Rec. zool. Surv. India, 87(4) : 265-266, 1990

TEREBELLODIBRANCHIA AGATTIENSIS A NEW GENUS AND SPECIES OF TEREBELLIDAE (POLYCHAETA) FROM LAKSHADWEEP, INDIA

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In course of the taxonomic studies on the Ploychaetes recently collected from Lakshadweep Archipelago, three examples of interesting Polychaetes belonging to the family Terebellidae were encountered. The specimens differ from all the known genera under the family and hence, they are described here as a new genus *Terebellodibranchia* with *T agattiensis* as the type species. The types are deposited in the National Collection of the Zoological Survey of India, Calcutta.

Family TEREBELLIDAE

Terebellodibranchia n. gen.

Tentacular lobe very short and collar-shaped with numerous long tentacles and few eye-spots. Two paris of branched gills on segments 3 and 7. No lateral lobes on the first few segments. Notosetae start on segment 4 and continue for a variable number of segments. Notosetae have serrated blades. Uncini are avicular start on segment 5 and are set in double rows face to face from segment 10.

Type species : *Terebellodibranchia agattiensis* n. sp.

Material : Holotype - Agatti Island, Lakshadweep; A. Misra; 29.12.1979; Z.S.I. Reg. No. An 1893/I

Paratype - 1 ex.; Kavaratti Island, Lakshadweep; A. Misra; 3.1.1980; Z.S.I. Reg. No. 1894/1 1 ex.; Agatti Island, Lakshadweep; A. Misra; 4.4.1984; Z.S.I. Reg. No. An 1895/1.

Description : The length of the holotype is 66 mm and maximum diameter is 1 mm. The largest of the paratype is 65 mm long and diameter is 1 mm. The tentacular lobe bears numerous tentacles and with few lateral eye-spots. Lateral lobes absent. Two pairs of branched branchiae on segment 3 and 7, anterior pair is smaller than the posterior one (Plate I, Plate II, fig. 1).

Notosetae commence on segment 4 and continue nearly to the posterior ones and all are capillaries with long finely-tipped blades. The distal portion of the blade is smooth, while the proximal part is finely serrated (Plate II, fig. 4 & 5). Uncini start on segment 5 and arranged in single row on the anterior segments, becoming double from segment 10. Uncini avicular and with a series of three denticles above the main fang giving the formula MF : 3 : 6-7. Attachement button not developed. Abdominal uncini are borne on short, square pinnules.

Remarks Initially, when only one specimen was examinned, it was assumed that

the specimen with two pairs of branchiae well separated along the thorax (segment 3 and 7) was a species under *Terebellobranchia* erected by Day (1951), in which the 3rd pair of branchiae had been lost. However, subsequent examination of two other specimens revealed that two pairs of brnchiae is a constant feature of the species. The present genus differs from all the known genera under the family Terebellidae (see Fauchald, 1977) and hence, the species has been described here as a new species under the new genus.

The genus *Terebellodibranchia* comes closer to two other genera, *Terebellodibranchia* Day, 1951 and *Terebella* Linnaeus, 1767. *Terebellodibranchia* agrees with *Terebellobranchia* in that both the genera are with notosetae from segment 4, uncini from segment 5 and the first two pairs of branchiae originate from segments 3 and 7, while, the later differs mainly in having an extra pair of branchiae on segment 13 and thoracic setigers limited to the anterior part of the body. The notosetae of the present species are unique in having smooth distal part and finely serrated proximal part. The genus *Terebella* differs from other two genera in having closely placed branchiae on segments 2 to 4. Three allied genera are compared (Table I).

TABLE I

Comparative accounts of three allied Genera

	Characters	Genera *Terebellodibranchia*	*Terebellobranchia*	*Terebella*
1	Tentacular lobe shaped	Short and collar indistinct	Short and collar-shaped	Short and collar-shaped
2.	Eye spot	Few	Nil	Many
3.	Branchiae	Two pairs on segment 3 & 7	Three pairs on segment 3,7 & 13	Two or three pairs on segment 2-4
4.	Notosetae	Start on segment 4 and total 35 or more	Start on segment 4 and total 19 or more	Start on segment 4 and continue for a variable number of segments.

Habitat : All the specimens were found to be living within coral crevices in the lagoon floor (2-4 meter depth) collected by dredging.

ACKNOWLEDGEMENTS

The authors are indebted to the Director, Zoological Survey of India, Calcutta for providing necessary facilities to carry out this work.

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