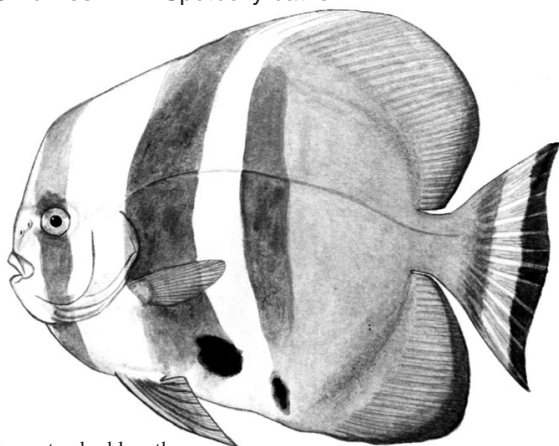


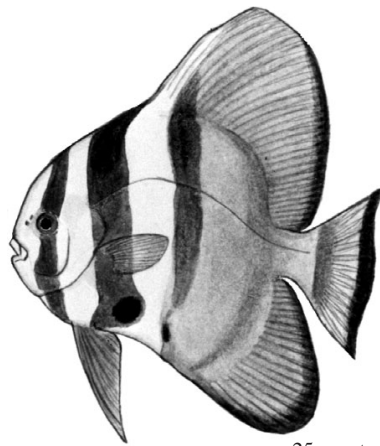
Platax teira (Forsskål, 1775)

Frequent synonyms / misidentifications: None / *Platax orbicularis* (non Forsskål, 1775).

FAO names: En - Spotbelly batfish.

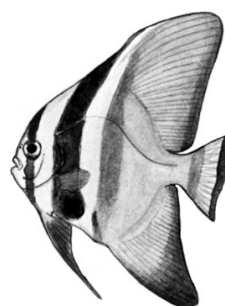
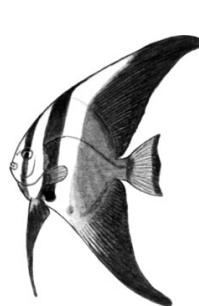


34 cm standard length



25 cm standard length

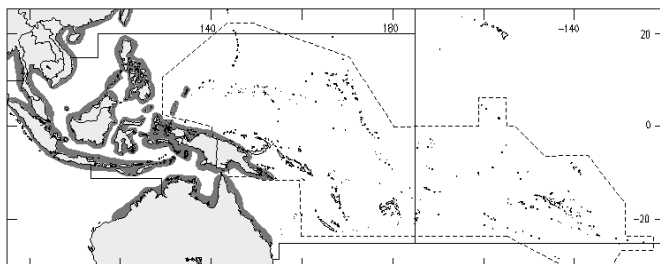
Diagnostic characters: Body orbicular and strongly compressed, its depth more than twice length of head and 0.9 to 1.2 times in standard length. Head length 2.7 to 3.5 times in standard length. Large adults (above 35 cm standard length) with bony hump from top of head to interorbital region, the front head profile almost vertical; interorbital width 42 to 50% head length. Jaws with bands of slender, flattened, tricuspid teeth, the middle cusp slightly longer than lateral cusps; vomer with a few teeth, but none on palatines. Five pores on each side of lower jaw. Preopercle smooth; opercle without spines. **Dorsal fin single, with V or VI spines and 29 to 34 soft rays, the spines hidden in front margin of fin, the last spine longest; anal fin with III spines and 21 to 26 soft rays;** juveniles with pelvic fins and anterior soft rays of dorsal and anal fins elongated, but pelvic fins not reaching much past vertical at rear end of anal-fin base; pectoral fins shorter than head, with 16 to 18 rays; caudal fin truncate. Scales small and rough. Lateral line complete, with 56 to 66 scales. **Colour:** yellowish silvery or dusky, with a black (or dusky) bar through eye and another **dark bar from dorsal-fin origin across rear edge of operculum and pectoral-fin base to belly, where it usually encloses a black blotch, with another smaller black vertical streak often present at origin of anal fin;** median fins dusky yellow, with black margins posteriorly; pelvic fins yellow, dusky yellow or blackish.

20 cm
standard length12 cm
standard length9.4 cm
standard length

Size: Maximum total length 65 cm.

