## Eusyllinae (Polychaeta: Syllidae) from Australia with the Description of a New Genus and Fifteen New Species

GUILLERMO SAN MARTÍN<sup>1</sup>\* AND PAT HUTCHINGS<sup>2</sup>

<sup>1</sup> Departamento de Biología (Zoología), Laboratorio de Biología Marina e Invertebrados, Facultad de Ciencias, Universidad Autónoma de Madrid, Canto Blanco, 28049 Madrid, Spain guillermo.sanmartin@uam.es

<sup>2</sup> Aquatic Zoology, Australian Museum, 6 College Street, Sydney NSW 2010, Australia path@austmus.gov.au

ABSTRACT. Large collections of Syllidae (Polychaeta) from around Australia, housed at the Australian Museum (Sydney), have been examined and identified. Australian material from the Hamburgische Zoologische Museum der Universität, Hamburg, Germany was also examined. All known Australian species of the subfamily Eusyllinae (Syllidae) are described and figured. Some were examined using the Scanning Electron Microscope to illustrate characters and methods of reproduction in this subfamily. Keys to genera and species are given. A total of 53 species are reported from Australia belonging to 14 genera: Amblyosyllis Grube, 1857 (3 species); Anoplosyllis Claparède, 1868 (1 species); Astreptosyllis Kudenov & Dorsey, 1982 (2 species); Eusyllis Malmgren, 1867 (3 species); Nudisyllis Knox & Cameron, 1970 (1 species); Odontosyllis Claparède, 1863 (9 species); Opisthodonta Langerhans, 1879 (3 species); Paraehlersia San Martín, 2003 (2 species); Paraepisthosyllis Hartmann-Schröder, 1991 (4 species); Pionosyllis Malmgren, 1867 (15 species); Psammosyllis Westheide, 1990 (1 species); Streptodonta n.gen. (1 species); Streptosyllis Webster & Benedict, 1884 (3 species); and Syllides Örsted, 1845 (5 species). A total of 15 new species are described: Amblyosyllis enigmatica, A. multidenticulata, Odontosyllis marombibooral; Opisthodonta hanneloreae, Paraopisthosyllis alternocirra, P. ornaticirra, Syllides tam, Pionosyllis rousei, P. kalimna, P. yolandae, P. mariae, P. mayteae, P. ancori, P. koolalya, and P. heterochaetosa. A new name, Pionosyllis hartmannschroederae, is proposed for Typosyllis (Langerhansia) longisetosa Hartmann-Schröder, 1990 as this is junior homonym of Pionosyllis longisetosa (Hartmann-Schröder, 1965).

Additionally, five species are new records for Australia: *Odontosyllis gravelyi* Fauvel, 1930; *Opisthodonta morena* Langerhans, 1879; *Pionosyllis corallicola* Ding & Westheide, 1997; *Streptodonta pterochaeta* (Southern, 1914) and *Syllides japonicus* Imajima, 1966. A discussion of the reproduction and systematics of the subfamily is given.

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This is the second contribution to the Australian Syllidae, based on the large collections housed in the Australian Museum from all around Australia, and revision of material collected and described by Hartmann-Schröder (1979–1991). The material examined was collected predominantly

from southern Australia, and no material was examined from north of 14°S on either the west or east coast of Australia. This paper also summarises material already published by San Martín (2002, 2005) and San Martín & López (2003). A general introduction to the family Syllidae is given by