

Ventrifossa Gilbert & Hubbs, 1920**MACROUR Vent**

Genus with Reference : *Ventrifossa* Gilbert & Hubbs, 1920 Bull. U.S. Natl. Mus., 100 (pt. 7):553 (type species *Coryphaenoides garmani* Jordan & Gilbert, 1904, by original designation).

Diagnostic Features : Macrourines with 7 branchiostegal rays. Snout moderately pointed to rounded; a small, poorly developed median tubercle on snout tip in a few species, lateral snout tubercles not developed; head without stout, coarsely scuted ridges, mouth subterminal, upper jaw usually more than 35% of head length. Teeth small, in narrow to moderately broad bands in upper jaw, outer series slightly enlarged in most species; lower jaw teeth small, none notably enlarged, in 1 to several series laterally. Anus removed from anal fin origin and closer to pelvic fin insertion, situated within an oval area of naked black skin (periproct); a small, round dermal window of light organ at anterior end of periproct, a second window anterior to periproct, situated in a shallow fossa between pelvic fin bases and generally separated from periproct by a series of small scales (but connected midventrally beneath scales by a narrow isthmus of black skin). No reticulate structures on scales; scale spinules short, fine, needle-like to broad, flat triangular; scale patches on branchiostegals present (subgenus *Lucigadus*) or absent. Retia mirabilia and gas glands 2; retia rather short. Pyloric caeca numerous, usually 30 to 70.

Habitat, Distribution and Biology : Worldwide in mostly tropical to warm-temperate seas. Subgenera *Ventrifossa* and *Sokodara* absent on continental margins of the eastern Pacific and the eastern Atlantic. Subgenus *Lucigadus* in South Atlantic, Indian Ocean, and the western and southeastern Pacific. Benthopelagic in about 200 to 1 500 m depth.

Size : To more than 53 cm total length.

Interest to Fisheries : A few species occur in sufficient quantities to constitute part of the bycatch of trawlers fishing continental slope waters. Off southern Japan, one or more species are taken incidentally on bottom set-lines.

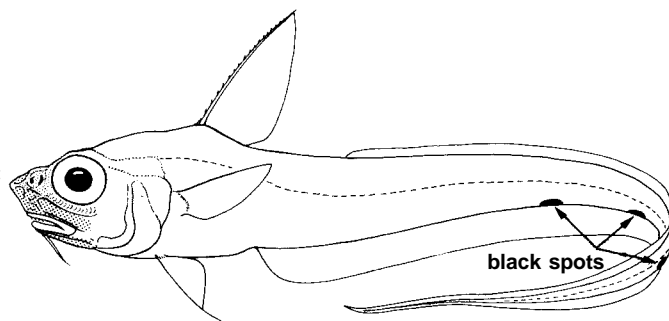
Literature : Gilbert & Hubbs (1920); Iwamoto (1979); Okamura (1970a, 1970b, 1982); Okamura, *in* Okamura & Kitajima (1984).

Remarks : Of the three subgenera, *Lucigadus* appears to be the most derived, and its position within the tribe Malacocephalini remains somewhat obscure. Sazonov (1985) has accorded the group separate generic status, citing characters that suggest a closer relationship with *Malacocephalus* than with *Ventrifossa*. However, until these characters are adequately surveyed within the group, better defined, and more rigorously evaluated, the present author is unable to use them to circumscribe the genus in the keys and diagnoses. Therefore, *Lucigadus* is maintained as a subgenus for this work. The inclusion of *Lionurus japonicus* Matsubara, 1943, in this genus is tentative in that the species shares the character of anterodorsal surface of snout and entire underside of head naked with the following genera: *Asthenomacrus* Sazonov & Shcherbachev, 1982, *Haplomacrus* Trunov, 1981, *Macrosmia* Merrett, Sazonov & Shcherbachev, 1983, *Parakumba* Trunov, 1981, and *Pseudonezumia* Okamura, 1970. None of the other members of *Ventrifossa* have extensive naked areas; only in a few members of *Lucigadus* does one find restricted naked areas along the ventral margins of the snout and suborbital region.

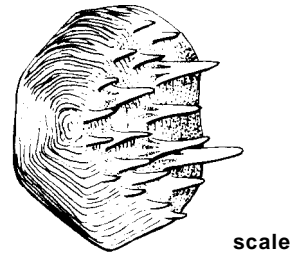
Ventrifossa appears to be most closely related to *Malacocephalus*; a few species closely approach that genus in a number of shared characters and thereby cloud the distinctions between the two. Three derived features serve to separate *Malacocephalus* from *Ventrifossa*: (1) enlarged, caninelike teeth on mandible; (2) large, halfmoon or bean-shaped anterior window of light organ; (3) short, broad, flat retia mirabilia. The presence of scale patches on the lowermost branchiostegal rays is common to *Malacocephalus* and subgenus *Lucigadus*, but absent in the other two subgenera of *Ventrifossa*.

Key to Adults of Genus *Ventrifossa*

- 1a. Anterodorsal margin of snout and entire underside of head naked; 3 blackish spots along base of anal fin (Fig. 665) *V. japonica*
- 1b. Snout and underside of head almost entirely scaled; no spots along anal fin base
- 2a. Dorsal spine smooth
- 3a. Pectoral fins more than 2/3 of head length *V. macroptera*
- 3b. Pectoral fins less than 2/3 of head length

*V. japonica* Fig. 665

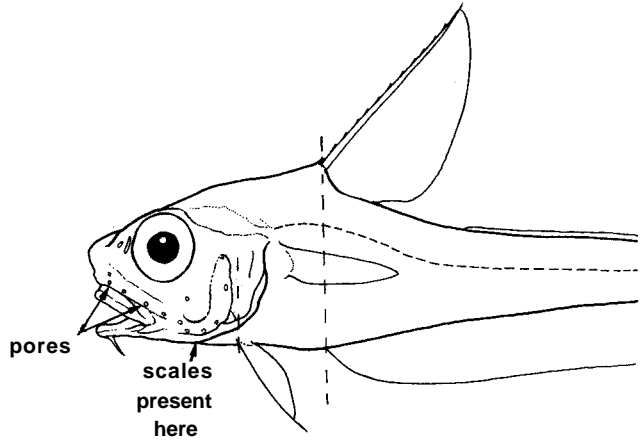
- 4a. Enlarged spinules on scales of dorsum below interspace between dorsal fins in adults (Fig. 666) *Ventrifossa* species 1 *
- 4b. No enlarged spinules on scales of dorsum
 - 5a. Barbel 12 to 20% of head length; orbit 32 to 40% of head length; outer gill slit 26 to 32% of head length *V. atherodon*
 - 5b. Barbel 23 to 27% of head length; orbit 30 to 34% of head length; outer gill slit 23 to 26% of head length *Ventrifossa* species 2*



