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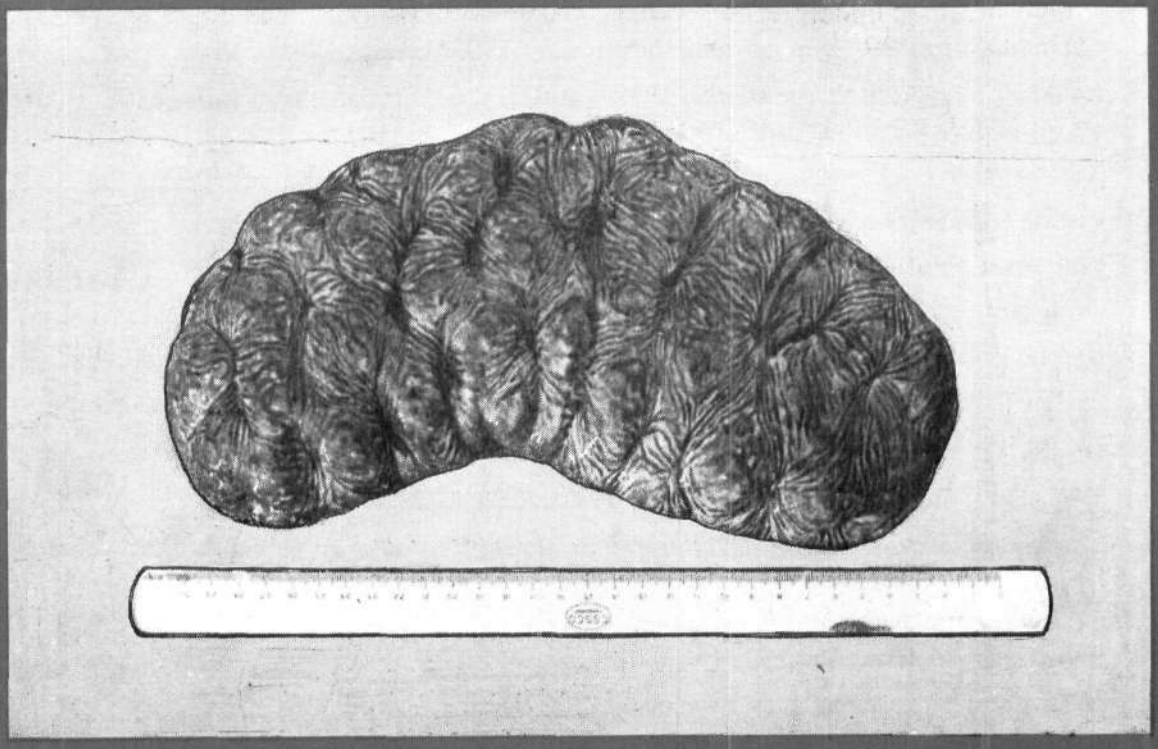

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888 Note on *Mercia opima*, a venerid clam from Medha creek, Gujarat

The Medha river flows through the low lying plain lands of Porbander and Jamnagar districts in Gujarat and opens into the Arabian Sea between Harshad and Miani (Fig. 1) Saline

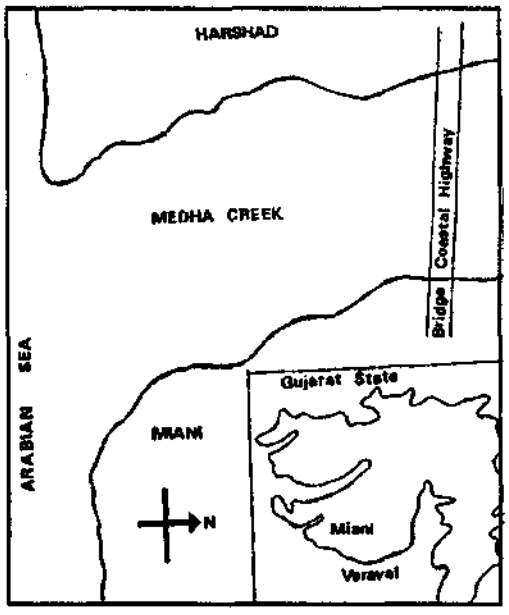

Fig. 1. Sketch map of study area (Medha Creek).

intrusion to the river is restricted to 1 km in Medha Creek by the irrigation project shutters. The saline condition persists throughout the year in the bay area of Medha creek and abundant biomass of edible oysters and clams exist here.

