

COMMERCIALLY IMPORTANT COASTAL FISHES OF KENYA



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Introduction

This is a reprint with minor corrections of the pocket guide from 2010. The species and fishing methods included have been communicated to FAO by the Government of Kenya as the most important commercially exploited coastal species of Kenya. For those interested in a more thorough identification of marine resources along the coasts of Kenya, we have enclosed a mini disc with comprehensive national and regional identification guides published by FAO.

The format of this pocket guide was chosen to facilitate communication with practitioners (fishers and marketers). The morphological descriptions (line drawings, photographs and size indications) are complemented with some information on similar species, bio-ecology and common capture methods. The photographs can give important clues but it should be noted that colour and shape can look quite different in dead specimens.

The local names included in the cards should be very helpful in the identification of species. However, users must be aware that the same local name often applies to several species and that one species may be known by more than one local name. **Here, we have underlined those local names that are in use for only one species.**

To aid in a quick identification, the pocket guide includes a colour coded grouping of species based on simple morphological characteristics (fins) as well as symbols for adult sizes, ecological preferences and catch methods.

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Quick Access Keys:

The marine species indicated in this pocket guide have been grouped using easily identifiable morphological characteristics, i.e. the dorsal (and anal) fins. The grouping does not reflect taxonomic classification and is only intended to allow users to quickly find a species. Each group has been colour-coded for easy recognition within the card set.

Bony Fishes



One long dorsal fin, anal fin at least one-third of body length



One long dorsal fin, anal fin shorter than one-third of body length



Two dorsal fins



One short dorsal fin



Other Groups



All other species



Symbols used:

Common Adult Size (Total Length)



≤ 20 cm



21–30 cm



31–40 cm



41–70 cm



≥ 70 cm

Habitat



hard substrates and reefs



algae



schools, preferred locations



preferred locations

m

maximum depth reported

Fishing Methods:



bottom trawls



by hand



castnets



diving



gill/shark nets



harpoon



hooks and line, trolling



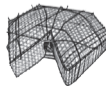
purse seines /ring nets



scoop nets, lift nets



stake traps



traps

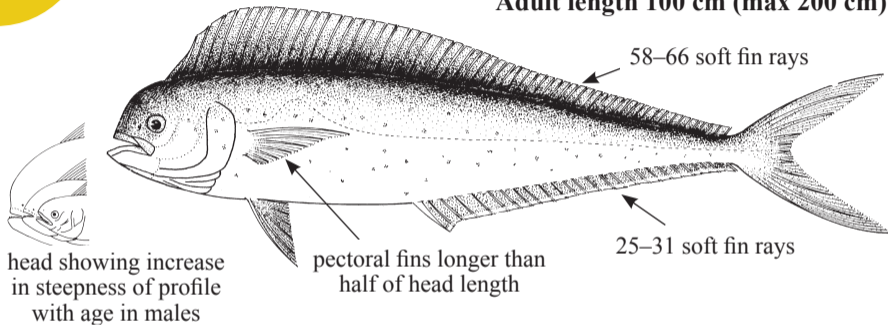
Beach seines have been banned in 2001,
and thus have not been included

CORYPHAENIDAE

Fulusi

Coryphaena hippurus Linnaeus, 1758

Adult length 100 cm (max 200 cm)



Colour metallic blue and green on back and sides, golden hues on sides, white and yellow on underparts. Small specimens have pronounced vertical bars on sides of body. Small, oval tooth patch on tongue; mature males possess a prominent bony crest in front of head. **Similar species:** *C. equiselis* (dorsal-fin rays ≤ 59 ; tooth patch on tongue broad and square, pectorals = half of head length). **Habitat:** Pelagic, inhabiting open waters but also approaching the coast; schooling; follows ships and forms small concentrations below floating objects; highly migratory. **Fishery:** Marketed frozen and fresh and is of high value.

Fulusi

FAO Species Names:

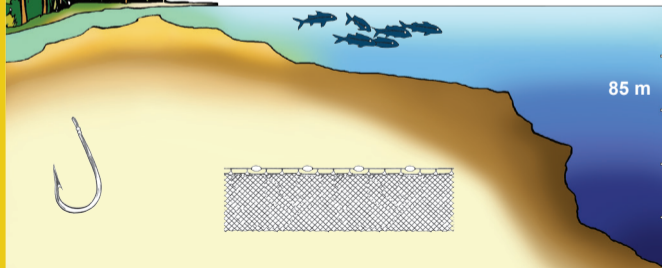
En - Common dolphinfish

Fr - Coryphène commune

Sp - Lampuga



Image: photo collage

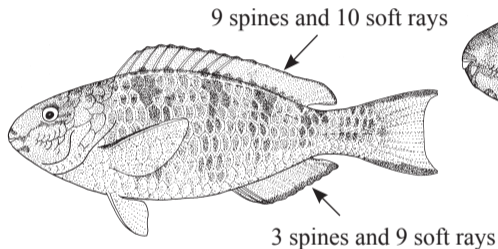


SCARIDAE

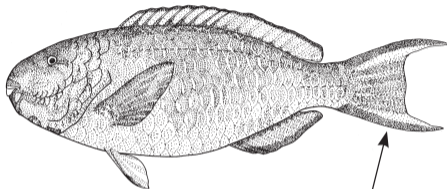
Pono

Scarus ghobban Forsskål, 1775

Adult length 30-50 cm (max 90 cm)



Initial phase (♀ or ♂)



Terminal phase (♂)

caudal fin green with a salmon-pink band in each lobe

Protogynous hermaphrodites. Initial phase: distinctive yellow and blue bars. Terminal phase: dorsal green, ventral salmon. Teeth fused to broad dental plates. **Similar species**: *Scarus* spp. (all differ in coloration); *Hipposcarus* (narrow dental plates); *Bolbometopon*, *Cetoscarus* (dental plates rough to touch); *Calotomus*, *Leptoscarus* (only 1 row of cheek scales). **Habitat**: Lagoons and seaward reefs, mostly solitary; males at depths of about 10 m; females deeper; algae scrapers. **Fishery**: Marketed fresh.

Pono

FAO Species Names:

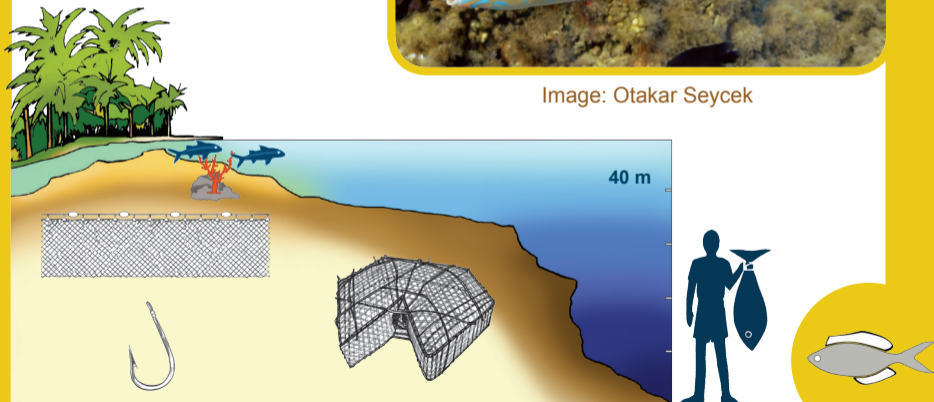
En - Blue-barred parrotfish

Fr - Perroquet barbe bleue

Sp - Loro barba azul



Image: Otakar Seycek



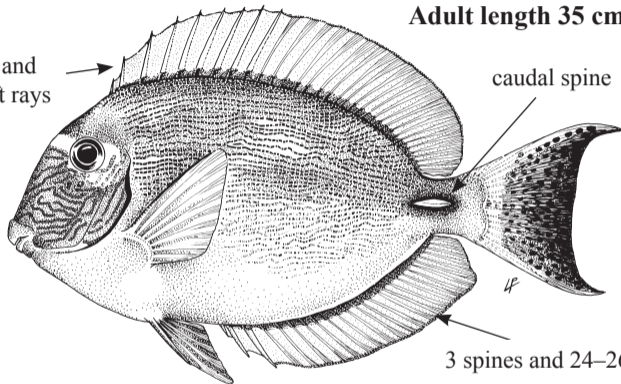
ACANTHURIDAE

Kangaja

Acanthurus dussumieri Valenciennes, 1835

Adult length 35 cm (max 54 cm)

9 spines and
25–27 soft rays



3 spines and 24–26 soft rays

Body pale brown; dorsal and anal fins yellow, caudal fin blue; yellow band between eyes; minute scales; caudal fin lunate in adults. **Similar species:** *A. xanthopterus* (caudal without black spots, caudal spine small, dorsal and anal fins with 4 longitudinal blue bands). **Habitat:** Reef-associated, benthopelagic, solitary or in groups, mostly deeper than 10 m. **Fishery:** Marketed fresh; often caught incidentally.

Kangaja

FAO Species Names:

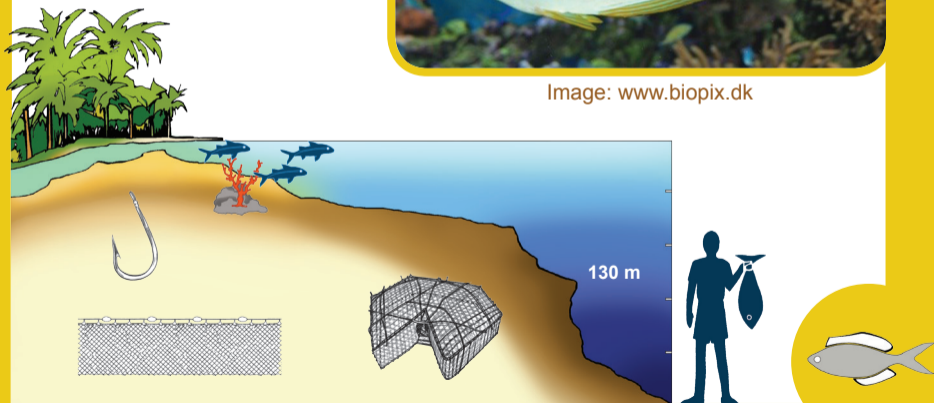
En - Eyestripe surgeonfish

Fr - Chirurgien couronné

Sp - Navajón coronado



Image: www.biopix.dk



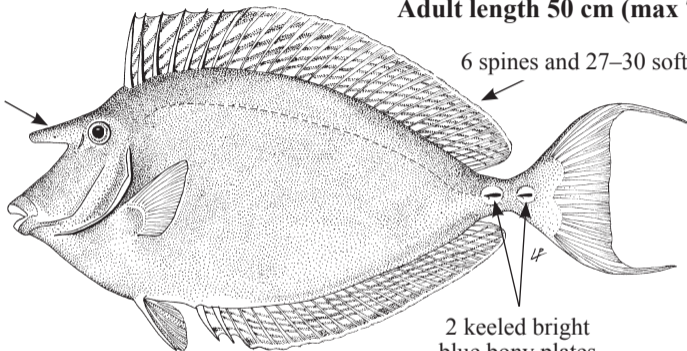
ACANTHURIDAE

Puju

Naso unicornis (Forsskål, 1775)

Adult length 50 cm (max 70 cm)

adults with
median horn-
like projection
not extending
in front of
mouth



6 spines and 27–30 soft rays

2 keeled bright
blue bony plates

Light olive to yellowish-grey, caudal spines blue; edges of lips bluish; dorsal and anal fins with a blue margin and alternating narrow bands of light blue and brownish-yellow. **Similar species:** *N. lituratus* (no rostral projection, yellow and black bands on head); *N. brachycentron* (“humpback” just after spiny portion of dorsal fin; females no “horn”). **Habitat:** Inshore, reef-associated; benthopelagic; typically in small groups. **Fishery:** Marketed fresh.