Ventrifossa species 1 Fig. 666

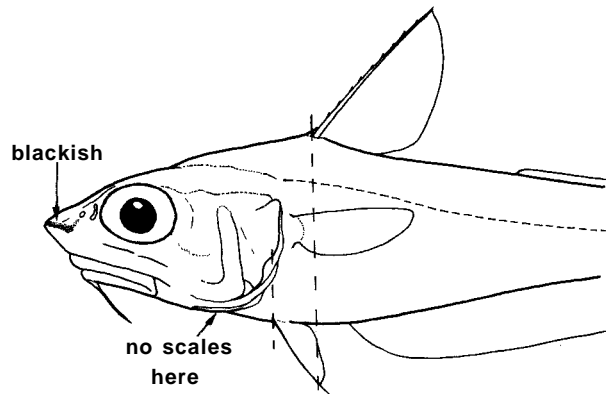
2b. Dorsal spine serrated

- 6a. Ventral parts of body appearing to have shifted forward so that anal fin origin often lies below first dorsal fin origin, pelvic fins below operculum, and the snout is short, bluntly rounded and high (Fig. 667a). Pores of head rather prominent. Scales present on lowermost branchiostegal rays. Tip and leading edge of snout without distinct pigmentation. Mandibular teeth in a narrow to wide band; premaxillary teeth not present posterior to hind margin of maxillary process. Spinules on scales in more or less parallel horizontal rows. Abdominal vertebrae 10 or 11 Subgenus *Lucigadus*



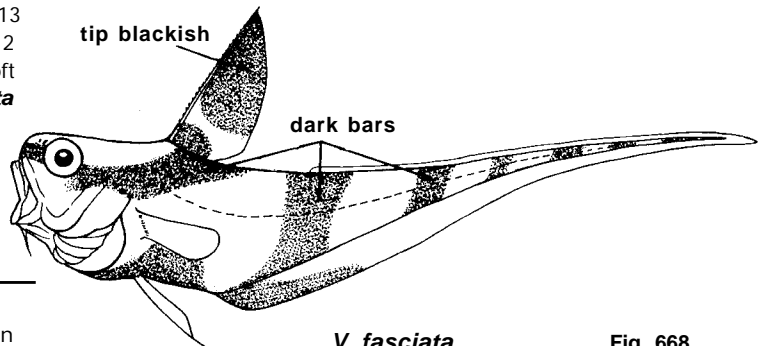
a. Subgenus *Lucigadus*
(after Iwamoto, 1979)

- 7a. Pelvic fin rays fewer than 13
 - 8a. Pelvic fin rays 7 or 8.. *V. lucifer*
 - 8b. Pelvic fin rays 10 to 12
 - 9a. Bold bars and bands on body (Fig. 668).. *V. fasciata*
 - 9b. No bars and bands on body *V. nigromarginata*



b. Subgenus *Ventrifossa* Fig. 667

- 7b. Pelvic fin rays 13 or more
 - 10a. Scales below first dorsal fin 9 or 10; first dorsal fin with 2 spines and 9 soft rays *V. ori*
 - 10b. Scales below first dorsal fin 13 to 20; first dorsal fin with 2 spines and 10 or 11 soft rays *V. nigromaculata*



V. fasciata
(after Weber, 1913)

Fig. 668

* Species under study that will be described in the near future

6b. Ventral parts of body not especially far forward; anal fin origin below or behind posterior half of first dorsal fin; pelvic fins below or slightly forward of pectoral fin. Snout slightly to moderately pointed (Fig. 667b). Pores of head small, inconspicuous. No scales on branchiostegal membranes. Snout tip and usually also leading edge blackish (Fig. 669). Mandibular teeth in 1 to 3 irregular series laterally, premaxillary teeth present posterior to maxillary process. Scale spinules in "quincunx" order (Fig.670a) or in widely divergent rows. Abdominal vertebrae 11 to 15

11a. Tip of snout without any sign of modified tubercular scale. Snout barely protruding beyond large mouth, upper jaw 42 to 53% of head length, preoral length of snout usually less than 21% of head length; suborbital shelf not especially narrow anteriorly

12a. A prominent black blotch on first dorsal fin

13a. Anal fin with a black margin anteriorly...*V. rhipidodorsalis*

13b. No black margin on anal fin

14a. First dorsal fin with 2 spines and 12 or 13 rays; pelvic fins with 9 or 10 rays; lateral-line scales over predorsal length 50 to 53 *V. ctenomelas*

14b. First dorsal fin with 2 spines and 8 or 10 rays; pelvic fin with 8 or 9 rays; lateral-line scales over predorsal length less than 47

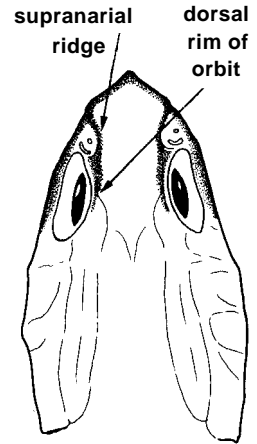
15a. Barbel equal to or more than orbit diameter; a large area of spinuleless scales behind first dorsal fin *V. longebarbata*

15b. Barbel shorter than orbit diameter; spinuleless scales behind first dorsal fin present or absent

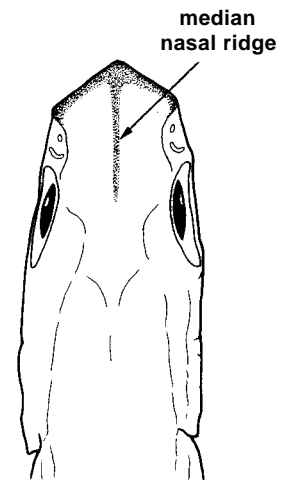
16a. Spinules blackish; supranarial ridges and dorsal rim of orbits blackish; orbit 26 to 30% of head length; a broad area of spinuleless scales behind first dorsal fin; preoral length 11 to 14.5% of head length (Fig. 669a) *V. petersoni*

16b. Spinules pale; supranarial ridges and orbit rim not blackish; orbit 29 to 33% of head length; few or no spinuleless scales behind first dorsal fin; preoral length 14 to 21% of head length.....*V. nigrodorsalis*

12b. First dorsal fin uniformly dusky or somewhat darker basally



a. *V. petersoni*



b. *V. macropogon*

top of head Fig. 669

17a. Spinules on body scales broadly triangular (Fig. 670a.); scale rows below second dorsal fin 5 to 6.5 *V. garmani*

17b. Spinules on body scales conical to narrowly lanceolate (Fig.670b); scale rows below second dorsal fin 6.5 to 10

