

Euprymna morsei (Verrill, 1881)

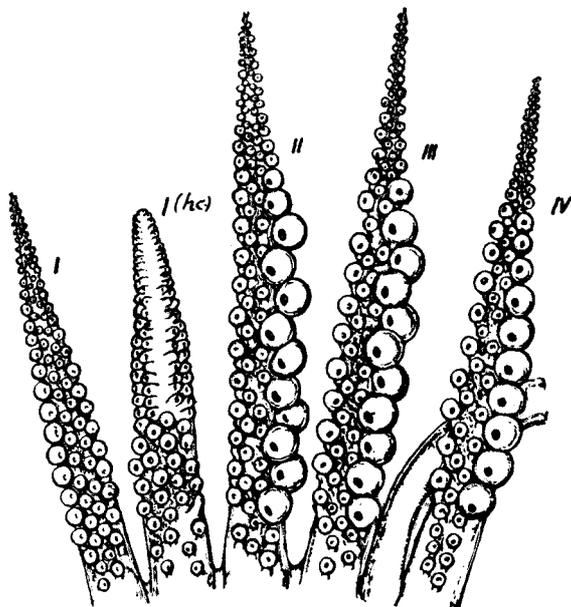
SEPIOL Eup 2

Inioteuthis morsei Verrill, 1881, Trans.Conn.Acad.Sci., 5(6):417.

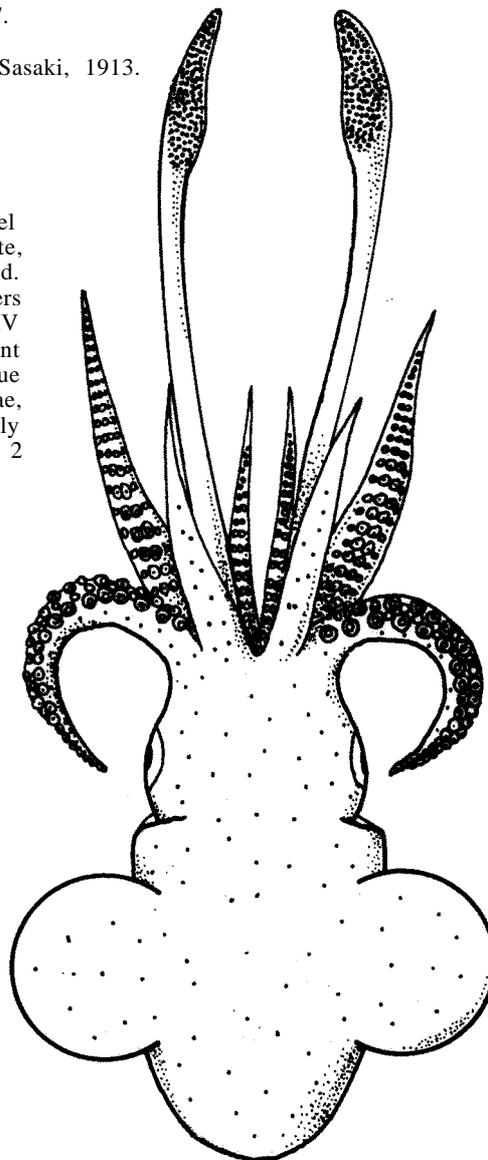
Synonymy : Inioteuthis morsei Verrill, 1881; Euprymna similis Sasaki, 1913.

FAO Names : En - Mimika bobtail
Fr - Sépiole mimika
Sp - Sepiola mimika

Diagnostic Features : Tentacular clubs with swimming keel extending along stalk; suckers extremely numerous, minute, crowded, shallow, globular and on very long stalks; dactylus naked. Arms with 4 rows of suckers, 2 rows proximally and distally; suckers uniformly small in females, enlarged in ventral row of arms II, III, IV in males. Left arm I hectocotylized, shorter, thicker, more blunt than right arm I; suckers in proximal third normal, in 2 to 4 oblique rows; in ventral row near base are 1 or 2 small nipple-like papillae, occasionally with a minute sucker; distal 2/3 of arm with tightly packed, palisaded, compressed papillae (modified sucker stalks) in 2 to 4 rows, ending in minute toothed suckers with elongate apertures.



arms of male (oral view)



dorsal view

Geographical Distribution : Western Pacific: Malaysia, Indonesia, the Philippines and China; northward through the East China Sea and throughout Japan.

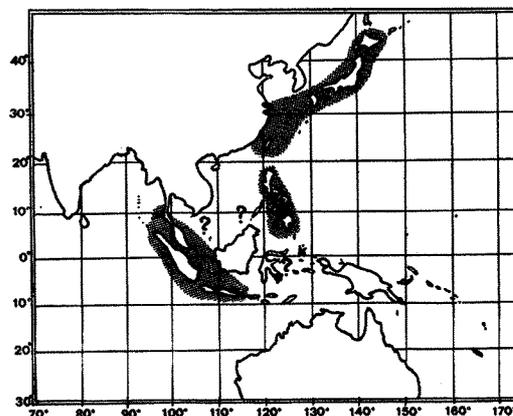
Habitat and Biology : A small benthopelagic species, found in coastal waters over sandy bottoms on which it spawns; the eggs are small.

