

Nezumia Jordan, 1904

MACROUR Nez

Genus with Reference : *Nezumia* Jordan, in Jordan & Starks, 1904, Bull. U.S. Fish Comm. (1902). 22: 620 (type species *Nezumia condylura* Jordan & Gilbert, 1904, by original designation).

Synonyms : [?] *Macruropus* Bleeker, 1874 (type species *Macrurus serratus* Lowe, 1843, by original designation; considered a nomen nudum because the holotype is lost and the original description is inadequate to determine what species it represents).

Diagnostic Features : Macrourines with 7 branchiostegal rays. Snout pointed to bluntly rounded with spiny tuberclelike scales at tip and lateral angles in all but a few species; suborbital shelf covered with 2 or more rows of stout, spiny, deeply embedded scales in all but a few species; snout and suborbital space with naked areas ventrally in most species; mouth subterminal, upper jaws usually less than 40% of head length; a small barbel present. Teeth small, in narrow to broad bands that fall short of end of rictus; premaxillary teeth do not extend beyond maxillary process, outer series usually slightly enlarged. Rakers present on outer side of first gill arch; inner rakers usually less than 12. Second spinous ray of first dorsal fin usually slightly prolonged and serrated along leading edge (serrations often obsolete in *N. liolepis*); pelvic fin rays 6 to 17. Anus removed from anal fin origin (usually closer to pelvic fin insertion) and situated within an oval area of naked black skin (the periproct); a small round to teardrop-shaped fossa forming anterior point of periproct in most species, detached from periproct in some, obsolete in a few. Body scales with reticulate structure, exposed surfaces covered with needlelike to broadly shield-shaped spinules. Pyloric caeca 30 or less in most species, but as many as 60 in a few. Retia mirabilia 2, slender and uncoiled; gas glands globular to somewhat flattened. Precaudal vertebrae usually 13 to 14.

Habitat Distribution and Biology : Worldwide in tropical to temperate seas, from about 200 m to more than 2 000 m depth. Benthopelagic in about 200 m to more than 2 000 m.

Size: To 45 cm

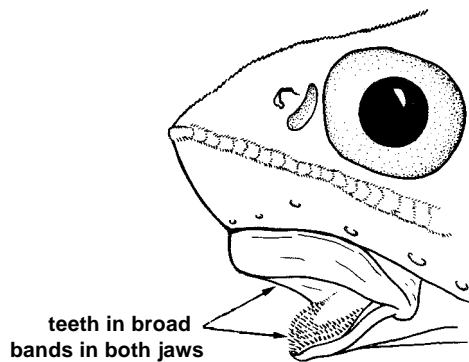
Interest to Fisheries : The relatively small size of most members of the genus makes this group of limited commercial potential, although a few are used in fishmeal and other processed fish products.

Literature : Gilbert & Hubbs (1916; 1920); Parr (1946); Iwamoto (1970; 1979); Marshall & Iwamoto (in Marshall, 1973).

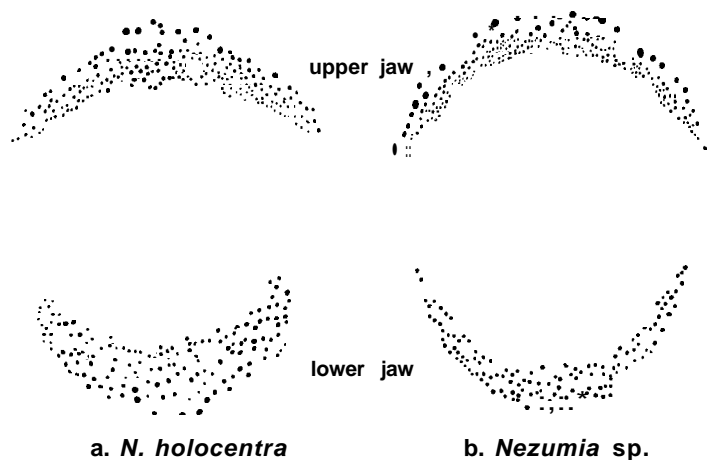
Remarks : The genus is closely related to, and shares many feature with, *Ventrifossa* and *Lucigadus*. These genera are not well defined and a number of species have been switched from one genus to the other. Several species groups seem to be present, but the distinction between one or another usually becomes obscured by the presence of species having intermediate characters. *Lucigadus* has been separated by Sazonov (1985) from *Ventrifossa*, but is retained for now as a subgenus. *Kuronezumia* probably warrants taxonomic separation from *Nezumia* but is also treated as a subgenus. *Nezumia* as currently defined is probably polyphyletic.

