

Sepia brevimana Steenstrup, 1875

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Sepia brevimana Steenstrup, 1875.

Synonymy : *Sepia rostrata* (pars) Ferussac & Orbigny, 1848; *Sepia winckworthi* Adam, 1939.

FAO Names : En - Shortclub cuttlefish
Fr - Seiche petites mains
Sp - Sepia maziçorta

Diagnostic Features : Mantle broad, its dorsal margin acuminate, strongly projecting anteriorly; posteriorly very pointed due to the long spine. Tentacular club short, with a well developed swimming keel extending proximally beyond base; dorsal protective membrane as broad as sucker-bearing surface; suckers very small, subequal; 6 to 8 suckers in oblique transverse rows.

Geographical Distribution : Indo-Malayan region, along the northern coast of the Indian Ocean, from Singapore westwards probably to the west coast of India.

Habitat and Biology : A small, demersal species, restricted to shallow, coastal waters down to 30 m depth. Spawning extends almost throughout the year; in eastern Indian waters several peaks have been observed between July and February (Silas *et al.* 1982). Hatchlings grow to adult size in 11 to 13 months, depending on environmental temperature conditions. Off Madras, they attain 2.9 to 3.4 cm within 6 months, 5.6 to 5.8 cm at the end of 12 months and about 7.5 cm after 18 months.

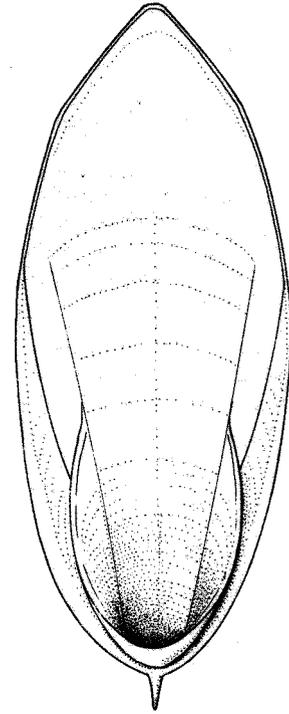
Size : Maximum mantle length 10 cm; maximum length in the Indian trawl fishery, 8.5 cm off Madras, and 9.5 cm off Waltair (northeast India). Common size ranges from about 4 to 7 cm. Length at first maturity for males is 5.6 cm off Madras and 6.2 cm off Waltair; for females, 5.9 cm and 6.3 cm, respectively.

Interest to Fisheries : This species appears as bycatch in the eastern Indian trawl fishery off Madras and Waltair, but separate catch data are not reported.

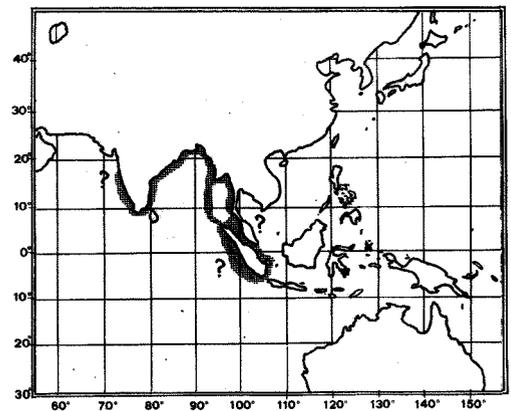
Local Names :

Literature : Silas *et al.* (1982, biology, India).

Remarks : The species identification from the west coast of India needs confirmation.



cuttlebone

***Sepia elegans*** Blainville, 1827

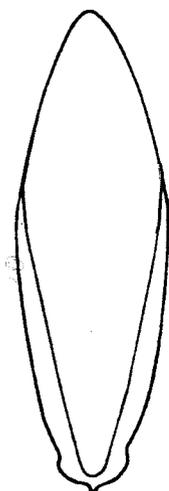
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Sepia elegans Blainville, 1827, *Sepia, Dict.Sci.nat.*, 48:284.

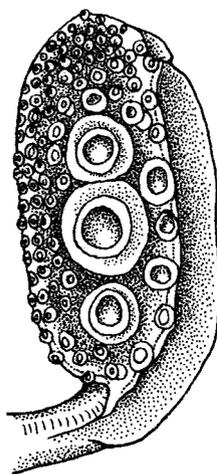
Synonymy : *Sepia biserialis* Blainville, 1827; *Sepia rupelloria* Ferrusac & Orbigny, 1835-48; *Sepia italica* Risso, 1854.