Size : Maximum mantle length 4 cm.

Interest to Fisheries : Currently of low commercial value, but sometimes utilized locally as food.

Local Names : JAPAN: Dangoika, Hidokoika, Jikoika, Mimiika.

Literature : Tomiyama & Hibiya (1978).



Sepietta oweniana (Orbigny, 1840)

SEPIOL Sepiet 1

Sepioloa oweniana Orbigny, 1840 (in 1834-1848), Hist.Nat.Ceph.Viv.Foss., 229.

Synonymy : *Sepioloa oweniana* Orbigny, 1840.

FAO Names : En - Common bobtail
Fr - Sepioloa commune
Sp - Sepioloa común

Diagnostic Features : Mantle blunt, bullet-shaped. Fins with a slight lateral angle and pronounced anterior lobes. Tentacular clubs with about 32 very minute, subequal suckers in transverse rows (giving a velvety appearance). Left arm I hectocotylyzed by 4 small, normal suckers at base, followed by a fleshy transverse swelling with a long, hook-like, inward-curved lateral papilla, a deep cleft medial to papilla, a flask-like rugose bulb, and a swelling at the dorsal edge; first 2 suckers in dorsal row distal to swelling greatly enlarged, followed by 3 smaller suckers, then 2 enlarged, then gradually decreasing suckers to tip; ventral rows with moderately enlarged suckers; a broad scoop-like depressed area lies between the sucker rows.

Geographical Distribution : Northeast Atlantic: Norway (northern limit undetermined) to Morocco and the Mediterranean Sea.

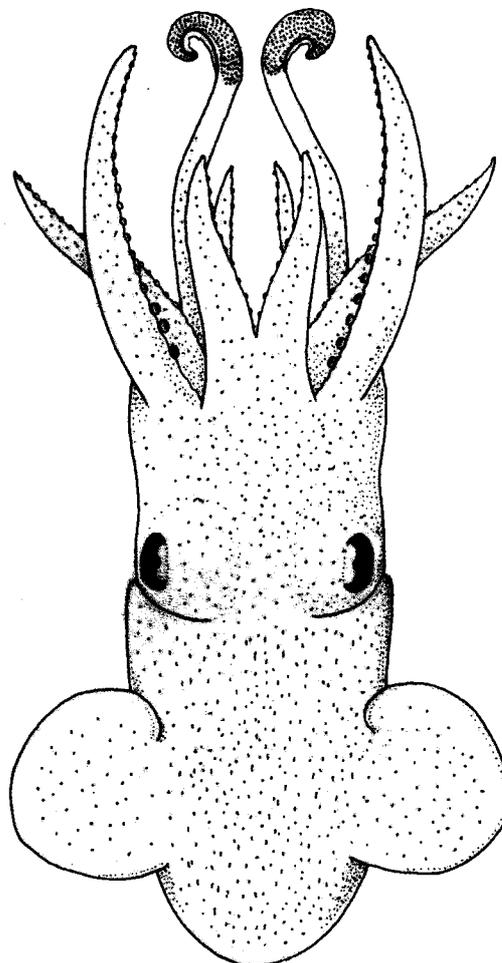
Habitat and Biology : A benthopelagic species found over muddy bottoms over the shelf and the upper slope, ranging in depth from about 50 to over 600 m. In the North Atlantic most common from 50 to 100 m depth and in the Mediterranean from 100 to 400 m. In the Mediterranean, onshore migrations of large individuals have been observed in late winter, when deep water temperatures are higher than those at the surface. These spawn in spring and early summer in relatively shallow, coastal waters, induced by an increase in water temperatures. Smaller sized bobtail squids ascend later in the year and do not spawn before autumn. The entire spawning period thus extends from, March to November. The eggs are deposited on ascidians (*Microcosmus*) and other substrates. At 20° C they take about 30 days to hatch.

Size : Maximum mantle length 4 cm in females, about 3.5 cm in males.

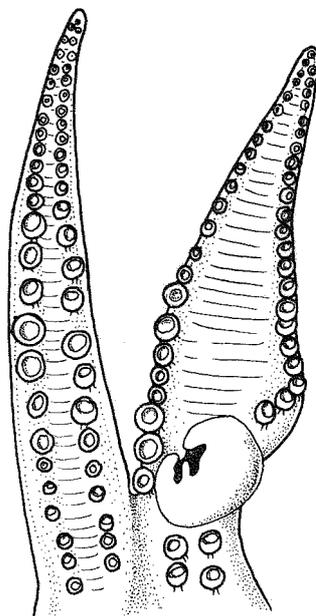
Interest to Fisheries : Undetermined.

