Habitat: Benthic in shallow waters, on coral and rocky reefs. Maximum depth 40 m.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: Teeth on roof of mouth sharp, fang-like in 2 rows.

Colour: Body whitish, densely mottled with light brown spots; black pores on head forming lines.



Size: To 65 cm

***Gymnothorax javanicus* (Bleeker, 1859)** (Plate I, 3)

FAO names: Giant moray (En)

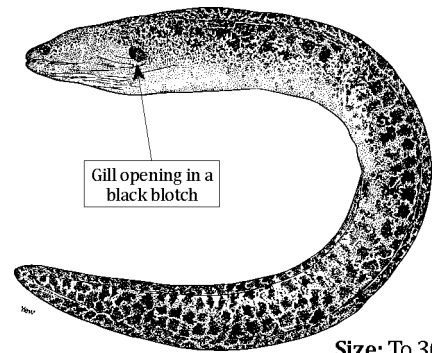
Local name(s): N: Mkunga chui–mweupe; S: Mkunga chui–mweupe (M/K).

Habitat: Coral and rocky reefs from 10 m to 50 m.

Fisheries: Hooks and Line, Spears, Traps.

Distinctive Characters: Teeth uniserial, 18–19 on each side of jaws; premaxillary with 2 inner median fang–like teeth; vomerine band of teeth short and bifurcated anteriorly.

Colour: Juveniles are tan with numerous large black spots; adults have black specks that grade into leopard-like spots behind the head and a black area surrounding the gill opening.



Size: To 300 cm

***Gymnothorax meleagris* (Shaw, 1795)**

FAO names: Turkey moray (En)

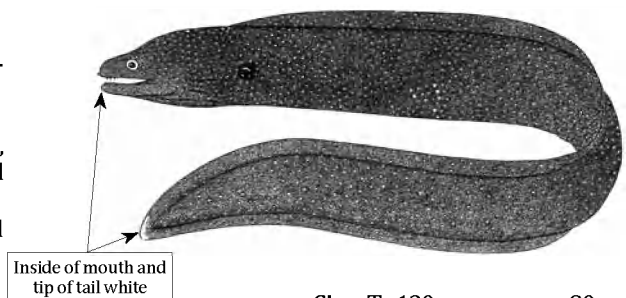
Local name(s): N: Mkunga; S: Mkunga (M/K).

Habitat: Benthic, on coral reefs and rocks. Maximum depth 36 m.

Fisheries: Gillnets, Traps, Spears

Distinctive Characters: Usually two rows of teeth, the ones on vomer sharp, fang–like, in one row; gill opening black.

Colour: Body orangish brown with small round yellow spots, less than eye diameter in size.



Size: To 120 cm, common 80 cm

***Gymnothorax monochrous* (Bleeker, 1856)**

FAO names: Drab moray (En)

Local name(s): N: Mukunga nyoka–maji;

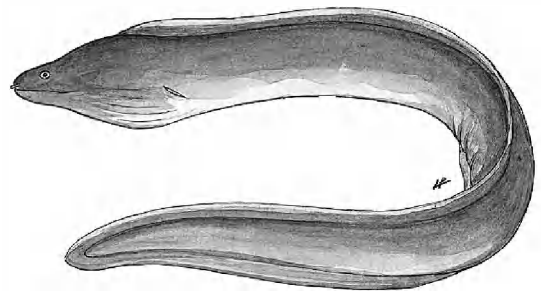
S: Mkunga maji (M/K).

Habitat: Benthic, in shallow coastal reefs.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: A single series of conical teeth in upper jaw and 2–3 fangs on each side; a row of 3 larger canines on intermaxillary; mandibles with a single series of teeth; vomerine teeth uniserial.

Colour: Body uniformly light brown, without darker markings.



Size: To 80 cm

Gymnothorax nudivomer* (Günther, 1867)

FAO names: Yellowmouth moray (En)

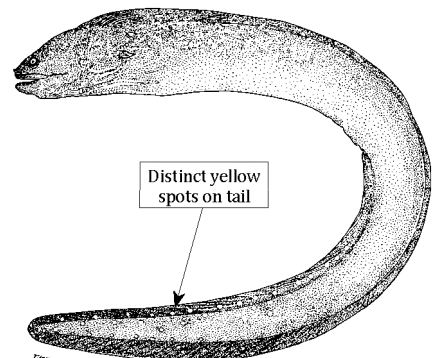
Local name(s): N: Mkunga nitakate; S: Mkunga (M/K).

Habitat: Coastal areas from 4 m to 270 m.

Fisheries: Traps, Spears, Gillnets, Lines.

Distinctive Characters: One row of compressed and triangular teeth; no canines; no teeth on vomer in adults; one possible front middle tooth in upper jaw.

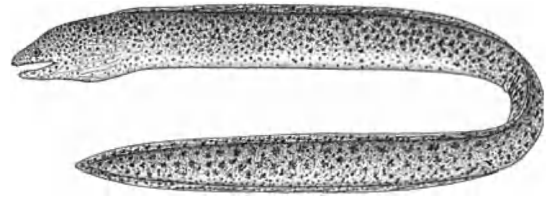
Colour: Body dark yellow–brown; numerous spots smaller than pupil, that become small and numerous anteriorly, but large and widely spaced posteriorly; inside of mouth yellow.



Size: To 180 cm

***Gymnothorax pictus* (Ahl, 1789)**

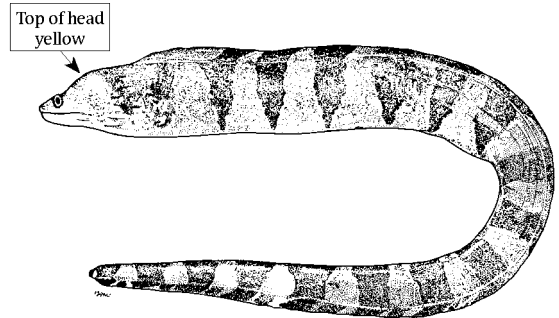
FAO names: Peppered moray (En)

Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Benthic, in shallow coastal waters on rock and corals.**Fisheries:** Gillnets, Traps, Spears.**Distinctive Characters:** Teeth on roof of mouth sharp, fang-like in 2 rows; no obvious lateral line, reduced to two pores above and before gill opening.**Colour:** Adults greyish or whitish, with irregular dark spots; juveniles yellow with dark blotches.

Size: To 140 cm

***Gymnothorax rueppellii* (McClelland, 1844)**

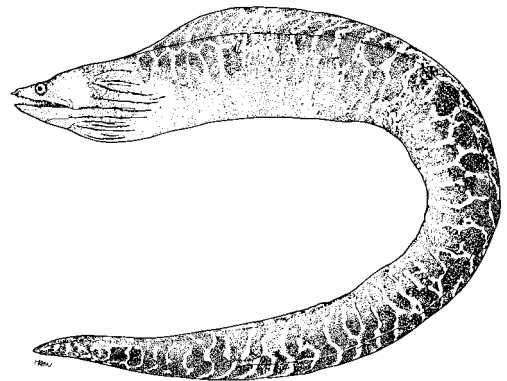
FAO names: Banded moray (En)

Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Benthic in shallow coastal reefs down to 40 m.**Fisheries:** Gillnets, Traps, Spears.**Distinctive Characters:** Teeth anteriorly in jaws in one row, with long canines alternating to 2–3 small teeth; median row of 3 canines at front of upper jaw considerably long; side of upper jaw with 1–3 slender canines.**Colour:** Body light greyish-brown with 15–20 darker bars; dark spot at corner of mouth.

Size: To 80 cm

***Gymnothorax undulatus* (Lacepède, 1803)**

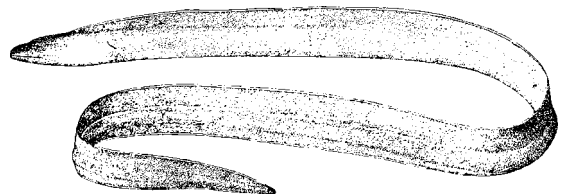
FAO names: Undulated moray (En)

Local name(s): N: Mkunga chui; S: Mkunga chui (M/K).**Habitat:** Corals reefs and rocks down to 110 m.**Fisheries:** Gillnets, Traps, Spears.**Distinctive Characters:** Long canine teeth anteriorly in jaws, some alternating with very small teeth, the longest in 1 row of 3 teeth at front of upper jaw.**Colour:** Body yellow or orange, with irregular red-brown blotches in rows separated by pale yellowish ground colour; top of head may be greenish-yellow.

Size: To 150 cm

Pseudechidna brummeri* (Bleeker, 1858)

FAO names: White ribbon eel (En)

Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Benthic, in shallow coastal waters.**Fisheries:** Gillnets, Traps, Spears.**Distinctive Characters:** Body ribbon-like, extremely slender, its depth 3 times in head length; fins wide.**Colour:** Body pale dirty white, with hyaline fins.

Size: To 103 cm

***Scuticaria tigrina* (Lesson, 1828)**

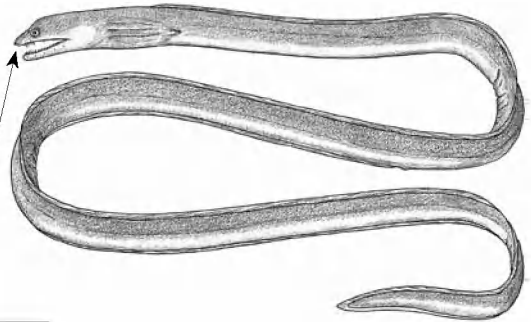
FAO names: Tiger reef-eel (En)

Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Reefs in shallow waters.**Fisheries:** Traps, Spears, Gillnets, Hooks and Line.**Distinctive Characters:** Dorsal and anal fins barely visible reduced to rudiments on tip of tail; teeth conical, sharp, in 2 rows along jaws; 1 row of 4–5 teeth on roof of mouth.**Colour:** Yellowish to russet brown, with yellow-edged black spots and jaw speckled with black.

Size: To 105 cm

***Strophidon sathete* (Hamilton, 1822)**

FAO names: Slender giant moray (En)

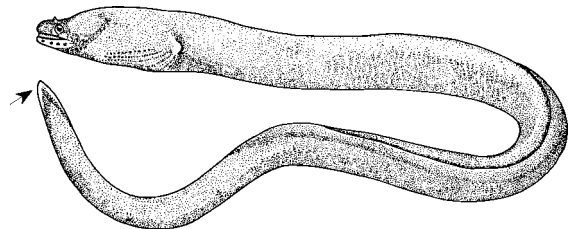
Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Benthic, in shallow coastal waters, muddy areas, estuaries and river mouths.**Fisheries:** Traps, Hooks and Line.**Distinctive Characters:** Dorsal fin originating on head before gill opening; scales absent; two rows of compressed canines at sides of upper jaw and front of lower jaw; four longest depressible canines medially on intermaxilla.**Colour:** Body brownish-grey above, lighter below.

Mouth large, extending to well beyond eye

Size: To 400 cm, common 70 cm

***Uropterygius concolor* Rüppell, 1838**

FAO names: Unicolor snake moray (En)

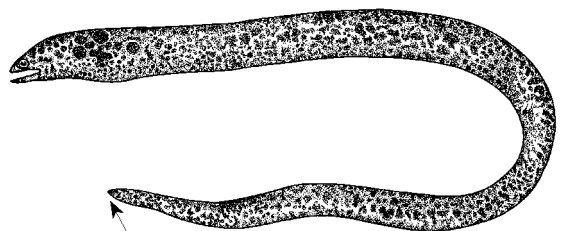
Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Reefs and shallow waters.**Fisheries:** Traps, Spears, Gillnets, Hooks and Line.**Distinctive Characters:** Inner row of teeth on the lower jaw extending only about 2/3 of the way back along the outer row; vomerine teeth present.**Colour:** Drab brown in colour; tip of tail yellow.

Dorsal and anal fins reduced to rudiments on tip of the tail

Size: To 50 cm

***Uropterygius marmoratus* (Lacepède, 1803)**

FAO names: Marbled reef-eel (En)

Local name(s): N: Mkunga; S: Mkunga (M/K).**Habitat:** Occurs on reefs in shallow waters.**Fisheries:** Traps, Spears, Gillnets, Hooks and Line.**Distinctive Characters:** Teeth in jaws in 3 rows, the marginal series of numerous small close set teeth, the two inner series with fewer, longer and depressible teeth; the maxillary encloses numerous longer and depressible teeth; vomerine teeth long, biserial anteriorly, uniserial posteriorly.**Colour:** Body yellowish or brownish, lighter below and finely or coarsely marbled with darker brown spots.

Dorsal and anal fins reduced to rudiments on tip of the tail

Size: To 62 cm

OPHICHTHIDAE

Snake eels – Worm eels

Lamnostoma orientalis (McClelland, 1844)*

Local name(s): N: Mkunga; S: Mkunga (M/K).

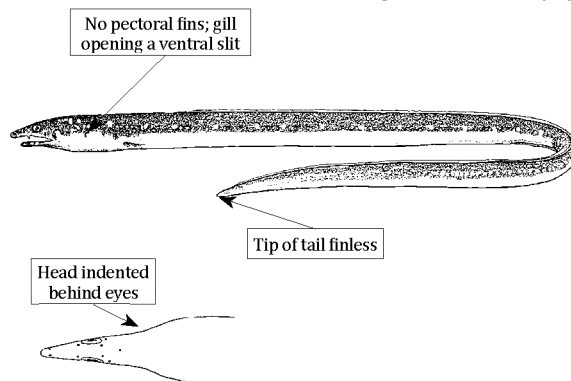
Habitat: Benthic in estuaries and inshore areas with turbid waters.

Fisheries: Caught mainly with nets and by hand; used as fresh bait.

Distinctive Characters: Dorsal-fin origin just behind gill opening; both dorsal and anal fins poorly developed.

Colour: Dark grey to blue-black above to below lateral line, lighter below; a series of prominent light spots on head and along lateral line; pores lighter than surrounding skin.

FAO names: Oriental worm-eel (En)
Serpenton oriental (Fr)



Size: To 36 cm

Pisodonophis boro (Hamilton, 1822)

Local name(s): N: Mkunga; S: Mkunga (M/K).

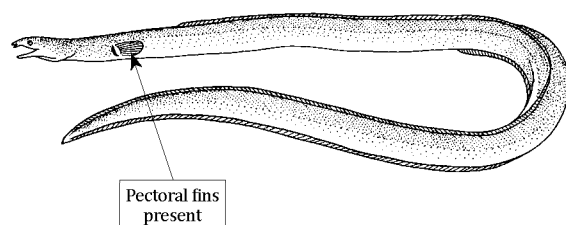
Habitat: Lagoons and estuaries, enters freshwater and paddy fields.

Fisheries: Caught incidentally in bag nets; used as bait.

Distinctive Characters: Teeth on roof of mouth granular to molariform; tip of tail finless; eye relatively small; dorsal fin originating behind pectoral fins.

Colour: Uniformly brownish-olive above, lighter below; dorsal fin with a narrow black edge.

FAO names: Rice-paddy eel (En)
Serpenton des rizières (Fr)



Size: To 100 cm

CONGRIDAE

Conger eels

Conger cinereus Rüppell, 1830

Local name(s): N: Mkunga; S: Mkunga (M), Mkunga samaki (K).

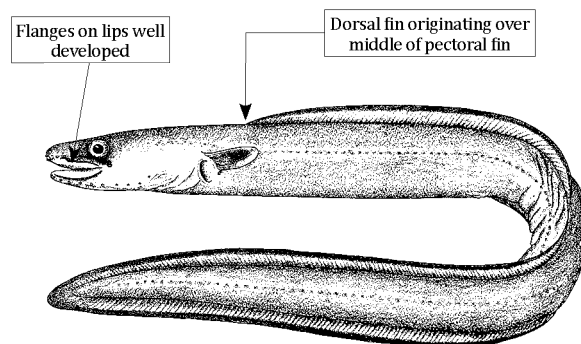
Habitat: Benthic on reefs and active at night.

Fisheries: Bottom trawls, Hooks and Line.

Distinctive Characters: Teeth on outer row longer; close-set and compressed to form a cutting edge; 6th infraorbital pore located close and slightly above posterior angle of jaw.

Colour: Grey to brown with a broad black margin on median fins; a black spot on pectoral fins (absent on juveniles) and a black bar under the eye; in life with dark crossbars.

FAO names: Longfin African conger (En)



Size: To 130 cm, common 50 cm

Uroconger lepturus (Richardson, 1845)

Local name(s): N: Mkunga; S: Mkunga (M), Mkunga samaki (K).

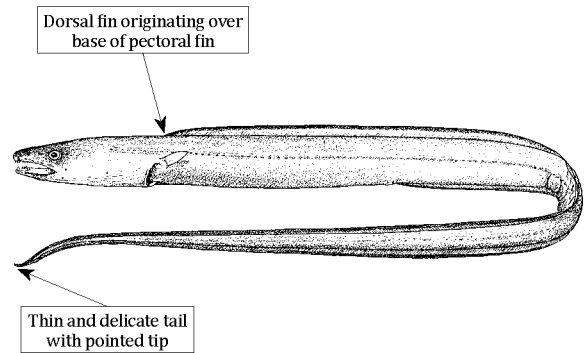
Habitat: Offshore on soft sand–mud bottoms.

Fisheries: Fine meshed shrimp trawls.

Distinctive Characters: Poorly developed lips; teeth multiserial, forming a band, but no cutting edge; vomerine teeth in a single row extending far back on roof of mouth; pectoral fins small and delicate.

Colour: Light greyish–brown, darker on opercle, the lower surface of head and trunk white; lateral–line pores white; posterior part of dorsal and anal fins black.

FAO names: Slender conger (En)



Size: To 52 cm, common 30 cm

MURAENESOCIDAE

Pike congiers

Muraenesox bagio (Hamilton, 1822)

Local name(s): N: Mkunga; S: Mkunga (M), Mkunga samaki (K).

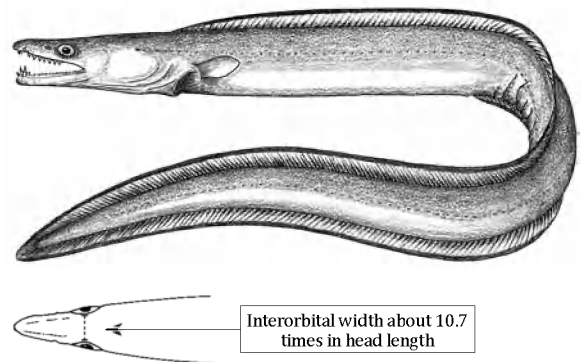
Habitat: Benthic on soft bottoms in deeper waters down to 100 m.

Fisheries: Longlines, Bottom trawls, Driftnets, Bag nets.

Distinctive Characters: Body robust and eel-shaped; snout long; eye diameter 3 times in snout length; posterior nostrils only slightly nearer to eye than to anterior nostrils; teeth on vomer triangular, blade–like; 33 to 39 lateral–line pores before level of anus.

Colour: Light greyish–brown with olive–bronze above, lighter below; dorsal and anal fins with narrow black edges.

FAO names: Common pike conger (En)
Morénésoce commun (Fr)



Size: To 200 cm, common 150 cm

Muraenesox cinereus (Forsskål, 1775)

Local name(s): N: Mkunga; S: Mkunga (M), Mkunga samaki (K).

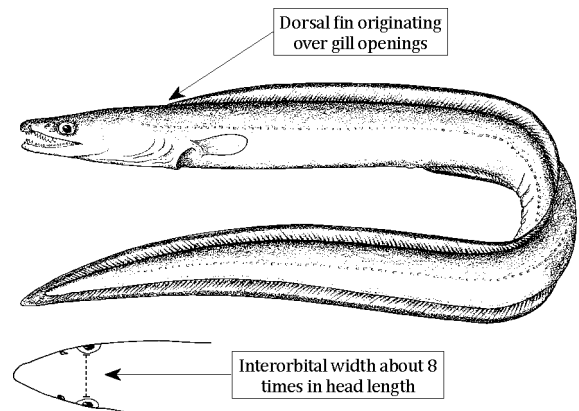
Habitat: Benthic, on soft bottoms, in estuaries, lagoons and shallow coastal inlets down to 100 m.

Fisheries: Longlines, Bottom trawls, Driftnets, Bag nets.

Distinctive Characters: Teeth in upper and lower jaws in three series; principal teeth in lower jaw triangular; large median vomerine teeth triangular in lateral view; 40–47 lateral–line pores before level of anus.

Colour: Light to dark greyish–brown above, lighter below; dorsal and anal fins with narrow black edges.

FAO names: Daggertooth pike conger (En)
Murénésoce–dague (Fr)



Size: To 80 cm, common 50 cm

CLUPEIDAE

Herrings – Shads – Gizzard shads – Sardines – Sardinellas

***Amblygaster leiogaster* (Valenciennes, 1847)**

Local name(s): N: Simu/Kerenge; S: Simu koko (M/K).

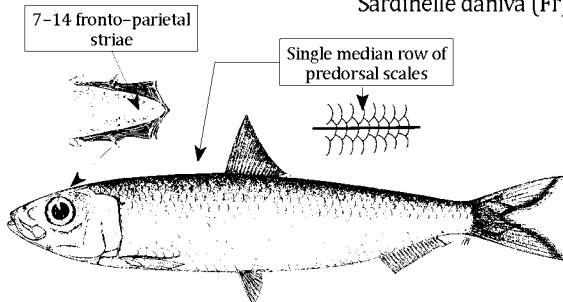
Habitat: Pelagic coastal schooling species.

Fisheries: Seines, Gillnets, Bottom trawls.

Distinctive Characters: Belly rounded with weak scutes; dorsal-fin origin at midpoint of body; 8 pelvic fin rays; anal-fin origin well behind dorsal-fin base; 31–33 gill rakers on lower limb of 1st arch.

Colour: Back blue–green; flanks silvery without spots; dorsal fin black or dusky when fully extended.

FAO names: Smoothbelly sardinella (En)
Sardinelle daniva (Fr)



Size: To 23 cm, common 18 cm

***Amblygaster sirm* (Walbaum, 1792)**

Local name(s): N: Simu/Kerenge; S: Simu koko (M/K).

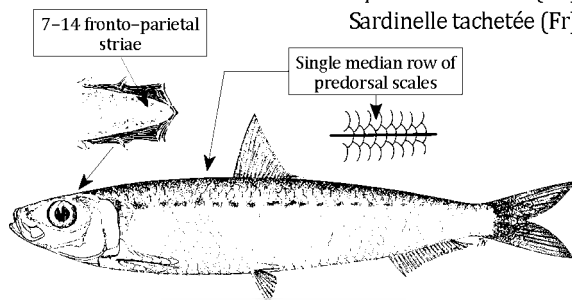
Habitat: Pelagic coastal schooling species.

Fisheries: Seines, Gillnets, Bottom trawls.

Distinctive Characters: Belly rounded, with weak scutes; anal-fin origin well behind dorsal-fin base; 33 to 43 gill rakers on lower limb of 1st arch.

Colour: Back blue–green, flanks silvery with a series of 10 to 12 golden–green spots.

FAO names: Spotted sardinella (En)
Sardinelle tachetée (Fr)



Size: To 27 cm, common 20 cm

***Dussumieria acuta* Valenciennes, 1847**

Local name(s): N: Simu/Kerenge; S: Simu koko (M/K).

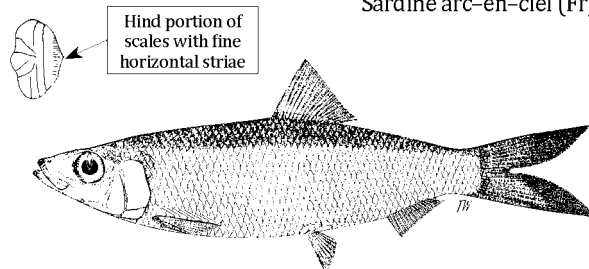
Habitat: Pelagic in inshore waters.

Fisheries: Seines, Gillnets, Bottom trawls.

Distinctive Characters: Belly rounded, without scutes; dorsal-fin origin behind mid-point of body; pelvic fins below dorsal-fin base; 19–26 gill rakers on lower limb of 1st arch.

Colour: Back iridescent blue with a shiny golden–brass line below; flanks silvery; caudal fin with a dark hind margin.

FAO names: Rainbow sardine (En)
Sardine arc-en-ciel (Fr)



Size: To 20 cm, common 15 cm

***Dussumieria elopsoides* Bleeker, 1849**

Local name(s): N: Simu/Kerenge; S: Simu koko (M/K).

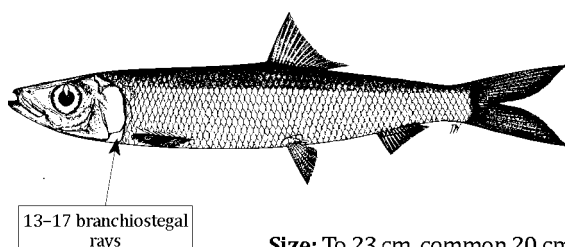
Habitat: A Pelagic inshore species.

Fisheries: Seines, Gillnets.

Distinctive Characters: Body slender; belly rounded without scutes; no striae on posterior part of scales; pelvic fins more advanced; 21 to 32 gill rakers on lower limb of 1st arch.

Colour: Back blue, flanks silvery; all fins dark.

FAO names: Slender rainbow sardine (En)
Sardine arc-en-ciel gracile (Fr)



Size: To 23 cm, common 20 cm

***Etrumeus teres* (DeKay, 1842)**

Local name(s): N: Simu/Kerenge; S: Simu uzio (M/K).

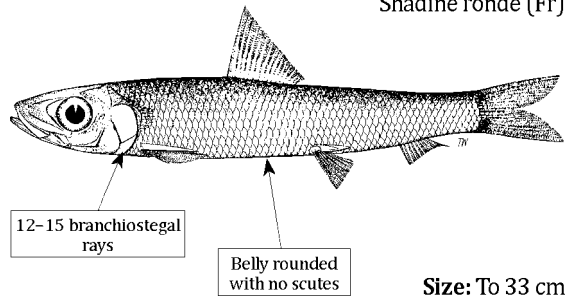
Habitat: Pelagic inshore species.

Fisheries: Purse seines.

Distinctive Characters: Body fairly elongate sub-cylindrical in cross-section; gill rakers 30 to 35 on lower limb of 1st arch; pelvic-fin origin below last dorsal-fin ray; anal fin with 10–13 soft rays.

Colour: Back blue–green, flanks silvery.

FAO names: Red-eye round herring (En)
Shadine ronde (Fr)



Size: To 33 cm

***Herklotsichthys punctatus* (Rüppell, 1837)**

Local name(s): N: Simu/Kerenge; S: Simu uzio (M/K).

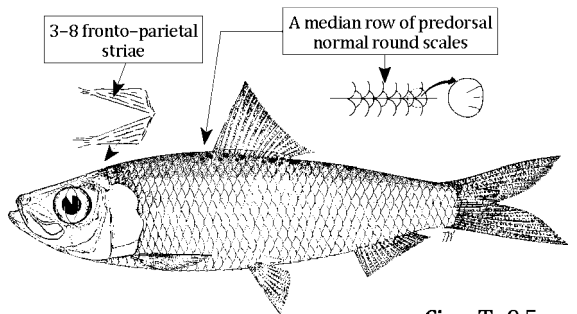
Habitat: Pelagic in coastal waters.

Fisheries: Seines, Bottom trawls, Cast nets.

Distinctive Characters: Belly with a distinct keel of scutes.

Colour: Back blue–green with small scattered dark spots, flanks silvery; no dark blotch on dorsal fin.

FAO names: Spotted herring (En)
Hareng tacheté (Fr)



Size: To 9.5 cm

***Herklotsichthys quadrimaculatus* (Rüppell, 1837)**

Local name(s): N: Simu/Kerenge; S: Simu uzio (M/K).

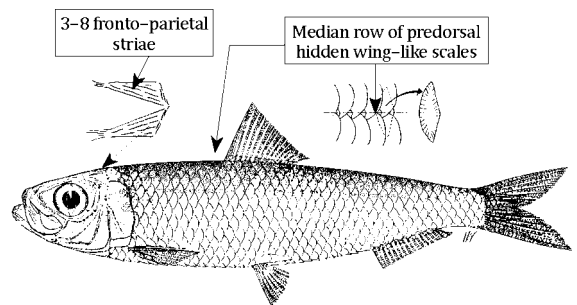
Habitat: Pelagic in coastal waters.

Fisheries: Seines, Cast nets, Shallow trawls.

Distinctive Characters: Belly with a distinct keel of scutes.

Colour: Back blue–green; flanks silvery with 2 orange spots behind gill opening in life and a blue midlateral band.

FAO names: Bluestripe herring (En)
Hareng à bande bleue (Fr)



Size: To 9.5 cm

***Herklotsichthys spilurus* (Guichenot, 1863)**

Local name(s): N & S: Simu/Kerenge (M/K).

Habitat: Pelagic in coastal waters.

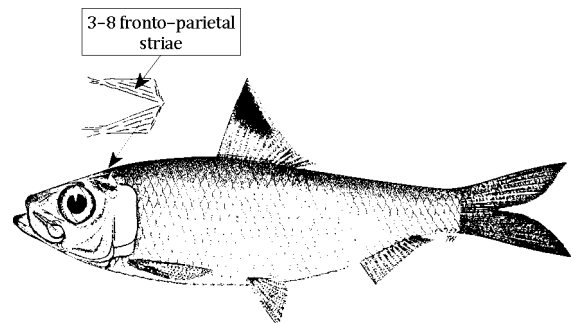
Fisheries: Seines, Cast nets, Shallow trawls.

Distinctive Characters: Body moderately deep; belly sharp with a keel of scutes.

Colour: Flame–silvery without dark spots on flanks; a bright yellow or orange patch behind gill opening; dark blotch on tip of dorsal fin.

Remarks: Overlaps range of *H. quadrimaculatus*, which has elongate wing-like scales underneath the normal paired pre-dorsal scales.

FAO names: Reunion herring (En)

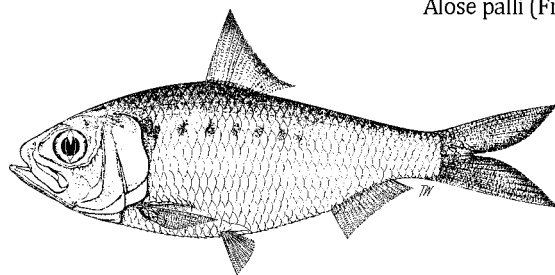


Size: To 9 cm (SL)

***Hilsa kelee* (Cuvier, 1829)**

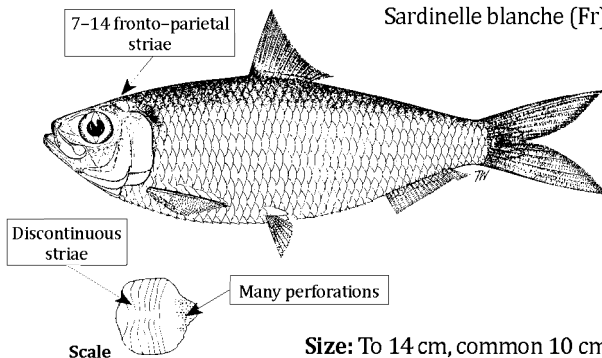
FAO names: Kelee shad (En)

Alose palli (Fr)

Local name(s): N & S: Simu/Kerenge (M/K).**Habitat:** Pelagic in coastal waters, enters estuaries.**Fisheries:** Seines, Gillnets, Cast nets, Bottom trawls.**Distinctive Characters:** Belly with a distinct keel of scutes; top of head with numerous fronto-parietal striae; upper jaw with a distinct median notch; a series of small triangular scales above axil of pectoral fins; hind part of body scales perforated.**Colour:** Back blue-green, flanks silvery with 4–10 dark spots.**Size:** To 35 cm, common 16.5 cm***Sardinella albella* (Valenciennes, 1847)****Local name(s):** N & S: Simu/Kerenge (M/K).**Habitat:** Pelagic in coastal waters.**Fisheries:** Seines, Gillnets, Bottom trawls.**Distinctive Characters:** Body fusiform, moderately compressed, belly with a sharp keel of 30–32 scutes; predorsal scales paired and overlapping.**Colour:** Back blue/green, flanks silvery; a dark spot at dorsal-fin origin.

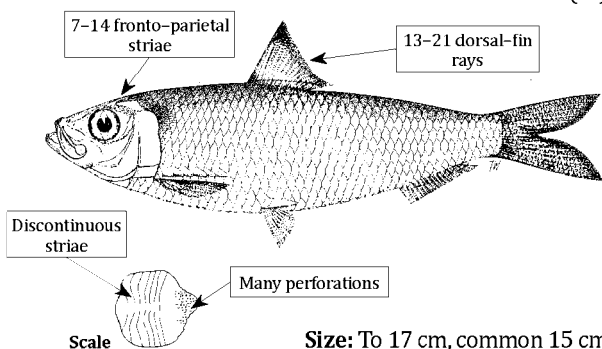
FAO names: White sardinella (En)

Sardinelle blanche (Fr)

**Size:** To 14 cm, common 10 cm***Sardinella gibbosa* (Bleeker, 1849)****Local name(s):** N & S: Simu/Kerenge (M/K).**Habitat:** Pelagic in coastal waters.**Fisheries:** Seines, Gillnets, Bottom trawls.**Distinctive Characters:** Body moderately compressed, belly with a sharp keel of 32–34 scutes; predorsal scales paired and overlapping.**Colour:** Back blue-green, flanks silvery; tip of dorsal fin and margin of caudal fin dusky, remainder of caudal faintly yellow, other fins clear; a small black spot at dorsal-fin origin.

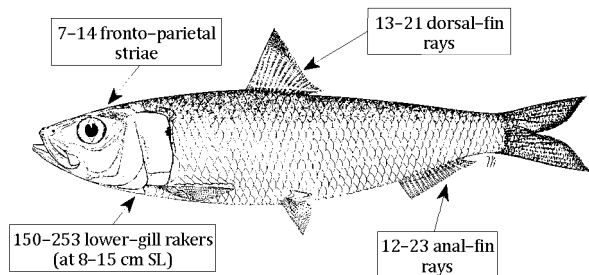
FAO names: Goldstripe sardinella (En)

Sardinelle dorée (Fr)

**Size:** To 17 cm, common 15 cm***Sardinella longiceps* Valenciennes, 1847****Local name(s):** N & S: Simu/Kerenge (M/K).**Habitat:** Pelagic in coastal waters.**Fisheries:** Boat seines, Gillnets, Shore seines.**Distinctive Characters:** Belly rounded with a low keel of scutes; pelvic fin with 1 branched and 8 unbranched rays; predorsal scales paired and overlapping.**Colour:** Back blue-green, flanks silvery; a black spot on hind edge of gill cover.**Remarks:** Often misidentified as *Sardinella neglecta* Wongratana, 1983.

FAO names: Indian oil sardine (En)

Sardinelle indienne (Fr)

**Size:** To 23 cm, common 20 cm

***Sardinella melanura* (Cuvier, 1829)**

Local name(s): N & S: Simu/Kerenge (M/K).

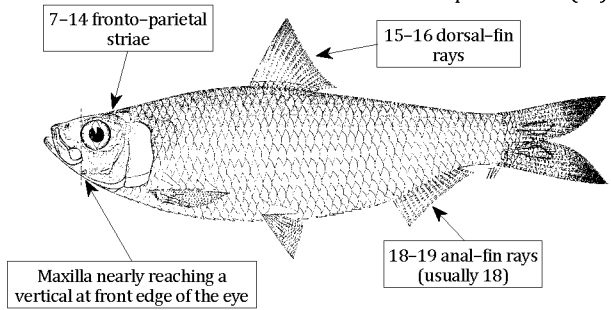
Habitat: Pelagic in coastal waters.

Fisheries: Seines, Gillnets, Bottom trawls.

Distinctive Characters: Belly with a sharp keel, with 27–31 scutes; predorsal scales paired and overlapping; no perforations on posterior part of scales; lower-limb gill rakers 38–74.

Colour: Back blue–green, flanks silvery; tips of caudal fin black (character retained in preserved specimens) distinguish this species from all other *Sardinella* species in the area.

FAO names: Blacktip sardinella (En)
Sardinelle queue noire (Fr)



Size: To 15 cm (SL), common 10 cm

***Sardinella neglecta* Wongratana, 1983**

Local name(s): N & S: Simu/Kerenge (M/K).

Habitat: Coastal pelagic, schooling in bays and over shallow banks from 1 m to 60 m.

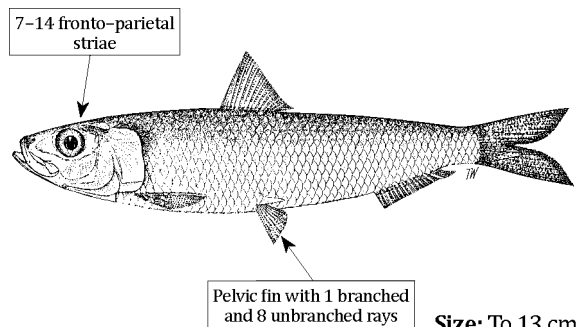
Fisheries: Seines, Cast nets, Bottom trawls.

Distinctive Characters: Predorsal scales paired and overlapping; 144–188 lower gill rakers (at 9–13 cm SL).

Colour: A faint golden spot behind gill opening, followed by a faint golden mid-lateral line.

Remarks: Often misidentified as *Sardinella longiceps* Valenciennes, 1847.

FAO names: East African sardinella (En)



Size: To 13 cm

***Spratelloides delicatulus* (Bennett, 1832)**

Local name(s): N & S: Simu/Kerenge (M/K).

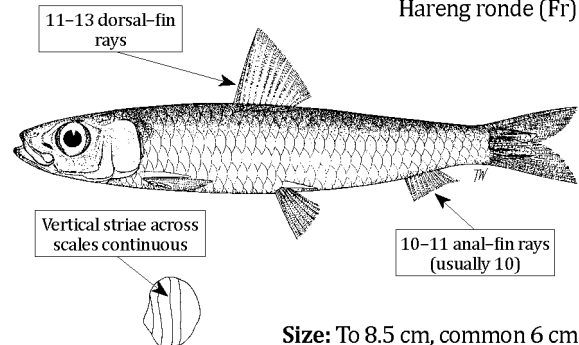
Habitat: Pelagic in shallow waters.

Fisheries: Beach seines, Cast nets.

Distinctive Characters: No pre-pelvic or post-pelvic scutes, except for a W-shaped pelvic scute; usually 7 branchiostegal rays below mouth; 26–32 lower-limb gill rakers.

Colour: No bright silver band along flanks; two prominent dark streaks on caudal-fin base.

FAO names: Delicate round herring (En)
Hareng ronde (Fr)



Size: To 8.5 cm, common 6 cm

***Spratelloides gracilis* (Temminck & Schlegel, 1846)**

Local name(s): N & S: Simu/Kerenge (M/K).

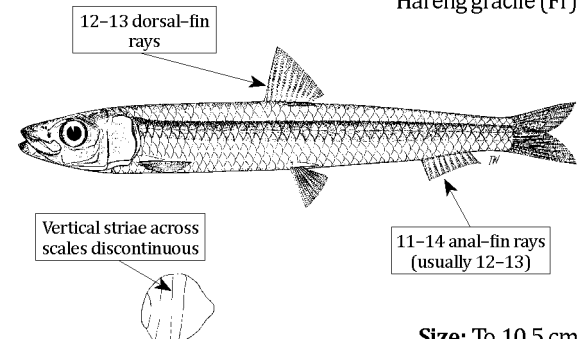
Habitat: Pelagic in shallow waters.

Fisheries: Beach seines, Cast nets.

Distinctive Characters: No pre-pelvic or post-pelvic scutes, except for a W-shaped pelvic scute; usually 7 branchiostegal rays below mouth; dorsal fin at about mid-point of body; anal fin very short and far behind dorsal-fin base.

Colour: Back blue–green, flanks with a distinct silvery stripe.

FAO names: Silver-stripe round herring (En)
Hareng gracile (Fr)



Size: To 10.5 cm

***Spratellomorpha bianalis* (Bertin, 1940)**

Local name(s): N & S: Simu/Kerenge (M/K).

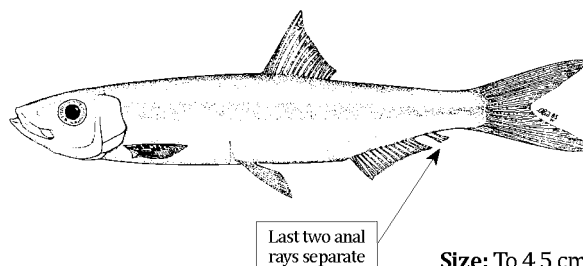
Habitat: Coastal pelagic in marine and brackish waters.

Fisheries: Seines, Cast nets, Bottom trawls.

Distinctive Characters: Body a little compressed, belly rounded, without pre-pelvic scutes, but a pelvic present with slender vertical arms; snout pointed, lower jaw projecting slightly.

Colour: No information.

FAO names: Two-finned round herring (En)

**ENGRAULIDAE**

Anchovies

Encrasicholina devisi* (Whitley, 1940)

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic in coastal waters down to 200 m.

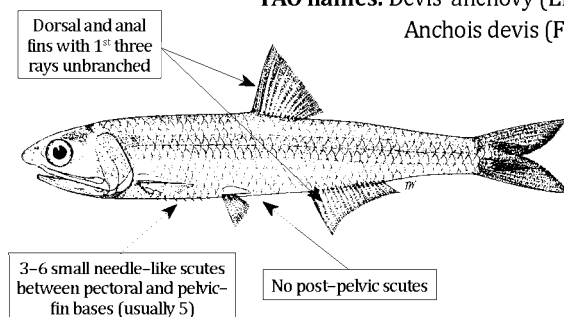
Fisheries: Seines, Stake traps.

Distinctive Characters: Maxilla tip pointed reaching into preopercle; anal-fin origin behind base of last dorsal-fin ray.

Colour: Light transparent fleshy brown, with a pink tinge, and a broad silver stripe with a thin blue line above.

FAO names: Devis' anchovy (En)

Anchois devis (Fr)



Size: To 8 cm, common 7 cm

***Encrasicholina heteroloba* (Rüppell, 1837)**

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic in coastal waters.

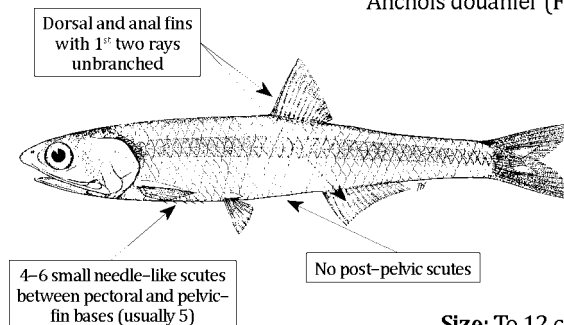
Fisheries: Seines, Stake traps.

Distinctive Characters: Maxilla tip pointed, reaching onto preopercle; anal-fin origin behind base of last dorsal-fin ray.

Colour: Light transparent fleshy brown, with a silvery stripe down flanks.

FAO names: Shorthead anchovy (En)

Anchois douanier (Fr)



Size: To 12 cm

***Encrasicholina punctifer* Fowler, 1938**

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic in coastal waters.

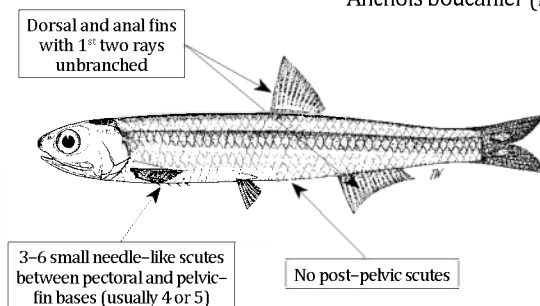
Fisheries: Seines, Stake traps.

Distinctive Characters: Maxilla short and bluntly rounded at the tip; dorsal fin with 12-15 rays; anal fin with 14-17 rays; anal-fin origin clearly posterior to rear base of dorsal fin.

Colour: Light transparent fleshy brown, with a silvery stripe down flanks.

FAO names: Buccaneer anchovy (En)

Anchois boucanier (Fr)



Size: To 9 cm

Stolephorus commersonii Lacepède, 1803

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic in coastal waters.

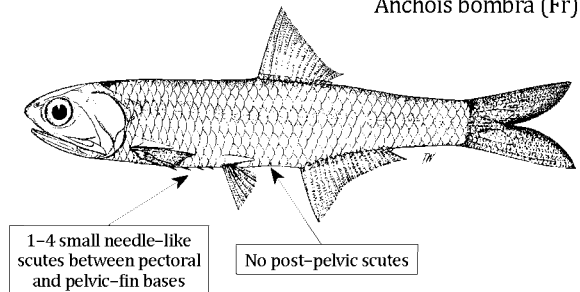
Fisheries: Seines.

Distinctive Characters: Maxilla long reaching to gill opening; pelvic-fin tips reaching beyond dorsal-fin origin.

Colour: Body light transparent fleshy brown, with silvery band down flanks; back with 2 pigmented areas behind head; a double pigmented line before dorsal-fin origin.

FAO names: Commerson's anchovy (En)

Anchois bombra (Fr)



Size: To 10 cm, common 8 cm

Stolephorus indicus (van Hasselt, 1823)

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic in coastal waters.

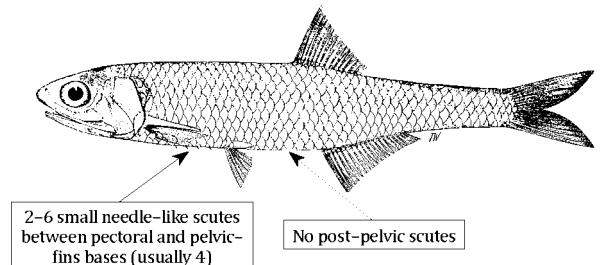
Fisheries: Seines, Bottom trawls, Stake traps.

Distinctive Characters: Maxilla tip short, not reaching gill opening; pelvic-fin tips not reaching to dorsal-fin origin; anal-fin origin below dorsal-fin base.

Colour: Light transparent fleshy brown, with a silver band down flanks; no dark pigment lines on back between head and dorsal-fin origin.

FAO names: Indian anchovy (En)

Anchois indien (Fr)



Size: To 15.5 cm (SL), common 12 cm (SL)

Stolephorus insularis Hardenberg, 1933

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

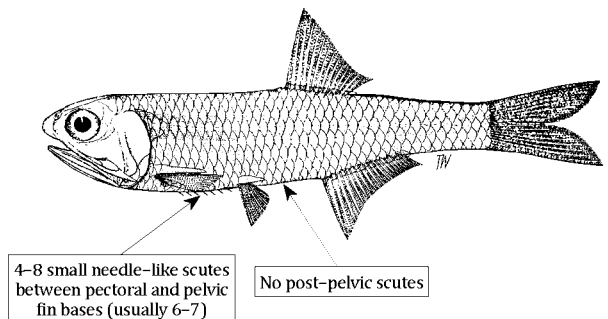
Habitat: Pelagic schooling in coastal waters.

Fisheries: Seines, Bottom trawls, Stake traps.

Distinctive Characters: Maxilla tip pointed, reaching to or beyond hind boarder of preopercle; anal fin short, usually with 14-17 rays, its origin below about middle of dorsal-fin base.

Colour: A double pigmented line on back behind dorsal fin; tail deep yellow.

FAO names: Hardenberg's anchovy (En)



Size: To 8 cm (SL)

Thryssa baelama (Forsskål, 1775)

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

Habitat: Pelagic mostly in inshore waters, bays, lagoon, harbours, mangroves pools and estuaries.

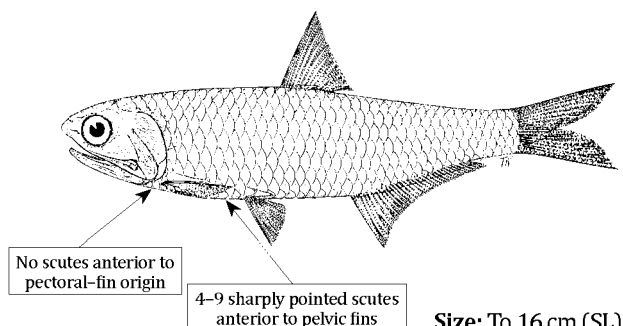
Fisheries: Seines, Shallow trawls.

Distinctive Characters: Maxilla short, not reaching to edge of gill cover; anal fin moderately long, usually with 26-30 branched rays.

Colour: Back blue-green or brown, flanks silvery; a dark venulose area behind gill opening.

FAO names: Baelama anchovy (En)

Anchois-moustache sardin (Fr)



Size: To 16 cm (SL)

Thryssa setirostris (Broussonet, 1782)

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

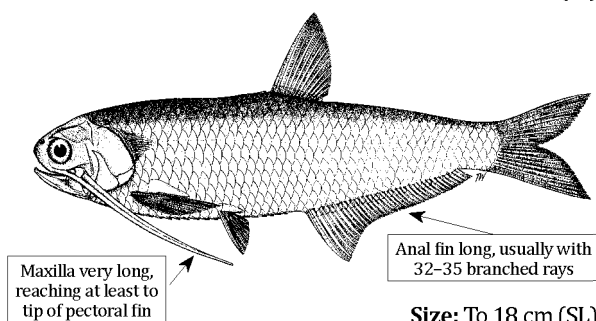
Habitat: Pelagic, mostly inshore, enters bays and estuaries.

Fisheries: Boat seines, Gillnets, Bottom trawls.

Distinctive Characters: Belly with a sharp keel of scutes; tip of snout at level of eye centre; scutes present before and behind pelvic-fin base.

Colour: Back blue-green or brown, flanks silvery; a dark venulose area behind gill opening; dorsal and caudal fins faint yellow.

FAO names: Longjaw thryssa (En)
Anchois-moustache cornu (Fr)



Size: To 18 cm (SL)

Thryssa vitirostris (Gilchrist & Thompson, 1908)

Local name(s): N: Dangaa/Dagaa; S: Mwatiko (K).

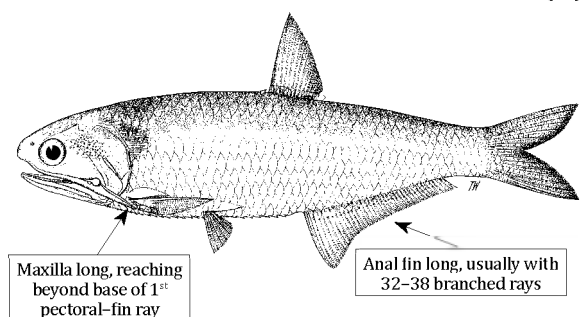
Habitat: Pelagic in inshore areas, enters estuaries and lagoons.

Fisheries: Boat seines, Gillnets, Shallow trawls.

Distinctive Characters: Body fusiform; belly with a sharp keel of scutes before and behind pelvic-fin base; tip of snout at level of eye centre.

Colour: Back blue-green, flanks silvery; a dark blotch behind upper part of gill opening; inside of gill cavity bright orange.

FAO names: Orangemouth anchovy (En)
Anchois-moustache cristal (Fr)



Size: To 20 cm

CHIROCENTRIDAE**Wolf-herrings*****Chirocentrus dorab*** (Forsskål, 1775)

Local name(s): N: Panga; S: Panga (M), Mkonje (K).

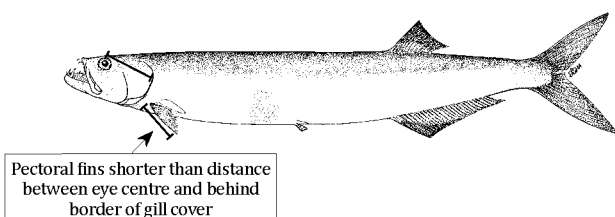
Habitat: Pelagic in coastal waters down to 120 m.

Fisheries: Gillnets, Seines, Traps, Bottom trawls; used as bait for large scombroids in trolling.

Distinctive Characters: Dorsal fin with 16-19 rays; anal fin with 29-36 rays.

Colour: Back with bands of green and blue; tip of dorsal fin and front of anal fin black.

FAO names: Dorab wolf-herring (En)
Chirocentre dorab (Fr)



Size: To 100 cm (SL), common 60 cm

Chirocentrus nudus Swainson, 1839 (Plate I, 4)

Local name(s): N: Panga; S: Panga (M), Mkonje (K).

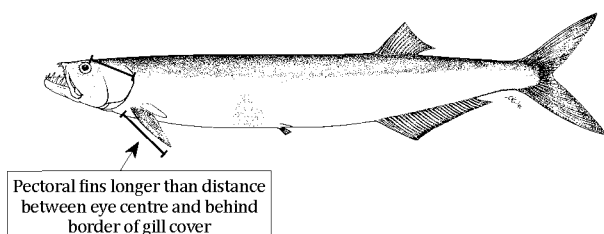
Habitat: Pelagic in coastal waters down to 150 m.

Fisheries: Gillnets, Seines, Shallow water trawls; used as bait for large scombroids in trolling.

Distinctive Characters: Dorsal fin with 16-19 rays; anal fin with 29-36 rays.

Colour: Dorsal and anal fins colourless; back with bands of green and blue.

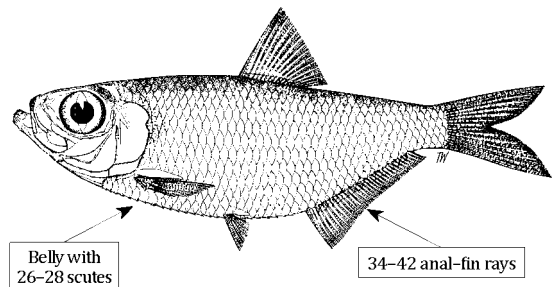
FAO names: Whitefin wolf-herring (En)
Chirocentre sabre (Fr)



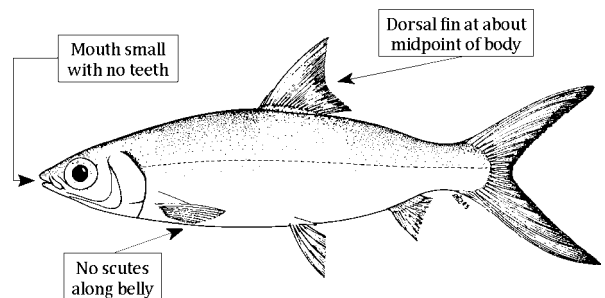
Size: To 100 cm (SL), common 60 cm

PRISTIGASTERIDAE

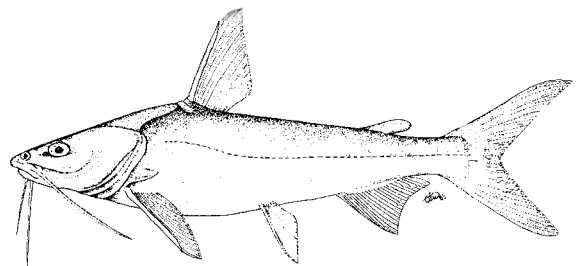
Pristigasterids

Pellona ditchela Valenciennes, 1847**Local name(s):** N & S: Simu/Kerenge (M/K).**Habitat:** Pelagic in coastal waters, in estuaries, lagoons and rivers.**Fisheries:** Seines, Cast nets.**Distinctive Characters:** Body moderately deep, compressed; eye very large, lower jaw projecting; upper jaw toothed; dorsal-fin origin near midpoint of body; scales with upper and lower vertical striae slightly overlapping each other at center of scales.**Colour:** Back blue-green or grey, flanks silvery.**FAO names:** Indian pellona (En)
Alose-écaille indienne (Fr)**Size:** To 16 cm (SL), common 13 cm**CHANIDAE**

Milkfish

Chanos chanos (Forsskål, 1775) (Plate I, 5)**Local name(s):** N: Borodi/Fupefupe; S: Mwatiko (M/K).**Habitat:** Coastal pelagic, entering rivers.**Fisheries:** Scoop nets, Seines, Gillnets, Traps, Hooks and Line; important to fisheries for culture in fresh and brackish waters.**Distinctive Characters:** Lower jaw with a small tubercle at tip; dorsal fin with 2 spines and 13-17 rays; anal fin with 2 spines and 8-10 rays; scales small; lateral line present.**Colour:** Back olive green, flanks silvery; dorsal, anal and caudal fins with dark margins.**FAO names:** Milkfish (En)
Chano (Fr)**Size:** To 180 cm, common 100 cm**ARIIDAE**

Sea catfishes

Arius africanus Günther, 1867**Local name(s):** N: Fumi/Yahudhi; S: Fumi (M/K).**Habitat:** Estuaries but mainly freshwater.**Fisheries:** Gillnets, Stake traps, Hooks and Line.**Distinctive Characters:** Three pairs of barbels around mouth, the maxillary pair extending to slightly beyond pectoral-fin base; median longitudinal groove on head shallow, extending to just behind posterior margin of orbit anteriorly, not reaching supraoccipital process posteriorly; 1st dorsal and pectoral fins each with a strong spine; 19 to 21 total anal-fin rays.**Colour:** Back brownish, sides silvery, belly white.**FAO names:** African sea catfish (En)
Mâchoiron africain (Fr)**Size:** To 45 cm

Arius madagascariensis* Vaillant, 1894

Local name(s): N: Fumi/Yahudhi; S: Fumi (M/K).

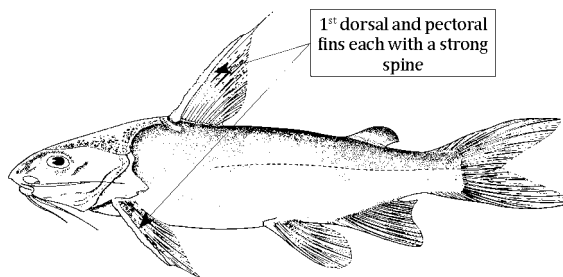
Habitat: Estuaries but mainly freshwater.

Fisheries: Stake traps, Hooks and Line, Gillnets.

Distinctive Characters: Three pairs of barbels around mouth, the maxillary pair extending to pectoral-fin base; head shield granulated behind orbit with a blunt conical protuberance above eye; median longitudinal groove shallow; dorsal and pectoral fins outermost ray prolonged.

Colour: Steel blue above, silvery on sides, pinkish-yellow on belly; dorsal and caudal fins greyish.

FAO names: Madagascar sea catfish (En)
Mâchoiron malgache (Fr)



Size: To 70 cm (SL), common 20 cm

Arius venosus* Valenciennes, 1840

Local name(s): N: Fumi/Yahudhi; S: Fumi (M/K).

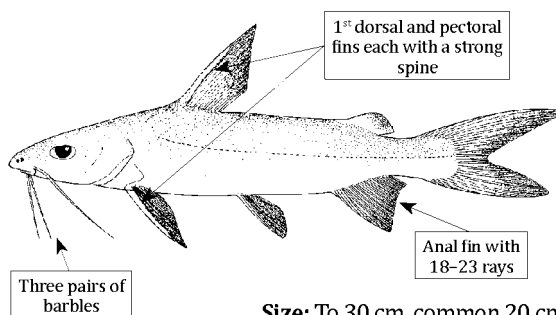
Habitat: Coastal waters. Maximum depth 100 m.

Fisheries: Bottom trawls, Gillnets, Stake traps, Beach seines, Hooks and Line.

Distinctive Characters: Head shield nearly smooth with few rugosities bordering the median longitudinal groove.

Colour: Dark reddish-brown, or dark grey-blue above, white below; all fins generally hyaline, unpaired fins darker terminally; paired fins grey or black above; upper half of adipose fin spotted with black.

FAO names: Veined catfish (En)



Size: To 30 cm, common 20 cm

***Plicofollis dussumieri* (Valenciennes, 1840)**

Local name(s): N: Fumi/Yahudhi; S: Fumi (M/K).

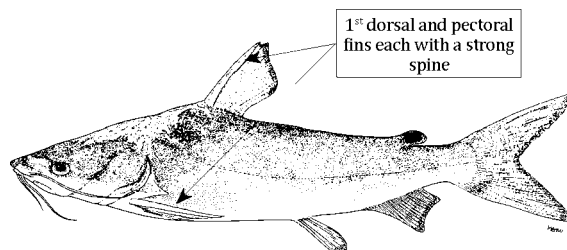
Habitat: Purely marine waters down to 100 m.

Fisheries: Bottom trawls, Gillnets, Stake traps, Beach seines, Hooks and Line.

Distinctive Characters: Three pairs of barbels around mouth; head shield not very granulated or rugose, except at occiput and occipital process; predorsal plate V-shaped; anal fin with 14–16 rays.

Colour: Bluish-black on dorsal surface and sides, dull white below; fin tips edged with black.

FAO names: Blacktip sea catfish (En)



Size: To 62 cm (SL)

Plicofollis polystaphylodon* (Bleeker, 1846)

Local name(s): N: Fumi/Yahudhi; S: Fumi (M/K).

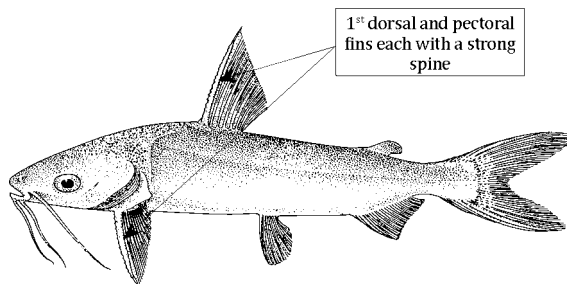
Habitat: Coastal marine waters and estuaries.

Fisheries: Stake traps, Beach seines, Gillnets, Hooks and Line, Bottom trawls.

Distinctive Characters: Three pairs of barbels around mouth, maxillary pair extending slightly to beyond orbit, relatively longer in small specimens; head shield rugose and granulated in the hind part near the occipital region; anal fin with 15–17 rays.

Colour: Greyish-brown above, silvery below; fins dusky.

FAO names: Mozambique sea catfish (En)
Mâchoiron barbarin (Fr)



Size: To 35 cm (SL)

PLOTOSIDAE

Eel catfishes

Plotosus limbatus Valenciennes, 1840

FAO names: Darkfin eel catfish (En)

Local name(s): N: Tondi; S: Ngogo/Mtozi (M), Msilimu (K).

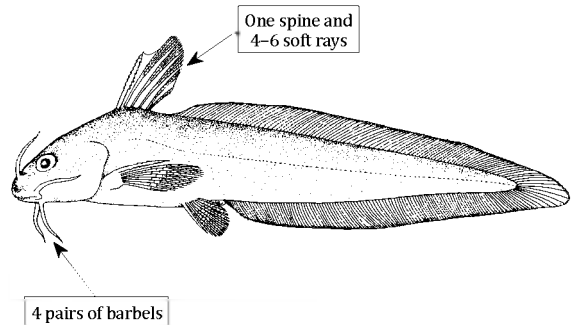
Habitat: Open coastal waters and estuaries.

Fisheries: Bottom trawls, Seines, Hooks and Line.

Distinctive Characters: Head moderately large, arched from snout tip to dorsal-fin origin; pectoral fins with 13–16 soft rays; pelvic fins with 12–16 rays; dorsal procurrent; caudal fin (2nd dorsal fin) with 106–133 rays; anal fin with 87–126 soft rays.

Colour: Body reddish brown to dark brown, sometimes fading to a lighter brown ventrally; fins often blackish brown, usually with a black border.

Remarks: Dorsal and pelvic spines are venomous and may be fatal.



Size: To 41 cm (SL)

Plotosus lineatus (Thunberg, 1787)

FAO names: Striped eel catfish (En)

Local name(s): N: Tondi; S: Ngogo/Mtozi (M), Ngogo (K).

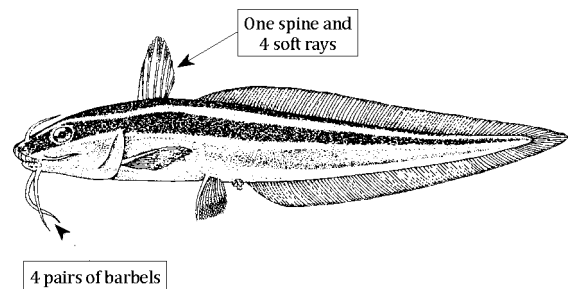
Habitat: Reefs, estuaries and tidal pools in schools.

Fisheries: Bottom trawls, Seines, Hooks and Line.

Distinctive Characters: Head moderately large, profile slightly arched from tip of snout to dorsal-fin origin; dorsal procurrent caudal fin (or second dorsal fin) with 69 to 115 rays; pectoral fins with 9–13 soft rays; pelvic fins with 10–13 rays.

Colour: Brown or black above, whitish below, with 2–3 stripes (white or yellow in life); 2 of the stripes from snout to near caudal peduncle.

Remarks: Dorsal and pelvic spines are venomous and may be fatal.



Size: To 32 cm, common 25 cm

CHLOROPHTHALMIDAE

Greeneyes

Chlorophthalmus agassizi Bonaparte, 1840FAO names: Shortnose greeneye (En)
Eperlan du large (Fr)

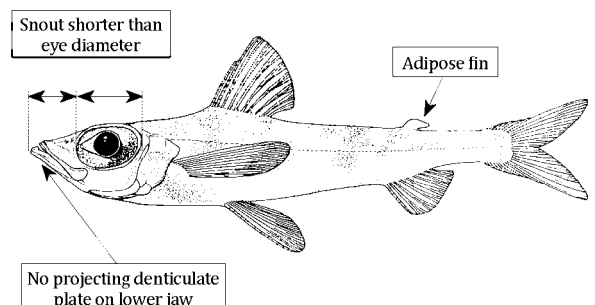
Local name(s): N & S: No information.

Habitat: Benthic, inhabits shelf and offshore waters from 150 m to 980 m.

Fisheries: Bottom trawls.

Distinctive Characters: Origin of dorsal fin much closer to tip of snout than to adipose fin.

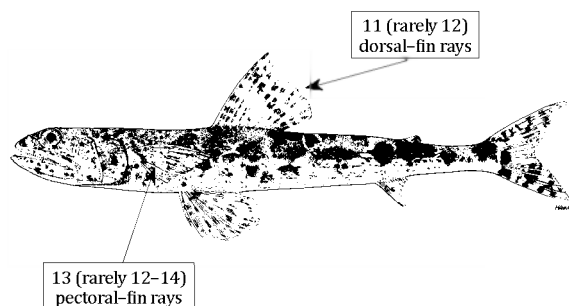
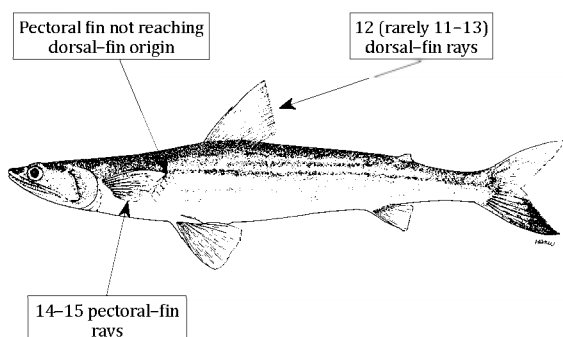
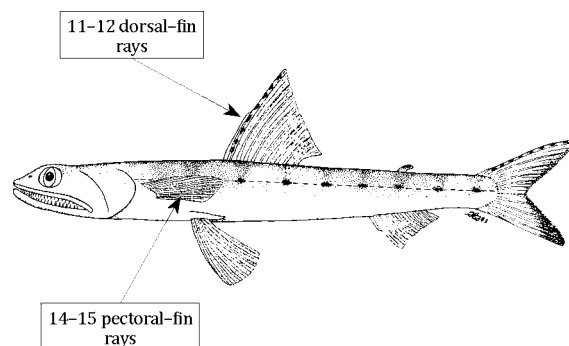
Colour: Brownish or yellowish, covered with large dark blotches, especially the dorsal half; eyes green; ventral surface of body around anus, pharyngeal and peritoneal lining black; gill cover black with metallic luster; inner pelvic-fin rays blackish.



Size: To 40 cm

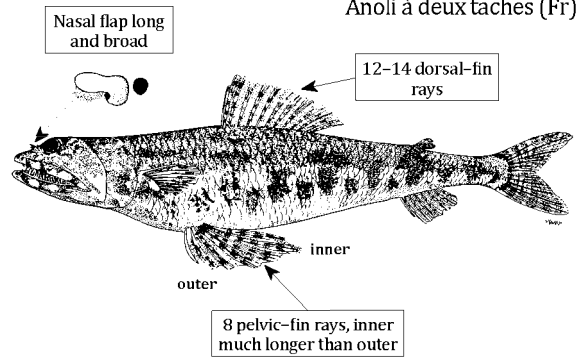
SYNODONTIDAE

Lizardfishes

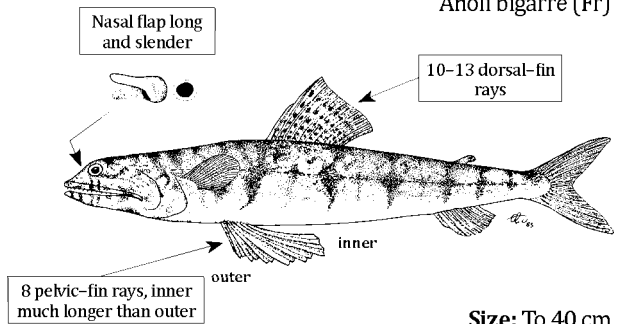
Saurida gracilis (Quoy & Gaimard, 1824) (Plate I, 6)FAO names: Gracile lizardfish (En)
Anoli grêle (Fr)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Shallow waters, sandy areas near coral reefs.**Fisheries:** Bottom trawls.**Distinctive Characters:** A vertical from tip of pectoral fins passes through 2nd or 3rd predorsal scale; anal fin with 9–10 soft rays.**Colour:** White or pale yellow, with dark brown and black spots on back and sides; darker crossbars on back; all fins with dark bars and spots.**Size:** To 30 cm***Saurida tumbil*** (Bloch, 1795)FAO names: Greater lizardfish (En)
Anoli tumbil (Fr)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Muddy bottoms from 20 m to 60 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Head and caudal peduncle somewhat depressed; several rows of teeth visible in both jaws even when mouth is closed.**Colour:** Back and sides brown, belly pale or silvery; distal parts of dorsal, pectoral and particularly caudal fins, dusky; otherwise, no markings.**Size:** To 60 cm***Saurida undosquamis*** (Richardson, 1848)FAO names: Brushtooth lizardfish (En)
Anoli à grandes écailles (Fr)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Muddy bottoms from 20 m to 350 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Cigar-shaped, rounded or slightly compressed; the head pointed and depressed; the snout rounded; longest pectoral ray extending to about dorsal-fin origin; 9 pelvic-fin rays, inner barely longer than outer.**Colour:** Back and sides brown, belly pale or silvery; 8–10 bars often visible along lateral line; 2nd dorsal-fin ray and upper caudal ray with dark spots.**Size:** To 50 cm

***Synodus binotatus* Schultz, 1953** * (Plate I, 7)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Shallow waters down to 10 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Cheek behind mouth scaled; palatine teeth in a single band on each side (characteristic of the genus); pectoral fins reaching well beyond a line connecting origin of dorsal and pelvic fins; 8–10 anal–fin rays.**Colour:** Two black spots on snout; a series of 4 dark brown dorsal saddle-like bands on tan background; all fins barred.**FAO names:** Two-spot lizardfish (En)

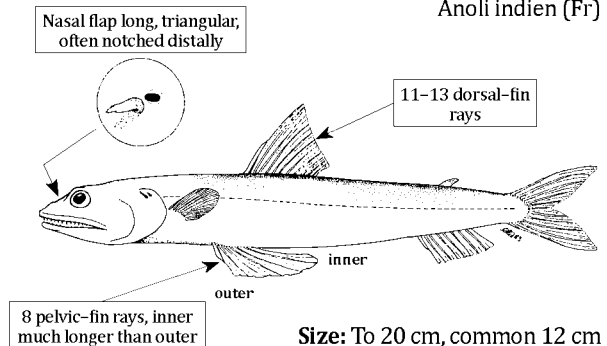
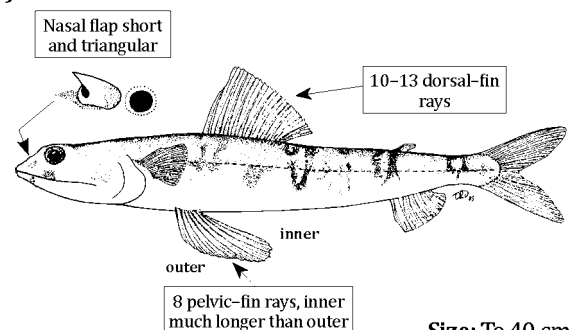
Anoli à deux taches (Fr)

**Size:** To 18 cm***Synodus dermatogenys* Fowler, 1912** (Plate I, 8)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Shallow waters down to 20 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Cheek behind mouth scaled; palatine teeth in a single band on each side (characteristic of the genus); pectoral fins short not reaching the line between origins of dorsal and pelvic fins; 8–10 anal–fin rays.**Colour:** Background tan; a series of 8–9 dark brown squared blotches with pale centers along lateral line; peritoneum pale.**FAO names:** Banded lizardfish (En)

Anoli bigarré (Fr)

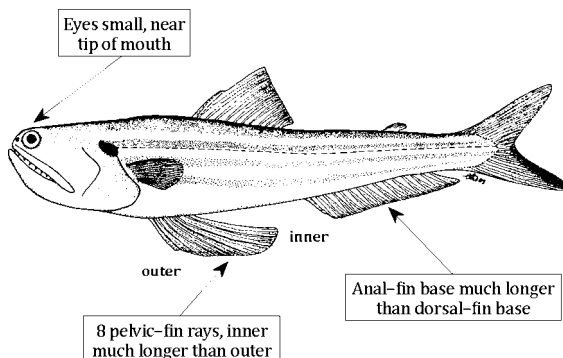
**Size:** To 40 cm***Synodus indicus* (Day, 1873)****Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Coastal waters from 20 m to 100 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Anterior palatine teeth short, not forming a discrete group; 8–11 anal–fin rays; posterior pelvic process wide.**Colour:** Body dusky pink above, with pale blue-grey blotches and stripes; two small pigmented spots at upper distal corner of operculum; 9–11 peritoneal spots.**FAO names:** Indian lizardfish (En)

Anoli indien (Fr)

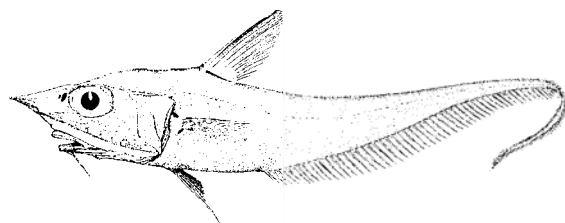
**Size:** To 20 cm, common 12 cm***Synodus variegatus* (Lacepède, 1803)** (Plate I, 9)**Local name(s):** N: Goromwe; S: Spika (K).**Habitat:** Shallow waters down to 10 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Anterior palatine teeth long and forming a discrete group; 8–10 anal–fin rays; posterior pelvic process wide.**Colour:** Adults variable from grey to red; on some individuals, the saddle-shaped markings along the sides may be obliterated by an almost solid dark red band.**FAO names:** Variegated lizardfish (En)**Size:** To 40 cm

***Trachinocephalus myops* (Forster, 1801)**

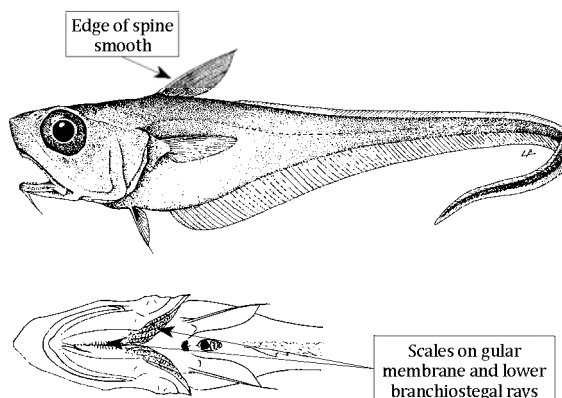
FAO names: Snakefish (En)

Local name(s): N: Goromwe; S: Spika (K).**Habitat:** Sand, shell, rock or mud bottoms from the shoreline down to 400 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Mouth oblique with a single row of teeth on upper jaw visible even when mouth is closed; 14–15 anal-fin rays.**Colour:** A series of longitudinal blue and yellow stripes cover back and sides; belly pale yellow or gold; a large, dark, oblique spot at upper corner of gill cover.**Size:** To 40 cm, common 25 cm**MACROURIDAE****Grenadiers*****Coelorinchus denticulatus* Regan, 1921**

FAO names: Filesnout grenadier (En)

Local name(s): N: Tondi; S: No information.**Habitat:** Benthopelagic, occurs in waters between 64 m and 335 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Light organ a dark streak extending forward from anus to chest, streak broadened at either end but anterior fossa not broadly naked; spinules on scales slender, conical, recurved, in irregular subparallel rows to somewhat quincunx pattern.**Colour:** Body light brownish to grey-brown with faint diagonal bands in some individuals; 1st dorsal fin with a dark band across the middle; pelvic fins black-tipped, their base blackish.**Size:** To 28 cm***Malacocephalus laevis* (Lowe, 1843)**

FAO names: Softhead grenadier (En)

Local name(s): N: Tondi; S: No information.**Habitat:** Benthopelagic on the continental slope between 200 m and 1000 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Upper jaw teeth in 1 row, outer series enlarged and widely spaced; dorsal fin with 2 spines and 9–13 rays, plus more than 220 soft rays; anal fin with more than 210 soft rays; pectoral fins with 16–22 soft rays.**Colour:** Body brown; 1st dorsal fin, pectoral fins, ventral fins and belly, blackish.**Size:** To 60 cm, common 40 cm

***Ventrifossa petersonii* (Alcock, 1891)**

Local name(s): N: Tondi; S: No information.

Habitat: Benthopelagic, occurs in deep waters between 300 m and 1000 m.

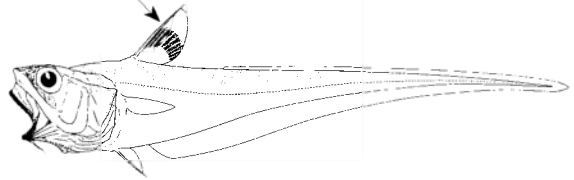
Fisheries: Bottom trawls.

Distinctive Characters: Teeth small; mandibular teeth in 2 or 3 rows; no scales on branchiostegal rays; scales rather large, with short, slender, conical spinules, many with broadened bases, arranged in widely divergent V rows or quincunx pattern.

Colour: Snout with a black margin along leading edge; 1st dorsal fin with a prominent black blotch across middle to lower portions.

FAO names: Peterson's grenadier (En)

Dorsal fin with 2 spines (the 2nd one serrated) and 8-10 soft rays



Size: To 42 cm

OPHIDIIDAE

Cusk eels – Brotulas

***Brotula multibarbata* Temminck & Schlegel, 1846**

Local name(s): N: Tondi; S: No information.

Habitat: Benthic on continental shelf and slope in deeper waters. Maximum depth 650 m.

Fisheries: Hooks and Line, Traps, Bottom trawls.

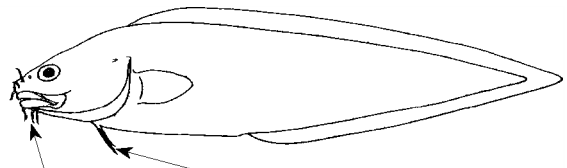
Distinctive Characters: Body elongate with a tapering caudal fin; fine teeth present on jaws and on palate; fins spineless; dorsal and anal fins long, continuous with caudal fin; body completely covered with small, cycloid (smooth) scales.

Colour: Uniform silvery, dusky to brown.

FAO names: Goatsbeard brotula (En)

Brotula barbe-de-boue (Fr)

12 barbels present on snout and chin



Pelvic fins with 2 rays each

Size: To 100 cm

LOPHIIDAE

Goosefishes

***Lophiodes mutilus* (Alcock, 1894)**

Local name(s): N: Shinda dovu/Guguye; S: Bocho (M).

Habitat: Inshore benthic on muddy to rocky bottoms, coral and rocky reefs; meso- and bathypelagic between 300 m and 500 m.

Fisheries: Bottom trawls.

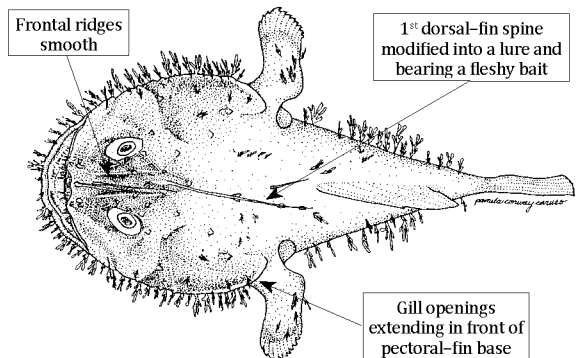
Distinctive Characters: Head with numerous sharp spines on dorsal and lateral surfaces; 2nd cephalic dorsal-fin spine scarcely longer than 1st; 2nd (soft) dorsal fin with 8 rays; anal fin with 6 rays.

Colour: Uniformly light to dark brown above, lighter below; pectoral fins darker distally; all fin rays with pale tips.

FAO names: Smooth angler (En)

Baudroie marache (Fr)

Frontal ridges smooth



1st dorsal-fin spine modified into a lure and bearing a fleshy bait

Gill openings extending in front of pectoral-fin base

Size: To 45 cm, common 30 cm

Lophiomus setigerus* (Vahl, 1797)

FAO names: Blackmouth angler (En)

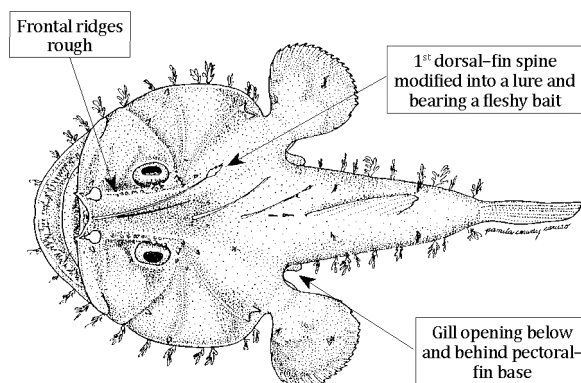
Local name(s): N: Shinda dovú/Guguye; S: Bocho (M).

Habitat: Inshore benthic on muddy to rocky bottoms, coral and rocky reefs to meso- and bathypelagic at depths from 30 m to 800 m.

Fisheries: Bottom trawls.

Distinctive Characters: Floor of mouth with a distinct reticulate pattern; 2nd cephalic dorsal-fin spine stout and darkly pigmented; 2nd (soft) dorsal fin with 8 rays; anal fin with 6 rays.

Colour: Light to dark brown above, lighter below; dorsal surface frequently mottled; all fin rays with pale tips; 2nd cephalic dorsal-fin spine darkly pigmented.



Size: To 40 cm, common 30 cm

ATHERINIDAE

Silversides

***Atherinomorus duodecimalis* (Valenciennes, 1835)**

FAO names: Tropical silverside (En)

Athérine tropicale (Fr)

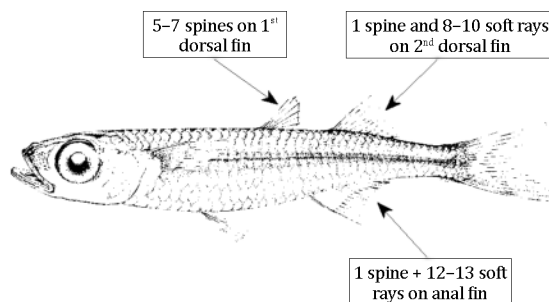
Local name(s): N: Makame kuoza; S: Hanithi/Mambangumu (M), Mambangumu (K).

Habitat: Restricted to coastal waters and harbours.

Fisheries: Seines, Cast nets.

Distinctive Characters: The distal end of upper jaw extending slightly backward beyond vertical through anterior border of orbit; the anus is 2 to 4 scales in front of the pelvic-fin tips, rarely more than 3 scales.

Colour: Scales above the midlateral stripe heavily pigmented with edges outlined by chromatophores; midlateral stripe narrow.



Size: To 11 cm (SL)

***Atherinomorus lacunosus* (Forster, 1801)**

FAO names: Hardyhead silverside (En)

Athérine tête (Fr)

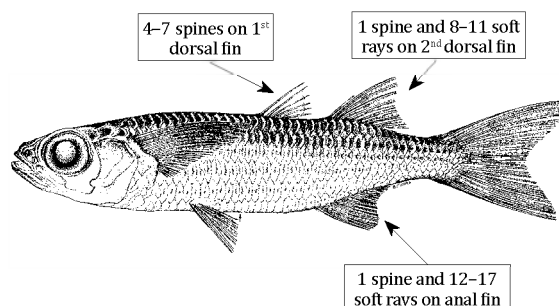
Local name(s): N: Makame kuoza; S: Hanithi/Mambangumu (M), Mambangumu (K).

Habitat: Schooling along shores sometimes with sardines.

Fisheries: Seines, Cast nets.

Distinctive Characters: Head and eyes moderately large; posterior edge of preopercle straight, anterior edge with a distinct notch; 18-25 gill rakers on lower limb of 1st gill arch; body scales large.

Colour: Greenish-grey with a broad silvery stripe on side of body, its upper edge with an iridescent blue line; a dark blotch on pectoral fins.



Size: To 25 cm

***Hypoatherina barnesi* Schultz, 1953**

FAO names: Barnes' silverside (En)

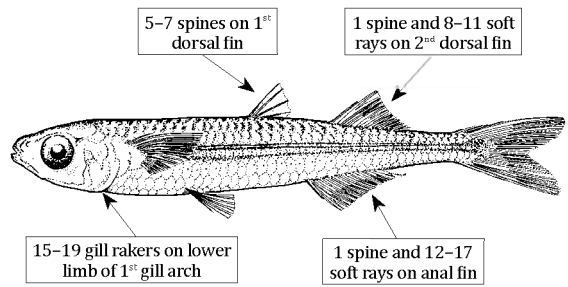
Local name(s): N: Makame kuoza; S: Hanithi/
Mambangumu (M), Mambangumu (K).

Habitat: Coastal waters and lagoons.

Fisheries: Seines, Cast nets.

Distinctive Characters: Body slender; body scales large; pectoral fins with 12–15 rays.

Colour: A black mid-dorsal line running from head to end of caudal peduncle; midlateral stripe wide, broadest between anus and anal fin extending onto caudal fin forming a triangular blotch on upper half of fin base; rows of spots on lower sides occasionally present.



Size: To 10 cm, common 4 cm

***Hypoatherina temminckii* (Bleeker, 1854)**

FAO names: Samoan silverside (En)

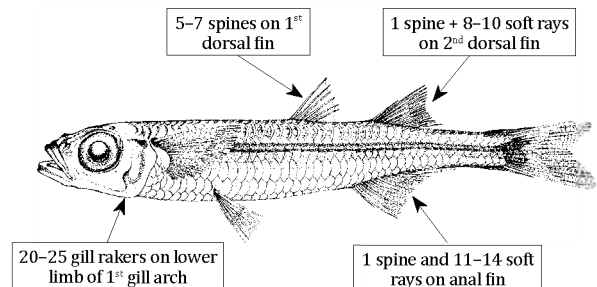
Local name(s): N: Makame kuoza; S: Hanithi/
Mambangumu (M), Mambangumu (K).

Habitat: Restricted to coastal waters and harbours.

Fisheries: Seines, Cast nets.

Distinctive Characters: Body slender; anus always behind pelvic-fin tips.

Colour: Transparent and blue-green in colour; silvery narrow midlateral stripe; scales above it heavily pigmented with edges outlined by chromatophores.



Size: To 11 cm, common 5 cm

BELONIDAE

Needlefishes

***Ablennes hians* (Valenciennes, 1846)**

FAO names: Flat needlefish (En)
Orphie plate (Fr)

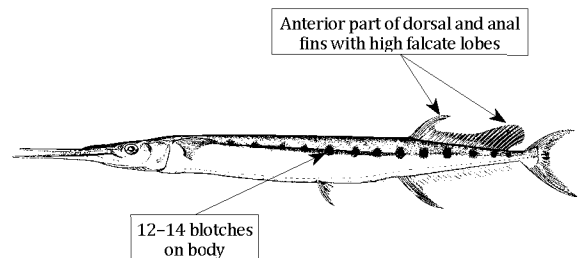
Local name(s): N: Mtumbuudau/Mgendi/Mgezi;
S: Mtumbuudau (M), Tsatsarika/Ngarengare (K).

Habitat: Pelagic, inhabiting offshore surface waters, abundant around islands.

Fisheries: Seines, Cast nets, Trolling gears, Gillnets, Handlines.

Distinctive Character: Dorsal fin with 23–26, usually 24–25 rays; anal fin with 24–28, usually 26–27 rays; pectoral fins falcate with 13–15 rays; caudal peduncle without lateral keels.

Colour: Bluish green above, silvery white below.



Size: To 140 cm, common 70 cm

Platybelone platyura* (Bennett, 1832)

Local name(s): N: Mtumbuudau/Mgendi/Mgezi;
S: Mtumbuudau (M), Tsatsarika/Ngarengare (K).

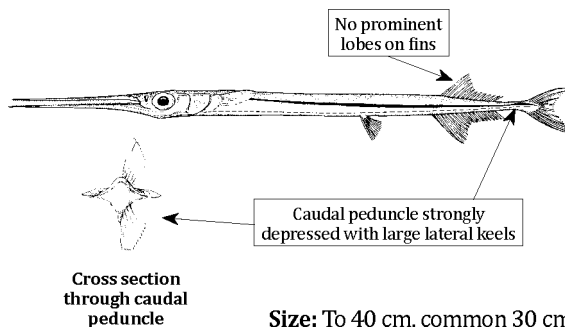
Habitat: Pelagic in off-shore waters.

Fisheries: Castnets, Trolling gears, Lured hooks, Seines, Handlines.

Distinctive Character: Dorsal fin with 12–15 rays; anal fin with 15–20 rays; pectoral fins not falcate.

Colour: Bluish–green above, silvery below; a dark blue stripe along sides; scales and bones green.

FAO names: Keeltail needlefish (En)
Orphie carénée (Fr)



Size: To 40 cm, common 30 cm

***Strongylura leiura* (Bleeker, 1850)**

Local name(s): N: Mtumbuudau/Mgendi/Mgezi;
S: Mtumbuudau (M), Tsatsarika/Ngarengare (K).

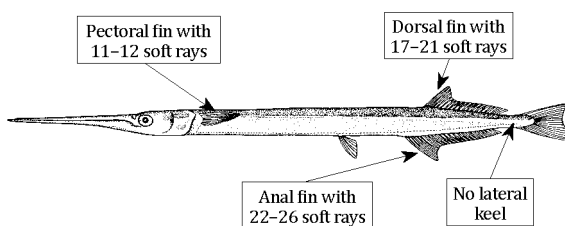
Habitat: In coastal areas, also enters estuaries.

Fisheries: Drift nets, Seines, Lines.

Distinctive Character: Body almost rectangular in cross section; origin of dorsal fin over 7th to 10th ray of anal fin.

Colour: Back greenish, sides silvery, white ventrally; a black bar on cheek between opercle and preopercle; pectoral fins dark distally, the tip yellow.

FAO names: Banded needlefish (En)



Size: To 75 cm

***Tylosurus acus melanotus* (Bleeker, 1850)**

Local name(s): N: Mtumbuudau/Mgendi/Mgezi;
S: Mtumbuudau (M), Tsatsarika/Ngarengare (K).

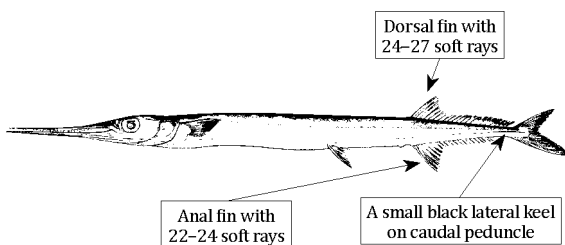
Habitat: Pelagic in off-shore waters, also found in coastal waters.

Fisheries: Cast nets, Trolling gears, Lured hooks, Gillnets, Seines.

Distinctive Characters: Caudal fin deeply forked, lower lobe much longer than upper; longer jaws with more numerous teeth and narrower caudal lobe than *T. crocodilus*.

Colour: Dark bluish above, silvery white below.

FAO names: Agujon needlefish (En)
Aiguille voyeuse (Fr)



Size: To 90 cm

***Tylosurus crocodilus crocodilus* (Péron & Lesueur, 1821)**

Local name(s): N: Mtumbuudau/Mgendi/Mgezi;
S: Mtumbuudau (M), Tsatsarika/Ngarengare (K).

Habitat: Pelagic in coastal waters, but also off-shore.

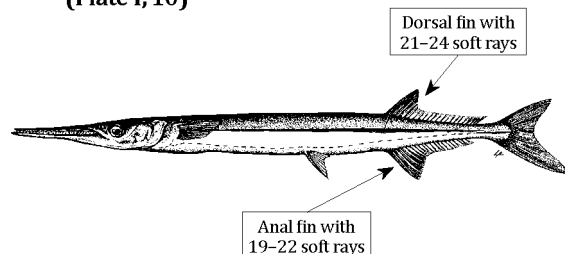
Fisheries: Castnets, Trolling gears, Purse seines, Drift nets, Gillnets, Lines.

Distinctive Character: Caudal fin deeply forked, lower lobe much longer than upper; a small black lateral keel on caudal peduncle.

Colour: Dark bluish green above, silvery below; a dark blue stripe along sides; a distinct black lateral keel on caudal peduncle.

FAO names: Hound needlefish (En)
Aiguille crocodile (Fr)

(Plate I, 10)



Size: To 150 cm

HEMIRAMPHIDAE

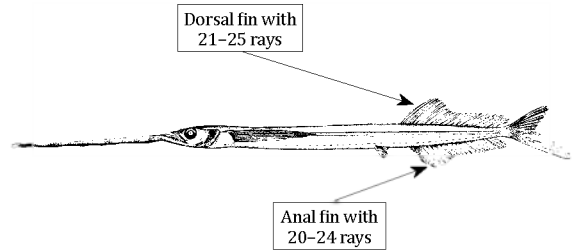
Halfbeaks

Euleptorhamphus viridis (van Hasselt, 1823)**Local name(s):** N: Chuchungi/Mkeke/Mgezi

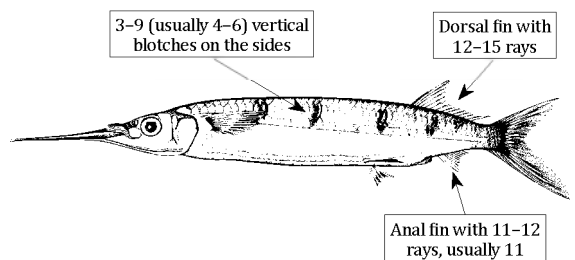
S: Chuchungi (M), Kidau (K).

Habitat: Off-shore waters.**Fisheries:** Gillnets, Shore seines; common in catches particularly in the south coast.**Distinctive Characters:** Lower jaw very prolonged; upper jaw short, triangular, and scaly; pectoral fins long.**Colour:** Fins unpigmented; fold of skin at edges of lower jaw, grey with transverse black bands.**FAO names:** Ribbon halfbeak (En)

Demi-bec allongé (Fr)

**Size:** To 50 cm***Hemiramphus far*** (Forsskål, 1775) (Plate II, 11)**Local name(s):** N: Chuchungi/Mkeke/Kule

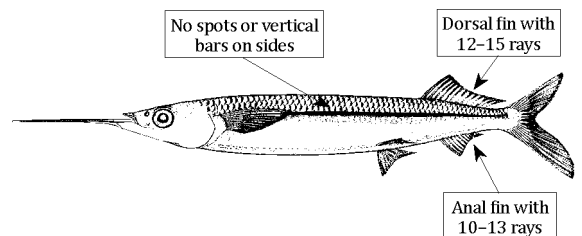
S: Chuchungi (M), Kidau (K).

Habitat: Common in off-shore waters rich in submerged vegetation.**Fisheries:** Gillnets, Seines.**Distinctive Characters:** Lower jaw very prolonged; upper jaw short triangular and scaleless; pectoral fins short; total number of gillrakers on first gill arch 25 to 36, usually 29 to 33.**Colour:** Dark bluish above, silvery white below.**FAO names:** Black-barred halfbeak (En)**Size:** To about 45 cm, common to 27 cm***Hemiramphus lutkei*** Valenciennes, 1847***Local name(s):** N: Chuchungi /Mkeke/Kiroho

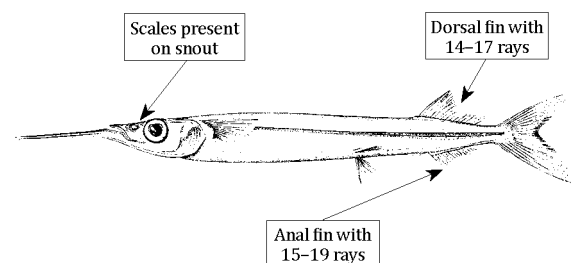
S: Chuchungi (M), Kidau (K).

Habitat: Off-shore waters.**Fisheries:** Shore seines, Gillnets, Lines.**Distinctive Characters:** Prolonged lower jaw; upper jaw short, triangular and scaleless; total number of gillrakers on first gill arch 33 to 46; pectoral fins long, reaching beyond anterior margin of nasal pit when folded forward.**Colour:** Dark bluish above, silvery white below.**FAO names:** Lutke's halfbeak (En)

Demi-bec de Lutke (Fr)

**Size:** To 40 cm, common 25 cm***Hyporhamphus affinis*** (Günther, 1866)**Local name(s):** N: Chuchungi/Mkeke/Mgezi

S: Chuchungi (M), Kidau (K).

Habitat: Clear waters particularly around reefs.**Fisheries:** Shore seines, Purse seines, Gillnets.**Distinctive Characters:** Lower jaw very prolonged; upper jaw short; front part of dorsal fin and entire anal fin covered with scales.**Colour:** Body deep blue above, silvery white below; silvery stripe on side; caudal fin bluish, other fins unpigmented; tip and distal half of underside of lower jaw bright carmine red.**FAO names:** Tropical halfbeak (En)**Size:** To 38 cm

***Hyporhamphus dussumieri* (Valenciennes, 1847)**

Local name(s): N: Chuchungi/Mkeke;

S: Chuchungi (M), Kidau (K).

Habitat: Occurs around islands and coral reefs.

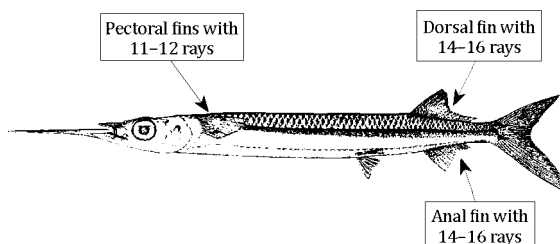
Fisheries: Shore seines, Gillnets, Lines.

Distinctive Characters: Greatly prolonged beak-like lower jaw; upper jaw short, triangular and scaly; caudal fin forked with lower lobe longer than upper.

Colour: Greenish above, silvery white below; fleshy tip of beak red.

FAO names: Dussumier's halfbeak (En)

Demi-bec de Dussumier (Fr)



Size: To 38 cm, common 20 cm

EXOCOETIDAE

Flyingfishes

Cheilopogon atrisignis* (Jenkins, 1903)

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

Habitat: Pelagic in surface waters of both oceanic and neritic areas.

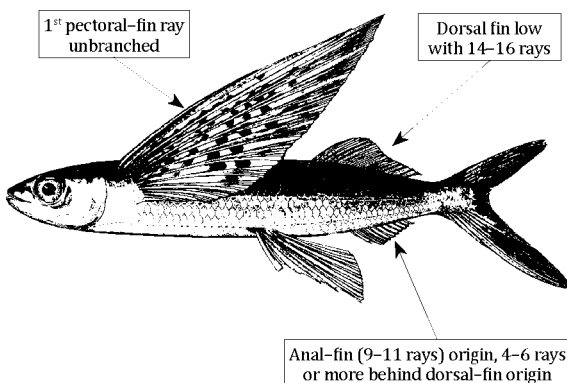
Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Head shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; dorsal-fin rays at anterior end, the longest; pelvic fins abdominal, large, reaching well beyond anal-fin origin.

Colour: Dark above, pale below; pectoral fins brownish with numerous scattered spots.

FAO names: Glider flyingfish (En)

Exocet planeur (Fr)



Size: To 35 cm

Cheilopogon cyanopterus* (Valenciennes, 1847)

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

Habitat: Pelagic in surface waters in both oceanic and neritic areas.

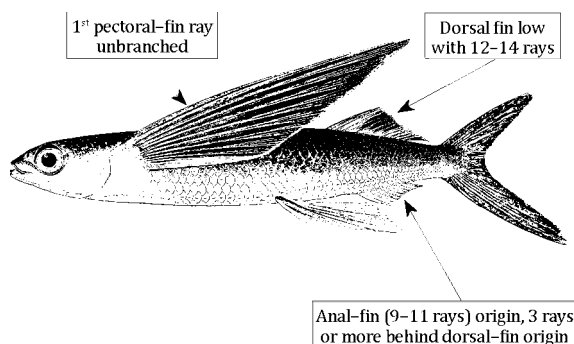
Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Head approximately equal to distance between dorsal-fin origin and origin of upper caudal-fin lobe; dorsal-fin rays at anterior end the longest; pelvic fins abdominal, large, reaching well beyond anal-fin origin.

Colour: Dark above, pale below; dorsal with a prominent black spot; pectoral fins blue in life; without stripes or spots.

FAO names: Margined flyingfish (En)

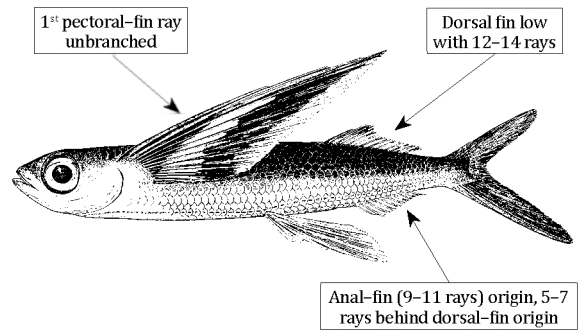
Exocet cadène (Fr)



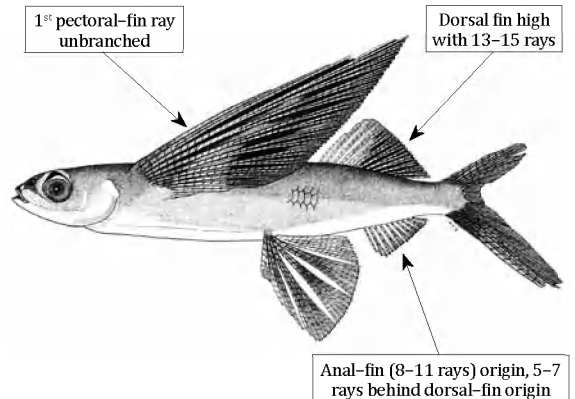
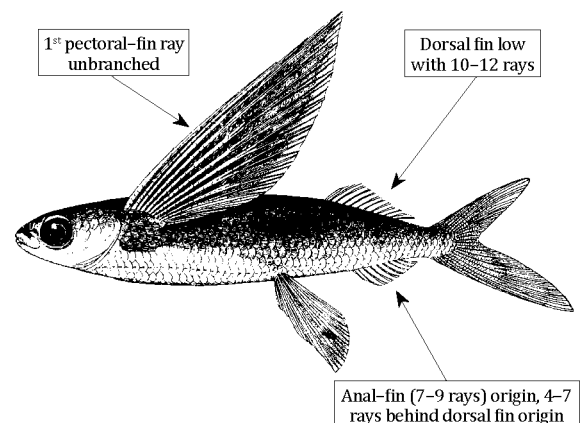
Size: To 40 cm

Cheilopogon furcatus* (Mitchill, 1815)

FAO names: Spotfin flyingfish (En)

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).**Habitat:** Pelagic in oceanic surface waters.**Fisheries:** Gillnets, Seines, Hand nets.**Distinctive Characters:** Head considerably shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; dorsal rays at anterior end the longest; caudal fin forked with lower lobe much longer than upper.**Colour:** Body dark iridescent blue above, silvery-white below; pectoral fins dark grey, with a broad pale margin crossed by a pale stripe becoming narrower toward anterior fin margin; pelvic fins pale.**Size:** To 35 cm***Cheilopogon nigricans* (Bennett, 1840)***

FAO names: Blacksail flyingfish (En)

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).**Habitat:** Pelagic in oceanic surface waters.**Fisheries:** Gillnets, Seines, Hand nets. By-catch in various types of gears.**Distinctive Characters:** Head shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; pelvic fins abdominal, large, reaching well beyond anal-fin origin.**Colour:** Dorsal fin with a prominent black spot; pectoral fins black with a central portion crossed by a yellow or greenish-yellow transverse stripe becoming narrow towards fin margin; pelvic fins with prominent black spot.**Size:** To 28 cm***Cypselurus naresii* (Günther, 1889)***FAO names: Pharao flyingfish (En)
Exocet pharaon (Fr)**Local name(s):** N: Pandi mai (maji); S: Panzi (M/K).**Habitat:** Pelagic in oceanic surface waters.**Fisheries:** Gillnets, Seines, Hand nets.**Distinctive Characters:** Head approximately equal to the distance between dorsal-fin origin and origin of upper caudal-fin lobe; insertion of pelvic fins closer to anal-fin origin than to pectoral-fin insertion.**Colour:** Dorsal fin greyish; pectoral fins brownish, unpigmented below the 9th ray.**Size:** To 21 cm

***Cypselurus oligolepis* (Bleeker, 1865) ***

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

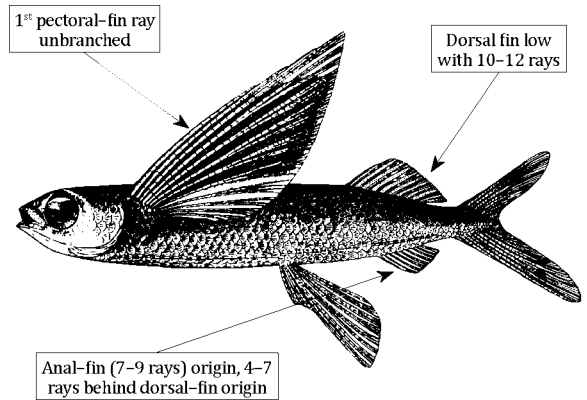
Habitat: Pelagic in surface waters of inshore areas.

Fisheries: Gillnets, Seines, Handnets.

Distinctive Characters: Head much shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; pelvic-fin insertion closer to anal-fin origin than to pectoral-fin insertion and much nearer to hind margin of head than to origin of lower caudal-fin lobe.

Colour: Pectoral fins greyish-brown, lower portion and posterior tip colourless.

FAO names: Largescale flyingfish (En)
Exocet à grandes écailles (Fr)



Size: To 27 cm

***Cypselurus poecilopterus* (Valenciennes, 1847) ***

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

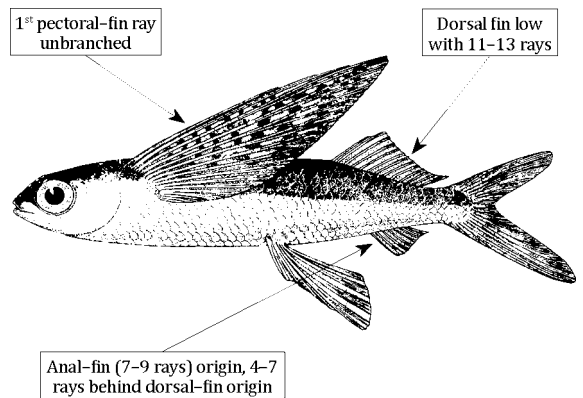
Habitat: Pelagic in neritic surface waters; rare in the open ocean.

Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Head shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; insertion closer to anal-fin origin than to pectoral-fin insertion and much nearer to hind margin of head than to origin of lower caudal-fin lobe.

Colour: Pectoral fins brownish-grey (yellowish-brown in life) with numerous dark spots.

FAO names: Yellowing flyingfish (En)



Size: To 27 cm

***Exocoetus monocirrhus* Richardson, 1846**

Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

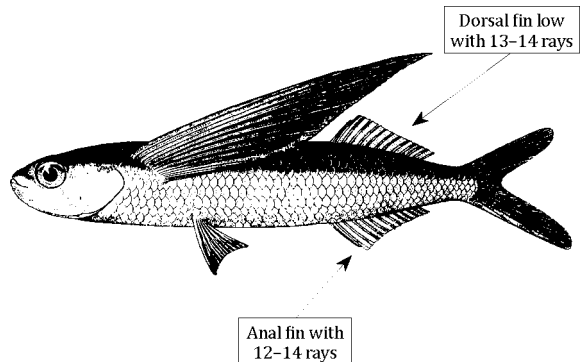
Habitat: Pelagic in oceanic surface waters.

Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Upper jaw not protrusible; gillrakers on first arch 21 to 29; pelvic fins short, far from reaching anal fin; usually 7 transverse rows of scales between dorsal-fin origin and lateral line.

Colour: Body dark iridescent blue above, silvery-white below; pectoral fins and caudal fin greyish or brownish, other fins unpigmented.

FAO names: Barbel flyingfish (En)
Exocet boue (Fr)



Size: To 20 cm

***Parexocoetus brachypterus* (Richardson, 1846)**

FAO names: Sailfin flyingfish (En)

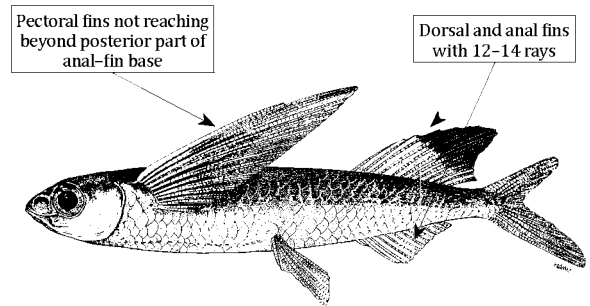
Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

Habitat: Pelagic in neritic surface waters, rare in the open ocean.

Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Upper jaw protrusible; dorsal fin high, reaching well beyond origin of upper caudal-fin lobe when depressed.

Colour: Body iridescent greenish-blue dorsally, silvery-white ventrally; dorsal fin black except for base and posterior rays which are pale; pelvic fins greyish, other fins transparent.



