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ON A NEW SPECIES OF *HALAMMOHYDRA* (ACTINULIDA, HYDROZOA)
FROM SAGAR ISLAND, INDIA

While studying the collections of interstitial meiofauna inhabiting the intertidal sands of the Sagar Island located at the mouths of the Gangetic estuarine system, we came across specimens of the aberrant cnidarian, *Halammohydra* Remane, along with other groups of animals. On a detailed examination, it is found that the specimens do not agree with any of the species of the genus hitherto known. Hence, they are described here as a new species under the name *Halammohydra sagarensis*. (Pl. VIII) The first report on the occurrence of *Halammohydra* in Indian waters has earlier been made on the Waltair coast (Rao and Ganapati, 1966).

Description :—All the six adult specimens examined morphologically belonged to the same population and measured 140—210 μ in total length. Body in oval, white and sparsely ciliated. Gastric tube is oval, 100—180 μ long depending on the state of contraction, makes up about $\frac{8}{10}$ of the total body length and 65—80 μ wide. Neck is short and 4—5 μ long. Aboral cone is slightly elliptical, wider than long and about 20 \times 30 μ in size. Aboral adhesive organ is little developed, shallow and cup-shaped, about 6 \times 10 μ in size and occupies only about $\frac{1}{3}$ of the upper part of cone. Two distinct whorls of slender tentacles occur on the aboral cone, numbering 4 + 8. Tentacles do not bulge or taper at their base. The first whorl of tentacles are nearly of the same size and attain about 170—250 μ in length. The second whorl of tentacles are longer and considerably vary in size ; one of these tentacles is

usually longer than the others and attains about 400—560 μ in length. During locomotion, the anterior tentacles are directed forwards, while the posterior ones trail behind. Tentacles extend completely during locomotion, while some annulation often occurs distally when the animal is at rest. Four statocysts of the lithostyle type occur in a whorl alternating with the posterior tentacles and measure about 4 μ in diameter.

The cnidome consists of two types of nematocysts, viz., small oval stenoteles of two size categories and atrichous isorhizas. Macrostenoteles are C. 4.2-5.0 \times 3.4-3.8 μ ; microstenoteles C. 3.2-3.6 \times 2.4-2.8 μ and isorhizas C. 2.2-2.6 \times 2.0-2.4 μ . Sexes are separate. Males and females with one gonad only.

Holotype :—Female specimen 170 μ long, with gonad, collected by the authors on 3 May, 1979. Deposited with the Zoological Survey of India, Calcutta. Regd. No. p 3027/1.

Type locality :—Fine sand 5 cm below surface, intertidal zone, Gangasagar Beach, Sagar Island (Lat. 21° 38' 02" N and Long. 88° 05' 12" E), West Bengal, India.

Remarks :—Among the nine species of the genus *Halammohydra* hitherto known (see Clausen 1977), *H. sagarensis* n. sp. is closely related to *H. chauhani* Rao (1975) in the general organization of body, particularly in the shape of gastric tube, the structure, number

and disposition of aboral tentacles and statocysts. But the new species clearly differs from the latter in the colour and size of body, shape of aboral cone, shape and size of adhesive organ, structure of cnidome and the number of gonads.

Ecology :—The halammohydrids were rarely collected in fine detritus sands 5 cm below surface between the low and half-tide levels of the intertidal zone. The sands are mostly silicious and angular; their texture varied between 80—200 μ in mean diameter. At the time of collection, temperature in the habitat varied between 28°C—30°C, while the salinity of interstitial water ranged between 29 and 30‰. The hydrozoan is active in habits and exhibits weak powers of adhesion. Locomotion is effected in the direction of aboral pole by ciliary gliding. The cnidarian appeared to

feed on fine particles of detritus and other micrometazoans of sand.

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