Local Names :

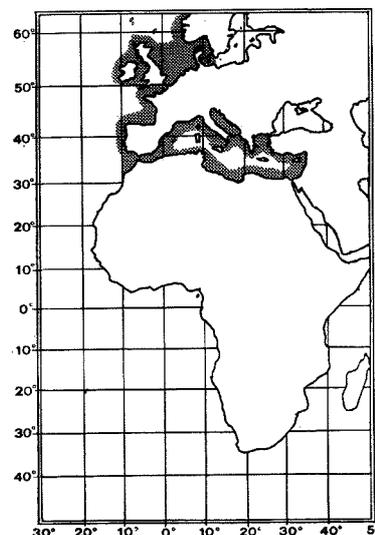
Literature : Mangold-Wirz (1963, biology, western Mediterranean).



dorsal view



arms I of male, oral view
left arm (see arrow)
hectocotylyzed



Rondeletiola minor (Naef, 1912)

SEPIOL Rond 1

Sepietta minor Naef, 1912, Zool.Anz., 39(7):267.

Synonymy : Sepietta minor Naef, 1912.

FAO Names : En - Lentil bobtail
Fr - Sépiole bobie
Sp - Rondeletiola

Diagnostic Features : Mantle blunt, bullet-shaped. Fins small, round, with blunt lateral angles. Tentacular clubs with about 16 small, uniform suckers in each transverse row. Ventral arms with normal biserial suckers to apex; left arm I hectocotyized, with 3 small suckers at base, and a large, swollen, transverse, hood-shaped papilla with small accessory lateral papilla; suckers distal to the papilla greatly enlarged in the dorsal row to the tip, in the ventral row only about the proximal half of the suckers are enlarged; the two rows not widely separated.

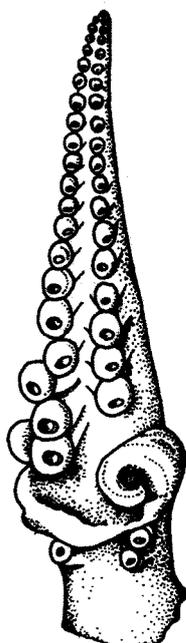
Geographical Distribution : Mediterranean Sea and Eastern Atlantic (Portugal, southern limit undetermined).

Habitat and Biology : A demersal species inhabiting mud bottoms between 80 and 400 m depth.

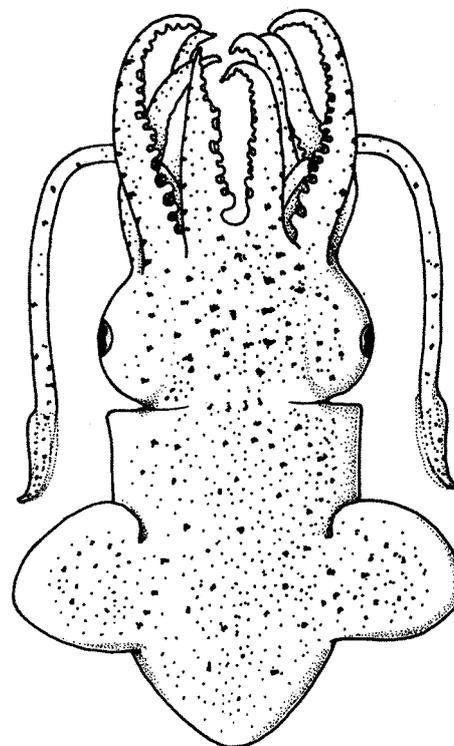
Size : Maximum mantle length approximately 4 cm.

Interest to Fisheries : Undetermined.

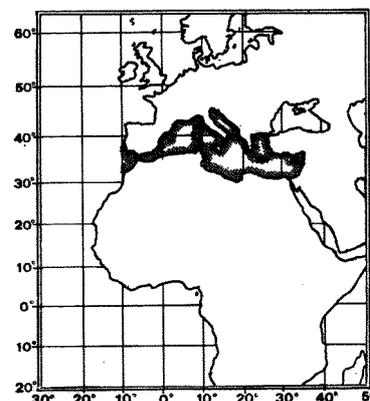
Local Names :



left arm I of male
hectocotyized



dorsal view



Rossia antillensis Voss, 1955

SEPIOL Ross 2

Rossia antillensis Voss, 1955, Bull.Mar.Sci., 5(2):86.

Synonymy : None.

FAO Names : En - Antilles bobtail
Fr - Sépiole mignonne
SP - Globito antillano

Diagnostic Features : The largest western Atlantic *Rossia*. Mantle sac-like, flabby. Fins 80 to 90% of mantle length, 1 2/3 to 2 times wider than mantle length. Head wider than mantle. Tentacles short, stout; clubs not expanded but with a well-developed swimming keel extending the length of the club to just proximal of suckers; 30 to 40 extremely minute, numerous suckers in transverse rows. Arm suckers in 2 rows, smaller in females, somewhat enlarged in mid-section in males; both arms I hectocotylyzed; 6 proximal pairs of suckers small, followed by 6 pairs enlarged to 2 times the diameter of the basal pair; distal suckers much reduced; a thick, fleshy pad extends from 3rd to 8th sucker along ventral margin (protective membrane) of each arm I.

