

FISHES OF THE GREAT NICOBAR EXPEDITION, 1966  
WITH DESCRIPTION OF A NEW GOBIOID FISH  
OF THE FAMILY KRAEMERIIDAE

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(With 1 Text-figure)

I—INTRODUCTION

It is well known that the Andaman and Nicobar group of islands is rich in its fish fauna (*vide* Day, 1870, 1878 ; Alcock, 1899 ; Annandale and Hora, 1925 ; Mukherji, 1935 ; Rao and Hora, 1938 ; Herre, 1939, 1941 ; Koumans, 1941 ; Jones, Silas and Dawson, 1960 ; Silas and Toor, 1961, 1962 ; Jones and Silas, 1962 ; Yazdani, 1963 ; Luther, 1966). The recent collection made by the Great Nicobar Expedition, 1966 is a very valuable addition to our knowledge of the fish fauna of these group of islands. It contains ninety three species belonging to sixty one genera and thirty five families, of which eleven species viz., *Gymnothorax boschi* (Blkr.), *Uropterygius macrocephalus* (Blkr.), *Ambassis buton* Popta, *Plesiops oxycephalus* Blkr., *Abudefduf cyaneus* (Q. & G.), *Abudefduf glaucus* (Cuv.) *Xanothon oktodon* (Blkr.), *Enchelyurus kraussi* (Klunz.), *Omobranchus zebra* (Blkr.), *Hypseleotris guntheri* (Blkr.), and *Ctenogobius grammatorgaster* Blkr., are recorded here for the first time from the Indian Seas,<sup>1</sup> while twelve species viz., *Pisodonophis cancrivorous* (Rich.), *Holocentrus lacteo-guttatus* Cuvier, *Mugil carinatus* Val., *Mugil cunnesius* Val., *Ephinephelus caeruleo-punctatus* (Bl.), *Leiognathus blochi* (Val.), *Secutor insidiator* (Bl.), *Abudefduf septemfasciatus* (Cuv.), *Butis gymnopomus* (Blkr.), *Bunaka gyrinoides* (Blkr.), *Quisquilius eugenius* Jordan & Evermann and *Periophthalmus variabilis* Eggert are new records for the Andaman and Nicobar group of Islands. A new species of a gobioid fish belonging to the genus *Kraemerius* Schultz, 1966 (family Kraemeridae) is also described.

A systematic account giving details of the number of specimens of each species present in the collection, the size range in standard length, the date of collection, locality and their range of distribution are given in this paper. A brief description of those species which are either recorded for the first time from the Indian Seas or from the Andaman group of islands is also given.

<sup>1</sup> The limits of the Indian Seas are : on the west, the Gulf of Oman and then from Ras el Haad southwards along Long. 60°E.; on the south from Lat. 1°S., where it meets Long. 60°E, eastwards to the coast of Sumatra ; on the East, the coast of Burma. The Andaman Sea is included but the coastal and territorial waters of Pakistan, Burma and Ceylon are considered outside our area. (*vide* Misra, 1947.).

## II—SYSTEMATIC ACCOUNT

## Order 1. LAMNIFORMES

## Family 1. CARCHARHINIDAE

1. **Carcharias melanopterus Quoy & Gaimard**

1824. *Carcharias melanopterus* Quoy & Gaimard, *Voy. Uranie, Zool. Poiss.* : 194, pl. 43, figs. 1-2.  
 1878. *Carcharias melanopterus* : Day, *Fish. India* : 715, pl. 185, fig. 3.

1 ex., 520 mm., Great Nicobar Island, 1966.

*Distribution*.—Widely distributed in the tropical Pacific and Indian Oceans from South Africa to the Marquesas Islands, Japan and Australia.

## Order 2. CLUPEIFORMES

## Family 1. CLUPEIDAE

2. **Herklotischthys punctatus (Rüppell)**

1837. *Clupea punctata* Rüppell, *Neue Wirbelth., Fische* : 78, pl. 21, fig. 2.  
 1878. *Clupea klunzei* Day, *Fish. India* : 636, pl. 163, fig. 1.  
 1965. *Herklotischthys punctatus* : Whitehead, *Bull. Brit. Mus. nat. Hist. (Zool.)*, 12 (7) : 237.

1 ex., 35 mm., Campbell Bay, 12. iii. 1966.

*Distribution*.—East coast of Africa to Japan, Australia and Polynesia.

## Family 2. ENGRAULIDAE

3. **Thrissina baelama (Forskål)**

1775. *Clupea baelama* Forskål, *Descript. animal.*, : 72.  
 1878. *Engraulis baelama* : Day, *Fish. India* : 626, pl. 158, fig. 7.  
 1940. *Thrissina baelama* : Herre, *Rec. Indian Mus.*, 42 : 1.

4 exs., 52-90 mm., Campbell Bay, 3, 12. iii. 1966.

*Distribution*.—Widely distributed from the Red Sea through India, East Indies to the Philippines, Guam and Samoa.

## Order 3. CYPRINIFORMES

## Family I. PLOTOSIDAE

4. **Plotosus anguillaris (Bloch)**

1797. *Platystacus anguillaris* Bloch, *Syst. Ichth.*, 11 : 49, pl. 373, figs. 1 & 2.  
 1877. *Plotosus arab* Day, *Fish. India* : 483, pl. 112, fig. 4.  
 1913. *Plotosus anguillaris* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 2 : 229.

3 exs., 62—90 mm., Casurina Bay, 6. iv. 1966.

*Distribution*.—From the coast of Africa to Japan and the Society Islands.

## Order 4. ANGUILLIFORMES

## Family I. ANGUILLIDAE

5. *Anguilla bicolor* McClelland

1845. *Anguilla bicolor* McClelland, *Calcutta J. nat. Hist.*, 5 : 178, pl. 6, fig. 1.  
 1878. *Anguilla bicolor* : Day, *Fish. India* : 660, pl. 167, fig. 3 and pl. 168, fig. 2.

1 ex., 49 mm., Log Point, Dogma river, 9. iv. 1966.

*Distribution*.—From India, Ceylon to the East Indies.

## Family 2. MURAENIDAE

6. *Echidna nebulosa* (Ahl)

1789. *Muraena nebulosa* Ahl, *Dissert. de Muraena et Ophichths* : 5, pl. 1, fig. 2.  
 1878. *Muraena nebulosa* : Day, *Fish. India* : 673, pl. 172, fig. 2.  
 1916. *Echidna nebulosa* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 3 : 348.

1 ex., 255 mm., between Cereberus and Conical Rock, 9.iii. 1966 ;  
 1 ex., 290 mm., Galathea Bay, 28.iii. 1966 ; 1 ex., 260 mm., Great Nicobar Island, 1966.

*Distribution*.—From the Red Sea and east coast of Africa across the Indian and Pacific Oceans to China, Guam, Hawaii, and throughout Polynesia.

7. *Gymnothorax boschi* (Bleeker)

1853. *Muraena boschi* Bleeker, *Verh. Bat. Gen.*, 25 : 52.  
 1955. *Gymnothorax boschi* : Munro, *Marine Freshwater Fishes Ceylon* : 62.

1 ex., 555 mm., Campbell Bay, 15.iii. 1966.

Body depth 13.5, head length 8.2 in total length. Head and trunk about equal to tail. Dorsal and anal moderately developed, the former beginning before gill opening. Dorsal three times as high as anal. Teeth in single series in both jaws. Intermaxillary with three mesial teeth and mandible with two inner symphysial canines. No vomerines but infrapharyngeals with two parallel double rows. Gill openings not much narrower than the eye diameter.

*Distribution*.—Ceylon, the East Indies and the Philippines. This is the first record of this species from Indian waters.

8. *Uropterygius macrocephalus* (Bleeker)

1865. *Gymnomuraena macrocephalus* Bleeker, *Ned. Tijdschr. Dierk.*, 2 : 54.  
 1943. *Uropterygius macrocephalus* : Schultz, *Bull. U. S. natn. Mus.*, 180 : 27.

2 exs., 130-155 mm., Campbell Bay, 6.iii. 1966 ; 3 exs., 143-185 mm., Galathea Bay, 25.iii. 1966.

Depth of body 17.0-18.5, head length 6.2-8.0 in total length. Head and trunk somewhat longer than tail. Eye situated above middle of cleft of mouth, about 7.0 in length of head. Anterior nostrils in short tube, posterior nostrils with elevated rim. Gill openings about as wide as eye diameter. Anal and dorsal fins present only at tip of tail, both confluent with short caudal fin. Maxillary and mandibular teeth in two series; vomerine teeth uniserial. Colour pattern of finely mottled brown and markings not arranged in rows or bars, tail pale edged, nostrils white.

*Distribution*.—Marquesas Islands to Samoa. This is the first record of this species from Indian seas.

### 9. *Uropterygius marmoratus* (Lacépède)

1803. *Gymnomuraena marmorata* Lacépède, *Hist. nat. Poiss.*, 5 : 648.  
 1878. *Gymnomuraena marmorata* : Day, *Fish. India* : 674, pl. 172, fig. 5.  
 1962. *Uropterygius marmoratus* : Smith, *Ichthyol. Bull. Rhodes Univ.*, 23 : 247, pl. 53D.

1 ex., 385 mm., Campbell Bay, 11.iii. 1966.

*Distribution*.—Widely distributed in the tropical Indo-Pacific, from islands on the east coast of Africa to Central Pacific.

### Family 3. OPHICHTHYIDAE

#### 10. *Pisoodonophis cancrivorus* (Richardson)

1844. *Ophisurus cancrivorus* Richardson, *Voy. Erebus & Terror, Fishes* : 97.  
 1916. *Pisoodonophis cancrivorus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 3 : 300.

