

Size: Maximum size is 14 cm SL, commonly 13 cm SL.

Interest to Fisheries: Taken by handline and bottom trawl, together with other species.

Literature: Gloerfelt-Tarp & Kailola (1984, fig. as *N. metopias*).

Remarks: *N. mesoprion* has been confused with *N. marginatus*. The two species are very similarly coloured, but *N. mesoprion* may be distinguished by the absence of a caudal filament, a more or less straight posterior suborbital margin, absence of a pale silvery mauve streak behind the red shoulder spot, and the middle caudal rays not contrasted yellow when fresh.

Nemipterus nematophorus (Bleeker, 1853)

Fig. 78, Plate II, e

NEMIP Nem 8

Nemipterus nematophorus Bleeker, 1853d, Nat. Tijdschr. Ned.-Indië, 5: 500 (Padang, Sumatra).

Synonyms: *Dentex filamentosus* Valenciennes in C. & V. (1830b) (name preoccupied by *Cantharus filamentosus* Rüppell); *Synagris macronemus* Günther (1859) (replacement name for *D. filamentosus*).

FAO Names: En - Doublewhip threadfin bream.

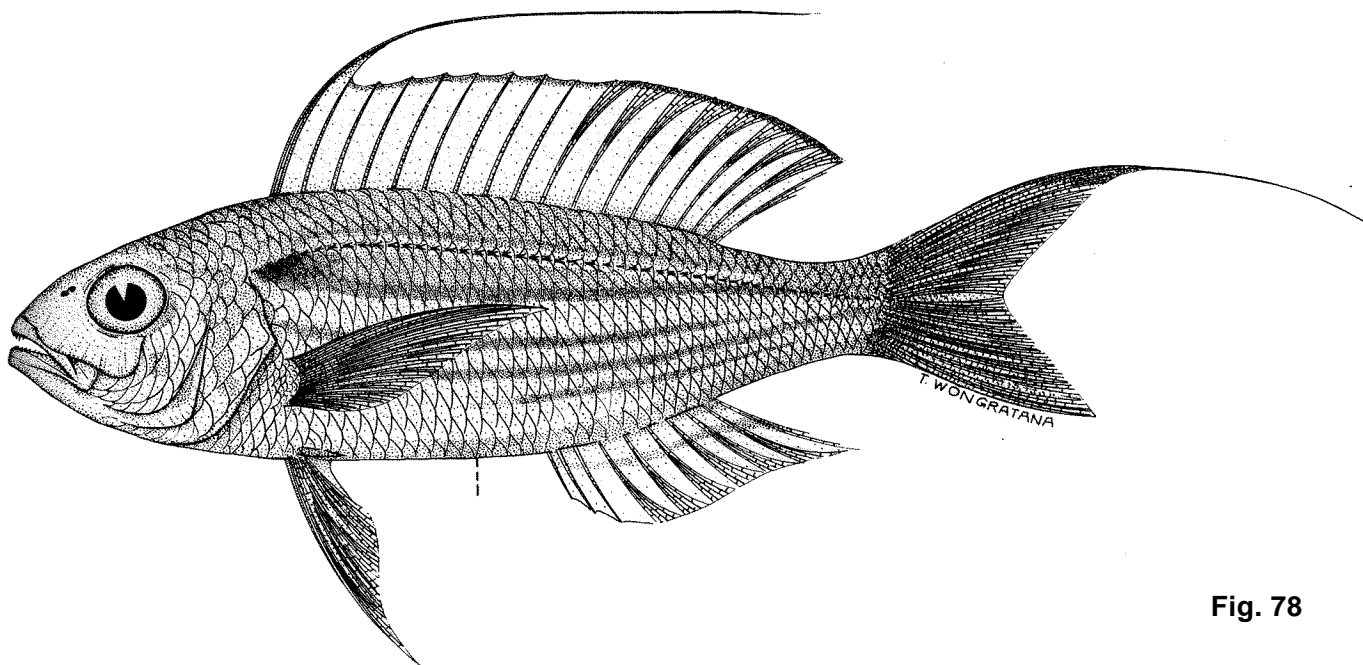


Fig. 78

Diagnostic Features: Body depth 2.9 to 3.5 in SL; snout length about equal to or greater than diameter of eye; diameter of eye 3.0 to 4.0 in head length; lower margin of eye tangent to a line from tip of snout to upper base of pectoral fin; interorbital width 0.8 to 1.8 in eye; suborbital depth 1.4 to 2.6 in eye diameter; a line drawn up from the posterior edge of suborbital reaching the dorsal profile about 2 to 5 scale rows before origin of dorsal fin; preopercle naked width 1.3 to 1.9 in scaly width; dorsal fin with anterior pair of spinous rays close together, almost fused and produced into a long, trailing filament; pectoral and pelvic fins

