

**Monotaxis** Bennett, 1830

**LETH Mono**

**Genus:** *Monotaxis* Bennett, 1830: 688. Type-species *Monotaxis indica* Bennett, 1830 (= *Monotaxis grandoculis* [Forsskål, 1775]), by monotypy.

**Synonyms:** *Sphaerodon* Rüppell, 1840.

A single species in the genus - see *Monotaxis grandoculis*

**Monotaxis grandoculis** (Forsskål, 1775)

Fig. 155, Plate VIII, 47-49

**LETH Mono 1**

*Sciaena grandoculis* Forsskål, 1775; Descrip.Animal.: xi, 53 (Arabia).

**Synonyms:** *Monotaxis indica* Bennett (1830); *Lethrinus latidens* Valenciennes (1830); *Pagrus heterodon* Bleeker (1854b).

**FAO Names:** En - Humpnose big-eye bream.

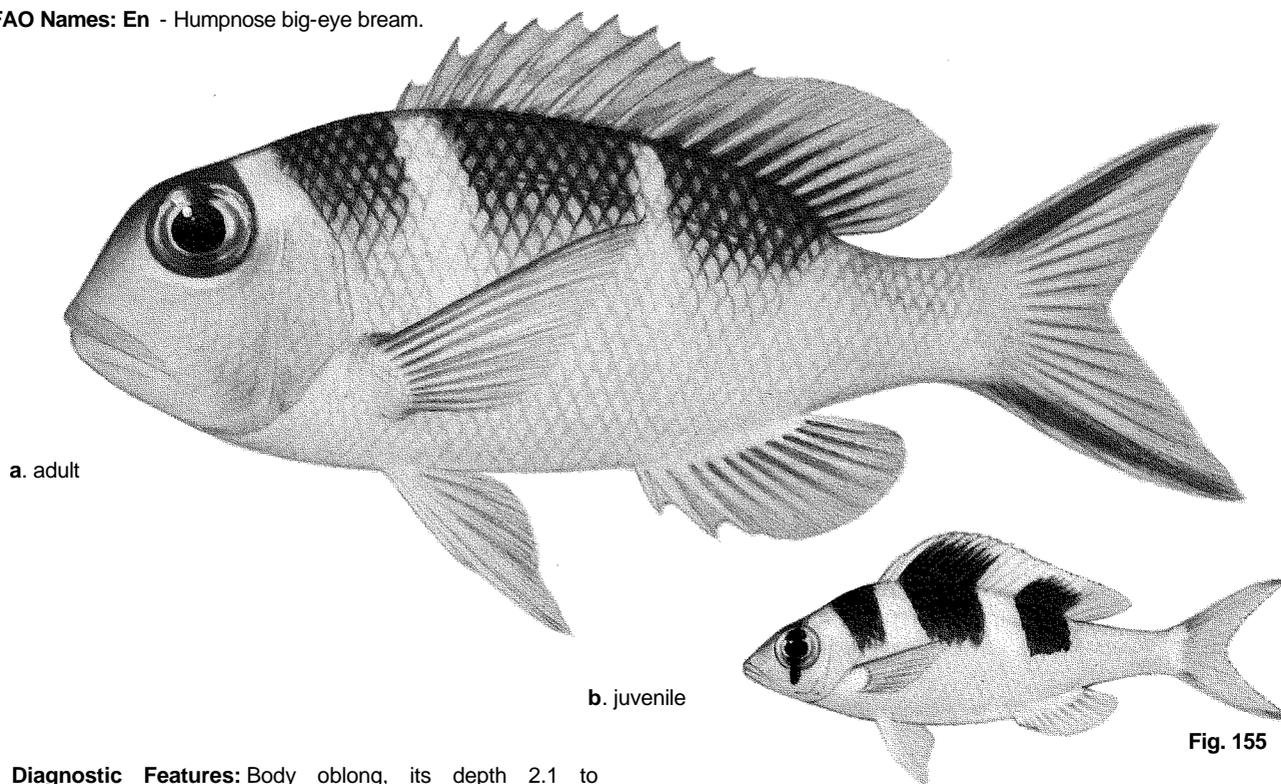
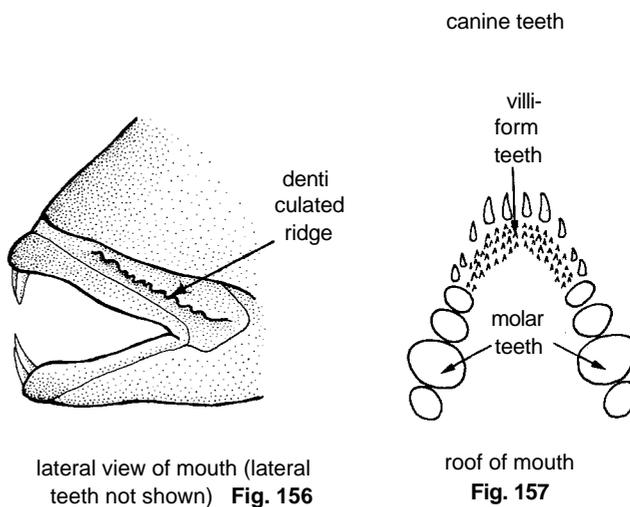


