

Ventrifossa macroptera Okamura, 1982

Fig. 682

MACROUR Vent 6

Scientific Name with Reference : *Ventrifossa macroptera* Okamura, 1982, Fishes Kyushu-Palau Ridge & Tosa Bay, Jpn. Fish. Resource Conserv. Assoc.: Tokyo: 148 (Kyushu-Palau Ridge; 27° 55.1'N, 134° 44.8'E; 685-710 m).

Synonyms : None.

FAO Names : En - Palau grenadier

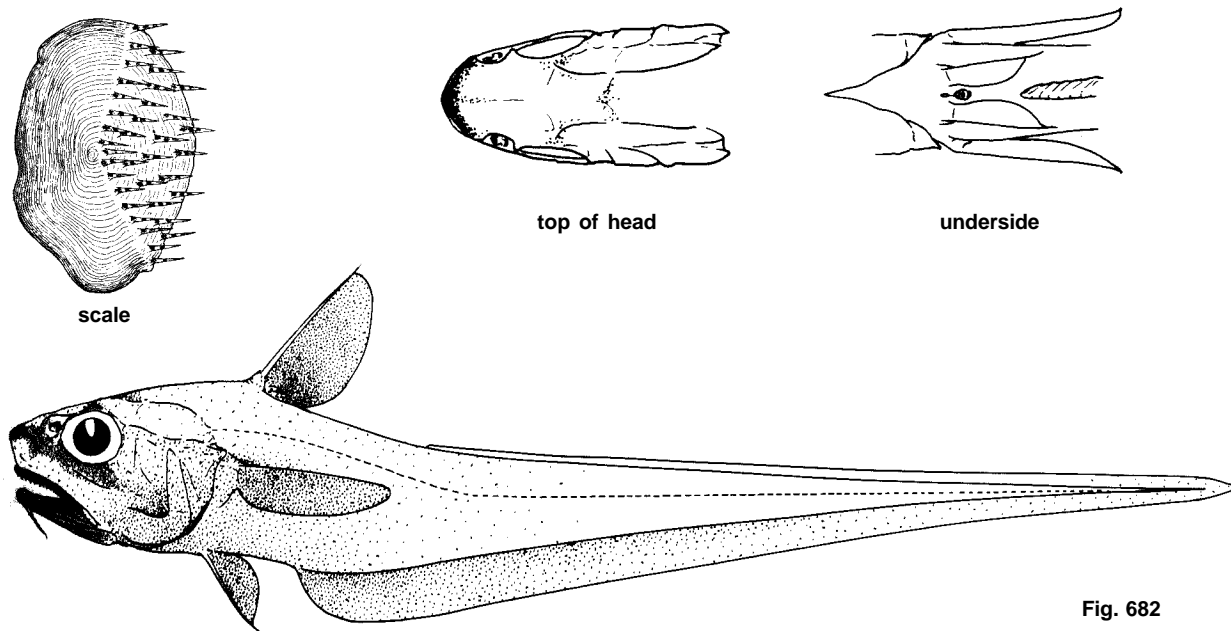


Fig. 682

Diagnostic Features : Premaxillary teeth in narrow bands 4 or 5 teeth wide, outer series enlarged with arrowhead-like tips; mandibular teeth in 2 series, the inner larger. Inner gill rakers on first arch 16 to 18 total. First dorsal fin with 2 spines and 9 to 11 rays, second spinous ray smooth; pectoral fin rays i19 to i25; pelvic fin rays 9 or 10. Measurements in percentages of head length: snout length 28 to 32; preoral length 14 to 15; orbit diameter 28 to 31; interorbital space 30 to 32; orbit to angle of preopercle 45 to 49; length of upper jaw 47 to 51; barbel length 20 to 25; length of outer gill slit 27 to 30; length of pectoral fin 67 to 77. Scale rows below midbase of first dorsal fin 6.5 to 7.5, below second dorsal origin 8 to 10; lateral-line scales over a distance equal to predorsal length 49 to 55. Scales covered with slender, sharp spinules in widely divergent V rows or irregularly in quincunx order. Snout with a black margin along leading edge and posteriorly over half of supranarial ridges; first dorsal fin uniformly blackish or dusky.

Geographical Distribution : Known only from the Kyushu-Palau Ridge (Fig. 683).

Habitat and Biology : Benthopelagic in 685 to 710 m depth. Females with ripe eggs were taken in mid-December.

Size : To about 40 cm total length.

Interest to Fisheries : Captured in fair numbers during exploratory fishing on the Kyushu-Palau Ridge, but not known from any other area.

Local Names : JAPAN : Parao-sokodara

Literature : Okamura, in Okamura, Amaoka & Mitani, eds (1982)

Remarks : See Remarks under *Ventrifossa atherodon* for comparisons with other similar species.

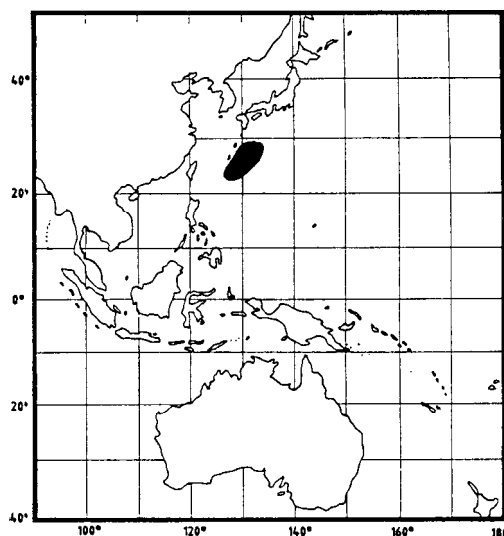


Fig. 683

Ventrifossa misakia (Jordan & Gilbert, 1904)

Fig. 684

MACROUR Vent 7

Scientific Name with Reference : *Coryphaenoides misakius* Jordan & Gilbert, in Jordan & Starks, 1904, Bull. U.S. Fish Comm. 22 (1902): 611 (Sagami Bay, Japan).

