Cistopus indicus (Orbigny, 1840)

OCT Cist

Octopus indicus Orbigny, 1840, in 1834-1848, Hist.Nat.Ceph.Acetab., 24.

Synonymy: Octopus indicus Orbigny, 1840; Cistopus bursarius (Steenstrup MS) Hoyle, 1886.

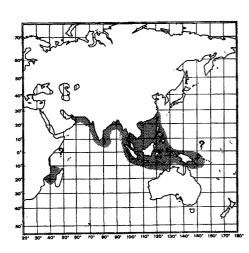
FAO Names:

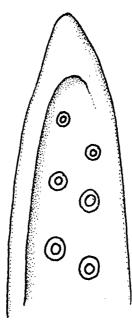
En - Old woman octopus Fr - Poulpe vieille femme Sp - Pulpo perforado

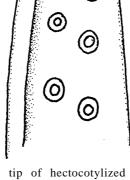
Diagnostic Features : Mantle elongate; neck constricted; head narrow. Arms long, slender, attenuate tips; dorsal arms (I) always longest and stoutest, IV shortest; dorsum covered with fine, low, widely-spaced warts; a small pouch occurs on each segment of the web between the bases of the arms; these 8 water pouches communicate with the sea water

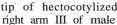
through small pores that open on the oral surface of the web; right arm III hectocotylized with a very small ligula (3% of arm length) that appears smooth and poorly developed; 10 or 11 lamellae on demibranch of gill.

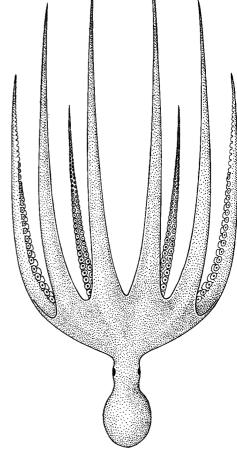
Geographical Distribution : Indo-Pacific: mostly Indo-Malayan region, the Philippines, China, Bangladesh, India and Pakistan, and recorded off Mozambique











dorsal view

Habitat and Biology: A benthic species, occurring from 0 to 50 m depth on mud bottom in Hong Kong.

Size: Maximum total length 60 cm; maximum mantle length 18 cm, weight 2 kg.

Interest to Fisheries: The species is a primary commercial octopod in most Asian markets. It also supports localized and subsistence fisheries in the Philippines. About 50 metric tons landed in Hong Kong per year.

Local Names: CHINA: Laai por (Muddy old woman).

Literature: Voss & Williamson (1971, Hong Kong); Pickford (1974).

Pteroctopus tetracirrhus (Delle Chiaje, 1830)

OCT Pter 1

Octopus tetracirrhus Delle Chiaje, 1830, Mem.Anim.Napoli, 4, pl. 72.

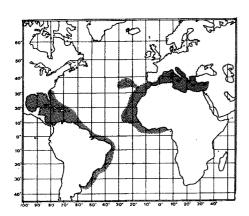
Synonymy: Octopus tetracirrhus Delle Chiaje, 1830; ? Scaeurgus titanotus Troschel, 1857.

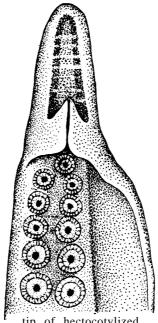
FAO Names: En - Fourhorn octopus

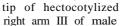
Fr - Poulpe à quatre cornes SP - Pulpo cuatro cuernos

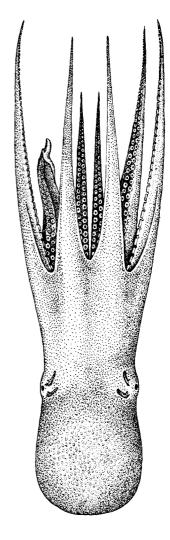
**Diagnostic Features:** A median-sized, deepwater octopus. Mantle very broadly oval, usually as broad as long; neck not constricted; the skin and subcutaneous tissue are very soft and gelatinous. Head nearly as wide as mantle; two long, slender cirri occur over each eye (may measure up to 50% as long as mantle). Arms of moderate length; suckers biserial proportianally very small and imbedded; web deep-up to 40% of arm length; the surface of the skin is covered with low, closely-set tubercles; left arm III hectocotylized, stouter and shorter (60 to 80%) than right III; ligula broadly conical (blunt tip); large (5 to 11% of arm length), with shallow groove and faint transverse ridges; calimus medium-sized, conical, deeply grooved; 9 or 10 filaments on outer demibranch of gill.