FAO Names : En - Elegant cuttlefish
Fr - Seiche elegante
SP - Choquito sin punta

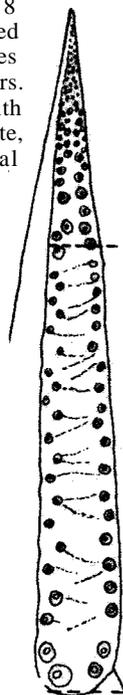
Diagnostic Features : Mantle elongate, oval-shaped, more than 2 times longer than wide, its dorsal margin projecting strongly in a Sharp angle. Tentacular club short, broad, blunt distally; swimming keel extending slightly along stalk; dorsal and ventral projective membranes united at proximal base of club, extending slightly along stalk; 6 to 8 suckers in oblique, transverse rows; a few moderately enlarged suckers dorsally; 3 greatly enlarged suckers in 2nd or 3rd series (counted from dorsal side), may exceed the size of arm suckers. Left ventral arm (IV) hectocotylyzed for 2/3 of its length, with a few normal basal suckers followed by 9 to 11 rows of minute, widely spaced suckers arranged in a zig-zag pattern; distal third of hectocotylus with 4 oblique rows of normal suckers.



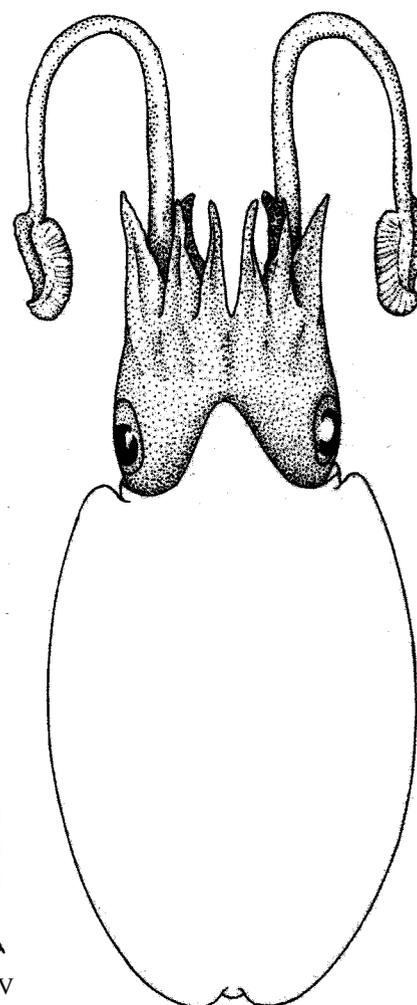
cuttlebone



tentacular club



left arm IV
of male
hectocotylyzed



dorsal view

Geographical Distribution : Eastern Atlantic from 15° S to 50° N; Mediterranean Sea including the Adriatic.

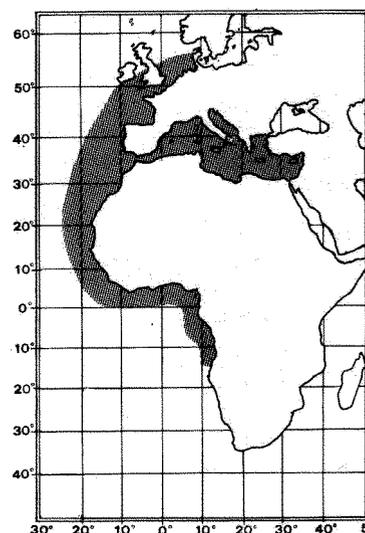
Habitat and Biology : A small demersal species with a total depth range from 30 to 430 m. In the western Mediterranean, the population begins to migrate into shallower water during the spring and by summer is concentrated on the spawning grounds in 40 to 70 m depth. In October the population begins to descend and it resides in winter at 100 to 250 m depth. Off West Africa spawning extends almost throughout the year in shallow inshore waters, with peaks in summer and autumn. Maturity is attained at about 1 year of age. Males may carry about 95 spermatophores and females about 250 eggs. Spawning occurs at temperatures of 13° to 18° C. The eggs are laid in clusters of 12 to 25 (diameter 4 mm) attached to alcyonarians (sea fans), shells, etc., on muddy bottoms. The lifespan of this species is about 1 ½ years. It preys on molluscs, small crustaceans and fishes.

Size : Maximum mantle length 9 cm. Males attain sexual maturity between 3 and 5 cm; females between 5 and 6 cm. In the western Mediterranean length at first maturity is 3.7 cm in males and 6.2 cm in females.

Interest to Fisheries : Taken as bycatch in Mediterranean and West African trawl fisheries. It is most abundant in about 150 m depth, hence deeper than *S. officinalis* and *S. bertheloti*. Separate statistics are not reported for this species. It is marketed fresh and frozen.

Local Names : ITALY: Seppia elengate; SPAIN: Castaño.

