

NEW RECORDS OF FISHES FROM THE SEAS AROUND INDIA —
PART II

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THE present account forms the second part of the series (Part I appeared in Vol. 6(2), 1964 of the same Journal) giving information on the new records of fishes from the seas around India, and is based on the material collected from the Laccadive Archipelago. For localities of collection reference is invited to Fig. 28 in Part I. 18 species of fishes belonging to 9 families not hitherto recorded from the Central Indian Ocean are briefly described and figured here.

Family: BELONIDAE

1. *Belone platyura* Bennett (Fig. 1)

Belone platyura Bennett, 1831, *Proc. Comm. Zool. Soc. London*, Pt. 1: 168.

Belone (Eurycaulus) platyura Weber and de Beaufort, 1922, *Fishes Indo-Australian Archipelago*, 4: 118.

D.ii, 12-13; A.ii, 15-17; P.i, 10-11; V.i, 5. Ll.147-165; Ltr. 11-12+1+4.

Head 2.65-3 in standard length, 2.85-3.2 in total length. Depth of body 17.5-19.2 in standard length, 19-21 in total length. Eye 7-8 in snout, 1.6-1.8 in postorbital length of head, 3.4-4 in distance between origin of ventral and origin of anal and equal to or slightly more than interorbital space. Snout tip shorter than lower jaw by $\frac{3}{4}$ eye diameter. Postorbital length of head 2.2-2.4 in distance between origin of ventral and origin of anal. Caudal peduncle depressed, with a sharp lateral keel continued on middle rays of caudal above lateral line. Colour deep brown with greenish tinge on back and upper part of head, silvery white below, with a dark band along sides of body. Dorsal, anal and ventral yellowish hyaline, often slightly dusky distally.

Material: Agathi, 2 specimens, 305 and 308 mm.* Androth, 1 specimen, 282 mm. Bangaram, 1 specimen, 306 mm. Kalpeni, 2 specimens, 325 and 348 mm. Kavarathi, 2 specimens, 278 and 297 mm. Minicoy, 3 specimens, 321 to 340 mm. Suheli, 1 specimen, 337 mm.

Distribution: Previous record from Red Sea, Aldabra and Mauritius in the Western Indian Ocean and from Singapore to Indonesia, Marshall, Marianas, Samoa and Sandwich Islands in the Pacific. This species is fairly common in the Laccadive Islands.

* Unless otherwise stated, length mentioned is standard length.

2. *Strongylura incisa* (Cuvier and Valenciennes) (Fig. 2)

Belone incisa (Cuvier and Valenciennes,) 1846, *Hist. Nat. Poissons*, 18 : 451.
Tylosurus incisus Weber and de Beaufort, 1922, *Fishes Indo-Australian Archipelago*, 4 : 125.

D.ii, 17-18 ; A.ii, 20 ; P.i, 10-11 ; V.i, 5. Ll. 165-180 ; Ltr. 13-14+1+5-6.

Head 2.4-2.7 in standard length, 2.6-2.95 in total length. Depth of body 15-18.5 in standard length, 16.8-20.5 in total length. Breadth of body 1.3 in height. Eye 7.3-9 in snout, 2.4-2.7 in postorbital length of head, 4.2-5.3 in distance between origin of ventral and origin of anal and about 1.2 in interorbital space. Postorbital length of head 1.8-2.1 in distance between origin of ventral and origin of anal. Canines of upper jaw directed straight downward. Origin of ventral nearer to hind border of eye than to base of caudal. Lateral line along ventro-lateral edge of body and ending near caudal base without raised keel. Origin of dorsal above second branched ray of anal. Light brownish above, lighter below with a dark longitudinal lateral band. Fins pale yellowish, base of pectoral slightly dark.

Material : Agathi, 3 specimens, 296 to 339 mm. Bangaram, 1 specimen, 437 mm. Kavarathi, 1 specimen, 345 mm. Minicoy, 12 specimens, 55 to 199 mm.

Distribution : Singapore and Indonesia to the Philippines, Marianas, Marshall, Admiralty Islands, New Guinea and Samoa. The type specimen is from Indian Ocean but locality not known.

Family: HEMIRAMPHIDAE

3. *Hyporhamphus balinensis* (Bleeker) (Fig. 3)

Hemiramphus balinensis Bleeker, 1858-59, *Nat. Tijds. Ned.-Ind.*, 17 : 170.
Hemiramphus balinensis Weber and de Beaufort, 1922, *Fishes Indo-Australian Archipelago*, 4 : 152.
Hyporhamphus balinensis Smith, 1949, *Fishes of Southern Africa* : 128.

D.ii, 14 ; A.ii, 16 ; P.i, 10 ; V.i, 5. Ll. 59 ; Ltr. $6\frac{1}{2}+1+2\frac{1}{2}$. Predorsal scales 40.

Entire head 2.75 in standard length, 3.1 in total length. Depth of body about 12 in standard length, 13.8 in total length. Body compressed, breadth of body 1.2 in height. Head from tip of upper jaw to hind margin of opercular flap 3.4 in trunk. Length of lower jaw beyond tip of upper jaw 5 in standard length, 5.8 in total length. Eye 4.1 in head from tip of upper jaw to branchial opening, 1.6 in postorbital length of head and equal to interorbital space. Upper jaw broader than long, preorbital equal to eye diameter. Teeth in 3-4 bands in jaws. Origin of anal opposite to 2nd undivided ray of dorsal. Distance between origin of ventral and anal $\frac{1}{2}$ preorbital length shorter than distance between angle of jaws and gill opening. Pectoral about $\frac{1}{2}$ eye diameter longer than postorbital length of head. Ventral $\frac{3}{5}$ of pectoral, its origin midway between pectoral base and caudal base. Caudal deeply forked, median rays equal to eye diameter. Colour brownish above, pale yellowish below, each scale of back with a dark brown spot posteriorly. A bluish silvery lateral band bordered by blackish above. Dorsal dusky, distal part

