

XXI. NOTES ON FRESHWATER  
SPONGES.

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XI.—DESCRIPTION OF A NEW SPECIES OF *Spongilla*  
FROM ORISSA.

Genus SPONGILLA.

Subgenus Euspongilla.

*Spongilla hemephydatia*, sp. nov.

*Sponge* soft, fragile, amorphous, of a dirty yellow colour, with large oscula, which are not conspicuously raised above the surface but open into very wide channels in the substance of the sponge. The oscular collars are fairly well developed, but the subepidermal space is not extensive.

*Skeleton* diffuse, consisting of very fine radiating fibres, which are crossed at wide and irregular intervals by still finer transverse ones; very little chitinous substance present.

*Spicules*.—Skeleton spicules smooth, slender, sharply pointed at both ends, nearly straight. No true flesh spicules. Gemmule spicules straight or nearly so, cylindrical, obscurely pointed, clothed with short, sharp, straight spines, which are very numerous, but not markedly longer, at the two ends; these spicules frequently found free in the parenchyma.

*Gemmules* numerous, small, free, spherical, yellow, with a well-developed granular coat (in which the spicules are arranged almost horizontally) and external to it a fine membrane, which in preserved specimens becomes puckered owing to unequal contraction; each gemmule with a single aperture, provided with a straight, rather wide but very delicate foraminal tubule.

*Measurements of spicules and gemmules.*

Length of skeleton spicule	..	0.313 mm.
Breadth        "       "	..	0.012 "
Length of gemmule spicule	..	0.062 "
Breadth        "       "	..	0.004 "
Diameter of gemmule ..	..	0.313—0.365 mm.

This sponge in its general structure bears a very close resemblance to *Ephydatia crateriformis*.

*Habitat*.—Growing on weeds at the edge of the Sur Lake, Orissa, October, 1908. Only one specimen was taken, together with many examples of *S. lacustris* subsp. *reticulata*, *S. carteri* and *S. crassissima*.