Fig. 155

**Diagnostic Features:** Body oblong, its depth 2.1 to 2.7 times in standard length. Head profile strongly convex in front of eye, the snout sloping steeply; eye large, its diameter about equal to length of snout or 2.5 to 3.2 times in head length; interorbital space wide and flat; hind margin of preopercle finely serrated; posteriormost part of jaws reaching beyond vertical through anterior margin of eye; a broad patch of small teeth in jaws anteriorly, followed by a series of 6 or 7 round, flat molars on each side and preceded by canines in front of each jaw; maxilla with a longitudinal denticulated ridge. Dorsal fin with 10 slender spines and 10 soft rays, the first spine half the length of second otherwise remaining spines about equal; anal fin with 3 spines and 9 soft rays; pectoral rays 14 including splint-like uppermost ray; caudal fin forked with pointed tips. Lateral-line scales 44 to 47, about 4 or 5 horizontal scale rows above lateral line; inner surface of pectoral fin base densely scaled.



lateral view of mouth (lateral teeth not shown) Fig. 156

roof of mouth Fig. 157

**Colour:** ground colour generally bluish-grey grading to whitish on ventral parts; lips yellow to pinkish; area around eye often yellow or orange; fins generally without distinctive markings, the membranes clear or dusky, but often reddish to yellow-orange; base of upper pectoral fin rays and inner base (i.e. body side) of pectoral axil black; caudal fin frequently with blackish rays contrasted against paler membranous part of fin. Small juveniles whitish on lower half and with 3 prominent black saddles separated by narrower white bars on upper half; a prominent black bar through eye; fins clear to white except the dorsal fin which includes the continuation of 2 of the black saddles of the upper side and the outer edges of the caudal fin lobes which are yellow-brown. The juvenile pattern of bars is often seen in relatively large (20 to 30 cm) individuals. Even the largest adults, although usually seen without markings, are able to rapidly assume dark bars or saddles on the body.

**Geographical Distribution:** Widespread in the Indo-West and Central Pacific from the Hawaiian Islands and southeastern Oceania to the east coast of Africa and Red Sea and from Australia northwards to Japan (Fig. 158).

**Habitat and Biology:** Generally found in the vicinity of coral reefs, often on the sandy periphery of individual reef complexes or in sand and rubble areas. Solitary fish are often encountered, but large adults frequently form aggregations of up to about 50 individuals. Two distinct colour forms are seen which has led to speculation that 2 species may be involved: a dark variety with broad black saddles on the back separated by narrow white interspaces and a paler variety having the saddles more widely separated.

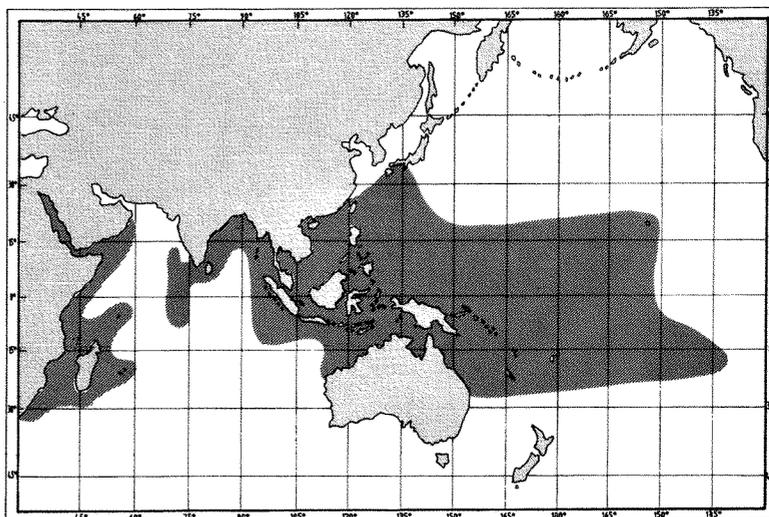


Fig. 158

Observations on the Great Barrier Reef indicated that dark-phase individuals are usually associated with the higher-contrast environment of the coral reef whereas the light-phase fish are generally seen over sand or light-coloured rubble. Moreover, the lighter fish were seen to quickly assume the dark pattern when harrassed with a spear gun. The depth range is between about 3 and 60 m, although it appears to be most common between about 5 and 30 m. The diet consists mainly of gastropod molluscs, ophiuroids, and echinoids. Items of lesser importance include pagurid and brachyuran crabs, polychaetes, tunicates, and holothurians.

