Rec. zool. Surv. India : **97** (Part-1) : 43-47, 1999

OBSERVATIONS ON A COLLECTION OF POLYCHAETES FROM GODAVARI ESTUARY, ANDHRA PRADESH

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INTRODUCTION

Studies on the ecology and fauna of the estuaries has been the important area of research as estuaries are recognised as nursery grounds for a variety of invertebrate animals as well as fishes. The estuarine fauna assumes significance due to the dynamic nature of estuarine environment with a wide variety of habitats viz. mud-flats, swamps and mangrove infested river banks/creeks etc. at the river mouths. Estuarine sediments made of mixture of sand/silt and clay harbour wide variety of benthic organisms of which polycheata constitutes the major group. Faunal studies on the estuarine environment of Indian coasts resulted in the report of several new and hitherto un-recorded species, (1-10). Godavari estuary was taken up for detailed studies for its fauna and ecology during 1993-95 and a large number of polychaetes were collected from estuarine areas of the three branches of Godavari river near Kakinada, Narsapur and Amalapuram. Though more than 30 species of polychaetes were collected during this study, present report deals with the occurrence of some uncommon and rarely reported species.

Family PILARGIDAE

Telehsapia annandalei Fauvel, 1932

Very long, narrow and rounded worms in brick-red colour; everted Proboscis with four cirri on either side. Prostomium without antennae, Palps, tentacles or eyes. Parapodia uniramous with a ventral setigerous lobe. Dorsal ramus reduced with only a small aciculum. Capillary setae only.

Habitat Six specimens from the sand-mud sediments near mouth and other estuarine areas of Godavari river at Narsapur.

Remarks : This is the first record of occurence of this species from Godavari Estuary.

Family : PHYLLODOCIDAE

Phyllodoce (Anaitides) tenuissima Grube. 1878

Long and slightly broad worm of 8 cm. dark brown in colour on preservation; Two large eyes; occipital papillae small. Proboscis with 12 longitudinal rows of papillae at the base and a dorsal median row of three brown papillae. Dorsal cirri broad and lanceolate.

Habitat One specimen collected from muddy coast of Godavari river near Narsapur.

Remarks Earlier reported by Radhakrishna & Ganapari (1969) from Kakinada Bay.

Family: NEREIDAE

Dendronereides zululandica Dary 1951

Speciemens of 6-8 cm. in length; Proboscis with soft Papillae; Anterior segments with three notopodial lobes, a dorsal cirrus and a single neuropodial lobe. Between 8-20th segments, branchiae formed by the four pinnate divisions of the superior lobe of the notopodia. Setae spingers and falcigers.

Habitat .. 15 specimens from muddy intertidal areas of Godavari estuary near yanam, Kakinada.

Remarks Earlier reported by Srinivasa Rao & Rama Sarma, (1982), from Narsapur area of this estuary.

Namalycastis fauveli Rao, 1981

Slender worms reaching 4-5 cm. Knob-like paired antennae and four pairs of small tentacular cirri. Feet uniramous; Dorsal cirri small and not much expanded posteriorly. Ventral rami with spinigers and falcigers. One limb of the lower piece of the falciger very long and nearly equal to the length of the upper piece.

Habitat Three specimens from sand/mud sediments from the intertidal coast of Godavari river about 7 Km. away from its mouth, Narsapur.

Remarks This is the first record of occurence from this area.

Tylonereis bogoyawlenskyi Fauvel, 1911

Slightly broad specimens of about 4 cm. in length. Proboscis with soft Paragnaths only. Feet biramous with only spinigers; Dorsal ligule of the notopodia leaf-like; ventral rami with three ligules in the anterior feet and two lobes in the posterior feet.

Habitat 10 specimens from the intertidal muddy areas at Godavari river mouth, Antervedi, Narsapur.

Remarks This is the first record of occurence from this area.

