NEMIP

1983

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

NEMIPTERIDAE

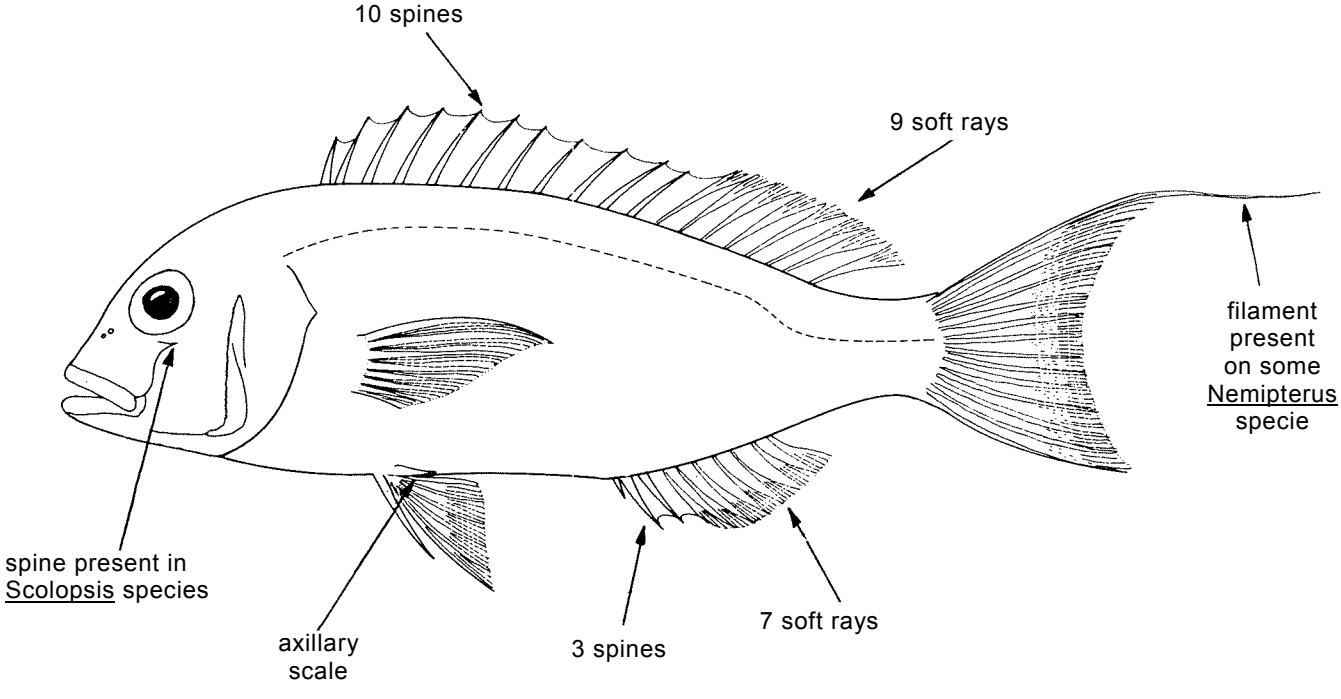
(including Scolopsidae of authors)

Threadfin breams, monocle breams and dwarf monocle breams

Small to moderate-sized, slightly compressed fishes. Mouth terminal; small teeth in bands, and in Nemipterus species canine teeth in upper jaw (sometimes also in lower jaw); a backward pointing sine below eye in Scolopsis and in some Parascolopsis species; front of head scaleless, scales on top of head (predorsal scales) beginning above, or just in front of eye; cheeks (preopercle) with 3 rows of scales in Nemipterus, 4 to 7 rows in Scolopsis and Parascolopsis. Dorsal fin single, with 10 spines and 9 soft rays, originating above pectoral fin bases, its first spine sometimes prolonged into a filament; pectoral fins with 14 to17 branched rays; pelvic fins with 1 spine and 5 soft rays, their origin below or just behind the pectoral fin bases; first ray sometimes elongate; a medium-sized axillary scale present above each pelvic fin; anal fin with 3 spines and 7 soft rays, anal spines strong in Scolopsis and Parascolopsis species; caudal fin forked or emarginate, upper lobe sometimes with a filament. A single, curved lateral line with small to moderately large scales. Scales on body large, ctenoid and cycloid, in longitudinal series, easily shed.

Colour: extremely variable; overall colour may be brownish, reddish, red and yellow, or greenish; usually, but not always, a few longitudinal or vertical broad bands on body, these bands often disappearing or becoming less after death; filaments of fins usually yellow; a spot sometimes present neae origin of lateral line and dark saddle-like markings occasionally on back. Colour pattern of juveniles often differs from adult fish.