Key to *Nezumia* Groups

- 1a. Teeth in both upper and lower jaws in broad cardiform bands (Fig. 559,560a).....**Group A**
- 1b. Teeth in jaws in moderately broad to narrow bands (Fig. 560b) or in two or three rows

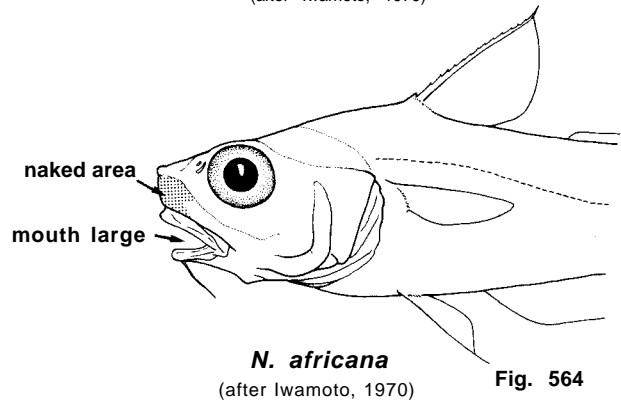
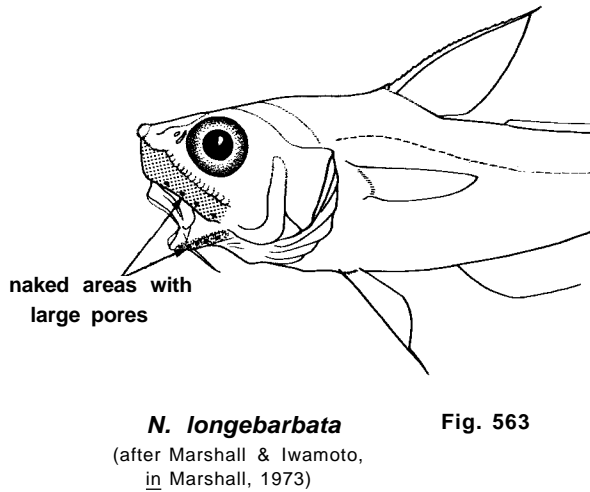
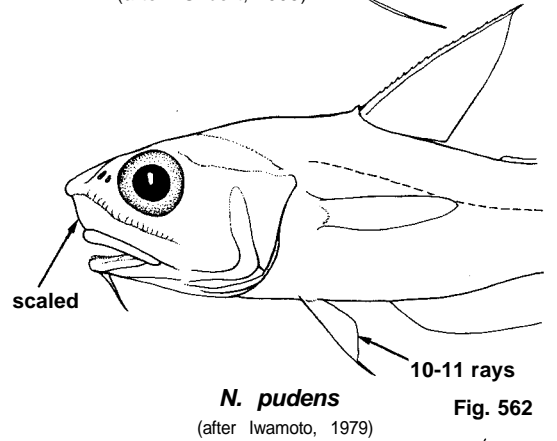
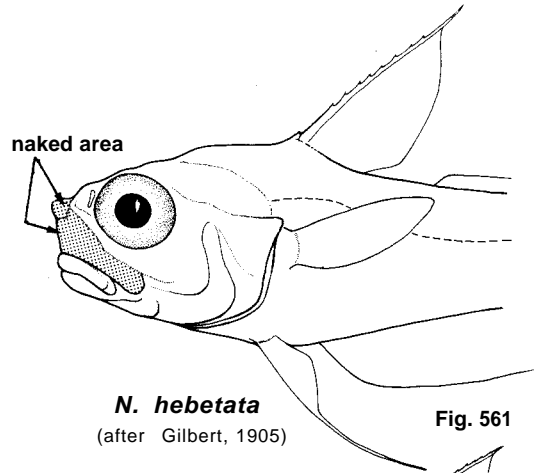