1 ex., 150 mm., Galathea Bay, 25.iii. 1966.

Snout projects beyond mouth which reaches behind eye. Teeth in bands of several rows. Dorsal fin originates above middle of pectorals ; median fin low, ends before tip of tail. Tail about 1.5 times longer than rest of the body. Dorsal with a fine black margin.

*Distribution*.—Widespread, from Africa through India, Ceylon to Japan and Australia. This is the first record from the Andaman and Nicobar group of Islands.

### Order 5. BELONIFORMES

#### Family 1. HEMIRHAMPHIDAE

#### 11. *Hyporhamphus unifasciatus* (Ranzani)

1842. *Hemirhamphus unifasciatus* Ranzani, *Nov. Comm. Acad. Sci. Inst. Bonon*, 5 : 326.  
 1877. *Hemirhamphus unifasciatus* : Day, *Fish. India* : 514.  
 1955. *Hyporhamphus unifasciatus* : Munro, *Marine Freshwater Fishes Ceylon* : 74.

1 ex., 210 mm., Great Nicobar Island, 1966.

*Distribution*.—Pantropical, from the east coast of Africa through the East Indies and the Philippines to the Galapagos Islands, Panama, and also the Atlantic coast of tropical America.

**Order 6. SYNGNATHIFORMES**

**Family 1. SYNGNATHIDAE**

**12. *Syngnathus spicifer* Rüppell**

1840. *Syngnathus spicifer* Rüppell, *Neue Wirbelth., Fische* : 143, pl. 33, fig. 4.  
 1878. *Syngnathus spicifer* : Day, *Fish. India* : 678, pl. 174, fig. 1.

1 ex., 135 mm., Shampen village, Dogma river, 10.iv. 1966.

*Distribution*.—From the Red Sea and east coast of Africa to China, Caroline Islands and the Bismarck Archipelago.

**Order 7. CYPRINIDONTIFORMES**

**Family 1. CYPRINODONTIDAE**

**13. *Oryzias melastigma* (McClelland)**

1839. *Aplocheilus melastigma* McClelland, *Asiatic Res., Calcutta*, **19** : 301, 427, pl. 42, fig. 3.  
 1878. *Haplochilus melastigma* : Day, *Fish. India* : 522, pl. 121, fig. 4.  
 1939. *Oryzias melastigma* : Herre, *Rec. Indian Mus.*, **41** : 331.

50 exs., 33-43 mm., Casurina Bay, 7.iv. 1966 ; 1 ex., 36 mm., Shampen village, Dogma river, 10.iv. 1966 ; 1 ex., 43 mm., Great Nicobar Island, 1966.

*Distribution*.—From coasts of Ceylon and Peninsular India through Lower Bengal to Burma.

**Order 8. BERYCIFORMES**

**Family 1. HOLOCENTRIDAE**

**14. *Holocentrus lacteo-guttatus* Cuvier**

1829. *Holocentrum lacteo-guttatum* Cuvier, *Hist. nat. Poiss.*, **9** : 214.  
 1953. *Holocentrus lacteo-guttatus* : Smith, *Sea Fishes Southern Africa* : 153, pl. 9, fig. 297.

2 exs., 107-131 mm., Casurina Bay, 2.iv. 1966.

D. XI, 13 ; A. IV, 9 ; Ll. 41-43 ; L tr. 3/8 ; Gill rakers 6+1+10.

Depth of body 2.7-2.8 ; head length 2.7 in standard length. Snout 4.6-5.0 ; eye diameter 2.6-2.8 ; interorbital width 2.8-3.0 ; in length of head. Lower jaw not projecting beyond upper ; interorbital area flat, spine at angle of preopercle projecting beyond margin of opercular flap. Colour in alcohol ground colour of cheeks, and opercles profusely sprinkled with minute brown dots. Back and upper sides light brown with faint yellow lengthwise lines and many minute brown dots. Caudal, pectoral and pelvic fins pale.

*Distribution*.—A central Indo-Pacific species, from the Red Sea through the East Indies and the Philippines to Hawaii and Tahiti. This is the first record of this species from the Andaman and Nicobar group of Islands.

## Order 9. MUGILIFORMES

## Family 1. MUGILIDAE

15. **Mugil carinatus** Valenciennes

1836. *Mugil carinatus* Valenciennes, *Hist. nat. Poiss.*, 11 : 148.  
 1876. *Mugil carinatus* : Day, *Fish. India* : 349, pl. 74, fig. 2.  
 1888. *Mugil klunzingeri* Day, *Fish. India, Suppl.*, : 800.  
 1961. *Mugil carinatus* : Sarojini, *J. Bombay nat. Hist. Soc.*, 59 (2) : 548.

2 exs., 54-55 mm., Galathea Bay, 2.iii. 1966.

D. IV+1.8 ; A. III, 9 ; V. I, 5 ; P. 15 ; L I. 34-35.

Height of body 2.4-2.6 ; length of head 2.2-2.3 ; both in standard length. Eye diameter 3.7-4.0 in head length. Head length greater than height of body. Symphysial knob single. No elongated scale in axil of pectoral. End of maxilla visible when mouth is closed. Colour gray above, silvery below. Numerous black spots on pectorals which give a black appearance to its basal half. Similar spots on dorsal, caudal and anal also.

*Distribution*.—Red Sea and the west coast of India. This is the first record from the Andaman and Nicobar group of Islands.

16. **Mugil cunnesius** Valenciennes

1836. *Mugil cunnesius* Valenciennes, *Hist. nat. Poiss.*, : 11, 114.  
 1876. *Mugil speigleri* Day, *Fish. India* : 348, pl. 74, fig. 1.  
 1876. *Mugil cunnesius* : Day, *Fish. India* : 349, pl. 74, fig. 3.  
 1961. *Mugil cunnesius* : Sarojini, *J. Bombay nat. Hist. Soc.*, 59 (2) : 563.

4 exs., 62-82 mm., Jutalee river, 15.iv. 1966.

D. IV+1.8 ; A. III, 9 ; V. I.5 ; P. 15 ; L I. 32-34.

Height of body 3.0-3.6 ; length of head 3.1-3.6 ; both in standard length. Eye diameter 3.6 in head length. Head length less than height of body. Symphysial knob double. Lower jaw with single row of teeth, none on upper. Pectorals with elongate axillary scale ; dark spot at axil. Adipose lid present.

*Distribution*.—Red Sea, India, the East Indies, the Philippines and Queensland. This is the first record from the Andaman and Nicobar group of Islands.

17. **Mugil macrolepis** Smith

1849. *Mugil macrolepis* Smith, *Illust. S. Africa Zool., Pisces*, 4 : pl. 28, fig. 2.  
 1876. *Mugil poicilus* Day, *Fish. India* : 351, pl. 75, fig. 4.  
 1876. *Mugil borneensis* Day, *Fish. India* : 357, pl. 76, fig. 1.  
 1961. *Mugil macrolepis* : Sarojini, *J. Bombay nat. Hist. Soc.*, 59 (2) : 551.

9 exs., 66-85 mm., Casurina Bay, 5.iv. 1966 ; 1 ex., 80 mm., Campbell Bay, 12.iii. 1966 ; 4 exs., 74-88 mm., Appial Bay, 8.iv. 1966 ; 3 exs., 85-98 mm., Shampen village, Dogma river, 10.iv. 1966.

*Distribution*.—From South Africa to China, Japan and the Society Islands.

### 18. ***Mugil melinoptera* Valenciennes**

1836. *Mugil melinopterus* Valenciennes, *Hist. nat. Poiss.*, **11** : 146.

2 exs., 60-100 mm., Casurina Bay, 5.iv. 1966 ; 1 ex., 70 mm., Shampen village, Dogma river ; 10.iv. 1966.

*Distribution*.—From the Andamans to Samoa.

### 19. ***Mugil vaigiensis* Quoy & Gaimard**

1825. *Mugil vaigiensis* Quoy & Gaimard, *Voy. Uranie, Zoologie* : 337, pl. 59, fig. 2.

1876. *Mugil vaigiensis* : Day, *Fish. India* : 359, pl. 73, fig. 4.

1961. *Mugil vaigiensis* : Sarojini, *J. Bombay nat. Hist. Soc.*, **59** (2) : 561.

1 ex., 58 mm., Campbell Bay, 3.iii. 1966.

*Distribution*.—Widely distributed in the Indo-West Pacific ranging from the Red Sea and the east coast of Africa to Australia and Polynesia.

### Family 2. AATHERINIDAE

#### 20. ***Allanetta forskali* (Rüppell)**

1835. *Atherina forskalii* Rüppell, *Neue Wirbelth., Fische* : 132.

1876. *Atherina forskalii* : Day, *Fish. India* : 345, pl. 71, fig. 4.

1953. *Allanetta forskali* : Schultz, *Bull. U. S. Nat. Mus.*, (202) **1** : 299.

1 ex., 95 mm., Campbell Bay, 2. iii. 1966.

*Distribution*.—From the Red Sea and the east coast of Africa to New Guinea.

#### 21. ***Pranesus duodecimalis* (Valenciennes)**

1835. *Atherina duodecimalis* Valenciennes, *Hist. nat. Poiss.*, **10** : 458.

1876. *Atherina duodecimalis* : Day, *Fish. India* : 345.

1955. *Pranesus duodecimalis* : Munro, *Marine Freshwater Fishes Ceylon* : 95.

4 exs., 45-50 mm., Campbell Bay, 12.iii. 1966.

*Distribution*.—From Ceylon, the Andamans through the East Indies to the Aru Islands.

### Order 10. PERCIFORMES

#### Family 1. AMBASSIDAE

#### 22. ***Ambassis buton* Popta**

1918. *Ambassis buton* Popta, *Meded. Zool. Mus. Leiden* : 6.

