

ASCIDIAN FAUNA OF THE SUEZ CANAL

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Apart from the coastal waters of Alexandria (HARANT, 1936; KHALIL, 1962; ABDEL-MESSIH, 1982) and of the Suez Canal (HARANT, 1926; MONNIOT and MONNIOT, in POR and FERBER, 1972) little is known about the Ascidiaceans of Egyptian waters. An extensive seasonal survey was carried out in 1988-1990 along the Egyptian Mediterranean coast, the Suez Canal and part of the Northern Gulf of Suez. This paper reports briefly on the status of the Suez Canal Ascidian fauna, about sixty years after the report of HARANT (1926). The collection examined by MONNIOT and MONNIOT (POR and FERBER, 1972) was more limited in scope. HARANT (1926) recognized 25 species, the majority of which were of Red Sea-Indo-Pacific origin. The present survey shows the Suez Canal Ascidian fauna to have been enriched since by 14 newly established species (Table). The new records comprise nine Red Sea-Indo-Pacific Ascidiaceans. Thus, the well known predominance of the southern species in the Canal is maintained.

The Canal fauna is remarkably diverse in contrast with the paucity in species of the Mediterranean localities examined: of a total of 51 species recorded from Egyptian waters, 40 were contributed by the Canal. Their distribution however is not uniform. The southernmost segment, including the Small Bitter Lake down to Suez, is the poorest with only five species. Diversity improves in the Great Bitter Lakes with 12 species and comparatively large populations. It is in the middle and northern segments of the Canal that a diverse population was found to flourish. Twenty nine species growing in massive aggregations were collected from the two segments. *Styela partita*, *S. canopus*, *Ascidia nigra*, *Polyclinum constellatum* and several *Didemnum* were dominant and abundant.

Polyclinum constellatum is recorded as a new species for the Mediterranean. While it was absent from the records of HARANT and rare in those of MONNIOT and MONNIOT, it is at present widespread in the Canal and was found to be settled in Damietta harbour. *P. constellatum* provides a further case of progressive northward extension of a Red Sea species.

Three Mediterranean species were recorded as southward migrants: *Macroclinum duboscqui* var. *orientale*, *Distomus variolosus* and *Microcosmus sulcatus*. The latter two were represented at El Ghardaqa although by rare specimens. *Macroclinum duboscqui* var. *orientale*, unknown before from Egyptian waters, occurs at the two ends of the Canal and also at El Ghardaqa. This is the first record of southward migration of Mediterranean Ascidiaceans in the Red Sea.

It is obvious that the Canal fauna has not reached its climax, as thought by POR and FERBER (1972). The process of colonization of the Canal and of immigration to both seas is still going on, as also concluded by HALIM (1990) for plankton.

Table. New Ascidian records from the Canal.

Ascidia obliqua, *A. prunum*, *Botryllus schlosseri*, *Didemnum amethysteum*, *D. e dmondsoni*, *D. acazei*, *D. moseleyi*, *Ecteinascidia imperfecta*, *Molgula occidentalis*, *M. siphonalis*, *Perophora listeri*, *P. viridis*, *Styela plicata*, *Trididemnum savignii* var. *joelensis*.

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