head Fig. 559



tooth pattern in jaws Fig. 560

- 2a. Snout blunt, naked over almost all of dorsal and ventral surfaces (Fig. 561)..... **Group B**
- 2b. Snout blunt or pointed, usually mostly scaled dorsally, naked or fully scaled ventrally
 - 3a. Snout blunt, fully scaled (except sometimes a narrow naked strip along ventral margin) (Fig. 562)..... **Group C**
 - 3b. Snout blunt or pointed, almost all with a moderate to broad naked area ventrally (Fig. 563,564)
 - 4a. Pelvic fin rays 7..... **Group D**
 - 4b. Pelvic fins rays 8 or more
 - 5a. Pelvic fin rays 8 to 10 **Group E**
 - 5b. Pelvic fin rays 11 or more
 - 6a. Pelvic fin rays 11 or 12 **Group F**
 - 6b. Pelvic fin rays 13 or more **Group G**

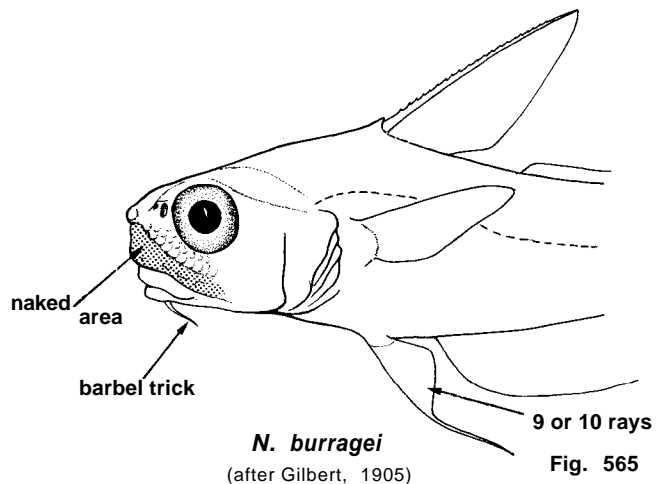


Key to Species of *Nezumia* by Groups

Teeth in both upper and lower jaws in broad cardiform bands - Group A

Group A

- 1a. Snout high and blunt, scarcely protruding beyond mouth; underside of head back to level of angle of mouth entirely naked; chin barbel thick, about 20% of head length; pelvic fin rays 9 or 10 ***N. burragei*** (Hawaii) (Fig. 565)
- 1b. Snout pointed, protruding well beyond mouth; underside of head scaled or naked; barbel slender, 7 to 19% of head length; pelvic fin rays 8 or 9



2a. Underside of head back to level of mouth angle and mandibles naked; scale rows below origin of second dorsal fin about 8.5; barbel 7 to 9 % of head length ***N. holocentra***
(Hawaii) (Fig. 566)

2b. Underside of head almost entirely scaled; scale rows below origin of second dorsal fin about 12; barbel about 19% of head length ***N. leonis***
(Southern Africa) (Fig. 567)

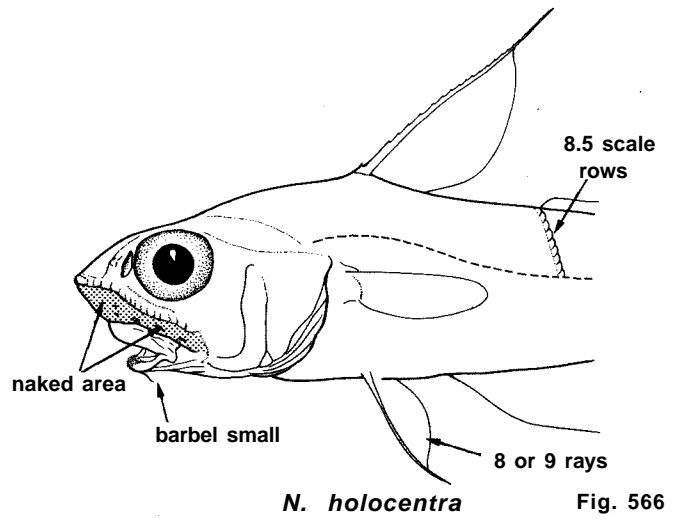
Snout blunt, naked over almost all of dorsal and ventral surfaces - Group B