**Size:** Maximum total length about 60 cm; common to 40 cm.

**Interest to Fisheries:** Frequently found in markets. Caught mainly with gillnets, traps, spears, and handlines. Average quality flesh that is marketed mostly fresh. In the Marshall Islands, this species was found sometimes to be ciguatoxic.

**Local Names:** AUSTRALIA: Humnose bigeye-bream; INDONESIA: Levovangan (Simalur); JAPAN: Yokoshima-kurodai; LACCADIVE ISLANDS: Dathi, Pallan; MALAYSIA: Ikan gigi oran; NEW CALEDONIA: Brème aux gros yeux; PAKISTAN: Tailgi; PAPUA NEW GUINEA: Budia (Port Moresby); PHILIPPINES: Dapak, Gapas-gapas, Malaking-mata; SOUTH AFRICA: Bigeye barenose; SRI LANKA: Angana; TAHITI: Mu; USA: Hawaii: Mu, Mamamu.

**Literature:** Sato in Fischer & Bianchi (eds.) (1984); Sato (1986); Allen & Swainston (1988)

**Wattsia** Chan & Chilvers, 1974

Fig. 159, Plate VIII, 50

**LETH Watt**

**Genus:** *Wattsia* Chan & Chilvers, 1974:85. Type-species *Gnathodentex mossambicus* Smith, 1957, by original designation.

**Synonyms:** None

A single species in the genus - see *Wattsia mossambica*

***Wattsia mossambica*** (Smith, 1957)

Fig. 159, Plate VIII, 50

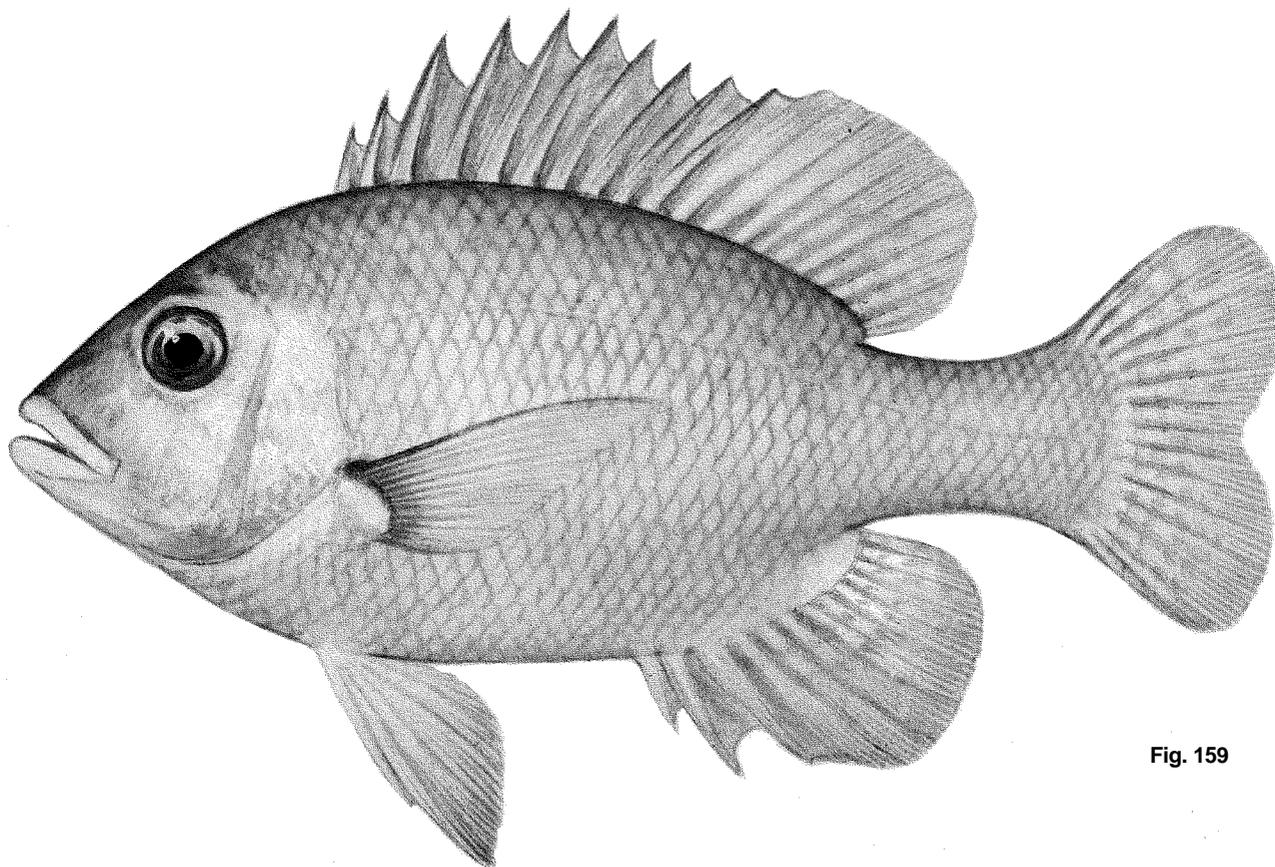
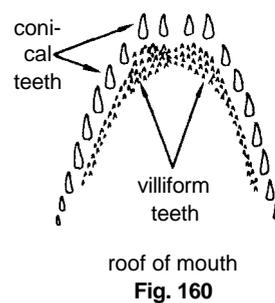
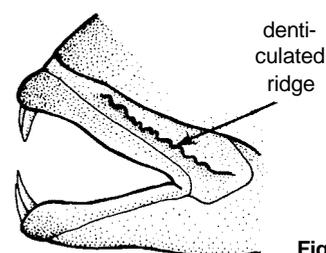
**LETH Watt 1***Gnathodentex mossambicus* Smith, 1957, *Ann. Mag. Nat. Hist.*, Ser. XII, 10 (110): 121-124 (Mozambique).**Synonyms:** None**FAO Names:** En - Mozambique large-eye bream.