Geographical Distribution: Mediterranean and Atlantic Ocean: east coast of Africa (Azores, Cape Verde Islands); Cuba; Gulf of Mexico, east coast of US from North Carolina, Caribbean Sea to Uruguay.









dorsal view

**Habitat and Biology:** A benthic species occurring from 25 to about 720 m depth on muddy bottoms. Medium-sized individuals are taken in April in demersal catches. Males and females mature consecutively by May/June and June/July respectively. Young, immature individuals appear in the catches by November and December. Longevity is probably about 2 or 3 years.

Size: Maximum mantle length 13 cm in females, 11 cm in males; maximum total length 28 cm. Mantle Iength at first maturity about 11 cm in females, 8.5 cm in males.

Interest to Fisheries: Currently minor; taken as bycatch in shrimp or finfish trawling operations in western Mediterranean and western Atlantic. Separate statistics are not reported for this species.

## Local Names:

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

Eledone cirrosa (Lamarck, 1798)

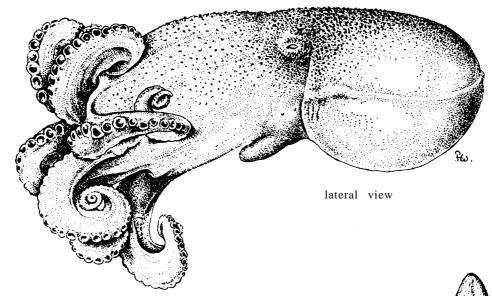
OCT Eled 1

Octopus cirrhosus Lamarck, 1798, Bull.Soc.Philom.Paris, 2:130.

Synonymy: Octopus cirrhosus Lamarck, 1798; Octopus aldrovandi Montfort, 1802 (see Robson, 1932, p. 264).

FAO Names: En - Horned octopus

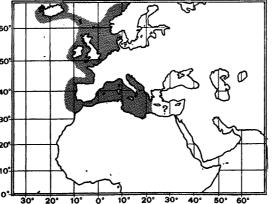
Fr - Elédone commune Sp - Pulpo blanco

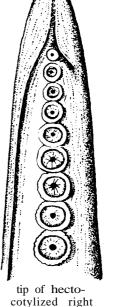


Diagnostic Features: Mantle ovoid, broad; skin covered with very fine, closely-set granulations or warts, interspersed with larger warts; a low, pale-coloured ridge encircles the lateral periphery of the mantle. Head narrower than body; one cirrus over each eye. Arms moderately short; suckers uniserial (one row only); web about 30% (21 to 41%) of arm length; right arm III hectocotylized, about 69 to 76% as long as left III; ligula very short (3 or 4% of arm length), indistinct; calimus lacking; suckers near tips of remaining arms of males modified by being compressed and drawn out into cirrus-like prolongations with much reduced sucker size; 11 filaments on outer demibranch of gill. Colour: living animal yellowish or reddish orange to reddish brown dorsally with diffuse rust-brown patches.

Geographical Distribution: 60
Eastern Atlantic: northeast
Atlantic, Iceland (to 67°N) and
Mediterranean Sea.

Habitat and Biology: A 400 benthic species occurring on trawlable grounds from the 300 coastline down to about 500 m depth, mostly between 60 and 150 m. Females predominate from 30 to 80 m, males below 100 m depth. This species seems to be rather stationary.





arm III of male

tip of normal arm

In the western Mediterranean, spawning occurs between May and September with a peak in July. Females deposit from 800 to 1 500 large eggs (up to about 7.5 mm long) whichtake about 100 days to hatch (at temperatures of 16°C). The juveniles appear in demersal catches by about March measuring between 2 and 2.5 cm (mantle length). In spring of the following year females have attained about 9 to 9.5 cm mantle length, males about 7 cm. Growth retes vary inversely with size and seasonally, directly with temperature (Mangold-Wirz, 1963). A similar growth pattern was found in the North Sea, off Scotland, but due to overall lower temperatures growth is slower (Boyle & Knobloch, 1982) and apparently larger maximum sizes are reached. In the western Mediterranean, the lifespan appears to be 2 or 3 years, in the North Sea probably longer. Food consists primarily of crustaceans such as shrimps (Crangon), crabs (Carcinus, Macropipus), and lobsters (Nephrops).