Group B

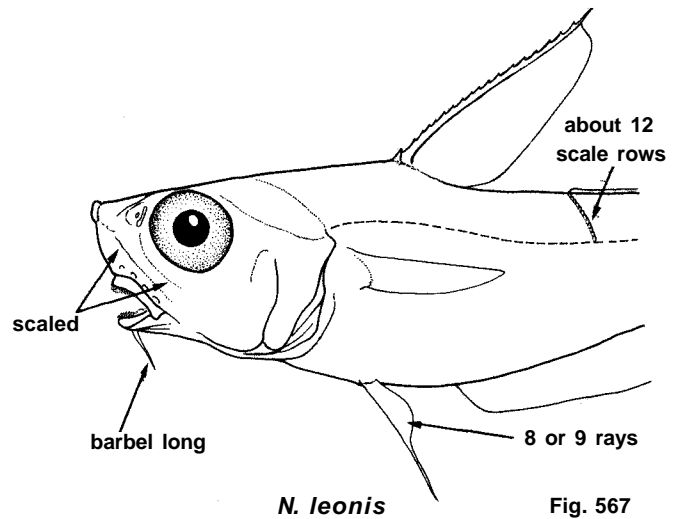
This group is very similar to ***Parakumba*** in the members having extensive areas of the snout and underside of head naked. Unlike ***P. maculisquamis***, the sole member of that genus, members of Group B lack an expanded, broad head.

1a. Pelvic fin rays 8; spinous dorsal ray strongly denticulate along leading edge; scales relatively adherent, with erect spinules in distinct rows ***N. hebetata***
(Hawaii) (Fig. 568)

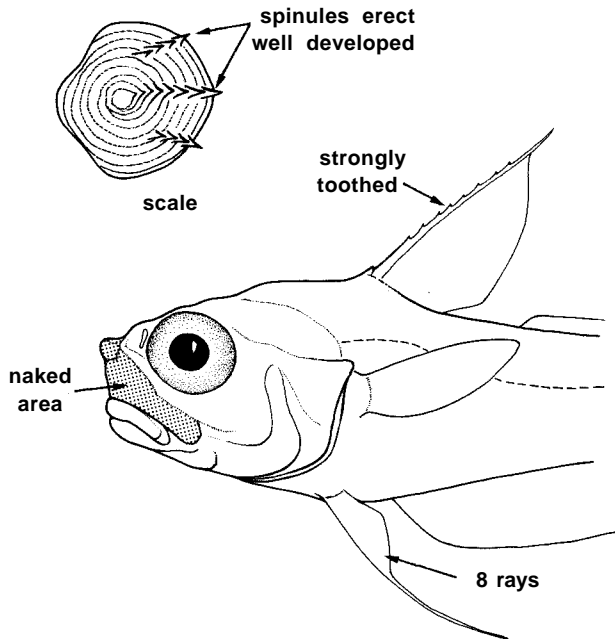
1b. Pelvic fin rays 10 or 11 (rarely 12); spinous dorsal ray smooth or with a few weak teeth along leading edge; scales highly deciduous and thin, spinules weak, greatly reclined or absent ***N. liolepis***
(E. Pacific) (Fig. 569)