Fig. 159

**Diagnostic Features:** Body relatively deep, roughly rhomboid, its depth 1.9 to 2.2 times in standard length. Head profile slightly convex; eye moderate in size, its diameter much shorter than snout length; jaw teeth in a narrow, villiform band bordered by an outer series of conical teeth; anteriorly 4 moderate-sized canines in upper jaw and 6 in lower jaw; maxilla with a longitudinal denticulated ridge; a pair of close-set nasal openings, the posterior one slit-like, ending close to eye. Dorsal fin with 10 long, strong spines and 10 soft rays; first spine about 2/3 the length of the second, the second spine slightly longer than eye diameter, the fourth to sixth spines longest; anal fin with 3 strong spines and 10 soft rays; third spine twice as long as eye diameter; anal fin base 1.4 to 1.6 times longer than longest anal fin ray; caudal fin slightly forked with broadly rounded lobes. Lateral-line scales 41 to 47; 5 scale rows between lateral line and base of middle dorsal fin spines; inner surface of pectoral fin axil scaleless. **Colour:** overall silvery-grey with yellowish suffusion; scale margins narrowly brownish; indistinct dark blotches or bars sometimes apparent on body; lips whitish to yellow; fins yellow, faint brown spotting may be present on soft dorsal, anal, and caudal; a narrow blackish bar across base of pectoral fin.

roof of mouth  
Fig. 160denti-  
culated  
ridge  
Fig. 161

**Geographical Distribution:** Tropical Indian Ocean and western Pacific. It is known only from a few scattered localities including Mozambique, Malay Peninsula, New Guinea, southern China, and Japan (Fig. 162).

**Habitat and Biology:** Inhabits the outer edge of the continental shelf at depths between 100 and 180 m. It feeds on bottom-living invertebrates and small fishes.

**Size:** Maximum total length about 55 cm; common to 35 cm.

**Interest to Fisheries:** Occasionally seen in markets, mainly fresh. Caught mainly with bottom longlines and bottom trawls.

**Local Names:** JAPAN: Koke-nokogiri.

**Literature:** Sato in Fischer & Bianchi (eds.) (1984), Masuda *et al.* (1984); Smith & Heemstra (eds.) (1986); Sato (1986).

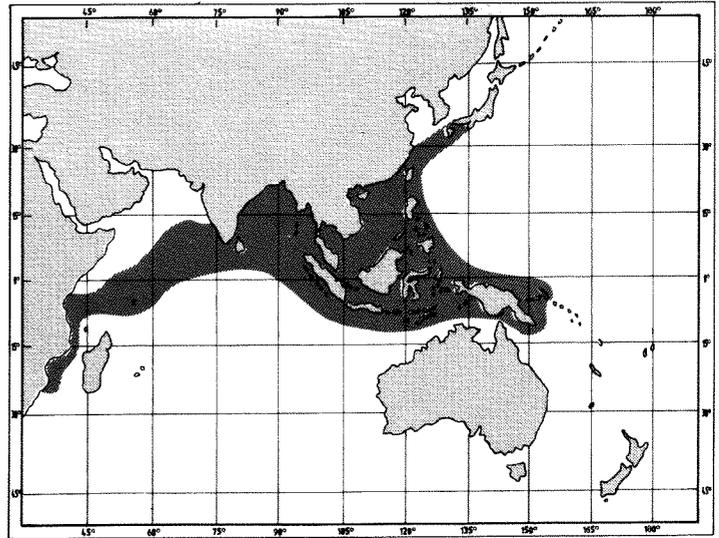


Fig. 162