

## XVII NOTES ON FRESHWATER SPONGES.

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### XIII.—SPECIMENS COLLECTED IN THE POONA DISTRICT, BOMBAY PRESIDENCY, BY S. P. AGHARKAR.

The Indian Museum is indebted to Mr. Agharkar for an interesting little collection of sponges from the Bhima River in the Western Ghats (Poona district), among the specimens being the types of a new subspecies.

#### Genus SPONGILLA.

##### 1. *Spongilla (Euspongilla) cinerea*, Carter.

This rare sponge was found encrusting the bed of the Bhima River at Khed in the Poona district on May 1st. The specimens, which retain a bright green colour in spirit, agree in structure with others obtained at Nasik on the western slopes of the Western Ghats and in Naukuchia Tal (alt 4,200 feet) in the W. Himalayas. They differ from a piece of the type with which I have compared them in having smaller, radiate oscula and rather stouter and more distinctly spinous skeleton-spicules. They possess comparatively few gemmules.

##### 2. *Spongilla (Stratospongilla) bombayensis*, Carter.

Specimens were found on the bed of the Bhima River at Khed with those of *S. cinerea*. They contained (in May) few gemmules.

#### Genus CORVOSPONGILLA.

In my volume on the freshwater sponges, etc., in the *Fauna of British India* I have proposed the recognition of a new genus (*Corvospongilla*) to include those species formerly assigned to *Spongilla* which have birotulate flesh-spicules and amphioxous or (more usually) amphistrongylous gemmule-spicules devoid of rotulae.

##### 3. *Corvospongilla burmanica* subsp. *bombayensis*, nov.

Kirkpatrick<sup>1</sup> has described *C. burmanica* with such care that it is unnecessary to characterize the new subspecies here proposed otherwise than by indicating the points in which it differs from the typical form of its species.

<sup>1</sup> *Rec. Ind. Mus.*, ii, p. 97.

1. The sponge is green fresh and nearly black dry.
2. The oscula are almost flush with the external surface and show but slight traces of being elevated above it.
3. The vertical pillars or radiating fibres of the skeleton are rather close together, so that their free extremities are disposed densely on the surface, giving it a more spiny appearance.
4. The skeleton-spicules are slightly stouter.
5. The gemmule-spicules are extremely variable in size; indeed, there is an almost complete gradation between megascleres and microscleres, some of the largest of the latter being nearly smooth.

*Habitat.*—Bed of the Bhima River at Khed, Poona district: with *Spongilla cinerea* and *S. bombayensis*.

In his account of the gemmule of *C. burmanica* Kirkpatrick distinguishes three layers of spicules, an outer shell of skeleton-spicules, an intermediate layer of microscleres, and an inner layer of the latter in close contact with the gemmule. In many of the gemmules I have examined, however, I can only distinguish two distinct layers, an outer cage of skeleton-spicules mixed with amphistrongylous microscleres of very variable size and form, and an inner layer of much more uniform gemmule-spicules embedded like a mosaic in the outer wall of the gemmule.

Both forms of *C. burmanica* differ from *C. loricata*, Weltner, in the structure of the gemmule-spicule, the spines of which are much stouter in the latter; from *C. lapidosa*, Annandale, their much less stony hardness, spherical gemmules, well-defined radiating skeleton-fibres and conspicuous oscula will at once distinguish them.