Size: To 14 cm

***Parexocoetus mento* (Valenciennes, 1847)**FAO names: African sailfin flyingfish (En)
Exocet voilier africain (Fr)

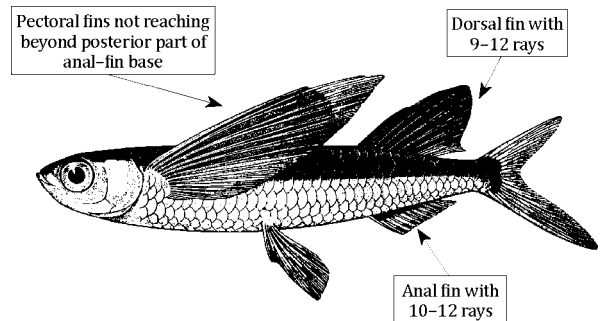
Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

Habitat: Pelagic in neritic surface waters, absent in the open ocean.

Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Upper jaw protrusible; dorsal fin high almost reaching the origin of upper caudal-fin lobe when depressed; pelvic fins abdominal, medium-sized, reaching beyond anal-fin origin, their insertion closer to anal-fin origin than to pectoral-fin insertion.

Colour: Dorsal fin mostly blackish; pectoral fins and caudal greyish, other fins transparent.



Size: To 11 cm

***Prognichthys brevipinnis* (Valenciennes, 1847)**

FAO names: Shortfin flyingfish (En)

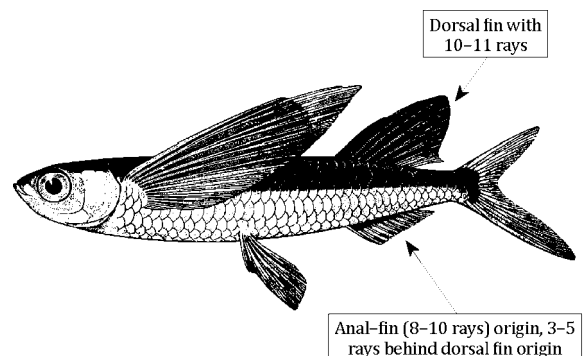
Local name(s): N: Pandi mai (maji); S: Panzi (M/K).

Habitat: Pelagic in neritic surface waters, rare in the open ocean.

Fisheries: Gillnets, Seines, Hand nets.

Distinctive Characters: Head shorter than distance between dorsal-fin origin and origin of upper caudal-fin lobe; lower jaw a little shorter than the upper; first 3 rays of pectoral fins unbranched; pelvic-fin insertions closer to anal-fin origin than to pectoral-fin insertion and much nearer to hind margin of head than to origin of lower caudal-fin lobe.

Colour: Dorsal fin greyish; pectoral fins grey above, lower part and tip transparent; pelvic fins unpigmented.



Size: To 19 cm

BERYCIDAE

Alfonsinos

***Beryx splendens* Lowe, 1834**

Local name(s): N & S: No information.

Habitat: Bathypelagic, over the continental slope, in depths from about 200 m to 600 m.

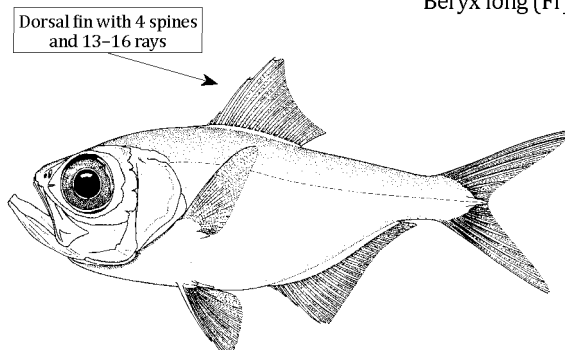
Fisheries: Longlines, Bottom trawls.

Distinctive Characters: Body depth 2.5 to 2.8 times in standard length; first infraorbital bone with a spine projecting laterally on anterior end; lateral line extends to caudal fin; a fleshy disk on inner face of exposed area of scale; in young fishes the 2nd dorsal ray is elongate.

Colour: Body orange-red with silvery reflections ventrally.

FAO names: Splendid alfonsino (En)

Béryx long (Fr)



Size: To about 70 cm, common 40 cm

HOLOCENTRIDAE

Squirrelfishes – Soldierfishes

***Myripristis adusta* Bleeker, 1853**

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Common in shallow waters around coral reefs; hides in caves during day.

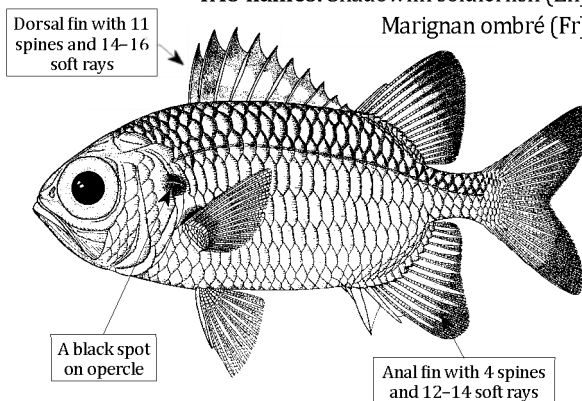
Fisheries: Hooks and Line, Gillnets, Spears, Seines.

Distinctive Characters: One or two (usually one) pairs of tooth patches at front of lower jaw outside mouth.

Colour: Pale salmon pink; edges of scales dorsally on body deep blue to black; median fins with broad black outer border.

FAO names: Shadowfin soldierfish (En)

Marignan ombré (Fr)



Size: To 35 cm, common 20 cm

Myripristis berndti* Jordan & Evermann, 1903

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Shallow waters around coral reefs.

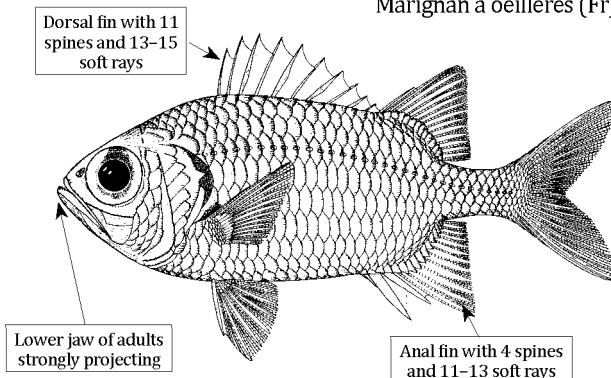
Fisheries: Hooks and Line, Gillnets; caught at night.

Distinctive Characters: One pair of tooth patches at front of lower jaw outside mouth; 11th dorsal spine more than twice length of 10th and closely applied to soft portion of fin.

Colour: Spiny dorsal fin orange-yellow; opercular membrane black; leading edge of soft dorsal, anal caudal and pelvic fins white.

FAO names: Blotcheye soldierfish (En)

Marignan à ocellères (Fr)



Size: To 30 cm, common 22 cm

***Myripristis kuntzei* Valenciennes, 1831**

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Shallow waters around coral reefs; caught at night.

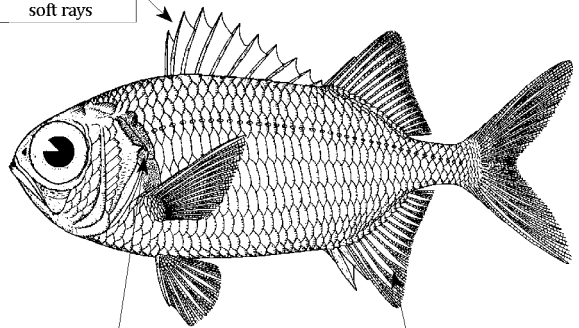
Fisheries: Hooks and Line, Gillnets.

Distinctive Characters: One pair of tooth patches at front of lower jaw outside mouth; corner of preopercle with a sharp spine; 11th dorsal spine about twice the length of 10th spine and closely applied to soft portion of fin.

Colour: Silvery orange-red; red pigment in soft dorsal and anal fins concentrated in a large spot at tips of fins.

Remarks: Has smaller scales than most other similar species and the higher number along the body is quite obvious.

Dorsal fin with 11 spines and 15-17 soft rays



Continuous reddish-brown bar from upper end of gill opening to axil of pectoral fin

Anal fin with 4 spines and 14-16 soft rays

Size: To 26 cm, common 16 cm

FAO names: Shoulderbar soldierfish (En)
Marignan ardoisé (Fr)

***Myripristis murdjan* (Forskåål, 1775)**

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

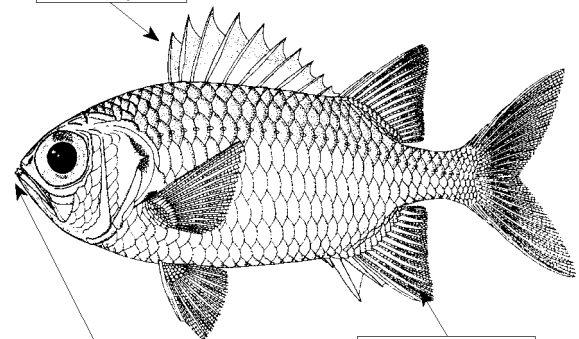
Habitat: Coral reefs, hiding in caves and crevices by day.

Fisheries: Hooks and Line, Gillnets; caught at night.

Distinctive Characters: Snout short; lower jaw slightly projecting when mouth is closed; a single pair of tooth patches at front of lower jaw outside mouth; caudal fin deeply forked.

Colour: Body colour silvery-pink; edge of scales red; opercular margin black; all fins red; submarginal band in each caudal-fin lobe; leading edges of median fins white.

Dorsal fin with 11 spines and 13-15 soft rays



Lower jaw slightly projecting

Anal fin with 4 spines and 11-14 soft rays

Size: To 30 cm, common 20 cm

FAO names: Pinecone soldierfish (En)

***Neoniphon opercularis* (Valenciennes, 1831)**

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

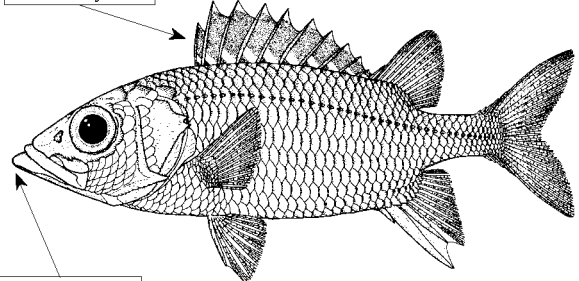
Habitat: A reef species found in shallow to moderate depths.

Fisheries: Hooks and Line, Traps.

Distinctive Characters: Body moderately elongated; corner of preopercle with a sharp spine; anal fin with 4 spines and 8-9 soft rays.

Colour: Body iridescent silvery with dark red or black markings on each scale; spinous portion of dorsal fin black; soft dorsal, anal and caudal fins reddish-yellow; pectoral fins pink; pelvic fins white.

Dorsal fin with 11 spines and 12-14 soft rays



Lower jaw strongly pointed when mouth closed

Size: To 35 cm, common 23 cm

FAO names: Blackfin squirrelfish (En)
Marignan aile noire (Fr)

***Neoniphon sammara* (Forsskål, 1775)**

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha (K).

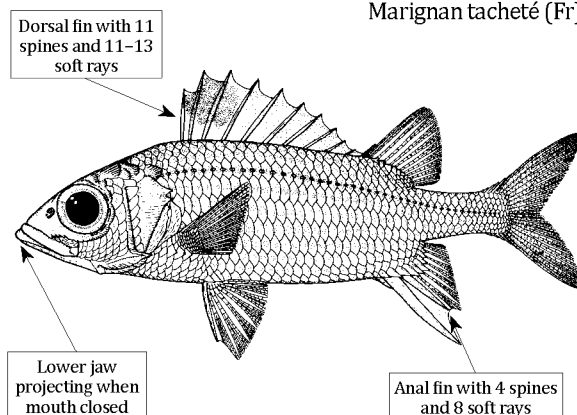
Habitat: Coral reefs, most often in shallow waters of bays and lagoons.

Fisheries: Hooks and Line, Traps, Seines.

Distinctive Characters: Body moderately elongated; corner of preopercle with a sharp spine.

Colour: Silvery with blue-green iridescence; a reddish stripe following lateral line; snout and top of head red; spiny portion of dorsal fin with a large black spot tinged with red on first 3 membranes.

FAO names: Sammara squirrelfish (En)
Marignan tacheté (Fr)



Size: To 30 cm, common 23 cm

Ostichthys archiepiscopus* (Valenciennes, 1862)

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha (K).

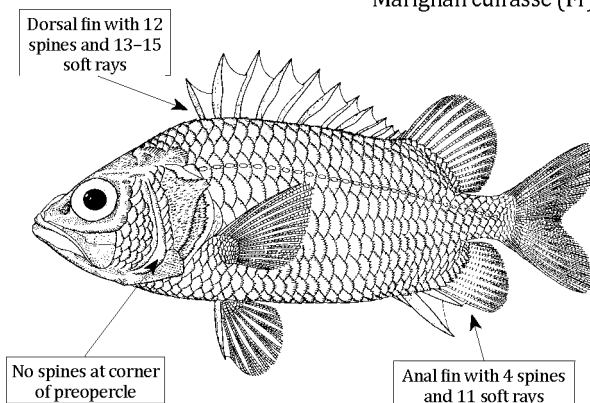
Habitat: Associated with reefs down to 200 m.

Fisheries: Bottom trawls, Hooks and Line.

Distinctive Characters: Dorsal profile of head straight; dorsal fin continuous though deeply notched between spiny and soft portions.

Colour: Light red, the centers of the scales paler, thus forming faint longitudinal bands.

FAO names: Longsnout soldier (En)
Marignan cuirassé (Fr)



Size: To 32 cm, common 24 cm

***Sargocentron caudimaculatum* (Rüppell, 1838)**

(Plate II, 12) **FAO names:** Silverspot squirrelfish (En)

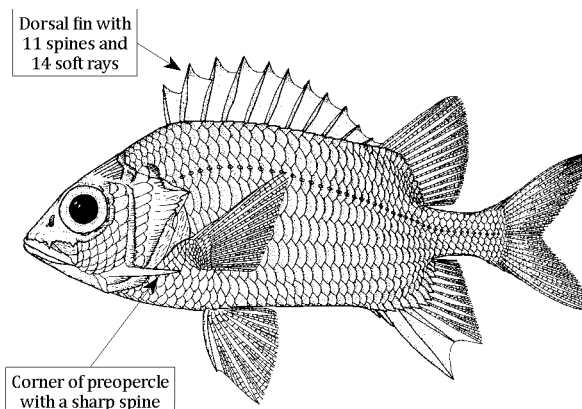
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Associated with reefs.

Fisheries: Hooks and Line, Traps.

Distinctive Characters: Dorsal profile of head of adults nearly straight; very large scales on posterior part of opercle; anal fin with 4 spines and 9 soft rays.

Colour: Head and body red, edges of scales silver; silvery white spot antero-dorsally on caudal peduncle (often disappears after death); spinous part of dorsal fin mottled light red, the outer part of the membranes bright red.



Size: To 25 cm, common 18 cm

***Sargocentron diadema* (Lacepède, 1802)**

(Plate II, 13)

FAO names: Crown squirrelfish (En)

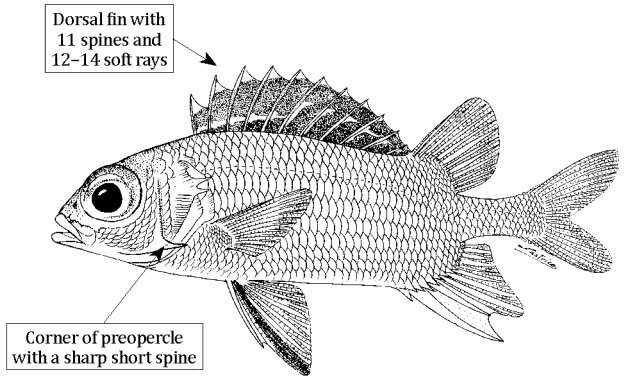
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Coral reefs from 2 m to 30 m.

Fisheries: Hooks and Line.

Distinctive Characters: Anal fin with 4 spines and 8–9 soft rays.

Colour: Body with alternating stripes of red and silvery-white; head red with 2 vertical white streaks on the opercle, one on its edge and an oblique one below the eye; distinctive reddish-black to black dorsal fin with two white streaks.



Size: To 17 cm

Sargocentron ittodai* (Jordan & Fowler, 1902)

FAO names: Samurai squirrelfish (En)

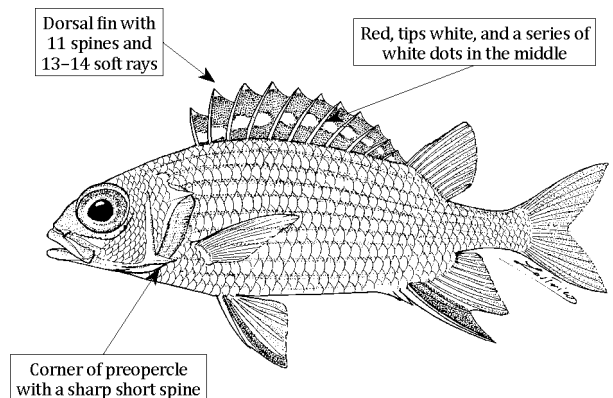
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Associated with coral reefs.

Fisheries: Hooks and Line.

Distinctive Characters: Anal fin with 4 spines and 8–10 soft rays.

Colour: Body with red and white stripes following the scale rows, the red stripes slightly narrower than the white ones; inner base of pectoral fins with a black spot.



Size: To 20 cm

***Sargocentron macrosquamis* Golani, 1984**

FAO names: Bigscale squirrelfish (En)

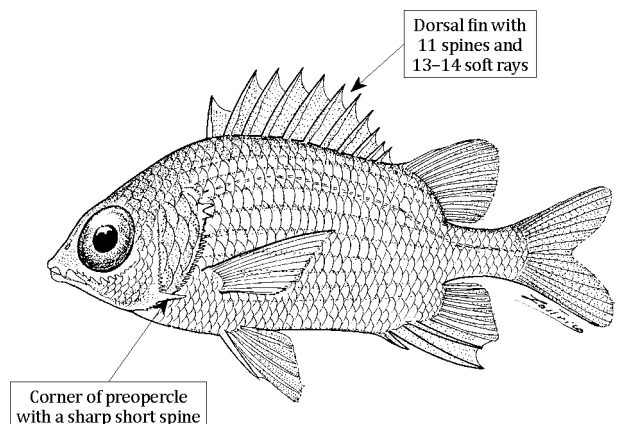
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Shallow inshore waters from 4 m to 10 m.

Fisheries: Traps, Seines, Hooks and Line, Gillnets.

Distinctive Characters: Very large scales on posterior part of preopercle; anal fin with 4 spines and 9–10 soft rays; pectoral fins with 14–16 soft rays; mouth terminal to slightly inferior; maxilla extending to a vertical at front edge of pupil or slightly before or beyond to it; broadly rounded caudal fin lobes.

Colour: Body red with silvery reflections on many scales, shading to silvery-white on lower part of the head, thorax, and anterior abdomen.



Size: To 9 cm

Sargocentron melanospilos* (Bleeker, 1858)

FAO names: Blackblotch squirrelfish (En)

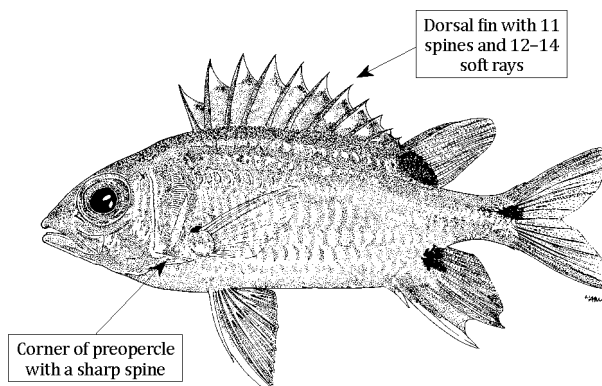
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha (K).

Habitat: Shallow coastal waters down to 90 m.

Fisheries: Traps, Seines, Hooks and Line, Gillnets.

Distinctive Characters: Anal fin with 4 spines and 12 soft rays (3rd spine stoutest, but the 4th slightly longer).

Colour: Body with red–orange and silvery stripes; dark spots at origin of pectoral fins, end of caudal peduncle and bases of soft rayed portions of dorsal and anal fins.



Size: To 25 cm

***Sargocentron praslin* (Lacepède, 1802)**

FAO names: Dark–striped squirrelfish (En)

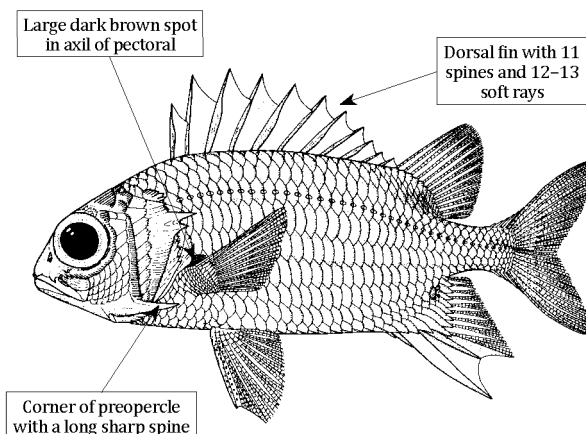
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Shallow waters, often around coral reefs.

Fisheries: Traps, Hooks and Line, Seines, Gillnets.

Distinctive Characters: Body deep; anal fin with 4 spines and 9 soft rays; 13–15 pectoral–fin rays (rarely 13).

Colour: Body with brownish–red stripes alternating with silvery white ones; the upper 2 dark stripes often ending in an elongate dark brown spot at the base of the dorsal–fin soft portion; the 3rd curving downward to end at mid–base of caudal fin; the 4th ending just before the caudal peduncle; the 5th and 6th converging posteriorly on lower edge of caudal peduncle; 7th and 8th ending in a dark blotch at the rear soft anal–fin base; soft portions of dorsal and anal fins with a dark spot each.



Size: To 32 cm

Sargocentron punctatissimum* (Cuvier, 1829)

FAO names: Peppered squirrelfish (En)

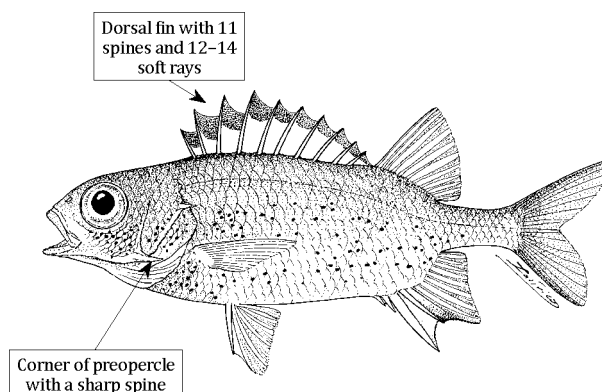
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Rocky shores and reefs exposed to wave action, often in shallow waters.

Fisheries: Traps, Hooks and Line, Seines, Gillnets.

Distinctive Characters: Small mouth, terminal to slightly inferior, maxilla reaching from below front of iris to below center of eye; anal fin with 4 spines and 9 soft rays; pectoral fins with 14–16 soft rays.

Colour: Body reddish–silvery, iridescent bluish dorsally; scales finely dotted with black; spiny dorsal–fin silvery white, with broad red margin.



Size: To 16 cm

Sargocentron rubrum (Forsskål, 1775)

FAO names: Redcoat (En)
Marignan rouget (Fr)

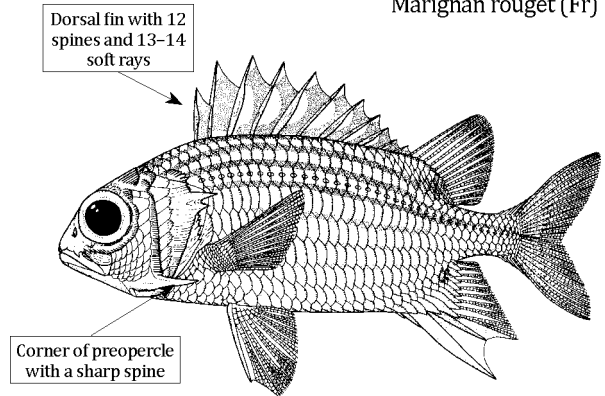
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Shallow water species found in protected habitats such as bays and lagoons.

Fisheries: Traps, Hooks and Line, Seines, Gillnets.

Distinctive Characters: Mouth terminal to slightly inferior; maxilla usually extending nearly to or a short distance beyond a vertical through center of eye; anal fin with 4 spines and 8–9 soft rays.

Colour: Body with alternate stripes of red and silvery–white; spiny dorsal–fin red with white tips and a median band of white spots; no dark spots at pectoral–fin base, but with dark spots at bases of soft dorsal and anal fins.



Size: To 32 cm, common 27 cm

Sargocentron spiniferum (Forsskål, 1775) *

FAO names: Sabre squirrelfish (En)
Marignan sabre (Fr)

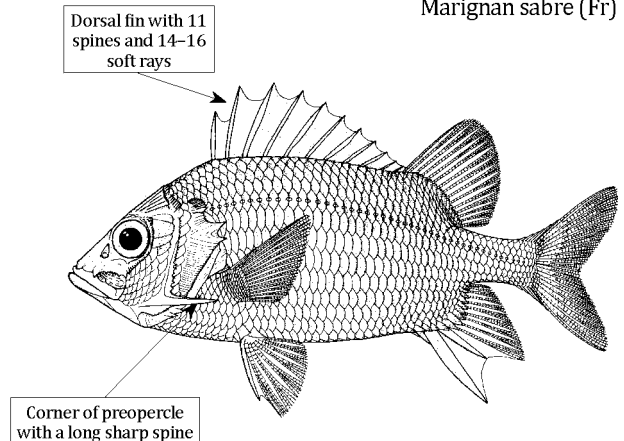
Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

Habitat: Associated with coral reefs; hides by day and emerges with the onset of darkness.

Fisheries: Hooks and Line, Traps, Gillnets, Spears.

Distinctive Characters: Lower jaw projecting when mouth closed; maxilla extending posteriorly to a vertical at front edge of the orbit; anterior end of nasal bone often with 2 close-set, short spines; anal fin with 4 spines and 9–10 soft rays; 15 pectoral–fin rays.

Colour: Head and body red, darker dorsally; a large vertically elongate deep red spot behind eye; pectoral axil and region above pectoral–fin base deep red.



Size: To 45 cm, common 35 cm

Sargocentron violaceum (Bleeker, 1853) (Plate II, 14)

FAO names: Violet soldierfish (En)

Local name(s): N: Sheemiito/Idazi; S: Bwanaheri/Kifufu (M), Mwanaasha, Kijame, Kifudu (K).

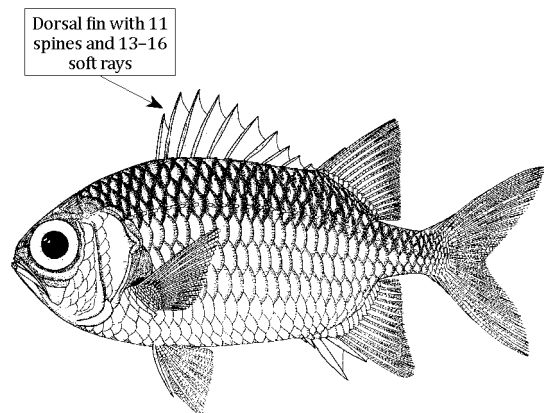
Habitat: Coral reefs of shallow waters.

Fisheries: Traps, Hooks and Line, Gillnets.

Distinctive Characters: A single pair of tooth patches at front of lower jaw outside gape; anal fin with 4 spines and 12–14 soft rays.

Colour: Body colour brownish to purplish red; head primarily red; upper part of opercular membrane blackish; dorsal margin of scales dark brown to nearly black; median fins light–red, red distally, with white edges anteriorly on soft dorsal, anal, caudal and pelvic fins.

Remarks: Has a high body similar to *S. spiniferum*, but differs in coloration and does not get as large.



Size: To 45 cm, common 20 cm

PARAZENIDAE

Parazens

Cyttopsis rosea* (Lowe, 1843)

FAO names: Rosy dory (En)
Saint Pierre rosé (Fr)

Local name(s): N: Sese/Ngamia; S: No information.

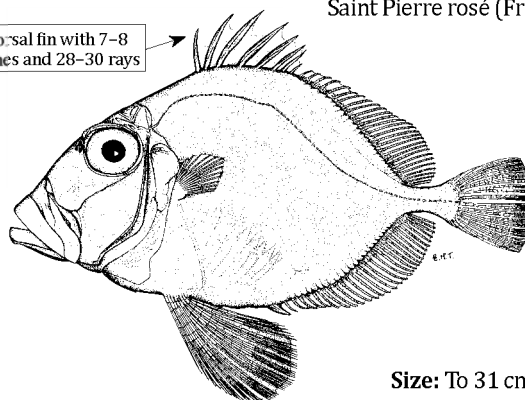
Habitat: Bathypelagic from 65 m to 600 m.

Fisheries: Gillnets, Seines, Bottom trawls.

Distinctive Characters: Upper edge of orbit with small spines anteriorly; two large keeled scutes, each ending in a spine between pelvic-fin rays; anal fin with 2 spines, the 1st immovable and the 2nd movable, the 1st much larger than the 2nd, and 28–30 soft rays; pelvic fins with 9–10 segmented and branched soft rays.

Colour: Rosy pink and silvery in life; pelvic fins reddish, the membrane black.

Dorsal fin with 7–8 spines and 28–30 rays



Size: To 31 cm

ZEIDAE

Dories

***Zenopsis conchifer* (Lowe, 1852)**

FAO names: Silvery John dory (En)
Saint Pierre argenté (Fr)

Local name(s): N: Sese/Ngamia; S: No information.

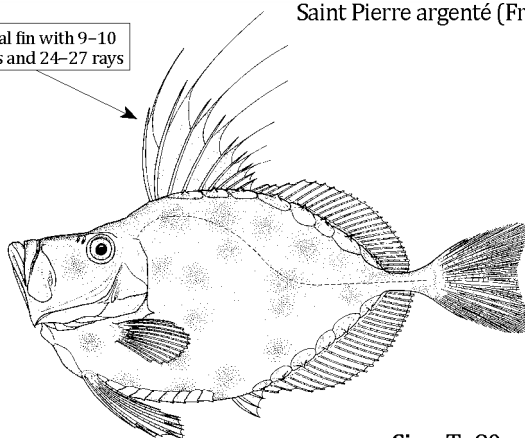
Habitat: Mesopelagic from 90 m to 600 m.

Fisheries: Gillnets, Seines, Bottom trawls.

Distinctive Characters: Seven pairs of keeled bony scutes between pelvic fins and 1st anal spine; 1–3 bony plates at base of 1st dorsal fin, 4–5 along base of soft dorsal and 5–7 along base of anal fin; anal fin with 3 spines and 24–26 soft rays; pelvic fins with 6–7 rays.

Colour: Body silvery, with a dusky mid lateral spot just posterior to and slightly above end of pectoral fins; fin membranes of spinous dorsal, pectoral, pelvic and caudal fins blackish.

Dorsal fin with 9–10 spines and 24–27 rays



Size: To 80 cm

AULOSTOMIDAE

Trumpetfishes

***Aulostomus chinensis* (Linnaeus, 1766)**

FAO names: Chinese trumpetfish (En)
Trompette chinoise (Fr)

Local name(s): N: Misusa; S: Misonjo/Mziwa (M), Mrara, Unjasi (K).

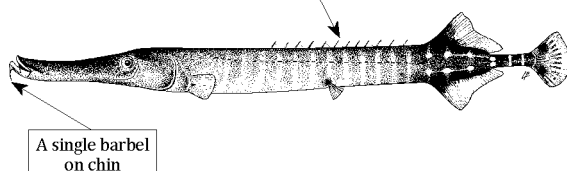
Habitat: Clear, shallow waters, in rocky and coral areas of protected and seaward reefs.

Fisheries: Lines, Gillnets, Bottom trawls.

Distinctive Characters: Second dorsal fin with 24–27 soft rays; anal fin with 26–29 segmented soft rays; pelvic fins small, abdominal, with 6 rays.

Colour: Background colour brownish with irregular light vertical bars; dorsal and anal fins light, with a dark basal bar; caudal fin usually with two round black spots; a black spot at base of pelvic fin.

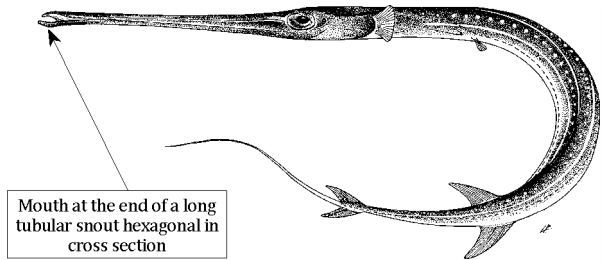
1st dorsal fin with 8–12 isolated spines



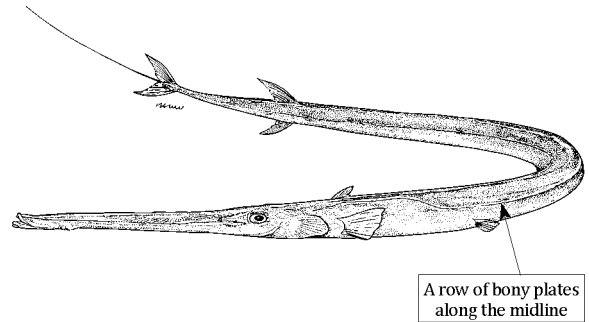
Size: To 80 cm, common 50 cm

FISTULARIIDAE

Cornetfishes – Flutemouths

Fistularia commersonii Rüppell, 1838FAO names: Bluespotted cornetfish (En)
Cornette à taches bleues (Fr)**Local name(s):** N: Misusa; S: Misonjo/Mziwa (M), Mrara, Unjasi (K).**Habitat:** Seagrass beds and coral reefs in shallow waters.**Fisheries:** Lines, Gillnets, Bottom trawls.**Distinctive Characters:** Dorsal and anal fins short-based and opposite, with 15–17 and 14–16 segmented soft rays, respectively; pectoral fins with 13–15 rays; pelvic fins small and abdominal, with 6 rays.**Colour:** Brownish to olive above, lighter to silvery below; a pair of blue stripes or a row of blue spots along back; dorsal and anal fins with an orange cast becoming transparent at base; caudal filament white.

Size: To 160 cm, common 100 cm

Fistularia petimba Lacepède, 1803FAO names: Red cornetfish (En)
Cornette rouge (Fr)**Local name(s):** N: Misusa; S: Misonjo/Mziwa (M) Mrara, Unjasi (K).**Habitat:** In coastal areas over soft beds down to more than 10 m.**Fisheries:** Lines, Gillnets, Bottom trawls.**Distinctive Characters:** Body elongate and depressed; mouth at end of a long tubular snout, hexagonal in cross section; dorsal and anal fins short-based and opposite, with 14–16 segmented soft rays; pectoral fins with 15–16 rays; pelvic fins small and abdominal, with 6 rays.**Colour:** Background colour red to orange-brown above, silvery below; vertical fins also have an orange cast.

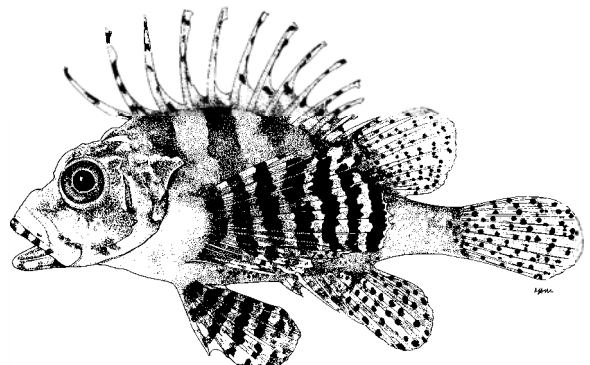
Size: To 200 cm, common 100 cm

SCORPAENIDAE

Scorpionfishes – Rockfishes

Dendrochirus brachypterus (Cuvier, 1829) (Plate II, 15)

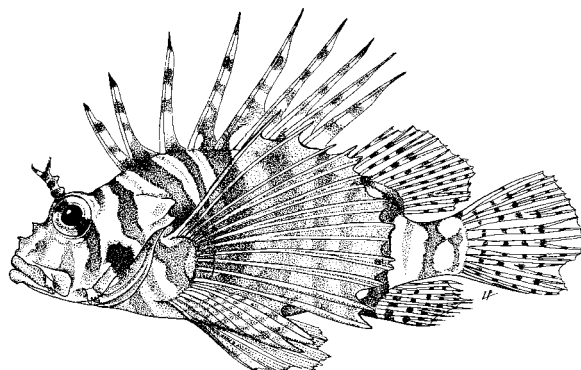
FAO names: Shortfin turkeyfish (En)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Benthic on sandy and muddy bottoms down to 70 m.**Fisheries:** Bottom trawls (incidentally), Spears.**Distinctive Characters:** Dorsal fin with 13 spines and 9–10 soft rays; anal fin with 3 spines and 5–6 soft rays; mid-dorsal spines shorter than body depth.**Colour:** Body reddish with vague broad bars; paired fins with bars; median fins with small dark spots.

Size: To 17 cm

Dendrochirus zebra (Cuvier, 1829)

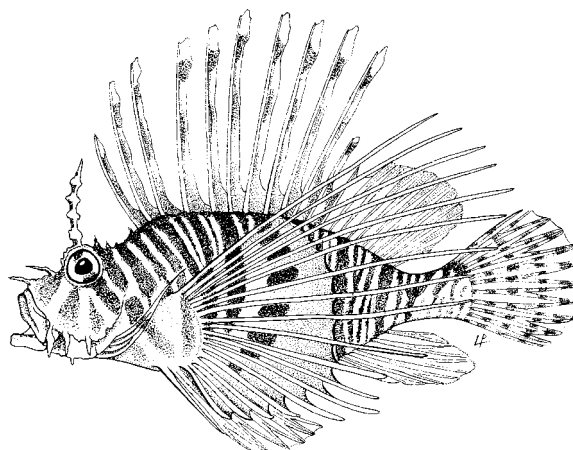
FAO names: Zebra turkeyfish (En)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Benthic on sandy and muddy bottoms down to 80 m.**Fisheries:** Spears.**Distinctive Characters:** Dorsal fin with 13 spines and 10–11 soft rays; anal fin with 3 spines and 6–7 soft rays; mid-dorsal spines longer than body depth.**Colour:** Body reddish with 5 dark bars, alternating with thin dark bars in large specimens; median fins with small dark spots; dark spot on cheek.

Size: To 25 cm SL

Pterois antennata (Bloch, 1787)

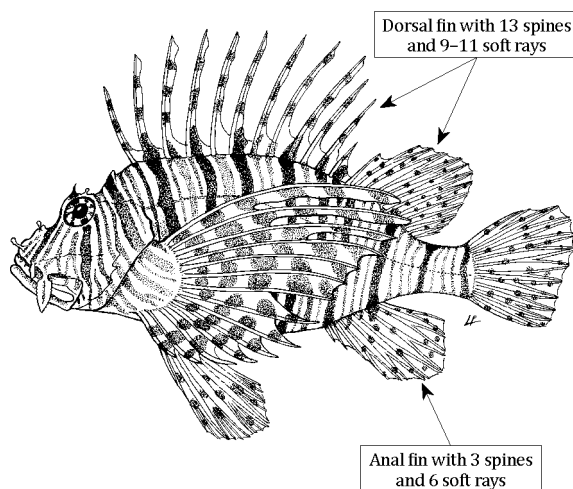
FAO names: Broadbarred firefish (En)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Lagoon and seaward reefs; hides in crevices under rocks and coral formations during the day and hunts at night. Maximum depth 50 m.**Fisheries:** Bottom trawls (incidentally), Spears.**Distinctive Characters:** Dorsal fin with 13 spines and 11–12 soft rays; anal fin with 3 spines and 6 soft rays; tentacle above eye long and with dark bands.**Colour:** Reddish to tan with many dark bars on body; median fins with scattered dark spots; adults with bluish-black blotches near the base of the pectoral fins.

Size: To 20 cm

Pterois miles (Bennett, 1828)

FAO names: Devil firefish (En)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Benthic in coastal waters in muddy habitats down to 60 m.**Fisheries:** Bottom trawls (incidentally).**Distinctive Characters:** Body covered by small cycloid scales; many spinules on bones below eye in adults; dorsal spines and pectoral rays greatly extended; numerous spines and tentacle projections on head; caudal fin truncate.**Colour:** Background colour reddish or grey, with numerous thin dark bars on body and head; white spots may occur along lateral line and on fins; dark spots on caudal and tentacles above eye occasionally banded; dark spots on median fins.**Remarks:** Fin spines highly venomous, sting can cause death in humans.

Size: To 35 cm SL

***Pterois mombasae* (Smith, 1957)**

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).

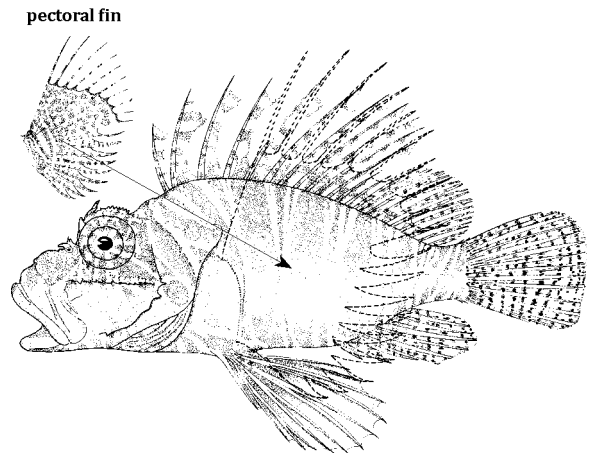
Habitat: Benthic, normally found on soft-bottoms or muddy substrates with rich rubble ridges amongst rich invertebrate growth, especially sponges down to 60 m.

Fisheries: Bottom trawls (incidentally).

Distinctive Characters: Dorsal fin with 13 spines and 10 soft rays; anal fin with 3 spines and 6–7 soft rays.

Colour: Reddish brown with alternating broad and thin dark bars separated by white; dark spot on cheek; small tentacle above eye which may be banded; upper half of pectorals with large dark spots on inner surface.

FAO names: Frillfin turkeyfish (En)



Size: To 31 cm

***Pterois radiata* Cuvier, 1829**

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).

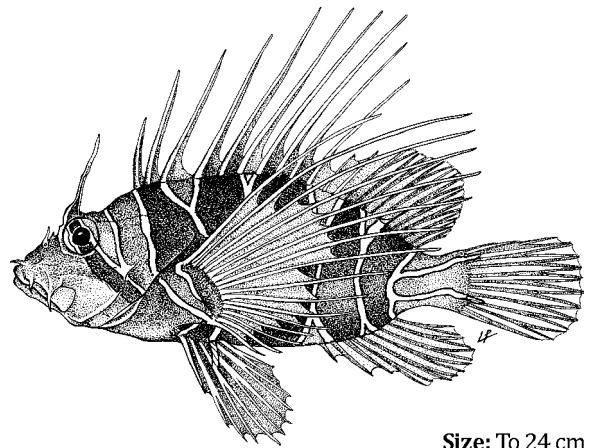
Habitat: Benthic, coastal, sometimes in surge zones or in narrow crevices, or along rock-walls in small caves down to 30 m.

Fisheries: Spears.

Distinctive Characters: Dorsal spines longer than body depth; dorsal fin with 12–13 spines and 11 rays; anal fin with 3 spines and 5–6 rays; pectoral fins with 16 soft rays.

Colour: Reddish to brownish, with about 5–6 broad dark bars on body, separated by pale lines; broad horizontal stripe on caudal peduncle; tentacles above eye occasionally faintly banded; no spots on caudal fin.

FAO names: Radial firefish (En)



Size: To 24 cm

***Pterois russellii* Bennett, 1831**

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).

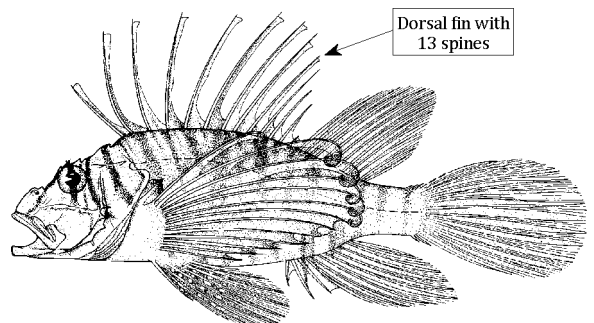
Habitat: Benthic on soft bottoms down to 60 m.

Fisheries: Bottom trawls, Seines.

Distinctive Characters: Head with feeble spines in young, better developed in adults; dorsal-fin membrane strongly incised, almost the entire height of fin; 3 anal spines; pectoral fins with 13 unbranched segmented rays, the longest reaching to or beyond end of segmented part of dorsal fin; upper 3–4 pectoral-fin rays free from the fin membrane for about half their length; caudal fin rounded; scales small and cycloid.

Colour: Reddish-brown with 4 dark crossbars on head; segmented soft rays of dorsal, anal and caudal fins without spots; pectoral-fin membrane usually covered with dark spots; pelvic fins mostly dusky, with light round spots on proximal half.

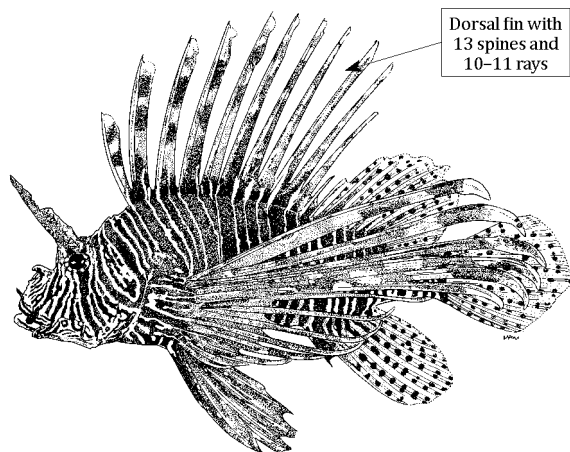
FAO names: Plaintail turkeyfish (En)



Size: To 30 cm SL

***Pterois volitans* (Linnaeus, 1758)**

FAO names: Red lionfish (En)

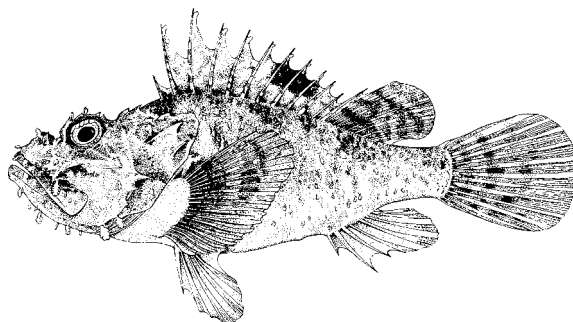
Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Benthic, associated to coral and rocky reefs down to 50 m.**Fisheries:** Bottom trawls, Seines.**Distinctive Characters:** Anal fin with 3 spines and 6–7 soft rays; scales cycloid; often with large tentacles above eyes.**Colour:** Variable in colour, usually in relation to habitat; coastal species generally darker, sometimes almost black in estuaries.

Size: To 38 cm

***Scorpaena scrofa* Linnaeus, 1758**

FAO names: Red scorpionfish (En)

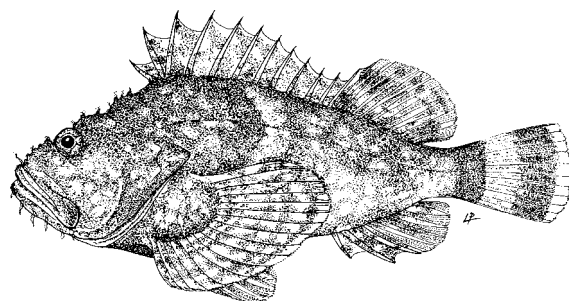
Rascasse rouge (Fr)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Over rocky, sandy or muddy bottoms, down to 500 m; usually down to 150 m.**Fisheries:** Bottom trawls, Seines.**Distinctive Characters:** Dorsal fin with 12 spines and 9 soft rays; anal fin with 3 spines and 5 soft rays.**Colour:** Dark spot often on spiny dorsal.

Size: To 50 cm

***Scorpaenopsis diabolus* (Cuvier, 1829) (Plate II, 16)**

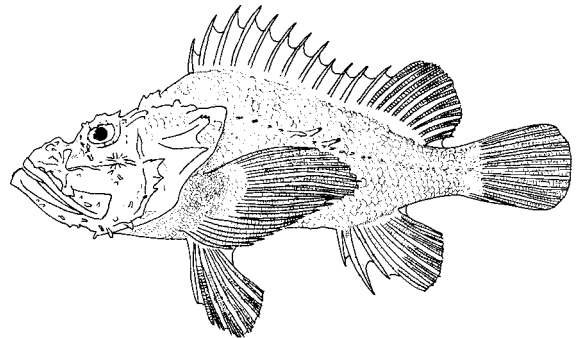
FAO names: False stonefish (En)

Local name(s): N: Mchafe; S: Bocho (M), Chale (K).**Habitat:** Benthic in inshore waters, among rocks and corals, down to 70 m.**Fisheries:** Spears.**Distinctive Characters:** Dorsal fin with 12 spines and 8–10 soft rays; anal fin with 3 spines and 5–6 rays; usually 18 pectoral-fin rays; back arched, with about 45 vertical scale rows.**Colour:** Colourful inside the pectoral fins.

Size: To 30 cm

***Scorpaenopsis gibbosa* (Bloch & Schneider, 1801)**

FAO names: Humpbacked scorpionfish (En)

Local name(s): N: Mchafe; S: Bocho (M) Chale (K).**Habitat:** Benthic in inshore waters, among rocks and corals.**Fisheries:** Bottom trawls, Spears.**Distinctive Characters:** A robust fish, with a markedly humped back (size of hump increasing with age); dorsal fin with 12 spines and 9 soft rays; anal fin with 3 spines and 5 rays; pectoral fins with 17–18 rays.**Colour:** A black spot nearly as large as eye on inner surface of pectoral fins near base of first 5 rays; no black mark inside mouth at front of upper jaw.

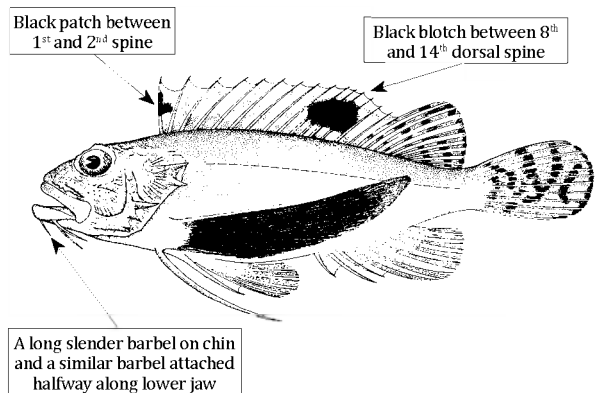
Size: To 21 cm SL

APISTIDAE

Wasp scorpionfishes

Apistus carinatus* (Bloch & Schneider, 1801)

FAO names: Ocellated waspfish (En)

Local name(s): N: Mchafe; S: Bocho (M) Chale (K).**Habitat:** Benthic on soft bottoms down to 60 m.**Fisheries:** Bottom trawls, Seines.**Distinctive Characters:** Preopercle with a strong spine and 2–3 shorter spines below; pectoral fins elongate, longest rays reaching to or beyond posterior end of anal fin; one pectoral-fin ray detached from remainder of fin.**Colour:** Body greyish dorsally and rosy ventrally; spiny part of dorsal fin grey, darker grey distally, with a black patch between; pectoral fins black, uppermost pectoral-fin ray white.

Size: To 20 cm

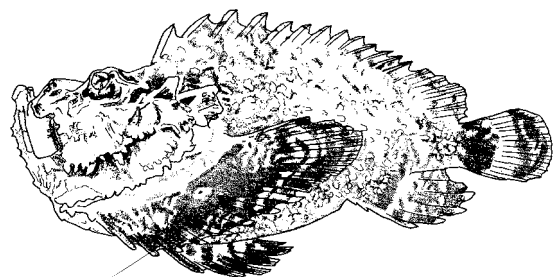
SYNANCEIIDAE

Stonefishes

***Synanceia verrucosa* Bloch & Schneider, 1801**

FAO names: Stonefish (En)

Poisson pierre commun (Fr)

Local name(s): N: Shinda dovi; S: Bocho (M), Bevi (K).**Habitat:** Benthic in shallow waters, around coral reefs, rocks and in tidal pools.**Fisheries:** Spears.**Distinctive Characters:** Dorsal fin with 12–14 spines covered by thick skin and 5–7 rays; anal fin with 3 spines and 5 rays usually covered with thick skin.**Colour:** Body brownish; pectoral, pelvic and caudal fins tipped with white; caudal fin with subterminal dark bands.**Remarks:** Fin spines venomous, sting can cause death in humans.

Pectoral fin with 18–19 soft rays

Size: To 40 cm SL

DACTYLOPTERIDAE

Flying gurnards

Dactyloptena orientalis (Cuvier, 1829)

FAO names: Oriental flying gurnard (En)
Grondin volant étoilé (Fr)

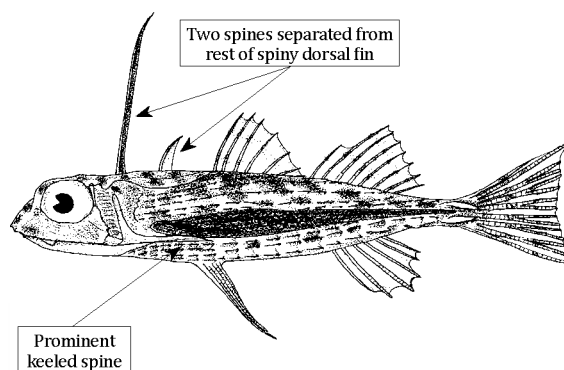
Local name(s): N: Mnuvi/Vumbama (maji);
S: Panzi (M/K).

Habitat: Benthic on sandy bottoms in coastal waters.

Fisheries: Seines.

Distinctive Characters: Heavily armored box-like body and winglike pectoral fins; anal fin with 6–7 soft rays; pectoral fins divided into 2 sections, a short anterior part, with 5 rays, and a long posterior part with 27–30 rays reaching caudal-fin base in adult (much shorter in young).

Colour: Usually yellowish–brown above, light brown below, with small orange spots over top of head and back; dusky golden spots on pectoral fins.



Size: To 40 cm, common 20 cm

TRIGLIDAE

Gurnards – Searobins

Lepidotrigla faurei Gilchrist & Thompson, 1914

FAO names: Scalybreast gurnard (En)
Grondin armure (Fr)

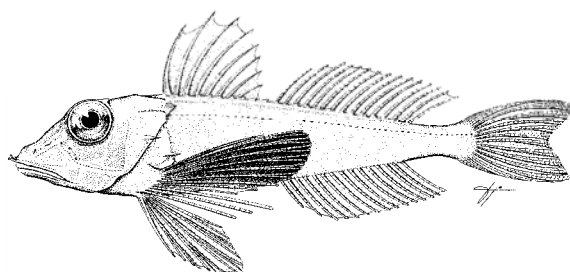
Local name(s): N: Mnuvi; S: Panzi (M/K).

Habitat: Bottom dweller that occurs in rather deep waters from 50 m to 175 m.

Fisheries: Bottom trawls.

Distinctive Characters: Head large, triangular, with many ridges and spines, and a fissure on top, behind eyes (occipital groove); rostral process with several prominent spines; dorsal fin with 8–9 spines and 15–17 rays; anal fin with 15–16 soft rays; pectoral fins variable in length; body scales large.

Colour: Mostly red.



Size: To 18 cm

Lepidotrigla multispinosa Smith, 1934

FAO names: Indian Ocean spiny gurnard (En)
Grondin épineux (Fr)

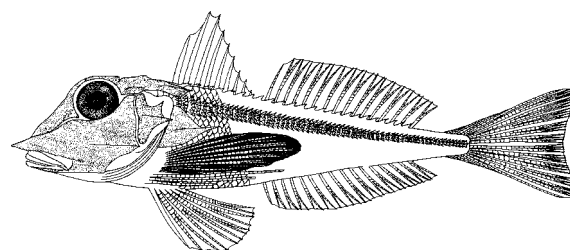
Local name(s): N: Mnuvi; S: Panzi (M/K).

Habitat: Bottom dweller that occurs in deep waters from 230 m to 335 m.

Fisheries: Bottom trawls.

Distinctive Characters: Head large, triangular with many ridges and spines and a fissure on top behind eyes (occipital groove); rostral process forming a curved projection with no prominent spines; dorsal fin with 8–9 spines and 15–16 rays; anal fin with 16–17 soft rays; preopercular ridge strong; body scales large.

Colour: Mostly red.



rostral process in dorsal view

Size: To 15 cm

***Lepidotrigla spiloptera* Günther, 1880** (Plate II, 17)

FAO names: Spotwing gurnard (En)
Grondin aile tachetée (Fr)

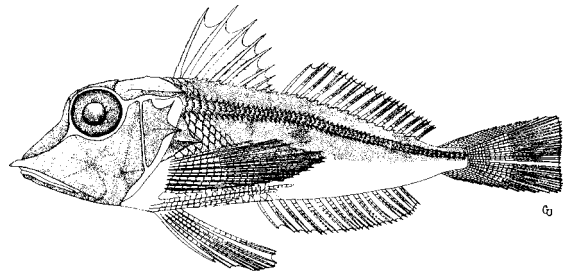
Local name(s): N: Mnuvi; S: Panzi (M/K).

Habitat: Bottom dweller that occurs in rather deep waters from 54 m to 256 m.

Fisheries: Bottom trawls.

Distinctive Characters: Head large, triangular with many ridges and spines, and a fissure on top, behind eyes (occipital groove); rostral process with several prominent spines; bony scales large.

Colour: Mostly red with definite silvery white breast, belly and lower flanks.



rostral process in dorsal view

Size: To 10 cm

PLATYCEPHALIDAE

Spiny flatheads

***Cociella crocodilus* (Cuvier, 1829)**

FAO names: Crocodile flathead (En)

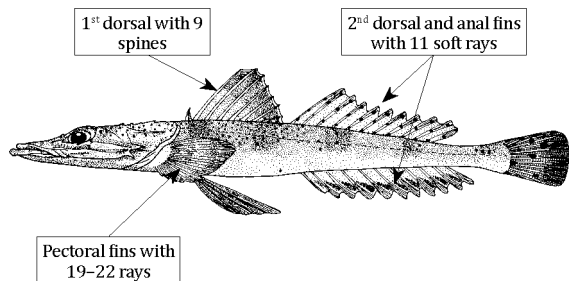
Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

Habitat: Benthic on sandy or muddy bottoms from near the shore to 100 m.

Fisheries: Bottom trawls, Gillnets.

Distinctive Characters: Top of head with spines and body ridges; bony ridge crossing cheek below eye with 3 spines; usually 2 preopercular spines.

Colour: Small, dark spots on head and back; 4–5 brown bands crossing the back in some individuals, vague or absent in others; spiny dorsal and caudal fins with a dusky band near margin; soft dorsal fin with small dark spots.



Size: To 50 cm, common 40 cm

***Papilloculiceps longiceps* (Cuvier, 1829)**

FAO names: Tentacled flathead (En)

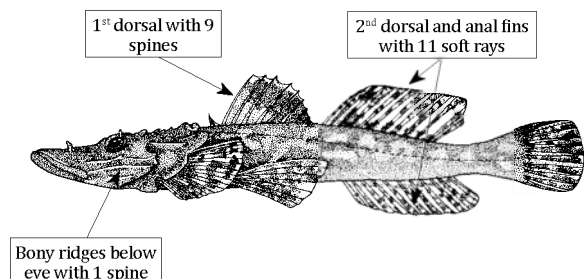
Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

Habitat: Benthic species, found on sandy bottoms near coral reefs from 1 m to 15 m.

Fisheries: Hooks and Line, Spears, Seines.

Distinctive Characters: Snout long; a prominent papilla on upper surface of eye; pectoral fins with 19–22 rays.

Colour: Body brownish to green above, pale below; caudal fin with 3–4 vertical dark bands; other fins with prominent dark blotches.



Size: To 70 cm, common 50 cm

***Platycephalus indicus* (Linnaeus, 1758)**

Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

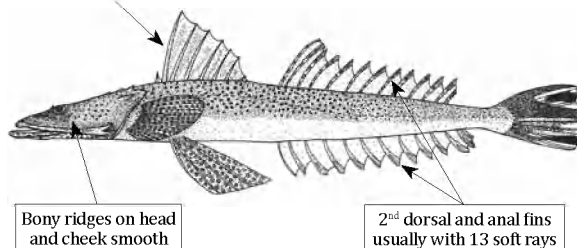
Habitat: Benthic on sandy bottoms in shallow areas, also in estuaries. Maximum depth 25 m.

Fisheries: Hooks and Line, Spears, Bottom trawls.

Distinctive Characters: Head with only 1 small preocular spine; pectoral fins with 17–20 rays.

Colour: Brownish or greyish above, whitish below; small dark blotches on back and head; pectoral and pelvic fins with numerous brown blotches; caudal fin centrally yellow with black stripes on upper and lower margins.

1st dorsal fin with 9–10 spines, the 1st and last often separated from other spines



FAO names: Bartail flathead (En)
Platycephale indien (Fr)

Size: To 100 cm, common 60 cm

***Rogadius pristiger* (Cuvier, 1829) ***

Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

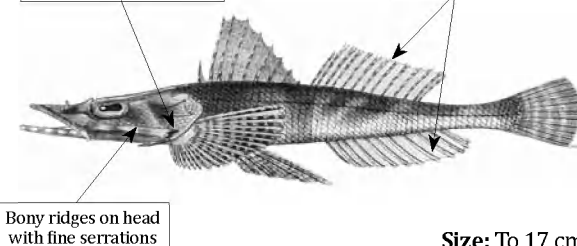
Habitat: Benthic on sandy or muddy bottoms from 15 m to 95 m.

Fisheries: Hooks and Line, Spears, Bottom trawls.

Distinctive Characters: Lower opercular spine lacks serrations along base; 21–23 pectoral-fin rays.

Colour: Brownish above, white or tan below; 4–5 dark bands usually crossing back; caudal fin with a dark band near base, a light area in middle and a dark band near posterior margin.

Four preopercular spines and 1 forward-pointing spine on lower face



FAO names: Thorny flathead (En)
Platycephale épineux (Fr)

Size: To 17 cm

***Sorsogona prionota* (Sauvage, 1873)**

Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

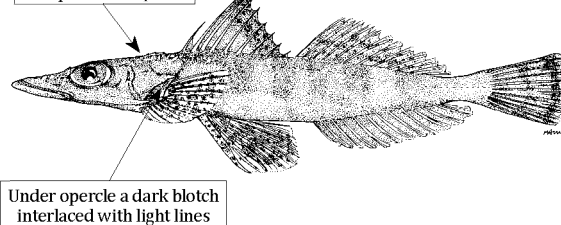
Habitat: Benthic on sandy or muddy bottoms down to 65 m.

Fisheries: Bottom trawls.

Distinctive Characters: Three spines on preopercle not pointing forward; 2nd dorsal and anal fins with 12 rays.

Colour: Brownish in colour, with 4–5 bands crossing back; spiny dorsal dusky brown, other fins dark spotted.

Bony ridges on head finely serrate; usually 3–4 preocular spines



FAO names: Halfspined flathead (En)

Size: To 22 cm

***Thysanophrys chiltonae* Schultz, 1966**

Local name(s): N: Mnuvi/Vumbama; S: Songwe (K).

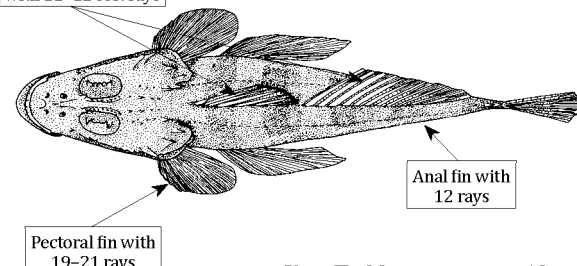
Habitat: Benthic over sand in coral reef areas.

Fisheries: Hooks and Line, Spears, Seines, Gillnets.

Distinctive Characters: Iris lappet of eye with finger-like or branched lobes; small papillae on upper surface of eye lacking; head with spines and bony ridges; bony ridge crossing cheek below eye with 4 or more spines.

Colour: Body greyish or light tan above, pale below, with 4–5 dark bands crossing back; spiny dorsal fin pale, with a broad black band near margin.

1st dorsal with 9 spines; 2nd dorsal with 11–12 soft rays



FAO names: Longsnout flathead (En)
Platycephale clin d'œil (Fr)

Size: To 23 cm, common 18 cm

ACROPOMATIDAE

Lanternbellies

***Acropoma japonicum* Günther, 1859**

FAO names: Glowbelly (En)
Maconde lumineux (Fr)

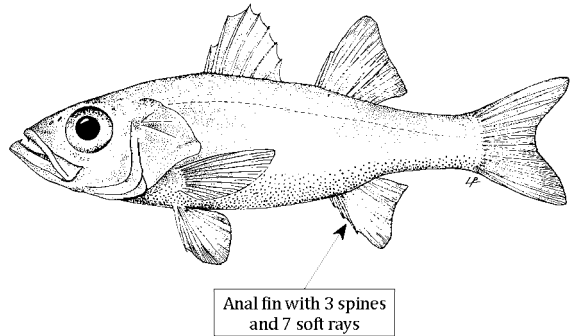
Local name(s): N & S: No information.

Habitat: Occurs over trawlable bottoms from 100 m to 300 m.

Fisheries: Bottom trawls.

Distinctive Characters: First dorsal fin with 8–9 slender spines, 2nd dorsal fin with 1 spine and 10 soft rays; anus closer to pelvic fin than to anal fin.

Colour: Body pink, ventral surface abruptly silvery and thickly covered with dark dots; at night or in the dark, the entire ventral region is brighter.



Size: To 20 cm

***Synagrops adeni* Kotthaus, 1970**

FAO names: Aden splitfin (En)
Maconde aden (Fr)

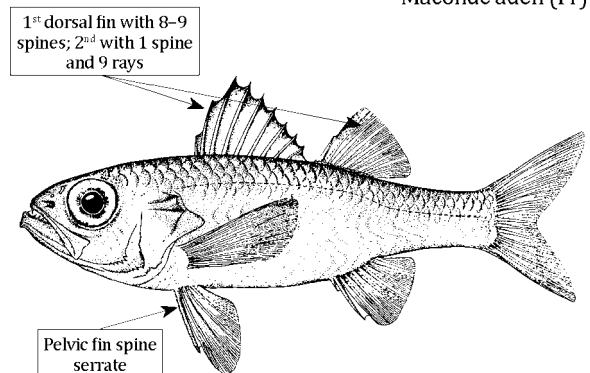
Local name(s): N & S: No information.

Habitat: Occurs over trawlable bottoms from 280 m to 600 m.

Fisheries: Bottom trawls.

Distinctive Characters: A band of villiform teeth in upper jaw, separated by a gap at symphysis, with a large canine on each side of gap; anus closer to anal fin than to pelvic-fin origin; anal fin with 2 spines and 7 soft rays; 17 pectoral-fin rays.

Colour: Head and body pale brown or dusky.



Size: To 11 cm

***Synagrops japonicus* (Döderlein, 1883)**

FAO names: Blackmouth splitfin (En)
Maconde bouche noir (Fr)

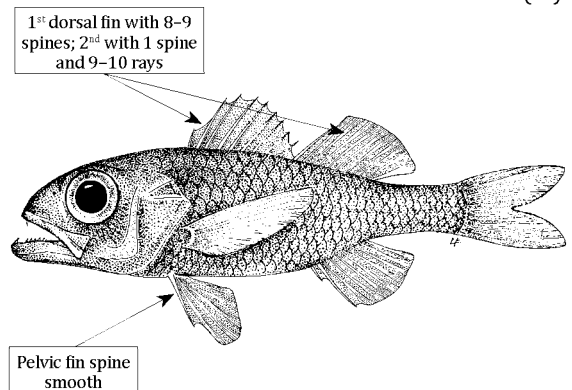
Local name(s): N & S: No information.

Habitat: Occurs over trawlable bottoms from 180 m to 600 m.

Fisheries: Bottom trawls.

Distinctive Characters: A band of villiform teeth in upper jaw and a large pair of backward-pointing canines; no spines on preopercular ridge; anus closer to anal fin than to pelvic-fin origin; anal fin with 2 slender spines and 7–8 soft rays.

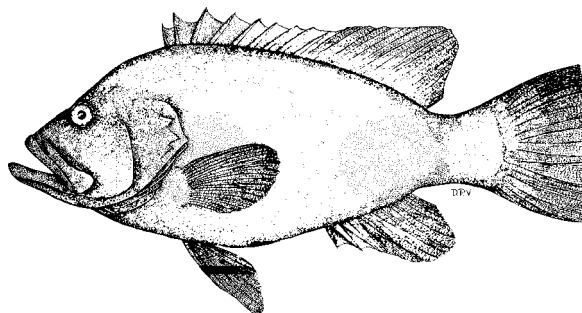
Colour: Body uniformly blackish-brown in young, black dorsally, paler ventrally in adults.



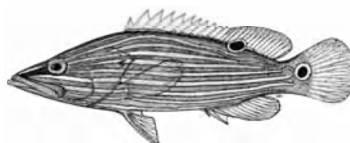
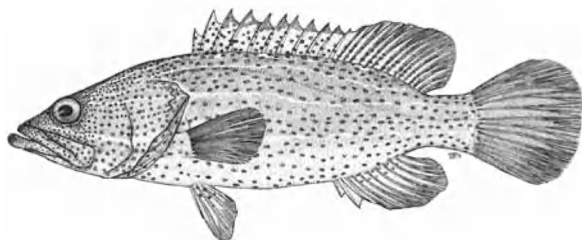
Size: To 35 cm

SERRANIDAE

Groupers – Seabasses – Rockcods – Hinds – Combers – Coral trouts – Lyretails

***Aethaloperca rogae* (Forsskål, 1775)** (Plate II, 18)FAO names: Redmouth grouper (En)
Vieille roga (Fr)**Local name(s):** N: Tewa shambaro; S: Tewa (M/K).**Habitat:** Demersal on coral reefs from 3 m to 60 m.**Fisheries:** Lines, Traps, Spears, Seines, Bottom trawls.**Distinctive Characters:** Steep dorsal head profile; lump on nape in large specimens; dorsal fin with 9 spines and 17–18 soft rays; anal fin has 3 spines and 8–9 soft rays; pelvic fins subequal to pectoral fins, reaching anus or beyond; caudal fin truncate.**Colour:** Uniformly dark or black; inside of mouth and gill cavity reddish; young with crescentic white margin of caudal fin and soft-rayed part of dorsal fin edged with white.

Size: To 60 cm

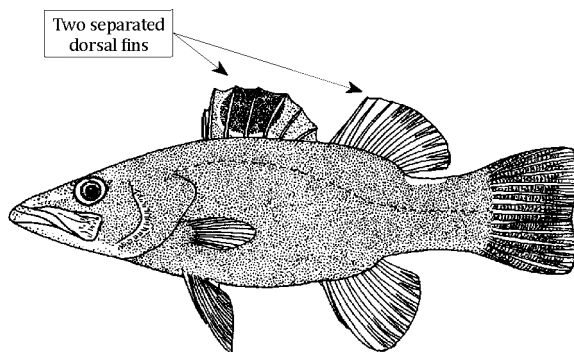
Anyperodon leucogrammicus* (Valenciennes, 1828) (Plate III, 19)FAO names: Slender grouper (En)
Mérour élégant (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Demersal on protected coral reefs from 5 m to 80 m.**Fisheries:** Hooks and Line, Spears, Traps, Gillnets.**Distinctive Characters:** Head length distinctly greater than body depth; preopercle rounded; lower serrae not much enlarged; dorsal fin with 11 spines and 14–16 soft rays; anal fin with 3 spines and 8–9 soft rays; pectoral fins with 15–17 rays; caudal fin rounded.**Colour:** Adults background colour greenish with often 4 white bands and orange-red spots; juveniles golden with dark-edged bluish stripes and a blue-edged black spot at base of caudal fin, and one on dorsal fin.

Juvenile

Size: To 65 cm

Belonoperca chabanaudi* Fowler & Bean, 1930

FAO names: Arrowhead soapfish (En)

Local name(s): N: Tewa; S: Tewa (M/K).**Habitat:** Occurs on reefs, hiding in caves.**Fisheries:** Hooks and Line, Traps, Seines.**Distinctive Characters:** First dorsal fin with 9 spines, 2nd dorsal fin with 10 rays; anal with 2 spines and 8 rays; pectoral fins with 17–18 rays.**Colour:** Background colour greyish with darker blotches along back; dorsal surface of peduncle blackish brown; prominent black streak on maxillary groove; yellow spot on edge of caudal peduncle; spiny portion of dorsal fin with roundish black blotch.

Size: To 15 cm

***Cephalopholis argus* Schneider, 1801** (Plate III, 20)

FAO names: Peacock hind (En)
Vieille la prude (Fr)

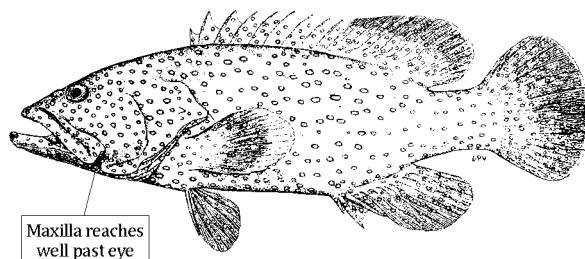
Local name(s): N: Tewa pande; S: Tewa (M/K).

Habitat: Coral reefs from tide pools down to 40 m; juveniles usually in shallow protected coral beds.

Fisheries: Hooks and Line, Spears, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 9 spines and 15–17 soft rays; anal fin with 3 spines and 9 rays; 16–18 pectoral-fin rays; caudal fin rounded.

Colour: Head, body and fins dark brown, covered with small, black-edged blue spots; narrow white margin along rear edge of pectoral and median fins; 5 or 6 broad pale vertical bars often present on rear half of body.



Size: To 60 cm

***Cephalopholis aurantia* (Valenciennes, 1828)** (Plate III, 21)

FAO names: Golden hind (En)
Vieille dorée (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).

Habitat: Steep seaward reefs from 40 m to 250 m.

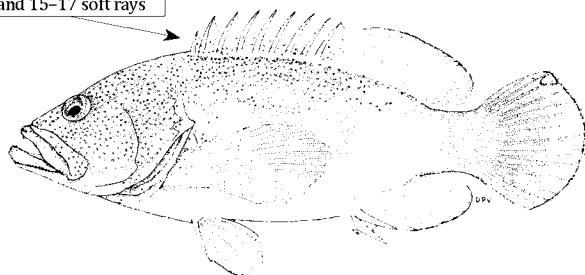
Fisheries: Traps, Gillnets, Lines.

Distinctive Characters: Maxilla reaches past eye; subopercle and preopercle serrate; 3 anal spines and 9 soft rays; 17–18 pectoral-fin rays; caudal fin rounded.

Colour: Background colour orange–yellow to dull pink with reddish–orange to yellow dots on head and antero–dorsally on body.

Remarks: Usually pelvic fins reach anus, while in *C. spiloparaea*, do not.

Dorsal fin with 9 spines
and 15–17 soft rays



Size: To 60 cm, common 30 cm

***Cephalopholis boenak* (Bloch, 1790)** (Plate III, 22)

FAO names: Chocolate hind (En)
Vieille chocolat (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).

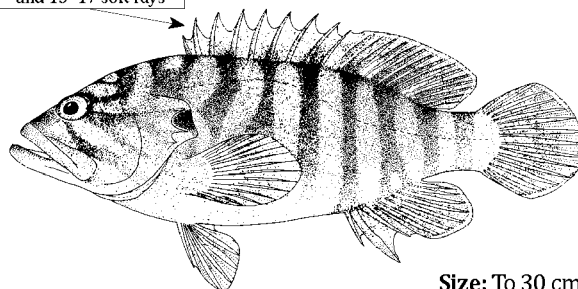
Habitat: Common on coral reefs and sand stone flats in shallow waters down to 50 m.

Fisheries: Handlines, Bottom longlines.

Distinctive Characters: Maxilla reaches past eye; anal with 3 spines and 8 soft rays; pectoral fins with 15–17 rays.

Colour: Head, body and fins dark brown; body with slightly irregular blackish brown bars; head with irregular dark bands radiating from eye and a black spot between upper 2 opercular spines.

Dorsal fin with 9 spines
and 15–17 soft rays



Size: To 30 cm

***Cephalopholis leopardus* (Lacèpede, 1801)**

FAO names: Leopard hind (En)
Vieille léopard (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).

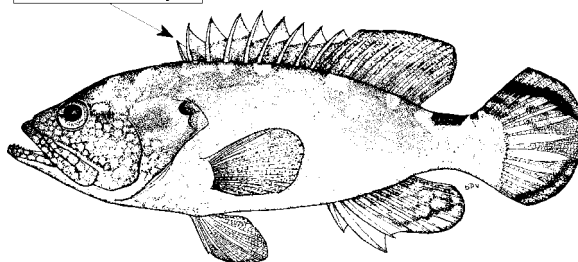
Habitat: Common on hard bottoms down to 30 m.

Fisheries: Handlines, Gillnets, Traps.

Distinctive Characters: Maxilla reaches well past eye; lower edge fleshy; 3 anal spines and 9–10 soft rays; 16–18 pectoral-fin rays; pelvic fins usually not reaching anus.

Colour: Light reddish brown, shading to whitish ventrally; a black saddle-like spot dorsally on caudal peduncle, with a small spot behind it.

Dorsal fin with 9 spines
and 13–15 soft rays



Size: To 24 cm

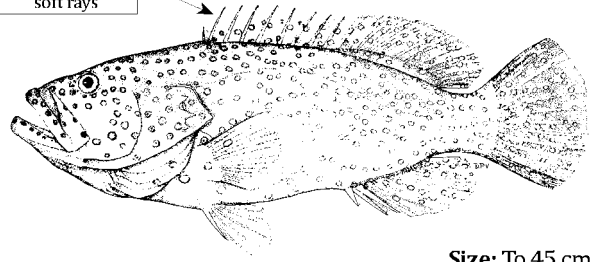
***Cephalopholis miniata* (Forsskål, 1775)**

(Plate III, 23)

FAO names: Coral hind (En)
Vieille de corail (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Demersal on coral reefs from 2 m to 150 m.
Fisheries: Hooks and Line, Spears, Traps.
Distinctive Characters: Maxilla scaly, reaches to or beyond edge of orbit; anal fin with 3 spines and 9 soft rays; 17–18 pectoral–fin rays.
Colour: Orange–red, with numerous small blue spots on body, head, median fins, maxilla and lips, but not underside of lower jaw; pectoral fins orange–red at base, rest of the fin yellow orange; juveniles may be yellow.

Dorsal fin with 9 spines and 14–16 soft rays

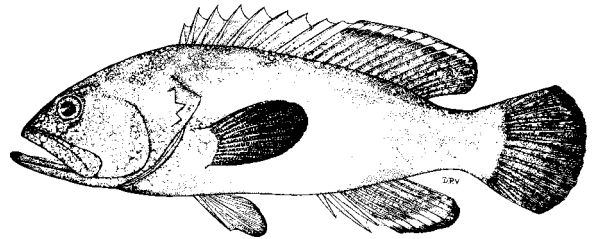


Size: To 45 cm

***Cephalopholis nigripinnis* (Valenciennes, 1828)**

FAO names: Darkfin hind (En)
Vieille aile noire (Fr)

Local name(s): N: Tewa pande; S: Tewa (M/K).
Habitat: Demersal on coral reefs from 1 m down to 60 m.
Fisheries: Hooks and Line, Traps.
Distinctive Characters: Dorsal fin with 9 spines and 14–16 soft rays; anal fin with 3 spines and 8, rarely 9, soft rays; pectoral fins with 17–19 rays; pelvic fins usually not reaching anus.
Colour: Reddish–brown to brownish–red, darker posteriorly; head and nape with numerous close-set orange–red spots, more evident ventrally.



Size: To 28 cm

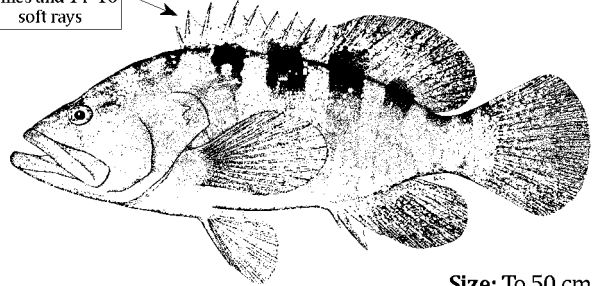
***Cephalopholis sexmaculata* (Rüppell, 1830)**

(Plate III, 24)

FAO names: Sixblotch hind (En)
Vieille six taches (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Coral reefs from 10 m to 150 m.
Fisheries: Hooks and Line, Traps, Gillnets.
Distinctive Characters: Maxilla reaches to or past edge of orbit; anal fin with 3 spines and 9 soft rays; pectoral fins with 16–18 rays; pelvic fins not reaching anus.
Colour: Orange–red with numerous small blue spots on body, head and median fins; four squarish, black blotches on body at base of dorsal fin extending onto the fin and 2 more on caudal peduncle; pectoral fins yellow–orange.

Dorsal fin with 9 spines and 14–16 soft rays



Size: To 50 cm

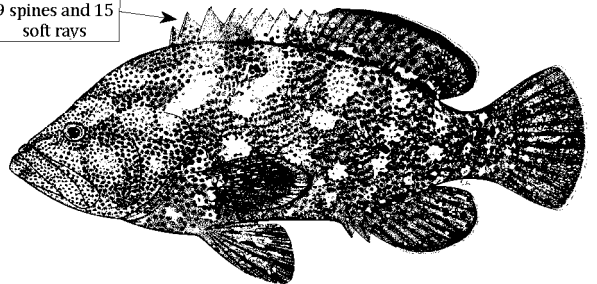
***Cephalopholis sonnerati* (Valenciennes, 1828)**

(Plate III, 25)

FAO names: Tomato hind (En)
Vieille ananas (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Coral reefs from 12 m to 150 m.
Fisheries: Hooks and Line, Traps.
Distinctive Characters: Dorsal profile of head above eye and nape strongly convex in adults; maxilla reaching past eye; anal fin with 3 spines and 9 soft rays; 18–20 pectoral–fin rays.
Colour: Background colour orange–red to red to reddish–brown, often with small whitish or purple spots; juveniles dark reddish–brown to nearly black; purple network on head, maxilla and tips.

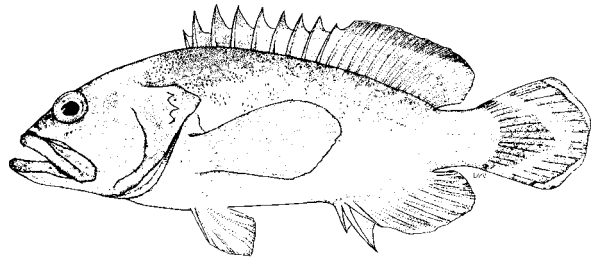
Dorsal fin with 9 spines and 15 soft rays



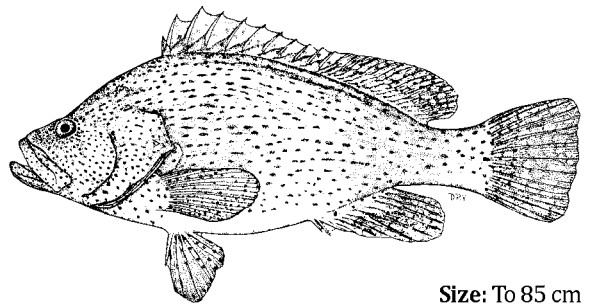
Size: To 57 cm

***Cephalopholis spiloparaea* (Valenciennes, 1828)**

(Plate III, 26)

FAO names: Strawberry hind (En)
Vieille fraise (Fr)**Local name(s):** N: Tewa pande; S: Tewa (M/K).**Habitat:** Coral reefs from 15 m down to 108 m.**Fisheries:** Hooks and Line, Traps.**Distinctive Characters:** Dorsal fin with 9 spines and 14–16 soft rays; anal fin with 3 spines and 9 soft rays; pectoral fins (17–19 rays), clearly longer than pelvic fins; caudal fin rounded.**Colour:** Pale reddish–orange, mottled and blotched with dark red or brownish red; faint pale spots usually present on head, body, and median fins; caudal fin usually coloured like the body, with a bluish–white submarginal band at corner of fin.

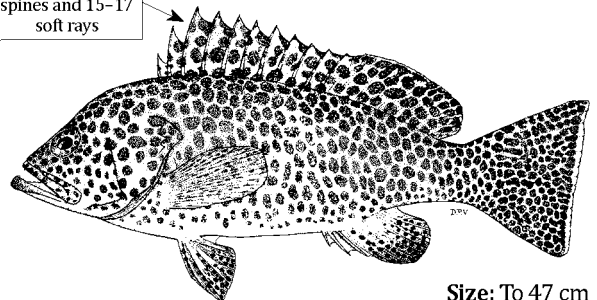
Size: To 30 cm

***Dermatolepis striolata* (Playfair, 1867)**FAO names: Smooth grouper (En)
Méroü lisse (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Demersal on coral reefs.**Fisheries:** Hooks and Line, Traps, Gillnets.**Distinctive Characters:** Preopercle finely serrated beneath skin, more or less smooth in large adults; opercle with only 12 apparent spines, the 3rd is covered by skin and scales; dorsal fin with 11 spines and 18–19 rays; anal fin with 3 spines and 9–10 soft rays; 18 pectoral–fin rays.**Colour:** Background colour yellowish to reddish–brown with dark spots.

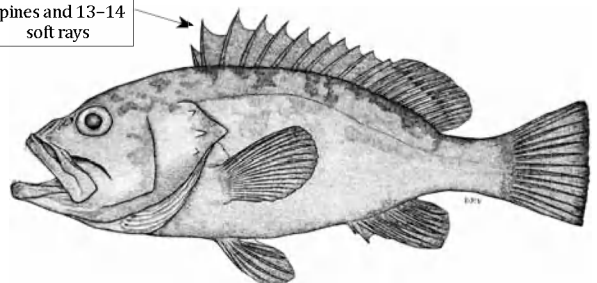
Size: To 85 cm

***Epinephelus areolatus* (Forsskål, 1775)**

(Plate III, 27)

FAO names: Areolate grouper (En)
Méroü aréolé (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Usually in sea grass beds near rocky reefs from 6 m to 200 m.**Fisheries:** Hooks and Line, Traps, Bottom trawls.**Distinctive Characters:** Preopercle serrate with 3–7 large serrae at the angle; anal fin with 3 spines and 8 soft rays; 17–18 pectoral–fin rays; caudal fin margin truncate to slight concave.**Colour:** Head, body and anal fins pale, covered with numerous brown to yellowish–brown spots, relatively smaller and more numerous with growth; caudal fin with a white posterior border.Dorsal fin with 11
spines and 15–17
soft rays

Size: To 47 cm

***Epinephelus chabaudi* (Castelnau, 1861)**FAO names: Moustache grouper (En)
Méroü moustache (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Coral reefs from 90 m to 300 m.**Fisheries:** Traps, Gillnets, Lines, Seines.**Distinctive Characters:** Interorbital area convex; preopercle angular, the serrae at angle enlarged and on some specimens they continue onto posterior part of lower limb.**Colour:** Adults rosy slate or chocolate brown; throat and hidden membranes of head pinkish–grey; juveniles with head and body greyish–brown, shading to pale purplish–grey ventrally, with 3 broad dark bars between dorsal fin and lateral line.Dorsal fin with 11
spines and 13–14
soft rays

Size: To 137 cm, common 70 cm

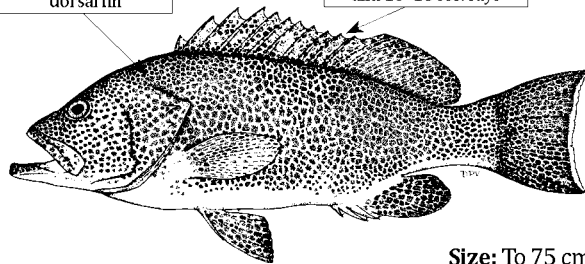
***Epinephelus chlorostigma* (Valenciennes, 1828)** (Plate III, 28) **FAO names:** Brownspeckled grouper (En)

Mérour pintade (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).**Habitat:** Coral reefs and muddy bottoms from 4 m to 280 m.**Fisheries:** Traps, Seines, Gillnets, Lines.**Distinctive Characters:** Preopercle serrate, with enlarged serrae at the angle; anal fin with 3 spines and 8 soft rays; pectoral fins with 17–19 rays; caudal fin truncate or near margin slightly concave.**Colour:** Background colour forming a pale network; head, body and fins with small closely set brown spots; no white margins on dorsal and anal fins.

Largest spots smaller than pupil in front of dorsal fin

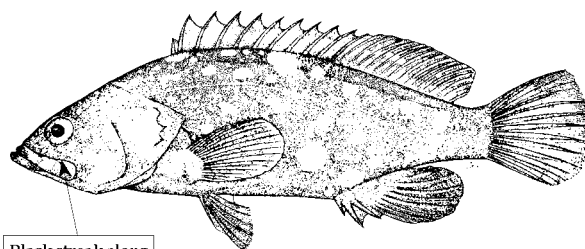
Dorsal fin with 11 spines and 16–18 soft rays

**Size:** To 75 cm***Epinephelus coeruleopunctatus* (Bloch, 1790)** (Plate IV, 29) **FAO names:** Whitespeckled grouper (En)

Mérour taches blanches (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).**Habitat:** Coral reefs from 4 m to 65 m.**Fisheries:** Traps, Gillnets, Lines, Seines.**Distinctive Characters:** Interorbital area flat; upper edge of operculum almost straight; dorsal fin with 11 spines and 15–17 rays; anal fin with 3 spines and 8 soft rays; 17–19 pectoral-fin rays.**Colour:** Background colour brownish-grey, covered with small pale spots overlaying with large purple blotches; large adults brownish, covered with indistinct small pale spots; oblique black saddle on caudal peduncle.

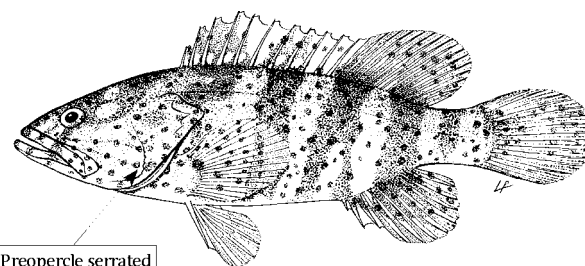
Black streak along maxillary groove

**Size:** To 76 cm***Epinephelus coioides* (Hamilton, 1822)** (Plate IV, 30) **FAO names:** Orange-spotted grouper (En)

Mérour taches oranges (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).**Habitat:** Continental and island shores, also in estuaries; offshore down to 100 m.**Fisheries:** Hooks and Line, Traps, Bottom trawls.**Distinctive Characters:** Dorsal fin with 11 spines and 13–16 rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 18–20 rays.**Colour:** Background colour tan dorsally, shading to whitish ventrally, with small brownish orange spots; body with 5 faint irregular greyish bars which bifurcate ventrally.

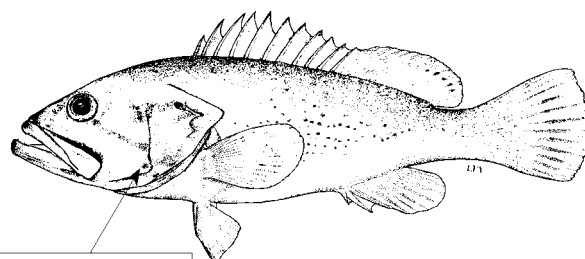
Preopercle serrated at the angle

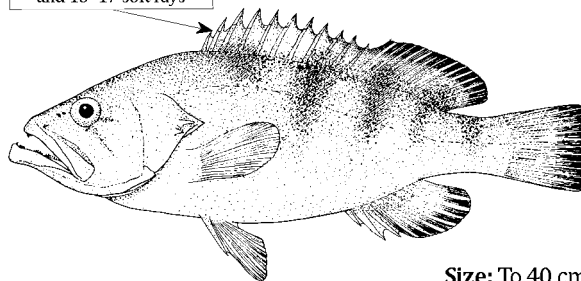
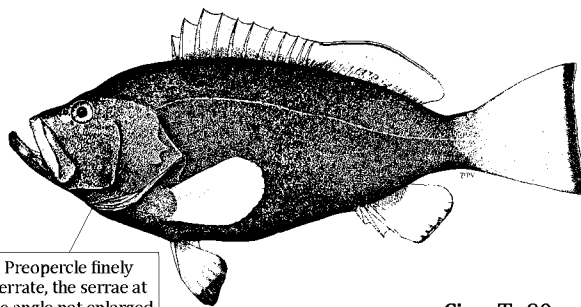
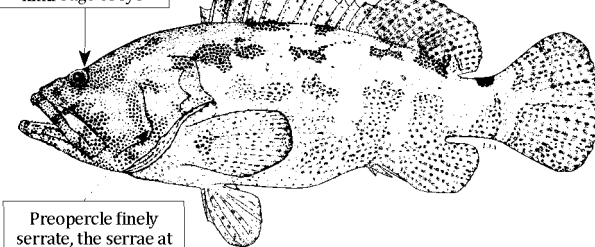
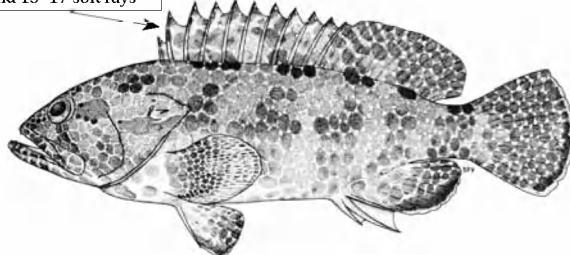
**Size:** To 120 cm***Epinephelus epistictus* (Temminck & Schlegel, 1842)** (Plate IV, 31) **FAO names:** Dotted grouper (En)

Mérour pâle (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).**Habitat:** Rocky bottoms from 71 m to 290 m.**Fisheries:** Hooks and Line, Traps, Bottom trawls.**Distinctive Characters:** Upper edge of operculum straight or slightly convex; dorsal fin with 11 spines and 14–15 rays; anal fin with 3 spines and 8 rays; pectoral fins with 17–19 rays.**Colour:** Background colour pale brownish to greyish; faint brownish black dots usually visible on dorso-lateral part of body and sometimes on postorbital part of head; faint dark band from eye to end of operculum.

Preopercle angle produced, with 3–5 distinctly enlarged serrae

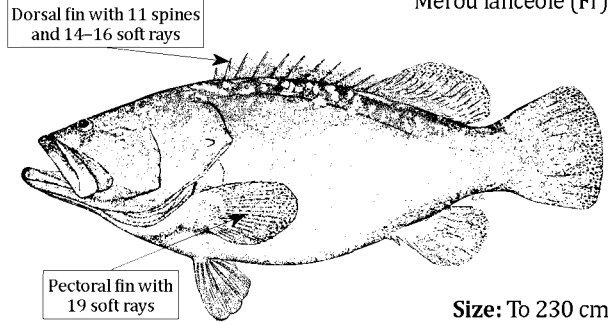
**Size:** To 80 cm

Epinephelus fasciatus* (Forsskål, 1775)*(Plate IV, 32)****FAO names:** Blacktip grouper (En)
Mérour oriflamme (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Rocky bottoms from 4 m to 160 m.**Fisheries:** Hooks and Line, Traps, Bottom trawls.**Distinctive Characters:** Interorbital area flat; preopercle rounded, the rear edge finely serrate, with lowermost serrae slightly enlarged; upper edge of operculum straight.**Colour:** Ground colour varying from pale greenish-grey to pale reddish-yellow to scarlet; body often with 5 or 6 faint dark bars, the last on peduncle; fins reddish-orange or pale yellow.Dorsal fin with 11 spines
and 15-17 soft rays**Size:** To 40 cm***Epinephelus flavocaeruleus* (Lacepède, 1802)****FAO names:** Blue-and-yellow grouper (En)
Mérour faraud (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Juveniles occur in shallow coral reefs; adults on deep reefs down to 150 m.**Fisheries:** Hooks and Line, Spears.**Distinctive Characters:** Adults (> 40 cm SL) with rear nostrils much larger than anterior ones; dorsal fin with 9 spines and 15-17 rays; anal fin with 3 spines and 8 soft rays; 18-19 pectoral-fin rays.**Colour:** Background colour dark greyish, dark blue, violet or almost black; head and body dark bluish-violet to greyish-blue; fins and jaws bright yellow; distal third of pelvic fins black in some fish.Preopercle finely
serrate, the serrae at
the angle not enlarged**Size:** To 90 cm***Epinephelus fuscoguttatus* (Forsskål, 1775)****(Plate IV, 33)****FAO names:** Brown-marbled grouper (En)
Mérour marron (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Coral and rocky bottoms down to 60 m.**Fisheries:** Hooks and Line, Traps, Spears.**Distinctive Characters:** Front nostril tiny, rear one oval or triangular; anal fin with 3 spines and 8 soft rays; 18-20 pectoral-fin rays.**Colour:** Generally brownish with many small dark spots on body and fins and large irregular dark blotches on head and body overlying smaller dark spots; a brownish-black saddle-blotch on top of caudal peduncle.An indentation above
hind edge of eyePreopercle finely
serrate, the serrae at
the angle not enlarged**Size:** To 120 cm***Epinephelus hexagonatus* (Forster, 1801)****(Plate IV, 34)****FAO names:** Starspotted grouper (En)
Mérour mélifère (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Rocky or coral reefs from 1 m to 37 m.**Fisheries:** Hooks and Line, Spears.**Distinctive Characters:** Preopercle rounded, the ventral serrae slightly enlarged; upper edge of opercle convex; anal fin with 3 spines and 8 rays.**Colour:** Small but conspicuous triangular white spots on the corners of the brown hexagons of the vertical fins and of the body, except the belly; four to six dark blotches along the dorsal-fin base.Dorsal fin with 11 spines
and 15-17 soft rays**Size:** To 28 cm

***Epinephelus lanceolatus* (Bloch, 1790)**

FAO names: Giant grouper (En)
Mérrou lancéolé (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Shallow and deep waters down to 100 m.
Fisheries: Hooks and Line, Spears.
Distinctive Characters: Eyes small; preopercle rounded, finely serrate; maxilla reaches well past eye; anal fin with 3 spines and 8 soft rays.
Colour: Juveniles variegated brown and yellow, the fins yellow with dark brown or black spots; adults dark greyish or brown with pale mottlings.

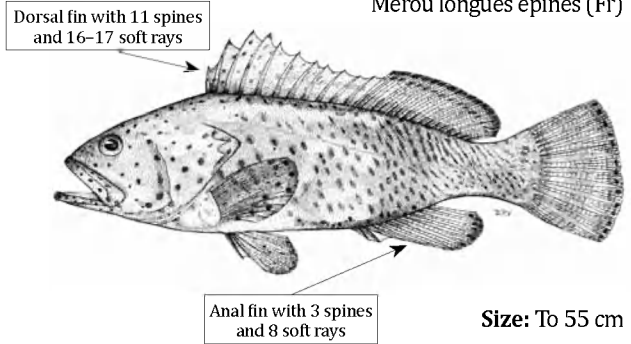


Size: To 230 cm

***Epinephelus longispinis* (Kner, 1864)** (Plate IV, 35)

FAO names: Longspine grouper (En)
Mérrou longues épines (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Rocky or coral reefs from 1 m to 70 m.
Fisheries: Hooks and Line, Spears.
Distinctive Characters: Preopercle corner with enlarged serrae and a shallow indentation just above the corner; upper edge of opercle straight or slightly convex.
Colour: Head and body pale greyish-brown, covered with small dark reddish-brown spots round on head and front of body, but obliquely elongated and darker posteriorly.

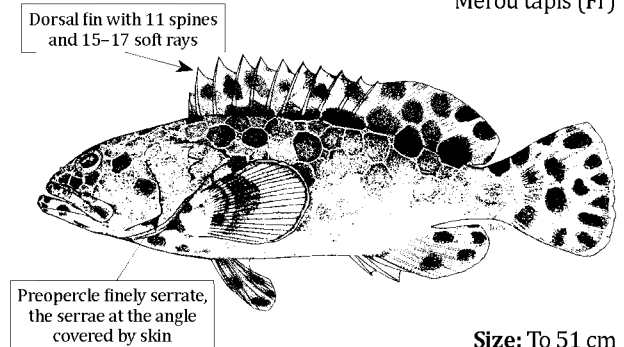


Size: To 55 cm

***Epinephelus macrospilus* (Bleeker, 1855)** (Plate IV, 36)

FAO names: Snubnose grouper (En)
Mérrou tapis (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Lagoons and seaward reefs from 5 m to 25 m.
Fisheries: Traps, Gillnets, Handlines, Seines, Spears.
Distinctive Characters: Anal fin with 3 spines and 8 soft rays; 18–19 pectoral-fin rays; caudal fin rounded.
Colour: Background colour of head and body with close-set brown and black spots; pale interspaces forming a network pattern; median fins pale with large blackish spots.

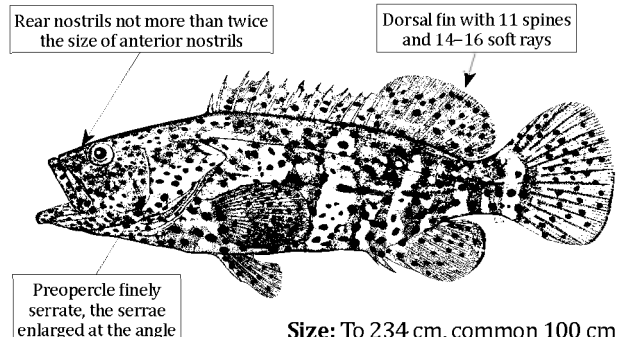


Size: To 51 cm

***Epinephelus malabaricus* (Bloch & Schneider, 1801)** (Plate IV, 37)

FAO names: Malabar grouper (En)
Mérrou malabar (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).
Habitat: Coral and rocky reefs, tide pools, estuaries, mangrove swamps and sand or mud bottoms from the shore to 150 m.
Fisheries: Bottom trawls, Longlines, Traps, Spears, Hooks and Line, Seines.
Distinctive Characters: Anal fin with 3 spines and 8 soft rays; 18–20 pectoral-fin rays.
Colour: Head, body and fins brownish covered with small blackish brown and white spots; often irregular brown bars visible on body.



Size: To 234 cm, common 100 cm

Epinephelus merra Bloch, 1793

(Plate IV, 38)

FAO names: Honeycomb grouper (En)

Mérou gâteau de cire (Fr)

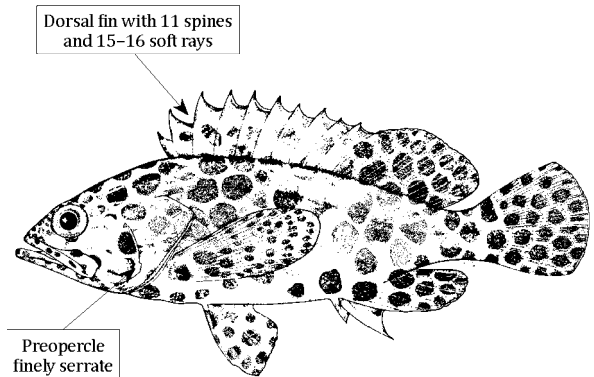
Local name(s): N: Tewa chui; S: Tewa chui (M), Tewa (K).

Habitat: Lagoons and semi-protected seaward reefs, intertidal waters down to 50 m.

Fisheries: Traps, Gillnets, Handlines, Spears.

Distinctive Characters: Anal fin with 3 spines and 8 soft rays; 16–18 pectoral-fin rays.

Colour: A series of about five darker diagonal bands, each two to five hexagons wide, superimposed on sides and radiating from eye; hexagons on sides may coalesce into short rows.



Size: To 31 cm

Epinephelus miliaris (Valenciennes, 1830)

FAO names: Netfin grouper (En)

Mérou abeille (Fr)

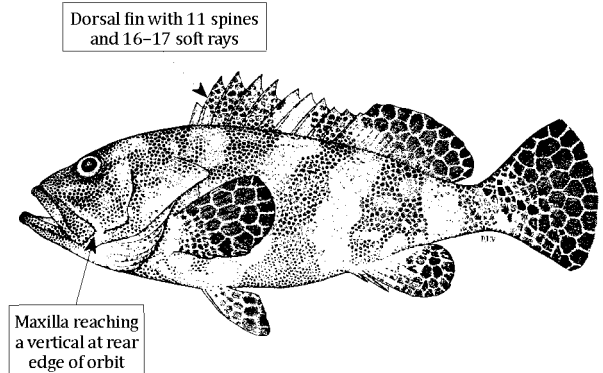
Local name(s): N: Tewa chui; S: Tewa chui (M), Tewa (K).

Habitat: Juveniles on mud bottoms, seagrass beds, mangrove swamps, and coral reefs from 1 m to 16 m; adults in coral reefs from 18 m to 180 m.

Fisheries: Traps, Gillnets, Handlines, Spears.

Distinctive Characters: Preopercle subangular, with a shallow notch just above the angle; anal fin with 3 spines and 8 soft rays.

Colour: Body and head pale; large spots on the soft-rayed portions of the fins and a fine pattern of small close-set spots on the body and spinous portions of the fins.



Size: To 43 cm

Epinephelus morrhua (Valenciennes, 1833)

(Plate V, 39)

FAO names: Comet grouper (En)

Mérou comète (Fr)

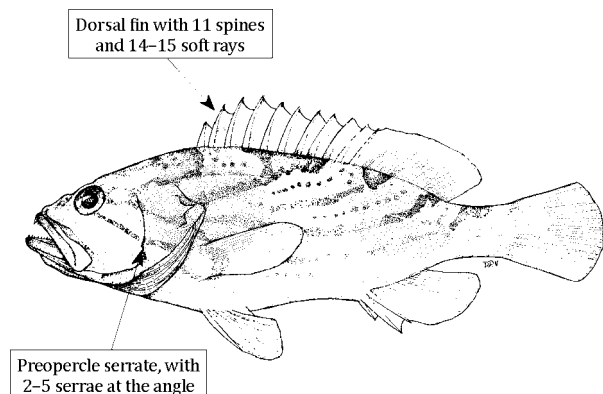
Local name(s): N: Tewa/Chewa; S: Tewa (M/K).

Habitat: Usually found in deep waters from 80 m to 370 m.

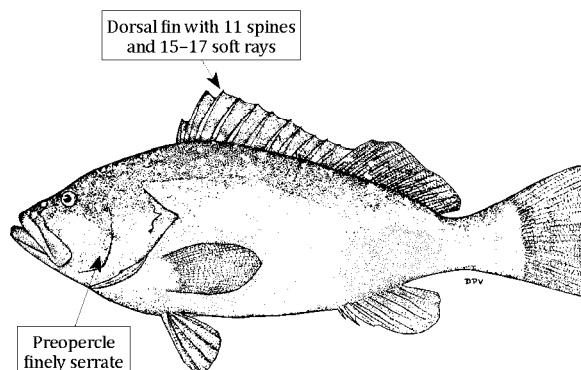
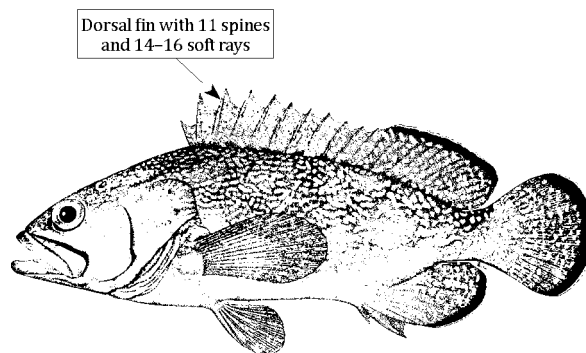
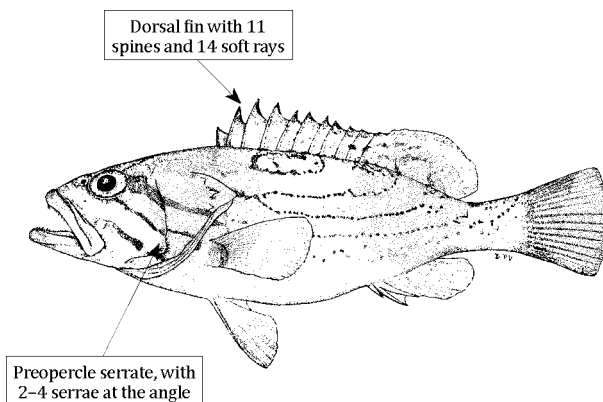
Fisheries: Longlines, Hooks and Line, Bottom trawls.

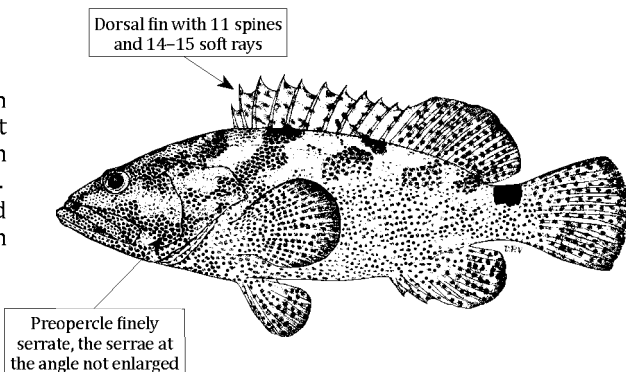
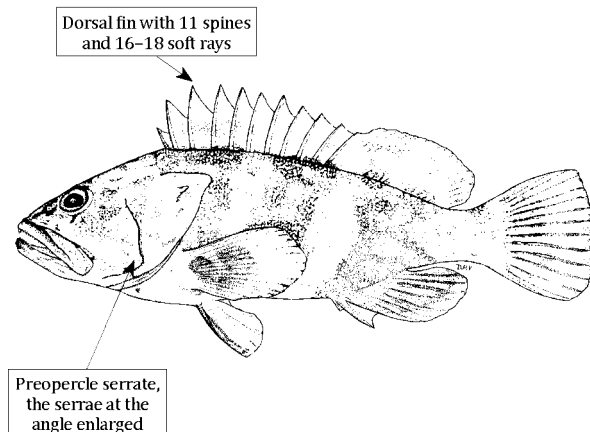
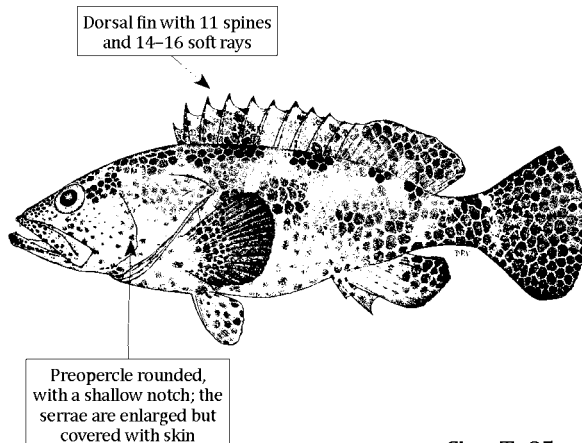
Distinctive Characters: Anal fin with 3 spines and 7–8 soft rays; pectoral fins with 17–18 rays; caudal fin slightly to moderately rounded; body scales ctenoid (except on belly) without axillary scales.

