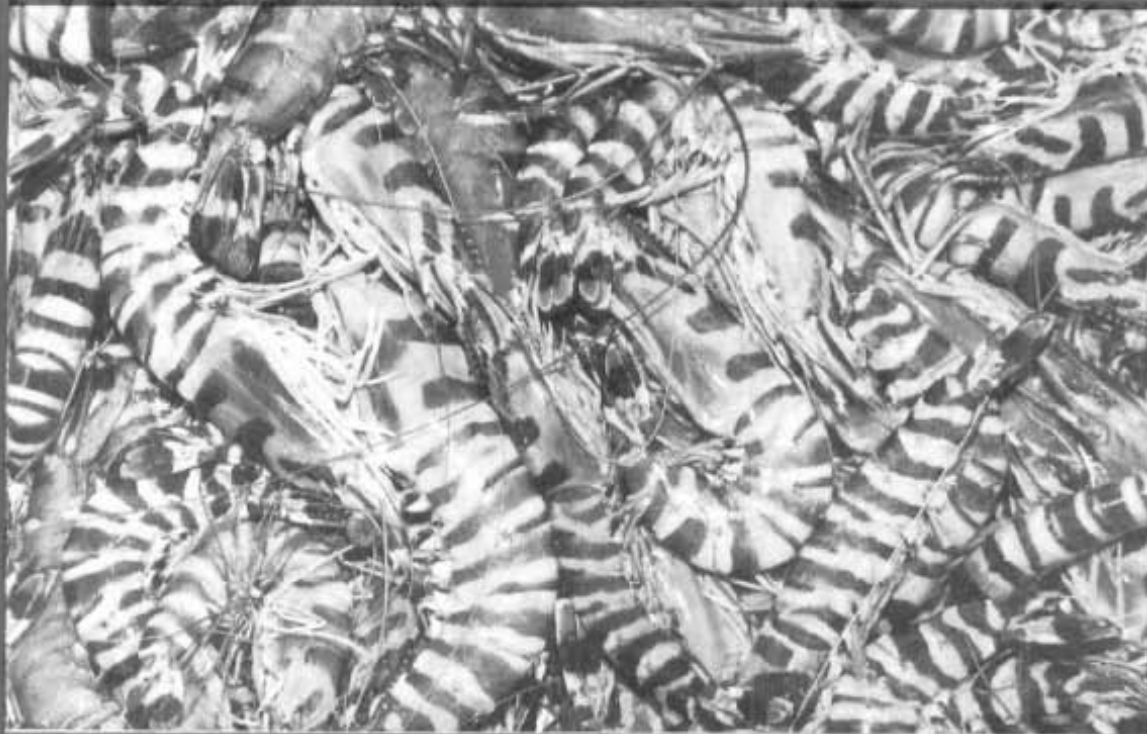




समुद्री मात्स्यकी सूचना सेवा  
**MARINE FISHERIES  
INFORMATION SERVICE**

No. 166 :

October, November, December 2000



तकनीकी एवं TECHNICAL AND  
विस्तार अंकावली EXTENSION SERIES

केन्द्रीय समुद्री मात्स्यकी CENTRAL MARINE FISHERIES  
अनुसंधान संस्थान RESEARCH INSTITUTE  
कोचिन, भारत COCHIN, INDIA

भारतीय कृषि अनुसंधान परिषद  
INDIAN COUNCIL OF AGRICULTURAL RESEARCH

**946 Landing of large-sized "Koth"  
*Otolithoides Blauritus* in bottomset  
gill nets**

Gill net fishing along the southern Gujarat coast is done by OBM units (30-32 FRP boats employing two alternating 8 HP outboard engines). Diu is an important base of operation for these units from October-November, especially after Diwali. Around 20-25 units from Baroli and Daman (southern Gujarat), Satpathi, Valsad and Ummergaon operate from Diu. These operations commence after an initial period of monofilament gill net fishing for pomfrets in the Okha-Dwaraka-Mangrol stretch during October-November (mostly long trips). By December they start operating from Diu as base and employ thick nylon multifilament bottomset gill nets (*Jaada jal*) and small meshed pelagic gill nets (*Chokla jal*).

