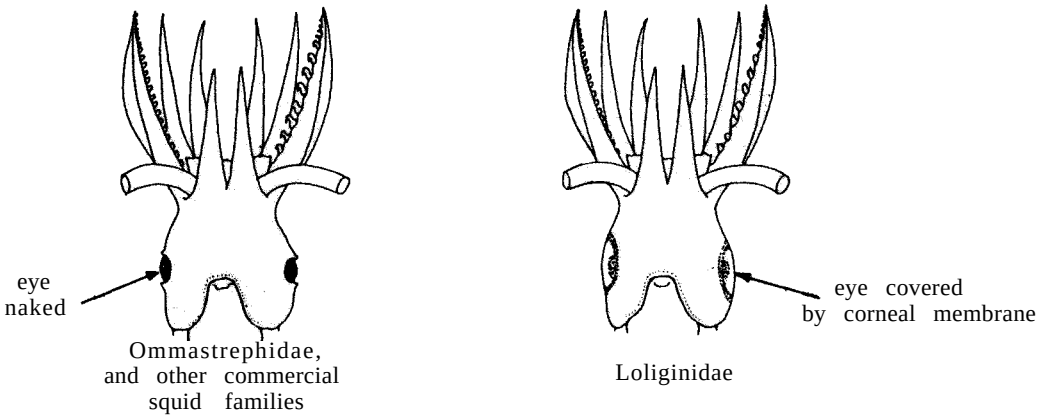
Suborder Oegopsida Orbigny, 1845

Oegopsida - Orbigny, 1845, Moll.Viv.Foss., 1:367.

Twenty three families compose the suborder Oegopsida or oceanic squids, several of which support the major cephalopod fisheries of the world. The suborders Oegopsida and Myopsida apparently diverged from the basic teuthoid stock in the Lower Jurassic.

Díagnostic Features : Oegopsid squids are distinguished from myopsid squids by their lack of a corneal membrane, thus exposing the eyes directly to the sea; suckers are absent on the buccal lappets (except in Bathyteuthidae and Ctenopterygidae); sucker ornamentation consists of chitinous rings and/or hooks; female gonoducts are paired; accessory nidamental glands are absent.



4.2 FAMILY ENOPLOTEUTHIDAE Pfeffer, 1900

ENOP

Enoploteuthidae Pfeffer, 1900, Mitt.Nat.Mus., 17:163.

FAO Names : En - Enope squids
Fr - Encornets
SP - Enoplolurias

General Remarks on the Family : This family contains 2 commercially exploited species taken in Japan and Australia. A third species is known to be used in Singapore, but no data are available. The Enoploteuthidae are divided into three long-established subfamilies: Enoploteuthinae (Enoploteuthis, Abralia, Abraliopsis, Watasenia), Pyroteuthinae (Pyroteuthis, Pterygioteuthis), and Ancistrochirinae (Thelidioteuthis, Ancistrocheirus).

Diagnostic Features : All members of this large family possess a straight locking apparatus; biserial armature (except occasionally at the arm tips) with at least some hooks on the arms; tetraserial armature on the clubs (marginal suckers of the manus may be lost with growth in some species); photophores; 8 buccal lappets and buccal connectives that attach dorsally to the ventral arms (Enoploteuthis dubia Adam, l960, is unique in having connectives that attached dorsally to all arms). All species, except those of the genus Pterygioteuthis, possess hooks on the tentacular clubs.

Geographical Distribution : Enoploteuthids primarily are mesopelagic inhabitants of the tropical and subtropical oceans of the world. Some species of the genera Pterygioteuthis, Abraliopsis, and Watasenia, however, inhabit temperate waters as well.

Ancistrocheirus lesueuri (Orbigny, 1839)

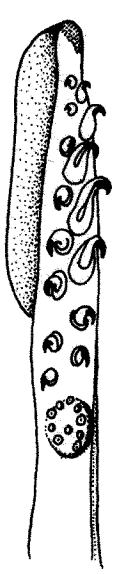
ENOP Anci 1

Onychoteuthis lesueurii Orbigny, 1839, in 1834-1848, Hist.Nat.Ceph.Acet.Viv.Foss., Atlas, Onychoteuthis, pl. 11.

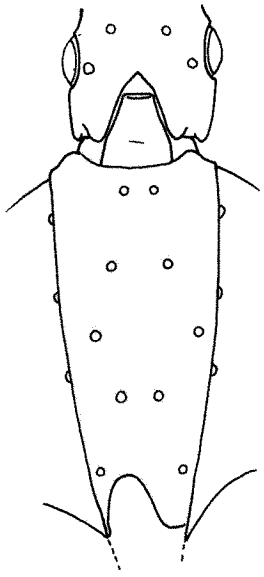
Synonymy : Onychoteuthis lesueurii Orbigny, 1839; Theliodioteuthis alessandrini (Verany, 1851).