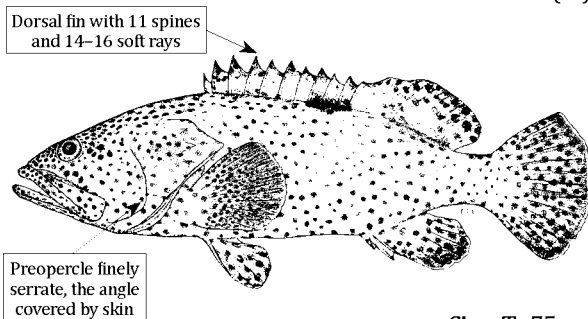
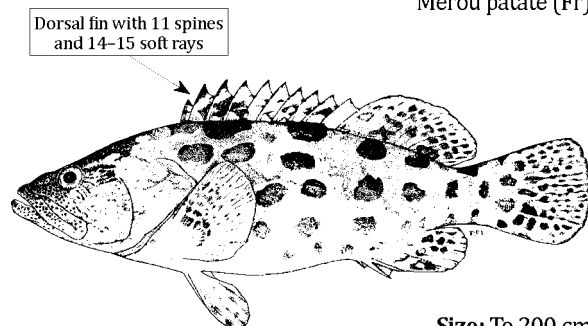
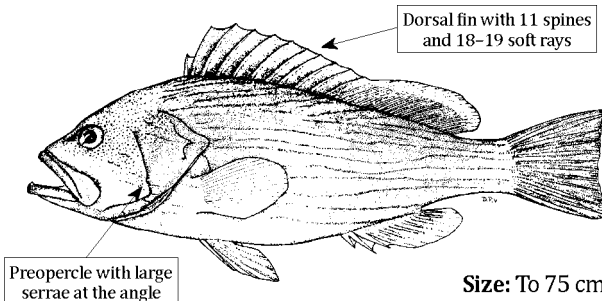
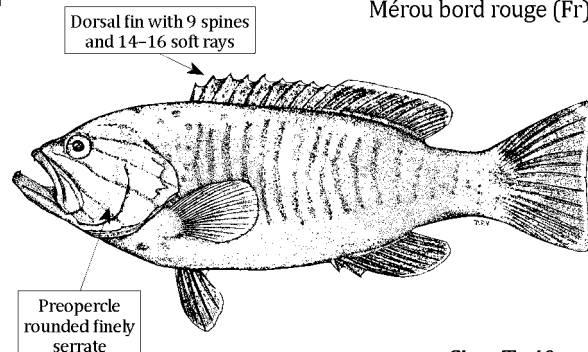
Colour: Background colour light brownish with dark brown bands; dark bands on head; dark band from upper edge of opercle to blotch below dorsal fin.



Size: To 90 cm

Epinephelus multinotatus* (Peters, 1876)*(Plate V, 40)****FAO names:** White-blotched grouper (En)
Mérout plate gris (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Juveniles on inshore coral reefs; adults in deeper waters down to 90 m.**Fisheries:** Hooks and Line, Traps.**Distinctive Characters:** Anal fin with 3 spines and 8 soft rays; pectoral fins with 17–18 rays; caudal fin slightly to moderately rounded; scales on body ctenoid (except on belly).**Colour:** Background colour of head and body purplish-grey with whitish spots and blotches; usually dark reddish-brown spots ventrally.**Size:** To 100 cm***Epinephelus ongus* (Bloch, 1790)****FAO names:** White-streaked grouper (En)
Mérout à flocons (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Rocky reefs from 150 m to 300 m.**Fisheries:** Hooks and Line, Longlines.**Distinctive Characters:** Interorbital area flat; preopercle rounded, the serrae small and mostly covered by skin; upper edge of operculum strongly convex, the rear edge almost vertical, the upper spine extending posterior to lower spine.**Colour:** Body brown, with numerous small white spots horizontally elongated, tending to form wavy lines.**Size:** To 40 cm***Epinephelus poecilnotus* (Temminck & Schlegel, 1842)****(Plate V, 41)****FAO names:** Dot-dash grouper (En)
Mérout morse (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Reef-associated from 45 m to 375 m.**Fisheries:** Hooks and Line, Longlines, Bottom trawls.**Distinctive Characters:** Anal fin with 3 spines and 8 soft rays; pectoral fins with 17–18 rays.**Colour:** Background colour in adults pale brownish; spots and bands on body are faint or absent; dark blotches not joining to lower bands; dark bands on the head.**Size:** To 65 cm

Epinephelus polyphkadion* (Bleeker, 1849)*(Plate V, 42)****FAO names:** Camouflage grouper (En)
Mérout camouflage (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Demersal on coral reefs.**Fisheries:** Hooks and Line, Spears, Traps.**Distinctive Characters:** Dorsal head profile with an indentation above hind edge of eye; nape not highly notched; interorbital area flat; anal fin with 3 spines and 8 soft rays; pectoral fins with 17 rays.**Colour:** Background colour pale brown, covered with dark brown spots; irregular dark blotches on body; dark saddle blotch on caudal peduncle.**Size:** To 90 cm***Epinephelus rivulatus* (Valenciennes, 1830)****(Plate V, 43)****FAO names:** Halfmoon grouper (En)
Mérout demi-lune (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Rocky bottoms or coral reefs from 10 m to 150 m.**Fisheries:** Handlines, Longlines, Gillnets, Spears.**Distinctive Characters:** Anal fin with 3 spines and 8 soft rays; pectoral fins with 17-19 rays.**Colour:** Background colour reddish to greenish-brown, with whitish spots on each scale; dark reddish blotch on pectoral fins; dark reddish band covering most of the pectoral-fin base; 4 irregular dark bands (3rd and 4th usually joined midlaterally).**Size:** To 37 cm***Epinephelus spilotoceps* Schultz, 1953****(Plate V, 44)****FAO names:** Foursaddle grouper (En)
Mérout quatre selles (Fr)**Local name(s):** N: Tewa; S: Tewa chui (M), Tewa (K).**Habitat:** Coral reefs from 1 m to 30 m.**Fisheries:** Hooks and Line, Longlines.**Distinctive Characters:** Anal fin with 3 spines and 8 soft rays; 17-19 pectoral-fin rays; caudal fin rounded.**Colour:** Head and body mostly covered with close-set dark brown, olive, or reddish-brown spots; those on the dorso-lateral parts of the head, body, and on median fins polygonal and close-set, with the interspaces forming a white reticulum; those on the ventral portions more rounded, separated and often more reddish; three dark blotches often visible at the base of the dorsal fin and one forming a saddle blotch on the caudal peduncle.**Size:** To 35 cm

Epinephelus tauvina* (Forsskål, 1775)*(Plate V, 45)****FAO names:** Greasy grouper (En)
Mérout loutre (Fr)**Local name(s):** N: Tewa; S: Tewa chui (M), Tewa (K).**Habitat:** Coral reefs down to 50 m.**Fisheries:** Hooks and Line, Longlines.**Distinctive Characters:** Anal fin with 3 spines and 8 soft rays; 18–20 pectoral–fin rays; caudal fin rounded.**Colour:** Body and fins pale greyish, covered with dull orange–red or red–brown spots not sharply outlined; blackish blotch usually at base of last 4 dorsal spines; dark spots on soft dorsal, caudal and anal fins separated by a pale network in small specimens.**Size:** To 75 cm***Epinephelus tukula* Morgans, 1959****(Plate V, 46)****FAO names:** Potato grouper (En)
Mérout patate (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Coral reefs from 10 m to 150 m.**Fisheries:** Hooks and Line, Spears.**Distinctive Characters:** Maxilla reaches vertical at rear edge of eye; anal fin with 3 spines and 8–9 soft rays; 19–20 pectoral–fin rays; midlateral body scales ctenoid.**Colour:** Background colour pale brownish–grey with several dark brown to black widely spaced blotches, arranged in ventral series; streaks radiating from eye.**Size:** To 200 cm***Epinephelus undulosus* (Quoy & Gaimard, 1824)****(Plate V, 47)****FAO names:** Wavy–lined grouper (En)
Mérout ondulé (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Sand banks from 24 m to 90 m.**Fisheries:** Hooks and Line, Longlines, Bottom trawls.**Distinctive Characters:** Rear end of maxilla with a distinct protuberance covered by upper lip; anal fin with 3 spines and 8 soft rays; 18–19 pectoral–fin rays; caudal fin truncate to slightly concave.**Colour:** Background colour generally purplish–grey or brownish, usually with wavy longitudinal lines on dorsal part of body.**Size:** To 75 cm***Gracila albomarginata* (Fowler & Bean, 1930)****FAO names:** Masked grouper (En)
Mérout bord rouge (Fr)**Local name(s):** N: Tewa; S: Tewa (M/K).**Habitat:** Outer reef slopes and channels adjacent to deep water, from 6 m to 120 m.**Fisheries:** Hooks and Line, Longlines.**Distinctive Characters:** Head smaller than most groupers; dorsal–fin origin over rear end of operculum.**Colour:** Adults greenish or reddish–brown to brownish–grey, with several narrow curved dark bars on midlateral part of body; 3 to 5 blue lines across the head; soft dorsal and anal fins with a narrow blue margin.**Size:** To 40 cm

***Grammistes sexlineatus* (Thunberg, 1792)**

Local name(s): N: Tewa; S: Tewa (M/K).

Habitat: Coral and rocky bottoms down to 15 m.

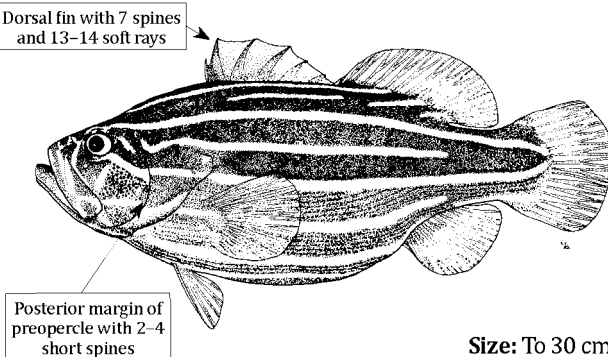
Fisheries: Hooks and Line, Traps.

Distinctive Characters: Mouth large; margins of subopercle and interopercle smooth; a small fleshy flap (smaller than pupil of eye) on tip of chin; anal fin with 2 spines and 9 soft rays; 16–18 pectoral–fin rays.

Colour: Body dark brown to black with yellow stripes (3 in juveniles of about 5 cm SL), increasing to 8 in large adults.

FAO names: Goldenstriped soapfish (En)

Dorsal fin with 7 spines and 13–14 soft rays



Posterior margin of preopercle with 2–4 short spines

Size: To 30 cm

***Hyporthodus octofasciatus* Griffin, 1926**

Local name(s): N: Tewa; S: Tewa (M/K).

Habitat: Rocky reefs from 150 m to 300 m.

Fisheries: Hooks and Line, Longlines.

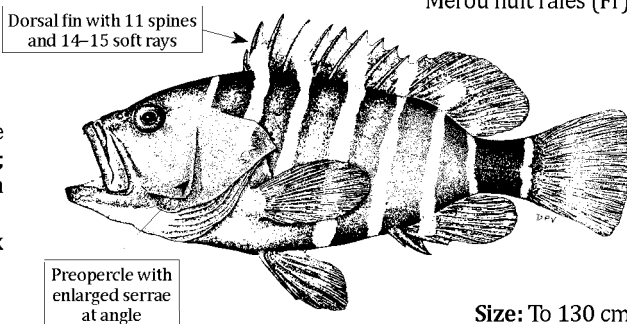
Distinctive Characters: Lower edge of subopercle and rear edge of interopercle distinctly serrate; anal fin with 2 spines and 9 rays; pectoral fins with 18–19 rays; caudal fin rounded.

Colour: Background colour pale, with 8 broad dark bars; dark maxillary streak present.

(Plate V, 48)

FAO names: Eightbar grouper (En)
Méroù huit raies (Fr)

Dorsal fin with 11 spines and 14–15 soft rays



Preopercle with enlarged serrae at angle

Size: To 130 cm

***Plectropomus laevis* (Lacepède, 1801)**

(Plate VI, 49, 50)

FAO names: Blacksaddled coral grouper (En)
Méroù sellé (Fr)

Local name(s): N: Tewa dudu; S: Tewa (M/K).

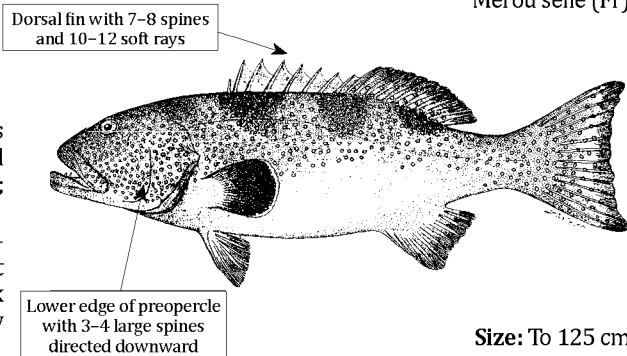
Habitat: Coral reefs from 4 m to 90 m.

Fisheries: Spears, Traps, Seines, Hooks and Line.

Distinctive Characters: Posterior nostrils elongate, much longer than anterior nostrils; anal fin with 3 spines and 8 soft rays; 17 pectoral rays; caudal fin emarginated, the middle rays shortest.

Colour: Two colour phases: a dark form reddish-brown, with 5 dark bars usually faint or absent with small blue spots; a white form with 5 dark brown bars and scattered blue spots, and yellow fins.

Dorsal fin with 7–8 spines and 10–12 soft rays



Lower edge of preopercle with 3–4 large spines directed downward

Size: To 125 cm

Plectropomus pessuliferus* (Fowler, 1904)

(Plate VI, 51)

FAO names: Roving coral grouper (En)
Méroù-loche vagabonde (Fr)

Local name(s): N: Tewa; S: Tewa (M/K).

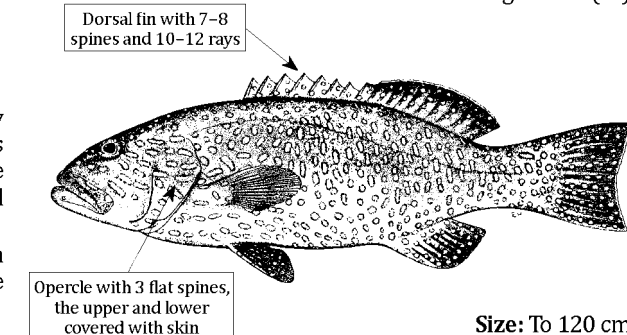
Habitat: Coral reefs from 20 m to 147 m.

Fisheries: Hooks and Line, Spears, Bottom trawls.

Distinctive Characters: Preopercle broadly rounded, with 3 large ventrally-directed spines along lower half; interopercle and subopercle smooth; anal fin with 3 spines and 8 rays; caudal fin emarginate.

Colour: Background colour brownish with numerous small dark-edged blue spots; some spots on head and sides vertically elongate.

Dorsal fin with 7–8 spines and 10–12 rays



Opercle with 3 flat spines, the upper and lower covered with skin

Size: To 120 cm

***Plectropomus punctatus* (Quoy & Gaimard, 1824)**

(Plate VI, 52) **FAO names:** Marbled coralgroupier (En)
Mérrou pointillé (Fr)

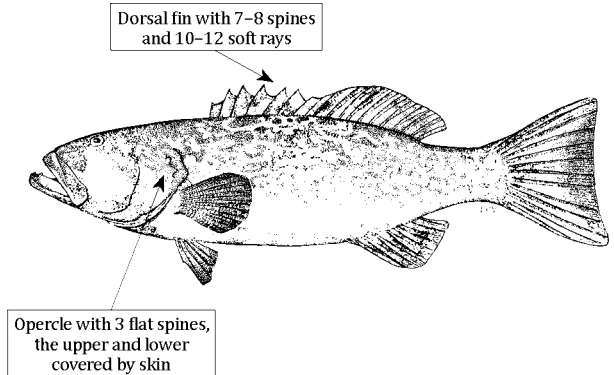
Local name(s): N: Tewa dudu; S: Tewa (M), Mjombo (K).

Habitat: Coral reefs from 4 m to 90 m.

Fisheries: Spears, Traps, Seines, Hooks and Line.

Distinctive Characters: Posterior nostrils elongate, much longer than anterior nostrils; anal fin with 3 spines and 8 soft rays; 16–18 pectoral-fin rays; caudal fin emarginate.

Colour: Adults brown to reddish or purplish-brown, often irregularly mottled with pale olive-green, orange, or white; no small blue spots, broad dark bars, or wedge-shaped blotches on body; pectoral fins dark brown; body of juveniles brownish dorsally, with numerous round or oval pale spots.



Size: To 96 cm

***Variola albimarginata* Baissac, 1953 ***

FAO names: White-edged lyretail (En)
Croissant queue blanche (Fr)

Local name(s): N: Tewa; S: Tewa (M), Tewa miombo, Kikokwe (K).

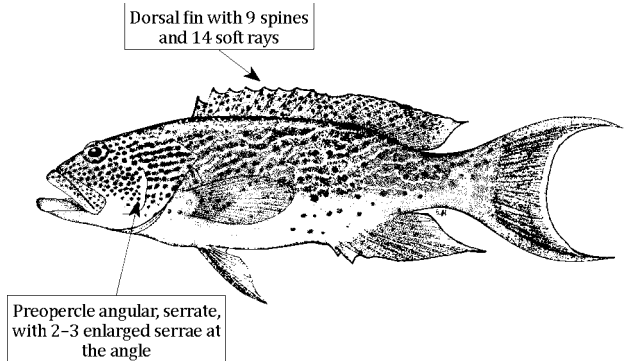
Habitat: Seaward reefs from 2 m to 100 m.

Fisheries: Hooks and Line, Spears, Traps.

Distinctive Characters: Maxilla naked; anal fin with 3 spines and 8 soft rays; 17–19 pectoral-fin rays; caudal fin lunate.

Colour: Head, body and median fins yellowish brown to orange-red with numerous even spaced dark brown spots; anal, soft dorsal and caudal fins with white edges.

Remarks: Can be distinguished from *V. louti* by the thin white margin on its tail.



Size: To 65 cm

***Variola louti* (Forsskål, 1775)**

FAO names: Yellow-edged lyretail (En)
Croissant queue jaune (Fr)

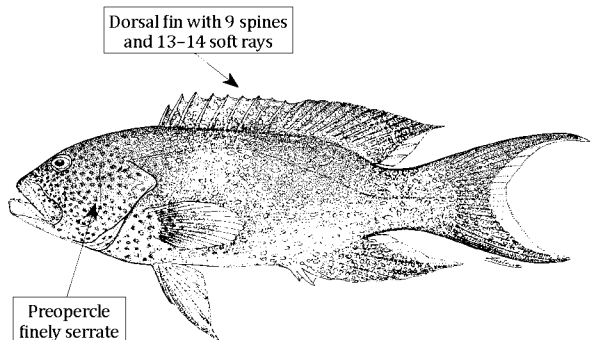
Local name(s): N: Tewa; S: Tewa (M), Tewa miombo, Kikokwe (K).

Habitat: Coral reefs from 3 m to 250 m.

Fisheries: Handlines, Spears, Traps.

Distinctive Characters: Sides of lower jaw with 1–2 large canines; anal fin with 3 spines and 8 soft rays; 16–18 pectoral-fin rays; caudal fin crescentic, the upper and lower rays elongate.

Colour: Head, body and median fins yellowish-brown to orange-red with small round or elongate blue or pink spots; caudal fin with a broad yellow edge.



Size: To 83 cm

TERAPONTIDAE

Grunters

***Pelates quadrilineatus* (Bloch, 1790)**

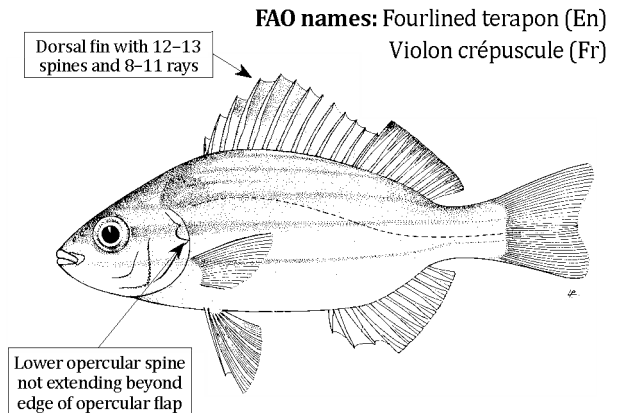
Local name(s): N: Chende/Tende; S: Ngagu (M/K).

Habitat: Inshore areas, sometimes in brackish waters down to 40 m.

Fisheries: Gillnets, Traps, Handlines, Castnets.

Distinctive Characters: Anal fin with 3 spines and 9–11 soft rays, the 2nd anal spine subequal to the 3rd and shorter than longest anal rays.

Colour: Body silvery-grey dorsally, silvery-white ventrally; 4–6 narrow, dark brown stripes on body; spiny part of dorsal fin and behind gill opening with blotches; mouth and gill cavity red in life.



Size: To 30 cm, common 20 cm

***Terapon jarbua* (Forsskål, 1775) (Plate VI, 53)**

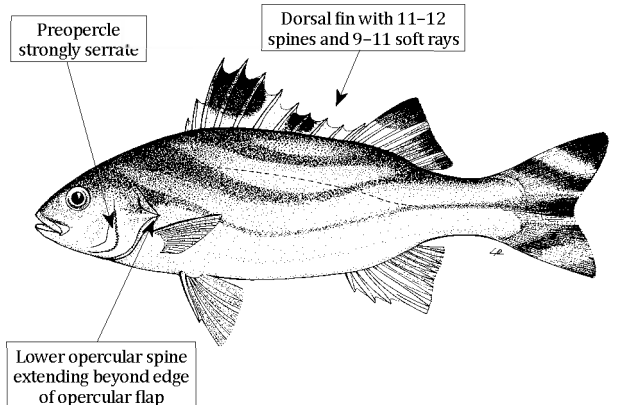
Local name(s): N: Chende/Tende; S: Ngagu (M/K).

Habitat: Inshore waters often in brackish waters down to 40 m.

Fisheries: Gillnets, Traps, Handlines, Cast nets.

Distinctive Characters: Anal fin with 3 spines and 7–10 soft rays; 2nd anal spine subequal to 3rd spine and shorter than longest anal rays; caudal fin emarginate.

Colour: Body silvery dorsally and silvery white ventrally; 3–4 black curved stripes on body; dorsal fin with black bands on upper portions of fin membranes; caudal fin with median rays pigmented; both caudal lobes with dark tips and transverse bands.



Size: To 36 cm, common 25 cm

***Terapon puta* Cuvier, 1829**

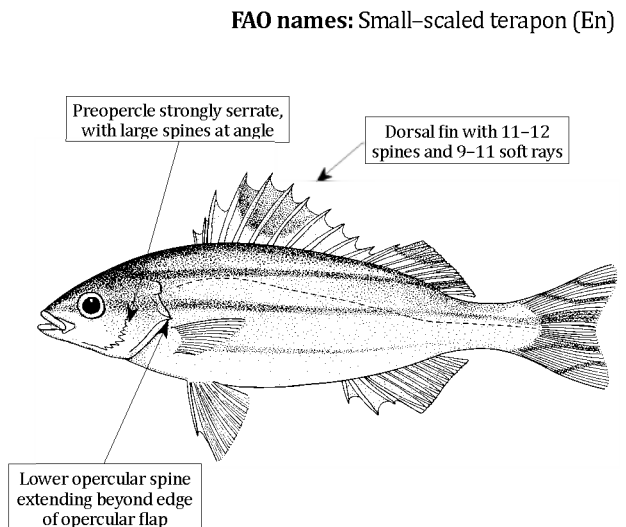
Local name(s): N: Chende/Tende; S: Ngagu (M/K).

Habitat: Inshore areas sometimes in brackish waters down to 40 m.

Fisheries: Gillnets, Traps, Handlines, Castnets.

Distinctive Characters: Body somewhat elongate; spiny part of dorsal fin strongly arched and deeply notched, 5th and 6th spines longest; margin of soft part of dorsal fin straight or emarginate; anal fin with 3 spines and 8–9 soft rays, 2nd spine shorter than the 3rd spine; margin of soft part of anal and caudal fins emarginate.

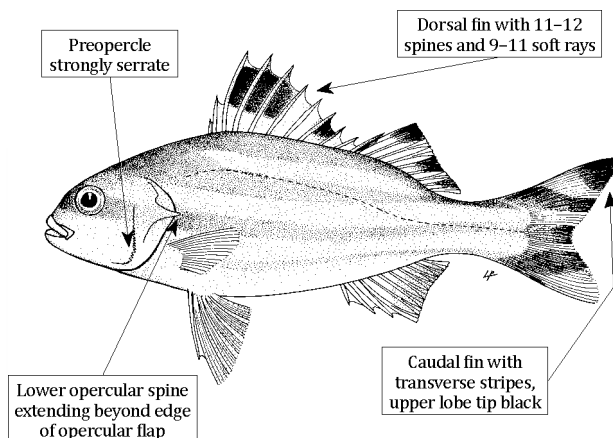
Colour: Body light grey or brown dorsally; tan or silvery-white ventrally; 4 narrow dark brown stripes on body; juveniles with 6–7 light grey vertical bars; dorsal fin with a black blotch; caudal lobes with dark tips and transverse bands.



Size: To 16 cm, common 12 cm

***Terapon theraps* Cuvier, 1829**

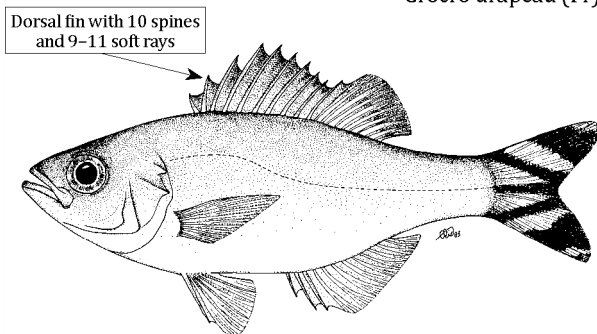
FAO names: Largescaled terapon (En)

Local name(s): N: Chende/Tende; S: Ngagu (M/K).**Habitat:** Inshore areas, sometimes in brackish waters down to 40 m.**Fisheries:** Gillnets, Traps, Handlines, Castnets.**Distinctive Characters:** Body oblong compressed; spiny part of dorsal fin strongly arched and deeply notched; 3rd to 6th dorsal spine longest; anal fin with 3 spines and 7–9 soft rays, 3rd spine longest; caudal fin emarginate with rounded lobes.**Colour:** Body dusky dorsally, silvery-white ventrally; 4 dark brown stripes almost straight and broad on body; juveniles with 6–7 vertical bars; dorsal fin with black blotches; soft part of dorsal fin with a dark band along upper portions of anterior rays and a horizontal band on posterior rays.

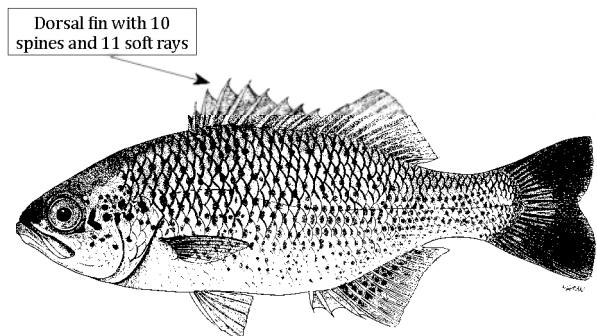
Size: To 30 cm

KUHLIIDAE

Aholeholes

***Kuhlia mugil* (Forster, 1801) (Plate VI, 54)**FAO names: Barred flagtail (En)
Croco drapeau (Fr)**Local name(s):** N: No information; S: Haruni (K).**Habitat:** Often found schooling near reefs.**Fisheries:** Lines, Beach seines, Cast nets.**Distinctive Characters:** Maxilla not reaching vertical through middle of eye; 10–12 gill rakers on upper limb and 23–26 on lower limb of 1st arch; anal fin with 3 spines and 9–11 soft rays; 14 pectoral-fin rays; 48–53 lateral-line scales plus 5 or 6 on caudal fin.**Colour:** Head and body silvery, with dorsal parts bluish-grey; two prominent oblique black bands across each lobe of caudal fin and a narrower black band along middle rays of the fin.

Size: To 40 cm, common 20 cm

***Kuhlia rupestris* (Lacepède, 1802)**FAO names: Rock flagtail (En)
Croco sauvage (Fr)**Local name(s):** N: No information; S: Haruni (K).**Habitat:** Estuaries and freshwater.**Fisheries:** Lines, Beach seines, Cast nets.**Distinctive Characters:** Maxilla reaches to or beyond vertical through middle of eye; anal fin with 3 spines and 10 soft rays; 13–14 pectoral-fin rays; caudal fin emarginate.**Colour:** Head and body silvery; scales usually with a dark spot; soft dorsal fin with a broad dark margin narrowing posteriorly; caudal fin of juveniles with a blackish blotch on each lobe, spreading to form a broad band in adults; anal fin usually with a small dark spot.

Size: To 45 cm

PRIACANTHIDAE

Bigeyes – Glasseyes – Bullseyes

Cookeolus japonicus* (Cuvier, 1829)

FAO names: Longfinned bullseye (En)

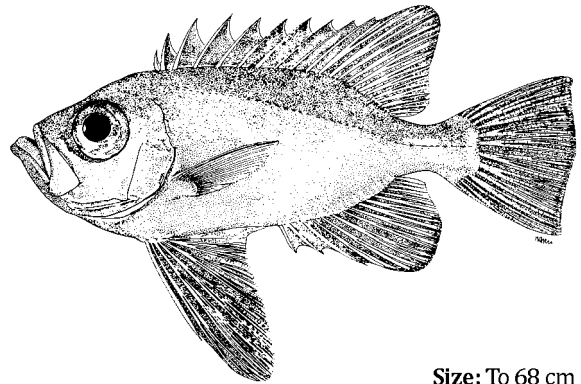
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Inhabits waters from 60 m to 400 m.

Fisheries: Bottom trawls.

Distinctive Characters: Dorsal fin single with 10 spines and 12–13 soft rays; anal fin with 3 spines and 11–16 soft rays; dorsal spines increase regularly in length from first to last; 10th spine more than twice length of 2nd spine; soft portions of dorsal and anal fins elongate; pelvic fins very long in adults.

Colour: Background colour silvery–reddish, paler ventrally; membranes of dorsal and anal fins dark anteriorly; ventral membrane blackish, rays pale.



Size: To 68 cm

***Heteropriacanthus cruentatus* (Lacepède, 1801)**

FAO names: Glasseye (En)

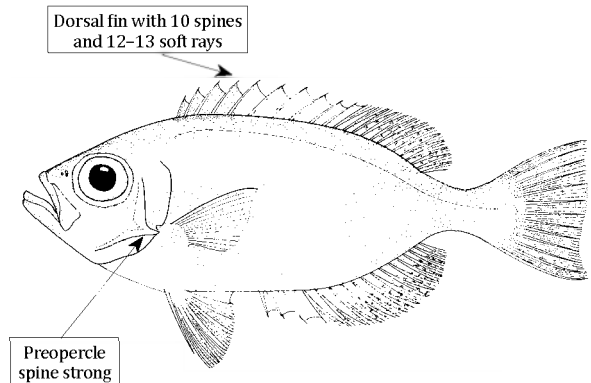
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Shallow waters on coral reefs and rocky bottoms by day and migrates to feed at night. Maximum depth 300 m.

Fisheries: Hooks and Line, Traps.

Distinctive Characters: Anal fin with 3 spines and 13–14 soft rays; pectoral fins with 18–19 soft rays; adults with well-developed U-shaped gaps under preopercular spine and junction of subopercle and interopercle.

Colour: Silvery or reddish or mottled silvery and red; ventral part of body uniformly pale or dusky, but without distinct spots; caudal, soft dorsal and soft anal fins usually with dark spots.



Size: To 50 cm, common 20 cm

Priacanthus blochii* Bleeker, 1853FAO names: Paeony bulleye (En)
Beauclair pivoine (Fr)

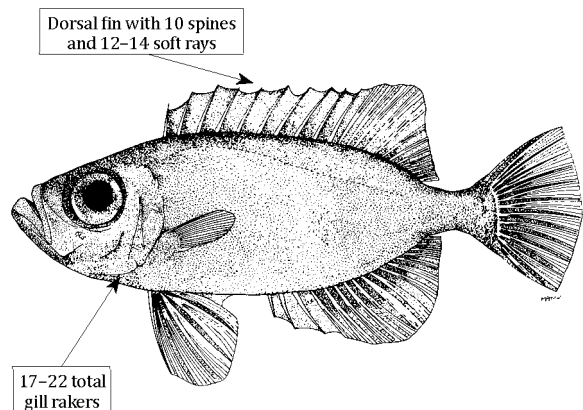
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Benthic in shallow coastal waters, over reefs or rocky bottoms, usually down to 35 m.

Fisheries: Handlines.

Distinctive Characters: Eyes very large; mouth large and oblique, the lower jaw strongly projecting, the maxilla reaching approximately to below front margin of pupil; spine at corner of preopercle short in adults, variable in young; posterior portion of preopercle, above and below spine, scaled; soft portions of dorsal and anal fins broadly rounded; soft anal fin with 14–15 rays; pelvic fins about equal to head length; caudal fin rounded.

Colour: Body and fins pinkish to scarlet; pelvic fins with a black spot basally; iris red.



Size: To 35 cm

Priacanthus hamrur (Forsskål, 1775) *

FAO names: Moontail bullseye (En)
Beauclaire miroir (Fr)

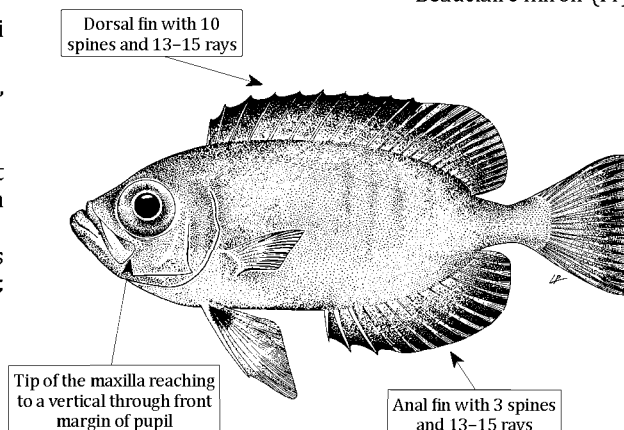
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Bottom dwelling in shallow waters, associated with coral and rocky reefs.

Fisheries: Handlines, Gillnets.

Distinctive Characters: Eyes very large; spine at corner of preopercle short in adults, variable in young; caudal fin crescentic to emarginate.

Colour: Red in colour with 15 small dark spots along lateral line; median and pelvic fins dusky red; black spot at base of 1st three pelvic rays.



Size: To 40 cm, common 30 cm

Priacanthus prolixus Starnes, 1988 *

FAO names: Elongate bulleye (En)

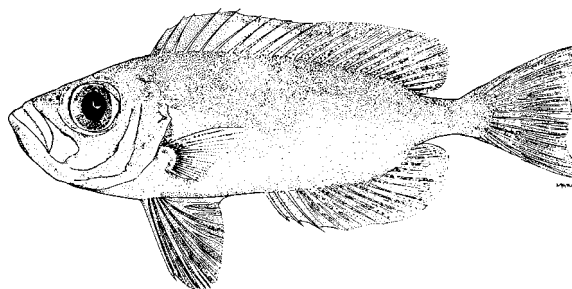
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Open bottoms from 35 m to 250 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body elongate; denticles on leading edge of lachrymal bone (before eye) of about uniform size throughout; dorsal fin continuous with 10 spines and 13–15 soft rays; anal fin with 3 spines and 12–15 soft rays; spiny dorsal with longest spine posteriorly; pelvic fins less than, or about equal to head length.

Colour: No information.



Size: To 25 cm

Pristigenys nipponia (Cuvier, 1829) *

FAO names: Japanese bigeye (En)

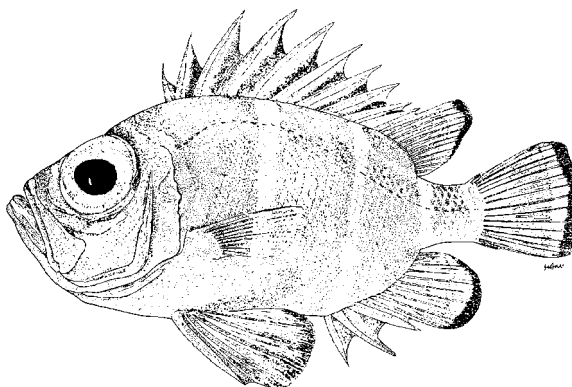
Local name(s): N: No information; S: Bwanaheri (M), Haruni (K).

Habitat: Coastal waters, in rocky habitats from 80 m to 100 m.

Fisheries: Bottom trawls.

Distinctive Characters: Dorsal fin with 10 spines and 11–12 soft rays; anal fin with 3 spines and 10–11 soft rays; pectoral fins with 18–19 soft rays.

Colour: Body bright scarlet with 3 or 4 narrow pale vertical bars; median fins with narrow black margin; pelvic fins dark red, blackish distally.



Size: To 27 cm

SILLAGINIDAE

Smelt-whitings

***Sillago aeolus* Jordan and Evermann, 1902**

Local name(s): N: Mtokoza; S: Jelisi (M).

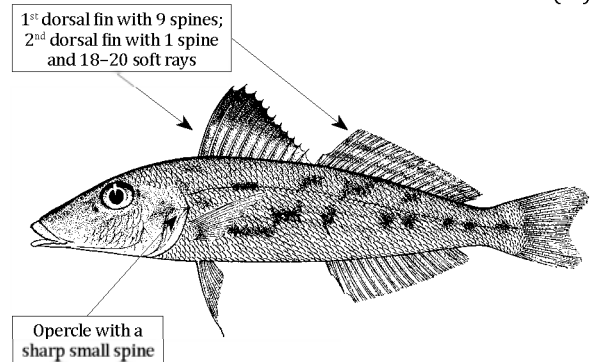
Habitat: Shallow sandy bottoms offshore and bays; also in estuaries down to 60 m.

Fisheries: Seines, Cast nets, Handlines, Bottom trawls.

Distinctive Characters: Body elongate, slightly compressed; pelvic-fins origin slightly behind origin of pectoral fins; anal fin with 2 spines and 17–19 soft rays.

Colour: Body colour is silvery with scattered dark brown elongate blotches on the sides.

FAO names: Oriental sillago (En)
Pêche-madame oriental (Fr)



Size: To 30 cm, common 20 cm

***Sillago chondropus* Bleeker, 1849**

Local name(s): N: Mtokoza; S: Jelisi (M).

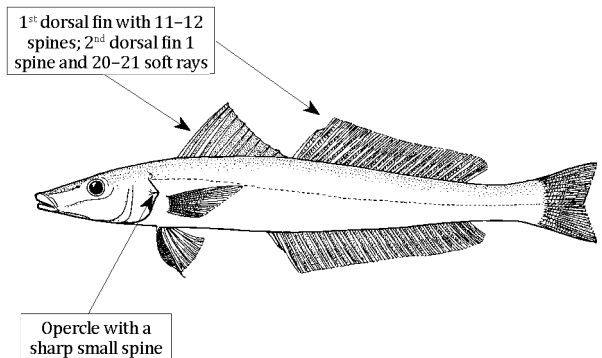
Habitat: Shallow coastal waters and bays; also in estuaries down to 5 m.

Fisheries: Seines, Cast nets, Handlines, Bottom trawls.

Distinctive Characters: Body elongate; anal fin with 2 spines and 22–33 soft rays; pelvic fins with a minute spine and 1st ray greatly thickened to form a club-like structure.

Colour: Back pale brown; lower ventral flanks and belly paler; adult silver-grey; fins pale, the 1st dorsal fin with dusky tip.

FAO names: Clubfoot sillago (En)
Pêche-madame diablotin (Fr)



Size: To 35 cm, common 25 cm

***Sillago sihama* (Forsskål, 1775)**

Local name(s): N: Mtokoza; S: Jelisi (M), Mkupi (K).

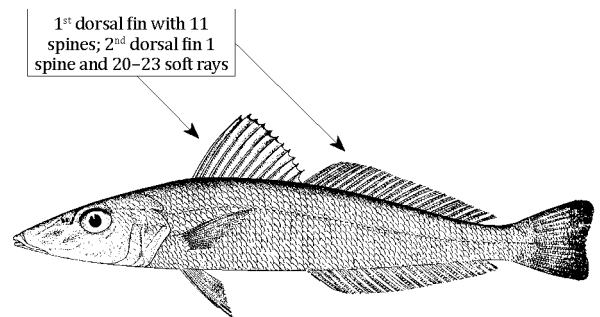
Habitat: Common along beaches, sandbars, mangrove creeks and estuaries; recorded from freshwater. Maximum depth 60 m.

Fisheries: Seines, Cast nets, Handlines, Bottom trawls.

Distinctive Characters: Body elongate; anal fin with 2 spines and 18–23 soft rays.

Colour: Back light brown; lower ventral flanks and belly whitish or silvery, without dark blotches.

FAO names: Silver sillago (En)
Pêche-madame argenté (Fr)



Size: To 30 cm, common 25 cm

MALACANTHIDAE

Bianquillos – Tilefishes

***Malacanthus latovittatus* (Lacepède, 1801)**

Local name(s): N & S: No information.

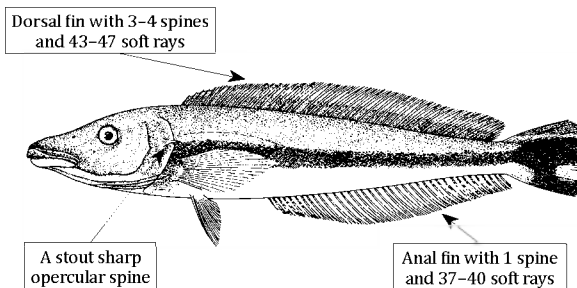
Habitat: Inhabits burrows in sand and rubble bottoms near reefs in shallow waters.

Fisheries: Hooks and Line, Traps.

Distinctive Characters: Jaws reaching posteriorly only to below anterior nostril, well in front of eye.

Colour: Upper body olive-grey to blue-violet, ventral portion whitish; a broad black stripe running the length of the body; caudal fin black with a small white rectangular area; head blue, iris yellow.

FAO names: Blue blanquillo (En)
Matajuel bleu (Fr)



Size: To 45 cm, common 35 cm

LACTARIIDAE

False trevallies – Hulk trevallies

Lactarius lactarius* (Bloch & Schneider, 1801)

Local name(s): N & S: No information.

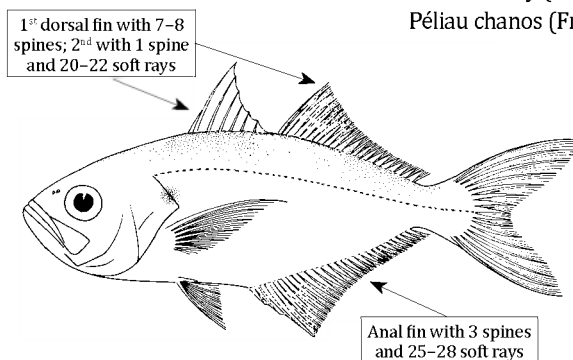
Habitat: Coastal deeper waters down to 100 m.

Fisheries: Bottom trawls, Boat seines, Traps.

Distinctive Characters: Maxilla reaching to posterior 1/3 of eye; mouth large and oblique, with a prominent lower jaw; caudal fin forked.

Colour: Silvery-grey with blue iridescence above; silvery white below; a dusky spot on upper part of gill cover; fins all pale yellow; dorsal and caudal fins sometimes with dusky margins; the blue iridescence and sometimes the yellow of the fins are lost some hours after death.

FAO names: False trevally (En)
Pélieu chanos (Fr)



Size: To 40 cm, common 30 cm

POMATOMIDAE

Bluefishes

***Pomatomus saltatrix* (Linnaeus, 1766)** (Plate VI, 55)

FAO names: Bluefish (En)
Tassergal (Fr)

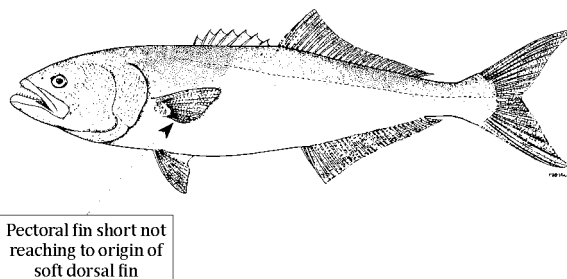
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee (K).

Habitat: Oceanic and coastal waters.

Fisheries: Gillnets, Lines, Purse seines.

Distinctive Characters: Mouth large, terminal, lower jaw sometimes slightly projecting; two dorsal fins, the 1st short and low, with 7-8 feeble spines connected by a membrane, the 2nd long with 1 spine and 23-28 soft rays; anal fin a little shorter than soft dorsal fin with 2 spines and 23-27 soft rays; caudal fin forked, but not so deeply.

Colour: Back greenish blue, sides and belly silvery; dorsal and anal fins pale green tinged with yellow; pectoral fins bluish at base; caudal fin dull greenish tinged with yellow.



Size: To 130 cm, common 60 cm

RACHYCENTRIDAE

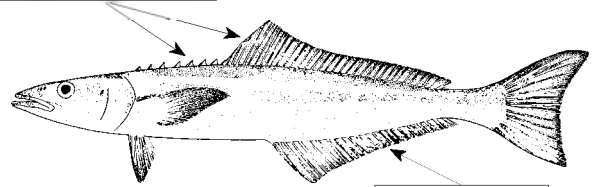
Cobias

Rachycentron canadum (Linnaeus, 1766)

(Plate VI, 56)

FAO names: Cobia (En)
Mafou (Fr)**Local name(s):** N: Songoro; S: Songoro (M/K).**Habitat:** Pelagic, but also over shallow coral reefs, occasionally in estuaries.**Fisheries:** Handlines, Bottom trawls, Trolling gears, Driftnets, Floating gillnets.**Distinctive Characters:** Head broad and depressed; mouth large, terminal, with projecting lower jaw; pectoral fins pointed; caudal fin lunate in adults, upper lobe longer than lower.**Colour:** Back and sides dark brown, with 2 sharply defined narrow light bands; belly yellowish.

Dorsal fin with 7-9 isolated spines and 31 soft rays



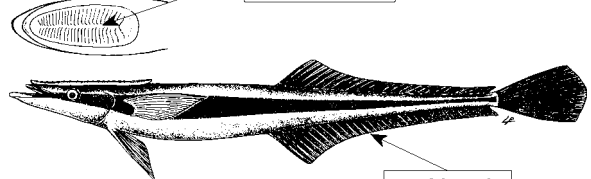
Anal fin with 2 spines and 24 soft rays

Size: To 200 cm, common 110 cm**ECHENEIDAE**

Remoras – Sharksuckers

Echeneis naucrates Linnaeus, 1758FAO names: Live sharksucker (En)
Rémora commun (Fr)**Local name(s):** N: Tadha; S: Kibuzi mulo (M), Kibuzi muro, Mbuzi mro (K).**Habitat:** Coastal and oceanic waters.**Fisheries:** Seines, Handlines, Gillnets.**Distinctive Characters:** Jaws broad, the lower projecting beyond the upper; pectoral fins short and pointed; caudal fin lanceolate in young, the middle rays elongate and filamentous, almost truncate in adults.**Colour:** Dark longitudinal band on sides bordered with white; juveniles with upper and lower margins of fins white.

20-28 laminae on sucking disk



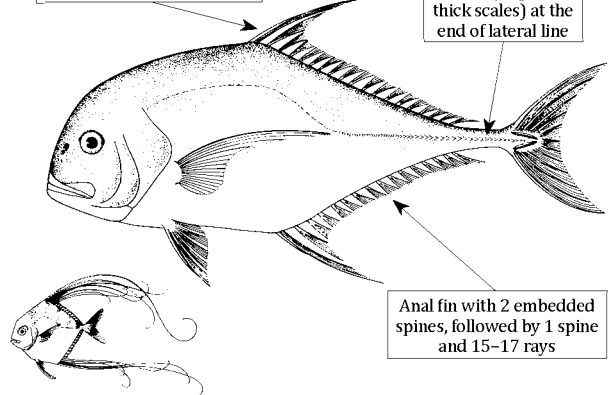
Anal fin with 29-41 soft rays

Size: To 110 cm**CARANGIDAE**

Jacks – Trevallies – Scads – Queen-fishes – Runners – Pompanos

Alectis ciliaris (Bloch, 1787)FAO names: African pompano (En)
Cordonnier fil (Fr)**Local name(s):** N: Sese/Beberu; S: Kolekole ngamia (M), Kolekole.**Habitat:** Adults in shallow coastal waters; young are pelagic. Maximum depth 100 m.**Fisheries:** Hooks and Line, Gillnets, Beach Seines.**Distinctive Characters:** Body deep becoming more elongate with growth, and very compressed; anterior soft rays of dorsal and anal fins extremely long and filamentous in young; pectoral fins falcate, longer than head; pelvic fins elongate in young; 17-22 lower gill rakers.**Colour:** Mostly silvery with a light metallic bluish tinge on upper 1/3 of body and head; juveniles with 5 chevron-shaped dark bars on body, and a black blotch at base of 3rd to 6th soft dorsal-fin ray; filaments black distally.

Dorsal fin with 7 embedded spines, followed by 1 spine and 18-20 rays



Scutes (large and thick scales) at the end of lateral line

Anal fin with 2 embedded spines, followed by 1 spine and 15-17 rays

Juvenile of 13 cm SL

Size: To 150 cm; common 100 cm (FL)

***Alectis indica* (Rüppell, 1830)** (Plate VI, 57)

Local name(s): N: Sese/Beberu; S: Kolekole ngamia (M), Kolekole (K).

Habitat: Adults in coastal waters; juveniles often enter estuaries. Maximum depth more than 60 m.

Fisheries: Hooks and Line, Gillnets, Beach seines.

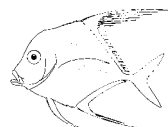
Distinctive Characters: Profile of head and nape somewhat angular; body deep, becoming more elongate with growth, and very compressed; anterior soft rays of dorsal and anal fins extremely long and filamentous in young; pectoral fins falcate, longer than head; pelvic fins elongate in young; 21–26 lower gill rakers.

Colour: Mostly silvery with a dusky green tinge dorsally; juveniles with dark bars on body; dorsal fin pale with leading edges at tips of rays dusky; anal fin pale yellow and caudal fin dusky green.

Dorsal fin with 6 embedded spines, followed by 1 spine and 18–20 rays

Scutes (large and thick scales) at the end of lateral line

Anal fin with 2 embedded spines, followed by 1 spine and 15–17 rays



Juvenile

FAO names: Indian threadfish (En)
Cordonnier plume (Fr)

Size: To 150 cm, common 100 cm (FL)

***Alepes djedaba* (Forsskål, 1775)** (Plate VI, 58)

Local name(s): N: Kolekole/Kambisi; S: Kolekole fuamaji (M), Kolekole (K).

Habitat: Common in near inshore reefs.

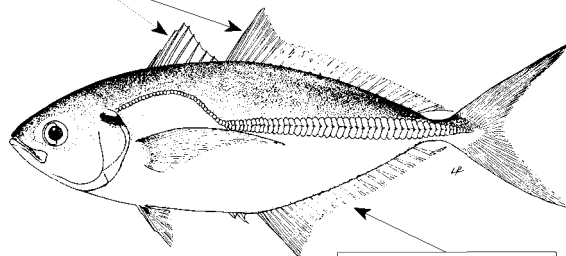
Fisheries: Hooks and Line, Gillnets, Beach seines.

Distinctive Characters: Body oblong, compressed; snout pointed; spiny dorsal fin moderately high, longest spine about equal to length of soft dorsal-fin lobe.

Colour: Greyish-green above, silvery to white below; a distinct black blotch on margin of opercle, bordered above by a smaller white spot; spiny dorsal fin pale to dark dusky; dorsal-fin lobe dusky, pale distally; caudal fin yellowish, except upper lobe often dusky to black distally; other fins pale.

1st dorsal fin with 8 spines; 2nd with 1 spine and 23–25 soft rays

Anal fin with 2 detached spines, followed by 1 spine and 18–20 rays



FAO names: Shrimp scad (En)
Sélar subari (Fr)

Size: To 40 cm, common 25 cm (FL)

***Atule mate* (Cuvier, 1833)**

Local name(s): N: Kolekole/Kambisi/Kanaa; S: Kolekole (M/K).

Habitat: Pelagic species occurring down to 50 m.

Fisheries: Hooks and Line, Gillnets, Seines.

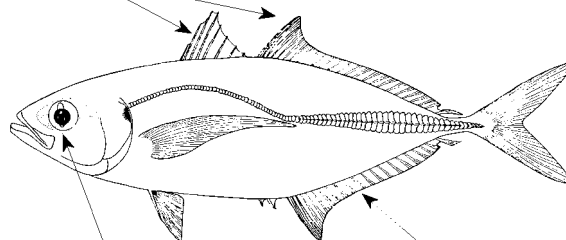
Distinctive Characters: Terminal dorsal and anal-fin rays finlet-like in adults, about twice length of adjacent rays and a little more separated but joined by interradiar membranes; pectoral fins long and falcate; lateral line gently arched anteriorly, its straight part with 36–49 scutes.

Colour: Bright olive-green dorsally, yellowish-green laterally and whitish ventrally; dorso-laterally, 9 or 10 faint grey bars; a black spot, slightly smaller than eye, on upper margin of opercle and adjacent area of shoulder.

1st dorsal fin with 8 spines; 2nd with 1 spine and 22–25 soft rays

Adipose eyelid completely covering eye except for a vertical slit

Anal fin with 2 detached spines, followed by 1 spine and 18–21 rays



FAO names: Yellowtail scad (En)
Sélar queue jaune (Fr)

Size: To 30 cm, common 26 cm (FL)

***Carangoides armatus* (Rüppell, 1830)**

FAO names: Longfin trevally (En)

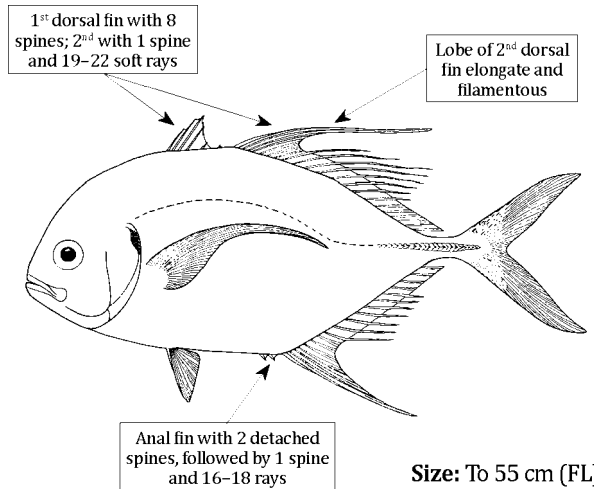
Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Rocky and coral coastlines, also in shallow lagoons down to 50 m.

Fisheries: Hooks and Line, Gillnets, Spears.

Distinctive Characters: Head profile very deep in adults but relatively straight from snout to nape; rays 3 to 12 of the central dorsal fin produced into filaments in males larger than 21 cm (FL); lateral line anteriorly with a moderate regular arch; straight part of lateral line with 11–24 weak scutes.

Colour: Bluish–grey above, silvery below; blackish blotch on upper margin of opercle; spiny dorsal fin blackish; caudal fin grey with leading and trailing edges black.

***Carangoides chrysoptrys* (Cuvier, 1833)**

FAO names: Longnose trevally (En)

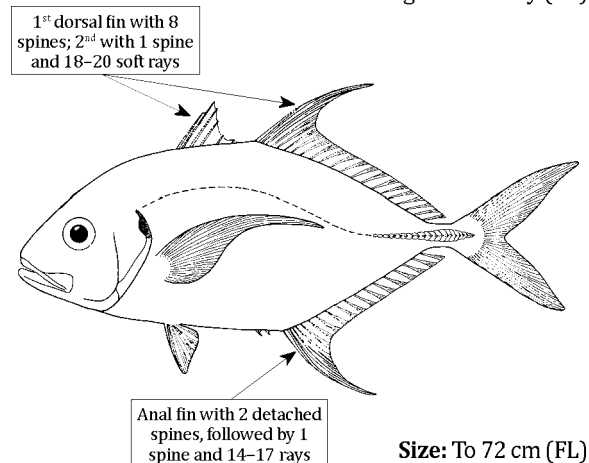
Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Open waters of coastal reefs down to 60 m.

Fisheries: Hooks and Line, Gillnets, Traps.

Distinctive Characters: Lobe of 2nd dorsal fin falcate, becoming shorter with age; lateral line anteriorly with moderately regular arch, with junction of curved and straight parts below 12th to 14th soft ray of 2nd dorsal fin; straight part of lateral line with 20–37 scutes.

Colour: Silvery with head and body greenish above; silvery with yellow–green reflections below; a small black blotch on upper edge of opercle; large adults sometimes very dark; head and fins blackish.

***Carangoides coeruleopinnatus* (Rüppell, 1830)**

FAO names: Coastal trevally (En)

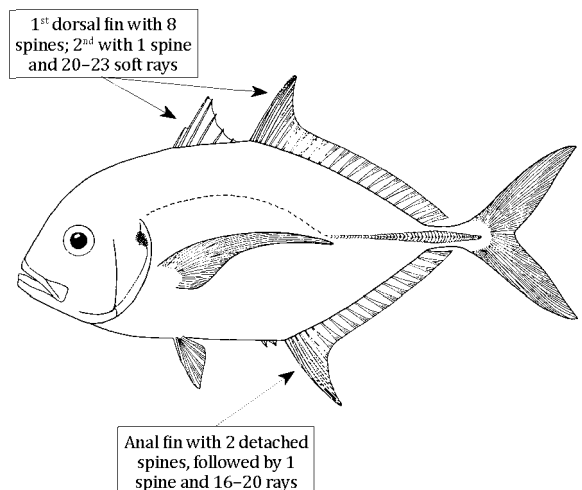
Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Deeper coastal reefs and rarely close to shore. Maximum depth 60 m.

Fisheries: Hooks and Line, Gillnets, Traps.

Distinctive Characters: Lobe of 2nd dorsal fin filamentous in young, becoming shorter with age; lateral line anteriorly with moderately regular arch, with junction of curved and straight parts below 12th to 14th soft ray of 2nd dorsal fin; straight part of lateral line with 20–38 scutes.

Colour: Bluish–green above, silvery grey below; sides with numerous, small yellow spots; small black blotch on upper margin of opercle; 2nd dorsal, anal and caudal fins dusky, the latter sometimes yellowish; pectoral fins pale yellow; pelvic fins hyaline to pale grey.



***Carangoides equula* (Temminck & Schlegel, 1844)**

FAO names: Whitefin trevally (En)

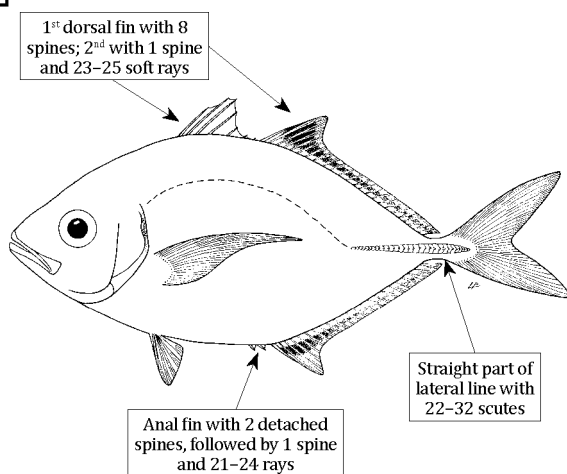
Local name(s): N: Kolekole/Kambisi/Kanaa/Kidara; S: Kolekole zebra (M), Kolekole (K).

Habitat: Benthopelagic, largely restricted to the continental shelf and slope habitats from 100 m to 230 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body compressed, almost rhomboidal; lateral line anteriorly with a moderately regular arch, with junction of curved and straight parts below 12th to 15th soft ray of 2nd dorsal fin.

Colour: Head and body bluish-grey to green dorsally, silvery white below; young with 5–7 dark bands on sides; 2nd dorsal and anal fins with a submarginal black to brown band, white distally; caudal fin dusky yellow; pectoral and pelvic fins pale yellowish to white.



Size: To 37 cm (FL)

***Carangoides ferdau* (Forsskål, 1775) (Plate VII, 59)**

FAO names: Blue trevally (En)

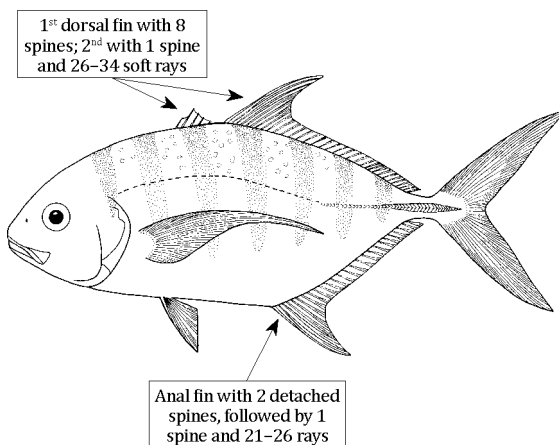
Local name(s): N: Kolekole/Kambisi/Kanaa; S: Kolekole (M/K).

Habitat: Coastal waters adjacent to sandy beaches down to 200 m.

Fisheries: Hooks and Line, Gillnets, Traps.

Distinctive Characters: Lobe of 2nd dorsal fin falcate, especially in small adults, but usually shorter than head length.

Colour: Adults typically with 5–6 dusky bands on sides that usually persist in marketed specimens; in life head and body generally silvery, blue-green above, paler below; caudal fin yellow-green with trailing edge and lobe tips dark; pelvic fins hyaline whitish.



Size: To 70 cm (FL)

***Carangoides fulvoguttatus* (Forsskål, 1775)**FAO names: Yellowspotted trevally (En)
Carangue pailletée (Fr)

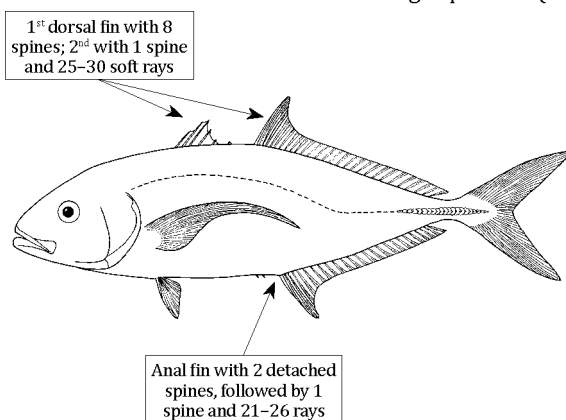
Local name(s): N: Kolekole/Kambisi/Kanaa; S: Kolekole (M/K).

Habitat: Schools along outer reef slopes, rocky coasts and offshore banks.

Fisheries: Hooks and Line, Spears, Gillnets, Traps, Bottom trawls.

Distinctive Characters: Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below 13th to 16th soft ray of 2nd dorsal fin; chord of curved part of lateral line longer than straight part.

Colour: Adults iridescent blue-green dorsally, shading to silvery on sides, with many small golden or brassy spots mainly above midline; large individuals often with 3 irregular black blotches (sometimes very indistinct or absent) on flanks, the 1st below dorsal-fin lobe.



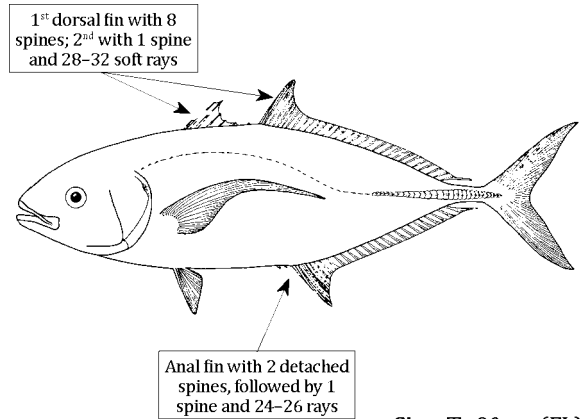
Size: To 120 cm (FL)

***Carangoides gymnostethus* (Cuvier, 1833)**

FAO names: Bludger (En)

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Common over deeper offshore reefs.**Fisheries:** Hooks and Line, Gillnets, Bottom trawls.**Distinctive Characters:** Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below 16th to 20th soft ray of 2nd dorsal fin; straight part of lateral line with 20–31 small scutes.**Colour:** Adults olive–green above, silvery–white below with a few brown or golden spots sometimes present midlaterally; opercular spot dusky and inconspicuous; dorsal, anal and caudal fins pale olive–green to greenish–grey; leading edge and distal margin of anal fin white; pelvic and pectoral fins pale green to hyaline.

Size: To 90 cm (FL)

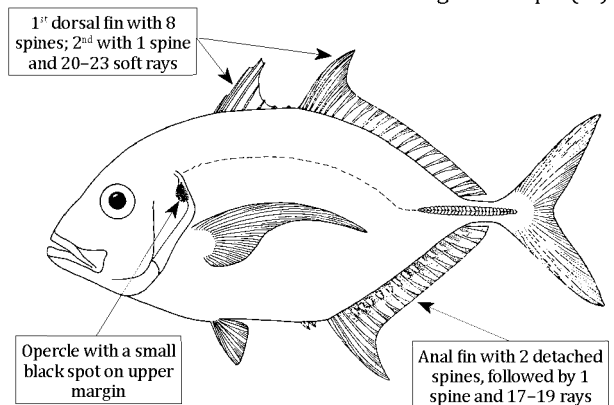
***Carangoides malabaricus* (Bloch & Schneider, 1801)**

FAO names: Malabar trevally (En)

Carangue monique (Fr)

Local name(s): N: Kolekole/Kambisi/Kanaa

S: Kolekole (M/K).

Habitat: A benthopelagic species occurring over corals and rocky reefs but also found in shallow sandy bays.**Fisheries:** Hooks and Line, Gillnets, Bottom trawls.**Distinctive Characters:** Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below 12th to 14th soft ray of 2nd dorsal fin; chord of curved part of lateral line longer than straight part.**Colour:** Generally silvery with bluish–grey above, silvery white below; caudal, soft dorsal and anal fins pale greenish–yellow to dusky; interradiol of soft anal–fin rays often with a white spot basally.

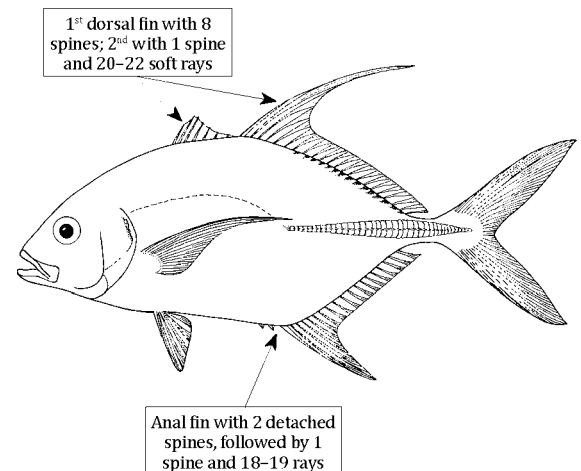
Size: To 40 cm (FL)

***Carangoides oblongus* (Cuvier, 1833)**

FAO names: Coachwhip trevally (En)

Local name(s): N: Kolekole/Kambisi/Kanaa

S: Kolekole (M/K).

Habitat: Predominantly a seaward reef species, rare in offshore areas; juveniles taken in estuaries.**Fisheries:** Hooks and Line, Bottom trawls.**Distinctive Characters:** Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below 8th to 9th soft ray of 2nd dorsal fin; straight part of lateral line with 37–40 scutes.**Colour:** Head and body bluish–green above, silvery below; small blue to black blotches on back between bases of 2nd dorsal–fin rays; opercular spot diffuse or absent; anal fin and remainder of dorsal and caudal fins yellowish; pectoral and pelvic fins pale yellow.

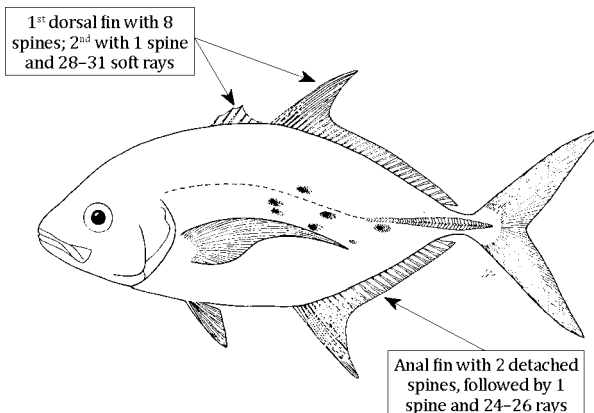
Size: To 46 cm (FL)

Carangoides orthogrammus (Jordan & Gilbert, 1882)

FAO names: Island trevally (En)

Local name(s): N: Kolekole/Kambisi/Kanaa;

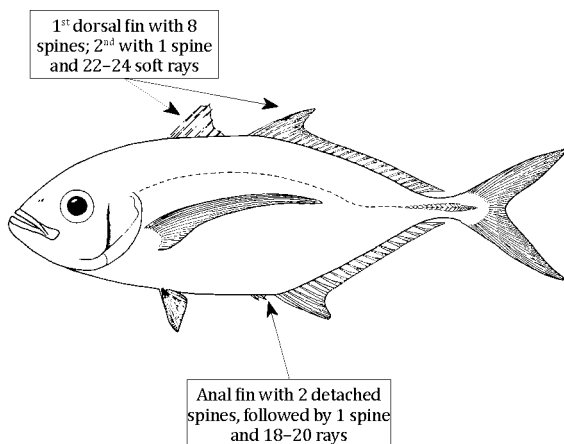
S: Kolekole (M/K).

Habitat: Reef-associated but also oceanic, from 3 m to 170 m.**Fisheries:** Hooks and Line, Gillnets, Spears.**Distinctive Characters:** Body compressed with a row of scutes on the caudal peduncle.**Colour:** Sometimes has faint chevron bars similar to those of *C. ferdau*, but nearly has a few small yellow blotches on its sides; large individuals develop a terminal snout and elongate points on the soft dorsal and anal fins.**Size:** To 75 cm (FL), common 40 cm (FL)***Carangoides plagiotænia*** Bleeker, 1857 *

FAO names: Barcheck trevally (En)

Local name(s): N: Kolekole/Kambisi/Kanaa;

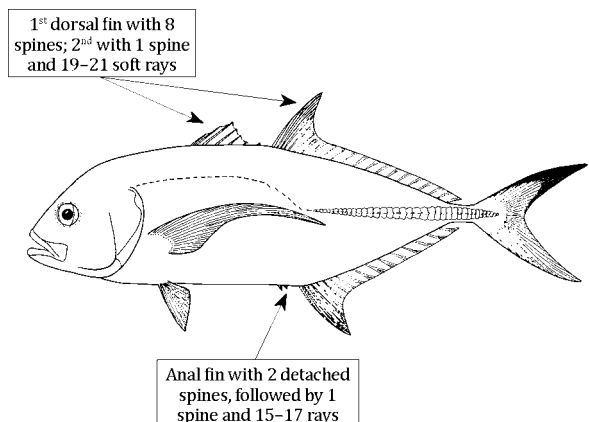
S: Kolekole (M/K).

Habitat: Generally along the edges of lagoons and seaward reef slopes.**Fisheries:** Bottom trawls, Hooks and Line, Gillnets.**Distinctive Characters:** Lateral line anteriorly with a relatively low arch, with junction of curved and straight parts below 13th to 15th soft ray of 2nd dorsal fin; straight part of lateral line with 11-18 relatively small scutes.**Colour:** Silvery-greyish above, paler below; no opercular spot, but adults with posterior margin of preopercle distinctly dark to black; sides of body sometimes with 6 or 7 dusky oblique bands, mostly above midline; large adults occasionally with scattered dark blotches or a few small yellow spots on sides.**Size:** To 50 cm (FL)***Caranx heberi*** (Bennett, 1830) (Plate VII, 60)

FAO names: Blacktip trevally (En)

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Prefers clean, open coastal waters; adults are particularly common in small aggregations over rocky reefs.**Fisheries:** Hooks and Line, Gillnets, Spears.**Distinctive Characters:** Adipose eyelid extends onto eye to rear border of posterior eyelid; straight part of lateral line with 30 to 40 strong scutes; upper jaw with an outer series of moderate to strong canines and an inner band of fine teeth.**Colour:** Dark bronze to yellow-green above, silvery bronze to yellowish below; identified by its black-tipped caudal fin.**Size:** To 85 cm (FL)

***Caranx ignobilis* (Forsskål, 1775) (Plate VII, 61)**

FAO names: Giant trevally (En)

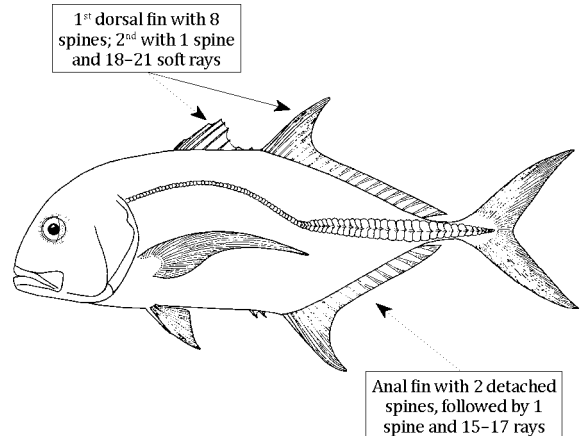
Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Abundant in all marine habitats; juveniles over sandy inshore or estuarine areas; adults solitary in lagoons and seaward reef waters. Maximum depth 80 m.

Fisheries: Hooks and Line, Gillnets, Spears.

Distinctive Characters: Adipose eyelid moderately developed, small anteriorly; posterior eyelid extends onto eye rear border of pupil.

Colour: Adults with body silvery-grey to black above, usually paler below; fins uniformly pigmented grey to black, except for leading edges and tips of dorsal and anal-fin lobes which are paler; mature males usually darker than females, sometimes head and fins completely black.



Size: To 170 cm (FL), common 100 cm (FL)

***Caranx lugubris* Poey, 1860**

FAO names: Black jack (En)

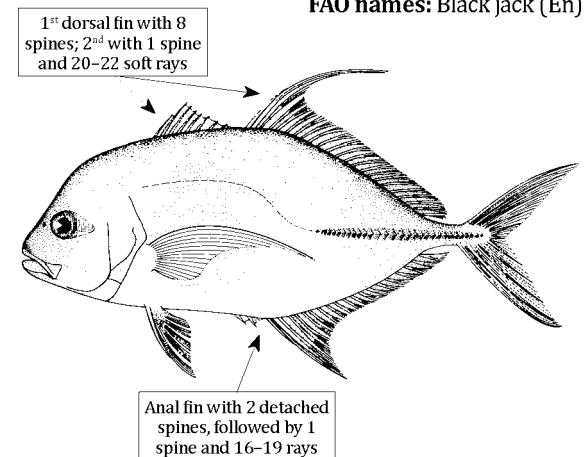
Local name(s): N: Kolekole/Kambisi/Kanaa; S: Kolekole (M/K).

Habitat: Oceanic and insular species, very much restricted to clear oceanic waters.

Fisheries: Hooks and Line, Gillnets, Spears.

Distinctive Characters: Upper profile of head steep, the anterior part slightly concave; mouth relatively large, the maxilla nearly reaching center of eye.

Colour: Dark olive-grey to almost black on the back, shading to bluish-grey ventrally; scutes black.



Size: To 100 cm (FL), common 70 cm (FL)

***Caranx melampygus* Cuvier, 1833**FAO names: Bluefin trevally (En)
Carangue aîle bleue (Fr)

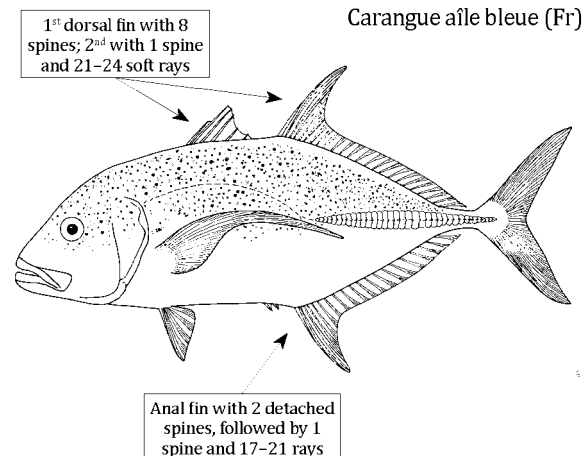
Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Associated to reef habitats, lagoons and seaward reefs. Maximum depth 190 m.

Fisheries: Hooks and Line, Gillnets, Traps.

Distinctive Characters: Adipose eyelid weakly developed, extends onto eye to rear border of pupil in large adults; straight part of lateral line with 27-42 strong scutes; breast completely scaled.

Colour: Adults with head and dorsal half of body brassy, suffused with blue, and covered with small blue-black spots; ventrally, body generally silvery white; 2nd dorsal, anal and caudal fins electric blue; pectoral fins mostly pale yellow; juveniles and young adults head and body silvery-grey and fins pale to dark dusky, except for yellow pectoral fins.



Size: To 100 cm (FL)

***Caranx papuensis* Alleyne & MacLeay, 1877**

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Shallow lagoon and seaward reefs; juveniles often in estuaries.

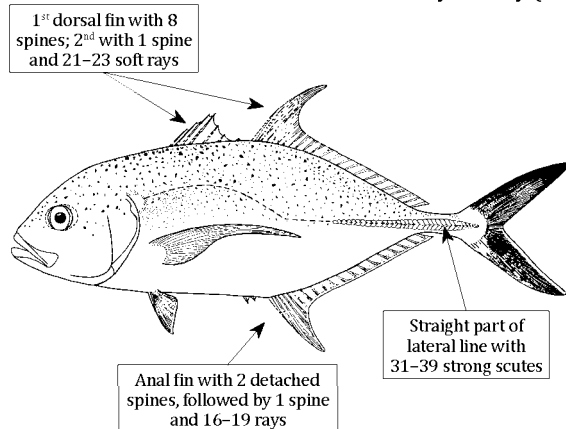
Fisheries: Hooks and Line, Gillnets, Purse seines.

Distinctive Characters: Adipose eyelid weakly developed.

Colour: Adults with head and body brassy to yellowish-green above, silvery below; small black spots scattered on body above lateral line; caudal fin with upper lobe uniformly dusky, lower lobe dusky to bright yellow with a distinct, narrow white border; other fins pale to dusky yellow.

Remarks: Resembles *C. melampygus*, but lacks blue on the fins and has a large naked area on the breast.

FAO names: Brassy trevally (En)



Size: To 88 cm (FL), common 55 cm (FL)

***Caranx sexfasciatus* Quoy & Gaimard, 1825**

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Adults in schools by day along lagoons, channels, or seaward reef drop-offs; juveniles in shallow inshore areas even entering freshwater as well as offshore around floating objects. Maximum depth 90 m.

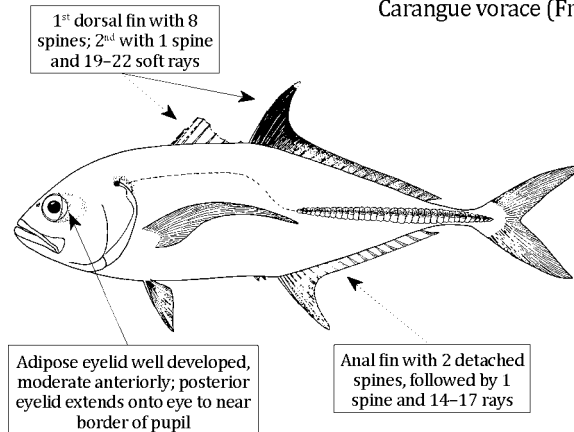
Fisheries: Hooks and Line, Gillnets, Purse seines, Spears.

Distinctive characters: Straight part of lateral line with 27–36 strong scutes.

Colour: Adults with head and body silvery-olive to iridescent blue-green above, silvery-olive whitish below; small blackish spot at upper margin of opercle; 2nd dorsal fin olive to blackish, the lobes with a white tip; caudal fin yellowish to black; lateral-line scutes dark to black.

FAO names: Bigeye trevally (En)

Carangue vorace (Fr)



Size: To 120 cm (FL)

Caranx tille* Cuvier, 1833

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K)

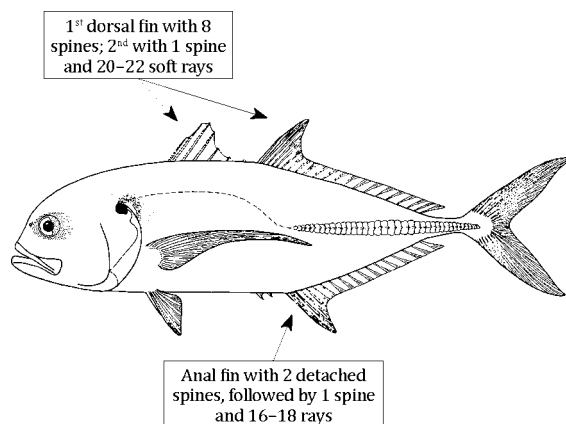
Habitat: Coastal species preferring inshore waters around rocky and coral reefs.

Fisheries: Hooks and Line, Gillnets, Purse seines, Spears.

Distinctive Characters: Straight part of lateral line with 33–42 strong scutes.

Colour: Adults with head and body dark olive-green to bluish-grey above, shading to silvery white below; a blackish spot at least 1/2 diameter of pupil at upper margin of opercle; 2nd dorsal fin olive-grey to blackish; anal and caudal fins yellow-olive to black; lateral-line scutes grey; juveniles and young adults head and body pale olive to silvery grey and fins uniformly pale to dusky.

FAO names: Tille trevally (En)



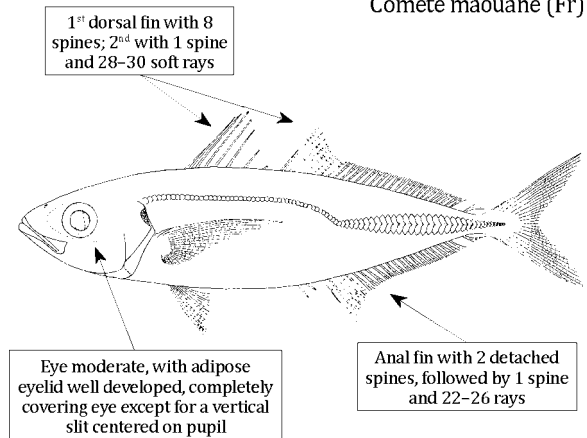
Size: To 80 cm (FL)

Decapterus kurroides* Bleeker, 1855*Local name(s):** N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: A deep water schooling species occurring between 100 m and 300 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Terminal dorsal and anal soft rays each consisting of a wide detached finlet; lateral line anteriorly with a low regular arch, with junction of curved and straight part below 2nd dorsal fin between 11th to 13th soft rays; straight part with 31–36 scutes.**Colour:** Bluish–green above, silvery white below; moderate black blotch or margin of opercle near upper edge; caudal fin red; spiny dorsal and 2nd dorsal–fin lobe sometimes dark; anal and pelvic fins pale dusky to white.**FAO names:** Redtail scad (En)

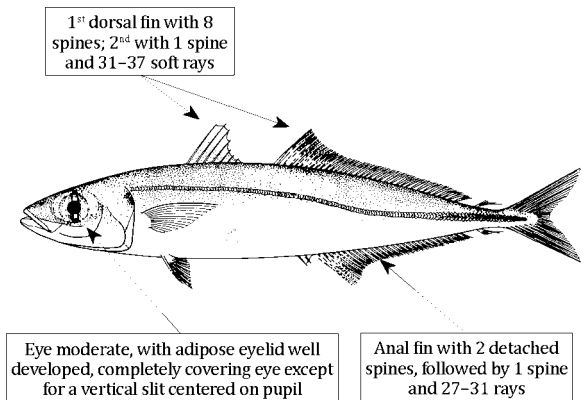
Comète mauvane (Fr)

**Size:** To 45 cm TL***Decapterus macarellus* (Cuvier, 1833) *****Local name(s):** N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Mostly in open waters sometimes near the surface but usually between 40 m and 200 m.**Fisheries:** Purse seines, Bottom trawls.**Distinctive Characters:** Terminal dorsal and anal soft rays each consisting of a widely detached finlet; lateral line anteriorly with a low regular arch, with junction of curved and straight parts below the 11th to 13th soft ray of 2nd dorsal fin; lateral–line straight part with 25 to 39 scutes.**Colour:** Bluish–green above, silvery below; small black blotch on margin of opercle near upper edge; caudal fin yellow–green, dorsal–fin lobe sometimes dark distally; anal and pelvic fins pale to whitish.**FAO names:** Mackerel scad (En)

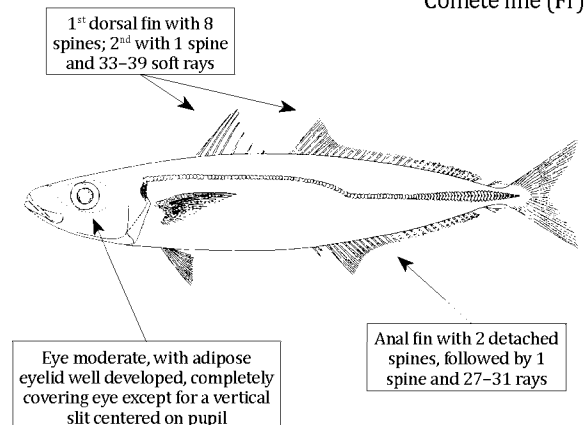
Comète maquereau (Fr)

**Size:** To 32 cm (FL)***Decapterus macrosoma* Bleeker, 1851****Local name(s):** N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: A schooling species occurring from 30 m to 170 m.**Fisheries:** Purse seines, Bottom trawls, Gillnets.**Distinctive Characters:** Pectoral fins not reaching 2nd pectoral–fin origin; terminal dorsal and anal soft rays each consisting of a widely detached finlet; lateral line anteriorly with a low regular arch with junction of curved and straight parts below 2nd dorsal fin between 11th to 13th soft rays; no scutes in curved part; straight part with 24–40 scutes.**Colour:** Metallic blue above, silvery below; small black blotch on margin of opercle near upper edge; caudal fin hyaline to dusky and dorsal–fin lobe sometimes dark distally; other fins mostly pale.**FAO names:** Shortfin scad (En)

Comète fine (Fr)

**Size:** To 30 cm (FL)

***Decapterus russelli* (Rüppell, 1830)**

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Coastal waters and on open banks in deeper waters down to 100 m.

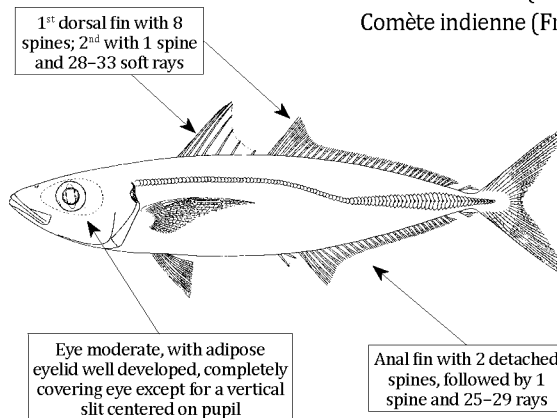
Fisheries: Purse seines, Bottom trawls, Gillnets.

Distinctive Characters: Lateral line anteriorly with a low regular arch, with junction at curved and straight parts below 11th to 13th soft ray of 2nd dorsal fin; 30–40 scutes in straight part of lateral line.

Colour: Bluish–green above, silvery below; small black blotch or margin of opercle near upper edge; caudal fin hyaline to dusky brown; 2nd dorsal fin hyaline basally; other fins mostly hyaline, except pelvic fins of adult males slightly dark.

FAO names: Indian scad (En)

Comète indienne (Fr)



Size: To 45 cm (FL)

***Decapterus tabl* Berry, 1968**

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Kolekole (M/K).

Habitat: Mid–water or near the bottom; also near the surface.

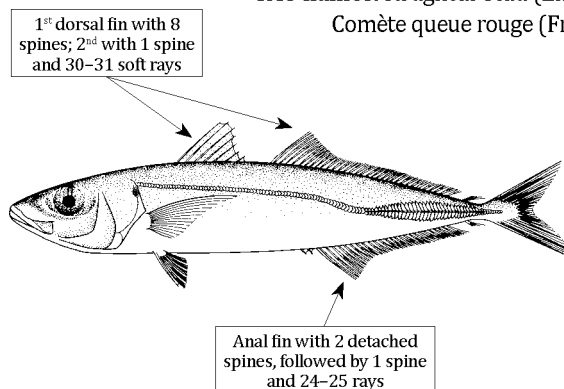
Fisheries: Purse seines, Bottom trawls, Gillnets.

Distinctive Characters: Eye moderate, with adipose eyelid well developed, completely covering eye except for a vertical slit centred on pupil; scales on top of head extend forward to anterior margin of pupil.

Colour: Blue to greenish above, silvery below; caudal fin bright red; tips of dorsal rays reddish; opercle with a small black spot.

FAO names: Roughear scad (En)

Comète queue rouge (Fr)



Size: To 50 cm (FL), common 25 cm (FL)

***Elagatis bipinnulata* (Quoy & Gaimard, 1825)**

Local name(s): N: Kolekole/Kambisi/Kanaa;

S: Songoro (M), Kanandi (K).

Habitat: A pelagic species usually found at or near the surface, sometimes far offshore.

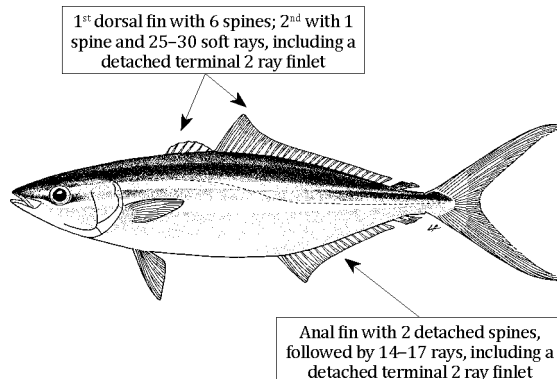
Fisheries: Hooks and Line, Gillnets, Seines.

Distinctive Characters: Pectoral fins short about 2 times in head length and about as long as pelvic fins; caudal fin deeply forked; lateral line with a slight anterior arch; no scutes; caudal–peduncle grooves present.

Colour: Dark olive–blue or green above and white below; 2 narrow light blue or bluish–white stripes along sides, with a broader olive or 1 yellowish stripe between them; fins dark white on olive–yellow tinge.

FAO names: Rainbow runner (En)

Comète saumon (Fr)

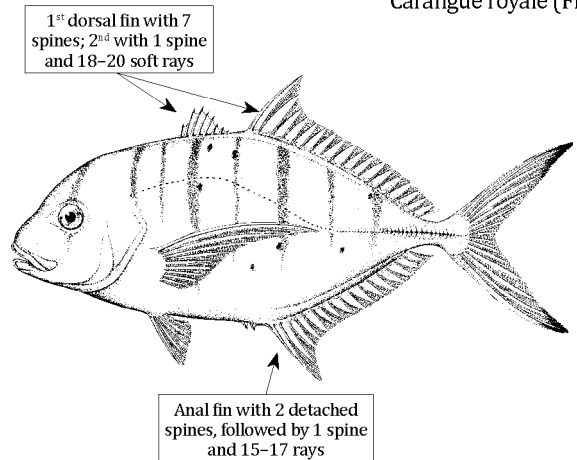


Size: To 150 cm (FL), common 80 cm (FL)

***Gnathanodon speciosus* (Forsskål, 1775)** (Plate VII, 62)FAO names: Golden trevally (En)
Carangue royale (Fr)Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: Inshore, including rocky reefs, deep lagoons and seaward reefs.

Fisheries: Gillnets, Spears, Bottom trawls.

Distinctive Characters: Lip noticeably papillose and upper jaw strongly protractile; lobe of 2nd dorsal fin shorter.Colour: Juveniles and young adults silvery to yellow with 7–11 black bands, usually alternating broad and narrow, the 1st band oblique through eye; upper margin of opercle black; all fins yellow; tips of caudal fin lobes black; bands fade in large adults and are replaced by a few patches or spots on sides; dark opercular spot also fades with age and body becomes yellow–green dorsally, pale yellow below.

Size: To 120 cm (FL)

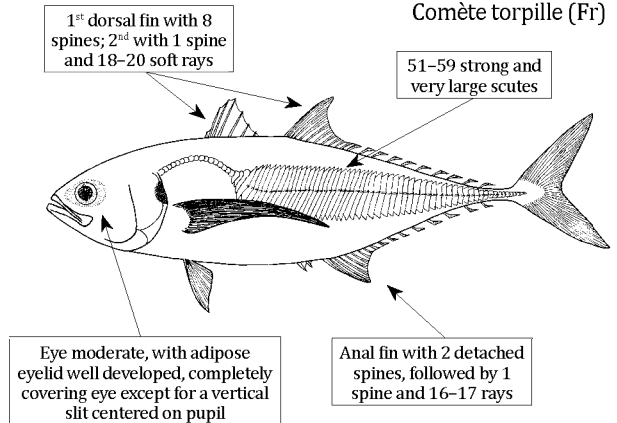
***Megalaspis cordyla* (Linnaeus, 1758)**FAO names: Torpedo scad (En)
Comète torpille (Fr)Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

Habitat: A pelagic coastal schooling species, usually near the surface; intolerant of turbid waters.

Fisheries: Hooks and Line, Gillnets, Beach seines.

Distinctive Characters: Caudal peduncle strongly compressed with a marked medial keel; posterior part of dorsal and anal fins with 8–10 rays consisting of detached finlets; spiny dorsal fin moderately high, longest spine height about equal to length of soft dorsal-fin lobe.

Colour: Head and body bluish–grey to green dorsally, sides and belly silvery; large black opercular spot; dorsal and anal fins with upper half dusky; caudal fin dark, especially leading and trailing edges of fins.



Size: To 80 cm, common 40 cm (FL)

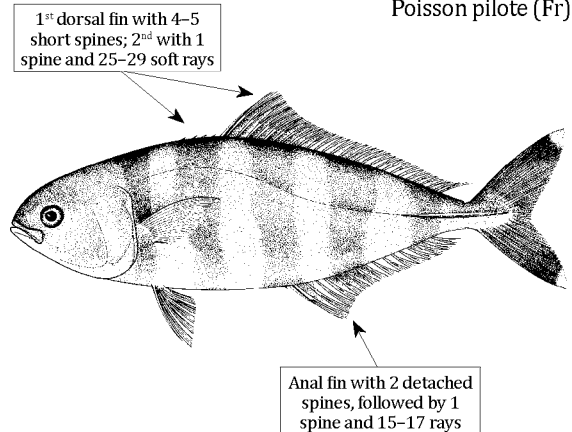
***Naucrates ductor* (Linnaeus, 1758)**FAO names: Pilotfish (En)
Poisson pilote (Fr)

Local name(s): N: Kuku mai (maji); S: Kolekole (M/K).

Habitat: Pelagic in oceanic waters, often associated with sharks, rays, other large fishes and turtles.

Fisheries: Pelagic trawls.

Distinctive Characters: No scutes on caudal peduncle; a well developed lateral line; fleshy keel on each side of dorsal and ventral peduncle grooves.

Colour: Head dark; 5–6 dark broad bars on body and a similar bar at end of caudal peduncle; 3–6 bars extending through soft dorsal and anal-fin membranes, and the bars persistent at all sizes; rest of body bluish, or light or dusky; white tips prominent on upper and lower caudal-fin lobes and smaller white tips on 2nd dorsal and anal-fin lobes; most fins dusky to dark.

Size: To 70 cm, common 38 cm (FL)

***Parastromateus niger* (Bloch, 1795)**

Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole (M/K).

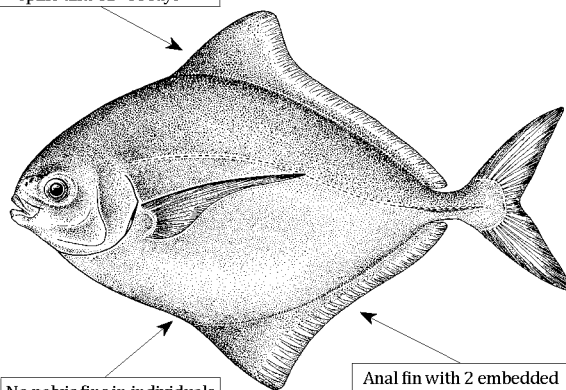
Habitat: Pelagic on the continental shelf from 15 m to 40 m, generally over muddy bottoms.

Fisheries: Gillnets, Boat seines, Bottom trawls.

Distinctive Characters: Mouth terminal; pectoral fins long and falcate; lateral line very weakly arched anteriorly with junction of straight and curved parts below posterior 1/3 of dorsal fin; straight part of lateral line with 8–19 weak scutes, forming a slight keel on caudal peduncle.

Colour: Adults uniformly silvery–grey to bluish–brown (yellowish–brown when deciduous scales are missing); fins with dark edges; young with dark vertical bars and long black jugular pelvic fins.

Dorsal fin with 4–5 embedded short spines, followed by 1 spine and 41–44 rays



No pelvic fins in individuals larger than 10 cm

Anal fin with 2 embedded spines, followed by 1 spine and 35–39 rays

FAO names: Black pomfret (En)
Castagnoline noire (Fr)

Size: To 75 cm, common 30 cm (FL)

Pseudocaranx dentex* (Bloch & Schneider, 1801)

Local name(s): N: Kolekole/Kambisi/Kanaa;
S: Kolekole ngamia (M), Kolekole (K).

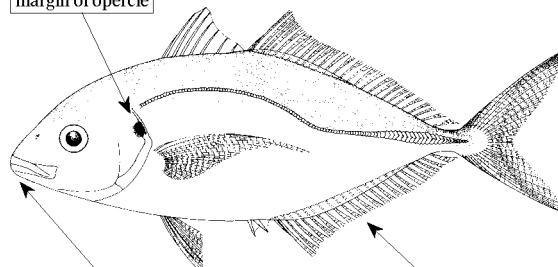
Habitat: Banks and shelf slope habitats from 80 m to 200 m, occasionally inshore.

Fisheries: Bottom trawls.

Distinctive Characters: Eyes relatively small with adipose eyelid poorly developed; lateral line with a weak extended anterior arch, with junction of curved and straight parts of lateral line below 12th to 14th soft ray of 2nd dorsal fin.

Colour: Pale greenish–blue above, silvery below; a yellow stripe usually present along sides and at base of soft dorsal and anal fins; caudal and soft dorsal fins dusky yellow.

A distinct black spot on upper margin of opercle



Lips papillose and upper jaw projecting in adults

Anal fin with 2 detached spines, followed by 1 spine and 21–22 rays

FAO names: White trevally (En)
Carangue dentue (Fr)

Size: To 110 cm, common 40 cm (FL)

***Scomberoides commersonianus* Lacepède, 1801**

Local name(s): N: Ndili; S: Kolekole ngamia (M), Kolekole/Tando (K).

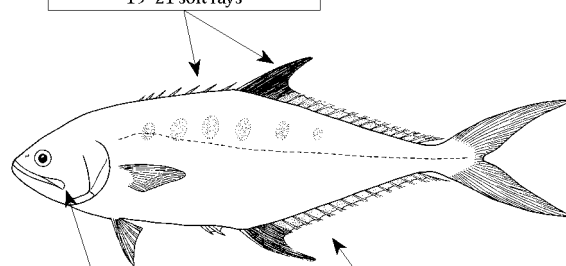
Habitat: Reefs and offshore islands, usually in small groups.

Fisheries: Gillnets, Seines, Hooks and Line.

Distinctive Characters: Pelvic fins about equal in length or shorter than pectoral fins; no scutes; no caudal–peduncle grooves.

Colour: Head and body dusky green to bluish dorsally, grey to silvery below; large individuals often golden especially ventrally; sides of adults with 5–8 large, plumbeous blotches above or touching lateral line, 1st two may intersect lateral line; dorsal and anal fins dusky to dark.

1st dorsal fin with 6–7 depressible short spines; 2nd with 1 spine and 19–21 soft rays



Upper jaw extending well beyond eye

Anal fin with 2 detached spines, followed by 16–19 rays

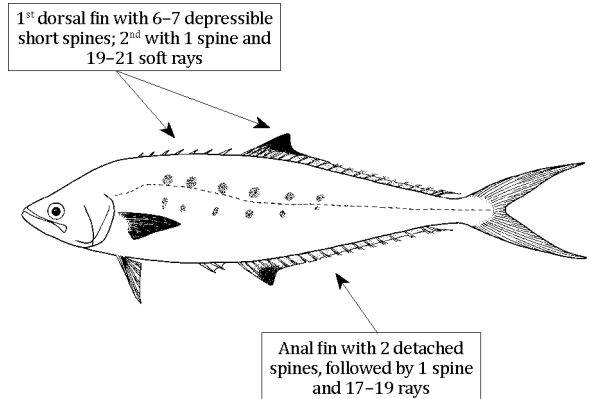
FAO names: Talang queenfish (En)
Sauteur talang (Fr)

Size: To 120 cm (FL)

Scomberoides lysan (Forsskål, 1775)

Local name(s): N: Pandu; S: Kolekole/Tando (K).
Habitat: Shallow lagoons to offshore areas, from 2 m to 100 m.
Fisheries: Set nets, Gillnets, Seines, Hooks and Line.
Distinctive Characters: Upper jaw extending beyond eye; pelvic fins about equal in length or shorter than pectoral fins; lateral line only irregular; weakly to moderately convex above pectoral fins, becoming straight posteriorly; no scutes.
Colour: Body grey-green dorsally, silvery-grey to midline and silvery-white ventrally; adults with a double series of 6-8 dusky roundish blotches above and below lateral line; distal half of dorsal-fin lobe abruptly and heavily pigmented; anal-fin lobe white or pale yellow; often interradiial membrane of several anterior rays, black, especially in large individuals.

FAO names: Doublespotted queenfish (En)
 Sauteur sabre (Fr)

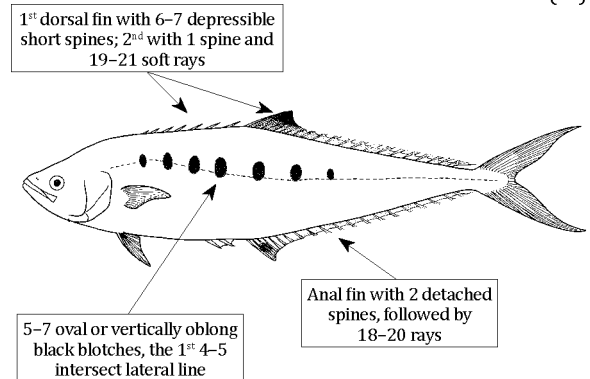


Size: To 110 cm (FL)

Scomberoides tol (Cuvier, 1832)

Local name(s): N: Pandu; S: Kolekole/Tando (K).
Habitat: Usually in small schools near the surface in coastal waters.
Fisheries: Gillnets, Seines, Hooks and Line.
Distinctive Characters: Upper jaw not extending beyond eye; posterior soft dorsal and anal-fin rays consisting of semi-detached finlets; lateral line only slightly irregular; weakly to moderately convex above pectoral fins, straight posteriorly; no scutes; scales on mid body below lateral line partially embedded; no caudal-peduncle grooves.
Colour: Body bluish dorsally, white ventrally; blotches faint or absent in juveniles; distal half dorsal fin lobe abruptly and heavily pigmented; anal fin lobe usually immaculate, white in life.

FAO names: Needlescaled queenfish (En)
 Sauteur leurre (Fr)

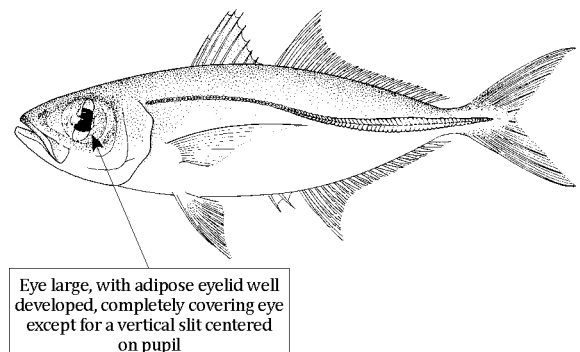


Size: To 60 cm (FL)

Selar crumenophthalmus (Bloch, 1793)

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).
Habitat: Inshore or shallow waters, but sometimes in deeper waters down to 170 m.
Fisheries: Hooks and Line, Beach seines, Purse seines, Traps.
Distinctive Characters: Dorsal fin with 8 spines, followed by 1 spine and 24-27 soft rays; anal fin with 2 spines separated from rest of fin, followed by 1 spine and 21-23 soft rays; no finlets.
Colour: Body and top of head metallic blue or bluish-green; lower 2/3 of body and head silvery or whitish; small, elongated blackish opercular spot on edge near upper margin; a narrow yellowish stripe may be present from edge of opercle to upper part of caudal peduncle.

FAO names: Bigeye scad (En)
 Sélar coulisou (Fr)



Size: To 30 cm, common 25 cm (FL)

Seriola rivoliana Valenciennes, 1833

FAO names: Longfin yellowtail (En)
Sériele limon (Fr)

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

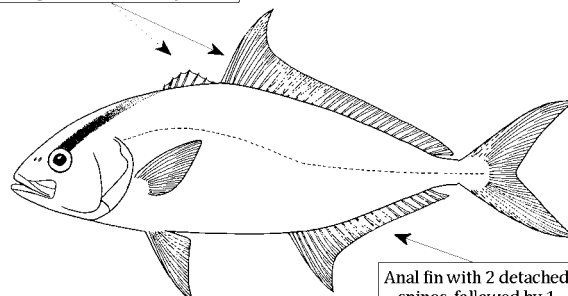
Habitat: Adults are pelagic and epipelagic, oceanic, rarely found in inshore waters.

Fisheries: Seines, Bottom trawls, Hooks and Line.

Distinctive Characters: In adults, pelvic fins longer than pectoral fins; no scutes; caudal peduncle grooves present.

Colour: Silvery blue–green to silvery olive dorsally, shading to silvery ventrally; a midlateral yellowish stripe usually present on body; an oblique, dark yellowish–brown band from nape through eye to edge of upper lip; fins yellowish grey; juveniles with a dark nuchal bar and 6 dark body bars.

1st dorsal fin with 7 spines, the 1st minute or missing; 2nd with 1 spine and 27–33 rays



Anal fin with 2 detached spines, followed by 1 spine and 18–22 rays

Size: To 160 cm (FL), common 90 cm (FL)

Seriolina nigrofasciata (Rüppell, 1829)

FAO names: Blackbanded trevally (En)
Sériele amoureux (Fr)

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

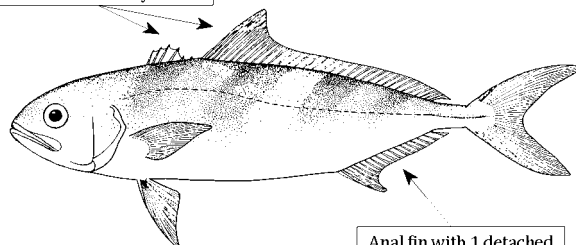
Habitat: Solitary, mainly in offshore reefs on the continental shelf from 20 m to 150 m.

Fisheries: Seines, Traps, Gillnets, Hooks and Line.

Distinctive Characters: Length of dorsal fin–lobe slightly longer than pectoral fins; pelvic fins longer than pectoral fins; no scutes; caudal peduncle grooves present.

Colour: Head and body bluish–grey to black dorsally, white to dusky below; young with 5–7 dark oblique bands and blotches on upper body that fade with age; spiny dorsal fin black; caudal and pelvic fins yellowish brown to black.

1st dorsal fin with 7–8 short spines; 2nd with 1 spine and 30–37 soft rays



Anal fin with 1 detached spine, followed by 1 spine and 15–18 rays

Size: To 70 cm (FL)

Trachinotus baillonii (Lacepède, 1801)

FAO names: Smallspotted dart (En)
Pompaneau muscadin (Fr)

Local name(s): N: Ndili; S: Kolekole/Kipanza/Kiphaza (M/K).

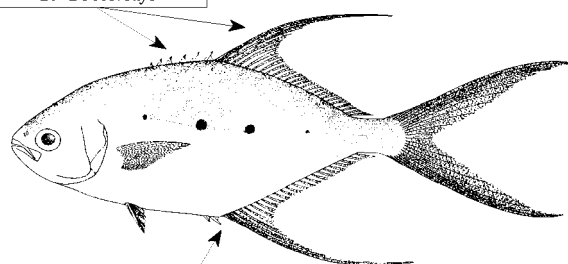
Habitat: Surge zone along sandy beaches and near surface waters of clear lagoon and seaward reefs.

Fisheries: Traps, Gillnets, Handlines.

Distinctive Characters: Dorsal–fin lobe shorter than anal–fin lobe in specimens larger than about 25 cm (FL); pelvic fins relatively short; no scutes on caudal peduncle grooves.

Colour: Adults silvery–blue to grey above, silvery white below; sides with 1–5 relatively small black spots (absent on fish smaller than about 10–15 cm (FL), the number of spots generally increasing with age) in a longitudinal row or near lateral line in adults; caudal, 2nd dorsal and anal fins grey to black, lobes usually darker; pectoral fins pale to dusky yellow; pelvic fins pale yellow to orange–yellow.

