

# Occurrence of *Octopus vulgaris* Cuvier, 1797 at Mumbai, Maharashtra

Sujit Sundaram and J. D. Sarang

Research Centre of CMFRI, Mumbai

Octopuses popularly called as 'devilfish' are caught mainly as bycatch in the bottom trawl. Due to the growing demand for octopus in the international market, octopus fishery is catching up in Maharashtra. The main fish landing centres for octopus in Mumbai are New Ferry Wharf and Sassoon Dock. Octopuses contribute 3.6% towards the total cephalopod catch in Mumbai. Ommen (1971, 1977) identified many new species of octopus along the west coast of India. Thirty eight commercial species have been reported from the Indian seas but a directed fishery for octopus is lacking. *Cistopus indicus* dominates the octopus fishery in Mumbai waters. The other species of octopus recorded from Mumbai waters are *Octopus membranaceus*, *O. defilippi* and *O. dollfusi*.

*Octopus vulgaris* Cuvier, 1797 (Fig. 1) known as 'common octopus' is a benthic, neritic species occurring from the coastline to the outer edge of the continental shelf and is found in a variety of habitats, such as rocks, coral reefs and grass beds. Though this species is commonly observed throughout its distribution range, there is not much studies on this species from Indian waters. The species is observed in rocky crevices all along the Mumbai coast especially in areas such as 'Madh' and Arnala. The species is caught by dolnetters operating at a depth of 14-16 m. The octopus caught in dolnets are generally alive and can be used as an excellent species in the aquarium industry. The species is observed in the fishery almost throughout the year with peak period of abundance during January-April.

The species has worldwide distribution in temperate and tropical waters. The body of *O. Vulgaris* is bulky; arms broad, moderately long and very robust at bases. The third left arm of males is shorter as compared to females of the corresponding size. The species has a striking similarity with *Octopus lobensis* and *Cistopus indicus* but for its stout body and comparatively shorter arm lengths and the arrangement of suckers on the arms. According to Roper *et al.* (1984), the maximum total length of the species is 1.3 m. However, the maximum total length recorded for the species occurring at Mumbai is 40 cm.

Ten specimens of *O. vulgaris* were analysed for biological aspects. The food items were in well crushed and macerated condition and, therefore it was possible to categorise into groups only. Majority had 'trace' or 'empty' guts. The species seems to mainly feed on 'fish' (40%) followed by 'crustacean remains' (20%) and 40% was digested matter (probably 'bivalve' and other 'gastropod remains'). They were all in different stages of maturity.



Fig. 1. *Octopus vulgaris* Cuvier, 1797

Octopus resources are almost totally exported and *O. vulgaris* fetches the maximum price due to its bigger size and better quality of flesh, but the landings of this species is very less compared to *C. indicus* and other species. The price ranged between R 60-70 per kg at the landing centre.