TECHNICAL AND EXTENSION SERIES

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

COCHIN, INDIA

(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)
suspension of any fine sediment associated with the substratum, destruction of clam bed habitat and/or associated fauna in or on the bottom etc. Hence close monitoring of such activities for the exploitation of shell is required for long-term benefit.

Prepared by: Geetha Sasikumar, N. Ramachandran and G. Sampathkumar. Mangalore Research Centre of CMFRI, Mangalore

Processing of jellyfishes (aluvai chori) for value added product was undertaken by a private processing firm at Tharuvaikulam for the first time along Tuticorin coast. Though jelly fish processing and export was reported already from some parts of Tamil Nadu this type of processing is reported for the first time engaging local women.

**Processing technique:**

Processing technique is nothing but displacement of body fluids of the animal by chlorine powder and salt solution in a slow and long process. It involves 6 stages, the first 5 stages are of cleaning the animals and the last stage is packing. The processing should take place within three hours of fishing otherwise the protein contents would be either reduced or destroyed.

Initially the jellyfishes are washed thoroughly in fresh water and then dissected into two halves; upper (umbrella) and the lower (arm with stomach cavity). The umbrella alone is washed and further processed in the first tank and the rest discarded.

**I stage:** The washed and cleaned jellyfishes are placed in the first tank, containing 3 kg/tank of chlorine powder for 3-6 hours soon after they are bought from the landing places.

**II stage:** The jellyfishes are then transferred into the second tank containing 150 kg/tank of sodium chloride (common salt) and kept for 24 hrs. Now the weight of a single jellyfish is reduced to 50% of the body weight.

![Fig. 1 Massaging of jellyfish](image-url)
III stage: Again, the jellyfishes are transferred into the third tank containing 150 kg/tank of sodium chloride for 24 hrs. which further reduces body weight.

IV stage: The jellyfishes are again transferred into the fourth tank containing 150 kg of sodium chloride for 24 hrs. which further reduces the weight.

V stage: The samples are kept on steel tables and massaged after which they are kept one above the other. The fifth stage involves removing of the extra-unwanted thistles and then they are layered one above other in the fifth tank. (Fig. 1). Again, 150 kg of sodium chloride is sprinkled in between each layer and the top of the tank is covered with polythene sheet over which sufficient weight is placed for compressing. In this way, the remaining body fluid will also get squeezed out. Fifth stage continues for 72 hrs.

Depending on the humidity condition, the preservation time may vary accordingly and all these processes and drying take place only in shady place.

Packing stage: The flattened umbrellas are piled in polythene bags one above the other and packed in wooden boxes for export.

The jellyfish fishery and processing were terminated by December, 2005 as the catch rate has come down and also the fishermen diversified their fishing activities. Perhaps this maiden attempt might pave way for other enterprising private entrepreneurs to take up such challenging value added marine products processing right at the fish landing centre itself.

Reported by: M. Manickaraja and T.S. Balasubramanian, Tuticorin Research Centre of CMFRI, Tuticorin

Seasonal exploitation of the sea cucumber

*Stichopus hermanni* (Semper) at Tuticorin

*Stichopus hermanni* earlier known as *S. variegates* is a widely distributed commercial species, popularly called 'pura attai' or 'pavaikya attai' in Tamil. This species, generally with a massive and quadrangular body having a colour which varies from dark yellow to pale yellow with irregular brown patches and fleshy tubercles projecting along the sides (Fig. 1). This is a common inhabitant of sea grass or algal bed with muddy bottom up to a depth of 10-16 m. The occurrence of young ones of this species (100 - 200 mm) in