1st dorsal fin with 6 short spines; 2nd with 1 spine and 20–24 soft rays



Anal fin with 2 detached spines, followed by 1 spine and 20–24 rays

Size: To 60 cm (FL)

Trachinotus blochii (Lacepède, 1801)

Local name(s): N: Ndili; S: Kolekole (M/K).

Habitat: Juveniles in sandy inshore and estuarine areas; large adults off-seaward reefs.

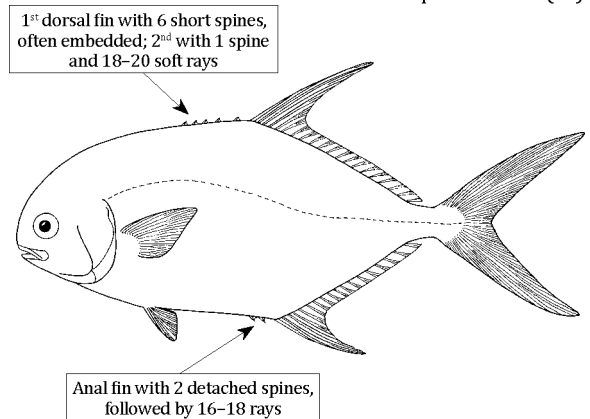
Fisheries: Gillnets, Traps, Handlines.

Distinctive Characters: Dorsal profile of head very steep and strongly convex.

Colour: Head and body generally blue-grey above, paler below; large adults sometimes with most of body golden-orange, especially snout and lower half of body; 2nd dorsal fin dark, lobe of fin dusky orange; anal fin dusky to dirty orange; caudal fin dark to dirty orange, leading edges darkest; juveniles silvery with pale fins except lobes of median fins and anterior half of pelvic fins brownish to dirty orange.

FAO names: Snubnose pompano (En)

Pompaneau lune (Fr)



Size: To 70 cm (FL)

Trachinotus botla (Shaw, 1803)

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

Habitat: Inhabits coastal waters.

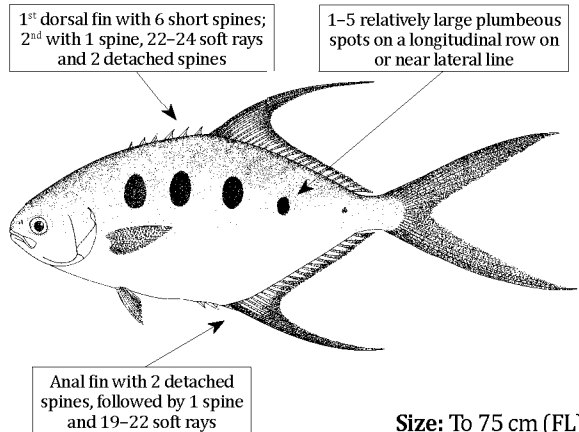
Fisheries: Seines, Gillnets, Hooks and Line.

Distinctive Characters: Pectoral fins relatively long, in specimens larger than about 25 cm (FL); lateral line only slightly irregular, weakly convex above pectoral fins, becoming straight posteriorly; no scutes or caudal peduncle groove.

Colour: Adults bluish-black above, silvery below; 2nd dorsal and anal fins black to blue-black, the lobes usually darker; caudal fin dusky with leading edges and most of lobes blue-black; pectoral fins pale; upper 2/3 of body sometimes dark.

FAO names: Largespotted dart (En)

Pompaneau pierrot (Fr)



Size: To 75 cm (FL)

Trachurus indicus Nekrasov, 1966

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

Habitat: Demersal from 20 m to 100 m.

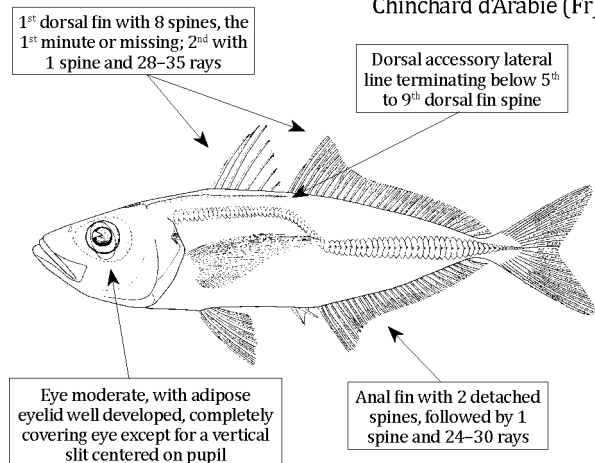
Fisheries: Seines, Gillnets, Hooks and Line.

Distinctive Characters: Scales in curved as well as straight part of lateral line enlarged and scute-like; curved part of lateral line with 33–41 scutes, straight part with 33–40 scutes; total scales and scutes in lateral line (excluding caudal scales), 71–79.

Colour: No distinct markings except for a black opercular spot on edge near upper margin; body and head dorsally dusky to nearly black or grey to bluish-green; lower 2/3 of body and head usually paler whitish to silvery.

FAO names: Arabian scad (En)

Chinchard d'Arabie (Fr)



Size: To 35 cm, common 20 cm (FL)

***Ulua mentalis* (Cuvier, 1833)**

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

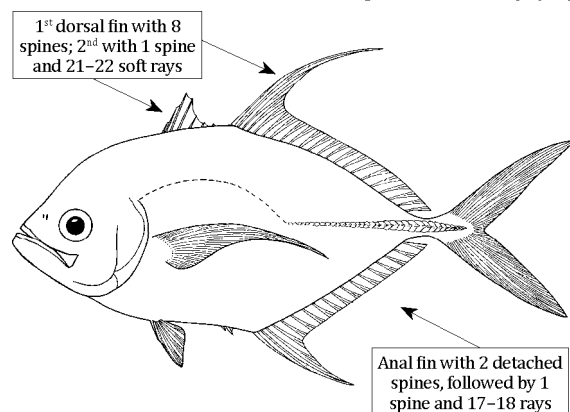
Habitat: Inhabits coastal waters.

Fisheries: Gillnets, Traps, Handlines.

Distinctive Characters: Lateral line anteriorly with a moderate regular arch, with junction of curved and straight part below 10th to 12th ray of 2nd dorsal fin; straight part of lateral line with 26–38 scutes.

Colour: Head and body blue green dorsally, silvery below; adults with a dark area on shoulder at upper margin of opercle and a dusky mark on cheek at angle of jaws; spiny dorsal and caudal fins dusky to black; 2nd dorsal and anal fins pale green except leading edges and distal margins of fins dusky.

FAO names: Longrakered trevally (En)



Size: To 100 cm, common 60 cm (FL)

Uraspis secunda* (Poey, 1860)

Local name(s): N: Kolekole/Kambisi; S: Kolekole (M/K).

Habitat: Mainly pelagic oceanic in surface water.

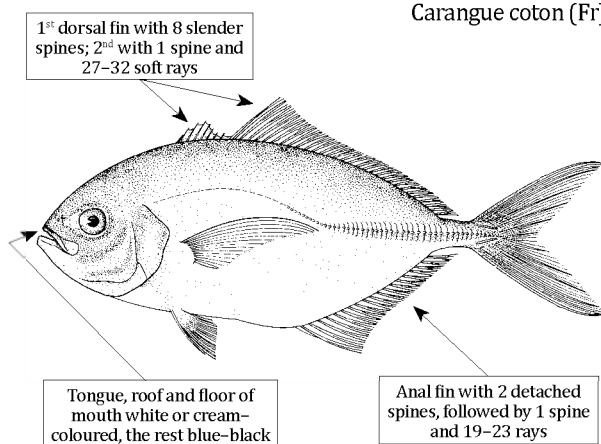
Fisheries: Bottom trawls, Seines, Longlines, Hooks and Line.

Distinctive Characters: Pelvic fins very long in young but becoming relatively shorter with age; straight part of lateral line with 23–40 scutes; in fish smaller than about 20 cm (FL) some scutes have spines directed anteriorly, their number decreasing with growth.

Colour: Body and head dark (lead blue-black or dusky) in fish of 30 cm and larger (FL); juveniles with 6–7 very wide dark bars with narrow pale interspaces; traces of nuchal and opercular bands persisting to about 30 cm (FL); 2nd dorsal and anal fins dusky hyaline.

FAO names: Cottonmouth jack (En)

Carangue coton (Fr)



Size: To 50 cm TL

CORYPHAENIDAE**Dolphinfishes*****Coryphaena equiselis* Linnaeus, 1758**

Local name(s): N: Fulusi; S: Fulusi (M/K).

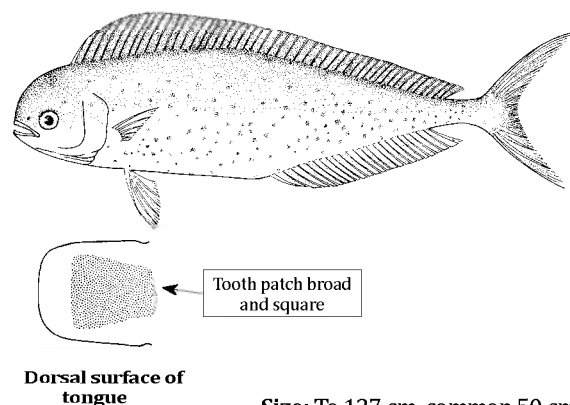
Habitat: Pelagic, inhabiting open waters but also approaching the coast.

Fisheries: Trolling gears, Longlines, Gillnets.

Distinctive Characters: A single dorsal fin extending from just behind eye almost to caudal fin, with 52–59 soft rays; pectoral fins about 1/2 of head length; caudal fin deeply forked.

Colour: Back brilliant metallic blue-green in life, fading rapidly after death to grey with a green tinge; sides silvery with a golden sheen and numerous black spots; dorsal fin dark; juveniles have entire margin of caudal fin white; pelvic fins not pigmented.

FAO names: Pompano dolphinfish (En)



Size: To 127 cm, common 50 cm

***Coryphaena hippurus* Linnaeus, 1758**

Local name(s): N: Fulusi; S: Fulusi (M/K).

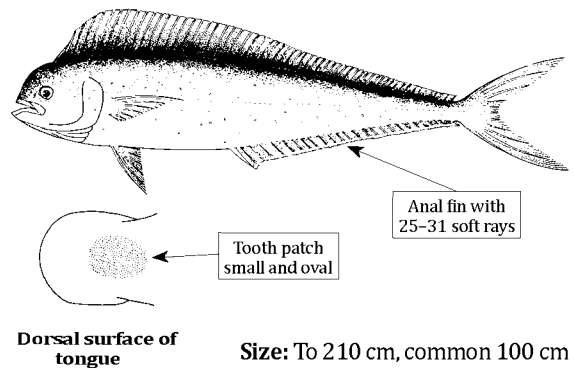
Habitat: Pelagic, inhabiting open waters but also approaching the coast.

Fisheries: Trolling gears, Longlines, Gillnets.

Distinctive Characters: A single dorsal fin extending from above eye almost to caudal fin with 58–66 rays; pectoral fins more than 1/2 of head length; caudal fin deeply forked.

Colour: Back brilliant metallic blue–green in life, fading after death to grey with a green tinge; sides silvery with a golden sheen and row of dark spots of golden blotches running below dorsal fin scattered irregularly; pectoral fins pale, caudal fin silvery with a golden sheen.

FAO names: Common dolphinfish (En)
Coryphène commune (Fr)



Size: To 210 cm, common 100 cm

MENIDAE

Moonfishes

***Mene maculata* (Bloch & Schneider, 1801)**

Local name(s): N: No information; S: Jutejute/ Korokoro (M).

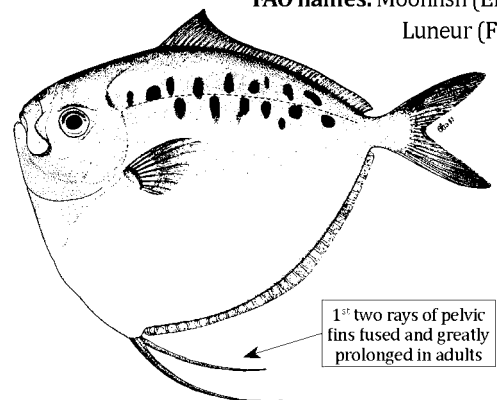
Habitat: Deeper coastal waters, around coral reefs, sometimes in estuaries.

Fisheries: Bottom trawls, Beach seines, Traps.

Distinctive Characters: Upper jaw protrusible; dorsal fin long and low; anal fin very long and low, with very short rays and overgrown with skin in adults, so that only their widely branched tips are visible; pectoral fins shorter than head, with 15 soft rays; caudal fin forked.

Colour: Dark blue dorsally and silvery white below; several small round black spots on dorsal part of body.

FAO names: Moonfish (En)
Luneur (Fr)



Size: To 30 cm, common 20 cm

LEIOGNATHIDAE

Ponyfishes – Slipmouths – Tooth-ponies

***Aurigequula fasciata* (Lacepède 1803)**

Local name(s): N: Korokoro; S: Korokoro/Kibamba/ Kibati (M).

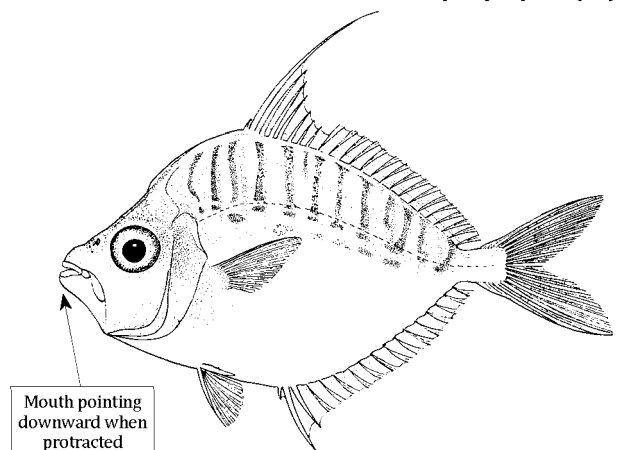
Habitat: Coastal shallow waters near bottom down to 40 m.

Fisheries: Beach seines, Bottom trawls.

Distinctive Characters: Head naked, with nuchal spine; thin scales on breast; dorsal fin with 7–8 spines and 16 rays; anal fin with 3 spines and 14 rays; 2nd dorsal spine very long and filamentous.

Colour: Body silvery; about 11 widely spaced, dark vertical lines on back superimposed by a few yellow blotches and fading gradually towards lower sides; axil of pectoral fins yellow.

FAO names: Striped ponyfish (En)



Size: To 21 cm, common 17 cm

Equulites elongatus (Günther, 1874)

FAO names: Slender ponyfish (En)
Sapsap élégant (Fr)

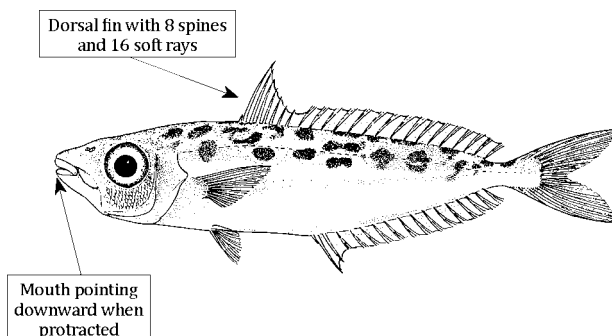
Local name(s): N: Korokoro; S: Korokoro (M).

Habitat: Coastal shallow waters, in schools, near the bottom down to 40 m.

Fisheries: Beach seines, Bottom trawls.

Distinctive Characters: Body elongate and slender not deeper than head length; breast scaled; anal fin with 3 spines and 14 soft rays.

Colour: Body silvery back with irregular green and dark marbling; horizontal yellow band at mid-height of spiny part of dorsal fin; most of margin of dorsal-fin soft part, orange.



Size: To 12 cm, common 8 cm

Equulites leuciscus (Günther, 1860) *

FAO names: Whipfin ponyfish (En)
Sapsap fil (Fr)

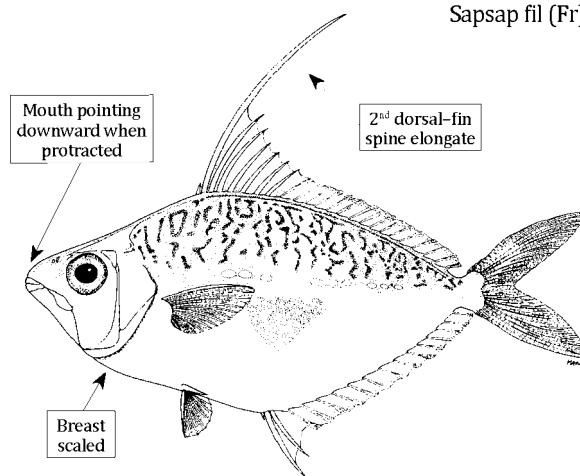
Local name(s): N: Korokoro; S: Korokoro (M).

Habitat: Coastal shallow waters near bottom down to 40 m.

Fisheries: Beach seines, Bottom trawls.

Distinctive Characters: Dorsal fin with 8 spines and 16 soft rays; anal fin with 3 spines and 14 soft rays; second anal-fin spine slightly elongate;

Colour: Belly silvery, back with irregular, partly semi-circular, greyish-green vermiculations; a row of oval yellow blotches below lateral line; membrane between dorsal-fin spines yellow and mid-height edge of soft part of dorsal fin also yellow, superimposed with light grey; anal fin of similar colour to dorsal; posterior margin of caudal fin yellowish.



Size: To 25 cm, common 10 cm

Gazza minuta (Bloch, 1795)

FAO names: Tooth ponyfish (En)
Sapsap dentu (Fr)

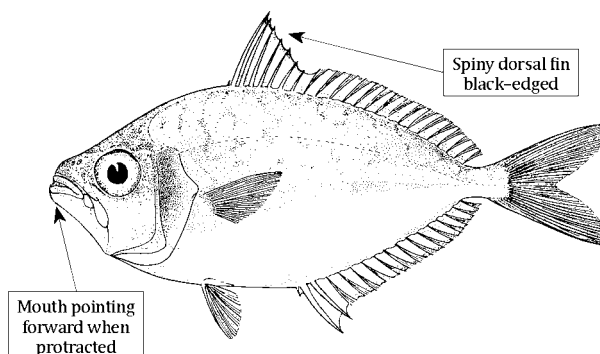
Local name(s): N: Korokoro; S: Korokoro (M).

Habitat: Coastal waters down to 40 m.

Fisheries: Beach seines, Bottom trawls.

Distinctive Characters: Head scaleless, but scales covering entire body except for breast ahead of a line from base of pectoral-fin origin to anal fin; nuchal spine on nape.

Colour: Silvery, back greyish, with dark yellow irregular marks extending to below lateral line; soft part of dorsal, pectoral and pelvic fins colourless; anterior part of anal yellow; underside of pectoral-fin bases and snout with black dots.



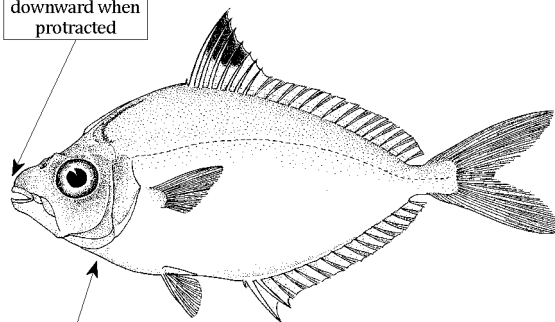
Size: To 21 cm, common 15 cm

***Karalla daura* (Cuvier 1829) (Plate VII, 63)**

FAO names: Goldenstripe ponyfish (En)

Local Name(s): N: Korokoro; S: Korokoro (M).**Habitat:** Coastal shallow waters in schools near bottom up to 40 m.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** Snout somewhat blunt.**Colour:** Back grey-greenish, belly silvery; black dots all over ventral half of body; a golden hue on dorsal half of body and on head; tip of snout black; distal half of anal fin golden yellow from 2nd spine onwards; distal half of membrane between 2nd and 6th dorsal spine black

Mouth pointing downward when protracted



Breast scaleless

Size: To 14 cm, common 9 cm

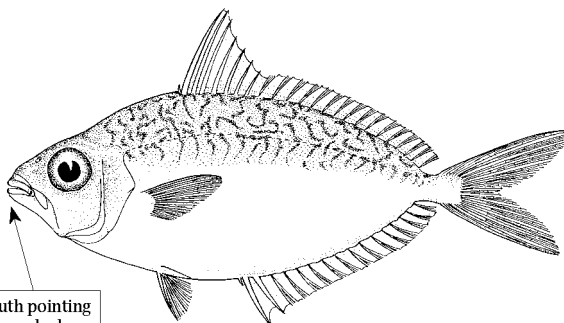
***Leiognathus berbis* (Valenciennes, 1835) (Plate VII, 64)**

FAO names: Berber ponyfish (En)

Sapsap berbère (Fr)

Local name(s): N: Korokoro; S: Korokoro (M).**Habitat:** Coastal shallow waters in schools near bottom down to 40 m.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** More or less distinct notch present at nape; snout pointed; breast scaled.**Colour:** Belly silvery; back greenish to brownish with light grey, crowded irregular vermiculations extending on sides to slightly below lateral line; snout and underside of pectoral-fin bases dotted black.

Mouth pointing forward when protracted



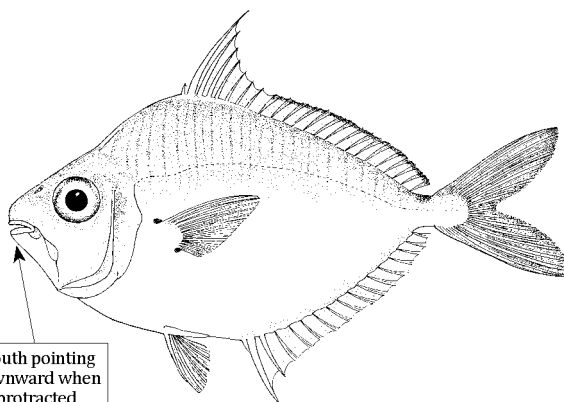
Size: To 11 cm, common 9 cm

***Leiognathus equulus* (Forsskål, 1775) (Plate VII, 65)**

FAO names: Common ponyfish (En)

Local name(s): N: Korokoro; S: Korokoro/Kibamba/Kibati (M).**Habitat:** Coastal shallow waters near bottom down to 40 m.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** Body deep and compressed with short rounded snout and large eyes; head and breast scaleless; strongly arched back; dorsal fin with 8 spines and 15–16 rays; anal fin with 3 spines and 14–15 rays.**Colour:** Adults, back greyish, belly silvery, and close-set faint bars on back and sides; a dark brown saddle on caudal peduncle.

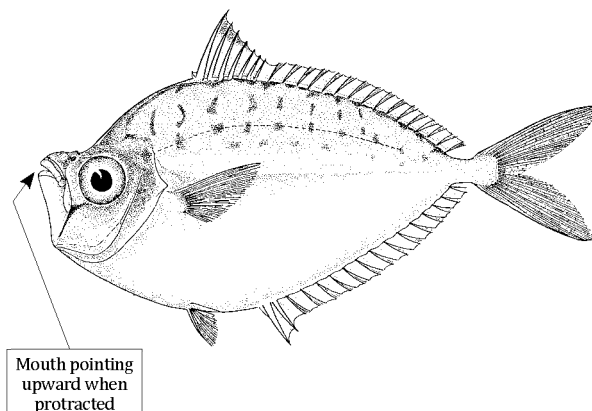
Mouth pointing downward when protracted



Size: To 28 cm, common 20 cm

***Secutor insidiator* (Bloch, 1787) (Plate VII, 66)**

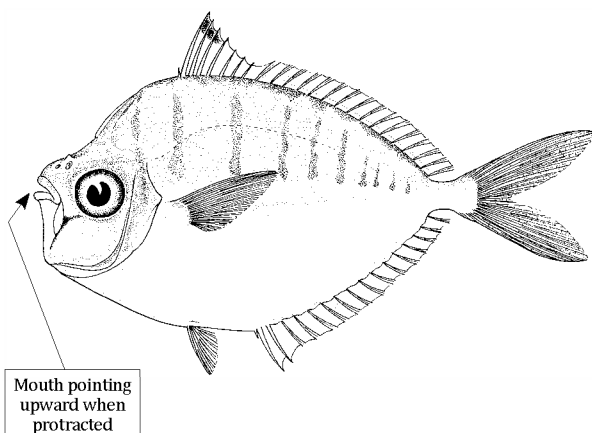
FAO names: Pugnose ponyfish (En)

Local name(s): N: Korokoro; S: Korokoro(M).**Habitat:** Demersal in coastal shallow waters down to 40 m.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** Body oval, deep and compressed; head strongly concave above eye; snout pointed; mouth strongly oblique; nostrils situated above eyes; lateral line reaching backward nearly below dorsal-fin end; cheeks scaleless.**Colour:** Belly silvery; back greenish to brownish, with about 10 dark broken vertical bars and spots extending to little below lateral line; a black, curved band from lower margin of eye to posterior angle of lower jaw; dorsal-fin membrane between 2nd and 6th spines black at upper 1/3; caudal fin partly yellow; underside of pectoral-fin base dotted black.

Size: To 11 cm, common 8 cm

Secutor ruconius* (Hamilton, 1822)

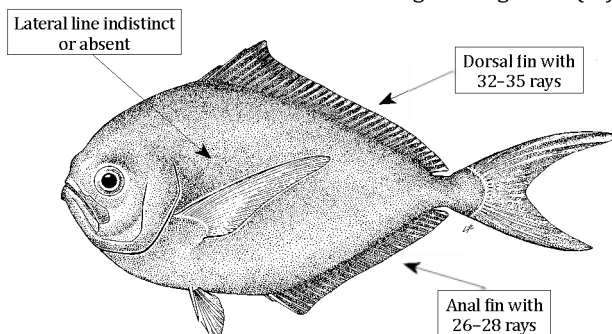
FAO names: Deep pugnose ponyfish (En)

Local name(s): N: Korokoro; S: Korokoro.**Habitat:** Shallow waters, lives near bottom down to 40 m; enters estuaries and rivers.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** Body oval, very deep and compressed; head strongly concave above eye; lateral line ending below about middle of soft portion of dorsal fin.**Colour:** Silvery, with about 10 bluish vertical bars on back extending to a little below lateral line; a prominent curved black band running from lower margin of eye to beyond posterior angle of lower jaw; membrane between 2nd and 5th dorsal-fin spines black on upper 1/3 portion; caudal fin partly yellow; underside of pectoral-fin bases black.

Size: To 8 cm, common 6 cm

BRAMIDAE

Pomfrets – Ocean breams

***Brama dussumieri* Cuvier, 1831**FAO names: Lesser bream (En)
Castagnole mignonne (Fr)**Local name(s):** N & S: No information.**Habitat:** Pelagic occurring along the continental shelf.**Fisheries:** By-catch in bottom trawls.**Distinctive Characters:** Caudal peduncle short and compressed, without keels; eye large, centrally located; mouth large, oblique; lower edges of mandibles in contact for their entire lengths; scales smooth, with uneven edges.**Colour:** Dark brown to tan, median fins may be darker than body; pectorals light.

Size: To 22.5 cm

LUTJANIDAE

Snappers – Jobfishes

***Aphareus furca* (Lacepède, 1801) (Plate VIII, 67)**

FAO names: Small toothed jobfish (En)
Vivaneau tidents (Fr)

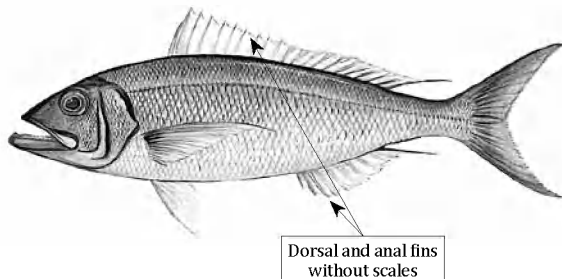
Local name(s): N: Tembo; S: Chauziwa (M), Tembo (K).

Habitat: Solitary or in groups in inshore coral reefs of clear lagoons and seaward reefs, down to 122 m.

Fisheries: Handlines, Longlines, Gillnets.

Distinctive Characters: Lower jaw protruding; dorsal fin with 10 spines and 11 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 15–16 soft rays; pectoral fins long, reaching to above anus.

Colour: Silvery–purplish brown dorsally, light silvery–bluish grey ventrally; lower jaw silvery; vertical edge of opercle and preopercle blackish; median fins yellow to yellowish brown.



Size: To 70 cm, common 30 cm

***Aphareus rutilans* Cuvier, 1830 (Plate VIII, 68)**

FAO names: Rusty jobfish (En)
Vivaneau rouillé (Fr)

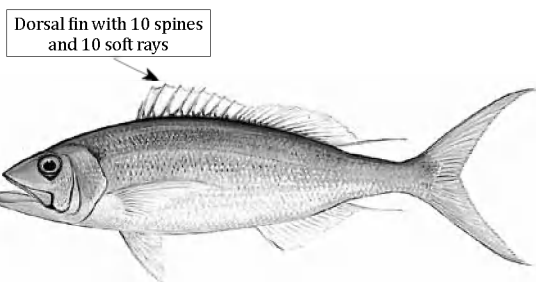
Local name(s): N: Tembo; S: Domezare, (M), Tembo (K).

Habitat: Reef areas from 10 m to 250 m.

Fisheries: Trolling gears, Handlines, Bottom longlines, Bottom trawls.

Distinctive Characters: Anal fin with 3 spines and 8 soft rays; pectoral fins with 15–16 soft rays, lower pectoral rays longer than middle rays; dorsal and anal fins without scales.

Colour: Head and body brick red or pink dorsally; inside of mouth, gill chamber and gills shiny silver; edge of maxilla and lower jaw black; vertical edge of preopercle narrowly black; fins reddish.



Size: To 110 cm, common 80 cm

***Aprion virescens* Valenciennes, 1830 (Plate VIII, 69)**

FAO names: Green jobfish (En)
Vivaneau job (Fr)

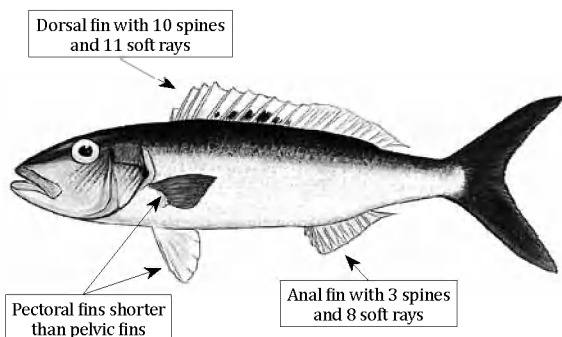
Local name(s): N: Tembo; S: Mpale (M), Mrongo (K).

Habitat: Shore reef areas, open waters, deep lagoons channels, down to 180 m.

Fisheries: Handlines, Bottom longlines, Gillnets, Bottom trawls, Trolling gears, Lured hooks.

Distinctive Characters: Preopercular edge smooth, sometimes denticulate in juveniles; a distinct horizontal groove in front of eyes; pectoral fins short; dorsal and anal fins without scales.

Colour: Dark green to blue or green; a black area often present at base of last 5 interspiny membranes of dorsal fin.



Size: To 110 cm, common 90 cm

***Etelis carbunculus* Cuvier, 1828**

(Plate VIII, 70)

FAO names: Deep-water red snapper (En)
Vivaneau rubis (Fr)

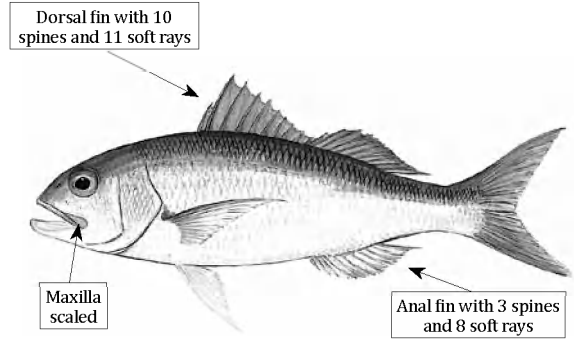
Local name(s): N: Chauziwa; S: Nduji (M), Tembo (K).

Habitat: Rocky bottoms from 90 m to 400 m.

Fisheries: Bottom longlines, Deep handlines.

Distinctive Characters: Gill rakers on lower limb of 1st arch (including rudiments), 11 to 14; pectoral fins with 15–17 rays; caudal fin forked, the lobes relatively short compared to other *Etelis*; dorsal and anal fins without scales.

Colour: Mainly pink to red, becoming white on lower sides and belly.



Size: To 127 cm, common 65 cm

***Etelis coruscans* Valenciennes, 1862**

(Plate VIII, 71)

FAO names: Deepwater longtail red snapper (En)
Vivaneau flamme (Fr)

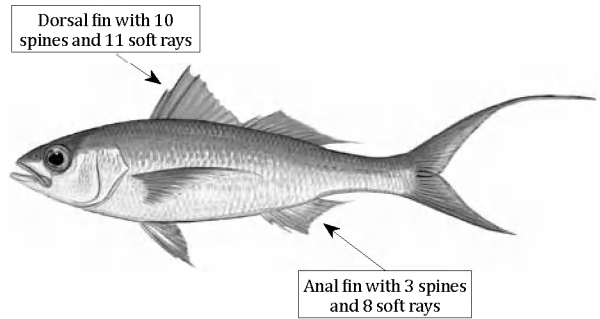
Local name(s): N: Chauziwa; S: Nduji (M), Tembo (K).

Habitat: Rocky bottoms from 100 m to 300 m.

Fisheries: Deep handlines.

Distinctive Characters: Gill rakers on lower limb of 1st arch (including rudiments), 15 to 18; pectoral fins with 15–16 soft rays; upper caudal-fin lobe becoming greatly elongate with increased growth; dorsal and anal fins without scales.

Colour: Generally reddish; darker dorsally, silvery ventrally.



Size: To 120 cm, common 50 cm

***Lutjanus argentimaculatus* (Forsskål, 1775)**

(Plate VIII, 72)

FAO names: Mangrove red snapper (En)
Vivaneau des mangroves (Fr)

Local name(s): N: Tazanda; S: Kiunga (M/K).

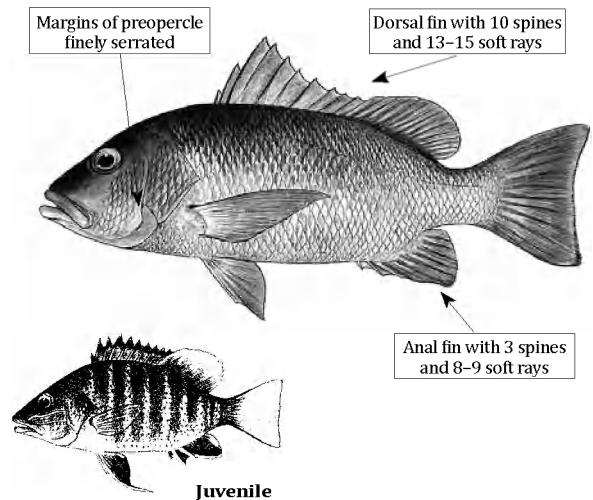
Habitat: Juveniles and young adults in mangrove estuaries and lower reaches of freshwater streams; adults in deeper reef areas down to 120 m.

Fisheries: Handlines, Bottom longlines, Bottom trawls, Gillnets.

Distinctive Characters: Head profile straight; preopercle un-notched, or at most with a slight notch; caudal fin truncate or slightly emarginate; soft parts of dorsal and anal fins with a scaly sheath.

Colour: Generally greenish-brown on back, grading to reddish on sides and ventral parts; somewhat paler on belly; often a silvery patch in the centre of each scale; juveniles with broad dark bars on body.

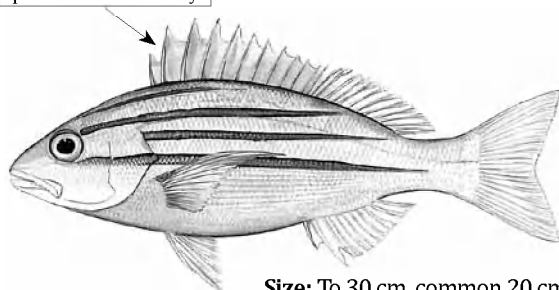
Remarks: *L. argentimaculatus* is distinguished from *L. bohar* by its longer snout and truncate tail and more bronze to greenish coloration.



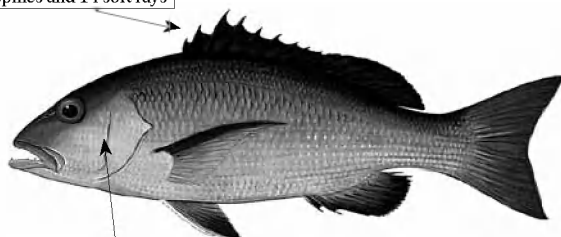
Size: To 150 cm, common 80 cm

***Lutjanus bengalensis* (Bloch, 1790)** (Plate VIII, 73)FAO names: Bengal snapper (En)
Vivaneau du Bengale (Fr)**Local name(s):** N: Tembo; S: Tembo kaza (M), Tembo (K).**Habitat:** Coral and rocky reefs from 10 m to 30 m.**Fisheries:** Handlines, Traps, Gillnets.**Distinctive Characters:** A prominent notch on rear edge of preopercle; anal fin with 3 spines and 8 soft rays; caudal fin emarginate.**Colour:** Back and sides yellowish; belly whitish; sides with a series of 4 bright blue stripes; no black spot on back below middle of dorsal fin; the medial fins are yellow, the pectoral and pelvic fins whitish.

Dorsal fin with 11–12 spines and 12–14 soft rays

**Size:** To 30 cm, common 20 cm***Lutjanus bohar* (Forsskål, 1775)** (Plate VIII, 74)FAO names: Two-spot red snapper (En)
Vivaneau chien rouge (Fr)**Local name(s):** N: Tembo; S: Tembo (M, K).**Habitat:** Channel and seaward reefs down to 180 m.**Fisheries:** Handlines, Bottom longlines.**Distinctive Characters:** Head profile slightly convex; a deep groove or pit runs from the nostrils to the front of the eye; preopercular margin with a distinct, shallow notch and an interopercular knob.**Colour:** Red or purplish red; juveniles and some adults with 2 distinct silvery spots on body between lateral line and dorsal fin; usually centre of each scale silvery.

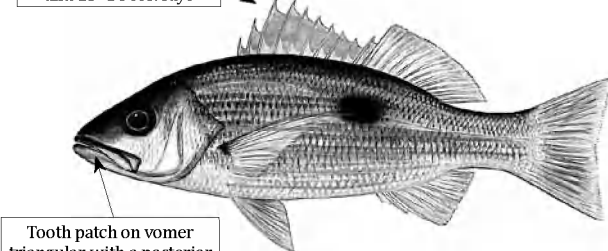
Dorsal fin with 10–11 spines and 14 soft rays



Vertical and horizontal borders of preopercle finely denticulate

Size: To 90 cm, common 60 cm***Lutjanus ehrenbergii* (Peters, 1869)** (Plate VIII, 75)FAO names: Blackspot snapper (En)
Vivaneau encrier (Fr)**Local name(s):** N: Tembo mbavaa/Mbawaa; S: Tembo kaza (M), Tembo (K).**Habitat:** Occurs in coastal lagoon and seaward reefs from 5 m to 20 m.**Fisheries:** Handlines, Traps, Gillnets.**Distinctive Characters:** Soft parts of fins scaled; anal fin with 3 spines and 7–8 soft rays; scale rows on the upper back run parallel to lateral line.**Colour:** Generally lemon-yellow grading to white or silvery on lower sides and head; yellow-brown horizontal stripes frequently present on sides; fins yellow; large black spot on lateral line.

Dorsal fin with 10 spines and 13–14 soft rays



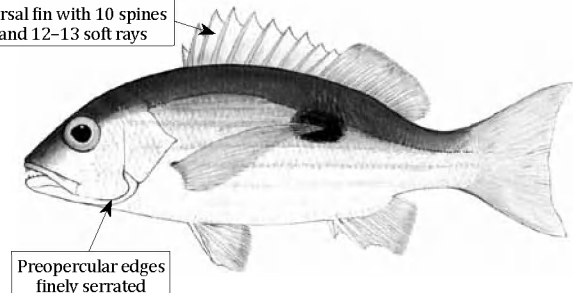
Tooth patch on vomer triangular, with a posterior median extension

Size: To 35 cm, common 20 cm***Lutjanus fulviflamma* (Forsskål, 1775)** (Plate VIII, 76)

FAO names: Dory snapper (En)

Local name(s): N: Tembo mbavaa/Mbawaa; S: Tembo (M, K).**Habitat:** Coral reefs from 3 m to 35 m.**Fisheries:** Handlines, Traps, Gillnets, Seines.**Distinctive Characters:** A slight preopercular notch; anal fin with 3 spines and 7–8 soft rays; soft parts of dorsal and anal fins scaled; scale rows on back rising obliquely above lateral line.**Colour:** Yellow-green or yellow above, silvery-pink below, sometimes with marked longitudinal golden stripes; large black spot on lateral line.

Dorsal fin with 10 spines and 12–13 soft rays



Preopercular edges finely serrated

Size: To 35 cm, common 30 cm

***Lutjanus fulvus* (Forster, 1801) (Plate IX, 77)**

FAO names: Blacktail snapper (En)
Vivaneau a queue noir (Fr)

Local name(s): N: Tembo; S: Tembo kaza (M), Tembo (K).

Habitat: Coral reefs, lagoons and outer reef slopes from 1 m to 75 m.

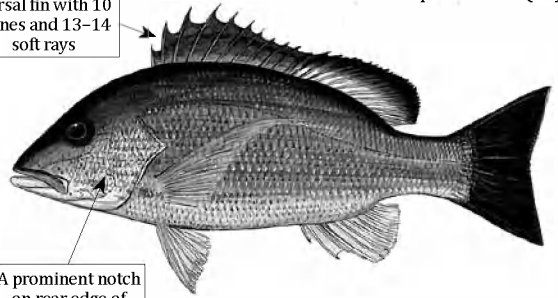
Fisheries: Handlines, Traps, Gillnets.

Distinctive Characters: Anal fin with 3 spines and 8 soft rays; soft parts of dorsal and anal fins scaled.

Colour: Background colour grey, grey-brown or yellowish; dorsal fin overall reddish or dusky; anal and pelvic fins translucent with a yellow suffusion; caudal fin black.

Dorsal fin with 10 spines and 13-14 soft rays

A prominent notch on rear edge of preopercle



Size: To 40 cm, common 25 cm

***Lutjanus gibbus* (Forsskål, 1775) (Plate IX, 78)**

FAO names: Humpback red snapper (En)
Vivaneau pagaie (Fr)

Local name(s): N: Tembo/Numba; S: Tembo (M, K).

Habitat: Lagoons and coral reefs from 1 m to 150 m.

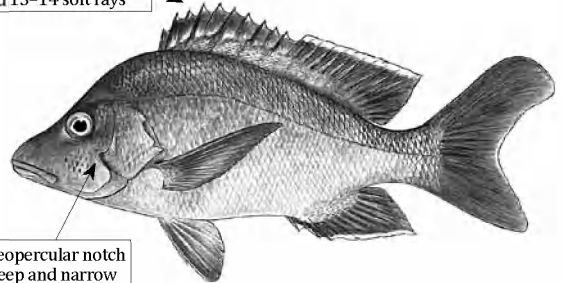
Fisheries: Handlines, Traps, Gillnets.

Distinctive Characters: Dorsal profile of head steeply sloped in adults; anal fin with 3 spines and 8 rays; caudal fin becoming deeply forked with age, its upper lobe larger than lower lobe in adults and distinctly rounded; soft part of dorsal and anal fins with a scaly sheath.

Colour: Deep red; juveniles grey with posterior part of caudal peduncle and caudal fin dark brown.

Dorsal fin with 10 spines and 13-14 soft rays

Preopercular notch deep and narrow



Size: To 50 cm, common 40 cm

***Lutjanus johnii* (Bloch, 1792) (Plate IX, 79)**

FAO names: John's snapper (En)
Vivaneau ziebelo (Fr)

Local name(s): N: Tembo mbavaa/Mbawaa; S: Tembo (M), Tembo (K).

Habitat: Juveniles occur in brackish mangrove estuaries, adults on coral reefs down to 80 m.

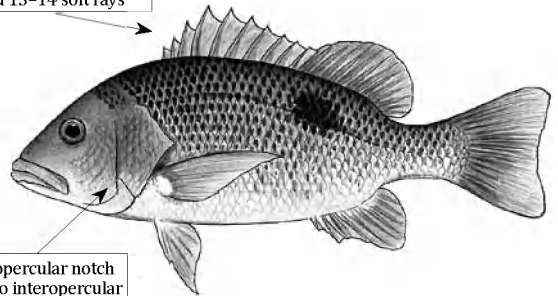
Fisheries: Handlines, Bottom longlines, Traps.

Distinctive Characters: Dorsal profile of head steeply sloped; anal fin with 3 spines and 8 rays; soft parts of dorsal and anal fins with a scaly sheath.

Colour: Body silvery-green or bronze or red, with a distinct dark spot on each scale forming a lengthwise series of dark streaks; large black spot on lateral line.

Dorsal fin with 10 spines and 13-14 soft rays

Preopercular notch but no interopercular knob



Size: To 97 cm, common 50 cm

***Lutjanus kasmira* (Forsskål, 1775) (Plate IX, 80)**

FAO names: Common bluestripe snapper (En)
Vivaneau à raies bleues (Fr)

Local name(s): N: Tembo; S: Tembo kaza (M), Tembo (K).

Habitat: Shallow sheltered reefs to exposed seaward reefs, below surge zone down to 265 m.

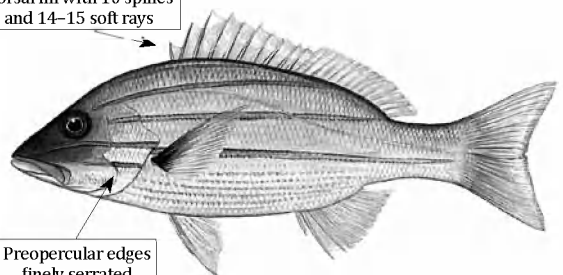
Fisheries: Handlines, Traps, Gillnets.

Distinctive Characters: A prominent notch on rear edge of preopercle; anal fin with 3 spines and 8 soft rays.

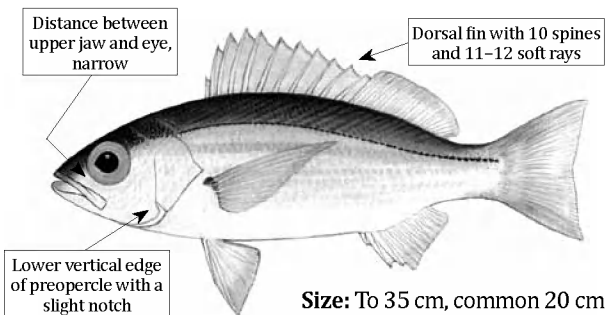
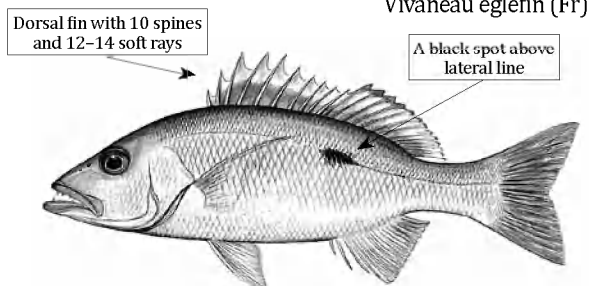
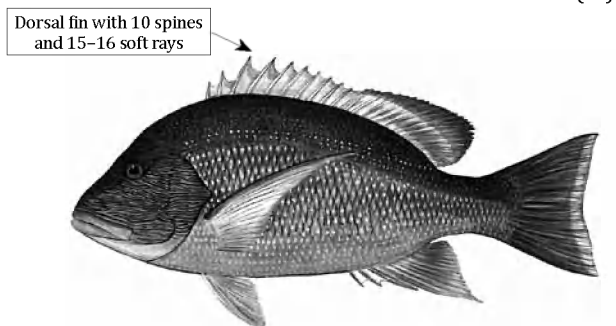
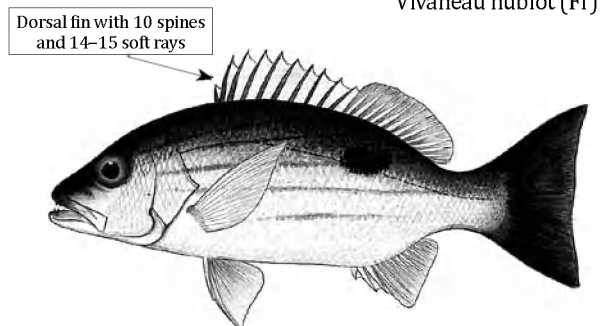
Colour: Yellow with abrupt transition to white on lower one-third; a series of 4 blue stripes on yellow portion of body.

Dorsal fin with 10 spines and 14-15 soft rays

Preopercular edges finely serrated



Size: To 40 cm, common 25 cm

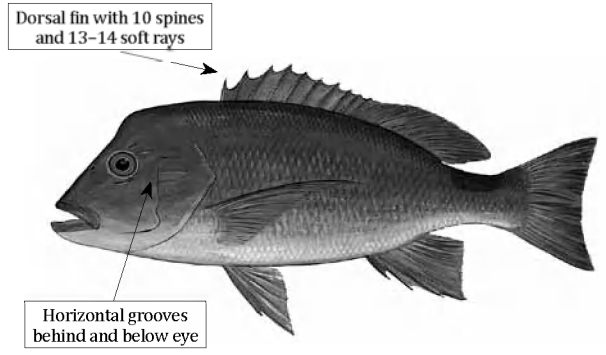
Lutjanus lutjanus Bloch, 1790 (Plate IX, 81)**Local name(s):** N: Tembo; S: Tembo (M, K).**Habitat:** Offshore coral reefs down to 90 m.**Fisheries:** Handlines, Bottom trawls.**Distinctive Characters:** An elongate, large eyed snapper; dorsal profile of head gently sloped; anal fin with 3 spines and 8 soft rays; caudal fin slightly forked.**Colour:** Background colour yellowish or pale brown, with a stronger dark yellow stripe along sides from tip of snout, through eye, to caudal fin.**Size:** To 35 cm, common 20 cm**FAO names:** Bigeye snapper (En)
Vivaneau gros yeux (Fr)***Lutjanus monostigma*** (Cuvier, 1828) (Plate IX, 82)**Local name(s):** N: Tembo mbavaa/Mbawaa; S: Tembo (M, K).**Habitat:** Outer lagoons and seaward reefs from 1 m to 60 m.**Fisheries:** Handlines, Traps, Gillnets.**Distinctive Characters:** Dorsal profile of head gently to moderately sloped; anal fin with 3 spines and 8 rays; caudal fin truncate to emarginate; soft parts of dorsal and anal fins with a scaly sheath.**Colour:** Overall yellowish to pinkish-white; grey or brown on upper back and dorsal portion of head.**Size:** To 60 cm, common 50 cm**FAO names:** One-spot snapper (En)
Vivaneau églefin (Fr)***Lutjanus rivulatus*** (Cuvier, 1828) (Plate IX, 83)**Local name(s):** N: Tembo chusi; S: Tembo (M, K).**Habitat:** Coral reefs from 50 m to 100 m.**Fisheries:** Handlines, Traps, Bottom trawls.**Distinctive Characters:** Dorsal profile of head steeply sloped; preorbital bone broad, about twice the eye diameter; preopercular notch and knob moderately developed; anal-fin lobes pointed.**Colour:** Head with numerous undulating blue lines; large adults brownish to grey with small white spots and fine striations on the head; juveniles with a series of 3 to 8 brown bars on sides and a chalky-white spot, with a broad blackish margin, present below anterior soft-dorsal ray.**Size:** To 80 cm, common 60 cm**FAO names:** Blubberlip snapper (En)
Vivaneau maori (Fr)***Lutjanus russellii*** (Bleeker, 1849) (Plate IX, 84)**Local name(s):** N: Tembo mbavaa/Mbawaa; S: Tembo kaza (M), Tembo (K).**Habitat:** Coral reefs down to 80 m.**Fisheries:** Handlines, Traps, Bottom trawls.**Distinctive Characters:** Head profile a little concave; interorbital space convex; anal fin with 3 spines and 8-9 soft rays.**Colour:** Generally whitish or pink with silvery sheen, frequently brownish on the upper part of the head and back; a black spot, which is sometimes faint, on lateral line below the anterior portions of the soft-dorsal fin.**Size:** To 50 cm, common 30 cm**FAO names:** Russell's snapper (En)
Vivaneau hublot (Fr)

***Lutjanus sanguineus* (Cuvier, 1828)**

(Plate X, 85)

FAO names: Humphead snapper (En)
Vivaneau tête (Fr)

Local name(s): N: Shogo; S: Shogo (M/K).
Habitat: Coral banks from 9 m to 100 m.
Fisheries: Handlines, Vertical longlines, Traps, Bottom trawls.
Distinctive Characters: Dorsal profile of head angular with a pronounced hump above eyes becoming more prominent with age; snout steeply sloped; anterior and posterior nostrils widely spaced; preopercular notch and knob poorly developed; anal fin with 3 spines and 9 soft rays.
Colour: Overall red, pale below; an indistinct saddle-line blotch dorsally on caudal peduncle sometimes apparent; palatine yellow; fins red; juveniles with a broad brown bar from upper jaw to beginning of dorsal fin and a series of reddish horizontal lines on sides.



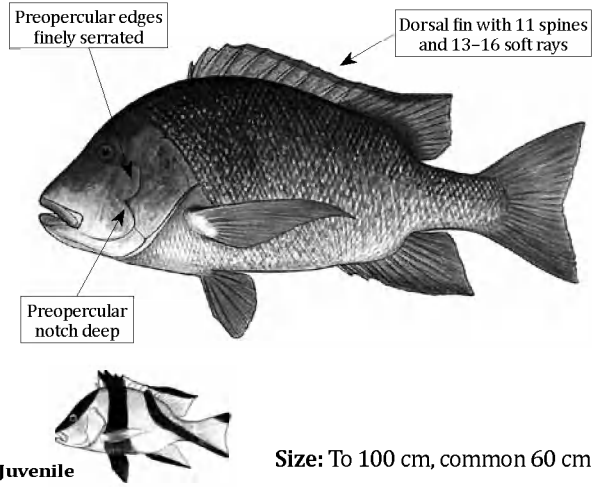
Size: To 100 cm, common 70 cm

***Lutjanus sebae* (Cuvier, 1816)**

(Plate X, 86)

FAO names: Emperor red snapper (En)
Vivaneau bourgeois (Fr)

Local name(s): N: Kungu; S: Nzuki (M), Tembo (K).
Habitat: Lagoons and sand flats near coral reefs from 10 m to 100 m.
Fisheries: Handlines, Traps and Gillnets.
Distinctive Characters: Head profile straight or convex; anal fin with 3 spines and 10-11 soft rays; soft parts of dorsal and anal fins pointed and with a scaly sheath.
Colour: Large adults red or pink; fins are red except the pectorals which is pink; juveniles and smaller adults pink with a dark red band from 1st dorsal spine through eye to tip of snout; a 2nd dark band from middle of spiny part of dorsal fin to pelvic fin and a 3rd band running from base of last dorsal-fin spines obliquely down across caudal peduncle and along lower rays of caudal fin.



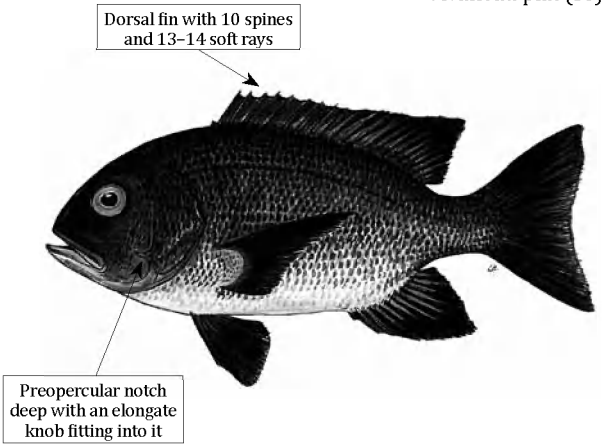
Size: To 100 cm, common 60 cm

***Macolor niger* (Forsskal, 1775)**

(Plate X, 87)

FAO names: Black and white snapper (En)
Vivaneau plat (Fr)

Local name(s): N: Tembo; S: Tembo kitubaku (M), Tembo (K).
Habitat: Coral reefs from 3 m to 90 m.
Fisheries: Handlines, Gillnets, Traps.
Distinctive Characters: Head profile convex; anal fin with 3 spines and 11 soft rays; soft parts of dorsal and anal fins pointed; pectoral fins long.
Colour: Body silvery grey, strongly blotched with blackish; snout and dorsal part of head with a fine dark grey and pale reticular pattern; juveniles completely coloured in black and white, the pattern changing with growth.



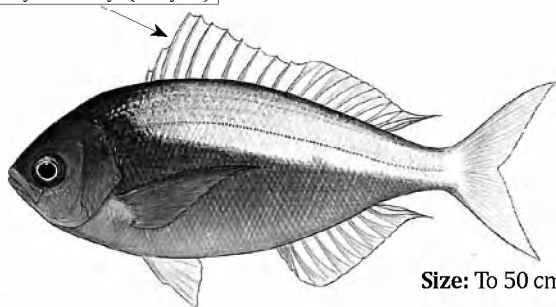
Size: To 75 cm, common 35 cm

Paracaesio xanthura (Bleeker, 1869)

(Plate X, 88)

FAO names: Yellowtail blue snapper (En)
Vivanette queue jaune (Fr)**Local name(s):** N: No information; S: Tembo (M, K).**Habitat:** Rocky bottoms from 20 m to 150 m.**Fisheries:** Handlines, Bottom longlines.**Distinctive Characters:** Interorbital space broad and convex; last ray of anal and dorsal fins shorter than preceding rays; anal fin with 3 spines and 8 soft rays; pectoral fins long and falcate, much longer than head length; caudal fin forked.**Colour:** Background colour blue, grading to white ventrally; a broad yellow stripe on back; caudal fin yellow; other fins white to translucent.

Dorsal fin with 10 spines and usually 10 soft rays (rarely 11)



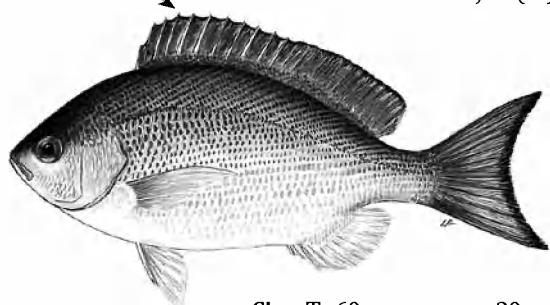
Size: To 50 cm

Pinjalo pinjalo (Bleeker, 1850)

(Plate X, 89)

FAO names: Pinjalo (En)
Pinjalo (Fr)**Local name(s):** N: No information; S: Tembo (M, K).**Habitat:** Reefs and rocky bottoms down to 60 m.**Fisheries:** Handlines, Traps, Bottom trawls.**Distinctive Characters:** Mouth small and oblique; dorsal profile of head high and convex; eye with an adipose lid; horizontal axis from snout tip to middle of caudal fin, cuts through pupil of eye; anal fin with 3 spines and 8–10 soft rays; caudal fin deeply lunate; fins scaled.**Colour:** Body pink or red; pelvic and anal fins yellow to pink; caudal fin with a dark margin.

Dorsal fin with 11 spines and 13–15 soft rays



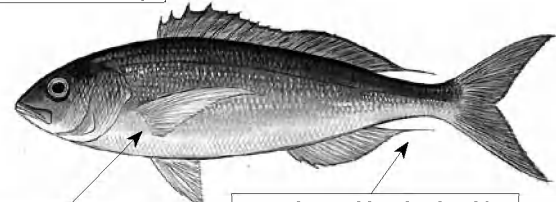
Size: To 60 cm, common 30 cm

Pristipomoides filamentosus (Valenciennes, 1830)

(Plate X, 90)

FAO names: Crimson jobfish (En)
Colas fil (Fr)**Local name(s):** N: Tembo; S: Namanaku (M), Tembo (K).**Habitat:** Rocky bottoms from 90 m to 360 m.**Fisheries:** Bottom longlines, Deep handlines.**Distinctive Characters:** Tongue toothless; interorbital space flat; anal fin with 3 spines and 8 soft rays; caudal fin forked; no scales on dorsal and anal fins.**Colour:** Body variable from lavender with a blue tinge to reddish purple; small blue spots on top of head; dorsal fin with 2 yellowish longitudinal lines; soft dorsal and caudal fins margined with red.

Dorsal fin with 10 spines and 11 soft rays



Last soft rays of dorsal and anal fins extended into short filaments

Pectoral fin as long as head and slightly falcate

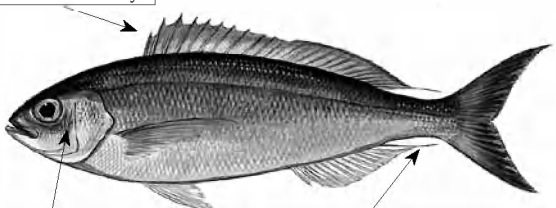
Size: To 100 cm, common 50 cm

Pristipomoides sieboldii (Bleeker, 1855)

(Plate X, 91)

FAO names: Lavender jobfish (En)
Colas lavande (Fr)**Local name(s):** N: Tembo; S: Namanaku (M), Tembo (K).**Habitat:** Rocky bottoms from 180 m to 360 m.**Fisheries:** Bottom longlines, Deep handlines.**Distinctive Characters:** Interorbital space flat; tongue toothed; anal fin with 3 spines and 8 soft rays; pectoral fins as long as head, slightly falcate; no scales on dorsal and anal fins.**Colour:** Body light lavender or violet, paler ventrally; caudal fin dark lavender with a light margin; dark spots on top of head, conspicuous in younger specimens.

Dorsal fin with 10 spines and 11 soft rays



Last soft rays of dorsal and anal fins extended into short filaments

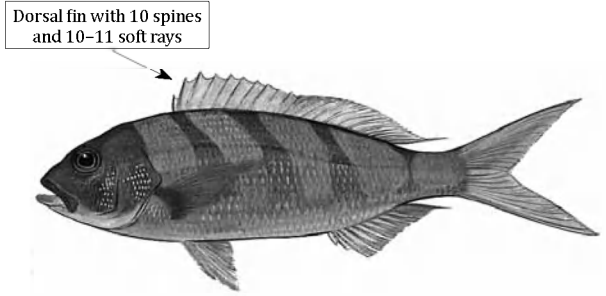
Horizontal grooves behind and below eye

Size: To 70 cm, common 40 cm

***Pristipomoides zonatus* (Valenciennes, 1830)**

(Plate X, 92) **FAO names:** Oblique-banded snapper (En)
Colas bagnard (Fr)

Local name(s): N: Tembo; S: Tembo (M, K).
Habitat: Rocky bottoms from 70 m to 300 m.
Fisheries: Handlines.
Distinctive Characters: Tongue toothless; anal fin with 3 spines and 8 rays; pectoral fins with 15–16 rays; no scales on dorsal and anal fins; last soft ray of dorsal and anal fins extended into short filaments.
Colour: Overall colour pink or reddish with four oblique orange or yellow bars on the sides; the dorsal and caudal fins yellow.



Size: To 50 cm, common 35 cm

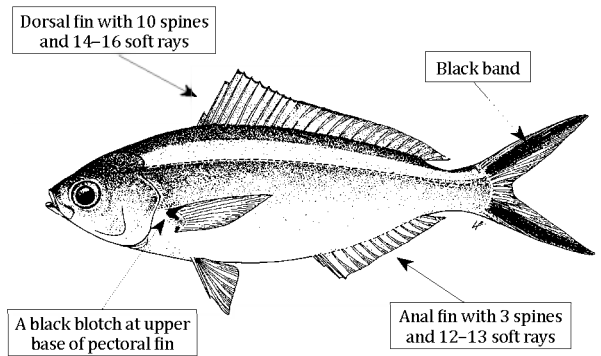
CAESIONIDAE

Fusiliers

***Caesio caerulea* Lacepède, 1801**

(Plate X, 93) **FAO names:** Blue and gold fusilier (En)
Caesio azuror (Fr)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).
Habitat: Schooling in mid-water in deep lagoons and along seaward coral reefs.
Fisheries: Seines, Gillnets, Traps, Handlines, Bottom trawls.
Distinctive Characters: Mouth protrusible; eye moderately large; dorsal and anal fins almost completely scaled.
Colour: Upper body bluish, lower body white to pale bluish; golden band from above the eye, running straight along the body to upper caudal peduncle and continuing on the caudal fin to the tip of the upper lobe, becoming near black on the fin.

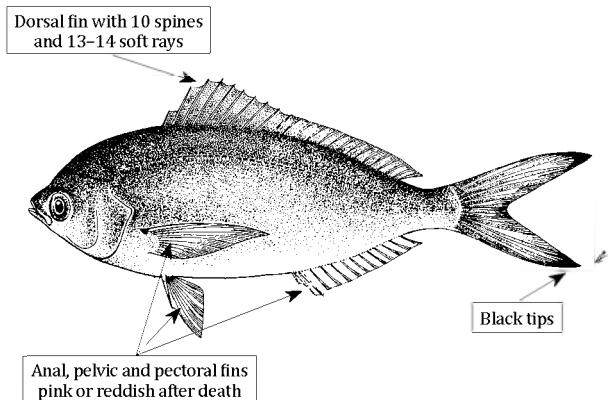


Size: To 35 cm

***Caesio lunaris* Cuvier, 1830**

(Plate X, 94) **FAO names:** Lunar fusilier (En)
Caesio à croissant (Fr)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).
Habitat: Coastal areas, on or near coral reefs.
Fisheries: Traps, Seines.
Distinctive Characters: Mouth protrusible; eye moderately large; anal fin with 3 spines and 10–11 soft rays; basal portion of dorsal and anal fins scaled.
Colour: Mostly bright blue except on ventral portion of body; caudal fin blue (yellow in juveniles) with black tips on lobes.



Size: To 40 cm

***Caesio teres* Seale, 1906** (Plate XI, 95)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Coral reefs and coral lagoons.

Fisheries: Gillnets, Handlines, Traps.

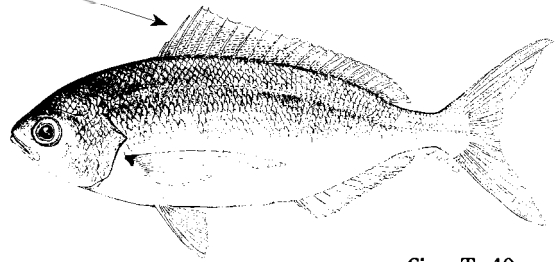
Distinctive Characters: Mouth protrusible; eye rather large; anal fin with 3 spines and 12 rays.

Colour: Bright yellow on caudal fin, caudal peduncle, and body above an oblique demarcation from dorsal-fin origin to ventral origin of caudal peduncle; head and remainder of body bright blue, shading ventrally to silvery white.

FAO names: Yellow and blueback fusilier (En)

Fusilier à dos jaune et bleu (Fr)

Dorsal fin with 10 spines
and 14–16 soft rays



Size: To 40 cm

***Caesio varilineata* Carpenter, 1987** (Plate XI, 96)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Schooling in mid-water in deep lagoons and along seaward coral reefs from 1 m to 25 m.

Fisheries: Gillnets, Handlines, Traps.

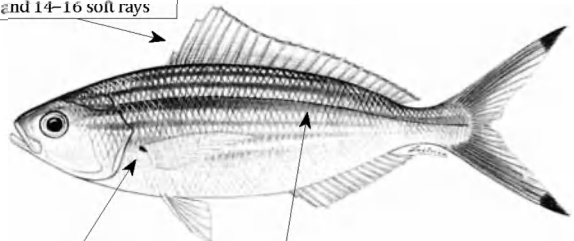
Distinctive Characters: Mouth protrusible; anal fin with 3 spines and 11–13 soft rays; pectoral fins with 20–23 rays.

Colour: Upper body blue, lower body white to pale bluish; caudal fin with an indistinct bluish or dark streak within each lobe and tips with a large black blotch; pectoral, pelvic and anal fins white.

FAO names: Variable-lined fusilier (En)

Fusilier à bandes variées (Fr)

Dorsal fin with 10 spines
and 14–16 soft rays



Axil of pectoral
fin black

3–6 yellow longitudinal
stripes on side, 2–3 of them
above lateral line

Size: To 40 cm

***Caesio xanthonota* Bleeker, 1853** (Plate XI, 97)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Schooling in mid-water in deep lagoons and seaward coral reefs.

Fisheries: Gillnets, Handlines, Traps, Seines, Trawls.

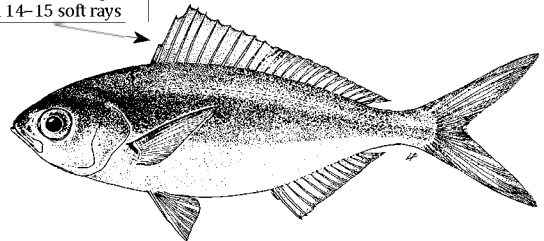
Distinctive Characters: Mouth protrusible; eyes moderately large; anal fin with 3 spines and 11–12 soft rays.

Colour: Generally sky blue on sides, grading to whitish (pink after death) on ventral region; caudal fin without black tips or dark streaks on lobes.

FAO names: Yellowback fusilier (En)

Fusilier à dos jaune (Fr)

Dorsal fin with 10 spines
and 14–15 soft rays



Most of back, upper part of head,
dorsal fin and caudal fin, yellow

Size: To 40 cm

Dipterygonotus balteatus* (Valenciennes, 1830)

Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Primarily a near-shore pelagic species swimming mainly in open water away from reefs.

Fisheries: Traps, Handlines, Purse seines.

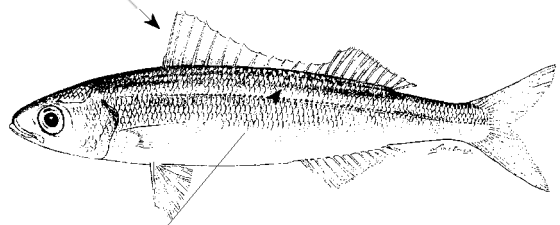
Distinctive Characters: Mouth protrusible; body very slender; anal fin with 3 spines and 9–10 soft rays; pectoral fins with 16–19 rays; dorsal and anal fins without scales.

Colour: Upper body brownish bronze; lower body silvery white; dorsal, anal, pelvic and pectoral fins clear to pinkish; axil of pectoral fins black.

FAO names: Mottled fusilier (En)

Fusilier marbré (Fr)

Dorsal fin with 12–15
spines and 8–11 soft rays



A thin straight tan stripe
from orbit to caudal fin

Size: To 14 cm

***Gymnocaesio gymnoptera* (Bleeker, 1856)**

(Plate XI, 98)

FAO names: Slender fusilier (En)
Fusilier élégant (Fr)

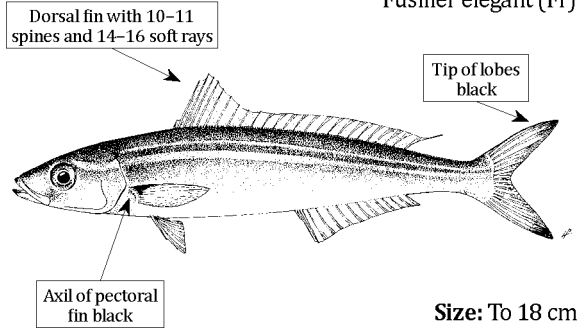
Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Coastal areas near coral reefs down to 25 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Mouth protrusible; anal fin with 3 spines and 11–13 rays; dorsal and anal fins without scales.

Colour: Upper body bluish green; a single yellow or brown stripe running dorsal to lateral line on caudal peduncle; often a bright blue longitudinal band directly below the lateral line.



***Pterocaesio capricornis* Smith & Smith, 1963**

FAO names: Capricorn fusilier (En)
Fusilier capricorne (Fr)

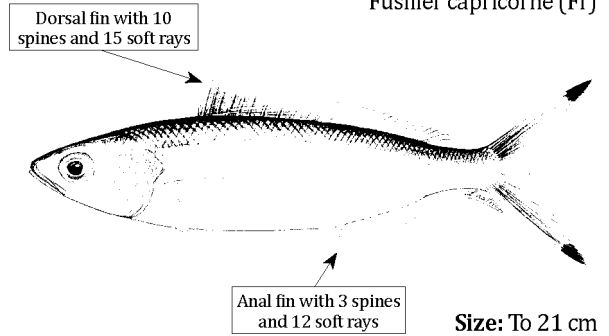
Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Coastal areas, around coral reefs down to 20 m.

Fisheries: Seines, Gillnets, Traps.

Distinctive Characters: Two post maxillary processes; posterior end of maxilla tapered; dorsal and anal fins scaled; 11 upper peduncular scale rows; 15 lower peduncular scale rows.

Colour: Upper body with a chequered, bronzy green yellow and blue appearance.



***Pterocaesio chrysozona* (Cuvier, 1830)**

(Plate XI, 99)

FAO names: Goldband fusilier (En)
Caesio à ceinture d'or (Fr)

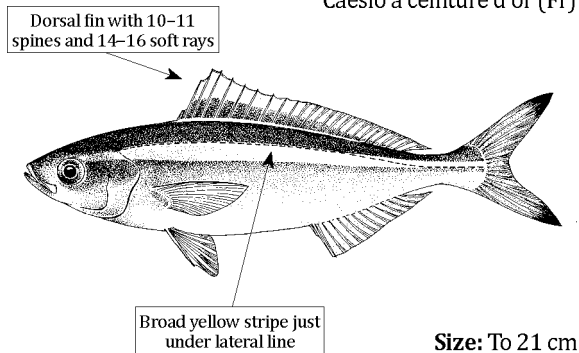
Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

Habitat: Ranges widely around coral reefs; found in schools.

Fisheries: Seines, Gillnets, Traps.

Distinctive Characters: Anal fin with 3 spines and 11–13 soft rays; dorsal and anal fins scaled; 11–13 upper peduncular scale rows (usually 11); 14–17 lower peduncular scale rows (usually 15); posterior end of maxilla tapered.

Colour: Body light blue to brownish dorsally, white to pinkish ventrally.



***Pterocaesio digramma* (Bleeker, 1864)**

FAO names: Double-lined fusilier (En)
Fusilier à deux bandes jaunes (Fr)

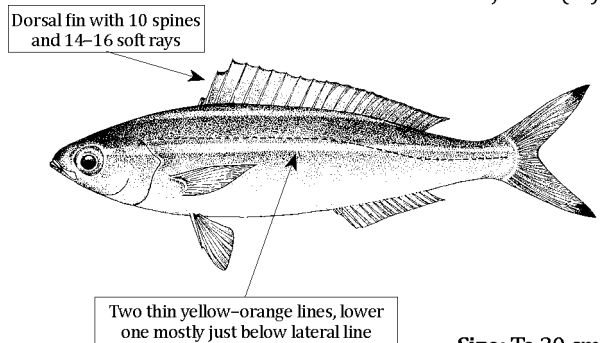
Local name(s): N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).

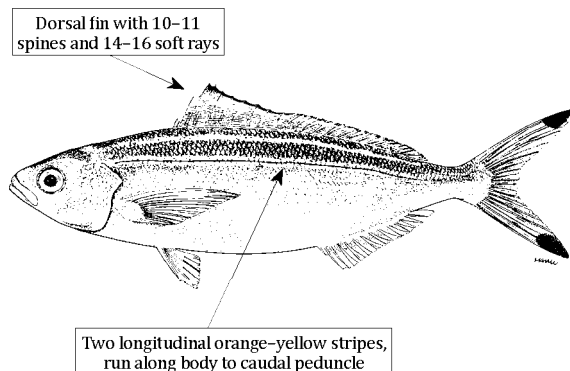
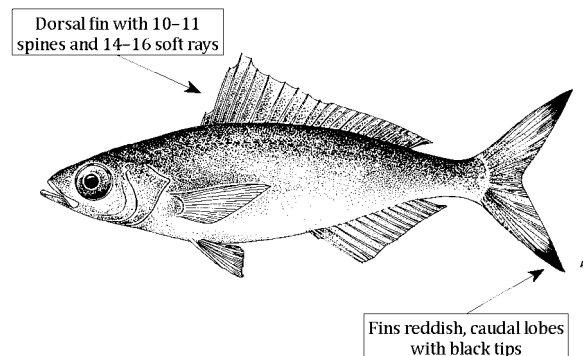
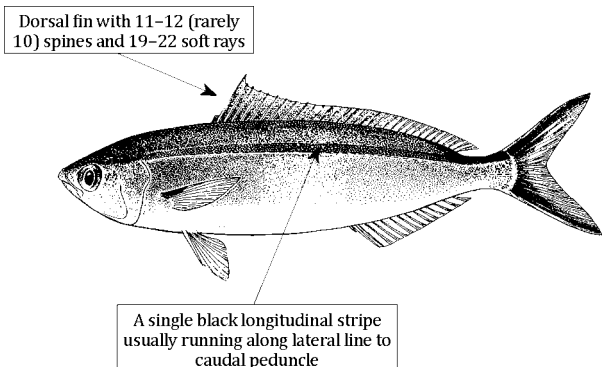
Habitat: Coastal areas, primarily around coral reefs.

Fisheries: Seines, Gillnets, Traps.

Distinctive Characters: Anal fin with 3 spines and 11–12 soft rays; dorsal and anal fins scaled; 11–14 upper peduncular scale rows (usually 12 or 13); 16–18 lower peduncular scale rows (usually 16 or 17).

Colour: Body blue to greenish dorsally, white ventrally; black tips on caudal fin.



Pterocaesio marri* Schultz, 1953*(Plate XI, 100)****FAO names:** Marr's fusilier (En)
Fusilier de Marr (Fr)**Local name(s):** N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).**Habitat:** Schools in clear lagoons and seaward reefs.**Fisheries:** Seines Gillnets Traps.**Distinctive Characters:** Mouth protrusible; anal fin with 3 spines and 11–13 soft rays; pectoral fins with 22–24 rays; dorsal and anal fins scaled.**Colour:** Body blue to greenish dorsally, white ventrally; fins white to pinkish; dorsal fin slightly dusky distally; axil of pectoral fins and tips of caudal lobes black.**Size:** To 35 cm***Pterocaesio pisang* (Bleeker, 1853)****(Plate XI, 101)****FAO names:** Banana fusilier (En)
Fusilier banane (Fr)**Local name(s):** N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).**Habitat:** Schooling in mid–water in deep lagoons and along seaward reefs.**Fisheries:** Gillnets, Traps, Seines.**Distinctive Characters:** Mouth protrusible; eye moderately large, diameter of orbit greater than snout length; anal fin with 3 spines and 12 soft rays; usually 11 (10–12) upper peduncular scale rows; usually 15 (13–17) lower peduncular scale rows; base portion of dorsal and anal fins scaled.**Colour:** Generally pink or reddish, grading to whitish on ventral region.**Size:** To 21 cm***Pterocaesio tile* (Cuvier, 1830)****(Plate XI, 102)****FAO names:** Dark–banded fusilier (En)
Fusilier à ligne olive (Fr)**Local name(s):** N: Kirongwe; S: Mweru (M), Numbi, Unwa (K).**Habitat:** Schooling in mid water in deep lagoons and along seaward reefs.**Fisheries:** Traps, Seines, Gillnets, Handlines.**Distinctive Characters:** Mouth protrusible; anal fin with 3 spines and 13 soft rays; pectoral fins with 22–24 (most frequently 23) rays; usually 11 or 12 upper peduncular scale rows; 15 or 16 lower peduncular scale rows.**Colour:** Upper body light bluish–green, lower part whitish to pink; pectoral, pelvic and anal fins white to pinkish; dorsal fin light bluish–green; caudal fin with a black streak within each lobe, the upper streak continuous with the lateral stripe.**Size:** To 25 cm

LOBOTIDAE

Tripletails

Lobotes surinamensis (Bloch, 1790)

FAO names: Tripletail (En)
Croupia roche (Fr)

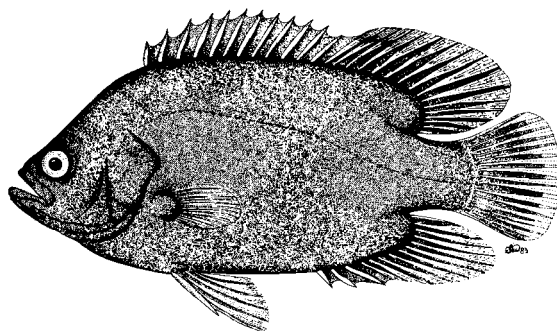
Local name(s): N: Pawizi; S: Pawizi (M).

Habitat: Coastal waters and muddy estuaries.

Fisheries: Seines, Gillnets, Traps, Hooks and Line, Bottom trawls.

Distinctive Characters: Eye small; soft dorsal and anal fins large and broadly rounded reaching past base of caudal fin; dorsal fin with 11–12 strong spines and 15–16 soft rays; anal fin with 3 spines and 11–12 soft rays; caudal fin rounded, the fish appears to have 3 tails.

Colour: Adults dark brown or greenish–yellow above, silvery–grey below; pectorals pale yellow, other fins darker than body; caudal fin with yellow margin.



Size: To 110 cm, common 70 cm

GERREIDAE

Silverbiddies – Mojarras

Gerres filamentosus Cuvier, 1829

FAO names: Whipfin silver–biddy (En)

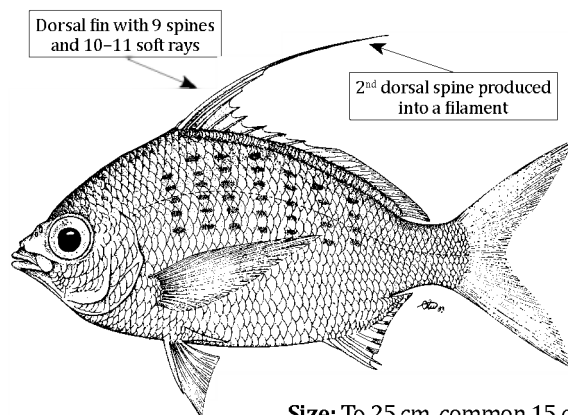
Local name(s): N: Tae; S: Chaa (M), Tsaa (K).

Habitat: Shallow coastal waters down to 50 m.

Fisheries: Seines, Handlines Traps, Bottom trawls.

Distinctive Characters: Pectoral fins long, reaching to level of origin of 1st anal spine; 2nd anal–fin spine much short; caudal fin deeply forked.

Colour: Silvery, with 7–10 columns of ovoid spots on upper portion of sides, coalescing as bars in small specimens; pectoral, pelvic, caudal and anal fins dusky hyaline; tips of pelvic, anal and caudal lobes, white; dorsal fin hyaline except for the end of filamentous spine, which is black.



Size: To 25 cm, common 15 cm

Gerres longirostris (Lacepède, 1801)

FAO names: Strongspine silver–biddy (En)
Blanche gubernail (Fr)

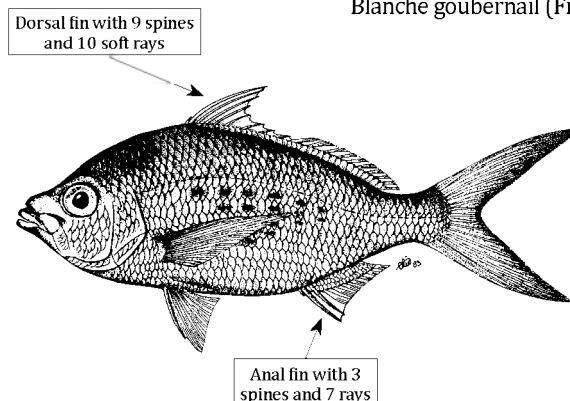
Local name(s): N: Tae; S: Chaa (M), Tsaa (K).

Habitat: Common in shallow waters over sandy bottoms, coral reefs and brackish lagoons.

Fisheries: Seines, Handlines, Traps, Bottom trawls.

Distinctive Characters: Body slender; 2nd anal spine fairly strong and long; caudal fin deeply forked and very long.

Colour: Olive green above to silver below; young with 7–8 dusky bars on sides of body; trailing margin of caudal fin broadly edged in black.



Size: To 37 cm

***Gerres oblongus* Cuvier, 1830**

Local name(s): N: Tae; S: Chaa (M), Tsaa (K).

Habitat: Occurs in coral areas.

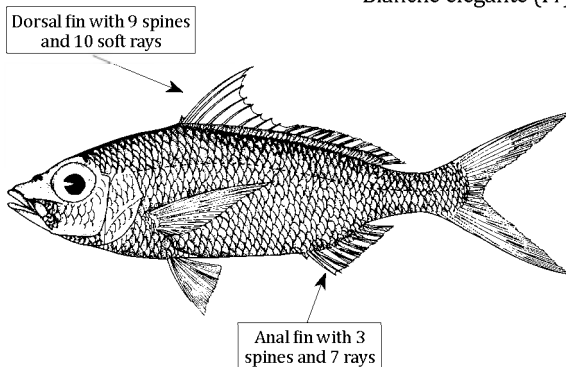
Fisheries: Gillnets, Bottom seines, Traps.

Distinctive Characters: Fin spines weak; 2nd anal spine very short; pectoral fins increasing in length with age, reaching to level of anus in small specimens and almost to level of 1st anal spine in adult specimens; caudal fin very deeply forked.

Colour: Silvery; lilac-brown dorsally; 4-9 slightly oblique dusky bands or columns of ovoid dark spots (rarely brownish) immediately below lateral line, but more obvious in preserved or stressed live specimens; dorsal fin with a dusky tip; other fins pale.

FAO names: Slender silver-biddy (En)

Blanche élégante (Fr)



Size: To 30 cm, common 15 cm

***Gerres oyena* (Forsskål, 1775)**

Local name(s): N: Tae; S: Chaa (M), Tsaa (K).

Habitat: Along sandy beaches but also enters estuaries and brackish lagoons.

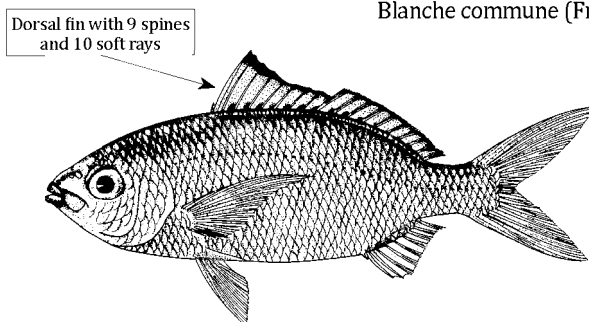
Fisheries: Bottom trawls, Seines.

Distinctive Characters: Body very slender; pectoral fins reaching to just above anus; 2nd anal spine slender and short; caudal fin deeply forked.

Colour: Pale olive above to silvery below; 7-8 faint dusky bars on sides of body, more pronounced in young; prominent black tip of dorsal fin; caudal fin uniformly dusky.

FAO names: Common silver-biddy (En)

Blanche commune (Fr)



Size: To 30 cm

HAEMULIDAE

Grunts – Sweetlips – Rubberlips – Hotlips

***Diagramma pictum* (Thunberg, 1792)**

(Plate XI, 103)

FAO names: Painted sweetlips (En)

Diagramme voilier (Fr)

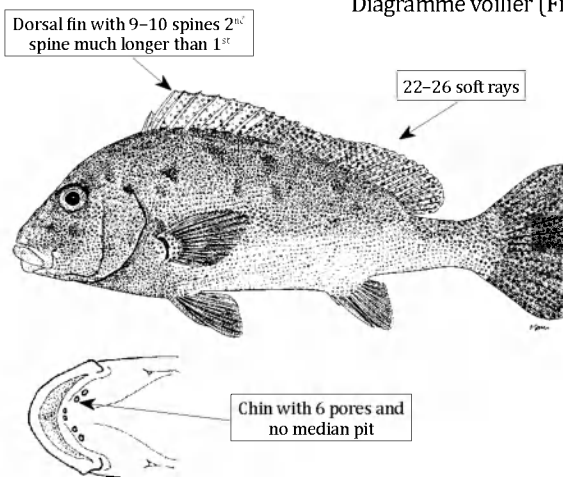
Local name(s): N: Gundi; S: Fute mwewe (M), Futa/Mninga (K).

Habitat: Coastal areas around coral reefs. Maximum depth 80 m.

Fisheries: Longlines, Handlines, Traps, Bottom trawls, Spears.

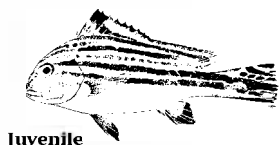
Distinctive Characters: Mouth small; anal fin with 3 spines and 7 soft rays; pectoral fins with 16-18 rays; caudal peduncle slender and long; scales small, ctenoid.

Colour: Longitudinal black bands on juveniles; spots in adults; in large individuals the spots become small or indistinct; sometimes faint yellow spots on head and body.



Underside of head

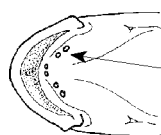
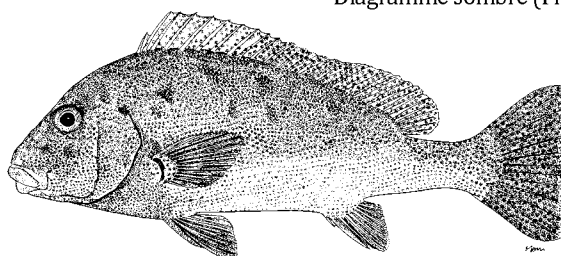
Size: To 100 cm, common 55 cm



Juvenile

Plectorhinchus chubbi (Regan, 1919)

(Plate XI, 104)

FAO names: Dusky rubberlip (En)
Diagramme sombre (Fr)**Local name(s):** N: Mlinga; S: Kumbi maji (M), Futa (K).**Habitat:** Coastal waters near reefs.**Fisheries:** Traps, Gillnets, Spears.**Distinctive Characters:** Lips thick, greatly swollen with age; dorsal fin with 11–12 spines and 16–17 soft rays; anal fin with 3 spines and 7–8 soft rays; 35 to 40 gill rakers on 1st arch (13 or 16 on upper limb, 1 at corner and 21 to 23 on lower limb); lateral line with 60 tubed ctenoid (rough) scales.**Colour:** Uniformly grey or grey-bronze with small white spots on body; underside may be paler; fins dark brown; chin pink; juveniles, dusky olive to greyish.Chin with 6 pores and
no median pit

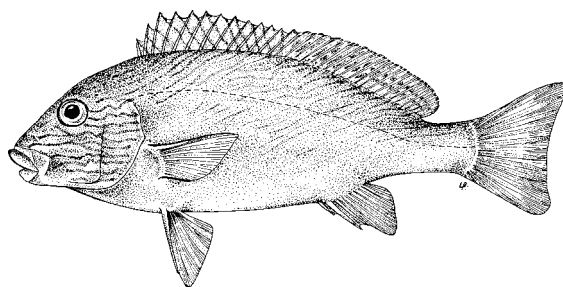
Underside of head

Size: To 75 cm

Plectorhinchus flavomaculatus (Cuvier, 1830)

(Plate XII, 105)

FAO names: Lemonfish (En)

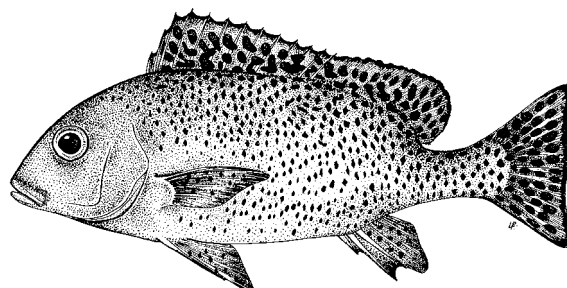
Local name(s): N: Fute; S: Fute (M), Futa (K).**Habitat:** Coastal waters near reefs and weedy areas.**Fisheries:** Handlines, Gillnets, Bottom trawls, Spears.**Distinctive Characters:** Lips fleshy, moderately thickened with age; chin with 6 pores but no median pit; dorsal fin with 12–13 spines and 19–22 soft rays; scales ctenoid (rough).**Colour:** Body bluish-grey; juveniles with golden or rusty-orange stripes along the body that breaks into a reticulate pattern and later forms small spots that may be lost with age or remain as lines of spots on head.

Juvenile

Size: To 60 cm

Plectorhinchus gaterinus (Forsskål, 1775)

(Plate XII, 106)

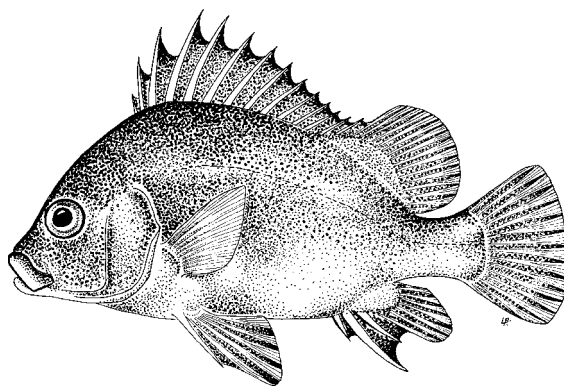
FAO names: Blackspotted rubberlip (En)
Diagramme moucheté (Fr)**Local name(s):** N: Fute nyea; S: Fute mlea (M), Futa (K).**Habitat:** Coastal water reefs, sand banks and near estuaries.**Fisheries:** Handlines, Gillnets, Bottom trawls.**Distinctive Characters:** Lips fleshy but not swollen; mouth red inside; dorsal fin with 13 spines and 19–20 soft rays; pelvic fins longer than pectoral fins; scales ctenoid (rough).**Colour:** Adults yellowish-grey, back greenish and belly yellowish, with rows of dark grey or black-brown spots on body and fins; juveniles pale silver grey with yellow fins and 5–7 brown longitudinal bands which break into line of spots at 10–12 cm (SL); dorsal fin whitish with large dark basal bands.

Juvenile

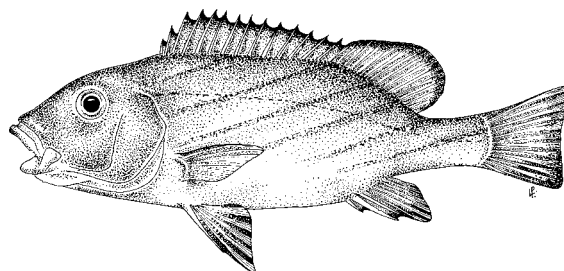
Size: To 50 cm

Plectorhinchus gibbosus (Lacepède, 1802)

(Plate XII, 107)

FAO names: Harry hotlips (En)
Diagramme noir (Fr)**Local name(s):** N: Fute dukwa; S: Fute kinauchi (M), Futa (K).**Habitat:** Coastal waters on reefs, sand banks and near estuaries.**Fisheries:** Handlines, Gillnets, Traps, Spears.**Distinctive Characters:** Lips fleshy, greatly swollen with age; chin with 6 pores but no median pit; dorsal fin with 14 spines (4th or 5th the longest) and 15–16 soft rays; anal fin with 3 spines and 7 soft rays; pectoral fins with 17 rays; in juveniles, spiny portion of dorsal fin twice as high as soft portions, becoming about equal in height in large adults.**Colour:** Uniformly dark grey to brownish or blackish; large specimens are sometimes mottled with light brown.

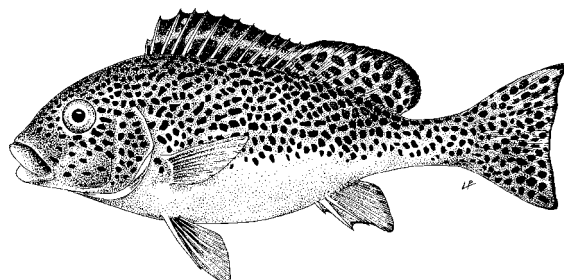
Size: To 75 cm

Plectorhinchus paulayi Steindachner, 1895FAO names: Zebra sweetlip (En)
Diagramme zébré (Fr)**Local name(s):** N: Fute dukwa; S: Fute (M), Futa (K).**Habitat:** Shallow inshore waters; also seaward reef slopes.**Fisheries:** Handlines.**Distinctive Characters:** Lips fleshy but not swollen; chin with 6 pores but no median pit; dorsal fin with 14 spines and 16 soft rays; 20 to 23 gill rakers on 1st arch (6 to 8 on upper limb, 1 at corner and 13–14 on lower limb); lateral line with 54 or 55 tubed scales; scales ctenoid.**Colour:** Silvery-grey with 6 straight oblique narrow dark (rarely paler) lines, running upwards and backwards; dark spots and streaks on side of head; chin pale; margins of dorsal fin, tips of anal and pelvic fins black.

Size: To 45 cm

Plectorhinchus picus (Cuvier, 1828)

FAO names: Painted sweetlip (En)

Local name(s): N: Fute dukwa; S: Fute (M), Futa (K).**Habitat:** A solitary species found in lagoon and seaward reefs; adults usually under coral heads or in caves, while juveniles in shallow lagoons.**Fisheries:** Handlines.**Distinctive Characters:** Dorsal fin with 12–14 spines and 17–20 soft rays; anal fin with 3 spines and 7–8 soft rays.**Colour:** Juveniles under 25 cm black with a few large white blotches; adults white with numerous small dark spots; changes from bold black and white pattern to a whitish grey with numerous small black spots over most of the upper body and fins.

Size: To 84 cm

***Plectorhinchus plagiodesmus* Fowler, 1935**

FAO names: Barred rubberlip (En)
Diagramme rayé (Fr)

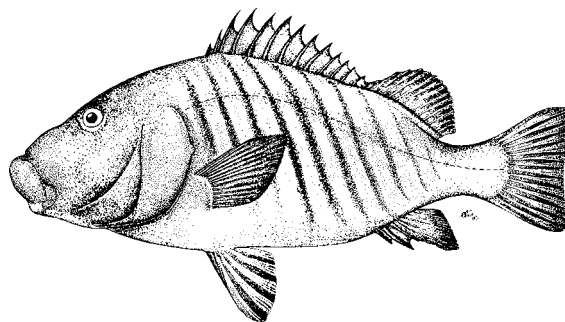
Local name(s): N: Fute dukwa; S: Fute (M), Futa (K).

Habitat: Inhabits coral reefs, often seen in pairs.

Fisheries: Handlines, Spears.

Distinctive Characters: Lips fleshy greatly swollen with age; chin with 6 pores but no median pit; dorsal fin with 14 spines and 15–16 soft rays; 27 to 32 gill rakers on 1st arch (8 to 10 on upper limb, 1 at corner and 18–21 on lower limb); lateral line with 48 tubed scales; scales ctenoid.

Colour: Body dark grey to bronze with alternate orange and blackish stripes running downwards and backwards, becoming faint or absent with age; juveniles dark, with caudal fin and edges of soft dorsal and anal fins pale.



Size: To 90 cm

***Plectorhinchus playfairi* (Pellegrin, 1914)**

(Plate XII, 108) FAO names: Whitebarred rubberlip (En)
Diagramme rayons de soleil (Fr)

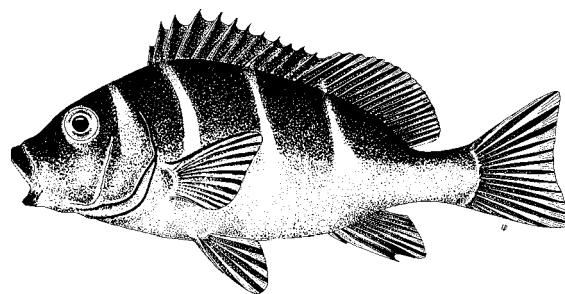
Local name(s): N: Fute pundamia; S: Fute (M), Futa (K).

Habitat: Coastal reefs down to 80 m.

Fisheries: Bottom trawls, Bottom longlines, Handlines, Gillnets, Traps.

Distinctive Characters: Lips fleshy, swollen with age; chin with 6 pores but no median pit; dorsal fin with 12 spines and 19–20 soft rays; 32 to 34 gill rakers on 1st arch (11 on upper limb, 1 at corner and 20–22 on lower limb); lateral line with about 58 to 60 tubed scales; scales ctenoid.

Colour: Grey to black with narrow white cross bars; lips, mouth and base of pectoral fins pink; tips of dorsal-fin spines and edge of opercle red to scarlet.



Size: To 90 cm

***Plectorhinchus schotaf* (Forsskål, 1775)**

(Plate XII, 109) FAO names: Minstrel sweetlips (En)
Diagramme ménestrel (Fr)

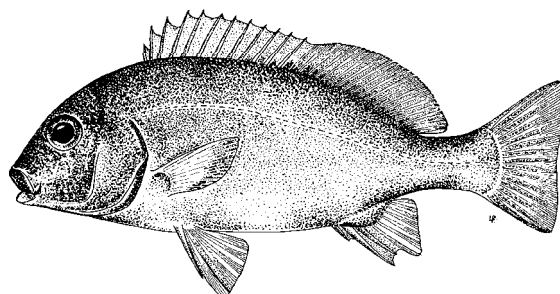
Local name(s): N: Fute mwana kili; S: Fute ninga (M), Futa (K).

Habitat: Inhabits coastal waters near reefs.

Fisheries: Handlines, Spears.

Distinctive Characters: Lips fleshy, moderately swollen with age; dorsal fin with 12 spines and 18–20 soft rays; base of soft part of dorsal fin distinctly longer than head; 26 to 29 gill rakers on 1st arch (10 to 12 on upper limb, 1 at corner and 15–16 on lower limb); lateral line with about 55 tubed scales; scales ctenoid.

Colour: Dusky grey to brownish grey; posterior edge of preopercle and opercle with a red line; lips and mouth scarlet; juveniles sometimes with narrow faint blue lines on body and below eye.



Size: To 80 cm, common 60 cm

***Plectorhinchus sordidus* (Klunzinger, 1870)**

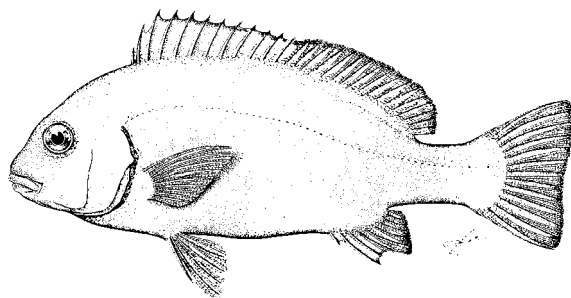
Local name(s): N: Fute; S: Fute (M), Futa (K).

Habitat: Rocks and corals, as well as shallow weedy areas.

Fisheries: Handlines, Spears, Bottom trawls.

Distinctive Characters: Lips fleshy, swollen with age; chin with 6 pores but no median pit; dorsal fin with 12 spines and 17–18 soft rays; base of soft part of dorsal fin about equal to head length; 24 to 26 gill rakers on 1st arch (9 or 10 on upper limb, 1 at corner and 14–15 on lower limb); lateral line with about 50 tubed scales; scales ctenoid (rough).

Colour: Blue grey to steel grey with areas of bronze; fins and head leaden grey; inside of mouth, edge of opercle and lips scarlet; edge of membrane at front of dorsal fin darker; juveniles colorful.



Size: To 30 cm

FAO names: Sordid rubberlip (En)
Diagramme à lèvres rouges (Fr)

***Plectorhinchus vittatus* (Linnaeus, 1758)**

Local name(s): N: Fute nyeya mweuzi; S: Fute (M), Futa (K).

Habitat: Coastal reefs and inshore rocky reefs.

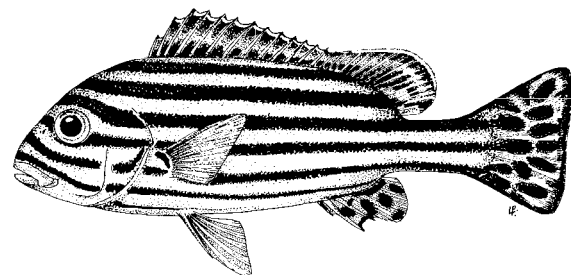
Fisheries: Handlines, Spears, Bottom trawls.

Distinctive Characters: Lips fleshy, moderately swollen with age; dorsal fin with 13 spines and 17–20 soft rays; 3rd or 4th dorsal spine longest; scales ctenoid (rough).

Colour: Varies greatly with age; juveniles with connected black blotches and spots that gradually break up in adults into horizontal bands which unite at tip of snout; pectoral fins black in juveniles, becoming uniformly yellow in adults; tail spotted with age.

(Plate XII, 110)

FAO names: Indian Ocean oriental sweetlips (En)
Diagramme oriental (Fr)



Juvenile

Size: To 70 cm

***Pomadasys argenteus* (Forsskål, 1775)**

Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

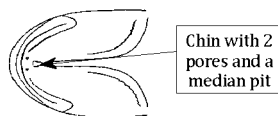
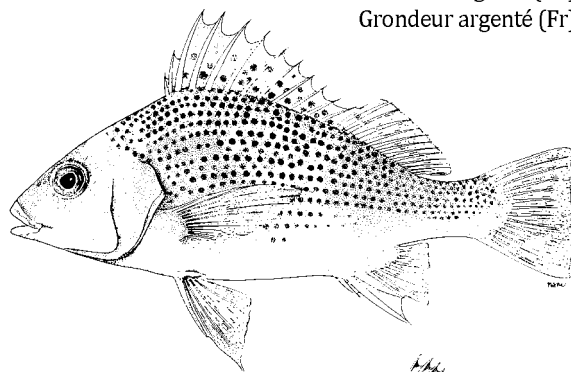
Habitat: Shallow coastal waters.

Fisheries: Bottom trawls, Traps, Gillnets, Bottom longlines.

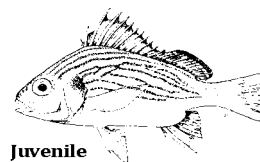
Distinctive Characters: Body ovate; head profile almost straight; mouth small; lips not thickened; dorsal fin with 12 spines and 14 soft rays; anal fin with 3 spines and 7 soft rays; 5 scale rows between lateral line and dorsal-fin origin; scales ctenoid (rough).

Colour: Juveniles pale brownish, lighter below; back with irregular longitudinal streaks; dorsal fin with dusky membrane; a dark spot on gill cover; adults silvery, with dark blotches on dorsal fin and numerous scattered dark brown to blackish spots on body.

FAO names: Silver grunt (En)
Grondeur argenté (Fr)



Underside of head



Juvenile

Size: To 52 cm

Pomadasys commersonnii (Lacepède, 1801)

Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

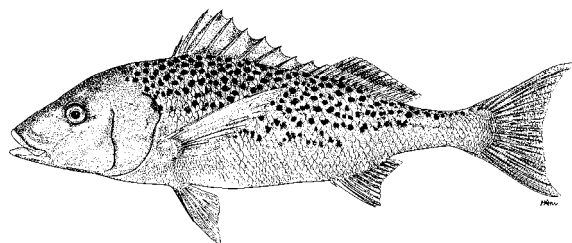
Habitat: Inhabits coastal waters, sheltered estuaries and tidal creeks.

Fisheries: Bottom trawls, Bottom longlines, Gillnets, Traps.

Distinctive Characters: Mouth small, lips fairly thick; two pores and a median pit on chin; dorsal fin with 10–11 spines and 14–15 soft rays; anal fin with 3 spines and 9–10 soft rays; scales ctenoid (rough).

Colour: Back grey or green shading to silvery white on belly; back and flanks with numerous small dark brown spots that extend onto dorsal fin but not on head; a dark spot at edge of opercle; pelvic and anal fins dark.

FAO names: Smallspotted grunter (En)



Size: To 60 cm, common 35 cm

Pomadasys furcatus (Bloch & Schneider, 1801)

Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

Habitat: Inhabits coastal waters near reefs.

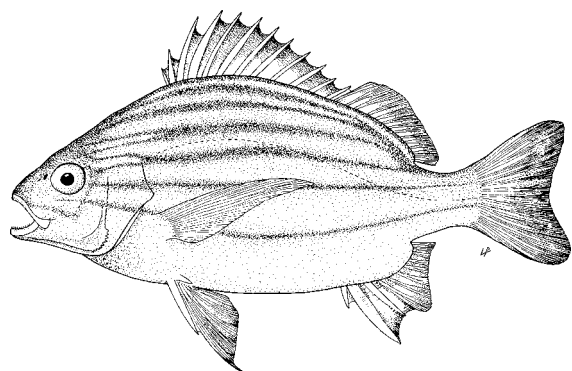
Fisheries: Handlines, Gillnets.

Distinctive Characters: Body elongate and compressed; head rounded its upper profile convex; mouth small; two pores and a median pit on chin; dorsal fin with 12 spines and 14–15 soft rays; anal fin with 3 spines and 7 soft rays; lateral line with 50 to 60 scales; 6 to 9 scale rows between lateral line and dorsal-fin origin.

Colour: Body purplish-brown above, paler below, with about 6 longitudinal dark stripes that may be bifurcate anteriorly.

(Plate XII, 111)

FAO names: Banded grunter (En)
Goret à six bandes (Fr)



Size: To 50 cm

Pomadasys kaakan (Cuvier, 1830)

(Plate XII, 112)

FAO names: Javelin grunter (En)
Grondeur javelot (Fr)

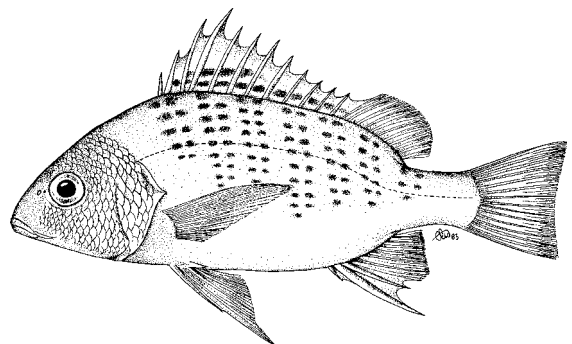
Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

Habitat: Inhabits coastal waters down to 60 m.

Fisheries: Bottom trawls, Bottom longlines, Gillnets, Traps.

Distinctive Characters: Mouth small, lips moderately thick; upper jaw reaching to level of anterior eye margin; two pores and a median pit on chin; dorsal fin with 12 spines and 13–15 soft rays; anal fin with 3 spines and 7–8 soft rays; scales moderate, ctenoid.

Colour: Body silvery grey, with about 7–11 interrupted double dark brown to greyish spots, forming transverse bars in juveniles but gradually becoming less distinct and disappearing completely with age; dorsal fin with 2–3 rows of brown spots; other fins yellow.