long, reaching to between level of anus and origin of anal fin; pectoral fins 0.9 to 1.1 in head length, pelvic fins 0.9 to 1.5 in head length; caudal fin forked, upper lobe produced into a trailing filament; 3 to 5 pair of small recurved canines anteriorly in upper jaw; gill rakers 12 to 15. **Colour:** upper part of head and body pinkish, silvery-white below; broad golden-yellow stripe beneath lateral line, with distinct gold patch anteriorly beneath origin of lateral line; 3 narrow golden-yellow stripes laterally along ventral half of the body; yellow stripe on either side of ventral midline; dorsal fin translucent pinkish, anterior dorsal filament and margin of fin yellow; anal fin translucent, faint yellow or orange stripe along fin extending from near base of first spine to middle of last ray, basal part of fin pale bluish-white; caudal fin pink, upper tip and caudal filament yellow; pectoral fins pale pink; pelvic fins pink, axillary scale lemon-yellow.

Geographical Distribution: Indo-West Pacific, including the Bay of Bengal, Andaman Sea, Strait of Malacca, Philippines, South China Sea, Gulf of Thailand and Indonesia. Record of this species from northwestern Australia by Allen & Swainston (1988) is apparently without basis (Fig. 79).

Habitat and Biology: A benthic species, occurs on sand or mud bottoms in depths down to 75 m.

Size: Maximum size is 20 cm SL, commonly 15 cm SL.

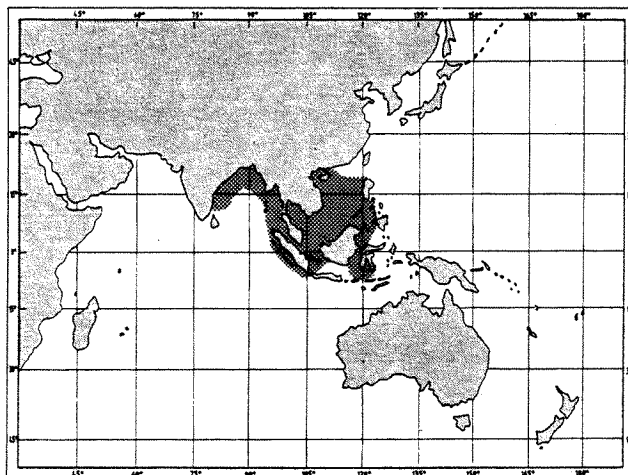


Fig. 79

Interest to Fisheries: Taken by gill net and bottom trawl. In East Malaysian waters highest catches occur in depths of more than 50 m. Appears occasionally in local markets. No major fishery exists.

Local Names: PHILIPPINES: Lagao.

Literature: Fisher & Whitehead (1974); Rao & Rau (1980); Fischer & Bianchi (1984); Gloerfelt-Tarp & Kailola (1984).

Nemipterus nematopus (Bleeker, 1851)

Fig. 80, Plate II, f

NEMIP Nem 21

Dentex nematopus Bleeker, 1851b, Nat. Tijdschr. Ned.-Indië, 2: 219 (Bulucomba, Celebes).

Synonyms: *Dentex sumbawensis* Bleeker (1859).

FAO Names: En - Yellow-tipped threadfin bream.