Synonyms : *Macrourus asper* -- Jordan & Thompson, 1914; *Lionurus (Nezumia) misakius* -- Gilbert & Hubbs, 1916; *Ventrifossa misakia* -- Gilbert & Hubbs, 1920.

FAO Names : En - Misaki grenadier.

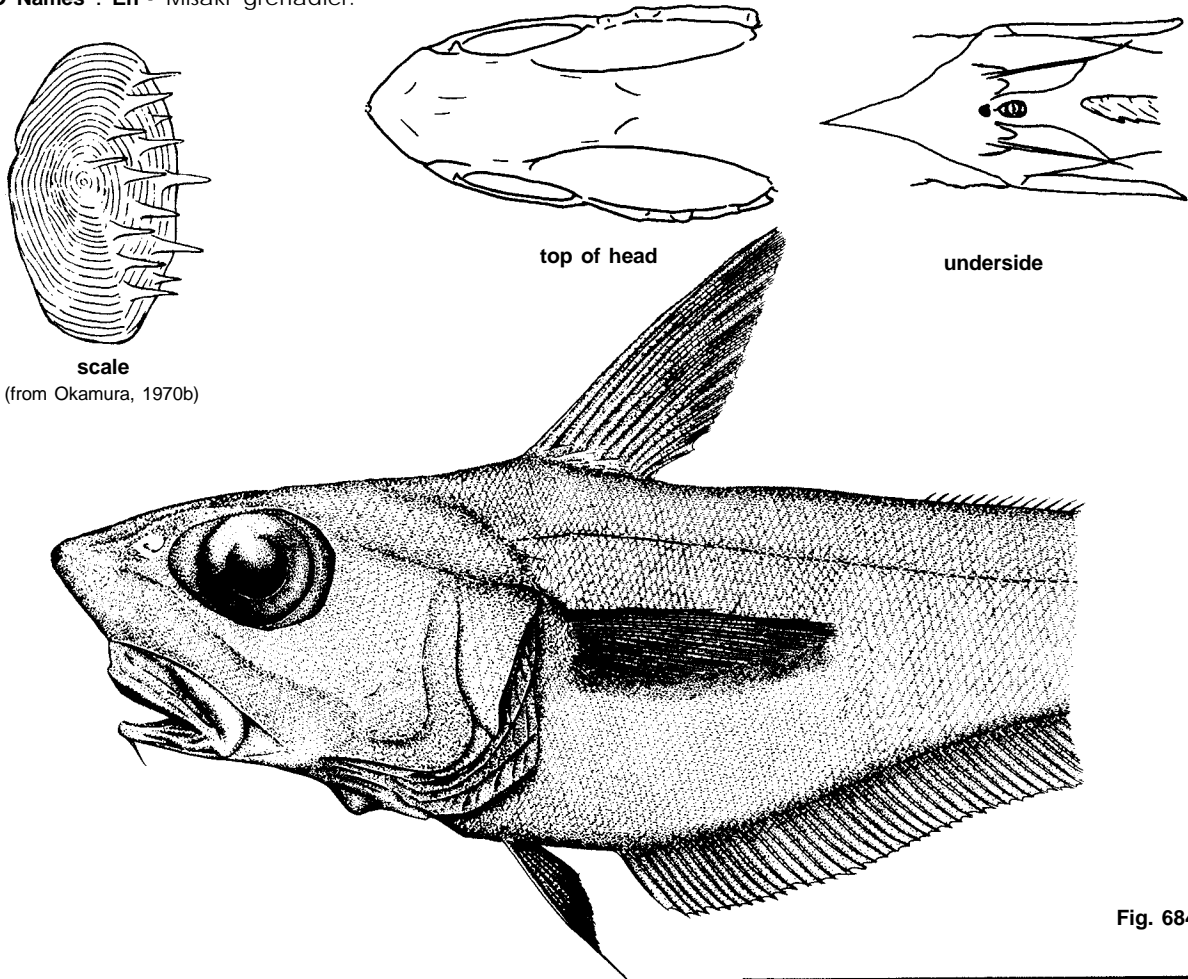


Fig. 684

Diagnostic Features : Teeth small, in narrow bands about 3 rows wide in premaxillae, outer series slightly enlarged; mandibular teeth in 2 irregular series, the inner teeth slightly larger. Inner gill rakers of first arch 14 or 15 total. First dorsal fin with 2 spines and 10 or 11 rays, second spinous ray finely serrated; pectoral fin rays i19 to i22; pelvic fin rays 8. Measurements in percentages of head length: snout length 26 to 32; preoral length 21 to 27; orbit diameter 29 to 38 (relative size decreases with age); interorbital space 30 to 35; distance orbit to angle of preopercle 39 to 46; length of upper jaw 35 to 42; barbel length 4 to 8; length outer gill slit 19 to 25; length of pectoral fin about 40 to 60. Scales very small, sparsely covered with slender conical to lanceolate spinules in widely divergent V rows; scale rows below origin of second dorsal fin 9 to 9.5; lateral-line scales over a distance equal to predorsal length 66 to 76. Snout of young individuals with faint blackish margin along leading edge, older individuals appear to have only a blackish snout tip; first dorsal fin uniformly dusky.