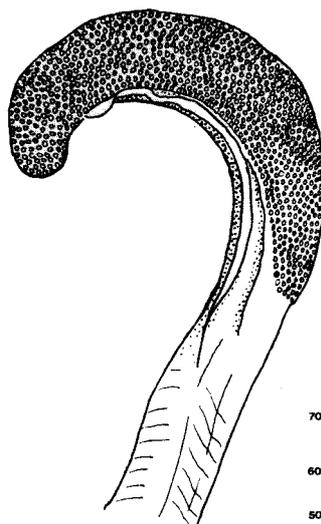
Geographical Distribution :
Caribbean Sea: Cuba, Dry Tortugas and western Florida.

Habitat and Biology : A deep-living demersal species; depth range undetermined (only records: 540 to 700 m).

Size : Maximum mantle length 7.5 cm.

Interest to Fisheries : Undetermined.

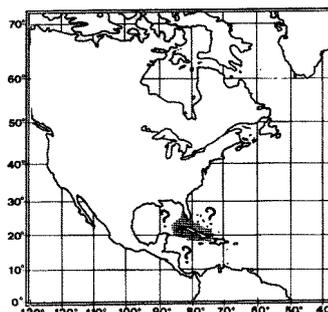
Local Names :



tentacular club



dorsal view



SEPIOL Ross 2

Rossia bullisi Voss, 1956

Rossia bullisi Voss, 1956, *Bull.Mar.Sci.*, 6(2):101.

Synonymy : None.

FAO Names :
En - Bully bobtail
Fr - Sépiole bouledogue
SP - Globito cabezudo

Diagnostic Features : Mantle stout, sacular. Fins 65 to 75% of mantle length, 1½ times wider than mantle length. Tentacular clubs long, slightly expanded, with swimming keel slightly longer than club; 10 to 12 minute suckers in transverse rows. Arms relatively long, subequal, suckers in 2 rows, smaller in females than in males; both arms I hectocotylyzed, the ventral protective membrane modified, expanded and running along full length of arm.

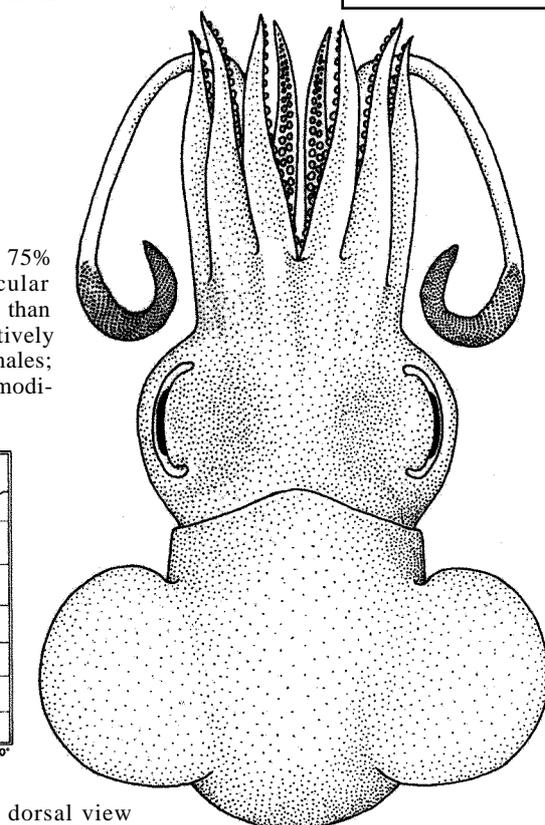
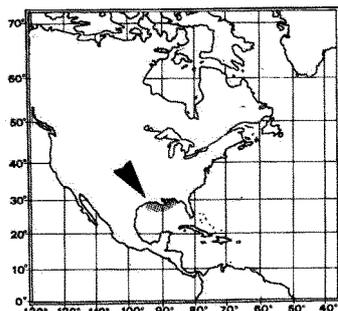
Geographical Distribution :
Northern Gulf of Mexico.

Habitat and Biology : A deep-living demersal species; depth range undetermined (only record is about 400 m).

Size : Maximum mantle length 4.5 cm.

Interest to Fisheries :
Undetermined.

Local Names:



dorsal view

Rossia macrosoma (Delle Chiaje, 1829)

SEPIOL Ross 1

Sepiolo macrosoma Delle Chiaje, 1829, Mem.Animali Vert.Napoli, 1:11.

Synonymy : *Sepiolo macrosoma* Delle Chiaje, 1829.

FAO Names : En - Stout bobtail
Fr - Sépiole melon
SP - Globito robusto

Diagnostic Features : Dorsal mantle border not fused to head. Orbital pores open. Tentacular clubs with more than 8 subequal suckers, all much smaller than arm suckers, in transverse rows. Arms III and IV united by a broad web; both arms I (dorsal) hectocotylized by decrease in size of large basal suckers (in 2 rows) to smaller suckers (arranged in 4 rows in a rounded zig-zag pattern) and by the presence of a deep ridge and groove between horizontal sucker rows.

Geographical Distribution : Eastern Atlantic: North Sea, Mediterranean Sea, West Africa, Morocco.