Habitat, biology, and fisheries: Juveniles and adults occur inshore on protected reefs and in mangrove areas and also on wrecks and deep reefs to 70 m; they may be solitary, in pairs, or in large schools. Feeds on algae, zooplankton, and benthic invertebrates. Caught with hook-and-line, palisade traps, spear, trawls, and hand nets. Like most spadefishes, this species is unafraid of divers. Flesh excellent, or rank, with a weedy flavour. The long-finned juveniles are valuable in the aquarium fish trade.

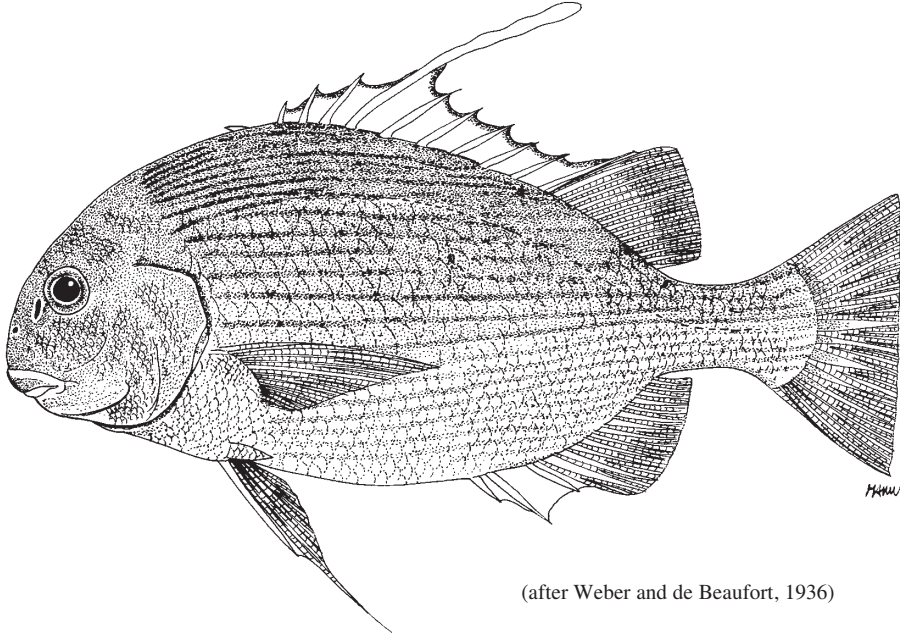
Distribution: Tropical and subtropical waters of the Indo-West Pacific region from the Red Sea to South Africa, Japan (Hokkaido), Taiwan Province of China, Philippines, Indonesia, New Guinea, northern Australia, and Melanesia.



***Proteracanthus sarissophorus* (Cantor, 1850)**

Frequent synonyms / misidentifications: None / None.

FAO names: En - Harpoon spadefish.



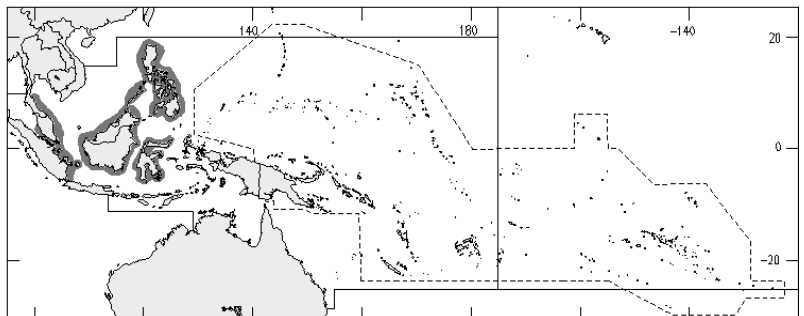
(after Weber and de Beaufort, 1936)