18a. Median nasal ridge blackish (Fig. 669b) *V. macropogon*

18b. Median nasal ridge not blackish

19a. Barbel short, 16 to 25% of head length

20a. First dorsal fin with 2 spines and 9 or 10 rays; interorbital width 18 to 22% of head length; body depth less than 2/3 of head length *Ventrifossa* species 3

20b. First dorsal fin with 2 spines and 11 to 13 rays; interorbital width 24 to 28% of head length; body depth more than 2/3 of head length *V. mucocephalos*

19b. Barbel long, more than 25% of head length

21a. First dorsal and pelvic fins dark; scale pockets brown; barbel 115 to 133% of orbit..... *V. saikaiensis*

21b. First dorsal and pelvic fins pale; scale pockets not dark-edged; barbel 82 to 115% of orbit *V. divergens*

11b. Tip of snout with a small spiny scute; snout distinctly pointed, protruding well beyond mouth; preoral length usually more than 21% of head length (Fig. 671)

22a. Scales large, rows below second dorsal fin 5 to 6.5, about 40 lateral-line scales over distance equal to predorsal length; barbel 18 to 21% of head length *V. nasuta*

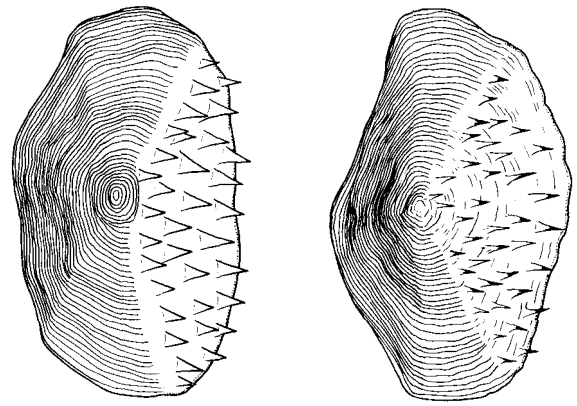
22b. Scales small, rows below second dorsal fin 9 to 11, about 60 to 75 lateral-line scales over distance equal to predorsal length; barbel less than 17% of head length

23a. Oral cavity pale; barbel 4 to 8% of head length

24a. Colour dark, fins blackish....*V. fusca*

24b. Colour medium brown, fins dusky to pale.....*V. misakia*

23b. Oral cavity blackish; barbel 11 to 16% of head length.....*V. johnboborum*

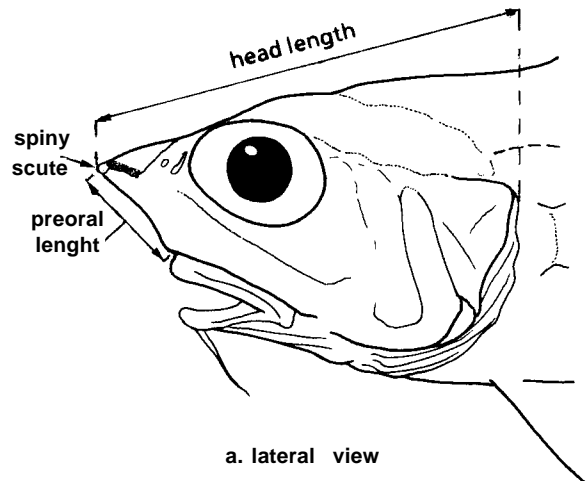


a. *V. garmani*
(after Okamura, 1970a)

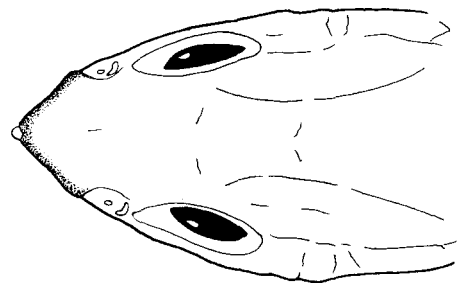
b. *V. macropogon*

scales

Fig. 670



a. lateral view



b. top of head

Fig. 671

List of Species

Ventrifossa atherodon (Gilbert & Cramer, 1897)
Ventrifossa ctenomelas (Gilbert & Cramer, 1897)
Ventrifossa divergens Gilbert & Hubbs, 1920
Ventrifossa fasciata (Weber, 1913)
Ventrifossa fusca Okamura, 1982
Ventrifossa garmani (Jordan & Gilbert, 1904)
Ventrifossa japonica (Matsubara, 1943)
Ventrifossa johnboborum Iwamoto, 1982
Ventrifossa longebarbata Okamura, 1982
Ventrifossa lucifer (Smith & Radcliffe, 1912)
Ventrifossa macropogon Marshall, 1973
Ventrifossa macroptera Okamura, 1982
Ventrifossa misakia (Jordan & Gilbert, 1904)
Ventrifossa mucocephalus Marshall, 1973
Ventrifossa nasuta (Smith, 1935)
Ventrifossa nigrodorsalis Gilbert & Hubbs, 1920
Ventrifossa nigromaculata (McCulloch, 1907)
Ventrifossa nigromarginata (Smith & Radcliffe, 1912)
Ventrifossa ori (Smith, 1968)
Ventrifossa petersoni (Alcock, 1889)
Ventrifossa rhipidodorsalis Okamura, 1984
Ventrifossa saikaiensis Okamura, 1984

Ventrifossa atherodon (Gilbert & Cramer, 1897)

Fig. 672

MACROUR Vent 1

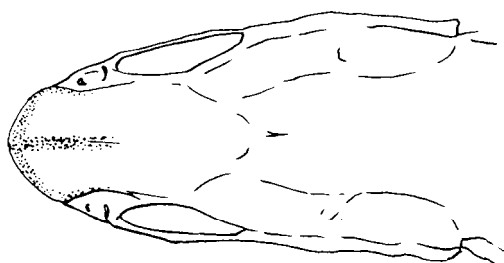
Scientific Name with Reference : *Optonurus atherodon* Gilbert & Cramer, 1897, Proc. U.S. Natl. Mus., 19(1114): 431, pl. 46, fig. 1 (Kaiwi Channel, Hawaiian Is.; 21°12'N. 159°38'30"W; 686 m; ALBATROSS sta. 3474).

Synonyms : *Lionurus (Nezumia) atherodon* -- Gilbert & Hubbs, 1916; *Ventrifossa (Atherodus) atherodon* -- Gilbert & Hubbs, 1920.