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



Sepia elobyana Adam, 1941

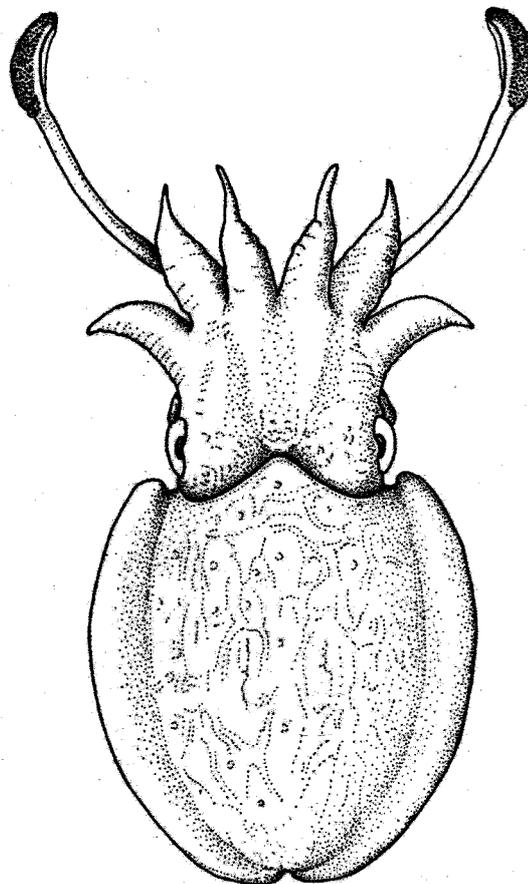
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Sepia elobyana Adam, 1941, Mém.Mus.Roy.Hist.Nat. Belg., (2)21:121.

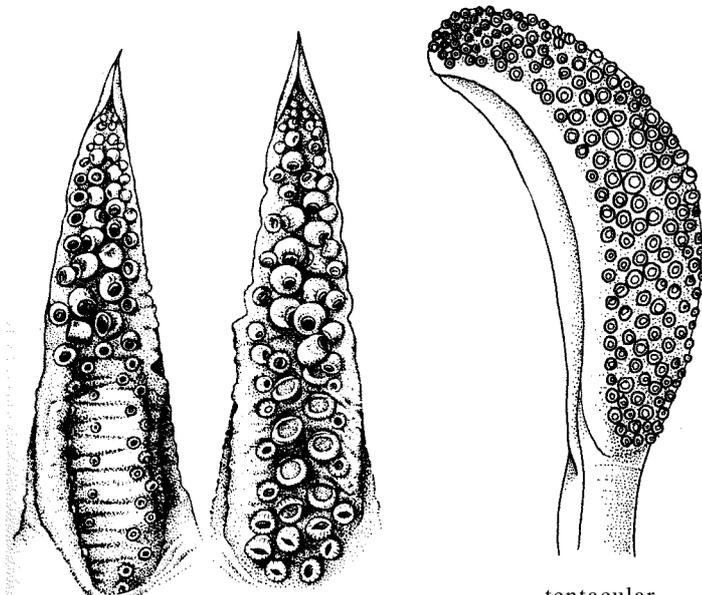
Synonymy : None.

FAO Names : En - Guinean cuttlefish
Fr - Seiche de Guinée
SP - Sepia guineana

Diagnostic Features : Mantle broad, length less than 2 times width, its dorsal surface with scattered tubercles and a reticulate pattern of ridges. Fins broad. Tentacular club with about 8 subequal suckers in transverse rows. Left arm IV hectocotylized in proximal half with minute, widely separated suckers on fleshy ridges; all arms attenuate, suckers of unequal sizes.



dorsal view



left (hectocotylized) right (normal)

tentacular club

pair of arms IV of male

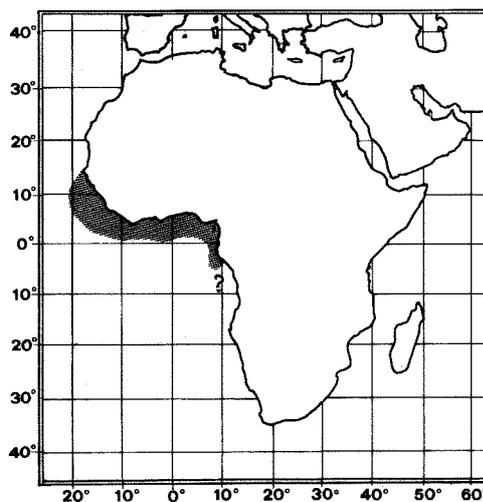
Geographical Distribution : Eastern Atlantic Ocean along West African coast from Senegal to Gulf of Guinea (southern limits undetermined).

Habitat and Biology : Unknown.

Size : Maximum mantle length 6 cm.

Interest to Fisheries : Possibly taken with other cuttlefishes off West Africa, but not distinguished from similar species.

Local Names :



Sepia esculenta Hoyle, 1885

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Sepia esculenta Hoyle, 1885, Ann.Mag.Nat.Hist., (5)16:195.

Synonymy : *Sepia elliptica* Hoyle, 1885.