Geographical Distribution : Japan, from Choshi (about 36° N) to Kagoshima (in East China Sea) (Fig. 685).

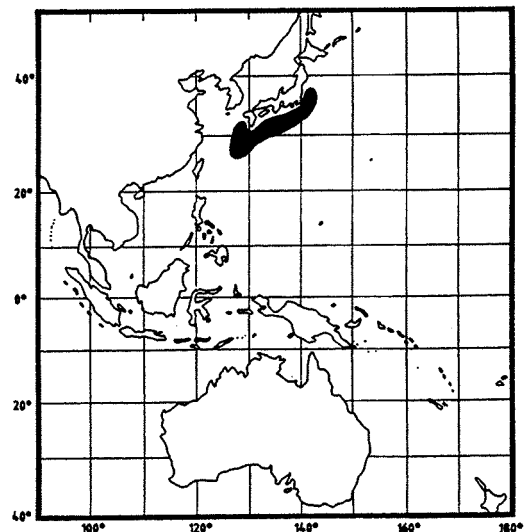


Fig. 685

Habitat and Biology : Benthopelagic in about 400 m depth. Feeds primarily on euphausiids, prawns, and isopods. Spawning probably takes place from January through March.

Size : To about 40 cm total length

Interest to Fisheries : Taken occasionally off southern Japan, but no catch statistics are available.

Local Names : JAPAN : Misaki-sokodara

Literature : Jordan & Gilbert (*in* Jordan & Starks, 1904); Okamura (1970a).

Remarks : *Ventrifossa misakia* is closely related to *V. fusca* and *V. johnborum*, sharing with these species a similar squamation, general physiognomy, light organ structure, and trunk vertebrae count (14). No sharp differences are apparent to distinguish the species from *V. fusca*, aside from that species' seemingly darker body, presence of a gular scale patch, and more numerous spinules on body scales. *V. johnborum* can be distinguished from *V. misakia* by its slightly higher pelvic fin ray count (9 or 10), longer barbel (10 to 14% of head length), slightly longer interspace between the dorsal fins (35 to 41% of head length vs. 30 to 35%), and longer distance anus to anal fin origin (20 to 26% of head length vs. 11 to 15%).

***Ventrifossa mucocephalus* Marshall, 1973**

Fig. 686

MACROUR Vent 8

Scientific Name with Reference : *Ventrifossa mucocephalus* Marshall, 1973, *Mem. Sears Found. Mar. Res.* 1 (pt. 6): 660, fig. 53 (off N. coast Cuba; 23° 05'30"N, 82° 35'W; 604 m; Harvard-Havana Exped. sta. 3305).

Synonyms : None

FAO Names : En - Slimehead grenadier.

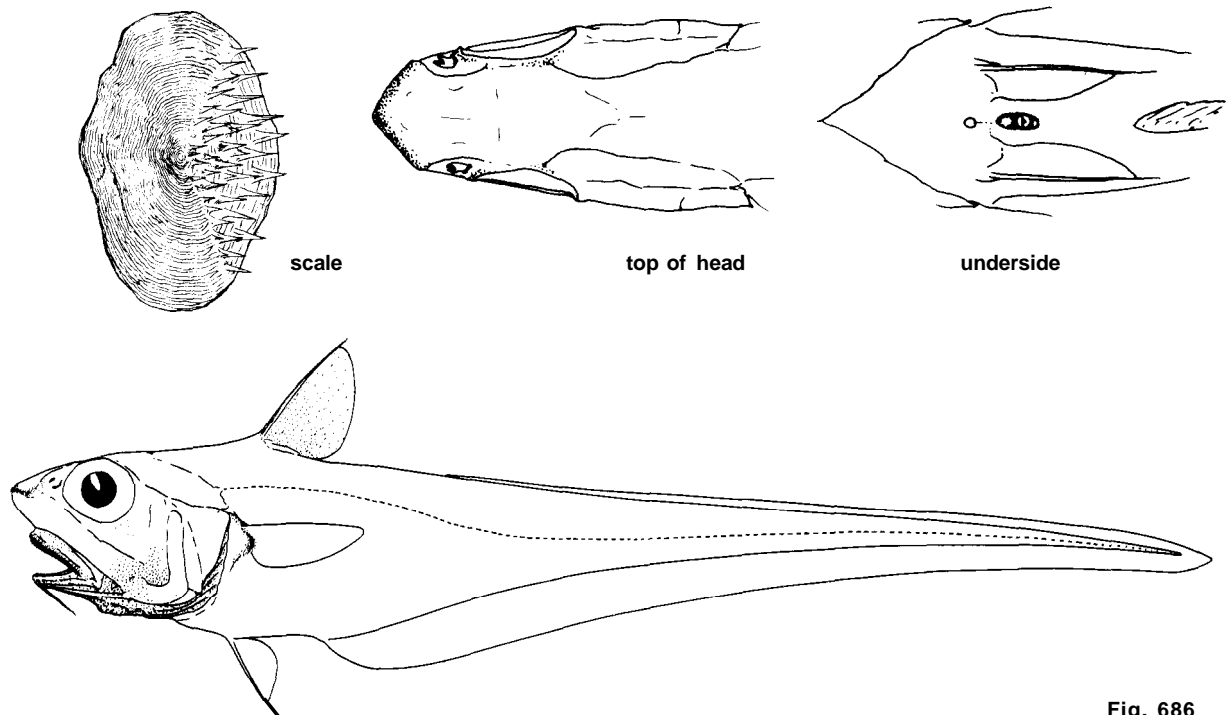


Fig. 686

Diagnostic Features : Teeth in premaxilla in a rather narrow band, outer series slightly enlarged; mandibular teeth in 2 or 3 series, inner teeth slightly larger than outer. Inner gill rakers on first arch 12 to 14 total. First dorsal fin with 2 spines and 10 to 12 rays, second spinous ray finely serrated along leading edge; pectoral fin rays i20 to i22; pelvic fin rays 8 (rarely 9). Measurements in percentages of head length: snout length 25 to 31; preoral length 14 to 20; orbit diameter 30 to 36; interorbital space 24 to 28; length of upper jaw 39 to 45; barbel length 16 to 23; length of outer