2 exs., 68-77 mm., Polo-Balu, 18.iv. 1966 ; 3 exs., 32-36 mm., Great Nicobar Island, 1966.

$D_1$ . VII,  $D_2$ . I. 9-10 ; A. III.9 ; L 1. 29-32 ; L tr. 2/1/8.

Depth of body 2.3-2.7 ; head length 2.3-2.7 ; in standard length. Eye diameter 2.9-3.0 ; interorbital distance 4.0-4.1.; in length of head.

Maxillary reaches below anterior margin of pupil, its posterior end somewhat dilated, hind border emarginate. Chin prominent; mouth oblique. Pointed teeth in several rows; vomer, palatines and tongue with teeth. Preoperculum serrated in horizontal part. Dorsal separated from occiput by 14-15 scales. Caudal deeply forked. Lateral line continuous. Colour in alcohol yellowish brown; sides of head, and lateral band on body and caudal silvery, accompanied by a bluish stripe. Membrane between second and third dorsal spine dusky, blackish distally.

*Distribution.*—This species has so far been reported only from Buton and New Guinea. The record of this species from the Great Nicobar Island is of interest.

### 23. *Ambassis commersonii* Cuvier

1828. *Ambassis commersonii* Cuvier, *Hist. nat. Poiss.*, 2 : 176, pl. 25.  
 1875. *Ambassis commersonii* : Day, *Fish. India* : 52, pl. 15, fig. 3,  
 1929. *Ambassis commersoni* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 5 : 406.

1 ex., 145 mm., Polo-Balu, 18.iv. 1966.

*Distribution.*—From the Red Sea, east coast of Africa and eastwards to India, Thailand, the Philippines and Australia.

### 24. *Ambassis gymnocephalus* (Lacépède)

1802. *Lutjanus gymnocephalus* Lacépède, *Hist. nat. Poiss.*, 4 : 181, 216, pl. 23, fig. 3.  
 1875. *Ambassis gymnocephalus* : Day, *Fish. India* : 54, pl. 15, fig. 6.

12 exs., 58-83 mm., Shampen village, Dogma river, 10.iv. 1966.

*Distribution.*—From the coasts of East Africa, India, Ceylon through the East Indies to the Philippines and China.

### 25. *Ambassis urotaenia* Bleeker

1852. *Ambassis urotaenia* Bleeker, *Nat. Tijdschr. Ned-Indie*, 3 : 257.  
 1875. *Ambassis urotaenia* : Day, *Fish. India* : 55, pl. 15, fig. 8.

1 ex., 76 mm., Casurina Bay, 5.iv. 1966 ; 4 exs., 53-56 mm., Jutalee river, 15.iv. 1966.

*Distribution.*—Widespread, from South Africa to the Caroline Islands and Fiji.

## Family 2. SERRANIDAE

### 26. *Epinephelus caeruleo-punctatus* (Bloch)

1790. *Holocentrus caeruleo-punctatus* Bloch, *Naturges. ausland. Fische*, 4 : 94, pl. 242, fig. 2.  
 1875. *Serranus tumilabris* Day, *Fish. India* : 16, pl. 3, fig. 3.  
 1875. *Serranus dermochirus* Day, *Fish. India* : 21.  
 1931. *Epinephelus caeruleo-punctatus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 6 : 66.

1 ex., 55 mm., Galathea Bay, 21.iii. 1966 ; 1 ex., 76 mm., Pygmalion Point, 22.iii. 1966.

D. XI. 15-16 ; A. III,8 ; L1. 105-108 ; Predorsal scales 86-88 ; Gill rakers 9+17.

Height of body 3.5-3.7, head length 2.9 ; in total length. Interorbital space about half eye diameter. Maxillary reaches to below posterior border of eye. Head with cycloid scales, maxillary naked, body with ctenoid scales. Colour in alcohol-dark-brown, with smaller and larger chalky white spots. Maxillary groove edged with black.

*Distribution*.—East coast of Africa to the Philippines, Japan, Marshall and Fiji Islands. This is the first record from the Andaman and Nicobar group of Islands.

#### Family 3. PLESIOPIDAE

##### 27. *Plesiops coeruleolineatus* Rüppell

1835. *Plesiops coeruleolineatus* Rüppell, *Neue Wirbelth., Fische* : 5, pl. 2, fig. 5.

1 ex., 24 mm., Pygmalion Point, 22.iii. 1966 ; 1 ex., 60 mm., Galathea Bay, 25.iii. 1966 ; 2 exs., 36-55 mm., Casurina Bay, 2.iv. 1966 ; 2 exs., 52-53 mm., Appial Bay, 14.iv. 1966.

*Distribution*.—From the Andamans through the East Indies, the Philippines, Japan, Australia to Fiji and Samoa Islands.

##### 28. *Plesiops corallicola* Bleeker

1853. *Plesiops corallicola* Bleeker, *Nat. Tijdschr. Ned-Indie*, 4 : 280.

1875. *Plesiops nigricans* Day, *Fish. India* : 128, pl. 31, fig. 5.

1966. *Plesiops corallicola* : Schultz, *Bull. U. S. nat. Mus.*, (202) 3 : 163.

1 ex., 135 mm., Galathea Bay, 21.iii. 1966 ; 3 exs., 21-65 mm., Pygmalion Point, 22.iii. 1966 ; 2 exs., 120-138 mm., Galathea Bay, 25.iii. 1966 ; 1 ex., 94 mm., Casurina Bay, 6.iv. 1966 ; 1 ex., 109 mm., Great Nicobar Island, 1966.

*Distribution*.—Widespread, from the east coast of Africa to the Andamans, the Philippines, Australia, the Gilbert, Tonga and Samoan Islands.

##### 29. *Plesiops oxycephalus* Bleeker

1855. *Plesiops oxycephalus* Bleeker, *Nat. Tijdschr. Ned-Indie*, 8 : 320.

1 ex., 126 mm., Galathea Bay, 25.iii. 1966

D. XII. 7 ; A. III,8 ; L1. 25.

Head length 2.7 ; depth of body 3.2 ; snout to anal fin origin 1.4 ; length of pelvics 2.7 ; in standard length. Eye diameter 3.9 in head length ; rostro-frontal line straight. Jaws equal ; maxillary reaching slightly behind eye, about twice in head. Preoperculum rounded, with 7 oblique series of scales. Posterior lateral line beginning in front of a vertical through anal fin origin. Pectorals rounded,

equal post-orbital part of head. Lower rays of pectoral branched into silky filaments. Pelvics origin before origin of pectorals, first ray reaches anal. Caudal rounded. Colour in alcohol, brownish-violet, head dotted.

*Distribution*.—Batu and Ambon. This is the first record from Indian Seas.

#### Family 4. THERAPONIDAE

##### 30. *Therapon jarbua* (Forskål)

1775. *Sciaena jarbua* Forskål, *Descript. animal.*, 12 : 50.  
1875. *Therapon jarbua* : Day, *Fish. India* : 69, pl. 18, fig. 4.

3 exs., 19-87 mm., Great Nicobar Island, 1966.

*Distribution*.—Tropical Indo-Pacific, ranging from east coast of Africa to Japan, Australia and Polynesia.

#### Family 5. SILLAGINIDAE

##### 31. *Sillago sihama* (Forskål)

1775. *Atherina sihama* Forskål, *Descript. animal.* : 13, 70.  
1876. *Sillago sihama* : Day, *Fish. India* : 265, pl. 57, fig. 3.

1 ex., 170 mm., Great Nicobar Island, 1966.

*Distribution*.—Red Sea and east coast of Africa to Australia, Japan and Polynesia. Günther (1860) records this species from Nepal which obviously is an error.

#### Family 6. CARANGIDAE

##### 32. *Caranx sexfasciatus* Quoy & Gaimard

1824. *Caranx sexfasciatus* Quoy & Gaimard, *Voy. de l'Uranie*, : 358,  
pl. 65, fig. 4.  
1876. *Caranx hippos* Day, *Fish. India* : 216.

1 ex., 115 mm., Campbell Bay, 2.iii. 1966 ; 1 ex., 78 mm., Campbell Bay, 3.iii. 1966 ; 1 ex., 98 mm., Campbell Bay, 12.iii. 1966.

*Distribution*.—All through the warmer waters of the Indian and Pacific Oceans, from Africa to Hawaii.

#### Family 7. LIognathidae

##### 33. *Gazza minuta* (Bloch)

1797. *Scomber minutus* Bloch, *Syst. Ichth.* : 110, pl. 429, fig. 2.  
1876. *Gazza minuta* : Day, *Fish. India* : 244, pl. 53, fig. 1.

1 ex., 64 mm., Shampen village, Dogma river, 10.iv. 1966.

*Distribution*.—Widespread in the Indo-West Pacific, ranging from the Red Sea and east coast of Africa to the Philippines, Taiwan, Queensland and Polynesia.

### 34. *Gerres oblongus* Cuvier

1830. *Gerres oblongus* Cuvier, *Hist. nat. Poiss.*, 6 : 479.  
 1875. *Gerres oblongus* : Day, *Fish. India* : 98, pl. 25, fig. 2.

1 ex., 72 mm., Shampen village, Dogma river, 10.iv. 1966.

*Distribution*.—From east coast of Africa to India, Ceylon, the East Indies, the Philippines and Samoa.

### 35. *Leiognathus blochi* (Valenciennes)

1835. *Equula blockii* Valenciennes, *Hist. nat. Poiss.*, 10 : 84.  
 1876. *Equula blockii* : Day, *Fish. India* : 241, pl. 52, fig. 5.  
 1931. *Leiognathus blocki* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 6 : 328.