**Size:** Maximum total length 40 cm; maximum weight about 1.2 kg (females grow larger than males). In the western Mediterranean, mantle length at first maturity is about 12.5 cm in females; males start maturing at about 5 cm mantle length.

Interest to Fisheries: The Mediterranean catch for all <u>Eledone</u> species was reported as about 2 300 metric tons in 1981 (FAO, 1983). Most of this corresponds to <u>E. cirrosa</u>, which is the most abundant species of the genus. it is taken throughout the year, with best catches usually in July to December. In the western Mediterranean, extensive fisheries exist for this and other octopus species, which are important for the local economy. The species is primarily caught with bottom trawls, and to a lesser extent with seines.

Local Names: FRANCE: Elédone; GREECE: Moscoctapoda; ITALY: Moscardino bianco; MONACO: Purpissa; SPAIN: Pulpo blanco; TUNISIA: Qarnit; TURKEY: Ahtopot; UK: Curled octopus.

**Literature :** Mangold-Wirz (1963, biology, western Mediterranean); Fischer (ed., 1973, Species Identification Sheets, Mediterranean and Black Sea, fishing area 37); Moriyasu (1981, biology, population dynamics and fishery, western Mediterranean); Boyle & Knobloch (1982, growth, Scotland).

Eledone massyae Voss, 1964

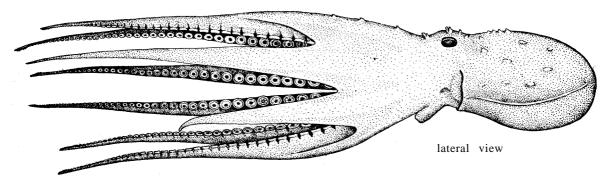
OCT Eled 3

Eledone massyae Voss, 1964, Bull.Mar.Sci.Gulf and Carib., 14(3):511.

Synonymy: Moschites brevis Massy, 1916.

FAO Names: En - Combed octopus

Fr - Elédone peigne SP - Pulpo desflecado



**Diagnostic Features:** Animal covered with fine, round papillae interspersed with a few larger, simple papillae or warts. Mantle oval, broad (the width 60 to 100% of mantle length), somewhat dorso-ventrally flattened; lateral periphery surrounded by a low cutaneous fold or ridge; mantle aperture wide. Head broad; no neck constriction; 2 to 4 bifid or multifid cirri occur over each eye; Arms moderately long, slender, tapering; suckers uniserial (in one row), small, well-spaced proximally, crowded and minute distally; in males the 7 non-hectocotylized arms have suckers modified into a double row of minute, fleshy papillae; right arm III hectocotylized, only 65% as long as left III; ligula 4 to 15% of arm length, conical, undifferentiated, calimus absent; 8 to 10 filaments on outer demibranch of gill:

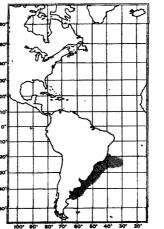
**Geographical Distribution :** Southwestern South Atlantic Ocean; Brazil and Argentina (20°S to 43°S); Trinidade Island (20°30'S, 29°20'W).

**Habitat and Biology:** A very little known, benthic species; caught on trawlable bottoms at 30 to 160 m depth.

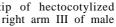
**Size:** Maximum mantle length 7.5 cm.

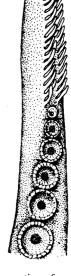
Interest to Fisheries: Possibly as bycatch to other demersal fisheries.

**Local Names:** 



tip of hectocotylized





tip of normal arm

Eledone moschata (Lamarck, 1798)

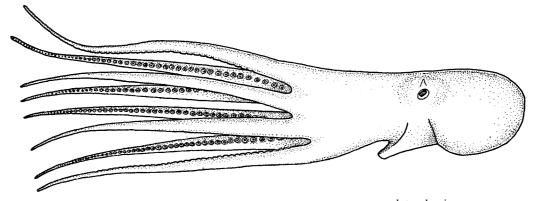
OCT Eled 2

Octopus moschatus Lamarck, 1798, Bull.Soc.Philom.Paris, 2:130.