FAO Names : En - Sharpear enope squid
Fr - Encornet cachalot
Sp - Enoploluria rómbica

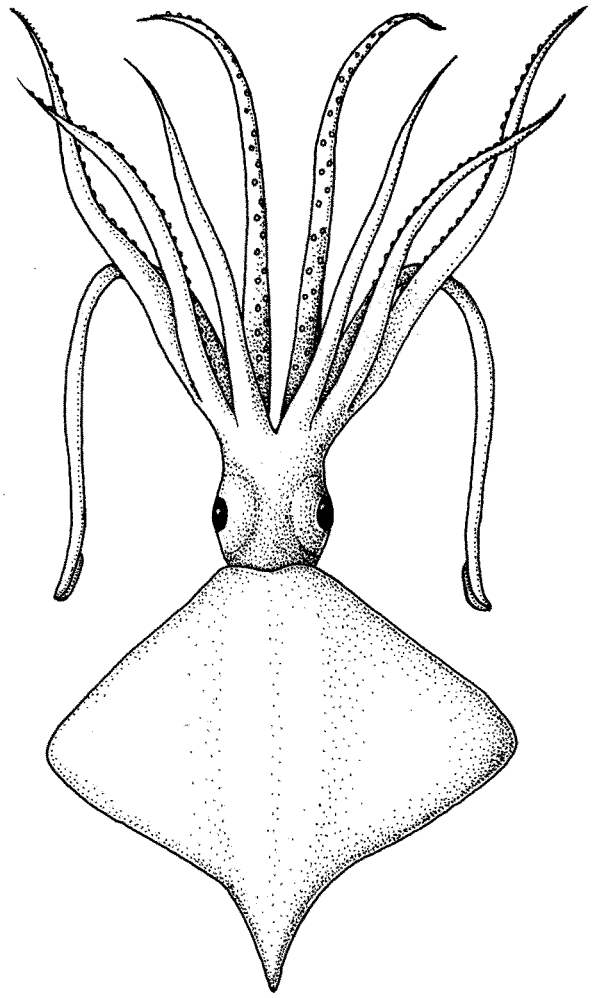
Diagnostic Features : Mantle long, broad, conical, thick-walled. Fins thick, rhomboidal, long (70 to 80% of mantle length), broad (80% of mantle length). Tentacles robust with 12 photophores along the aboral side of the stalk; clubs narrow, unexpanded, with a distinct carpal cluster; manus with 2 rows of sharp hooks, the 7 or 8 of the ventral row being larger than the 8 of the dorsal row. Arms robust, relatively short, with 2 rows of hooks instead of suckers. Ventral surface of mantle studded with 20 to 22 relatively large, separated photophores arranged in transverse rows.



tentacular club

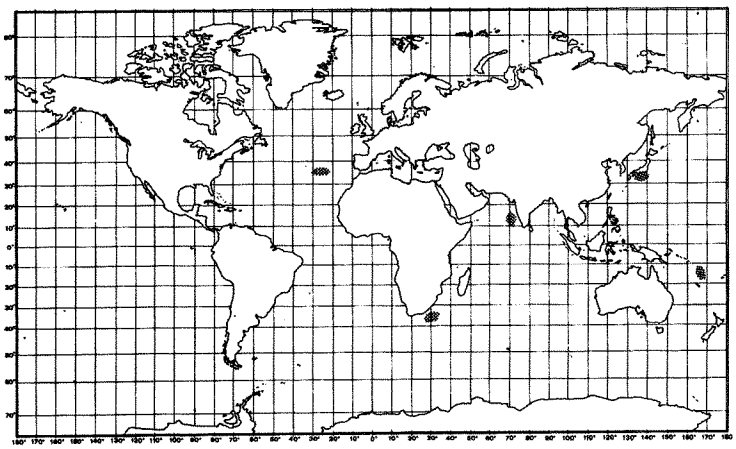


ventral view showing photophores posterior end damaged



dorsal view

Geographical Distribution : Worldwide in tropical and temperate open ocean waters.



Habitat and Biology : An oceanic species.

Size : Maximum mantle length 39 cm.

Interest to Fisheries : This species is believed to have some fishery potential because of its size.

Local Names:

Remarks : It is suspected that Theli-dioteuthis alessandrini (Verany, 1851) which very abundant in warm waters is the juvenile form of this species.