2 exs., 43-48 mm., Campbell Bay, 3.iii. 1966.

D. VIII. 16 ; A. III, 14.

Depth of body 2.0-2.1 ; head length 2.7.-2.9 ; both in standard length. Eye diameter 2.0 in length of head. Dorsal profile more arched than ventral profile. Mouth protractile, horizontal. Supraorbital edge serrated, a pair of small spines at its anterior-superior angle. Teeth minute, in single row in both jaws. Chest scaly ; head without scales. Colour in alcohol-silvery below and back brownish silvery.

*Distribution*.—India, Borneo and the Philippines. This is the first record of this species from the Andaman and Nicobar group of Islands.

### 36. *Leiognathus daura* (Cuvier)

1829. *Equula daura* Cuvier, *Regne Animal*, 2 : 22.  
 1876. *Equula daura* : Day, *Fish. India* : 240, pl. 52, fig. 4.  
 1931. *Leiognathus daura* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 6 : 332.

2 exs., 53-55 mm., Campbell Bay, 12.iii. 1966.

*Distribution*.—From the coast of Arabia through the East Indies to Australia and the Philippines.

### 37. *Leiognathus dussumieri* (Valenciennes)

1835. *Equula dussumieri* Valenciennes, *Hist. nat. Poiss.*, 10 : 77, pl. 283.  
 1876. *Equula dussumieri* : Day, *Fish. India* : 239, pl. 52, fig. 3.  
 1931. *Leiognathus dussumieri* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 6 : 326.

1 ex., 42 mm., Campbell Bay, 3.iii. 1966.

*Distribution*.—Widespread in the tropical Indo-Pacific, from Madagascar, India, Ceylon to Australia and Polynesia.

### 38. *Leiognathus equulus* (Forskål)

1775. *Scomber equula* Forskål, *Descript. animal.* : 75.  
 1876. *Equula edentula* : Day, *Fish. India* : 238, pl. 52, fig. 1.

1931. *Leiognathus equulus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 6 : 322.

1 ex., 55 mm., Campbell Bay, 12.iii. 1966 ; 1 ex., 81 mm., Casurina Bay, 5.iv. 1966 ; 2 exs., 62-66 mm., Jutalee river, 15.iv.66 ; 1 ex., 83 mm., Polu Balu, 18.iv. 1966.

*Distribution.*—Widespread in the tropical Indo-Pacific, from the east coast of Africa to the Philippines, Marshall Islands and Fiji.

### 39. *Pertica filamentosa* (Cuvier)

1829. *Gerres filamentosus* Cuvier, *Regne Animal*, (ed. 2), 2 : 188.  
 1875. *Gerres filamentosus* : Day, *Fish. India* : 98, pl. 25, fig. 3.  
 1955. *Pertica filamentosa* : Munro, *Marine Freshwater Fishes Ceylon* : 143, fig. 411.

1 ex., 83 mm., Casurina Bay, 4.iv.1966 ; 3 exs., 66-92 mm., Jutalee river, 15.iv.66.

*Distribution.*—From east coast of Africa to India, Ceylon, the East Indies, the Philippines, China, Japan, Australia and Melanesia.

### 40. *Secutor insidiator* (Bloch)

1787. *Zeus insidiator* Bloch, *Naturges. ausland. Fische*, 3 : 41, pl. 191, figs. 2 & 3.  
 1876. *Equula insidiatrix* : Day, *Fish. India* : 242, pl. 51 C, fig. 5.  
 1955. *Secutor insidiator* : Munro, *Marine Freshwater Fishes Ceylon* : 145, pl. 27, fig. 416.

1 ex., 26 mm., Campbell Bay, 12.iii.1966.

D. VIII.16 ; A. III,14.

Compressed, depth of body 2.3, length of head 3.0 ; in standard length. Mouth small, when fully protracted forms an upward directed tube. Ventral profile more convex than dorsal. Scales minute. Teeth minute, in two rows in both jaws. Colour in alcohol back brownish silvery, more silvery below, nine vertical bands on upper part of body.

*Distribution.*—Widespread, from the east coast of Africa to China, the Philippines and Polynesia. This is the first record from the Andaman and Nicobar group of Islands.

## Family 8. MONODACTYLIDAE

### 41. *Monodactylus argenteus* (Linnaeus)

1758. *Chaetodon argenteus* Linnaeus, *Syst. Nat.*, (ed. 10) 1 : 272.  
 1876. *Psettus argenteus* : Day, *Fish. India* : 235, pl. 51 B, fig. 5.  
 1936. *Monodactylus argenteus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 7 : 207, fig. 54.

2 exs., 65-76 mm., Jutalee river, 15.iv.1966.

*Distribution.*—Indo-Pacific, from east coast of Africa through the East Indies to the Philippines, China and Samoa.

Family 9. TOXOTIDAE

42. *Toxotes jaculator* (Pallas)

1766. *Sciaena jaculatrix* Pallas, *Phil. Trans. roy. Soc., London*, **56** : 186, pl. 8, fig. 6.  
 1875. *Toxotes jaculator* : Day, *Fish. India* : 117.

1 ex., 110 mm., Galathea Bay, 10.iii.1966.

*Distribution*.—From India to New Hebrides, Australia and the Philippines.

Family 10. POMACENTRIDAE

43. *Abudefduf bengalensis* (Bloch)

1787. *Chaetodon bengalensis* Bloch, *Naturges. ausland. Fische*, **3** : 110, pl. 213, fig. 2.  
 1877. *Glyphidodon bengalensis* Day, *Fish. India* : 387, pl. 83, fig. 3.  
 1940. *Abudefduf bengalensis* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, **8** : 403.

1 ex., 13 mm., between Cereberus and Conical Rock, 9.iii.1966 ;  
 1 ex., 86 mm., Casurina Bay, 2.iv.1966.

*Distribution*.—Indo-Pacific, from the Red Sea and Madagascar to the Andaman Islands, the Philippines, China and Japan.

44. *Abudefduf biocellatus* (Quoy & Gaimard)

1825. *Glyphisodon biocellatus* Quoy & Gaimard, *Voy. Uranie, Zoologie* **2** : 389.  
 1877. *Glyphidodon antjerius* Day, *Fish. India* : 387, pl. 81, figs. 4 and 5.  
 1940. *Abudefduf biocellatus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, **8** : 436.

2 exs., 33-52 mm., Galathea Bay, 25.iii.1966.

*Distribution*.—The Indo-Pacific, from the Red Sea and east coast of Africa to the Andaman Islands, Australia, the Marshall and Tuamotu Islands, and Japan.

45. *Abudefduf cyaneus* (Quoy & Gaimard)

1824. *Glyphisodon cyaneus* Quoy & Gaimard, *Voy. Uranie, Zoologie*, **2** : 392, pl. 64, fig. 3.  
 1940. *Abudefduf cyaneus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, **8** : 432.

3 exs., 43-46 mm., Casurina Bay, 2.iv.1966.

D, XIII,12 ; A,II. 11-12 ; P,1.17 ; Upper L1. 15-16 ; Gill rakers 6+1+13.

Depth of body 2.2-2.3 ; head length 2.8-3.2 ; in standard length. Eye diameter 2.5-3.0 ; interorbital distance 3.7-4.0 ; in length of head. Preorbital and suborbital without scales. Two transverse rows of scales on preopercle. Scales on upper part of head reaching to between eyes. Opercle with single, flat spine. Teeth uniserial and

compressed. Membranes between dorsal spines deeply incised. Caudal deeply emarginate, almost truncate. Colour in alcohol brownish yellow, vent black.

*Distribution.*—The East Indies, the Philippines, Riu Kiu Islands, Marianas, New Hebrides and Samoa. This is the first record of this species west of the East Indies.

#### 46. *Abudefduf glaucus* (Cuvier)

1830. *Glyphisodon glaucus* Cuvier, *Hist. Nat. Poiss.*, 5 : 475.

1960. *Abudefduf glaucus* : Smith, *Ichthyol. Bull. Rhodes. Univ.*, 19 : 336, pl. 29 F.

25 exs., 25-80 mm., Pygmalion Point, 22.iii.1966 ; 2 exs., 36-58 mm., Galathea Bay, 25.iii.1966.

D.XIII,12 ; A.II, 11-12 ; P,2.16 ; Upper lateral line 16-18 ; Gill rakers 7+1+12-13.

Depth of body 2.0-2.3 ; head length 2.7-3.4 ; in standard length. Eye diameter 2.4-3.0 ; interorbital width 3.0-3.7 ; in head length. Preopercle edge smooth. Teeth in two rows, inner row of smaller teeth. Scales of interorbital region extending to anterior margin of eye ; snout and area around nostrils naked ; orbital bones and both margins of preopercle naked. Opercular spines two, small and flat. Dorsal spines subequal after fourth ; soft dorsal and anal outlines angular ; caudal slightly forked, lobes rounded. Colour in alcohol uniform light yellowish, margin of anal and vent black.

*Distribution.*—Over the whole Western Indian Ocean, the East Indies, the Philippines to the Marshall and Marianas Islands. This is the first record from Indian Seas.

#### 47. *Abudefduf modestus* (Schlegel)

1839-41. *Glyphidodon modestus* Schlegel, *Nat. Gesch. Ned. Zool.*, 2 : 23, pl. 6, fig. 2.

1877. *Glyphidodon modestus* : Day, *Fish. India* : 388, pl. 81, fig. 6.

1939. *Abudefduf modestus* : Herre, *Rec. Indian Mus.*, 61 : 341.

2 exs., 34-46 mm., Great Nicobar Island, 1966.

*Distribution.*—India to Japan and Samoa.

