SOME NEW OR RARE FISHES OF THE INDO AUSTRALIAN ARCHIPELAGO VII¹)

by

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Fam. AULOSTOMATIDAE.

AULOSTOMA Lacépède.

Aulostoma valentini (BLKR.).

D.XII.26; A.IV.24; P.17; V.6.

Elongate and impressed; height 13 in length without caudal ²), 7 in head. Head with snout very compressed, 3 in length. Snout 1.5 in head. Eye more than 8 in snout. Lower jaw longer than upper. Chin prominent with a rather stiff barbel, which is about as long as eye. Operculum, neck and lower part of snout with conspicuous striae. Soft dorsal posterior. The distance from the origin of the soft dorsal to origin of caudal about equal to snout. Anal equal to soft dorsal and opposite to it, its longest ray somewhat less than twice in its length. Pectorals short, rounded about twice the diameter of the eye. Length of ventrals 1.5 diameter of eye. Its base midway between frontborder of eye and base of caudal. Caudal rounded, its length 2.5 the diameter of the eye. Scales small, rather strongly ctenoid. Head naked. Longitudinal brownish bands from operculum to end of dorsal. On caudal peduncle a few faint crossbars. The lowermost longitudinal band from below the pectorals through base of ventrals to origin of anal where the right and left one become confluent. It is continued along the base of the anal where it is much darker brown as anteriorly. The second longitudinal band from base of pectoral to end of base of anal. Third and fourth longitudinal bands from operculum to a point on lateral line just between ends of anal and soft dorsal. They become confluent between the origin of anal and of dorsal. The lowermost one of the two is divided into two narrow bands just above origin of ventrals, the upper one is divided into two narrower ones halfway between origin of ventrals and origin of dorsal. The fifth and sixth (uppermost) bands become confluent below origin of dorsal. Anterior half of base of dorsal black. Two black dots on base of anal. A black line on maxillary as well as before eye.

One specimen with a total length of 54 cm. Bay of Batavia February 1937.

 ¹) Cf. Treubia XIII, p. 411; XIV, p. 215; XIV, p. 131; XV, p. 367; XVI, p. 311.
⁽¹⁾) With length is always meant the length of head and body, with the caudal fin excluded.

Litterature:

- 1. Polypterichthys valentini BLEEKER, Nat. Tijdschr. Ned. Indië IV, 1853, p. 608.
- 2. Aulostoma chinense GÜNTHER, Cat. Brit. Mus. 1859 1861, p. 538.
- 3. Aulostoma chinense BLEEKER, Ned. Tijdschr. Dierk. I, 1863, p. 235.
- 4. Aulostoma valentini JENKINS, Bull. U.S. Fish Comm. XXII, (1902) 1904, p. 437.
- 5. Aulostoma valentini Jordan and Evermann, ibid. XXIII, (1903) 1905, p. 114.
- 6. Aulostoma valentini MAX WEBER, Siboga-Exped. Fische 1913, p. 100.
- 7. Aulostoma chinensis JORDAN, TANAKA & SNYDER, Journ. Coll. Sc. Univ. Tokyo XXXIII, 1913, p. 103.
- 8. Aulostoma valentini WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago IV, 1922, p. 10.
- 9. Aulostoma chinensis FOWLER, Fishes of Oceania 1928, p. 116.
- 10. Aulostoma valentini BARNARD, Fishes of South Africa 1927, p. 272.

Fam. SOLENOSTOMIDAE.

SOLENOSTOMUS LACÉPÈDE.

Solenostomus cyanopterus BLKR.

D.V.8; A.18; P.27; V.7.

Height 8 in total length (caudal included), head about 3. Eye 9-10 in head, more than twice in postorbital part. Length of snout 3 in length without caudal. Caudal peduncle as high as long. Membrane of the caudal beginning rather near the dorsal and anal. Dorsal and anal inserted on half circular elevations, which together are as high as height of body behind pectorals. Height of spinous dorsal about 1.5 in snout, its base somewhat behind ventrals. Ventrals somewhat longer as spinous dorsal. Pectoral rays short, about as long as eye. No barbel at mandibular symphysis. Skin osseous with rather feeble spines in three rows on body. Colour brownish with scattered small black spots. Spinous dorsal ventrals and caudal blackish. Soft dorsal, anal and pectorals transparent.

Four specimens from the South Coast of Bali (den Pasar, leg. Mr. NEUMANN), 2-10-'37. Largest one (which is described here) 100 mm.