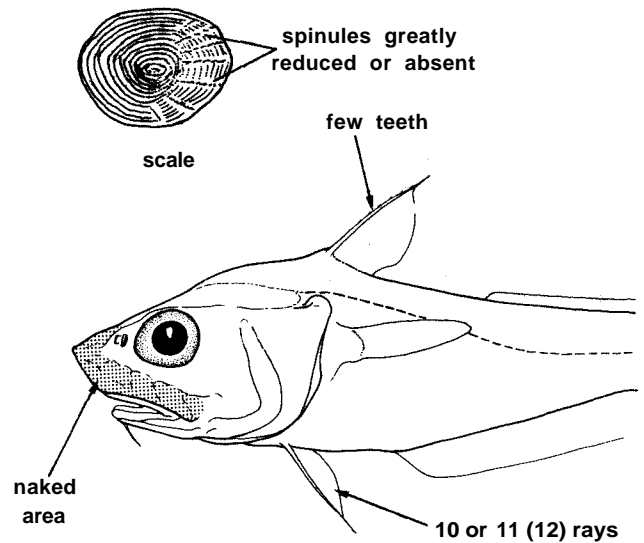
N. holocentra Fig. 566



N. leonis Fig. 567
(after Iwamoto in Smith & Heemstra, 1986)



N. hebetata Fig. 568
(after Gilbert, 1905)



N. liolepis Fig. 569
(after Iwamoto, 1979)

Snout blunt, fully scaled (except sometimes a narrow naked strip along ventral margin) - Group C

Group C

1a. Origin of first dorsal and pectoral fins about on same vertical; upper jaw extends posteriorly to below anterior edge of pupil; scale rows below origin of second dorsal 11 to 14

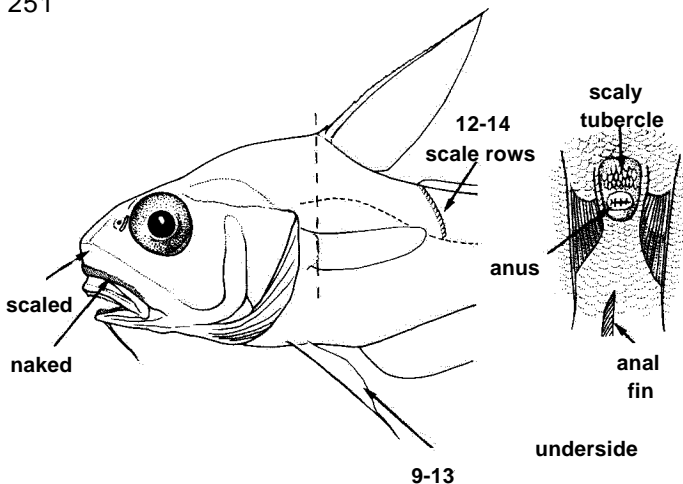
2a. A large scaly tubercle between pelvic fin bases; scale rows below origin of second dorsal 12 to 14 *N. bubonis*
(Hawaii, W. Atlantic) (Fig. 570)

2b. No scaly tubercle between pelvic fins; scale rows below second dorsal 11 or 12 *N. dara*
(Japan) (Fig. 571)

1b. Origin of first dorsal behind that of pectoral; upper jaw extends to below midorbit or beyond; scale rows below second dorsal 8.5 to 11

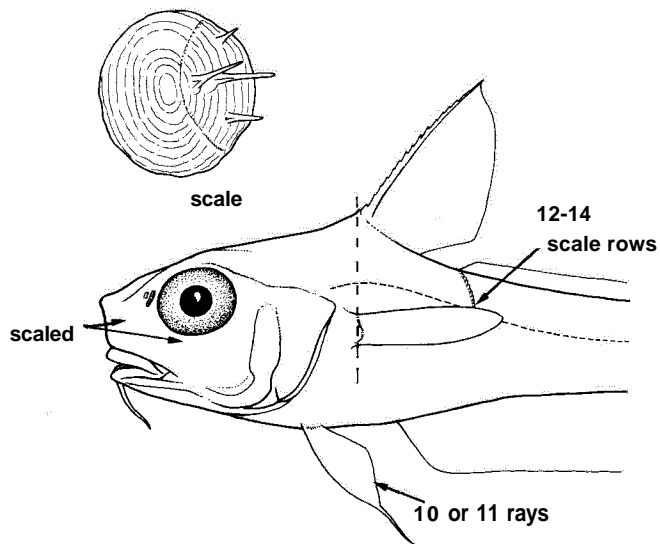
3a. Scale rows below second dorsal 8.5 to 10.5; outer pelvic ray rather short, 44 to 58% of head length; orbits 31 to 35%; interspace between dorsal fins 34 to 43% of head length *N. pudens*
(Chile) (Fig. 572)