#### 48. *Abudefduf septemfasciatus* (Cuvier)

1830. *Glyphisodon septemfasciatus* Cuvier, *Hist. nat. Poiss.*, 5 : 463.

1877. *Glyphidodon septemfasciatus* : Day, *Fish. India* : 386, pl. 81, fig. 7.

1940. *Abudefduf septemfasciatus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 8 : 401, fig. 49.

1 ex., 20 mm., between Cereberus and Conical Rock, 9.iii.1966 ; 4 exs., 43-63 mm., Galathea Bay, 21.iii.1966 ; 1 ex, 180 mm., Great Nicobar Island, 1966.

D.XIII. 13 ; A.II,12 ; P.ii, 16 ; Upper L1. 21-22. Gill rakers 8+1+14.

Depth of body 1.7-1.9 ; head length 2.8-3.0 ; in standard length. Eye diameter 2.7-2.9 ; interorbital width 2.9-3.1 in head length. Teeth

úniserial. Preorbital and suborbital entire, naked ; preopercle entire, margins not scaled. Scales on head only to narrowest part of interorbital. Opercle with broad, flat, triangular spine. Soft dorsal and anal fins angular. Colour in alcohol body with seven light greyish transverse vertical bars alternating with six blackish bars of about equal width. Pectorals pale, small black spot on pectoral base at its upper insertion. The specimen measuring 20 mm. with a black saddle across dorsal part of caudal peduncle, just behind dorsal fin.

*Distribution.*—Widespread, from the east coast of Africa to India, East Indies, the Philippines, China, Australia, Marshall, Society and Taumotu Islands. This is first record from the Andaman and Nicobar group of Islands.

#### Family 11. LABRIDAE

##### 49. *Halichoeres centriquadrus* (Lacépède)

1802. *Labrus centriquadrus* Lacépède, *Hist. nat. Poiss.*, 34 : 437, 493.  
 1877. *Platyglossus hortulanus* Day, *Fish. India* : 599, pl. 85, fig. 3.  
 1940. *Halichoeres centriquadrus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 8 : 189.

1 ex., 11 mm., between Cereberus and Conical Rock, 9.iii.1966.

*Distribution.*—Indo-Pacific, from east coast of Africa to Taiwan, Guam, Gilbert and Society Islands.

##### 50. *Halichoeres marginatus* Rüppell

1835. *Halichoeres marginatus* Rüppell, *Neue Wirbelth., Fische* : 16.  
 1877. *Platyglossus marginatus* : Day, *Fish. India* : 398, pl. 84, fig. 5.  
 1940. *Halichoeres marginatus* : Weber & Beaufort, *Fishes Indo-Australian Archipelago*, 8 : 197.

1 ex., 36 mm., Pygmalion Point, 23.iii.1966 ; 3 exs, 31-44 mm., Galathea Bay, 25.iii.1966.

*Distribution.*—From the Red Sea to the Philippines and Society Islands.

##### 51. *Labroides dimidiatus* (Valenciennes)

1839. *Cossyphus dimidiatus* Valenciennes, *Hist. nat. Poiss.*, 13: 136, & 139.  
 1877. *Labroides dimidiatus* : Day, *Fish. India* : 393, pl. 87, fig. 1.

1 ex., 17 mm., Casurina Bay, 2. iv. 1966.

*Distribution.*—From the Red Sea, Mauritius to the Philippines, Hawaii and Samoa.

##### 52. *Thalassoma purpureum* (Forskal<sup>o</sup>)

1775. *Scarus purpureus* Forskal, *Descript. animal.*, : x, 27.  
 1877. *Julius purpurea* : Day, *Fish. India* : 404, pl. 86, fig. 3.  
 1960. *Thallassoma purpureum* Schultz, *Bull. U. S. natn. Mus.*, (202) 2 : 197, pl. 100D.

1 ex., 230 mm., Great Nicobar Island, 1966.

*Distribution.*—From the east coast of Africa, Red Sea through India to Hawaii and Panmotu Islands.

### Family 12. SCARIDAE

#### 53. *Xanothon oktodon* (Bleeker)

1861. *Pseudoscarus oktodon* Bleeker, *Versl. Akad. Amersterdam*, **12** : 235.  
1956. *Xanothon oktodon* : Smith, *Ichthyol. Bull. Rhodes Univ.*, **1** : 7,  
pl. 41, fig. K.

1 ex., 400 mm., Great Nicobar Island, 1966.

D. IX, 10 ; A. III, 9 ; P. 2, 12 ; Ll. 18 + 7 ; L tr. 2 + 6.

Two rows of scales on cheek, preopercle flange naked. Teeth brown red, single canine in each jaw. Nostrils minute, before eye. Interorbital width 2.5 in eye diameter. Caudal lobes slightly pointed. Colour in alcohol brown with lighter snout; a dark blue band above upper lip continued to eye; dorsal dark brown; caudal brown with a vertical blue band.

*Distribution.*—East Africa, Seychelles, Madagascar, Zanzibar, Ceylon, the East Indies and the Philippines. This is the first record from India.

### Family 13. BLENNIIDAE

#### 54. *Enchelyurus flaviceps* Peters

1868. *Enchelyurus flaviceps* Peters, *Monatsber. Akad. Berlin* : 268.

1 ex., 38 mm., Galathea Bay, 21.iii.1966.

*Distribution.*—From the Andamans to the Hawaii and Society Islands.

#### 55. *Enchelyurus kraussi* (Klunzinger)

1871. *Petroscirtes kraussi* Klunzinger, *Verh. Zool. bot. Ges. Wien*, **21** : 497.  
1959. *Enchelyurus kraussi* : Smith, *Ichthyol. Bull. Rhodes Univ.*, **14** : 234.

1 ex., 33 mm., Galathea Bay, 21.iii.1966 ; 1 ex., 30 mm., Appial Bay, 14.iv.1966.

D. VIII, 21 ; A. II, 17-18 ; P. 13 ; V, 2.

Depth of body 4.8-5.0 ; head length 3.7-4.2 ; both in total length. Eye-diameter about 4.0 in head length. Mouth small, its corner scarcely reaching to below middle of eye. Gill openings to midpectoral base. About 30 upper and 40 lower teeth, lower canines larger. Origin of dorsal above hind border of preopercle. Dorsal higher behind, no notch. Anal rays subequal. Both vertical fins fully united with caudal, caudal rounded. Colour in alcohol brownish, underside somewhat lighter.

*Distribution.*—East coast of Africa, Seychelles, Red Sea and Malacca Straits. This is the first record from Indian Seas.

### 56. *Omobranchus zebra* (Bleeker)

1868. *Petroskirtes zebra* Bleeker, *Verl. Akad. Amrterdam*, 2 (2) : 279.  
 1951. *Petroscirtes (Omobranchus) zebra* : Chapman, *Fishes Indo-Australian Archipelago*, 9 : 376.

1 ex., 43 mm., Galathea Bay, 2.iii.1966.

D. XII, 18 ; A. 20 ; P. 13.

Depth of body 8.8 ; head length 5.5. ; both in total length. Mouth terminal, reaching to below anterior part of eye. No tentacles on head. Gill openings small, above level of base of pectoral. Origin of dorsal above gill openings. Pelvics equal to post-orbital part of head. Caudal emarginate. No lateral line. Colour in alcohol head with five transverse vertical dark bands ; body and caudal with eight dark transverse bands. Dorsal and anal freckled with brown. A dark blotch behind eye.

*Distribution*.—Singapore, Sulu Islands and the Philippines. This is a new record for the Indian Seas.

### Family 14. SALARIIDAE

#### 57. *Atrosalarias fuscus* (Rüppell)

1835. *Salarias fuscus* Rüppell, *Neue Wirbelth, Fische* : 135, pl. 32, fig. 2.  
 1875. *Salarias fuscus* : Day, *Fish. India* : 33, pl. 70, fig. 2.  
 1888. *Salarias ruficaudus* Day, *Fish. India, Supplement* : 797.  
 1951. *Atrosalarias fuscus* : Chapman, *Fishes Indo-Australian Archipelago*, 9 : 255, fig. 44.

3 exs., 20-47 mm., Campbell Bay, 1.iii.66 ; 2 exs., 25-35 mm., between Cereberus and Conical Rock, 9.iii. 1966 ; 1 ex., 29 mm., Appial Bay, 14.iv.1966.

*Distribution*.—From the Red Sea, east coast of Africa through India to the Philippines, Pelew Island, Solomon Island, New Hebrides, Fiji and Tonga Islands.

#### 58. *Entomacrodus epalzeocheilos* (Bleeker)

1859. *Salarias epalzeocheilos* Bleeker, *Nat. Tijdschr. Ned-Indie*, 19 : 343.  
 1876. *Salarias marmoratus* Day, *Fish. India* : 335.  
 1951. *Entomacrodus epalzeochilos* : Chapman, *Fishes Indo-Australian Archipelago*, 9 : 281.

1 ex., 55 mm., Campbell Bay, 1.iii.1966 ; 1 ex., 59 mm., Campbell Bay, 6.iii.1966.

*Distribution*.—India, the East Indies to Samoa.

#### 59. *Istiblennius andamanensis* (Day)

1869. *Salarias andamanensis* Day, *Proc. zool. Soc. Lond.*, : 611.  
 1876. *Salarias andamanensis* : Day, *Fish. India* : 332.  
 1959. *Istiblennius andamanensis* : Smith, *Ichthyol. Bull. Rhodes Univ.*, 14 : 242, fig. 5.

1 ex., 44 mm., between Cereberus and Conical Rock, 9.iii.1966 ;  
 1 ex., 62 mm., Galathea Bay, 21.iii.1966 ; 10 exs., 24-67 mm.,  
 Pygmalion Point, 22.iii.1966.