Puju

FAO Species Names:

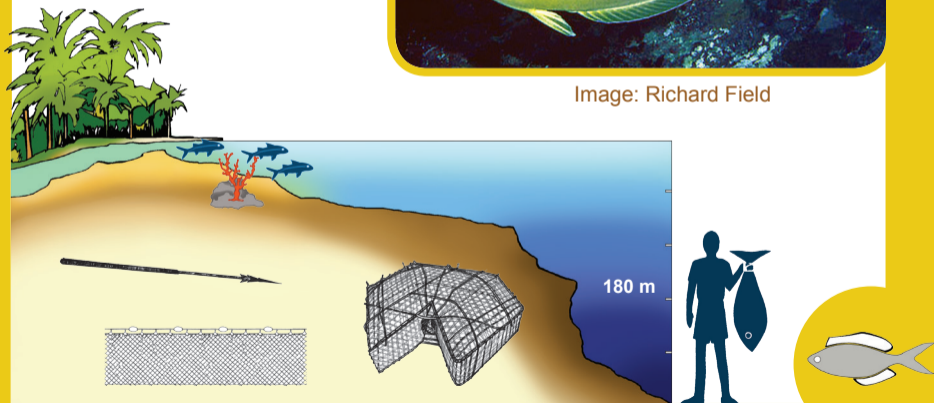
En - Bluespine unicornfish

Fr - Nason à éperons bleus

Sp - Barbero de agujón azul



Image: Richard Field

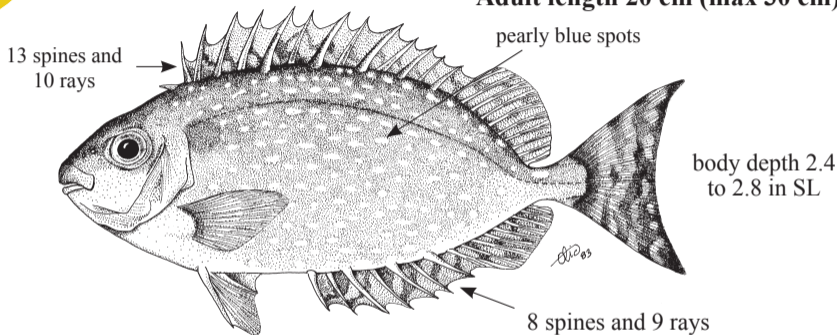


SIGANIDAE

Tafi, Tassi

Siganus canaliculatus (Park, 1797)

Adult length 20 cm (max 30 cm)



Colour variable; stressed individuals mottled brown; spines poisonous. **Similar species:** *S. sutor* (spots round, larger and less numerous); *S. rivulatus* (body more slender, lateral golden horizontal lines); *S. argenteus* (caudal fin deeply forked); *S. luridus* (caudal fin truncate); other *Siganus* spp. (body deeper). **Habitat:** Reefs, estuaries and lagoons with algae-rubble habitats; juveniles schooling. **Fishery:** Marketed mostly fresh. Also known as rabbit fish.

Tafi, Tassi

FAO Species Names:

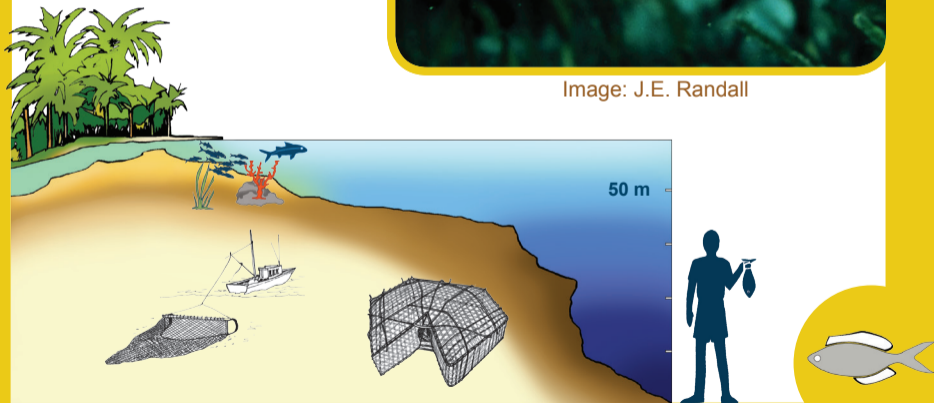
En - White-spotted spinefoot

Fr - Sigan pintade

Sp - Sigano pintado



Image: J.E. Randall

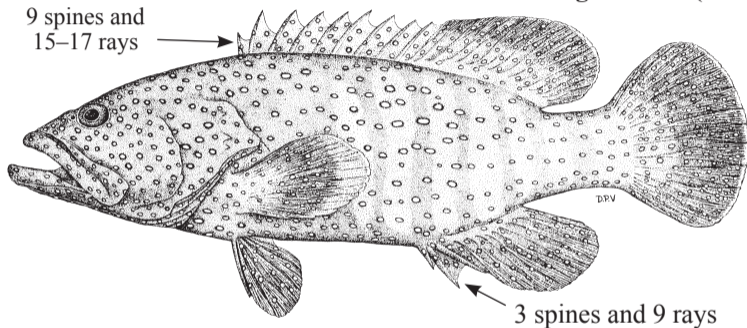


SERRANIDAE

Tewa

Cephalopholis argus Schneider, 1801

Adult length 40 cm (max 60 cm)



Protogynous hermaphrodite. Dark brown with small, black-edged blue spots; 5 or 6 broad pale vertical bars often on rear half of body. **Similar species:** *C. miniata* (reddish, blue spots not extending onto underside of lower jaw); *C. hemistiktos* (no blue spots on dorsal half of body); *C. oligosticta* (orange-red in life, only scattered pale blue spots). **Habitat:** Benthopelagic, generally found in shallow coral habitats to depths down to 20 m. **Fishery:** Marketed fresh and dried salted. In the South Pacific the species is reported to contain ciguatoxin (harmful to humans).

Tewa

FAO Species Names:

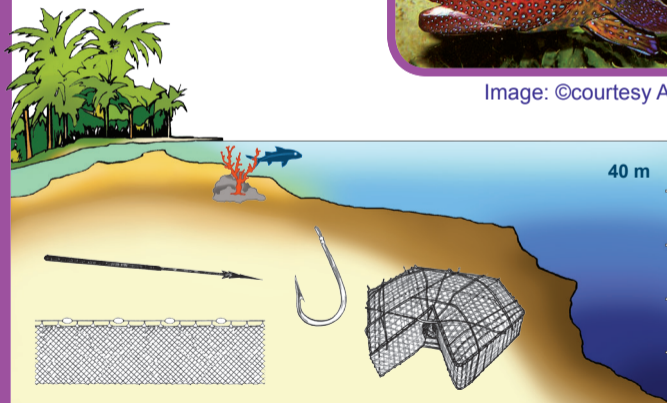
En - Peacock hind

Fr - Vielle la prude

Sp - Cherna pavo real



Image: ©courtesy A. Pingstone 2005

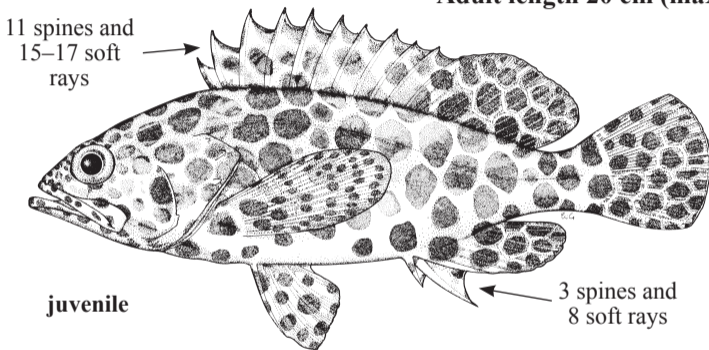


SERRANIDAE

Tewa chui

Epinephelus merra Bloch, 1793

Adult length 20 cm (max 31 cm)



Protogynous hermaphrodite. Five darker diagonal bands superimposed on sides and radiating from eye; scales ctenoid except on belly. **Similar species:** *E. faveatus* (mostly cycloid scales, 4 dark dorsal saddle-blotches); *E. melanostigma* (black blotch on central dorsal-fin base); *E. areolatus* (caudal fin truncate); *E. tauvina* (dark spots blurry). **Habitat:** Shallow lagoons and seaward reefs. **Fishery:** Important in artisanal fisheries because of its abundance in shallow waters.

Tewa chui

FAO Species Names:

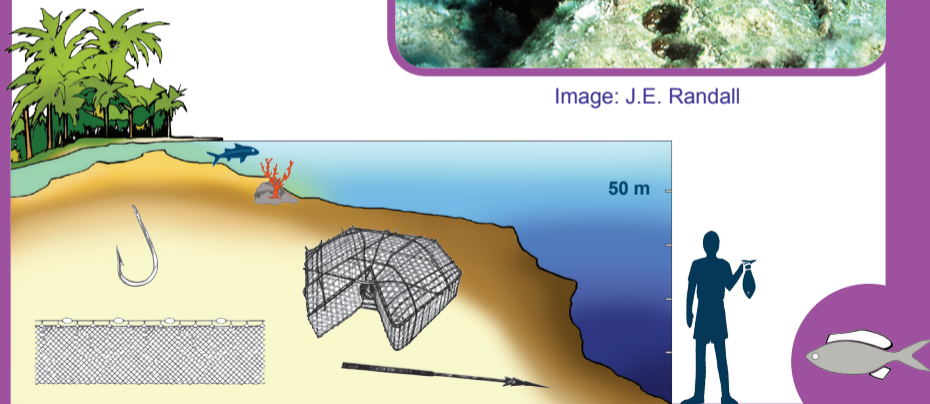
En - Honeycomb grouper

Fr - Mérou gâteau de cire

Sp - Mero panal



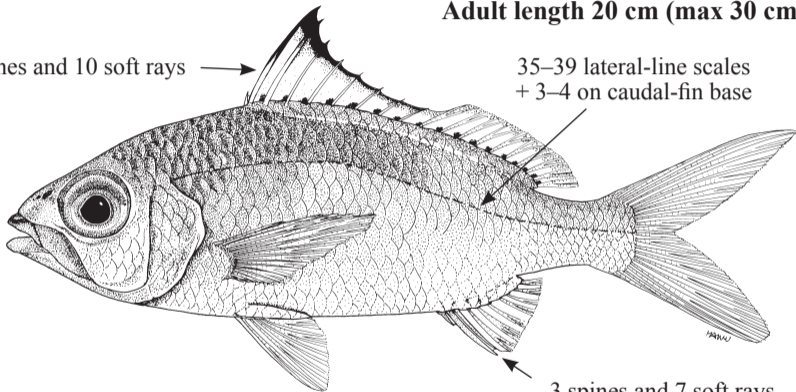
Image: J.E. Randall



Gerres oyena (Forsskål, 1775)

Adult length 20 cm (max 30 cm)

9 spines and 10 soft rays

35–39 lateral-line scales
+ 3–4 on caudal-fin base

3 spines and 7 soft rays

Pale olive above, silvery below. Black rim on spinous part of dorsal fin, sometimes continuing along whole dorsal fin. **Similar species:** *G. oblongus* (44–45 lateral-line scales); other Gerreidae (less slender – body depth < 3 times in SL). **Habitat:** Along sandy beaches, brackish waters and estuaries; reef-associated; singly or in groups. **Fishery:** Marketed fresh; also used as fishmeal.