gill slit 23 to 27; length of pectoral fin 45 to 55. Scale rows below second dorsal fin 6 or 7 (rarely 8); lateral-line scales over a distance equal to predorsal length usually 40 to 45. Scales rather large, covered with slender conical to somewhat lanceolate and flattened spinules in widely divergent V rows or in quincunx order. Snout with black margin along leading edge only; gums all white; first dorsal fin uniformly blackish.

Geographical Distribution : So far known only from the western Caribbean, the Straits of Florida off Cuba, and the Atlantic off northeastern Florida (Fig. 687).

Habitat and Biology : Benthopelagic in 450 to 732 m depth. Reproductive organs of 17 specimens were examined from a large collection made in 732 m depth off Santa Marta, Colombia. Of these, 15 were females with large gonads containing nearly mature eggs.

Size : To at least 40 cm total length.

Interest to Fisheries : Probably occurs incidentally in catches of royal red shrimp, especially in the Caribbean.

Literature : Marshall (1973)

Remarks : In the western Atlantic, *V. mucocephalus* is likely to be confused only with *V. macropogon*, but the two are easily differentiated by characters given in the key and in the Remarks section in the description of *V. macropogon*.

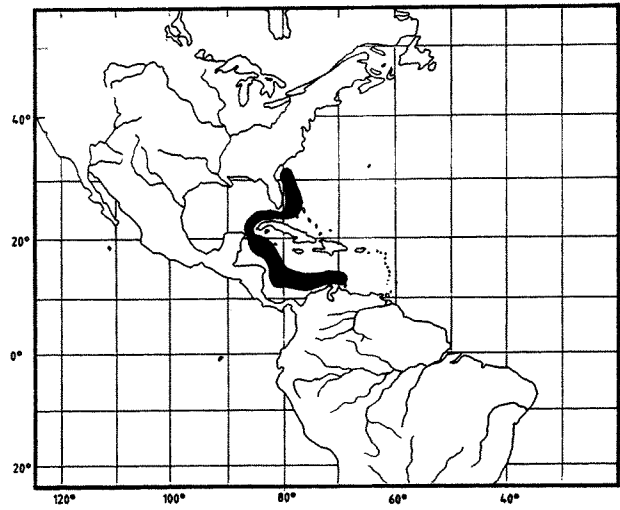


Fig. 687

Ventrifossa nasuta (Smith, 1935)

Fig. 688

MACROUR Vent 9

Scientific Name with Reference : *Lionurus nasutus* Smith, 1935, Rec. Albany Mus. 4: 176 (South Africa; PICKLE collections, no other data).

Synonyms : *Macruroplus nasutus* -- Smith, 1949.

FAO Names : En - Conesnout grenadier.