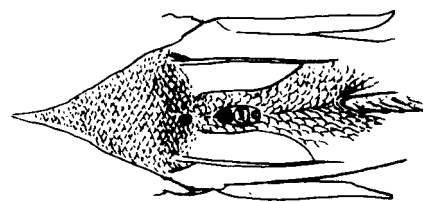
FAO Names : En - Arrowtooth grenadier.



scale



top of head



underside

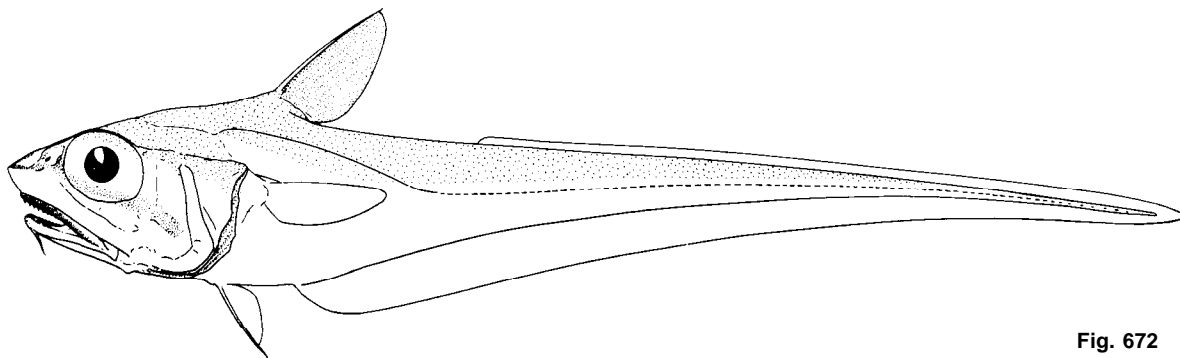


Fig. 672

Diagnostic Features : Teeth in premaxillae in broad bands, those in outer series distinctly enlarged, conical, recurved canines with arrowhead-shaped tips; mandibular teeth in 2 irregular series, the inner series slightly enlarged. Inner gill rakers on first arch 18 to 20 (total). Measurements in percentages of head length: snout 25 to 30; preoral 9 to 15 (usually 10 to 12); orbit diameter 28 to 38; interorbital space 21 to 28; distance orbit to angle of preopercle 39 to 46; upper jaw length 46 to 53; barbel length 13 to 22; outer gill slit 25 to 32; body depth under first dorsal fin origin 71 to 92; length of pectoral fin 57 to 63. First dorsal fin with 2 spines and 9 or 10 rays, first spinous ray lacking serrations; pectoral fin rays i20 to i23; pelvic fin rays 9 or 10. Scales small; spinules very small, short, conical, erect; scale rows below second dorsal fin origin 7 or 8 over a distance equal to predorsal length 47 to 56. Snout with black margins along leading edge, supranarial ridges, and a median nasal ridge; first dorsal fin uniformly dusky.

Geographical Distribution : Apparently confined to the Hawaiian Islands. Specimens reported from other areas probably represent different species (Fig. 673).

Habitat and Biology : Benthopelagic in 302 to 936 m depth. Gilbert (1905) reports the food to consist of shrimp-like crustacea and squids.

Size : To more than 31 cm total length.

Interest to Fisheries : Gilbert (1905) considered this as "One of the most abundant of Hawaiian *Macrurids* between 250 and 400 fathoms." The absence of a deep-water trawl fishery in the Hawaiian Islands, however, precludes their capture other than by research vessels.

Local Names : USA : Arrow-toothed grenadier.

Literature : Gilbert & Cramer (1897); Gilbert (1905); Gilbert & Hubbs (1920).

Remarks : Three closely related species are known: one undescribed species recently taken off the Sala-Gomez and Nazca ridges in the southeastern Pacific is distinguished by its distinctly longer barbel (23 to 27% of head length) and smaller outer gill slit (23 to 26% head length); another undescribed species taken in the South China Sea has enlarged spinules on scales below the second dorsal fin and a slightly longer barbel (1.4 to 1.8 in orbit vs. 1.8 to 2.8); a third species, *V. macroptera* Okamura, 1982, from the Kyushu-Palau Ridge has a much longer pectoral fin (more than 2/3 head length) and a smaller orbit (26 to 31% of head length).

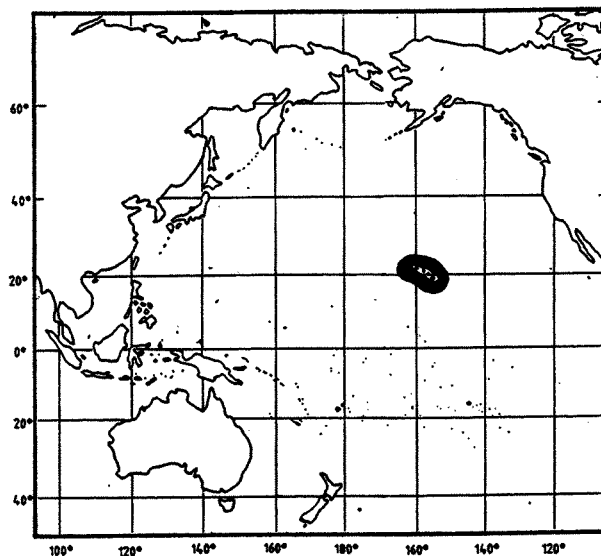


Fig. 673

Ventrifossa ctenomelas (Gilbert & Cramer, 1897)

Fig. 674

MACROUR Vent 2

Scientific Name with Reference : *Chalinura ctenomelas* Gilbert & Cramer, 1897, Proc. U.S. Natl. Mus., 19(1114): 430, pl. 45, fig. 2 (Kaiwi Channel, Hawaiian Is.; 21°08'30"N, 157°49'W; 627 m; ALBATROSS sta. 3470).

Synonyms : *Lionurus (Nezumia) ctenomelas* -- Gilbert & Hubbs, 1916; *Ventrifossa (Ventrifossa) ctenomelas* -- Gilbert & Hubbs, 1920.