Size: To 80 cm, common 50 cm

***Pomadasys maculatus* (Bloch, 1793)** (Plate XIII, 113)

FAO names: Saddle grunt (En)

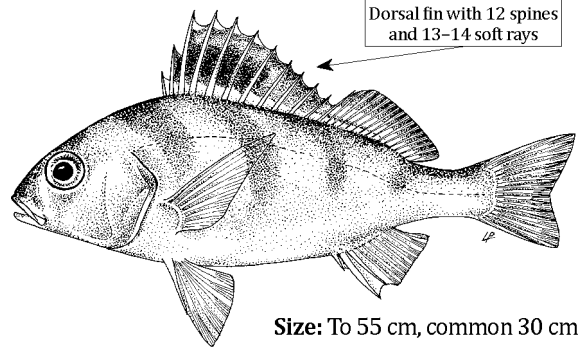
Local name(s): N: Tamamba; S: Pamamba, Sotaja (M), Paramamba (K).

Habitat: Inhabits coastal waters down to 40 m.

Fisheries: Bottom trawls, Lines, Gillnets, Traps.

Distinctive Characters: Mouth small, lips moderately thick; anal fin with 3 spines and 7 soft rays; scales ctenoid (rough).

Colour: Body silvery grey; head purplish; nape and back with a series of incomplete cross bars (the one on nape conspicuous); spiny part of dorsal fin with a large black blotch; fins yellowish.



Size: To 55 cm, common 30 cm

***Pomadasys multimaculatus* (Playfair, 1867)**

FAO names: Cock grunter (En)

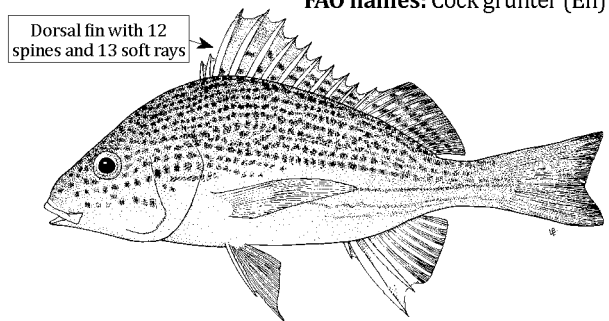
Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

Habitat: Coastal waters along sandy beaches and estuaries.

Fisheries: Bottom trawls, Seines, Spears, Gillnets.

Distinctive Characters: Mouth small; 2 pores and a median pit on chin; anal fin with 3 spines and 7 soft rays; scales ctenoid (rough).

Colour: Body and head with small dark brown spots; dorsal fin spotted like on body.



Size: To 76 cm, common 50 cm

***Pomadasys olivaceus* (Day, 1875)** (Plate XIII, 114)

FAO names: Olive grunt (En)

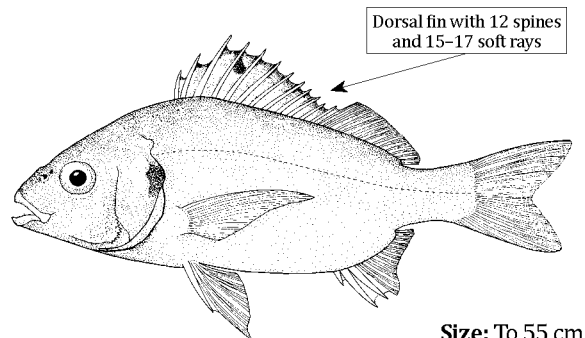
Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

Habitat: Inhabits coastal waters.

Fisheries: Bottom trawls, Bottom longlines, Handlines, Gillnets, Traps.

Distinctive Characters: Mouth small; 2 pores and a median pit on chin; anal fin with 3 spines and 11-13 soft rays; scales ctenoid (rough).

Colour: Body and head olive-grey, sometimes tinged with purple; a large blotch, bordered by yellow anteriorly at upper angle of gill cover; dorsal fin with fine brown dots.



Size: To 55 cm

***Pomadasys stridens* (Forsskål, 1775)**

FAO names: Striped piggy (En)

Goret à trois bandes (Fr)

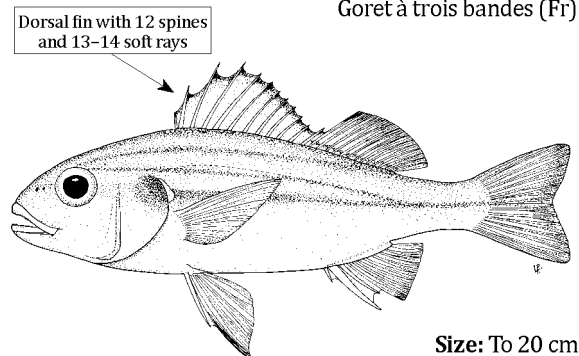
Local name(s): N: Tamamba; S: Pamamba (M), Paramamba (K).

Habitat: Inhabits coastal waters.

Fisheries: Handlines, Longlines, Bottom trawls.

Distinctive Characters: Mouth small; anal fin with 3 spines and 7 soft rays; pectoral-fin tip when vented, equal or reaching past the pelvic-fin tip; 10 scales between lateral line and dorsal-fin origin; scales ctenoid (rough).

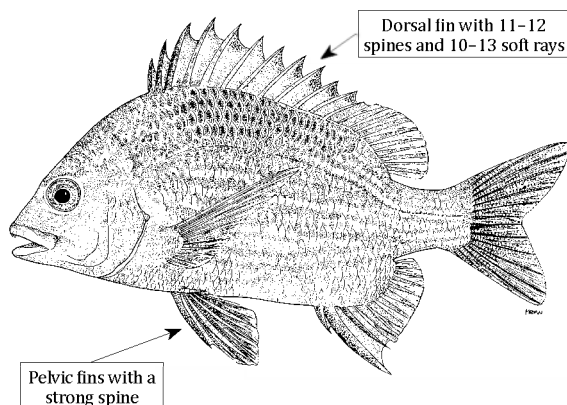
Colour: Body brown above, white below with three brown to golden stripes on body; a dark spot present on opercle.



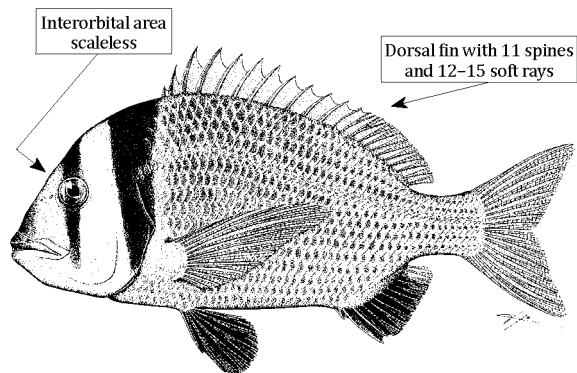
Size: To 20 cm

SPARIDAE

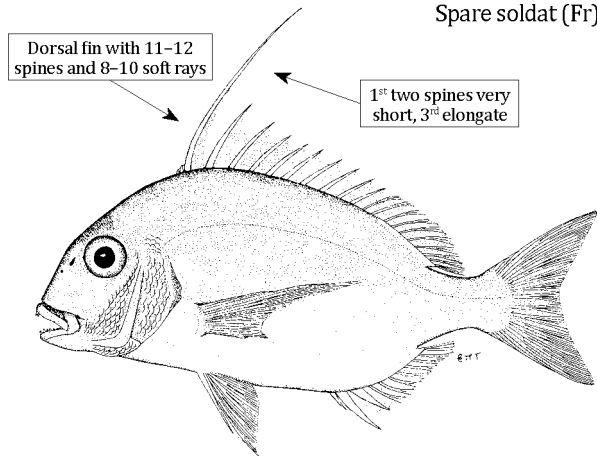
Porgies – Seabreams

Acanthopagrus berda (Forsskål, 1775) (Plate XIII, 115)FAO names: Goldsilk seabream (En)
Pagre berda (Fr)**Local name(s):** N: Tuku, Chuku; S: Chena (M), Njona (K).**Habitat:** Demersal in coastal waters.**Fisheries:** Bottom trawls, Handlines, Stake traps, Longlines.**Distinctive Characters:** Ventral profile almost straight to anus; anal fin with 3 spines and 8–9 soft rays, 1st spine short, 2nd spine flattened laterally, longer and stronger than 3rd; caudal fin moderately forked.**Colour:** Grey, dark silver or olive–brown with silvery or brassy reflections; upper part of body and scale bases, darkest; lower part of head and body paler; a dark edge along opercle; spiny dorsal fin with a dark edge and spines often silvery; pectoral fins dusky.

Size: To 90 cm, common 30 cm

Acanthopagrus bifasciatus (Forsskål, 1775) (Plate XIII, 116)FAO names: Twobar seabream (En)
Pagre double bande (Fr)**Local name(s):** N: Tuku; S: Chena (M), Njona (K).**Habitat:** Shallow coastal waters, mainly around coral reefs; enters estuaries and bays.**Fisheries:** Bottom trawls, Handlines, Longlines, Stake traps.**Distinctive Characters:** Anal fin with 3 spines and 10–12 soft rays, 1st spine short, 2nd the strongest and slightly longer than 3rd; caudal fin forked.**Colour:** Body yellow above, silvery below, head silvery; 2 vertical black bars across head, the 1st ending below angle of jaw, the 2nd larger, from nape across opercle to its inferior edge; dorsal fin yellow; pectoral and caudal fins brightly yellow; pelvic and anal fins black.

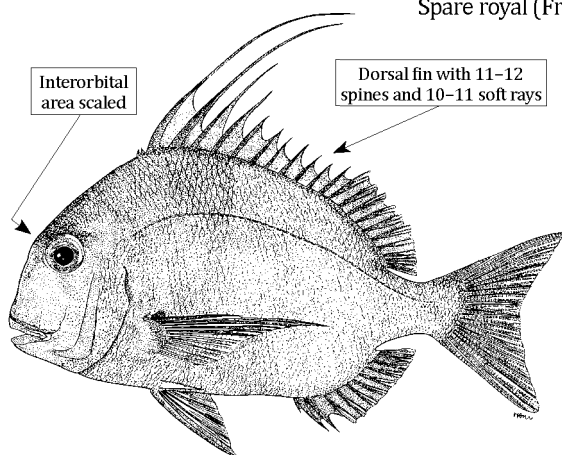
Size: To 50 cm, common 35 cm

Argyrops filamentosus (Valenciennes, 1830)FAO names: Soldierbream (En)
Spare soldat (Fr)**Local name(s):** N: Tuku; S: Chena (M), Njona (K).**Habitat:** Found on reefs.**Fisheries:** Bottom trawls, Handlines, Longlines.**Distinctive Characters:** Scaled area between eyes broad (occupying full width of interorbital space) U-shaped at end; anal fin with 3 spines and 8 soft rays, 2nd spine usually longer and stouter than 3rd spine; caudal fin deeply emarginate with pointed lobes.**Colour:** Pink with a bluish overlay; belly and chin silvery white; dorsal, caudal and pectoral fins pink; anal and pelvic fins pale pink; red spot on upper margin of opercle.

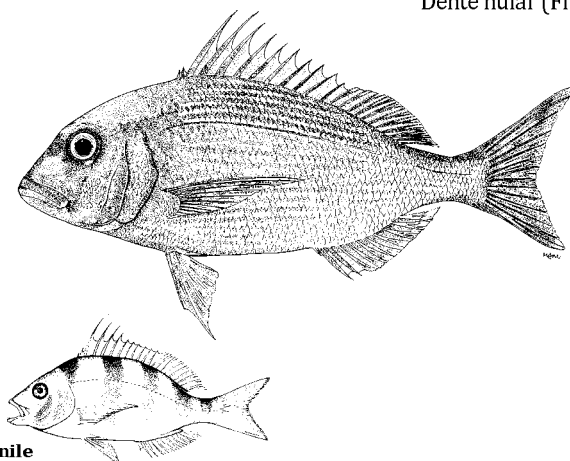
Size: To 70 cm, common 40 cm

Argyrops spinifer (Forsskål, 1775)

(Plate XIII, 117)

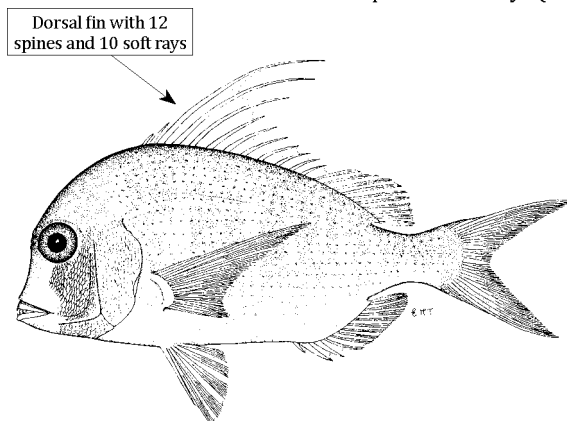
FAO names: King soldier bream (En)
Spare royal (Fr)**Local name(s):** N: Tuku; S: Chene zuki (M), Njona (K).**Habitat:** Bottom dwelling species, common from 5 m to 100 m.**Fisheries:** Bottom trawls, Longlines, Handlines, Stake traps.**Distinctive Characters:** Scaled area between eyes narrow, ending in a point; first 2 spines of dorsal fin very short, 3rd to 7th flattened and much elongated (in young reaching to a level of caudal fin, shorter in old fish); anal fin with 3 spines (2nd and 3rd sub-equal) and 8–10 soft rays; caudal fin deeply emarginate to forked with pointed lobes.**Colour:** Body mainly silvery–pinkish, darker on head; usually dark red on margin of upper part of opercle; all fins red; young fish with several vertical red bars on body.

Size: To 70 cm, common 30 cm

Cheimarius nufar (Valenciennes, 1830)FAO names: Santer seabream (En)
Denté nufar (Fr)**Local name(s):** N: Tuku; S: Chena (M), Njona (K).**Habitat:** Rocky bottoms from 60 m to 100 m.**Fisheries:** Longlines, Handlines, Bottom trawls.**Distinctive Characters:** Molars absent; dorsal fin single with 11–12 spines and 10–11 rays, the 1st two spines short, 3rd to 7th elongate (shorter in adults); anal fin with 3 spines and 8 rays; 1st pelvic ray elongate; caudal fin forked with pointed lobes.**Colour:** Rosy–pink above, silvery below (turns to purplish–pink after death); juveniles with 6 darker pink bars across head and pectoral fins rosy; anal and pelvic fins bluish with pink streaks in centre of rays.

Juvenile

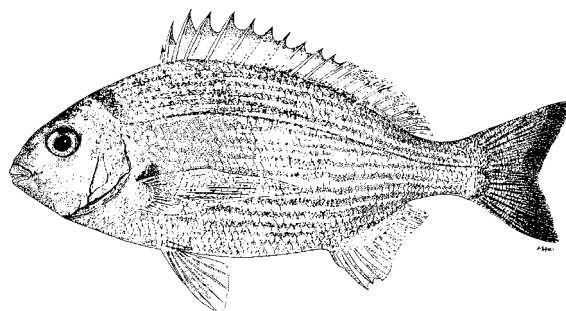
Size: To 75 cm, common 30 cm

Chrysoblephus lophus (Fowler, 1925)FAO names: False red stumpnose (En)
Spare à front rayé (Fr)**Local name(s):** N: Tuku; S: Chena kiziwa (M), Njona (K).**Habitat:** Muddy bottoms in shallow coastal waters, down to 50 m.**Fisheries:** Beach seines, Handlines, Stake traps, Gillnets.**Distinctive Characters:** Head profile very steep, concave from above upper lip to corrugated bony interorbital space which becomes more pitted between eyes with growth; scales on head extending to bony interorbital space above nostrils; cheek scales with a forward extension of smaller scales along suborbital space below eye.**Colour:** Red with lighter bars up from belly, becoming yellow above midline; red and yellow lines across bony interorbital.

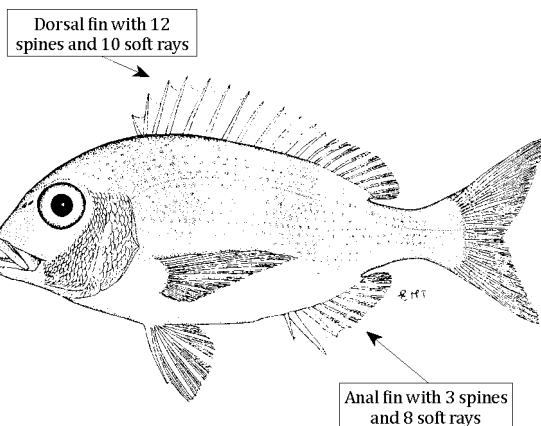
Size: To 50 cm, common 35 cm

Crenidens crenidens (Forsskål, 1775)

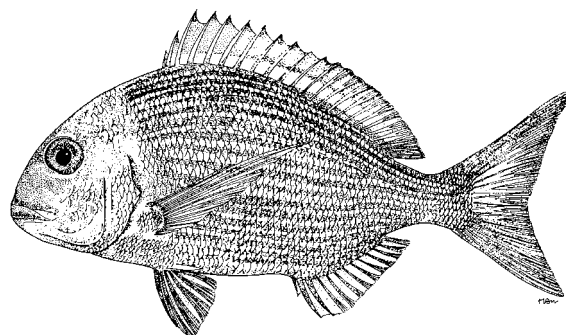
(Plate XIII, 118)

FAO names: Karanteen seabream (En)
Saupe de Mer Rouge (Fr)**Local name(s):** N: Tuku; S: Chena kiziwa (M), Njona (K).**Habitat:** Muddy bottoms in shallow coastal waters.**Fisheries:** Beach seines, Handlines, Stake traps, Gillnets.**Distinctive Characters:** In each jaw, 2 series of incisors, the cutting edge of each with five points; molariform teeth absent; dorsal fin with 11 spines and 11 rays, 3rd and 4th spines the longest; anal fin with 3 spines and 10 rays, 2nd spine stouter than 3rd; caudal fin forked.**Colour:** Silvery, greenish-blue or olive above; darker, narrow longitudinal stripes along scale rows from level of pectoral fins dorsally; fins dull yellowish or olive; dorsal fin darkened marginally; axil of pectoral fins sometimes darkish.

Size: To 30 cm, common 25 cm

Polysteganus coeruleopunctatus (Klunzinger, 1870)FAO names: Blueskin seabream (En)
Denté à points bleus (Fr)**Local name(s):** N: Tuku; S: Chena njona (K).**Habitat:** Mainly in deep waters around reefs.**Fisheries:** Longlines, Handlines, Bottom trawls.**Distinctive Characters:** Mouth subterminal, large, the maxilla reaching to anterior eye margin; outer teeth canines not very strong, 4 in upper, 6 in lower jaw; molars absent; pectoral fins long, reaching to beyond anal spines; caudal fin forked.**Colour:** Deep rosy-pink above, silvery below; a blue spot on each scale on dorsal half of body forming longitudinal lines of blue spots along scale rows; dorsal, anal, caudal and pectoral fins rosy pink; pelvic fins pink basally with distal 2/3 blue; eye deep ruby with silver reflections.

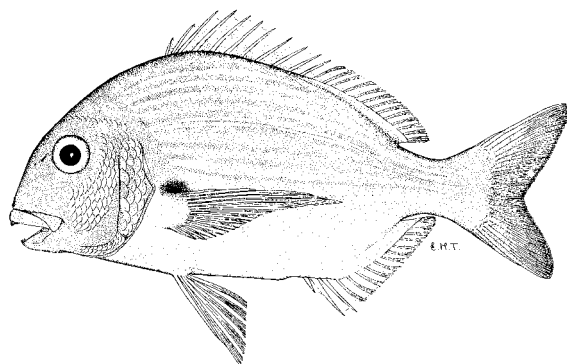
Size: To 60 cm, common 35 cm

Rhabdosargus sarba (Forsskål, 1775)FAO names: Goldlined seabream (En)
Sargue doré (Fr)**Local name(s):** N: Tuku; S: Chena (M), Njona (K).**Habitat:** Benthic in coastal waters, sometimes entering estuaries.**Fisheries:** Bottom trawls, Gillnets, Longlines, Handlines, Stake traps.**Distinctive Characters:** Dorsal fin single, with 11–12 slender spines and 13–15 soft rays, 3rd and 4th spines longest; anal fin with 3 spines and 11 soft rays, 2nd and 3rd spines sub equal; pectoral fins long; pelvic fins not reaching anus; caudal fin forked; 6 or 7 scale rows between lateral line and 4th dorsal spine.**Colour:** Body bright silver-grey; each scale with a golden centre forming longitudinal lines on body; belly with a bright yellow band starting at pelvic fin and flaring upward and backward; lower caudal-lobe yellow with tip and lower edge whitish.

Size: To 80 cm, common 45 cm

***Rhabdosargus thorpei* Smith, 1979**

FAO names: Bigeye stumpnose (En)

Local name(s): N: Tuku; S: Chena (M), Njona (K).**Habitat:** Shoals congregate in rivers and many enter estuaries.**Fisheries:** Bottom trawls, Gillnets, Longlines, Handlines, Stake traps.**Distinctive Characters:** At front of both jaws, 6 enlarged incisiform teeth; dorsal fin single, with 11 slender spines and 13 soft rays; anal fin with 3 spines and 12 soft rays; 6½ or 7 scale rows between lateral line and 4th dorsal spine; dorsal and anal fins with a basal sheath.**Colour:** Bright yellow on ventral part of body including pelvic and anal fins.

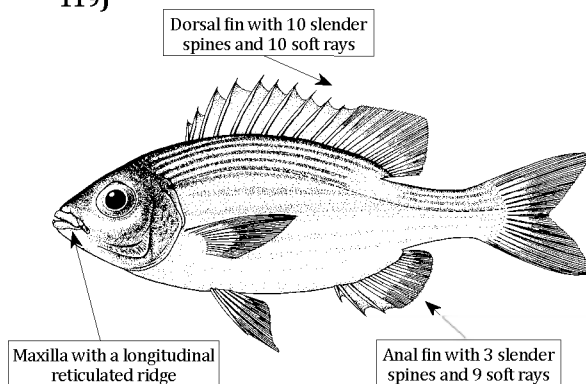
Size: To 40 cm, common 30 cm

LETHRINIDAE

Emperors – Scavengers – Large-eye breams

***Gnathodentex aureolineatus* (Lacepède, 1802)**

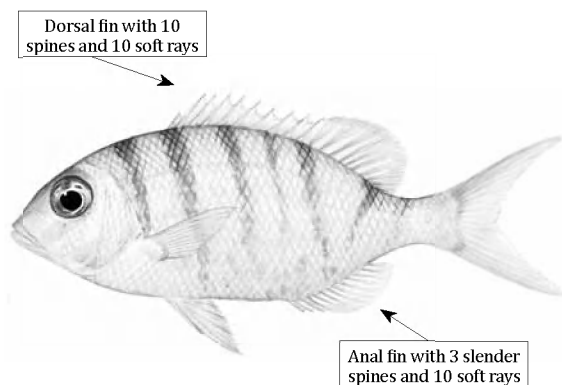
(Plate XIII, 119) FAO names: Striped large-eye bream (En)

Local name(s): N: Changu/Tangu; S: Changu (M/K).**Habitat:** Coral reefs from 3 m to 20 m; forms compact aggregations.**Fisheries:** Traps, Gillnets, Handlines, Seines, Spears.**Distinctive Characters:** Head profile straight in front of a large eye; 2 close-set, round nasal openings in front of eye; caudal fin forked with pointed tips.**Colour:** Body above lateral line dark brown with a pale green spot on each scale; whitish longitudinal stripes on body; a conspicuous yellow blotch with a pearly white centre on body below last dorsal soft rays; spiny parts of dorsal and anal fins and caudal fin, light red.

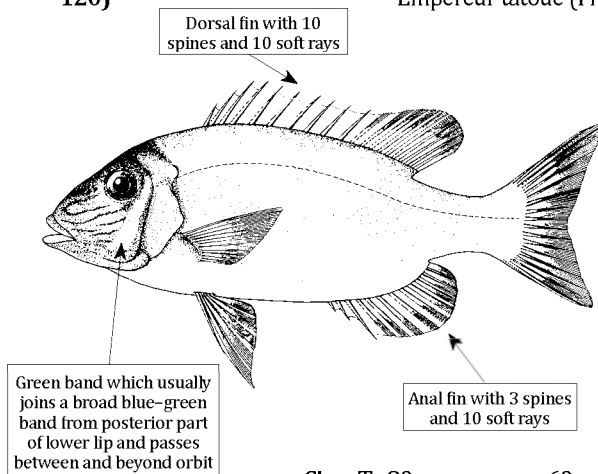
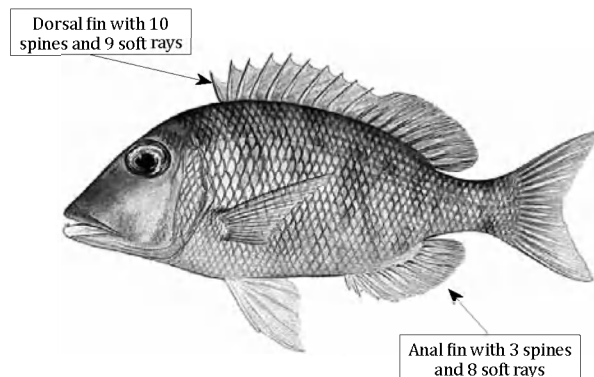
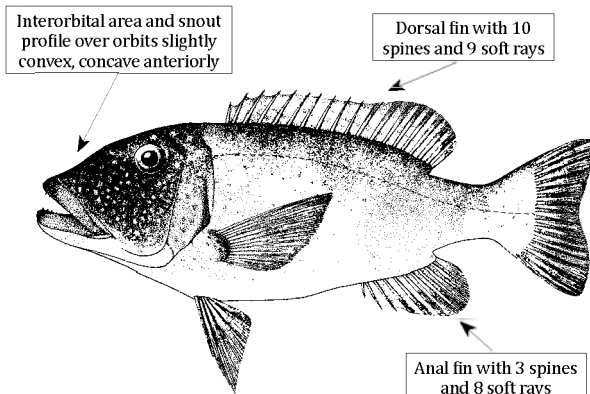
Size: To 30 cm, common 20 cm

***Gymnocranius elongatus* Senta, 1973**

FAO names: Forktail large-eye bream (En)

Local name(s): N: Changu/Tangu; S: Changu (M/K).**Habitat:** Benthic on the continental shelf from 50 m to 100 m.**Fisheries:** Traps, Gillnets, Handlines, Seines, Spears.**Distinctive Characters:** Eye diameter usually about equal to the length of the snout; outer surface of maxilla smooth; hind tip of maxilla not reaching a vertical from anterior nostril; 3rd dorsal-fin spine longest; inner surface of pectoral-fin base scaleless.**Colour:** Overall silvery, sometimes slightly brownish dorsally; about 8 transverse brown bars on sides, the first crossing through eye, the remainder below dorsal fin and across caudal peduncle; dorsal fin often splashed with red spots; caudal-fin margins and tips often deep red.

Size: To 35 cm, common 25 cm

Gymnocranius grandoculis* (Valenciennes, 1830)*(Plate XIII, 120)** FAO names: Blue-lined large-eye bream (En)
Empereur tatoué (Fr)**Local name(s):** N: Changu/Tangu; S: Changu chauzio (M), Changu (K).**Habitat:** Benthic on the continental shelf and offshore rocky bottoms, from 50 m to 100 m.**Fisheries:** Bottom longlines, Bottom trawls.**Distinctive Characters:** Dorsal profile of head smoothly convex; eye moderate in size; maxilla with a smooth surface; caudal fin forked with pointed lobes; inner surface of pectoral-fin base scaleless.**Colour:** Silvery grey-blue above, silvery white below; cheeks, snout and opercle with conspicuous wavy blue lines in fresh specimens; upper and lower edges of caudal fin blue with submarginal band of salmon-pink; juveniles silvery with dark brown bars and oblique bands on body.**Size:** To 80 cm, common 60 cm***Lethrinus borbonicus* Valenciennes, 1830****(Plate XIV, 121)** FAO names: Snubnose emperor (En)**Local name(s):** N: Changu/Tangu; S: Changu (M/K).**Habitat:** During daytime in sandy areas near reefs, sometimes in groups, but solitary at night. Maximum depth 40 m.**Fisheries:** Traps, Bottom trawls, Handlines, Seines.**Distinctive Characters:** The inner surface of the pectoral-fin base is densely scaled; posterior angle of the operculum is fully scaled; cheek without scales.**Colour:** Body greenish-grey or yellow-brown; irregular patterns of broken dusky bars on sides; caudal fin and soft portion of dorsal-fin margins reddish.**Size:** To 40 cm, common 25 cm***Lethrinus erythracanthus* Valenciennes, 1830****FAO names:** Orange-spotted emperor (En)
Empereur capitaine (Fr)**Local name(s):** N: Changu/Tangu; S: Changu (M/K).**Habitat:** Inhabits deep lagoons and channels, outer reefs slopes and adjacent soft bottom areas, from 20 m to 120 m.**Fisheries:** Handlines, Longlines, Traps, Bottom trawls.**Distinctive Characters:** Pectoral fins almost equal to head length; inner surface of pectoral-fin bases scaled; cheek without scales; 4 ½ scale rows between lateral line and base of middle dorsal-fin spines.**Colour:** Body pale green-yellow, lighter below, with 5 or 6 bright orange-yellow longitudinal stripes; head yellow-brown; opercular and preopercular margins and top of eye all bright red; dorsal and caudal fins purple-red, other fins orange-yellow.**(Plate XIV, 122)****Size:** To 70 cm, common 50 cm

Lethrinus genivittatus Valenciennes, 1830

FAO names: Longspine emperor (En)

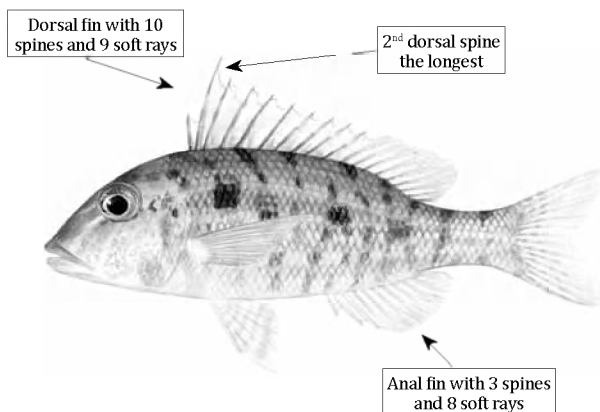
Local name(s): N: Changu/Tangu; S: Changu chakufa (M), Change dizi (K).

Habitat: Benthic on the continental shelf and offshore rocky bottoms from 50 m to 100 m.

Fisheries: Beach Seines, Gillnets, Traps, Handlines.

Distinctive Characters: Posterior nostril an oblong nearly vertical opening, about halfway between orbit and anterior nostril; outer surface of maxilla with a distinct knob; 4 ½ scale rows between lateral line and base of middle dorsal-fin spines.

Colour: Body tan or brown on upper sides, lower sides white with three brown or tan stripes; sides often with scattered irregular black oblique bars and a square black blotch above the pectoral fins and bordering below the lateral line.



Size: To 50 cm, common 30 cm

Lethrinus harak (Forsskål, 1775) (Plate XIV, 123)FAO names: Thumbprint emperor (En)
Empereur Saint Pierre (Fr)

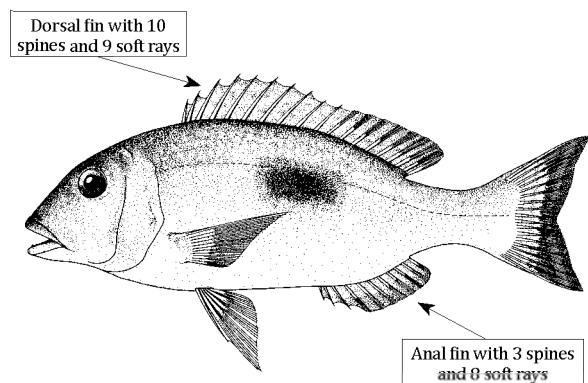
Local name(s): N: Changu/Tangu; S: Changu chakufa (M), Change dizi (K).

Habitat: Shallow sandy areas, coral rubble, mangroves, lagoon and seagrass areas, inshore and adjacent to coral reefs down to 20 m.

Fisheries: Beach Seines, Gillnets, Traps, Handlines.

Distinctive Characters: Mouth slightly protractile; interorbital space moderately convex; snout profile straight; maxilla reaching opposite anterior nostrils; cheek without scales; 4th or 5th dorsal-fin spine the longest.

Colour: Olive green above, lighter below, belly often tinged with pink; a large black, oblong blotch present on side of body located below lateral line from 7th dorsal spine to 2nd dorsal-fin ray in level with end of pectoral fins; all fins pinkish to rosy red; vertical fins mottled or striped.



Size: To 50 cm, common 30 cm

Lethrinus lentjan (Lacepède, 1802) (Plate XIV, 124)FAO names: Pink ear emperor (En)
Empereur lentille (Fr)

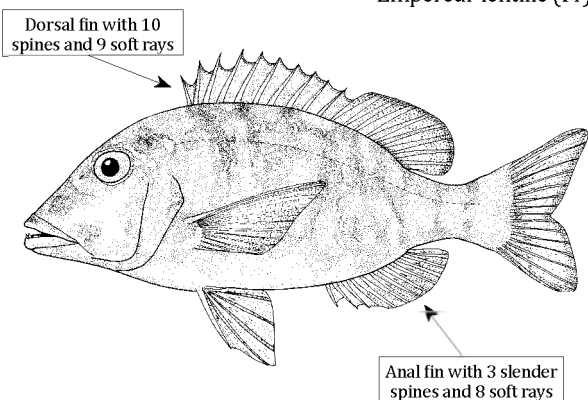
Local name(s): N: Changu-mombasi/Tangu; S: Changu njana (M/K).

Habitat: Shallow sandy bottoms in coastal areas, deep lagoons and near coral reefs down to 50 m.

Fisheries: Handlines, Traps, Beach seines, Gillnets, Bottom trawls, Bottom longlines.

Distinctive Characters: Interorbital space moderately convex; snout straight or nearly so, no hump on head; maxilla reaching opposite anterior or posterior nostril, a little short in young; inner surface of pectoral-fin bases scaleless or with only few scales.

Colour: Body green-grey above, silver below; white spots sometimes on scale centres especially above lateral line; head brownish mauve-purple; a bright red margin to opercle and usually to pectoral-fin base.



Size: To 50 cm, common 40 cm

Lethrinus mahsena (Forsskål, 1775)

(Plate XIV, 125)

FAO names: Sky emperor (En)
Empereur mahsena (Fr)

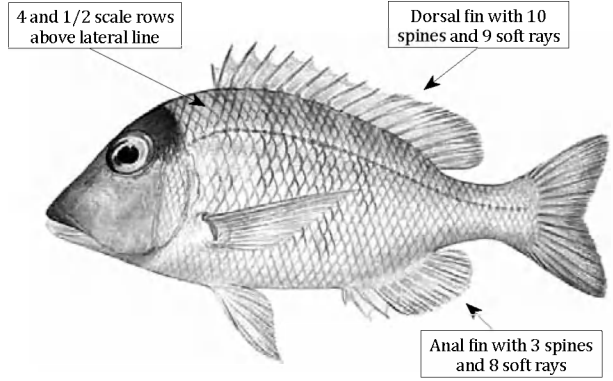
Local name(s): N: Changu chona/Chuku/Tangu;
S: Changu tukwana (M), Changu tukuwana (K).

Habitat: Coral reefs and adjacent sandy and seagrass areas from 2 m to 100 m.

Fisheries: Handlines, Traps, Bottom trawls.

Distinctive Characters: Interorbital space flat or slightly convex; snout blunt; 3rd to 6th dorsal-fin spines the longest; inner base of pectoral fins without scales.

Colour: Body olive-grey to green, becoming white below, belly tinged pink anteriorly; head brownish-green with bronze reflections on side of face; upper lip pinkish-red, scarlet at gape; dorsal and anal-fin membranes orange-red; a crimson-red blotch may be present on dorsal head profile above eye.



Size: To 65 cm, common 40 cm

Lethrinus microdon Valenciennes, 1830

(Plate XIV, 126)

FAO names: Smalltooth emperor (En)
Empereur tidents (Fr)

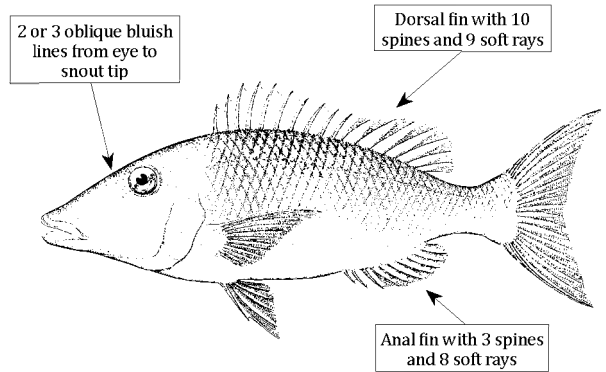
Local name(s): N: Changu borasimbo/Tangu; S: Changu domo (M), Change omoomo (K).

Habitat: Sandy areas near coral reefs; occasionally in groups with *L. olivaceus*. Maximum depth 80 m.

Fisheries: Handlines, Gillnets, Traps, Bottom trawls.

Distinctive Characters: Interorbital area gently convex; snout convex above and in front of nostrils, often slightly concave behind upper lip; 3rd dorsal-fin spine longest; inner surface of pectoral-fin base scaleless.

Colour: Olive brown, paler below, with bluish scale centres; head purple with a dark area behind eye; fins bright red, pelvic fins darker; juveniles with indistinct cross band and a dark blotch between lateral line and middle of pectoral fins; 8 vertical bands usually present on upper half of body.



Size: To 80 cm, common 40 cm

Lethrinus nebulosus (Forsskål, 1775)

(Plate XIV, 127)

FAO names: Spangled emperor (En)
Empereur moris (Fr)

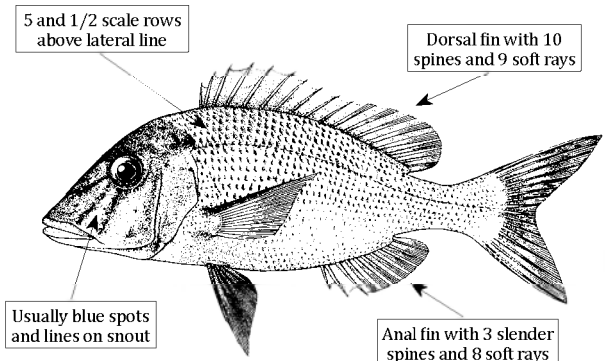
Local name(s): N: Changu mbavaa/Tangu;
S: Changu chava (M), Changu (K).

Habitat: Near shore and offshore coral reefs, lagoons, seagrass beds, mangrove swamps and coastal sand and rock areas, down to 75 m.

Fisheries: Handlines, Traps, Gillnets, Bottom trawls.

Distinctive Characters: Interorbital space convex, snout profile straight or slightly concave above nostrils, convex beyond; 3rd to 5th dorsal-fin spines longest; inner surface of pectoral-fin base scaled.

Colour: Olive-green above, paler below; each scale on the back with a white to blue centre; usually several yellow longitudinal stripes on sides, giving an overall effect of blue and yellow; fins yellow, mottled or striped with orange to red; upper margin of pectoral fins blue; pelvic fins usually dark.



Size: To 87 cm, common 70 cm

***Lethrinus olivaceus* Valenciennes, 1830**

FAO names: Longface emperor (En)

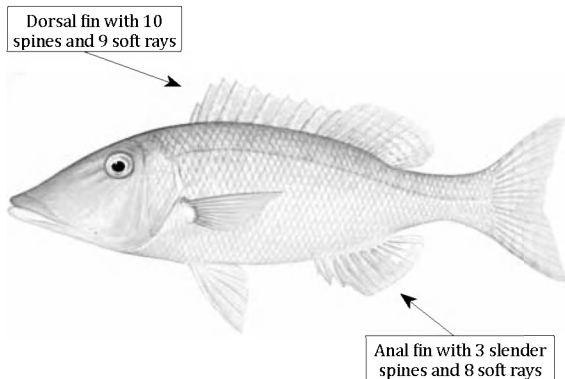
Local name(s): N: Changu mdomo/Tangu;
S: Changu domo (M), Changu/Changu domomo (K).

Habitat: Coral reefs and coastal waters to rather deep waters. Maximum depth 190 m.

Fisheries: Handlines, Gillnets, Longlines, Bottom trawls.

Distinctive Characters: Snout long and thin; lips fleshy, following profile of snout and chin respectively; 3rd dorsal-fin spine longest; cheek without scales; 5 ½ scale rows between lateral line and base of middle dorsal-fin spines; inner surface of pectoral-fin base scaleless.

Colour: Greenish-grey, with patches of brown above, lighter below, sometimes with tinge of pink; a conspicuous red line below the lips; often 2 to 3 dark streaks extending from eye toward mouth; dorsal fin often splashed with red spots; pectorals blue; pelvic and caudal fins dominantly reddish.



Size: To 100 cm, common 70 cm

***Lethrinus rubrioperculatus* Sato, 1978**

(Plate XIV, 128)

FAO names: Spotcheek emperor (En)

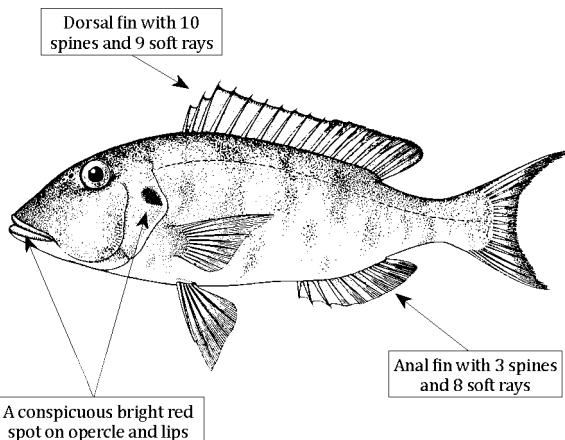
Local name(s): N: Changu chavi/Tangu; S: Changu nyavi (M/K).

Habitat: Sandy and rubble areas of outer reef slopes from 12 m to 160 m.

Fisheries: Handlines, Gillnets, Traps, Bottom trawls.

Distinctive Characters: Interorbital space flat or only slightly convex; eye placed very near dorsal profile; hind tip of maxilla reaching to or vertical from anterior nostril; 3rd and 4th dorsal-fin spines longest; caudal fin lunate, upper lobe usually longer than lower; inner surface of pectoral-fin base scaleless.

Colour: Body greyish green to purple, paler below; head often darker; fins red to orange, with brighter margins, sometimes mottled with bright red.



Size: To 50 cm, common 30 cm

***Lethrinus variegatus* Valenciennes, 1830**

(Plate XV, 129)

FAO names: Slender emperor (En)

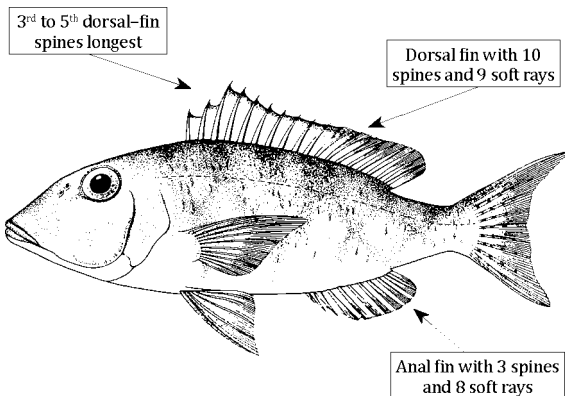
Local name(s): N: Changu/Tangu; S: Changu choo (M), Change shororo (K).

Habitat: Sandy and weedy areas near coral reefs.

Fisheries: Beach seines, Traps, Gillnets, Handlines, Longlines, Bottom trawls.

Distinctive Characters: Eye placed very near to dorsal profile; snout profile with a slight hump above nostril and a little concave anteriorly; hind tip of maxilla reaching posterior nostril; inner surface of pectoral-fin base without scales.

Colour: Body yellow to olive-green, often with a reticulated pattern enclosing white blotches and black variegated spots; 2 dark bands from eye, one straight downward, the other to upper jaw, present in juveniles (but not readily visible in adults).



Size: To 20 cm

***Lethrinus xanthochilus* Klunzinger, 1870**

Local name(s): N: Changu/Tangu; S: Changu (M), Change kiyoga (K).

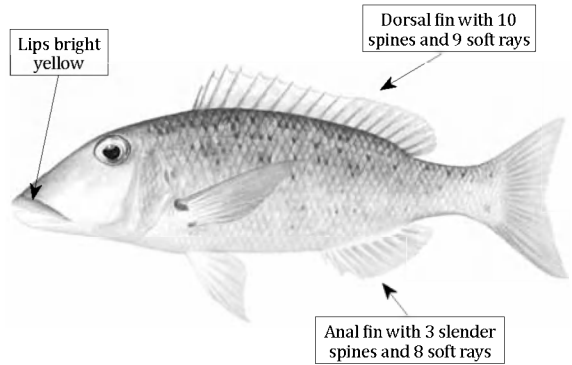
Habitat: Shallow lagoons seaward reefs, seagrass beds, sand and rubble or coral areas often in small groups.

Fisheries: Gillnets, Handlines, Traps, Bottom trawls.

Distinctive Characters: Eye placed very near dorsal profile; snout long and thin, its profile sloping gently, sometimes a small hump before eye; lips fleshy; 3rd dorsal-fin spine the longest; inner surface of pectoral-fin base scaleless.

Colour: Body yellowish-grey, often tinged with pink; yellowish-brown longitudinal bands often present on sides; sometimes small black spots scattered here and there; a red spot at upper base of the pectoral fins.

FAO names: Yellowlip emperor (En)
Empereur bec-de-cane (Fr)



Size: To 70 cm, common 60 cm

***Monotaxis grandoculis* (Forsskål, 1775)**

(Plate XV, 130) **FAO names:** Humpnose big-eye bream (En)
Empereur bossu (Fr)

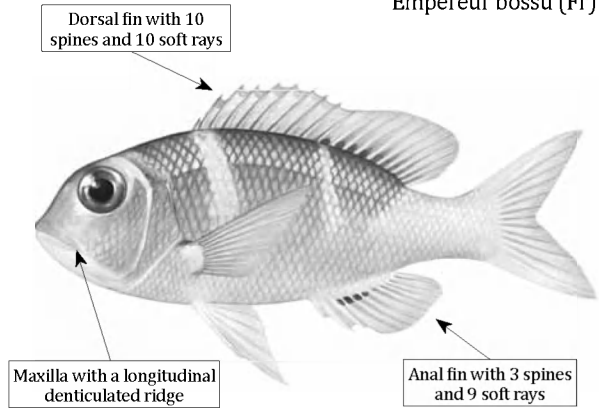
Local name(s): N: Changu/Tangu; S: Changu mawe/Macho (M), Changeu (K).

Habitat: Inhabits lagoon and seaward reefs near sand patches from 1 m to 100 m.

Fisheries: Gillnets, Traps, Spears, Handlines, Longlines.

Distinctive Characters: Head profile strongly convex in front of a large eye; caudal fin forked with pointed tips; inner surface of pectoral-fin base densely scaled.

Colour: Body bluish-grey above, paler below; lips yellow; area over and around eye yellow or orange; a narrow vertical dark band through eye; posterior part of dorsal fin with irregular dark spots at bases; in young individuals, body with 4 wide, vertical bands.



Size: To 60 cm, common 40 cm

NEMIPTERIDAE

Threadfin breams – Monocle breams – Dwarf monocle breams

***Nemipterus bipunctatus* (Valenciennes, 1830)**

Local name(s): N: Koana; S: Koana (K).

Habitat: Benthic on sandy or muddy bottoms from 18 m to 60 m.

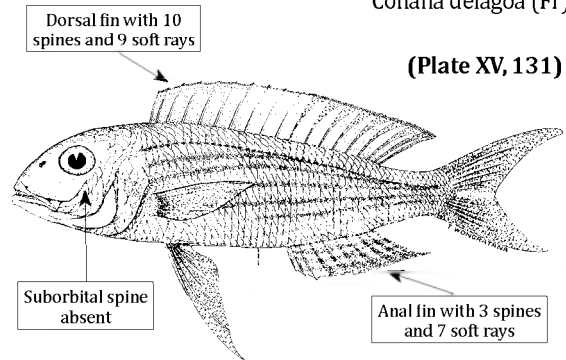
Fisheries: Handlines, Bottom trawls, Gillnets.

Distinctive Characters: Preopercle with 3 transverse scale rows; pectoral fins moderately long, reaching to or just behind anus with 2 unbranched and 16 branched rays; pelvic fins long, reaching to or just beyond level of origin of anal fin.

Colour: Upper part of body pinkish, shading to silvery on the ventral surface; 5 to 7 greenish-yellow upward-curved stripes on body below lateral line.

FAO names: Delagoa threadfin bream (En)
Cohana delagoa (Fr)

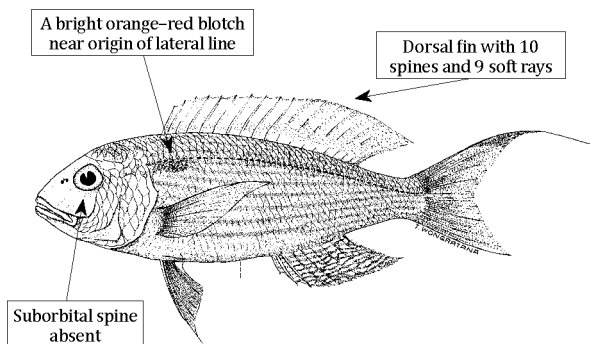
(Plate XV, 131)



Size: To 30 cm, common 25 cm

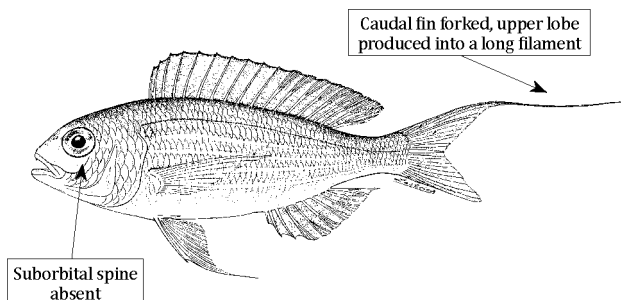
Nemipterus japonicus (Bloch, 1791)

(Plate XV, 132)

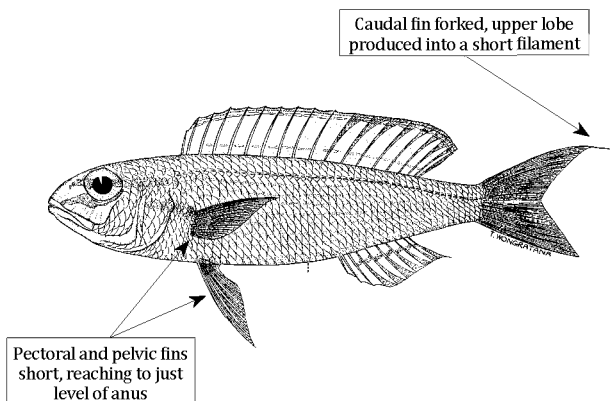
FAO names: Japanese threadfin bream (En)
Cohana japonaise (Fr)**Local name(s):** N: Koana; S: Koana (K).**Habitat:** Benthic in coastal waters, found on sandy bottoms from 5 m to 80 m.**Fisheries:** Longlines, Bottom trawls, Gillnets.**Distinctive Characters:** Anal fin with 3 spines and 7 rays; upper lobe of caudal fin prolonged into a filament; no filaments in other fins.**Colour:** Upper part of body pinkish, becoming silvery below; top of head behind eye with a golden sheen; 1–3 longitudinal yellow lines above lateral line, 7–9 below, and a yellow band along belly.**Size:** To 30 cm, common 25 cm***Nemipterus randalli*** Russell, 1986

(Plate XV, 133)

FAO names: Randall's threadfin bream (En)

Local name(s): N: Koana; S: Koana (K).**Habitat:** Benthic on sandy or muddy bottoms from 22 m to 225 m.**Fisheries:** Bottom trawls, Handlines.**Distinctive Characters:** Preopercle with 3 transverse scale rows; snout length about equal to diameter of eye; pectoral and pelvic fins very long, reaching to or just beyond level of origin of anal fin.**Colour:** Body silvery-pink with 3 or 4 faint yellow stripes on sides below lateral line; broad yellow stripe on either side of ventral midline; pinkish blotch below origin of lateral line; eye salmon pink.**Size:** To 20 cm, common 15 cm***Nemipterus zysron*** (Bleeker, 1856)

(Plate XV, 134)

FAO names: Slender threadfin bream (En)
Cohana élégante (Fr)**Local name(s):** N: Koana; S: Koana (K).**Habitat:** Benthic on sandy bottoms near rocks from 10 m to 125 m.**Fisheries:** Handlines, Bottom trawls.**Distinctive Characters:** Snout length about equal to or less than diameter of eye; suborbital spine absent; preopercle with 3 transverse scale rows.**Colour:** Upper part of body reddish, silvery below; yellow stripes in front of eye through nostrils, and from upper lip to beneath eye; less distinct golden stripe from behind eye to origin of lateral line.**Size:** To 25 cm

***Parasclopsis eriomma* (Jordan & Richardson, 1909)**

FAO names: Rosy dwarf monocle bream (En)
Mamila rosée (Fr)

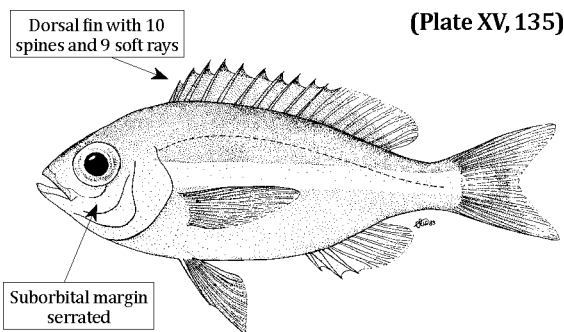
Local name(s): N: Chenda mashimo; S: Changu doa (M), Mbalamwezi (K).

Habitat: Benthic on sandy or muddy bottoms in offshore waters from 25 m to 175 m.

Fisheries: Longlines, Bottom trawls.

Distinctive Characters: Small rudimentary spine below eye; head scales reaching forward to between middle of eyes; pectoral fins with 2 unbranched and 14–15 branched rays; anal fin with 3 spines and 7 soft rays.

Colour: Overall pinkish; a broad yellowish longitudinal band along middle of body from above pectoral fins to base of caudal fin.



Size: To 30 cm

***Scolopsis bimaculata* Rüppell, 1828** (Plate XV, 136)

FAO names: Thumbprint monocle bream (En)
Mamila Saint Pierre (Fr)

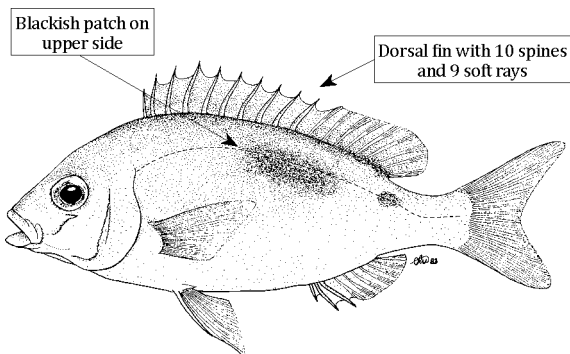
Local name(s): N: Chenda mashimo; S: Changu doa (M), Mbalamwezi/Dizi (K).

Habitat: Benthic in inshore waters usually on coral reefs or on sandy bottoms near coral reefs down to 60 m.

Fisheries: Bottom trawls, Handlines, Traps, Gillnets, Seines.

Distinctive Characters: A stout, backward projecting spine just below eye; anal fin with 3 spines and 7 soft rays; pectoral fins with 2 unbranched rays and 15 to 17 (usually 16) branched rays.

Colour: Upper body grey, whitish below; a blue stripe joining eyes; fins generally pale grey.



Size: To 31 cm, common 15 cm

***Scolopsis frenata* (Cuvier, 1830)**

FAO names: Bridled monocle bream (En)
Mamila de Seychelles (Fr)

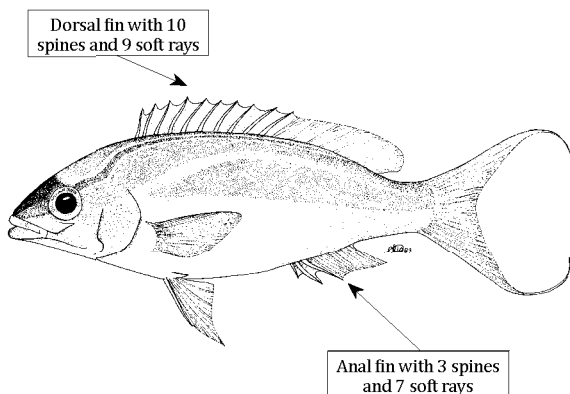
Local name(s): N: Chenda mashimo; S: Changu doa (M), Kanga macho (K).

Habitat: Inhabits sandy bottoms close to coral reefs; occurs in small groups.

Fisheries: Bottom trawls, Handlines, Traps, Gillnets.

Distinctive Characters: A stout, backward-projecting spine just below eye; predorsal scales (on top of head) reaching forward to, or about to level of posterior nostrils.

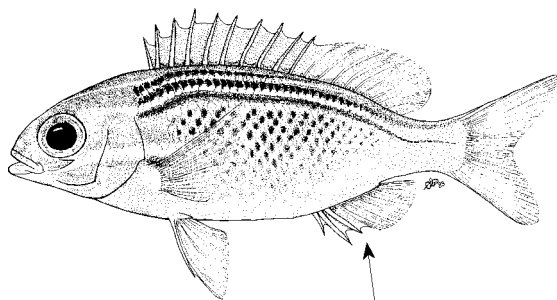
Colour: White on lower half; upper half dark brown to greenish; a silvery band from snout to below eye, sometimes continued onto opercle; a broad yellow band from upper part of eye and arching along dorsal profile to end of dorsal fin, bordered above and below with a broad band of brown or dark green; a light blue area just below lower dark green band.



Size: To 26 cm, common 17 cm

Scolopsis ghanam (Forsskål, 1775)

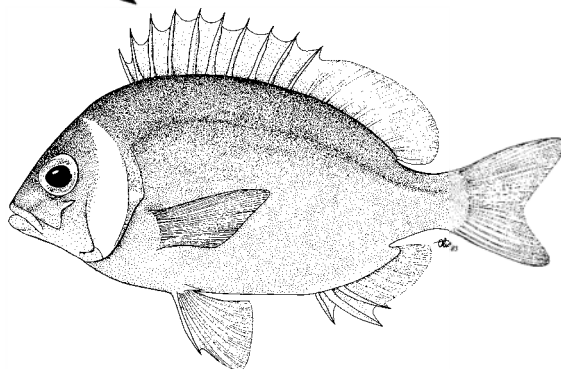
(Plate XV, 137)

FAO names: Arabian monocle bream (En)
Mamila arabe (Fr)**Local name(s):** N: Chenda mashimo; S: Changu doa (M), Kanga macho (K).**Habitat:** Benthic in inshore waters on shallow sandy bottoms close to coral reefs.**Fisheries:** Bottom trawls, Handlines, Traps, Gillnets.**Distinctive Characters:** A stout, backward projecting spine just below eye; pectoral fins with 2 unbranched and 14 branched rays; pelvic fins long, reaching to or just beyond level of anus; axillary scale present.**Colour:** Body silvery-grey with numerous black or dark brown spots on sides; 2–3 narrow brown-black longitudinal stripes with white spaces in between.Anal fin with 3 spines
and 7 soft rays

Size: To 30 cm, common 12 cm

Scolopsis vosmeri (Bloch, 1792)

(Plate XV, 138)

FAO names: Whitecheek monocle bream (En)
Mamila joues blanches (Fr)**Local name(s):** N: Chenda mashimo; S: Changu doa (M), Dizi (K).**Habitat:** Benthic inshore waters, usually on sandy or muddy bottoms close to reefs.**Fisheries:** Bottom trawls, Handlines, Traps.**Distinctive Characters:** Snout with a backward-pointing spine just below eye, preceded by a small forward-pointing spine; pectoral fins with 2 unbranched and 16–17 branched rays; anal fin with 3 spines and 7 soft rays; pelvic fins long, reaching to or just beyond level of anus; axillary scale present.**Colour:** Body colour usually dark with a reddish-purple tinge; a broad, white vertical band from top of head on to gill covers; scales on sides of body with dark spots; fins greyish, tinged red.Dorsal fin with 10
spines and 9 soft rays

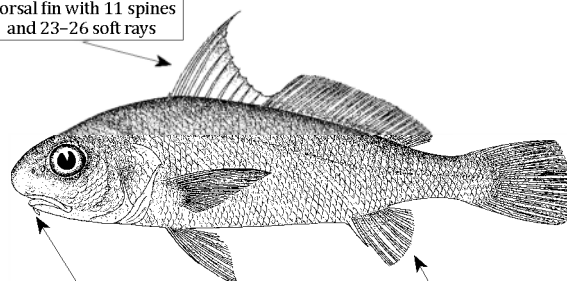
Size: To 25 cm, common 15 cm

SCIAENIDAE

Croakers – Drums – Meagres – Weakfishes

Johnius amblycephalus (Bleeker, 1855)

FAO names: Bearded croaker (En)

Local name(s): N: Gufadi; S: Gufadhi (M), Kowe, Beha (K).**Habitat:** Shoaling fish of shallow coastal waters and estuarine waters. Maximum depth 40 m.**Fisheries:** Bottom trawls, Beach seines.**Distinctive Characters:** Mouth inferior; teeth differentiated into large and small in upper jaw only, the large ones forming outer close-set series; pectoral fins moderately long, about 3/4 of head length; caudal fin rhomboid; scales on body cycloid (smooth); 6–9 gill rakers on lower limb of 1st arch.**Colour:** Body black, upper part of the rather high spiny dorsal fin black; no other distinctive markings.Dorsal fin with 11 spines
and 23–26 soft raysA blunt barbel
without pore at
tip of chinAnal fin with 2 spines
and 7 soft rays

Size: To 25 cm, common 15 cm

Johnius dussumieri (Cuvier, 1830)

(Plate XVI, 139)

FAO names: Sin croaker (En)

Local name(s): N: Gufadi; S: Gufadhi (M), Kowe, Beha (K).

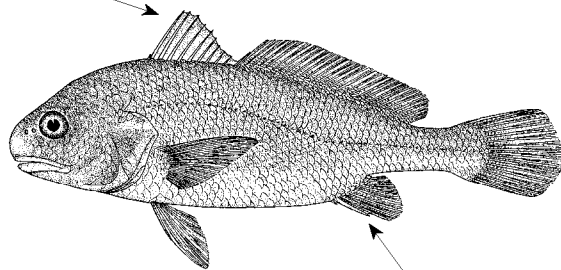
Habitat: Inshore and coastal waters down to 40 m.

Fisheries: Bottom trawls, Gillnets, Seines.

Distinctive Characters: Mouth small and subterminal; small and large teeth both in upper and lower jaw; enlarged outer teeth widely spaced; 12–16 gill rakers on lower limb of 1st gill arch; pectoral fins moderately long, about 3/4 of head length; caudal fin rhomboid.

Colour: Dusky brown on back, lighter below; upper part of dorsal fin black and black spot at base of pectoral fins; opercular opening with a black blotch.

Dorsal fin with 9–10 spines and 25–30 soft rays



Anal fin with 2 spines and 7–8 soft rays

Size: To 40 cm

Otolithes ruber (Bloch & Schneider 1801)

FAO names: Tigertooth croaker (En)

Grande verrueigre (Fr)

Local name(s): N: Gufadi; S: Gufadhi (M), Kowe, Beha (K).

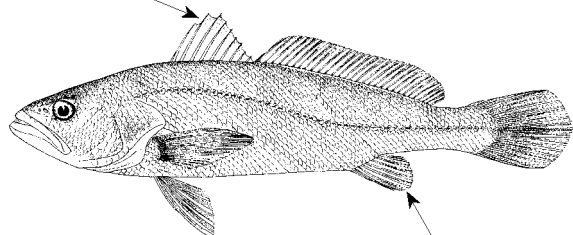
Habitat: Coastal waters, sheltered bays and estuarine systems; tolerant to turbid waters and wide range of salinities. Maximum depth 40 m.

Fisheries: Bottom trawls, Gillnets, Handlines.

Distinctive Characters: Body slender; greatest depth 4–5 times in standard length; mouth large, terminal, slightly upturned; 1–2 pairs of strong canines in upper jaw and 1 pair at tip of lower jaw; 8–11 gill rakers on lower limb of 1st arch; caudal fin rhomboid (pointed in juveniles).

Colour: Brownish above; silvery with a golden sheen on flanks and belly, often with oblique dark streaks dorsally.

Dorsal fin with 9–10 spines and 27–30 soft rays



Anal fin with 2 spines and 7–8 soft rays

Size: To 90 cm, common 40 cm

Umbrina canariensis Valenciennes, 1843

FAO names: Canary drum (En)

Ombrine bronze (Fr)

Local name(s): N: Gufadi; S: Gufadhi (M), Kowe, Beha (K).

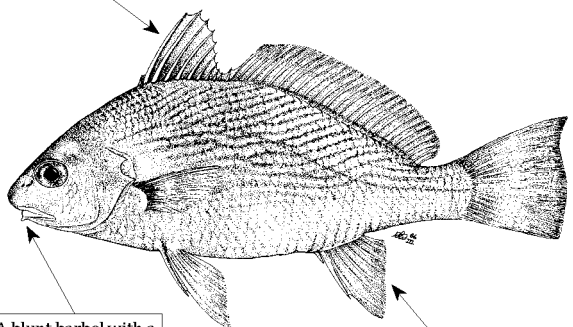
Habitat: Sluggish, usually in shallow waters along rocky shores or bays. Maximum depth 40 m.

Fisheries: Bottom trawls.

Distinctive Characters: Snout rounded, mouth inferior; maxilla reaching to middle of eye; pectoral fins moderate about 3/4 of head length; caudal fin wedge-shaped; scales cycloid (smooth) on snout, ctenoid (rough to touch) elsewhere; scales present on anal-fin base.

Colour: Body with about 9 sinuous brown bands; a dark blotch at pectoral-fin axil; 1st part of dorsal fin black; a black band along the length of 2nd dorsal and anal fins; pelvic fins black.

Dorsal fin with 11 spines and 27–29 soft rays



A blunt barbel with a pore at tip of chin

Anal fin with 2 spines and 7 soft rays

Size: To 80 cm

Umbrina ronchus Valenciennes, 1843 *

FAO names: Fusca drum (En)

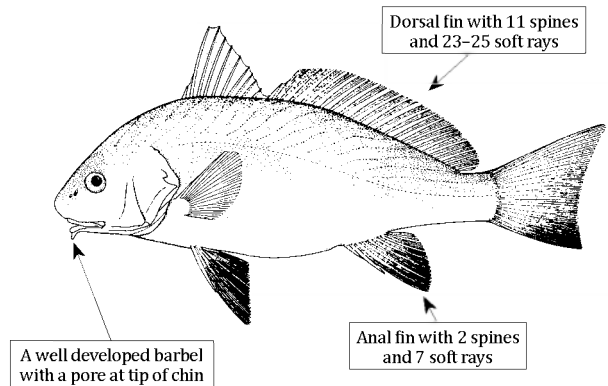
Local name(s): N: Gufadi; S: Gufadhi (M), Kowe, Beha (K).

Habitat: Inhabits inshore and coastal waters. Maximum depth 50 m.

Fisheries: Bottom trawls, Handlines.

Distinctive Characters: Eye small; snout rounded, mouth inferior and horizontal; caudal fin sub-truncate in adults; scales ctenoid (rough) on head and body.

Colour: Greyish above; body with about 20 distinct dark oblique streaks; pectoral-fins axil with a dark spot; spiny part of dorsal and pelvic fins black, soft part of dorsal fin with a dark margin.



Size: To 100 cm, common 50 cm

MULLIDAE

Goatfishes – Red mullets

Mulloidichthys flavolineatus (Lacepède, 1801)

(Plate XVI, 140) FAO names: Yellowstripe goatfish (En)
Capucin à bande jaune (Fr)

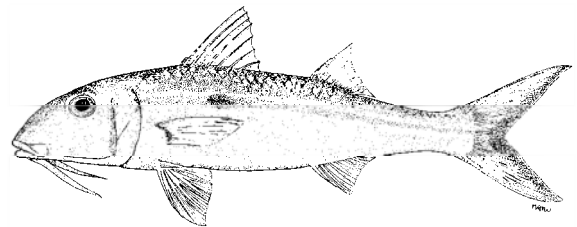
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Shallow waters on sandy bottoms of calm lagoons and bays.

Fisheries: Traps, Hooks and Line, Spears.

Distinctive Characters: Body very elongate; chin with a pair of slender barbels which usually do not reach rear margin of preopercle; mouth small, the maxilla not reaching front edge of eye; 1st dorsal fin with 8 spines, the 1st spine very small; 16–18 pectoral-fin rays.

Colour: Silver white with a yellow stripe on body at level of eyes, a blackish spot often present in the yellow stripe beneath 1st dorsal fin; barbels white; fins whitish to faint yellowish.



Size: To 40 cm, common 25 cm

Mulloidichthys vanicolensis (Valenciennes, 1831)

(Plate XVI, 141) FAO names: Yellowfin goatfish (En)
Capucin de Vanicolo (Fr)

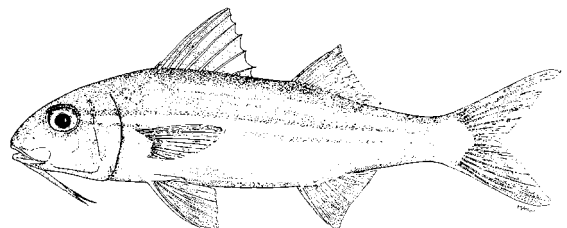
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji/Sonyo (M), Mkundazi (K).

Habitat: Shallow waters on sandy bottoms of calm lagoons and bays.

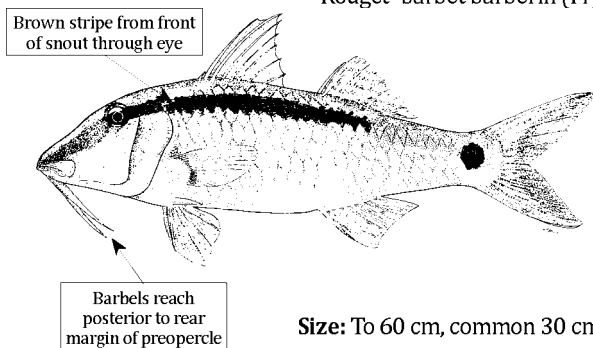
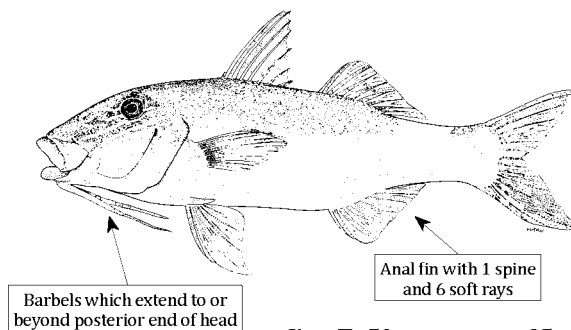
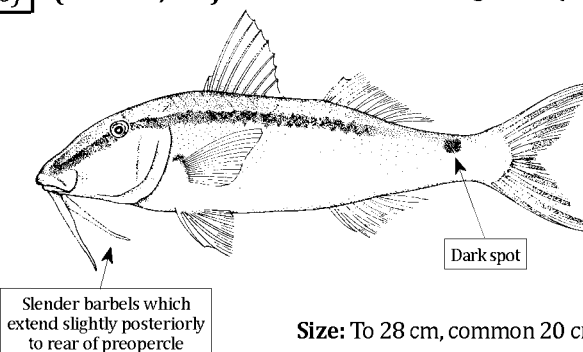
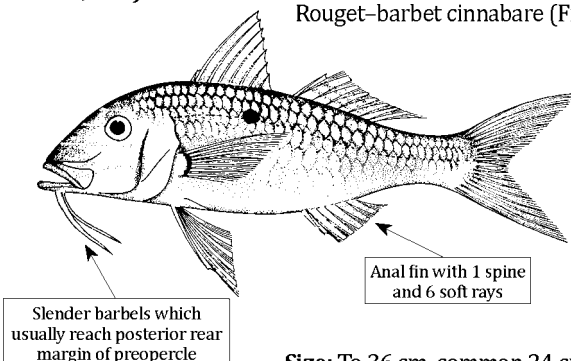
Fisheries: Traps, Gillnets, Hooks and Line, Spears.

Distinctive Characters: Body elongate; chin with a pair of slender barbels which reach beyond rear margin of preopercle; 1st dorsal fin with 8 spines, the 1st spine very small; 16–18 pectoral-fin rays.

Colour: Whitish to pink with a yellow stripe edged in pale blue on body at upper end of gill opening; no black spot within lateral yellow stripe on body; barbels white to yellowish; fins yellow.



Size: To 38 cm, common 25 cm

Parupeneus barberinus* (Lacepède, 1801)*(Plate XVI, 142)****FAO names:** Dash-and-dot goatfish (En)
Rouget-barbet barberin (Fr)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji/Sonyo (M), Mkundazi (K).**Habitat:** Shallow waters on sandy bottoms down to 100 m.**Fisheries:** Bottom trawls, Beach seines, Traps.**Distinctive Characters:** Body slightly elongate; snout long and pointed; 1st dorsal fin with 8 spines, 2nd with 9 soft rays; 16 to 18, pectoral-fin rays.**Colour:** Brown to reddish-brown dorsally, shading to whitish on sides and ventrally; dark reddish-brown spot larger than eye on caudal peduncle.**Size:** To 60 cm, common 30 cm***Parupeneus cyclostomus* (Lacepède, 1801)****(Plate XVI, 143, 144)****FAO names:** Gold-saddle goatfish (En)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).**Habitat:** Found on coral reefs.**Fisheries:** Lines, Seines, Traps.**Distinctive Characters:** First dorsal fin with 8 spines, 2nd with 9 soft rays; snout moderately long, the profile slightly concave; mouth small.**Colour:** Two colour phases, one entirely yellow the other dusky yellow dorsally; head with blue lines extending dorso-posteriorly and ventro-anteriorly from eye; other blue lines on cheek and opercle.**Size:** To 50 cm, common 35 cm***Parupeneus forsskali* (Fourmanoir & Guézé, 1976)****(Plate XVI, 145)****FAO names:** Red Sea goatfish (En)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).**Habitat:** Sandy bottoms near coral reefs.**Fisheries:** Hooks and Line, Traps, Gillnets.**Distinctive Characters:** Mouth small, the maxilla extending only slightly more than half distance to front edge of eye; 15–16 pectoral-fin rays.**Colour:** Head and body above stripe yellow; black stripe from front of snout through eye.**Size:** To 28 cm, common 20 cm***Parupeneus heptacanthus* (Lacepède, 1802)****(Plate XVI, 146)****FAO names:** Cinnabar goatfish (En)
Rouget-barbet cinnabare (Fr)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).**Habitat:** Lives over silty bottoms from 15 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Head of adults smoothly convex; mouth small; 1st dorsal fin with 8 spines, 2nd with 9 soft rays; pectoral-fin rays 15 to 17 (usually 16).**Colour:** Brown yellow to red (deeper dwelling fish more red); a small reddish brown spot on upper side of adults just below 7th and 8th lateral-line scale.**Size:** To 36 cm, common 24 cm

***Parupeneus indicus* (Shaw, 1803) (Plate XVI, 147)**

FAO names: Indian goatfish (En)
Rouget-barbet indien (Fr)

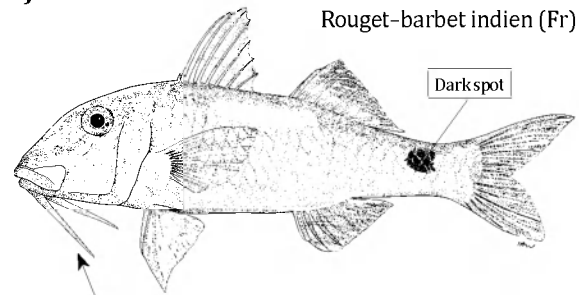
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Inhabits shallow coastal waters.

Fisheries: Bottom trawls, Traps, Gillnets, Seines.

Distinctive Characters: Mouth small; last ray of 2nd dorsal and anal fin longer than penultimate ray; 15–17 (usually 16) pectoral rays.

Colour: Greenish–brown to reddish–brown dorsally; a large elongate yellow spot on lateral line; a slightly curved pale blue line passing from above mouth to lower edge of eye and beyond, a 2nd shorter line below and parallel to it.



Slender barbels which usually reach posterior to rear margin of preopercle

Size: To 45 cm, common 30 cm

***Parupeneus macronemus* (Lacepède, 1801) (Plate XVI, 148)**

FAO names: Long–barbel goatfish (En)

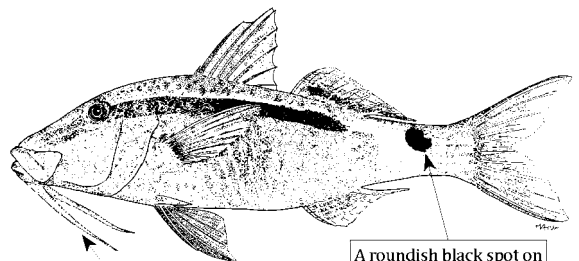
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Shallow sandy or weedy bottoms.

Fisheries: Bottom trawls, Beach seines, Traps.

Distinctive Characters: Last dorsal and anal soft ray of adults longer than penultimate ray.

Colour: Reddish brown, paler ventrally and posteriorly; a dark brown band from front of snout, ending beneath rear base of second dorsal fin; basal third of 2nd dorsal fin with a broad black or blackish band or a large black spot; pale blue lines on margin of dark stripe on snout.



Slender barbels usually reaching posterior rear margin of preopercle

A roundish black spot on posterior third of caudal peduncle

Size: To 40 cm, common 25 cm

***Parupeneus nansen* Randall & Heemstra, 2009**

FAO names: Nansen goatfish (En)

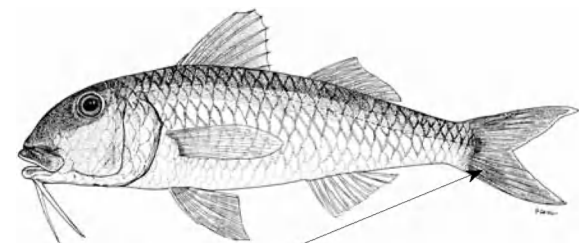
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Sandy or weedy bottoms down to 51 m.

Fisheries: Bottom trawls, Beach seines, Traps.

Distinctive Characters: Moderately elongate body; 1st dorsal-fin with 8 spines, 2nd with 9 rays; 7 anal-fin rays; 15 or 16 pectoral-fin rays.

Colour: Light yellowish–grey dorsally, the red edges of scales progressively fainter ventrally; head broadly red dorsally, grading to silvery white on cheek and operculum.



3 large deep pink to red spots on caudal fin, one in each lobe and one at midbase of fin

Size: To 16 cm

***Parupeneus pleurostigma* (Bennett, 1831) * (Plate XVII, 149)**

FAO names: Sidespot goatfish (En)

Local name(s): N: Mkoma/Mkundaji; S: Mkundaji/Sonyo (M), Mkundazi (K).

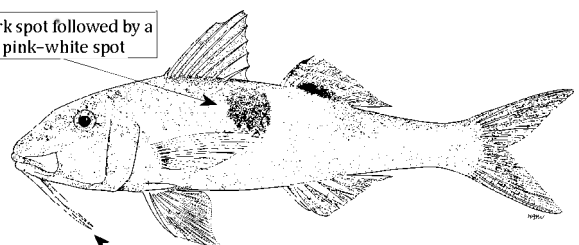
Habitat: Coral reefs down to 46 m.

Fisheries: Traps, Gillnets.

Distinctive Characters: Body moderately elongate; mouth small; last dorsal soft ray of adults longer than penultimate ray; anal fin with 1 spine and 6 soft rays.

Colour: Pale yellowish to light red shading to white or pale pink ventrally; base of 2nd dorsal fin with a broad black band or spot.

Dark spot followed by a pink–white spot

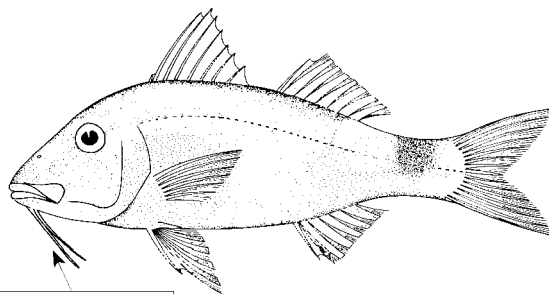


Slender barbels usually reaching posterior rear margin of preopercle

Size: To 33 cm, common 20 cm

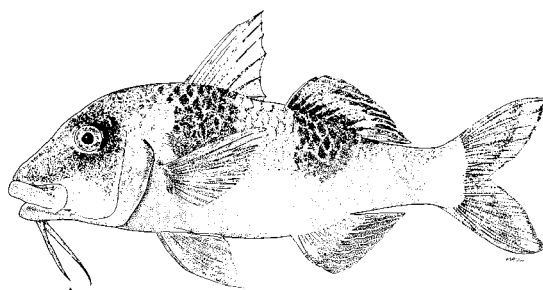
Parupeneus rubescens (Lacepède, 1801)

(Plate XVII, 150)

FAO names: Rosy goatfish (En)
Rouget-barbet sellé (Fr)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).**Habitat:** Coastal waters, on turbid and silty sandy bottoms with coral reefs.**Fisheries:** Bottom trawls, Gillnets, Traps.**Distinctive Characters:** Mouth small; 3 vertical scale rows in space between dorsal fins; 8 or 9 vertical scale rows along upper part of caudal peduncle.**Colour:** Reddish to greenish brown dorsally, shading to light red ventrally; a large black spot on posterior part of caudal peduncle, preceded by a whitish spot; a pale-edged dark brown band from front of snout through eye.

Slender barbels usually reaching posterior rear margin of preopercle

Size: To 43 cm, common 23 cm

Parupeneus trifasciatus (Lacepède, 1801)FAO names: Doublebar goatfish (En)
Rouget-barbet double-tache (Fr)**Local name(s):** N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).**Habitat:** Coral reefs down to 60 m.**Fisheries:** Beach seines, Hooks and Line.**Distinctive Characters:** Mouth small; pectoral fins with usually 16 soft rays.**Colour:** Body colour yellowish-grey to brownish-red; 2 broad saddle-like dark bars below 1st dorsal and posterior part of 2nd dorsal fin and often a 3rd faint one on caudal peduncle; the dark saddle-like bars of small individuals much more evident.

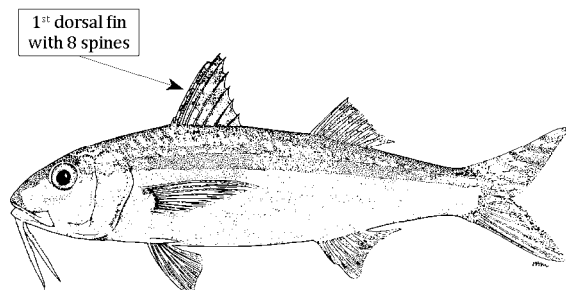
Slender barbels reaching posterior to rear margin of preopercle

Size: To 35 cm, common 24 cm

Upeneus moluccensis (Bleeker, 1855)

(Plate XVII, 151)

FAO names: Goldband goatfish (En)

Local name(s): N: Mkoma/Mkundaji; S: Mkundaji/Sonyo (M), Mkundazi (K).**Habitat:** Muddy bottoms from 10 m to 40 m.**Fisheries:** Beach seines, Bottom trawls.**Distinctive Characters:** Body elongate; 15–18 pectoral rays; pelvic fins about 2/3 length of pectoral fins; 5½ vertical rows of scales in space between dorsal fins; 12 or 13 vertical rows of scales along upper part of caudal peduncle.**Colour:** Golden yellow stripe about as broad as pupil passing from eye along upper side of body to upper caudal base; head and body above stripe silvery pink to greenish, silvery white below.1st dorsal fin with 8 spines

Slender barbels not reaching posterior rear margin of preopercle

Size: To 20 cm, common 14 cm

Upeneus suahelicus Uiblein & Heemstra, 2010

FAO names: Swahili goatfish (En)

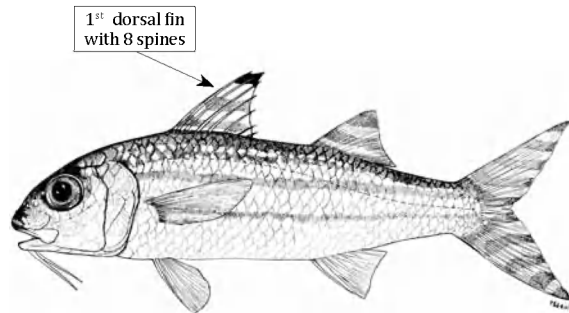
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Coastal waters from 20 m to 100 m.

Fisheries: Beach seines, Bottom trawls, Traps.

Distinctive Characters: 8-10 total bars on caudal fin, 4-6 brown bars on upper caudal-fin lobe, 3-4 of same color on lower lobe with the 3 proximal bars on upper lobe slightly curved with caudal-fin bars and white interspaces nearly equal in width.

Colour: Two yellow or pale brown lateral body stripes, one close to lateral line, reaching from behind head to caudal-fin base, and another one below, starting behind pectoral-fin base; tip of first dorsal-fin dark, also in preserved fish.



Size: To 13.5 cm

Upeneus sulphureus Cuvier, 1829 (Plate XVII, 152)

FAO names: Sulphur goatfish (En)

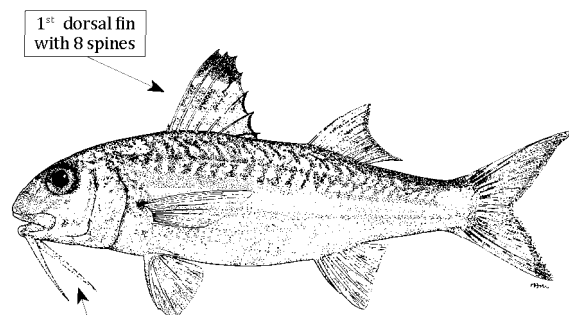
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Schooling in coastal waters from 20 m to 60 m.

Fisheries: Beach seines, Bottom trawls, Traps.

Distinctive Characters: Maxilla reaching clearly posterior to front edge of eye (on some specimens to below centre of eye); 15-17 pectoral-fin rays; 5½ vertical scale rows in space between dorsal fins; 12 or 13 vertical rows of scales along upper part of caudal peduncle.

Colour: Back greenish, mottled with bronze; silvery-white on side with 2 narrow yellow stripes, the uppermost at level of eye most prominent, the lowermost ending in axil of pectoral fins.



Size: To 23 cm

Upeneus taeniopterus Cuvier, 1829* (Plate XVII, 153)FAO names: Finstripe goatfish (En)
Rouget-souris rayé (Fr)

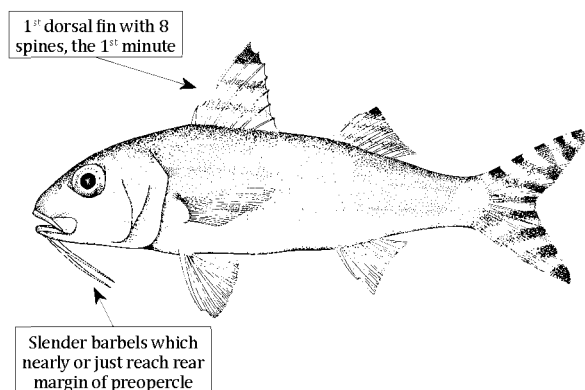
Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

Habitat: Shallow waters on sandy bottoms near coral reefs.

Fisheries: Seines, Traps, Gillnets, Castnets.

Distinctive Characters: Body elongate; 13-14 pectoral-fin rays; pelvic fins nearly as long as pectorals.

Colour: Silvery pink to orangish on back, shading to silvery white on side and ventrally, with 2 narrow yellow stripes (one at level of upper part of eye and the other at mid pectoral base); upper lobe of caudal fin with 6 transverse blackish bands and lower lobe with 4-5.



Size: To 33 cm, common 25 cm

Upeneus tragula Richardson, 1846

(Plate XVII, 154)

FAO names: Freckled goatfish (En)

Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

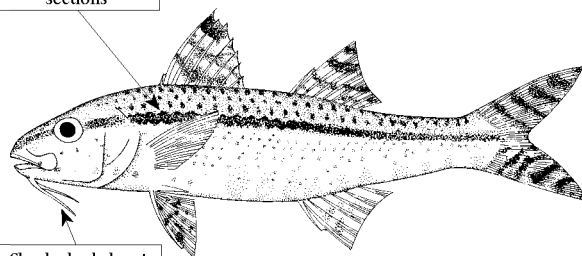
Habitat: Shallow sandy or silty lagoons or sheltered coastal reefs, also enters rivers down to 40 m.

Fisheries: Bottom trawls, Beach seines, Traps.

Distinctive Characters: Body elongate; 12–14 pectoral–fin rays; pelvic fins nearly as long as pectoral fins.

Colour: Greenish grey dorsally, white ventrally with numerous small red spots and a row of irregular red blotches on lower side; caudal fin striped; upper lobe of caudal fin with 4 to 6 blackish crossbands, the lower lobe with 5 to 7.

Red to brown stripe containing 6 darker sections



Slender barbels not reaching rear margin of preopercle

Size: To 33 cm, common 25 cm

Upeneus vittatus (Forsskal, 1775)

(Plate XVII, 155)

FAO names: Yellowstriped goatfish (En)

Local name(s): N: Mkoma/Mkundaji; S: Mkundaji (M), Mkundazi (K).

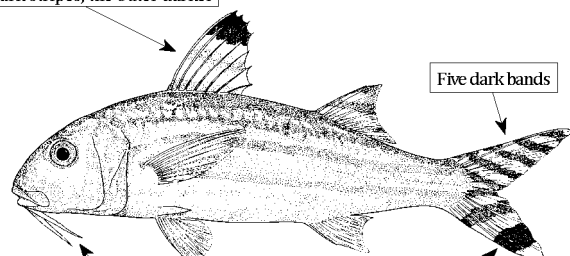
Habitat: Shallow sandy areas or lagoons and coastal reefs. Maximum depth 100 m.

Fisheries: Bottom trawls, Beach seines, Boat seines.

Distinctive Characters: First dorsal fin with 8 spines; 2nd dorsal fin with 9 rays; pelvic fins about 2/3 of pectorals length; 15–16 pectoral–fin rays.

Colour: Greenish on back, shading to silvery white on sides and pale yellow vertically, with 4 orange–yellow stripes.

1st dorsal fin with 3 broad dark stripes, the outer darker



Five dark bands

Slender barbels not reaching rear margin of preopercle

Three dark bands, the outer broader and darker

Size: To 28 cm, common 20 cm

KYPHOSIDAE

Seachubs – Rudderfishes – Stonebreams

Kyphosus bigibbus Lacepède, 1801

(Plate XVII, 156)

FAO names: Brown chub (En)

Local name(s): N: Khusi; S: Khufi (M), Kuku bahari (K).

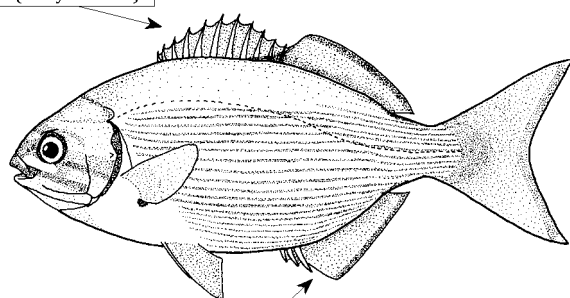
Habitat: Shallow coastal waters above reefs and rocky areas.

Fisheries: Hooks and Line, Seines, Spears.

Distinctive Characters: Maxilla reaching to below anterior edge of eye when mouth fully closed; soft portion of dorsal fin not higher than spiny portion.

Colour: Silvery grey, the edges of the scales brown, resulting in a longitudinal linear pattern on body; a broad silvery stripe from front of snout to below eye, bordered below by a grey streak; opercular membrane dark brown; fins dark grey.

Dorsal fin with 11 spines and 12 rays (rarely 11 or 13)

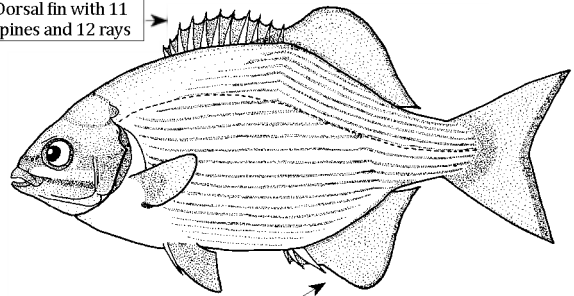


Anal fin with 3 spines and 11 rays (rarely 10 or 12)

Size: To 75 cm

***Kyphosus cinerascens* (Forsskål, 1775)** (Plate XVII, 157)FAO names: Blue Sea chub (En)
Calicagère bleue (Fr)**Local name(s):** N: Khusi; S: Khufi (M), Kuku bahari (K).**Habitat:** Occurs in shallow coastal waters around reefs and rocks.**Fisheries:** Hooks and Line, Seines, Spears.**Distinctive Characters:** Body ovate, compressed; snout blunt, upper profile with a low hump above nostrils; preopercle edge finely serrate; soft part of dorsal fin clearly higher than the longest spine.**Colour:** Silvery grey, olivaceous to dusky dark above; a dark stripe between each row of scales; a grey or silvery stripe under the eye; vertical fins blackish, paired fins lighter.

Dorsal fin with 11 spines and 12 rays



Anal fin with 3 spines and 11 rays (rarely 10 or 12)

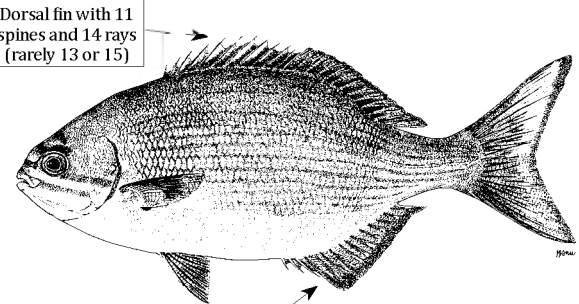
Size: To 50 cm

***Kyphosus vaigiensis* (Quoy & Gaimard, 1825)** (Plate XVII, 158)

FAO names: Brassy chub (En)

Local name(s): N: Khusi; S: Khufi (M), Kuku bahari (K).**Habitat:** Over hard, algal coated bottoms of exposed surf-swept outer reef flats, lagoons, and seaward reefs to a depth of at least 24 m.**Fisheries:** Hooks and Line, Seines, Spears.**Distinctive Characters:** Maxilla reaching to below anterior edge of eye when mouth fully closed; soft portion of dorsal fin not higher than spiny portion.**Colour:** Silvery grey with narrow brassy stripes along upper and lower edges of scales of body; two oblique brassy bands on snout and cheeks; opercular membrane usually yellowish brown.

Dorsal fin with 11 spines and 14 rays (rarely 13 or 15)



Anal fin with 3 spines and 13 rays (rarely 12)

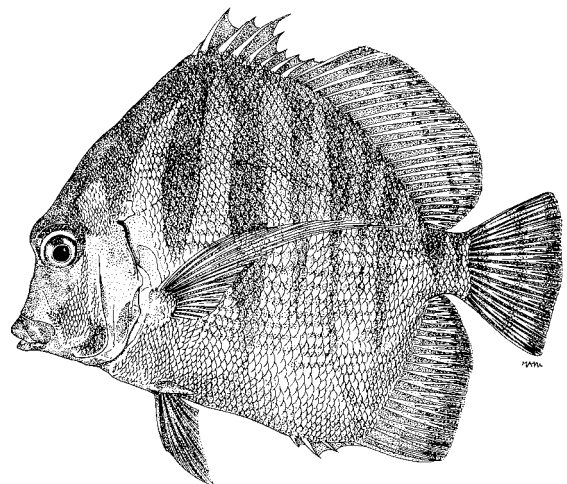
Size: To 60 cm

DREPANEIDAE

Sicklefishes

***Drepane longimana* (Bloch & Schneider, 1801)** (Plate XVIII, 159)

FAO names: Concertina fish (En)

Local name(s): N: Chana mwezi; S: Shana (K).**Habitat:** Coastal waters including estuaries.**Fisheries:** Bottom trawls, Handlines.**Distinctive Characters:** Mouth protrusible; teeth pointed, slender, crowded together; dorsal fin with 8–9 (generally 9) spines, 4th dorsal spine the longest, and 19–23 rays; anal fin with 3 spines and 17–19 rays; pectoral fins long; 45–55 lateral-line scales.**Colour:** Silvery with purple and yellow reflections, uniform or with 4–9 vertical bars dorsally, some reach middle of body, others stop at lateral line.**Remarks:** Similar to *D. punctata*, which could be present in Kenya waters, and is characterized by having 4–11 vertical gray spots on the upper half of the sides, and generally 8 dorsal spines.

Size: To 40 cm

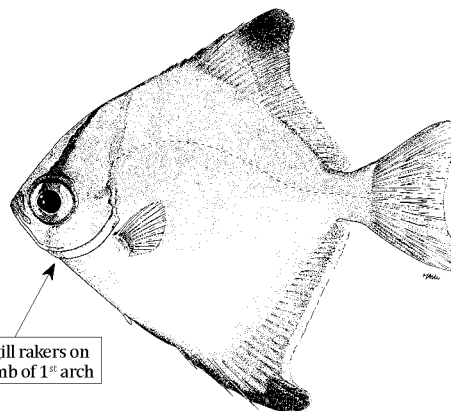
MONODACTYLIDAE

Moonies

Monodactylus argenteus (Linnaeus, 1758)

(Plate XVIII, 160)

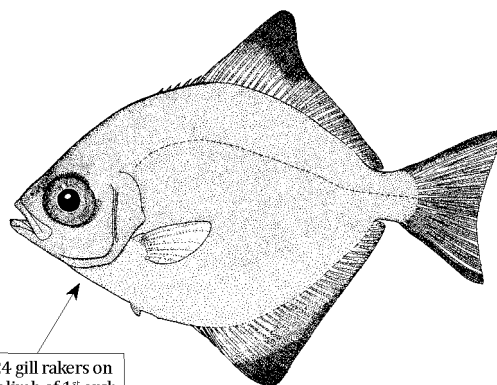
FAO names: Silver moony (En)

Local name(s): N: Rambale/Peruperu; S: Lalua (M), Chembeu/Madara (K).**Habitat:** Shallow coastal waters, fresh waters, estuaries and harbours.**Fisheries:** Beach seines, Cast nets, Bottom trawls.**Distinctive Characters:** Body covered with small deciduous (easily shed) scales; mouth small; pelvic fins very small or absent in adults; dorsal fin with 7–8 spines and 26–30 soft rays; anal fin with 3 spines and 26–30 soft rays; dorsal and anal-fin spines small and inconspicuous; 16 pectoral-fin rays.**Colour:** Adults silvery; tips of dorsal and anal-fin lobes dusky; juveniles dusky silver with 2 curved dark stripes across head.18–22 gill rakers on lower limb of 1st arch

Size: To 25 cm

Monodactylus falciformis Lacepède, 1801

FAO names: Full moony (En)

Local name(s): N: Rambale/Peruperu; S: Lalua (M), Chembeu/Madara (K).**Habitat:** Estuaries and shallow coastal waters.**Fisheries:** Beach seines, Cast nets, Bottom trawls.**Distinctive Characters:** Body covered with small deciduous scales; mouth small; pelvic fins very small or absent in adults; dorsal fin with 7–8 spines and 25–30 soft rays; anal fin with 3 spines and 25–29 soft rays; dorsal and anal-fin spines small and inconspicuous; 17–18 pectoral-fin rays.**Colour:** Adults silvery; tips of dorsal and anal fin lobes dusky; juveniles dusky silver with 11 or 12 dark vertical bars.22–24 gill rakers on lower limb of 1st arch

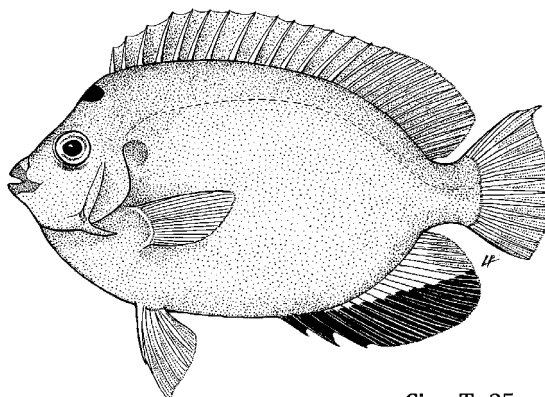
Size: To 25 cm

POMACANTHIDAE

Angelfishes

Apolemichthys trimaculatus (Cuvier, 1831)*

FAO names: Threespot angelfish (En)

Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).**Habitat:** Clear lagoons and seaward reefs from 3 m to 40 m.**Fisheries:** Traps, Gillnets, Spears.**Distinctive Characters:** Dorsal fin with 14 spines and 16–18 soft rays; anal fin with 3 spines and 17–18 soft rays.**Colour:** Adults with background colour bright yellow without a large black area posteriorly on dorsal fin; young with a black spot at base of soft dorsal fin and a dark bar through eye; blue lips.

Size: To 25 cm

Centropyge bicolor (Bloch, 1787)

FAO names: Bicolor angelfish (En)

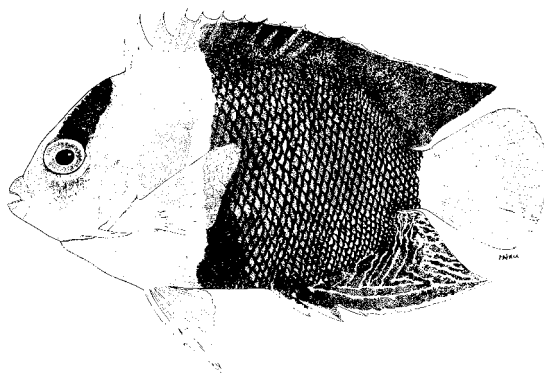
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: Inhabits lagoon, channel, or protected seaward reef slopes, drop-offs, coral and rubble areas.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Dorsal fin with 15 spines and 15–17 soft rays; anal fin with 3 spines and 17–18 soft rays; juveniles similar to adults and easily recognized by their distinctive coloration.

Colour: Head and anterior half of trunk yellow with a blue blotch over the eye; posterior half of trunk and tail blue; caudal fin yellow.



Size: To 15 cm TL

Pomacanthus chrysurus (Cuvier, 1831)

FAO names: Goldtail angelfish (En)

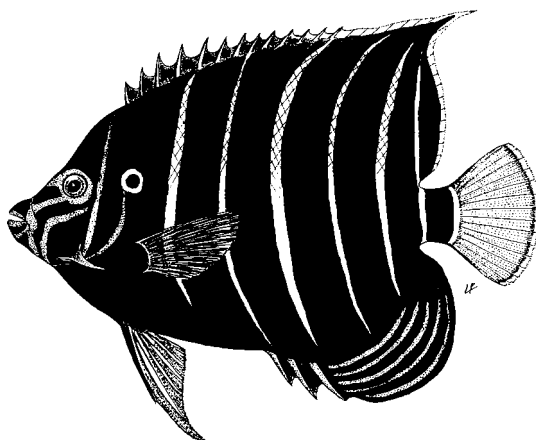
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: Shallow coral reef areas from 1 m to 25 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Body round to oval, strongly compressed; dorsal fin with 13–14 spines and 17–19 soft rays; anal fin with 3 spines and 18–19 soft rays; pectoral fins with 18–19 soft rays; pelvic fin elongate; caudal fin rounded; mouth small, bearing slender bristle-like teeth.

Colour: Body dark brown; yellowish–orange ring behind eye; bluish lines on head; yellowish vertical lines on body; caudal fin yellowish–orange.



Size: To 33 cm SL

Pomacanthus imperator (Bloch, 1787)

FAO names: Emperor angelfish (En)

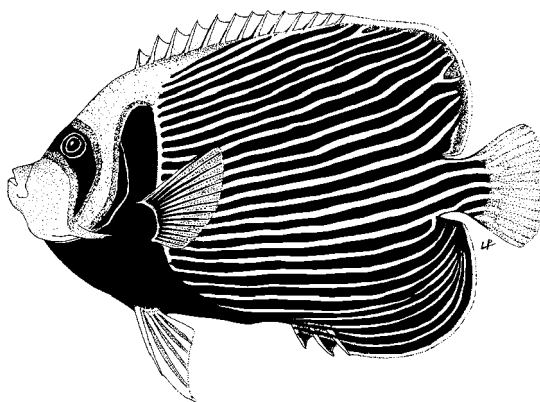
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: Adults generally in outer coral reefs areas from 3 m to 70 m.

Fisheries: Spears, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 13–14 spines and 19–21 soft rays; anal fin with 3 spines and 18–21 soft rays; pectoral fins with 19–20 soft rays (usually 20).

Colour: Purple and yellow striped body; blue-edged black anterior markings, and yellow caudal fin; juveniles deep blue to black with alternating narrow blue and wider white lines that are vertical anteriorly and curved posteriorly.



Size: To 40 cm SL

***Pomacanthus maculosus* (Forsskål, 1775)**

FAO names: Yellowbar angelfish (En)

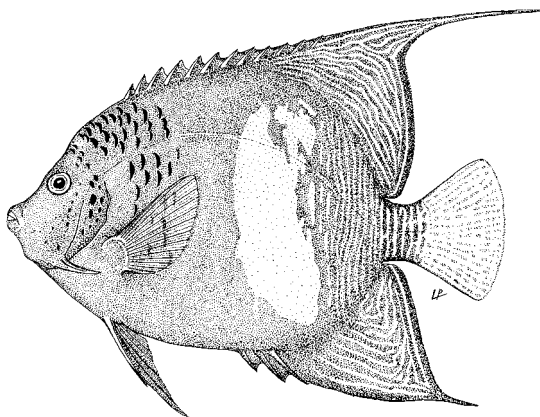
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: More often in silty reef areas than in rich coral growth. Maximum depth 50 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Dorsal fin with 12–13 spines and 21 soft rays; anal fin with 3 spines and 19–20 soft rays; pectoral fins with 19–20 soft rays; pelvic fin elongate; soft portions of dorsal and anal fins elevated and angular; mouth small, with slender bristle-like teeth; a conspicuous spine occurs at angle of preopercle.

Colour: Body bluish; caudal fin yellowish; irregular pale bluish and yellow lines on soft portions of dorsal and anal fins; irregular yellow bar on body.



Size: To 50 cm (SL)

***Pomacanthus semicirculatus* (Cuvier, 1831)**

FAO names: Semicircle angelfish (En)

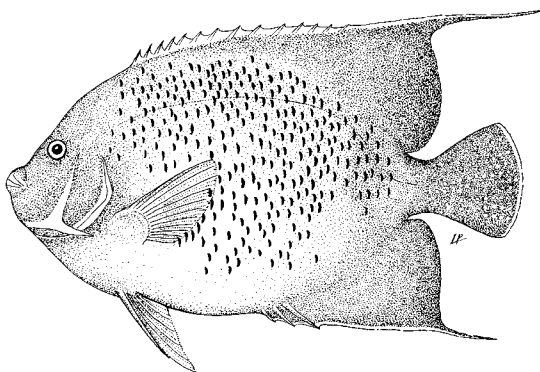
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: Coral reefs areas down to 30 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Dorsal fin with 13 spines and 20–23 soft rays; anal fin with 3 spines and 18–22 soft rays; a filament posteriorly on dorsal and anal fins.

Colour: Juveniles deep blue to black with narrow white bars and blue lines which are progressively more curved posteriorly; adults body pale brownish with numerous blue elongate spots; posterior part of body, dorsal, anal and caudal fins brownish with numerous white spots; preopercular spine, margin of preopercle and opercle, blue.



Size: To 40 cm (SL)

***Pygoplites diacanthus* (Boddaert, 1772)**

FAO names: Regal angelfish (En)

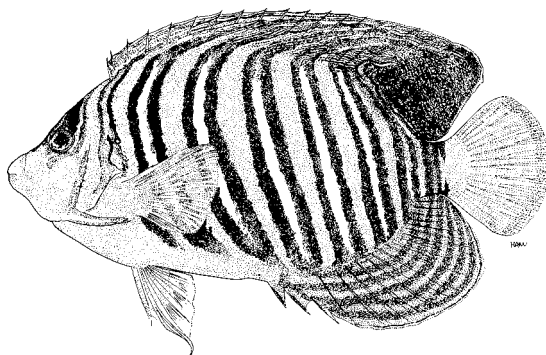
Local name(s): N: Birinji; S: Birinzi/Kipepeo (M), Jamee/Soya (K).

Habitat: Coral rich areas of clear lagoons and seaward reefs often near caves and crevices from 1 m to 48 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Body round to oval, strongly compressed and slightly elongate; dorsal fin with 14 spines and 17–19 soft rays; anal fin with 3 spines and 17–19 soft rays; pectoral and pelvic fins enlarged and relatively short.

Colour: Background colour yellow; black bar above eye; 8 black edged whitish bars; alternating blue and orange lines on soft portion of anal fin.



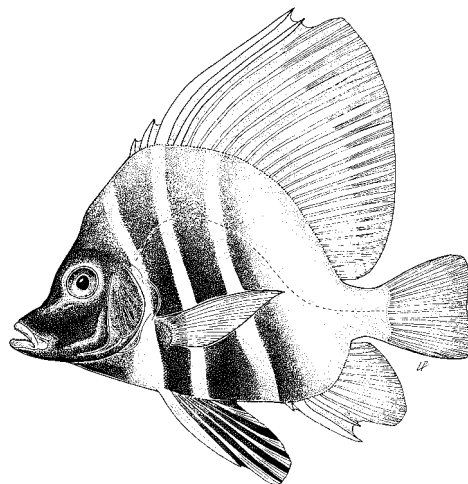
Size: To 25 cm (SL)

PENTACEROTIDAE

Armorheads

Histiopertus typus Temminck & Schlegel, 1844 *

FAO names: Sailfin armourhead (En)

Local name(s): N: Shana; S: Kipepeo (M), Jamee/ Bangalamwewe (K).**Habitat:** Steep seaward reef drop-offs; bottom dweller from 40 m to 400 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Chin with a patch of fine barbels or papillae; dorsal fin very high, sail-like, with 4 spines, the 1st two short; 25–27 dorsal-fin soft rays; anal fin with 3 spines and 8–10 soft rays.**Colour:** Small juveniles pale, with prominent dark blotches on body, dorsal, anal and pelvic fins; dark blotches enlarge and coalesce with age, the body becoming then dark, with more or less distinct narrow pale vertical bands.