*Distribution*.—East coast of Africa, Seychelles and the Andamans.

#### 60. *Istiblennius bleekeri* (Chapman)

1876. *Salarias periophthalmus* Day, *Fish. India* : 333, pl. 69, fig. 5.  
 1951. *Salarias bleekeri* Chapman, *Fishes Indo-Australian Archipelago*,  
 9 : 338.

1 ex., 70 mm., Galathea Bay, 21.iii.1966.

*Distribution*.—The Andaman Islands, Sumatra and Huisman's Island.

#### 61. *Istiblennius bilitonensis* (Bleeker)

1858. *Salarias bilitonensis* Bleeker, *Nat. Tijdschr. Ned-Indie*, 15 : 231.  
 1876. *Salarias bilitonensis* : Day, *Fish. India* : 334, pl. 71, fig. 1.

1 ex., 58 mm., between Cereberus and Conical Rock, 9.iii.1966.

*Distribution*.—From the Andamans to the East Indies.

#### 62. *Istiblennius cyanostigma* (Bleeker)

1849. *Salarias cyanostigma* Bleeker, *Verh. Bat. Gen.*, 22 : 5, 7 & 18.  
 1876. *Salarias striolatus* Day, *Fish. India* : 333.  
 1960. *Istiblennius cyanostigma* : Schultz & Chapman, *Bull. U. S. natn. Mus.*, (202) 2 : 355, pl. 117 E.

3 exs., 40-46 mm., Pygmalion Point, 22.iii.1966.

*Distribution*.—The Andamans through the East Indies to the Marshall and Marianas Islands.

#### 63. *Istiblennius dussumieri* (Valenciennes)

1836. *Salarias dussumieri* Valenciennes, *Hist. nat. Poiss.*, 11: 310.  
 1876. *Salarias dussumieri* : Day, *Fish. India* : 333, pl. 70, fig. 7.

1 ex., 36 mm., Appial's Bay, 14.iv.1966.

*Distribution*.—East coast of Africa, Seas of India to Queensland, the Marianas and Palmyra Islands.

#### 64. *Istiblennius dayi* (Whitley)

1876. *Salarias alboguttatus* Day (nec. Kner), *Fish. India* : 334.  
 1929. *Salarias dayi* Whitley, *Rec. Austr. Mus.*, 17 : 136.

1 ex., 48 mm., Galathea Bay, 25.iii.1966.

*Distribution*.—The Andaman Islands.

#### 65. *Istiblennius edentulus* (Bloch)

1801. *Blennius edentulus* Bloch, *Syst. Ichth.*, : 172.

1876. *Salarias quadricornis* Day, *Fish. India* : 331, pl. 70, fig. 4.  
 1960. *Istiblennius edentulus* : Schultz & Chapman, *Bull. U. S. natn. Mus.*, (202) 2 : 353, pl. 118, A, B.

1 ex., 63 mm., Campbell Bay, 6.iii.1966 ; 1 ex., 70 mm., Galathea Bay, 25.iii.1966.

*Distribution*.—From the Red Sea to Madagascar, China, Hawaii, Australia and the Marquesas.

#### 66. *Salarias fasciatus* (Bloch)

1786. *Blennius fasciatus* Bloch, *Naturges. ausland. Fische*, 2 : 110.  
 1876. *Salarias fasciatus* : Day, *Fish. India* : 330.

1 ex., 51 mm., Galathea Bay, 25.iii.1966 ; 2 ex., 46-52 mm., Casurina Bay, 2.iv.1966 ; 1 ex., 58 mm., Galathea river, 1966.

*Distribution*.—From the Red Sea to the Samoa and Caroline Islands.

#### 67. *Salarias fuscus* Rüppell

1835. *Salarias fuscus* Rüppell, *Neue Wirbelth., Fische* : 135, pl. 32, fig. 2.  
 1876. *Salarias fuscus* : Day, *Fish. India* : 330, pl. 70, fig. 2.

3 exs., 20-47 mm., Campbell Bay, 1. iii.1966.

*Distribution*.—From the Red Sea through the Andaman and Nicobar Islands to the Philippines.

#### Family 15. CLINIDAE

##### 68. *Tripterygion fasciatum* Weber

1913. *Tripterygion fasciatum* Weber, *Siboga Expeditn., Fische* : 548, fig. 118.

1 ex., 21 mm., between Cereberus and Conical Rock, 9.iii.1966 ;  
 1 ex., 21 mm., Pygmalion Point, 23.iii.1966.

*Distribution*.—From the Andamans to the East Indies.

#### Family 16. ACANTHURIDAE

##### 69. *Acanthurus lineatus* (Linnaeus)

1758. *Chaetodon lineatus* Linnaeus, *Syst. Nat.*, (ed. 10) : 274.  
 1876. *Acanthurus lineatus* : Day, *Fish. India* : 203.

1 ex., 220 mm., Great Nicobar Island, 1966.

*Distribution*.—From Zanzibar to the Marquesas and Marshall Islands.

#### Family 17. ELEOTRIDAE

##### 70. *Butis gymnopomus* (Bleeker)

1853. *Eleotris gymnopomus* Bleeker, *Nat. Tijdschr. Ned-Indie.*, 4 : 274.  
 1856. *Butis gymnopomus* : Bleeker, *Nat. Tijdschr. Ned-Indie.*, 12 : 215.

3 exs., 61-86 mm., Shampen village, Dogma river, 10.iv.66.

D<sub>1</sub>. VI, D<sub>2</sub>. 1,8 ; A. 1,8 ; P. 17 ; Ll. 30-31 ; L tr. 10 ; Predorsal scales  $\pm$  14.

Body elongate, height 5.0-5.3 ; head length 2.6-2.7 ; both in standard length. Eye 5.0-5.2 in head length ; interorbital width equals eye diameter. Lower jaw prominent ; maxillary extends to below anterior part of eye. Teeth small, in many rows, those of the outer and inner rows enlarged. Supraopercular groove distinct. Snout, interopercle and cheek naked. Head only scaled above behind eyes, opercle with ctenoid scales. No scales between eyes and orbital crest. Scales of breast and belly cycloid, of nape and laterally on body ctenoid. Caudal shorter than head. Colour in alcohol blackish, light behind.

*Distribution*.—India (Patani River) and Indo-Australian Archipelago. This is the first record from the Andaman and Nicobar group of Islands.

### 71. *Bunaka gyrinoides* (Bleeker)

1853. *Eleotris gyrinoides* Bleeker, *Nat. Tijdschr. Ned-Indie*, 4 : 272.

1876. *Eleotris canarensis* Day, *Fish. India* : 313, pl. 69, fig. 2.

1941. *Bunaka gyrinoides* : Koumans, *Mem. Indian Mus.*, 13 : 327.

18 exs., 23-74 mm., Shampen village, Dogma river, 10.iv.1966.

D<sub>1</sub>. VI, D<sub>2</sub>. 1.8 ; A. 1.8 ; P. 18-19 ; L l. 58-61 ; L tr. 16-17 ; Predorsal scales  $\pm$  40.

Body anteriorly cylindrical, posteriorly compressed, height 5.1-6.0 ; head length 2.5-2.7 ; both in standard length. Eye diameter 5.0-5.2 in head length, interorbital width more than one eye diameter. Lower jaw little prominent ; maxillary extends to below posterior half of eye. Teeth equal, small. Supraocular groove distinct. Scales of body ctenoid ; cheek and opercle scaled, cycloid. Caudal obtusely rounded, shorter than head. Colour in alcohol dark brownish above, lighter below. Each scale with a dark spot. A dark longitudinal stripe from snout to eye.

*Distribution*.—India, Ceylon, Indo-Australian Archipelago, Admiralty Island and Pelew Island. This is the first record from the Andaman and Nicobar group of Islands.

### 72. *Bostrichthys sinensis* (Lacépède)

1801. *Bostrychus sinensis* Lacépède, *Hist. nat. Poiss.*, 5 : 183.

1876. *Bostrichthys sinensis* : Day, *Fish. India* : 309, pl. 65, fig. 4.

2 exs., 17-21 mm., between Cereberus and Conical Rock, 9.iii.1966 ; 2 exs., 16-20 mm., Galathea Bay, 21. iii.1966 ; 5 exs., 16-18 mm., Pygmalion Point, 22.iii.1966 ; 1 ex., 16 mm., Casurina Bay, 2.iv.1966.

*Distribution*.—From the Andamans through the East Indies to the Pacific.

### 73. *Eleotris andamensis* Herre

1939. *Eleotris andamensis* Herre, *Rec. Indian. Mus.*, 41 : 344.

1 ex., 29 mm., Shampen village, Dogma river, 1966.

*Distribution*.—The Andamans Islands.

#### 74. *Eleotris fusca* (Schneider)

1801. *Poecilia fusca* Schneider, *Syst. Ichth* : 453.

1876. *Eleotris cavifrons* Day, *Fish. India* : 313, pl. 65, fig. 6.

1876. *Eleotris fusca* : Day, *Fish. India* : 313, pl. 65, fig. 7.

6 exs., 39-85 mm., Shampen village, Dogma river, 1966.

*Distribution*.—Red Sea and east coast of Africa to the Pacific.

#### 75. *Hypseleotris guntheri* (Bleeker)

1875. *Asterropteryx guntheri* Bleeker, *Arch. neerl. Sc. ex. et. nat.*, 10 : 112.

1953. *Hypseleotris guntheri* : Koumans, *Fishes Indo-Australian Archipelago*, 10 : 326, fig. 80.

1 ex., 43 mm., Great Nicobar Island, 1966.