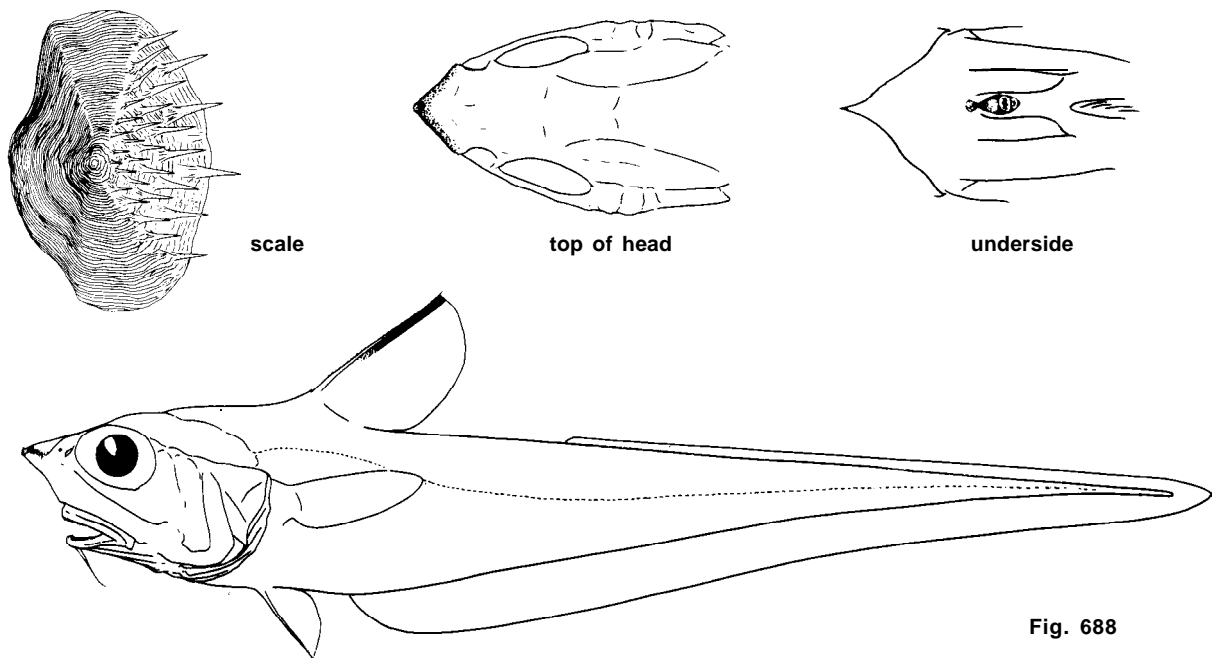


Fig. 688

Diagnostic Features : Teeth small, in a narrow band 4 to 6 rows wide in premaxilla, outer series slightly enlarged; mandibular band 4 to 6 teeth wide near symphysis, in 2 or 3 irregular series laterally, the inner teeth slightly larger. Inner gill rakers on first arch 13 to 15 total. First dorsal fin with 2 spines and 9 or 10 (rarely 8 or 11) rays, second spinous ray finely serrated; pectoral fin rays i16 to i22 (usually i18 to i20); pelvic fin rays 8. Measurements in percentages of head length: snout length 28 to 32; preoral length 22 to 25; orbit diameter 33 to 36; interorbital space 27 to 29; distance orbit to angle of preopercle 37 to 42; length of upper jaw 35 to 37; barbel length 18 to 21; length of outer gill slit 19 to 23; length of pectoral fin about 65 to 75. Pyloric caeca 29 to 37. Scales fairly large, covered with conical spinules in quincunx pattern or widely divergent V rows, spinules darkly pigmented except at tip; scale rows below midbase of first dorsal fin 5 to 6.5, below origin of second dorsal fin 5.5 to 7; lateral-line scales over a distance equal to predorsal length 38 to 45. Snout with a black margin along leading edge, the black does not extend onto suborbital or supranarial ridges; first dorsal fin generally dusky except black distally on membrane separating second spinous ray and first branched ray.

Geographical Distribution : Southern Africa (Indian Ocean) and Mozambique (Fig 689).

Habitat and Biology : Benthopelagic in 405 to 960 m depth. Feeds primarily on fish (including *Bregmaceros*) and squid, but polychaetes and pagurid crabs have also been found in the stomach.

Size : To about 41 cm total length.

Interest to Fisheries : The species has been taken by research vessels in moderate numbers off Mozambique in depths of 450 to 700 m, but no fisheries presumably exists for the species.

Local Names : SOUTH AFRICA : Rattail

Literature : Smith (1935); Iwamoto (in Smith & Heemstra, 1986).

Remarks : *Ventrifossa nasuta* bears resemblance to *V. misakia*, *V. johnboborum*, and *V. fusca* in general shape and presence of a small terminal snout scute, but it differs from these three in having much larger scales, a longer barbel, and a black membrane between the second spinous ray of the first dorsal fin and the first branched ray, among other features.

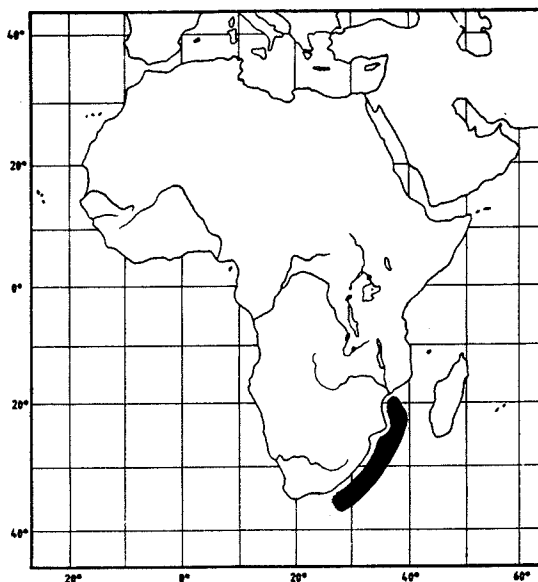


Fig. 689

Ventrifossa nigrodorsalis Gilbert & Hubbs, 1920

Fig. 690

MACROUR Vent 10

Scientific Name with Reference : *Ventrifossa nigrodorsalis* Gilbert & Hubbs, 1920, Bull. U.S. Natl. MUS. 100, 1(7): 546, fig. 36 (Philippines off Mindanao; 8° 37'37"N, 124° 35'E; 391 m; ALBATROSS sta. 5502).

Synonyms : None

FAO Names : En - Spinaker grenadier.

