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OBSERVATIONS ON THE LANDING OF LANTERN FISH MYCTOPHUM PTEROTUM ALCOCK ALONG MAHARASHTRA COAST*

The lantern fishes are pelagic and are considered to be deep water forms, occurring upto 2000 m depth. Though this species has been known to be abundant in off-shore regions, a fishery for it has not been reported earlier. During October-November months of 1985, one species identified as *Myctophum pterotum* Alcock (Fig. 1) was noticed to have considerable fishery value along the Maharashtra coast. Details of the landings for the period Oct.-Nov., 1985 by bag net ('dol') at a depth of 25 m are given below:

Place	Total No. of units	Total catch (kg)	C.P.U. (kg)
Sassoon Dock	75	53,005	706.7
Versova	374	26,005	69.5
Madh	128	31,590	246.8
Navgaon (Alibag)	126	52,000	412,6

The highest catch and catch/unit were registered at Sassoon Dock during this period. At this centre the fishery was of short duration. This is because of the fact that more trawlers are in operation at Sassoon Dock and fishermen land penaeid prawns of large size owing to the great demand from the exporters to feed their processing plants located at Thane (Bombay). At other centres the fishery was prolonged where more 'dol' nets are in operation and facilities are available for sun drying than at Sassoon Dock.

The length of the fishes ranged between 35 and 45 mm. Normally the species attains a size of 100 mm. The ovaries showed indications of maturing. The stomach contents of 120 specimens analysed showed that Acetes johni Nataraj was the main food item.

Incidently Myctophum pterotum appeared in association with swarms of Acetes johni especially at Versova and Sassoon Dock. This is indicative of its preference to Acetes as food and unusual landings are related to good catches of Acetes at the centres of observation. The only other food item in the stomachs of this fish was fish scales which formed only a very small percentage.



Fig. 1. Close-up view of Myctophum pterotum Alcock showing the luminous organs.

The fishery potential of myctophids has been reported to be considerable, though not in Indian waters. The myctophid Diaphus dumerilii contributed to 15 tonnes in a single haul off Uruguan coast of South America. It is possible that a tappable resource exists in Indian waters also as evidenced by the present report of heavy landings of Myctophum pterotum. Studies conducted in Soviet Union have established that myctophids are suitable for human consumption. It may therefore augment the much needed protein for the fish eating population in future. The catches were sundried for future consumption.

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