Litterature:

- 1. Solenostoma paradoxum BLEEKER, Nat. Tijdschr. Ned. Indië III, 1852, p. 308, (nec. PALLAS).
- Solenostoma paradoxum BLEEKER, Verh. Bat. Genootsch. XXV, 1853, Bijdr. Troskieuwige Visschen p. 29 (nec. PALLAS).
- 3. Solenostoma cyanopterus BLEEKER, Nat. Tijdschr. Ned. Indië VI, 1854, p. 507.
- 4. Solenostoma cyanopterus BLEEKER, Nat. Tijdschr. Ned. Indië VIII, 1855, p. 434.

114

- 5. Solenichthys cyanopterus BLEEKER, Ned. Tijdschr. Dierk. II, 1865, p. 183 ibid p. 273.
- 6. Solenostoma cyanopterum PLAYFAIR & GÜNTHER, Fishes Zanzibar 1866, p. 137.
- 7. Solenostoma cyanopterum GÜNTHER, Cat. Brit. Mus. VIII, 1870, p. 151.
- 8. Solenostomichthys cyanopterus BLEEKER, Ned. Tijdschr. Dierk. IV, 1873, p. 126.
- 9. Solenostomus cyanopterus JORDAN & EVERMANN, Bull. U.S. Fish Comm. XXIII, (1903) 1905, p. 118.
- Solenostomus cyanopterus MAX WEBER, Siboga-Expedition, Fische 1913, p. 104.
- 11. Solenostomus cyanopterus WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago, IV, 1922, p. 26.
- 12. Solenostomus cyanopterus BARNARD, Fishes of South Africa, 1927, p. 28.
- 13. Solenostomus cyanopterus Fowler, Fishes of Oceania, 1928, p. 109.

Fam. BOTHIDAE.

PSEUDORHOMBUS BLEEKER.

Pseudorhombus affinis M. WEB.

D.73; A.51; P. sin 2.9.1; P. dextr. 11; V.24; L.1.76.

Dorsal profile somewhat more arched than ventral. Height 2 in length without caudal, 2.3 with caudal included. Head 3.6 in length, 4.4 in length with caudal. Eye 6 in head, about 1.5 in snout. Eyes separated by a rather low bony ridge. Eyes above each other, equal in length. A row of small canines in both jaws. Maxillary reaching to below about the middle of the eye, 2.3 in head with a few scales on coloured side. Origin of dorsal beginning on blind side above anterior nostril. A line through origin of dorsal and posterior nostril does not reach the maxillary. Origin of ventral below origin of pectorals. No preanal spine. All anal and dorsal rays simple. The subposterior rays are slightly longer than the others. Scales ctenoid on coloured side, cycloid on blind side, covering head with exception of snout. Forward prolongation of lateral line reaches upper profile at 10th dorsal ray. Left pectoral somewhat longer than postorbital part of head, right pectoral much shorter. Ventrals somewhat shorter than eye and snout together. Caudal obtusely pointed. Colour darkbrownish with three faint blackish spots on lateral line. More blotches on several parts of the body are faintly to be seen. Body and fins widely covered with small black spots.

One specimen with a total length of 28 cm. Fishmarket of Dolo (Aru Islands). November 1937.

Litterature:

1. Pseudorhombus affinis MAX WEBER, Siboga Exp., Fische 1913, p. 426.



2. Pseudorhombus affinis WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago V, 1929, p. 110.

Fam. CHAETODONTIDAE.

HEMITAURICHTHYS BLEEKER.

Hemitaurichthys zoster (BENNETT).

D.XII.25; A.III.21; L.l.74; L.tr.14-1-33.

Strongly compressed, orbicular, dorsal profile more convex than ventral, especially anteriorly. Rostrodorsal profile with a concavity above snout. Height 1.5 in length without caudal. Head 3 in length. Eye about 4 in head, more than once in postorbital part, situated just above the horizontal through commoncement of gape of mouth. The eye is somewhat smaller than interorbital space. Praeoperculum with an almost rectangular finely serrated hindborder. Mouth terminal, small, with fine brushlike teeth. Scales small, somewhat decreasing on head and on caudal peduncle, continued as a sheath on base of anal and of soft dorsal. Lateral line strongly arched. Spinous dorsal with an incomplete membrane. Base of soft dorsal about as long as base of anal and as long as base of spinous dorsal without the three anterior spines. Spines of spinous dorsal strong, the highest in the middle, 1.7 in head and somewhat longer than spines of anal. Pectorals somewhat longer than head and somewhat shorter than ventrals, which end into a filament. Caudal very slightly concave, least height of its peduncle 2.8 in eye. Head, breast, anterodorsal part of body and dorsal and anal yellow. Remainder of body and pectorals, ventrals and caudal greyish. The yellow of the head is partly covered with brown. Snout blackish.