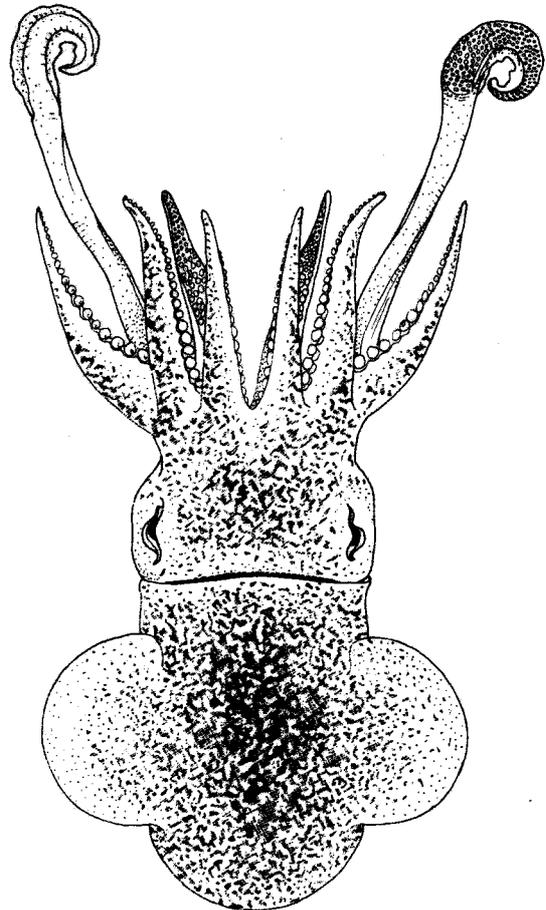
Habitat and Biology : A demersal species in shallow to medium depths (between 30 and 600 m) over sandy to muddy bottoms. It carries out seasonal migrations between deeper offshore waters (winter) and shallower coastal zones (for the rest of the year), but partitioned by size in such a way that largest individuals arrive first in spring, followed by smaller bobtail squids in summer). Maturing males (aged 7 or 8 months) carry 85 to 100 spermatophores, females (8 to 11 months) have about 120 to 150 eggs in the ovary. The spawning season extends from spring through autumn with peaks in spring and autumn corresponding to the major size classes. The eggs are deposited in clusters of 30 to 40 (egg diameter 7 or 8 mm) on shells, i.e., of *Pinna* sp. They hatch after 45 days (temperature 16°C). Females grow larger than males. Longevity is about 1 year.

Size : Maximum mantle length 8.5 cm; common between 2 and 6 cm. Length at first maturity is about 3.7 cm in males, and 6.2 cm in females.

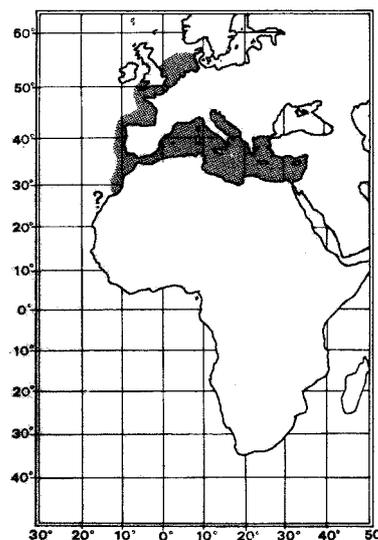
Interest to Fisheries : A species of minor commercial importance, taken as bycatch in bottom trawls, mostly between 100 and 250 m. Its commercial value varies from one Mediterranean country to another. The flesh is tasty, but difficult to preserve. Separate statistics are not reported for this species.

Local Names : FRANCE: Sépiole; ITALY: Babbu-nedda, Cape e chiuove, Capo di chiodo, Pignatta, Pugnatta, Purpessa de funna, Purpo seccia, Seppiola grossa, Vurpascele; MOROCCO: Sépiole; SPAIN: Choco, Chopito, Globito.

Literature : Mangold-Wirz (1963, biology, western Mediterranean); Okutani (1980); Roper & Sweeney (1981, Species Identification Sheets, eastern central Atlantic, fishing areas 34/47 in part).



dorsal view



Rossia pacifica Berry, 1911

SEPIOL Ross 4

Rossia pacifica Berry, 1911, Proc.U.S.Nat.Mus., 40:591.

Synonymy : None.

FAO Names : En - North Pacific bobtail
Fr - Sépiole du Pacifique boreal
SP - Globito del Pacífico boreal

Diagnostic Features : Tentacular clubs expanded, the sucker-bearing surface surrounded with protective membranes; 8 suckers in oblique rows, appearing as 5 or 6 suckers proximally, subequal in size, largest in the dorsal longitudinal rows. Arms stout, web between arms rudimentary; both arms I hectocotylized, with narrow dorsal and broad ventral protective membranes and a deep longitudinal groove and membranous fold along 2/3 of arm length; suckers reduced to 1/3 of size of those on lateral arms, in 4 rows basally, in 2 rows distally.

Geographical Distribution : Northern Pacific: Japan northward, Sea of Okhotsk, Aleutian Islands, Gulf of Alaska southward to 32°N.

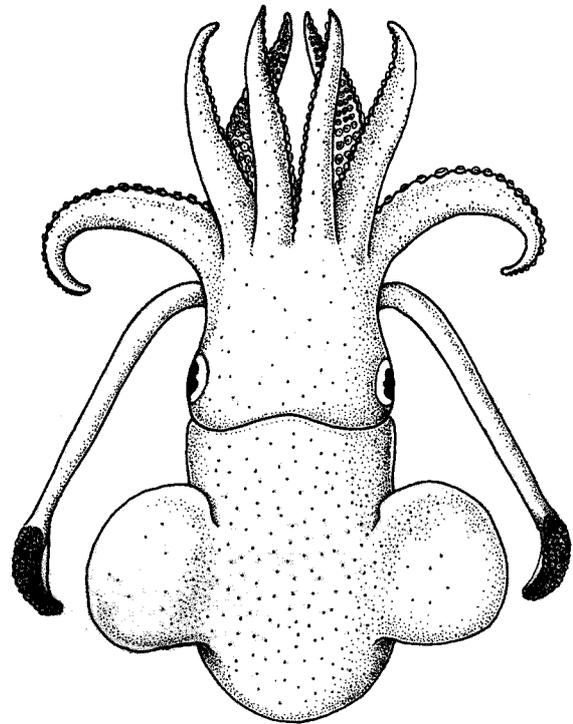
Habitat and Biology : A demersal species, *Rossia pacifica* occurs in depths between 100 and 600 m in the western Pacific; and in the eastern Pacific from 10 m downward (lower depth limit undetermined).

Size : Maximum mantle length 8 cm.

Interest to Fisheries : Trawled in large quantities off the Sanriku coast and Hokkaido, Japan. It is believed to have inferior meat quality and therefore it has low economic value even though the resource is considered to be large. The species is only locally utilized in Japan. Separate statistics are not reported for this species.

Local Names : JAPAN: Bouzuika.

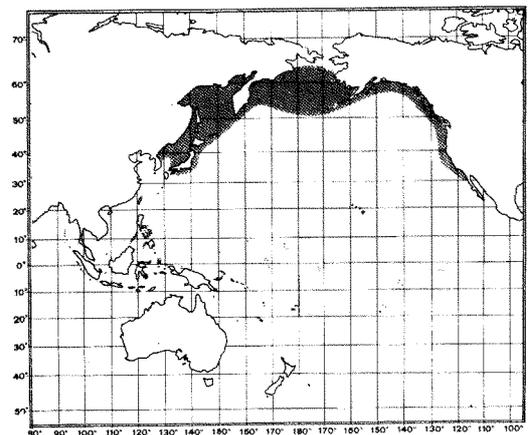
Literature : Tomiyama & Hibiya (1978, Japanese fisheries); Okutani (1980).



dorsal view



tentacular club



Rossia tortugaensis Berry, 1911

SEPIOL Ross 5

Rossia tortugaensis Voss, 1956, Bull.Mar.Sci., 6(2):103.

Synonymy : None.

FAO Names : En - Tortuga bobtail
Fr - Sépiole tortuette
SP - Globito de Tortugas

Diagnostic Features : Tentacular clubs large; swimming keel extending from just proximal to basal suckers to the distal tip; 10 small, finely toothed suckers in oblique rows across the club. Arms relatively long; suckers in 2 rows, elongated, barrel-shaped, with narrow oval apertures without dentition.

Geographical Distribution : Gulf of Mexico: apparently restricted to the southern Dry Tortugas Islands.

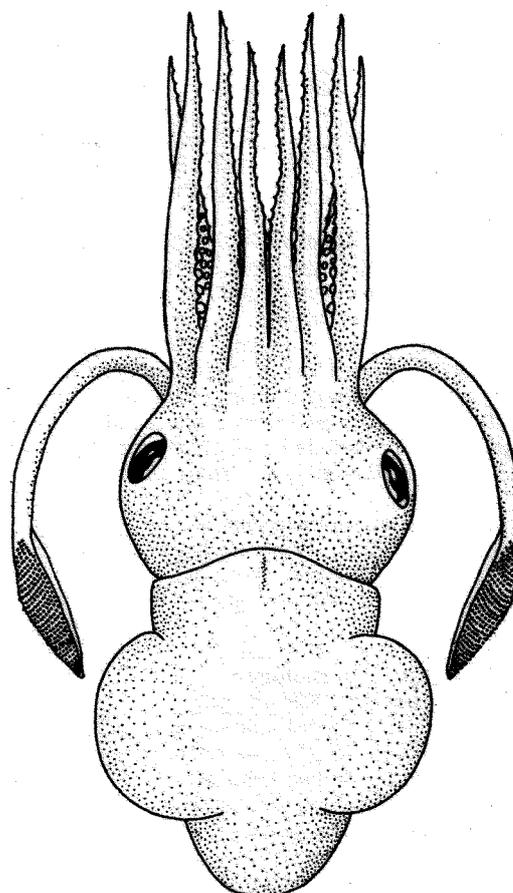
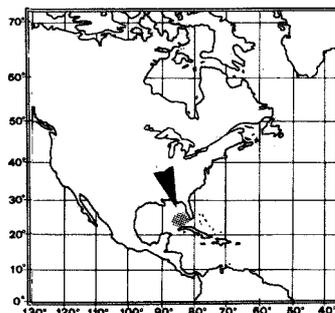
Habitat and Biology : The depth distribution of Rossia tortugaensis is still undetermined (only records are from 520 and 680 m).