Small to moderate-sized fishes, mostly living in shallow coastal waters, often frequenting the vicinity of coral reefs, but some species also inhabiting soft bottoms. Carnivorous, feeding chiefly on a wide variety of bottom-living invertebrates. Excellent foodfishes, which in some areas make up a sizeable part of catches. However, this group is much more important in the Eastern Indian Ocean and the Western Central Pacific than in the Western Indian Ocean. The statistics reported to FAO for this family from Fishing Area 51 do not exceed 1 000 t annually, but the actual catches are undoubtedly much higher.



SIMILAR FAMILIES OCCURRING IN THE AREA:

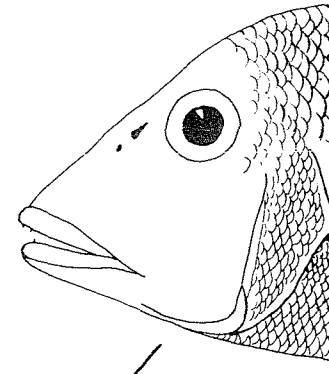
Lethrinidae: always more anal fin rays (8 to 10, instead of 7). Furthermore, cheek scaleless in the genus Lethrinus.

Sparidae: more dorsal and anal fin rays, 9 to 17 and 7 to 15. respectively (9 and 7, respectively, in Nemipteridae); often more dorsal fin spines (10 to 13). Furthermore, many species with molarlike or incisorlike teeth.

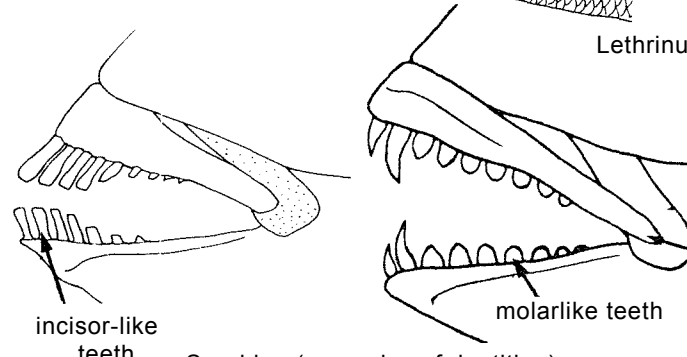
Lutjanidae: dorsal fin rays 10 to 17; anal fin rays 7 to 11; often more dorsal fin spines (10 to 12). Furthermore, teeth present on roof of mouth in most genera (absent in Nemipteridae); a preopercular notch and an interopercular notch usually present in Lutjanus.

Caesionidae: dorsal fin rays 9 to 22; anal fin rays 9 to 13; horizontal axis from tip of snout to middle of caudal fin passing through centre of eye.

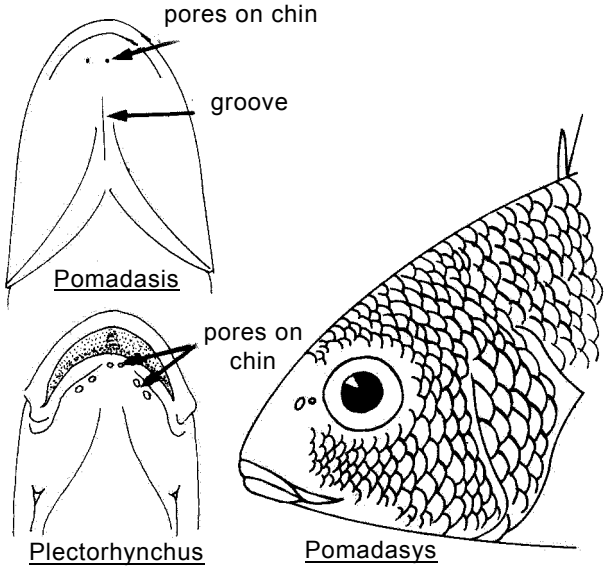
Haemulidae (including Pomadasyidae and Plectorhynchidae of authors): often more dorsal fin spines (9 to 14); always more dorsal fin rays (11 to 26) often more anal fin rays (6 to 18); scales present between eye and mouth (absent in that area in Nemipteridae); pores present on chin.