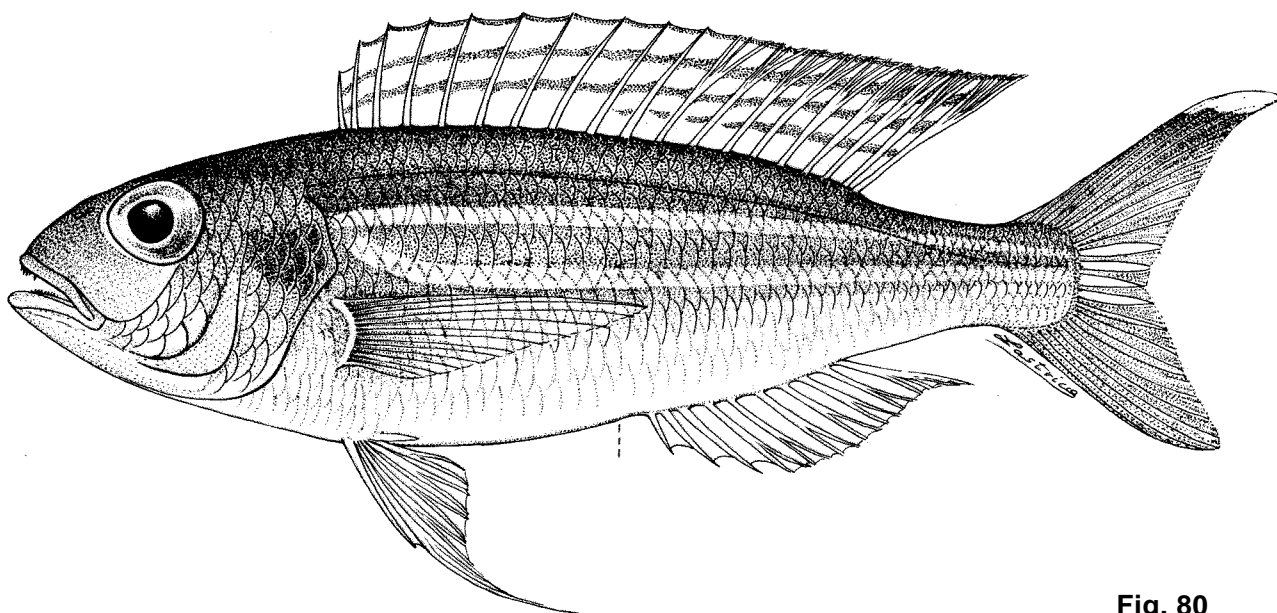


Fig. 80

Diagnostic Features: Body depth 3.1 to 4.0 in SL; snout length a little less or a little more than diameter of eye; diameter of eye 2.9 to 3.7 in head length; lower margin of eye tangent to or above a line from tip of snout to upper base of pectoral fin; interorbital width 1.3 to 2.1 in eye; suborbital depth 1.6 to 3.0 in eye diameter; a line drawn up from the posterior edge of suborbital reaching the dorsal profile about 2 to 6 scale rows before origin of dorsal fin; preopercle naked width 1.5 to 2.3 in scaly width; pectoral fins long, reaching to or just short of level of origin of anal fin, 1.0 to 1.3 in head length; pelvic fins long, reaching to or just beyond level of origin of anal fin, 0.9 to 1.1 in head length; caudal fin forked, upper lobe pointed; 4 pair of small recurved canines anteriorly in upper jaw; gill rakers 13 to 16. **Colour:** head and body pinkish, with mauve reflections, paling to pearly-white on ventral half; indefinite pale mauve stripe along lateral line; two distinctive sulphur-yellow stripes beneath lateral line; first stripe from below origin of lateral line and extending horizontally to upper caudal-fin base; second stripe from above pectoral base, descending slightly and extending midlaterally to middle of caudal-fin base; 1 or 2 less distinct, narrower, yellow stripes present beneath midlateral stripe; pale yellow stripe on either side of ventral midline from isthmus to caudal-fin base; dorsal fin translucent, with narrow yellow margin and 3 narrow yellow stripes (smaller specimens with 2 stripes, a lower third stripe sometimes forming posteriorly on fin; larger specimens with a lower fourth stripe posteriorly); anal fin translucent, without stripes; pelvic fins pale whitish, anteriormost spine and axillary scale yellow; pectoral fins translucent pink; caudal fin pinkish, upper tip bright sulphur-yellow.

Geographical Distribution: Philippines, Indonesia, northern Australia from the Timor Sea to northern Queensland (Fig. 81).

Habitat and Biology: A benthic species, occurs on sand or mud bottoms in depths of 30 to 102 m.

Size: Maximum size is 17.5 cm SL, commonly 15 cm SL.

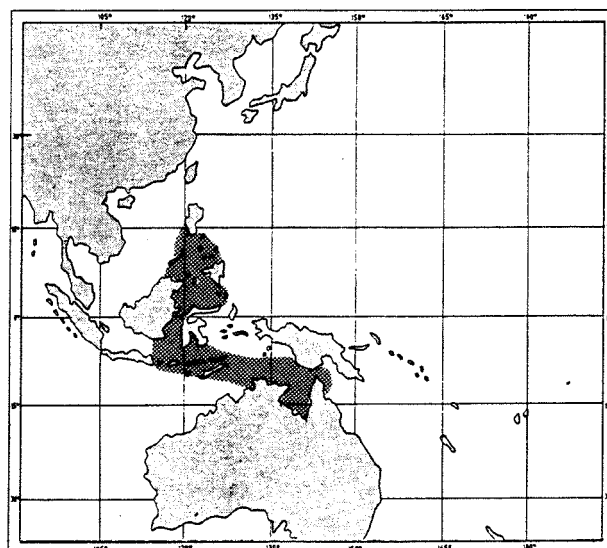


Fig. 81

Interest to Fisheries: Taken by handline and bottom trawl together with other species. Appears in small numbers in local markets. No major fishery exists.

Local Names: AUSTRALIA: Yellow-tipped threadfin-bream.

Literature: Gloerfelt-Tarp & Kailola (1984); Sainsbury *et al.* (1984); Allen & Swainston (1988).

Remarks: This species has been previously confused with *N. marginatus* by some authors.

