

NOTES ON SOME ECHIURA FROM THE EAST COAST OF INDIA

From the east coast of India, so far, eight species of Echiura were described. The present note reports the occurrence of four species of Echiura : *Thalassema diaphanes* Sluiter, 1889, *Anelassorhynchus branchiorhynchus* (Annandale and Kemp, 1915), *A. dendrorhynchus* (Annandale and Kemp, 1915) and *A. sabinus* (Lanchester, 1905). Out of them, *T. diaphanes* and *A. sabinus* are hitherto not known from the east coast. *A. dendrorhynchus* is recorded for the first time outside the type locality, while *A. branchiorhynchus* originally based on a single specimen was collected in abundance at present locality.

Order ECHIUROINEA BOCK
Family ECHIURIDAE de Blainville
Subfamily THALASSEMATINAE MONRO

***Thalassema diaphanes* Sluiter**

Material : 1 ex. off Porto Novo, Tamilnadu, 12. iii. 1975, Coll. B. Srikrishnadhas (C. A. S. in Marine Biology).

Remarks : The length of the proboscis is about a half than that of the trunk ; its distal extremity is broader than the middle part and truncated and its proximal extremities join to form a very short tube.

The trunk measured 10 mm in length. The skin papillae are more or less of same size and uniformly distributed over the body without any localised concentrations. Longitudinal muscle layer of the body wall is continuous. One pair of short nephridia

occur, the nephrostomal lips of which are not spirally coiled as in *Anelassorhynchus*. Anal vesicles are short and transparent.

Besides the proboscis—trunk relation, other characters justify the specific status.

Distribution : West coast of Africa, South Africa, Cape Province, Maldive and Laccadive Islands, Andaman Islands, Bay of Batavia (Type Locality) and New Britain.

***Anelassorhynchus branchiorhynchus*
(Annandale and Kemp)**

Material : 12 ex. Champatala, Sagar Island, 28. x. 1966, Coll. S. S. Saha ; 17 ex. Vanga Tushkhali, Sundarban, 15. iii. 1975, Coll. A. Mishra.

Habitat : Specimens were collected from hard black humus soil and fine muddy sand behind sandy bed. On lifting from the substratum waves of contraction were observed passing from anterior to posterior end of the body. Their burrows are U shaped but both the arms of U are very narrow as opposed to *Urechis caupo* Fisher and MacGinitie. Here, the burrow is shared with a gobiid fish, a polychaete of the family Polynoidae and an isopod.

Remarks : The largest specimen measured about 130 mm in length including 45 mm proboscis and 43 mm in maximum width of the trunk, while smallest one attained 55 mm in length including 17 mm proboscis. The pro-

boscis is more or less truncate and the dendritic outgrowths are more developed than reported by earlier workers. Dorsal surface of the proboscis is practically smooth as opposed to the reported tuberculate appearance (Annandale and Kemp, 1915) but the conspicuous longitudinal ridge is present on the ventral surface of the proximal part of the proboscis. The hooks are dark brown, tipped with golden yellow and vice versa.

Distribution : India : Chingrihata, outskirts of Calcutta (Type locality), Chandipore and Port Okha.

Anelassorhynchus dendrorhynchus
(Annandale and Kemp)

Material : 1 ex. Pamban near Rameswaram, Tamilnadu, 4. iii. 1975, Coll. *B. P. Haldar* ; 4 ex. (not available in the Z. S. I. collection), Sagar Island, 28. v. 1975, Coll. *A. Das* (University of Calcutta).

Habitat : Occurrence of this species was not as abundant as *A. branchiorhynchus*, but collected from the same type of bed. Commensals of its burrow were not observed.

Remarks : The largest specimen measured 70 mm in length excluding 9 mm proboscis, while the smallest one attained 28 mm excluding 5 mm proboscis. The proboscis-trunk relation ranges from 1/6 to 1/8. The proboscis has dendritic outgrowths but the longitudinal ridge on the ventral surface as seen in *A. branchiorhynchus* is absent. Two circles of large conical papillae occur at the posterior region of the body—one around the anus and the other in the preanal region. The circum-anal region is devoid of concentric folds

as stated by Annandale and Kemp, 1915. Anal trees reach about half the length of the trunk.

Distribution : The present record shows that this species has a wide range of distribution on the east coast on either side of the type locality, Chilka Lake, Orissa.

Anelassorhynchus sabinus (Lanchester)

Material : 1 ex. Pamban near Rameswaram, Tamilnadu, 1. iii. 1975, Coll. *B. P. Haldar* ; 1 ex. off Porto Novo, Tamilnadu, 12. iii. 1975, Coll. *B. Srikrishnadhas* (C. A. S. in Marine Biology).

Remarks : Out of the two specimens, one proved to be an immature form as the gonoducts are devoid of sex cells. The length of the trunk ranges from 7.5 mm to 19 mm, while proboscis forms 1/4 to 1/6 of the trunk length, respectively. The proboscis shows the beginning of the formation of gill like outgrowths. The trunk is covered uniformly with large and small papillae. Muscle layer is continuous. Spirally coiled filaments of nephridia extend out of the nephrostomal lips. Short anal vesicles, a small caecum and a pair of ventral hooks close to the proboscis are present.

Distribution : Japan, Korea, Indonesia (Type Locality), Thailand and Pirotan Island (India).

REFERENCE

- ANNANDALE, N. AND KEMP, S. 1915. Fauna of the Chilka Lake. The Echiuroidea of the lake and the Gangetic Delta. *Mem. Indian Mus.*, 5 : 55 - 63.