3b. Scale rows below second dorsal 10 or 11; outer pelvic ray long, 75 to 95% of head length; orbit 27 to 30% of head length; interspace between dorsal fins 22 to 32% of head length *N. macronema*
(W.C. Pacific) (Fig. 573)



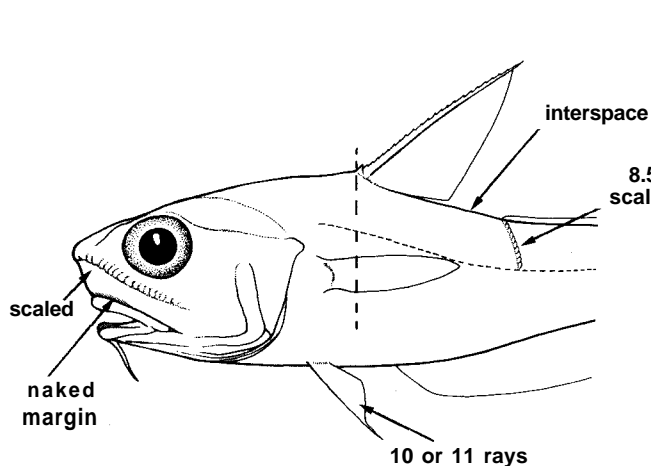
N. bubonis
(after Iwamoto, 1974)

Fig. 570



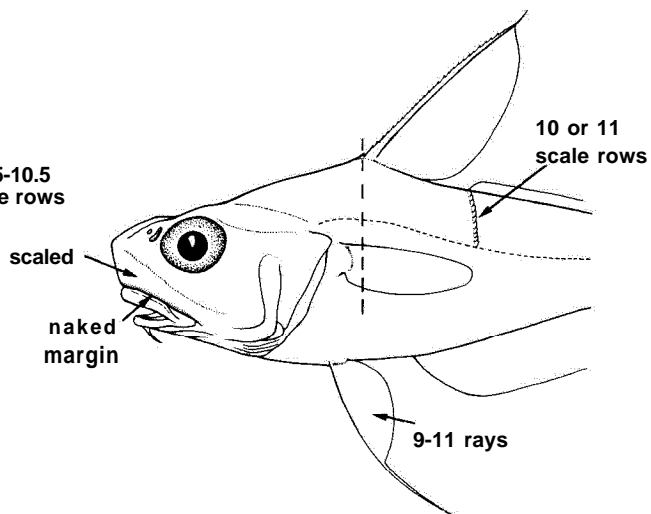
N. dara
(after Gilbert & Hubbs, 1916)

Fig. 571



N. pudens
(after Iwamoto, 1979)

Fig. 572



N. macronema

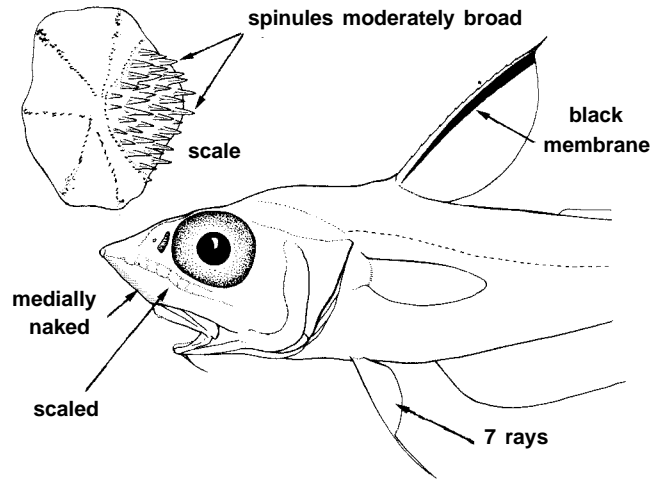
Fig. 573

Pelvic fin rays 7 - Group D

Group D

1a. Membrane between spinous second ray and first segmented ray of first dorsal fin black, the fin otherwise pale; underside of head (including mandible) uniformly scaled except for a narrow to moderately broad median strip on snout; spinules on body scales lanceolate to moderately broad..... ***N. bairdii***
(W.N. Atlantic) (Fig. 574)