FAO Names : En - Hawaiian grenadier

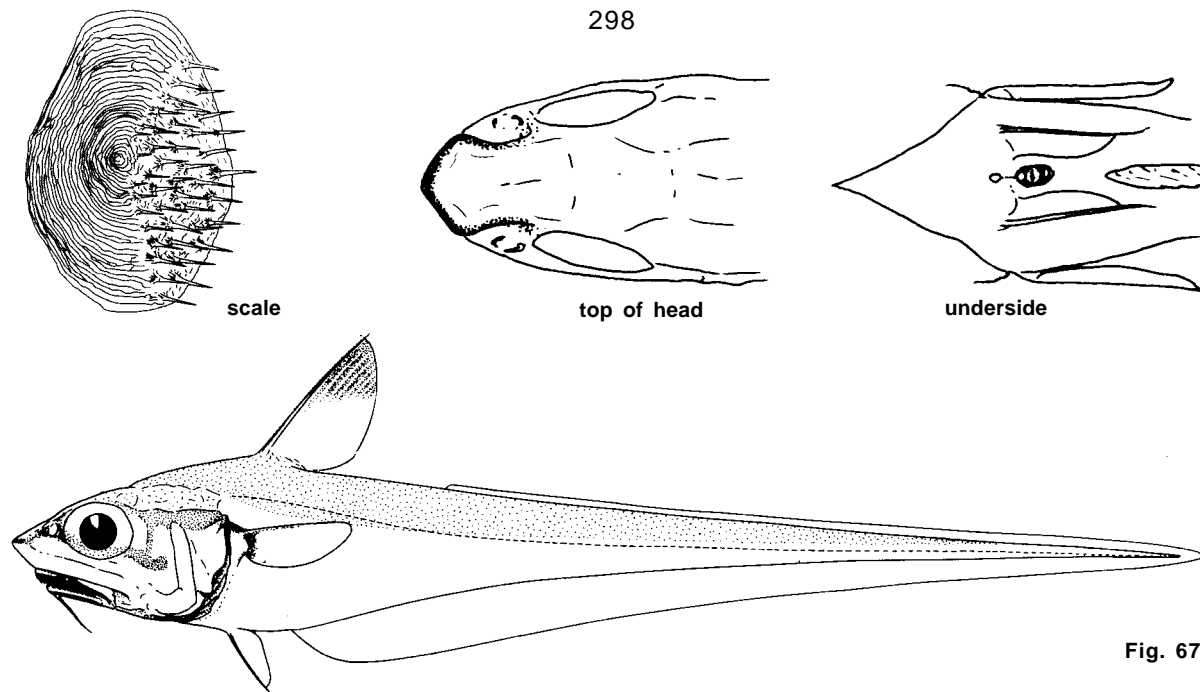


Fig. 674

Diagnostic Features : Teeth in premaxilla in a moderately wide band, outer series distinctly enlarged, widely spaced conical canines; mandibular teeth in 2 irregular series laterally, the inner series slightly enlarged. Inner gill rakers on first arch 15 or 16 total. First dorsal fin with 2 spines and 10 or 11 (rarely 9) rays, second spinous ray finely serrated; pectoral fin rays i20 to i22; pelvic fin rays 9 or 10 (rarely 8). Measurements in percentages of head length: snout length 26 to 31; preoral length 13 to 18; orbit diameter 31 to 38; interorbital space 20 to 25; distance orbit to angle of preopercle 36 to 44; length upper jaw 40 to 46; length barbel 22 to 28; length outer gill slit 21 to 25; body depth under first dorsal origin 75 to 86; length pectoral fin 48 to 58. Scales small, uniformly covered with small, fine, conical spinules; scale rows below second dorsal origin 8, over a distance equal to predorsal length 50 to 53. Snout with a black margin along leading edge and supranarial ridges, but not along median nasal ridge; first dorsal fin with a large black blotch across middle to distal portions.

Geographical Distribution : Apparently confined to the Hawaiian Islands (Fig. 675).

Habitat and Biology : Benthopelagic in 411 to 673 m depth. Gilbert (1905) has reported shrimplike crustacea and squid beaks in the stomachs of specimens he examined.

Size : To more than 31 cm total length.

Interest to Fisheries : Gilbert (1905) reported the species as very abundant in depths of 250 to 350 fathoms (457 to 640 m). As with other Hawaiian macrourids, is not normally taken by commercial fishermen because of the absence of a deep-water trawl fishery in the islands.

Local Name : USA : Common grenadier.

Literature : Gilbert & Cramer (1897); Gilbert(1905); Gilbert & Hubbs (1920).

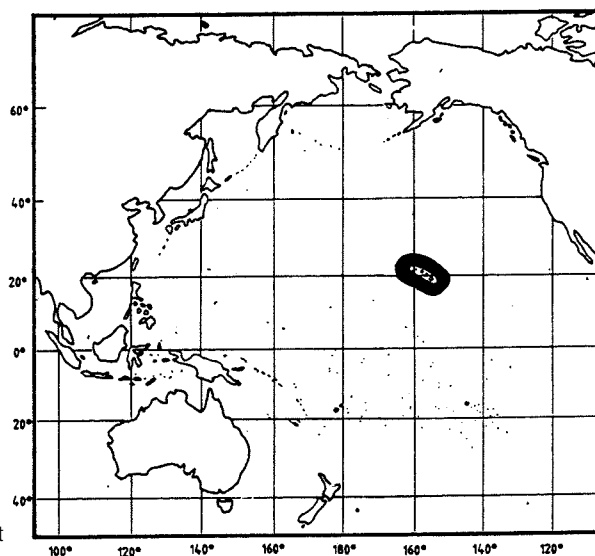


Fig. 675

Remarks : *Ventrifossa ctenomelas* is readily distinguished from its close relatives with a black-blotched first dorsal fin by its high first dorsal ray count and small scales (as reflected in the count of lateral-line scales over a distance equal to the predorsal measurement). It further differs from *V. rhipidodorsalis* by its shorter pectoral fin (58.7 to 68.2% of head length*), from *V. longebarbata* by its shorter pectoral fin (59 to 67%) and shorter barbel (102 to 127% of orbit*), and from *V. nigrodorsalis* by its somewhat higher range of pelvic fin rays (8 or 9) and inner gill raker counts (13 to 15) and slightly longer barbel (18 to 23% of head length).

*

Data from Okamura, 1982, 1984.

Ventrifossa divergens Gilbert & Hubbs, 1920

Fig. 676

MACROUR Vent 3

Scientific Name with Reference : *Ventrifossa divergens* Gilbert & Hubbs, 1920, *Bull. U.S. Natl. Mus.* 100, 1(7): 549, fig. 37 (Sibuko Bay, Borneo; 4°12'44"N, 118°27'44"E; 557 m; ALBATROSS sta. 5592).

