



## ON THE FIRST RECORD OF *COMATELLA STELLIGERA* (P. H. CARPENTER) (ECHINODERMATA : CRINOIDEA) FROM WEST COAST OF INDIA

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### INTRODUCTION

The Karnataka state on west coast of India abutting the Arabian Sea has a long and narrow coast with small crescent shaped pocket beaches. It is interspersed with rocky head lands, spectacular spits, estuaries, shallow lagoons, mudflats and a few patches of mangroves. The northern coast is rocky while the southern coast has long sandy beaches.

The studies on echinoderms of Karnataka coast were not comprehensive. Among 649 species of echinoderms in Indian region, only 27 species were recorded from Karnataka (Sastry, 2007). Five species of sea lilies (Crinoidea) were reported from Karnataka out of the 65 species from Indian region (Sastry, 2007). Clark (1912) reported 4 species viz., *Heterometra compta*, *Oligometra serripinna*, *Comastrocrinus ornatus* and *Comastrocrinus springeri* from the off shore waters of Karnataka where as Patil (1953) reported *Lampometra* sp. from Karwar coast of Karnataka.

During the recent faunistic survey (2009-2010) of Karnataka coast, authors observed one crinoid specimen in trash collection from the mechanized boat of Murudeswar beach, which is an off shore collection of this area. Subsequently some more specimens were observed in the water column of the rock pools of the Murudeswar sea beach (Fig.1). A study of the specimens revealed the identity as *Comatella stelligera* (P.H.Carpenter), This species was recorded earlier from Tamilnadu (James, 1988) and Andaman island (Sastry, 2005)

of Indian coast. But so far there was no record of this species from the west coast of India. This species is recorded for the first time from Karnataka coast as well as from west coast of India. The diagnosis and distribution of this species are given here in brief.

### SYSTEMATIC ACCOUNTS

Phylum ECHINODERMATA

Class CRINOIDEA

Order COMATULIDA

Family COMASTERIDAE

*Comatella stelligera* (P.H. Carpenter, 1880).

Figs -1, 2

1880. *Actinometra stelligera* P.H. Carpenter, *J.Linn. soc., (Zool)*, 15:198.

1931. *Comatella stelligera* : Clark, A.H. *Bull., U.S. Natn. Mus. No.*, 82, vol-1(Part3):98.

1971. *Comatella stelligera*: Clark, A.H. and Rowe, F.W.E. *Monograph of shallow water indo-west pacific echinoderms*, 6-7 (distribution) and 15 (key).

2005. *Comatella stelligera*: Sastry, D.R.K. *Rec. zool. Surv. India, Occ. Paper No.*, 233:7

*Materials* : One example; India, Karnataka, Uttar Kanada dist, Murudeswar off shore; 17.iii.2009, coll: M. K. Dev Roy and party; Reg. No. E2022/1; One example; India, Karnataka, Uttar Kanada dist, rock pool at Murudeswar sea beach; 20.iii.2010, coll: J. G. Pattanayak and S. Mitra; Reg. No. E2023/1.

*Diagnosis* : Cirri well developed the distal segments with dorsal tubercles or spines. Arms 30 in number, 22 sirrus segments. III Brachial series

usually present only on the external side of each II Brachial series. All the division series present are of only two ossicles and without a syzygy. II Br series with two III Br series, or III Br only on the outer side. First brachial syzygy at 3+4.

*Distribution* : India: Murudeswar (Karnataka); Gulf of Mannar (Tamilnadu); North and South Andaman.

*Elsewhere* : East Indies, Australia, China, S. Japan, South pacific Is., Philipine Is. (Clark & Rowe, 1971)

*Remarks* : This species was collected from the Murudeswar temple beach in the trash from a mechanized boat and after the discussions with local fishermen, confirmed that this specimen was collected from the off shore area (2-4 km. from the shore) and from a rocky substratum as well as this species established its occurrence in the rock pools of intertidal sandy beach.

## SUMMARY

The present communication deals with a crinoid species *Comatella stelligera* (P.H. Carpenter) from the coast of Karnataka. This is the first recorded of the species from Karnataka as well as from the West Coast of India extending the distribution westward into the Arabian Sea.

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**Fig. 1 :** *Comatella stelligera* on Murudeswar seabeach



**Fig. 2 :** *Comatella stelligera* as preserved condition