$D_1$ . VI,  $D_2$ . I.9 ; A. I.9 ; P.14 ; L 1. 28 ; L tr. 8 ; Predorsal scales 15. Body compressed, height 4.4, head length 3.3; both in standard length. Body profile straight. Eye diameter 3.6 in head length ; interorbital width slightly less than eye diameter. Snout pointed, shorter than eye, tip before middle of eye. Lower jaw prominent ; mouth narrow. Maxillary does not reach eye. Head totally scaled. except anteriorly on snout. Colour in alcohol yellowish. A black band from opercle to lower part of base of caudal fin, ending in a dark blotch. Rays of second dorsal and caudal fin spotted. Pectoral fin with dark spot at upper part of base. First dorsal fin with dark longitudinal band halfway.

*Distribution*.—This is the first record of the genus *Hypseleotris* Gill from Indian Seas. *H. guntheri* was known only from the East Indies to the Fiji Islands, Samoa and New Caledonia.

#### 76. *Ophiocara aporos* (Bleeker)

1854. *Eleotris aporos* Bleeker, *Nat. Tijdschr. Ned-Indie*, 6 : 54.

1876. *Eleotris opiocephalus* Day, *Fish. India* : 312, pl. 62, fig. 2.

1888. *Eleotris tumifrons* Day, *Fish. India, Suppl.* : 795.

1953. *Ophiocara aporos* : Koumans, *Fishes Indo-Australian Archipelago*, 10 : 346, fig. 84.

8 exs., 59-125 mm., Shampen village, Dogma river, 10.iv.1966 ; 227 exs., 28-87 mm., freshwater pools, Great Nicobar Islands, 1966.

*Distribution*.—From Madagascar to India, through the East Indies to the Philippines, Kusaie, Fiji and Queensland.

#### Family 18. KRAEMERIIDAE

##### 77. *Kraemericus smithi* sp. n.

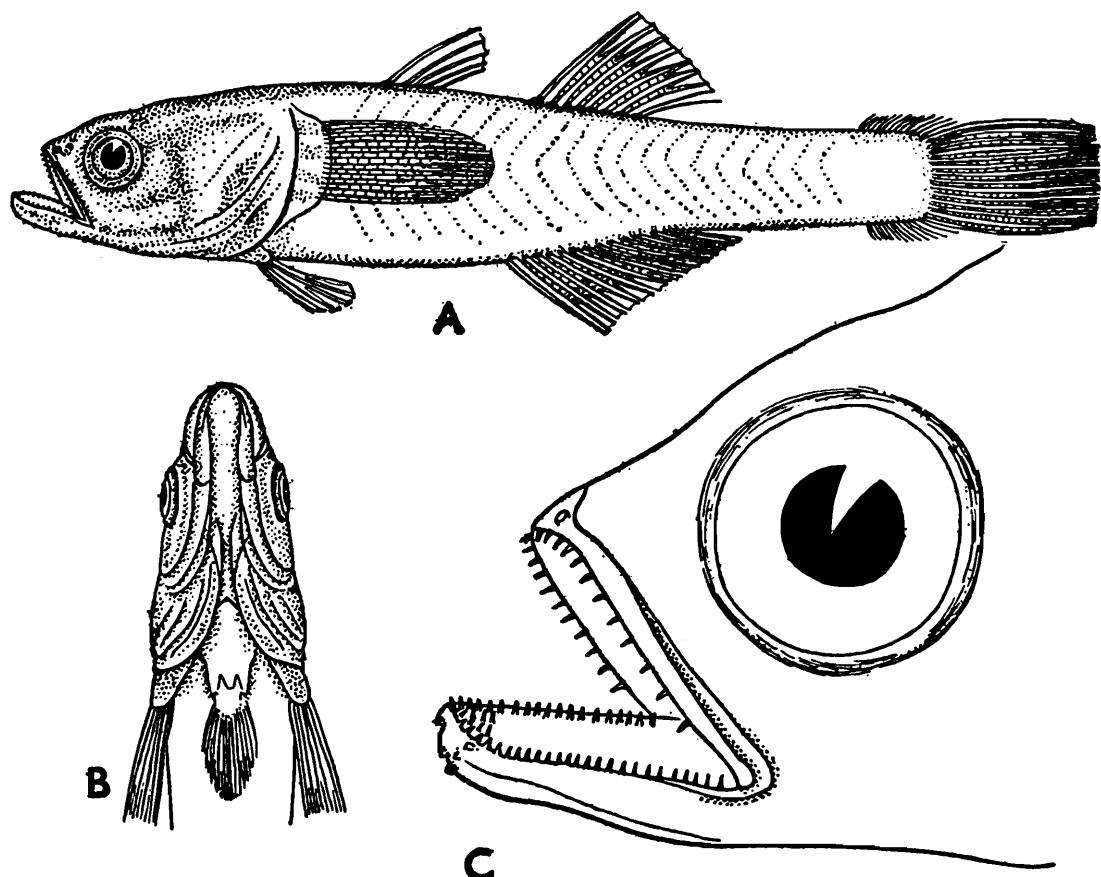
(Text-fig. 1 a, b & c)

*Holotype*.—26.0 mm., total length ; ♀ mature ; Shampen village, Dogma river, Great Nicobar Island ; 10.iv.1966 ; Coll. Dr. A. Daniel ; Zoological Survey of India Reg. No. 5522/2.

*Paratypes*.—14 examples, 11 ♂♂ and 3 ♀♀; mature; 13.5-20.0 mm., standard length; other details as for the holotype.  
Reg. No. 5523/2.

Description.— $D_1$ . V,  $D_2$ . I.7; A. I.12; P. 16; V. I. 4; C. 15.

Depth of body 5.0-6.1; head length 2.8-3.2; pectoral fin length 3.8-4.0; pelvic fin length 6.0-6.2, tip of snout to dorsal origin 2.2-2.5, all in standard length. Eye diameter 3.0-3.6; interorbital width 4.0-4.5; both in head length.



TEXT-FIG. 1. *Kraemerius smithi* sp. nov. X 6. A. Lateral view of holotype. B. Ventral view of head (diagrammatic). C. Lateral view of head showing teeth (diagrammatic).

Body elongate, naked, moderately compressed. The head relatively large, eyes large, lateral. Lower jaw notably projecting in front of snout, entering dorsal profile. Mouth moderate with single row of sharp minute teeth in upper jaw and two rows in lower jaw; no canines. Palatines and tongue edentate. Tongue bilobed, free. Maxillary oblique in position, vertical line through hind edge passing slightly in front of pupil; premaxillary not protractile. Gill rakers obsolete. Two pairs of nasal openings, one dorsally in front of eye, other next to upper lip. Anal fin origin slightly in front of base of second dorsal. Dorsal and anal rays divided, the last dorsal ray deeply forked. Pelvic insertion under base of pectorals; pelvics separate, fraenum distinct, not forming cup like disc. Caudal truncate, shorter than head. No lateral line. Air bladder present.

A stained and cleared specimen has revealed the following : Vertebrae 23 (7+16) ; 4 branchiostegal rays.

Colour in alcohol.—light brownish, pigment spots scattered on fins ; eyes black.

This new species is named in honour of Prof. J.L.B. Smith, Department of Ichthyology, Rhodes University, Grahamston, who confirmed the identity of the species.

The new species may be distinguished from the other known species of *Kraemericus* Schultz, 1966 by the following key.

1. Dorsal V-15 ; body scaled....*K. chapmani* Schultz, 1966.
2. Dorsal V-1.7 ; body naked....*K. smithi* sp. n.

*Ecology*.—These gobioids were collected from a creek of the Dogma river from clear shallow water by disturbing the bottom mud. The area of collection is probably within the area of tidal influence.

#### Family 19. GOBIIDAE

##### 78. *Acentrogobius reichei* (Bleeker)

1853. *Gobius reichei* Bleeker, *Nat. Tijdschr. Ned-Indie*, 5 : 509.  
 1876. *Gobius neilli* Day, *Fish. India* : 290, pl. 112, fig. 4.  
 1941. *Acentrogobius reichei* : Koumans, *Mem. Indian. Mus.*, 13 (pt. 3) : 232.

8 exs., 20-33 mm., between Cereberus and Conical Rock, 9.iii. 1966 ; 5 exs., 23-45 mm., Pygmalion Point, 23.iii.1966 ; 1 ex, 31 mm., Great Nicobar Island, 1966.

*Distribution*.—South-east Africa, India to the Philippines.

##### 79. *Bathygobius fuscus* (Rüppell)

1828. *Gobius fuscus* Rüppell, *Atl. Reise N. Afr. Fische* : 137.  
 1876. *Gobius elegans* Day, *Fish. India* : 293.  
 1876. *Gobius albo-punctatus*, Day, *Fish. India* : 294, pl. 63, fig. 7.  
 1941. *Bathygobius fuscus* : Koumans, *Mem. Indian. Mus.*, 13 : 267.

2 exs., 32-45 mm., between Cereberus and Conical Rock, 9.iii. 1966 ; 1 ex, 45 mm., Galathea Bay, 21.iii. 1966 ; 2exs. 41-63 mm., Pygmalion Point, 23.iii.1966 ; 1 ex., 34 mm., Casurina Bay, 2.iv.1966 ; 2 exs., 35-48 mm., Great Nicobar Island, 1966.

*Distribution*.—From South Africa and Red Sea to Pacific America.

##### 80. *Callogobius hasseltii* (Bleeker)

1851. *Eleotris hasseltii* Bleeker, *Nat. Tijdschr. Ned-Indie*, 1 : 253.  
 1941. *Callogobius hasseltii* : Koumans, *Mem. Indian Mus.*, 13 : 236.

