
Seasonal fishery of *Acetes* sp. off Veraval

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Acetes sp. are non-penaeid and epipelagic planktonic shrimp (Fig. 1). *Acetes indicus* and *Acetes japonicus* are the two species contributing to the *Acetes* fishery. They are called ‘Paste shrimp’ in English, and locally they are called ‘*Jawala*’ in fresh and ‘*Kolim*’ in dried form, in Marathi and Gujarati. Almost all species are occurring in flocks and exhibit spatio-temporal migration patterns. *Acetes* sp. is caught from 0.5 m to 150 m depth range depending on geographic location. In India they are mainly distributed in the coasts of Gujarat, Maharashtra, West Bengal, Andhra Pradesh, Kerala, and coast of Andaman and Nicobar Islands (Deshmukh, 2002).

A seasonal fishery of *Acetes* sp. exists in Saurashtra coast. In Veraval, fishery of *Acetes* sp. commences by January and end up by April and its peak season is February (Fig. 2). Wooden trawlers with length range of 35 - 45 ft and width range 13 - 16 ft and trawl nets with very small codend mesh size of about 13 - 25 mm are used for fishery. Average daily catch during the fishing season is 350 - 1000 kg/boat. About 90% of the catch constitutes *Acetes* sp. and the remaining 10% is contributed by other species like ribbon-fish, squid, squilla, crocker, small shrimps, octopus, sepia etc. (Fig. 3.) From a field survey it was assessed that the landing of *Acetes* sp. during January to April 2016 was 1932 t. The catch is





Fig. 1. *Acetes* sp.



Fig. 2. Freshly landed *Acetes* sp. off Veraval coast



A



B



C



D

Fig. 3. Landing of *Acetes* sp. in Veraval hoarbour (A,B,C) and dried *Acetes* sp. and other fishes from local fish market (D)

mainly sold to fish meal plants for meager amount and is sold in local market as dried *Acetes* sp. It is also sold to fish plants at ₹ 5-6 per kg.

Acetes sp. is also known to play an important role in the ocean food web. They are being important for transmittance of energy from one trophic level to next higher trophic level. *Acetes* sp. is preferred as food for many commercially important fishes like threadfin bream, catfish, ribbonfish, mackerel, lizard fish, crocker, Bombay duck, bull's eye etc. (Jaiswar and Chakraborty, 2005). Over-exploitation of *Acetes* sp. will lead to insufficiency of preferred food of many fish species and this may contribute to migration of

species in search of food, further causing depletion of the species from that location. Bombay duck is reported to resort to cannibalism in the absence of *Acetes* sp. which forms ideal food affecting the Bombay duck fishery as such by reducing the stock.

References

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