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केन्द्रीय समुद्री मात्स्यकी CENTRAL MARINE FISHERIES  
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## A FISHERY FOR FIDLER SHRIMP *METAPENAEOPSIS STRIDULANS* ALCOCK OFF MAHARASHTRA COAST \*

*Metapenaeopsis stridulans* belongs to the tough shelled varieties of shrimps known as 'Dugdu' in Marathi. This species has been known to occur in small numbers during post - monsoon months in 'Dol' net catches. Later it appears regularly in trawl catches at Sassoon Dock during premonsoon months (March - June), contributing to a regular fishery. As the species occurred in every month during the years 1988 and '89 the trend in catch has been studied on its landings along with some biological parameters.

The fishery is mainly by trawl net at Sassoon Dock. The details of catch along with units operated

are given in Table 1.

The landings as seen from the table show an increase from January to June and decrease afterwards. During some months like October and November, 1988, substantial increase in catches was noticed. This fluctuation is to be expected since the entry of this species into the fishery is relatively new. The decline in catches is attributable to the fact that during post - monsoon months, trawlers operate in shallower waters where larger sized penaeids are available in plenty due to their influx during this period. The average catch per boat in both the years was found to reach 27 kg / unit.

The size range in the fishery was 50 - 98 mm though the species has been reported to attain 100 mm. Maturing and mature females were found to be present during March and April, indicating spawning just prior to the monsoon. The size at first maturity was 59 mm for male and 65 mm for female.

The growth study indicated a rate of 5 mm increment per month for both sexes which is comparable to the growth rate of other penaeids like *Solenocera crassicornis*. This growth rate is for adults only as juveniles were not captured by the trawlers.

Another species of *Metapenaeopsis* present as strays was *M. hilarula*. The catches were sold in the local market and also bought by exporters for export. The price/kg amounted to Rs.10. This tough-shelled prawn was not easily spoiled when compared to other species caught along with it like *Salenocera choprai* and *Parapenaeus longipes*.

Judging from the present rate of exploitation, it can be predicted that the fishery is likely to sustain at the present trend for some more years.

TABLE 1. Catch particulars in kg of *M. stridulans* (Units shown in parenthesis) Place : S. Dock, Gear : Trawl

Month	Year 1988	Year 1989
January	8,667 (1,833)	5,507 (2,287)
February	64,987 (1,618)	8,064 (1,680)
March	97,672 (1,605)	45,901 (1,802)
April	77,005 (1,733)	77,661 (1,795)
May	79,046 (1,977)	12,2810 (3,291)
June	63,213 (1,687)	64,802 (1,705)
July	46,989 (2,006)	48,256 (1,590)
August	59,649 (2,586)	33,379 (1,050)
September	21,149 (1,838)	22,924 (1,444)
October	50,037 (1,732)	15,087 (2,152)
November	83,398 (2,565)	6,684 (964)
December	33,934 (2,446)	- -
Total with C. P. U.	6,85,755 (26.77)	4,50,775 (24.09)

\* Reported by : M. Aravindakshan, Bombay Research Centre of CMFRI, Bombay.