

# First record of *Ephesiella* Chamberlin, 1919 (Polychaeta : Sphaerodoridae) in the Mediterranean Sea, with a description of a new species

Première signalisation d' *Ephesiella* Chamberlin, 1919 (Polychaeta, Sphaerodoridae)  
en mer Méditerranée. Description d'une nouvelle espèce

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## ABSTRACT

Mòllica E., 1994 - First record of *Ephesiella* Chamberlin, 1919 (Polychaeta : Sphaerodoridae) in the Mediterranean Sea, with a description of a new species. Marine Life, 4 (2) : 19-21.

A new species of Sphaerodoridae (Annelida : Polychaeta) is described from San Giovanni li Cuti Bay (Eastern Sicily). *Ephesiella cantonei* n. sp. is the first record of *Ephesiella* genus in the Mediterranean Sea. The morphological characteristics of the species are the absence of the hooks in the first segment, the presence of eyes and the parapodial structure. The Author also reports a key to species of *Ephesiella* genus.

## RÉSUMÉ

Mòllica E., 1994 - [Première signalisation d' *Ephesiella* Chamberlin, 1919 (Polychaeta, Sphaerodoridae) en Méditerranée. Description d'une nouvelle espèce]. Marine Life, 4 (2) : 19-21.

Dans ce travail, l'auteur relève la présence, sur des fonds rocheux, dans le golfe de Catane (Sicile, Italie), d'une nouvelle espèce du genre *Ephesiella* (Polychaeta, Sphaerodoridae) jamais encore signalée en Méditerranée. Les caractéristiques morphologiques distinctives de l'espèce *Ephesiella cantonei* n. sp. sont l'absence de crochet au premier segment, la présence d'yeux ; la conformation des parapodes. L'auteur propose une clé dichotomique des espèces du genre *Ephesiella*.

## INTRODUCTION

The Sphaerodoridae family, instituted by Malmgren in 1867, includes 81 benthic species belonging to 10 genera. Most of them have been reported from high latitudes or from bathyal and abyssal zones (Desbruyères, 1980). Sphaerodoridae are most common in sandy or muddy bottoms, but some species are found in shallow water in hard bottoms. From Italian waters only sporadic findings are reported: 7 species belonging to 3 genera (*Clavodorum*, *Sphaerodoropsis* and *Sphaerodorum*), have been recorded. Most Italian reports concern the Adriatic Sea, only two species *Sphaerodoropsis*

*sphaerulifer* (Moore, 1911) and *Sphaerodorum gracilis* (Rathke, 1843) have also been found in the Tyrrhenian Sea; there have so far been no reports in the Ionian Sea.

## Material examined

This study is based on samples collected in 1992 in San Giovanni li Cuti Bay (Catania, eastern Sicily) in a rocky bottom at 3 and 6 m depth, near a fresh water spring. I found four specimens of Sphaerodoridae that can be placed in the *Ephesiella* genus as defined by Hartman and Fauchald, 1971.

## EPHESIELLA CANTONEI N. SP.

### Description

The holotype is a complete specimen 12 mm long and 0.6 mm wide with parapodia, for 54 segments (Figure 1a). It is light brown in alcohol. It presents two rows of sessile macrotubercles and two rows of microtubercles on the dorsum. Macrotubercles are large, spherical with a terminal papilla (Figure 1b). The microtubercles have an upper papilla. Many other small papillae cover the dorsum. The anterior end (Figure 1c) is rounded with two pairs of lateral digitate antennae; the median antenna is absent. These features are typical of the *Ephesiella* genus. There is a pair of eyes each consisting of two pigmented areas. The parapodia are uniramous with a large digitate ventral cirrus and a variable number (at least two each side) of

parapodial papillae (Figure 1d) . Only composite chetae are present in all parapodia (Figure 1e, f).

The hook typical of first chaetigerous of the most long-bodied species of *Ephesiella* is absent in this species.

### Remarks

There are only two *Ephesiella* species that do not present recurved hook in the first parapodium: *E. gallardi* (Gallardo, 1967 as *Sphaerodorum* sp. B.; Fauchald, 1974) and *E. australiensis* Hartmann-Schröder, 1982. The specimen described here differs from *E. gallardi* with regard to : 1- parapodial lobes structure ; 2- the anterior end conformation; 3- the type of chetae and 4- the absence of nuchal organ. The differences from *E. australiensis* are: 1- the absence of nucal antenna; 2- the presence of eyes and 3- the parapodial structure.