One specimen with a total length of 130 mm from a reef in the western part of the Java Sea 1938.

Litterature:

- 1. Chaetodon polylepis BLEEKER, Act. Soc. Sc. Indo-Neerl. II, 1857, p. 54.
- 2. Chaetodon zoster GÜNTHER, Cat. Brit. Mus. II, 1860, p. 33.
- 3. Tetragonopterus zoster BLEEKER, Ned. Tijdschr. Dierk. I, 1863, p. 270.
- Hemitaurichthys polylepis BLEEKER, Arch. Néerl. Sc. Nat. XI, (1875) 1876, p. 304. — Versl. Akad. Amsterdam (2) X, 1876, p. 316.
- Hemitaurichthys polylepis BLEEKER, Verh. Akad. Amsterdam XVII (1876) 1877. Rév. Chétodont. p. 50. Atl. Ichth. IX, 1877, p. 31. — Arch. Néerl. Sc. Nat. XIII, 1878, p. 44.
- Hemitaurichthys polylepis HERRE & MONTALBAN, Philippine Journ. Sci. 1927, p. 73.
- 7. Hemitaurichthys zoster Fowler, Fishes of Oceania, Bishop Mus. X, 1928, p. 257.
- 8. Hemitaurichthys zoster WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago VII, 1936, p. 25.

CHAETODON L.

Chaetodon (Citharoedes) ornatissimus C. V.

D.XII.25; A.III.20; L.l. \pm 50; L.tr.10-1-22.

Compressed, oval. Height 1.5 in head, 3.4 in length. Rostrodorsal profile obliquely ascending in a nearly straight line. A concavity before the eyes. Eyes 4 in head, situated high above horizontal through gape of mouth, almost totally in anterior half of head, about twice in strongly convex interorbital space. Snout bluntly rounded about 1.5 the diameter of the eye. Praeoperculum very finely denticulated. Several rows of fine setiform teeth-in anterior part of jaws. Scales rounded, moderate, smaller on head, chest and unpaired fins. Scales on trunk in regular longitudinal and transverse series. Lateral line arched, parallel with dorsal profile till last dorsal spine, hence deflected towards termination of dorsal but ending before it. Spinous dorsal longer than soft. First spine stronger than soft. First spine stronger than second about as long as eye, last spine somewhat shorter than head without snout. Soft dorsal rounded, obtusely angulate in its last part. Anal spines strong, second one somewhat longer than half of head. Soft anal rounded. Pectorals subequal, about as long as head without snout. Candal somewhat rounded. Least height of caudal peduncle more than twice in head. Colour of alcoholspecimen yellowish. Head with six transverse black bands. First on lower lip. Second around snout. Third through the eye from isthmus to front, not so broad as eye. Fourth across praeoperculum and continued along margin of sheath of dorsal. Fifth, much narrower, across frontborder of operculum, sixth along hindborder of operculum. Body with six oblique longitudinal bands reaching medium fins. On dorsal and anal a black band below margin, then follows a whitish band, whilst the border is black again. On the caudal the same two black bands with the whitish interspace, but the outer black band is submarginal.

One specimen, total length 17 cm. From a coral reef in the western part of the Java Sea.

Litterature:

- 1. Chaetodon ornatissimus Cuvier & Valenciennes, Hist. nat. Poiss. VII, 1831, p. 32.
- 2. Chaetodon ornatissimus BLEEKER, Act. Soc. Sc. Indo-Néerl. II, 1857, Ambon p. 55.
- 3. Chaetodon ornatissimus GÜNTHER, Cat. Brit. Mus. II, 1860, p. 15.
- 4. Tetragonopterus ornatissimus BLEEKER, Ned. Tijdschr. Dierk. II, 1865, p. 286.
- 5. Chaetodon ornatissimus GÜNTHER, Fische der Südsee, 1873 75, p. 38.
- Tetragonopterus (Citharoedus) ornatissimus BLEEKER, Verh. Akad. Amsterdam XVII, (1876) 1877, Chétodont. p. 57-Atl. Ichth. IX, 1877, p. 32.
- 7. Chaetodon ornatissimus SEALE, Occas. Papers Bishop Mus. I, 1901, p. 100.
- Chaetodon ornatissimus JORDAN & SEALE, Bull. Bur. Fish XXV (1905) 1906, p. 345.

