SHORT COMMUNICATION

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ON THE OCCURRENCE OF THE GIANT SEA ANEMONE PARACONDYLACTIS SP. FROM DIGHA COAST, WEST BENGAL, WITH A NOTE ON SECONDARY ORAL DISC

During a survey of the intertidal region along the Digha coast, West Bengal, an abnormal specimen of a giant-sized sea anemone with two oral discs was collected on 13th February, 1978 from sandy mid-littoral zone of the beach at low tide period. The specimen identified as *Paracondylactis* sp. was kept alive in the laboratory of the Zoological Survey of India, Calcutta, and was maintained in a closed-system marine aquarium for further observations.

On examination the oral end showed the presence of two oral discs. The original disc was large and circular and had five whorls of long tentacles. The secondary disc was ovate covering one side of the oral end of the animal and was situated just below the outer whorl of largest tentacles of the original oral disc. The tentacles of the secondary disc which lie just below the pseudospherules of the original disc were much shorter and smaller in comparison with the rest of the tentacles. The movements and functions of both the oral discs and their tentacles have been observed to be independent of each other as shown in Plate VIII, figs. 1, 2 & 3.

In fig. 1, it can be observed that the animal when left undisturbed, kept its tentacles of both the discs well expanded. Fig. 2 shows the reaction of the secondary disc of the animal on stimulation with a piece of black paper (cut in the shape of an arrow) by converging its tentacles towards the mouth. Fig. 3 shows the converged tentacles of the secondary disc and the tentacles and mouth of the original disc that remained unchanged on stimulation given to the secondary disc.

Instances of such double oral discs are available in literature (Child, 1903-1908 ; Stephenson, 1928 ; Hyman, 1940 ; MacGinitie and MacGinitie, 1968). A double animal (anemone with two oral discs with independent stalks and a common scaphus) occurs either due to certain disturbances in early development or due to partial longitudinal fission that was left incomplete (Carlgren, 1925). A secondary oral disc develops in an anemone when a deep puncture occurs on the suboral region at the oral end (Stephenson, 1928). Hymen (1940) also observed that a superficial cut made on the column of an animal heals but when cut involves the actinopharynx also, then a crown of tentacles or a oral disc with tentacle may develop.

Specimen is provided with 12 pairs of

large, perfect mesenteries and 12 pairs of small, imperfect ones. The secondary disc with only 12 pairs of small mesenteries and with a short pharynx which opens into the original actinopharynx. The coelenteric cavity is common for both the discs. There is no record on the function of the secondary disc as to whether it acts either independently or in unison with the original disc. The anatomical evidence collected during the present study shows that the secondary disc acts independently because of the presence of separate actinopharynx of its own.

The present account is the first instance of the natural occurrence of secondary oral disc recorded for *Paracondylactis* sp. and also the first description of independent function of the secondary oral disc.

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Figs. 1-3. 1. *Paracondylactis* sp. With a secondary oral disc, undisturbed.
2. Secondary disc of *paracondylactis* sp., stimulated.
3. Original disc of *paracondylactis* sp. remains unchanged.