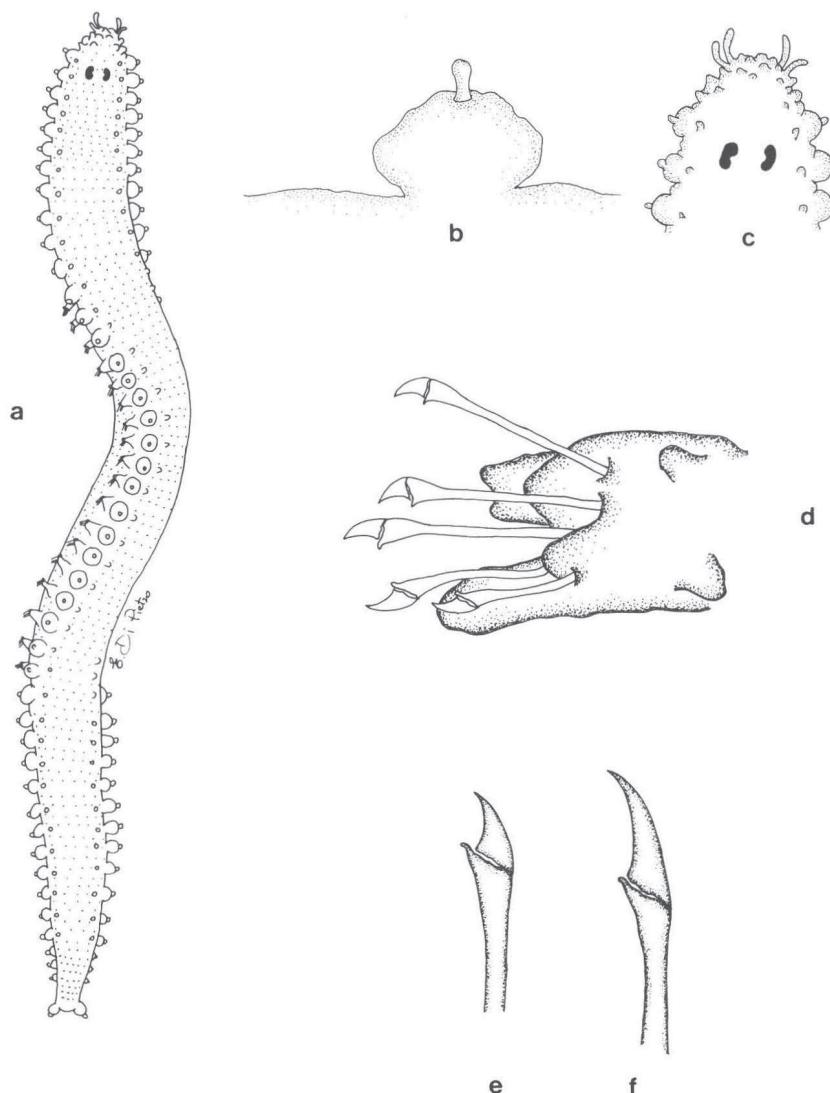


Figure 1 - *Ephesiella cantonei* n. sp. : a- entire worm ; b- macrotuberle ; c- anterior end ; d- parapodium ; e,f- chetae. / *Ephesiella cantonei* n. sp. : a- animal entier ; b- macrotubercules ; c- région antérieure ; d- parapode ; e,f- soies.

For these reasons the specimen described here represents a new species which I propose to name *Ephesiella cantonei*. At the same time, it represents the first record of the genus *Ephesiella* in the Mediterranean Sea.

## KEY TO SPECIES OF EPHESIELLA

from Fauchald, 1974 modified

- 1 - Macro-and microtubercles partially fused ..... mammifera
- Macro-and microtubercles free and separated on the dorsum ..... 2
- 2 - Recurved hooks absent in the first parapodium ..... 3
- Recurved hooks present ..... 5
- 3 - Eyes present; nuchal antenna absent ..... cantonei
- Eyes absent; nuchal antenna present ..... 4
- 4 - Microtubercles without terminal papilla ..... gallardi
- Microtubercles with terminal papilla ..... australiensis
- 5 - Two pairs of lateral antennae present ..... 6
- One pair of lateral antennae present ..... pallida
- 6 - Superior lateral antennae distinctly shorter than all other antennae ..... antarctica
- Superior lateral antennae at least as long as the other antennae ..... 7
- 7 - Ventral cirrus projecting beyond parapodial lobes ..... 8
- Ventral cirrus not projecting beyond parapodial lobes ..... 9
- 8 - Parapodia with one or two distal papillae ..... abyssorum
- Parapodia with three or four distal papillae ..... ramosae
- Parapodia with five or six distal papillae ..... macrocirris
- 9 - An erect papilla on the superior edge of each parapodium ..... mixta
- Superior edge of parapodia without erect papillae ..... brevicapitis

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