

Large scale exploitation of Indian squid, *Loligo duvauceli* by jigging from nearshore waters of Ratnagiri, Maharashtra

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Loligo duvauceli locally called as ‘Nal makul’ (Plate 1) contributes 52.8% to the cephalopod landings of Maharashtra. Large scale aggregation of squids was observed in the nearshore waters of Ratnagiri, Maharashtra during October-November 2013 which



Fig. 1. *Loligo duvauceli* caught by jigging

caught the attention of fishermen, who used jigs to exploit them. High catches of squids were observed daily during this period. An unprecedented catch of about 24 t of *L. duvauceli* was landed at Rajiwada landing centre on 15.11.2013 which was sent to local fish processing units.

Jigging locally termed as ‘Garkadi’ is usually carried out at night. Fishermen leave shore at mid night and return with the catch at about 6 am. Big gill netters are temperature converted for squid jigging by the fishermen during this period. About 20 bulbs of 28 V are fixed on the boat including a generator. There are about 20 such functional jigging boats operated in Ratnagiri. Each boat carries 6 crew

members and fishing is carried out at a distance of around 15 - 20 miles south off Ratnagiri at a depth of about 4 - 6 m. About 60 - 80 litres of diesel is required to reach the fishing grounds. Ice slabs are carried for improving the shelf life and keeping quality of the catch.

The jigs are cylindrical in shape and coated with luminescent material, which shines in the dark. Sometimes prawn shaped jigs are also used. The jigs have pointed-recurved hooks, usually 16 to 18 in two rows which are attached in the tail region. Each jig is tied to a nylon rope with length ranging from 6-15 m which is rolled on a wooden frame reel or spindle and no baits are used for jigging. Duration of operation ranged from 5 - 30 minutes and the

catch per day was about 10 - 40 kg.

The characteristic feature of this fishery was the large size of the squids caught. The Dorsal Mantle Length (DML) of the squids caught was 210-350 mm weighing 208 to 609 g. Since the catch was extremely fresh, it fetched high prices ranging from Rs.120-180/kg at the landing centre making it very remunerative.

Squids are known to make seasonal migrations, influenced by breeding activity. The species migrates shoreward and aggregates in shallow waters for spawning. The present observations are indicating migration from deeper waters to the coastal areas.