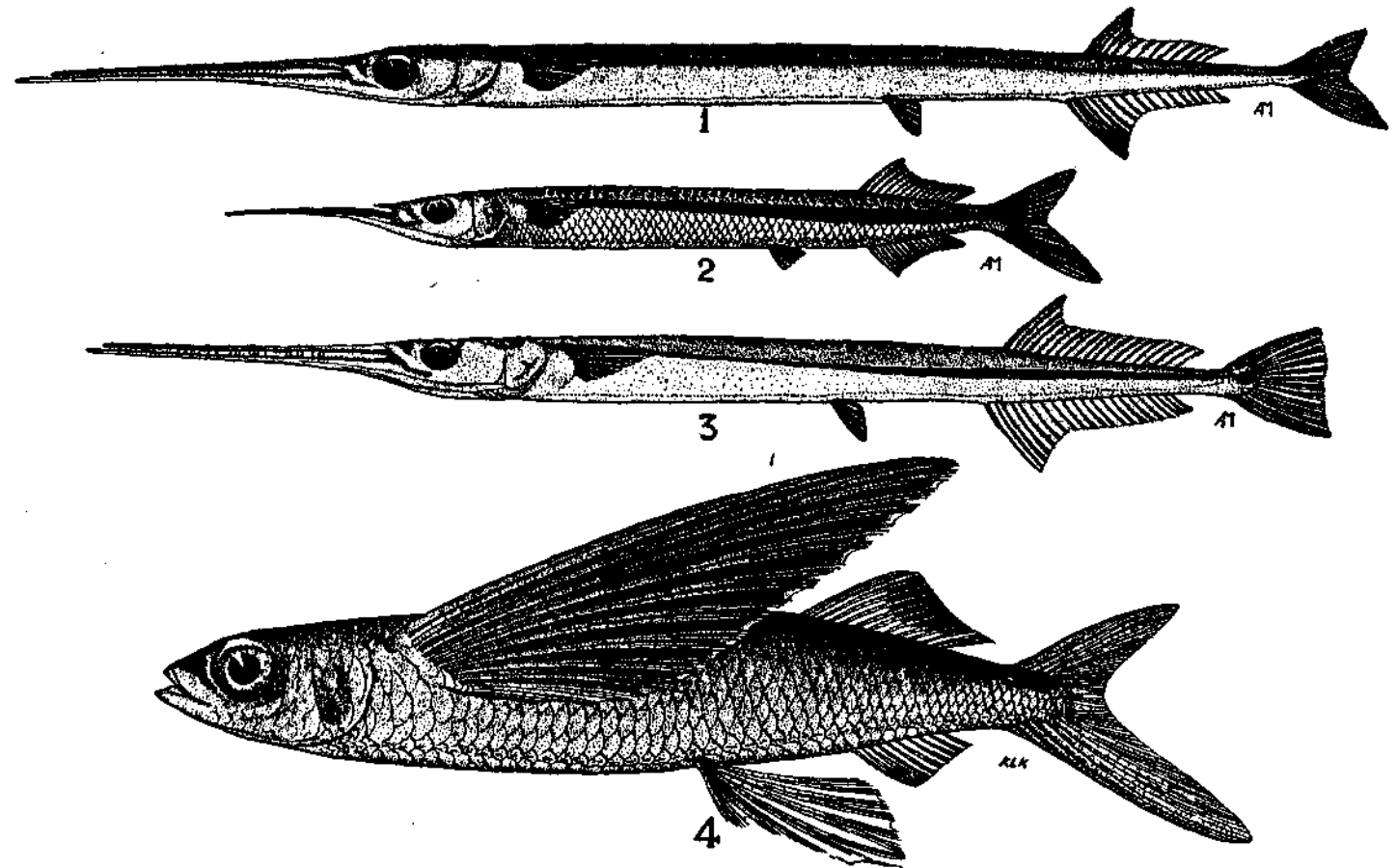


FIG. 1. *Belone platyura* Bennett, 348 mm. FIG. 2. *Strongylura incisa* (Cuvier and Valenciennes), 314 mm.
FIG. 3. *Hyporhamphus ballnensis* (Bleeker), 214 mm. FIG. 4. *Cypselurus cyanopterus* (Cuvier and Valenciennes), 235 mm.

of anterior rays of dorsal darker, caudal dusky. Pectoral and anal hyaline. Ventral hyaline, anterior rays slightly dusky basally.

Material : Ameni, 1 specimen, 214 mm.

Distribution : Previously known only from Natal coast of Africa, Indonesia, Philippines and Ellice Islands.

Family : EXOCOETIDAE

4. *Cypselurus cyanopterus* (Cuvier and Valenciennes) (Fig. 4)

ERRATA

- p. 110. Figure numbers 2 and 3 to be interchanged.
 p. 113. Legend to figure to read as Fig. 8. Upeneus
sundaicus (Bleeker), 108 mm.
 p. 114. Legend to figure to read as Fig. 7. Upeneus arge
 Jordan and Evermann, 139 mm.

base of caudal. Distance between origin of ventral and origin of anal about $\frac{1}{2}$ eye diameter shorter than head. Colour blackish above, silvery white below. Dorsal with a bluish black blotch generally between 3rd and 10th ray. Pectoral bluish black, more so in posterior third, lower and posterior border narrowly edged with white. Ventral transparent, first ray often slightly dusky, in one specimen tips of median rays dusky. Caudal lobes dusky, anal hyaline.

Material : Chetlat, 1 specimen, 235 mm. Kadamat, 2 specimens, 230 and 238 mm. Kalpeni, 1 specimen, 228 mm. Kavarathi, 1 specimen, 242 mm.

Distribution : Widespread in the tropical Atlantic, but it has not been recorded from the Indian Ocean probably because it has been confused with *Cypselurus ballensis*=*C. comatus*.

5. *Cypselurus oligolepis* (Bleeker) (Fig. 5)

Exocoetus oligolepis Bleeker, 1866, *Ned. Tijds. Dierk.*, 3 : 109.

Cypsilurus oligolepis Weber and de Beaufort, 1922, *Fishes Indo-Australian Archipelago*, 4 : 189.