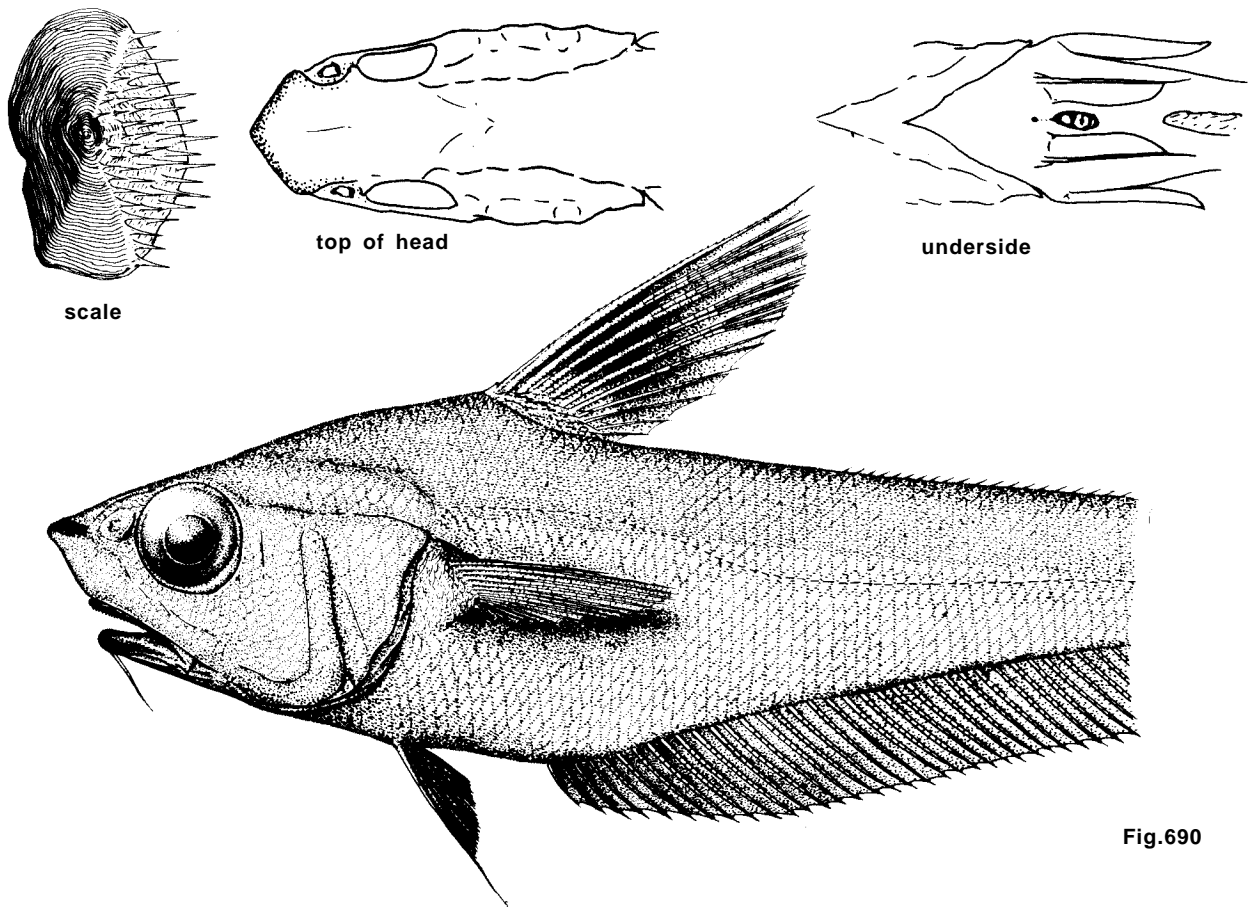


Fig.690

Diagnostic Features : Teeth small, in broad bands in premaxilla, outer series slightly enlarged; mandibular teeth in a rather narrow tapered band about 3 or 4 teeth wide laterally. Inner gill rakers on first arch 13 to 15 total. First dorsal with 2 spines and 9 or 10 rays, second spinous ray finely serrated; pectoral fin rays i18 to i22 (rarely 23); pelvic fin rays 8 or 9 (usually 8). Measurements in percentages of head length: snout length 26 to 32; preoral length 14 to 21; orbit diameter 29 to 33; interorbital space 21 to 28; distance orbit to angle of preopercle 40 to 45; length of upper jaw 37 to 42; barbel length 18 to 23; length of outer gill slit 20 to 24; body depth under origin of first dorsal 77 to 93; length of pectoral fin 48 to 67. Scales medium-sized, uniformly covered with slender, sharp, conical reclined spinules in widely divergent V rows or quincunx order; scale rows below origin of second dorsal fin 6.5 to 8; lateral-line scales over a distance equal to predorsal length 36 to 43. Snout with a black margin along leading edge, extending posteriorly onto suborbital shelf but not over supranarial and median nasal ridges; first dorsal fin with a large black blotch across middle.

Geographical Distribution : Known from southern Japan, Taiwan Island, Philippines, and parts of Indonesia (Borneo, Halmahera) (Fig. 691). Slight morphological variation seen in specimens from Japan and Indonesia, but not sufficient to recognize additional taxa.

Habitat and Biology : Benthopelagic in 270 to 700 m depth.

Size : To about 34 cm total length.

Interest to Fisheries : An abundant species, especially in the Philippines, but no catch statistics are available.

Local Names : JAPAN : Homaehige.

Literature : Gilbert & Hubbs (1920); Okamura (in Okamura et al. 1982).