1b. First dorsal blackish overall or distally only; underside of head mostly naked on snout and, in some, posteriorly to above mouth angle; mandible naked over anterior third to three-quarters; spinules on body scales broad, mostly shield-shaped

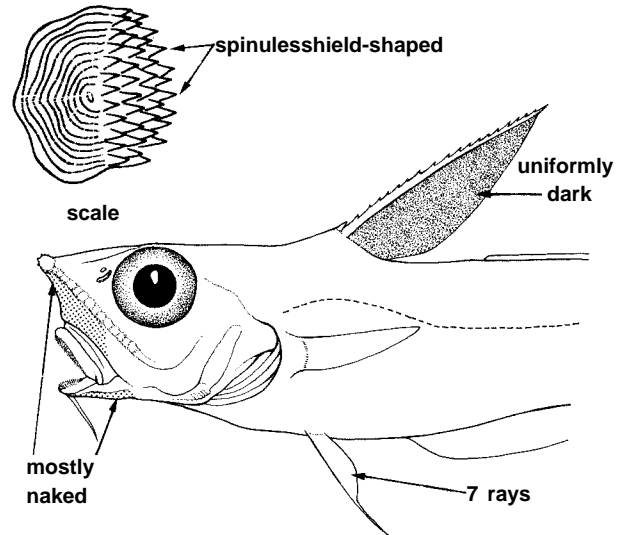


N. bairdii

Fig. 574

2a. First dorsal fin blackish overall; colour medium to dark brown overall, bluish over abdomen, blackish over throat, opercles, and pelvic region; most of underside of snout and suborbital region to mouth angle naked or sparsely covered with small, loose scales; mandibles mostly naked ***N. suilla***
(W.N. Atlantic) (Fig.575)

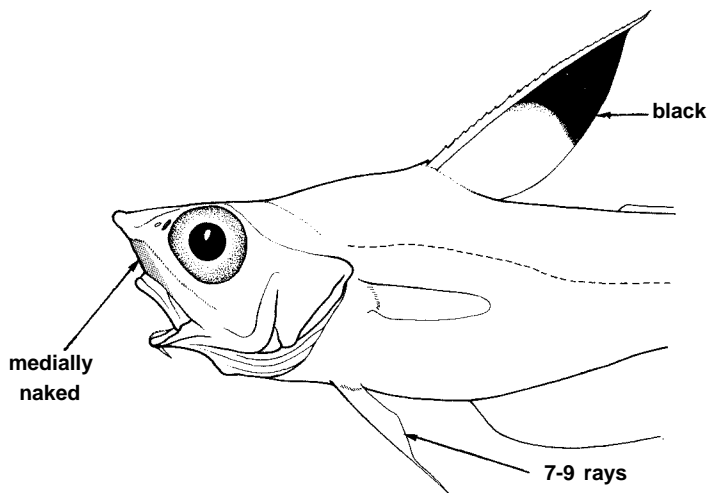
2b. First dorsal fin black-tipped; colour overall light brown or somewhat tawny to dirty greyish brown, the abdomen (and in some the entire trunk) bluish to violet, blackish with a bluish tint over throat, opercles, and pelvic region, silvery in fresh specimens over opercles and much of ventral parts of head and trunk; underside of snout variously naked, from a moderately wide median strip to naked over most of underside of snout; mandibles scaled at least on posterior half ***N. aequalis***
(Atlantic) (Fig. 576)



N. suilla

(after Marshall & Iwamoto, in Marshall, 1973)

Fig. 575



N. aequalis

Fig. 576