D. 12-13 ; A. 8-9 ; P.I, 13 ; V. 6. Ll. 43-46 ; Ltr. $8\frac{1}{2}+1+2\frac{1}{2}$. Predorsal scales 23-26 ; Gill rakers 5-6+16-17.

Head 3.8-4.2 in standard length, 5.2-5.6 in total length. Depth of body 4.6-4.9 in standard length, 6.1-6.5 in total length. Breadth of body 1.4-1.5 in its height.

Eye 2.6-2.8 in head, 0.5-0.6 in snout and 1.2-1.3 in somewhat concave interorbital space. 2 or 3 rows of small tricuspid teeth in jaws and an elongate patch of teeth on palatines. Origin of anal below 6th or 7th dorsal ray. Pectoral reaching to posterior third of dorsal. Ventral longer than head, reaching to middle of anal, its origin midway between hind border of eye and base of caudal. Colour bluish brown above, silvery below. Pectoral blackish, tip of fin and 4-5 lower rays hyaline. Caudal little dusky. Dorsal hyaline, anterior 2 rays often slightly dusky. Ventral and anal transparent.

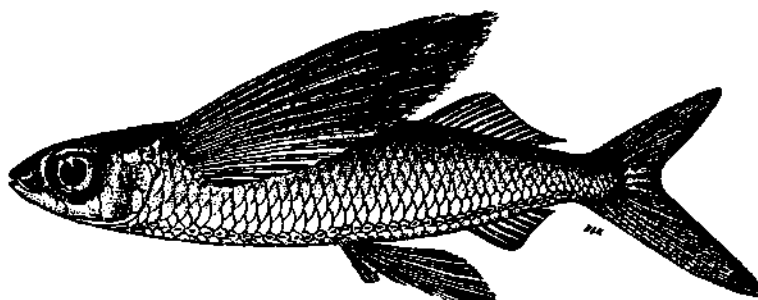


FIG. 5. *Cypselurus oligolepis* (Bleeker), 136 mm.

Material : Androth, 2 specimens, 147 and 151 mm. Chetlat, 1 specimen, 136 mm. Kadamat, 2 specimens, 132 and 137 mm.

Distribution : Muscat and Zanzibar in the Western Indian Ocean, Singapore, Indonesia, Philippines, China, New Guinea, Solomons, and beyond to Tahiti in the Pacific.

6. *Hirundichthys oxycephalus* (Bleeker) (Fig. 6)

Exocoetus oxycephalus Bleeker, 1852, *Nat. Tijds. Ned.-Ind.*, 3 : 771.

Cypsilurus oxycephalus Weber and de Beaufort, 1922, *Fishes Indo-Australian Archipelago*, 4 : 181.

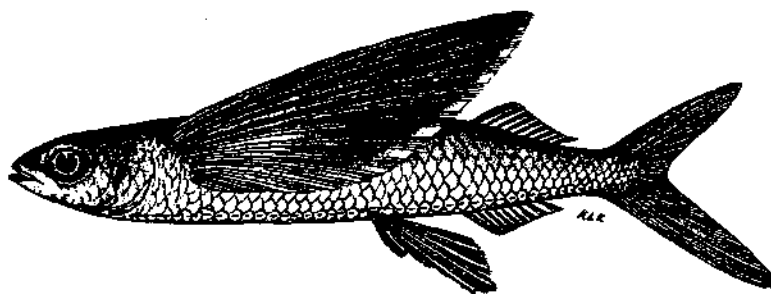


FIG. 6. *Hirundichthys oxycephalus* (Bleeker), 161 mm.

D. 10-11 ; A. 10-11 ; P. i, 15 ; V. 6. Ll. 49-51 ; Ltr. $7\frac{1}{2}+1+2\frac{1}{2}$. Predorsal scales

32-33 ; Gill rakers 7+20-21.

Head 4.1-4.2 in standard length, 5.3-5.4 in total length. Depth of body 5.2-5.3 in standard length, 6.7-6.8 in total length. Breadth of body about 1.3 in its height. Eye 3-3.2 in head, 0.7 in snout and about 1.3 in interorbital space. Teeth small, in a single series in jaws, palatines edentulous. Origin of anal opposite to that of dorsal. Anal base 1.1-1.2 in base of dorsal. Ventral more or less than length of head, reaching to middle of base of anal or farther, and inserted midway between gill opening and base of caudal or a little nearer to the former. Colour brownish above, pale or whitish below. Pectoral dark with a narrow hyaline hind border and an oblique lighter area on lower third of fin. Caudal dusky. Other fins hyaline ; proximal part of anterior 3-4 rays of ventral slightly dusky.

Material : Androth, 1 specimen, 132 mm. Kiltan, 1 specimen, 161 mm.

Distribution : Previously reported only from Indonesia, Torres straits and Solomon Islands. This appears to be the first record west of Indonesia.

Family : MULLIDAE

7. *Upeneus arge* Jordan and Evermann (Fig. 7)

Upeneus arge Jordan and Evermann, 1903, *Bull. U.S. Fish Comm.*, 22 : 187 ; Lachner, 1954, *Proc. U.S. Nat. Mus.*, 103 : 518, Pl. 14, Fig. A ; Smith and Smith, 1963, *Fishes of Seychelles* : 22, Pl. 88, G.

D₁. VIII ; D₂. i, 8 ; A. I, i, 6 ; P. 13-14 ; V.I, 5. Ll. 38-39 ; Ltr. 2½+1+7. Gill rakers 5-6+1+14-16.