Lethrinus

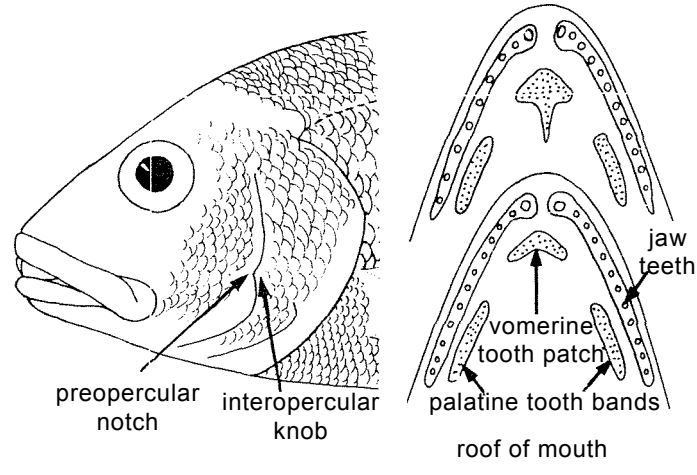


Sparidae (examples of dentition)



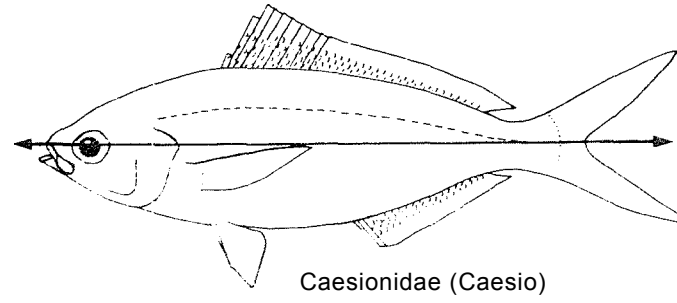
ventral view of head

Haemulidae



examples of dentition on palate

Lutjanidae (Lutjanus)



Caesionidae (Caesio)

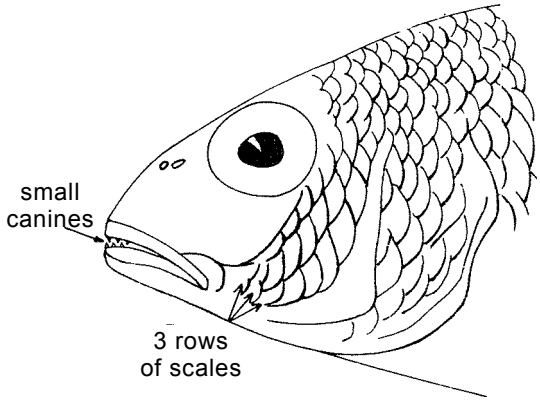
KEY TO GENERA OCCURRING IN THE AREA:

1a. 3 rows of cheek scales; 3 or 4 pairs of small canines in upper and/or lower jaw (Fig.1); anal fin spines weak (Fig.2a) ..... Nemipterus

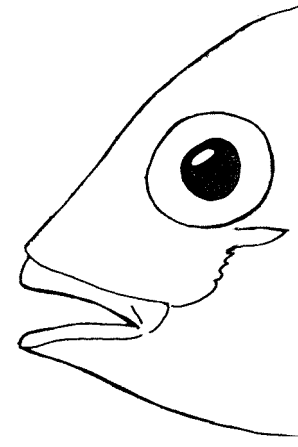
1b. 4 to 7 rows of cheek scales, no canines in jaws (Figs.S,4); anal fin spines strong (Fig.2b)

2a. Suborbital spine well developed (Fig.3) ..... Scolopsis

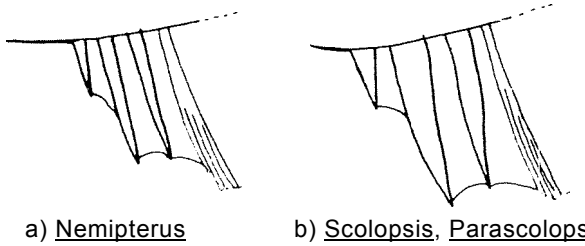
2b. Suborbital spine rudimentary or absent (Fig.4) ..... Parascolopsis



Nemipterus Fig.1

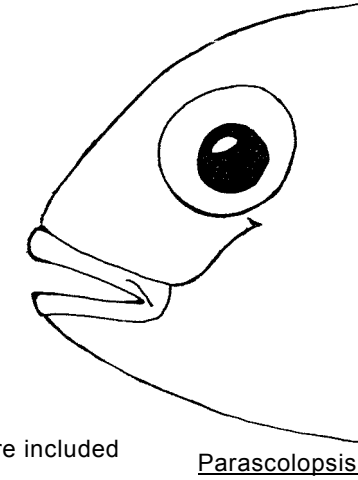


Scolopsis Fig.3



a) Nemipterus b) Scolopsis, Parascolopsis

anterior part of anal fin Fig.2



Parascolopsis Fig.4

LIST OF SPECIES OCCURRING IN THE AREA*:

Code numbers are given for those species for which Identification Sheets are included

