

ISSN 0254-380 X



# **MARINE FISHERIES INFORMATION SERVICE**

No. 183

January, February, March 2005



**TECHNICAL AND EXTENSION SERIES**

**CENTRAL MARINE FISHERIES RESEARCH INSTITUTE**

**COCHIN, INDIA**

**(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)**

## Note on a regular fishery of mysid, *Mesopodopsis orientalis* in Mumbai waters

Seasonal fishery (April – May) of mysids or ‘opossum shrimps’ has been reported earlier from Satpati and Juhu in Mumbai waters employing dugout canoes or boats and a modified net called the ‘*kolim bokshi*’ net. The present account deals with a regular fishery, occurring in the salt pan areas adjacent to mangroves close to Trombay landing centre. Unlike the seasonal fishery for mysids reported earlier this fishery commences in September after the monsoon and continues

till early June, till the commencement of the next monsoon with daily fishing.

The method employed for fishing is also different from earlier reports as no craft is employed here. The gear is operated by a single individual, usually a woman fisher. The hand held gear is a piece of tapering fine cloth or mosquito netting stretched between small wooden poles. The net is approximately 1 m X 1.3 m in length. The use of fine meshed fabrics has given these nets the name ‘saree

jaal' locally. The mesh size is 1 mm or less. The fishers operate the nets at 0.5 to 0.8 m depth at dawn and dusk. Unlike in earlier accounts the fishery is not tide based. The net is held by both the poles and dragged along the water column vertically. The mysids present in the surface layers are scooped and transferred to container periodically. The fishing is conducted irrespective of moon phase and tidal conditions.

The cost of the gear is negligible. Fishing lasts three to four hours with active fishing taking place for approximately two hours. The price of one kg of mysids is Rs 30/- to Rs.50/- with the rates being higher when the landing is lesser.

The fishery of *Mesopodopsis orientalis* is lucrative and regular though labour intensive and conducted by marginal fishers in Trombay area. The catch statistics suggests that the fishery wanes in the premonsoon months of April and May. It is interesting to note that

**Table : Fishery of *Mesopodopsis orientalis* at Trombay (Nov 2003 – May 2004)**

Months	Units	Fishing days	Mysid landings (kg)	CPUE (kg)	Sex ratio	Berried females (%)
Nov. '03	540	30	949	1.76	1:19	46.4
Dec. '03	760	31	1244	1.64	1:1.8	48.4
Jan. '04	752	31	1250	1.66	1:2.4	42.9
Feb. '04	711	29	1207	1.7	1:2.2	46.2
Mar. '04	696	31	1111	1.6	1:2.1	53.5
Apr. '04	190	30	180	0.95	1:1.9	52.1
May. '04	315	30	350	1.11	1:1.8	57.3

Almost the entire catch (98%) consisted of *Mesopodopsis orientalis*. The average size of the mysids ranged from 4-5 mm for males and 5-7 mm for females. Male to female ratio ranged 1:1.8 to 1:2.4. About 46.4 to 57.3% of females were found to be in the berried state. Fishing effort was least in April '04 and highest in December '03. The CPUE ranged between 0.95 to 1.76 kg. (Table)

the seasonal fishery for this species from the open sea is reported during the same period each year. It is possible that these mysids migrate from mangrove areas to deeper waters during this period and enter into the fishery there. There is also an increase in the number of berried females in the population during this period.

Prepared by: **Miriam Paul and C.J. Josekutty**,  
Mumbai Research Centre of CMFRI, Mumbai