- 9. Chaetodon ornatissimus JORDAN & EVERMANN, Bull. U.S. Fish. Comm. XXIII, (1903) 1905, p. 373.
- 10. Chaetodon ornatissimus HERRE & MONTALBAN, Philippine Journ. Sci. XXXIV, 1927, p. 42.
- 11. Chaetodon ornatissimus Fowler, Fish. Oceania Bishop. Mus. X, 1928, p. 243.
- 12. Chaetodon (Citharoedus) ornatissimus WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago VII, 1936, p. 71.

Fam. LUTJANIDAE.

SCOLOPSIS CUVIER.

Scolopsis xenochrous GTHR.

D.X.9; A.III.7; P.2.15; V.I.5; L.l.44; L.tr.3¹/₂-1-13.

Height 3, head 3.2 in length. Eye 2.6 in head, somewhat longer than snout and somewhat more than interorbital space. Scales on head beginning between anterior part of eyes, by far not reaching line connecting nostrils. Maxillary reaching to behind nostrils, almost reaching frontborder of eye. Praeoperculum with 5 transverse rows of scales, the inferior limb naked. Posterior border scalloped and denticulate. Praeorbital with a strong spine, smaller ones below it, only one of which is conspicuous. Dorsal spines moderate, the first more than half the length of the second, third to sixth longest, equal to about snout and half eye. Other spines somewhat shorter. Soft dorsal rounded, as high as spinous part. First anal spine less than half length of second. Second spine by far the strongest, subequal to third. Soft anal as deep as dorsal, rounded. Pectorals somewhat longer than head without snout. Ventrals shorter than pectorals. Colour of alcohol specimen brownish. A large blackish brown spot on posterior part of operculum. A silvery band, three scales broad, along the trunk below lateral line. In the anterior part it is crossed by two narrow short oblique brown streaks, the middle part with a brown spot on the base of each scale, forming oblique rows.

One specimen from Sabang, 156 mm. According to the length of the maxillary this specimen could belong to *Scolopsis cancellatus* C. V., but the five rows of scales on the operculum and the colouration show its affinity to *Scolopsis xenochrous*.

Litterature:

- 1. Scolopsis xenochrous Günther, Ann. Mag. Nat. Hist. (4) V, 1872, p. 423.
- 2. Scolopsis xenochrous WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago VII, 1936, p. 338.

PENTAPUS C.V.

Pentapus microdon (BLKR.).

D.X.9; A.III.7; P.2.14; V.I.5; L.l.49; L.tr.21/2-1-16.

Height 3.5, head 3.3 in length. Eye 3.3 in head, equal to snout, somewhat less than convex interorbital space. Mouth somewhat oblique, maxillary reaching

118

nearly to below frontborder of eye. Teeth in bands in both jaws, the outer series enlarged. In the upper jaw a few moderate canines, none in lower: Posterior border of praeoperculum serrated. Six curved rows of scales on praeoperculum, transverse behind eye, longitudinal below eye. Praeorbital pointed behind, not scaly. Middle dorsal rays longest, somewhat longer than postorbital part of head. Origin of anal below second soft dorsal ray. First anal spine about half as long as second, which is about three fourth of third. Third spine longer than snout. Pectorals about as long as head without snout, ventrals somewhat longer, its first soft ray prolonged. Ventral spine as long as dorsal ones. Least height of caudal peduncle equal to postorbital part of head. Caudal deeply forked, the lobes not prolonged. A silvery band from head to caudal peduncle (alcohol-specimen!).

One specimen from Singapore 115 mm. From an old collection from the fisheries-investigation steamer "Gier".

Litterature:

- 1. Heterognathodon microdon BLEEKER, Nat. Tijdschr. Ned. Indië IV, 1853, p. 464.
- 2. Heterognathodon microdon Günther, Cat. Brit. Mus. 1859, p. 366.
- 3. Heterognathodon canunis GÜNTHER Fische der Südsee I, 1873 1875, p. 32 (nec. C. V.).
- 4. Pentapus microdon BLEEKER, Verh. Akad. Amsterdam XIII (1872), 1873. Révision Dentex, p. 36. — Atl. Ichth. VIII, 1876 - 1877, p. 101.
- 5. Pentapus microdon WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago VII, 1936, p. 389.

CAESIO LACÉPÈDE.

Caesio tile C.V.