Nemipterus bleekeri (Day, 1875)	NEMIP Nem 2
Nemipterus furcosus (Valenciennes, 1830) (doubtful)	
Nemipterus japonicus (Bloch, 1791)	NEMIP Nem 4
Nemipterus mesoprion (doubtful)	
Nemipterus metopias (Bleeker, 1852)	NEMIP Nem 7
Nemipterus nematophorus (Bleeker, 1853)	NEMIP Nem 8
Nemipterus nemurus (doubtful)	
Nemipterus peronii (Valenciennes, 1830)	NEMIP Nem 12 (= N. tolu, Areas 57/71)
Nemipterus smithii (doubtful)	

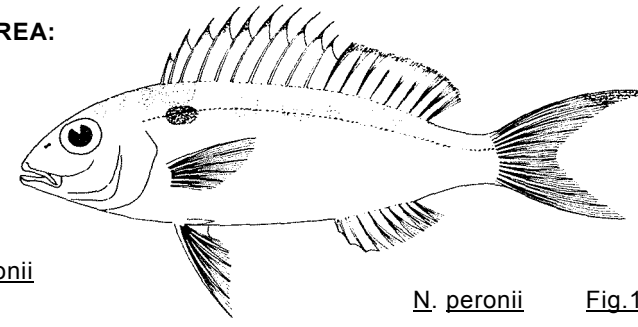
*The genus Nemipterus is presently being revised and some additional records are likely

Parascolopsis aspinosa (Rao & Rao, 1981)	NEMIP Para 1
Parascolopsis boesemani (Rao & Rao, 1981)	NEMIP Para 2
Parascolopsis eriomma Jordan & Richardson, 1909	NEMIP Para ,3
Parascolopsis townsendi Boulenger, 1901	NEMIP Para 4
Scolopsis auratus (Park, 1789)	NEMIP Scol 3
Scolopsis bilineatus (Bloch, 1793)	NEMIP Scol 4
Scolopsis bimaculatus Rüppell, 1828	NEWP Scol 5
Scolopsis frenatus (Cuvier, 1830)	NEMIP Scol 6
Scolopsis ghanam (Forsskål, 1775)	NEMIP Scol 7
Scolopsis taeniatus (Cuvier, 1830)	NEMIP Scol 8
Scolopsis vosmeri (Bloch, 1792)	NEMIP Scol 2

KEY TO SPECIES OF Nemipterus. OCCURRING IN THE AREA:

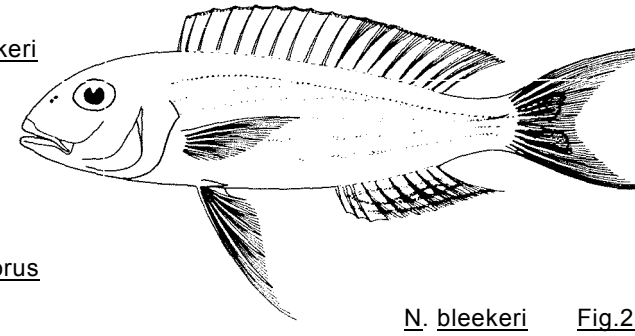
1a. Caudal fins without filamentous extensions

2a. Dorsal fin with interspinous membrane deeply notched; no upwardly curved stripes on body; a reddish-brown spot near origin of lateral line (Fig.1) ..... N. peronii



N. peronii Fig.1

2b Dorsal fin emarginate; body with 5 to 7 greenish yellow upwardly curved bands on body, no spot near origin of lateral line (Fig.2) ..... N. bleekeri

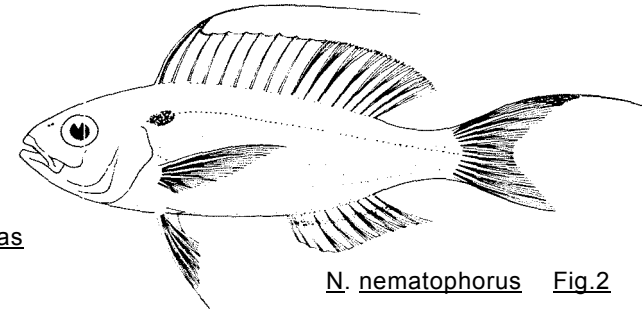


N. bleekeri Fig.2

1b. Caudal fin with filamentous extensions

3a. First and second spines of dorsal fin close together and forming a single very long filament (Fig.3) ..... N. nematophorus

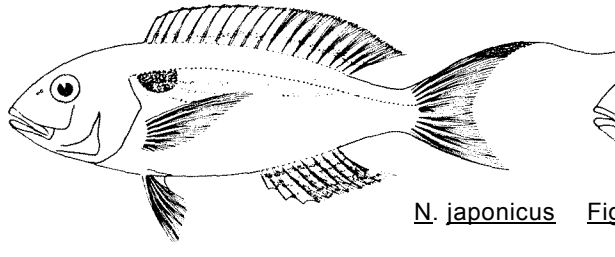
3b. Dorsal fin lacking any filamentous extensions



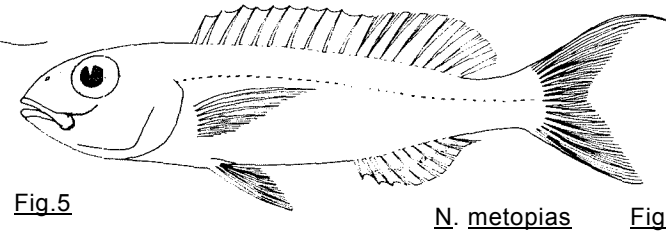
N. nematophorus Fig.2

4a. Body slender (3.9 to 4.6 times in standard length); two short yellow bands on head, one from below eye to upper jaw, the other from nostril to eye; no orange-red blotch near origin of lateral line (Fig.4) ..... N. metopias

4b. Body deeper (2.8 to 3.2 times in standard length); no yellow bands on head; distinctive orange-red blotch near origin of lateral line (Fig.5)..... N. japonicus



N. japonicus Fig.5



N. metopias Fig.4

KEY TO SPECIES OF Parascolopsis OCCURRING IN THE AREA:

1a. Gllrakers 18 to 19 ..... P. eriomma

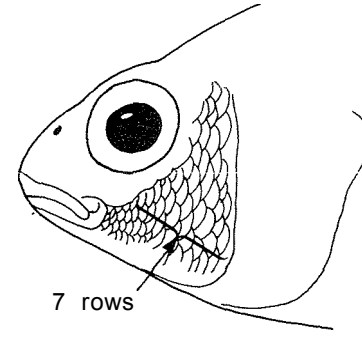
1b. Gllrakers 9 to 13

2a. Cheek scales in 7 transverse rows; lower limb of preopercle with 2 rows of small scales (Fig.1) ..... P. townsendi

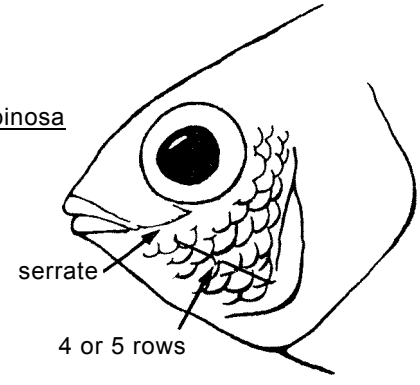
2b. Cheek scales in 4 or 5 transverse rows; lower limb of preopercle naked

3a. Suborbital finely serrate on posterior margin; opercle with a broad membranous margin (Fig.2); no dark markings on dorsal fin ..... P. boesemani

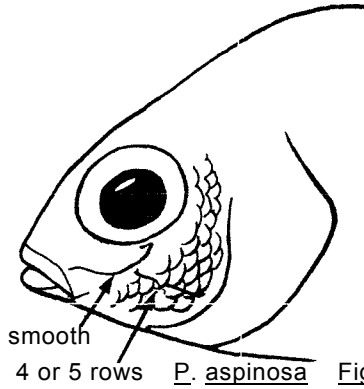
3b. Suborbital smooth on posterior margin; opercle without a broad membranous margin; a black marking at base of dorsal fin between 8th spine and first soft ray (Fig.3) ..... P. aspinosa



P. townsendi Fig.1



P. boesemani Fig.2



P. aspinosa Fig.3

KEY TO SPECIES OF Scolopsis OCCURRING IN THE AREA:

1a. A small antrorse (forward pointing) spine below eye (Fig-1)

2a. Body relatively deep (2 to 2.6 times in standard length); branched pectoral rays 16 or 17; pectoral fin short, not reaching level of anus (Fig.2) ..... S. vosmeri

2b. Body more elongate (2.5 to 3 times in standard length); branched pectoral fin rays 15; pectoral fin long, reaching level of anus (Fig.3) ..... S. bilineatus

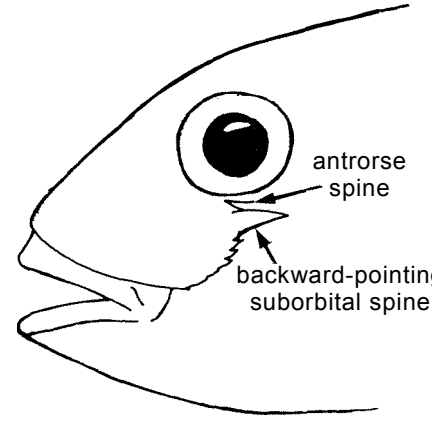
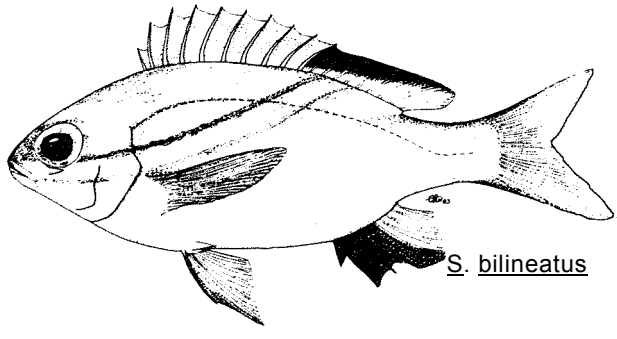
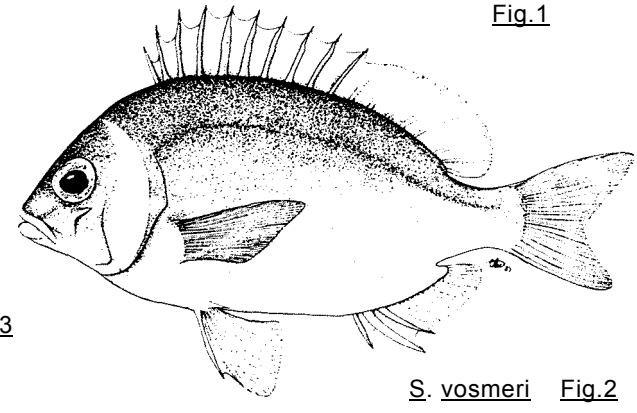


Fig.1



S. bilineatus Fig.3



S. vosmeri Fig.2

1b. No antrorse (forward pointing) spine below eye

3a. Head scales reaching forward to level of mid-pupil (Fig.4) ..... S. ghanam

3b. Head scales reaching forward to or in front of anterior margin of eye

4a. A dark ovoid spot on posterior part of back, crossed by a lateral line (Fig.5).....S. bimaculatus

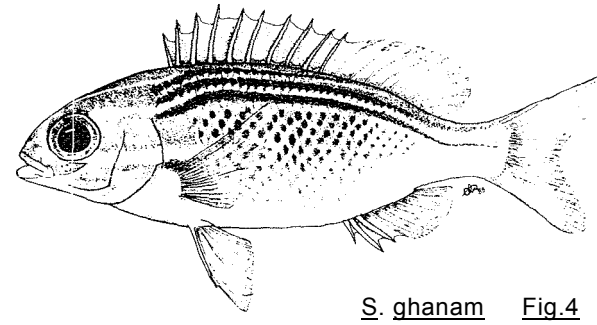
4b. No dark ovoid spot on back

5a. Branched pectoral fin rays 16; a pale bar across snout between eyes; snout dusky in front of bar (Fig.6) ..... S. auratus

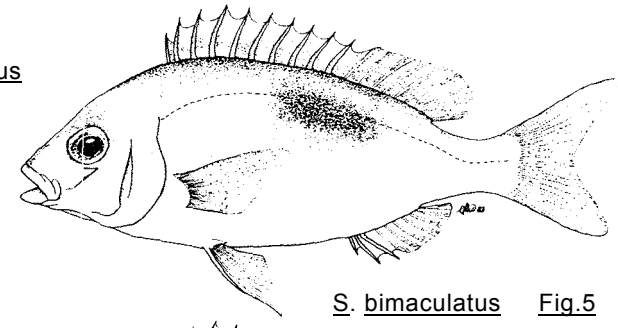
5b. Branched pectoral fin rays 15; no pale bar across snout between eyes; snout same colour as rest of head

6a. Lower limb of preopercle with 1 to 3 rows of small scales; a blue band from beneath eye to middle of upper lip; back dusky, a narrow pale band along base of dorsal fin (Fig.7) .....S. taeniatus

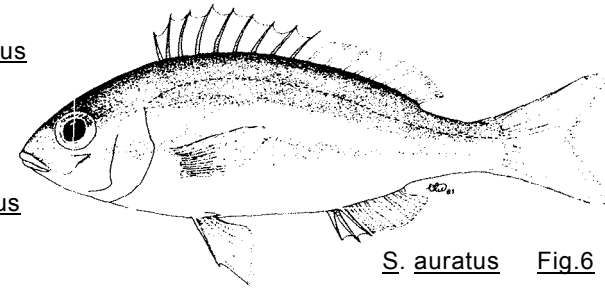
6b. Lower limb of preopercle naked, a pale blue band from tip of snout to beneath eye; an oblique dusky bar from behind eye to anterior part of dorsal fin (Fig.8) ..... S. frenatus



