NOTES 845

ON TWO NEW RECORDS OF DINOPHYCEAE OF THE INDIAN SEAS

ABSTRACT

This note deals with the descriptions of two species of dinoflagellates viz., Ceratocorys gourretii Paulson and Histoneis 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 (Subrahmanyan, 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 gourretti Paulsen (Pl. 1 B)

Ceratocorys gourrellii Paulsen, 1931, p. 36; Wood, 1954, p. 314, figs. 244a, b; Sournia, 1970, p. 690.

Ceratocorys jourdani (Gourret) 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) 95μ .

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

13

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 88μ and width 55μ .

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.

The authors are thankful to Dr. R. V. Nair, former Director and Dr. E. G. Silas, Director, C.M.F.R. Institute, for encouragement. Their sincere thanks are also due to Dr. P. V. Ramachandran Nair, for going through the manuscript critically; to Dr. Alain Sournia, National Museum of Natural History, Paris, for the help rendered in connection with the literature; and to Dr. F. G. R. Taylor, University of British Columbia, Canada, for helping in the identification.

Central Marine Fisheries Research Institute, Cochin-682 018. C. P. GOPINATHAN
C. THANKAPPAN PILLAI

REFERENCES

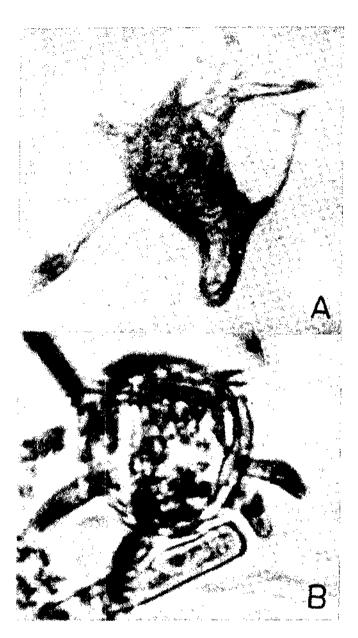
ENTZ, G. 1902. Novên, Kozl., 1: 83.

1905. Math. naturw. Ber. Ung., 20: 96.

GOPINATHAN, C. P. AND C. THANKAPPAN PILLAT 1975. J. mar. biol. Ass. India, 17 (1).

KOFOID, C. A. AND J. R. MICHENER 1911. Bull. Mus. Comp. Zool. Harv., 54: 265.

MURRAY, G. AND F. WHITTING 1899. Trans. Linn. Soc., (Bot.) 5: 321,



PEAD I. A. Histomers biremis Stem in girdle view, and B. Ceranecory's gourreui Paulsen in sagittal plane showing 5 winged spines.

NOTES 847

PAULSEN, O: 1931. Trab. Inst. Esp. Oceanogr., 4: 1-108.

SCHÜTT, F. 1895. Ergeb. Plankton Exped. Humboldt. Stiftung., 4A: 1-170.

SOURNIA, A. 1970. Bull. Mar. Sci., 20 (3): 678-696.

STEIN, F. 1883. Leipzig, 30.

Subrahmanyan, R. 1958. J. Indian Bot. Soc., 37 (4): 435-441.

---- 1968. Mem. Mar. biol. Ass. India, 2: 1-129.

———— 1971. Ibid., 2: 1-334.

Wood, E. J. F. 1954. Aust. J. Mar. and Freshw. Res., 5: 171-351.