Nemipterus nemurus (Sleeker, 1857)

Fig. 82, Plate II, g

NEMIP Nem 9

Dentex nemurus Sleeker, 1857, Act. Soc. Sc. Indo-Neerl., 2: 49 (Amboina).

Synonyms: None.

FAO Names: En - Redspine threadfin bream.

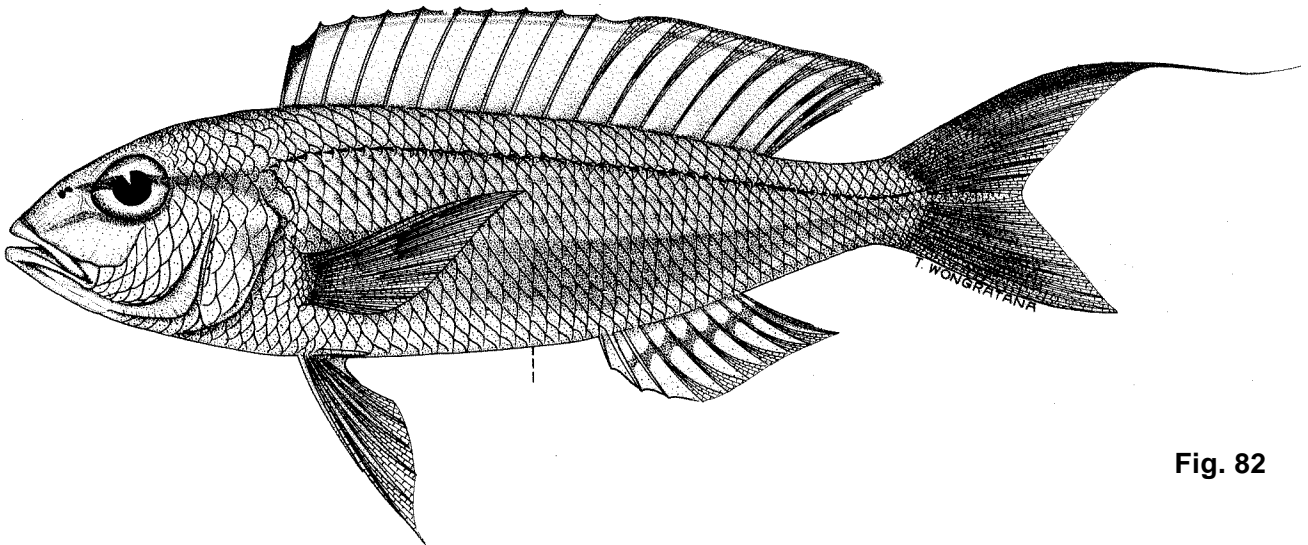


Fig. 82

Diagnostic Features: Body depth 3.3 to 4.0 in SL; snout length a little more than or a little less than diameter of eye; diameter of eye 2.9 to 3.7 in head length; lower margin of eye tangent to or just above a line from tip of snout to upper base of pectoral fin; interorbital width 1.4 to 1.9 in eye; suborbital depth 2.2 to 4.7 in eye diameter; a line drawn up from the posterior edge of suborbital reaching the dorsal profile about 3 to 7 scale rows before origin of dorsal fin; preopercle naked width 1.5 to 2.2 in scaly width; pectoral and pelvic fins moderately long, reaching to or just short of level of anus; pectoral fins 1.1 to 1.3 in head length, pelvic fins 1.2 to 1.5 in head length; caudal fin forked, the upper rays produced into a trailing filament; 2 to 5 pair of small recurved canines anteriorly in upper jaw; gill rakers 12 to 13. **Colour:** body pinkish above, with indistinct, broad, pale yellow stripe from behind eye to caudal base; indistinct, narrow golden stripes along 3 scale rows below lateral line; ventral half of body pearly-white, with indistinct, broad, pale yellow stripe from behind pectoral fin to caudal base; head pinkish, with pale golden reflections on cheeks and opercle; golden yellow stripe from posterior nostril extending through eye, and similar stripe from anterior margin of upper lip to lower margin of eye; iris pink; dorsal fin pale yellow, base of fin and submargin translucent pale mauve, margin of fin yellow; interspinous membrane of first two dorsal spines bright red superiorly; anal fin white, with series of yellow spots or irregular yellow stripe submedially; caudal fin pinkish, posterior margin red; lower lobe of fin suffused with yellow, upper rays and filament yellow; pectoral fins pale yellowish pink; pelvic fins white.

Geographical Distribution: West Pacific, including the Philippines, Gulf of Thailand, South China Sea, Strait of Malacca and Indonesia (Fig. 83).

Habitat and Biology: A benthic species, occurs on mud or sand bottoms. Feeds on small fishes and larger benthic invertebrates.