Synonyms : None

FAO Names : En - Plainfin grenadier

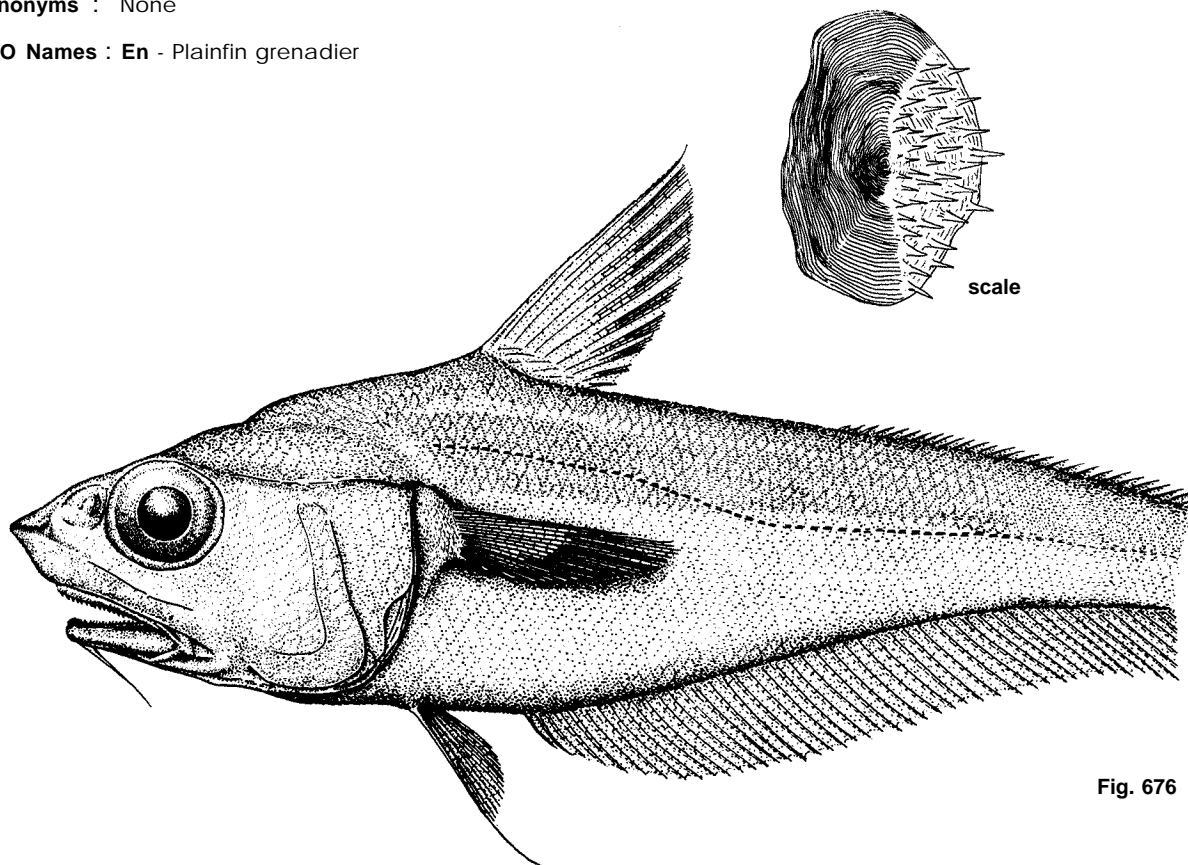


Fig. 676

Diagnostic Features : Teeth small, in broad bands in premaxilla, outer series slightly enlarged, some with arrowhead tips; mandibular teeth in a rather narrow band. Inner gill rakers on first arch 15 to 17 total. First dorsal fin with 2 spines and 9 to 11 rays, spinous ray finely serrated along leading edge; pectoral fin rays i19 to i23; pelvic fin rays 8 or 9. Measurements in percentages of head length: snout length 25 to 31; preoral length 15 to 19; orbit diameter 28 to 37; interorbital space 26 to 30; distance orbit to angle of preopercle 41 to 45; length upper jaw 43 to 49; length pectoral fin 56 to 57. Scales medium-sized, uniformly covered with fine, conical reclined spinules in widely divergent V rows or quincunx order; scale rows below second dorsal fin 8 to 10 over distance equal to predorsal length 43 to 48. Snout with a black margin along leading edge extending posteriorly onto suborbital shelf, but not over supranarial and median nasal ridges; first dorsal fin uniformly dusky or darker proximally, but lacking a distinct black blotch.

Geographical Distribution : Philippines, South China Sea near Hong Kong, Borneo, and Indian Ocean off South Africa and Mozambique (Fig. 677).

Habitat and Biology : Benthopelagic in 183 to 772 m depth, but most common in about 350 to 550 m.

Size : To about 30 cm total length.

Interest to Fisheries : Apparently a fairly common species in the Philippines and southern Africa, but no catch statistics are available.

Literature : Gilbert & Hubbs (1920); Barnard (1925b); Iwamoto (in Smith & Heemstra, 1986).

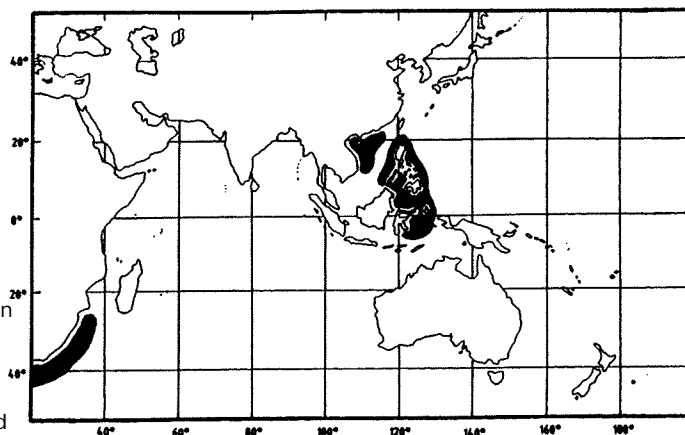


Fig. 677

Remarks : *Ventrifossa divergens* appears to be closely related to *V. saikaiensis*, *V. macropogon*, and *V. longebarbata*, and perhaps more distantly to *V. rhipidorsalis*. It differs from *V. longebarbata* primarily in lacking the distinct black blotch on the first dorsal, and in having a shorter interspace between dorsal fins (38 to 58% of head length vs. 63 to 71%*), a longer postorbital (41 to 44% vs. 39 to 41%*), a shorter pectoral fin (59 to 67%* in *longebarbata*), and a somewhat broader interorbital space (24 to 30% vs. 23 to 24%*). *V. saikaiensis* and *V. macropogon* share in common with *V. divergens* the features of lacking a black-blotched first dorsal, pelvic fin rays 8 or 9, and a long barbel, but *V. saikaiensis* has fewer rows of scales below the origin of second dorsal fin, a broader area of spinuleless scales behind the first dorsal, and a somewhat longer pectoral fin (61.4 to 72.2% of head length*); *V. macropogon* is distinguished by its somewhat higher first dorsal fin ray count (2 spines and 11 to 14 rays, usually 12 or 13), somewhat fewer inner gill rakers of first arch (13 to 15, rarely 16 total), fewer lateral-line scales over distance equal to predorsal length (38 to 43). *V. rhipidorsalis* has, in addition to a black-blotched first dorsal fin, somewhat more pelvic rays (9 or 10), fewer lateral-line scales over a distance equal to the predorsal length (39 to 41), a narrower interorbital space (20.7 to 25.6% of head length*), and a longer pectoral fin (58.7 to 68.2% of head length*).

Ventrifossa garmani (Jordan & Gilbert, 1904)

Fig. 678

MACROUR Vent 4

Scientific Name with Reference : *Coryphaenoides garmani* Jordan & Gilbert, in Jordan & Starks, 1904, *Bull. U.S. Fish Comm.* 22 (1902): 610 (Sagami Bay, Japan; 201-474 m; ALBATROSS sta. 3695).