FAO Names : En - Golden cuttlefish
Fr - Seiche dorée
Sp - Sepia dorada

Diagnostic Features : Tentacular club with 12 minute, subequal suckers in transverse rows; swimming keel extending on stalk proximal to club; protective membranes narrow, separate at base, extending along stalk as very low membranous ridges. Six or 7 elongate, membranous, fleshy papillae along base of each fin. Left arm IV hectocotylized by 5 or 6 transverse rows of small-sized suckers distal to the first 5 transverse rows of suckers. Colour: pale transverse stripes across dorsal surface of mantle; a white line along base of fins.

Geographical Distribution : Western Pacific: South China Sea (north of central Philippines) and East China Sea (Japan, excluding Hokkaido).

Habitat and Biology : A demersal neritic species found on sandy bottoms between 10 and 100 m depth, sometimes burrowing in the substrate. After overwintering in deeper waters, the population migrates into shallow coastal areas where it spawns when the water temperature increases. The eggs are deposited on macrophytes and other substrates.

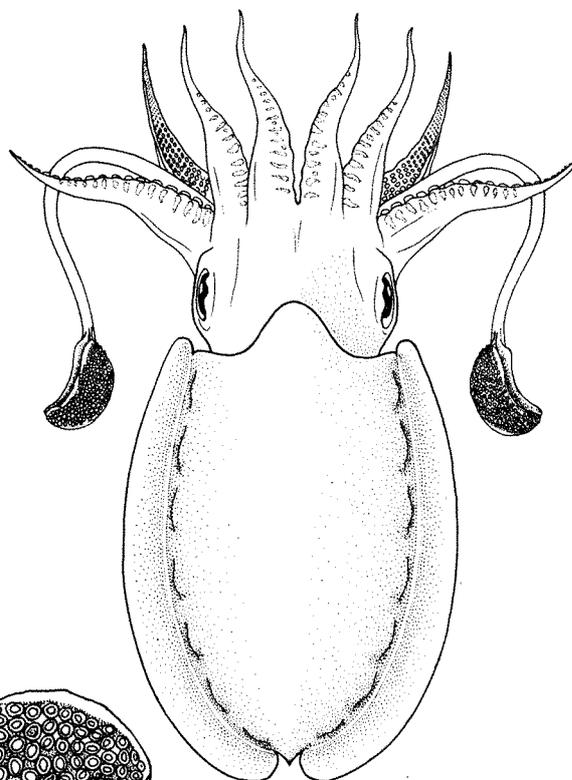
Size : Maximum mantle length 18 cm, weight 0.6 kg.

Interest to Fisheries : The most common cuttlefish in trawl catches off western Japan. It also supports localized and subsistence fisheries in the Philippines. Around Shantung and Kiangsu provinces of China it is the dominant *Sepia* species landed. In Hong Kong, annual landings average about 100 tons. Caught with otter trawls, pound nets, hoop nets, and on hook-and-line. The flesh is highly appreciated as food, especially in Japan and southeast Asian countries. The Japanese domestic landings of large-sized cuttlefish are consumed as sashimi, while small-sized individuals are marketed packed and frozen, ready for cooking.

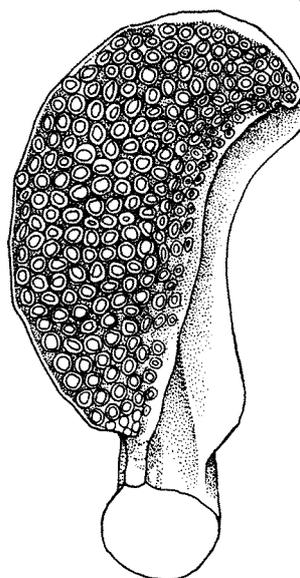
Local Names : CHINA: Gam woo chak, Jam mak yue; JAPAN: Hariika, Kouika Maika, Sumiika.

Literature : Choe (1966, experimental aquaculture); Tomiyama & Hibiya (1978); Okutani (1980).

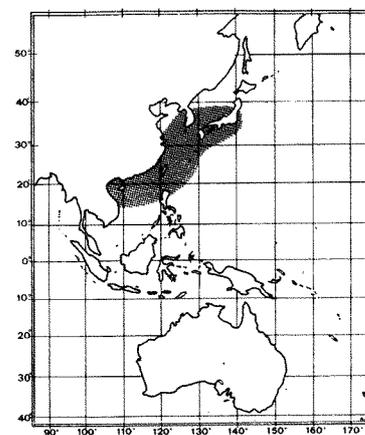
Remarks : The species has successfully been reared to market size in experiments, at growth rates well above those in natural populations (Choe, 1966).



dorsal view



tentacular club



Sepia kobiensis Hoyle, 1885

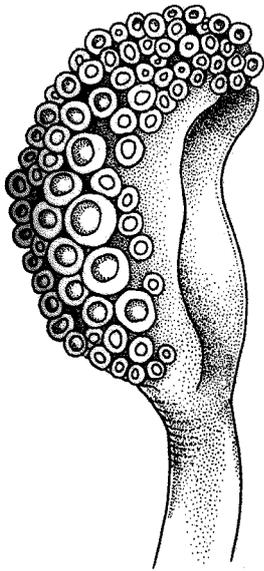
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Sepia kobiensis Hoyle, 1885, *Ann.Mag.Nat.Hist.*, (5)16:195.

