Heavy landing of needle fish, *Ablennes hians* (Valenciennes, 1846) at Sassoon dock, Maharashtra

Anulekshmi Chellappan, Nilesh Pawar, Dhanasree Bagade and Amey Jaokar Mumbai Research Centre of CMFRI, Mumbai

On 4th October, 2013 there was an unusual landing of needle fish, *Ablennes hians* (Valenciennes, 1846) by multiday purse seiners at Sassoon Dock (Fig.1). Approximately 8 tonnes of needle fish were landed by 16 purse seiners on the day. Such a heavy catch of needle fish is a rare phenomenon at Mumbai where these fish are landed only occasionally. These fishes are reef associated and highly pelagic. By observing the structural morphology of beak like jaws and teeth it appears that they are highly predaceous and feeds on smaller organisms. As per the information, the fishes appeared as a large shoal near the shore and were caught by multiday purse seiners fishing at depths of 10-15 m off Raigad



Fig. 1. Heavy landing of needle fish, *Ablennis hians* at Sassoon Dock, Mumbai

district of Maharashtra. The fishes were sold for ₹80/- per kg and all the catch was bought by traders from Kerala through local venders. The fish is greenish in colour and its flesh and vertebral column appears bluish green even after cooking. Therefore there is no local demand for this fish in Maharashtra.

Random samples were collected from Sassoon dock and brought to the laboratory. The total length and total weight of the fishes were measured and biological studies were carried out. The average weight of fishes was 500-800gm and the length ranged from 600-800mm with the modal length group of 700-730mm. The gonadal examination showed both males and females were in immature stage with a sex ratio of 1:1. It was noticed that in these fishes the gonads were unequal in size; the left lobe was bigger than the right one. Most of the



Fig. 2. Gonad and gut of needle fish

guts were in half filled state consisting of semi digested fish, cephalopods and crustaceans (Fig.2).

Analysis of total catch of needle fishes in Maharashtra showed an increasing trend from 2000 onwards (Fig. 3). The species contributing to the needle fish fishery in Maharashtra are Ablennes hians (44%), Tylosurus acus (28%), Strongylura leiura (11%), S. strongylura (10%) and T.crocodulus (7%). They are usually caught by gill nets, purse seines and trawl nets.

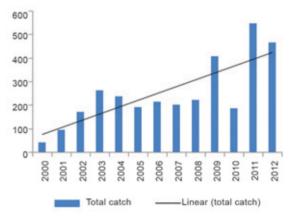


Fig. 3. Trend of needle fish fishery in Maharashtra