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Short Communication

FIRST RECORD OF TWO SPECIES OF SEA ANEMONES *EDWARDSIA JONESII* AND *PARACONDYLACTIS INDICUS* FROM KARNATAKA, INDIA

INTRODUCTION

Actinarians, popularly called as 'Sea-Anemones', belongs to the phylum Cnidaria form an important group of intertidal invertebrate distinguished by their habit, habitat and beautiful colouration. The sea anemones are least studied organisms in India. However Annandale (1907 & 1915), Carlgren (1925 & 1949), Parulekar (1968 & 1990), Seshaiya and Cuttress (1971), Misra (1975 & 1976) and Bairagi (1998, 2001) worked on this group and a total 40 species of sea anemones belongs to 33 genera and 17 families are so far recorded from India. During the recent faunal survey (February-March, 2009) of coastal districts of Karnataka the authors encountered with some specimens of this group. They were identified as *Edwardsia jonesii* Seshaiya & Cuttress, 1969 and *Paracondylactis indicus* Dave, 1957. Both the species are reported for the first time from the state of Karnataka. One species *Edwardsia jonesii* Seshaiya & Cuttress, 1971 is first time reported from the west coast of India. A short description, habitat-choice and distribution of the two species are provided in this short communication.

MATERIALS AND METHODS

As both the species are burrowing, the collection was done by inserting spade into the muddy or sandy substrata without disturbing the animals and lever up to the mud along with the Anemone. Specimens were picked up carefully and brought to the camp laboratory in sea water. Giant anemone *Paracondylactis indicus* Dave, was collected by digging the sand 20-25 cm around the specimens up to depth of about 70-120 cm depending on the size of the anemone. The animals were detached from the substratum by lifting the basal disc manually and narcotized with 1% formalin for the

period of 6-8 hours. The narcotized anemones with fully expanded condition were preserved in 10% formalin for further studies.

SYSTEMATIC ACCOUNTS

Phylum CNIDARIA

Class ANTHOZOA

Subclass HEXACORALLIA

Order ACTINIARIA

Family EDWARDSIIDAE

1. *Edwardsia jonesii* Seshaiya & Cuttress, 1969
(Plate-IB)

1971. *Edwardsia jonesii* Sheshaiya & Cuttress, 1969. *J. Mar. Biol. Ass. India*, **11**(1&2) : 73, Figs. 1, 2.

1998. *Edwardsia jonesi*, Bairagi, Cnidaria: Sea anemone. *Fauna of West Bengal, state fauna series*, **3**(Part-11) : 33.

2001. *Edwardsia jonesi*, Bairagi, Cnidaria : Sea anemone. *Fauna of Godavari Estuary, Estuarine ecosystem series*, **4** : 12.

Material examined : 2 exs, India, Karnataka, Uttar Kanada district, Sunkerri (Middle reaches of Kali river estuary), 16.iii.2009, Coll. M.K. Deb Roy and party, Reg. No. P3522/1.

Diagnosis : Tentacles 12, smooth and arranged in two cycles of six each. Body distinctly divided into capitulum, scapulus, scapus and inflatable physa without cuticle. Capitulum thin-walled, almost transparent, smooth and without cuticle. Scapus thick-walled, covered with thick shaggy rusty-red cuticle. Actinopharynx with 8 longitudinal ridges, siphonoglyph indistinct.

Habitat : Burrowing forms in soft muddy substratum of Intertidal zonation of Kali river estuary.

PLATE-I

A. *Paracondylactis indicus*

Distribution : India : East coast : Subarnarekha estuary, Chilika (Orissa), South 24 parganas (West Bengal), Andhra Pradesh, Tamilnadu; West coast : Sunkeri (middle reaches of Kali river estuary), Karnataka.

Remarks : *Edwardsia jonesii* Seshaiya & Cuttress, 1969 is fairly distributed in east coast of India. The present observation is the first record of this species from the west coast of India.

B. *Edwardsia jonesii*

Family ACTINIIDAE

2. *Paracondylactis indicus* Dave, 1957
(Plate-IA)

1957. *Paracondylactis indicus* Dave, Study of anthozoa, M.Sc.thesis, Univ. of Bombay (unpublished).
1968. *Paracondylactis indicus* Perulakar, Sea-Anemones of Bombay. *J. Bombay. nat. Hist. Soc.* 65 : 143, pl. II, fig. 10.
1998. *Paracondylactis indica* Bairagi, Cnidaria : Sea anemone. Fauna of West Bengal, state fauna series, 3(Part-11) : 38.

Material examined : 3 exs, India, Karnataka, Uttarakanda district, Murudeswar temple beach, 17.iii.2009, Coll. M.K. Deb Roy and party, Reg. No. P3523/1.

Diagnosis : Reddish orange coloured, column elongated and tapering. Pseudospherules present on columns. Pedal disc flattened and distinct. Tentacles 96, arranged in 5 cycles. Colour of the tentacles and oral disc are white to colourless.

Habitat : In the sandy beaches of the left side of the Murudeswar temple they are available in the middle to lower littoral zone. This anemone can retreat up to a depth of 120 cm.

Distribution : India : East coast : Orissa, West Bengal; West coast : Maharashtra and Karnataka.

Remark : This species is endemic to Indian coast. The present observation is the first record of *Paracondylactis indicus* Dave, 1957 from Karnataka.

SUMMARY

The present communication deals with two species of actinarians from the state of Karnataka. Both the species are recorded for the first time from the area. It

also furnishes the systematic account, habitat and their distribution in Indian region.

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