Size : Maximum mantle length 4.5 cm.

Interest to Fisheries : Undetermined.

Local Names :

Literature : Voss (1956).



dorsal view

Neorossia caroli (Joubin, 1902)

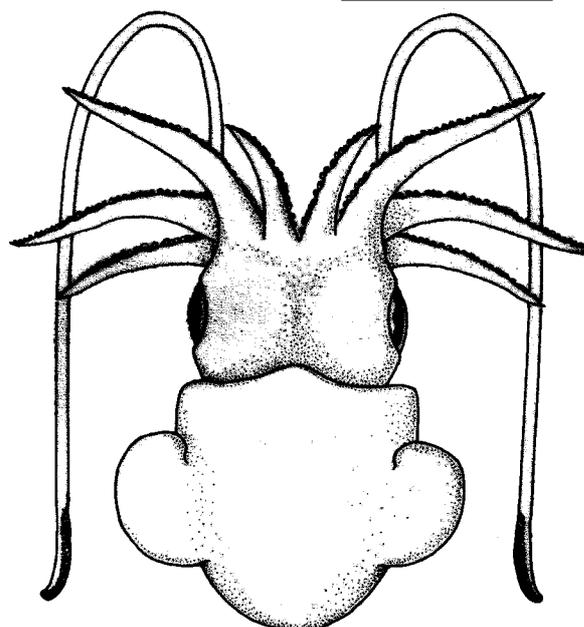
SEPIOL Neor 1

Rossia caroli Joubin, 1902, Bull.Soc.Zool.France. 27:143.

Synonymy : Rossia caroli Joubin, 1902.

FAO Names : En - Carol bobtail
Fr - Sépiole carolette
Sp - Globito carolino

Diagnostic Features : Mantle short, very broad. Fins relatively short, moderately broad, rounded. Head wide; eyes very large. Tentacular clubs not expanded, protective membrane surrounding club; swimming keel extending the length of club; 7 or 8 suckers in oblique rows across the club. Arms long, robust; suckers spherical, in 2 rows; apertures very small, rings without teeth; both dorsal arms (I) hectocotyized by reduction in size of the proximal 4 pairs of suckers and minute suckers at tips; a low crease along the ventral border of each arm; ink sac and anal flaps greatly reduced and non-functional.



dorsal view

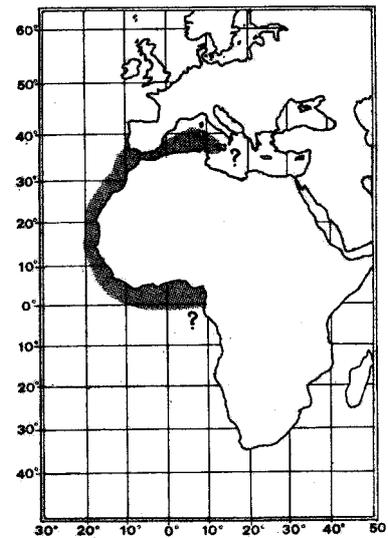
Geographical Distribution : Eastern Atlantic Ocean: western Mediterranean Sea South to Gulf of Guinea.

Habitat and Biology : A demersal species; known depth range from about 300 to 1 000 m, mostly around 400 m.

Size : Maximum mantle length 5.5 cm.

Interest to Fisheries : A species of minor commercial importance, taken only as bycatch in trawls. Separate statistics are not reported for this species.

Local Names:



Semirossia equalis Voss, 1950

SEPIOL Semir 1

Rossia (Semirossia) equalis Voss, 1950, *Rev.Soc.Malacol.*, 7(2):73.

Synonymy : None.

FAO Names : En - Greater shining bobtail
Fr - Sépiole cracheuse
SP - Globito reluciente

Diagnostic Features : Fins large, broad; lobes prominent. Tentacular clubs moderately expanded, with dorsal swimming keel extending along entire length; 7 or 8 suckers in transverse rows, those of the 2 dorsal-most longitudinal rows, only slightly larger than those of ventral rows. Arms long, slender; arm suckers in 2 rows, widely spaced enlarged in middle sections, globular, barrel-shaped, with untoothed rings. Left arm I hectocotylized; proximal 10 pairs of suckers normal-sized, followed by 4 rows of reduced-sized suckers to the tip; ventral protective membrane very broad from 3rd pair of suckers for 3/4 of arm length; sucker bases along membrane forming palisaded effect.