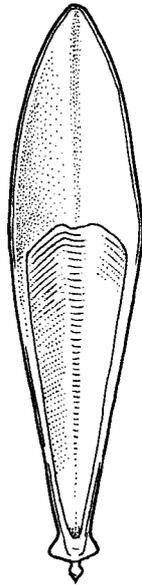
Synonymy : *Sepia andreanoides* Hoyle, 1885; seven subspecies - Sasaki, 1920 and 1929.

FAO Names : En - Kobi cuttlefish
Fr - Seiche kobi
Sp - Sepia kobi

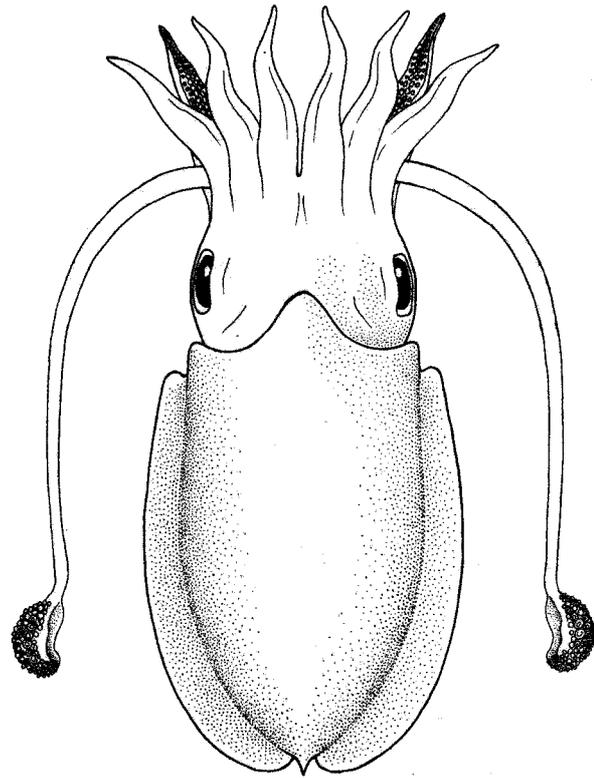
Diagnostic Features : Mantle width less than half the length. Tentacular club short, narrow; suckers small, 8 suckers in transverse rows; 5 suckers of third longitudinal row much larger than all others; swimming keel broad, extending proximally beyond base of club; dorsal protective membrane broad, half the width of sucker-bearing surface. Arms short, attenuate, subequal; arm suckers globular quadriserial, those in median rows larger than marginal ones; left arm IV hectocotylyzed along distal half, with suckers greatly reduced in size and the oral surface hollowed out and transversely ridged.



tentacular club



cuttlebone



dorsal view

Geographical Distribution : Western Pacific: South China Sea, East China Sea, Yellow Sea to southern and central Japan.

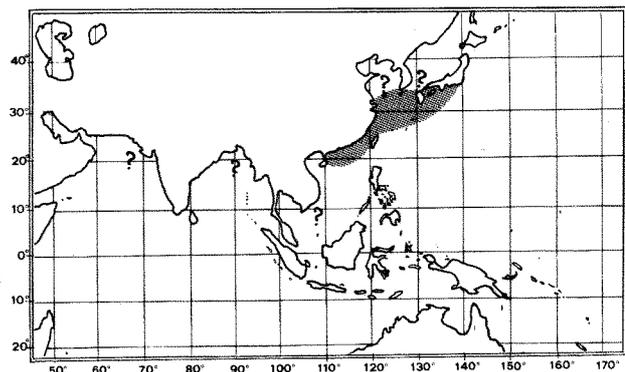
Habitat and Biology : A small demersal cuttlefish ranging to 160 m depth.

Size : Maximum mantle length 9 cm.

Interest to Fisheries : Taken as bycatch in small-scale fisheries off southern Japan and in the Inland Sea, mainly with fixed nets, trawls and beach seines, but also in small quantities between the 80 and 160 m contour in the Hong Kong area. No separate catch statistics are reported for this species.

Local Names : JAPAN: Himekouika.

Literature : Okutani (1980).