Synonymy: Octopus moschatus Lamarck, 1798.

FAO Names: En - Musky octopus

Fr - Elédone musquée Sp - Pulpo almizclado

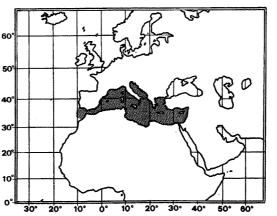


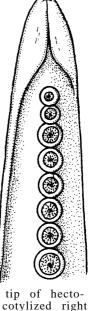
lateral view

**Diagnostic Features:** Mantle ovoid, moderately broad; skin smooth to very finely granulose; no ridge occurs around the lateral periphery of the mantle. Head narrower than mantle. Arms subequal, moderately long - up to 22% of mantle length; suckers uniserial, enlarged in males; web moderately deep - 30% of arm length; right arm III hectocotylized, length only 60 to 70% of left III; ligula very short - 3% of arm length; undifferentiated; calimus absent; distal tips of all other arms of males modified by subdivision of uniserial suckers into 2 parallel rows of flattened laminae or platelets; 11 or 12 filaments on outer demibranch of gill. Living animal exudes a very prominent, musk-like odour, reportedly from glands in the skin. Live colour greyish-brown with blackish-brown blotches on dorsum.

Geographical Distribution:
Mediterranean sea including 60
Adriatic Sea; Gulf of Cadiz
(Atlantic).

Habitat and Biology: A coastal benthic species occurring from 10 to 200 and 300 m depth on muddy bottoms; in the western Mediterranean, mating concentrations occur in February from 60 to 90 m depth, with most males mature and females nearly so; spawning occurs between March and July.





arm III of male



arm

Size: Maximum total length 35 cm; mantle length 14 cm.

Interest to Fisheries: The 1981 catch for all <u>Eledone</u> species was about 2 300 metric tons (FAO, 1983), part of which was <u>E. moschata</u>. This species is taken as bycatch in local trawl fisheries. In the western Mediterranean, it is captured year-round, with a maximum from April to July.

**Local Names :** FRANCE: Elédone musquée; GREECE: Moscoctapoda; ITALY: Moscardino rosso; MALTA: Karnita tal misk; MONACO: Muscardin; SPAIN: Pulpo almizclado; TUNISIA: Bou msik; TURKEY: Ahtopot; YUGOSLAVIA: Muzgavac.

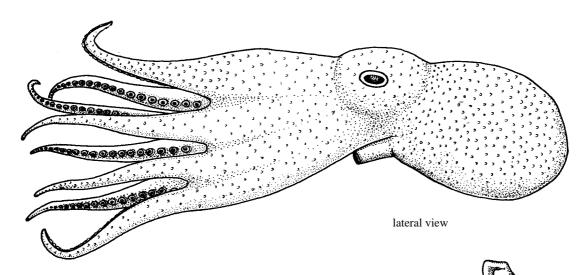
Literature: Fischer (ed., 1973, Species Identification Sheets, Mediterranean and Black Sea, fishing area 37).

Pareledone species OCT Parel

Synonymy: None.

FAO Names: En - Antarctic octopuses

Fr - Elédones antarctiques SP - Pulpos antárticos

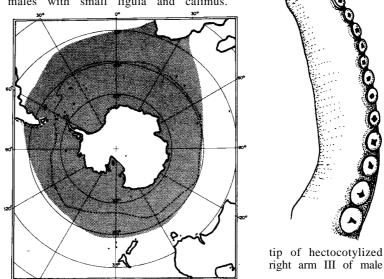


**Diagnostic Features:** Mantle broad, saccular, granulose. Arm suckers uniserial; right arm III hectocotylized in males with small ligula and calimus.

Geographical Distribution: Southern Ocean: southern South America, South Africa to Antarctica.

**Habitat and Biology:** A benthic species with a total depth range from 10 to 750 m, but occurring primarily on the Antarctic shelf, usually onrough grounds.