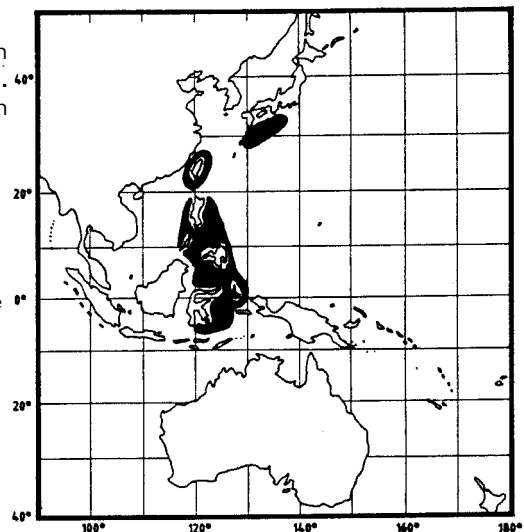


Fig. 691

Remarks : *Ventrifossa nigrodorsalis* is closely related to three other species with a black-blotched first dorsal: *V. petersoni*, *V. rhipidodorsalis*, and *V. longebarbata*. *V. petersoni*, to which it seems closest, differs in its longer barbel (20 to 28% of head length), smaller orbit diameter (25 to 29.5% of head length), shorter preoral length (11 to 14.5% of head length), more extensive areas of spinuleless scales behind first dorsal, blackish spinules, black margin on supranarial ridges and dorsal rim of orbit. *V. rhipidodorsalis* apparently has more spinuleless scales behind the first dorsal, an anteriorly black-edged anal fin, somewhat longer barbel (64.3 to 100% of orbit*), 9 or 10 pelvic fin rays,* and a slightly longer upper jaw (41 to 46.4% of head length*). *V. longebarbata* has a longer barbel (102 to 127% of orbit), longer upper jaw (41.9 to 46.9% of head length *), and smaller scales (9 or 10* below midbase of first dorsal and origin of second dorsal, about 47 lateral-line scales over a distance equal to predorsal measurement).

Ventrifossa nigromaculata (McCulloch, 1907)

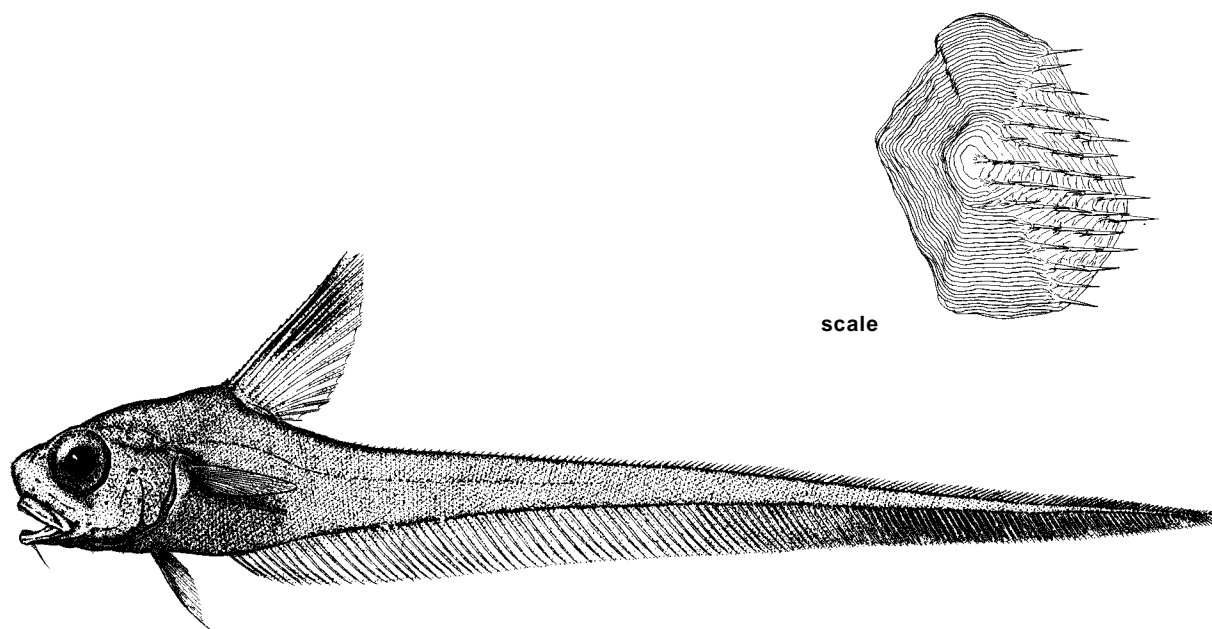
Fig. 692

MACROUR Vent 11

Scientific Name with Reference : *Macrourus nigromaculatus* McCulloch, 1907, Rec. Aust. Mus. 6:346, pl. 63, figs. 1, 1a (56 km East of Sydney, Australia; 1463 m).

Synonyms : *Lionurus nigromaculatus* -- McCulloch, 1919; *Nezumia nigromaculata* -- Makushok, 1967; *Macruroplus potronus* -- Pequeño, 1971; *Ventrifossa (Lucigadus) nigromaculata* -- Iwamoto, 1979.

FAO Names : En - Blackspotted grenadier.



(after Iwamoto, in Smith & Heemstra, 1986)

Fig. 692

Diagnostic Features : Teeth small, in a rather narrow band in premaxilla, outer series slightly enlarged; mandibular teeth in 1 to 3 irregular rows. Inner gill rakers on first arch 12 to 16 total. First dorsal with 2 spines and 10 or 11 rays, second spinous ray finely serrated; pectoral fin rays i18 to i22; pelvic fin rays 13 to 15. Measurements in percentages of head length: snout length 25 to 30; orbit diameter 40 to 47; preoral length 18 to 22; interorbital space 20 to 26; length of upper jaw 39 to 45; barbel length 18 to 26; length of outer gill slit 23 to 30; greatest body depth 92 to 112; length of pectoral fin 63 to 73. Scales small, covered with slender conical spinules in 11 or 12 subparallel rows (in larger specimens); scales present on lower branchiostegal rays and ventral margin of interopercle; scale rows below origin of second dorsal fin 10 to 12; lateral-line scales over a distance equal to predorsal length 42 to 45. Snout without prominent markings; first dorsal fin with a prominent black blotch across upper anterior half to 2/3.

* Data from Okamura, in Okamura et al. (1982, 1984)

Geographical Distribution : Southern Australia, New Zealand, west coast of Chile (Fig. 693).