Sepia latimanus Quoy & Gaimard, 1832

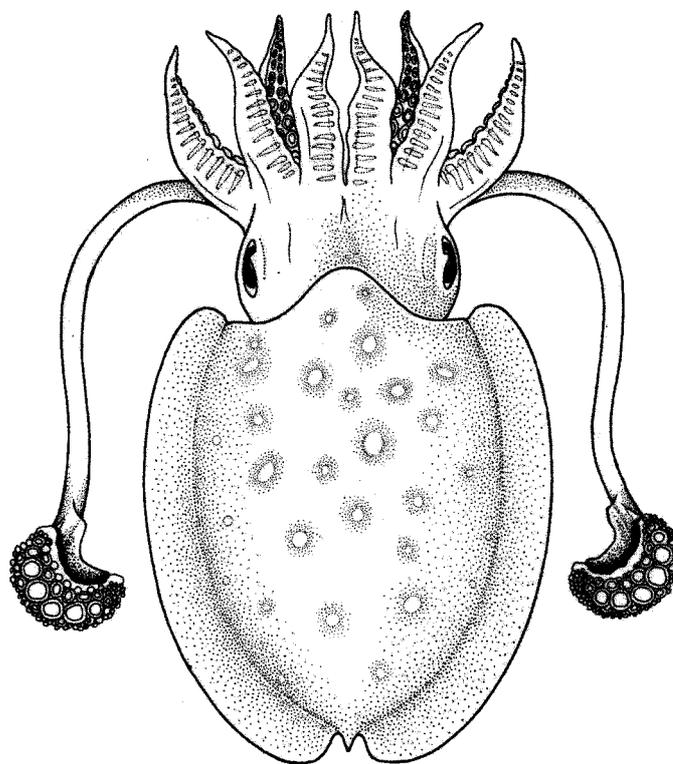
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Sepia latimanus Quoy & Gaimard, 1832, *Zool.Astrolabe*, 2(1):68.

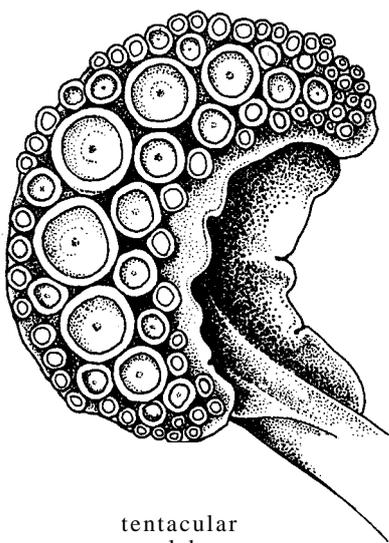
Synonymy : *Sepia rappiana* Ferussac, 1835; *Sepia mozambica* Rochebrune, 1884; *Sepia hercules* Pilsbry, 1894.

FAO Names : En - Broadclub cuttlefish
Fr - Seiche grandes mains
Sp - Sepia mazuda

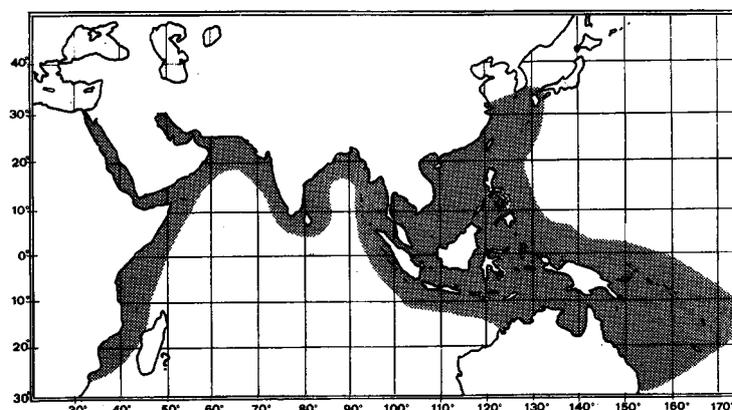
Diagnostic Features : Tentacular clubs half-moon-shaped, their protective membranes fused at base, completely surrounding sucker-bearing surface; a deep cleft or groove between swimming keel and dorsal protective membrane nearly separates sucker-bearing area from stalk; swimming heel extending proximally just beyond base of club; 5 or 6 suckers in transverse rows, a few median ones enlarged.



dorsal view



tentacular club



Geographical Distribution : Indo-Pacific: from southern Mozambique, throughout the periphery of the Indian Ocean, Coral Sea, Melanesian Islands, South China Sea, Philippine Sea and East China Sea to southern Japan.

Habitat and Biology : A shallow-water species inhabiting tropical coral reefs to depths of at least 30 m. Mating occurs on the west coast of Guam and off Okinawa in shallow waters (30 m depth) during January through May and the eggs hatch in 38 to 40 days.

Size : Maximum mantle length 50 cm.