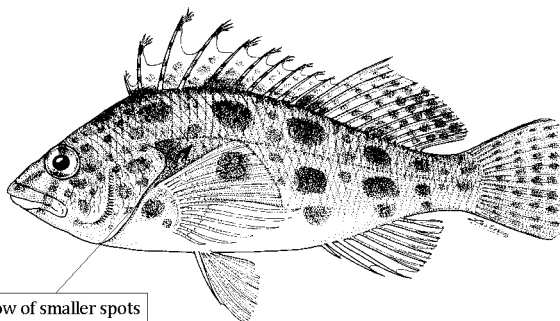
Size: To 35 cm, common 25 cm

CIRRHITIDAE

Hawkfishes

Cirrhitichthys oxycephalus (Bleeker, 1855)

FAO names: Coral hawkfish (En)

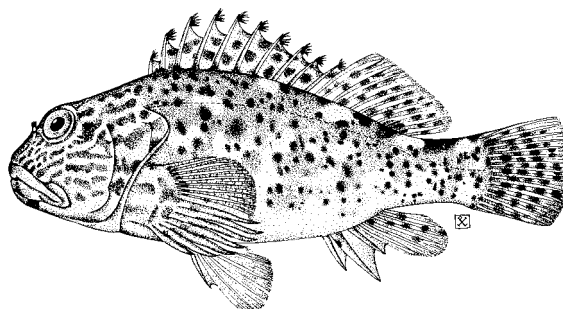
Local name(s): N: Nona; S: Nono/Chale/Kodowa (K).**Habitat:** Inhabits areas of rich coral growth and clear water lagoons, channels or seaward reefs from below the surge zone to at least 40 m.**Fisheries:** Hooks and Line.**Distinctive Characters:** Dorsal fin with 10 spines and 12–13 soft rays; anal fin with 3 spines and 6 soft rays.**Colour:** Highly variable in colour from pale grey with black blotches to pink with bright red blotches; small dark brown spots on head.

A row of smaller spots between larger spots

Size: To 10 cm

Cirrhitus pinnulatus (Forster, 1801) (Plate XVIII, 161)

FAO names: Stocky hawkfish (En)

Local name(s): N: Nona; S: Nono/Chale/Kodowa (K).**Habitat:** Rocky shorelines and reef fronts exposed to surge from 0.3 m down to 3 m.**Fisheries:** Hooks and Line.**Distinctive Characters:** Snout short and blunt; mouth large; a continuous dorsal fin with 10 spines and 11 rays deeply notched between spiny and soft portion; a tuft of cirri from membrane near tip for each dorsal spine; anal fin with 3 spines and 6 rays; scales on cheek much smaller than scales on body.**Colour:** Ground colour white with brown blotches and orangish to reddish brown spots.

Size: To 30 cm, common 23 cm

***Paracirrhites forsteri* (Schneider, 1801)**

(Plate XVIII, 162)

FAO names: Blackside hawkfish (En)

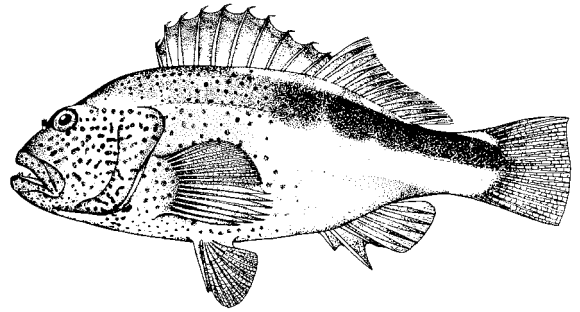
Local name(s): N: Nona; S: Nono/Chale/Kodowa (K).

Habitat: Clear lagoons and seaward reefs from 1 m to 33 m.

Fisheries: Hooks and Line.

Distinctive Characters: Snout short, mouth large; preopercle finely serrate; a continuous dorsal fin of 10 spines and 11 rays, notched between spiny and soft portions; a single cirrus from membrane near tip of each dorsal spine; anal fin with 3 spines and 6 rays; caudal fin slightly rounded; 5–6 rows of large scales on cheek.

Colour: Background colour yellowish; dark longitudinal broad blackish band on upper side; small brownish red spots; fins varying from yellow to pink.



Size: To 22 cm, common 18 cm

MUGILIDAE

Mulletts

***Crenimugil crenilabis* (Forsskål, 1775)**

FAO names: Fringelip mullet (En)
Mulet boxeur (Fr)

Local name(s): N: Mkizi; S: Mkizi/Binini (M), Mkizi (K).

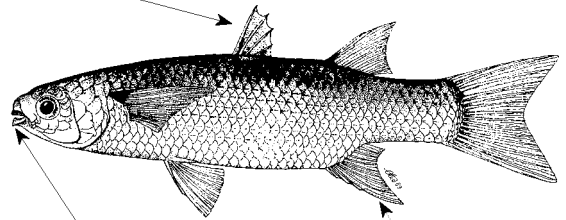
Habitat: Found in sandy areas often near coral reefs in mangrove areas.

Fisheries: Seines, Gillnets, Stake traps.

Distinctive Characters: Scales cycloid, the edge membranous; no adipose tissue over eye; no teeth on edge of lips; caudal fin deeply emarginate; pectoral-fin tip nearly or just reaching a vertical at origin of 1st dorsal.

Colour: Olive-green on back, white on sides and belly; a black spot at the base of the yellowish pectoral fins; other fins off-white.

Dorsal fins with 4 spines and 8–10 rays (usually 9)



Upper lip broad anteriorly, its lower part with a fringe of small papillae

Anal fin with 3 spines and 8–9 rays (rarely 8)

Size: To 50 cm, common 25 cm

***Liza macrolepis* (Smith, 1846)**

FAO names: Largescale mullet (En)
Mulet à grandes écailles (Fr)

Local name(s): N: Mkizi; S: Mkizi (M/K).

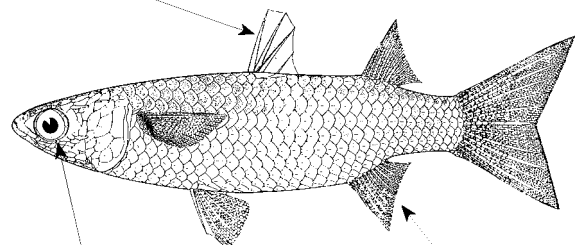
Habitat: Schooling in shallow coastal lagoon waters, estuaries and brackish waters.

Fisheries: Gillnets, Castnets, Beach seines, Stake traps.

Distinctive Characters: Head broad; inter-orbital slightly convex; a small slender part of maxilla exposed when mouth closed; upper lip with a row of very small, well spaced, peg-like teeth; 1 or 2 irregular inner rows of small teeth well separated from outer row.

Colour: Greenish-grey dorsally; flanks and abdomen silvery; fins grey or bluish with dusky margins, may appear yellowish at base; pectoral fins with golden base, and perhaps a dark spot.

Dorsal fins with 4–5 spines and 8–9 rays (rarely 9)



Adipose tissue little developed

Anal fin with 3 spines and 8–10 rays (usually 9)

Size: To 60 cm, common 26 cm

Liza melinoptera (Valenciennes, 1836) *

Local name(s): N: Mkizi; S: Mkizi (M/K).

Habitat: Shallow coastal lagoon waters, estuaries and brackish waters.

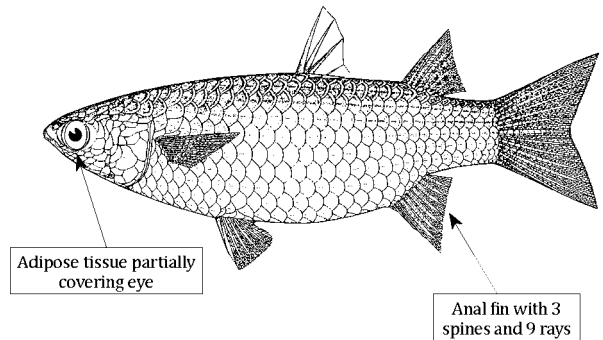
Fisheries: Gillnets, Castnets, Stake traps.

Distinctive Characters: Head wide, dorsally flattened; 1st dorsal-fin origin nearer to caudal-fin base than to snout tip with 5 spines; 2nd dorsal-fin origin at vertical through middle of anal-fin base, with 7–9 rays; pectoral axillary scale absent; 2nd dorsal and anal fins densely scaled.

Colour: Greenish-brown above, white to silvery below; fins dusky distally.

FAO names: Otomebora mullet (En)

Mulet otomebora (Fr)



Size: To 22 cm, common 18 cm

Liza vaigiensis (Quoy & Gaimard, 1825) *

Local name(s): N: Mkizi; S: Mkizi (M/K).

Habitat: Shallow coastal waters and estuaries.

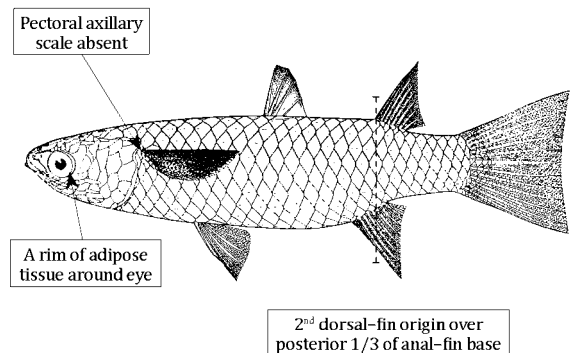
Fisheries: Castnets, Stake traps, Beach seines.

Distinctive Characters: First dorsal-fin origin nearer to caudal-fin base than to snout tip, with 4–5 spines; 2nd dorsal fin with 8–9 soft rays; anal fin with 3 spines and 7–9 soft rays; caudal fin only slightly emarginate.

Colour: Back olive brown, silvery on sides, belly white with pale yellow suffusion; margins of fins dusky, otherwise yellowish-white; pectoral fins wholly black in small fish, lower section yellowish in adults.

FAO names: Squaretail mullet (En)

Mulet mopiro (Fr)



Size: To 63 cm, common 35 cm

Moolgarda seheli (Forsskål, 1775) *

Local name(s): N: Mkizi; S: Mkizi/Binini (M), Mkizi (K).

Habitat: Brackish and fresh waters; spawns at sea.

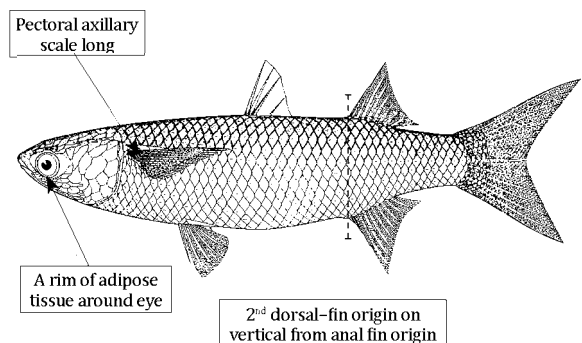
Fisheries: Gillnets, Castnets.

Distinctive Characters: Head wide, dorsally flattened; lips thin; 1st dorsal-fin origin nearer to snout tip than to caudal-fin base or equidistant, with 4–5 spines; 2nd dorsal fin with 8–9 soft rays; anal fin with 3 spines and 8–10 soft rays.

Colour: Greenish-brown on back, silvery below; upper rows of scales with dusky spots; 2nd dorsal and caudal fins pale blue; pelvic, anal and 1st dorsal fin white, pectoral fins dull yellow with a blue axillary spot; upper lobe of caudal fin with a dark blue tip.

FAO names: Bluespot mullet (En)

Mulet à tache bleue (Fr)



Size: To 60 cm, common 40 cm

***Mugil cephalus* Linnaeus, 1758**

FAO names: Flathead grey mullet (En)
Mulet à grosse tête (Fr)

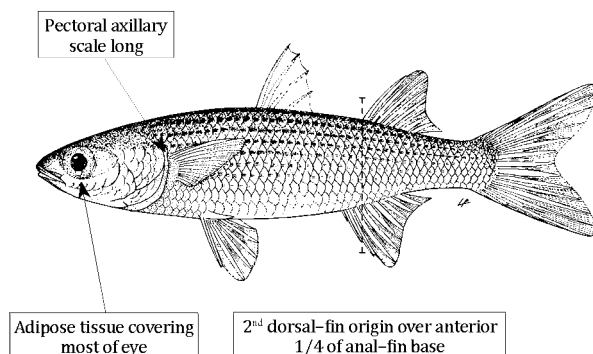
Local name(s): N: Mkizi; S: Mkizi/Binini (M), Mkizi (K).

Habitat: Coastal waters and adjacent lagoons.

Fisheries: Castnets, Stake traps, Beach seines.

Distinctive Characters: Lips thin; 1st dorsal-fin origin nearer to snout tip than to caudal-fin base, with 5 spines; 2nd dorsal fin with 7–9 soft rays; anal fin with 3 spines and 8–9 soft rays; pectoral fins short (when folded forward do not reach eye).

Colour: Olive–green on back, silvery on sides with 6–7 brown bands; a dark purple blotch at base of pectoral fins; margins of dorsal and caudal fins dusky.



Size: To 90 cm, common 35 cm

***Valamugil buchanani* (Bleeker, 1853)**

FAO names: Bluetail mullet (En)
Mulet à queue bleue (Fr)

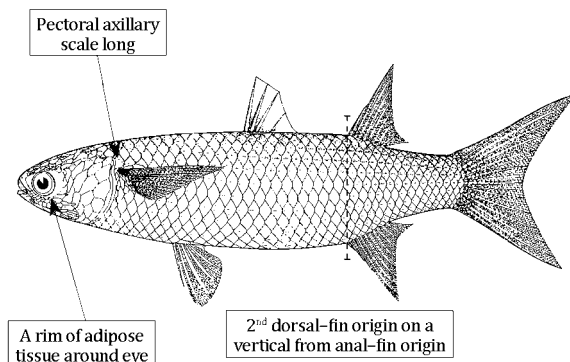
Local name(s): N: Mkizi; S: Mkizi (M/K).

Habitat: Coastal waters and adjacent lagoons.

Fisheries: Gillnets, Castnets, Stake traps, Beach seines.

Distinctive Characters: Snout short and bluntly rounded; lips thin, notched anteriorly; 1st dorsal-fin origin equidistant from caudal-fin base and snout tip, with 4–5 spines; 2nd dorsal fin with 8 soft rays; anal fin with 3 spines and 9 soft rays.

Colour: Greenish on back, silvery on sides and belly; a dark axillary spot on base of pectoral fins; a slight patch of gold on upper operculum and on iris.



Size: To 48 cm, common 35 cm

***Valamugil cunnesius* (Valenciennes, 1836)**

FAO names: Longarm mullet (En)

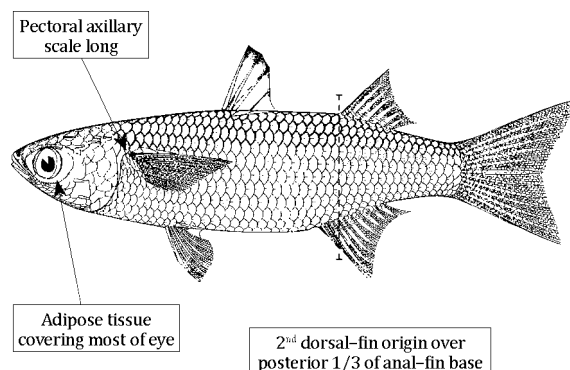
Local name(s): N: Mkizi; S: Mkizi (M/K).

Habitat: Schools in shallow coastal waters and estuaries; also enters freshwater.

Fisheries: Gillnets, Castnets, Stake traps, Beach seines.

Distinctive Characters: Head wide, flattened above; lips thin; 1st dorsal-fin origin nearer to snout tip than to caudal-fin base, with 4–5 spines; 2nd dorsal fin with 8 soft rays; anal fin with 2–3 spines and 9 soft rays.

Colour: Yellow–brown to dark grey on back, silvery below; a dark axillary spot on pectoral-fin base.



Size: To 41 cm, common 25 cm

***Valamugil engeli* (Bleeker, 1858) ***

FAO names: Kanda (En)
Mulet œil de perdriz (Fr)

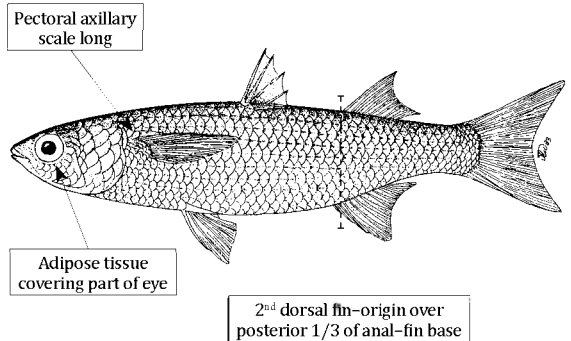
Local name(s): N: Mkizi; S: Mkizi (M/K).

Habitat: Inhabits coastal waters.

Fisheries: Gillnets, Stake traps, Beach seines.

Distinctive Characters: Head wide, flattened above; lips thin; preorbital bone wide, filling the space between lip and eye, notched anteriorly; 1st dorsal-fin origin nearer to caudal-fin base than to snout tip or midway, with 4 spines; 2nd dorsal fin with 9–10 soft rays; anal fin with 3 spines and 8–9 soft rays.

Colour: Back olive, sides silvery, fins hyaline.



Size: To 30 cm, common 25 cm

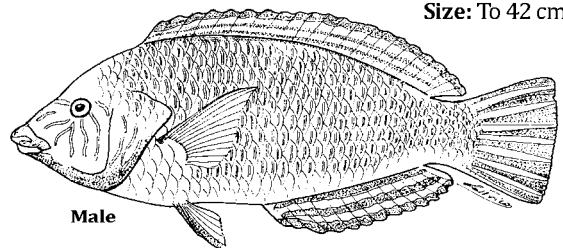
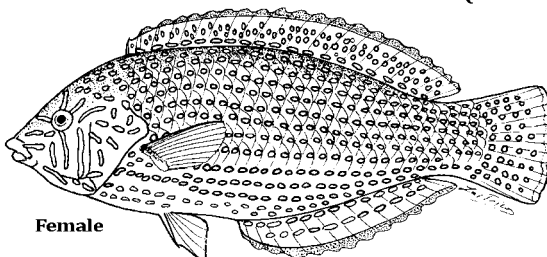
LABRIDAE

Wrasses – Hogfishes – Coris – Tuskfishes

***Anampses caeruleopunctatus* Rüppel, 1829**

(Plate XVIII, 163, 164)

FAO names: Bluespotted wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)
Size: To 42 cm



Habitat: Surge zone of coral reefs or rocky coasts.

Fisheries: Hooks and Line, Traps, Gillnets, Lines.

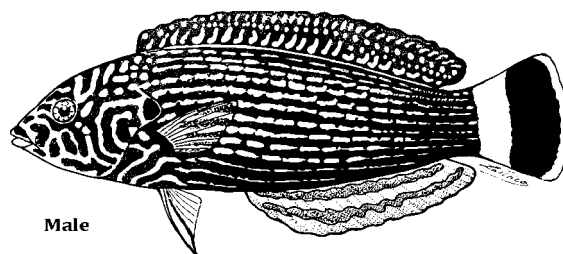
Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 soft rays; caudal fin rounded in

juveniles, slightly rounded to truncate in adults.

Colour: Female body brown, reddish ventrally, each scale with dark-edged blue spots; narrow blue bands on head; male body olive, each scale with a dark-edged blue vertical line; irregular dark-edged blue bands on head.

***Anampses lineatus* Randall, 1972**

FAO names: Lined wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)
Size: To 12 cm



Habitat: Lagoon and seaward reefs usually from 20 m to 42 m.

Fisheries: Hooks and Line, Traps, Gillnets, Lines.

Distinctive Characters: Dorsal with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays;

pectoral fins with 13 soft rays; caudal fin rounded.

Colour: Body orangish, with dark-edged blue-green stripes, passing along middle of scale rows; caudal fin white with a broad black band distally; dark spot on opercular flap.

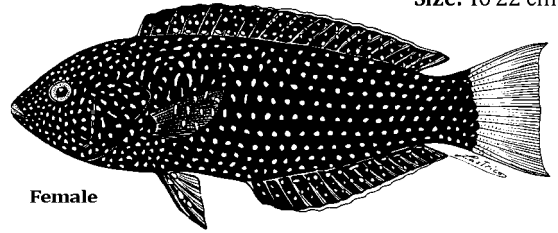
***Anampses meleagrides* Valenciennes, 1840**

Habitat: Seaward reefs from 4 m to 100 m.

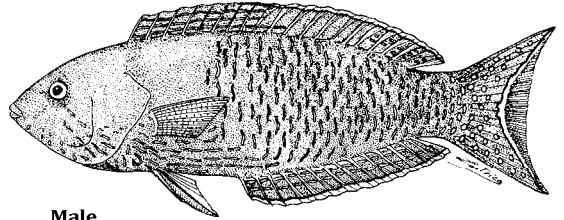
Fisheries: Hooks and Line, Traps, Gillnets, Lines.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 soft rays; caudal fin of small juveniles rounded; truncate to emarginate in adults.

Colour: Females dark brown, head and body covered with white spots; caudal fin bright yellow; males red brown with a blue line on scales and sides; irregular blue lines on the lower part of head; blue spots on caudal fin; white crescent with a narrow blue band on posterior end of caudal fin.



Female



Male

FAO names: Spotted wrasse (En)

Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 22 cm

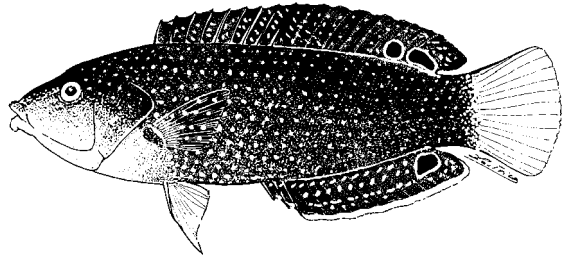
***Anampses twistii* Bleeker, 1856**

Habitat: Clear lagoons and seaward reefs.

Fisheries: Hooks and Line, Bottom trawls, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 soft rays.

Colour: Body dark brown with scattered dark-edged blue spots; caudal fin light red; blue-edged black blotches on dorsal and anal fins soft ray portions; ventral part of head yellow.



FAO names: Yellowbreasted wrasse (En)

Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 18 cm

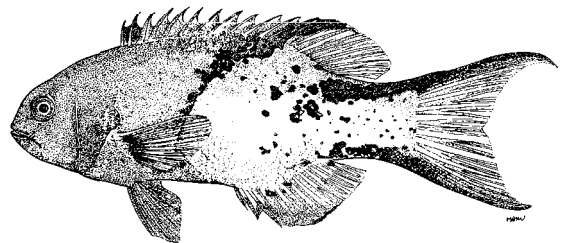
***Bodianus anthioides* (Bennett, 1832) * (Plate XVIII, 165)**

Habitat: Seaward reefs, usually from 6 m to 60 m.

Fisheries: Hooks and Line, Bottom trawls, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 12 spines and 9–10 soft rays; anal fin with 3 spines and 10–12 soft rays; pectoral fins with 15–17 soft rays; scales dorsally on head extending anteriorly to nostrils; preopercle margin coarsely serrate; snout short; caudal fin deeply emarginated in large adults and lunate in juveniles.

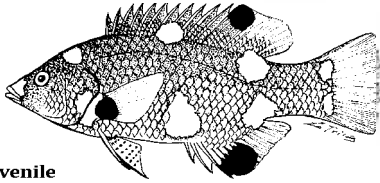
Colour: Head, chest and abdomen reddish brown; curved irregular black band across the body through the dorsal fin; body whitish with scattered brown spots.



FAO names: Lyretail hogfish (En)

Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 24 cm

Bodianus axillaris (Bennett, 1832)

Juvenile

Habitat: Clear lagoons and seaward reefs from 2 m to 40 m.

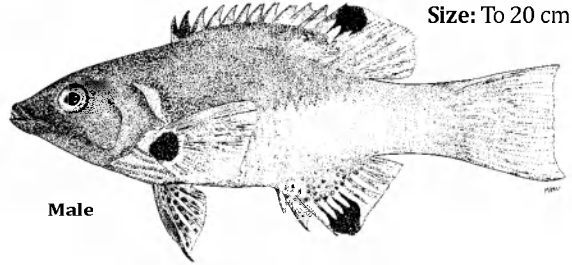
Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 12 spines and 10 soft rays; anal fin with 3 spines and 12–13 soft rays; pectoral fins with 15–17 soft rays; caudal fin truncate

FAO names: Axilspot hogfish (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 20 cm



Male

(slightly rounded in juveniles).

Colour: Juveniles with front of snout and chin white; 3 white blotches dorsally and 3 ventrally; male adults reddish brown anteriorly; round blotch on pectoral base; dorsal and anal soft rays yellow with black spots; caudal peduncle whitish posteriorly.

Bodianus bilunulatus (Lacepède, 1801)

Juvenile

Habitat: Lagoons and seaward reefs from 8 m to 160 m.

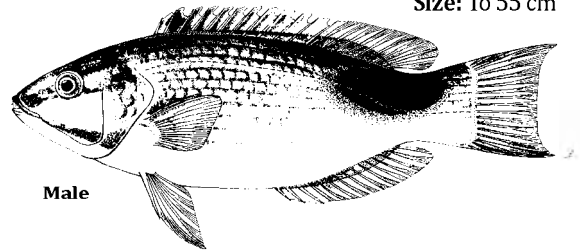
Fisheries: Hooks and Line, Trawls, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 12 spines and 10 rays; spines and anterior soft rays of similar length; anal fin with 3 spines and 12 rays; pectoral fins with 2 unbranched and 14 branched rays; upper and lower corners of caudal fin lobes extended in adults.

FAO names: Tarry hogfish (En)

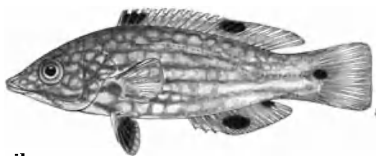
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 55 cm



Male

Colour: Very small individuals are white with numerous narrow, reddish brown horizontal stripes on sides, and a broad black band extending from outer edge of dorsal fin to outer edge of anal fin posteriorly; adults pink above, white below, with numerous narrow, horizontal red stripes on sides, and a large black saddle-shaped spot below posterior end of dorsal fin, extending onto upper side of caudal peduncle.

Bodianus diana (Lacepède, 1801)

Juvenile

Habitat: Coral rich areas from 6 m to 50 m.

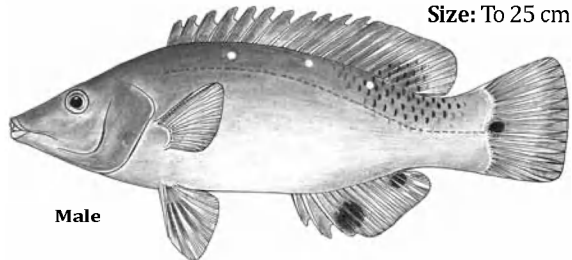
Fisheries: Hooks and Line, Trawls, Traps, Gillnets.

Distinctive Characters: Four strong canines situated anteriorly in each jaw; dorsal fin continuous, with 12 spines and 10 rays, spines and anterior rays of similar length; anal fin with 3 spines and 12 rays; pectoral fins with 2 unbranched and 14 branched rays; pelvic fins

FAO names: Diana's hogfish (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 25 cm



Male

not filamentous; caudal fin slightly rounded to square, its posterior corners not produced into lobes.

Colour: Very small individuals with prominent large black spots; adults red above, creamy white on sides and below; numerous small black spots posteriorly; black spot on caudal-fin base; 3 white spots situated on sides just below dorsal fin.

Bodianus leucosticticus (Bennett, 1832)

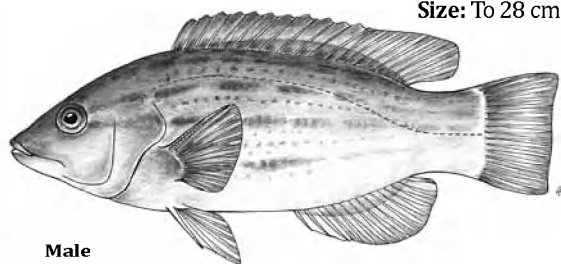
Habitat: Coastal and rocky reefs down to 50 m.

Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Dorsal fin with 12 spines and 10 rays, spines and anterior soft rays of similar length; anal fin with 3 spines and 12 rays; pectoral fins with 2 unbranched and 14 branched rays; pelvic fins not filamentous in adults; caudal fin slightly rounded to squared; posterior corners not produced into lobes.

Colour: Adults yellowish to pinkish with 5 narrow reddish horizontal stripes and intervening rows of small spots on sides.

FAO names: Lined hogfish (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 28 cm



Male

Bodianus macrognathos (Morris, 1974)

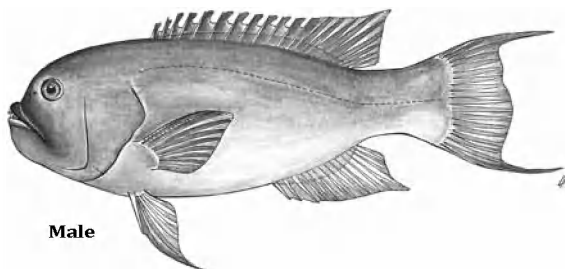
Habitat: Rocky bottoms from 25 m to 65 m.

Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Body of moderate depth, becoming deeper in larger individuals; dorsal fin with 12 spines and 10 soft rays, spines and anterior soft rays of similar length; anal fin with 3 spines and 12 soft rays; pectoral fins with 2 unbranched and 15 branched rays; pelvic fins slightly filamentous in very large individuals; upper and lower corners of caudal fin forming filamentous lobes in adults; cheek and opercle scaled.

Colour: Very large adults pink with a blue jaw.

FAO names: Giant hogfish (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 62 cm



Male

Bodianus opercularis (Guichenot, 1847)

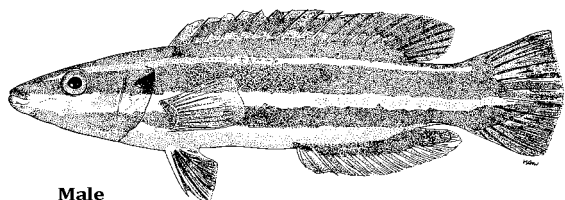
Habitat: Deep reefs on rubble bottoms of steep outer reef slopes from 35 m to 70 m.

Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Body slender, not very compressed; dorsal profile of head nearly straight; dorsal fin with 12 spines and 10 soft rays; anal fin with 3 spines and 12 soft rays.

Colour: Background colour generally white with three broad red stripes; black spot on operculum.

FAO names: Blackspot hogfish (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 18 cm



Male

Bodianus trilineatus (Fowler, 1934) *

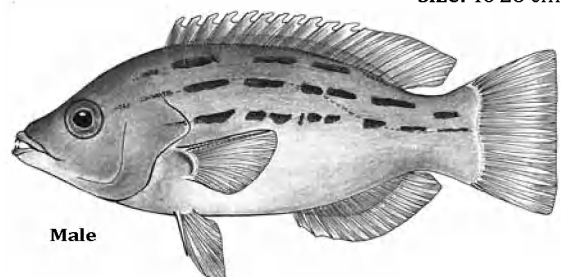
Habitat: Rough bottoms from 50 m to 100 m.

Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Body moderately deep; dorsal fin with 12 spines and 10 rays, spines and anterior rays of similar length; anal fin with 3 spines and 12 rays; pectoral fins with 2 unbranched and 14 branched rays; caudal fin slightly rounded to squared; cheek and opercle scaled; near half of lower jaw scaled.

Colour: Body pale with 3 narrow broken black stripes on upper half of sides; a narrow black line on pectoral-fin base in small individuals.

FAO names: Fourline hogfish (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 28 cm



Male

Cheilinus chlorourus (Bloch, 1791)

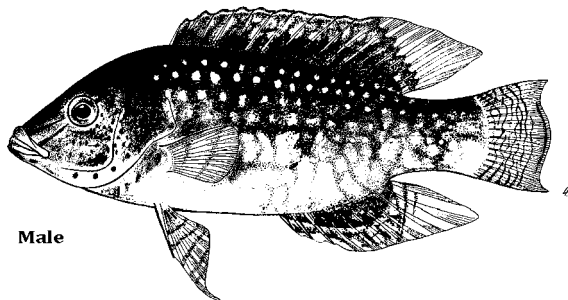
(Plate XVIII, 166)

FAO names: Floral wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 45 cm

Habitat: Coastal reef areas from 2 m to 30 m.**Fisheries:** Hooks and Line, Traps, Gillnets.**Distinctive Characters:** Dorsal fin continuous, with 10 spines and 9 rays; anal fin with 3 spines and 8 rays; pectoral fins with 2 unbranched and 10 branched rays; caudal fin rounded with a trilobed appearance in large individuals; cheeks and opercle scaled.**Colour:** Greenish-brown with reddish-brown fins, each scale on sides usually with a bluish spot; spots extending onto dorsal and anal fins; head with red spots, some joining to form lines radiating from eye.**Remarks:** Coloration very similar to *C. trilobatus*, but has black and white specks on its pelvic, anal and caudal fins.

Male

Cheilinus fasciatus (Bloch, 1791)

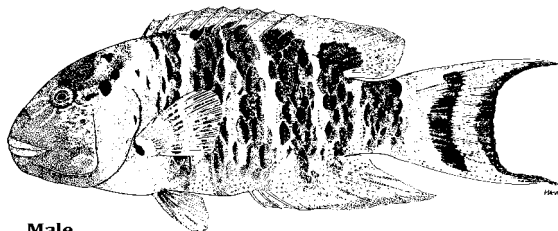
(Plate XIX, 167)

FAO names: Redbreasted wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 40 cm

Habitat: Lagoon and seaward reefs from 4 m to 40 m.**Fisheries:** Hooks and Line, Traps, Gillnets, Spears.**Distinctive Characters:** Jaws prominent, especially lower jaw in large individuals; dorsal fin with 9 spines and 10 rays; anal fin with 3 spines and 8 rays; pectoral fins with 12 rays; caudal fin with prolonged lobes in adults; cheeks and opercle scaled; lower jaw without scales.**Colour:** Body mostly greenish brown to black, with yellowish to white bars; red lines radiating from eye; anal and caudal fins with greenish-brown to black and yellow to white bands, stripes and blotches; fins often spotted with red.

Male

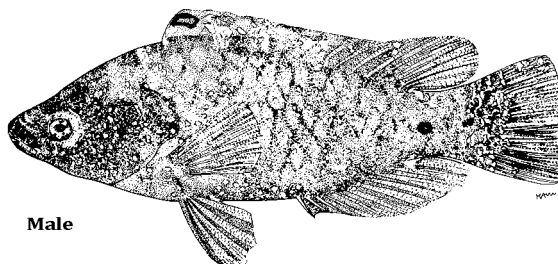
Cheilinus oxycephalus Bleeker, 1853

FAO names: Snooty wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 17 cm

Habitat: Coral rich areas of lagoons and reefs from 1 m to 40 m.**Fisheries:** Hooks and Line, Traps, Gillnets, Spears.**Distinctive Characters:** Dorsal fin with 9 spines and 10 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 12 soft rays; head scaled to above middle of eyes; mouth terminal or with lower jaw slightly projecting; caudal fin rounded in all stages.**Colour:** Brownish red, mottled with small white spots; 3 or 4 blackish dots nearly as large as pupil in mid-lateral row on posterior half of body.

Male

Cheilinus trilobatus Lacepède, 1801

(Plate XIX, 168)

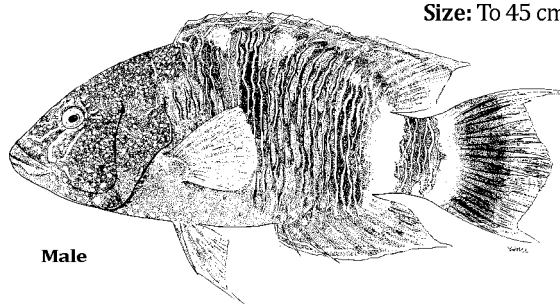
FAO names: Tripletail wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 45 cm

Habitat: Lagoons and seaward reefs from 1 m to 30 m.

Fisheries: Hooks and Line, Traps, Gillnets, Spears.

Distinctive Character: Dorsal fin continuous, with 9 spines and 10 rays; anal fin with 3 spines and 8 rays; caudal fin rounded with a trilobed appearance; lateral line uninterrupted below posterior portion of dorsal-fin base.

Colour: Green to purplish brown with about 4 vertical brownish bars; head with numerous small red spots; caudal fin greenish with a red posterior margin; small individuals with about 3 or 4 dark spots mid-laterally on sides.

***Cheilinus undulatus*** Rüppell, 1835

(Plate XIX, 169)

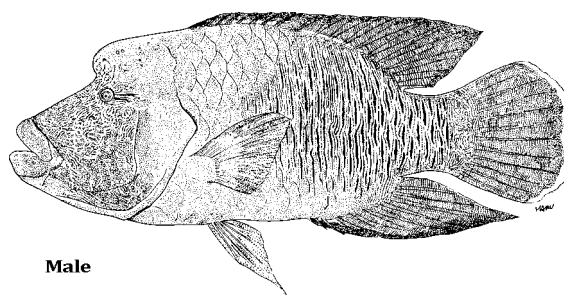
FAO names: Humphead wrasse (En)
Local name(s): N: Mbono;
 S: Pono (M); Badu (K)
Size: To 229 cm

Habitat: Lagoons and seaward reefs from 1 m to 60 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: A pronounced fleshy hump developing above eye in large individuals; jaws and lips prominent; dorsal fin with 9 spines and 10 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 12 rays; cheeks and opercle scaled.

Colour: Juveniles pale greenish with elongate dark spots on scales tending to form bars and 2 black lines posteriorly from eye; adults body greenish, with a vertical purplish-brown bar on scales behind pectoral fins; 2 black lines posteriorly from eye; wavy green and purplish brown lines on the head.

***Cheilio inermis*** (Forsskål, 1775)

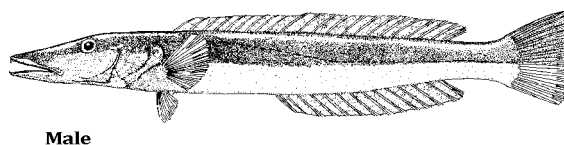
FAO names: Cigar wrasse (En)
Local name(s): N: Bua;
 S: Mgema (M); Bua (K)
Size: To 50 cm

Habitat: Lagoons and seaward reefs from 1 m to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Two short stout canines situated anteriorly in each jaw; dorsal fin with 9 flexible spines and 13 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 12 rays; pelvic fins not filamentous; caudal fin slightly rounded; head mostly naked with only 2 vertical rows of scales behind eye.

Colour: Body most often green above and cream or bluish below; several blackish spots along lateral line; small individuals with a continuous black stripe.

***Choerodon robustus*** (Günther, 1862)

(Plate XIX, 170)

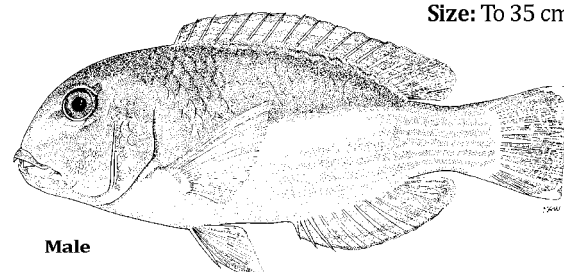
FAO names: Robust tuskfish (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 35 cm

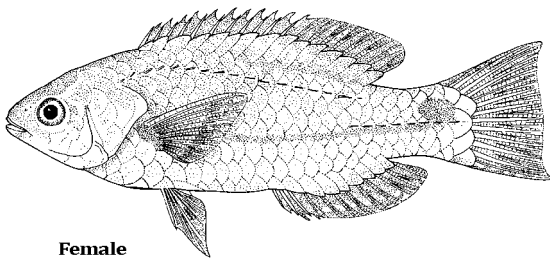
Habitat: Coral and rocky reefs from 40 m to 70 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 13 spines and 8 soft rays; anal fin with 3 spines and 10 soft rays; pectoral fins with 16 rays; pelvic fins not filamentous; caudal fin squared; cheek and opercle scaled; lower jaw without scales.

Colour: Body reddish orange to pinkish brown above, white to yellowish below and behind; several horizontal rows of blue spots on caudal peduncle; head with 2 short blue lines passing through and beneath eye.



***Cirrhilabrus exquisitus* Smith, 1957**

Female

Habitat: Seaward reefs from 6 m to 32 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

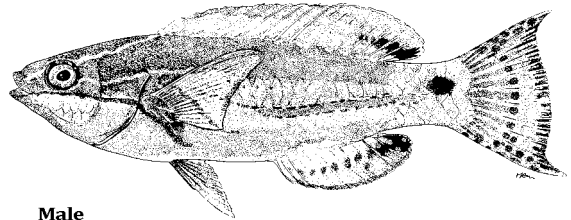
Distinctive Characters: Dorsal fin with 11 spines and 8–9 soft rays; anal fin with 3 spines and 9 soft rays; pectoral fins with 14–16 soft rays; caudal fin of juveniles

FAO names: Exquisite wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 12 cm



Male

rounded, of adults double emarginate.

Colour: The dominant marking for both sexes is a large oval black spot on caudal peduncle just above lateral line.

***Coris aygula* Lacepède, 1801**

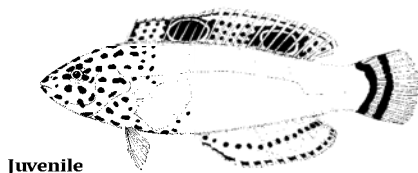
(Plate XIX, 171, 172)

FAO names: Clown wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 120 cm

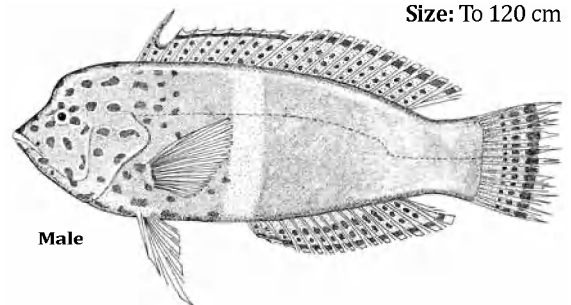


Juvenile

Habitat: Weed, rock and coral areas down to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin continuous with 9 flexible spines and 12 (rarely 13) soft rays, 1st two spines in large individuals longer and set closer together than succeeding spines; anal fin with 3 flexible spines and 12 soft rays; pectoral fins with 2 unbranched and 12 branched rays; pelvic fins filamentous in large individuals; caudal fin squared, each individual ray becoming filamentous; cheek, opercle and lower jaw



Male

without scales.

Colour: Small individuals white, with numerous black spots on head and forward on sides; two prominent large black spots encircled first by white; a series of black spots situated on dorsal fin immediately above 2 large patches of red on upper portion of sides; remainder of dorsal and anal fins white with black speckles and stripes; caudal fin white with a black base; adults greenish with red stripes and spots on head, back and fins; a dark spot on opercular flap.

***Coris caudimacula* (Quoy & Gaimard 1834)**

Habitat: Rubble, sand and seaweed from 2 m to 25 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 soft rays; caudal fin rounded; ventral fin not reaching anal-fin origin.

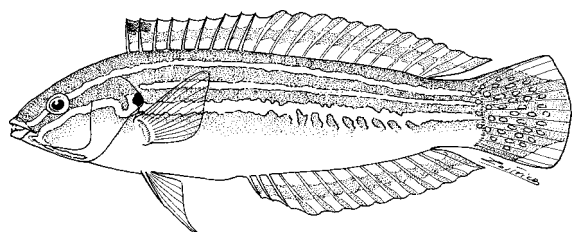
Colour: Head with irregular bands; opercular flap with a black spot edged with yellow on posterior part; body with 4 pink salmon stripes, sometimes with broad dark bars on upper side; large diffuse blackish spot at base of caudal fin.

FAO names: Spottail coris (En)

Local name(s): N: Bua;

S: Mgema (M); Bua (K)

Size: To 20 cm

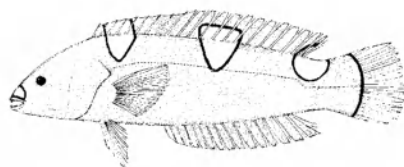


Male

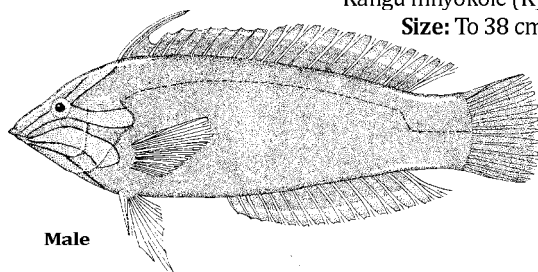
Coris cuvieri (Bennet, 1831)

(Plate XIX, 173, 174)

FAO names: African coris (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 38 cm



Juvenile



Male

Habitat: Weed, rock and coral areas from 5 m to 50 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

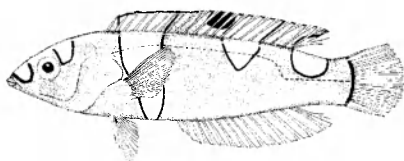
Distinctive Characters: Dorsal fin with 9 flexible spines and 12 (rarely 13) soft rays; 1st two spines in large individuals considerably longer and set close together than succeeding spines; anal fin with 3 flexible spines and 12 soft rays; pectoral fins with 2 unbranched

and 11 branched rays; pelvic fins filamentous in large individuals; caudal fin slightly rounded; lateral line abruptly curved below posterior portion of dorsal-fin base; cheek, opercle and lower jaw without scales.

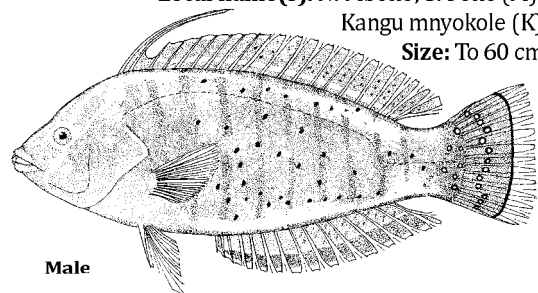
Colour: Juveniles orange, with 3 black edge white bands or spots; adults body red–purplish brown with numerous small bright green spots; bright green stripes on the head.

Coris formosa (Bennett, 1830)

FAO names: Queen coris (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 60 cm



Juvenile



Male

Habitat: Weed, rock and coral areas down to 20 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

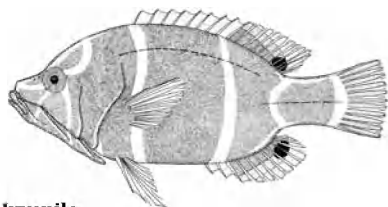
Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; 1st two spines in large individuals considerably longer and close together; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 rays; pelvic fins filamentous in large individuals; cheeks,

opercle and lower jaw without scales.

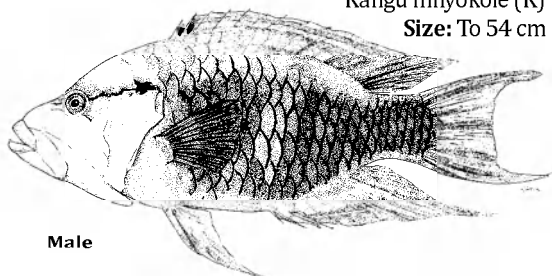
Colour: Juveniles red–orange with 5 prominent black-edged white bars or spots high on sides and with a prominent black spot centrally on dorsal fin; adults dark green to purplish brown, turning red forward on sides and head; black to brilliant blue spots on the entire body; brilliant blue to green stripes on head.

Epibulus insidiator (Pallas, 1770)

FAO names: Sling-jaw wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 54 cm



Juvenile



Male

Habitat: Shallow coral reefs from 1 m to 42 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Mouth protrusible unfolding into a tube easily half the body length; dorsal fin with 9 spines and 10 soft rays; anal fin with 3 spines and 8 soft rays; pectoral fins with 12 rays; pelvic fins filamentous

in adults; caudal fin with corners filamentous in adults.

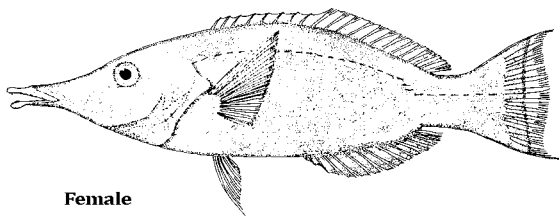
Colour: Juveniles brown with narrow, white horizontal bands traversing body and a black spot on anal fin and on rear of dorsal fin; adults yellow–brown; dorsal fin with horizontal dark brown stripes and a black spot between 1st two spines.

Gomphosus caeruleus Lacepède, 1801

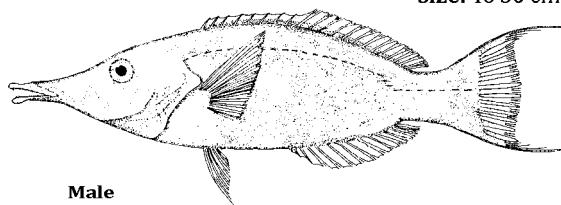
(Plate XIX, 175)

FAO names: Green birdmouth wrasse (En)**Local name(s):** N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 30 cm

Female



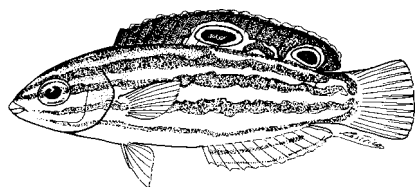
Male

Habitat: Shallow rocky and coral reefs down to 30 m.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Snout produced into a prominent tube-like structure tipped with jaws; dorsal fin with 8 spines and 13 soft rays; anal fin with 3 spines

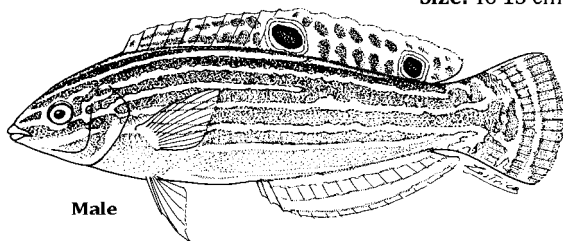
and 11 soft rays; pectoral fins with 15 rays; caudal fin rounded in small individuals (females), but squared off with corners prolonged into filaments in large males.

Colour: Body greenish brown to greenish blue.***Halichoeres cosmetus*** Randall & Smith, 1982 ***FAO names:** Adorned wrasse (En)**Local name(s):** N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 13 cm

Juvenile



Male

Habitat: Coral reefs and rocky substrata from 1 m to 31 m.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays;

pectoral fins with 12–14 soft rays; head naked; scales on chest small.

Colour: Juveniles with blue spots on dorsal fin surrounded by black and white; adults body with salmon pink stripes dorsally, yellowish ventrally and dark green stripes.***Halichoeres hortulanus*** (Lacepède, 1801)

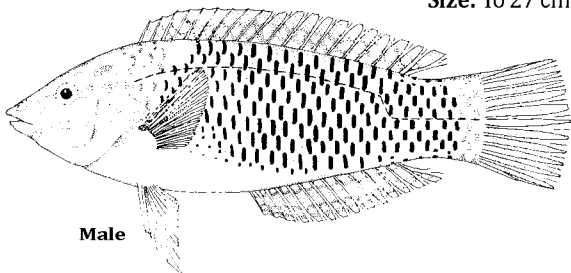
(Plate XIX, 176)

FAO names: Checkerboard wrasse (En)**Local name(s):** N: Mbono; S: Pono (M);

Kangu mnyokole (K)

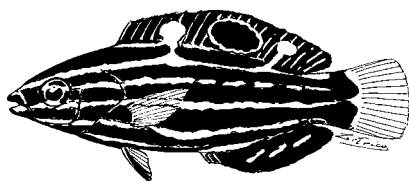
Size: To 27 cm

Juvenile



Male

Habitat: Sand patches of seaward reefs down to 30 m.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14 rays.**Colour:** Juveniles with 3 black bars and a large black spot encircled with yellow on dorsal fin; adults bluish to whitish, each scale with a vertical black bar; a prominent yellow patch on dorsal-fin edge; head bluish grey, with prominent red horizontal wavy stripes and spots.

***Halichoeres marginatus* Rüppell, 1835**

Juvenile

Habitat: Lagoons and seaward reefs down to 30 m.

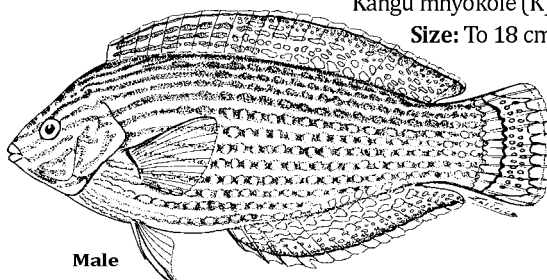
Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 13–14 soft rays; anal fin with 3 spines and 12–13 (usually 12) soft rays; pectoral fins with 14–15 soft rays; ventral fin of terminal males long, reaching

FAO names: Dusky wrasse (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 18 cm



Male

beyond anal-fin origin.

Colour: Juveniles dark brown with light horizontal stripes; yellow edged dark spots on spiny part of dorsal fin; caudal fin whitish; terminal phase greenish to orange-brown with lines of blue-edged greenish spots; caudal fin with green crescent.

***Halichoeres nebulosus* (Valenciennes 1839)**

Habitat: Juveniles in sandy areas, adults on exposed rocky bottoms down to 40 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

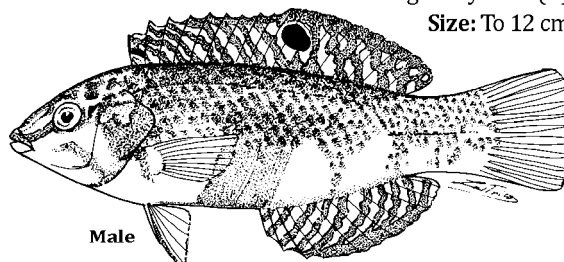
Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14 soft rays; scales on side of nape not reaching to posterior edge of eye; ventral fin of males nearly or just reaching anus.

Colour: Females have a bright pink patch of colour on the belly; males are identified by the angled or diagonal pink band below the eye.

FAO names: Nebulous wrasse (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 12 cm



Male

***Halichoeres nigrescens* (Bloch & Schneider, 1801)**

Habitat: Shallow weedy areas of rocky shorelines.

Fisheries: Traps, Gillnets, Handlines, Seines.

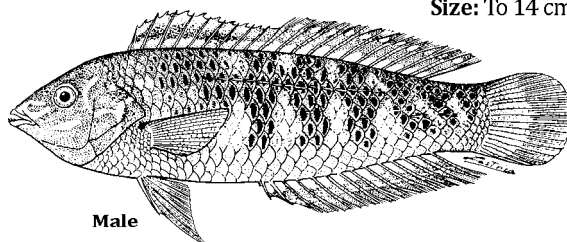
Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 14–15 soft rays; head naked; 2nd and 5th dorsal-fin spines higher than the rest of the fin.

Colour: Juveniles and females with thick mid-lateral stripe and ocellus midway in dorsal fin; males greenish-brown dorsally and whitish ventrally with 6–7 reddish brown bars; oblique red streaks on head; vertical blue spot or band behind upper half of eye.

FAO names: Bubblefin wrasse (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 14 cm



Male

***Halichoeres scapularis* (Bennett, 1832)**

Habitat: Shallow weedy areas of rocky shorelines.

Fisheries: Traps, Gillnets, Handlines, Seines.

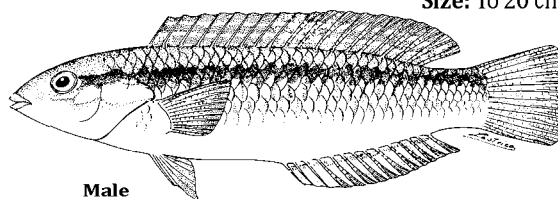
Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14 soft rays.

Colour: Initial phase pale olivaceous to yellowish-green on back, whitish below; brown or blackish zig-zag stripe (edged in yellow on head); terminal male green with a lavender-pink zig-zag stripe and a blackish blotch on the anterior upper side; head with broad lavender-pink bands.

FAO names: Zigzag wrasse (En)

Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)

Size: To 20 cm



Male

***Hemigymnus fasciatus* (Bloch, 1792)**

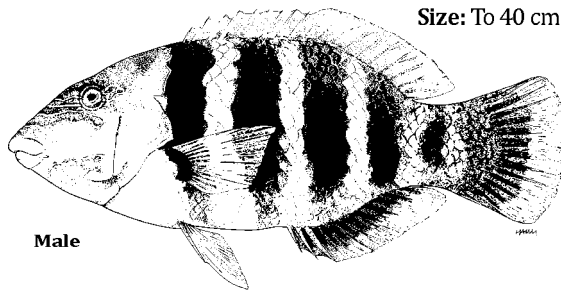
Habitat: Lagoons and coral reefs from 1 m to 20 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Lips very large and fleshy in adults; a pair of protruding canine teeth in jaws; dorsal fin with 9 spines and 10 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14 rays.

Colour: Sides black with 4 or 5 narrow, white, vertical bars; head greenish above, yellowish below, with several blue-edged bronze stripes especially around eyes; small individuals with similar markings, with yellowish bands and blackish head.

FAO names: Barred thicklip (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 40 cm



Male

***Hemigymnus melapterus* (Bloch, 1791)**

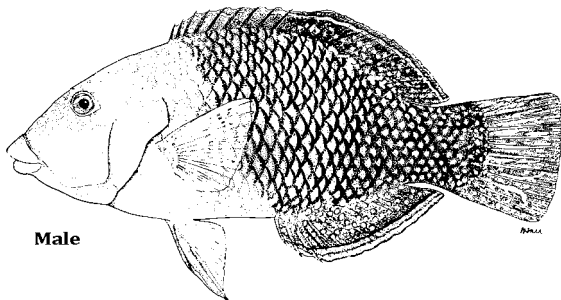
Habitat: Coral reefs from 1 m to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Lips very large and fleshy in adults; a pair of protruding canine teeth in jaws; dorsal fin with 9 spines and 10 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14 rays.

Colour: Juveniles and sub adults are almost white anteriorly and abruptly dark green and black posteriorly; those under about 8 cm have a bright yellow tail which slowly fades with growth; adults head, light blue above, greenish below with reddish spots and stripes around eyes.

FAO names: Blackeye thicklip (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: Common 50 cm



Male

***Hologymnosus annulatus* (Lacepède, 1801)**

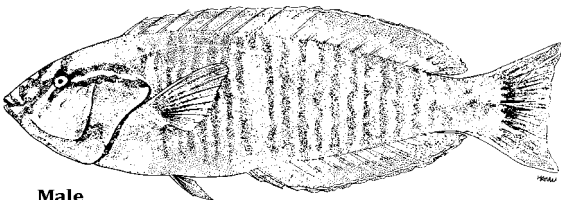
Habitat: Coral reefs from 1 m to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 rays, not short in length; caudal fin slightly rounded in juveniles, emarginated in adults.

Colour: Initial phase brown to olive-brown with 17-19 vertical dark brown bars; terminal-male phase green, shading to blue-green ventrally, with about 17 purplish red bars; blue-green bands on head.

FAO names: Ring wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 38 cm



Male

***Hologymnosus doliatus* (Lacepède, 1801)**

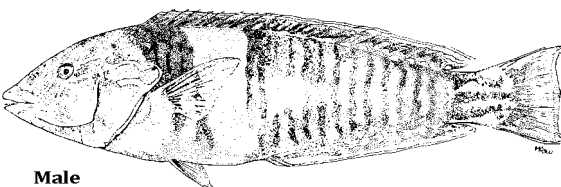
Habitat: Seaward coral and rocky reefs down to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays; anal fin with 3 spines and 12 soft rays; pectoral fins with 13 rays, not short in length; caudal fin slightly rounded in juveniles, emarginated in adults.

Colour: Juveniles whitish with 3 narrow orange-red stripes; initial phase pale greenish, bluish, or pinkish with 20-23 orangish brown bars; terminal-male phase with a deep blue to purple bar followed by a broad light red bar.

FAO names: Pastel ringwrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 50 cm



Male

***Iniistius pavo* (Valenciennes, 1840)**

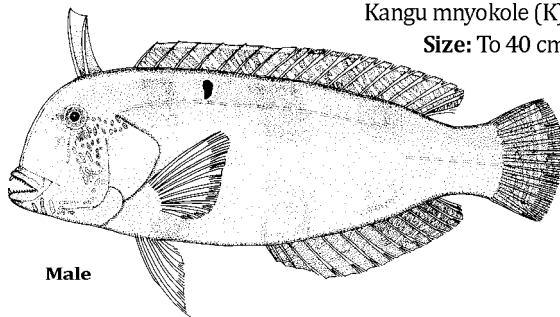
Habitat: Clear lagoon and seaward reefs, on large expanses of coarse sand; adults rare in less than 20 m, common in deeper waters. Maximum depth 100 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays, 1st two spines separated by a large gap from the rest of fin; anal fin with 3 spines and 12 soft rays; pectoral fins with 12 rays; caudal fin rounded.

Colour: Body pale blue to green, with 3 or 4 poorly indistinct bars; blue-edged black spot above lateral line below 6th dorsal-fin spine.

FAO names: Peacock wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)
Size: To 40 cm



Male

***Iniistius pentadactylus* (Linnaeus, 1758)**

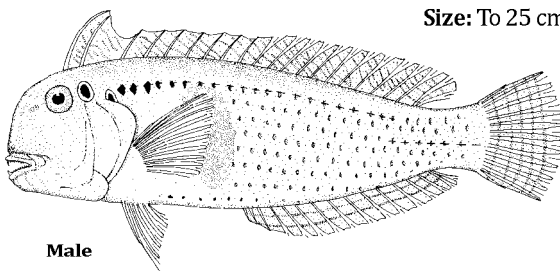
Habitat: Sandy bottoms from 2 m to 18 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays, 1st two spines slightly longer than remaining ones and 1st spine inserted above eye; anal fin with 3 spines and 12 soft rays; pectoral fins with 12 rays; pelvic fins filamentous in large individuals.

Colour: Greenish-brown above, whitish below; several prominent bright red spots outlined in pink on and below lateral line, and above pectoral-fin base in large individuals; fins bluish to transparent with several reddish to orange horizontal stripes and spots on dorsal, anal and caudal fins.

FAO names: Fivefinger wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)
Size: To 25 cm



Male

***Labroides dimidiatus* (Valenciennes, 1839)**

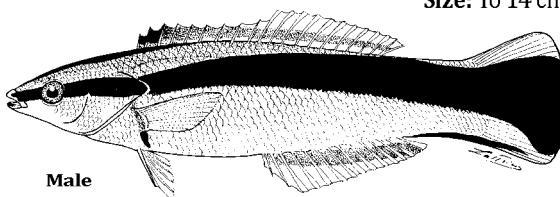
Habitat: Coral reef habitats down to 40 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 10 soft rays; pectoral fins with 13 soft rays.

Colour: Adults light blue, shading to pale yellowish or white anteriorly; a black stripe from snout through eye to rear edge of caudal fin, the stripe progressively broadens posteriorly; often with yellow back in deep waters.

FAO names: Bluestreak cleaner wrasse (En)
Local name(s): N: Mbono;
S: Pono (M); Chibachi (K)
Size: To 14 cm



Male

***Macropharyngodon bipartitus* Smith, 1957**

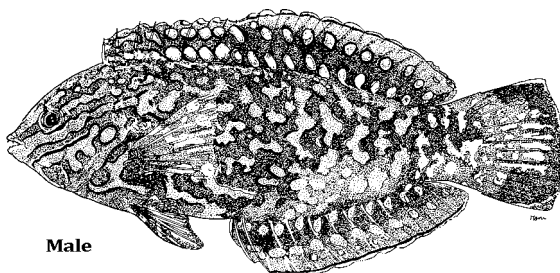
Habitat: Lagoon and sheltered reefs and seaward reefs.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 12 soft rays; caudal fin rounded.

Colour: Females orange with white spots of variable sizes; a very large black area over chest and abdomen with a coarse network of bright blue; head orange-yellow with black-edged orange or pale blue spots behind and above eye; males dull orange-red with dark-edged green diagonal bands on head which continue to middle of body where they break up into irregular spots; a large light yellow to orange area beneath soft portion of dorsal fin and onto caudal peduncle.

FAO names: Rare wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
Kangu mnyokole (K)
Size: To 13 cm



Male

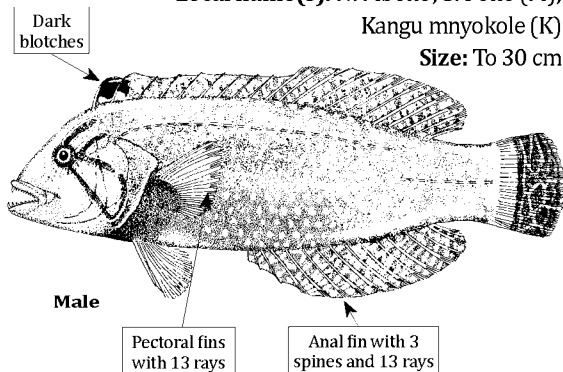
***Novaculichthys taeniourus* (Lacepède, 1801)**

Habitat: Reef flats, lagoons and seaward reefs in areas of mixed sand and rubble. Maximum depth 14 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 12 soft rays, the 1st two spines flexible; soft rays slightly longer than spines; caudal fin rounded; lateral line interrupted below posterior portion of dorsal fin; opercle and lower jaw without scales; juveniles have long extended dorsal-fin spines.

Colour: Body green or brown, with pearly white spots on sides; white-edged brown lines on head; small individuals with white spots on sides somewhat arranged in vertical bands.



FAO names: Rockmover wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 30 cm

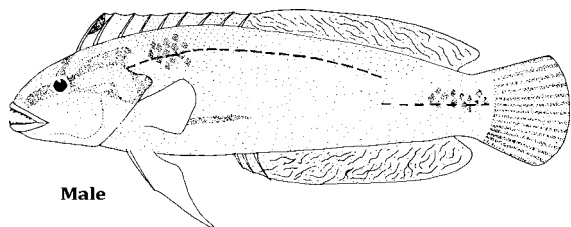
***Novaculoides macrolepidotus* (Bloch, 1791)**

Habitat: Lagoons and channels on sandy flats with seagrass and algae. Maximum depth 4 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 12–14 soft rays; anal fin with 3 spines and 12–14 soft rays; pectoral fins with 12 soft rays; caudal fin rounded.

Colour: Green to brownish-yellow with dark blotches in a midlateral row on body; dark bands radiating posteriorly from eye and one passing in front of upper lip to eye; a black spot edged white anteriorly on 1st dorsal membrane.



FAO names: Seagrass wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 18 cm

***Oxycheilinus bimaculatus* (Valenciennes 1840)**

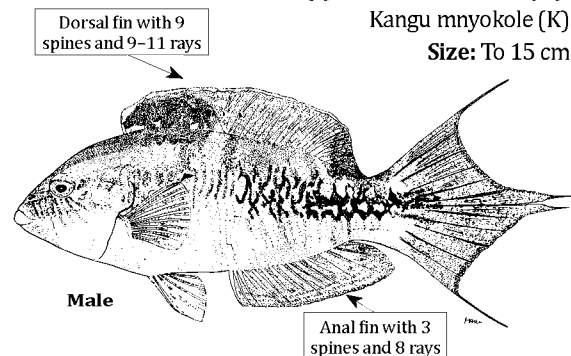
Habitat: Mainly in areas with thick vegetation.

Fisheries: Hooks and Line, Traps, Gillnets.

Distinctive Characters: Pectoral fins with 12–13 soft rays; snout nearly straight, nape convex; head scaled dorsally to above middle of eyes; mouth with lower jaw slightly projecting; caudal fin of terminal males rhomboid, with central rays longest, and dorsalmost caudal-fin ray elongated into a short filament.

Colour: Young with a broad, dark lateral stripe which breaks into dark blotches in adults, the largest above distal pectoral fins; ventral part of gill opening with orange-red lines; dark spot behind eye.

(Plate XX, 177)



FAO names: Two-spot wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole (K)
Size: To 15 cm

***Oxycheilinus digramma* (Lacepède, 1801)**

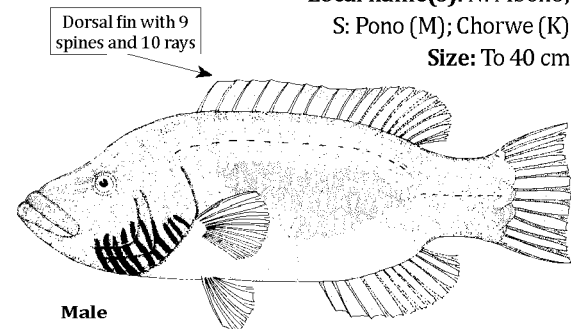
Habitat: Coral rich areas from 3 m to 120 m.

Fisheries: Hooks and Line, Traps, Gillnets, Spears.

Distinctive Characters: Two strong canines situated anteriorly in each jaw; anal fin with 3 spines and 8 rays; pectoral fins with 12 rays; pelvic fins not filamentous in adults; caudal fin slightly rounded.

Colour: Greenish-brown above, reddish-brown below, with red lines through eye towards upper jaw; additional series of black parallel lines slanted forward and upward on lower half of head; each scale, on sides, with red spots.

(Plate XX, 178)



FAO names: Cheeklined wrasse (En)
Local name(s): N: Mbono;
 S: Pono (M); Chorwe (K)
Size: To 40 cm

Pseudodax moluccanus (Valenciennes, 1840)

Habitat: Rock and coral reefs down to 60 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

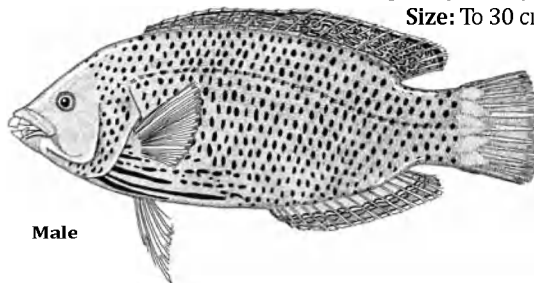
Distinctive Characters: Dorsal fin with 11 spines and 12 soft rays; anal fin with 3 spines and 14 soft rays; pectoral fins with 16 rays; pelvic fins slightly filamentous in large individuals; caudal fin slightly rounded; lateral line smoothly curved; cheek and opercle scaled; lower jaw without scales; anterior teeth spatulate.

Colour: Body deep purplish blue, reddish brown forward on back and rear of head; dorsal fin orange.

FAO names: Chiseltooth wrasse (En)

Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 30 cm



Male

Pteragogus flagellifer (Valenciennes, 1839)

Habitat: Algae patches of coral or rocky reefs.

Fisheries: Traps, Gillnets, Handlines, Seines.

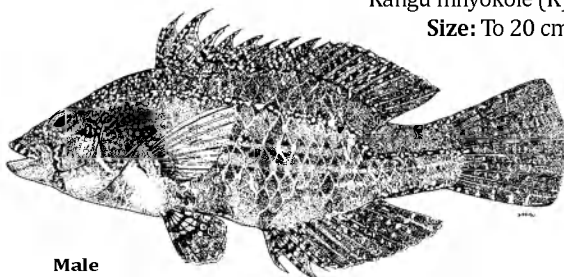
Distinctive Characters: Dorsal fin with 9 spines and 10–12 soft rays; anal fin with 3 spines and 9 soft rays; pectoral fins with 13 soft rays; cornea modified to form double pupil (true of all *Pteragogus*); posterior preopercular margin finely serrate; membranes from tips of dorsal fin spines prolonged into filaments, progressively longer anteriorly, very long in males.

Colour: Greenish, with a black spot on 1st dorsal-fin membrane; small black spots on the body.

FAO names: Cocktail wrasse (En)

Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 20 cm



Male

Pteragogus pelycus Randall, 1981

Habitat: Weedy bottoms down to 10 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

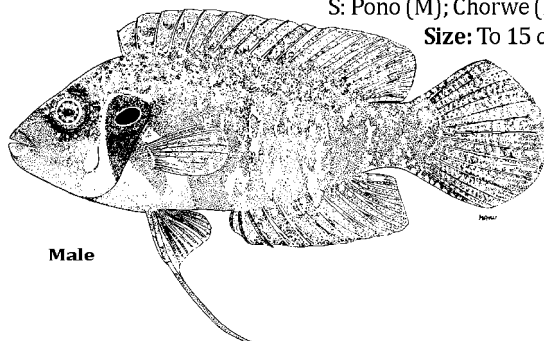
Distinctive Characters: First pelvic-fin ray prolonged, very long in males; dorsal fin with 11 spines and 9 soft rays; anal fin with 3 spines and 9 soft rays; pectoral fins with 13 soft rays; lateral line curved abruptly downward below posterior dorsal fin; cheeks scaled to below centre of eye; caudal fin strongly rounded.

Colour: Body reddish brown with darker pigments along lateral line; an oval black spot edged in yellow on opercle; anal and ventral fins light with brown margin.

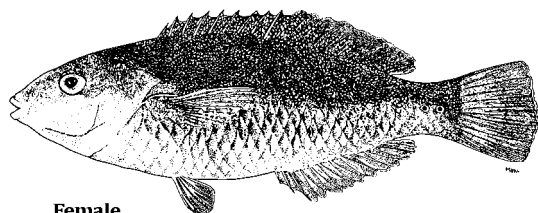
FAO names: Sideburn wrasse (En)

Local name(s): N: Mbono; S: Pono (M); Chorwe (K)

Size: To 15 cm



Male

Stethojulis albovittata (Bonnaterre, 1788)

Female

Habitat: Reef flats, clear lagoon and seaward reefs.

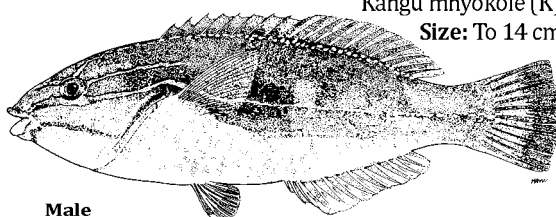
Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 14–15 soft rays, its base strongly oblique.

FAO names: Bluelined wrasse (En)

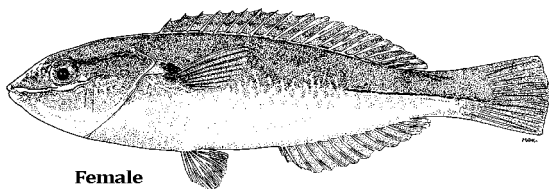
Local name(s): N: Mbono; S: Pono (M); Kangu mnyokole (K)

Size: To 14 cm



Male

Colour: Females brown to greenish dorsally, whitish ventrally; yellow streak on gill cover; orange spot on pectoral-fin base; 1–2 black spots on caudal peduncle; terminal males with 3 longitudinal blue lines on body; 4 narrow blue lines on head and no orange spot on pectoral-fin base.

Stethojulis interrupta (Bleeker, 1851)

Female

Habitat: Coastal areas of mixed sand, rock and coral down to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

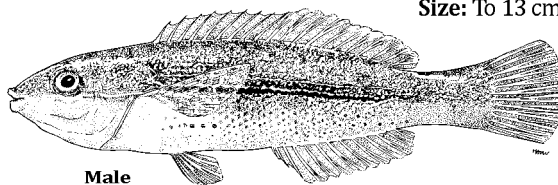
Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 13 soft rays; head naked.

FAO names: Cutribbon wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 13 cm



Male

Colour: Females brown, greenish or yellowish dorsally with tiny blue spots; whitish ventrally with a row of black dots; a yellow stripe from the tip of snout to just past axil, running below eye; often a narrow black stripe on body; male greenish dorsally, white ventrally; blue line adjacent to dorsal fin; 3 blue lines on the head.

Stethojulis strigiventer (Bennett, 1833)

Habitat: Shallow lagoons, usually in weedy areas or seagrass beds down to 6 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 11 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 15 (rarely 14) soft rays; 1st spine of the anal fin is minute or embedded.

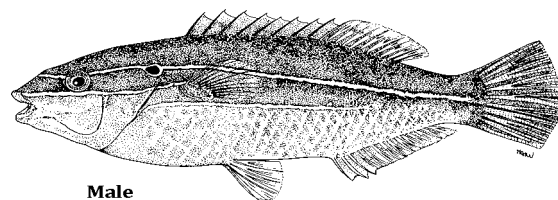
Colour: Green dorsally, white ventrally; continuous blue line from head; small black spot on opercular flap; 3 blue lines on head; red band near pectoral-fin base.

FAO names: Three-ribbon wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 15 cm



Male

Suezichthys russelli Randall, 1981

Habitat: Sand patches of shallow reefs down to 100 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal fin with 9 spines and 11 rays; anal fin with 3 spines and 10 soft rays; teeth in jaws caniniform; the anterior ones usually distinctly larger than others; cheek and opercle partially scaled; gill membranes free from isthmus.

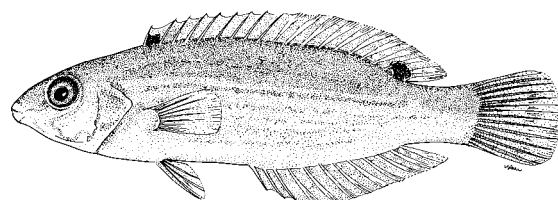
Colour: Females orangish dorsally; scales on sides with pink centres and broad yellow margin; 8 pinkish bars on body; terminal phase light red dorsally, with yellow-edged olive lines; black spots rimmed with pale blue.

FAO names: Russel's wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole (K)

Size: To 7.5 cm



Male

Thalassoma amblycephalum (Bleeker, 1856)

Habitat: Shallow lagoon and seaward reefs, typically near tops of isolated coral pinnacles and upper edge of steep slopes. Maximum depths 15 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Dorsal with 8 spines and 13 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 15 soft rays; caudal fin truncate to slightly emarginate becoming lunate in large males.

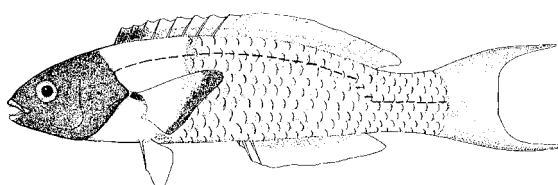
Colour: Juveniles and females brown to black dorsally, white ventrally; males reddish-violet with head usually green with a yellow band following on the body.

FAO names: Bluntheaded wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole, Msukutari (K)

Size: To 16 cm



Male

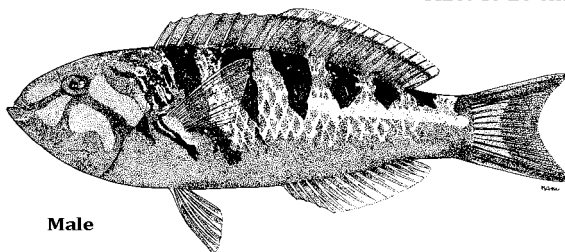
***Thalassoma hardwicke* (Bennett, 1830)**

Habitat: Shallow lagoon and seaward reefs in areas of clear waters down to 15 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 16 soft rays; caudal fin truncate in juveniles, emarginate in adults.

Colour: The pattern remains similar with growth; bluish-green with 6 black bars on body which are progressively short posteriorly; a midlateral pink stripe on posterior half of body; head with broad irregular pink bands; nape with 2 black bands.



Male

FAO names: Sixbar wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole, Msikutari (K)
Size: To 20 cm

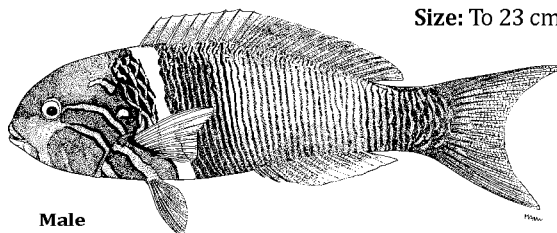
***Thalassoma hebraicum* (Lacepède, 1801)**

Habitat: Lagoon and seaward reefs from 1 m to 30 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; anal fin with 3 spines and 11 soft rays; pectoral fins with 15–16 soft rays; head scaleless except patch of small scales dorsally on opercle; caudal fin varying with age from truncate to lunate.

Colour: Bright yellow band around the shoulder; yellowish and blue vertical lines on the body.



Male

FAO names: Goldbar wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole, Msikutari (K)
Size: To 23 cm

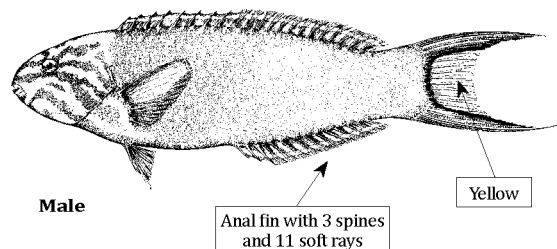
***Thalassoma lunare* (Linnaeus, 1758)**

Habitat: Coral and rocky reefs from 1 m to 20 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; pectoral fins with 15 rays; caudal fin lunate with upper and lower corners produced into filaments in very large individuals.

Colour: Bright green to blue with a vertical red band on each scale and several prominent red or purple lines on head; dorsal and anal fins green to blue basally with pink, blue and yellow horizontal stripes successively; adults with blue pectoral fins with a large elongate pink area distally.



Male

FAO names: Moon wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole, Msikutari (K)
Size: To 30 cm

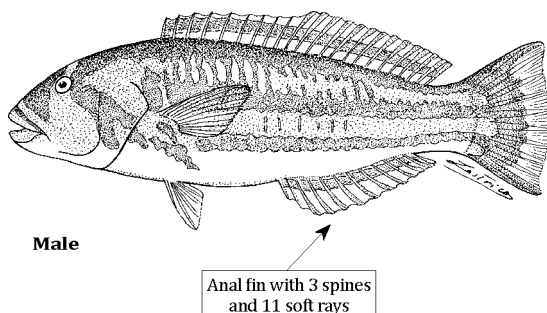
***Thalassoma purpureum* (Forsskål, 1775)** (Plate XX, 179, 180)

Habitat: Reef flats and surge zones of coral and rocky reefs at depths from 0.1 m to 10 m.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; pectoral fins with 16 branched rays; pelvic fins pointed but not filamentous.

Colour: Juveniles and females green and reddish with 2 longitudinal bands of elliptical or rectangular green spots; large males blue-green with 3 irregular pink to turquoise stripes on body; *T. purpureum* and *T. trilobatum* have nearly identical initial phases; they differ slightly in details of the head markings, and *T. purpureum* has a slightly longer head, shorter pectoral fins, and attains a larger size.



Male

FAO names: Surge wrasse (En)
Local name(s): N: Mbono; S: Pono (M);
 Kangu mnyokole, Msikutari (K)
Size: To 46 cm

***Thalassoma quinquevittatum* (Lay & Bennett 1839) ***

Habitat: Clear outer lagoon and seaward reefs.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; pectoral fins with 16 soft rays; head naked except for a patch of small scales dorsally on opercle; caudal fin truncate or with lobes slightly prolonged becoming deeply emarginate in large males.

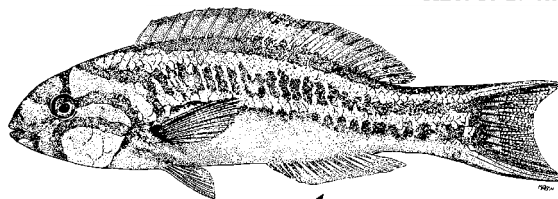
Colour: Body green and pink striped dorsally; 2nd green stripe consists of close set elongate spots; black spot on pectoral-fin base; head rose with 4 green-blue bands radiating from eye.

FAO names: Fivestripe wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole, Msukutari (K)

Size: To 17 cm



Male

Anal fin with 3 spines
and 11 soft rays

***Thalassoma trilobatum* (Lacepède, 1801) (Plate XX, 181, 182)**

Habitat: Surge zone of reef margins and rocky coastlines.

Fisheries: Traps, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 8 spines and 13 soft rays; pectoral fins with 16 rays; pelvic fins pointed but not filamentous; caudal fin slightly rounded in young; truncate in terminal males.

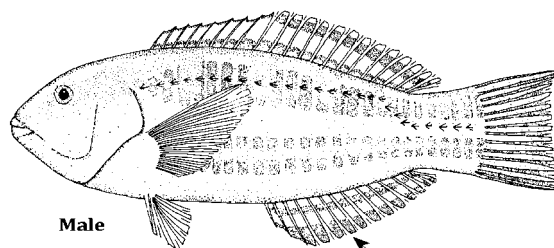
Colour: Juveniles and females brownish-red and green, the green in 2 longitudinal series of ellipses or rectangles; large-males body salmon pink with 2 longitudinal series of blue-green blotches; the primary phase of this wrasse is almost indistinguishable from that of *T. purpurum*, but head of male *T. trilobatum* is plain brown to orange or shaded with blue.

FAO names: Christmas wrasse (En)

Local name(s): N: Mbono; S: Pono (M);

Kangu mnyokole, Msukutari (K)

Size: To 30 cm



Male

Anal fin with 3 spines
and 11 soft rays

SCARIDAE

Parrotfishes

***Bolbometopon muricatum* (Valenciennes, 1840)**

Habitat: Juveniles in lagoons, adults in clear lagoon and seaward reefs, from 1 m to 30 m.

Fisheries: Traps, Gillnets, Seines, Lines, Spears.

Distinctive Characters: A hump develops on forehead and the anterior profile becomes increasingly vertical, which may obscure predorsal scales; 2 rows of cheek scales; pectoral fins with 14 (occasionally 13) branched rays; caudal fin rounded in small individuals, the lobes becoming slightly produced in larger individuals but centrally the fin still rounded.

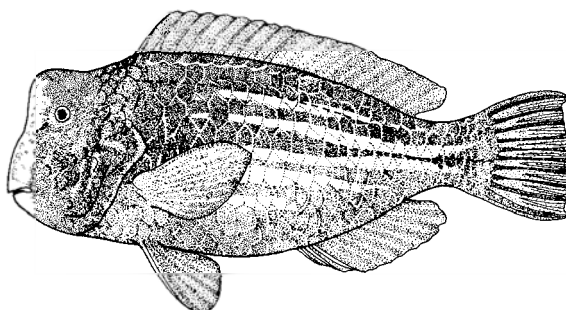
Colour: Background colour bright greenish-blue, head anteriorly pink.

FAO names: Green humphead parrotfish (En)

Local name(s): N: Pono; S: Pono/

Shunu (M), Amri (K)

Size: To 130 cm



Terminal phase

Calotomus carolinus (Valenciennes, 1840)

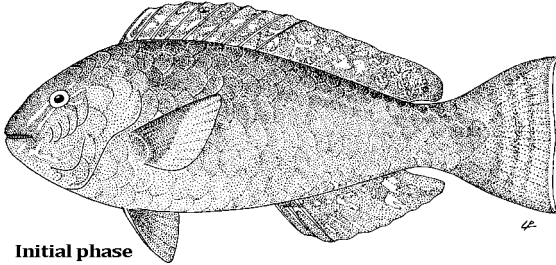
(Plate XX, 183, 184)

FAO names: Carolines parrotfish (En)

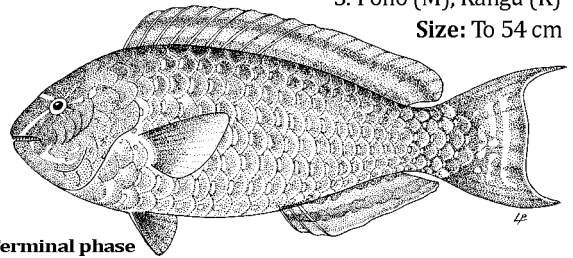
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 54 cm



Initial phase



Terminal phase

Habitat: Lagoon and seaward reefs down to 27 m.

Fisheries: Traps, Gillnets, Seines, Spears.

Distinctive Characters: Pectoral fins with 11 (occasionally 12) rays; initial phase with 3–4 median predorsal scales, 1 row of 4–5 cheek scales; caudal fin truncate; terminal phase caudal fin becoming concave.

Colour: Initial phase, body colour dull olive; dorsal and anal fins dark greenish with paler irregular blotches; whitish margin on caudal fin; terminal phase, body colour dark green with pink bars on centres of body scales; dark pigment around anus; reddish pink stripes on opercle.

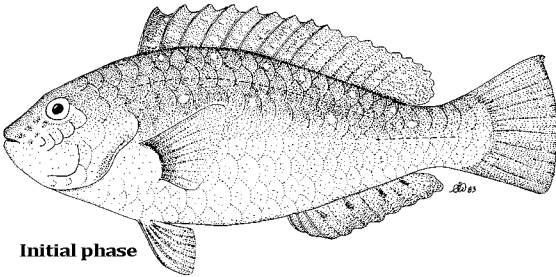
Calotomus spinidens (Quoy & Gaimard, 1824)

FAO names: Spinytooth parrotfish (En)

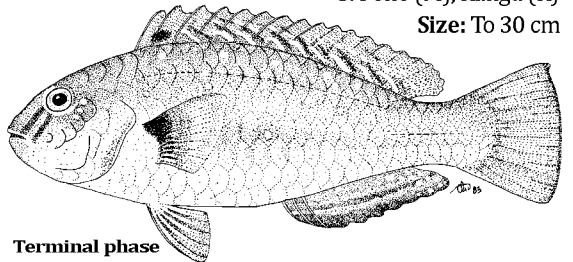
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 30 cm



Initial phase



Terminal phase

Habitat: Shallow waters on marine grass beds.

Fisheries: Traps, Nets, Spears.

Distinctive Characters: Pectoral fins with 10–12 branched rays; caudal fin rounded at all sizes; 4 median predorsal scales and 1 rows of 4–5 cheek scales in

initial phase (female).

Colour: Initial phase, body colour greenish-brown; terminal phase, body colour greyish black with pale speckling dorsally; a black spot on pectoral-fin base.

Cetoscarus bicolor (Rüppell, 1829)

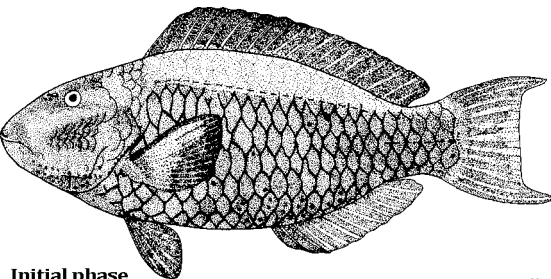
(Plate XX, 185, 186)

FAO names: Bicolour parrotfish (En)

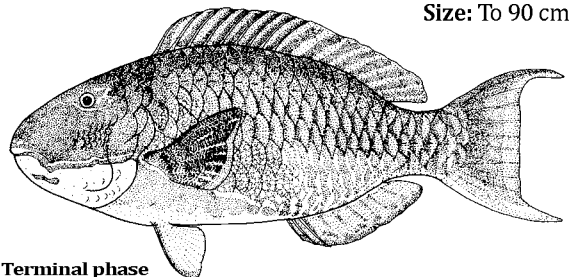
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 90 cm



Initial phase



Terminal phase

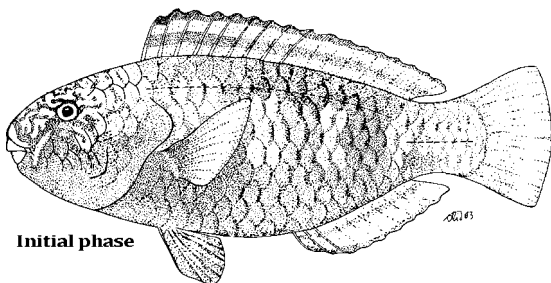
Habitat: Lagoon and seaward reefs from 1 m to 30 m.

Fisheries: Traps, Nets, Spears.

Distinctive Characters: Initial phase, 6 median predorsal scales and 3 rows of cheek scales; dental plate rough to touch; pectoral fins with 12 (occasionally 13) rays; caudal fin truncate; terminal phase, caudal fin

emarginate to deeply emarginate in adults.

Colour: Initial phase, body colour yellow; below bluish-grey, yellow dorsally; scales edged with black; terminal phase, body colour green; orange line from edge of upper lip to pectoral-fin base; ventro-anterior part of body orange; scales edged with orange.

***Chlorurus atrilunula* (Randall & Bruce, 1983)**

Initial phase

Habitat: On reefs, sand and rubble down to 15 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

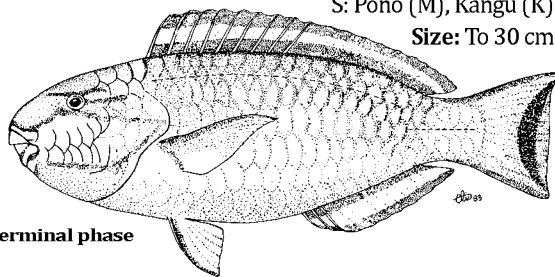
Distinctive Characters: Head bluntly rounded anteriorly; teeth fused to form smooth dental plates; upper jaw enclosing lower jaw; lips covering only basal part of dental plates; 1–3 canine teeth posteriorly on upper dental plates; 4 median predorsal scales; 2 rows of scales on cheek; pectoral fins with 13 rays; caudal fin

FAO names: Bluemoon parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 30 cm



Terminal phase

rounded in initial phase, becoming slightly emarginate in terminal phase but caudal lobes never produced.

Colour: Initial phase, body colour whitish dorsally, dark brown ventrally; white and brown bars on sides; terminal phase body colour green, anterior part of scales yellowish to pink; caudal fin with dark blue crescent; white band on dorsal fin; white zone edged blue–green on cheeks.

***Chlorurus sordidus* (Forsskål, 1775)**

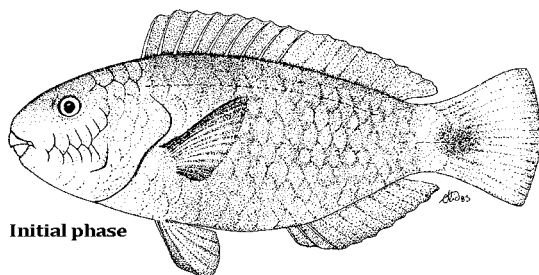
(Plate XXI, 187, 188)

FAO names: Daisy parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 40 cm

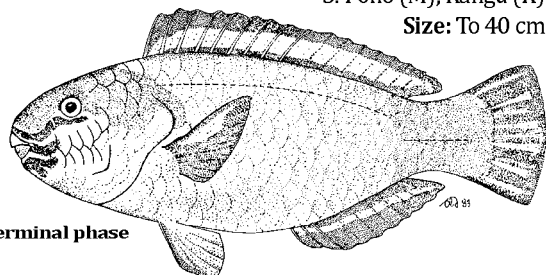


Initial phase

Habitat: Reef flats, lagoons and seaward reefs, in coral rich as well as open areas down to 25 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Head bluntly rounded anteriorly; teeth fused to form dental plates in upper and lower jaws; dental plates smooth; 3–4 median predorsal scales and 2 rows of cheek scales in initial



Terminal phase

phase; caudal fin rounded at all sizes.

Colour: Initial phase, body colour dark brown; often two rows of white spots; a white bar at the base of caudal peduncle and a dark spot on caudal fin; terminal phase, body colour green, scales edged pink; green or yellow cheeks; caudal fin with a blue edge and pink submarginal bands.

***Hipposcarus harid* (Forsskål, 1775)**

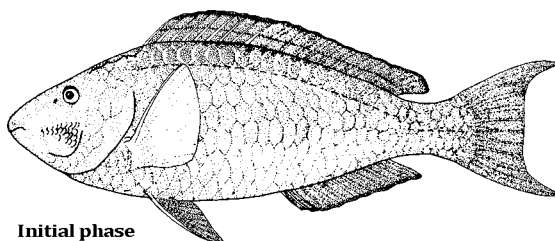
(Plate XXI, 189, 190)

FAO names: Candelamoa parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 75 cm

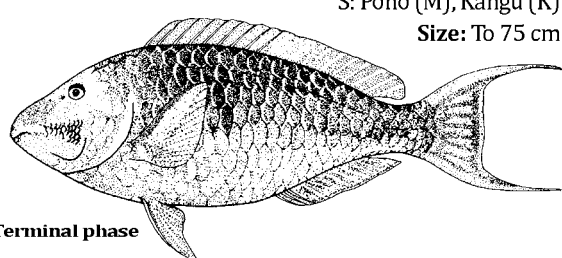


Initial phase

Habitat: Sand flats near reefs from 1 m to 25 m.

Fisheries: Traps, Nets, Spears.

Distinctive Characters: Initial phase, long snout; dental plates smooth; caudal fin emarginate; 3–4 rows of small cheek scales in a triangular patch; terminal



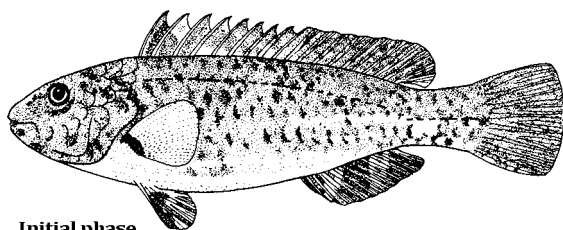
Terminal phase

phase caudal–fin lobes often greatly filamentous.

Colour: Initial phase, body colour light tan; light blue stripes on body and dorsal fin; terminal phase, body green, scales edged in pale orange; caudal fin blue with a broad band of orange in each lobe; cheeks orange.

***Leptoscarus vaigiensis* (Quoy & Gaimard, 1824)**

(Plate XXI, 191, 192)



Initial phase

Habitat: Shallow seagrass beds.

Fisheries: Traps, Set nets, Spears.

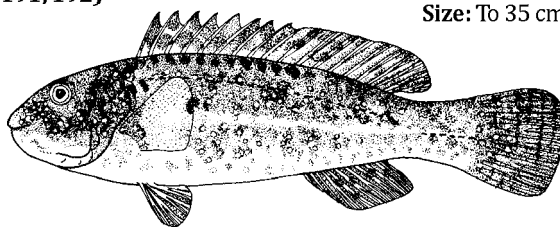
Distinctive Characters: Body elongate, caudal fin slightly rounded; 3–5 median predorsal scales and 1 row of 3–6 cheek scales in initial phase; dorsal fin with 9–10 spines and 10 rays; anal fin with 3 spines and 9

FAO names: Marbled parrotfish (En)

Local name(s): N: Pono/Mbono mwani;

S: Pono (M), Kangu (K)

Size: To 35 cm



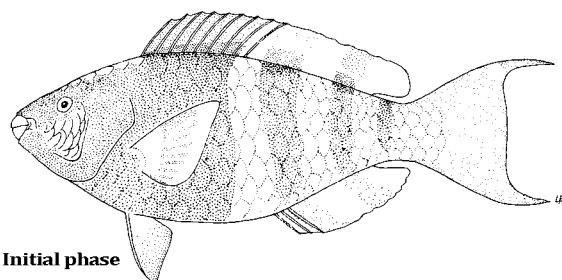
Terminal phase

rays; yellow–orange iris with outer green ring.

Colour: Initial phase, body colour dark greenish brown, head and body covered with black and white blotches; terminal phase, body colour dark greenish brown, blue spots on ventral part of body, white stripe running from pectoral–fin base to caudal fin.

***Scarus caudofasciatus* (Günther, 1862)**

(Plate XXI, 193, 194)



Initial phase

Habitat: Outer reef slopes from 8 m to 40 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

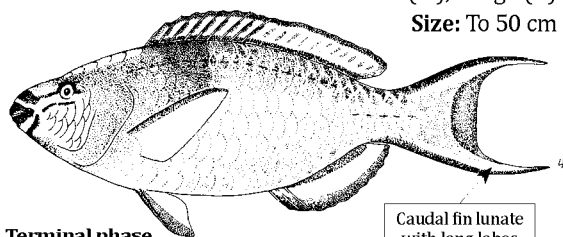
Distinctive Characters: Teeth fused to form dental plates; upper jaw enclosing lower jaw with mouth closed; 5–7 median predorsal scales; 3 rows of cheek scales; pectoral fins with 13–14 branched rays.

FAO names: Redbarred parrotfish (En)

Local name(s): N: Pono/Mbono mwani;

S: Pono (M), Kangu (K)

Size: To 50 cm



Terminal phase

Caudal fin lunate with long lobes

Colour: Initial phase, body colour black with pinkish–white bars posteriorly; median fins pink; terminal phase, dorsally bluish–green, pale salmon ventrally; dark bar on anterior part of body; blue–green marking around mouth.

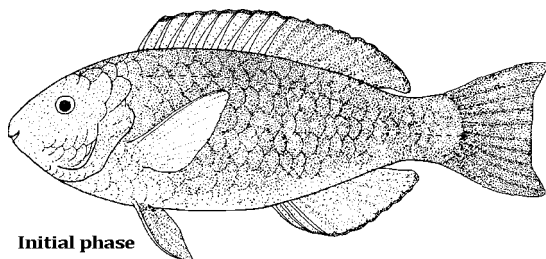
***Scarus falcipinnis* (Playfair, 1868)**

FAO names: Sicklefins parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 60 cm

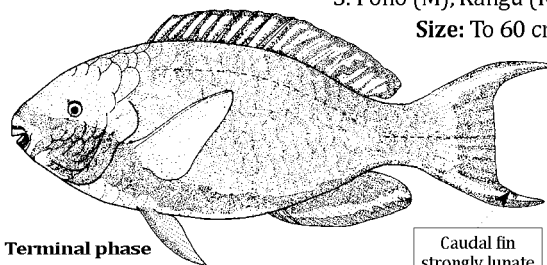


Initial phase

Habitat: Steep reef slopes from 6 m to 20 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Teeth fused to form smooth dental plates; 3 rows of cheek scales with 5–7 scales in dorsal row; pectoral fins with 13–14 rays; caudal fin emarginate in small fish.



Terminal phase

Caudal fin strongly lunate

Colour: Initial phase, body colour dull reddish brown, bright on underside of head, white spots on body; terminal phase, body colour blue–green; orange stripes on anal and caudal fins; bright blue band through pectoral–fin base from mouth to past end of anal fin.

Scarus festivus* Valenciennes, 1840

Habitat: Outer reef areas, clear lagoons and seaward reefs from 3 m to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Character: Large individuals with a pronounced lump on head above eye; 4–5 median predorsal scales; 3 rows of cheek scales; pectoral fins with 12 branched rays; caudal fin emarginate in small individuals, becoming lunate in large individuals.

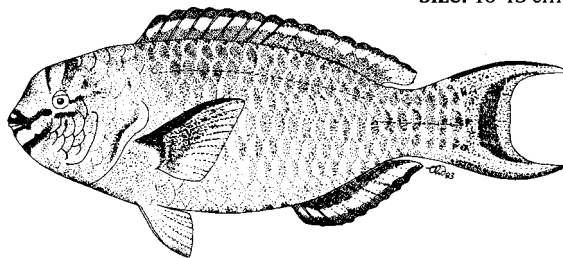
Colour: Body green with orange-edged scales; caudal fin dull orange with blue-green crescent; blue-green stripe on the chin; adults identified by lines radiating from eyes, two of which running over the top of the head.

FAO names: Festive parrotfish (En)

Local name(s): N: Pono/Mbono shunu;

S: Pono/Shunu (M), Kangu (K)

Size: To 45 cm



Terminal phase

***Scarus frenatus* Lacepède, 1802**

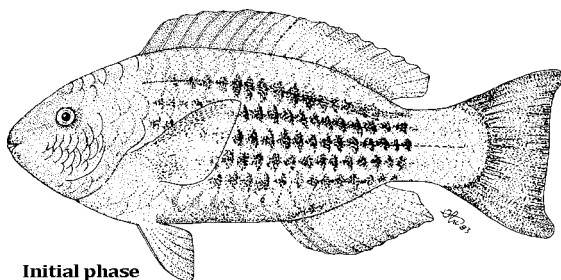
(Plate XXI, 195, 196)

FAO names: Bridled parrotfish (En)

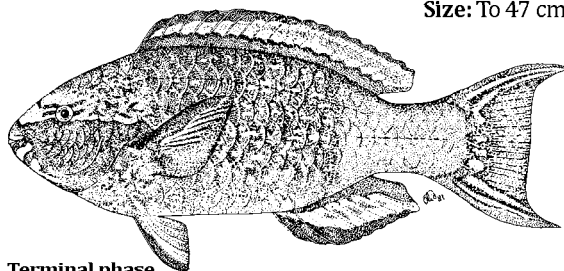
Local name(s): N: Pono/Mbono mwani;

S: Pono (M), Kangu (K)

Size: To 47 cm



Initial phase



Terminal phase

Habitat: Seaward reefs and reef crests.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Pectoral fins with 12 branched rays; caudal fin truncate in small individuals, becoming double emarginate in larger initial-phase fish, and with produced caudal lobes in terminal phase; 6–7 median

predorsal scales and 3 rows of cheek scales in initial phase.

Colour: Initial phase body colour reddish brown with 6–7 dark stripes; terminal phase, body dark green with orange irregular lines, abruptly light green posteriorly; crescent with orange and blue-green markings.

***Scarus ghobban* Forsskål, 1775**

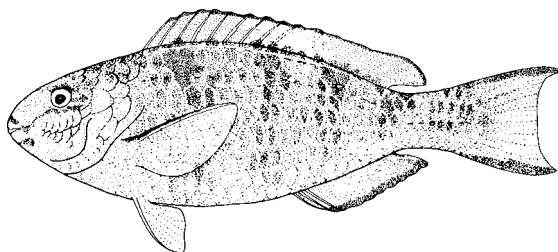
(Plate XXII, 197, 198)

FAO names: Blue-barred parrotfish (En)

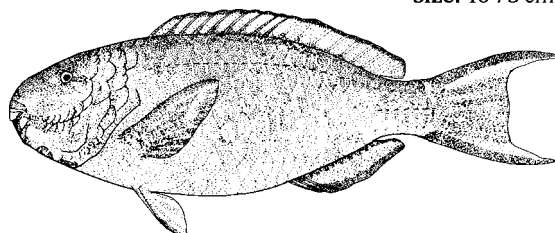
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 75 cm



Initial phase



Terminal phase

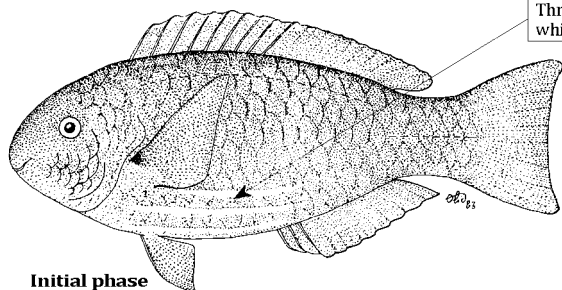
Habitat: Coral reefs and shallow lagoons near sandy areas down to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Initial phase, usually 6 median predorsal scales; 3 rows of cheek scales; caudal fin slightly emarginate or double emarginate; terminal phase caudal fin lunate.

Colour: Initial phase, scales of body bluish, edged with yellow to orange, thorax and abdomen white or pale red; often 5 irregular blue bars; terminal phase, dorsal part of head and body green, the scales with very narrow salmon-pink edges; ventral part mostly salmon; caudal fin green with a salmon-pink band in each lobe.

***Scarus globiceps* Valenciennes, 1840**



Initial phase

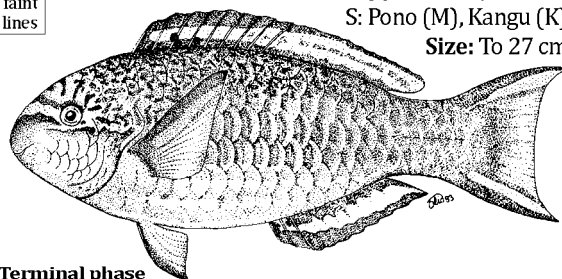
Three faint white lines

FAO names: Globehead parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 27 cm



Terminal phase

Habitat: Coral reefs and lagoons down to 12 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Mouth inferior; teeth fused to form smooth dental plates; lips almost covering dental plates; 4–6 median predorsal scales; 3 rows of cheek scales with 5–8 scales in dorsal row; 5–9 scales in middle row and 1–4 scales in ventral row; pectoral

fins with 12 rays; caudal fin slightly rounded to double emarginate in initial phase.

Colour: Initial phase, body dorsally dark brown, shading to yellowish-brown ventrally; terminal phase, body green, with an orangish bar on each scale, head solid green ventrally; orange streak on caudal-fin edges; orange band on posterior end of head through the eye.

***Scarus niger* Forsskål, 1775**

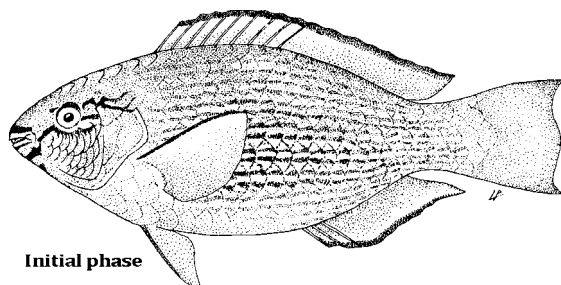
(Plate XXII, 199, 200)

FAO names: Dusky parrotfish (En)

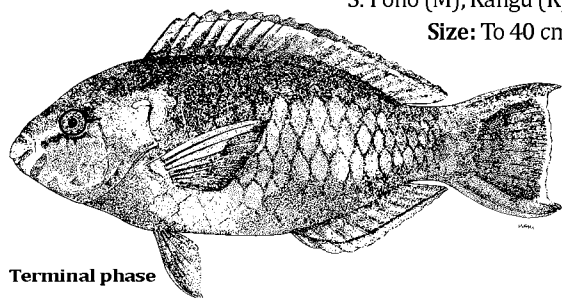
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 40 cm



Initial phase



Terminal phase

Habitat: Coral reefs and lagoons down to 12 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Initial phase with 6–8 median predorsal scales and 3 rows of cheek scales; caudal fin rounded, lobes terminating acutely; terminal-phase caudal fin double emarginate with produced lobes terminating acutely.

Colour: Initial phase, body reddish-brown, the scales dorsally and on side suffused with bluish-grey; green stripes on lower lip; terminal phase, body green, scales dark green, edged with dark reddish; green stripes on sides; pectoral fins violet pink; caudal fin salmon pink posteriorly; lips salmon; an irregular horizontal green band from in front of upper edge of orbit.