Head 3.6-4.1 in standard length, 4.8-5.2 in total length. Depth of body 4.1-4.4 in standard length, 5.3-5.6 in total length. Eye 4.5-5 in head, 1.7-2 in snout and 1.4-1.5 in nearly flat interorbital space. Maxillary reaching to below anterior third of

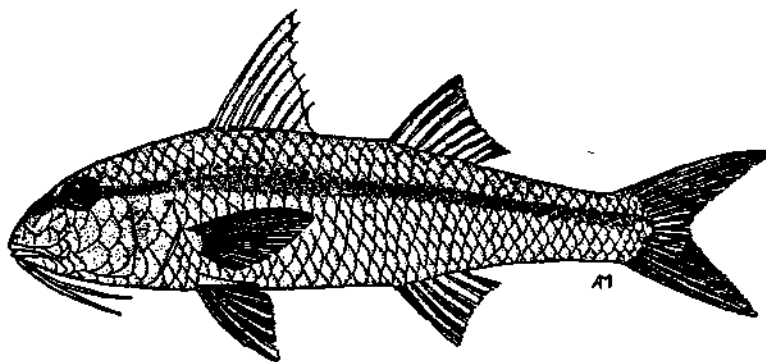


FIG. 7. *Upeneus arge* Jordan and Evermann, 139 mm.

eye. A prominent swelling on snout in front of eye. Teeth in villiform bands in jaws, teeth present on vomer and palatines. Preorbital without scales. Barbel scarcely reaches hind border of preopercle. First dorsal spine minute, second

spine longest, much longer than head without snout. Fresh specimens uniformly milky white, slightly dusky on back; a pale horizontal lateral stripe from operculum to caudal base. Spinous dorsal transparent, dusky distally with traces of two longitudinal dusky bars below, soft dorsal transparent with 3 indistinct dusky bars; caudal with 6 oblique black bars on upper lobe and 5 black bars on lower lobe, the outer two bars on the lower lobe much broader than others. Other fins transparent.

Material: Agathi, 1 specimen, 146 mm. Kavarathi, 1 specimen, 139 mm. Kiltan, 1 specimen 209 mm. Minicoy, 1 specimen, 138 mm.

Distribution: Seychelles in the Western Indian Ocean, Caroline, Gilbert, Hawaiian, Phoenix and Palmyra Islands in the Pacific.

8. *Upeneus sundaicus* (Bleeker) (Fig. 8)

Upeneoides sundaicus Bleeker, 1855, *Nat. Tijds. Ned.-Ind.*, 8: 411.

Upeneus sundaicus Weber and de Beaufort, 1931, *Fishes Indo-Australian Archipelago*, 6: 370.

D₁. VIII; D₂. i, 8; A. I, i, 6; P. 14-15; V. I, 5. Ll. 33-35; Ltr. 2½+1+6½. Gill rakers 5-6+1+14-15.

Head 3.3-3.6 in standard length, 4.1-4.5 in total length. Depth of body 3.6-3.9 in standard length, 4.6-5 in total length. Eye 4-4.6 in head, 1.5-2 in snout and 1.1-1.3 in slightly convex interorbital space. Maxillary extends beyond a level from the anterior border of eye. Teeth in villiform bands in jaws, vomer and palatines with teeth. Preorbital scaled. Barbel extending to hindborder of preoperculum. First dorsal spine minute, second longest, about 2/5 length of snout shorter than

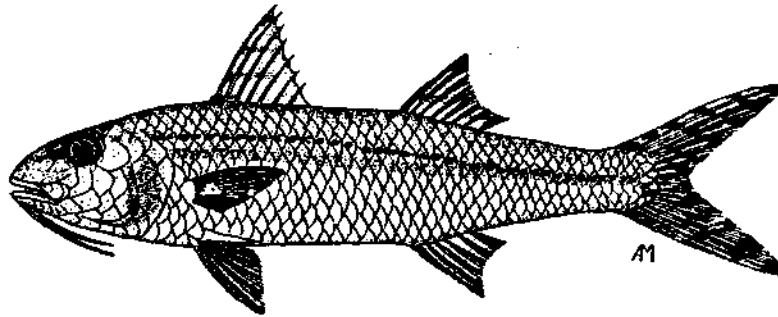


FIG. 8. *Upeneus sundaicus* (Bleeker), 108 mm.

head. Colour of preserved specimens dull yellowish, lighter below, upper sides slightly brownish with a brown longitudinal band from snout through eye to base of caudal. Spinous dorsal pale, soft dorsal with three obscure stripes, upper lobe of caudal with 5 or 6 oblique pale to slightly brownish stripes, posterior half of lower lobe brownish or with 5 or 6 irregular brownish stripes. Other fins yellowish hyaline.

NOTE: Lachner, 1954 (*Proc. U.S. Nat. Mus.*, 103: 507) considers this as a questionable species. This species is clearly distinct from *U. luzonius* to which it is

closely related. The body colour is much lighter, the upper lobe of caudal has pale or slightly brownish stripes, lower lobe is bordered posteriorly with light brown or with irregular cross bars which are much lighter than those in *U. luzonius* and the 2nd spine of dorsal appears to be slightly higher than in *U. luzonius*.

Material : Agathi, 1 specimen, 74 mm. Kadamat, 3 specimens, 94 to 112 mm. Kavarathi, 2 specimens, 84 and 122 mm.

Distribution : This species has so far been reported only from Singapore, Indonesia and the Philippines.

Family : BLENNIIDAE

9. *Aspidontus tractus* Fowler (Fig. 9)

Aspidontus tractus Fowler, 1903, *Fish. Zanzibar* : 170.

Aspidontus (aspidontus) tractus Smith, 1959, *Ichth. Bull.*, 14 : 235, Pl. 17, Fig. 14.

D. XI, 27 ; A. II, 26 ; Pl. 14 ; V. I, 4.

Head 3.7 in standard length, 4.3 in total length. Height 5.4 in standard length, 6.3 in total length. Eye 5.2 in head, 1.6 in snout and a little less than interorbital space. About 30 fixed teeth in each jaw, lower jaw with a canine on either side. Longest pectoral ray equal to postorbital length of head. Dorsal and anal joined

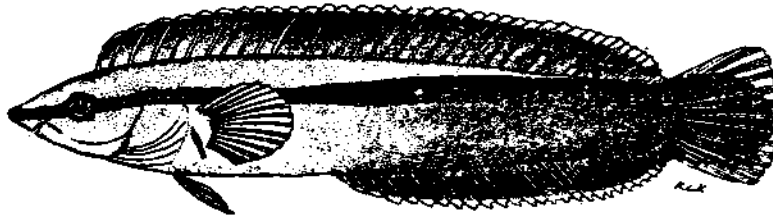


FIG. 9. *Aspidontus tractus* Fowler, 65 mm.

to base of caudal. Colour bluish violet, pale white on cheek and abdomen. A bluish black stripe from snout through eye to gill opening, broadens posteriorly towards posterior half of body and occupies almost the whole of caudal. Caudal broadly bordered above, below and posteriorly by white. A dark bar across lower part of base of pectoral. Dorsal and anal dark, distal margin of fins white. Pectoral and ventral white.