Chaa

FAO Species Names:

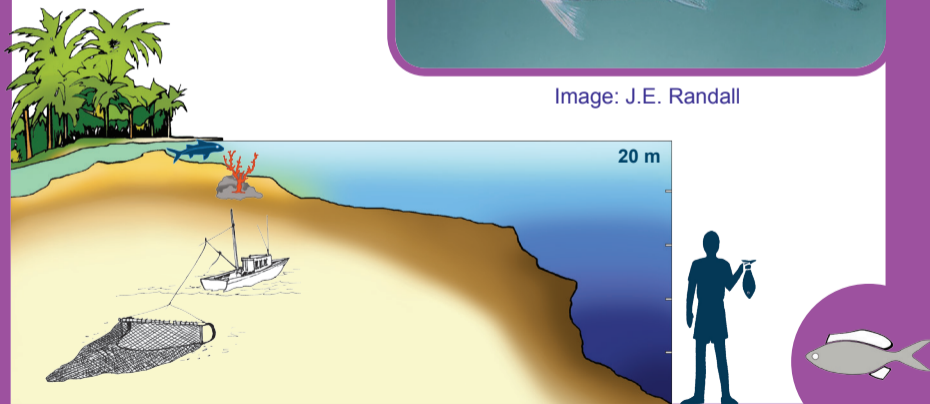
En - Common silver-biddy

Fr - Blanche commune

Sp - Mojarra común



Image: J.E. Randall

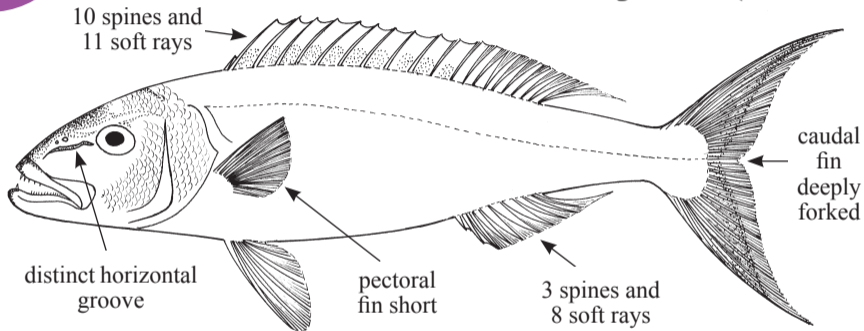


LUTJANIDAE

Mpale, Tembo

Aprion virescens Valenciennes, 1830

Adult length 80 cm (max 112 cm)



Anterior part of head without scales. Dark green to blue-grey. **Similar species:** *Pristipomoides* spp. (no groove in front of eye, different colour, pectoral fins > length of snout); other Lutjanidae (pectoral fins longer, no groove in front of eye). **Habitat:** Benthopelagic; open waters of deep lagoons, channels, reefs; singly or in groups. **Fishery:** Mainly marketed fresh but also dried and salted; excellent taste; large individuals may be ciguatoxic.

Mpale, Tembo

FAO Species Names:

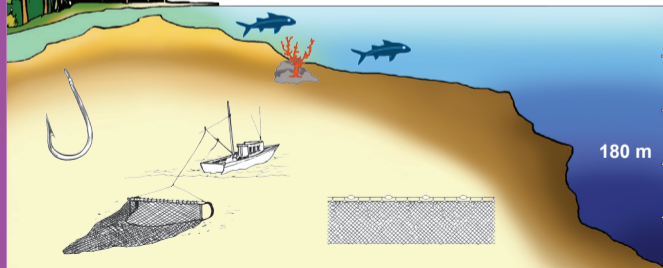
En - Green jobfish

Fr - Vivaneau job

Sp - Pargo verde



Image: Keoki Stender. www.marinelifephotography.com

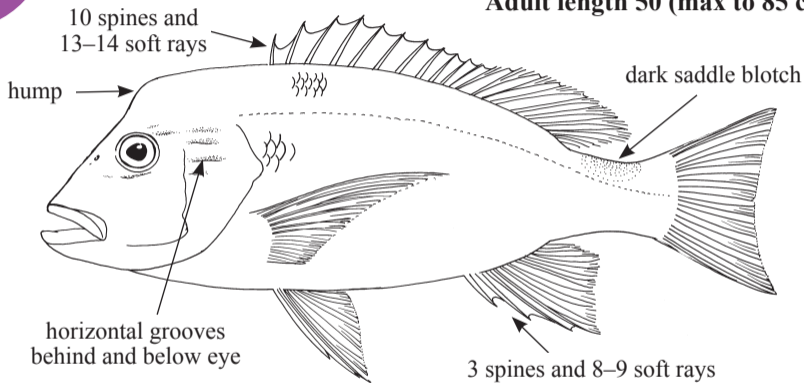


LUTJANIDAE

Shogo

Lutjanus sanguineus (Cuvier, 1828)

Adult length 50 (max to 85 cm)



Bright red; snout steeply sloped; long conical front teeth and highly mobile jaws. **Similar species:** Other red-coloured *Lutjanus* spp. (also called “red snappers”; no hump); has been misidentified as *L. coccineus* and *L. malabaricus*. **Habitat:** Offshore reefs (30–150 m depth); schooling. **Fishery:** Marketed mostly fresh.

Shogo

FAO Species Names:

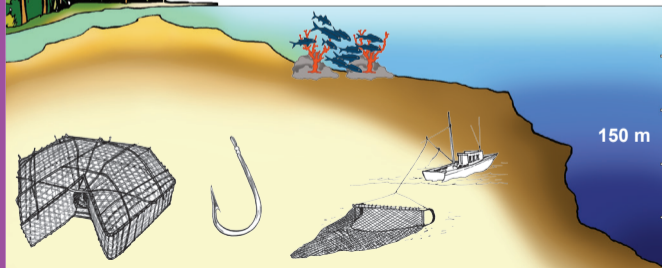
En - Humphead snapper

Fr - Vivaneau tête

Sp - Pargo cabezón



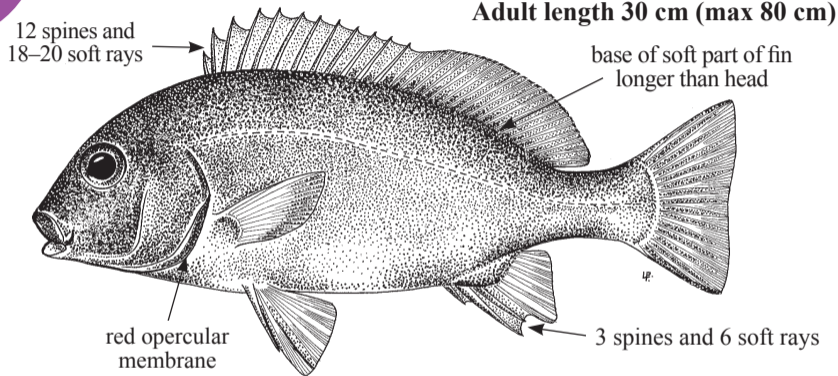
Image: J.E. Randall



HAEMULIDAE

Fute

Plectorhinchus schotaf (Forsskål, 1775)



Dusky to brownish grey; (juveniles may have pale blue lines on body); lips fleshy and scarlet; scales ctenoid (rough to touch); produces sound by grinding teeth. **Similar species:** *P. sordidus* (soft caudal base shorter than head); other *Plectorhinchus* spp. (different colour and/or different fin counts). **Habitat:** Coastal waters near reefs; enters estuaries and rivers; often in small groups; juveniles in tidal pools. **Fishery:** Marketed fresh and dried salted.

Fute

FAO Species Names:

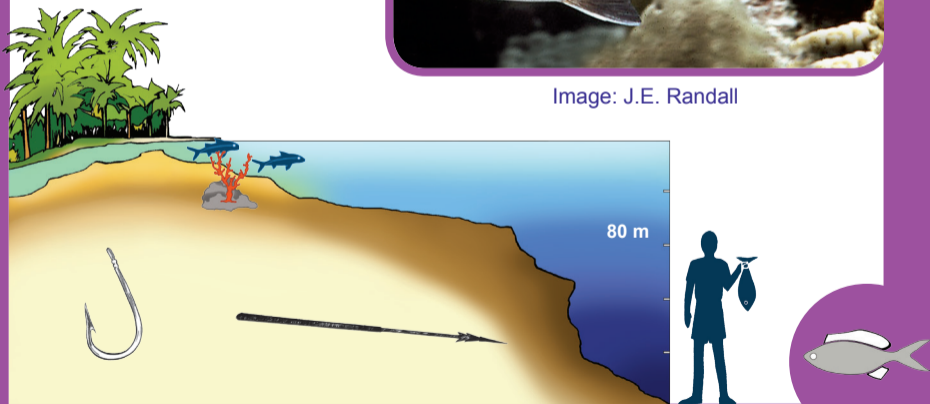
En - Minstrel sweetlips

Fr - Diagramme ménestrel

Sp - Burro trovador



Image: J.E. Randall

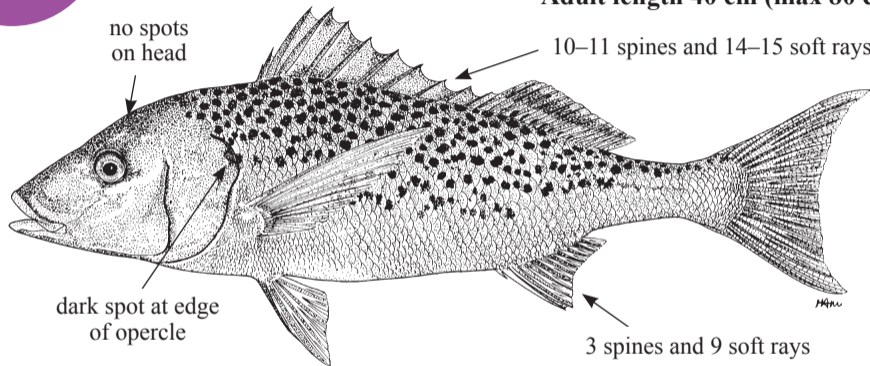


HAEMULIDAE

Pamamba

Pomadasys commersonii (Lacepède, 1801)

Adult length 40 cm (max 80 cm)



Back grey-green with dark spots, silvery-white on belly; pelvic and anal fins dark; juveniles without spots; scales ctenoid (rough to touch); produces sound by grinding teeth. **Similar species:** *P. multimaculatum* (spots extending to head); other *Pomadasys* spp. (no or faint spots, or large blotches). **Habitat:** Estuaries and tidal creeks; can tolerate freshwater. **Fishery:** Marketed fresh, also salted; tasty, improved by bleeding the fish.

Pamamba

FAO Species Names:

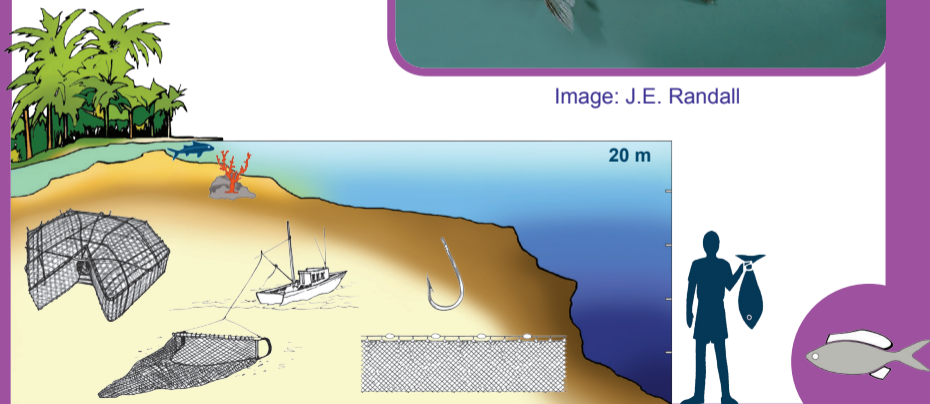
En - Smallspotted grunter

Fr - Grondeur moucheté

Sp - Corocoro arvejado



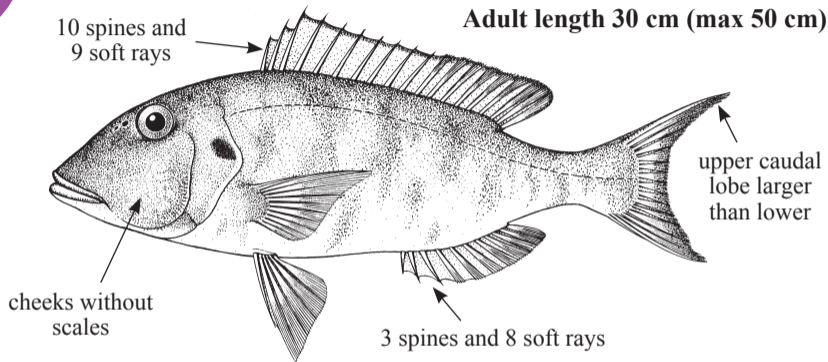
Image: J.E. Randall



LETHRINIDAE

Changu nyavi

Lethrinus rubrioperculatus Sato, 1978



Protogynous hermaphrodite; body depth < head length; body slender, its depth 3.0 to 3.4 times in standard length; yellowish to olive-green, often with a reticulated pattern enclosing white blotches and black spots. **Similar species:** *L. xanthochilus* and *L. conchyliatus* (red spot on or above pectoral-fin base); *L. semicinctus*, *L. variegatus*, *L. microdon*, *L. elongatus* (no red spots); other *Lethrinus* spp. (body depth > head length). **Habitat:** Coral reefs and nearby sandy and weedy areas. **Fishery:** Marketed fresh or frozen.

