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COSSURA DELTA REISH (POLYCHAETA) FROM THE VELLAR ESTUARY

In the course of a series of dredgings that were made in the Vellar estuary to study the bottom fauna, a Cirratulid, *Cossura delta* Reish (1958) was obtained in two localities which may be referred to as Stations C and D (Jacob and Rangarajan, 1959). The genus *Cossura* comprising four species *Cossura longocirrata* Web. & Ben. (1887), *C. Candida* Hartman (1955), *C. pygodactyla* Jones (1956) and *C. delta* Reish (1958) occurs mostly in America. *C. longocirrata* alone has been reported from Denmark (Eliason, 1920 and Thulin, 1921) and North Atlantic (Wesenbergtund, 1950). Now *C. delta* Reish is reported for the first time in Indian waters,

Family: CIRRATULIDAE

Genus: *Cossura* Webster & Benedict;

Cossura delta Reish;

The body is cylindrical and rolls up into coils posteriorly. The length varies from 15 mm. to 20 mm. and the diameter from 0.5 mm. to 0.6 mm. There are about 100 segments and the intersegmental lines are very faint in the anterior end; in life the animal is pale red in colour. The prostomium is conical in shape and devoid of tentacles and palps. It is slightly longer than width; Eyes are absent; In some of the specimens the prostomium is everted and showed 15-20 digitate subequal lobes. The peristomium lacks setae. The first setigerous segment follows the peristomium. A very long slender annulated median tentacle arises dorsally between the second and third setigerous segments in well narcotised specimens preserved in alcohol. In worms picked up from the seiving and preserved immediately in 4% formalin the dorsal tentacle is seen to arise from the posterior end of the second setigerous segment. The length of the tentacle varies from one-half to two-thirds of the length of the body.

Dorsal cirri, ventral cirri and gills are totally absent, Setae are simple curved capillaries and occur in two bundles which issue directly from the body wall without any parapodial lobes. The first setigerous segment is uniramous and the rest are biramous in the anterior end. The bundles of dorsal and ventral setae are close to each other forming as nearly a continuous series as in *C. Candida* (Hartman, 1955). They also show a biserial arrangement as in *C. Candida* with a row of long capillaries followed by another row of short capillaries. From the second to twenty-fifth segment there are usually 6 to 8 pairs of capillaries in the dorsal and ventral bundles. After the twenty-fifth segment the number of setae diminishes, and beyond the fortieth segment the dorsal bundle has 3 to 5 long straight smooth unbordered

capillaries, whereas ventrally 3 to 4 curved, unbordered capillaries are present. Further posteriorly in the body the segments show a slight increase in the setae. A few of the pre-anal segments are devoid of setae. The curved and straight capillaries are spinous along the outer edge. The body is flattened dorsoventrally upto thirtieth segment, and the segments thereafter are cylindrical and not clearly distinguishable excepting the last few. The anal segment is truncated with two small lateral cirri.

C. delta which has been described by Reish and the specimens from Vellar estuary agree (1) in the presence of a single achaetous segment anteriorly, (2) in having curved limbate setae in the anterior segments and (3) in having the median tentacle arising from the third setigerous segment. The specimens from the Vellar estuary differ from Reish's description in having the first setigerous segment uniramous and also in not having the notopodial and neuropodial regions distinctly separate. Reish (1958) has not described the posterior end of the body, all the specimens collected by him being incomplete specimens. The anal region in the Vellar specimens differs from that in the other three species in having two small lateral cirri.

C. delta occurs in a limited locality in the Vellar estuary at a depth of 6 to 12 feet. The specimens were dredged when the salinity was from 22.64 ‰ to 32.46 ‰ at the bottom. The animals live in slimy mud tubes in clayey silt bottoms.

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