D.XI.21; A.III.12; P.2.22; V.I.5; L.l.72; L.tr.6¹/₂-1-16.

Fusiform. Dorsal and anal profile evenly convex from snout to caudal. Height about 3.5, 4.3 in length with caudal. Head 3.7 in length. Eye 4 in head equal to snout, about 1.7 in convex interorbital space. Maxillary reaching to below frontborder of pupil. Teeth in upper jaw in two rows, anterior consisting of conical, moderate teeth. The inner row minute. Teeth in lower jaw moderate as in upper, only near symphysis in two rows. No teeth on palatines vomer and tongue. Supratemporal band of scales confluent with the band on the other side, 3 scales deep laterally, 5 scales when it is confluent, 10 or 11 scales long. Origin slightly behind that of ventrals. First dorsal spine minute, third longest, about equal to postorbital part of head. Dorsal gradually decreasing in height posteriorly. Last soft ray about equal to eye. Origin of anal opposite to fourth dorsal ray. First anal spine small. Second and third subequal, much longer than snout. Pectorals pointed, somewhat shorter than head. Origin of ventrals somewhat behind the middle of the distance between tip of snout and origin of anal. Their length longer than eye and snout. Caudal deeply forked, lobes pointed. Colour of fresh specimen dark bluish above, reddish below. The two areas

separated by a rather broad light bluish band with a metallic hue. This metallic hue is found also on the back, but here in a lesser degree. Dark medium stripes on the lobes of the caudal fin which is bordered by red. The lower border of the bluish area on the sides is continued in the lower border of the medium stripe of upper lobe of caudal fin. All other fins reddish. Axil of pectorals black. A blotch at upper part of base of pectorals.

Many specimens in the catch of Japanese fishermen at the fishmarket of Batavia. Caught near the coast of South-West Celebes. Exact locality unknown.

Litterature:

- 1. Caesio tile Cuvier & Valenciennes. Hist. Nat. Poissons VI, 1830, p. 428.
- 2. Caesio tile GÜNTHER, Fische der Südsee I, 1873 1875, p. 34.
- 3. Pterocaesio multiradiatus BLEEKER, Atl. Ichth. VIII, 1876, p. 41.
- 4. Pterocaesio multiradiatus Fowler & BEAN, Proc. U.S. Nat. Mus. LXII, 1922, p. 38.
- 5. Caesio tile CHABANAUD, Bull. Soc. Zool. France L, 1925, 151.
- 6. Caesio tile Fowler, Mem. B. P. Bishop Mus. X, 1928, p. 204.
- 7. Caesio tile WEBER and DE BEAUFORT, Fishes of the Indo Australian Archipelago VII, 1936, p. 296.

APRION C.V.

Aprion virescens C.V.

D.XII.10; A.III.8; P.II.15; V.I.5; L.1.50; L.tr.6¹/₂-1-18.

Height 4, head 3.2 in length without caudal. Eye 5 in head more than twice in snout and twice in flat interorbital space. Mouth oblique. Maxillary not quite reaching frontborder of eye. Teeth in villiform bands with an outer row of canines in front of jaws. Scales on head beginning behind eyes with an elongated band of 4 rows of scales widely separated from that of the other side and narrowly from the scales on body. Seven to eight rows of scales on praeoperculum smooth. Dorsal spines flexible. First dorsal spine small, others subequal gradually diminuishing in height backwards. Soft part of dorsal as high as last spines, its last ray prolonged. Height of dorsal shorter than length of snout. Anal spines flexible, the first one minute, the third as long as soft rays, which are about as high as soft dorsal rays, last ray prolonged. Pectorals rounded, as long as snout. Ventrals somewhat longer. Ventral spine about equal to postorbital part of head. Caudal deeply forked, the lobes pointed. Least height of caudal peduncle about twice in its length. Colour, when fresh, bluish, lighter below. Each scale with a dark streak. A series of violet blotches at base of the membrane of the five last dorsal spines. Pectorals yellowish. Ventrals with darker bluish tips.

