



# Marine Fisheries Information Service



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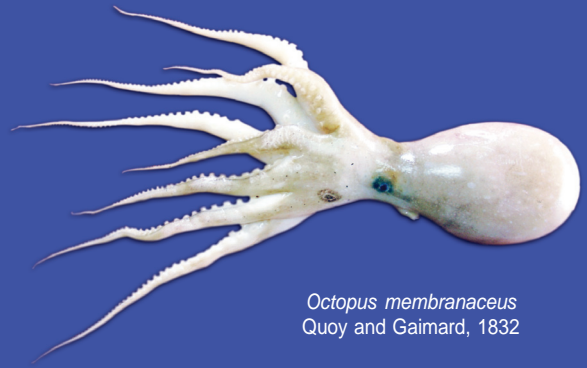
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## Record of *Octopus membranaceus* Quoy and Gaimard, 1832 in Maharashtra waters

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*Octopus membranaceus*  
Quoy and Gaimard, 1832

Cephalopods have good export demand, therefore it is the second most sought commodity next to prawns by trawl operators. Octopus, popularly known as “devil fish” were earlier discarded as it did not fetch any price, but in recent years, these are being exploited in commercial quantities. The major species of octopus which contributed to the world fishery, come under the genera *Octopus*, *Cistopus* and *Eledone*. Octopus in the continental shelf and oceanic region are caught mainly as by-catch in the bottom trawl.

Due to the growing demand for octopus in the international market, octopus fishery is catching up in the north-west region, especially along Maharashtra coast. The main fish landing centres for octopus at Mumbai are New Ferry Wharf, Sassoon Docks and Versova. Cephalopods form about 10.5% in trawl landings off Maharashtra with octopus dominated by the species *Cistopus indicus* contributing 7.1% towards the cephalopod catch.

With the increased exploitation and expansion of fishing grounds, new records of cephalopods are reported from various places all along the Indian coast. Thirty eight species of octopods belonging to the family Octopodidae, Theroctopodidae and Argonautidae abound the Indian seas including Andaman and Lakshadweep.

A new entrant to the octopus fishery is *Octopus membranaceus* Quoy and Gaimard, 1832 at New Ferry Wharf, Maharashtra. The species is present in the fishery during December - February. This species is commonly known as ‘webfoot octopus’ and locally all octopuses are known as ‘jeevrae makul’. They are known as ‘jidako’ in Japan, where it supports a minor fishery and in China they are called as ‘four eyed bird’. The mantle length of the species landed at New Ferry Wharf ranged from 50-80 mm. The depth of operation was about 30-40 m at 70-80 km off north-west coast. The occurrence of *O. membranaceus* is reported for the first time from this region.

Some of the important distinguishing characters of *O. membranaceus* are a saccular to elongate mantle with small, close-set tubercles over head, mantle and arms. Two cirri or warts observed over each eye, arms moderately long, robust and the web low. The right arm III is hectacotylised in males. Lingul is slender and long with 4 to 6% of arm length. The most important identification character is the presence of a conspicuous dark ringed ocellus on the web base of arm II, antero-ventral to the eyes.

*O. membranaceus* is a benthic shallow water species occurring down to about 60 m depth. It shows a strong cryptic behaviour and usually hides in holes

on flat bottoms. The spawning season extends from December to February. It is an Indo-Pacific species extending from the Indian Ocean to Japan, China, Philippines and southward to Australia.

The major octopus species landed in Kerala is *O. membranaceous* contributing about 82% towards the octopus catch. There seems to be no reference about this species from Maharashtra waters. The length range of the species landed at Cochin is 20 to 90 mm in mantle length. According to FAO, the maximum mantle length of the species is 80 mm and maximum total length is 300 mm in Mumbai waters, the size range of this species is smaller ranging

between 30 and 80 mm and the landings comparatively of lesser magnitude.

Separate catch statistics are not available for this species. Nine specimens were analysed for their gut contents. Majority of the gut was empty and food if present could not be identified as they were in finely macerated condition. In general, octopuses that are landed are taken to the processing unit within 4-6 h, where they are degutted and processed. The cost of octopus (*Cistopus indicus*) at Mumbai in 1999 was Rs 10/- per kg which has now increased to Rs. 60/- per kg at the landing centre. But *O. membranaceous* fetches a lower price due to its smaller size, seasonal occurrence and less demand.