***Scarus psittacus* Forsskål, 1775**

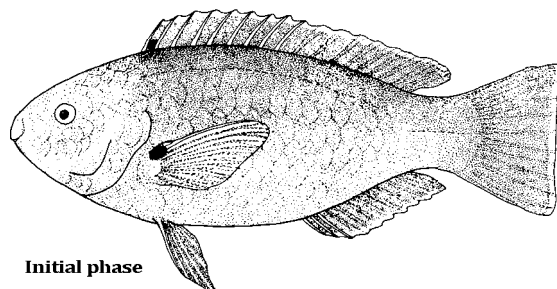
(Plate XXII, 201, 202)

FAO names: Common parrotfish (En)

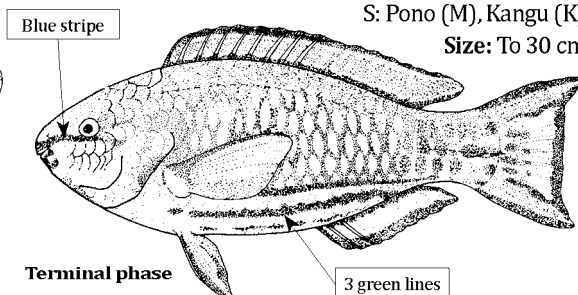
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 30 cm



Initial phase



Terminal phase

Habitat: Lagoons and seaward reefs down to 25 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Initial phase, 3–5 median predorsal scales and 2 rows of cheek scales; caudal fin truncate to emarginate; terminal-phase caudal fin

becoming more emarginate but lobes never produced.

Colour: Initial phase, body colour reddish brown, pale red ventrally; pectoral fins and body orange; terminal phase body colour pinkish-green, scales half green, half pink; 4–5 series of green spots on caudal peduncle.

***Scarus rubroviolaceus* Bleeker, 1847**

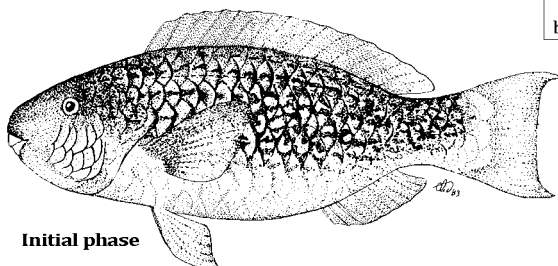
(Plate XXII, 203, 204)

FAO names: Ember parrotfish (En)

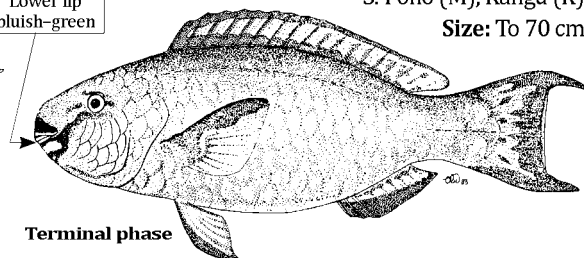
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 70 cm



Initial phase

Lower lip
bluish-green

Terminal phase

Habitat: Coral reefs and lagoons down to 30 m.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Head profile rising sharply from above mouth then to dorsal-fin origin; teeth fused to form smooth dental plates; 5–7 median predorsal scales; 3 rows of cheek scales, with 5–7 scales in dorsal row; 5–9 scales in middle row and 1–3 scales in vertical row; pectoral fins with 12–14 branched rays; caudal fin

truncate in small fish, emarginate in large individuals and with produced caudal lobes in terminal phase.

Colour: Initial phase, body colour yellowish and lower half of body whitish to purplish; 4 dark grey saddle blotches on the dorsal part of body; terminal phase, body colour greenish–purple dorsally, scales edged orange; ventrally pale green; dorsal and caudal fins orange; caudal fin crescent bluish–green.***Scarus russelii* Valenciennes, 1840**

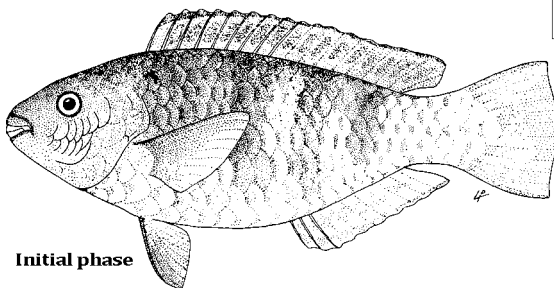
(Plate XXII, 205, 206)

FAO names: Eclipse parrotfish (En)

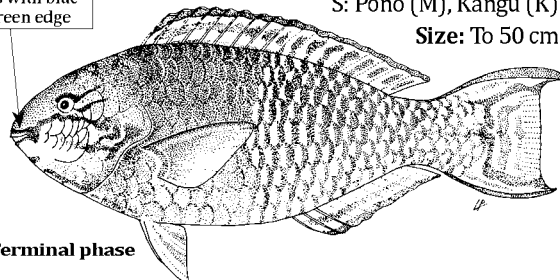
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 50 cm



Initial phase

Lips with blue-
green edge

Terminal phase

Habitat: Shallow coastal waters.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Teeth fused to form smooth dental plates; upper jaw enclosing lower jaw, lips almost covering dental plates; initial phase with 4 median predorsal scales; 2 rows of scales on cheek.**Colour:** Initial phase body colour reddish–brown with an orange–red bar on each scale; 5 dark bars often present on body; lips red–orange, edged with blue–green; terminal phase body colour bluish green, scales edged with orange; ventral part of head dull yellow.***Scarus scaber* Valenciennes, 1840**

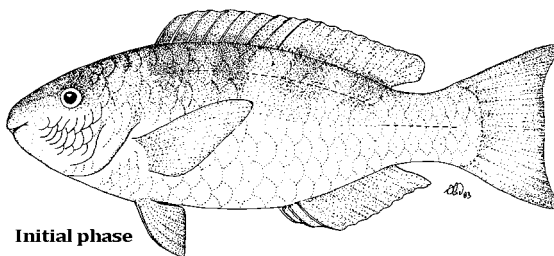
(Plate XXIII, 207, 208)

FAO names: Fivesaddle parrotfish (En)

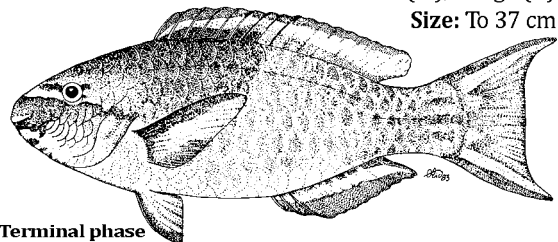
Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 37 cm



Initial phase



Terminal phase

Habitat: Reef flats and lagoon reefs down to 20 m.**Fisheries:** Traps, Gillnets, Handlines, Seines.**Distinctive Characters:** Teeth fused to form smooth dental plates; 4–7 median predorsal scales; 3 rows of scales on cheeks, with 6–8 scales in dorsal row, 3–9 scales in middle row, and 1–4 (usually 2 or 3) scales in ventral row; pectoral fins with 11–12 branched rays.**Colour:** Initial phase, upper half of body dull yellowish, lower half whitish to pinkish; 4 dark grey saddle blotches dorsally; terminal phase with anterior dorsal part of body purplish–grey, rest of body green; scales edged with salmon–pink; mid part of pectoral fins, purple with broad blue edge; orange stripes on caudal fin.

Scarus tricolor Bleeker, 1847

Habitat: Lagoon and seaward reefs, down to 30 m.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Head profile pointed; teeth fused to form smooth dental plates; individual teeth only visible at free margins of plates; caudal fin truncate to moderately emarginate in initial phase.

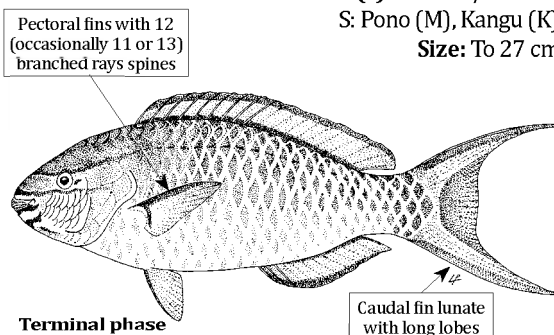
Colour: Initial phase, upper half of body dark purplish to blackish, shading on lower side to blue-green and blue; dorsal fin blackish, suffused with light red; anal fin orange-yellow; terminal phase, body green with a crescentic pale salmon-pink bar basally on each scale; head dull lavender; two horizontal green bands at level of lower edge of orbit and upper edge of eye.

FAO names: Tricolour parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

Size: To 27 cm

***Scarus viridifucatus*** (Smith, 1956)

(Plate XXIII, 209, 210)

FAO names: Roundhead parrotfish (En)

Local name(s): N: Pono/Mbono;

S: Pono (M), Kangu (K)

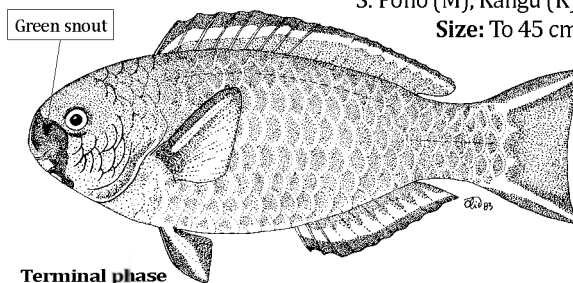
Size: To 45 cm

Habitat: Shallow reefs, on flats and reef fronts.

Fisheries: Traps, Gillnets, Handlines, Seines.

Distinctive Characters: Teeth fused to form smooth dental plates; upper jaw enclosing lower jaw; lips almost covering dental plates with mouth closed; 3-5 median predorsal scales; 3 rows of scales on cheek, with 4-6 scales in dorsal row; 5-7 scales in middle row, and 2 scales in ventral row; caudal-fin lobes not produced.

Colour: Initial phase, body colour dark brown; terminal phase body green; scales edged salmon-pink; caudal fin with a pink submarginal band.

**PINGUIPEDIDAE****Sandperches (Grubfishes, Sandsmelts)*****Parapercis hexophthalma*** (Cuvier, 1829)

FAO names: Speckled sandperch (En)

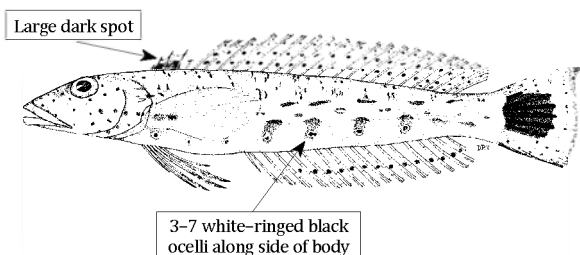
Local name(s): N: No information; S: Dumbwiri (K).

Habitat: Shallow lagoons and protected seaward reefs, on sand and rubble from 2 m to 22 m.

Fisheries: Bottom trawls, Seines, Gillnets.

Distinctive Characters: Dorsal fin with 5 spines and 21-22 soft rays; 17-18 pectoral-fin rays; anal fin with 1 spine and 17-18 soft rays.

Colour: Large oblong black blotch covering basal half to 2/3 of middle caudal rays; dorsal part of body and head tan, with many small dark spots.



Size: To 29 cm, common 18 cm

Parapercis robinsoni Fowler, 1929*

FAO names: Smallscale grubfish (En)

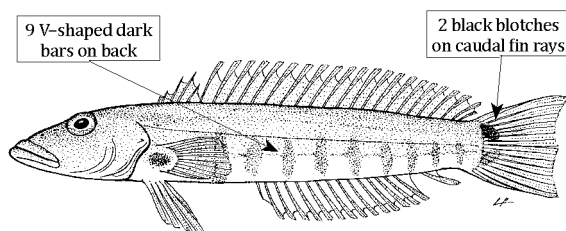
Local name(s): N: No information; S: Dumbwiri (K).

Habitat: Clear lagoons and reefs from 6 m to 55 m.

Fisheries: Bottom trawls, Seines, Gillnets.

Distinctive Characters: Suborpercle with several small serrae; pectoral fins with 16-18 soft rays; dorsal fin with 5 spines and 22 soft rays; anal fin with 1 spine and 18 soft rays.

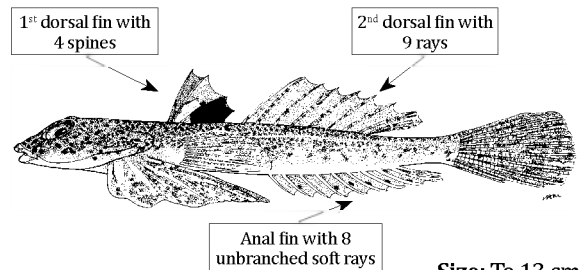
Colour: Body bluish-white, belly white; pectoral-fin base with a dark blotch.



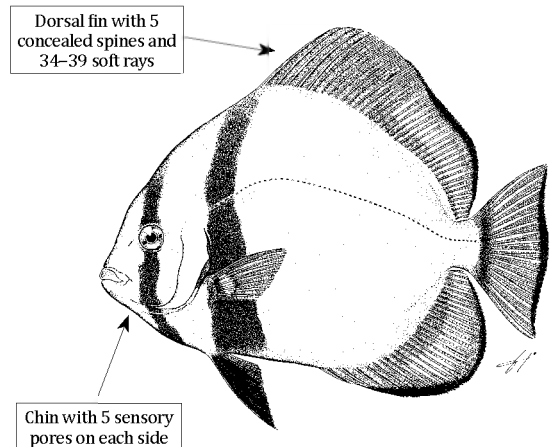
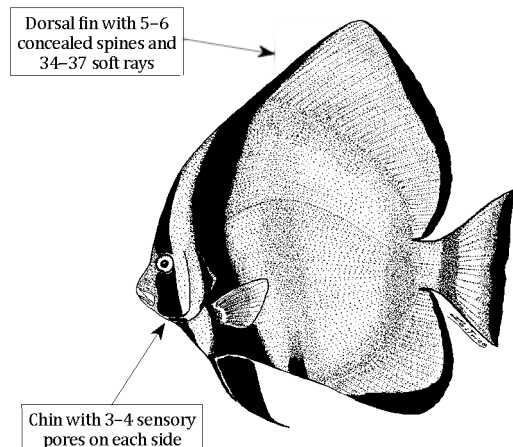
Size: To 30 cm

CALLIONYMIDAE

Dragonets

Callionymus marleyi Regan, 1919**Local name(s):** N: Paka mayi (maji); S: Panzi (M); Pandi mayi/Pandi Maji (K).**Habitat:** Benthic, in shallow coastal areas.**Fisheries:** Bottom trawls.**Distinctive Characters:** Preopercular spine broad, with 3–6 points at its dorsal side; distal margin of pelvic fin convex.**Colour:** Ground coloration variable from sandy to dark brown, usually with a row of dark blotches along body side; 1st dorsal fin transparent and with darkish lines in males but black in females.**FAO names:** Sand dragonet (En)
Dragonnet de sable (Fr)**EPHIPPIDAE**

Spadefishes – Batfishes

Platax orbicularis (Forsskål, 1775)**(Plate XXIII, 211)****FAO names:** Orbicular batfish (En)**Local name(s):** N: Chuguu/Bunusi; S: Chembeu/Bunusi (M), Tuguu/Kwala/Ruguu (K).**Habitat:** Juveniles among mangroves and on inner sheltered lagoons; sub-adults in deeper lagoons and channels, large adults in open waters over sandy areas of deep lagoons down to 30 m.**Fisheries:** Handlines, Gillnets, Traps.**Distinctive Characters:** Forehead profile somewhat angular; anal fin with 3 spines and 25–29 soft rays; body of juveniles very deep with dorsal and anal fins very elevated.**Colour:** Adults silvery-grey with blackish vertical bars fading with age; juveniles brownish yellow with a dark bar on head through the eye.***Platax pinnatus*** (Linnaeus, 1758)**FAO names:** Dusky batfish (En)**Local name(s):** N: Chuguu/Bunusi; S: Chembeu/Bunusi (M), Tuguu/Kwala/Ruguu (K).**Habitat:** Juveniles among mangroves on inner sheltered reefs. Maximum depth 20 m.**Fisheries:** Handlines, Gillnets.**Distinctive Characters:** Body deep, almost circular; mouth small and terminal.**Colour:** Juveniles blackish-brown with bright orange borders along dorsal, anal and pelvic fins from lips to dorsal origin; upper and lower edges of caudal fin, orange; fine orange bar before colourless hind part of the caudal fin; adults with pectoral fins black basally, yellow distally; pelvic fins black; body silvery grey with 2 broad solid black bars anteriorly and the 3rd posteriorly on body.

Platax teira (Forsskål, 1775)

FAO names: Longfin batfish (En)

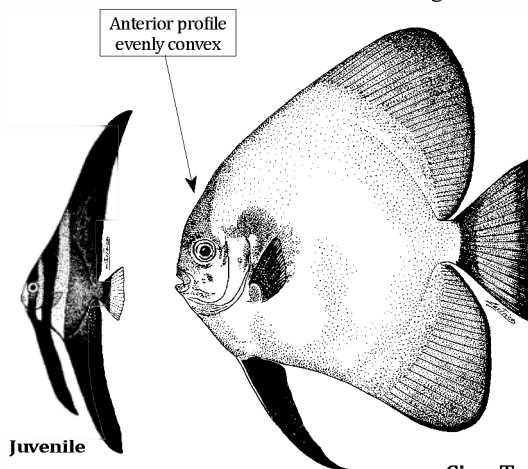
Local name(s): N: Chuguu/Bunusi; S: Chembeu/Bunusi (M), Tuguu/Kwala/Ruguu (K).

Habitat: Juveniles in shallow protected areas; adults in lagoons and seaward reefs down to 20 m.

Fisheries: Handlines, Set nets.

Distinctive Characters: Dorsal and anal fins very enlarged; small terminal mouth; dorsal, anal and pelvic fins are long in young fish, becoming progressively shorter with age; dorsal fin with 5–6 concealed spines and 28–37 soft rays; anal fin with 3 spines and 22–28 rays; caudal fin truncate.

Colour: Generally, juveniles yellow–orange and adults dark brown; vertical bars may occur on sides, at least one passing through the eyes; adults often rather drab, the young have more contrasting colours with vertical barred patterns.



Juvenile

Size: To 50 cm

Tripterodon orbis Playfair, 1867

FAO names: African spadefish (En)

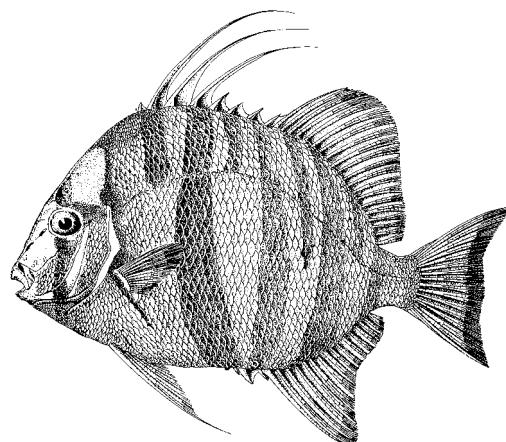
Local name(s): N: Chuguu/Bunusi; S: Chembeu/Bunusi (M), Tuguu/Kwala/Ruguu (K).

Habitat: Found in shallow inshore areas over silty bottoms near reefs from 10 m to 30 m.

Fisheries: Handlines, Traps.

Distinctive Characters: Mouth small, terminal, with thick lips; dorsal fin with 9 spines and 19–21 soft rays, the spines rather feeble, broad, elongate, 3rd spine the longest; pectoral fins short and rounded; pelvic fins present; anal fin with 3 spines and 15–17 soft rays.

Colour: Silvery grey, with 9–10 somewhat dark crossbars, fading with age, the 1st passing through the eye.



Size: To 75 cm, common 30 cm

SCATOPHAGIDAE

Scats

Scatophagus tetracanthus (Lacepède, 1802)

FAO names: Scatty (En)

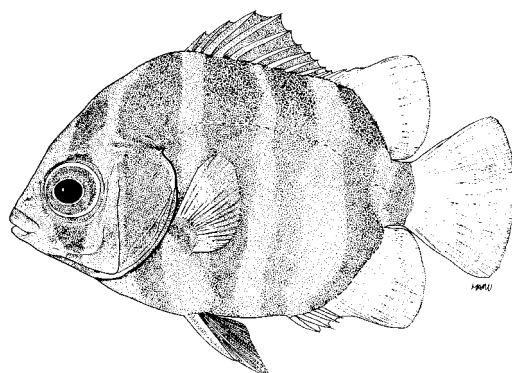
Local name(s): N: Chelwende; S: No information.

Habitat: Coastal waters and estuaries.

Fisheries: Traps, Gillnets, Seines.

Distinctive Characters: Jaws not protrusible; maxilla covered with minute ctenoid scales; dorsal fin with 11 spines and 15–18 soft rays; anal fin with 4 spines and 14–15 soft rays; pectoral fins with 16 soft rays; fins with strong spines; post larvae with bony shields on the head and a large spine at the shoulder, all vanishing with growth.

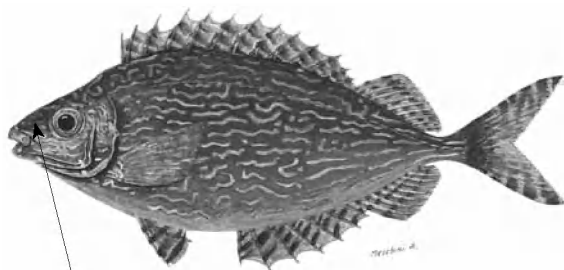
Colour: Body colour yellow with 7 black vertical bars.



Size: To 18 cm

SIGANIDAE

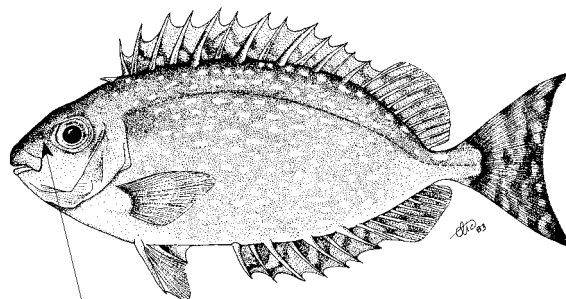
Spinefoots – Rabbitfishes

Siganus argenteus (Quoy & Gaimard, 1825)**(Plate XXIII, 212)** **FAO names:** Streamlined spinefoot (En)**Local name(s):** N: Tassi; S: Tafi (M/K).**Habitat:** Demersal in clear waters around coral reefs down to 30 m.**Fisheries:** Traps, Seines, Gillnets.**Distinctive Characters:** A forward-directed spine present in front of dorsal fin, embedded in nape; longest dorsal spines from 3rd to 8th; caudal fin deeply forked with pointed lobes.**Colour:** Light blue to bluish-grey or brown with several spots which can join to form horizontal wavy lines, mostly on lower sides; colour fades rapidly at death so that head and trunk may be solid brown; pre-juveniles are said to be yellow-brown to silver below.

Anterior nostril with a long flap reaching to or past posterior nostril

Size: To 35 cm, common 25 cm***Siganus canaliculatus*** (Park, 1797)**(Plate XXIII, 213)****FAO names:** White-spotted spinefoot (En)

Sigan pintade (Fr)

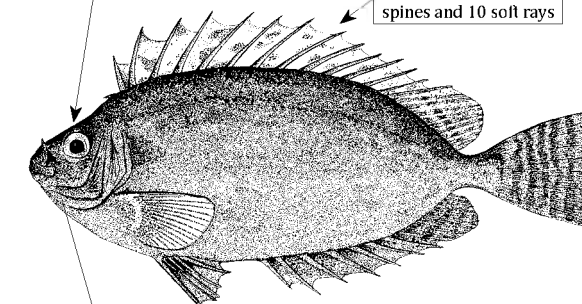
Local name(s): N: Tassi; S: Tafi (M/K).**Habitat:** Demersal, neritic, schooling in turbid inshore areas and inner reefs near river mouths down to 40 m.**Fisheries:** Bottom trawls, Traps, Seines.**Distinctive Characters:** Head profile, slightly to markedly concave above eye; a forward-directed spine present in front of dorsal fin; caudal fin almost emarginate in specimens under 10 cm, forked in larger fish.**Colour:** In life, highly variable, depending on mood of fish and colour of substrate; greenish-grey above to silver on belly; numerous pearly blue spots covering nape and sides, arranged more or less in horizontal rows; frightened and injured fish mottled brown.

Anterior nostril with a flap reaching less than half way to posterior nostril in adults

Size: To 30 cm, common 20 cm***Siganus luridus*** (Rüppell, 1829)**(Plate XXIII, 214)****FAO names:** Dusky spinefoot (En)**Local name(s):** N: Tassi; S: Tafi (M), Tafi mwarumba (K).**Habitat:** Demersal, schooling around coral and rocky reefs.**Fisheries:** Traps, Seines, Gillnets.**Distinctive Characters:** A forward directed spine present in front of dorsal fin; scales minute; cheeks with a few to many fine scales; 15–20 scale rows between lateral line and bases of leading dorsal-fin spines; anal fin with 7 spines and 9 soft rays.**Colour:** Head and sides olive green or very dark brown; sides often conspicuously marked with pale reticulating lines, but sometimes pattern very indistinct and disappearing at death; pectoral fins hyaline-yellow.

Dorsal profile of head strongly concave at nape; snout very blunt

Dorsal fin with 13 spines and 10 soft rays



Anterior nostril with a long flap reaching to or past posterior nostril

Size: To 30 cm, common 20 cm

Siganus rivulatus Forsskål & Niebuhr, 1775 *

(Plate XXIII, 215)

FAO names: Marbled spinefoot (En)
Poisson-lapin (Fr)

Local name(s): N: Tassi; S: Tafi (M/K).

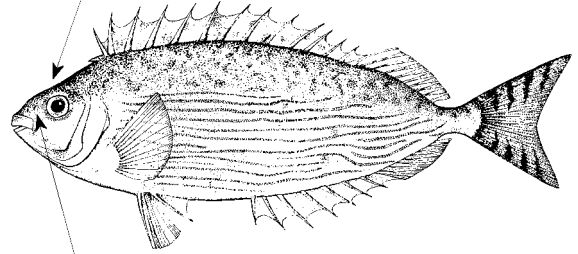
Habitat: Demersal in rocky, coral reefs and over sandy bottoms of weeds or sea grass areas down to 60 m.

Fisheries: Beach seines, Gillnets, occasionally trawled.

Distinctive Characters: A forward-directed spine present in front of dorsal fin; caudal fin only moderately forked; scales minute; 18–21 scale rows between lateral line and bases of leading dorsal lines.

Colour: Head and body brown or olive-green, grading to pale below; horizontal golden lines running the length of the body to 2/3 of sides; lines becoming indistinct after death.

Dorsal profile of head slightly concave at nape, snout blunt



Anterior nostril with a flap shaped like a tall triangle that reaches halfway to posterior nostril

Size: To 27 cm, common 20 cm

Siganus stellatus (Forsskål, 1775)

(Plate XXIV, 216)

FAO names: Brown-spotted spinefoot (En)

Local name(s): N: Tsasi mayenge; S: Tafi mwamba (M), Tafi manga, Tafi ziwa(K).

Habitat: Demersal around coral rocky and channel reefs from 12 m to 30 m.

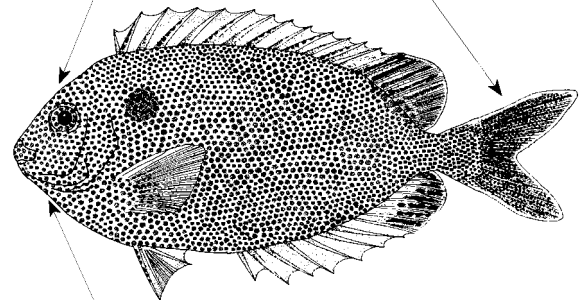
Fisheries: Traps, Spears.

Distinctive Characters: A forward-directed spine present in front of dorsal fin; scales minute; cheeks strongly scaled; 23–28 scale rows between lateral line and base of leading dorsal spines.

Colour: In life, greyish-green with brown spots all over head and trunk, spotted pattern extending onto all fins; the spots become very dark brown and the intermediate areas pale to dark lilac; trailing edges of soft parts of dorsal and anal fins, perimeter of caudal fin and a saddle over the caudal peduncle are markedly paler than the rest; a dark patch of about the size of orbit present at origin of lateral line.

Dorsal profile of head virtually a straight line descending at an angle of about 45°

Caudal fin emarginate in young, gradually changing to deeply forked in old individuals



Ventral profile strongly concave below chin

Size: To 40 cm, common 30 cm

Siganus sutor (Valenciennes, 1835)

(Plate XXIV, 217)

FAO names: Shoemaker spinefoot (En)

Local name(s): N: Tassi; S: Tafi (M/K).

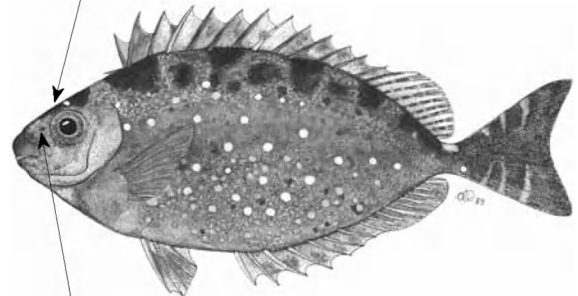
Habitat: Demersal, schooling around reefs, particularly in seagrass beds and weedy areas.

Fisheries: Traps, Gillnets, Seines.

Distinctive Characters: A forward-directed spine present in front of dorsal fin; scales minute; cheeks either scaleless or with a few to many very fine scales; 26–31 scale rows between lateral line and bases of leading spines.

Colour: In life, green-grey to sandy above, paler below; sides with about 30 large spots, the largest bigger than the pupil; spots evenly spaced over sides in 6 irregular rows, the upper row lying close to lateral line; after death, brown mottled with dark brown; spots absent.

Dorsal profile of head slightly concave above eye



Anterior nostril with a long flap in juveniles, shortening progressively with age

Size: To 45 cm, common 30 cm

ACANTHURIDAE

Surgeonfishes – Tangs – Unicornfishes

Acanthurus blochii Valenciennes, 1835 *

FAO names: Ringtail surgeonfish (En)

Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

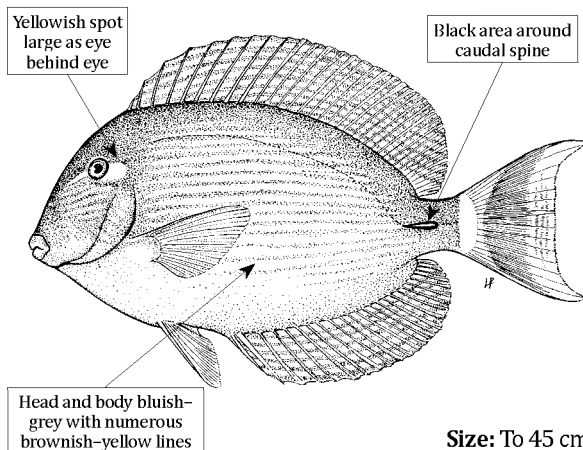
Habitat: Found in outer lagoons and seaward reefs from 1 m to 12 m.

Fisheries: Gillnets, Traps, Hooks and Line.

Distinctive Characters: Dorsal fin with 9 spines and 25–27 soft rays; anal fin with 3 spines and 24–25 soft rays; pectoral fins with 17 soft rays; 20–25 gill rakers; adults with up to 20 teeth in each jaw.

Colour: Caudal fin deep blue, often with a whitish to white bar across base.

Remarks: Differs from *A. dussumieri* by having vertical stripes instead of spots on the blue central area of the caudal fin, from *A. mata* by having a lunate caudal fin, and from *A. xanthopterus* by having plain brown to blue-grey pectoral fins.

***Acanthurus dussumieri*** Valenciennes, 1835FAO names: Eyestripe surgeonfish (En)
Chirurgien couronné (Fr)

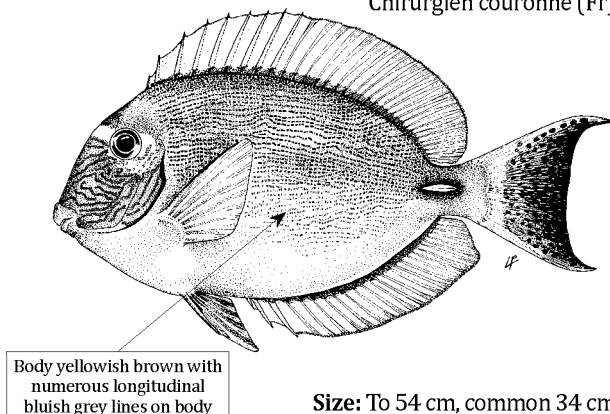
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Closely tied to coral reefs or rocky substrates. Maximum depth 131 m.

Fisheries: Traps, Hooks and Line.

Distinctive Characters: Mouth small, teeth spatulate, close-set, with denticulate edges; dorsal fin with 9 spines and 25–27 soft rays; anal fin with 3 spines and 24–26 soft rays; caudal fin lunate.

Colour: Dorsal and anal fins yellow sometimes with traces of narrow bluish longitudinal bands distally; yellow band across front of interorbital and behind eye; caudal fin deep blue with numerous small blackish spots; pectoral fins light yellowish-brown.

***Acanthurus leucosternon*** Bennett, 1833FAO names: Powderblue surgeonfish (En)
Chirurgien poudré (Fr)

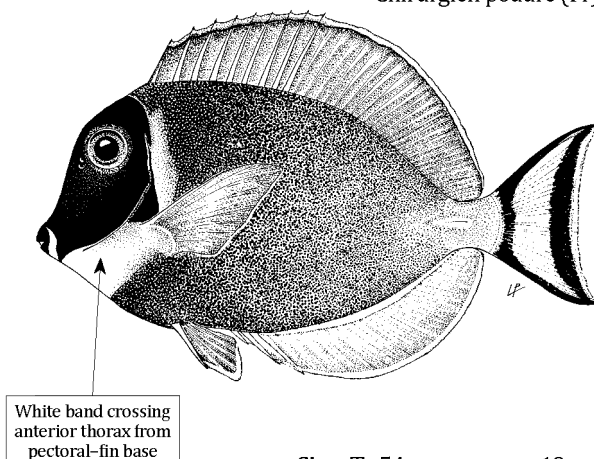
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka/Kinanzua (K).

Habitat: Shallow coastal waters and island reefs from 0.5 m to 25 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Teeth spatulate, close-set, with denticulate edges; dorsal fin with 9 spines and 28–30 soft rays; anal fin with 3 spines and 26–28 soft rays; caudal fin emarginate.

Colour: Body blue with caudal peduncle and spine yellow; head black; a vertical white line extending from chin to above corner of mouth; dorsal fin yellow with a white margin and a black sub marginal line; anal fin grey with a white margin and a narrow white band at base; caudal fin black with a large crescentic central white region and a white posterior margin; pectoral fins clear with yellow rays.



Acanthurus lineatus (Linnaeus, 1758)

FAO names: Lined surgeonfish (En)

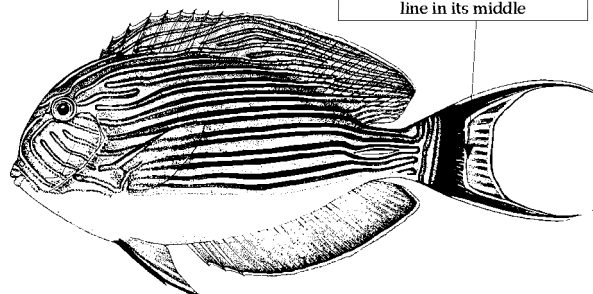
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Coral reefs or rocky substrates exposed to wave action from 4 m to 20 m.

Fisheries: Traps, Castnets, Gillnets, Spears.

Distinctive Characters: Mouth small; teeth spatulate, close-set, with denticulate edges; dorsal fin with 9 spines and 27–30 soft rays; caudal fin deeply lunate.

Colour: Upper 3/4 of body and head with alternating black-edged blue and yellow stripes; lower fourth pale lavender to bluish-white; pelvic fins yellow-orange with a white lateral margin and a blackish submarginal line.



Caudal fin blackish with 2 blue vertical lines and a curved blue line in its middle

Size: To 30 cm, common 20 cm

Acanthurus mata (Cuvier, 1829)

FAO names: Elongate surgeonfish (En)

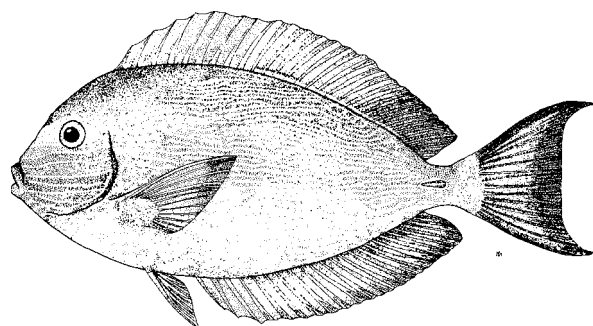
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Coastal and offshore reefs, often in small groups in mid-waters.

Fisheries: Gillnets, Traps.

Distinctive Characters: Dorsal fin with 9 spines and 24–26 soft rays; anal fin with 3 spines and 23–24 soft rays; mouth with 24 teeth in upper jaw and 26 in lower jaw in large adults; caudal fin of adults lunate.

Colour: Dark brown with lengthwise blue lines on head and body; a yellow area behind eye and 2 yellow bands extending anteriorly from eye; capable of colour change to overall pale blue.



Size: To 50 cm

Acanthurus nigricauda Duncker & Mohr, 1929

FAO names: Epaulette surgeonfish (En)

(Plate XXIV, 218)

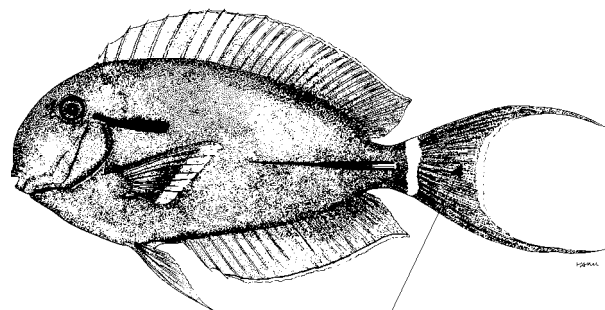
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Lagoons and bays, around isolated coral heads and rocks and on sandy bottoms.

Fisheries: Gillnets, Traps.

Distinctive Characters: Dorsal fin with 9 spines and 25–28 soft rays; anal fin with 3 spines and 23–26 rays; caudal fin of adults strongly lunate.

Colour: Brown without lines on body or spots on head; a horizontal black band passing posteriorly from upper end of gill opening first appearing at 6 cm (SL); a horizontal black line, progressively narrower anteriorly, extending forward from caudal fin up to half distance to pectoral base (this line first appearing at 10 cm SL).



Caudal fin brown, often with a white bar across base

Size: To 40 cm

***Acanthurus nigrofuscus* (Forsskål, 1775)**

Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

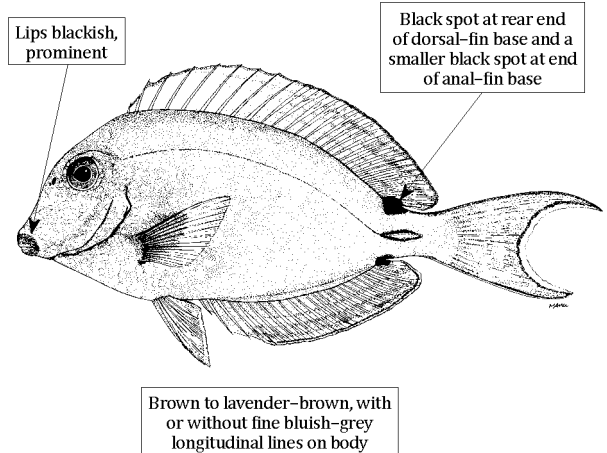
Habitat: Occurs in lagoons and seaward reefs from 1 m to 15 m.

Fisheries: Traps, Gillnets.

Distinctive Characters: Dorsal fin with 9 spines and 24–27 soft rays; anal fin with 3 spines and 22–24 soft rays; pectoral fins with 16–17 soft rays.

Colour: Head and chest with numerous small orange spots (which may or may not persist as pale spots in a preservative); a distinct narrow whitish border posteriorly on caudal fin; a narrow blackish edge around caudal spine socket.

FAO names: Brown surgeonfish (En)



Size: To 21 cm

***Acanthurus tennentii* Günther, 1861**

Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

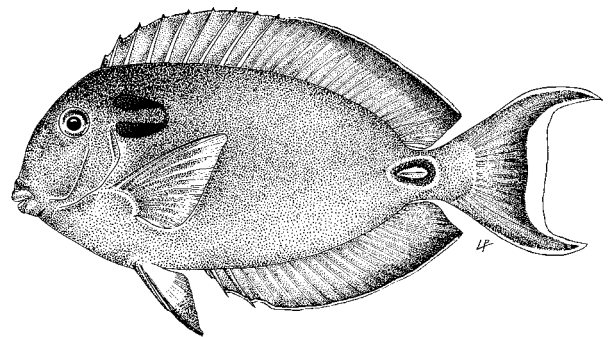
Habitat: Found on coral reefs.

Fisheries: Nets, Traps.

Distinctive Characters: Mouth small; teeth spatulate, close set with denticulate edges; dorsal fin with 9 spines and 23–24 soft rays; anal fin with 3 spines and 22–23 soft rays.

Colour: Brown with 2 black bands, one beginning at upper end of gill opening, the 2nd above and parallel to it (these two bands are joined posteriorly to form a horse shoe-shaped mark on juveniles and sub adults); caudal spine surrounded by a broad blackish ovoid area edged in blue; caudal fin with a pure white border which is expanded into a broad crescent centre posteriorly; outer third of pectoral fins pale.

FAO names: Doubleband surgeonfish (En)
Chirurgien fer à cheval (Fr)



Size: To 31 cm

***Acanthurus thompsoni* (Fowler, 1923) ***

Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K)

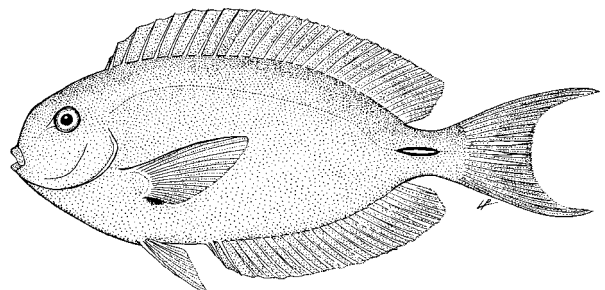
Habitat: Found on coral reefs.

Fisheries: Nets, Traps.

Distinctive Characters: Dorsal fin with 9 spines and 23–26 rays; anal fin with 3 spines and 23–26 rays; 17 pectoral-fin rays; caudal fin lunate.

Colour: Uniform brown to dark brown; a darker brown spot below and adjacent to pectoral axil (difficult to see on dark specimens).

FAO names: Thompson's surgeonfish (En)



Size: To 27 cm

Acanthurus triostegus (Linnaeus, 1758)

FAO names: Convict surgeonfish (En)

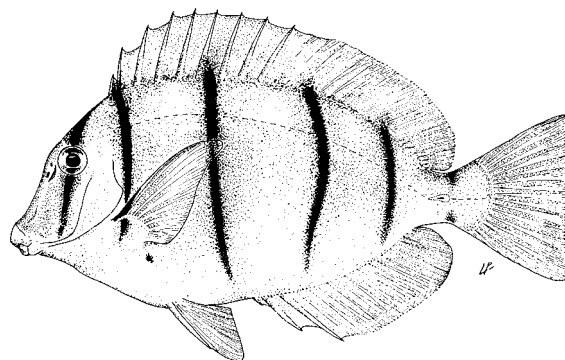
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka/Tongoo (K).

Habitat: An inshore species occurring over reef flats solitary or in large aggregations. Maximum depth 90 m.

Fisheries: Traps, Hand nets, Bottom trawls.

Distinctive Characters: Mouth small; teeth spatulated, close-set, with denticulate edges; dorsal fin with 9 spines and 22–26 soft rays; anal fin with 3 spines and 19–22 soft rays; 14–16 pectoral-fin rays; caudal fin truncate to slightly emarginate; caudal spine small.

Colour: Light greenish-grey, white ventrally, with narrow dark bars as follows: on head passing through eye, 4 on body beneath dorsal fin, and 1 on caudal peduncle.



Size: To 27 cm

Acanthurus xanthopterus Valenciennes, 1835

(Plate XXIV, 219) FAO names: Yellowfin surgeonfish (En)
Chirurgien aile jaune (Fr)

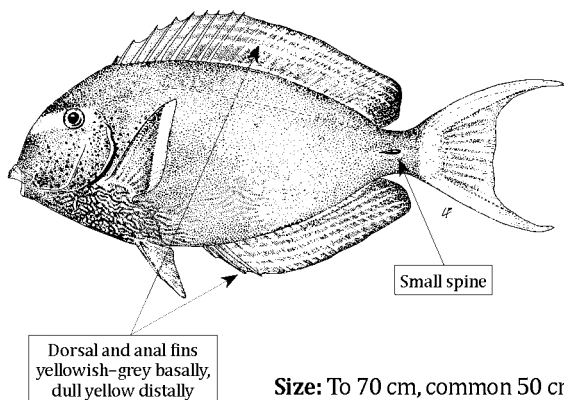
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Lagoon and seaward reefs; adults are common in sandy habitats near reefs from 20 m to 90 m.

Fisheries: Traps, Hooks and Line.

Distinctive Characters: Mouth small; teeth spatulated, close-set, with denticulate edges; dorsal fin with 8–9 spines and 25–27 soft rays; anal fin with 3 spines and 23–25 soft rays.

Colour: Body purplish grey when alive; greyish-brown when preserved; a region of dull yellow in front of eye, a lesser extension posterior to lower part of eye; outer 1/3 of pectoral fins yellow, extreme distal part hyaline.



Size: To 70 cm, common 50 cm

Ctenochaetus binotatus Randall, 1955

FAO names: Twospot surgeonfish (En)

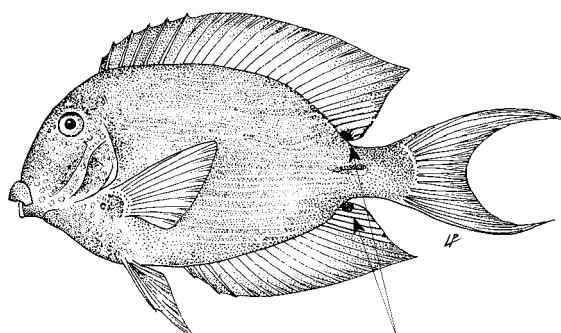
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Coral reefs and rocky bottoms from 0.5 m to 20 m.

Fisheries: Traps, Hand nets.

Distinctive Characters: Dorsal fin with 8 spines and 24–27 soft rays; anal fin with 3 spines and 22–25 soft rays; pectoral fins with 15–16 soft rays; adults with as many as 42 teeth in upper jaw and 45 in lower jaw.

Colour: Body orangish brown with longitudinal blue lines; blue dots on head and thorax; dorsal and anal fins with faint longitudinal banding in outer part; pectoral-fin rays light brownish except for upper 2 rays which are dark brown, membranes clear; iris mainly blue.



Size: To 22 cm

Ctenochaetus striatus (Quoy & Gaimard, 1825)

FAO names: Striated surgeonfish (En)
Chirurgien strié (Fr)

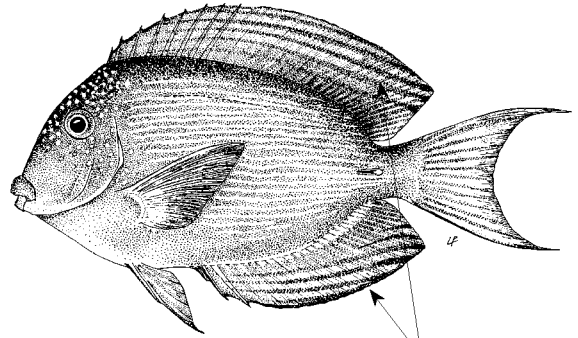
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Common on sand, stone and coral reefs. Maximum depth 30 m.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: Mouth small, teeth numerous (more than 30 in jaws of adults), movable, slender and elongate; dorsal fin with 8 spines and 27–31 soft rays; anal fin with 3 spines and 24–28 soft rays; caudal fin lunate.

Colour: Dark olive to yellowish-brown with blue or blue-grey lengthwise lines on body and small orange spots on head and nape; pectoral fins pale with brownish yellow rays; a small blackish spot at rear base of dorsal fin of juveniles and small adults.



Dorsal and anal fins with about 5 longitudinal dark bluish bands

Size: To 26 cm, common 18 cm

Ctenochaetus strigosus (Bennett, 1828)

FAO names: Spotted surgeonfish (En)

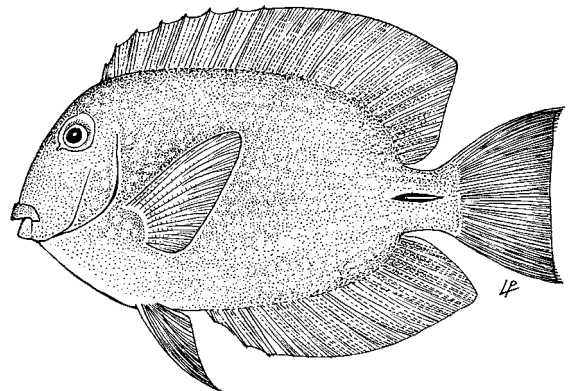
Local name(s): N: Kangaja; S: Kangaja (M), Kangaja/Kinuka (K).

Habitat: Common in lagoons, sandstone and seaward coral reefs from 1 m to 50 m.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: Dorsal fin with 8 spines and 25–28 soft rays; anal fin with 3 spines and 22–25 soft rays; pectoral fins with 15–16 soft rays; adults with as many as 47 upper jaw and 60 lower jaw teeth; caudal fin emarginate.

Colour: Body dark brown with numerous dots; *C. strigosus* differs from *C. striatus* by having a more truncate tail and a pale yellowish ring around the eye.



Size: To 15 cm

Naso annulatus (Quoy & Gaimard, 1825)

FAO names: Whitemargin unicornfish (En)

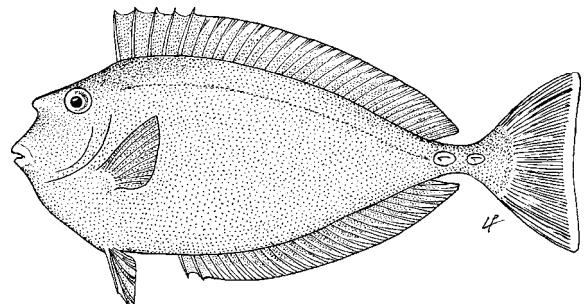
Local name(s): N: Puju pembe; S: Puju (M/K).

Habitat: Juveniles in shallow clear lagoons; adults occur on coral reefs and along rocky shores. Maximum depth 25 m.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: Dorsal fin with 5 spines and 28–29 soft rays; anal fin with 2 spines and 27–28 soft rays; pectoral fins with 17–19 soft rays; dorsal profile of snout to base of horn angled about 60°; 2 peduncular plates, each developing a knife-like keel in adults; caudal fin truncate in subadults.

Colour: Subadult's caudal fin with a distinct white, submarginally black lined edge; adults with caudal rays black, narrow membranes and caudal filaments white; pectoral fins with a white distal margin; juveniles have a whitish ring around caudal peduncle.



Olivaceous to brown, paler ventrally, without dark markings on head or body

Size: To 100 cm

***Naso brachycentron* (Valenciennes, 1835)**

Local name(s): N: Puju pembe; S: Puju (M/K).

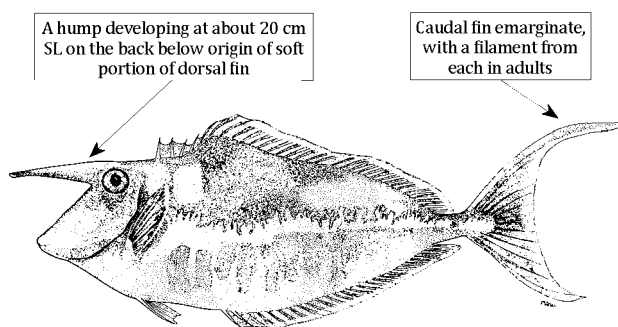
Habitat: Coral reefs and along rocky shores.

Fisheries: Gillnets, Traps, Spears.

Distinctive Characters: Dorsal fin with 4–5 spines and 28–30 soft rays; anal fin with 2 spines and 27–28 soft rays; pectoral fins with 17 soft rays; males develop a long tapering horn anterior to eye which extends as much as head length in front of mouth; females have only a prominent bump in front of eye.

Colour: Olive–grey, shading to pale yellowish ventrally, without dark markings; rear border of caudal and margins of dorsal and anal fins white.

FAO names: Humpback unicornfish (En)



Size: To 60 cm

***Naso brevirostris* (Cuvier, 1829)**

Local name(s): N: Puju pembe; S: Puju (M/K).

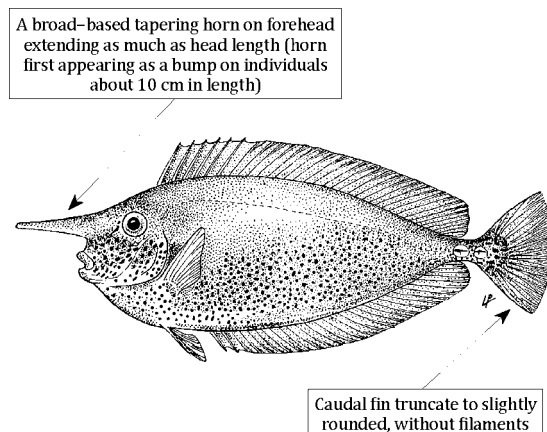
Habitat: Coral reefs and rocky shores from 4 m to 46 m.

Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Dorsal fin with 6 spines and 27–29 soft rays; anal fin with 2 spines and 27–29 soft rays; pectoral fins with 16–17 soft rays; 2 peduncular plates, the keels only moderately developed.

Colour: Ground colour varying from bluish grey to olivaceous brown; subadults with small dark spots on head and body; adults with diagonal dark lines on horn and short irregular lines on side of body; edges of lips blue; caudal–fin pale, particularly distally; often exhibits a broad pale zone on front part of body on cheek and throat.

FAO names: Spotted unicornfish (En)



Size: To 60 cm

***Naso elegans* (Rüppell, 1829)**

Local name(s): N: Puju; S: Puju (M/K).

Habitat: Shallow water closely tied to coral reefs and rocky bottoms. Maximum depth 90 m.

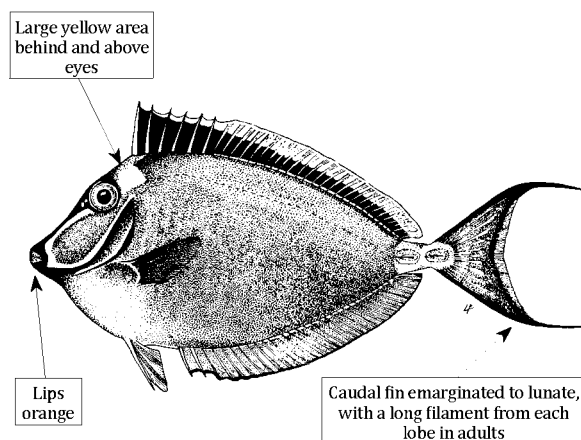
Fisheries: Gillnets, Traps.

Distinctive Characters: No rostral prominence on snout or forehead; dorsal fin with 6 spines and 26–30 soft rays; anal fin with 2 spines and 27–30 soft rays; anal fin with 2 spines and 28–30 soft rays; pelvic fins with 1 spine and 3 soft rays; caudal peduncle with 2 fixed bony plates on mid–side.

Colour: Dorsal fin yellow with a blue line at base and a black band above this; anal and pelvic fins dark brown; caudal fin yellowish with black upper and lower margins and a submarginal black band posteriorly.

Remarks: Previously considered the Indian Ocean colour variant of *Naso lituratus* (Forster 1801).

FAO names: Elegant unicornfish (En)



Size: To 45 cm, common 35 cm

Naso hexacanthus (Bleeker, 1855)

Local name(s): N: Puju; S: Puju (M), Karanzaga (K).

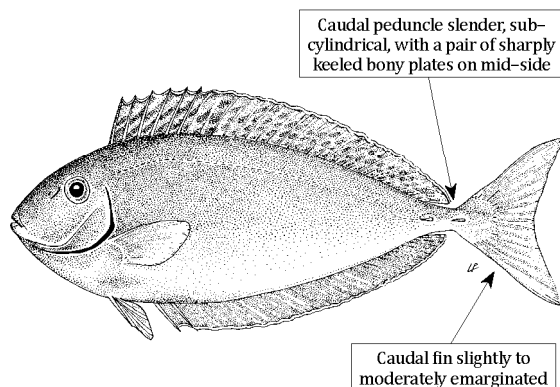
Habitat: Common in waters from 6 m to 150 m.

Fisheries: Traps, Spears.

Distinctive Characters: Dorsal profile of head uniformly convex, without any bony projection or prominence; dorsal fin with 6 spines and 26–29 soft rays; anal fin with 2 spines and 27–30 soft rays; pelvic fins with 1 spine and 3 soft rays.

Colour: Brownish grey, shading ventrally to yellowish (in life the colour may vary from dark brown to light blue–grey); opercular membrane with faint diagonal brown bands and a blue margin.

FAO names: Sleek unicornfish (En)



Size: To 75 cm, common 50 cm

Naso thynnoides (Cuvier, 1829)

Local name(s): N: Puju; S: Puju (M/K).

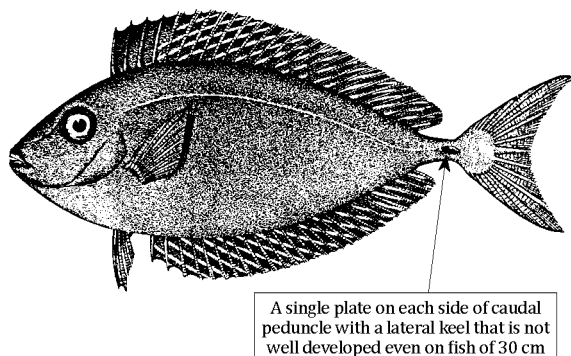
Habitat: Coral reefs and along rocky shores from 2 m to 30 m.

Fisheries: Spears.

Distinctive Characters: Dorsal fin with 4 spines and 28–30 soft rays; anal fin with 2 spines and 27–29 soft rays; pectoral fins with 17–18 soft rays; dorsal profile of head without a horn or hump on forehead (a slightly greater convexity to snout); caudal fin emarginate.

Colour: Body olive brown purplish; some specimens with narrow black stripes across middle of body; rear edge of pectoral and caudal fins yellowish; young with oblique olive–yellow lines in dorsal and anal fins.

FAO names: Oneknife unicornfish (En)



Size: To 40 cm, common 25 cm

Naso unicornis (Forsskål, 1775)

Local name(s): N: Puju pembe; S: Puju/Sange (M/K).

Habitat: An inshore species associated with coral reefs and rocky substrates. Maximum depth 80 m.

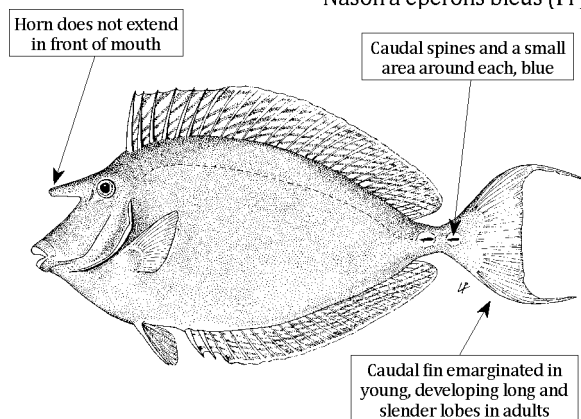
Fisheries: Traps, Gillnets, Spears.

Distinctive Characters: Mouth small; dorsal fin with 6 spines and 27–30 soft rays; anal fin with 2 spines and 27–30 soft rays; pelvic fins with 1 spine and 3 soft rays; caudal peduncle with 2 fixed bony plates on mid-side which have forward-directed, knife-like keels in adults.

Colour: Light olive to yellowish grey; edges of lips bluish; dorsal and anal fins with a blue margin alternating narrow band of light blue and brownish yellow; caudal fin yellowish grey, a little more yellow centro–posteriorly.

FAO names: Bluespine unicornfish (En)

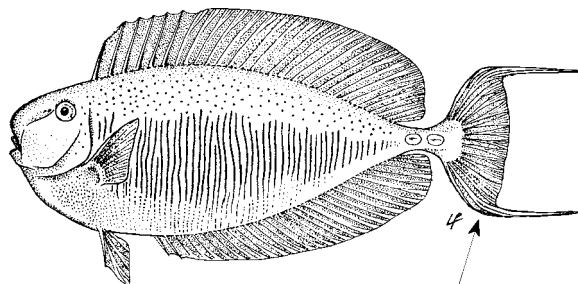
Nason à épérons bleus (Fr)



Size: To 70 cm

Naso vlamingii (Valenciennes, 1835) *

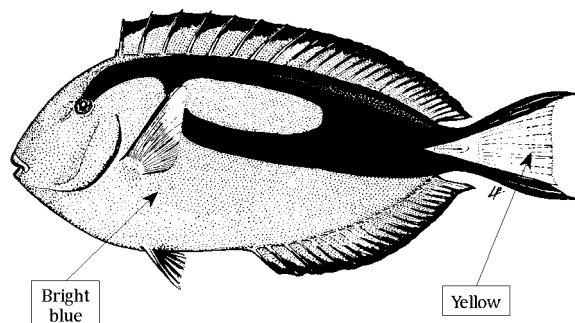
FAO names: Bignose unicornfish (En)

Local name(s): N: Puju; S: Puju (M/K).**Habitat:** Found off coral reefs.**Fisheries:** Traps, Gillnets, Spears.**Distinctive Characters:** Dorsal fin with 6 spines and 26–27 soft rays; anal fin with 2 spines and 27–29 soft rays; 17–19 pectoral–fin rays; adults develop a prominent convexity on forehead at level of lower edge of eye; two bony plates on caudal peduncle, those of adults bearing a sharp lateral keel with forward projecting points.**Colour:** Young with scattered small dark spots, adults with vertical violet lines on side of body and small spots above and below; a broad irregular deep violet band extending anteriorly from eye; lips deep violet; in life the fish may change these dark markings to brilliant blue.

Size: To 55 cm

Paracanthurus hepatus (Linnaeus, 1766)

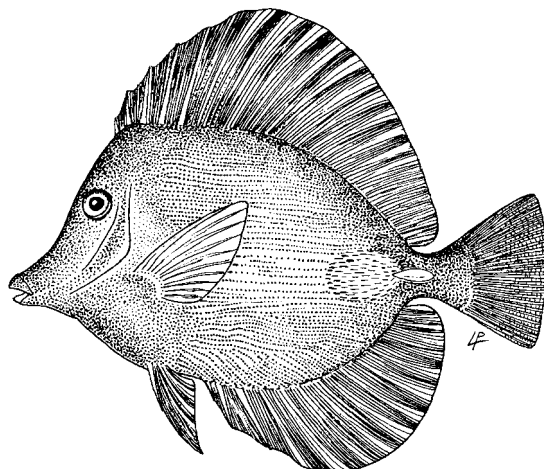
FAO names: Palette surgeonfish (En)

Local name(s): N: Kitomo/Chelwende; S: Kitatange (M), Kitogoo/Kitubaku (K).**Habitat:** Clear, current-swept terraces of seaward reefs; observed in loose aggregations 1 or 2 meters above the bottom.**Fisheries:** Hand nets, Traps; important in aquarium fish trade.**Distinctive Characters:** Dorsal fin with 9 spines and 19–20 soft rays; anal fin with 3 spines and 18–19 soft rays.**Colour:** Bright blue, yellow and black in colour.

Size: To 31 cm

Zebrasoma scopas (Cuvier, 1829)

FAO names: Twotone tang (En)

Local name(s): N: Kitomo/Chelwende; S: Kitatange (M), Kitogoo/Kitubaku (K).**Habitat:** Coral and rocky bottoms down to 60 m.**Fisheries:** Hand nets, Traps.**Distinctive Characters:** Dorsal fin with 4–5 spines and 23–25 soft rays; anal fin with 3 spines and 19–21 soft rays; pectoral fins with 14–16 soft rays; an oval, brush-like patch of setae on sides of body anterior to caudal spine at sizes greater than 7 cm SL (this patch larger and the setae longer in males).**Colour:** Fins dark brown except for pectorals which are clear with dusky orange rays and a narrow black upper margin; juveniles have ventral pale lines on body instead of horizontal lines.

Size: To 20 cm

Zebrasoma velifer (Bloch, 1795)

FAO names: Sailfin tang (En)
Chirurgien à voile (Fr)

Local name(s): N: Kitomo/Chelwende; S: Kitatange (M), Kitogoo/Kitubaku (K).

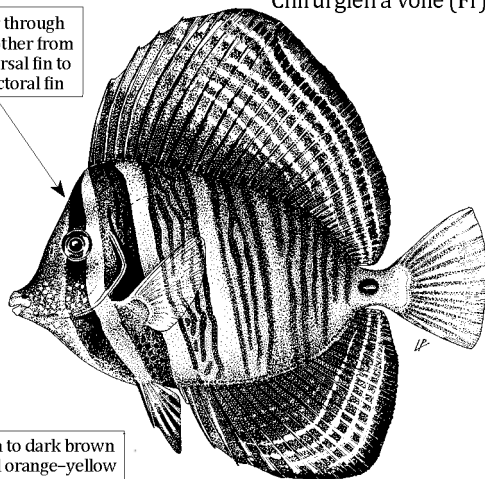
Habitat: Coral reefs or rocky bottoms. Maximum depth 30 m.

Fisheries: Traps, Handnets.

Distinctive Characters: Mouth small; dorsal fin with 4 spines and 27–31 rays; anal fin with 3 spines and 22–24 soft rays; 15 to 17 (usually 16) pectoral-fin rays; caudal fin truncate to slightly rounded; a lancet-like spine on side of caudal peduncle fitting into a groove.

Colour: Small orange–yellow spots on lower third of body and pale yellowish or greenish dots on head; dorsal and anal fins brown with numerous broadly curved yellow bands; caudal fin brown with many yellowish to greenish spots.

A dark bar through eye and another from origin of dorsal fin to base of pectoral fin



Grey–brown to dark brown with vertical orange–yellow lines on upper 2/3 of body

Size: To 40 cm, common 32 cm

Zebrasoma xanthurum (Blyth, 1852) *

FAO names: Yellowtail tang (En)

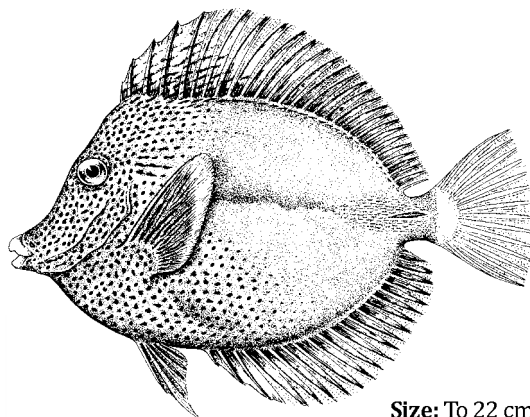
Local name(s): N: Kitomo/Chelwende; S: Kitatange (M), Kitogoo/Kitubaku (K).

Habitat: Coral reefs and rocky bottoms from 0.5 m to 20 m.

Fisheries: Traps, Hand nets.

Distinctive Characters: Dorsal fin with 5 spines and 24 soft rays; anal fin with 3 spines and 20 soft rays; pectoral fins with 15 rays.

Colour: Body deep blue with small dark spots anteriorly; caudal fin and outer part of pectoral fins bright yellow.



Size: To 22 cm

SPHYRAENIDAE

Barracudas

Sphyraena barracuda (Edwards, 1771)

(Plate XXIV, 220)

FAO names: Great barracuda (En)
Barracuda (Fr)

Local name(s): N: Kisumba; S: Vumangusi/Tengesi/Towa (M), Mzia, Kisumba (K).

Habitat: Adults in open sea or around reefs; juveniles sometimes in estuaries down to 100 m.

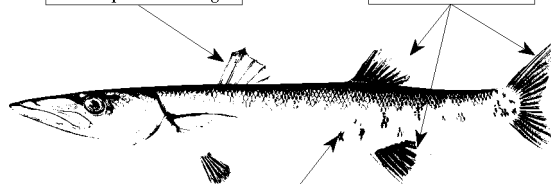
Fisheries: Trolling gears, Gillnets, Bottom trawls, Longlines.

Distinctive Characters: Upper jaw reaching at least to anterior margin of eye; lower jaw projecting; double emarginate caudal fin with pale tips on each lobe.

Colour: Deep green or steel grey above; sides mostly silvery, becoming abruptly white ventrally; small individuals with 18–22 oblique dark bars on back, faint to absent in adults.

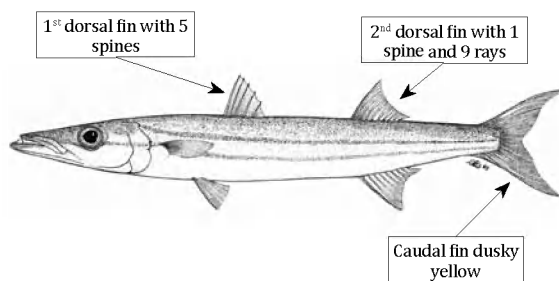
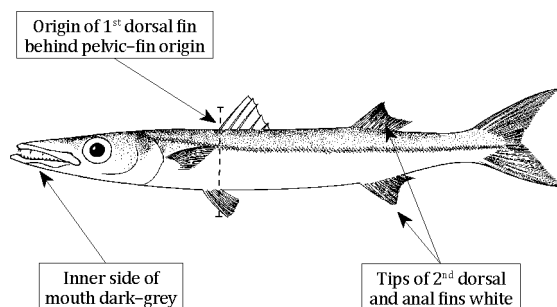
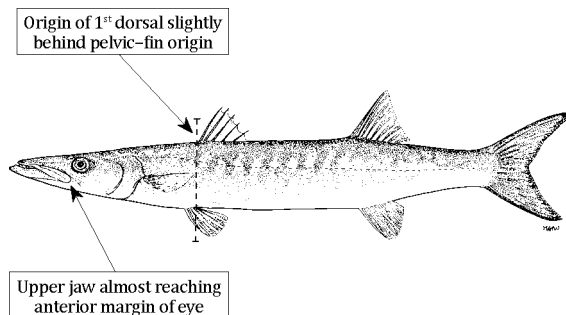
Origin of 1st dorsal fin behind pelvic-fin origin

2nd dorsal, anal and caudal fins blackish



Several inky blotches below lateral line

Size: To 200 cm, common 140 cm

Sphyraena flavicauda* Rüppell, 1838*(Plate XXIV, 221)****FAO names:** Yellowtail barracuda (En)**Local name(s):** N: Kisumba; S: Towa/Tengesi (M), Mzia, Kisumba (K).**Habitat:** Lagoons and sheltered seaward reefs.**Fisheries:** Trolling gears, Gillnets, Bottom trawls, Ringnets, Longlines.**Distinctive Characters:** Anal fin with 2 spines and 9 rays; pectoral fins with 14 soft rays.**Colour:** Brown stripe from tip of snout through centre of eye and pectoral-fin base; faint dusky stripe from top of eye along lateral line to caudal peduncle.**Remarks:** *S. flavicauda* is more elongate than *S. obtusata* and differs in dorsal-fin height and pectoral-fin length.**Size:** To 60 cm, common 40 cm***Sphyraena forsteri* Cuvier, 1829*****FAO names:** Bigeye barracuda (En)
Bécune de Forster (Fr)**Local name(s):** N: Kisumba; S: Mzia, Kisumba (K).**Habitat:** Close to shore or over shallow banks; frequently near the bottom.**Fisheries:** Trolling gears, Bottom trawls.**Distinctive Characters:** Eye very large; upper jaw reaching to anterior margin of eye, lower jaw projecting; pectoral-fin tip reaching beyond pelvic-fin base.**Colour:** Blue or black above, sides silvery, without dark bars or chevrons; a dark blotch in axil of pectoral fins.**Size:** To 75 cm, common 50 cm***Sphyraena jello* Cuvier, 1829****FAO names:** Pickhandle barracuda (En)
Bécune jello (Fr)**Local name(s):** N: Kisumba; S: Towa/Tengesi (M), Mzia, Kisumba (K).**Habitat:** Near the surface, at the edges of the reefs and over shallow banks.**Fisheries:** Trolling gears, Gillnets, Bottom trawls.**Distinctive Characters:** Anterior dorsal and anal-fin rays not reaching beyond tips of posterior rays when fin depressed; pectoral-fin tip reaching beyond pelvic-fin base; 1st dorsal with 6 spines, 2nd dorsal with 9 rays; anal fin with 2 spines and 7–9 soft rays.**Colour:** Blue or black or brown above, sides silvery, with a dark pattern of serpentine bars reaching a little below lateral line.**Size:** To 150 cm, common 120 cm

Sphyraena obtusata* Cuvier, 1829*(Plate XXIV, 222)****FAO names:** Obtuse barracuda (En)

Bécune obtuse (Fr)

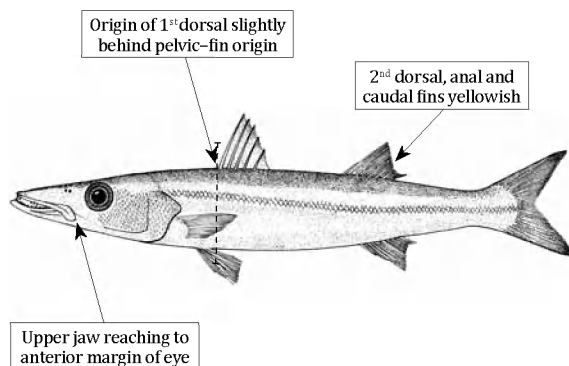
Local name(s): N: Kisumba; S: Towa/Tengesi (M), Mzia, Kisumba (K).

Habitat: Near the surface and just off the bottom.

Fisheries: Seines, Bottom trawls.

Distinctive Characters: Lower jaw projecting, strongly pointed; pectoral-fin tip reaching 1st dorsal-fin origin.

Colour: Grey or brown with greenish tinge above; sides silvery white without dark bars or chevrons; inside of mouth bright yellow or orange.

**Size:** To 55 cm, common 30 cm***Sphyraena putnamae* Jordan & Seale, 1905*****FAO names:** Sawtooth barracuda (En)

Bécune chevronnée (Fr)

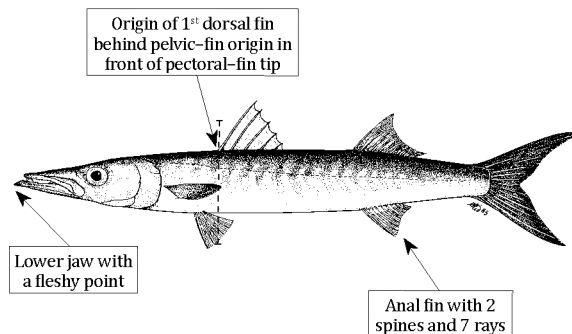
Local name(s): N: Kisumba; S: Vumangusi/Tengesi (M), Mzia, Kisumba (K).

Habitat: Current swept lagoons or seaward reefs.

Fisheries: Seines, Bottom trawls.

Distinctive Characters: No gill rakers on first gill arch; preopercle and opercle rounded; maxilla reaches almost front edge of eye; 1st dorsal fin with 5 spines, 2nd with 1 spine and 8 soft rays; 12–14 pectoral-fin rays; caudal fin forked, in large adults with a pair of indistinct lobes at posterior margin.

Colour: About 15 acutely angled chevrons on sides of body, their apices directed forward.

**Size:** To 90 cm***Sphyraena qenie* Klunzinger, 1870****(Plate XXIV, 223)****FAO names:** Blackfin barracuda (En)

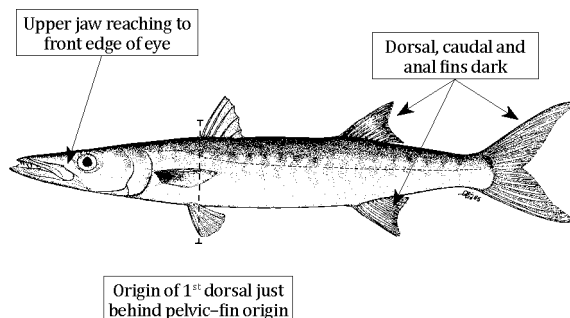
Local name(s): N: Kisumba; S: Vumangusi/Tengesi (M), Mzia, Kisumba (K).

Habitat: Near lagoons or seaward reefs.

Fisheries: Seines, Bottom trawls.

Distinctive Characters: No gill rakers on first gill arch; preopercle and opercle rounded, the latter with 2 flattened spines; 1st dorsal fin with 5 spines; 2nd with 1 spine and 8 soft rays; 13 pectoral-fin rays.

Colour: Body with about 20 dark cross bars extending well below lateral line; cross bars slightly wider than interspaces; usually small black dots on lateral line at rear margin of each cross bar.

**Size:** To 100 cm

GEMPYLIDAE

Snake mackerels – Barracoutas – Escolars – Oilfishes

***Gempylus serpens* Cuvier, 1829**

FAO names: Snake mackerel (En)
Escolier serpent (Fr)

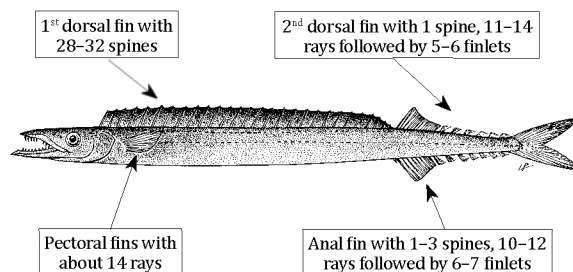
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Mesopelagic or pelagic, oceanic, at night often near the surface. Maximum depth more than 200 m.

Fisheries: By-catch in tuna longlines fisheries.

Distinctive Characters: Snout pointed, projecting beyond tip of snout; eyes large; pelvic fins minute, inserted a little behind pectoral-fin origin, with one spine and 4 rays; caudal fin deeply forked; two lateral lines both originating below 1st spine of dorsal fin.

Colour: Uniformly dark brown with light metallic reflections; sometimes a few small black spots above pectoral-fin base; fins dark brown, with darker margins.



Size: To 100 cm, common 60 cm

***Lepidocybium flavobrunneum* (Smith, 1843)**

FAO names: Escolar (En)
Escolier noir (Fr)

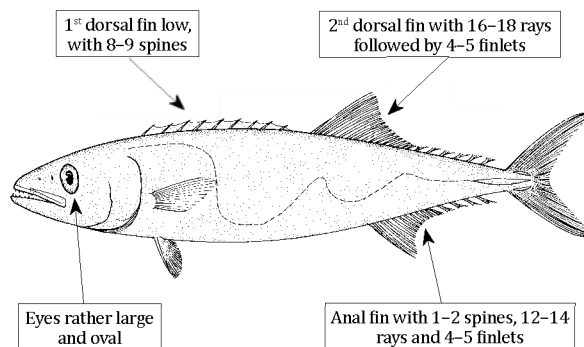
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Meso- or bathypelagic, oceanic, down to deeper waters. Maximum depth 200 m.

Fisheries: By-catch in tuna longlines fisheries.

Distinctive Characters: Pectoral fins short, with about 15 rays; pelvic fins well developed, with 1 spine and 5 rays; a strong keel with 2 small supplementary keels on either side of caudal peduncle.

Colour: Almost uniformly dark brown, becoming almost black with age.



Size: To 200 cm, common 150 cm

***Nealotus tripes* Johnson, 1865**

FAO names: Black snake mackerel (En)
Escolier reptile (Fr)

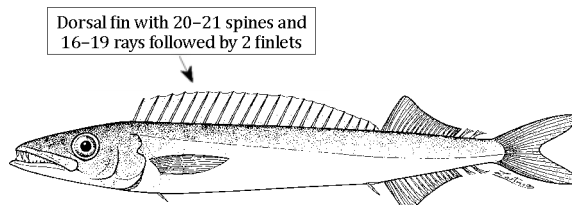
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Meso- to bathypelagic, oceanic, from the surface down to deeper waters. Maximum depth 600 m.

Fisheries: By-catch in deep trawls.

Distinctive Characters: Upper profile of head nearly straight from tip of snout to origin of dorsal fin; anal fin with 1 dagger-shaped spine, one smaller free spine and 15-19 soft rays followed by 2 finlets; pectoral fins with 13-14 soft rays; pelvic fins reduced to a small spine.

Colour: Body blackish brown; dorsal and anal fins pale brown; buccal, branchial cavities and peritoneum black.



Size: To 25 cm, common 15 cm

***Neopinnula orientalis* (Gilchrist & von Bonde, 1924)**

FAO names: Sackfish (En)
Escolier oriental (Fr)

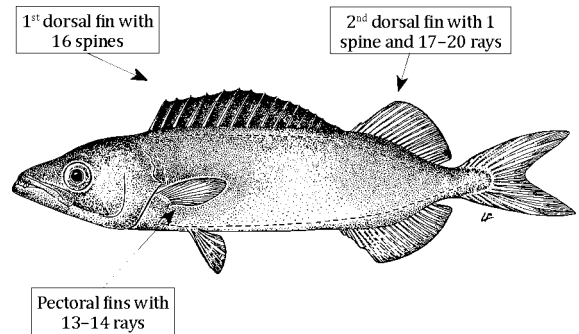
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Meso- or bathypelagic from 200 m to 570 m.

Fisheries: Deep water trawls.

Distinctive Characters: Mouth large; eye moderate in size; anal fin almost same as 2nd dorsal fin with 3 spines and 17–19 soft rays; pelvic fins well developed and large with one spine and 5 rays; caudal fin forked; two lateral lines on the sides, both originating from above the upper angle of the gill opening.

Colour: Uniformly bluish brown; fins pale except blackish 1st dorsal fin; lining of buccal and branchial cavities black.



Size: To 30 cm

***Promethichthys prometheus* (Cuvier, 1832)**

FAO names: Roudi escolar (En)
Escolier clair (Fr)

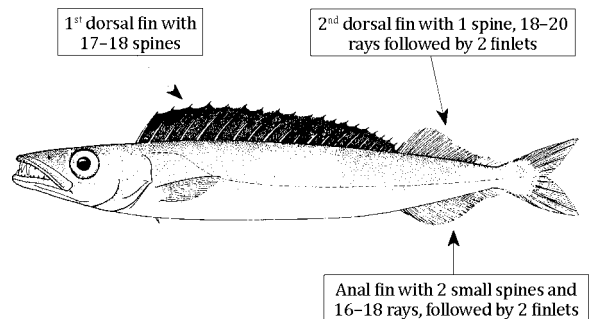
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Meso-, bathy- or benthopelagic from 100 m to 750 m.

Fisheries: Bottom trawls, Bottom longlines, Set nets.

Distinctive Characters: Eye large; mouth with fang-like teeth; pectoral fins short, with about 15 rays; pelvic fins reduced to a spine and sometimes rudimental soft rays.

Colour: Background colour dark brown with violet reflections, fading to dull brown after death; 1st dorsal-fin membrane black, other fins blackish brown.



Size: To 100 cm, common 40 cm

***Rexea prometheoides* (Bleeker, 1856)**

FAO names: Royal escolar (En)
Escolier tifiati (Fr)

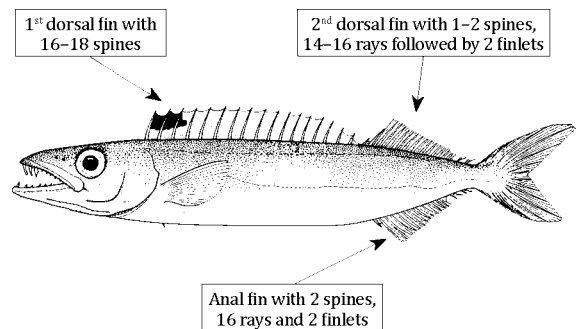
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Benthopelagic from 135 m to 540 m.

Fisheries: Bottom trawls.

Distinctive Characters: Inter-orbital region flattened and shallowly concave; pectoral fins round and short with 13–14 rays; pelvic fin represented by a single spine in smaller specimens but entirely absent in specimens over 18–20 cm SL; lateral line branching below the 4th to the 5th spine of the 1st dorsal fin; the upper branch reaching the middle to end of the 2nd dorsal-fin base; the lower branch running mid laterally; caudal fin forked, with longer upper lobe.

Colour: Back and upper side bluish brown, lower side and belly pale, with a strong silvery luster; large black blotch present on anterior part of 1st dorsal fin.



Size: To 40 cm

Thyrsitoides marleyi* Fowler, 1929

FAO names: Black snoek (En)
Escolier gracile (Fr)

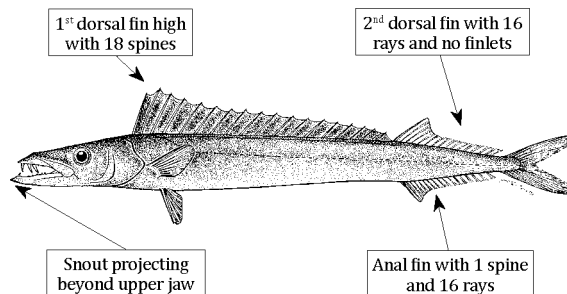
Local name(s): N: Mzio; S: Mzia (K).

Habitat: Meso- and bathypelagic down to more than 400 m.

Fisheries: Bottom trawls, Handlines, Longlines.

Distinctive Characters: Three fangs anteriorly in each side of upper jaw; eyes rather small; pectoral fins with a small spine and 13–14 rays; pelvic fins well developed with 1 spine and 5 rays; two lateral lines, originating above the upper angle of gill opening.

Colour: Dark brown with slight metallic reflections sometimes slightly pale on belly; black markings on 1st dorsal fin, other fins brown without any markings.



Size: To 200 cm, common 100 cm

TRICHIURIDAE

Cutlassfishes – Hairtailfishes – Frostfishes – Scabbardfishes

***Trichiurus lepturus* Linnaeus, 1758**

FAO names: Largehead hairtail (En)
Poisson sabre commun (Fr)

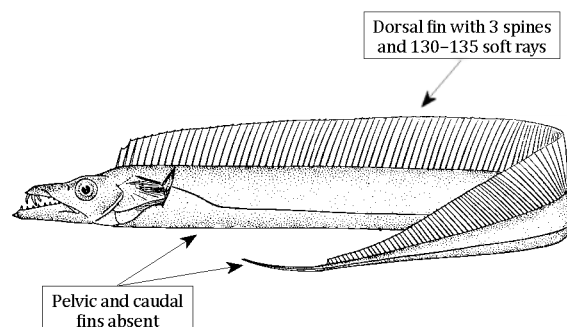
Local name(s): N: Panga meno; S: Panga meno (M/K).

Habitat: Benthopelagic from coastal waters to 350 m.

Fisheries: Boat seines, Longlines.

Distinctive Characters: Body ribbon-like tapering to a point; mouth large, with a dermal flap at tip of each jaw; eye large; anal fin reduced to about 100–105 minute spinules; pectoral fins medium-sized, with 1 spine and 11–13 soft rays.

Colour: Fresh specimens are steel blue with silvery reflections; pectoral fins semi-transparent, other fins sometimes pale yellow, the colour becomes uniform silvery grey sometimes after death.



Size: To 234 cm, common 100 cm

SCOMBRIDAE

Albacores – Bonitos – Mackerels – Seerfishes – Tunas – Wahoos

***Acanthocybium solandri* (Cuvier, 1832)**

FAO names: Wahoo (En)
Thazard-bâtard (Fr)

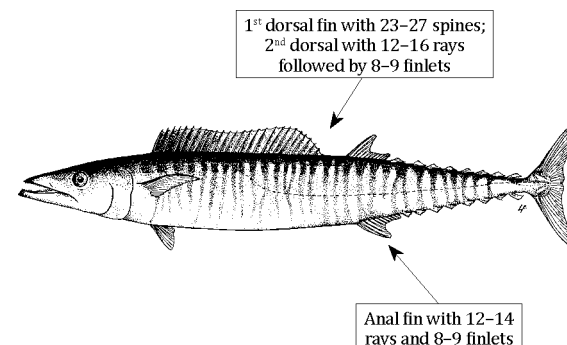
Local name(s): N: Nguru mtwana/Sumari; S: Nguru (M/K).

Habitat: Epipelagic, oceanic.

Fisheries: Trolling gears, Gillnets.

Distinctive Characters: Body very elongate and fusiform; snout about as long as the rest of the head; 2 small flaps (inter pelvic process) between pelvic fins.

Colour: Back iridescent bluish green; numerous dark vertical bars on sides which extend to below lateral line.



Size: To 250 cm

***Auxis rochei* (Risso, 1810)**

FAO names: Bullet tuna (En)
Bonitou (Fr)

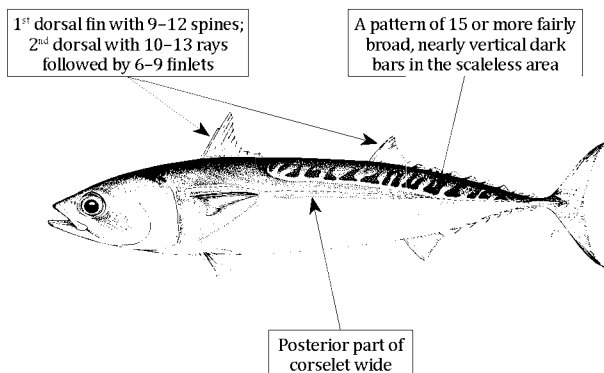
Local name(s): N: Nguru; S: Nguru (M/K).

Habitat: Epipelagic, neritic and oceanic.

Fisheries: Purse seines, Beach seines, Traps, Trolling gears.

Distinctive Characters: Body robust, elongate and rounded; teeth small and conical, in a single series; pectoral fins short, not reaching vertical line from anterior margin of scaleless area above corselet; a strong central keel on each side of caudal-fin base between 2 smaller keels.

Colour: Back bluish, turning to deep purple or almost black on the head; belly white; pectoral and pelvic fins purple.



Size: To 50 cm

***Auxis thazard* (Lacepède, 1800)**

FAO names: Frigate tuna (En)
Auxide (Fr)

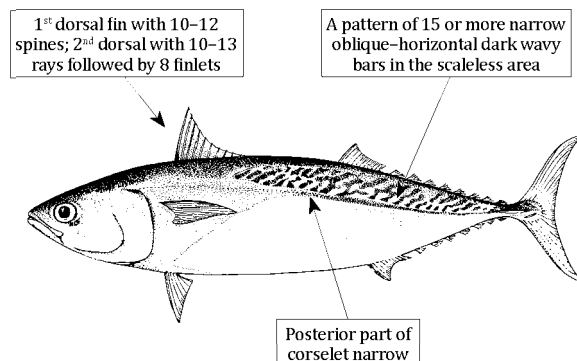
Local name(s): N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).

Habitat: Epipelagic, neritic and oceanic.

Fisheries: Beach seines, Shore seines, Driftnets, Purse seines, Hooks and Line, Trolling gears.

Distinctive Characters: Body rounded; pectoral fins short, but reaching past vertical line from anterior margin of scaleless area above corselet; a strong central keel on each side of caudal-fin base between 2 smaller keels.

Colour: Back bluish; deep purple or almost black on the head; belly white; pectoral and pelvic fins purple.



Size: To 65 cm, common 60 cm

***Euthynnus affinis* (Cantor, 1849)**

(Plate XXIV, 224)

FAO names: Kawakawa (En)
Thonine orientale (Fr)

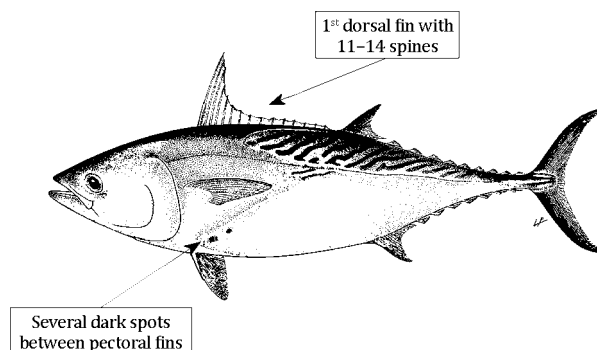
Local name(s): N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).

Habitat: Epipelagic and neritic.

Fisheries: Trolling gears, Gillnets.

Distinctive Characters: Pectoral fins short; two flaps (inter pelvic process) between pelvic fins.

Colour: Back dark blue with a complicated striped pattern which does not extend forward beyond middle of 1st dorsal fin; lower sides and belly silvery white.



Size: To 100 cm, common 60 cm

Gymnosarda unicolor* (Rüppell, 1836)

FAO names: Dogtooth tuna (En)
Bonite à gros yeux (Fr)

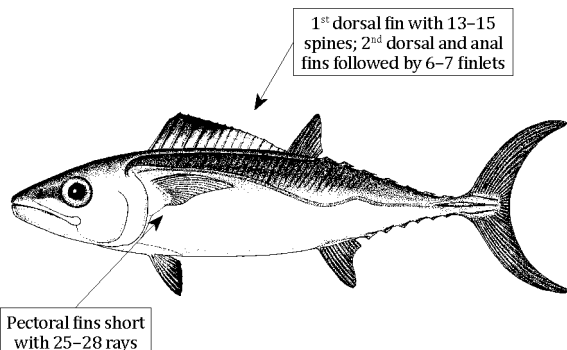
Local name(s): N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).

Habitat: Epipelagic, usually around coral reefs.

Fisheries: Pole and Line, Trolling gears, Gillnets.

Distinctive Characters: Mouth fairly large, upper jaw reaching to middle of eye; inter pelvic process large and single; caudal peduncle with a well developed lateral keel between 2 smaller keels on each side.

Colour: Back and upper sides brilliant blue-black, lower sides and belly silvery; no lines, spots or other markings on body.



Size: To 248 cm, common 190 cm

***Katsuwonus pelamis* (Linnaeus, 1758)**

(Plate XXIV, 225)

FAO names: Skipjack tuna (En)
Listao (Fr)

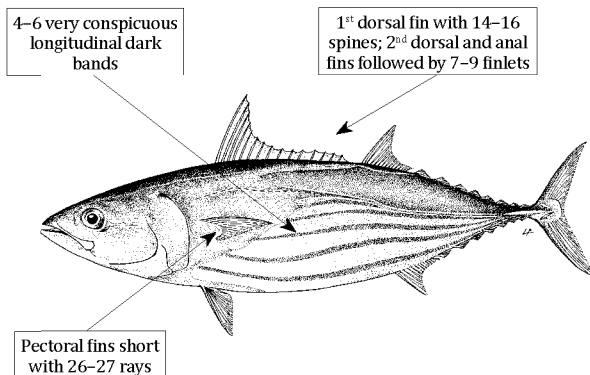
Local name(s): N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).

Habitat: Epipelagic and oceanic.

Fisheries: Purse seines, Pole and Line, Trolling gears, Gillnets.

Distinctive Characters: Body without scales except for the corselet and the lateral line; inter pelvic process between pelvic fins small and bifid; swim bladder absent; a strong keel on each side of base of caudal fin between 2 smaller keels.

Colour: Back dark purplish blue, lower sides and belly silvery.



Size: To 100 cm, common 80 cm

***Rastrelliger kanagurta* (Cuvier, 1816)**

FAO names: Indian mackerel (En)
Maquereau des Indes (Fr)

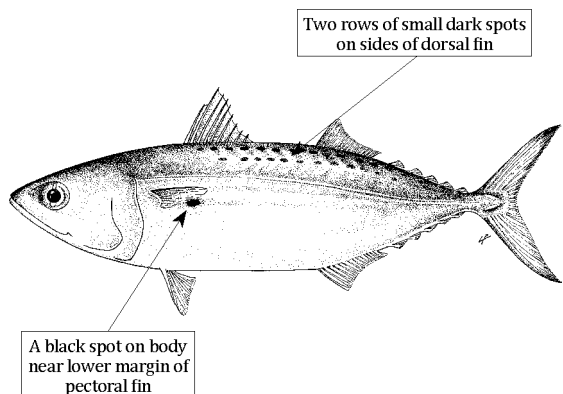
Local name(s): N: Una/Una bangra/Sehewa;
S: Una (M), Sehewa (K).

Habitat: Pelagic in coastal waters.

Fisheries: Purse seines, Ringnets.

Distinctive Characters: Head longer than body depth; maxilla partly concealed, covered by lacrimal bone; well developed adipose eyelids; swim bladder present; interpelvic process small and single.

Colour: Back blue-green, flanks silver with a golden tint; narrow dark longitudinal bands on upper part of body (golden in fresh specimens); dorsal fins yellowish with black tips; caudal and pectoral fins yellowish; other fins dusky.



Size: To 35 cm, common 25 cm

***Sarda orientalis* (Temminck & Schlegel, 1844)**

Local name(s): N: Jodari/Kiboma; S: Nguru (M/K).

Habitat: Pelagic in coastal waters.

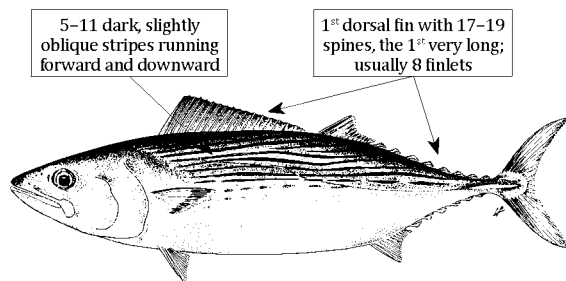
Fisheries: Pole and Line, Purse seines, Drift nets.

Distinctive Characters: Pectoral fins short; pelvic fins separated by 2 flaps; caudal peduncle slender, with a prominent lateral keel between two smaller keels on each side.

Colour: Back and upper sides steel-blue, with lower sides and belly silvery.

(Plate XXV, 226)

FAO names: Striped bonito (En)
Bonite oriental (Fr)



Size: To 100 cm, common 55 cm

***Scomberomorus commerson* (Lacepède, 1800)**

Local name(s): N: Nguru; S: Nguru (M/K).

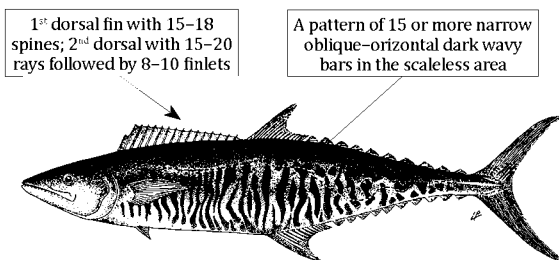
Habitat: Pelagic in coastal waters from 15 m to 200 m.

Fisheries: Deep gillnets, Mid-water trawls, Trolling gears.

Distinctive Characters: Anal fin with 16-20 rays followed by 7-12 finlets.

Colour: Back iridescent blue grey, sides silvery with bluish reflection, marked with numerous thin, wavy vertical bands; the number of bars increases with age; juveniles frequently spotted.

FAO names: Narrow-barred Spanish mackerel (En)
Thazard rayé indo-pacifique (Fr)



Size: To 240 cm, common 120 cm

***Scomberomorus plurilineatus* Fourmanoir, 1966**

Local name(s): N: Nguru borega; S: Nguru (M/K).

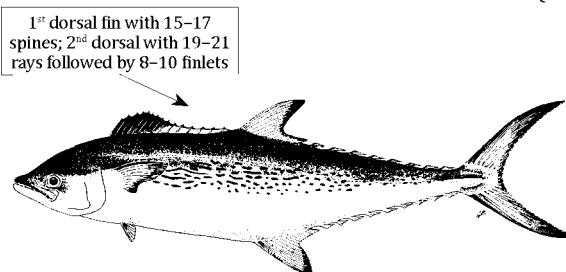
Habitat: Epipelagic, neritic, in coastal waters.

Fisheries: Gillnets, Trolling gears, Handlines.

Distinctive Characters: Snout much shorter than rest of head; posterior part of maxilla exposed; anal fin with 19-21 rays, followed by 8-9 finlets.

Colour: Back iridescent blue-grey, sides silvery, becoming whitish ventrally; a series of 6-8 interrupted horizontal black lines on sides of body; 1st dorsal fin black except for posterior pale area; 2nd dorsal, anal and finlets mostly dusky.

FAO names: Kanadi kingfish (En)
Thazard Kanadi (Fr)



Size: To 120 cm, common 80 cm

***Thunnus alalunga* (Bonnaterre, 1788)**

Local name(s): N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).

Habitat: Oceanic, epipelagic to mid-water distribution.

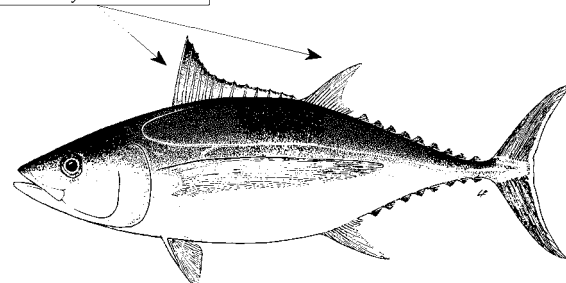
Fisheries: Purse seines, Longlines, Trolling gears.

Distinctive Characters: Pectoral fins remarkably long; 2 flaps between pelvic fins; caudal peduncle with a strong lateral keel between 2 smaller keels; posterior margin of caudal fin white.

Colour: Back metallic dark blue, lower sides and anal finlets dark; belly whitish.

1st dorsal fin deep yellow,
2nd dorsal and anal fins light
yellow

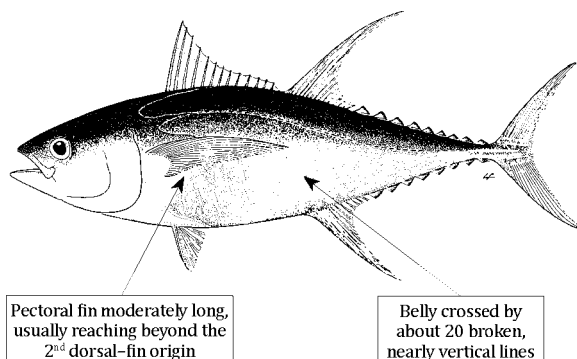
FAO names: Albacore (En)
Germon (Fr)



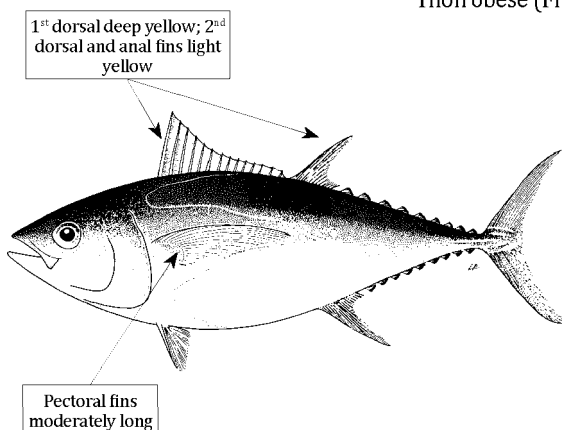
Size: To 140 cm, common 100 cm

Thunnus albacares (Bonnaterre, 1788)

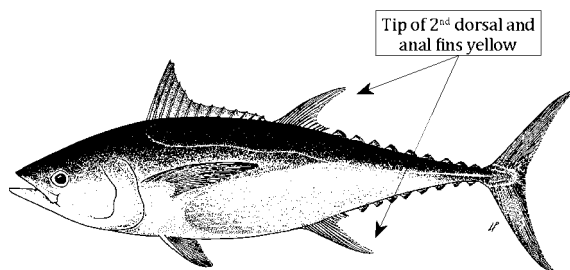
(Plate XXV, 227)

FAO names: Yellowfin tuna (En)
Albacore (Fr)**Local name(s):** N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).**Habitat:** Epipelagic and oceanic.**Fisheries:** Longlines, Purse seines, Trolling gears, Mid-water trawls.**Distinctive Characters:** Caudal peduncle very slender, with a strong lateral keel between 2 smaller keels.**Colour:** Back metallic dark blue changing to yellow and silver on belly; dorsal and anal fins and their finlets brightly yellow.

Size: To 239 cm, common 150 cm

Thunnus obesus (Lowe, 1839)FAO names: Bigeye tuna (En)
Thon obèse (Fr)**Local name(s):** N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).**Habitat:** Epipelagic and mesopelagic in oceanic waters.**Fisheries:** Longlines, Purse seines, Trolling gears, Mid-water trawls.**Distinctive Characters:** Two flaps between pelvic fins; caudal peduncle with a strong lateral keel between 2 smaller keels; in fish longer than 30 cm, ventral surface of liver striated.**Colour:** Back metallic dark blue, lower sides and belly whitish.

Size: To 250 cm, common 180 cm

Thunnus tonggol (Bleeker, 1851) *FAO names: Longtail tuna (En)
Thon mignon (Fr)**Local name(s):** N: Jodari/Kiboma; S: Jodari/Kiboma (M/K).**Habitat:** Epipelagic and neritic.**Fisheries:** Longlines, Purse seines, Trolling gears, Mid-water trawls.**Distinctive Characters:** Two flaps between pelvic fins; caudal peduncle with a strong lateral keel between 2 smaller keels.**Colour:** Back dark blue or black, lower sides and belly silvery white with colourless elongated oval spots in horizontal rows; anal fin silvery; dorsal and anal finlets yellow; caudal fin blackish, with yellowish-green streaks; dorsal, pectoral and pelvic fins, blackish.

Size: To 145 cm, common 70 cm

XIPHIIDAE

Swordfishes

***Xiphias gladius* Linnaeus, 1758**

FAO names: Swordfish (En)
Espadon (Fr)

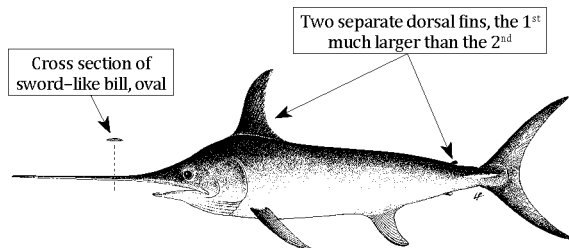
Local name(s): N: Sulisuli mweupe; S: Sulisuli (M), Sulisuli/Nduwaro (K).

Habitat: Epipelagic, primarily oceanic, also occurs in coastal waters.

Fisheries: Longlines, Harpoons, Trolling gears, Gillnets, Purse seines.

Distinctive Characters: Both jaws prolonged into long bills in juveniles; pectoral fins falcate, a little rigid; a large keel present on each side of caudal peduncle.

Colour: Dorsal and lateral sides of the body blackish-brown gradually fading to light brown on ventral side; fin membrane of 1st dorsal fin dark blackish-brown, other fins brown or blackish-brown.



Size: To 455 cm (FL), common 300 cm

ISTIOPHORIDAE

Marlins – Sailfishes – Spearfishes

***Istiophorus platypterus* (Shaw, 1792)**

FAO names: Indo-Pacific sailfish (En)
Voilier indo-pacifique (Fr)

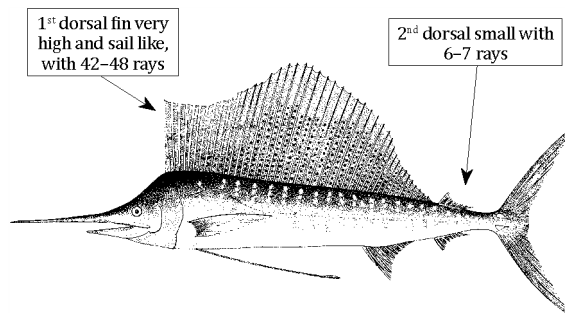
Local name(s): N: Sulisuli makuti; S: Sulisuli makuti (M/K).

Habitat: Oceanic, epipelagic.

Fisheries: Longlines, Harpoons, Trolling gears, Gillnets, Purse seines.

Distinctive Characters: Two separate anal fins, with 12–15 and 6–7 rays, respectively; pectoral fins falcate, with 17–20 rays; pelvic fins very long, almost reaching to anus, with 1 spine and 2 rays.

Colour: Body dark blue dorsally, silvery white ventrally; 1st dorsal membrane blue-black with many small black spots; other fins brown-black; more or less 20 horizontal bars on body, each consisting of several pale blue spots.



Size: To 348 cm (FL), common 270 cm

***Makaira indica* (Cuvier, 1832)**

FAO names: Black marlin (En)
Makaire noir (Fr)

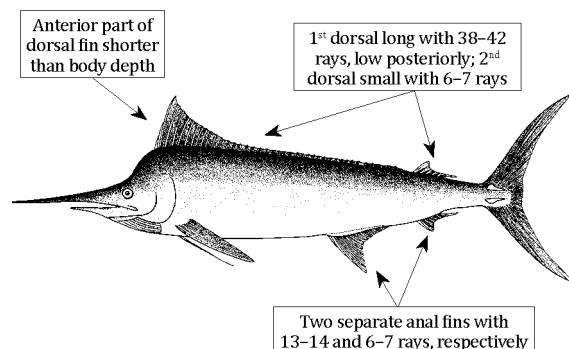
Local name(s): N: Sulisuli mweupe; S: Sulisuli (M/K).

Habitat: Oceanic, epipelagic.

Fisheries: Longlines, Harpoons, Trolling gears, Gillnets, Purse seines.

Distinctive Characters: Pectoral fins rigid and falcate with 19–20 rays; pelvic fins shorter than pectorals, with 1 spine and 2 rays.

Colour: Body dark blue dorsally, silvery white ventrally; 1st dorsal-fin membrane blue-black, usually unspotted; other fins brown-black; no markings or dots on sides of body; after death body turns greyish-white.