Synonyms : *Lionurus (Nezumia) garmani* -- Gilbert & Hubbs, 1916; *Ventrifossa garmani* -- Gilbert & Hubbs, 1920

FAO Names : En - Sagami grenadier.

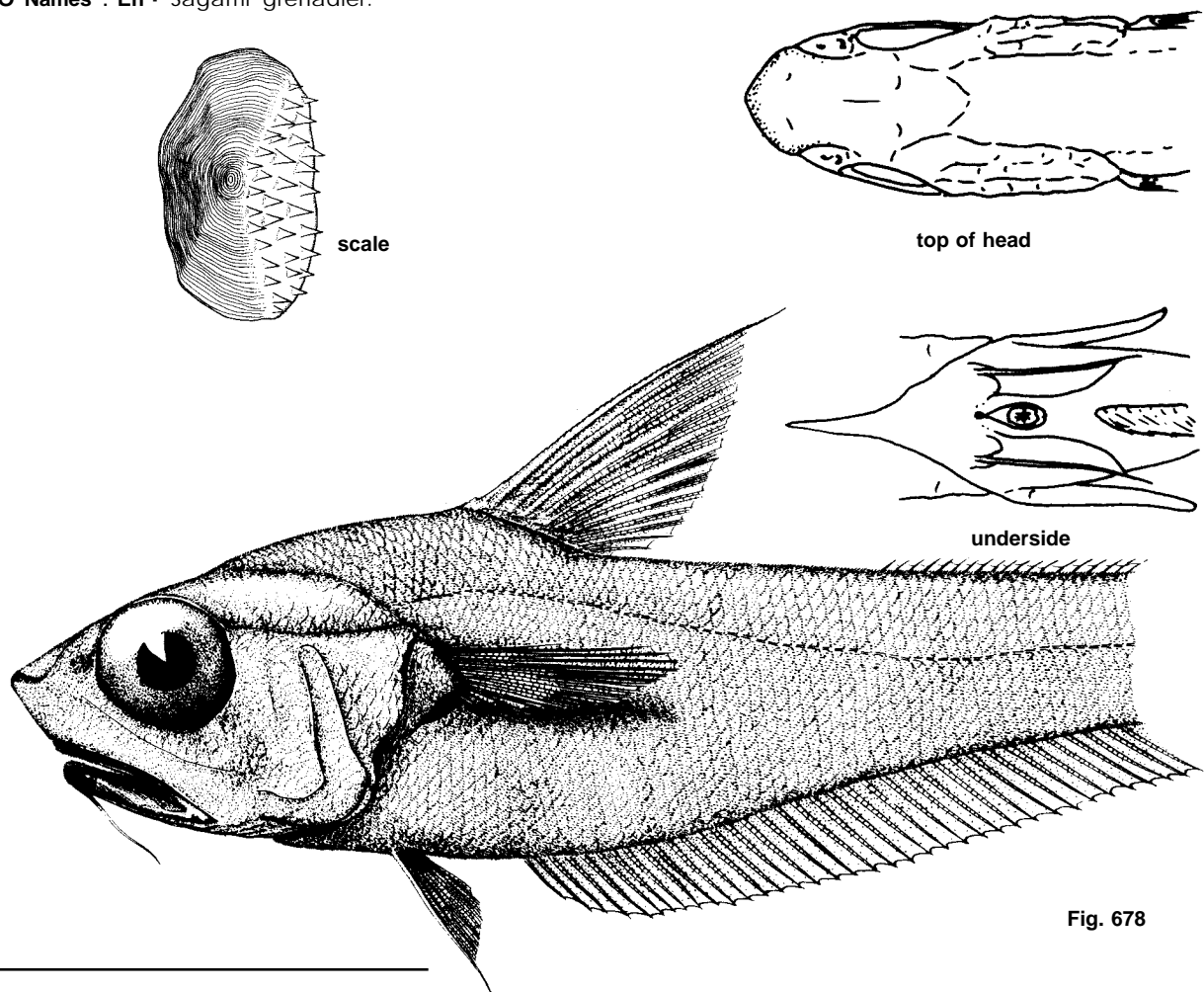


Fig. 678

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

Diagnostic Features : Teeth all small, in broad bands in premaxillae, outer series scarcely enlarged; mandibular teeth in moderately wide bands. inner gill rakers on first arch 16 to 19 total. First dorsal fin with 2 spines and 10 or 11 rays, second spinous ray finely serrated; pectoral fin rays i18 to i23; pelvic fin rays 8 or 9. Measurements in percentages of head length: snout length 26 to 31; preoral height 16 to 23; orbit diameter 31 to 38; interorbital space 27 to 34; distance orbit to angle of preopercle 41 to 46; length upper jaw 41 to 47; length barbel 23 to 32; length outer gill slit 24 to 30; length pectoral fin about 55 to 65. Scale rows below second dorsal fin 5 to 6.5, over a distance equal to predorsal length 38 to 42. Scales medium-sized, uniformly covered with broad, short, triangular spinules in widely divergent V rows or irregularly quincunx order. Snout with a black margin along leading edge only; first dorsal fin uniformly dusky or darker proximally, but lacking a distinct black blotch.

Geographical Distribution : Southern Japan and East China Sea (Fig. 679).

Habitat and Biology : Benthopelagic in 200 to 720 m depth, but most common in about 350 to 550 m where water temperatures range from 6° to 12°C. Feeds primarily on euphausiids, prawns, and isopods. Spawning probably takes place in early spring.

Size : To about 31 cm total length.

Interest to Fisheries : A common species off southern Japan, especially abundant in Tosa Bay and Kumano-Nada. Taken in trawls and bottom longlines, but no catch statistics are available.

Local Names : JAPAN: Sagami-sokodara.

Literature : Jordan & Gilbert (in Jordan & Starks, 1904); Okamura (1970a, 1982).

Remarks : *Ventrifossa garmani* is most closely similar in general features to *V. divergens* and *V. saikaiensis* but is readily differentiated from the two by its triangular scale spinules and lower scale counts.

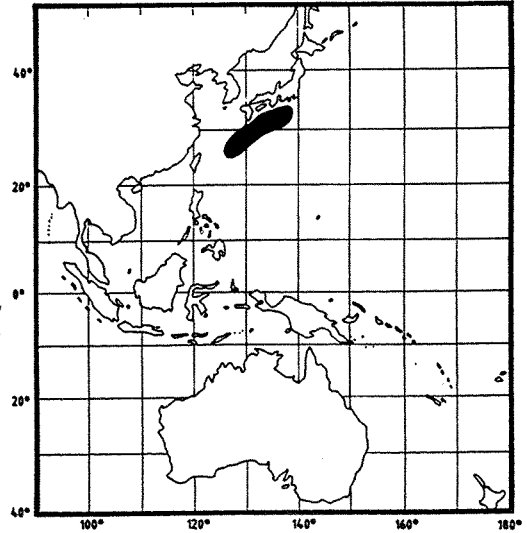


Fig. 679

Ventrifossa macropogon Marshall, 1973

Fig. 680

MACROUR Vent 5

Scientific Name with Reference : *Ventrifossa macropogon* Marshall, 1973, Mem. Sears Found. Mar. Res. 1 (pt. 6): 658, fig. 52 (Caribbean Sea off Nicaragua; 16°35'N, 80°10'W; 576 m; OREGON sta. 1980).

