

Sepioteuthis australis Quoy & Gaimard, 1832

LOLIG Sepio 2

Sepioteuthis australis Quoy & Gaimard, 1832, Zool.Astrolabe, 2(1):77.

Synonymy : Sepioteuthis bilineata Quoy & Gaimard, 1832.

FAO Names : En - Southern reef squid
Fr - Calmar de roche austral
Sp - Calamar roquero austral

Diagnostic Features : Mantle robust. Fins very long, exceeding 90% of mantle length, but fin width less than 50% of fin length; greatest width of fins at about midpoint. Tentacular clubs long, not greatly-expanded; suckers moderate-sized with 22 to 27 sharp teeth around the rings of the largest. Arm III sucker rings with 25 to 30 sharp teeth. A narrow white to blue line occurs along the base of the fins where they attach to the body.

Geographical Distribution : Western Pacific: Australia and New Zealand.

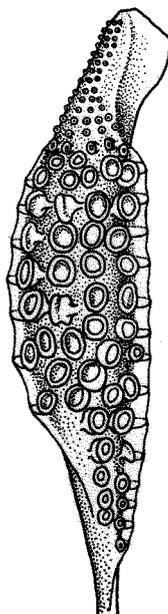
Habitat and Biology : A neritic, demersal species commonly found in depths from the surface to 10 m.

Size : Maximum mantle length 38 cm; maximum weight 1 kg.

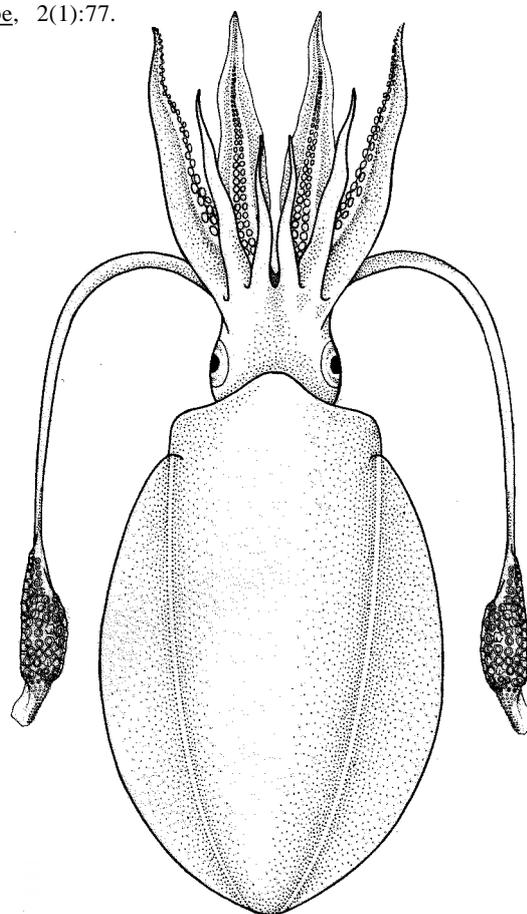
Interest to Fisheries : In Australia, this squid is taken in local fisheries by set nets, hook-(lure) -and-line, trolls, and jigging; a larger-scale directed fishery is developing, but published information is meagre. In New Zealand, relatively low quantities are caught by trawl.

Local Names :

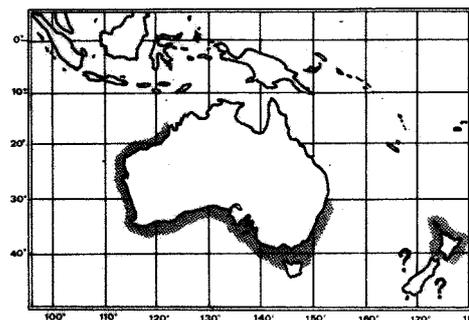
Literature : Okutani (1980); Dunning (1982, resources around Australia).



