

Fabricia filamentosa Day, 1963
(Polychaeta, Sabellidae, Fabriciinae)
new record in the Eastern Mediterranean Sea

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The finding of Fabricia filamentosa (DAY, 1963), a new record for the Eastern Mediterranean Sea is reported. A new aspect on the geographical distribution and the biological characteristics of the species are also discussed.

INTRODUCTION

The genus *Fabricia* belongs to the subfamily *Fabriciinae* of the *Sabellidae* family and is characterized by the constant presence of three abdominal setigers carrying long shafted hooks. The genus includes 18 species (FAUCHALD, 1977) and the typical species is *Fabricia sabella*.

In the framework of a study on the benthic fauna of Rhodes island (SE Aegean Sea) some specimens were collected and consist a new record for the Eastern Mediterranean Sea.

Moreover, 36 specimens of the same species were found in Gera gulf (Lesvos Island, NE Aegean Sea) during a benthic survey carried out in this area.

MATERIALS AND METHODS

Examined material

Fourty nine specimens were collected from five sampling stations located along the northern coast of Rhodes, the salinity ranging between 38.95‰ and 39.36‰. Nineteen of them were found on hard substrate with depth around

65 m, while the rest of them were collected from soft bottom stations with depth ranging from 58 to 145 m.

The sediment in the soft bottom stations was sandy silt with a 30% silt content and a median sorting coefficient (S_o) value of 0.79 ϕ .

Thirty-six specimens were collected from 5 stations located in Gera gulf (Lesvos island, NE Aegean Sea) the salinity ranging between 37.66‰ and 39.95‰ and the depth varying from 6 to 21 m. The sediment in two of the stations was sandy silt while in the others, various types of sediment were encountered such as mud mixed with fragments of *Cladocora caespitosa*, shelly gravel and sandy mud mixed with detritus.

The description of the specimens in both regions corresponded exactly with that of DAY (1963, 1967) for the specimens recorded in South Africa.

DISCUSSION

Fabricia filamentosa was firstly recorded in South Africa (DAY, 1963, 1967) and in the Red Sea near Elat (AMOUREUX *et al.*, 1978).

In 1986 GIAGRANDE and CASTELLI reported the occurrence of this species in Western Mediterranean (Porto Cesareo lagoon) and hypothesized a phenomenon of Lessepsian migration (GIAGRANDE *et al.*, 1986).

However, the lack of records for the Eastern Mediterranean was regarded as the missing link in the chain for the establishment of this theory.

In fact, as POR (1978) postulated the Lessepsian migrants follow a certain route: from the Suez Canal northward, then westward along the Levantine and Anatolian coasts and to the islands of Rhodes, Cyprus and the Crete - Santorin areas.

It is then evident that the finding of *Fabricia filamentosa* in the island of Rhodes sheds new light on the distribution and ecology of the species and serves as a supporting element for the confirmation of the above hypothesis.

The Lessepsian migrants as POR (1978) remarks may be considered in a figurative sense as "welcome guests" in the impoverished, subtropical Eastern Mediterranean basin. Moreover, studies in the zooplankton population in the same region (SIOKOU - FRANGOU *et al.*, in press) showed the presence of some species encountered in the South Aegean and the Levantine Sea, which reflects the zoo-geographical interrelation between the region of Rhodes and the Levantine sea.

The occurrence of *F. filamentosa* in Lesvos island shows that the dispersion of this species in the Eastern Mediterranean has advanced as far as the northern Aegean Sea.

As far as its ecological characteristics are concerned, the species seems to fulfill at least two of the three conditions which are regarded (POR, 1978) as obligatory for every migrant species. Being found in brackish as well as in sea water, *F. filamentosa* could be characterized as euryhaline, thus fulfilling the first condition.

Its occurrence on rocky as well as in soft bottom proves its nonselectiveness as far as substrate is concerned, which is the second condition. It is noteworthy that the mixed sandy muddy bottoms where the species was found is considered as the most advantageous type of soft substrate for the establishment of Lessepsian migrants.

The third condition which is nonselectiveness in the feeding mode, could not be discussed here, as adequate data on this subject are unavailable.

CONCLUSION

In conclusion, the finding of *F. filamentosa* in Rhodes and Lesvos islands adds some knowledge on the zoogeography as well as the ecology of this species.

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***Fabricia filamentosa* Day, 1963
(Polychaeta, Sabellidae, Fabriciinae)
novi nalaz u istočnom dijelu Sredozemnog mora**

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KRATKI SADRŽAJ

Objavljuje se nalaz vrste *Fabricia filamentosa* (DAY, 1963), nov za istočni dio Sredozemnog mora. Ovaj nalaz baca novo svjetlo na zoogeografiju i ekologiju ove vrste i potvrđuje pretpostavku o Lesepsijskim migracijama koje su postavili drugi istraživači.