Pterygioteuthis giardi Fischer, 1895

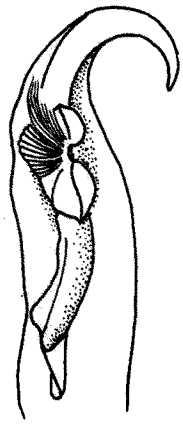
ENOP Ptery 1

Pterygioteuthis giardi Fischer, 1895, J.Conch., 43(4):211.

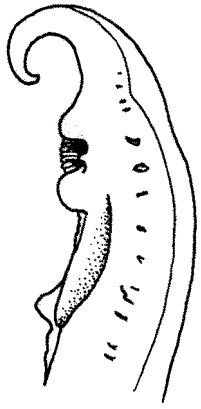
Synonymy : None.

FAO Names : En - Roundear enope squid
Fr - Encornet boubou
Sp - Enoploluria orejuda

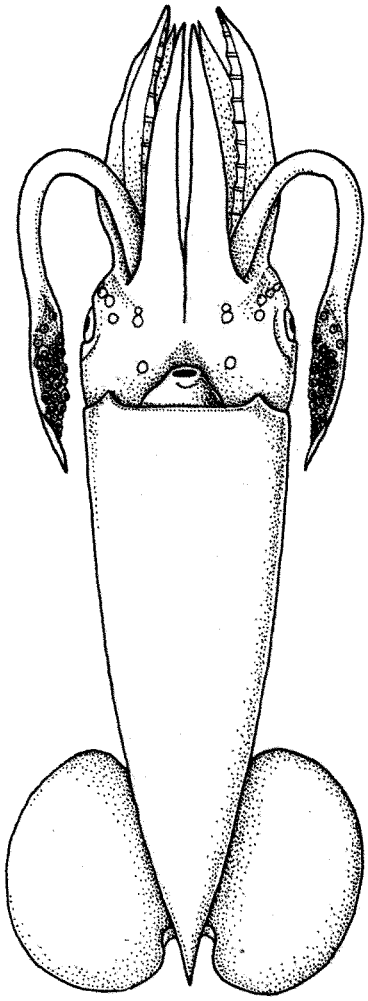
Diagnostic Features : Mantle small, tapered to a short sharp tail. Fins rounded with large lobes; fins do not meet posteriorly. Ventral surface of each eye studded with 15 irridescent photophores. Tentacular clubs with suckers only, no hooks. Arms I to III with 2 rows of hooks; arms IV with a few hooks, but no suckers; left arm IV hectocotylized.



oral view



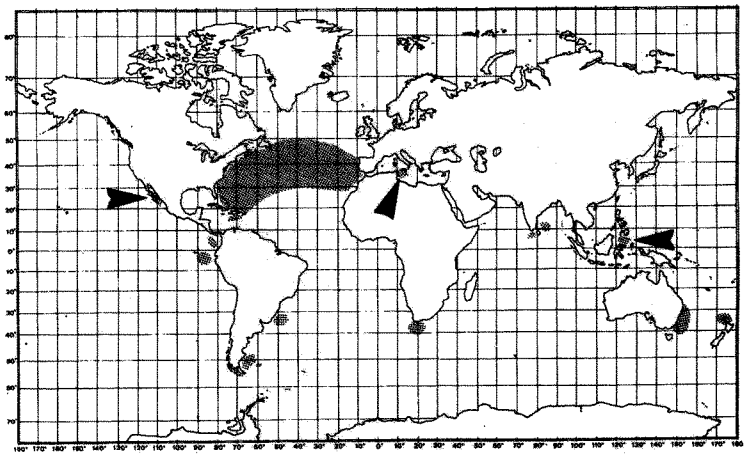
side view



left arm IV hectocotylized

ventral view

Geographical Distribution : Worldwide in warm oceanic waters.



Habitat and Biology : A predominantly oceanic species with a depth distribution ranging from just below the surface to about 500 m; known to undertake diel vertical migrations: off Bermuda is it found in 250 to 500 m by day and in 50 to 250 m at night. The species is preyed upon by large dolphins (Tursiops truncatus), and pelagic fishes.

Size : Maximum mantle length 4 cm.

Interest to Fisheries : None at present.

Local Names :

Watasenia scintillans (Berry, 1911)

ENOP Wata 1

Abraliopsis scintillans Berry, 1911, Nautilus, 25(8):93.

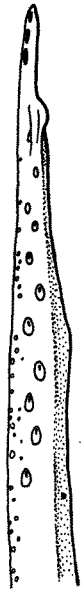
Synonymy : Abraliopsis joubini Watabé, 1905; Abraliopsis scintillans Berry, 1911.

