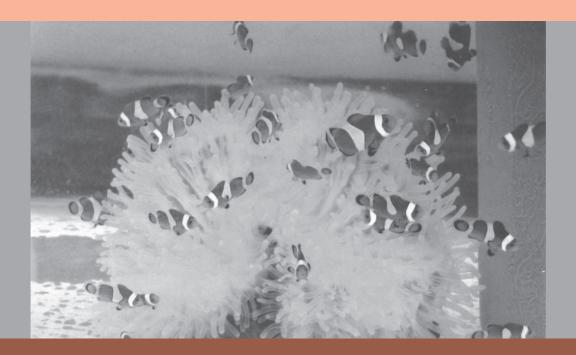


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## CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)

## Increasing trend of *Epinephelus* diacanthus landing by trawlers at Mumbai.

Epinephelus diacanthus, locally known as "hekru" has assumed commercial importance in view of their good quality meat and greater consumer demand in local and export markets both in live as well as frozen forms. Groupers constitute an important component of demersal fishery resource of India and form 2% of total marine landings in India. Due to the diversification of marine seafood export, ribbonfishes, nemipterids, sciaenids and groupers are exported to East Asian countries such as China, Japan Philippines, Taiwan and Korea.

E. diacanthus landings by trawlers are observed throughout the year at Sassoon Dock and New Ferry Wharf landing centers. Month wise analysis for the period 2001-2005 indicates seasonal fluctuations in the landings. The landings are on the increase from the month of October to January with the peak in December. There is also a secondary peak during January to March (Fig 1 & 2). During the above period, it formed 3.2% of the total

annual fish landings with a catch rate of 1.3 kg/hr at Sasoon Dock. At New Ferry Wharf it formed 1.0% with a catch rate of 0.4 kg/hr.

At Sasoon dock, the estimated catch of *E*. diacanthus increased from 558.6 t during 2001 to 1679.7 t in the year 2005 (Fig.3). The percentage of *E. diacanthus* in the total fish catch during this period increased from 3.1 to 13.1%. The catch per unit effort (CPUE) and the catch per hour registered an increasing trend from 126.6 to 508.2 kg/unit and from 2.0 to 6.6 kg/hr respectively. Similar trend was observed at New FerryWharf also, but with a lesser magnitude and the estimated catch increased from 136.3 t in 2001 to 446.5 t in the year 2005. The percentage increase was from 0.9 to 2.2%. The CPUE and the catch registered an increase from 21.3 kg/unit to 78.2 kg/unit and 0.3 kg/hr to 0.8 kg/hr respectively.

Trawlers landing at Sassoon Dock fish at southwest direction off Ratnagiri and Harnai in Maharashtra, whereas trawlers landing at

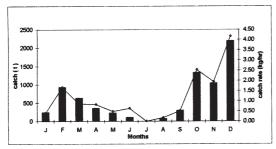


Fig. 1 Landing of *E.diacanthus* at Sasoon dock (2001-05)

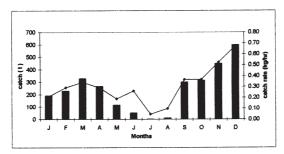


Fig. 2 Landing of *E. diacanthus* at New Ferry Wharf (2001-05)

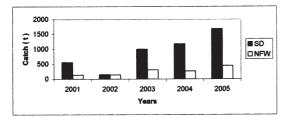


Fig. 3 Landing of *E.diacanthus* during the period October to December

New Ferry Wharf fish at the southern coast of Gujarat. The catch of other perches also showed an increased trend during this period with an increase from 28.0 t in 2001 to 131.5 t in 2005 at Season Dock and from 113.7 to 171.2 t at New Ferry Wharf.

During the period 2001-2005, the size range, dominant modal size group and mean size of *E. diacanthus* were 129.5 mm to 609.5 mm, 200-219 mm and 239.2 mm respectively.

Groupers began to form a sizable portion of the fishery ever since the extension of fishing operations to distant waters by trawlers in search of new fishing areas targeting shrimps and cephalopods. Exploratory survey conducted along the west coast has indicated abundance of groupers beyond 100m.

Prepared by: Paramita Banerjee, B.B. Chavan, Sujit Sundaram and S.D. Kamble, Mumbai Research Centre of CMFRI, Mumbai