tentacular club



dorsal view



Sepioteuthis lessoniana Lesson, 1830

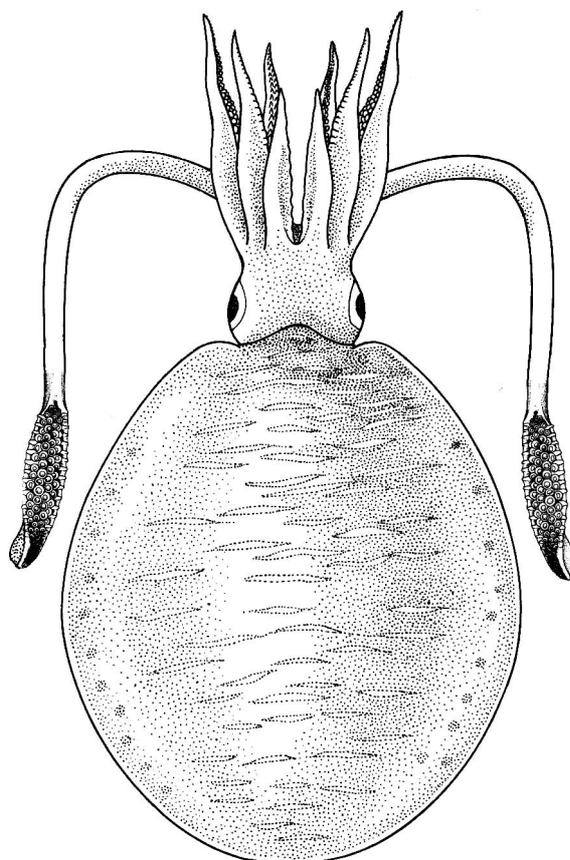
LOLIG Sepio 3

Sepioteuthis lessoniana Lesson, 1830, Voy.Coquille, 2(1):244.

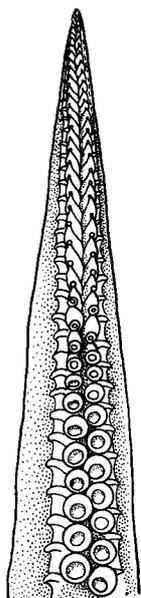
Synonymy : Sepioteuthis guinensis Quoy & Gaimard, 1832; Sepioteuthis lunulata Quoy & Gaimard, 1832; Sepioteuthis mauritania Quoy & Gaimard, 1832; Sepioteuthis sinensis Orbigny 1835-1848; Sepioteuthis arctipinnis Gould, 1852; Sepioteuthis brevis Owen, 1881; Sepioteuthis neoguinaica Pfeffer, 1884; Sepioteuthis indica Goodrich, 1896; Sepioteuthis sieboldi Joubin, 1898; Sepioteuthis malayana Wülker, 1913; Sepioteuthis krepfii Robson, 1928.

FAO Names : En - Bigfin reef squid
Fr - Calmar tonnelet
SP - Calamar manopla

Diagnostic Features : Mantle long, robust, its width about 40% of length. Fins very large, their length over 90% up to nearly 100% of mantle length, their width up to 75% of mantle length; the greatest width occurs posterior to the midpoint of the fins. Tentacular clubs long, expanded; median manal suckers enlarged; rings with 14 to 23 sharp teeth. Arm sucker rings with 18 to 29 sharp, triangular teeth; tentacles long, robust; left arm IV hectocotylized along distal 1/3 to 1/4 of arm.



