

## ON TWO NEW RECORDS OF DINOPHYCEAE OF THE INDIAN SEAS

## ABSTRACT

This note deals with the descriptions of two species of dinoflagellates viz., *Ceratocorys gouretili* Paulsen and *Histonels biremis* Stein, observed in the phytoplankton samples collected during the cruises of R. V. *VARUNA* in 1970. These species are found to be new distributional records from the Indian Seas.

APART from a taxonomic list and two monographs (Subrahmanyam, 1958, 1968, 1971) there are no detailed accounts on the Dinophyceae of the Indian Seas. Recently Gopinathan and Pillai (1975) have added 25 species of dinoflagellates to the existing record.

The material was collected using a half metre bolting nylon net (No. 21, mesh size 0.069 mm) from the west coast of India between lat. 09°00'N and long. 76°00'E during 1970. These two species are hitherto unrecorded from the Indian Seas and are of rare occurrence in the Indian Ocean.

## CLASS DINOPHYCEAE

## SUB CLASS DINOKONTAE

## Order Peridiniales

## Family Ceratocoryaceae

Genus *Ceratocorys* Stein***Ceratocorys gouretili* Paulsen (Pl. 1 B)**

*Ceratocorys gouretili* Paulsen, 1931, p. 36; Wood, 1954, p. 314, figs. 244a, b; Sourmia, 1970, p. 690.

*Ceratocorys jourdani* (Gouret) Kofoid and Michener, 1911.

*Phalacroma jourdani* Schutt, 1895. *Phalacroma ceratocorys* Entz. 1902, 1905.

*Ceratocorys horrida* Stein, Murray and Whitting, 1899.

**Occurrence :** R.V. *VARUNA* stn. No. 4419 between lat. 10°00'N and long. 76°08'E, during January 1970.

The morphological features are same as those of the genus *Phalacroma*. Body in side view rounded oval, more or less constricted at sides. Girdle anterior and epitheca very low. In sagittal plane, arises 5 winged spines; 2 ventral, 2 basal and one dorsal. Length (without spines) 95 $\mu$ .

**Distribution :** A warm water form occurring in all oceans, Mediterranean Sea, East Australian Coast, North Sea and Indian Ocean.

Order Dinophysiales

Family Dinophysiaceae

Genus *Histoneis* Stein

***Histoneis biremis* Stein (Pl. 1 A)**

*Histoneis biremis* Stein 1883, pl. 22, fig. 13.

**Occurrence :** R.V. *VARUNA* stn. No. 4423, between lat. 09°54'N and 75°41'E, during January, 1970.

Body short, peacock shaped, girdle dorsally, anterior girdle list funnel like and stalked. Lower girdle list with faint ventral reticulation. Left sulcal list large and more or less tongue shaped. Theca reticulate. Length 88 $\mu$  and width 55 $\mu$ .

This species shows a close resemblance to *Histoneis carinata* Kofoid, in external characters, except the boat shaped body of the latter.

**Distribution :** Eastern tropical Pacific, Mediterranean Sea, North Sea and Indian Ocean.

*Ceratocorys gourretii* and *Histoneis biremis* are quite rare distributional records from the Indian Ocean. However, these two species have been recorded from the Indian Ocean based on the collections of *Anton Bruun* by Taylor (personal communication). But *C. gourretii* had already been recorded by Wood (1954) from the Australian waters.

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PLATE I. A. *Histoneis biremis* Stem in girdle view, and B. *Ceratocorys goureii* Paulsen in sagittal plane showing 5 winged spines.

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