The yellow shelled clam *Mercia opima*, locally known as "Dabla" (Fig. 2 & 3), is found

Fig. 2. A few specimens of *Mercia opima* (venerid clam) cut open to show the soft parts.

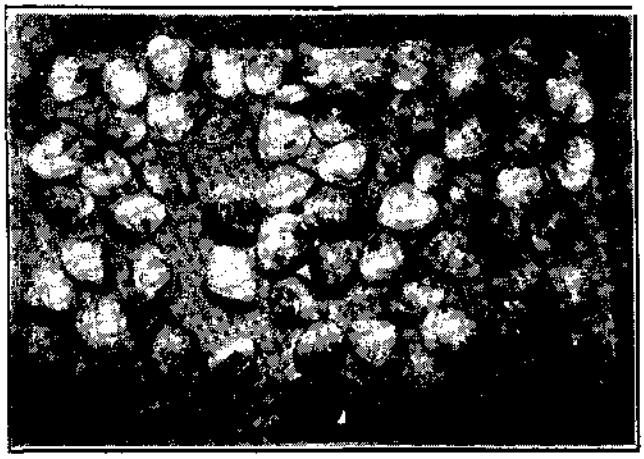

Fig. 3. A collection of venerid clam from Medha creek, Gujarat.

abundantly along the sandy beds of the barmouth of the Medha river between Harshad and Miani. It remains buried almost 5 cm deep in the porous sand and usually occurs in pairs. At present it is not exploited commercially. In view of its abundant distribution in Medha creek, the morphometrics, meat content, quality, proximate composition, transportation, maintenance in the laboratory and ecological parameters were studied.

The length-frequency distribution (APL measurement) of samples collected from the Medha creek during August 1997 showed the dominant size class to be 41-45 APL (Fig. 4).

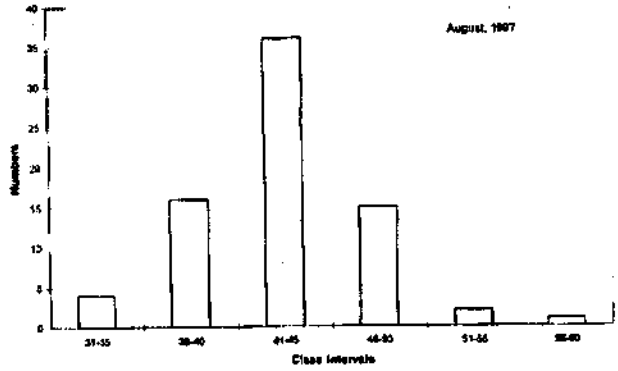

Fig. 4. Length Frequency distribution of *Mercia opima* (Medha Creek).

The antero-posterior length (APL) measurement ranged from 32.7 to 55.5 mm, with a mean of 40.43 mm; the dorso-ventral length (DVL) varied from 21.1 to 44.9 mm with a mean of 34.34 mm, the dominant size group was in the range of 40-45 mm, the thickness varied from 17.7 to 38.4 mm with a mean of 26.197 mm. The shell-on weight (SOW) ranged from 13.09 to 76.684 g, averaging 34.93 g, the raw flesh weight (RFW) varied from 1.33 to 7.54 g, averaging 3.67 g, shell weights from 7.71 to 46.93 g and dry meat weight (DW) 10 % moisture varying from 0.25 to 1.45 g, averaging 0.69 g. The average of percentage of raw flesh weight (RFW) to shell-on weight (SOW) was found to be 10.52 g, dry weight to raw flesh weight 18.24 g and percentage of moisture 77.212 %.

The proximate composition analysis carried out, showed protein content of 12.4218 % (N x 6.25), fat-0.5602 %, ash 2.4795 % and moisture 80.995 %, on total fresh weight basis. The meat is slight creamish to yellowish in colour and the foot orange in colour. Edibility and palatability tests carried out after sufficient depuration indicated that the meat is of good quality and edible.

M. opima, thus grows to a large size of

commercial value is highly nutritious and if popularised among the local population, will serve as a highly nutritious protein supplement. Being low on the food chain, and hitherto unexploited, this species which is easy to handle is a potential candidate for domestication. It can also serve as ideal brood stock diets for shrimp hatcheries. Further studies on aquafarming this species are in progress.

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