Habitat and Biology : Benthopelagic; reported from 200 to 1 460 m depth but probably most common in 400 to 800 m.

Size : To about 34 cm total length.

Interest to Fisheries : Occasionally caught by trawlers in Tasmania in 450 to 760 m depth, but no catch statistics are available.

Local Names : AUSTRALIA : Black-spotted whiptail.

Literature : McCulloch (1907); Pequeño (1971); Iwamoto (1979); Last, Scott & Talbot (1983).

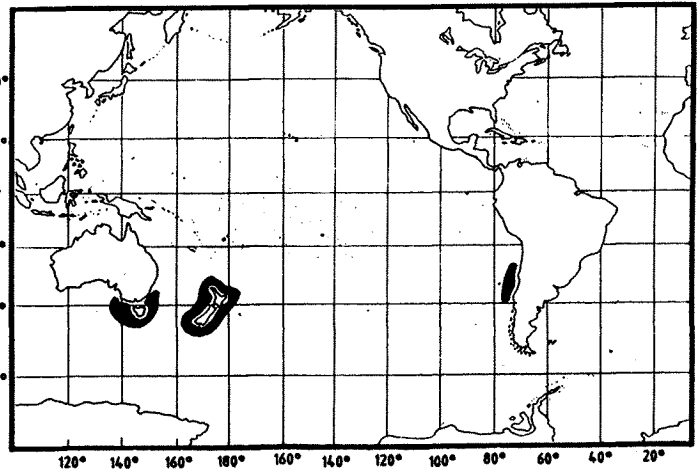


Fig. 693

Remarks : *Ventrifossa nigromaculata* is most similar to *V. ori* from the South Atlantic, but that species has a somewhat higher range of pelvic ray counts (15 or 16), the black blotch on the first dorsal fin extends to the tip of the first 5 branched rays, the outer gill slit is shorter (18 to 22% of head length), and the ground color is overall swarthy. Other members of this subgenus are readily distinguished by the fewer pelvic fin rays: *V. lucifer* (7 or 8); *V. fasciata* (10 to 12, and body marked with broad bars and bands); *V. nigromarginata* (10 or 11, and anal fin with a black margin anteriorly, scales below second dorsal origin 7 or 8).

Ventrifossa petersoni (Alcock, 1891)

Fig. 694

MACROUR Vent 12

Scientific Name with Reference : *Macrurus petersonii* Alcock, in Wood-Mason & Alcock, 1891 (Andaman Sea, 11° 31' 40" N. 92° 46' 40" E; 345 to 403 m; INVESTIGATOR sta. 115).

Synonyms : ? *Macrurus (Chalinurus) hispidus* Alcock, 1889; *Macrurus (Macrurus) petersonii* -- Alcock, 1899; *Ventrifossa petersonii* -- Gilbert & Hubbs, 1920.

FAO Names : En - Peterson's grenadier.

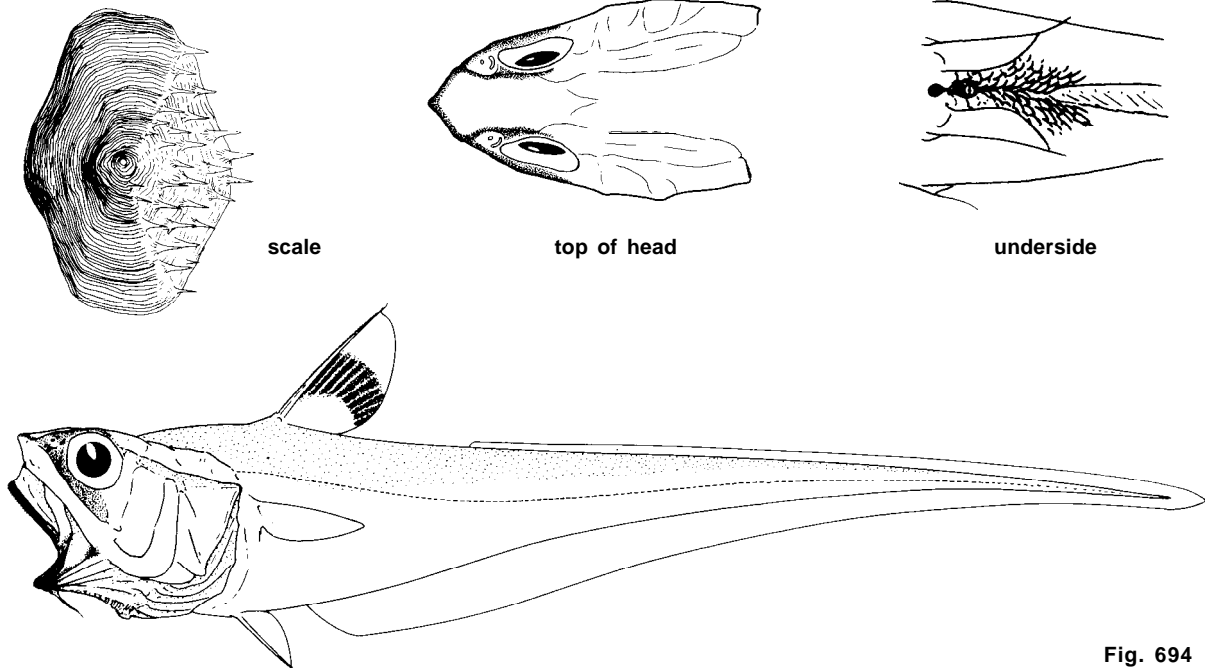


Fig. 694