Material : Minicoy, 1 specimen, 65 mm.

Distribution : Previously reported only from a restricted area of Western Indian Ocean, viz., East coast of South Africa, Aldabra, Zanzibar and Seychelles.

10. *Omobranchus elongatus* (Peters) (Fig. 10)

Petroscirtes elongatus Peters, 1855, *Monatsber. Akad. Berlin* : 249.

Omobranchus elongatus Smith, 1959, *Ichth. Bull.*, 14 : 232, Pl. 17, Fig. 1 and Pl. 19, F. D.XIII-XIV, 18-20 ; A.II, 21-23 ; P.13 ; V.1,2.

Head 4.6-4.9 in standard length, 5.5-5.9 in total length. Depth of body 5.5-5.8 in standard length, 6.6-6.9 in total length. Eye 3.5-3.8 in head and 0.7 in inter-orbital space. Canines in lower jaw longer and stronger than those in upper. Last

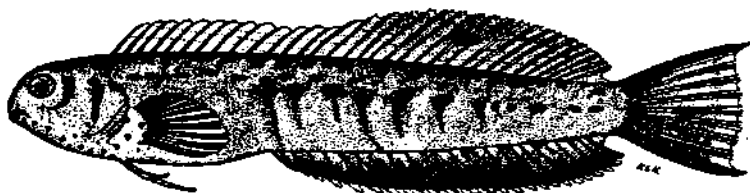


FIG. 10. *Omobranchus elongatus* (Peters), 40 mm.

dorsal and anal ray joined to caudal peduncle by membrane. Upper and lower rays of caudal often slightly produced. Colour yellowish brown with dark to blackish angular cross bars and spots on sides of body. Black spots on throat and at base of pectoral and blackish bars behind eye and on opercle. Soft dorsal with dark blotch on medium rays and four or five longitudinal dark lines.

Material : Minicoy, 3 specimens, 40 to 46 mm.

Distribution : Previously reported only from the east coast of Africa and upto Aldabra and Seychelles in the Western Indian Ocean.

11. *Petroscirtes pindae* Smith (Fig. 11)

Petroscirtes pindae Smith, 1959, *Ichth. Bull.*, 14 : 231, Pl. 17, Fig. 4.

D.XI, 15-16 ; A.II, 15 ; P. 14 ; V.I, 3.

Head 4.0-4.2 in standard length, 4.7-4.9 in total length. Depth of body 5.3-5.4 in standard length, 6.3-6.5 in total length. Eye 3.8 in head, equal to snout and about 0.7 in concave interorbital space. Lower canines strong and more than twice length of canines in upper jaw. Small flat tentacle above eye, dorsolateral to eye, at nape and above opercle. Nasal cirrus simple and short. Small cirrus with short filaments on chin and 5-6 along preopercle edge. Gill opening less than diameter of eye, just above and a little in front of pectoral base. Second dorsal spine longer than others. Upper caudal ray slightly produced. Preserved specimens light brownish with indications of 6-7 incomplete dark cross bars and light blotches along sides. Membrane between 1st and 2nd dorsal ray and between 9th and 11th or 12th ray with blackish spots near margin. Bluish white spots on distal half of dorsal, some dorsal rays with brownish streaks basally and submarginal

blackish spots. Anal pale yellowish with 7 rows of brownish spots and streaks. Pectoral and ventral pale yellowish. Caudal yellowish with pale streaks basally on rays.

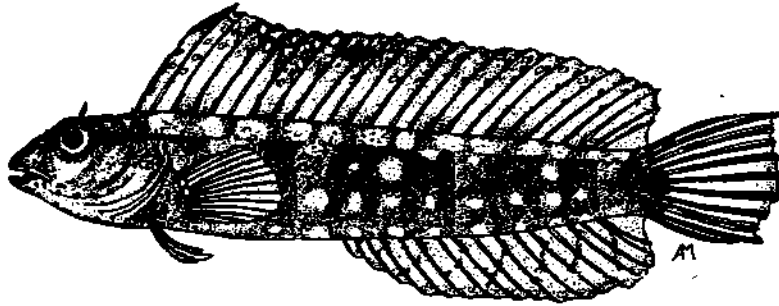


FIG. 11. *Petrosirtes pindae* Smith, 48 mm.

Material : Minicoy, 3 specimens, 36 to 60 mm. Suheli, 1 specimen, 37 mm.

Distribution : Only the type specimen 47 mm. in length from Pinda is known hitherto and the capture of 4 specimens from Laccadives far from the type locality is noteworthy.

Family : GOBIIDAE

12. *Amblygobius albimaculatus* (Rüppell) (Fig. 12)

Gobius albimaculatus Rüppell, 1828, *Atl. Reise N. Afr. Fische* : 135.

Amblygobius albimaculatus Koumans, 1953, (In Weber and de Beaufort) *Fishes Indo-Australian Archipelago*, 10 : 141, Fig. 33 ; Smith, 1959, *Ichth. Bull.*, 13 : 204 ; Pl. 10, B.

D_1 , VI ; D_2 , I, 13-14 ; A, I, 14 ; P, 18-19. LI. 52-57 ; Ltr. 19-20.