Interest to Fisheries : This species supports local fisheries in western Japan and the Philippines. It is caught with jigs, handlines, setnets and spears. Common as bycatch in southeast Asian trawl fisheries. Separate statistics are not reported for this species.

Local Names : JAPAN: Kobushime, Kubushime.

Literature : Okutani (1980); Chikuni (in press, fishery potential).

Sepia longipes Sasaki, 1914

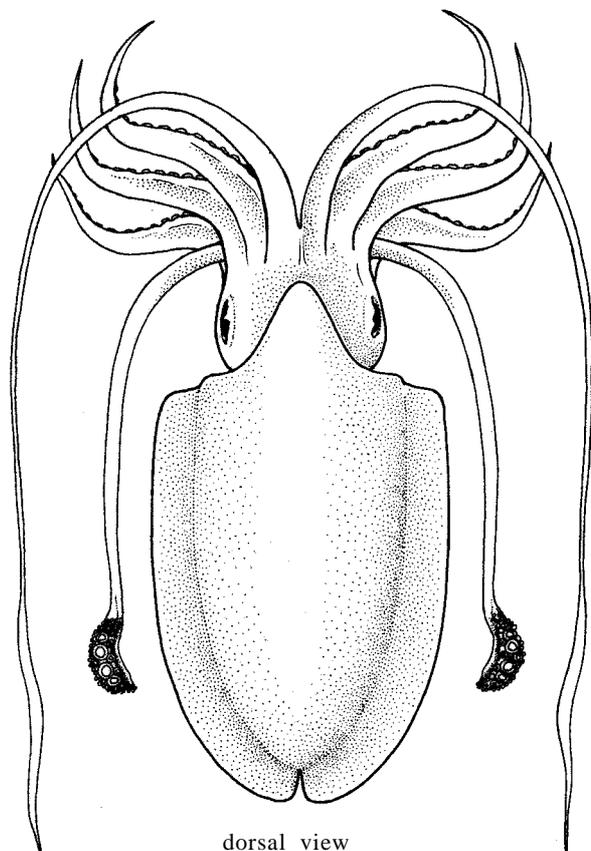
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Sepia (Doratosepior) longipes Sasaki, 1914, *Annot.Zool.Jap.*, 8(5):619.

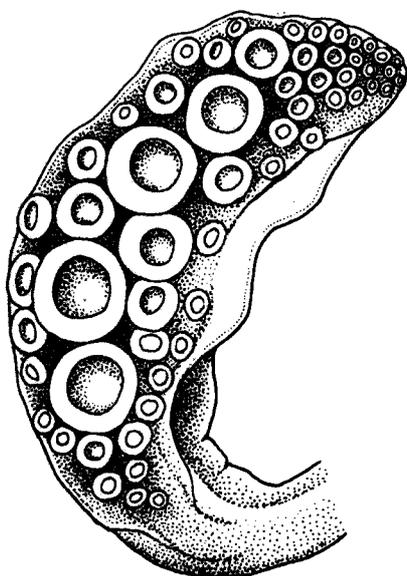
Synonymy : None.

FAO Names : En - Longarm cuttlefish
Fr - Seiche pieuvre
SP - brazolargo

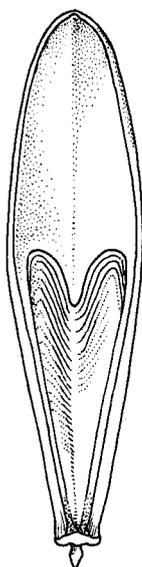
Diagnostic Features : Anterior dorsal mantle extending far anteriorly. Tentacular club crescent-shaped, expanded; up to 8 suckers in transverse rows, 4 medial suckers considerably enlarged. Arms I of males greatly elongate - 2 times longer than mantle, somewhat thickened distally, bordered with a broad, trabeculate protective membrane; both arms IV hectocotylized in their distal 2/5 - the left by longitudinal furrows and ridges with rudimentary quadriserial suckers, the right by slightly rudimentary suckers.



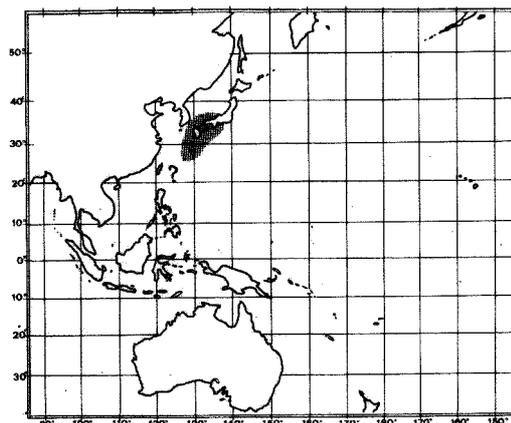
dorsal view



tentacular club



cuttlebone



Geographical Distribution : Southern Japan.