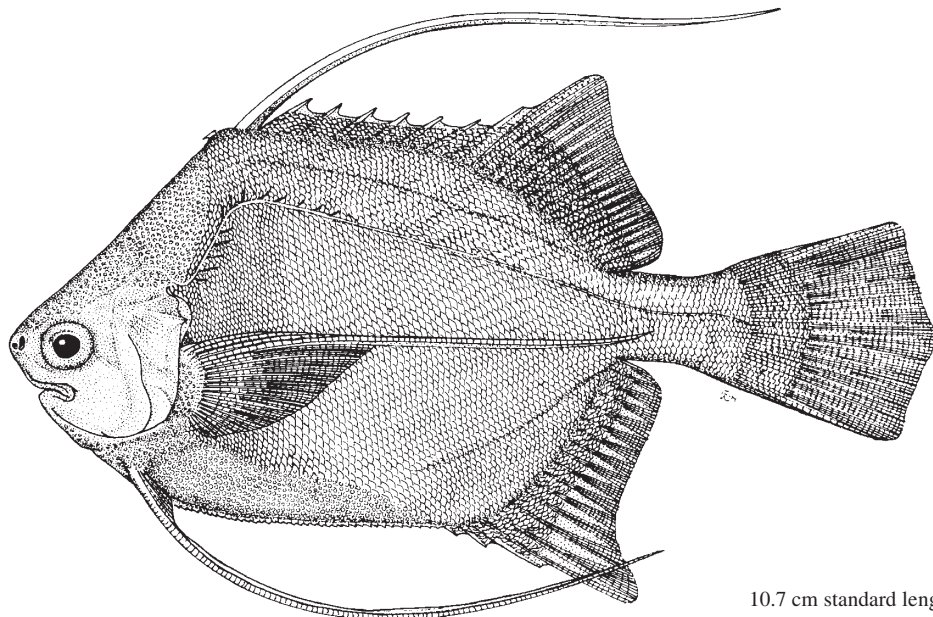
Diagnostic characters: Body oblong and compressed, its depth 1.9 to 2.1 times in standard length. Head length 3.4 to 3.7 times in standard length; dorsal head profile evenly curved from snout to dorsal-fin origin. Mouth subterminal, the upper jaw not protrusible, projecting somewhat in front of lower jaw; jaws with bands of slender, flattened, tricuspid teeth, the middle cusp slightly longer than lateral cusps; no teeth on vomer or palatines. Five pores on each side of lower jaw. Preopercle smooth except for a few weak, skin-covered serrae at the angle; opercle ending in 2 blunt points. Branchiostegal membranes broadly joined to isthmus; first gill opening constricted; hypobranchial connected to quadrate by skin. **Dorsal fin single, with X spines and 14 to 16 soft rays, the fourth spine greatly elongated, thickened, and irregularly swollen; tip of third supraneural bone exposed as a “procumbent dorsal spine” at front of dorsal fin; anal fin with III spines and 13 to 15 soft rays;** pectoral fins slightly shorter than head, with 19 rays; pelvic fins with I spine and 5 branched rays, the first ray elongate, extending to anal-fin origin; caudal fin truncate, with 8 branched rays in dorsal portion and 7 in ventral portion. Scales ctenoid, small above lateral line and distinctly larger below; head mostly covered with scales; interorbital area, front of snout, lips, and lower jaw with minute villi. Lateral line complete, with 60 to 63 scales. **Colour:** greenish brown dorsally, paler on flanks, silvery below, the scales dark edged, forming dark longitudinal lines.

Size: Maximum total length 35 cm.

Habitat, biology, and fisheries: Coastal waters and estuaries. Apparently rare; no information available on the biology or fisheries of this species. Probably caught with gill nets and hook-and-line.

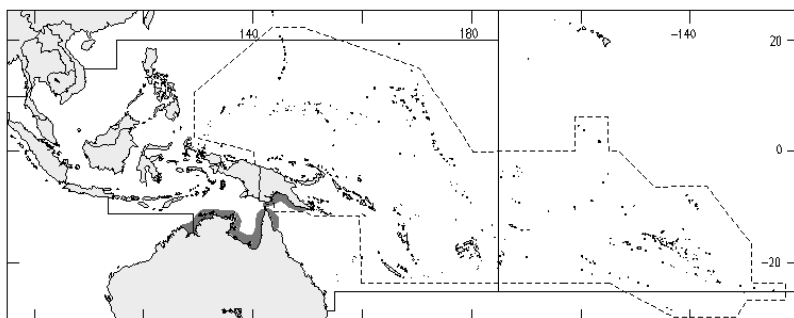
Distribution: Known only from Indonesia, Borneo (Sarawak), Philippines, and the Malay Peninsula.



Rhinoprenes pentanemus* Munro, 1964*Frequent synonyms / misidentifications:** None / None.**FAO names:** En - Threadfin spadefish.

10.7 cm standard length

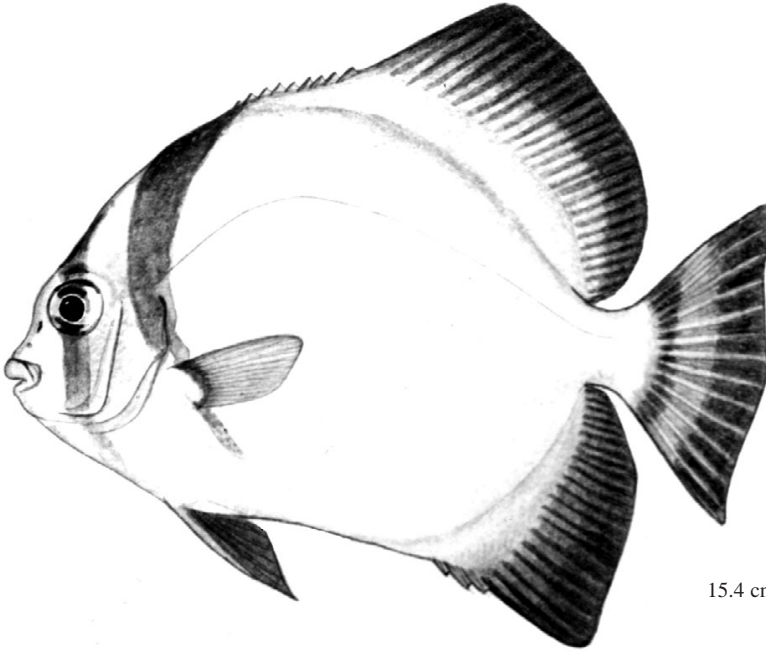
Diagnostic characters: Body oblong and strongly compressed, its depth 1.6 to 1.8 times in standard length. Head length 3.6 to 4.3 times in standard length; dorsal head profile concave in front of dorsal fin. Mouth subterminal, the upper jaw not protrusible, projecting somewhat in front of lower jaw; upper jaw with band of slender, setiform teeth; lower jaw teeth tricuspid; no teeth on vomer or palatines. Preopercle smooth, the edge covered by skin; opercle without spines. Branchiostegal membranes broadly joined to isthmus. **Dorsal fin single, with VIII spines and 19 or 20 soft rays, the first spine greatly elongated, extending past caudal-fin base; tip of first dorsal-fin pterygiophore exposed as a T-shaped “pro-cumbent dorsal spine” at front of dorsal fin; anal fin with III spines and 16 to 18 soft rays; pectoral fins with 19 or 20 rays, the upper 4 rays unbranched, and the fourth greatly elongated, reaching past base of anal fin; pelvic fins with I spine and 5 soft rays, the first ray elongate, extending to caudal fin, the other 4 rays rudimentary, the fin inserted well forward on chest (below preopercle); caudal fin wedge-shaped, with 8 branched rays in dorsal portion and 7 in ventral portion.** Scales small and adherent, becoming elongate and more numerous on chest, and hard and spiny along ventral midline of belly. Lateral line complete, with 46 to 50 scales. **Colour:** pinkish grey, darker dorsally; scales and fins speckled with minute melanophores; fins, including first dorsal-fin spine blackish.

Size: Maximum total length 15 cm.**Habitat, biology, and fisheries:** Shallow soft-bottom habitats in coastal waters and estuaries. Caught with trawls; apparently rare. No information available on the biology or fisheries of this species.**Distribution:** Known only from the north coast of Australia and the Gulf of Papua.

Zabidius novemaculeatus (McCulloch, 1916)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Ninespined batfish.