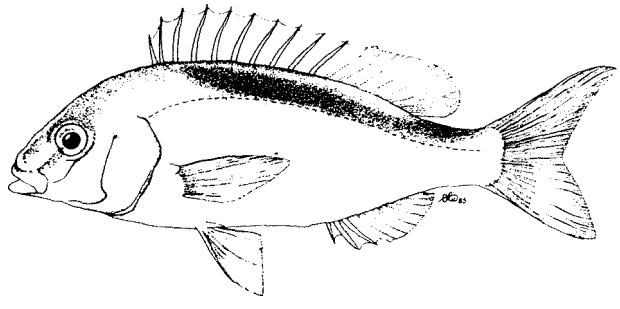
S. ghanam Fig.4



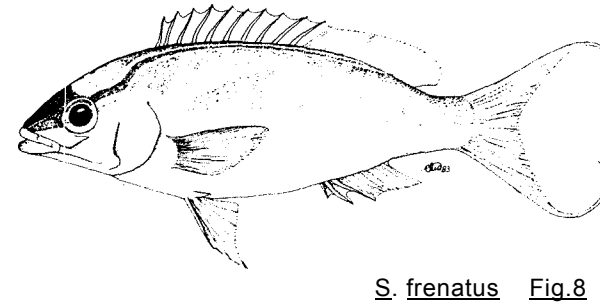
S. bimaculatus Fig.5



S. auratus Fig.6

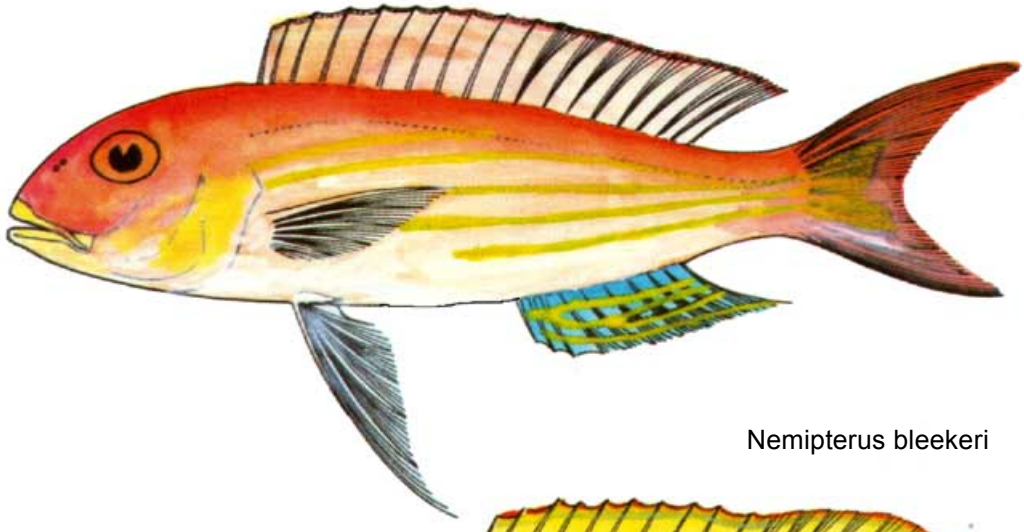


S. taeniatus Fig.7

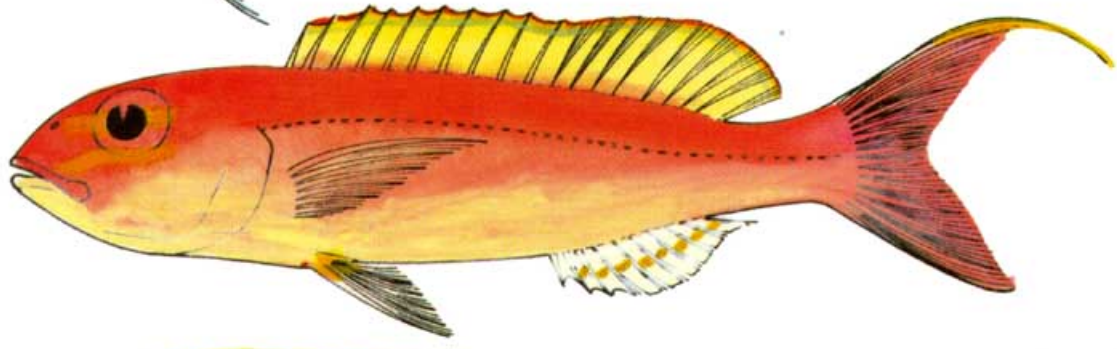


S. frenatus Fig.8

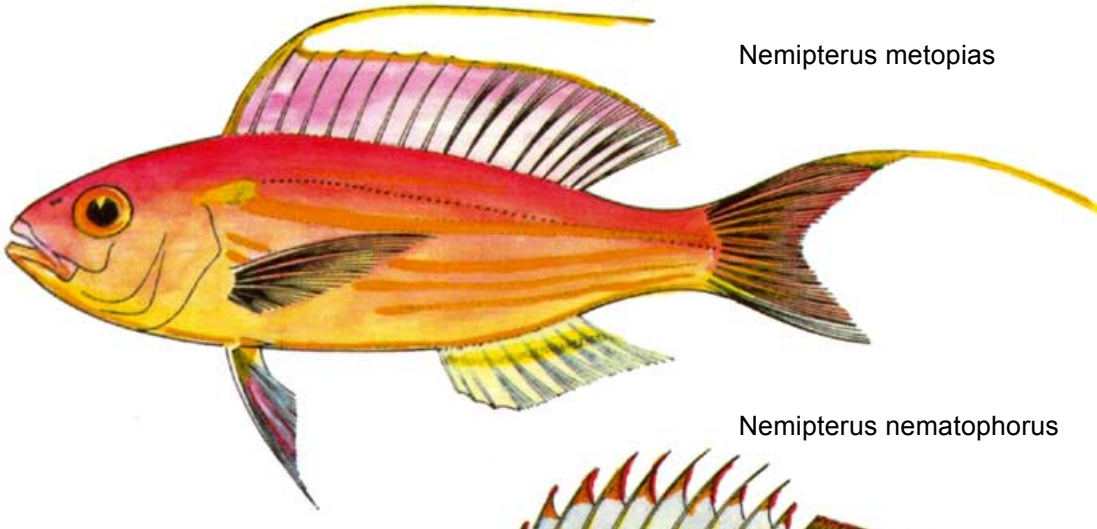
Prepared by B.C. Russell, Northern Territory Museum, Darwin„ Australia, and G.R. Allen, Western Australian Museum, Perth, Australia



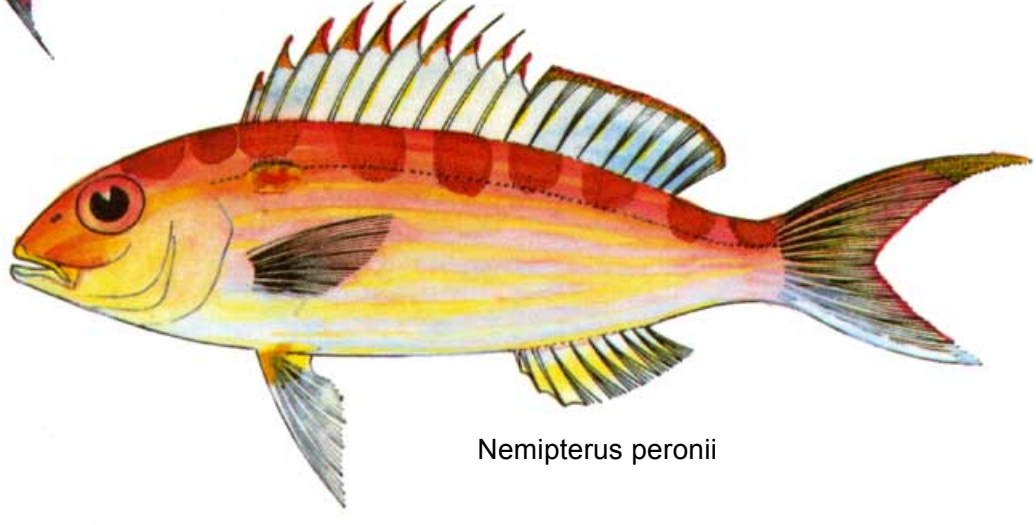
Nemipterus bleekeri



Nemipterus metopias



Nemipterus nematophorus



Nemipterus peronii

Nemipterus japonicus 186 mm S.L.
Madras, India

Parascolopsis eriomma 198 mm S.L.
Ryukyu Is.

Scolopsis bilineatus 111 mm S.L.
Palau Is.

Scolopsis bimaculatus 90 mm S.L.
Mulloor Point. India

Scolopsis frenatus 178 mm S.L.
Seychelles

Scolopsis ghanam 150 mm S.L.
Red Sea

Scolopsis vosmeri 159 mm S.L.
Sri Lanka

Photographs by J.E. Randall, B. Bishop Museum, Honolulu, Hawaii, USA

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