*Jaada jal* fishing is done mostly off Jaffrabad at a depth of nearly 15-20 m, with 100-125 gill net pieces being employed at a time. The mesh size ranges from 180-240 mm. A regular pattern of fishing is observed in these grounds during the summer months of March, April and May. Usually good catches of pomfrets are observed in early March-April by monofilament gill nets, while bottom set gill nets bring in good catches of large sized sciaenids, catfishes, perches and eels during late March and early April.

*Otolithoides blauritus*, locally called *Koth*, is an important resource along the northwest coast. Earlier reports on the trawl catches off Veraval show a steady fishery for *Koth*, comprising juveniles mostly and adults in very low numbers, while dol nets brought scarce catches comprising juveniles. The maximum abundance of *Koth* in the trawl catches has been reported off Dwaraka in December, January and February. The existence of a special bottomset gill net fishery for larger polynemids and sciaenids during March - May has also been reported. In the present observation, a similar fishery for *Koth* has been found to exist in the same period (March - May) off Jaffrabad and large numbers of

Koth above 1,000 mm have been observed at Diu landing centre in April, 1999.

The numbers landed by each boat varied, with one particular boat landing 42 numbers of fish of total weight 600 kg. The remaining catch was constituted by eels and catfishes. Enquiry and information from earlier surveys reveal that such exceptional sizes of bronze croakers, locally called *Kutiya* are a common feature in the summer catches landed at Diu and is observed in almost every bottomset gillnetter operated during this period. The average length of the sample (76 numbers) was 1,216.19 mm (range: 960 to 1,520 mm) and the average weight was 14.29 kg.

The fish is typically bright-bronze coloured with golden yellow ventrals and bright brick red coloured caudal and anals (Fig. 1). The long air bladder locally called *Potta* is taken out, dried and marketed. The fish meat fetches Rs. 22-25 per kg. All along the coast though trawl catches predominate the demersal fishery, the landings by the OBM from Diu in this regard are noteworthy since such large aggregation of adult-sized fishes caught in gill nets from shallow depths (15-20m) is a rare phenomenon. Information on the sex composition and maturity stages could not be collected since the fishes were brought to the shore after gutting and also removing the air bladders. Such aggregations suggest a biological relation to the grounds and may very well be a gathering for breeding/intensive feeding during onset of maturation since the grounds off Jaffrabad are well known for their excellent resources of small non-penaeids, caridean shrimps and other small fish groups which form the diet of these fishes. Observations made on the fishery off Bedl Port and on the reproductive biology of the species by the earlier workers indicate that such aggregations of adult-sized fishes was unique to the biology of the species and may well be related to spawning migrations. The aggregation of adults of *O. bauritus* in the inshore waters during the pre-monsoon season as observed in the present study thus suggests the preparation for breeding leading to spawning in the monsoon. The observation that the spawning season of *Koth* begins towards middle/late monsoon and extends



Fig. 1. *Otolithoides bauritus*.

well over a period of six months (Bhat, Y.M. *et al.*, 1964, *Indian J. Fish.*, 11 (1)A : 135-156; Kutty, M.Narayanan, 1967, *J.mar.biol.Ass.India*, 9(1) : 197; Jayaprakash, A.A., 1976, *Indian J.Fish.*, 23 (1& 2) : 86-96) is worth mentioning in this context.



Fig. 2. *O. bauritus* with its air bladder displayed.

#### Acknowledgments

The authors are thankful to Shri J.P.Polara, Technical Assistant, Research Centre of CMFRI Veraval for the assistance provided in carrying out field observations. They are also thankful to Shri. Sukar Anjani, Fisheries Officer, Diu and Shri. Virjibhai, owner of a boat operating from Diu for the information provided.

---

Prepared by Shoba Joe Kizhakudan and Joe Kizhakudan, Vverval Research Centre of CMFRI, Veraval-362 269, India.

• • • •