A NOTE ON THE SIMILARITY IN THE DISTRIBUTION OF *SAPPHIRINA* (COPEPODA, CRUSTACEA) AND *SALPA* (THALIACEA, TUNICATA) IN THE NORTH-WESTERN INDIAN OCEAN

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Species of the copepod genus *Sapphirina* are frequently associated with Salps, the pelagic tunicates (Lehnhofe, 1929; Dakin and Colefax, 1940; Sewell, 1948). They are found as endocommensals in *Salpa democratica*, *S. fusiformis*, *S. maxima*, *S. pinnata*, *S. cylindrica*, *S. confoderata*, *S. zonaria* and other tunicates like *Pyrosoma* (Lehnhofe, 1929). The females and young stages of *Sapphirina* are found more frequently inside the Salps than the males (Dakin and Colefax, 1940).

A study of the distribution of *Sapphirina* and *Salpa* in the North-western Indian Ocean will clearly show a striking similarity in the distribution of both. Distribution of Salps in the Indian Ocean, based on the collections of the International Indian Ocean Expedition conducted during 1960-1965, is shown in one of the maps of Plankton Atlas Vol. IV, Fasc. 2 published by the Indian Ocean Biological Centre, Cochin (IOBC). In the north-western Indian Ocean the Salps are densely distributed in the areas off the Somali and Saudi Arabian coast (Fig. 1). In the present study preserved collec-

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**Fig. 1**. Densely distributed areas of Salps in the north-western Indian Ocean (After IOBC Plankton Atlas Vol. IV Fasc. 2).

**Fig. 2**. Stations showing the occurrence of *Sapphirina* species.
tion of Sapphirina received from IOBC was analysed morphologically. This collection of Sapphirina was an aliquot of the total sample collected by R.-R.-S. Discovery in the north-western Indian Ocean. Analysis of the Discovery collection of Sapphirina revealed that most of the species of Sapphirina were found to occur frequently and abundantly in the areas off the Somali and Saudi Arabian coasts, where the Salps were found to be densely distributed (Fig. 2).

Since Sapphirina and Salpa are pelagic forms and the former occurs as endocommensal of the latter, it is to be expected that a close correlation would exist between the distribution of Sapphirina and Salpa. This close correlation may possibly provide an explanation for this striking similarity in the distribution of Sapphirina and Salpa in the north-western Indian Ocean. Moreover, since the Salps are themselves dependent on the currents for their distribution, the relationship between the surface currents and the distribution of Sapphirina is not affected (Sewell, 1948).

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