

## XXXII. NOTES ON FRESHWATER SPONGES.

By N. ANNANDALE, D.Sc., F.A.S.B., Director,  
*Zoological Survey of India.*

### NO. XVII.—A NEW RACE OF *TROCHOSPONGILLA LATOUCHIANA* FROM CHINA.

In my recent account of the freshwater sponges of China I assigned specimens of *Trochospongilla* from Soochow to *T. latouchiana*, mihi, but pointed out that there were differences in the proportions of the gemmule-spicules. Mr. Gee has since sent me a large number of additional specimens, in which the differences are so constant and so marked that I now think they are worthy of nominal distinction.

#### *Trochospongilla latouchiana* subsp. *sinensis*, nov.

1918. *Trochospongilla latouchiana*, Annandale, *Mem. As. Soc. Bengal* IV, p. 203.

The sponge appears to have formed small cushions of a greyish colour on sticks or water-plants, but is imperfect in all the specimens examined. The skeleton is compact and contains a considerable amount of horny material by means of which the spicules in the vertical spicule-fibres are fastened together tightly. These fibres are well defined and vary considerably in thickness. As a rule, however, they are not very thick. They are connected transversely by an irregular network of single spicules and bundles of spicules joined together at the nodes by horny substance. The sponge is frequently so intermixed with that of *Spongilla geei*<sup>1</sup> that it is impossible to separate the two species, and confusion is liable to occur unless the spicules are carefully sorted out.

The skeleton spicules are very like those of *T. latouchiana*<sup>2</sup> (s.s.) but are rather more slender and more subject to the slight irregularities of outline. They vary considerably in size and proportions but are always quite smooth. The gemmule-spicules are minute. As a rule the outer rotule is slightly smaller than the inner one. The former is rather deeply concave and its margin is very slightly sinuous. The upper end of the shaft is conspicuous as seen from above but the surface of the rotule is not sculptured. The different rotules do not overlap on the surface of the gemmule. The shafts of these spicules are relatively slender and at least as long as

<sup>1</sup> Annandale, *op. cit.*, p. 202 (1918).

<sup>2</sup> Annandale, *Faun. Brit. Ind., Freshw. Sponges*, etc., p. 114, fig. 23A.

the diameter of the upper rotule. The gemmules are small, sub-spherical but somewhat produced round the single foraminal aperture.

*Measurements* :—

Diameter of gemmule	..	0·26 × 0·28	mm.
Length of skeleton spicule	..	0·22 - 0·31	„
Diameter of skeleton spicule	..	0·01 - 0·012	„
Length of gemmule-spicule	..	0·012 - 0·015	„
Diameter of lower rotule	..	0·012 - 0·015	„

*Type-specimen*.—No. P  $\frac{95}{1}$  Zool. Survey of India (*Ind. Mus.*) dry.

The race differs from the *forma typica* mainly in the longer shaft of the gemmule-spicules and the greater concavity of their upper rotules.