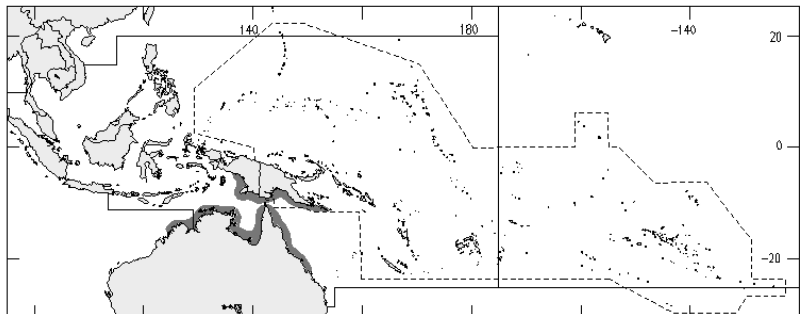
15.4 cm total length

Diagnostic characters: Body orbicular and strongly compressed, its depth more than twice head length and 1.2 to 1.4 times in standard length. Head length 3.1 to 3.6 times in standard length; head profile of adults with a slight bump between the eyes. Snout, preopercle flange, and lower jaw naked, rest of head scaly. Jaws with 2 to 4 rows of flattened, tricuspid teeth; small patch of teeth on vomer; palatines toothless. Five pores on each side of lower jaw. Preopercle with a few rudimentary serrae along its rounded angle; opercle with a flat spine, and a rounded bone on its upper portion. **Dorsal fin single, with IX spines and 27 to 29 soft rays, the anterior spines exposed, the last spine longest but only about 1/2 length of longest rays; soft dorsal fin rounded, with fourth to seventh rays longest; anal fin with III spines and 20 to 22 soft rays;** pectoral fins shorter than head, with 19 to 21 rays; pelvic fins with I spine and 5 soft rays; caudal fin truncate. Scales small and rough, extending over most of dorsal, anal, and caudal fins. Lateral line complete, with 46 to 48 scales. **Colour:** silvery, with faint dark horizontal lines between scale rows; brown band from top of head through eye to chest (fading with growth); another, less distinct, curved, dark band from nape across operculum and pectoral-fin base to belly; median fins dusky or pale with dark margins.

Size: Maximum total length 48 cm.

Habitat, biology, and fisheries: Usually found in shallow water on soft (sandy or muddy) bottom. Caught with trawls, spear, and hook-and-line. Good eating. No information available on the biology or fisheries of the ninespined batfish, but it is reported to be abundant in the Gulf of Carpentaria.

Distribution: North coast of Australia and south coast of New Guinea.

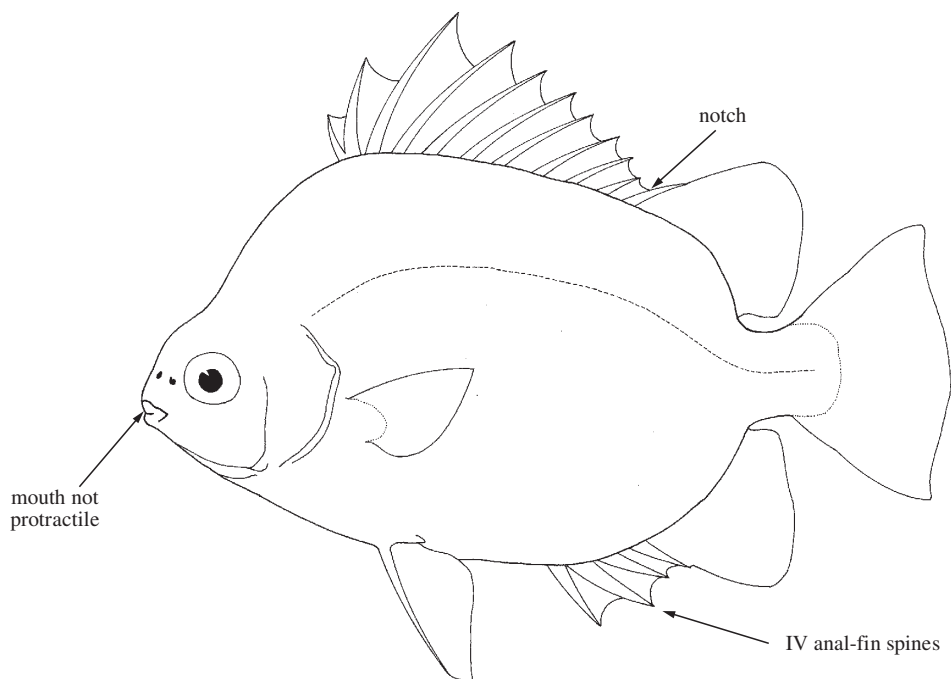


SCATOPHAGIDAE

Scats

by M. Kottelat

Diagnostic characters: Body quadrangular, strongly compressed (size to about 32 cm). Dorsal head profile steep. Eye moderately large, its diameter somewhat smaller than snout length. Snout rounded. **Mouth small, horizontal, not protractile.** Teeth villiform, in several rows on jaws. Dorsal fin with XI or XII spines and 16 to 18 soft rays; **first dorsal-fin spine procumbent; a deep notch between spinous and soft parts of dorsal fin.** Anal fin with IV spines and 13 to 16 soft rays. Caudal fin from rounded (in juveniles) to truncate or slightly emarginate. Pectoral fins with 16 or 17 rays. Pelvic fins with I spine and 5 soft rays. Head, body, caudal fin, and soft parts of anal and dorsal fins covered with small ctenoid scales. **Colour:** body greenish or silvery with black spots or bars; juveniles and adults of the same species may have very different colour patterns.