Interest to Fisheries: These small to large octopuses with potential value to fisheries occur in sizeable quantities on the Antarctic shelf and northward to the Falkland/Malvina Islands and the Burwood Bank off southern Patagonia. So far, they are only taken as bycatch in bottom trawls and their annual catch probably does not exceed a few hundred tons. The consistency of the flesh is firm, similar to octopuses that are regularly utilized. Their often eating qualities.



that are regularly utilized. Their often "loose" and semigelatinous skin, however, may detract from their good

## **Local Names:**

Literature: Everson (1977, resources, Southern Ocean).

**Remarks :** This group includes several proorly described species in need of revision, being undertaken by G.L. Voss. Southern substitute of <u>Octopus</u> species.

Bathypolypus arcticus (Prosch, 1849)

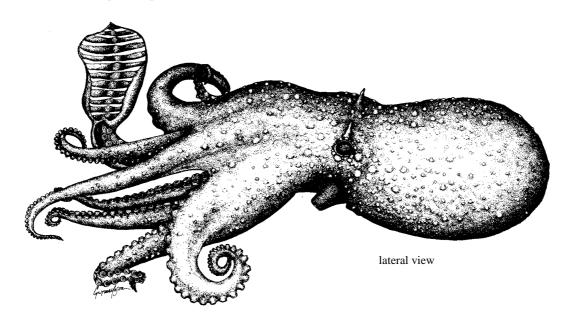
OCT Bath 1

Octopus arcticus Prosch, 1849, Kong.Dan.Viden.Sels., 1:59.

Synonymy: Octopus arcticus Prosch, 1849; Octopus groenlandicus Steenstrup, 1856; Octopus bairdi Verrill, 1873; Octopus lentus Verrill, 1880; Octopus obesus Verrill, 1880; Octopus faeroensis Russell, 1922.

FAO Names: En - North Atlantic octopus

Fr - Poulpe boreal Sp - Pulpito violáceo



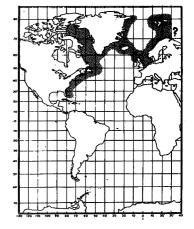
**Diagnostic Features :** Mantle globular, nearly as wide as long; mantle opening very narrow, restricted; surface of mantle, head, arms and web covered with simple or multifid warts, especially around the eyes. Head narrower than mantle; a large, prominent multifid, cirrus occurs above each eye; some specimens grade to smooth skinned. Arms short, irregular order; suckers small, biserial; web varies between 1/4 to 1/2 as deep as the longest arm; right arm III hectocotylized, about 75% as long as arm I; ligula huge, broad, spade-shaped, usually with a distal sharp-pointed tip; sides inrolled, forming a deep trough (groove) in which lie 9 to 13 strong, transverse laminae; calimus very small, conical. Ink sac absent; 7 or 8 filaments on demibranch of gill.

**Geographical Distribution :** North Atlantic Ocean: Straits of Florida northward to Greenland, Iceland, Spitzbergen and southward to northern Great Britain and North Sea.

**Habitat and Biology:** A benthic species with a broad depth distribution ranging from a few meters (14 m) to about 1 000 m depth on mud bottom mostly of the continental shelf and upper slope.

Breeding of the 13 mm long and about 6 mm wide eggs takes place throughout the year. The lifespan is 18 months. Its feeding pattern is opportunistic, including ophiuroids (brittle stars), crustaceans (isopods, amphipods, copepods, ostracods, barnacles), polychaete worms, bivalve and gastropod molluscs. It is in turn preyed upon by bottom fishes.

**Size:** Maximum mantle length 10 cm, mostly to 6 cm; weight from 300 to 400 g.



**Interest to Fisheries :** This species is frequently taken as bycatch in otter trawls; its potential for a directed fishery has not been assessed, but is believed to be significant if the animal proves of commercial interest.

Local Names: USA: North Atlantic octopus.

**Remarks:** The species is very variable in appearance; other species of this genus occur in the eastern Atlantic (B. proschi) and Mediterranean (B. sponsalis).

Bethoctopus januari (Hoyle, 1885)

OCT Benth 1

Octopus januari Hoyle, 1885, Ann.Mag.Nat.Hist., (5)15:229.