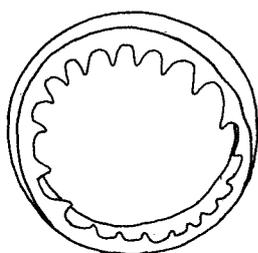
dorsal view



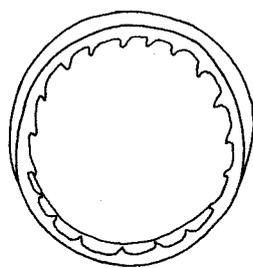
left arm IV
hectocotylized



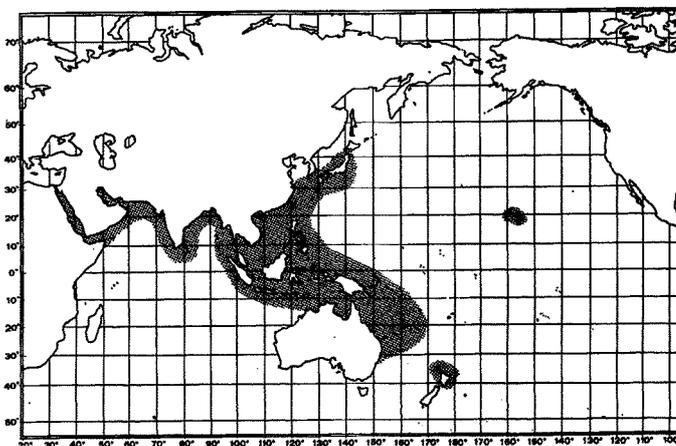
tentacular club



arm III
sucker ring



tentacular club
sucker ring



Geographical Distribution : Indo-Pacific: Red Sea, Arabian Sea east to 160°E, northern Australia and north to central Japan, eastward to the Hawaiian Islands.

Habitat and Biology : *Sepioteuthis lessoniana* is a neritic species occurring from the surface down to at least 100 m depth. The spawning season depends on the hydrographical conditions and can be quite extended. Egg capsules containing 3 to 7 eggs are finger-shaped and attached in clusters to seaweeds, twigs, stones and corals in coastal waters. Males attain sexual maturity at an age of 10 to 14 months, females at 12 to 17 months. Longevity is 2½ years. Males often outnumber females in the upper size classes.

Bigfin reef squid preys primarily on prawns and fishes, occasionally on stomatopods and crabs. Cannibalism is not very common.

Size : Maximum dorsal mantle length 36 cm, corresponding to a weight of about 1.8 kg. Off southern India, the maximum length is 33 cm. Length at first maturity is reported as 10 cm in males in Indian waters. Females mature within a length range from 8 to 20 cm (Silas, *et al.*, 1982).

Interest to Fisheries : The species is of commercial value all over southeast Asia where it is captured throughout the year, with lure-hooks, seines or purse seines in inshore waters and by trawlers on the continental shelf. In western Japan and the Philippines, local fisheries utilize set nets, spears and jigs; the seasonal fisheries from May to September around Hong Kong use purse seines. It is also reported as one of the 4 loliginid species of the Chinese squid catch. It is commonly found in southern India, where the major fisheries concentrate around Palk Bay and the Gulf of Mannar in March through June using trawls and purse seines. It is also reported to be the most common cephalopod species in Sri Lanka where it is caught with scoop-nets and beach seines (Ma-dels). It is marketed all along the coast, mostly fresh, some sun-dried.

Local Names : CHINA: Daai mei yau yue; JAPAN: Aoriika, Bashouika, Izuika, Kutsuika, Mizuika, Moika, Shiroika.

Literature : Tomiyama & Hibiya (1978); Silas et al. (1982, biology, India).

Remarks : This species has successfully been reared in aquaculture experiments (Choe, 1966).

Sepioteuthis sepioidea (Blainville, 1823)

LOLIG Sepio 1

Loligo sepioidea Blainville, 1823, J.Phys.Chim.Hist.Nat., 96:133.

Synonymy : Loligo sepioidea Blainville, 1823; Sepioteuthis biangutata Rang, 1837; Sepioteuthis sepioidea Orbigny, 1839; Sepioteuthis sloani Leach, 1849; Sepioteuthis ovata Gabb, 1868; Sepioteuthis ehrhardti Pfeffer, 1884; Sepioteuthis accidentalis Robson, 1926.

