

OCCURRENCE OF GENUS *MONOSTROMA* (ULVALES, CHLOROPHYTA)
FROM RATNAGIRI (MAHARASHTRA)

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ABSTRACT

The occurrence of a genus *Monostroma* has been recorded from the Shirgaon creek at Ratnagiri along the central west coast of India. The *Monostroma* sp. was found in the brackish water environment with low salinity, high nutrients and thick mangrove vegetation.

During a marine algal survey of the Maharashtra coast in 1978, the authors came across a green marine algal species, identified to be of the genus *Monostroma*. This was confirmed by Prof. Tatewaki and Prof. Gayral, experts in the field. This alga has not been recorded earlier from the Indian coast and hence, the following account is the first record of the genus *Monostroma*.

Pale green coloured macroscopic thallus attached to rocks with oyster shells and polychaete tubes, has a typical monostromatic blade, soft texture and gelatinous cell wall. Blades with entire margin are irregularly lobed, 20-40 cm in length and 15-30 cm in breadth, bear frill like projections at the edge with small perforations all over thallus. Cell arrangement is irregular, usually polygona, having a diameter of 11-14 μ with single parietal chromatophore.

The alga was found growing profusely in the brackish water areas of Shirgaon creek at Ratnagiri which has regular tidal influence (Fig. 1) and dense mangrove vegetation. The substratum is sandy clay and water is comparatively clean. The salinity of this creek is almost 0‰ during monsoon but gradually reaches 35‰ during premonsoon months. The other associated algal species were *Enteromorpha clathrata*, *Ulva reticulata*, *Padina tetrastromatica*, *Golpomenia sinuosa*, *Galoglossa lepriurii*, *Polysiphonia* sp. and a dense seagrass bed of *Halophila beccarii*.

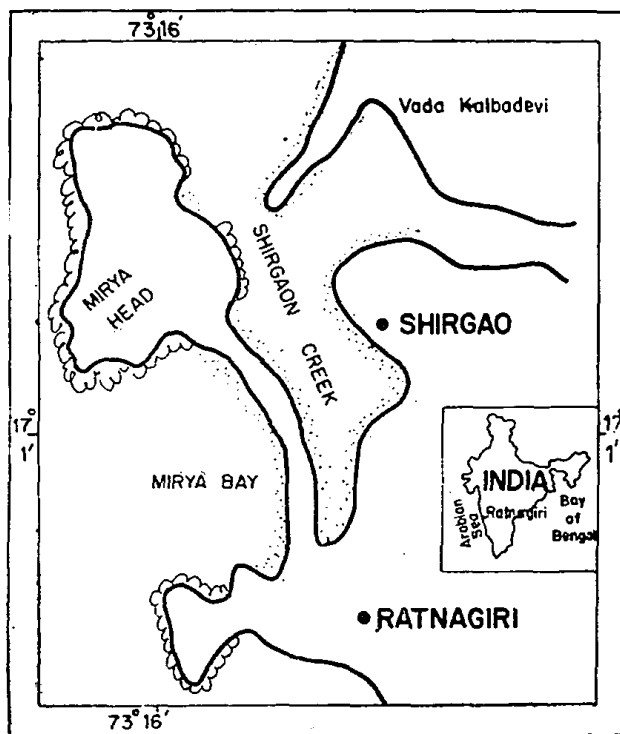


Fig. 1. Map of Ratnagiri (India) coast showing site of algal collection.

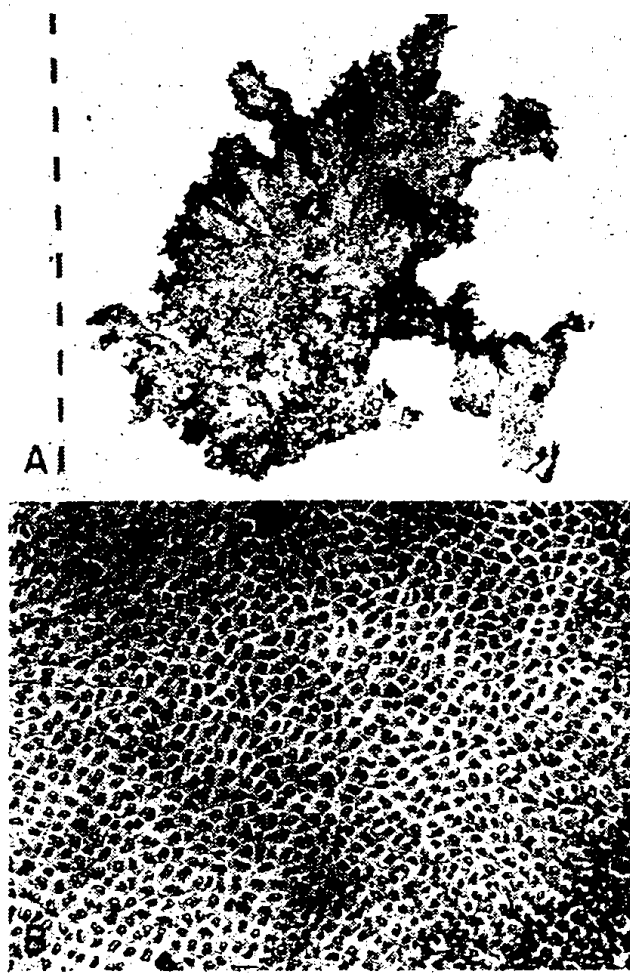


Plate : A Habit of the plant. B-Surface view of the middle part of the thallus ($\times 256$).

No reproductive structure of any type (unicellular cyst etc) could be seen from the collections made from October to March. This may be because of the fact that the thalli growing in the brackish waters generally lack the reproductive structures and the algae remain sterile (Levring, 1940; Krishnamurthy, 1954; Conover, 1958; Simonetti, Giaccone and Pignatti, 1970). Thus, because of the lack of the information on the pattern of development, mode of spore formation and liberation, the exact species could not be indentified. The life history of this genus has been described by Tatewaki (1969) and according to him (personal communication) the present alga resembles *M. latissimum* Wittrock (Sensu Wittrock), while according to Gayral (Personal Communication) it is *M. Oxysperma*.

Further studies on the life-history of this species in culture are in progress.

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* Original Paper not seen.