Changu nyavi

FAO Species Names:

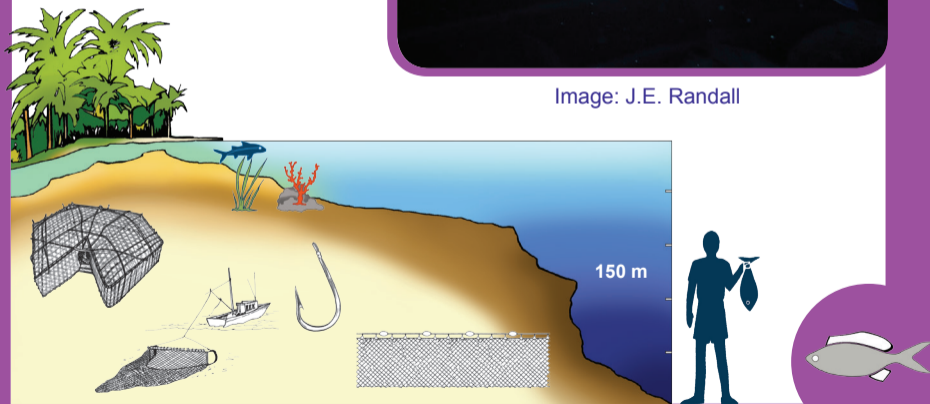
En - Spotcheek emperor

Fr - Empereur honteux

Sp - Emperador maquillado



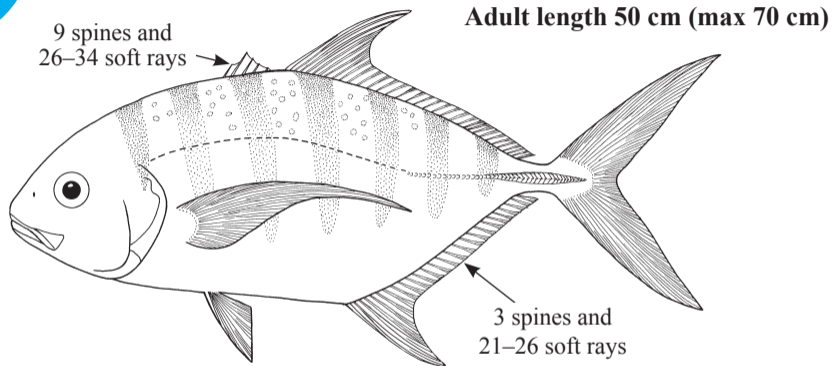
Image: J.E. Randall



CARANGIDAE

Kolekole

Carangoides ferdau (Forsskål, 1775)



Blue-green above, paler below; 5–6 dusky bands on sides; often inconspicuous golden spots; lateral line with 21–37 small scutes; breast naked ventrally up to pelvic fins. **Similar species:** *C. orthogrammus* (large yellow spots on side; no dark bands, lips fleshy); other *Carangoides* spp. (dorsal soft rays < 26 or breast completely scaled or breast naked beyond pelvic fins). **Habitat:** Pelagic; near sandy beaches down to 60 m, reef associated; singly or in small groups. **Fishery:** Marketed fresh and dried salted; excellent taste; rarely ciguatoxic.

Kolekole

FAO Species Names:

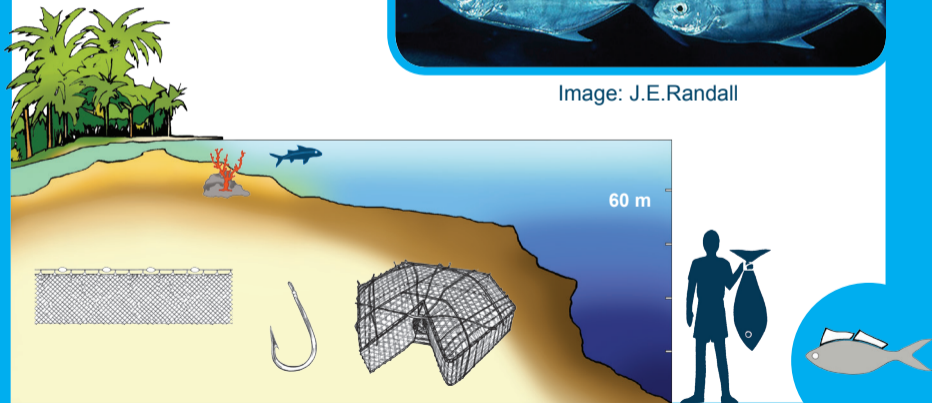
En - Blue trevally

Fr - Carangue tachetée

Sp - Jurel manchado



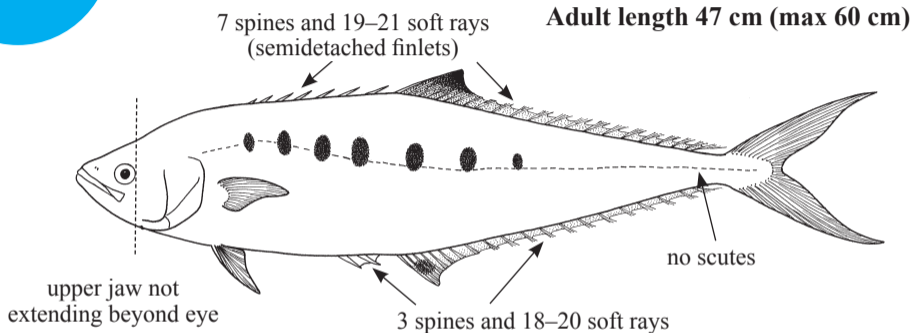
Image: J.E.Randall



CARANGIDAE

Pandu, Kolekole

Scomberoides tol (Cuvier, 1832)



Bluish dorsally, white ventrally; 5–8 lateral black blotches (faint or absent in young); distal half of dorsal-fin lobe heavily pigmented. **Similar species:** *S. lysan* (in adults upper jaw extends to posterior margin of eye, sometimes double rows of lateral spots); *S. commersonianus* and *S. tala* (lobe of dorsal fin completely pigmented); other species of Carangidae (no semidetached dorsal and anal finlets, lateral line often with scutes). **Habitat:** Reef-associated; small schools near surface of coastal waters. **Fishery:** Marketed mostly fresh; may be dried or salted. Fin spines venomous, capable of inflicting painful stings.

Pandu, Kolekole

FAO Species Names:

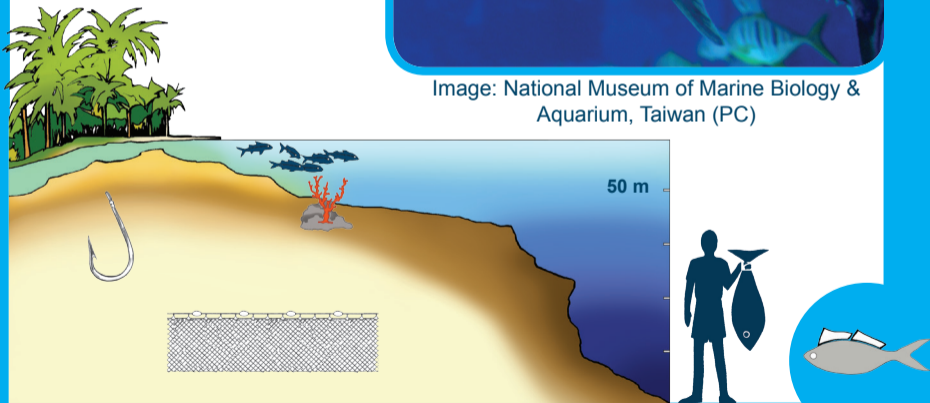
En - Needlescaled queenfish

Fr - Sauteur leurre

Sp - Jurel saltarín



Image: National Museum of Marine Biology & Aquarium, Taiwan (PC)

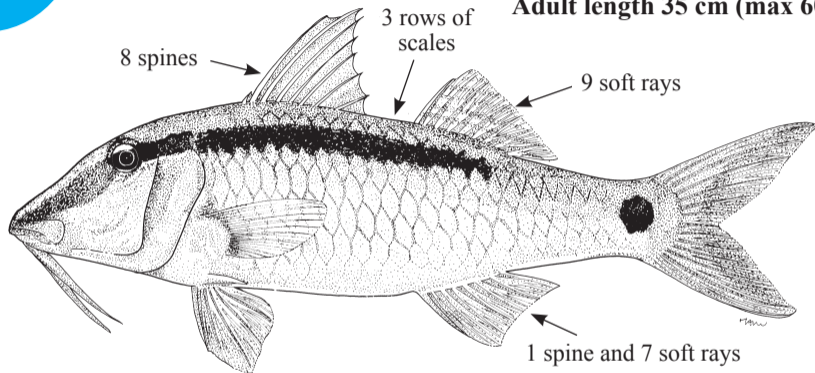


MULLIDAE

Mkundaji

Parupeneus barberinus (Lacepède, 1801)

Adult length 35 cm (max 60 cm)



Yellow to white ventrally; with a dark brown to black stripe (red on fish in deeper waters). **Similar species:** *P. macronemus* (barbels longer [almost to base of pelvic fins], last dorsal and anal-fin rays clearly elongated); *P. indicus* (no horizontal dark stripe, instead yellow blotch on lateral line between two dorsal fins). **Habitat:** Shallow-water of sandy bottoms, often near coral reefs; solitary or in small groups. **Fishery:** Very common; marketed mainly fresh.

Mkundaji

FAO Species Names:

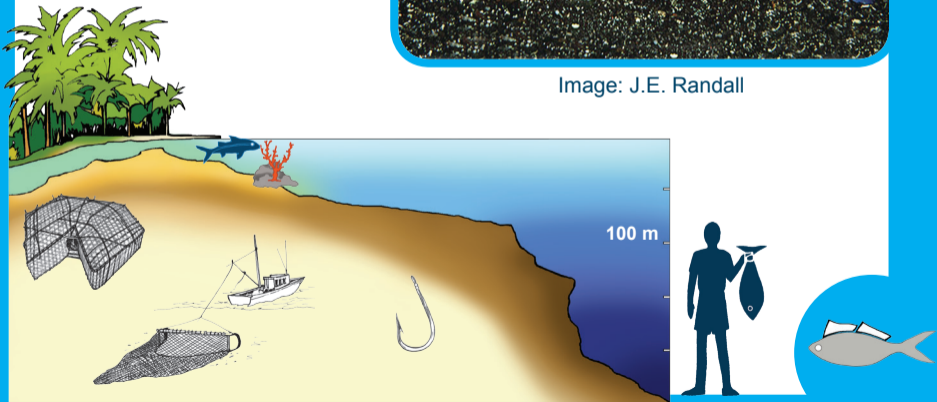
En - Dash-and-dot goatfish

Fr - Rouget-barbet barberin

Sp - Salmonete barberino



Image: J.E. Randall

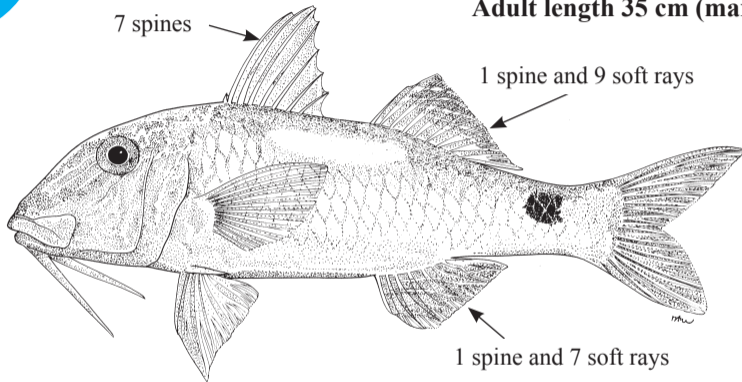


MULLIDAE

Mkundaji

Parupeneus indicus (Shaw, 1803)

Adult length 35 cm (max 45 cm)



Greenish to reddish brown dorsally, shading to whitish or pale pink ventrally; large elongate lateral yellow spot. **Similar species:** *P. barberinus* and *P. macronemus* (dark dorsolateral stripe, no yellow spot). **Habitat:** Shallow sandy or silty areas (seagrass substrata) of coastal and inner lagoon reefs; singly or in schools; down to about 30 m. **Fishery:** Marketed mainly fresh.

Mkundaji

FAO Species Names:

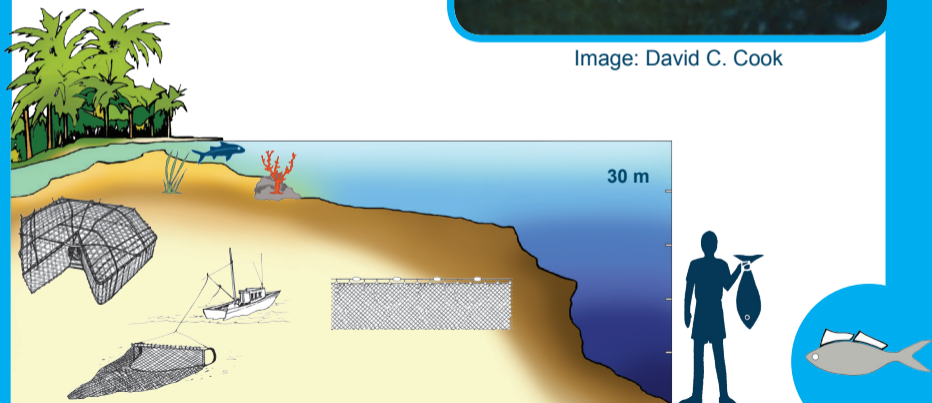
En - Indian goatfish

Fr - Rouget-barbet indien

Sp - Salmonete indico

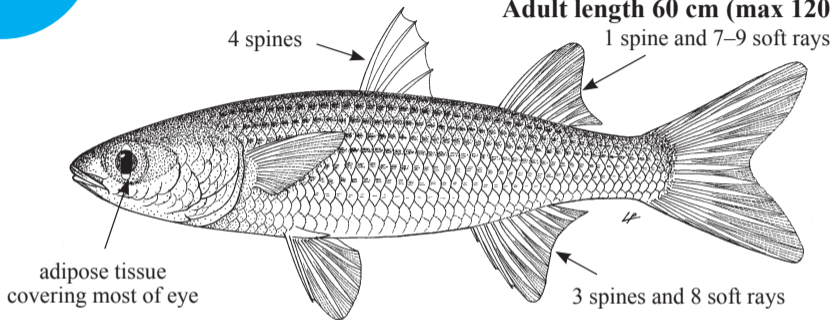


Image: David C. Cook



Mugil cephalus Linnaeus, 1758

Adult length 60 cm (max 120 cm)



Olive-green dorsally, sides silvery shading to white ventrally; lateral stripes sometimes distinctive; pectoral fins short (not reaching eye when folded forward); lateral line absent; scales in lateral series ≥ 43 . **Similar species:** *Liza* and *Valamugil* (9 soft rays in anal fin); *Liza macrolepis* and *L. melinoptera* (pectoral fin reaches the eye when folded forward); *L. vaigensis* (caudal fin not forked); *Valamugil* spp. (scales in lateral series < 43). **Habitat:** Shallow water, enters estuaries and rivers; over sand or mud, schooling; often leaps from water; tolerates extremely high salinities. **Fishery:** Marketed fresh, dried, salted and frozen; roe sold fresh or smoked; widely cultivated in freshwater and brackish ponds.

Mkizi

FAO Species Names:

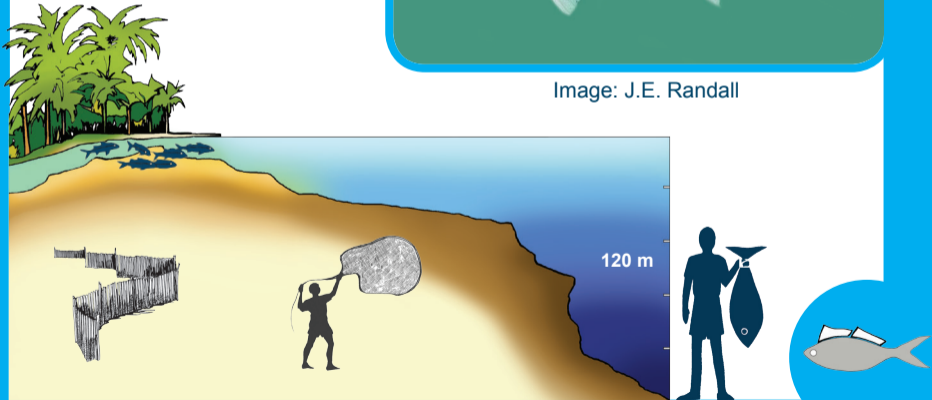
En - Flathead grey mullet

Fr - Mulet à grosse tête

Sp - Pardete



Image: J.E. Randall

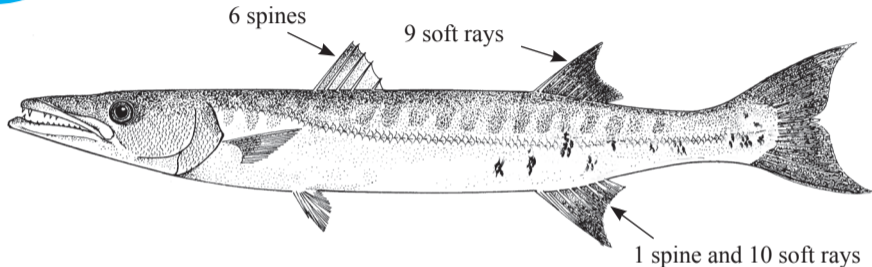


SPHYRAENIDAE

Tengesi, Kisumba

Sphyraena barracuda (Walbaum, 1792)

Adult length 140 cm (max 200 cm)



Distinguished by the double emarginate tail fin with pale tips on each lobe and (usually) the presence of a few scattered black blotches on the lower sides; dark bars on back in young, indistinct in adults; scales in lateral line <100 (usually 80 to 90). **Similar species:** Other *Sphyraena* spp. (no dark blotches on lower sides, smaller scales [> 100 in lateral line]). **Habitat:** Pelagic (mostly at or near surface); reef-associated; solitary and small groups; from inshore to open seas. **Fishery:** Marketed fresh, frozen or dried salted. Good food fish but cases of poisoning (ciguatera) reported. Rarely attacks humans, usually with one quick, fierce strike, which, although serious, is rarely fatal.

Tengesi, Kisumba

FAO Species Names:

En - Great barracuda

Fr - Barracuda

Sp - Picuda barracuda

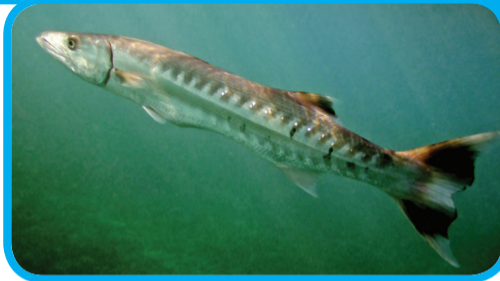
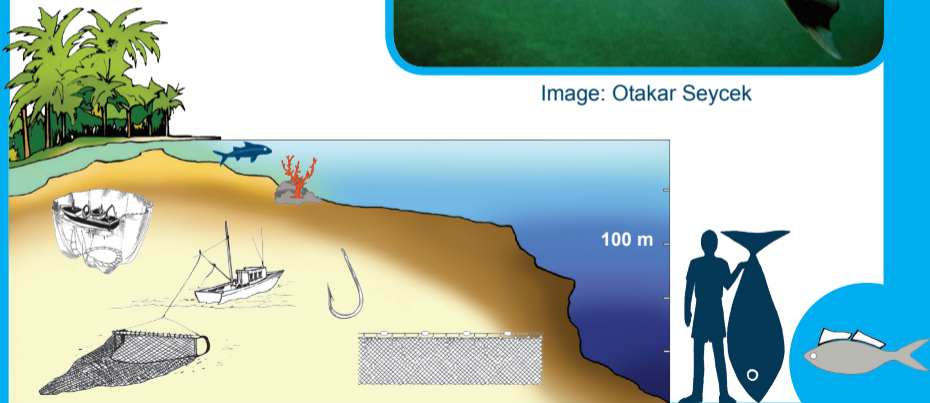


Image: Otakar Seycek

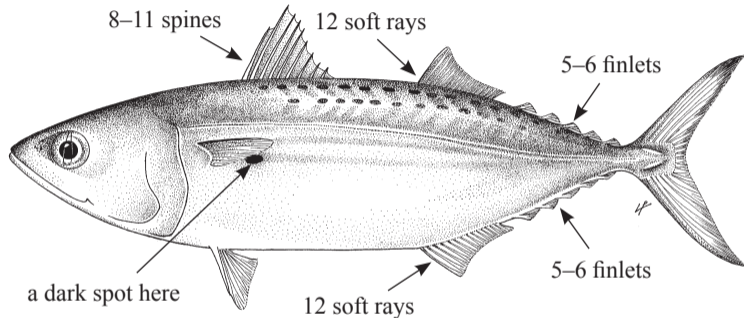


SCOMBRIDAE

Una

Rastrelliger kanagurta (Cuvier, 1816)

Adult length 25 cm (max 35 cm)



Back blue-green, flanks silver with a golden tint; 2 rows of small dark spots on sides of dorsal-fin bases; narrow dark longitudinal bands on upper part of body (golden in fresh specimens) and a black spot on body near lower margin of pectoral fin. **Similar species:** Other Scombridae (first and second dorsal fins close together; > 6 dorsal and anal finlets). **Habitat:** Bays, harbours and deep lagoons in turbid plankton-rich waters; pelagic; forms large schools. **Fishery:** Marketed fresh, frozen, canned, dried-salted, and smoked; also made into fish sauce.

Una

FAO Species Names:

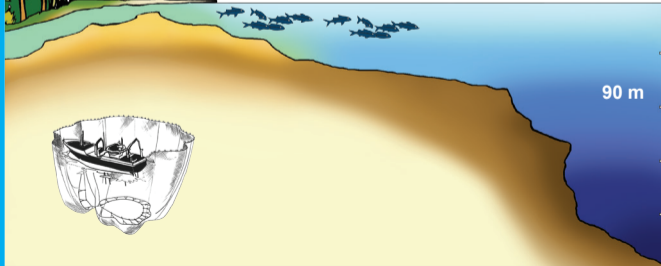
En - Indian mackerel

Fr - Maquereau des Indes

Sp - Caballa de la India



Image: Otakar Seycek

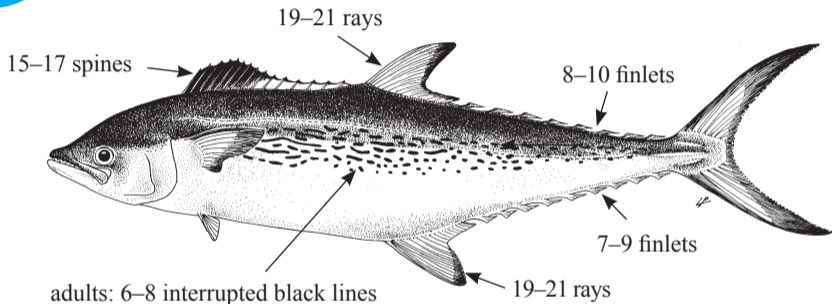


SCOMBRIDAE

Nguru

Scomberomorus plurilineatus Fourmanoir, 1966

Adult length 80 cm (max 120 cm)



Back iridescent blue-grey, sides silvery, whitish ventrally; body covered with small scales. **Similar species:** *S. lineolatus* (pattern of lines and spots (instead of mostly lines); rays in second dorsal fin ≤ 19); *S. commerson* (uniform colour or pattern of vertical bars on sides; lateral line abruptly bent downward below end of second dorsal fin); *Acanthocybium solandri* (> 23 spines in the first dorsal fin). **Habitat:** Epipelagic, neritic; schooling. **Fishery:** Marketed mainly fresh; does not keep well on ice; does not make a good sun-dried salted product.

Nguru

FAO Species Names:

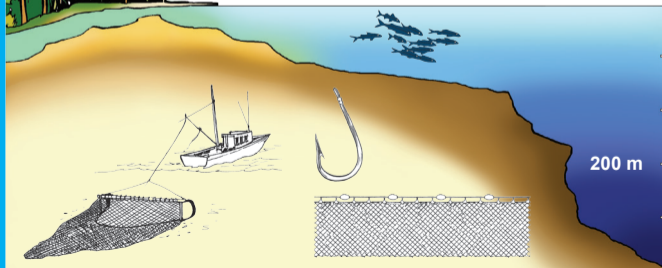
En - Kanadi kingfish

Fr - Thazard kanadi

Sp - Carite canadi



Image: photo collage

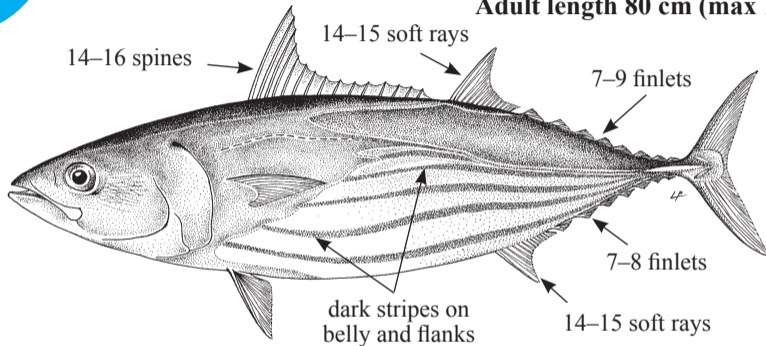


SCOMBRIDAE

Jodari, Kiboma

Katsuwonus pelamis (Linnaeus, 1758)

Adult length 80 cm (max 110 cm)



Body without scales except for corselet (thick scales on anterior body) and lateral line; swimbladder absent; adipose eyelid; 2 small keels on caudal peduncle; back purplish blue, silver ventrally; 6 horizontal dark bands (may appear discontinuous in live specimen). **Similar species:** *Sarda orientalis* (horizontal stripes on the upper body; first dorsal fin low and straight); all other Scombridae (no dark stripes on lower flanks). **Habitat:** Offshore surface waters (above thermocline), schooling. **Fishery:** Marketed fresh, frozen, canned; dried-salted and smoked; gamefish. Reports of ciguatera poisoning.

Jodari, Kiboma

FAO Species Names:

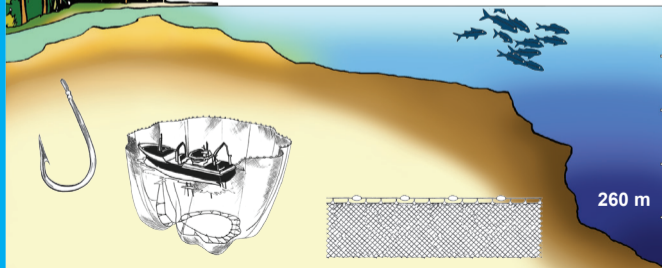
En - Skipjack tuna

Fr - Listao

Sp - Listado



Image: Rui M. Freitas

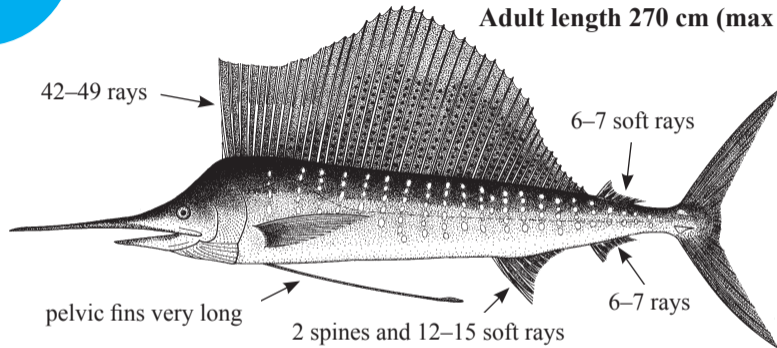


ISTIOPHORIDAE

Sulisuli makuti

Istiophorus platypterus (Shaw, 1792)

Adult length 270 cm (max 320 cm)



Body covered with small, embedded scales with 1 or 2 blunt points; back dark with about 20 bluish vertical bars; belly pale silver; membrane of first dorsal fin blue black with numerous dark spots. **Similar species:** None has a sail-like first dorsal fin; *Tetrapturus angustirostris* (snout short); *T. audax* (pelvic fins not much longer than pectoral fins); *Makaira mazara* and *M. indica* (pelvic fins shorter than pectoral fins). **Habitat:** Oceanic but often concentrates close to coasts; epipelagic; highly migratory; schooling (often by size). **Fishery:** Marketed fresh, smoked and frozen.

Sulisuli makuti

FAO Species Names:

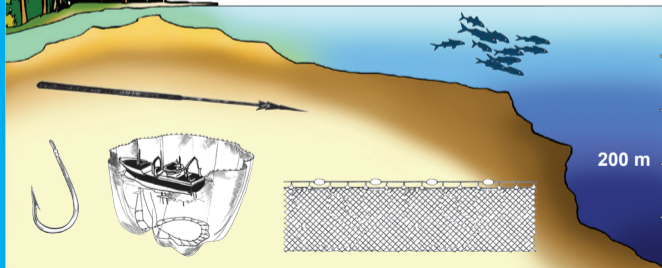
En - Indo-Pacific sailfish

Fr - Voilier indo-pacifique

Sp - Pez vela del Indo-Pacifico



Image: photo collage

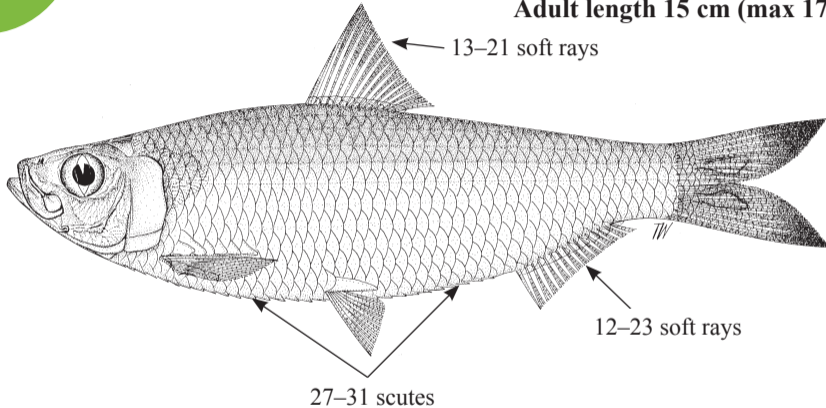


CLUPEIDAE

Simu, Kerenge

Sardinella melanura (Cuvier, 1829)

Adult length 15 cm (max 17 cm)



Body moderately compressed; belly with sharp keel (scutes); back blue-green, flank silvery; distinct jet-black caudal tips. **Similar species:** Other *Sardinella* spp. or Clupeidae have no jet-black caudal fin tips. **Habitat:** Pelagic in coastal waters; schooling. **Fishery:** Marketed fresh and fried salted; used as bait in the tuna fishery.

Simu, Kerenge

FAO Species Names:

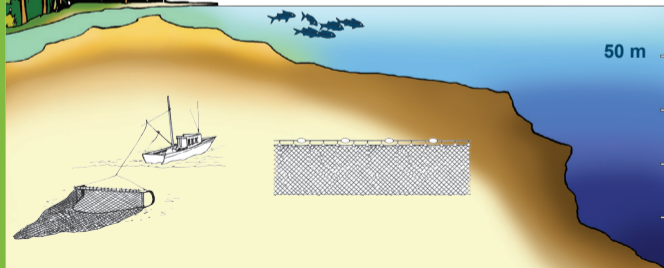
En - Blacktip sardinella

Fr - Sardineille queue noir

Sp - Sardinela rabo negro



Image: J.E. Randall

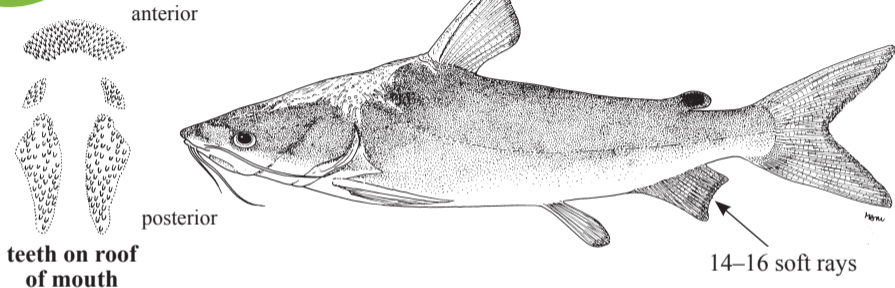


ARIIDAE

Fumi, Yahudhi

Plicofollis dussumieri (Valenciennes, 1840)

Adult length 30 cm (max 74 cm)



Prominent lateral ethmoid bone (forms a “shelf” between the eye and the nostrils); very short adipose-fin base; dark blue-brown on top and sides, dull white below, lower surfaces with fine brown pigment specks; fin tips edged with black. **Similar species:** *Plicofollis polystaphylodon* (posterior tooth patches narrow, carrot-shaped); *Netuma thalassina* (in adults middle tooth patches fused to each other and to posterior patches); other *Arius* spp. (only one tooth patch on each side on roof of mouth). **Habitat:** Demersal; coastal; mostly marine, brackish, enters into rivers. **Fishery:** Marketed fresh and dried-salted; air bladder utilized for isinglass (gelatin used as an adhesive and as clarifying agent).

Fumi, Yahudhi

FAO Species Names:

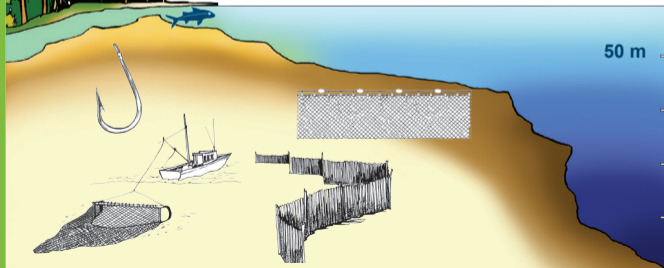
En - Blacktip sea catfish

Fr - Mâchoiron pointes noires

Sp - Bagre puntas negras



Image: courtesy of www.earth-touch.com

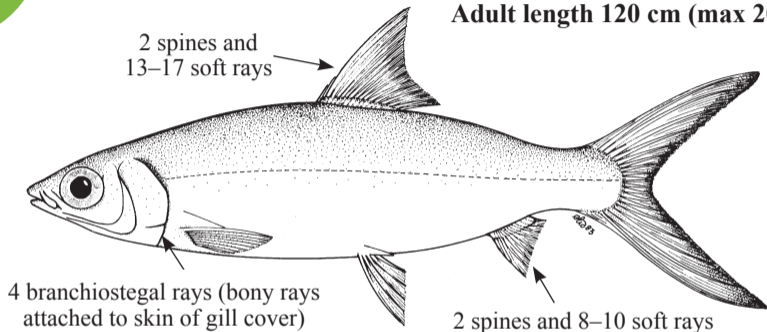


CHANIDAE

Borodi, Mwatiko

Chanos chanos (Forsskål, 1775)

Adult length 120 cm (max 200 cm)



2 spines and
13–17 soft rays

4 branchiostegal rays (bony rays
attached to skin of gill cover)

2 spines and 8–10 soft rays

Back olive green, flanks silver; no scutes along belly; small scales; no teeth. **Similar species:** Clupeidae (much smaller; with scutes, no lateral line), *Megalops cyprinoides* (scales large; last dorsal fin-ray filamentous), *Gonorhynchus gonorhynchus* (dorsal fin set far back on body, barbel under snout); *Elops machnata* (mouth much larger – maxilla reaching back beyond eye). **Habitat:** Benthopelagic; shallow coastal waters, reef-associated; larvae and juveniles in mangroves and even fresh waters. **Fishery:** Marketed fresh, smoked, canned or frozen; also cultured in tanks and ponds.

Borodi, Mwatiko

FAO Species Names:

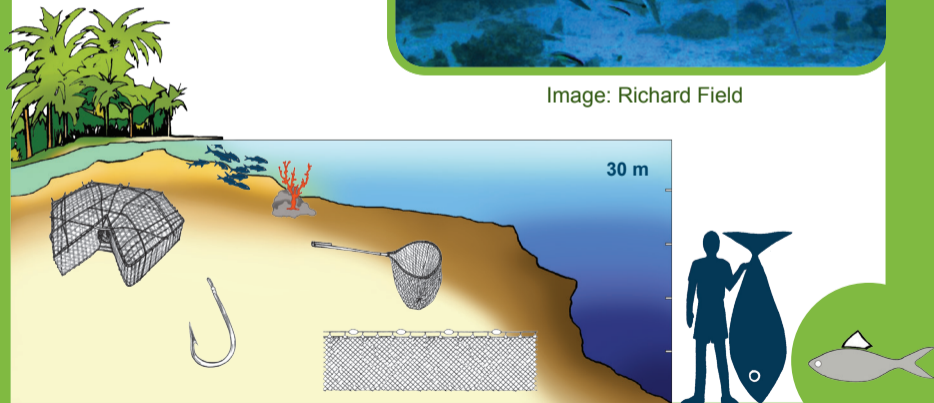
En - Milkfish

Fr - Chano

Sp - Chano



Image: Richard Field



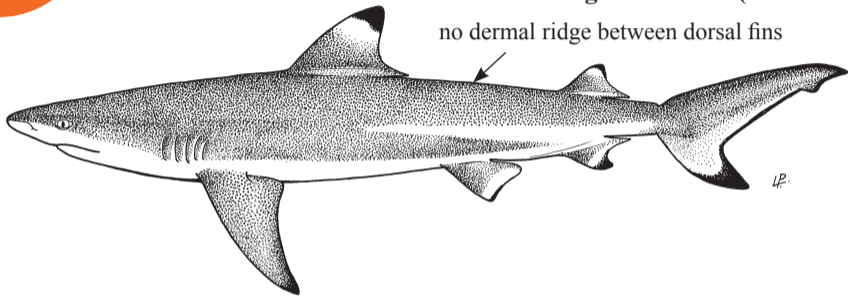
CARCHARHINIDAE

Papa

Carcharhinus melanopterus (Quoy & Gaimard, 1824)

Adult length < 160 cm (max 200 cm)

no dermal ridge between dorsal fins



Yellow-brown on dorsal surface, underside white; all fins conspicuous with black or dark brown tips; narrow-cusped teeth; no interdorsal ridge. **Similar species:** Combination of colouring and morphological characteristics readily separates this shark from all other carcharhinids in the area. **Habitat:** Common inshore, sometimes offshore; coral-reef associated; shallow waters, also brackish and fresh waters close to the sea; viviparous. **Fishery:** Generally marketed fresh (as fillet), may be dried, salted, smoked or frozen; fins are valued for shark-fin soup; liver as source of oil. This species is commonly seen in public aquariums. Not particularly dangerous but may be aggressive when divers are spearfishing.

Papa

FAO Species Names:

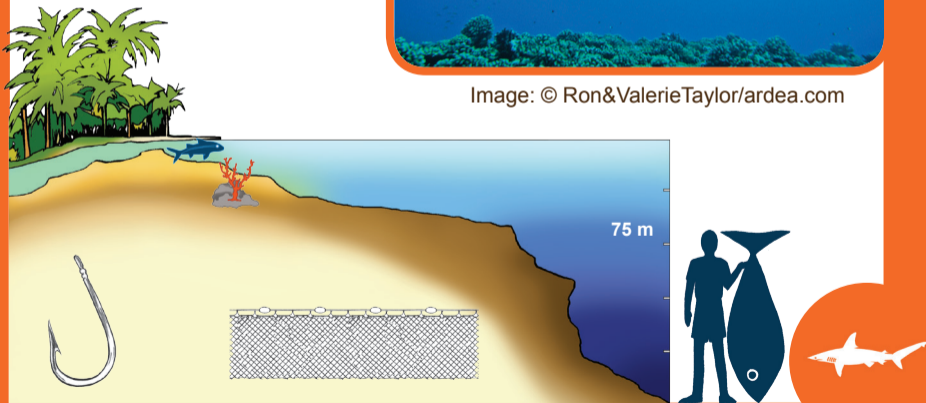
En - Blacktip reef shark

Fr - Requin pointes noires

Sp - Tiburón de puntas negras



Image: © Ron&ValerieTaylor/ardea.com

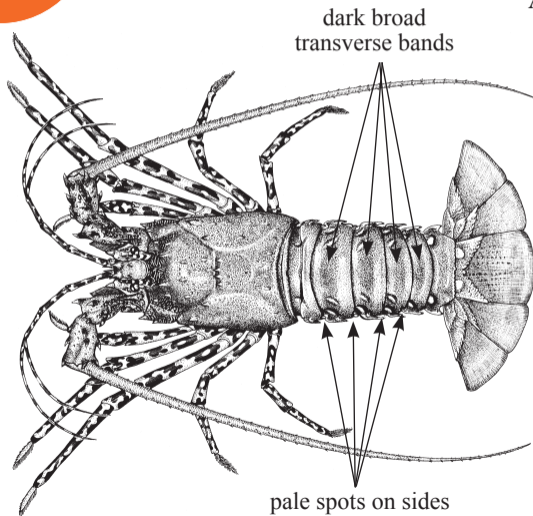


PALINURIDAE

Kamba mawe

Panulirus ornatus (Fabricius, 1798)

Adult length 35 cm (max 50 cm)



Greenish, carapace slightly bluish; frontal horns banded yellowish white and brown. Antennules and legs conspicuously ringed with pale yellow and black. **Similar species:** *P. homarus*, *P. longipes*, *P. penicillatus* (transverse groove on abdominal segments); *P. versicolor* (longitudinal stripes on legs and antennules). **Habitat:** Usually at depths from 1 to 10 m; calm areas of reefs, sometimes also on muddy, turbid river mouths; solitary or in pairs. **Fishery:** Sold mostly fresh or frozen in local markets, sometimes exported; traps are reported not to be effective to catch this species and mass mortality may occur in breeding lobsters.

Kamba mawe

FAO Species Names:

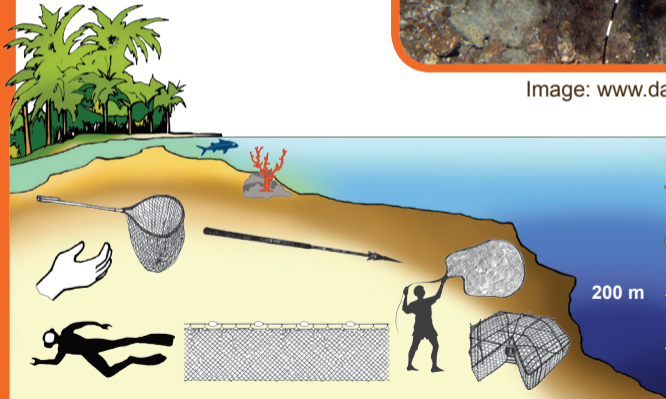
En - Ornate spiny lobster

Fr - Langouste ornée

Sp - Langosta ornamentada

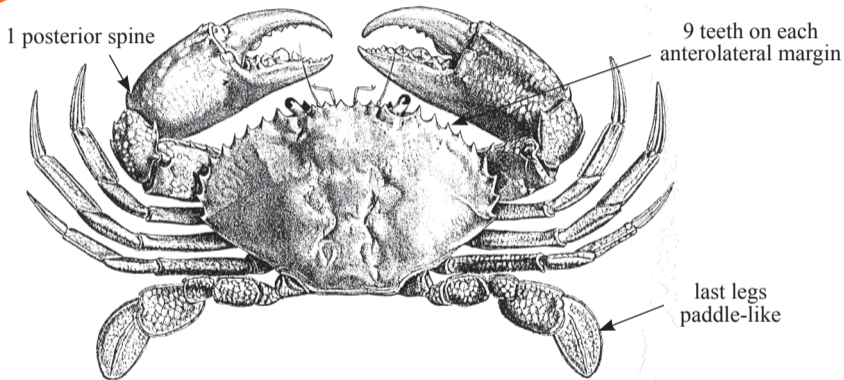


Image: www.daveharasti.com



Scylla serrata (Forsskål, 1775)

Adult ♂ carapace width 20 cm (max 28 cm)



Carapace rounded and green to almost black; last legs paddle-like and often marbled. **Similar species:** *Thalamita crenata* (5 teeth on each anterolateral margin; carapace width < 10 cm). **Habitat:** Soft substrates in shallow or intertidal waters (mangroves and open sea); emerge at sunset. Spawning migrations to offshore (up to 50 km). **Fishery:** Marketed alive; very tasty and sought after; used in pond culture.

Kaa

FAO Species Names:

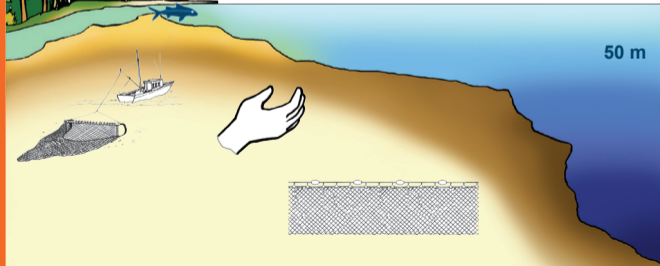
En - Indo-Pacific swamp crab

Fr - Crabe de palétuviers

Sp - Cangrejo de manglares



Image: Keoki Stender. www.marinelifephotography.com



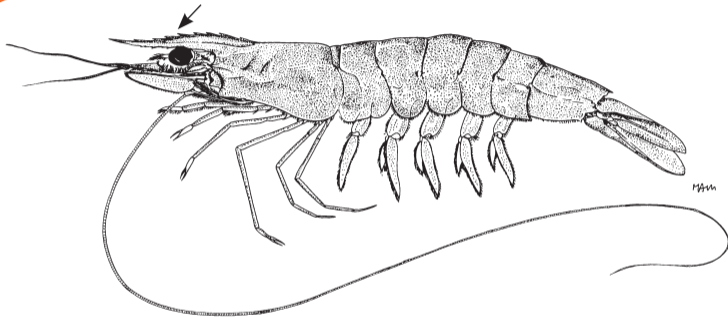
PENEIDAE

Kamba

Penaeus (Fenneropenaeus) indicus (H. Milne-Edwards, 1837)

7–9 dorsal and 4–6 ventral teeth

Adult length 18 cm (max 23 cm)



Well developed rostrum extends beyond the eyes and is toothed on dorsal and ventral margins; body pale pink, semi-translucent; **Similar species:** *P. latisulcatus* (short red lateral lines); other *Penaeus* spp. (banded with darker stripes); *Funchalia* spp. (head with lateral keels); other Penaeidae (rostrum toothed on dorsal margin only); *Heterocarpus woodmasoni* (4 longitudinal crests on head; sharp tooth on top of 3rd segment). **Habitat:** Shallow waters (< 30 m) on soft grounds; juveniles in estuaries. **Fishery:** Marketed mainly fresh and frozen; very important and valuable fishery species; also cultured.

Kamba

FAO Species Names:

En - Indian white shrimp

Fr - Crevette royale des Indes

Sp - Camarón blanco de la India

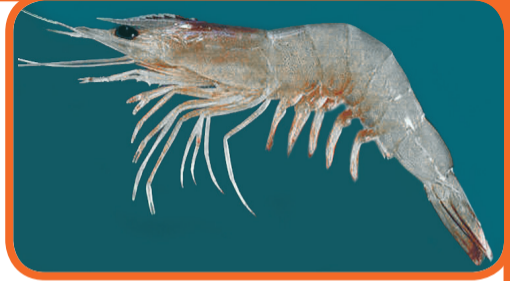
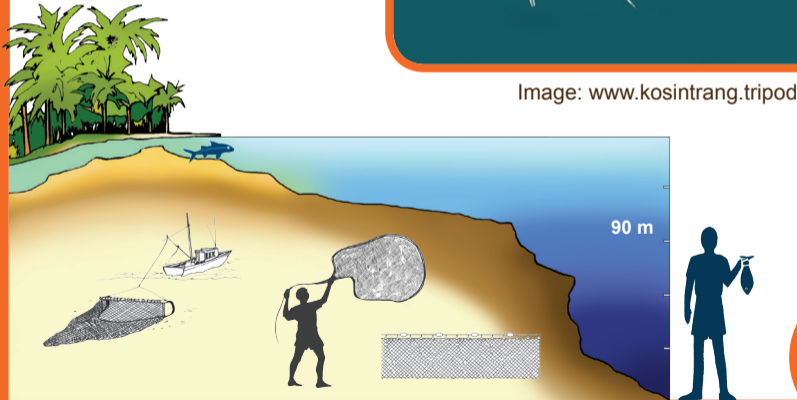


Image: www.kosinrang.tripod

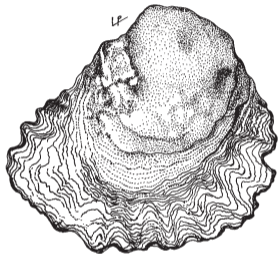


OSTREIDAE

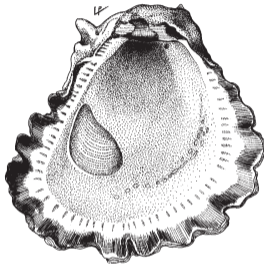
Shaza

Saccostrea cucullata Born, 1778

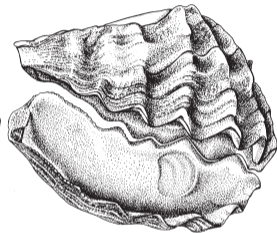
Adult length 4 cm (max 13 cm)



exterior of left valve



interior of left valve



Shell solid, very variable in shape; left valve generally larger and deeper; right valve quite flat; hinge without teeth; externally dark to light grey with purple shades; internally white with deep-purple margins and pearly iridescence. **Similar species:** *Crassostrea* spp. (margin not crenulated); *Hyotissa hyotis* (bubble-like shell structure [can be seen with magnifying glass on broken shell]). **Habitat:** Attached to various hard substrates in shallow marine, estuarine and mangrove areas; forms dense colonies. **Fishery:** Major commercial species; aquaculture. **Remarks:** Because of shell plasticity, the taxonomy of *Saccostrea* has been problematic.

Shaza

FAO Species Names:

En - Hooded oyster

Fr - Huître-capuchon

Sp - Ostión capuchón



Image: SimFish@hkwildlife.net



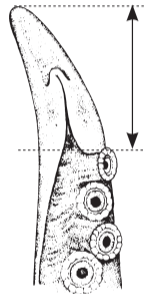
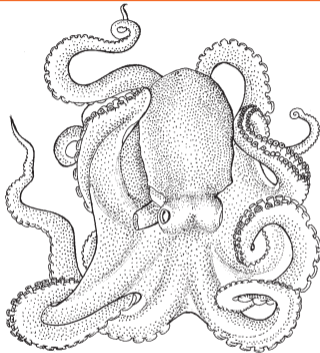
OCTOPODIDAE

Pweza

Octopus vulgaris Cuvier, 1797

Adult length 50 cm (max 130 cm)

dorsal view



ligula spoon-shaped, less than 2.5% of arm length

♂: third right arm hectocotyized (= transformed into copulation organ)

Large and chunky with eight stout arms (dorsal pair slightly shorter) lined with suckers; skin smooth; no internal shell; camouflage through changing skin colour and patterns, commonly mottled brown, white and tan. **Similar species:** *O. macropus* (dorsal arm pair longest; blue-green with large white spots, turns bright red when disturbed; ligula in ♂ 14% of arm length); *O. aegina* (dorsal arm pair much shorter), *O. cyaneus* (large cirrus [hump] over each eye). **Habitat:** Benthic; on all bottoms from coastal to shelf edge down to 200 m; releases a cloud of black ink for defense; very intelligent. **Fishery:** Marketed fresh, frozen and dried salted.

Pweza

FAO Species Names:

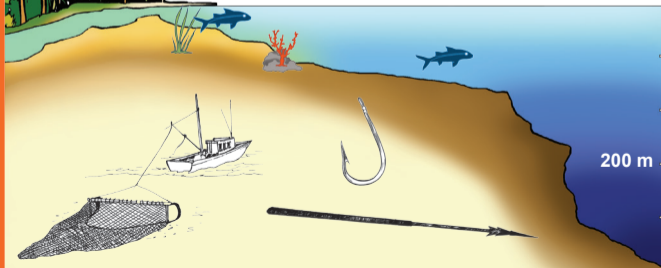
En - Common octopus

Fr - Pieuvre

Sp - Pulpo común



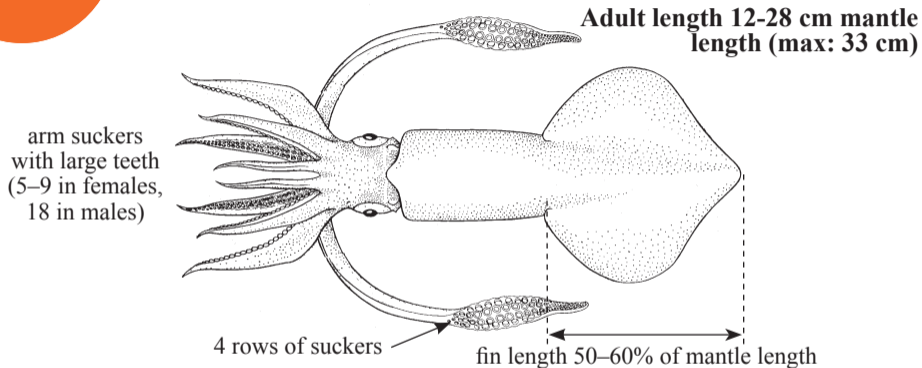
Image: ©FAO 2007



LOLIGINIDAE

Ngisi

Uroteuthis (Photololigo) duvaucelii (Orbigny, 1835)



Old name *Loligo duvaucelii*. A pair of photophores on ventral surface of ink sack; eye lens covered by transparent skin; arms with suckers in 2 series. Tentacles long (< 50% mantle length); exhibits polymorphism (colour change). **Similar species:** Other genera of Loliginidae (no photophores); other relevant squid families (no covered eye lenses). **Habitat:** Near-shore or shelf, demersal, shallow water, large spawning aggregations. **Fishery:** Marketed fresh, dried, squid meal.

Ngisi

FAO Species Names:

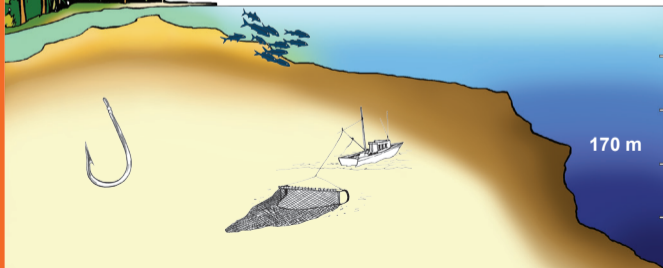
En - Indian squid

Fr - Calmar indien

Sp - Calamar índico



Image: C. Cherdchinda (background altered)



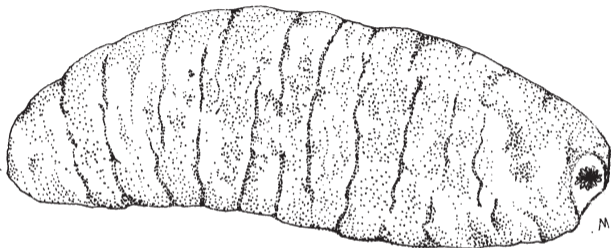
HOLOTHURIIDAE

Mchanga

Holothuria scabra Jaeger, 1833

Adult length 22 cm (max 45 cm)

mouth ventral,
with 20 grey,
stout tentacles



anus terminal
with 5 groups of
radial papillae

Dorsal part (bivium) arched, ventrally flattened (trivium); bivium with characteristic wrinkles; colour grey to dark with small yellow patches or horizontal bands. **Similar species:** *H. fuscogilva*, *H. nobilis* (lateral protuberances [teats]); other Holothuriidae (requires microscope to study distinctive shape of spicules [microscopic calcareous bits in the body wall]). **Habitat:** Shallow grounds (usually 2–10 m); inner reef flats and near mangroves; reproduces in seagrass beds; burrows in mud; slow growing and long-lived. **Fishery:** Not locally consumed, dried product exported to Asia. Can be cultured. High fishing pressure; as a result catches of high-value species (e.g. *H. scabra*, *H. fuscogilva*) are decreasing and replaced by low-value species (e.g. *Bohadschia* spp., *Actinopyga* spp., etc.) .

Mchanga

FAO Species Names:

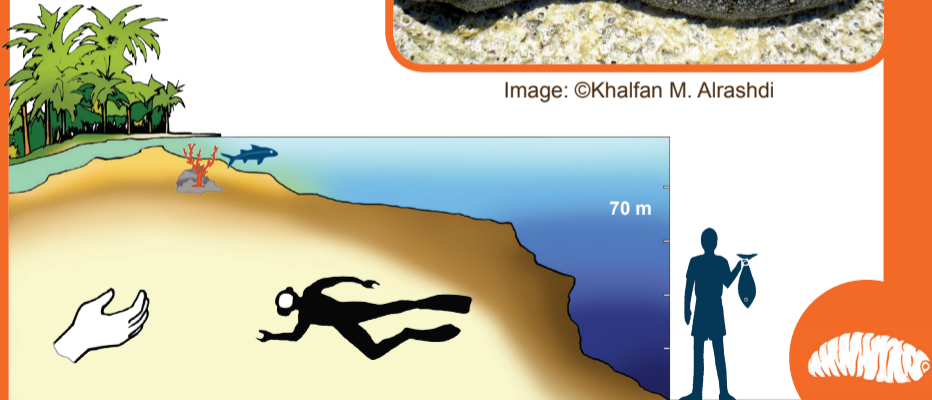
En - Sand fish

Fr -

Sp -



Image: ©Khalfan M. Alrashdi



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Kangaja – *Acanthurus dussumieri*
Puju – *Naso unicornis*
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Tewa – *Cephalopholis argus*
Tewa chui – *Epinephelus merra*
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Pweza – *Octopus vulgaris*
Ngisi – *Uroteuthis (Photololigo) duvaucelii*
Mchanga – *Holothuria scabra*

Mini disc contains:

Anam, R. and E. Mostarda. 2012. FAO species identification field guide for fishery purposes. The living marine resources of Kenya. Rome, FAO.

Fischer, W. and G. Bianchi (eds). 1984. FAO species identification sheets for fishery purposes. Western Indian Ocean; (Fishing Area 51). Prepared and printed with the support of the Danish International Development Agency (DANIDA). Rome, FAO, vols 1–6.

The FAO FishFinder Programme* produces species identification tools for fishery purposes. To date the Programme has described over 8 000 aquatic species and has an archive of more than 40 000 scientifically reviewed species drawings. This information is organized in many publications accessible on the FAO web pages (www.fao.org/fishery/sidp/en).

This FAO FishFinder pocket guide was developed to assist in the quick field identification of important commercial species and can be useful to: ichthyologists; fishery data collectors, observers and inspectors; consumers; fishery science teachers; and everybody else interested in the marine fauna and fisheries of Kenya.

The FAO FishFinder pocket guide user must keep in mind that he/she will encounter many other and often similar marine species in the landings and at markets. To help identify these species a mini disc is included containing more comprehensive FAO identification guides for fishery resources in Kenya and the Western Indian Ocean.

**formerly SIDP, Species Identification and Data Programme*