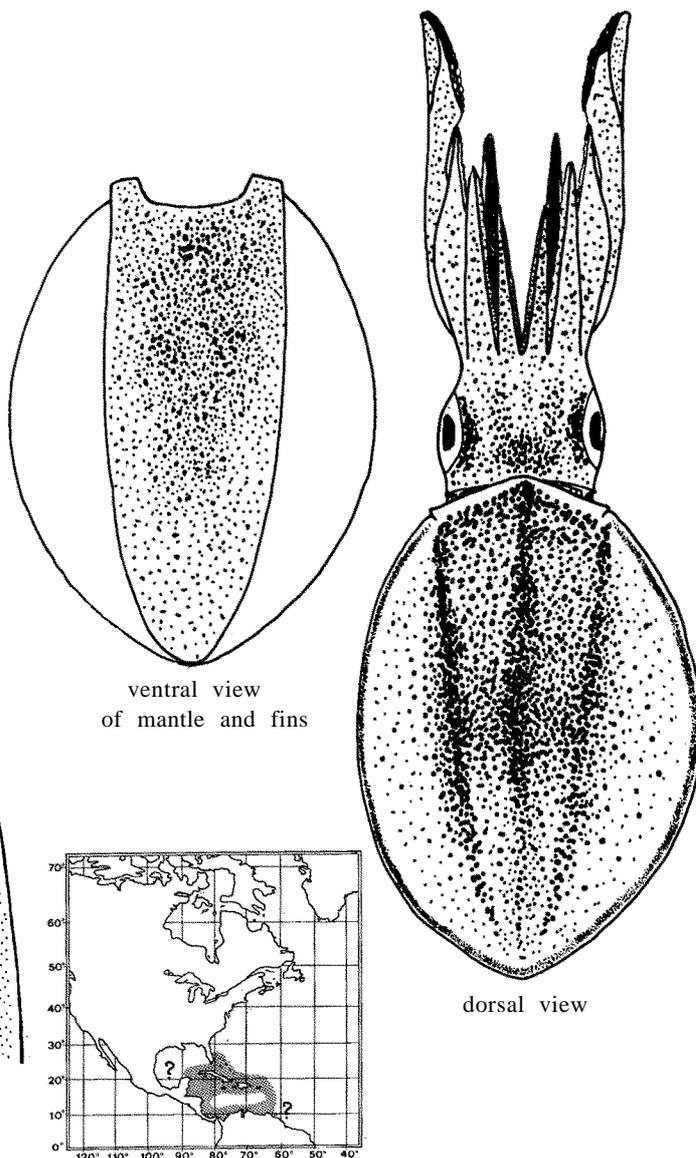
FAO Names : En - Caribbean reef squid
Fr - Calmar ris
Sp - Calamar de arrecife

Diagnostic Features : Mantle broad, relatively stout, tapered to a blunt posterior end, widest at anterior opening. Fins occupy nearly the entire length of mantle (90% in adults, 75% in juveniles) and are elliptical to weakly rhomboidal, their width about 65% of mantle length. Buccal lappets without suckers. Modified portion of hectocotylized (left ventral) arm IV occupies distal fourth of arm length and is characterized by sudden reduction in size of one or 2 pairs of suckers, the complete absence of suckers in both rows from the remaining distal portion of the arm, and the increase in size of the pedicels into large, fleshy papillae.

Geographical Distribution : Tropical western north Atlantic: Cape Canaveral, Florida to Venezuela, throughout the Caribbean Sea.

Habitat and Biology : A tropical shallow-water species ranging from the surface and about 20 m depth, most abundant between 3 and 7 m. It occurs exclusively associated with coral reefs and Thalassia grass flats.

Reef squids form small schools of 4 to 50 equally-sized individuals cruising around the reefs and over the flats. Spawning takes place throughout the year. The eggs are very yolky and large, 5 or 6 mm long. Only



ventral view
of mantle and fins

dorsal view

left arm IV
hectocotylized

3 or 4 eggs are encased in each gelatinous capsule and several capsules are attached together at their bases and deposited in clusters under rocks or in conch shells (*Strombus gigas*). The diet of this species includes shrimps and small fishes.

Size : Maximum mantle length 20 cm. Maturity is attained at approximately 9 cm, but the smallest males (immature) with a hectocotylized arm measure only 3 cm mantle length.

Interest to Fisheries : Taken only in subsistence fisheries throughout its range, using spears, night light and dip nets or lift nets. Separate statistics are not reported for this species. Consumed fresh.

Local Names :

Literature : Roper (1978, Species Identification Sheets, western central Atlantic, fishing area 31).