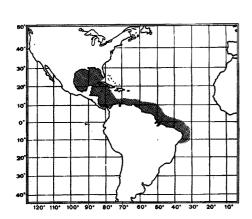
Synonymy: Octopus januari Hoyle, 1885.

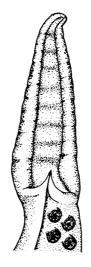
FAO Names:

En - January octopus Fr - Poulpe filamenteux Sp - Pulpo filamentoso

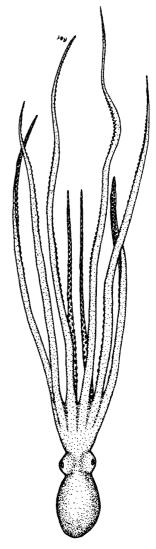
Díagnostic Features : Mantle saccular, elongate, smooth, devoid of sculpture. Head narrow; neck constriction deep. Arms long, narrow, very attenuate; suckers biserial; web very shallow, a maximum of 15% of longest arm length; right arm III hectocotylized, only about half as long as left III; ligula medium-sized (6 to 9% of arm length) with a deep groove and weak transverse laminae; calimus small, acute. Ink sac absent; 7 or 8 lamellae on outer demibranch of gill.

Geographical Distribution: Gulf of Mexico, Caribbean Sea, Tropical Atlantic to 10°S.





tip of hectocotylized right arm III of male



dorsal view

Habitat and Biology: A deep-living, benthic species occurring between 400 and 750 m depth on mud bottom.

Size: Maximum mantle length 7 cm.

Interest to Fisheries: None currently; its firm consistency makes it a good candidate for the development of a fishery.

## Local Names:

Remarks: A second species, B. oregonae Toll, 1981, also occurs in the Caribbean; it is a more gelatinous, stouter, shorter-armed species than B. januari.

Tetracheledone spinicirrhus Voss, 1955

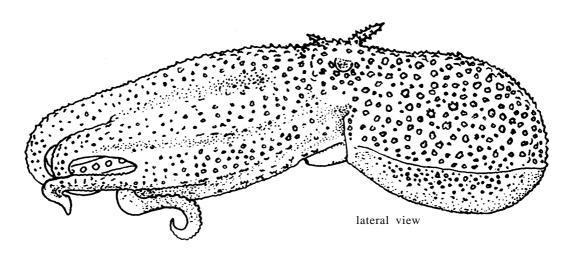
OCT Tetra 1

Tracheledone spinicirrhus Voss, 1955, Bull.Mar.Sci.Gulf and Carib., 5(2) p. 107.

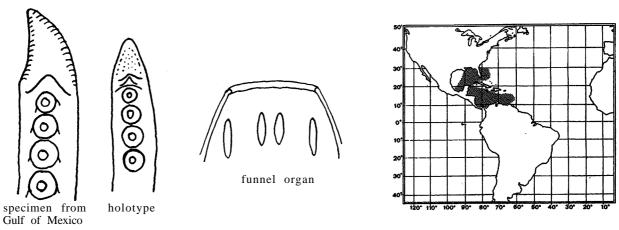
Synonymy: None.

FAO Names: En - Spiney-horn octopus

Fr - Poulpe cornu SP - Pulpo cornudo



Diagnostic Features: Mantle globular, as wide as long; surface of mantle, head, arms, and web covered with conspicuous, closely-set, large, stellate tubercles; a narrow, tuberculate, fold of skin encircles the lateral surface of the mantle; funnel organ, 4 separate longitudinal pads. Head narrower than mantle; two large, papillose cirri above each eye Arms relatively long with a deep web and uniserial, small, deep-set suckers; right arm III hectocotylized, ligula up to 10% of hectocotylized arm length; calimus short, broad, conical; 6 to 9 lamellae on demibranch of gill.



Geographical Distribution: Gulf of Mexico, Straits of Florida, Caribbean Sea, limits unknown.

**Habitat and Biology :** A benthic species occurring from about 200 to 400 m depth on trawlable bottom (mud).

Size: Maximum mantle length 10 cm.

Interest to Fisheries: None presently.

tip of hectocotylized right arm III of male

Local Names: