MALACANTHIDAE

Blanquillos, sand tilefishes

(May include Branchiostegidae in recent literature)

Body elongate, fusiform or cylindrical; body depth 12 to 26% of standard length (usually 16%). No predorsal ridge on head; snout blunt or pointed; nostrils paired, the posterior one enclosed in a thin cutaneous tube with a flap; preopercular margin smooth or serrated (in Hoplolatilus), if serrated it may have an enlarged spine at its angle; opercle with a single sharp spine; gill membranes free from isthmus; mouth terminal to slightly inferior; jaws with canine teeth and patches of villiform teeth near the anterior portions of both jaws; no teeth on roof of mouth, or tongue, but well developed pharyngeal teeth; total number of gillrakers on first arch 6 to 29. Dorsal and anal fins long and continuous; the sum of dorsal and anal fin bases amounts to between 80 and 135% of the standard length; dorsal fin with 1 to 10 thin spines and either 13 to 34 or 43 to 60 soft rays; anal fin with 1 or 2 spines and either 12 to 20, 37 to 40, or 46 to 55 soft rays; caudal fin rounded, truncate or forked, with 17 principal rays. Scales ctenoid (rough) over most of body, cycloid (smooth) in head region. Pored lateral line scales 89 to 181; vertebrae usually 10 to 14 (11 to 14 in subgenus Asymmetrurus).

The Malacanthidae include 2 genera, 2 subgenera and 10 species (4 species in area 51). They are small to medium-sized fishes, occurring in relatively shallow water (10 to 150 m; usually less than 50 m), and are burrow-dwelling or mound-building fishes. The elongate malacanthids usually inhabit these burrows or mounds in pairs. They enter the burrows head first one after the other when alarmed. The concealed nature of malacanthids' habitat generally preclude them from large-scale landings. However, these fishes are excellent eating and do appear in local markets.
SIMILAR FAMILIES OCCURRING IN THE AREA:

Coryphaenidae: dorsal fin extending forward to nape.

Labridae: prominent nipping canine teeth.

Branchiostegidae: a predorsal ridge present; body robust, its depth 21 to 36% (usually 27%) of standard length (25 to 29%, usually 18% in Malacanthidae); opercular spine soft and blunt.

KEY TO GENERA OCCURRING IN THE AREA:

1a. Preopercular edge smooth; dorsal fin elements 47 to 64; anal fin elements 38 to 56; gillrakers 6 to 20; pored lateral line scales 116 to 181 ................. Malacanthus

1b. Preopercular edge serrate, may have enlarged spine at angle; dorsal fin elements 22 to 38; anal fin elements 14 to 21; gillrakers 16 to 28; pored lateral line scales 89 to 140 ............. Hoplolatilus

LIST OF SPECIES OCCURRING IN THE AREA:

Code numbers are given for those species for which Identification Sheets are included

Malacanthus brevirostris Guichenot, 1848 MALAC Malac 2
Malacanthus latovittatus (Lacepède, 1802) MALAC Malac 3

Hoplolatilus fronticinctus Günther, 1887
Hoplolatilus oreni Clark & Ben-Tuvia, 1973

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FAO SPECIES IDENTIFICATION SHEETS

FAMILY: MALACANTHIDAE

FISHING AREA 51
(W. Indian Ocean)

Malacanthus brevirostris Guichenot, 1848

OTHER SCIENTIFIC NAMES STILL IN USE:
- Malacanthus hoedtii Bleeker, 1859
- Malacanthus parvipinnis Vaillant & Sauvage, 1875
- Dikellorhynchus incredibilis Smith, 1956

VERNACULAR NAMES:
- FAO: En - Quakerfish (= Shortnose sand tilefish. INFOPESCA II)
  Fr - Matajuelo nez court
  Sp - Matajuelo nato

NATIONAL:

DISTINCTIVE CHARACTERS:

Snout short (29 to 37% of head length); jaws reaching backward barely to under pupil; a stout sharp opercular spine; dorsal fin with 1 to 3 (usually 2) thin spines and to 53 to 60 soft rays; anal fin with 1 spine, and 46 to 55 soft rays; pored lateral line scales 146 to 181.

Colour: upper body brownish-green, lower body white; dorsal fin with a narrow edge of yellow, the membrane faint pink, anal fin without markings and transparent; upper and lower portions of caudal fin light yellow, separated by a central white portion bordered by 2 dark bands; iris deep blue with a little gold above.
Distinguishing characters of similar species occurring in the area:

*Malacanthus latovittatus*: a broad dark band from opercle to tip of caudal fin; 3 or 4 (usually 4) dorsal fin spines and 43 to 47 soft rays; (1 to 3 (usually 2) spines and 53 to 60 soft rays in *M. brevirostris*); jaws do not reach under eye.

**Size:**

Maximum: 30 cm; common to 25 cm.

**Geographical distribution and behaviour:**

Within the area, known from the Red Sea, east coast of Africa, Madagascar, Réunion and Mauritius. Also found in the Eastern Indian Ocean and the Western Central Pacific, along most of Indonesia, the Philippine Islands, and north to Okinawa, throughout the Pacific Islands, south to Queensland, Australia and Lord Howe Island and eastward to Central America.

Bottom-dwelling, in 5 to 33 m depth; inhabits burrows in pairs, often beneath the ledges of large rocks, when frightened dives into the borrow head first.

**Present fishing grounds:**

Shallow water, common in coral rubble or sand bottoms adjacent to reefs.

**Catches, fishing gear and forms of utilization:**

Separate statistics are not reported for this species.

Probably caught mostly by hook and line and traps. Found in local markets throughout the region.
FAMILY: MALACANTHIDAE

OTHER SCIENTIFIC NAMES STILL IN USE:
Malacanthus urichthys Fowler, 1904
Oceanops latovittata Jordan & Seale, 1906

VERNACULAR NAMES:

FAO : En - Blue blanquillo  
Fr - Matajuel bleu  
Sp - Matajuelo azul

DISTINCTIVE CHARACTERS:

Snout long (37 to 47% of head length); jaws reaching posteriorly only to below anterior nostril well in front of eye; opercle with a stout, sharp spine; dorsal fin with 4 (rarely 3) spines and 43 to 47 soft rays; anal fin with 1 spine, and 37 to 40 soft rays. Pored lateral line scales 116 to 132.

Colour: upper body olive grey to blue-violet, ventral portion whitish; a broad black stripe running the length of the body. Dorsal fin grey-brown basally, with a pale band along dorsal margin; anal and pelvic fins white; pectorals bluish; caudal fin with ventral 3/4 black surrounding a small white rectangular area; head blue, iris yellow; juvenile colour distinctly different; resembles the labrid Labroides dimidiatus, a cleaner wrasse.
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

**Malacanthus brevirostris** (no broad dark body stripe; dorsal fin with 1 to 3 (usually 2) spines and 53 to 60 soft rays (4 spines, rarely 3, and 43 to 47 soft rays in *M. lattovittatus*); jaws reaching to under anterior edge of pupil).

**Cheilio inermis** (Family Labridae): no sharp opercular spine; no dark body stripe; dorsal fin with 9 spines and 13 rays; anal fin with 2 spines and 12 rays (1 spine and 37 to 40 anal rays in *M. latovittatus*).

**Labroides dimidiatus** (Family Labridae): a small species, growing only to about 10 cm; no sharp opercular spine.

SIZE:

Maximum: 38 cm standard length; common to 35 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, this species is known from the Red Sea, Kenya, Mozambique, Aldabra Island, Madagascar, Seychelles, Réunion, Mauritius and Sri Lanka. Also found in Indonesia, Micronesia, the Philippines, north to the Ryukyu Islands (Okinawa) and Tanabe Bay, Japan, throughs Melanesia, New Guinea and New Caledonia to the Hawaiian Islands; apparently not extending as far south as New Zealand.

Inhabits burrows in sand and rubble bottoms near reefs in shallow water, common in coral rubble or sand bottoms adjacent to reefs.

PRESENT FISHING GROUNDS:

Shallow water (6 to 10 m) near the fringes of reefs.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.
Caught by hook and line and in traps.
Marketed fresh.
A single species in the area; see species sheet for:

**Megalops cyprinoides** (Broussonet, 1782) MEGAL Megal 1
FAMILY: MEGALOPIDAE

MEGALops cyprinoides (Broussonet, 1782)

OTHER SCIENTIFIC NAMES STILL IN USE: None

VERNACULAR NAMES:

FAO:
- En - Indo-Pacific tarpon
- Fr - Tarpon indo-pacifique
- Sp - Tarpon indo-pacifico

DISTINCTIVE CHARACTERS:

Body moderately deep; eye large; lower jaw projecting; a gular plate present between arms of lower jaw; branchiostegal rays numerous, 26 or 27. Fins lacking spines; dorsal fin origin at about midpoint of body, last dorsal fin ray filamentous; anal fin origin a little behind dorsal fin base. Scales large, 30 to 40 on lateral line.

Colour: back blue/green, flanks silvery.
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Species of Clupeidae: lateral line and gularplate absent; scutes along belly in most species.

Elops machnata and Chanos chanos: scales smaller; last dorsal fin ray not filamentous. Furthermore, gularplate absent and only 4 branchiostegal rays in Chanos chanos.

SIZE:

Maximum: 55 cm; common to 30 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout whole area. Elsewhere in the Eastern Indian Ocean and Western Central Pacific, westward to Hawaii.

A coastal pelagic species, entering lagoons and estuaries.

Feeds on fishes; also crustaceans.

PRESENT FISHING GROUNDS:

Caught throughout the area, but no special fishery (except as a sport fish).

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught with gillnets, seines and trawls.

Marketed fresh and dried salted.