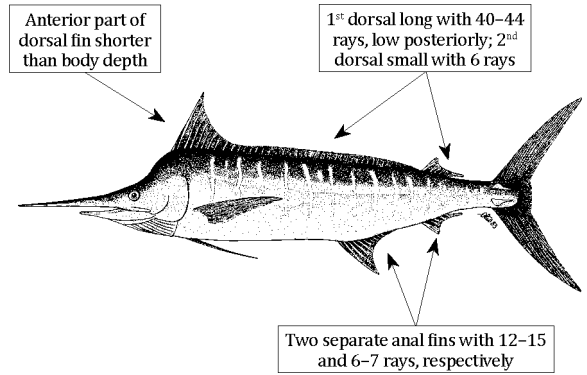


Size: To 465 cm (FL), common 380 cm

***Makaira nigricans* Lacepède 1802**

FAO names: Blue marlin (En)
Makaire bleu (Fr)

Local name(s): N: Sulisuli buluu; S: Sulisuli (M/K).
Habitat: Oceanic, epipelagic.
Fisheries: Longlines, Harpoons, Trolling gears, Gillnets, Purse seines.
Distinctive Characters: Pectoral fins falcate with 21–23 rays folding back against side of body; pelvic fins shorter than pectoral fins, with 1 spine and 2 soft rays.
Colour: Body blue dorsally, silvery white ventrally; 1st dorsal fin membrane blue–black, unspotted; other fins brown–black; about 15 vertical bars, each consisting of pale blue spots and lines on body.

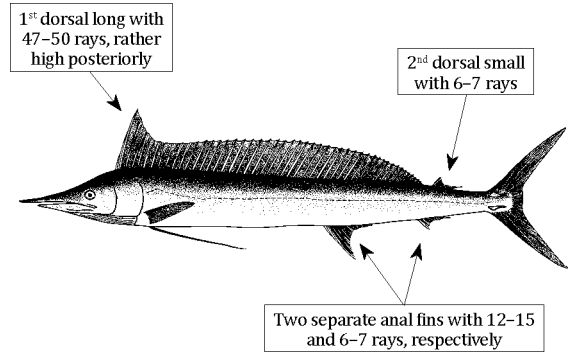


Size: To 500 cm (TL), common 350 cm

***Tetrapturus angustirostris* Tanaka, 1915**

FAO names: Shortbill spearfish (En)
Makaire à rostre court (Fr)

Local name(s): N: Sulisuli makuti; S: Sulisuli (M), Sulisuli mbase (K).
Habitat: Oceanic, epipelagic.
Fisheries: Longlines, Gillnets, Purse seines.
Distinctive Characters: Spear short; pectoral fins short with 18–19 rays; pelvic fins longer than pectoral fins with 1 spine and 2 soft rays.
Colour: Body dark blue dorsally, brownish–silvery white laterally, silvery white ventrally; 1st dorsal fin membrane blue–black without spots; other fins brown–black; no bars or spots on body.

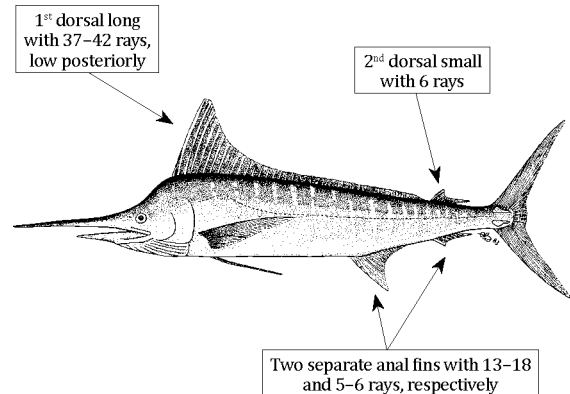


Size: To 230 cm (TL), common 190 cm

***Tetrapturus audax* (Philippi, 1887)**

FAO names: Striped marlin (En)
Marlin rayé (Fr)

Local name(s): N: Sulisuli mweupe; S: Sulisuli (M/K).
Habitat: Oceanic, epipelagic.
Fisheries: Longlines, Gillnets, Purse seines.
Distinctive Characters: Pectoral fins falcate, with 18–22 rays; anterior part of dorsal fin slightly higher than body.
Colour: Body dark blue dorsally, silvery white ventrally; 1st dorsal fin membrane blue–black; other fins brown–black; about 20 vertical bars, each consisting of several small pale blue spots or lines on body.



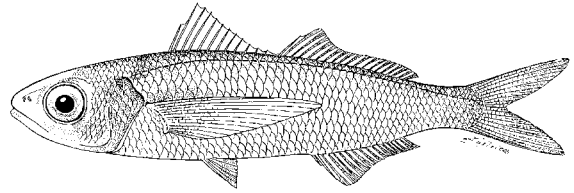
Size: To 420 cm (TL), common 290 cm

NOMEIDAE

Man-of-war fishes

Cubiceps pauciradiatus Günther, 1872 *

FAO names: Bigeye cigarfish (En)

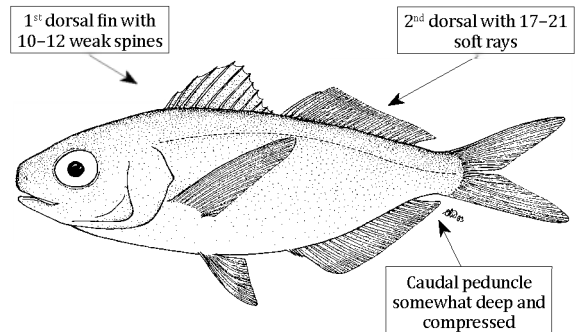
Local name(s): N: No information; S: Mdunji (K).**Habitat:** Deep waters on the continental slope.**Fisheries:** Bottom trawls.**Distinctive Characters:** Caudal peduncle broad, eye large equal to snout; dorsal fin with 10–13 spines and 15–17 dorsal rays; 2 anal spines and 14–16 soft rays; 17–20 pectoral-fin rays; teeth on roof of mouth in a oval patch; a thin bony keel on the breast; pectoral fins elongate.**Colour:** Background colour light tan to brown, caudal dusky but other fins clear.

Size: To 20 cm

Cubiceps whiteleggii (Waite, 1894)

FAO names: Shadow driftfish (En)

Derivant indien (Fr)

Local name(s): N: No information; S: Mdunji (K).**Habitat:** Deep waters on the continental slope.**Fisheries:** Bottom trawls.**Distinctive Characters:** Snout blunt and broad, mouth fairly small; jaw teeth small, in a single series; palatine teeth more elongate, in single row; vomerine tooth patch small; single median row of teeth on tongue; anal fin with 2–3 spines and 18–21 rays; pectoral fins longer than anal and wing-like, with 18–20 rays; scales fairly small, cycloid (smooth), easily shed.**Colour:** Preserved specimens brown, a little darker on back than sides, inside of opercle dark; silvery cast in life.

Size: To 21 cm

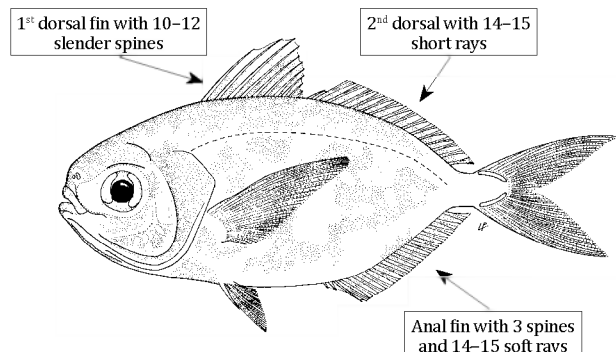
ARIOMMATIDAE

Ariommas

Ariomma indicum (Day, 1871)

FAO names: Indian driftfish (En)

Ariomme indienne (Fr)

Local name(s): N: Haluwa; S: Kisukari (K).**Habitat:** Muddy bottoms down to 300 m.**Fisheries:** Bottom trawls.**Distinctive Characters:** Caudal peduncle short, almost square in cross-section with two fleshy keels at base of caudal fin; eyes large, surrounded by thick adipose tissue.**Colour:** Background colour silvery with bluish tinge on back; inside opercle black; eye with 2 golden crescents separated by a vertical dark region; large specimens may be uniformly dark; fins grayish.

Size: To 25 cm, common 18 cm

CAPROIDAE

Boarfishes

***Antigonia rubescens* (Günther, 1860)**

Local name(s): N: Sese/Ngamia; S: Bembere (K).

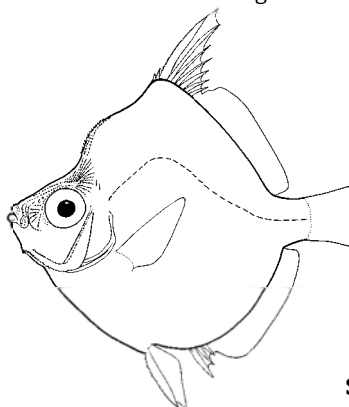
Habitat: Benthopelagic from 65 m to 600 m.

Fisheries: Gillnets, Seines, Bottom trawls.

Distinctive Characters: Body strongly compressed, discoid, with small ctenoid scales; mouth small, upper jaw protrusible; a single dorsal fin with 8–9 spines and 25–27 soft rays; anal fin with 3–5 soft rays; caudal fin truncate; pectoral fins with 15 rays, longer than pelvic and slightly shorter than head.

Colour: Head and body reddish orange dorsally, silvery below; median fins yellow.

FAO names: Indo–Pacific boarfish (En)
Sanglier indo–pacifique (Fr)



Size: To 22 cm

PSETTODIDAE

Spiny turbot

***Psettodes erumei* (Bloch & Schneider, 1801)**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

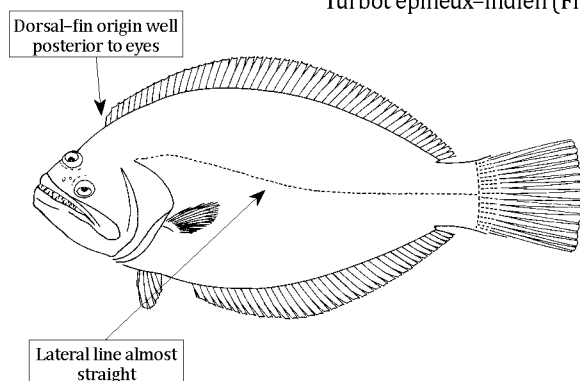
Habitat: Muddy and sandy bottoms from 1 m to 100 m.

Fisheries: Bottom trawls, Spears.

Distinctive Characters: Body oval and flat, but thicker than in most other flat fishes; mouth large with strong teeth; maxillary extends well beyond hind edge of lower eye; both eyes on left or right side; anterior fin rays spiny.

Colour: Usually brown or grey, sometimes with 4 broad dark crossbars; dorsal, anal and caudal fin tips black; black side occasionally partially coloured.

FAO names: Indian halibut (En)
Turbot épineux–indien (Fr)



Size: To 64 cm, common 50 cm

PARALICHTHYIDAE

Short pelvic flounders

***Pseudorhombus arsius* (Hamilton, 1822)**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

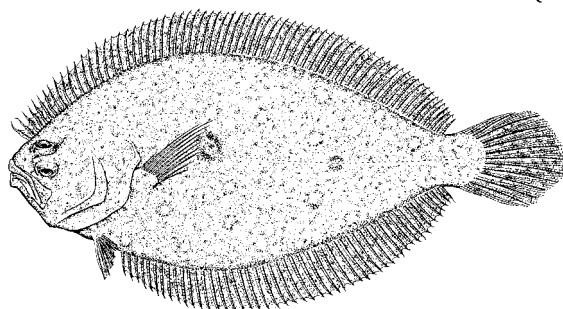
Habitat: Benthic in shallow waters and estuaries on muddy and sandy bottoms down to 200 m.

Fisheries: Bottom trawls.

Distinctive Characters: Dorsal fin with 72–78 rays; 54–60 anal rays; pectoral fins with 11–13 rays on eyed side, 11–12 on blind side; scales on eyed side ctenoid and cycloid on blind side except those on dorsal and anal rays.

Colour: Background colour of eyed side with varying pattern of brown spots but always a large and a smaller blotch along lateral line.

FAO names: Largetooth flounder (En)
Rite dentu (Fr)



Size: To 45 cm, common 30 cm

Pseudorhombus elevatus Ogilby, 1912

FAO names: Deep flounder (En)
Rite targeur (Fr)

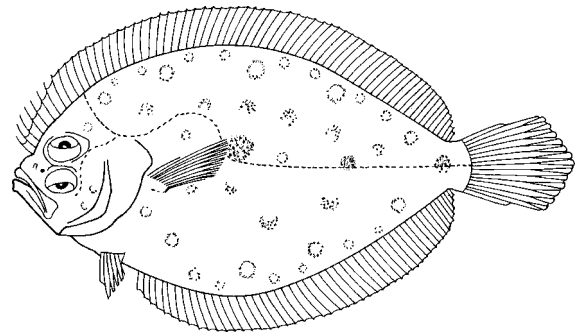
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Benthic on clay, sand and mud bottoms from 7 m to 200 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body oval and flat, with both eyes on left side; upper jaw ending below middle of lower eye; origin of 1st dorsal fin above or a little in front of anterior nostril; pelvic-fin base of blind side almost equal in length to that of eyed side; scales ctenoid (rough) on eyed side and cycloid (smooth) on blind side.

Colour: Background colour of eyed side, pale brown with about 5 irregular rows of blotches; 3 large distinct blotches along straight part of lateral line.



Size: To 20 cm, common 15 cm

BOTHIDAE

Lefteye flounders

Arnoglossus dalglishi (von Bonde, 1922)

FAO names: East coast flounder (En)

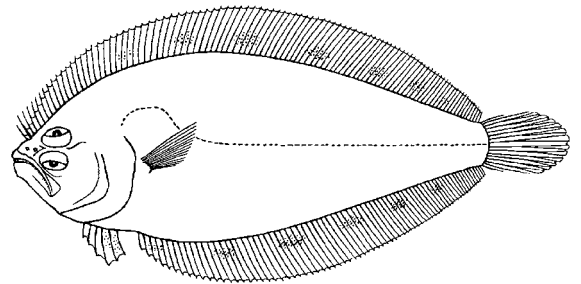
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: On muddy and sandy bottoms between 50 m and 220 m.

Fisheries: Bottom trawls.

Distinctive Characters: Both eyes on left side; dorsal fin with 101–108 soft rays; anal fin with 78–83 soft rays.

Colour: Dark blotches on dorsal and anal fins; last 3 pelvic rays on eyed side and 1st three dorsal rays darkened.



Size: To 19 cm

Bothus myriaster (Temminck & Schlegel, 1846)

FAO names: Indo-Pacific oval flounder (En)
Rombou oval (Fr)

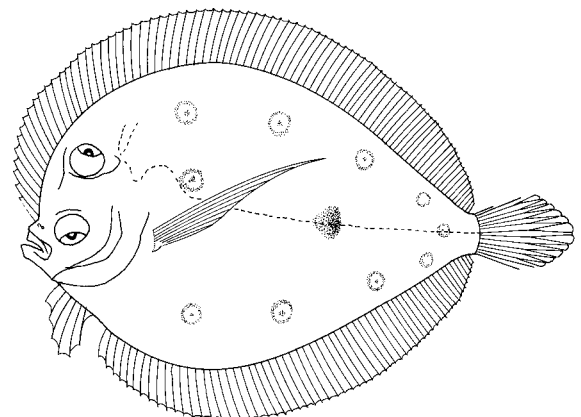
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: On muddy and sandy grounds of the continental shelf.

Fisheries: Bottom trawls.

Distinctive Characters: Both eyes on left side, separated by a wide space; pelvic-fin base of blind side much shorter than that of eyed side; scales on eyed side cycloid (smooth), except at extreme upper and lower edges of body, where they are ctenoid (rough).

Colour: Background colour grey-brown with 2–3 diffused dark blotches along lateral line; numerous bicoloured spots on body.



Size: To 27 cm

***Bothus pantherinus* (Rüppell, 1830)**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

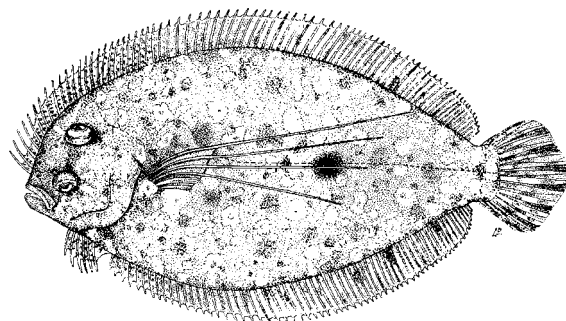
Habitat: Shallow waters on muddy and sandy bottoms.

Fisheries: Bottom trawls.

Distinctive Characters: Both eyes on left side, separated by a wide space; pelvic-fin base of blind side much shorter than that of eyed side; all scales on eyed side ctenoid (rough); males with spines near eyes, a larger space between eyes and much longer pectoral-fin rays than females; 9-12 pectoral rays on eyed side and 9-11 on blind side.

Colour: Background colour brown or reddish with irregular dark blotches and ocelli; large dark blotch midway along straight part of lateral line.

FAO names: Leopard flounder (En)
Rombou léopard (Fr)



Size: To 39 cm, common 20 cm

***Chascanopsetta lugubris* Alcock, 1894**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

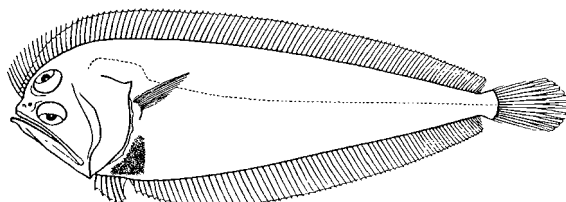
Habitat: Benthic from 60 m to 600 m.

Fisheries: Bottom trawls.

Distinctive Characters: Mouth extremely large, maxillary not projecting beyond tip of snout; eyes on left side; inter-orbital space narrow; 114-122 dorsal-fin rays, origin of dorsal fin well in front of eyes; scales small, cycloid (smooth) on both sides.

Colour: Background colour greyish or yellowish brown, with or without numerous spots; fins dusky; peritoneum black, visible through the thin abdominal walls; blind side uniformly light.

FAO names: Pelican flounder (En)
Perpeire pélicain (Fr)



Size: To 40 cm, common 25 cm

***Crossorhombus valderostratus* (Alcock, 1890)**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

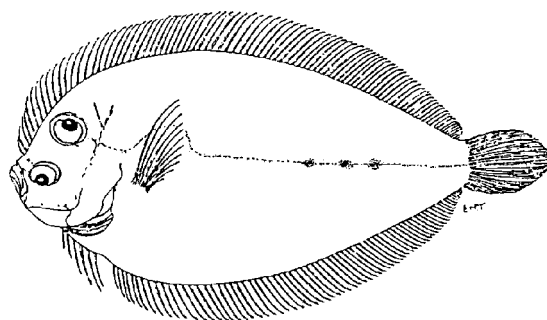
Habitat: Muddy and sandy bottoms.

Fisheries: Bottom trawls.

Distinctive Characters: Dorsal fin with 86-93 soft rays; anal with 68-74 soft rays; pectoral fins with 11-12 soft rays on eyed side and 9-11 soft rays on blind side.

Colour: Background colour green-brown with darker spots and blotches; 2-3 blotches along posterior part of lateral line.

FAO names: Broadbrow flounder (En)



Size: To 14 cm

***Engyprosopon grandisquama* (Temminck & Schlegel, 1846)**

FAO names: Largescale flounder (En)
Perpeire à grandes écailles (Fr)

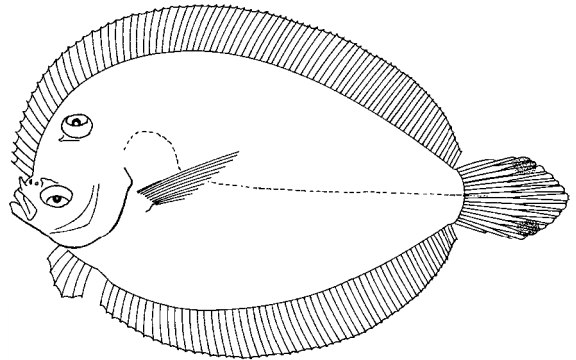
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Muddy and sandy bottoms of the continental shelf.

Fisheries: Bottom trawls.

Distinctive Characters: Eyes separated in adults by a more or less concave space; pelvic-fin base of blind side much shorter than on eyed side; scales of eyed side feebly ctenoid (rough); adult males have spines on snout and near eyes, and larger space between eyes than females.

Colour: Background colour brown with irregular dark spots and markings; a pair of jet-black blotches on caudal fin placed between 3rd and 4th rays counted from above and below respectively.



Size: To 15 cm, common 10 cm

SAMARIDAE

Crested flounders

***Samaris cristatus* Gray, 1831**

FAO names: Cockatoo righteye flounder (En)

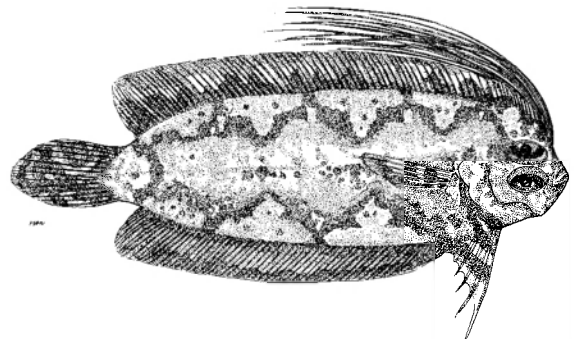
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Muddy and sandy bottoms.

Fisheries: Bottom trawls.

Distinctive Characters: Dorsal fin with 73–78 rays, first 12–15 (rarely 10–11) dorsal-fin rays greatly elongated; anal fin with 49–60 rays; fold of skin from base of 1st dorsal ray across blind side of head to rear end of lower jaw.

Colour: Body brownish with dark blotches along upper and 4 along lower edge; elongated anterior dorsal-fin rays white; dorsal and anal fins dusky; pectoral fins blackish.



Size: To 22 cm, common 16 cm

SOLEIDAE

Soles

Aesopia cornuta* Kaup, 1858

FAO names: Unicorn sole (En)

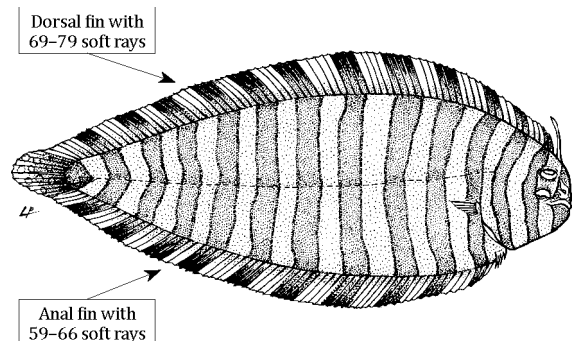
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Benthic in coastal waters to at least 100 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body oval and flat; eyes on right side; 11–15 pectoral-fin rays.

Colour: Background colour greyish or brown with 15–16 black-edged dark bars; caudal fin blackish with pale spots.



Size: To 25 cm

***Pardachirus marmoratus* (Lacepède, 1802)**

FAO names: Finless sole (En)

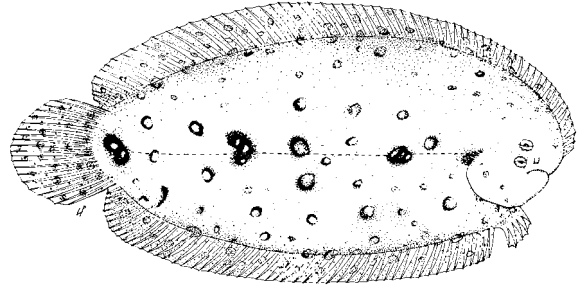
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Shallow muddy and sandy grounds.

Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Eyes on right side small, separated by a space slightly smaller than eye diameter; mouth small, curved; pectoral fins absent.

Colour: Olive green, with pale dark-edged areas, some with a dark central spot; head, body and fins with numerous small dark spots in addition to markings.



Size: To 26 cm, common 20 cm

***Pardachirus morrowi* (Chabanaud, 1954)**

FAO names: Persian carpet sole (En)

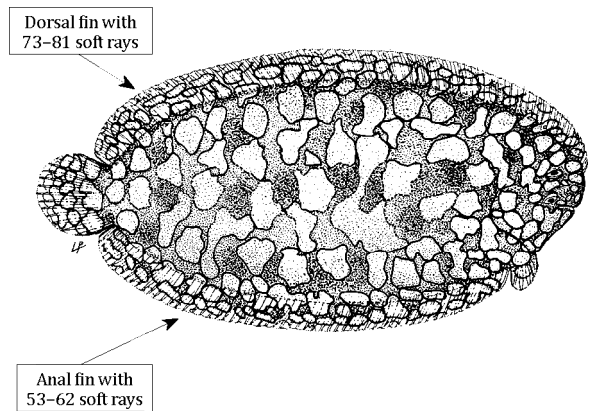
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Benthic in coastal waters to at least 10 m.

Fisheries: Bottom trawls.

Distinctive Characters: Body oval and flat; eyes on right side.

Colour: Background colour beige with a mosaic of beige and brown blotches.



Size: To 18 cm

CYNOGLOSSIDAE

Tonguesoles

***Cynoglossus acaudatus* Gilchrist, 1906**

FAO names: Natal tongue-fish (En)

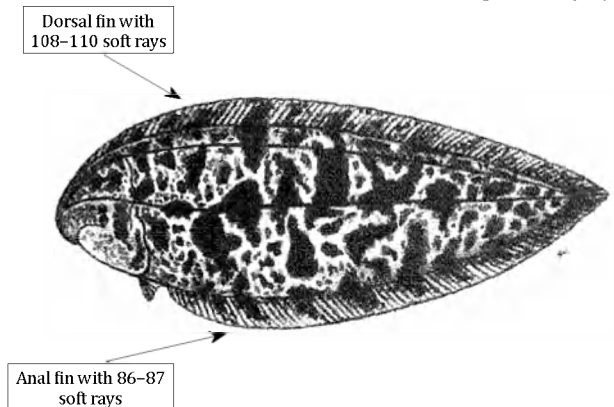
Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Benthic in shallow waters.

Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Eyes contiguous; dorsal and anal fins joined to caudal fin; two lateral lines on ocular side, none on blind side; scales ctenoid on both sides of body.

Colour: Background colour of eyed side brown with dark bars and blotches.



Size: To 14 cm

***Cynoglossus durbanensis* Regan, 1921**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

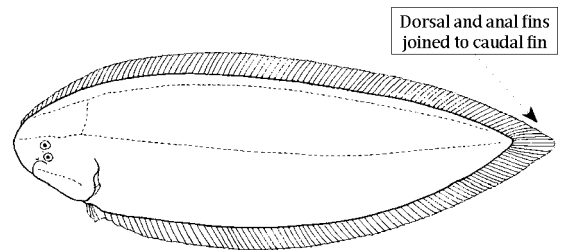
Habitat: Sandy bottoms of the continental shelf; enters brackish waters.

Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Dorsal fin with 98–105 soft rays; anal fin with 78–84 soft rays; 2 lateral lines on eyed side, none on blind side.

Colour: Upper side of body and fins pale brownish with dark spots and blotches.

FAO names: Durban tonguesole (En)



Size: To 20 cm

***Cynoglossus lachneri* Menon, 1977**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Sandy bottoms of the continental shelf.

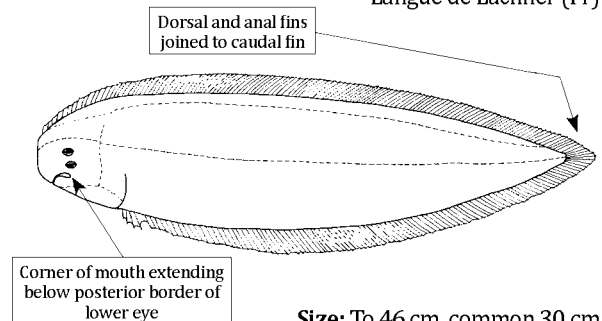
Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Eyes with a small scaly space between them; snout rounded; two lateral lines on eyed side and 2 on blind side; scales ctenoid on eyed side, cycloid on lateral line.

Colour: Upper side uniformly dark brown, lower side whitish.

FAO names: Lachner's tonguesole (En)

Langue de Lachner (Fr)



Size: To 46 cm, common 30 cm

***Cynoglossus zanzibarensis* Norman, 1939**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

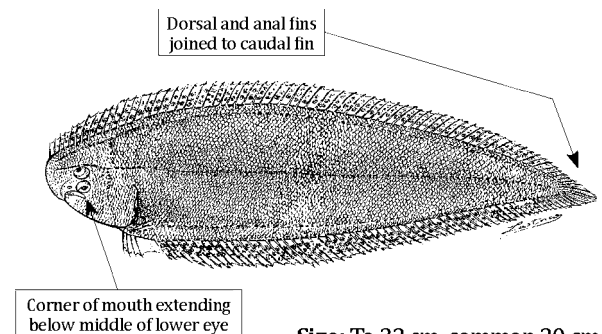
Habitat: Shallow muddy and sandy bottoms.

Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Eyes with a very narrow or no space between them; snout rounded; three lateral lines on eyed side but none on blind side; scales ctenoid (rough) on both sides of body, those of head on blind side rather weakly cycloid.

Colour: Upper side brownish, lower whitish.

FAO names: Zanzibar tonguesole (En)



Size: To 32 cm, common 20 cm

***Paraplagusia bilineata* (Bloch, 1787)**

Local name(s): N: Ulimi wa ngombe; S: Wayo (M), Rwayo (K).

Habitat: Muddy and sandy bottoms of the continental shelf; also found in shallow estuarine waters.

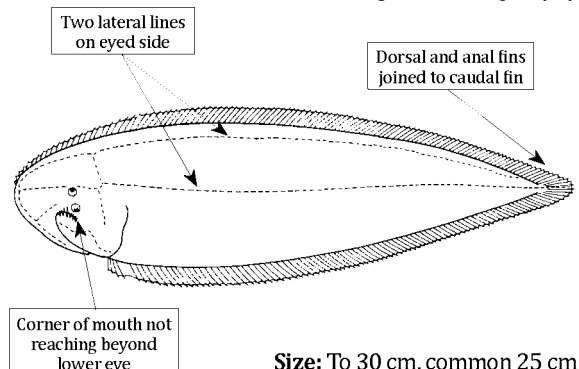
Fisheries: Bottom trawls, Beach seines.

Distinctive Characters: Eyes with a scaly space between them; snout rounded; mouth fringed with tentacles; no lateral line on blind side; scales ctenoid (rough) on both sides of body.

Colour: Eyed side brown sometimes spotted or marbled with darker patches; blind side tinged with yellow.

FAO names: Doublelined tonguesole (En)

Langue a deux ligne (Fr)



Size: To 30 cm, common 25 cm

BALISTIDAE

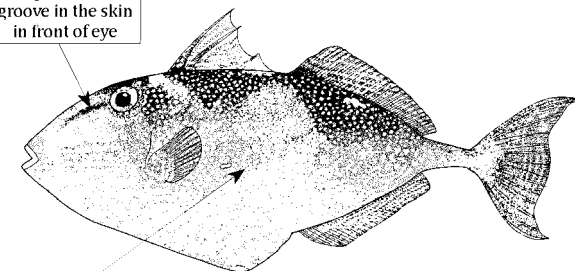
Triggerfishes – Durgons

Abalistes stellaris (Bloch & Schneider, 1801)

(Plate XXV, 228)

FAO names: Starry triggerfish (En)
Baliste étoilé (Fr)**Local name(s):** N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Sand, sponge and weed bottoms down to 100 m.**Fisheries:** Bottom trawls, Lines.**Distinctive Characters:** Scales of posterior part of body with prominent keels, forming longitudinal ridges; mouth terminal; 3 dorsal fin spines; caudal-fin rays of adults prolonged above and below; caudal peduncle depressed.**Colour:** Grey dashed with olive-green; 3 large white blotches on back, disappearing in large specimens; 3–4 yellow lines from mouth to pectoral-fin bases; soft dorsal and anal fins with yellow.

A prominent groove in the skin in front of eye



Numerous blue spots on body

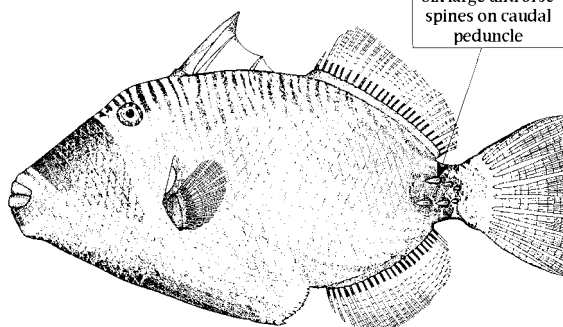
Size: To 60 cm, common 40 cm

Balistapus undulatus (Park, 1797)

FAO names: Orange-lined triggerfish (En)

Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Coral reef areas of lagoons and seaward reefs from 1 m to 50 m.**Fisheries:** Bottom trawls, Beach seines.**Distinctive Characters:** Two dorsal fins with 3 spines and 24–27 rays, respectively; anal fin with 20–24 rays; pectoral fins with 12–14 rays; mouth terminal; enlarged bony plates behind gill slit; cheeks fully scaled.**Colour:** Background colour dark green or dark brown with numerous orange stripes on body and head; one black spot at the tip of the 1st two dorsal spines.

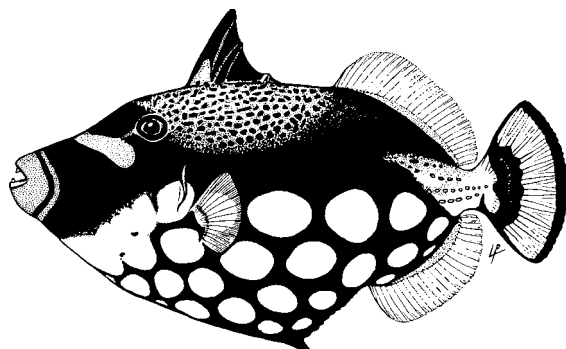
Six large antrorse spines on caudal peduncle



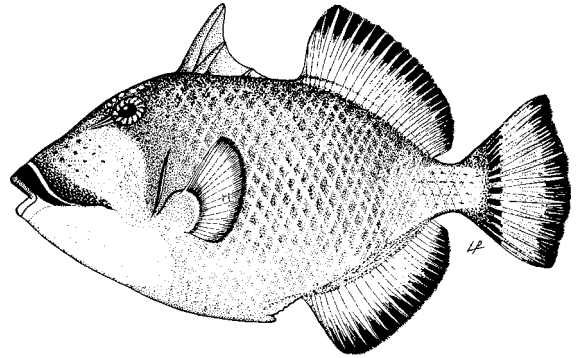
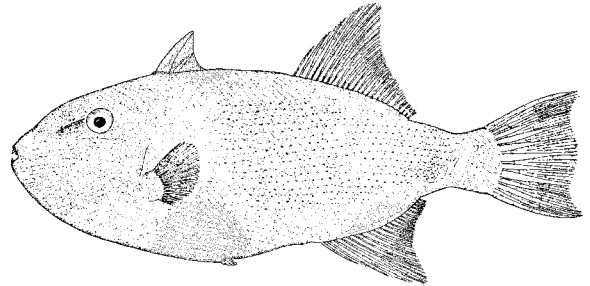
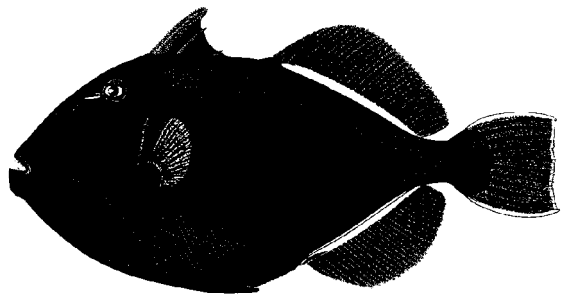
Size: To 30 cm

Balistoides conspicillum (Bloch & Schneider, 1801)

FAO names: Clown triggerfish (En)

Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Coral reefs and sandy bottoms from 2 m to 50 m.**Fisheries:** Traps, Seines, Spears, Gillnets.**Distinctive Characters:** Two dorsal fins with 3 spines and 25–27 rays, respectively; anal fin with 21–24 rays; pectoral fins with 14 rays; cheek entirely covered with scales.**Colour:** Large round white blotches ventrally; yellow band between eyes and snout; 2 yellow or reddish orange bands around mouth.

Size: To 50 cm

Balistoides viridescens (Bloch & Schneider, 1801)(Plate XXV, 229) **FAO names:** Titan triggerfish (En)
Baliste olivâtre (Fr)**Local name(s):** N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Lagoons and seaward reefs.**Fisheries:** Traps, Seines, Spears, Gillnets.**Distinctive Characters:** Deep groove before eye; scaleless area around lips, continuing and narrowing posterior to corner of mouth; small forward-curving spines in about five rows on side of caudal peduncle; caudal peduncle compressed; two dorsal fins with 3 spines and 24–26 rays, respectively; anal fin with 23–24 rays; pectoral fins with 14 rays.**Colour:** Lower lip pink; longitudinal stripe behind mouth; behind eye dark purple; rays of 2nd dorsal, anal and caudal fins black distally.**Size:** To 75 cm***Canthidermis maculata*** (Bloch, 1786)***FAO names:** Ocean triggerfish (En)
Baliste rude (Fr)**Local name(s):** N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Occurs in offshore waters.**Fisheries:** Various types of nets.**Distinctive Characters:** Two dorsal fins with 3 spines and 23–25 rays, respectively; anal fin with 20–22 rays; pectoral fins with 14–15 rays.**Colour:** Head, body and fins of adults, dark; body with elongated white spots that may disappear with growth.**Size:** To 50 cm***Melichthys indicus*** Randall & Klauswitz, 1973(Plate XXV, 230) **FAO names:** Indian triggerfish (En)**Local name(s):** N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Coral-rich seaward reef slopes from 2 m to 30 m.**Fisheries:** Traps, Seines, Spears, Set nets.**Distinctive Characters:** Two dorsal fins with 3 spines and 30–35 rays, respectively; anal fin with 27–30 rays; pectoral fins with 14–16 rays; shallow oblique groove on cheek.**Colour:** Background colour olive brown to dark brown; caudal fin with narrow white edge; white bands at dorsal and anal fin bases.**Size:** To 25 cm

***Melichthys niger* (Bloch, 1786)** * (Plate XXV, 231)

FAO names: Black triggerfish (En)

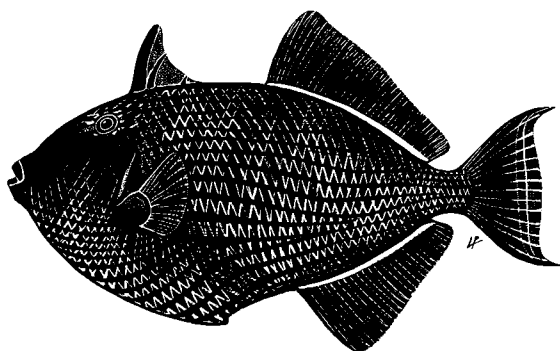
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Clear seaward reefs.

Fisheries: Traps, Seines, Spears, Set nets.

Distinctive Characters: Two dorsal fins with 3 spines and 32–35 soft rays, respectively; anal fin with 28–33 rays; pectoral fins with 15–17 rays; longitudinal ridges along caudal peduncle; scales prominent.

Colour: Background colour dark greenish-black with purplish overtones; pale blue lines along bases of soft dorsal and anal fins.



Size: To 50 cm

***Melichthys vidua* (Richardson, 1845)** *

FAO names: Pinktail triggerfish (En)

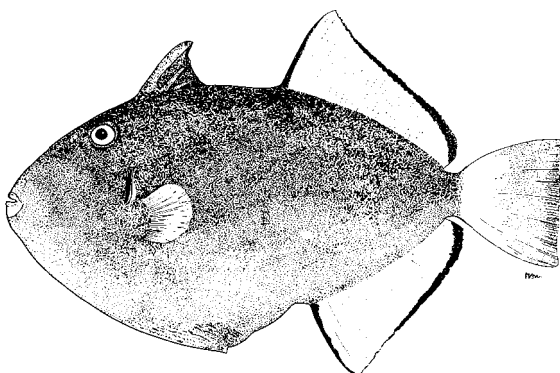
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Clear seaward reefs from 4 m to more than 60 m.

Fisheries: Traps, Seines, Spears, Set nets.

Distinctive Characters: Two dorsal fins with 3 spines and 32–35 rays, respectively; anal fin with 28–31 rays; pectoral fins with 14–16 rays; caudal slightly emarginate, double emarginate or truncate.

Colour: Body dark brown; dorsal and anal fins pale with black margins; pectoral fins yellow; juveniles with dark lines radiating from eye and dark lines on anal and soft dorsal fins.



Size: To 40 cm

***Odonus niger* (Rüppell, 1836)**

FAO names: Red-toothed triggerfish (En)

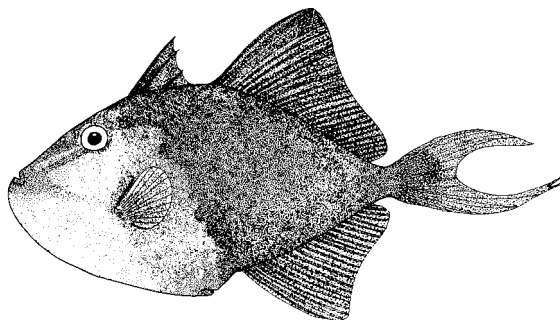
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Shallow waters around seaward reefs.

Fisheries: Gillnets, Bottom trawls, Lines.

Distinctive Characters: A prominent groove in the skin extending anteriorly from front of eye; mouth supraterminal; two dorsal fins with 3 spines and 33–36 rays, respectively; anal fin with 28–31 rays; caudal-fin rays of adults greatly prolonged above and below.

Colour: Background colour of body and fins blackish brown.



Size: To 50 cm, common 30 cm

***Pseudobalistes flavimarginatus* (Rüppell, 1829)**

FAO names: Yellowmargin triggerfish (En)

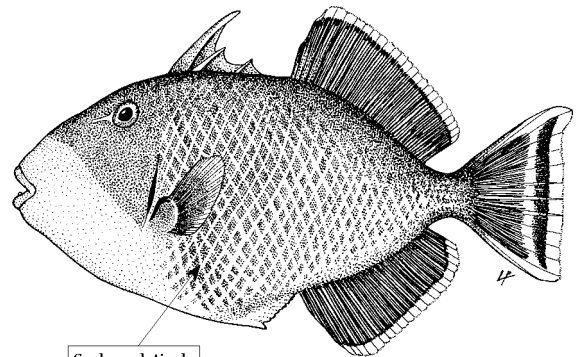
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Deep lagoon, channels and sheltered seaward reefs from 2 m to 50 m.

Fisheries: Gillnets, Lines, Traps, Spears.

Distinctive Characters: Two dorsal fins with 3 spines and 24–27 rays, respectively; anal fin with 22–25 rays; pectoral fins with 15 rays; shallow horizontal grooves on upper cheek; 5–6 rows of spines on caudal peduncle; caudal fin rounded in young to emarginated or double emarginated with lobes produced in adults.

Colour: Fins with yellow orange margins.



Size: To 60 cm

***Pseudobalistes fuscus* (Bloch & Schneider, 1801)**

FAO names: Yellow-spotted triggerfish (En)

Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

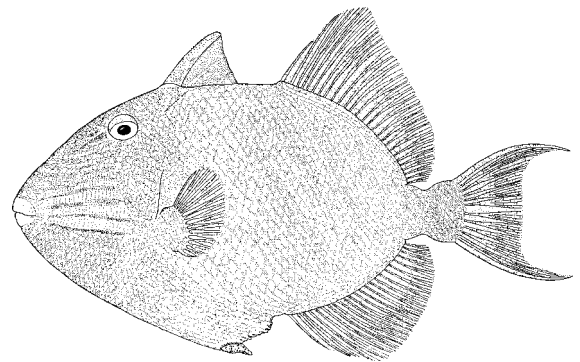
Habitat: Clear lagoon and seaward reefs down to 50 m.

Fisheries: Gillnets, Lines, Traps, Spears.

Distinctive Characters: Two dorsal fins with 3 spines and 24–27 rays, respectively; anal fin with 21–24 rays; pectoral fins with 14–15 rays; shallow horizontal grooves on lower cheek; caudal rounded in young, double emarginate in adults, lobes produced with growth.

Colour: Body dark brown with a yellow spot on each scale; caudal, dorsal, anal and pectoral fins with light blue edges.

(Plate XXV, 232)



Size: To 55 cm

***Rhinecanthus aculeatus* (Linnaeus, 1758)**

FAO names: White-banded triggerfish (En)

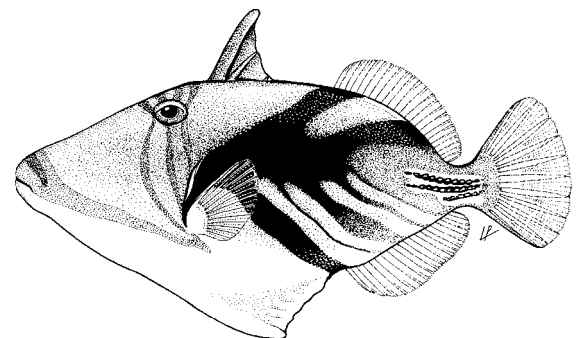
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Sandy areas of lagoons and seaward reefs.

Fisheries: Gillnets, Lines, Traps, Spears.

Distinctive Characters: Two dorsal fins with 3 spines and 23–26 soft rays, respectively; anal fin with 21–22 rays; pectoral fins with 12–14 rays; 3 rows of spines on caudal peduncle.

Colour: Background colour white–grey with a large blackish area over much of upper side of body; 4 diagonal bluish–white bands ventrally above anal fin; yellowish orange area on upper lip to under pectoral fins; 4 blue lines above eye and 3 below.



Size: To 30 cm

***Rhinecanthus rectangulus* (Bloch & Schneider, 1801)**

FAO names: Wedge-tail triggerfish (En)

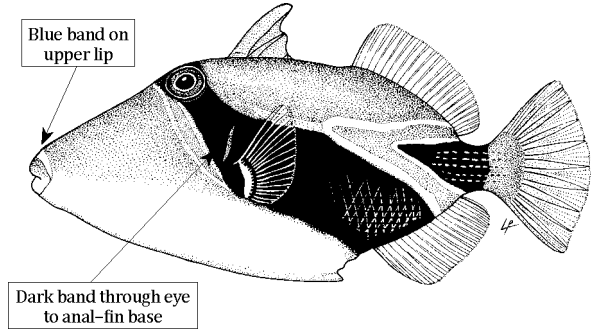
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Outer reefs flats and shallow seaward reefs down to 18 m.

Fisheries: Gillnets, Lines, Traps, Spears, Pots.

Distinctive Characters: Two dorsal fins with 3 spines and 22–24 rays, respectively; anal fin with 13–15 rays; caudal fin rounded, lobes only slightly produced in adults; 3–5 rows of spines on caudal peduncle.

Colour: Body yellow–orange dorsally; dark triangular spot with yellow margin on caudal peduncle; 2 blue lines in front of eye to pectoral–fin base.



Size: To 30 cm

***Sufflamen bursa* (Bloch & Schneider, 1801) ***

FAO names: Boomerang triggerfish (En)

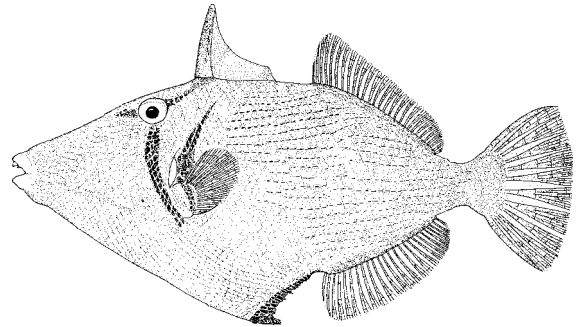
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Outer reef slopes below the surge zone from 3 m to 90 m.

Fisheries: Gillnets, Lines, Traps, Spears, Pots.

Distinctive Characters: Two dorsal fins with 3 spines and 27–30 rays, respectively; anal fin with 25–27 rays; pectoral fins with 13–14 rays; scale ridges extending to mid–body.

Colour: Two dark bars behind eye; white stripe from mouth to spiny anal–fin base; a characteristic scythe mark crossing the pectoral base, yellowish–tan to green in juveniles and subadults.



Size: To 25 cm

***Sufflamen chrysopteron* (Bloch & Schneider, 1801)**

FAO names: Halfmoon triggerfish (En)

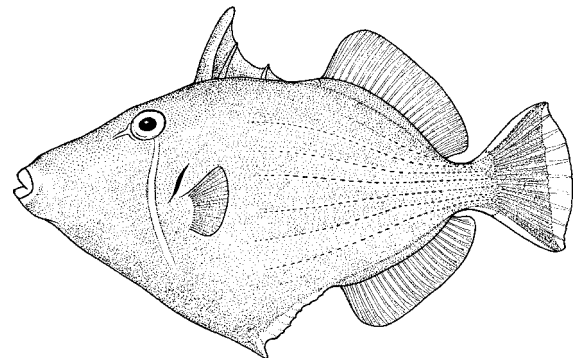
Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).

Habitat: Shallow lagoon and seaward reefs down to 30 m.

Fisheries: Gillnets, Lines, Traps, Spears, Pots.

Distinctive Characters: Two dorsal fins with 3 spines and 26–28 rays, respectively; anal fin with 23–26 rays; pectoral fins with 13–15 rays; scales with small spines forming ridges extending to mid–body.

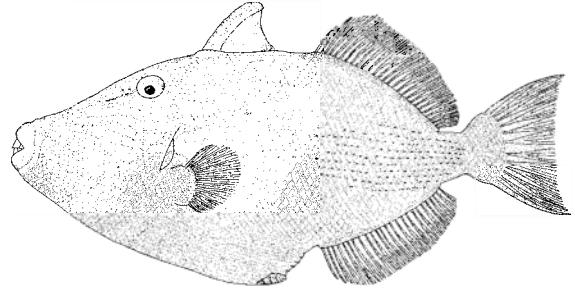
Colour: Head and body dark brown; adults with a pale yellow line from eye to pectoral fins ventrally; caudal–fin upper and lower edges light, with a broad white bar distally.



Size: To 30 cm

Sufflamen fraenatum (Latreille, 1804)

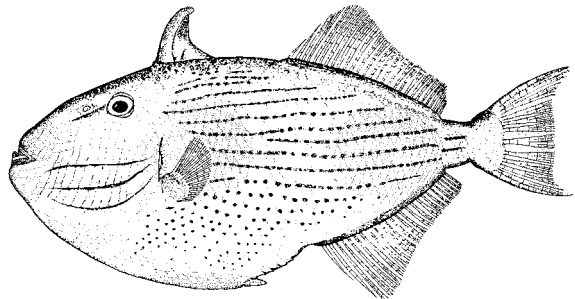
(Plate XXV, 233)

FAO names: Masked triggerfish (En)
Baliste masqué (Fr)**Local name(s):** N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Seaward reefs from 8 m; common in open areas with patches of sand and rubble below 18 m.**Fisheries:** Bottom trawls, Pots.**Distinctive Characters:** Scales of posterior body with keels, forming ridges extending to mid-body; mouth terminal; 1st dorsal fin with 3 spines, the 3rd small but readily apparent; 2nd dorsal fin with 27–31 rays; anal fin with 24–28 rays.**Colour:** Head and body yellowish-brown to dark brown; yellow stripe encircling lower jaw and meeting just behind the mouth; juveniles sand-coloured with numerous thin black pinstripes.

Size: To 38 cm

Xanthichthys lineopunctatus (Hollard, 1854)

FAO names: Striped triggerfish (En)

Local name(s): N: Gona; S: Gona/Kikande (M), Dui (K).**Habitat:** Coastal waters, on corals often high above the bottom. Maximum depth 50 m.**Fisheries:** Gillnets, Lines, Traps, Spears.**Distinctive Characters:** Two dorsal fins with 3 spines and 28–30 rays, respectively; anal fin with 25–27 rays; pectoral fins with 13–14 rays; cheek with 3 narrow, slightly diagonal dark-brown grooves.**Colour:** Numerous dark longitudinal lines on upper half of body; caudal-fin margin orange.

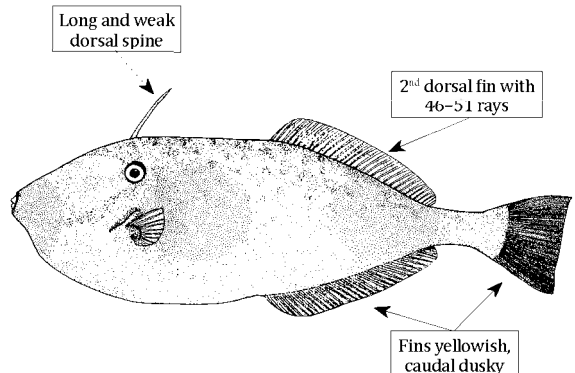
Size: To 30 cm

MONACANTHIDAE

Filefishes – Leatherjackets

Aluterus monoceros (Linnaeus, 1758)*

FAO names: Unicorn leatherjacket filefish (En)

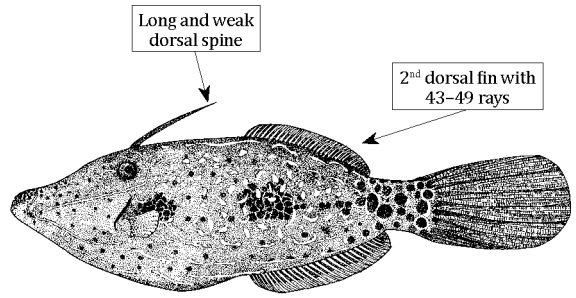
Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).**Habitat:** Semi-pelagic on the continental shelf down to 50 m.**Fisheries:** Bottom trawls, Gillnets, Spears.**Distinctive Characters:** Smooth leathery skin; pelvic fin rudimentary and minute, plate-like; caudal fin shorter than snout.**Colour:** Sandy to grey with small brown spots above; soft dorsal and anal fins pale yellowish to brownish; caudal membrane blackish-brown.

Size: To 76 cm, common 40 cm

***Aluterus scriptus* (Osbeck, 1765)**

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).
Habitat: Lagoons and seaward reefs from 2 m to 80 m.
Fisheries: Bottom trawls.
Distinctive Characters: Snout concave; body elongate, strongly compressed; gill opening oblique, pelvic terminus rudimentary or absent; anal fin with 46–52 soft rays; pectoral fins with 13–15 soft rays; snout profile prominently concave; caudal fin longer than snout.
Colour: Ground colour olive brown to grey, with blue lines and dark spots.

FAO names: Scribbled leatherjacket filefish (En)

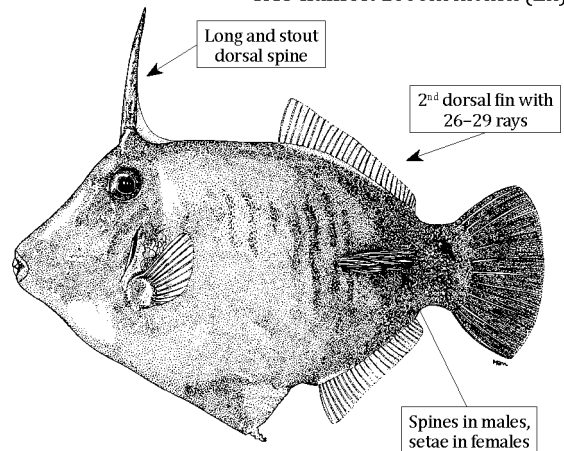


Size: To 100 cm

***Amanses scopas* (Cuvier, 1829)**

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).
Habitat: Areas of mixed sand, rubble and coral from 3 m to 18 m.
Fisheries: Bottom trawls, Spears.
Distinctive Characters: Anal fin with 22–25 soft rays; pectoral fins with 13 soft rays; deep groove for reception of 1st dorsal spine; ventral rudiments fixed, projecting prominently beyond ventral flap.
Colour: Brown with up to 12 narrow dark brown crossbars on mid-side of body; caudal fin dark-brown; soft dorsal, anal and pectoral fins pale; lips dark brown.

FAO names: Broom filefish (En)

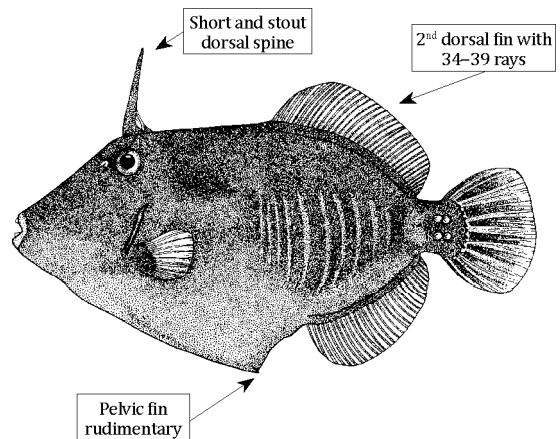


Size: To 20 cm

Cantherhines dumerilii* (Hollard, 1854)

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).
Habitat: Lagoon and seaward reefs from 0.5 m to 35 m.
Fisheries: Bottom trawls, Spears.
Distinctive Characters: Dorsal spine folds into a deep groove in back when depressed; anal fin with 28–35 rays; pectoral fins with 14–15 rays; caudal peduncle armed with 2 pairs of spines on each side.
Colour: Background colour brown; up to 12 dark bars on sides; fins yellowish; caudal-peduncle spines bright yellow.

FAO names: White-spotted filefish (En)
 Bourse à taches blanches (Fr)



Size: To 38 cm, common 25 cm

***Cantherhines pardalis* (Rüppell, 1837)**

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).

Habitat: Shallow coastal coral reefs down to 20 m.

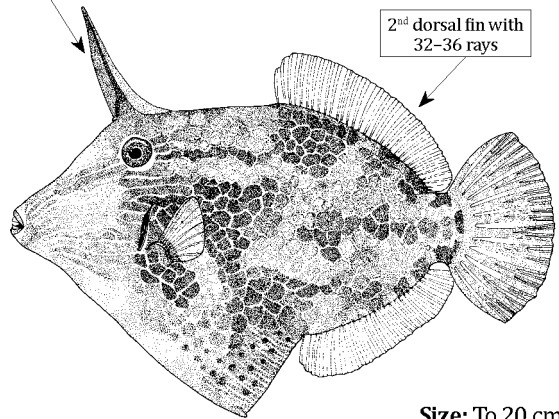
Fisheries: Bottom trawls, Spears.

Distinctive Characters: Pelvic fin rudimentary, non-mobile, and not prominently projecting; caudal peduncle of adult males armed with a dense patch of fine bristles, naked in adult females and juveniles.

Colour: Can adopt three basic colour patterns: mottled grey and brown, dark brown, or grey with a network of close-set polygonal spots; all have a small white spot at the rear base of the 2nd dorsal fin and sometimes the anal fin.

Spine armed with
barbs directed
posteriorly

2nd dorsal fin with
32-36 rays



Size: To 20 cm

***Oxymonacanthus longirostris* (Bloch & Schneider, 1801) ***

FAO names: Harlequin filefish (En)

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).

Habitat: Lagoon and seaward reefs from 1 m to 30 m.

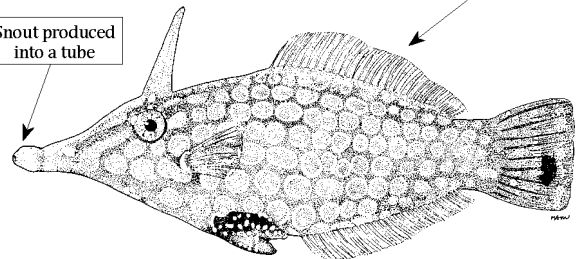
Fisheries: Bottom trawls, Spears.

Distinctive Characters: Pectoral fins with 11-12 soft rays; ventral flap small; bristles on caudal peduncle more elongate in adult males than those on rest of body.

Colour: Body blue-green with bright orange blotches; a black spot on caudal fin.

Snout produced
into a tube

2nd dorsal fin with
32-35 rays



Size: To 10 cm

***Paraluteres prionurus* (Bleeker, 1851)**

FAO names: False puffer (En)

Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).

Habitat: Lagoon and seaward reefs from 1 m to 25 m.

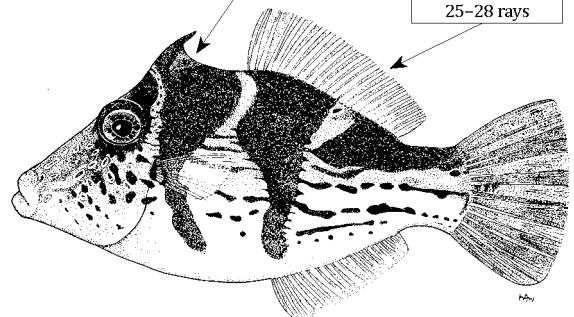
Fisheries: Bottom trawls, Spears.

Distinctive Characters: Pectoral fins with 10-11 soft rays; ventral rudiments and flaps absent; gill opening located directly above base of pectoral fins.

Colour: Background colour pale greenish to a dirty white; prominent blackish-brown saddles on dorsal surface; normally a round dark blotch above origin of anal fin; soft dorsal and anal fins hyaline, tips dusky; caudal fin yellowish.

1st dorsal spine with
a membrane

2nd dorsal fin with
25-28 rays



Size: To 11 cm

***Pseudalutarius nasicornis* (Temminck & Schlegel, 1850) ***

FAO names: Rhinoceros leatherjacket (En)

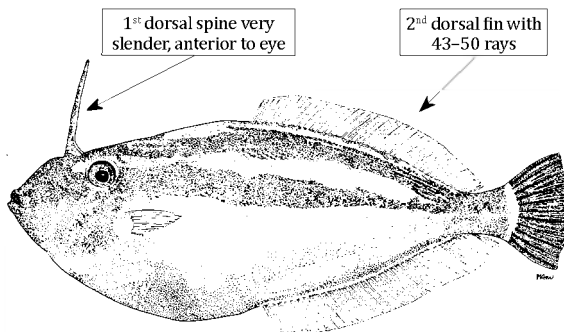
Local name(s): N: Kunju miba/Kibora; S: Gona/Kikande (M), Dui (K).

Habitat: Weedy and sandy areas of lagoon and seaward reefs from 1 m to 55 m.

Fisheries: Bottom trawls, Spears.

Distinctive Characters: Pectoral fins with 11 soft rays; ventral rudiment absent; body slender in juveniles, deep in adults.

Colour: Background colour pale brown to grey; 2 brown stripes on body; adult with closely set yellow spots on head and body; soft dorsal and anal fins pale yellow, caudal fin dark brown.



Size: To 19 cm

DIODONTIDAE

Porcupinefishes – Spiny puffers – Burrfishes – Balloonfishes

***Cylichthys orbicularis* (Bloch 1785)**

FAO names: Birdbeak burrfish (En)

Porc-épine bécard (Fr)

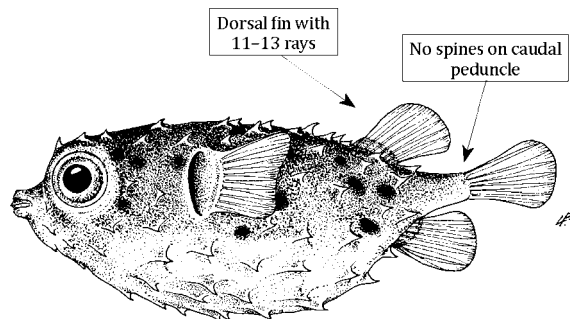
Local name(s): N: Mathwethwe/Chochovu/Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Sand and mud bottoms down to 170 m.

Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: Body bearing massive but relatively short, immovable 3-rooted spines; a short movable spine near the corner of mouth, and a 2nd possibly movable spine, somewhat elongate, immediately behind pectoral-fin base; dorsal and anal fins rounded and set far back on body; pelvic fins absent; no fleshy tentacle.

Colour: Back brown to grey, white on belly; clusters of spots occasionally merged to form blotches; dark spots on fins; a light area often surrounds the spine bases on back and sides.



Size: To 30 cm

***Cylichthys spilostylus* (Leis & Randall, 1982) ***

FAO names: Spotbase burrfish (En)

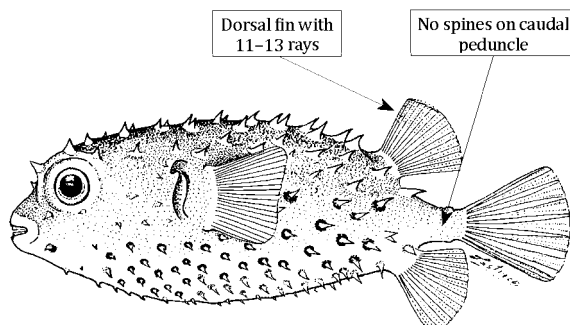
Local name(s): N: Mathwethwe/Chochovu/Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Juveniles pelagic, adults benthic in coastal reefs, seagrass beds, sandy areas from 3 m.

Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: Many spines on head with 4 roots; no movable spines; nasal organs separated by more than one eye diameter; teeth thick.

Colour: Adults with black spots on sides and belly, the spots associated with spine bases; no dark spots on fins.



Size: To 28 cm

Diodon holocanthus Linnaeus, 1758

Local name(s): N: Mathwethwe/Chochovu/
Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Coral reefs, over sand and mud bottoms in shallow to moderate depths; juveniles pelagic.

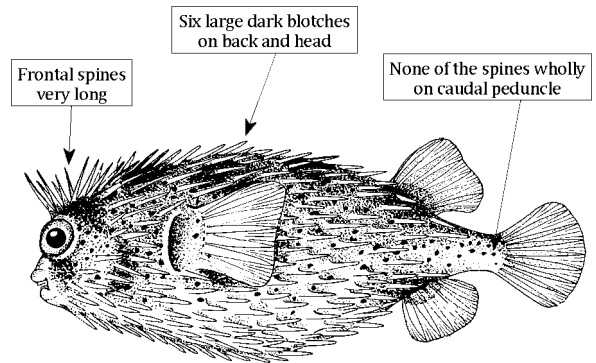
Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: No small downward-pointing spine below anterior margin of eye; 14 to 16 spines in an approximate row between snout and origin of dorsal fin; all fins spineless; pelvic fins absent; a pair of short barbels on chin.

Colour: Back brown to grey white on belly; many small black spots on back and sides; no spots on fins.

FAO names: Longspined porcupinefish (En)

Porc-épine ballon (Fr)



Size: To 29 cm

Diodon hystrix Linnaeus, 1758

Local name(s): N: Mathwethwe/Chochovu/
Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Shallow rocky or coral reefs from 2 m to 25 m.

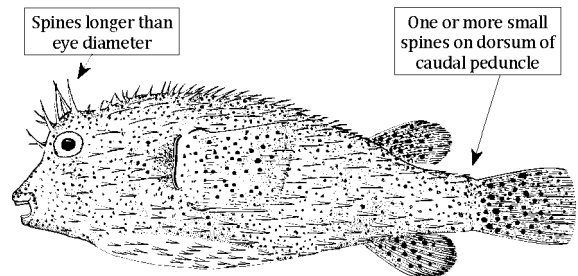
Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: Dorsal fin with 14–17 soft rays; anal fin with 14–16 rays; pectoral fins with 21–25 rays; long body spines, those on pectoral axil the longest; 16–20 spines from snout to dorsal base; no tentacles.

Colour: Benthic stage grey to brown with back, sides and fins covered with small black spots; dark gutter band present; belly white, surrounded by dusky ring.

FAO names: Spot-fin porcupinefish (En)

Porc-épine boubou (Fr)



Size: To 71 cm

Diodon liturosus Shaw, 1804

Local name(s): N: Mathwethwe/Chochovu/
Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Inhabits reef edges and slopes; hides in caves and ledges during the day and forages at night.

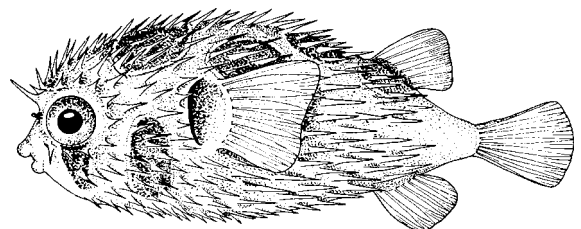
Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: Dorsal fin with 14–16 soft rays; anal fin with 14–16 soft rays; spines short.

Colour: Several yellow-edged dark blotches on body.

Remarks: Differs from *D. hystrix* by its shorter spines and colour.

FAO names: Black-blotched porcupinefish (En)



Size: To 65 cm

Lophiodon calori (Bianconi, 1854) *

FAO names: Four-bar porcupinefish (En)

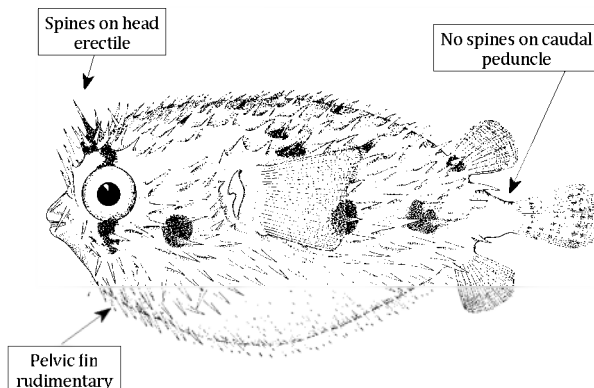
Local name(s): N: Mathwethwe/Chochovu/Kibora; S: Totovu/Bunju (M), Nungu (K).

Habitat: Benthic in shallow sandy lagoons with corals. Maximum depth 5 m.

Fisheries: Bottom trawls, Seines, Traps, Spears.

Distinctive Characters: Dorsal fin with 10–12 soft spines; anal fin with 10 rays; pectoral fins with 21–23 rays; a short tentacle over each eye.

Colour: Benthic individuals with 4 dark bars on flank and a blotch over each pectoral base and at dorsal base; fins spotted.



Size: To 30 cm

MOLIDAE

Molas – Ocean sunfishes – Headfishes

Mola mola (Linnaeus, 1758)FAO names: Ocean sunfish (En)
Luneur (Fr)

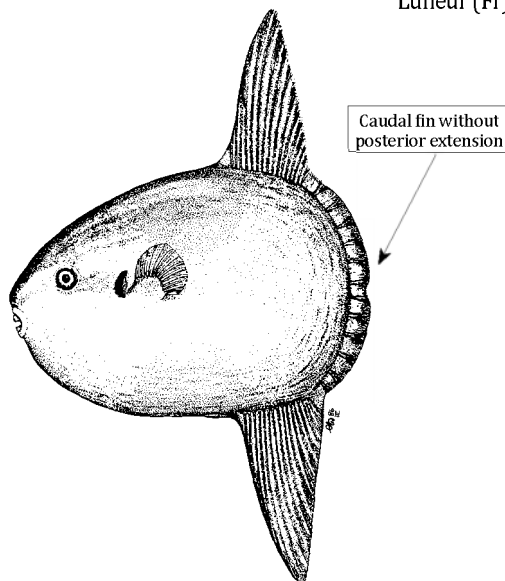
Local name(s): N & S: No information.

Habitat: Pelagic, idling at surface and often on their side.

Fisheries: Rarely caught.

Distinctive Characters: Eyes small, mouth terminal, small united and beak-like, in each jaw without a median suture; dorsal and anal fins of similar shape, generally triangular; dorsal located above anal, posterior portions of each fin more or less continuous with greatly abbreviated caudal fin; both fins without spines and with 15–19 soft rays; pectoral fins small, located mid side; pelvic fins absent, caudal fin reduced to a leathery fold with a scalloped trailing margin immediately posterior to the bases of dorsal and anal fins; skin of body leathery and thick.

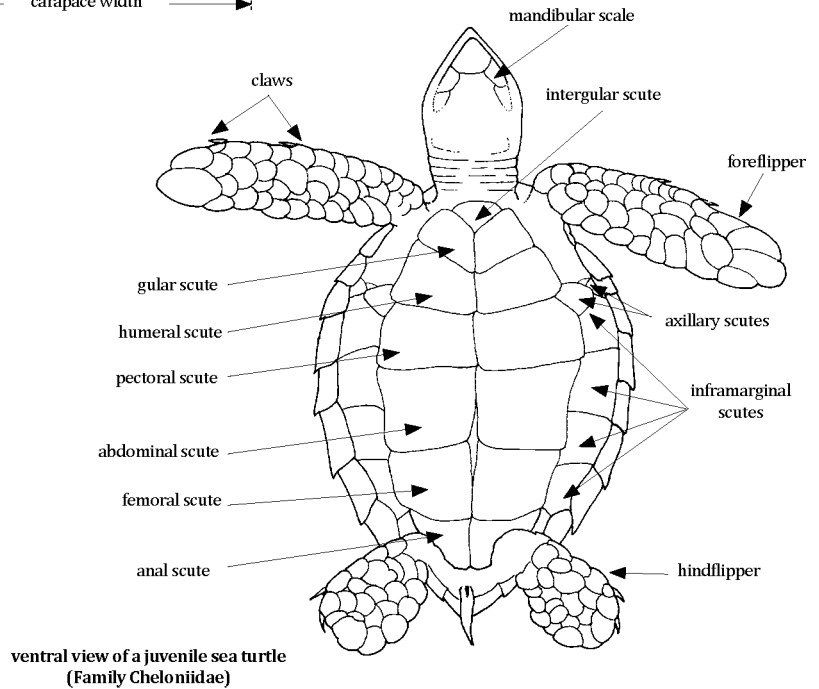
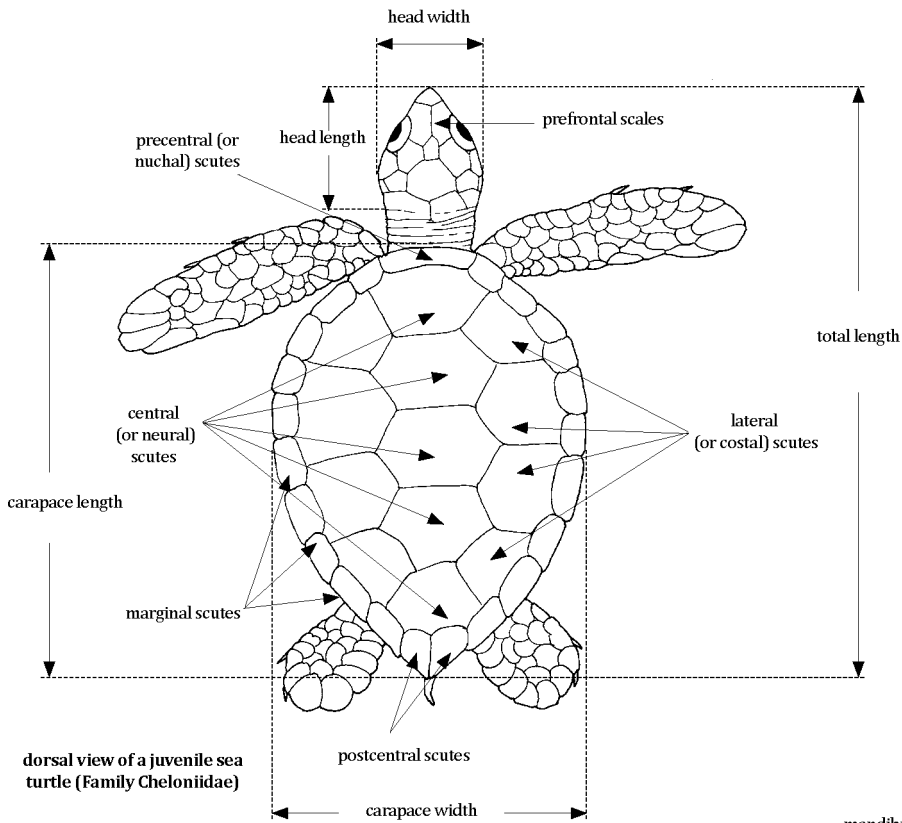
Colour: Grey to dark grey on back; grey-brown or brownish green on sides, with silvery reflections and dusky below; sides sometimes with small light spots.



Size: To 300 cm

SEA TURTLES

TECHNICAL TERMS AND MEASUREMENTS



CHELONIIDAE

Caretta caretta (Linnaeus, 1758)

Local name(s): N: Kasa; S: Kasa (M/K).

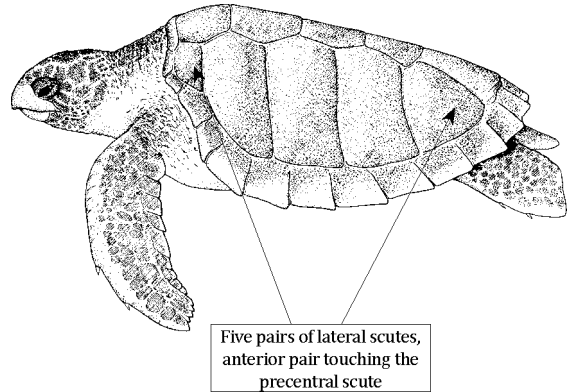
Habitat: Inhabits marine waters and is highly migratory.

Fisheries: By-catch of various fishing gears.

Distinctive Characters: Carapace heart-shaped, depressed; head rather large and very broad, with 2 pairs of prefrontal scutes and a strong horny beak; 3 pairs of enlarged inframarginal scutes on plastron; 2 claws on each flipper.

Colour: Upper side brownish red with light spots; underside pale yellow with diffuse orange spots.

FAO names: Loggerhead turtle (En)
Carouane (Fr)



Size: To 125 cm (CL)

Chelonia mydas (Linnaeus, 1758)

Local name(s): N: Kasa duvi; S: Kasa(M), Kasa ziwa (K).

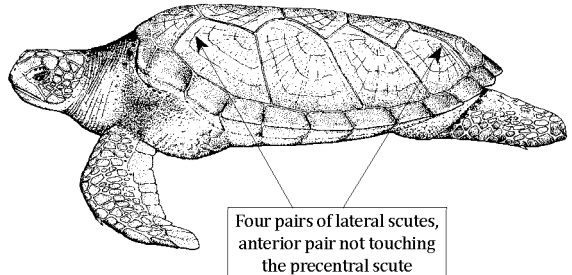
Habitat: Marine seagrass beds; migrates over considerable distances.

Fisheries: By-catch of various fishing gears.

Distinctive Characters: Carapace oval, depressed; head small, with a single pair of prefrontal scutes; edge of lower jaw coarsely toothed, that of upper jaw with strong ridges on inner surface; a single claw on each flipper.

Colour: Upper side dark olive-brown or black; carapace scutes shiny with radiating yellow, green and black spots; underside pale grey or whitish.

FAO names: Green turtle (En)
Tortue verte (Fr)



Size: To 120 cm (CL)

Eretmochelys imbricata (Linnaeus, 1776)

Local name(s): N: Kasa kingange; S: Kasa (M), Kasa ngamba (K).

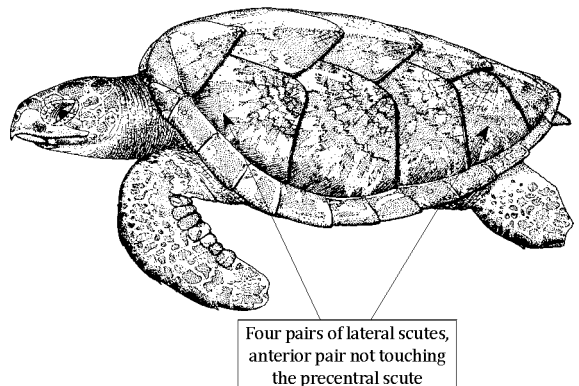
Habitat: Shallow seagrass and algae beds, also on mud or corals.

Fisheries: By-catch of various fishing gears.

Distinctive Characters: Carapace oval, depressed; head medium-sized with 2 pairs of prefrontal scutes and a strong horny beak; scutes on shell overlapping, but in very old specimens they are juxtaposed; 4 pairs of inframarginal scutes on plastron; 2 claws on each flipper.

Colour: Upper side dark-brown, with yellow and reddish streaks on scutes; underside pale yellow.

FAO names: Hawksbill turtle (En)
Tortue caret (Fr)



Size: To 100 cm (CL)

***Lepidochelys olivacea* (Eschscholtz, 1829)**

Local name(s): N: Kasa gamba/Kasa kingange;
S: Kasa (M/K).

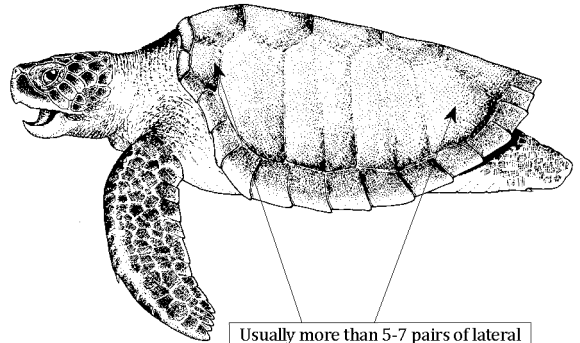
Habitat: Shallow coastal waters and open sea.

Fisheries: By-catch of various fishing gears.

Distinctive Characters: Carapace semi-circular in outline, depressed; head small with 2 pairs of prefrontal scutes and a horny beak which may be finely serrated; 4 pairs of inframarginal scutes, each perforated by a pore toward its hind margin; adults with only 1 visible claw on each flipper.

Colour: Upper side olive brown; underside yellowish-white; dorsal pigmentation of male is more intense than in female.

FAO names: Olive ridley turtle (En)
Tortue olivâtre (Fr)



Size: To 79 cm (CL)

DERMOCHELYIDAE***Dermochelys coriacea* (Vandelli 1761)**

Local name(s): N: Kasa/Kasa ngozi/Kasa Iladhi;
S: Kasa (M), Kasa ngozi (K).

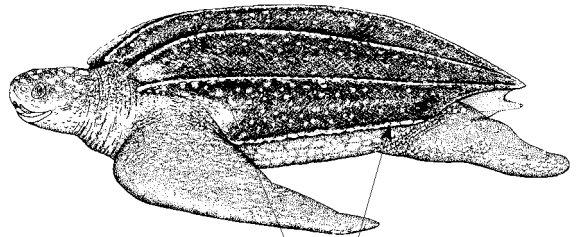
Habitat: Pelagic and migratory.

Fisheries: By-catch of various fishing gears.

Distinctive Characters: Body depressed and covered by a smooth leathery skin lacking lamellae or scutes; head small, ending in a horny beak (beak W-shaped when viewed from the front); flippers very large, without claws.

Colour: Upper side dark brown to almost black; whitish spots on neck, increasing in number on the ventral and caudal areas; underside pink and white.

FAO names: Leatherback turtle (En)
Tortue luth (Fr)



Size: To 180 cm (CL)

BIBLIOGRAPHY

Listed below are some of the principal references consulted during the preparation of this field guide, and should be referred to for further information or other references to Kenya fishes.

Bianchi, G. 1984. Field guide to the commercial marine and brackish-water species of Tanzania. Prepared and published with the support of TCP/URT/4406 and FAO (FIRF) Regular Programme. *FAO species identification sheets for fishery purposes*. Rome, FAO. 199 pp.

Brakel, W.H. 1982. Tidal patterns on the East African coast and their implications for littoral biota. UNESCO/ALESCO Symposium on the Coastal and Marine Environment of the Red Sea, Gulf of Aden and Tropical Western Indian Ocean. *The Red Sea & Gulf of Aden Environmental Programme. Jeddah: UNESCO/ALESCO, 2: 403–418.*

Branch, G.M., C. L. Griffiths, M.L. Branch, & Beckley, L.E. 2005. *Two Oceans. A guide to the Marine Life of Southern Africa*. New Edition.

Caddy, J.F. & L. Garibaldi. 2000. Apparent changes in the trophic composition of world marine harvests: the perspective from the FAO capture database. *Ocean Coast. Manage.*, 43(8-9): 615-655.

Compagno, L.J.V. 1984. Sharks of the world. An annotated and illustrated catalogue of sharks species known to date. Volume 4, Part 1. Hexanchiformes to Lamniformes. *FAO Fish Synop.*, (125): 249 pp.

Conand, C., Muthiga, N., Aumeeruddy, R., De La Torre Castro, M., Frouin, P., Mgaya, Y., J. Ochiewo, & Rasolofonirina, R. 2006. A three years regional project on sea cucumbers in the South-Western Indian Ocean: National and regional analyses to improve management. *SPC Bêche-de-Mer Inform. Bull.*, 23: 11–15.

De Bruin, G.H.P., B.C Russell, & Bogusch A. 1995. The marine fishery resources of Sri Lanka. *FAO species identification field guide for fishery purposes*. Rome, FAO. 400 pp., 32 colour plates.

Elst, R.V.D. 1993. *A guide to the Common Sea Fishes of Southern Africa*. Struik Publishers, 400 pp.

Elst, R.V.D. & King, D. 2006. *A photographic Guide to Sea Fishes of Southern Africa*. Struik Publishers, 144 pp.

Eschmeyer, W.N. & Fricke, R. (eds.). Catalog of Fishes electronic version (30 November 2011). <http://research.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>

FAO, 2007. Kenya Fishery Country Profile.

Fischer, W. 1989. The significance of FAO's biosystematic program in the enhancement of world fisheries. *Rev. Aquat. Sci.*, 1: 683–692.

Fischer, W. & Bianchi, G. (eds). 1984. Western Indian Ocean (Fishing Area 51). Prepared and printed with the support of the Danish International Development Agency (DANIDA). *FAO species identification sheets for fishery purposes*. Rome, Food and Agriculture Organization of the United Nations, vols. 1–6: pag. var.

Government of Kenya, 2006. *Kenya Marine Waters Frame Survey, 2006*. Ministry of livestock and fisheries development, Fisheries Department.

Government of Kenya, 2009. State of the Coast Report: Towards Integrated Management of Coastal and Marine Resources in Kenya. *Nat. Env. Man. Auth. (NEMA)*, Nairobi. 88 pp.

Heemstra, P.C. & Randall, J.E. 1993. Groupers of the world (Family Serranidae, Subfamily Epi-nephelinae). An annotated and illustrated catalogue of the grouper, rockcod, hind, coral grouper and lyretail species known to date. *FAO Fish. Synop.* (125), Volume 16. Rome, FAO. 382 pp., 522 figs, 31 colour plates.

Jereb, P. & Roper, C.F.E. (eds). 2005. Cephalopods of the world. An annotated and illustrated catalogue of cephalopod species known to date. Volume 1. Chambered nautilus and sepioids (Nautilidae, Sepiidae, Sepiolidae, Sepiadariidae, Idiosepiidae and Spirulidae). *FAO Species Catalogue for Fishery Purposes*. No. 4, Volume 1. Rome, FAO. 2005. 262 pp., 9 colour plates.

Lieske, E., & Myers, R. 2001. *Coral reef fishes, Indo-Pacific and Caribbean*. Princeton pocket guides. 400 pp.

- Márquez, M.R.**, 1990. Sea turtles of the world. An annotated and illustrated catalogue of sea turtle species known to date. *FAO Fish. Synop.* (125), Volume 11. Rome, FAO. 81 pp.
- McClanahan, T.R.** 1988. Seasonality in East Africa's coastal waters. *Mar. Ecol. Progr. Ser.*, 44: 191–199.
- Nakamura, I. & Parin, N.V.** 1993. Snake mackerels and cutlassfishes of the world (Families Gempylidae and Trichiuridae). An annotated and illustrated catalogue of the snake mackerels, snoeks, escolars, gemfishes, sackfishes, domine, oilfish, cutlassfishes, scabbardfishes, hairtails, and frostfishes known to date. *FAO Fish. Synop.* (125), Volume 15. Rome, FAO. 136 pp., 200 figs.
- Ochumba, P.B.O.** 1983. *Oceanographic features along the Kenyan Coast: implications for fisheries management and development.* School of Oceanography, Oregon State University.
- Provenzano, A.J.** 1985. Commercial culture of decapod crustaceans. In Bliss, D., ed., *The Biology of Crustaceans* Vol. 10. The American Museums of Natural History. New York: Academic Press.
- Randall, J.E.** 2005. *Reef and Shore Fishes of the South Pacific New Caledonia to Tahiti and the Pitcairn Islands.* University of Hawaii Press, Honolulu, Hawaii, USA, xii + 707 pp.
- Randall, J.E.** 2007. *Reef and Shore Fishes of the Hawaiian Islands,* University of Hawaii Press, Honolulu, Hawaii, USA, xiv + 546 pp.
- Roper, C.F.E., Sweeney M.J. & Nauen, C.E.** 1984. Cephalopods of the world. An annotated and illustrated catalogue of species of interest to fisheries. Volume 3. *FAO Fish. Synop.* (125): 277 pp.
- Russell, B.C.** 1990. Nemipterid Fishes of the World. (Threadfin breams, Whiptail breams, Monocle breams, Dwarf monocle breams, and Coral breams). Family Nemipteridae. An Annotated and Illustrated Catalogue of Nemipterid Species known to Date. *FAO Fish. Synop.* (125), Volume 12. Rome, FAO. 149 pp., VIII plates.
- Ruwa, R.K.** 1984. Invertebrate faunal zonation on rocky shores around Mombasa, Kenya. *Kenya J. Sci. Tech.*, (1, 2): 49–65.
- Ruwa, R.K.** 1996. Intertidal wetlands. In T.R. McClanahan & Young, TP, eds., *East African ecosystems and their conservation* (pp. 101–130). New York: Oxford University Press.
- Samoilys, M.** 1988. Abundance and species richness of coral reef fish on the Kenya coast: the effect of protective management and fishing. *Proc. Int. Coral Reef Symp.*, 6, 2: 261–266.
- Sheppard, C.** 1999. Biodiversity patterns in Indian Ocean corals, and effects of taxonomic error in data. *Biodiversity Conserv.*, (7): 847–868.
- Smith, M.M., & Heemstra, P.C.** 1986. *Smiths' Sea Fishes*, i-xx, 1-1047, pls. 1-144.
- Sommer, C., W. Schneider & Poutiers, J.-M.** 1996. The living marine resources of Somalia. *FAO species identification field guide for fishery purposes.* Rome, FAO. 376 pp., 32 colour plates.
- Stiassny, M.L.J.** 2012. The Congo Project, American Museum of Natural History. <http://research.amnh.org/vz/ichthyology/congo/other05.html>
- UNEP**, 1998. Eastern Africa Atlas of coastal resources: UNEP Regional Reports and Studies, No. 1 Nairobi, Kenya.
- Whitehead, P.J.P.** 1985. Clupeoid fishes of the world. An annotated and illustrated catalogue of the herrings, sardines, pilchards, sprats, anchovies and wolf-herrings. Part 1. Chirocentridae, Clupeidae and Pristigasteridae. *FAO Fish. Synop.* (125), Volume 7, Pt. 1: 303 pp.
- Whitehead, P.J.P., G.J. Nelson & Wongratana, T.** 1988. Clupeoid fishes of the world (Suborder Clupeoidei). An annotated and illustrated catalogue of the herrings, sardines, pilchards, sprats, anchovies and wolf-herrings. Part 2. Engraulididae. *FAO Fish. Synop.* (125), Volume 7, Part 2: 305–579.
- Wilkinson, C.R.** 1998. The 1997–1998 mass bleaching event around the world. In C.R. Wilkinson, ed., *Status of coral reefs of the world.* Australian Institute of Marine Science, 15–38.

INDEX OF SCIENTIFIC AND VERNACULAR NAMES

Explanation of the System

Italics: Valid scientific names (genera and species).

ROMAN: Family names.

ROMAN: Names of groups, classes, orders, suborders, and subfamilies.

Roman: FAO and vernacular names.

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PHOTO CREDITS

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3. MURAENIDAE: *Gymnothorax javanicus*



4. CHIROCENTRIDAE: *Chirocentrus nudus*



5. CHANIDAE: *Chanos chanos*



6. SYNODONTIDAE: *Saurida gracilis*



7. SYNODONTIDAE: *Synodus binotatus*



8. SYNODONTIDAE: *Synodus dermatogenys*



9. SYNODONTIDAE: *Synodus variegatus*



10. BELONIDAE: *Tylosurus crocodilus crocodilus*

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22. SERRANIDAE: *Cephalopholis boenak*



23. SERRANIDAE: *Cephalopholis miniata*



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PLATE IV



29. SERRANIDAE: *Epinephelus coeruleopunctatus*



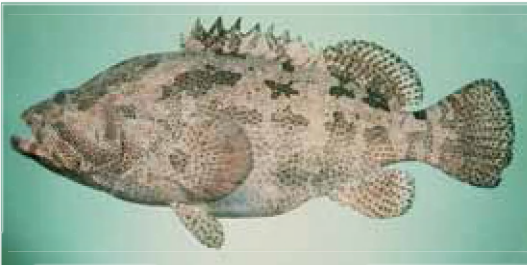
30. SERRANIDAE: *Epinephelus coioides*



31. SERRANIDAE: *Epinephelus epistictus*



32. SERRANIDAE: *Epinephelus fasciatus*



33. SERRANIDAE: *Epinephelus fuscoguttatus*



34. SERRANIDAE: *Epinephelus hexagonatus*



35. SERRANIDAE: *Epinephelus longispinis*



36. SERRANIDAE: *Epinephelus macrospilos*



37. SERRANIDAE: *Epinephelus malabaricus*



38. SERRANIDAE: *Epinephelus merra*

PLATE V



39. SERRANIDAE: *Epinephelus morrhua*



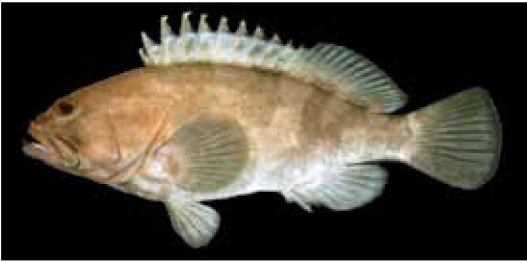
40. SERRANIDAE: *Epinephelus multinotatus*



41. SERRANIDAE: *Epinephelus poecilonotus*



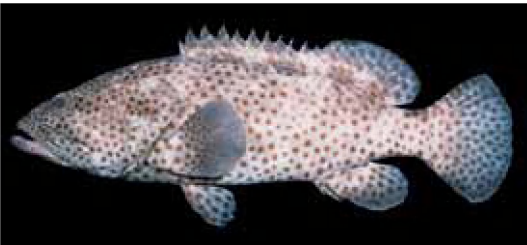
42. SERRANIDAE: *Epinephelus polyphekadion*



43. SERRANIDAE: *Epinephelus rivulatus*



44. SERRANIDAE: *Epinephelus spilotoceps*



45. SERRANIDAE: *Epinephelus tauvina*



46. SERRANIDAE: *Epinephelus tukula*



47. SERRANIDAE: *Epinephelus undulosus*



48. SERRANIDAE: *Hyporthodus octofasciatus*

PLATE VI



49. SERRANIDAE: *Plectropomus laevis* A



50. SERRANIDAE: *Plectropomus laevis* B



51. SERRANIDAE: *Plectropomus pessuliferus*



52. SERRANIDAE: *Plectropomus punctatus*



53. TERAPONTIDAE: *Terapon jarbua*



54. KUHLIIDAE: *Kuhlia mugil*



55. POMATOMIDAE: *Pomatomus saltatrix*



56. RACHYCENTRIDAE: *Rachycentron canadum*



57. CARANGIDAE: *Alectis indica* (juvenile)



58. CARANGIDAE: *Alepes djedaba*

PLATE VII



59. CARANGIDAE: *Carangoides ferdau*



60. CARANGIDAE: *Caranx heberi*



61. CARANGIDAE: *Caranx ignobilis*



62. CARANGIDAE: *Gnathanodon speciosus*



63. LEIOGNATHIDAE: *Karalla daura*



64. LEIOGNATHIDAE: *Leiognathus berbis*



65. LEIOGNATHIDAE: *Leiognathus equulus*



66. LEIOGNATHIDAE: *Secutor insidiator*

PLATE VIII



67. LUTJANIDAE: *Aphareus furca*



68. LUTJANIDAE: *Aphareus rutilans*



69. LUTJANIDAE: *Aprion virescens*



70. LUTJANIDAE: *Etelis carbunculus*



71. LUTJANIDAE: *Etelis coruscans*



72. LUTJANIDAE: *Lutjanus argentimaculatus*



73. LUTJANIDAE: *Lutjanus bengalensis*



74. LUTJANIDAE: *Lutjanus bohar*



75. LUTJANIDAE: *Lutjanus ehrenbergii*

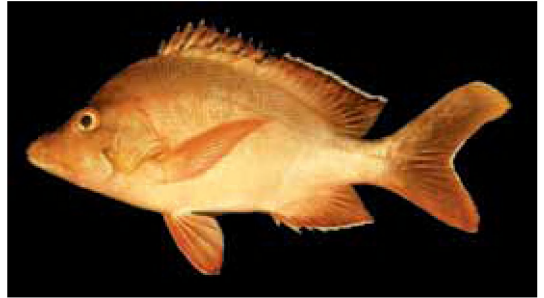


76. LUTJANIDAE: *Lutjanus fulviflamma*

PLATE IX



77. LUTJANIDAE: *Lutjanus fulvus*



78. LUTJANIDAE: *Lutjanus gibbus*



79. LUTJANIDAE: *Lutjanus johnii*



80. LUTJANIDAE: *Lutjanus kasmira*



81. LUTJANIDAE: *Lutjanus lutjanus*



82. LUTJANIDAE: *Lutjanus monostigma*

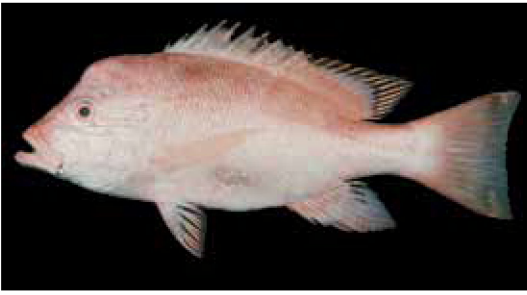


83. LUTJANIDAE: *Lutjanus rivulatus*



84. LUTJANIDAE: *Lutjanus russellii*

PLATE X



85. LUTJANIDAE : *Lutjanus sanguineus*



86. LUTJANIDAE: *Lutjanus sebae*



87. LUTJANIDAE: *Macolor niger*



88. LUTJANIDAE: *Paracaesio xanthura*



89. LUTJANIDAE: *Pinjalo pinjalo*



90. LUTJANIDAE: *Pristipomoides filamentosus*



91. LUTJANIDAE: *Pristipomoides sieboldii*



92. LUTJANIDAE: *Pristipomoides zonatus*



93. CAESIONIDAE: *Caesio caeruleaurea*



94. CAESIONIDAE: *Caesio lunaris*

PLATE XI



95. CAESIONIDAE: *Caesio teres*



96. CAESIONIDAE: *Caesio varilineata*



97. CAESIONIDAE: *Caesio xanthonota*



98. CAESIONIDAE: *Gymnocaesio gymnoptera*



99. CAESIONIDAE: *Pterocaesio chrysozona*



100. CAESIONIDAE: *Pterocaesio marri*



101. CAESIONIDAE: *Pterocaesio pisang*



102. CAESIONIDAE: *Pterocaesio tile*



103. HAEMULIDAE: *Diagramma pictum*



104. HAEMULIDAE: *Plectorhinchus chubbi*

PLATE XII



105. HAEMULIDAE: *Plectorhinchus flavomaculatus*



106. HAEMULIDAE: *Plectorhinchus gaterinus*



107. HAEMULIDAE: *Plectorhinchus gibbosus*



108. HAEMULIDAE: *Plectorhinchus playfairi*



109. HAEMULIDAE: *Plectorhinchus schotaf*



110. HAEMULIDAE: *Plectorhinchus vittatus*



111. HAEMULIDAE: *Pomadasys furcatus*



112. HAEMULIDAE: *Pomadasys kaakan*

PLATE XIII



113. HAEMULIDAE: *Pomadasys maculatus*



114. HAEMULIDAE: *Pomadasys olivaceus*



115. SPARIDAE: *Acanthopagrus berda*



116. SPARIDAE: *Acanthopagrus bifasciatus*



117. SPARIDAE: *Argyrops spinifer*



118. SPARIDAE: *Crenidens crenidens*



119. LETHRINIDAE: *Gnathodentex aureolineatus*



120. LETHRINIDAE: *Gymnocranius grandoculis*

PLATE XIV



121. LETHRINIDAE: *Lethrinus borbonicus*



122. LETHRINIDAE: *Lethrinus erythracanthus*



123. LETHRINIDAE: *Lethrinus harak*



124. LETHRINIDAE: *Lethrinus lentjan*



125. LETHRINIDAE: *Lethrinus mahsena*



126. LETHRINIDAE: *Lethrinus microdon*



127. LETHRINIDAE: *Lethrinus nebulosus*



128. LETHRINIDAE: *Lethrinus rubrioperculatus*

PLATE XV



129. LETHRINIDAE: *Lethrinus variegatus*



130. LETHRINIDAE: *Monotaxis grandoculis*



131. NEMIPTERIDAE: *Nemipterus bipunctatus*



132. NEMIPTERIDAE: *Nemipterus japonicus*



133. NEMIPTERIDAE: *Nemipterus randalli*



134. NEMIPTERIDAE: *Nemipterus zyson*



135. NEMIPTERIDAE: *Parascopsis eriomma*



136. NEMIPTERIDAE: *Scolopsis bimaculata*



137. NEMIPTERIDAE: *Scolopsis ghanam*

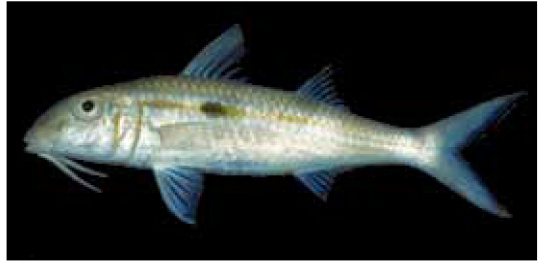


138. NEMIPTERIDAE: *Scolopsis vosmeri*

PLATE XVI



139. SCIAENIDAE: *Johnius dussumieri*



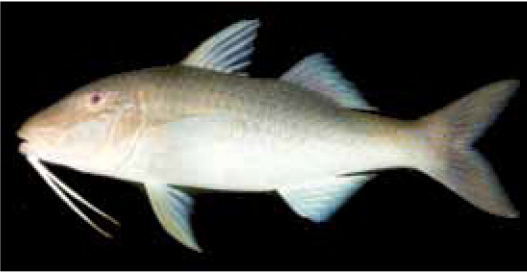
140. MULLIDAE: *Mulloidichthys flavolineatus*



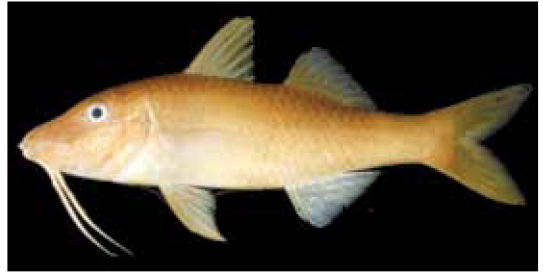
141. MULLIDAE: *Mulloidichthys vanicolensis*



142. MULLIDAE: *Parupeneus barberinus*



143. MULLIDAE: *Parupeneus cyclostomus* A



144. MULLIDAE: *Parupeneus cyclostomus* B



145. MULLIDAE: *Parupeneus forsskali*



146. MULLIDAE: *Parupeneus heptacanthus*



147. MULLIDAE: *Parupeneus indicus*



148. MULLIDAE: *Parupeneus macronemus*

PLATE XVII



149. MULLIDAE: *Parupeneus pleurostigma*



150. MULLIDAE: *Parupeneus rubescens*



151. MULLIDAE: *Upeneus moluccensis*



152. MULLIDAE: *Upeneus sulphureus*



153. MULLIDAE: *Upeneus taeniopterus*



154. MULLIDAE: *Upeneus tragula*



155. MULLIDAE: *Upeneus vittatus*



156. KYPHOSIDAE: *Kyphosus bigibbus*



157. KYPHOSIDAE: *Kyphosus cinerascens*



158. KYPHOSIDAE: *Kyphosus vaigiensis*

PLATE XVIII



159. DREPANEIDAE: *Drepane longimana*



160. MONODACTYLIDAE: *Monodactylus argenteus*



161. CIRRHITIDAE: *Cirrhitus pinnulatus*



162. CIRRHITIDAE: *Paracirrhites forsteri*



163. LABRIDAE: *Anampses caeruleopunctatus* (Female)



164. LABRIDAE: *Anampses caeruleopunctatus* (Male)



165. LABRIDAE: *Bodianus anthioides*



166. LABRIDAE: *Cheilinus chlorourus*

PLATE XIX



167. LABRIDAE: *Cheilinus fasciatus*



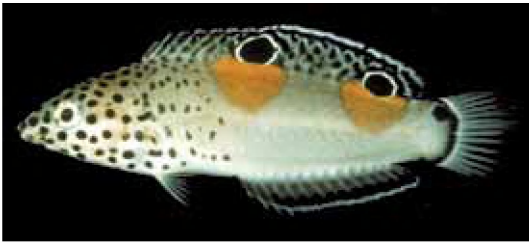
168. LABRIDAE: *Cheilinus trilobatus*



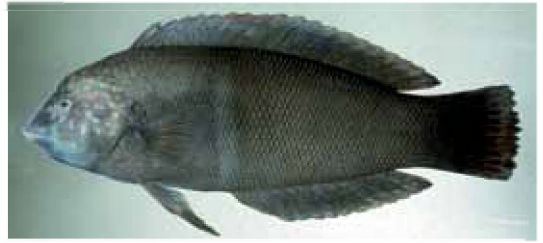
169. LABRIDAE: *Cheilinus undulatus*



170. LABRIDAE: *Choerodon robustus*



171. LABRIDAE: *Coris aygula* (Juvenile)



172. LABRIDAE: *Coris aygula* (Male)



173. LABRIDAE: *Coris cuvieri* (Juvenile)



174. LABRIDAE: *Coris cuvieri* (Adult)



175. LABRIDAE: *Gomphosus caeruleus* (Female)



176. LABRIDAE: *Halichoeres hortulanus*

PLATE XX



177. LABRIDAE: *Oxycheilinus bimaculatus*



178. LABRIDAE: *Oxycheilinus digramma*



179. LABRIDAE: *Thalassoma purpureum* (Female)



180. LABRIDAE: *Thalassoma purpureum* (Male)



181. LABRIDAE: *Thalassoma trilobatum* (Female)



182. LABRIDAE: *Thalassoma trilobatum* (Male)



183. SCARIDAE: *Calotomus carolinus* (Initial phase)



184. SCARIDAE: *Calotomus carolinus* (Terminal phase)



185. SCARIDAE: *Cetoscarus bicolor* (Initial phase)



186. SCARIDAE: *Cetoscarus bicolor* (Terminal phase)

PLATE XXI



187. SCARIDAE: *Chlorurus sordidus* (Initial phase)



188. SCARIDAE: *Chlorurus sordidus* (Terminal phase)



189. SCARIDAE: *Hipposcarus harid* (Initial phase)



190. SCARIDAE: *Hipposcarus harid* (Terminal phase)



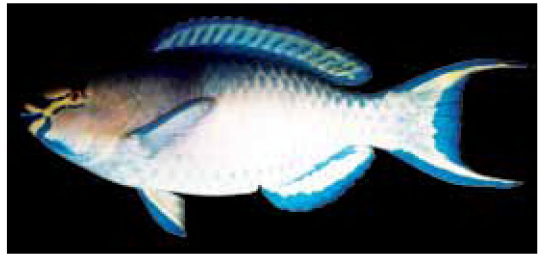
191. SCARIDAE: *Leptoscarus vaigiensis* (Initial phase)



192. SCARIDAE: *Leptoscarus vaigiensis* (Terminal phase)



193. SCARIDAE: *Scarus caudofasciatus* (Initial phase)



194. SCARIDAE: *Scarus caudofasciatus* (Terminal phase)



195. SCARIDAE: *Scarus frenatus* (Initial phase)



196. SCARIDAE: *Scarus frenatus* (Terminal phase)

PLATE XXII



197. SCARIDAE: *Scarus ghobban* (Initial phase)



198. SCARIDAE: *Scarus ghobban* (Terminal phase)



199. SCARIDAE: *Scarus niger* (Initial phase)



200. SCARIDAE: *Scarus niger* (Terminal phase)



201. SCARIDAE: *Scarus psittacus* (Initial phase)



202. SCARIDAE: *Scarus psittacus* (Terminal phase)



203. SCARIDAE: *Scarus rubroviolaceus* (Initial phase)



204. SCARIDAE: *Scarus rubroviolaceus* (Terminal phase)



205. SCARIDAE: *Scarus russelii* (Initial phase)



206. SCARIDAE: *Scarus russelii* (Terminal phase)

PLATE XXIII



207. SCARIDAE: *Scarus scaber* (Initial phase)



208. SCARIDAE: *Scarus scaber* (Terminal phase)



209. SCARIDAE: *Scarus viridifucatus* (Initial phase)



210. SCARIDAE: *Scarus viridifucatus* (Terminal phase)



211. EPHIPPIDAE: *Platax orbicularis*



212. SIGANIDAE: *Siganus argenteus*



213. SIGANIDAE: *Siganus canaliculatus*



214. SIGANIDAE: *Siganus luridus*



215. SIGANIDAE: *Siganus rivulatus*

PLATE XXIV



216. SIGANIDAE: *Siganus stellatus*



217. SIGANIDAE: *Siganus sutor*



218. ACANTHURIDAE: *Acanthurus nigricauda*



219. ACANTHURIDAE: *Acanthurus xanthopterus*



220. SPHYRAENIDAE: *Sphyaena barracuda*



221. SPHYRAENIDAE: *Sphyaena flavicauda*



222. SPHYRAENIDAE: *Sphyaena obtusata*



223. SPHYRAENIDAE: *Sphyaena qenie*



224. SCOMBRIDAE: *Euthynnus affinis*



225. SCOMBRIDAE: *Katsuwonus pelamis*

PLATE XXV



226. SCOMBRIDAE: *Sarda orientalis*



227. SCOMBRIDAE: *Thunnus albacares*



228. BALISTIDAE: *Abalistes stellaris*



229. BALISTIDAE: *Balistoides viridescens*



230. BALISTIDAE: *Melichthys indicus*



231. BALISTIDAE: *Melichthys niger*



232. BALISTIDAE: *Pseudobalistes fuscus*



233. BALISTIDAE: *Sufflamen fraenatum*

This field guide covers the major resource groups likely to be encountered in the fisheries of Kenya. This includes shrimps, lobsters, crabs, bivalves, gastropods, cephalopods, sea cucumbers, sharks, batoid fishes, bony fishes, and sea turtles. Each resource group is introduced by a general section on technical terms and measurements pertinent to that group and an illustrated guide to orders and families of the group. The more important species are treated in a subsequent guide that includes scientific nomenclature, FAO names in English and French (were available), local names used in Kenya, diagnostic features, one or more illustrations, maximum size, and notes on fisheries and habitat. The guide is fully indexed and a list of further literature is appended.

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