Habitat, biology, and fisheries: Occur in estuaries, harbours, and lower reaches of fresh-water streams, especially those with high mineral concentrations. Juveniles go through a pelagic “tholichthys” larval stage. Minor commercial importance, occasionally sold fresh in local markets. Considered of poor taste in some areas, esteemed in others. From 1990 to 1995, the FAO Yearbook of Fishery Statistics reports a range of yearly catch of around 1 290 to 4 610 t of *Scatophagus* spp. from the area (Philippines only).

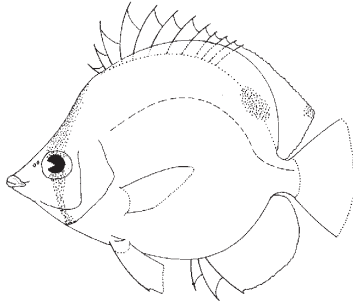
Remarks: A single species of the genus *Scatophagus* is presently recognized in the area, *S. argus*. However, possibly more than a single species are involved: juvenile specimens (about 1 to 3 cm standard length) from the Philippines, Sabah, Malukku, and Australia have 5 or 6 broad vertical bars, and larger individuals show small spots more or less arranged in vertical rows and still with faint indications of the bars. On the other hand, juveniles from Java, Singapore, Viet Nam, and possibly Sri Lanka have few large blotches, these become proportionally smaller and more numerous with age, but at similar size are always larger than those of the previous form. At this stage, both the systematic and nomenclatural problems remain unsolved.

Similar families occurring in the area

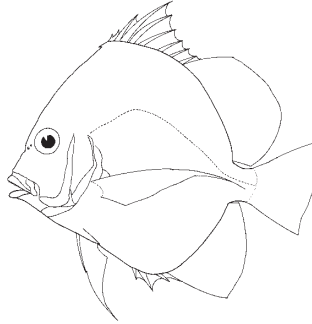
Chaetodontidae: no deep notch between spinous and soft-rayed parts of dorsal fin; mouth protractile.

Pomacanthidae: preopercle with a long, backward pointed spine; no deep notch between spinous and soft-rayed parts of dorsal fin; mouth protractile; anal fin with III spines.

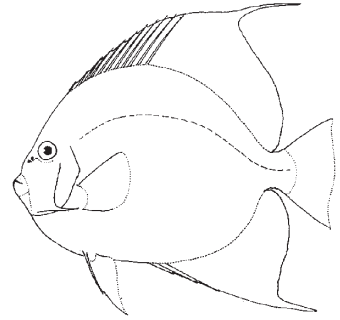
Drepanidae: anal fin with III spines; mouth protractile; pectoral fins elongate.



Chaetodontidae



Drepanidae

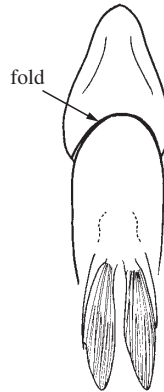


Pomacanthidae

Key to the species of Scatophagidae occurring in the area

1a. Dorsal-fin spines XI; gill membrane forming a free fold across isthmus (Fig. 1a); specimens above about 4 cm standard length with dark spots; juveniles may have a barred colour pattern; posterior margin of soft portions of dorsal and anal fins more or less vertical. *Scatophagus argus*

1b. Dorsal-fin spines XII; gill membrane not forming a free fold across isthmus (Fig. 1b); specimens of all sizes with dark bars; in specimens above 4 cm standard length, bars restricted to dorsal half of flanks, while ventral half is spotted; posterior margin of soft portions of dorsal and anal fins oblique *Selenotoca multifasciata*