Nereis (Nereis) lamellosa Ehlers 1968

Tentacular cirri short; Proboscis with group-I = 1-3, II = many in two rows, III = several in two rows. IV = a group of 10, V-1, VI = 10-12, VII-VIII = several in three rows. Anterior feet with three notopodial ligules and a short dorsal cirrus. In the posteroor feet the superior lobe of the notopodia expanded and lamellose with short dorsal cirri at its terminal notch;

Spinigers and few falcigers in some feet.

Habitat 30 specimens from intertidal muddy banks and mangrove areas at Godavari river mouth, Narsapur.

Remarks This is the first record of occurence from Indian coast.

Family EUNICIDAE

Arabella irricobr (Montagu, 1804)

Round and long specimens of about 15 cms. and white in colour on preservation. Eyes not very clear. Prostomium blunt and oval. Dorsal cirri and branchiae absent. Only capillary setae; Parapodial lobes short and slightly elongated.

Habitat 10 examples from sand-mud intertidal areas at Godavari river mouth, Antervedi, Narsapur.

Remarks This is the first record of occurence from this area.

Marphysa sanguinea (Montagu, 1815)

Broad and very long specimen of more than 30 cm. Prostomoum rounded with bulbous plaps and five tentacles; Gills begin from 15-16th segment, branched and present upto the posterior end of the body. Dorsal setae capillary, ventral setae compound and knife-like. Acicular setae and comb setae present.

Habitat :One example burrowing in the muddy/sandy sediments at Godavari river mouth, Vodalarevu, Amalapuram.

Remarks This is the first report of occurence from this area.

Family GLYCERIDAE

Glycera rouxii Audouin & M. Edwards. 1833

Narrow and cylindrical worms of 6-8 cm. Prostomium Pointed. Parapodia with two lobes in each rami. Posterior lobes un-equal. Branchiae simple and retractile into the anterior side of the foot.

Habitat 13 examples from Godavari river mouth near Yanam, Kakinada.

Remarks This is the first report of occurence from this area.

Family : ORBINIDAE

Scholoplos marsupialis Southern, 1921

Slightly Broad worms of 5-6 cm. in length. Body divided into a flat thorax of 16-17 segments and a long cylindrical abdomen. Proboscis sac-like with several lobes. Lanceolate

gills from 15-16th segment and continue till the Posterior end; Dorsal serrated capillaries, ventral capillary setae and hooks. A membranous pocket-like structure in between each foot from 17th segment.

Habitat 74 examples from sandy-muddy intertidal coasts of Godavari river mouth at Antervedi, Narsapur.

Remarks This is the first record of occurence from Andhra Pradesh coast.

DISCUSSION

Among the ten species reported here *N (N) lamellosa*, and *D. zululandica* are considered to be endemic to African coasts. However *D. zululandica* has been reported once from Indian waters, Godavari Estuary, (Rao & Rama Sarma, 1982) while *N (N) lamellosa* is another new record to our coastal waters. *T annadalei* once reported as a rare species in our estuarine waters (Soota & Rao, 1977) was repoted later from the estuaries of Ganges, Mahanadi and Chilka Lagoon. The present report of this species shows that its distribution might extend to other estuarine areas of this coast. *N. fauveli* and *S. marsupialis* are not commonly encountered species in our estuarine waters and hitherto reported from Mahanadi estuary, Chilka lagoon and vellar estuary only. Along with the above two species, the other viz. *P (A) tenuissima*, *T bogoyawlenskyi, G. rouxii; M. sanguinea* and *A. irricolor* are reported for the first time from this locality, thus adding new records to this area.

SUMMARY

More than 30 species of polychaetes found to occur in the Godavari estuarine areas during this study. This paper reports the occurence of ten species of which one is a new reocrd to our coastal waters, while the remaining are new reports from this area.

ACKNOWLEDGEMENTS

The auther is thankful to the Director, Zoological Survey of India, Calcutta for providing facilities and encouragement.

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