Alloteuthis africana Adam, 1950

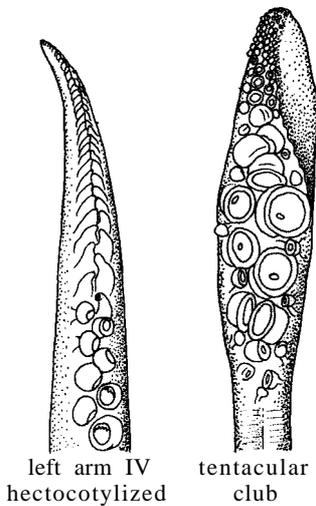
Alloteuthis africana Adam 1950, Bull.Inst.Sci.Nat.Belg.,26(45):1.

Synonymy : None.

FAO Names : En - African squid
Fr - Casseron africain
SP - Calamarin africano

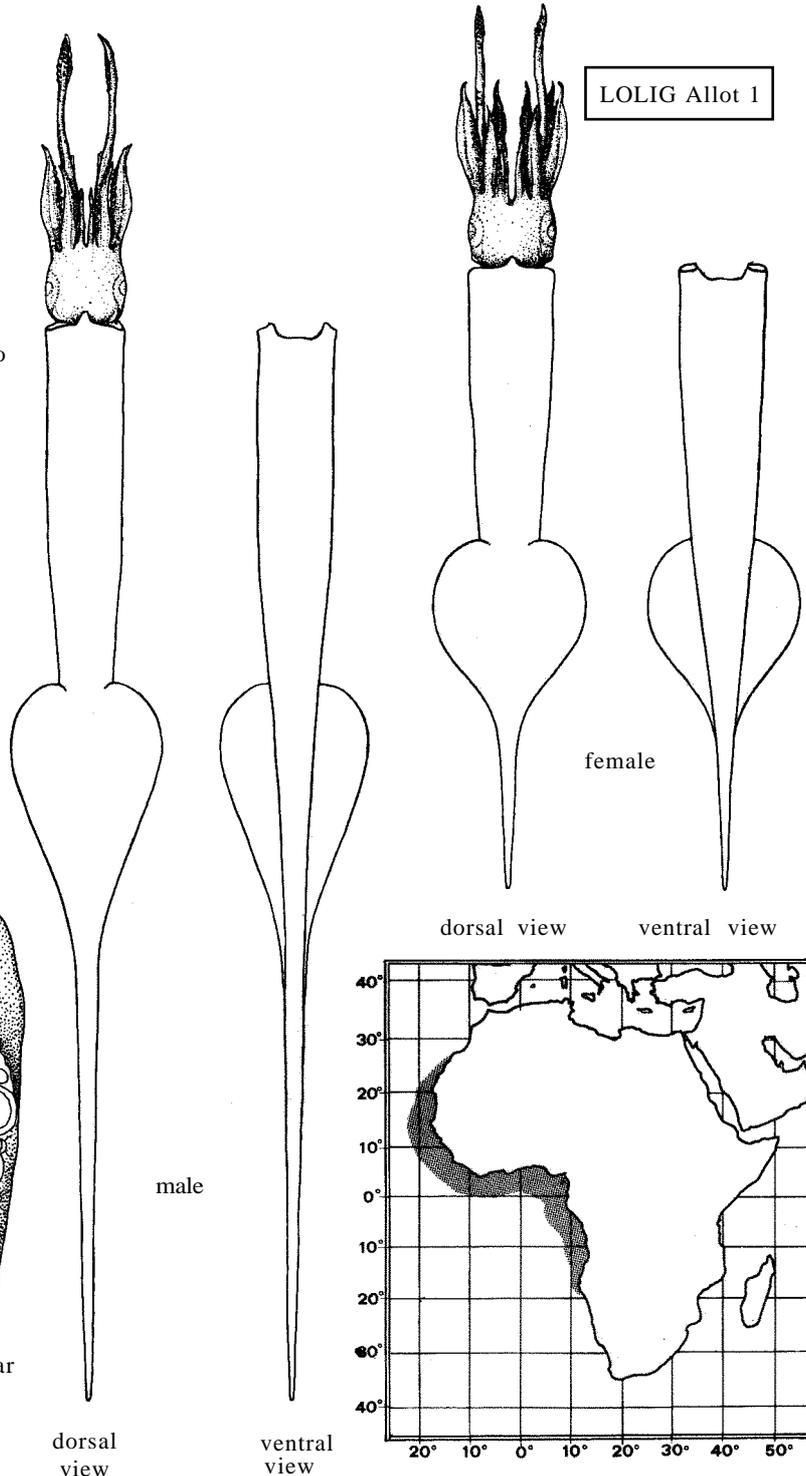
Diagnostic Features : Mantle long and narrow, mantle width index (mantle width as percentage of dorsal mantle length) 20 to 25% in juveniles, 15% in adult females, 5% in adult males; anterior ventral mantle margin squarish in outline. Tail (fins and posterior mantle projection) very long and pointed in females (37% of dorsal mantle length in juveniles and 58% in adults) and extremely long and spike-like in males (35% in juveniles, 73% in adults). Fins oval in outline, fin width index (width of both fins as a percentage of dorsal mantle length) 23% in adult females and 10% in adult males; posterior border of fins concave; arms very short; buccal lapets without suckers. Diameters of club suckers of median 2 rows 3 times greater than lateral ones. sucker rings with 20 to 30 blunt teeth.