Head 3.3-3.6 in standard length, 4.2-4.8 in total length. Depth of body 3.5-4 in standard length, 4.6-5.1 in total length. Eye 3.6-4 in head, equal to length of

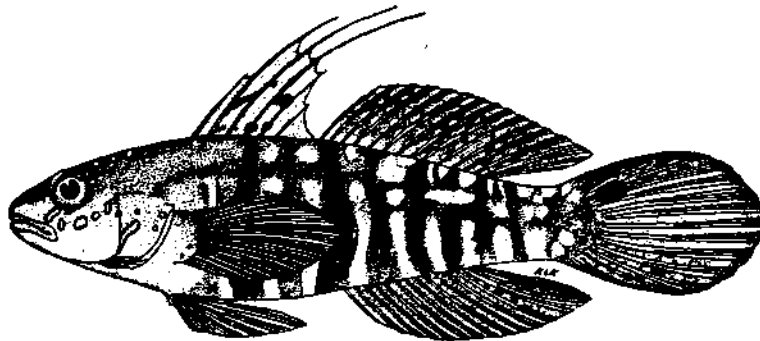


FIG. 12. *Amblygobius albimaculatus* (Rüppell), 76 mm.

snout and 0.7-1 in interorbital space. Maxillary reaching to below anterior half of eye. Teeth in 3 rows in jaws, outer row enlarged, a curved canine on either side in lower jaw. Pectoral equal to or a little shorter than head, ventral nearly equal to pectoral. About 30 predorsal scales. Colour variable, generally brownish green above, yellowish below. A few pale yellowish spots edged violet on head and nape. 5-6 dark transverse bands on body. Fins pale to orange, first dorsal with a diffuse dark spot between 4th and 5th spines and two pale oblique bands. Second dorsal with a pale submarginal band. Caudal fin with a dark spot at upper part of base and generally one spot each at upper and lower sides.

Material : Bitra, 3 specimens, 46 to 80 mm. Minicoy, 11 specimens, 47 to 87 mm.

Distribution : Red Sea and east coast of Africa ; Indonesia, Australia, Palau, Somoan and Society Islands.

13. *Bathygobius petrophilus* (Bleeker) (Fig. 13)

Gobius petrophilus Bleeker, 1853, *Nat. Tijds. Ned.-Ind.*, 4 : 476.

Bathygobius petrophilus Koumans, 1953, (In Weber and de Beaufort) *Fishes Indo-Australian Archipelago*, 10 : 185 ; Smith, 1959, *Ichth. Bull.*, 13 : 212.

D₁.VI ; D₂.I, 9-10 ; A.I, 8-9 ; P. 19-21. Ll. 37-39 ; Ltr. 12.

Head 3.1-3.3 in standard length, 3.8-4.1 in total length. Depth of body 4.3-4.7 in standard length, 5.3-5.7 in total length. Eye 3.7-4.1 in head, equal to snout and

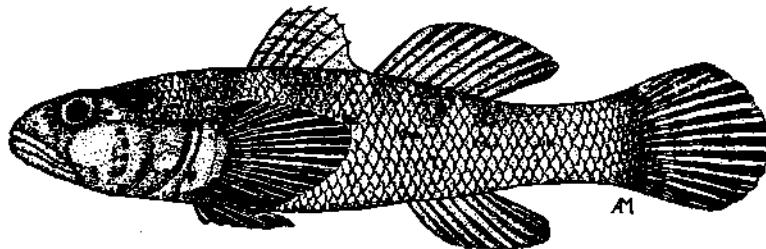


FIG. 13. *Bathygobius petrophilus* (Bleeker), 49 mm.

0.5 in interorbital space. Outer row of teeth in both jaws enlarged. Second dorsal a little higher than first dorsal. Pectoral shorter than head, upper rays free. Colour dark brown to lighter, often with obscure dark marks on upper sides. Fins brownish, first dorsal with 2 or 3 dark bands, rays of second dorsal, caudal and pectoral with dark spots.

Material : Agathi, 2 specimens, 56 and 61 mm. Kalpeni, 2 specimens, 42 and 49 mm. Kiltan, 7 specimens, 39 to 59 mm.

Distribution : Comoro Islands in the Western Indian Ocean ; Indonesia to the Philippines, Japan, Fiji, Hawaiian Islands and Society Islands.

Family : ELEOTRIDAE

14. *Eleotriodes strigatus* (Broussonet) (Fig. 14)

Gobius strigatus, Broussonet, 1782, *Desc. Ichth.*, 1 : 1, P. 1.

Eleotriodes strigatus Koumans, 1953, (In Weber and de Beaufort) *Fishes Indo-Australian Archipelago*, 10 : 334 ; Smith, 1958, *Ichth. Bull.*, 11 : 151, Pl. 1, D.

D₁.VI ; D₂.I, 17 ; A.I, 17 ; P. 21. Li. about 110 ; Ltr. 35.

Head 3.8 in standard length, 4.7 in total length. Depth of body 4.5 in standard length, 5.7 in total length. Eye 4.7 in head, 1.3 in snout and 1.3 in interorbital

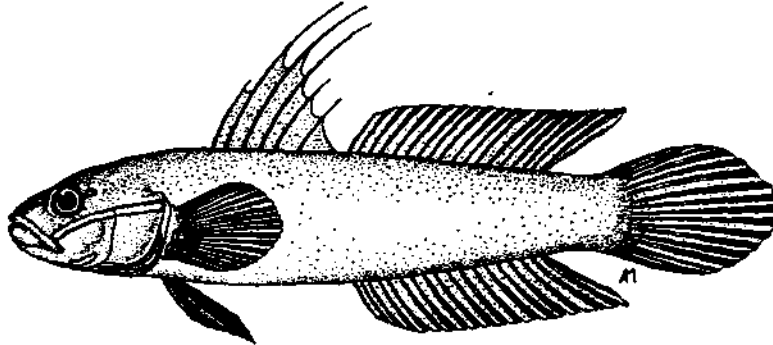


FIG. 14. *Eleotriodes strigatus* (Broussonet), 101 mm.

space. Teeth in a single row in upper jaw, 2 canines on either side in front. Teeth in lower jaw enlarged, 1-2 curved canines laterally. 2nd, 3rd and 4th dorsal spines filamentous. Colour of preserved specimen yellowish white. A pearly band narrowly edged with black from maxillary, below eye to opercle and an ill defined streak on lower part of cheek. A bluish spot behind eye. Fins yellowish white, median rays of caudal slightly dusky.

Material : Ameni, 1 specimen, 101 mm.

Distribution : East coast of Africa, Aldabra and Seychelles in the Western Indian Ocean and from Indonesia to the Philippines, Fiji, Samoa and Society Islands.