FAO Names : En - Sparkling enope squid
Fr - Encornet lumière
Sp - Enoploluria centellante

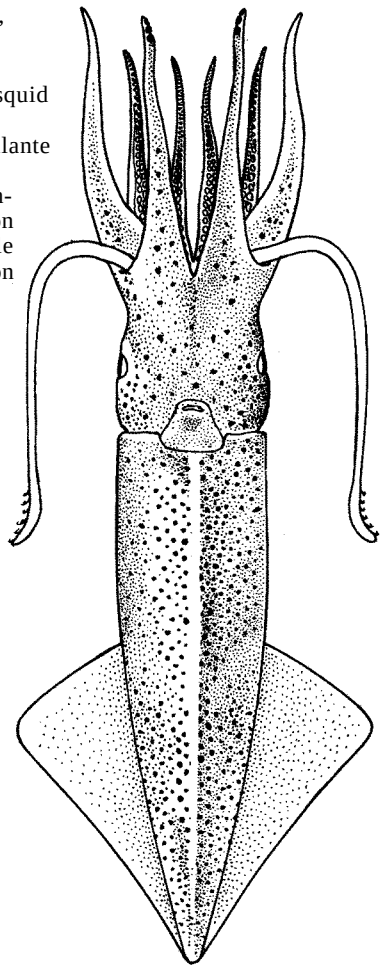
Diagnostic Features : Size small. Mantle stocky. A few large hooks in one row on tentacular club. Arms with hooks. Mantle covered with numerous, minute photophores on ventral and lateral surface, but with ventral midline devoid of photophores. Fins rhomboidal, about 60% of mantle length. Minute photophores also present on ventral surface of head; 5 on ventral surface of eyeball; 3 bulbous, black photophores on tips of arms IV.

Geographical Distribution : Western Pacific: Japan and Korea.

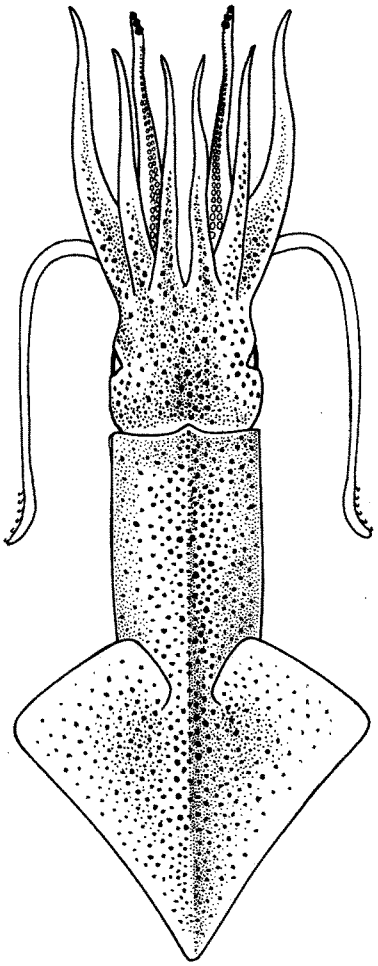
Habitat and Biology : A primarily Oceanie luminescent species, usually encountered in depths between 200 and 600 m, spawning in waters closer to the shore, e.g. Toyama Bay, Japan. Postspawning mortality is high and the life span is believed not to exceed 1 year. It is preyed upon by baleen whales, other marine mammals, Alaska pollack, Teragra chalcogramma, and constitutes 8% by volume of the diet of northern Pacific fur seal.



left arm IV hectocotylized



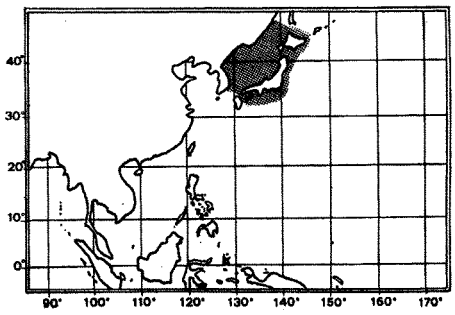
ventral view



dorsal view

Size : Maximum mantle length 7 cm in females and 6 cm in males.

Interest to Fisheries : The annual catch fluctuated between 800 and 3 700 metric tons in the last few years, without any clear trend. The species is regularly taken with set nets in Toyama Bay, Japan, between February and early July (peak April to May). During this period it aggregates near the surface, particularly at night.



Local Names : JAPAN: Hotaruika, Matsuika.

Literature : Osako & Murata (in press, biology and fishery).

Remarks : Used also in research work on bioluminescence.