Synonyms : None

FAO Names : En Longbeard grenadier.

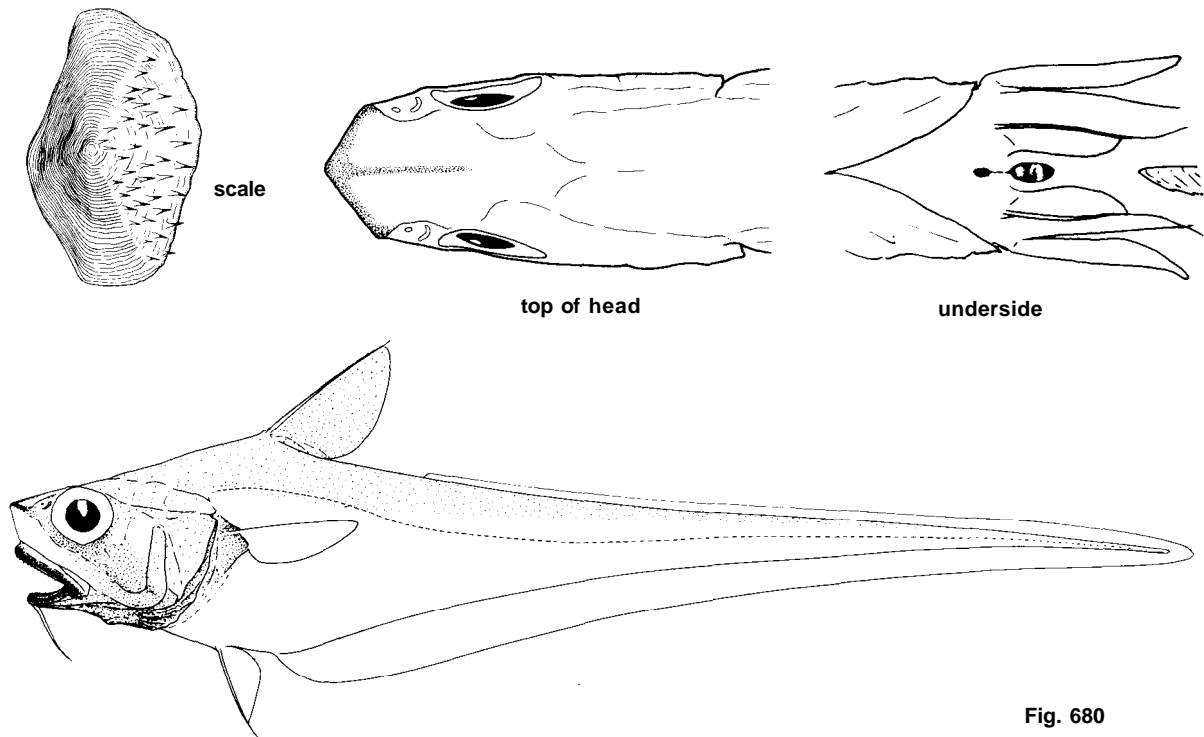


Fig. 680

Diagnostic Features : Teeth in premaxillae in broad bands, outer series slightly enlarged; mandibular teeth in narrow bands, 2 to 4 teeth wide. Inner gill rakers on first arch 13 to 15 (rarely 16) total. First dorsal with 2 spines and 12 or 13 rays (rarely 11 or 14), second spinous ray serrated along leading edge; pectoral fin rays i20 to i22; pelvic fin rays 9 or 10. Measurements in percentages of head length: snout length 26 to 34; preoral length 13 to 21; orbit diameter 29 to 33; interorbital space 23 to 28; upper jaw 38 to 49; barbel length 31 to 43; length of outer gill slit 23 to 29. Scale rows below second dorsal fin origin 7 to 9; lateral-line scales over a distance equal to predorsal length 41 to 49; scales fairly large, covered with slender conical spinules in quincunx order. Snout with black margins along leading edge, supranarial ridges, median nasal ridge, and dorsally on suborbital. Gums of lower jaw blackish; first dorsal fin uniformly blackish to dusky.

Geographical Distribution : Western tropical Atlantic, from off Guyana into the Caribbean and the Gulf of Mexico, and in Atlantic off northeastern Florida (Fig. 681). Common to the south of the Gulf of Mexico, but relatively rare in the Gulf and Gulf Stream.

Habitat and Biology : Benthopelagic in 439 to 1 000 m depth; most common in about 500 to 600 m.

Size : To at least 45 cm total length.

Interest to Fisheries : Occasionally taken in royal red shrimp grounds, especially in the Caribbean.

Literature : Marshall (1973).

Remarks : In the western Atlantic, the species is likely to be confused only with *Malacocephalus occidentalis* and *V. mucocephalus* with which it is sometimes taken. *Ventrifossa macropogon* can be readily differentiated from the first by that species' strong uniserial mandibular dentition, fewer gill rakers, very narrow snout, white gums, and broad, bean-shaped ventral fossa; and from the second by that species' shorter barbel, anteriorly narrowed suborbital shelf, lack of black margins on the supranarial and median nasal ridges, white gums, and somewhat fewer pelvic rays (8 or 9, usually 8).

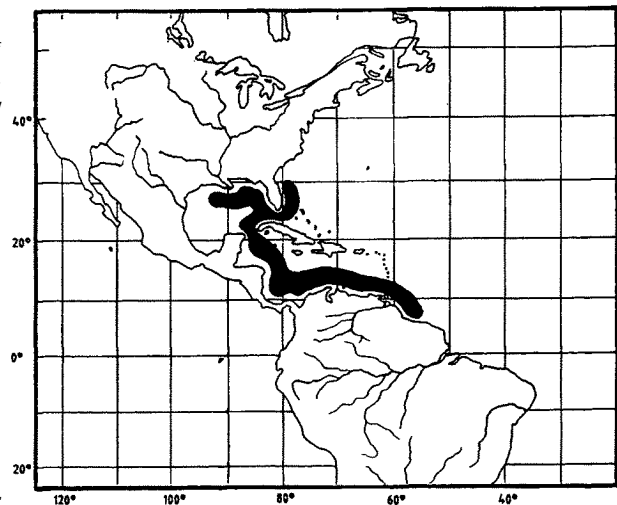


Fig. 681