a) *Scatophagus argus*




b) *Selenotoca multifasciata*

Fig. 1 ventral view

List of species occurring in the area

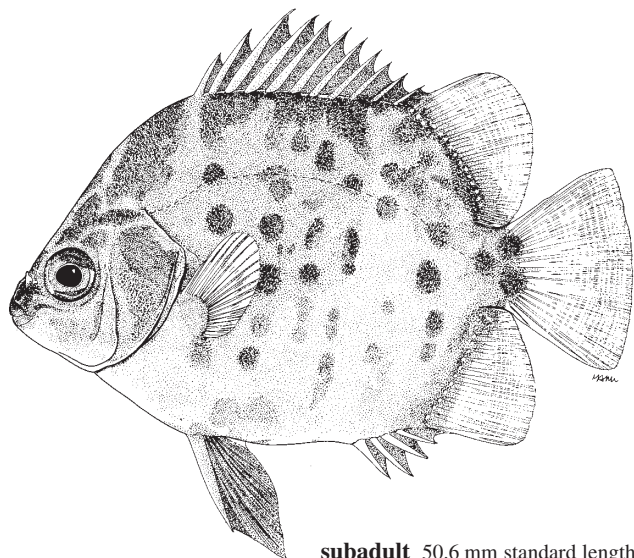
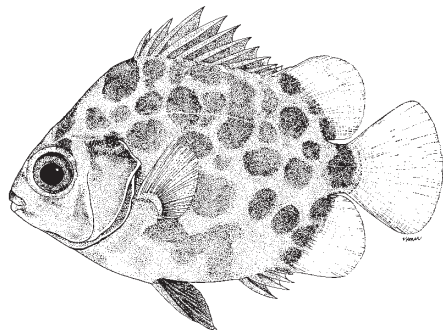
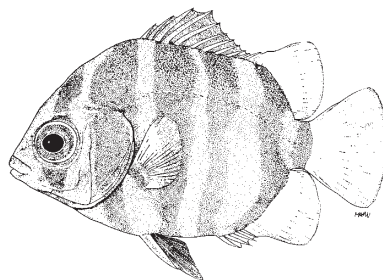
The symbol  is given when species accounts are included.

 *Scatophagus argus* (Bloch, 1788)

 *Selenotoca multifasciata* (Richardson, 1844)

Reference

Myers, G.S. 1936. On the Indo-Australian fishes of the genus *Scatophagus*, with description of a new genus, *Selenotoca*. *Proc. Biol. Soc. Wash.*, 49:83-85.

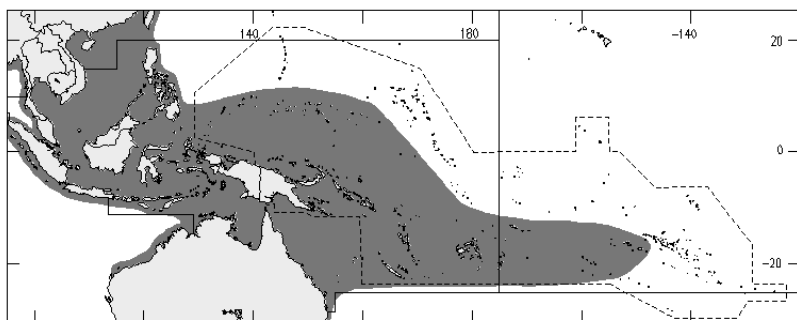
Scatophagus argus (Bloch, 1788)**Frequent synonyms / misidentifications:** None / None.**FAO names:** En - Spotted scat; Fr - Scatophage tacheté; Sp - Pingo manchado.**subadult** 50.6 mm standard length**juvenile** 30.2 mm standard length (Java)
(after Kottelat et al., 1993)**juvenile** 17.1 mm standard length (Philippines)

Diagnostic characters: Body quadrangular, strongly compressed. Dorsal head profile steep. Eye moderately large, its diameter somewhat smaller than snout length. Snout rounded. **Mouth small, horizontal, not protractile.** Teeth villiform, in several rows on jaws. **Dorsal fin with XI spines and 16 to 18 soft rays; first dorsal-fin spine procumbent; a deep notch between spinous and soft parts of dorsal fin. Anal fin with IV spines and 14 or 15 soft rays.** Caudal fin from rounded (in juveniles) to truncate or slightly emarginate. Pectoral fins with 16 rays. Pelvic fins with 1 spine and 5 soft rays. Head, body, caudal fin, and soft parts of anal and dorsal fins covered with small ctenoid scales. **Colour:** ground colour greenish; juveniles with a few large roundish blotches, about size of eye, or with about 5 or 6 broad, dark, vertical bars; **specimens above about 4 cm standard length with black spots, usually smaller than eye, more or less arranged in vertical rows;** in large adults, spots may be faint and restricted to dorsal part of flanks.

Size: Maximum standard length about 30 cm; total length to about 35 cm.