15. *Ptereleotris tricolor* Smith (Fig. 15)

Ptereleotris tricolor Smith, 1956, *Ann. Mag. Nat. Hist.*, (12) 9 : 817, Fig. 1 ; Smith, 1958, *Ichth. Bull.*, 11 : 155, Pl. 1, A & B.

D₁.VI ; D₂.I, 24-25 ; A.I, 23-25 ; P. 21-22.

Head 4.1-4.2 in standard length, 4.9-5.0 in total length. Depth of body 5.7-5.8 in standard length, 6.8-7.1 in total length. Eye 3.6-3.8 in head, 0.7 in snout and equal to or a little less than interorbital space. Preserved specimens pale white anteriorly, rest of body dusky to bluish. First dorsal pale yellowish, margin

narrowly bluish. Distal half of soft dorsal and anal and upper and lower rays of caudal bluish, median rays of caudal yellowish. A dark ocellus at base of lower caudal rays in juveniles.

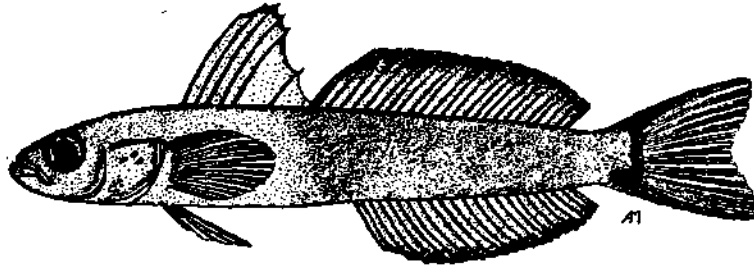


FIG. 15. *Ptereleotris tricolor* Smith, 49 mm.

Material : Minicoy, 2 specimens, 36 and 49 mm.

Distribution : Hitherto recorded only from the east coast of South Africa, Zanzibar, Pemba, Aldabra and Seychelles in the Western Indian Ocean.

Family : SCORPAENIDAE

16. *Sebastapistes nuchalis* (Günther) (Fig. 16)

Scorpaena nuchalis Günther, 1874, *Fische der sudsee*, 1 : 76.

Sebastapistes nuchalis Smith, 1957, *Ichth. Bull.*, 4 : 54, Pl. 2, B.

D.XII, 9 ; A.III, 5 ; P.i, 5, 11 ; L. lat. 41-43. Ltr. 6+1+12-13.

Head 2.3-2.4 in standard length, 3-3.1 in total length. Depth of body 2.7-2.8 in standard length, 3.5-3.6 in total length. Eye 3.8-4 in head, equal to snout and

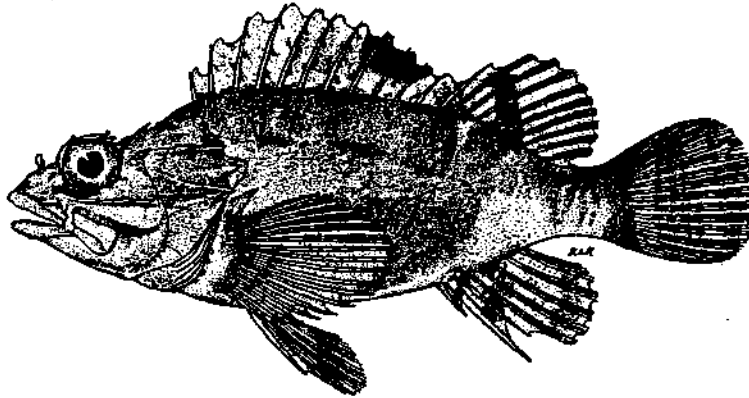


FIG. 16. *Sebastapistes nuchalis* (Günther), 47 mm.

about 0.6 in concave interorbital space. Pectoral equal to head without snout or shorter, ventral slightly shorter. Maxillary reaching to below hind margin of eye.

Interorbital ridges strong and well developed. Spination on head consists of one near anterior nostril, supraorbital ridge with 3 spines, one postfrontal spine, superior postorbital ridge with 3 spines, inferior postorbital ridge with 4 spines, a spine in between the last two spines of the above two ridges, preorbital with one spine directed forwards anteriorly and two retrose spines posteriorly, suborbital ridge ending posteriorly in one small spine, preopercle with 5-6 spines; opercle with two flat spines and one on upper part of shoulder girdle. Teeth in villiform bands in jaws, vomer and palatines. Small filaments at anterior nostril, supraorbital and preorbital spines and along preopercle margin. Colour somewhat yellowish marbled with brown. A dark mark on opercle. Dorsal light brownish with obscure dark markings, a dark brown mark between 7th and 11th spines distally. Anal yellowish with dark oblique markings. Caudal yellowish with broad light brownish markings at base and in the middle. Pectoral yellowish with 5-6 rows of dark brown spots. Ventral light with dusky mark on middle.

Material : Minicoy, 2 specimens, 32 and 47 mm.

Distribution : East coast of Africa and neighbouring islands as far as Seychelles in the Western Indian Ocean and Philippines, Hawaiian Islands, Rotuma and Rarotonga in the Pacific.

Family : CHAETODONTIDAE

17. *Chaetodon citrinellus* Cuvier and Valenciennes (Fig. 17)

Chaetodon citrinellus Cuvier and Valenciennes, 1831, *Hist. Nat. Poissons*, 7 : 27.

Chaetodon (Tetragonopterus) citrinellus Weber and de Beaufort, 1936, *Fishes Australian Archipelago*, 7 : 76, Fig. 23.

D.XIII-XIV, 20-22 ; A.III, 16-17 ; P. 15. L. lat. 37-41 ; Ltr. 8+15-16.