10 exs., 28-30 mm., between Cereberus and Conical Rock, 9.iii.1966 ; 1 ex., 68 mm., Galathea River, 27.iii.1966 ; 1 ex., 63 mm., Casurina Bay, 2.iv.1966.

*Distribution*.—From India to the East Indies, Australia and Japan.

81. *Ctenogobius criniger* (Valenciennes)

1837. *Gobius criniger* Valenciennes, *Hist. nat. Poiss.*, 12 : 82.  
 1876. *Gobius criniger* : Day, *Fish. India* : 288, pl. 62, fig. 2.  
 1941. *Ctenogobius criniger* : Koumans, *Mem. Indian Mus.*, 13 : 265.

5 exs., 20-68 mm., Pygmalion Point, 22.iii.1966.

*Distribution*.—Widespread, from the east coast of Africa to the Philippines.

✗ 82. *Ctenogobius grammatoaster* Bleeker

1875. *Ctenogobius grammatoaster* Bleeker, *Arch. neerl. Sc. ex. et. nat.*, 10 : 124.

6 exs., 28-44 mm., Pygmalion Point, 22.iii.1966 ; 1 ex., 20 mm., Great Nicobar Island, 1966.

D<sub>1</sub>. VI, D<sub>2</sub>. I.II ; A. I.9 ; P. 16 ; Ll. 29 ; L tr. 8.

Body elongate, height 4.1-4.5 ; head length 3.1-3.3 ; both in standard length. Body profile convex. Eye diameter 3.1 in length of head, interorbital width less than 1/3 eye-diameter. Mouth little oblique ; maxillary extends to below anterior part of pupil. Teeth in several rows. Nape naked ; breast with minute cycloid scales ; body scales ctenoid. Pectoral fin obtuse, slightly shorter than head. Ventrals pointed. Caudal obtuse, as long as head. Colour in alcohol greenish. A circular dusky band through eyes and the interorbital space. Eight transverse streaks along the sides of body. Caudal with transverse rows of dusky dots.

*Distribution*.—East Indies. This is the first record of this species from Indian waters.

83. *Pipidonia arenarius* (Snyder)

1908. *Heteroleotris arenarius* Snyder, *Proc. U. S. natn. Mus.*, 35 : 100.  
 1941. *Pipidonia arenarius* : Koumans, *Mem. Indian Mus.*, 13 : 247.

1 ex., 23 mm., between Cereberus and Conical Rock, 9.iii.1966.

*Distribution*.—The Andamans, Thailand and Japan.

84. *Stigmatogobius römeri* (Weber)

1911. *Gobius römeri* Weber, *Abh. Senckenb. Naturf. Ges.*, 34 : 39, fig. 8.  
 1953. *Stigmatogobius römeri* : Koumans, *Fishes Indo-Australian Archipelago*, 10 : 113, fig. 26.

1 ex., 30 mm., Shampen village, Dogma river, 1966.

*Distribution*.—The Andamans, the Philippines, Pelew Islands, Fiji and Australia.

85. *Quisquilius eugenius* Jordan & Evermann

1902. *Quisquilius eugenius* Jordan and Evermann, *Bull. U. S. Fish. Comm.*, 22 : 203.  
 1941. *Quisquilius eugenius* : Koumans, *Mem. Indian Mus.*, 13 : 248.

1 ex., 36 mm., Shampen village, Dogma river, 1966.

$D_1$ . VI,  $D_2$ . I.10; A. I. 10. P. 18 ; L1.30; Ltr. 10; Predorsal scales 15. Body elongate, compressed, height 4.6 in standard length. Head length 3.5 in standard length. Eye diameter 3.2 in head length. Maxillary extends to below posterior margin of pupil. Teeth in many rows, outer row enlarged. Gill openings continued forward below, isthmus narrow. Scales of body ctenoid, on nape ctenoid and on breast cycloid; head scaled above behind eyes. Caudal oblong, shorter than head. Ventrals united. Colour in alcohol yellowish, body with eight transverse bands on body.

*Distribution*.—India, Indo-Australian Archipelago and Hawaiian Islands. This is the first record from the Andaman and Nicobar group of Islands.

### 86. *Zonogobius semidoliatus* (Valenciennes)

1837. *Gobius semidoliatus* Valenciennes, *Hist. nat. Poiss.*, 12 : 67.

1876. *Gobius semidoliatus* : Day, *Fish. India* : 295, pl. 59, fig. 6.

1941. *Zonogobius semidoliatus* : Koumans, *Mem. Indian Mus.*, 13 : 250.

2 exs., 14-17 mm., between Cereberus and Conical Rock, 9.iii.1966 ; 1 ex., 27 mm., Pygmalion Point, 22.iii.1966 ; 1 ex., 23 mm., Galathea Bay, 25.iii.1966.

*Distribution*.—Widespread, Red Sea to the Pacific.

### Family 20. PERIOPHTHALMIDAE

#### 87. *Periophthalmus koelreuteri* (Pallas)

1770. *Gobius koelreuteri* Pallas, *Spicilegia Zool.*, 8 : 8, pl. 2, figs. 1-3.

1876. *Periophthalmus koelreuteri* : Day, *Fish. India* : 303, pl. 64, fig. 8.

2 exs., 70-125 mm., Alexandra river, 13.iv.1966.

*Distribution*.—Widespread, from East Africa to Samoa.

#### 88. *Periophthalmus variabilis* Eggert

1935. *Periophthalmus variabilis* Eggert, *Zool. Jahrb. (Syst.)*, 66 : 63, pl. 3, fig. 13, and pl. 4, figs. 14 & 15.

1 ex., 52 mm., Campbell Bay, 3.iii.1966.

$D_1$ . IX,  $D_2$ . I.12 ; A. I.12 ; P. 11 ; L1. 62 ; Predorsal scales 25.

Body elongate, anteriorly cylindrical, posteriorly compressed, height 7.4 ; length of head 5.2 ; both in total length. Teeth in upper jaw anteriorly two caninoid teeth ; in lower jaw on each side two caninoid teeth. Ventrals not totally united ; basal membrane absent. Caudal obtuse, about as long as head.

*Distribution*.—India, Thailand, Java and Sumatra. This is the first record from the Andaman and Nicobar group of Islands.

### Family 21. PLATYCEPHALIDAE

#### 89. *Platycephalus indicus* (Linnaeus)

1751. *Callionymus indicus* Linnaeus *Syst. Nat. (ed. 10)* : 250.

1876. *Platycephalus insidiator* Day, *Fish. India* : 276.  
 1962. *Platycephalus indicus* : Beaufort & Briggs, *Fishes Indo-Australian Archipelago*, 11 : 131.

1 ex., 205 mm., Alexandra river, 13.iv.1966.

*Distribution*.—Widespread, east coast of Africa, Red Sea through the East Indies to New Guinea, Queensland and Japan.

### Order 11. TETRADONTIFORMES

#### Family 1. TETRADONTIDAE

##### 90. *Tetraodon fluviatilis* Hamilton

1822. *Tetraodon fluviatilis* Hamilton, *Fish. Ganges* : 16 & 362, pl. 30, fig. 1.  
 1878. *Tetrodon fluviatilis* : Day, *Fish. India* : 707, pl. 183, fig. 1.  
 1962. *Tetraodon fluviatilis* : Beaufort & Briggs, *Fishes Indo-Australian Archipelago*, 11 : 395.

1 ex., 47 mm., Galathea river, 27.iii.1966.

*Distribution*.—From India to the East Indies and the Philippines.

##### 91. *Tetraodon immaculatus* Schneider

1801. *Tetraodon immaculatus* Schneider, *Syst. Ichth.* : 507.  
 1878. *Tetrodon immaculatus* : Day, *Fish. India* : 703, pl. 183, fig. 4.  
 1962. *Tetraodon immaculatus* : Beaufort & Briggs, *Fishes Indo-Australian Archipelago*, 11 : 405.

1 ex., 114 mm., Great Nicobar Island, 14.iii.1966.

*Distribution*.—From the Red Sea and the east coast Africa to the Marshall Islands, Samoa and Australia.

##### 92. *Tetraodon reticulatus* Schneider

1801. *Tetrodon reticulatus* Schneider, *Syst. Ichth.* : 506.  
 1878. *Tetrodon reticulatus* : Day, *Fish. India* : 705, pl. 180, fig. 5.  
 1962. *Tetraodon reticulatus* : Beaufort & Briggs, *Fishes Indo-Australian Archipelago*, 11 : 401.

1 ex., 114 mm., Campbell Bay, 3.iii.1966.

*Distribution*.—India, East Indies, the Philippines, Fiji Islands and Australia.

#### Family 2. BALISTIDAE

##### 93. *Balistapus undulatus* (Mungo Park)

1797. *Balistes undulatus* Mungo Park, *Trans. Linn. Soc. Lond.*, 3 : 37.  
 1878. *Balistes undulatus* : Day, *Fish. India* : 691, pl. 177, fig. 4.  
 1962. *Balistapus undulatus* : Beaufort & Briggs, *Fishes Indo-Australian Archipelago*, 11 : 297.

2 exs., 220 mm., Casurina Bay, 6.iv.1966.

*Distribution*.—From the Red Sea and east cost of Africa to Tahiti, and north to the Caroline Islands, China and Japan.

## III—ACKNOWLEDGEMENT

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## IV—SUMMARY

The fish collections of the Great Nicobar Expedition, 1966 contain 93 species belonging to 61 genera and 35 families of which eleven species are new records from the Indian Seas while twelve species are recorded for the first time from the Andaman and Nicobar group of Islands. A new species of the genus *Kraemericus* Schultz, belonging to the family Kraemeriidae, discovered in the collections, is described in this paper.

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