One specimen. Total length 63 mm. Caught in the Java Sea near Billiton. August 1937. According to WEBER and DE BEAUFORT the formula for the dorsal fin is X.11. My specimen has XII.10, just as given by BLEEKER in his Atlas Ichthyologique. Litterature:

- 2. Aprion virescens CUVIER & VALENCIENNES, Hist. Nat. Poissons VI, 1830, p. 544.
- 2. Mesoprion microchir BLEEKER, Nat. Tijdschr. Ned. Indië V, 1853, p. 332.
- 3. Lutjanus microchir BLEEKER, Ned. Tijdschr. Dierk. I, 1863, p. 233.
- 4. Chaetopterus microchir BLEEKER, Verh. Akad. Amsterdam (2) III, 1869 p. 85.
- 5. Aprion virescens GÜNTHER, Fische der Südsee I, 1873, p. 16.
- Aprion (Aprion), virescens BLEEKER, Verh. Akad. Amsterdam XIII (1872) 1873, Révision Lutjanus, p. 92. Atl. Ichth. VIII, 1876 - 1877, p. 77.
- 7. Aprion virescens JENKINS, Bull. U.S. Fish Comm. XXII (1902), 1904, p. 452.
- 8. Aprilon virescens SNYDER, ibid. p. 527.
- 9. Aprion virescens JORDAN & EVERMANN, ibid. XXIII (1903), 1905, p. 239.
- 10. Aprion virescens M. WEBER, Siboga Exp. Fische, 1913 p. 257.
- 11. Aprion virescens Fowler, Mem. B. P. Bishop Mus. X, 1928, p. 193.
- 12. Aprion virescens Mc. Culloch, Checklist Fish. Austr. Mem. Mus. V, Prt. II, 1929, p. 202.
- 13. Aprion virescens WEBER and DE BEAUFORT, Fishes of the Indo-Australian Archipelago VII, 1936, p. 311.

SYMPHORUS GÜNTHER.

Symphorus gibbifrons nov. spec.

D.X.7; A.III.10; P.I.16; V.I.5; L.l.54; L.tr.10-1-23.

Height 2.1 head 2.8 in length. Eye 4.7 in head, about once in snout. Profile of head almost rectangular with a rounded protuding elevation just before eyes. Maxillary reaching to below second half of head. Teeth small, short, conical and molarlike. One row of them in upper jaw and about 3 irregular rows of smaller ones in lower. In front of each jaw a row of blunt canines. Pectorals about as long head, longer than longest anal ray. Ventrals about as long as head without snout. Dorsal short, about as long as eyes. Soft anal pointed. First soft ray the longest, no filament. Caudal slightly incised. About 15 longitudinal somewhat vermicular stripes on body. Continued on head below eye. Above the eye all the lines are vermicular. A black spot on dorsal side of caudal peduncle.

One specimen. Total length 49 cm. Thousand Islands. March 1937. Soft dorsal damaged.

Fam. MOLIDAE.

MOLA LINCK.

Mola lanceolata (LIÉNARD).

Compressed. Hind end of body triangularly produced into a taillike organ. Height of body twice in total length. Head about 4 in total length. Eye somewhat smaller than branchial opening, somewhat more than twice in pectoral fin. Anal and dorsal fin about 2.5 in total length. Profile of snout rounded. Mouth small, terminal. Height of "tail" somewhat more than height of vertical fins, which are more or less falcate. Skin granular. Chin not prominent.

One specimen 68 cm. Bay of Batavia August 1937.

Fam. ELEOTRIDAE.

VIREOSA JORDAN and SNYDER.

Vireosa hanae JORDAN and SNYDER.

D.VI.I.25; A.I.25; P.23; V.I.4.

Head 5.5 in length, height 7.5. Depth of caudal peduncle 9.5 in length of head and body. Eye 3.5 in head, 1.5 in postorbital part. One or more short barbels on chin. Lower jaw longer than upper. Cleft of mouth large, almost vertical. Maxillary reaching to below frontborder of eye. Teeth in upper jaw in two series. The anterior consists of rather long fanglike curved canines. The inner teeth are minute. In the lower jaw a series of similar canines, with minute minute teeth between it and a single row of conical teeth outwards of the canines. Scales minute, slightly embedded in the skin. First dorsal just connected with second. First five rays of spinous dorsal separated from sixth which reaches the soft dorsal when depressed. Upper and lower rays much prolonged. Pectorals and ventrals rounded. Colouration completely faded in alcohol.

About twenty specimens were received in a living condition in the Aquarium at Batavia, 30-9-'36. They were kept alive and only two were put in alcohol. As at that time I did not know that we had to do with a species hitherto unknown from the Indo-Australian seas no notes were made of the colours. They were however mainly green with some brilliant red stripes and blotches. Dr. F. P. KOUMANS from the Leyden Museum was so kind as to give me the name of this species. Longest specimen about 100 without the caudal filaments.

1. Vireosa hanae JORDAN & SNYDER, Prod. U.S. Nat. Mus. XXIV, 1901, p. 38.