



## Description of a new species of *Streptosyllis* (Polychaeta: Syllidae) from the Mediterranean and Canary Islands with a re-description of *Streptosyllis arenae* and comments on the taxonomy of *Streptosyllis* and some morphologically similar genera

SARAH FAULWETTER<sup>1</sup>, AIKATERINI VASILEIADOU<sup>1</sup>, NAFSIKA PAPAGEORGIOU<sup>2</sup> & CHRISTOS ARVANITIDIS<sup>1,3</sup>

<sup>1</sup>Institute of Marine Biology and Genetics, Hellenic Centre for Marine Research, 71003 Heraklion, Crete, Greece

<sup>2</sup>Department of Biology, University of Crete, 71409 Heraklion, Crete, Greece

<sup>3</sup>Corresponding author. E-mail: arvanitidis@her.hcmr.gr

### Abstract

A new *Streptosyllis* species, *S. nunezi* n. sp., is described from shallow sandy substrates in the Mediterranean and the Canary Islands. The new species is distinguished by a unique combination of characters: teeth of the shafts of the compound chaetae covered by hyaline hood; 1–2 lateral tips formed by the hyaline hood covering the blades of the compound chaetae; strongly serrated dorsal simple chaetae which appear as 2–4 robust teeth when viewed laterally. The re-description of its closest congener, the type species *S. arenae* Webster and Benedict, 1884, is also provided based on the type material, as well as a key to the currently valid species and table of characters for the genus. Finally, some comments are made for the characters distinguishing the genera *Streptosyllis*, *Syllides*, *Anoplosyllis*, *Astreptosyllis* and *Streptospinigera*, which are listed in a table and a potential key for their identification is proposed.

**Key words:** Mediterranean, Canary Islands, sandy substrate, *Astreptosyllis*, *Streptospinigera*, *Syllides*, *Anoplosyllis*, *Streptosyllis*, *Streptosyllis arenae*, *Streptosyllis nunezi* n. sp.

### Introduction

The genus *Streptosyllis* was erected by Webster and Benedict in 1884 for a single species, *Streptosyllis arenae*, from Provincetown, Massachusetts, USA. In 1887, the same authors described *S. varians* from Eastport, Maine, USA. Southern (1914) described two new species *S. websteri* and *S. bidentata* from Bofin and Ballynakill, Ireland, and emended the definition of the genus. Currently, the genus is characterized by having an unarmed pharynx, palps fused at the base, enlarged aciculae and modified compound chaetae on a number of anterior parapodia (Brito *et al.* 2000; San Martín 2003).

In addition to these four, another 13 species of *Streptosyllis* have been described (of these, one has been synonymized (*S. pettiboneae* Perkins 1981) and one is of uncertain status (*S. cryptopalpa* Hartmann-Schröder 1960)): *S. verrilli* (Moore 1907) from Cape Cod, Massachusetts, USA; *S. cryptopalpa* Hartmann-Schröder 1960 and *S. reducta* Hartmann-Schröder 1960 from the Red Sea; *S. latipalpa* Banse 1968 from Puget Sound, Washington, USA; *S. magnapalpa* Hartmann-Schröder 1981 from Horrocks, Australia; *S. aequiseta* Hartmann-Schröder 1981 from Exmouth, Tantabiddy Creek, Australia; *S. pettiboneae* Perkins 1981 from Florida, USA; *S. templadoi* San Martín 1984 from the Balearic Islands, Spain; *S. biarticulata* Hartmann-Schröder 1991 from Heron Island, Australia; *S. suhrmeyeri* Hartmann-Schröder 1993 from Tierra del Fuego, Argentina;