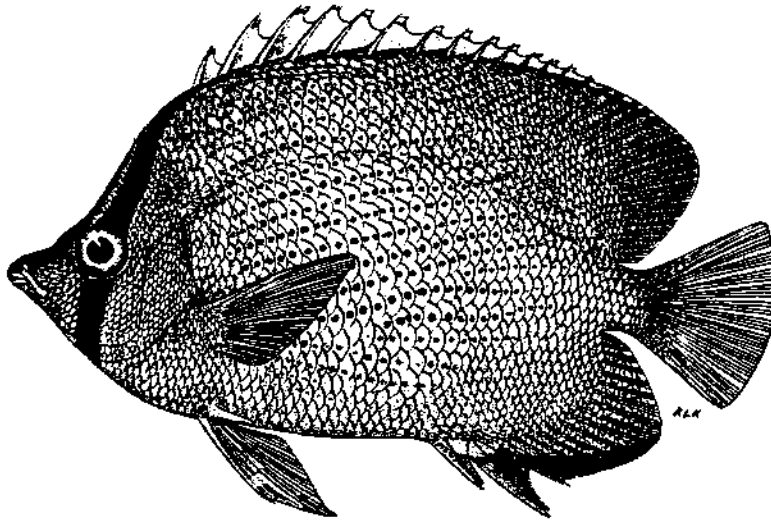


FIG. 17. *Chaetodon citrinellus* Cuvier and Valenciennes, 81 mm.

Head 3.1-3.3 in standard length, 3.9-4.1 in total length. Height 1.7-1.8 in standard length, 2-2.1 in total length. Eye 3.1-3.3 in head, about 1.2 in snout and about equal to convex interorbital space. Lateral line arched, terminating below end of dorsal. Dorsal spines increasing in length to fourth or fifth which is longest, posterior spines slightly shorter. Second anal spine stronger and longer than third. Pectoral shorter than head, ventral equal to or slightly longer than pectoral. Colour yellowish, gradually becoming whitish below, upper sides of head and top of snout dark; scales on sides of body with bluish black spots, a broad dark brown band from first dorsal spine through eye to lower margin of interopercle. Dorsal yellowish white, tip of anterior spines dusky, posterior part of spinous dorsal and anterior 2/3 of soft dorsal with narrow black submarginal line and narrow white outer border; lower border of anal fin with broad black margin and submarginal yellowish band. Caudal, pectoral and ventral yellowish hyaline.

Material : Chetlat, 2 specimens, 24 and 25 mm. Kiltan, 2 specimens, 27 and 81 mm. Minicoy, 2 specimens, 70 and 75 mm. (Specimens above 70 mm. only considered for body proportions.)

Distribution : Indonesia to Ryukyu, Tuamotu, Australia, Marshall, Marianas and Hawaiian Islands. This is the first record west of Indonesia.

18. *Chaetodon meyeri* Bloch and Schneider (Fig. 18)

Chaetodon meyeri Bloch and Schneider, 1801, *Syst. Ichth.* ; 223 ; Smith and Smith, 1963, *Fishes of Seychelles* : 24, Pl. 91, E.

Chaetodon (Citharoedus) meyeri Weber and de Beaufort, 1936, *Fishes Indo-Australian Archipelago*, 7 : 69, Fig. 20.

D. XII, 24 ; A. III, 20 ; P. 17. L. lat. 52 ; Ltr. 9+26.

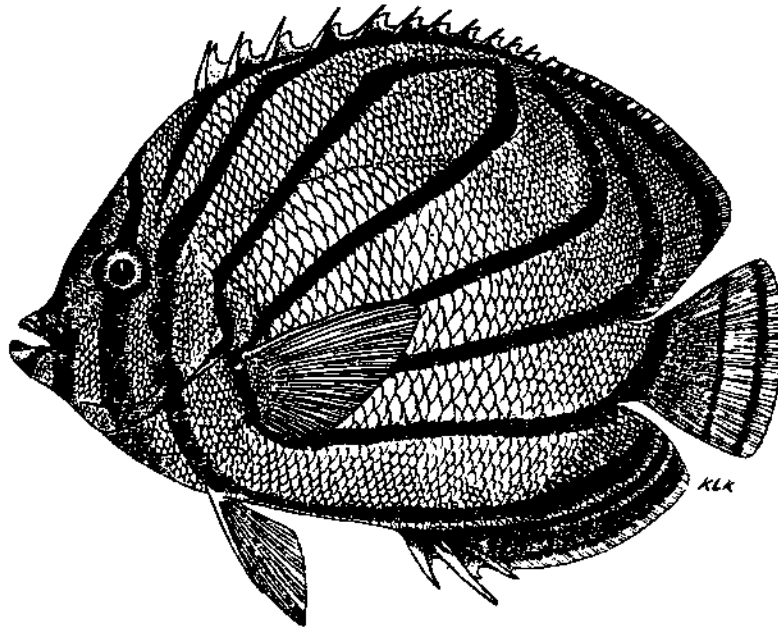


FIG. 18. *Chaetodon meyeri* Bloch and Schneider, 98 mm.

Head 3-3.2 in standard length, 3.65-3.8 in total length. Height 1.4-1.5 in standard length, 1.7-1.8 in total length. Eye 3.7-3.8 in head, 1.3-1.4 in snout and about 1.2-1.3 in convex interorbital space. Spinous dorsal gradually increasing in length, six or seventh spine longest, posterior spines slightly shorter. Second and third anal spines equal in length. Pectoral slightly shorter than head, ventral shorter than pectoral. Colour pearly white, upper sides of head pale greyish, a dark spot between ventrals and black stripes on head and body, one around mouth, one from snout to lower edge of interopercle, one from second spine of dorsal towards eye, one from below fourth and fifth dorsal spines which is continued as an intramarginal black band on dorsal across preopercle border and along base of ventral and passing posteriorly to base of anal, a stripe from pectoral base through upper edge of operculum to posterior dorsal spines, curving and descending to base of pectoral, side of body to caudal penduncle, a curved stripe from anterior half of soft dorsal towards pectoral and another originating from anterior dorsal rays curving backward to last dorsal rays and forward to base of pectoral. Soft anal with two black bands separated by white. Two black bands across caudal fin. Pectoral and ventral yellowish white.

Material : Agathi, 1 specimen, 98 mm. Bitra, 1 specimen, 106 mm. Chetlat, 2 specimens 116 and 129 mm.

Distribution : East coast of Africa, Madagascar, Seychelles, Mauritius, Indonesia, Philippines and Marshall Islands.