Size: Maximum size is 21 cm SL, commonly 17 cm SL.

Interest to Fisheries: Taken by handline and bottom trawl together with other species. The most abundant species of *Nemipterus* in bottom trawl catches from the South China Sea. Appears in small numbers in local markets. No major fishery exists.

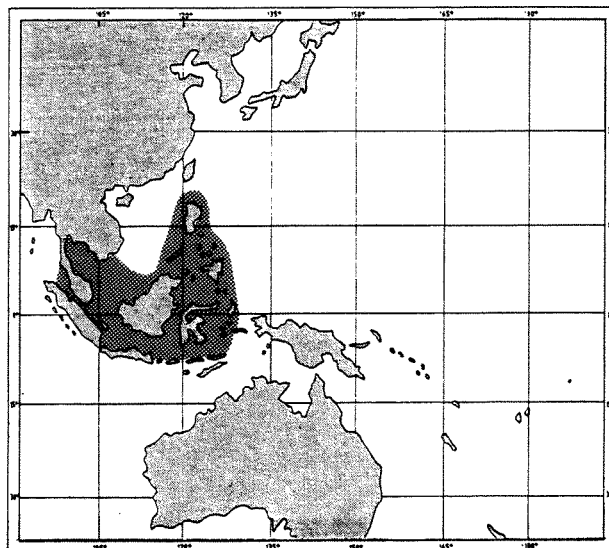


Fig. 83

Local Names: PHILIPPINES: Lambadon, Lagao, Silay, Silayan, Bisugo.

Literature: Fischer & Whitehead (1974); Rau & Rau (1980).

Nemipterus peronii (Valenciennes, 1830)

Fig. 84, Plate II, h

NEMIP Nem 12

Dentex Peronii Valenciennes in C. & V., 1830b, Hist. nat. poiss., 6: 245, pl. 154 (no type locality given - probably northwestern Australia).

Synonyms: *Dentex tolu* Valenciennes in C. & V. (1830b); *Cantharus guliminda* Valenciennes in C. & V. (1830b) (based on 'Lama guliminda' Russell, 1803); *Dentex mulloides* Bleeker (1852b); *Dentex obtusus* Bleeker (1860) (nomen nudum); *Dentex (Heterognathodon) smithii* Steindachner (1868); *Nemipterus oveniides* Popta (1921); *Nemipterus sampsonensis* Scott (1959).

FAO Names: En - Notchedfin threadfin bream. Fr - Cohana tolu. Sp - Baga tolu.

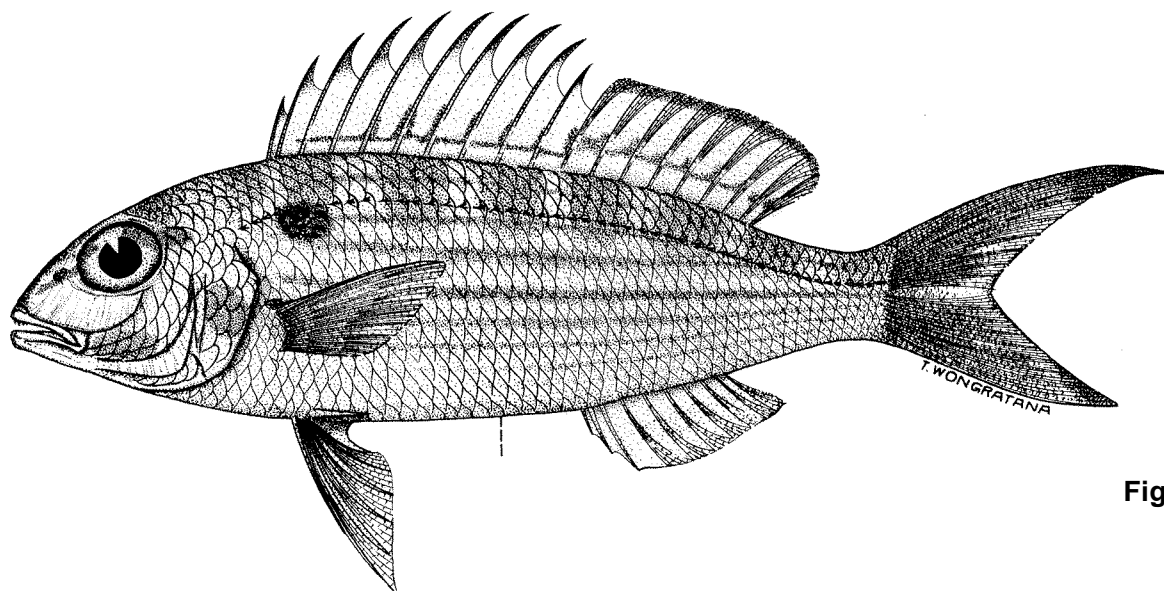


Fig. 84

Diagnostic Features: Body depth 3.1 to 4.1 in SL; snout length about equal to diameter of eye; diameter of eye 2.8 to 3.6 in head length; lower margin of eye just above a line from tip of snout to upper base of pectoral fin; interorbital width 1.4 to 1.9 in eye; suborbital depth 1.1 to 2.2 in eye diameter; a line drawn up from the posterior edge of suborbital reaching the dorsal profile at or just before origin of dorsal fin; preopercle naked width 1.5 to 2.2 in scaly width; dorsal-fin spines elongate, interspinous membrane deeply incised; pectoral fins short, 1.1 to 1.7 in head length, not reaching to level of anus; pelvic fins moderately long, 1.1 to 1.5 in head length, reaching to level of anus; caudal fin forked, upper lobe pointed and slightly longer than lower; 3 or 4 pair of small recurved canines anteriorly in upper jaw; gill rakers 9 to 12 (usually 10 to 11). **Colour:** upper part of body pinkish, with 7 or 8 indistinct darker pink saddles reaching to or just below the lateral line; lower part of body silvery, with faint golden lines following each scale row; a diffuse pale reddish spot below and just behind origin of lateral line; a golden-yellow stripe on snout in front of eye passing through nostrils; upper lip yellow; suborbital silvery-mauve; golden reflections on preopercle and opercle; dorsal fin pale whitish-pink, with a pale yellow line or series of spots just above base of fin; tips of spinous part of fin reddish-yellow; anal fin pale whitish-pink, suffused pale yellowish over its middle part; caudal fin pinkish; pelvic fins whitish, axillary scale at base yellow, pectoral fins translucent.

Geographical Distribution: West Pacific from Taiwan to northern Australia, and Indian Ocean including the Andaman Sea, Bay of Bengal, Sri Lanka, Arabian Sea, Persian Gulf and Red Sea (Fig. 85).

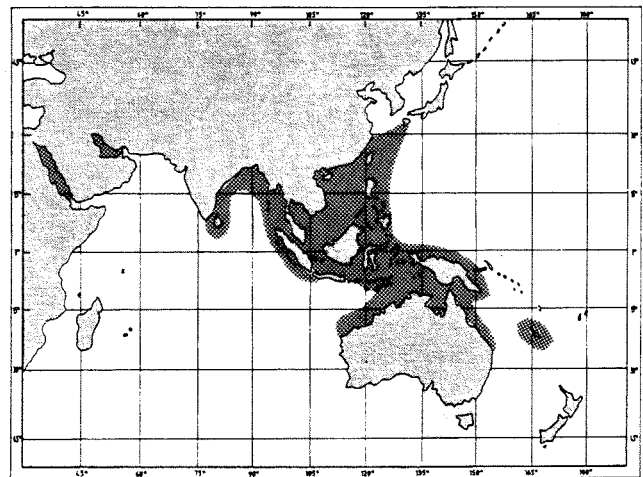


Fig. 85

Habitat and Biology: A benthic species, found on sand or mud bottoms in depths down to about 100 m. Size of the fish appears to increase with depth and males are relatively larger than females. Two prolonged spawning seasons are likely in the South China Sea off the Trengganu coast: from November to February, and another starting in May or June. This species is an active carnivore, feeding during daylight on fish, crustaceans, molluscs and polychaetes (Said *et al.*, 1983).

Size: Maximum size is 26.5 cm SL, commonly 17 cm SL.

Interest to Fisheries: Taken by handline and bottom trawl along with other species of *Nemipterus*. Appears in small numbers in local markets. Trawled in commercial quantities in the Straits of Malacca and off the Trengganu coast. South China Sea.

Local Names: AUSTRALIA: Notched threadfin-bream. PHILIPPINES: Bisugo (Tagalog), Sagisi-on (Visayan), Silay, Bakag, Bisugong maylawi. MALAYSIA: Kerisi. SRI LANKA: Kunda (Sinhalese), Kundan, Kundi (Tamil). JAPAN: Shamu-itoyori. SAUDI ARABIA: Bassi, Bassij. KUWAIT: Bassi. INDONESIA: Jamban, Krisi. THAILAND: Pla Sai Dang. PAKISTAN: Katti (Sindhi), Kolonto (Baluchi).

Literature: The following have reported this species as *N. tolu*: Kuronuma & Abe (1972); Fischer & Whitehead (1974); Randall *et al.* (1978); Rau & Rau (1980); Schroeder (1980); Kyushin *et al.* (1982); Tan *et al.* (1982); Kuronuma & Abe (1986). It is correctly named by Fischer & Bianchi (1984); Bianchi (1985b); Gloerfelt-Tarp & Kailola (1984); Sainsbury *et al.* (1984); Al-Baharna (1986); Smith & Heemstra (1986); Allen & Swainston (1988).

Remarks: This species has previously been referred to as *N. tolu* by many authors, and the name *N. peronii* has been misapplied to *N. furcosus*. *N. tolu* is a junior synonym of *N. peronii*.

Nemipterus randalli Russell, 1986

Fig. 86, Plate III, a

NEMIP Nem 22

Nemipterus randalli Russell, 1986a, Senckenberg. Biol., 67: 23, fig. 2 (Persian Gulf; Red Sea; Gulf of Aden; Zanzibar; Seychelles; Madagascar; Pakistan; India).

Synonyms: None.

FAO Names: En - Randall's threadfin bream.

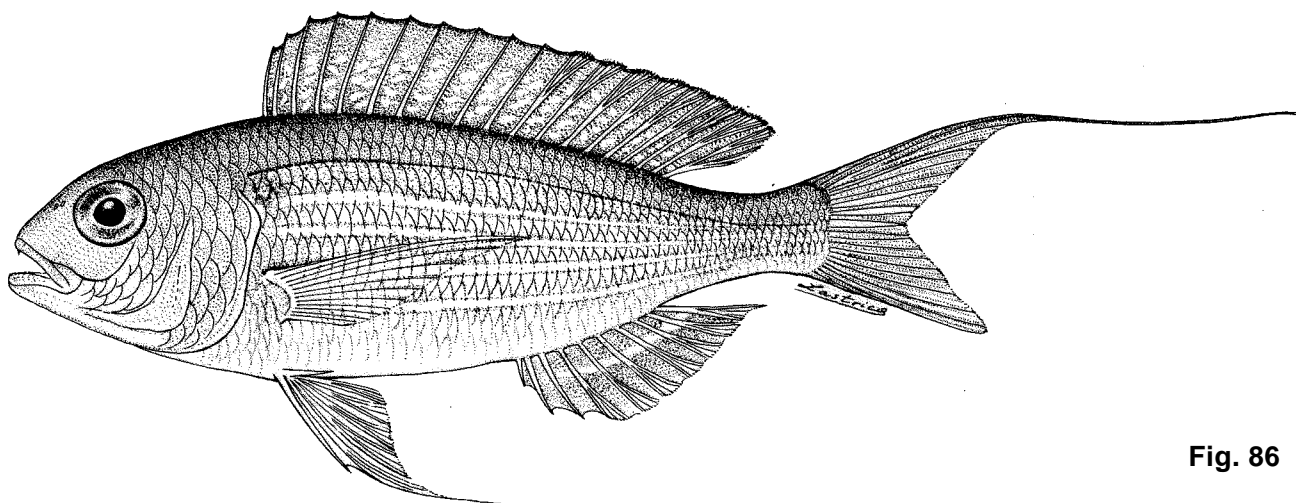


Fig. 86

Diagnostic Features: Body depth 2.9 to 3.5 in SL; snout length about equal to diameter of eye; diameter of eye 2.7 to 3.7 in head length; lower margin of eye tangent to or just above a line from tip of snout to upper base of pectoral fin; interorbital width 1.4 to 2.0 in eye; suborbital depth 1.7 to 4.0 in eye diameter; a line drawn up from the posterior edge of suborbital reaching the dorsal profile about 3 to 7 scale rows before origin of dorsal fin; preopercle naked width 1.2 to 3.0 in scaly width; pectoral and pelvic fins very long, reaching to or just beyond level of origin of anal fin; pectoral fins 1.0 to 1.4 in head length, pelvic fins 0.9 to 1.4 in head length; caudal fin forked, upper rays produced into a long trailing filament; 3 to 4 pair of small recurved canines anteriorly in upper jaw; gill rakers 12 to 15. **Colour:** body silvery-pink with 3 or 4 faint yellow stripes on sides below lateral line; broad yellow stripe on either side of ventral midline; pinkish blotch below origin of lateral line; eye salmon pink; dorsal fin pale bluish, with closely packed yellow-pigmented markings on the lower three fourths of the fin; upper margin of dorsal fin edged with red; anal fin pale bluish with narrow yellow medial stripe; caudal fin pink, caudal filament light reddish; pelvic fins whitish; pectoral fins transparent; peritoneum salmon-pink.

Geographical Distribution: Western Indian Ocean, including the east and west coast of India, Pakistan, Persian Gulf, Red Sea, Gulf of Aden, east African coast, Seychelles and Madagascar (Fig. 87).

Habitat and Biology: A benthic species, occurs on sand or mud bottoms in depths of 22 to 225 m. In Indian waters off Kakinada, this species apparently spawns during December to April, with a peak in January (Murty, 1981, as *N. mesoprion*).

Estimates of the parameters of the von Bertalanffy growth curve made for the population from Kakinada, India (Murty, 1981) are: L_{∞} = 21.9 cm TL, K = 0.83, t_0 = - 0.26.

Size: Maximum size is 18.5 cm SL, commonly 15 cm SL.

Interest to Fisheries: Taken by handline and bottom trawl. Appears in local markets. No major fishery exists, but a large population is believed to occur in the Persian Gulf (Kuronuma & Abe, 1986).

Literature: Russell (1986a), Kuronuma & Abe (1986, as *N. mesoprion*).

Remarks: This recently described species has been previously misidentified as *N. mesoprion*.

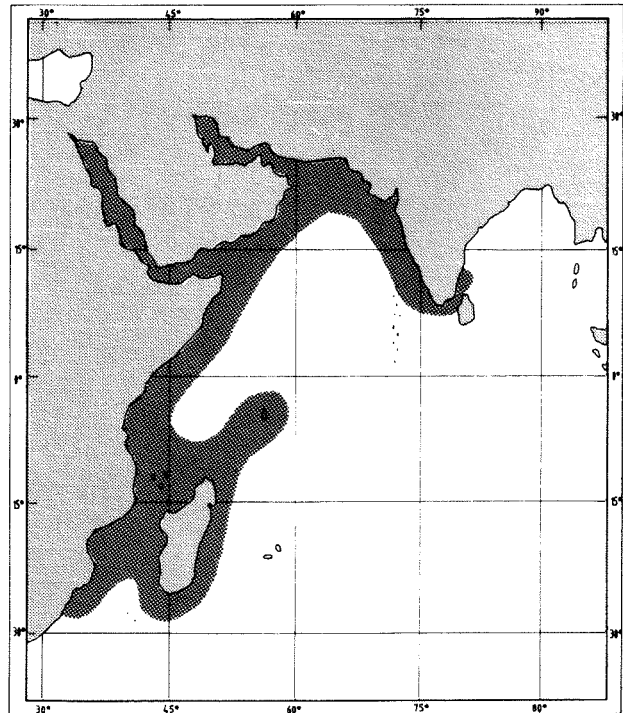


Fig. 87

Nemipterus sp. 1

Fig. 88, Plate III, b

NEMIP Nem 23

Undescribed species

Synonyms: None.

FAO Names: En - Bluecheek threadfin bream.

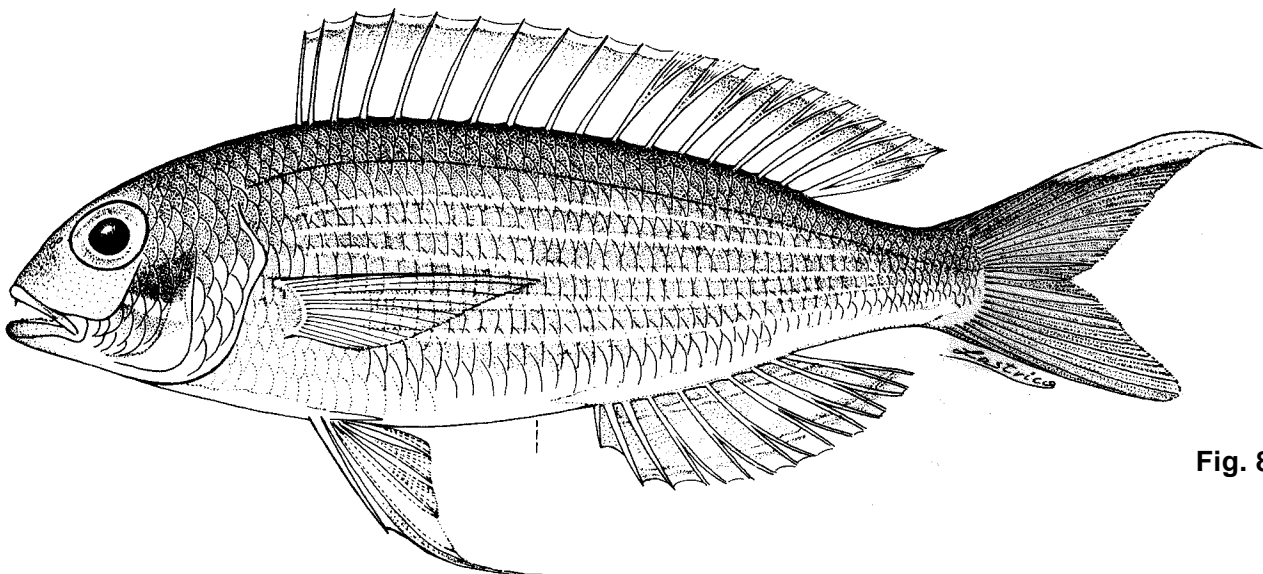


Fig. 88