Habitat, biology, and fisheries: Occur in estuaries, harbours, and lower reaches of fresh-water streams, especially those with high mineral concentrations. Juveniles go through a pelagic "tholichthys" larval stage. Minor commercial importance, occasionally sold fresh in local markets. Considered of poor taste in some areas, esteemed in others. Juveniles are collected for the aquarium fish trade.

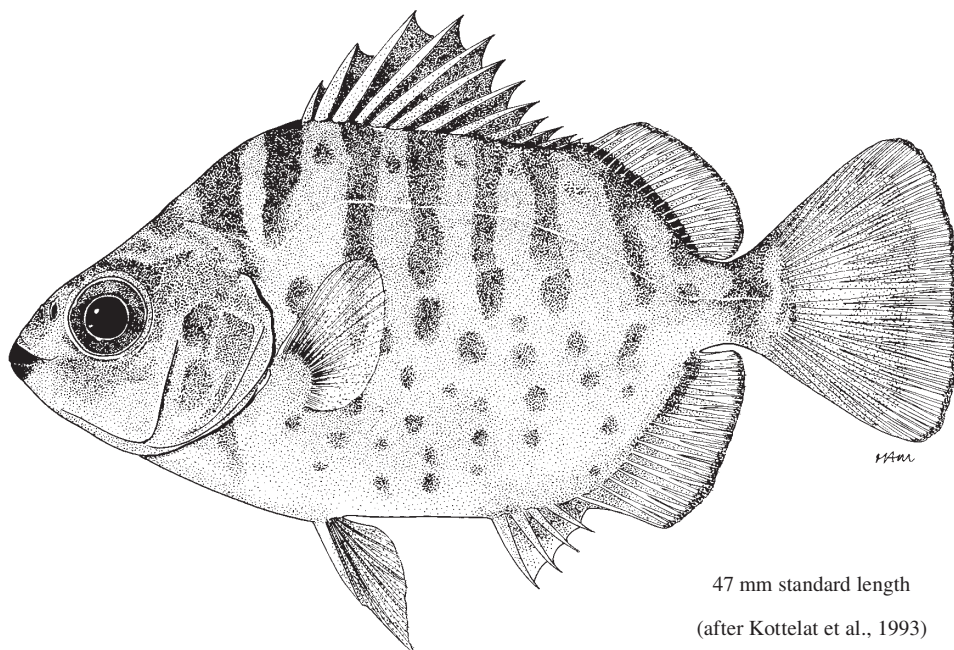
Distribution: Indo-West Pacific, from southern India and Sri Lanka to southern Japan and Tahiti.



Selenotoca multifasciata (Richardson, 1844)

Frequent synonyms / misidentifications: *Selenotoca papuensis* Fraser-Brunner, 1938 / *Scatophagus tetracanthus* (Lacepède, 1802).

FAO names: En - Barred scat.



47 mm standard length

(after Kottelat et al., 1993)

Diagnostic characters: Body quadrangular, strongly compressed. Dorsal head profile steep. Eye moderately large, its diameter somewhat smaller than snout length. Snout rounded. **Mouth small, horizontal, not protractile.** Teeth villiform, in several rows on jaws. **Dorsal fin with XII spines** and 16 soft rays; **first dorsal-fin spine procumbent; a deep notch between spinous and soft parts of dorsal fin.** **Anal fin with IV spines** and 15 or 16 soft rays. Caudal fin from rounded (in juveniles) to truncate. Pectoral fins with 17 rays. Pelvic fins with I spine and 5 soft rays. Head, body, caudal fin, and soft parts of anal and dorsal fins covered with small ctenoid scales. **Colour:** ground colour greenish or silvery; juveniles with about 6 few broad, dark, vertical bars; **specimens above about 4 cm standard length with 7 to 12 narrow dark vertical bars on dorsal half of flanks and with spots, usually smaller than eye, more or less arranged in vertical rows in ventral half;** lips black; posterior edge of caudal fin and soft portions of anal and dorsal fins with a narrow black margin which disappear in specimens larger than about 6 cm standard length.

Size: Maximum standard length about 32 cm; total length to 40 cm.

Habitat, biology, and fisheries: Occur in estuaries and river entrances. Minor commercial importance, occasionally sold fresh in local markets. Juveniles are collected for the aquarium fish trade.

Distribution: West Pacific, from Sulawesi to New South Wales, Australia.