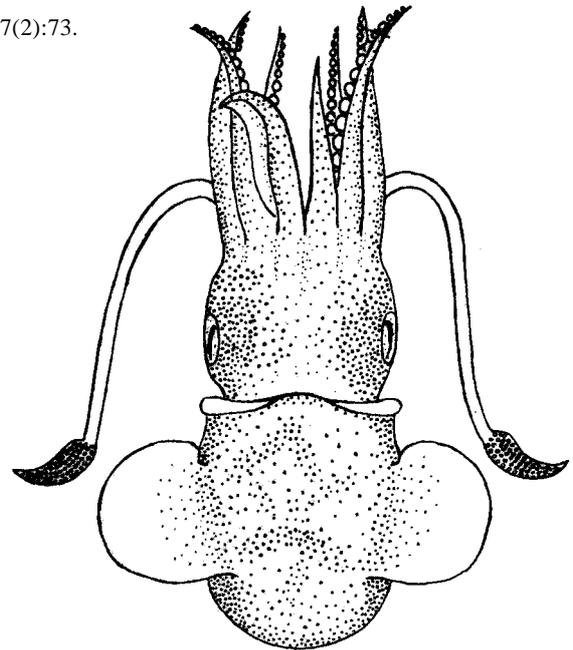
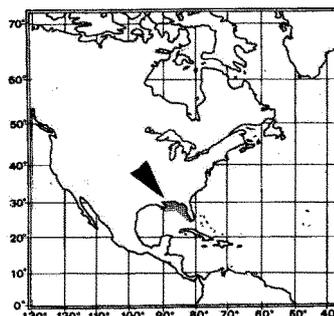
Geographical Distribution : Eastern Gulf of Mexico.

Habitat and Biology : Occurs over muddy bottoms in deeper waters from 130 to 260 m.

Size : Maximum mantle length 4 cm.

Interest to Fisheries : Undetermined.

Local Names:



dorsal view

Semirossia tenera (Verrill, 1880)

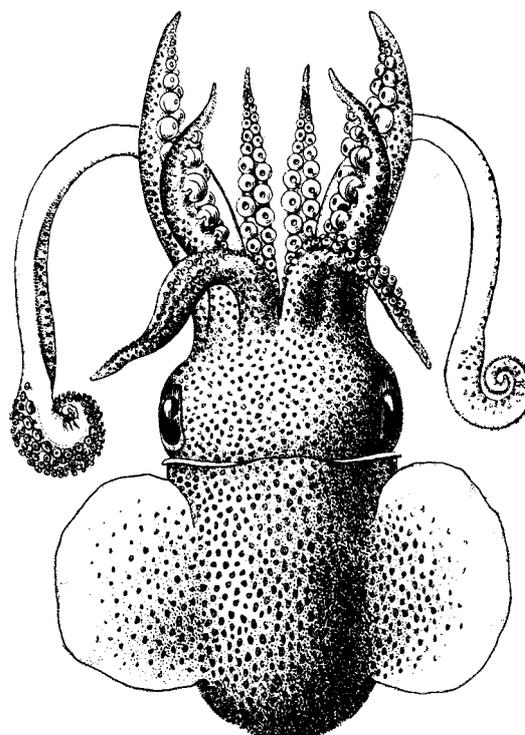
SEPIOL Semir 2

Heteroteuthis tenera Verrill, 1880, *Amer.J.Sci.*, 20(41):392.

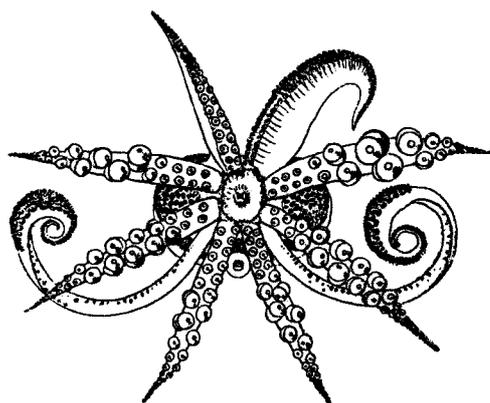
Synonymy : *Rossia tenera* (Verrill, 1880); *Heteroteuthis tenera* Verrill, 1880.

FAO Names : En - Lesser shining bobtail
Fr - Sépiole calamarette
SP - Globito tierno

Diagnostic Features : Mantle nearly as wide as long. Tentacular clubs slightly expanded; swimming keel extending from base to tip; 6 or 7 small suckers in the transverse rows, the dorsal ones about 2 times larger than the ventral ones; sucker rings toothed around entire margin. Arms moderately long; arm suckers much enlarged in midsection, globose, decreasing in size very abruptly near arm tip. Left arm I hectocotylized: 7 pairs of normal suckers proximally, giving way to 4 rows of suckers much reduced in size; arm attenuate near tip with suckers in 2 rows; ventral protective membrane very broad from 3rd basal pair of suckers for about 3/4 of arm length; stalks of suckers on ventral row forming a palisade, with small ridges that extend pleat-like onto oral surface of protective membrane.



dorsal view



oral view

Geographical Distribution : Western North Atlantic: from the northern Gulf of Maine to the Gulf of Mexico and to the Caribbean Sea; possibly also present in the southwestern Atlantic, along the coasts of Brazil and Uruguay.

Habitat and Biology : Occurs demersally in deeper waters on muddy and sandy bottoms (85 to 135 m in the New England area).

Size : Maximum mantle length 5 cm.

Interest to Fisheries : Reported to be fished in the Gulf of San Matías and some localities on the south coast of Argentina (species identification needs to be verified in this area).

Local Names : ARGENTINA: Calamarcito.

Remarks : Massay (1916) lists *S. tenera* from Rio de Janeiro.