Left ventral arm (IV) hectocotylized by modification of distal 2/5 of length; 8 to 11 pairs of normal suckers proximally followed by 2 longitudinal rows of more or less elongate papilla that gradually decrease in size distally; arm suckers with 6 to 10 square teeth on distal half, smooth on proximal half.



left arm IV
hectocotylized

tentacular
club



LOLIG Allot 1

female

dorsal view

ventral view

male

dorsal
view

ventral
view

Geographical Distribution : Eastern Atlantic: from 20°S to 25°N.

Habitat and Biology : A neritic demersal species, spawning on the bottom. It feeds on small fishes. Males grow considerably larger than females.

Size : Maximum mantle length 19 cm in males; 9 cm in females.

Interest to Fisheries : Bycatch in local trawl fisheries. Separate statistics are not reported for this species.

Local Names :

Literature : Roper & Sweeney (1981, Species Identification Sheets, eastern central Atlantic, fishing areas 34/47 in part).

Alloteuthis media (Linnaeus, 1758)

LOLIG Allot 3

Sepia media Linnaeus, 1758, *Syst.Nat.*, 659.

Synonymy : *Sepia media* Linnaeus, 1758; *Loligo marmorae* Verany, 1877.

FAO Names : En - Midsized squid
Fr - Casseron bambou
SP - Calamarín menor

Diagnostic Features : Mantle long, relatively narrow, its posterior end drawn out into a narrow, pointed tail, up to 6 cm long in adults. Fins heart-shaped, their lateral angles rounded, posterior borders concave, extending posteriorly along tail. Buccal suckers absent. Tentacles long, robust; clubs large, expanded, with large suckers in the 2 median manal rows. Left arm IV hectocotylized: 10 to 12 (usually 11) normal suckers in median row followed by coarse papillae.

Geographical Distribution : Eastern Atlantic: Irish Sea, English Channel (very rare in North Sea) South into Mediterranean Sea.

Habitat and Biology : A neritic, demersal species on sandy and muddy grounds occurring over a depth range from the surface to 350 m, usually between 20 and 200 m.

Like other neritic squids, it performs seasonal migrations between offshore and inshore areas. In the Mediterranean, spawning extends throughout the year, but two groups of spawners can usually be distinguished by size and time of peak spawning, even though mixing occurs. Large individuals are encountered in February at depths between 150 and 200 m; from March to April, they start migrating into shallower waters, where spawning takes place on sandy grounds and to a minor extent, in *Posidonia* grass beds. The second group, composed of smaller individuals, migrates onshore in June and July and spawn later in the year. By late fall, depending on environmental temperatures, they start returning to deeper waters.

Large males may carry up to 170 spermatophores, large females 8 to 30 eggs. The eggs are shed in several batches and are encapsuled in rather short gelatinous strings (each containing up to 1 400 eggs) which are attached in batches of up to 12 to hard objects on the substrate (shells, corals, stones).

This squid feeds on crustaceans, molluscs and small fishes. Longevity is about 1 year in males, 1½ years in females.

Size : Maximum mantle length 12 cm; females grow bigger than males. Length at first maturity is about 9.5 cm in females, and 5.5 cm in males.

