XXVIII. A NEW SPECIES OF FREDERICELLA FROM INDIAN LAKES.


Fredericella indica, sp. nov.

Zoarium delicate, branching sparsely, recumbent or with upright (or rather dependent), lax branches consisting of two or three zoeceia only.

Zoeceia very slender, distinctly but slightly emarginate at the tip, with a strong furrowed keel running along the dorsal surface from the emargination; the external surface minutely roughened, sometimes with small sand grains adherent to it, practically colourless but imperfectly transparent.

Lophophore bearing about twenty tentacles, which are of moderate length and very slender; the web at their base very narrow.

Alimentary canal elongated and slender, practically colourless.

Statoblast of Fredericella indica (upper surface). x 120.

Statoblast variable in shape and size but as a rule broadly oval, sometimes kidney-shaped, surrounded by a stout chitinious ring and smooth on the surface of the lower valve; the upper valve covered with minute prominences the base of which is somewhat star-shaped and the apex rounded. The prominences sometimes cover the whole surface almost uniformly but are sometimes sparser in the middle than towards the edges.

Habitat.—Western India; under stones in Igatpuri lake, Western Ghats, Bombay Presidency, and on lower surface of leaves of water-plants in Shasthancottah lake, Travancore; at both places taken by myself in November.

The most definite character in which this species differs from F. sultana is the ornamentation of the statoblast, but there also appear to be differences in the structure of the zoeceium and the lophophore. From F. tanganyika, of which the statoblasts are
unknown, it differs in having emarginate zoecia with a well-defined furrowed keel and in not being thickly encrusted with comparatively large sand grains.

At Shasthancottah the zoarium was found entangled with that of a delicate form of *Plumatella fruticosa* which closely resembled it externally. With a little care, however, it was found possible to disentangle the two species. The point is important as tending to explain Jullien's belief that *Fredericella* is merely an abnormal form of *Plumatella*, and in this connection I may state that in Scotland I have found a statoblast of *Plumatella* adhering to and partially embedded in the ectocyst of *Fredericella*.

*Fredericella* has not hitherto been recorded from the Oriental Region, although *F. sultana* is said to occur in Australia as well as in Europe and North America.

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