Habitat and Biology : A neritic demersal species.

Size : Maximum mantle length 20 cm.

Interest to Fisheries : Undetermined.

Local Names :

Sepia lorigera Wülker, 1910

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Sepia lorigera Wülker, 1910, *Abh.Bayer.Akad.Wiss.*, 3(suppl.1):12.

Synonymy : None.

FAO Names : En - Spider cuttlefish
Fr - Seiche araignée
SP - Sepia loriga

Diagnostic Features : Dorsal part of mantle extending into a prominent anterior lobe. Tentacular club expanded, crescent-shaped, with 8 suckers of greatly unequal size in transverse rows, 4 medial suckers greatly enlarged. Arms I of males greatly elongate - 2 times longer than mantle, whip-like, attenuate, with tips flared by a broad protective membrane; left arm IV hectotylized in its distal third by rudimentary suckers on swollen bases along transverse ridges.

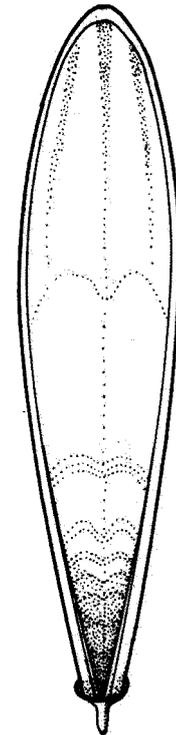
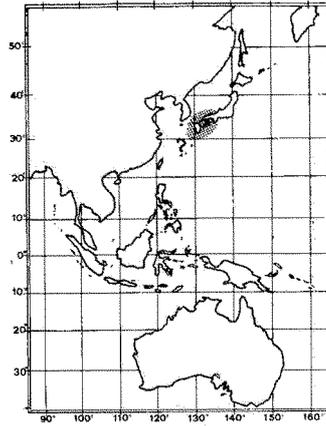
Geographical Distribution : Western Pacific: southwestern Japan, Inland Sea.

Habitat and Biology : A neritic, demersal species.

Size : Maximum mantle length 25 cm.

Interest to Fisheries : Fished in southwestern Japan, but no detailed information is available on the catch.

Local Names :



cuttlebone

Sepia lycidas Gray, 1849

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Sepia lycidas Gray, 1849, Cat.Moll.Brit.Mus., 103.

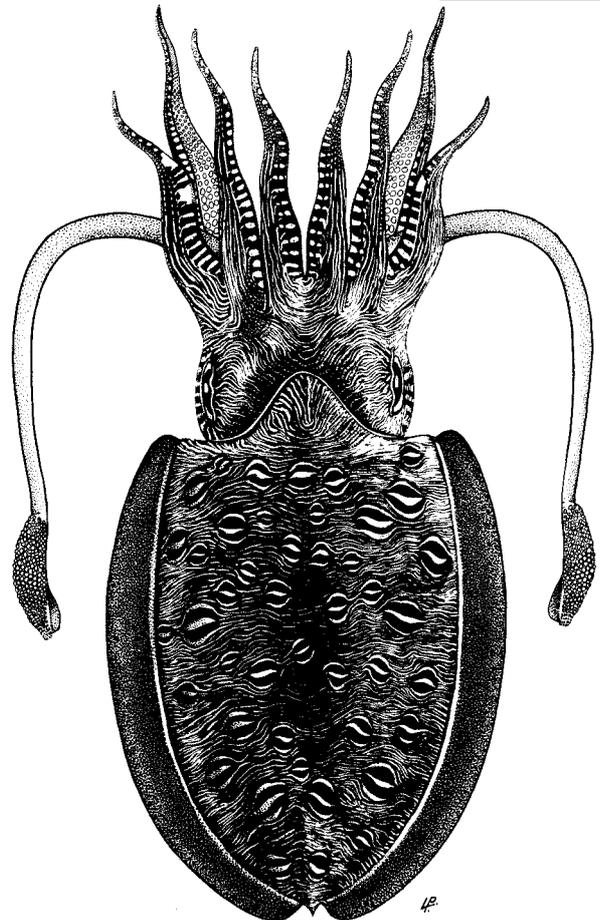
Synonymy : *Sepia subaculeata* Sasaki, 1914.

FAO Names : En - Kisslip cuttlefish
Fr - Seiche baisers
Sp - Sepia labiada

Diagnostic Features : Tentacular club with well-developed swimming keel extending nearly to base of club; outer keel along tentacular stalk extends along club but does not connect with swimming keel; protective membranes extending, without meeting, along entire length of stalk as membranous ridges; 8 subequal suckers in transverse rows. Colour: dorsal part of mantle with vivid oval eye-like or lip-shaped markings; a white line along bases of fins.



tentacular club



dorsal view