



<http://dx.doi.org/10.11646/zootaxa.3734.2.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:D4F65C2C-FF0D-4F2B-8E4E-CCB6D5F5FC0A>

A new species and new record of the commensal genus *Alcyonosyllis* Glasby & Watson, 2001 and a new species of *Parahaplosyllis* Hartmann-Schröder, 1990, (Annelida: Syllidae: Syllinae) from Philippines Islands

PATRICIA ÁLVAREZ-CAMPOS^{1,3}, GUILLERMO SAN MARTÍN¹ & M. TERESA AGUADO^{1,2}

¹Universidad Autónoma de Madrid, Departamento de Biología (Zoología), Facultad de Ciencias, Cantoblanco, 28049 Madrid, Spain.
E-mails: patricia.alvarez@uam.es; guillermo.sanmartin@uam.es; maite.aguado@uam.es

²American Museum of Natural History, Invertebrates Division, New York, NY 10024-5192, USA

³Corresponding author. E-mail: patricia.alvarez@uam.es

Abstract

A new species of *Alcyonosyllis* (Annelida: Syllidae), *A. aidae* n.sp. is described from Luzón island, Philippines, associated with the alcyonacean *Dendronephthya* sp. (Nephthyidae). This is the sixth known species of this genus living in the Indo-Pacific region. The new species differs from other *Alcyonosyllis* in having long and slender cirri with the first pair of dorsal cirri slightly thicker than remaining, bidentate chaetae with distal tooth larger than proximal one, and a distinct colour pattern, with a median longitudinal, slender reddish line, and two wider lateral bands, giving a tri-lineate appearance. A new report of the recently described species, *A. hinterkircheri*, previously known only from an area close to Bohol, in Philippines, is also included, being the first report of this species in Luzón Island. A new species of the genus *Parahaplosyllis* Hartmann-Schröder, 1990, is also described. Up to now, only the type species of the genus was known, from New South Wales, Australia; this is the second known species of this genus. It differs from *P. brevicirra* Hartmann-Schröder, 1990 by having unidentate dorsal simple chaetae (instead of bidentate ones as in *P. brevicirra*), ventral simple chaeta with shorter and less curved basal spur, more distinctly articulated dorsal cirri, with a long distal article, and a shorter proventricle. Finally, new different types of stolons are described for both genera.

Key words: Annelida, Syllidae, Syllinae, *Alcyonosyllis*, *Parahaplosyllis*, new species, soft coral, coral rubble, taxonomy

Introduction

The symbiotic genus *Alcyonosyllis* Glasby & Watson, 2001, is characterized by having long and slender bodies with numerous chaetigers, appendages unarticulated to weakly articulated and parapodia with unarticulated hooked chaetae with subdistal boss (Glasby & Watson 2001; Glasby & Aguado 2009). In addition, stolons of *Alcyonosyllis* are attached terminally to the parental body (Glasby & Watson 2001; San Martín & Nishi 2003; Aguado & San Martín 2009) and a new posterior end regenerates ventrally to the stolon before its release. Three species were originally described belonging to this genus: *A. phili* Glasby & Watson, 2001, the type species of the genus, reported from northern Australia, New Guinea, Bohol (Philippines Islands) (Glasby & Aguado 2009) and also recently reported from Vietnam (Britayev & Antokhina, 2012); *A. glasbyi* San Martín & Nishi, (2003) from Shimoda, Japan; and *A. hinterkircheri* Glasby & Aguado, (2009) from off Bohol (Philippines Islands). Another three species originally described as *Haplosyllis* Langerhans, 1879, were transferred to *Alcyonosyllis*: *A. xaeniaecola* (Hartmann-Schröder, 1993), from Moluccas (Indonesia); *A. bisetosa* (Hartmann-Schröder, 1960); and *A. gorgoniacola* (Sun & Yang, 2004) from South China (Glasby & Aguado, 2009). Some other species may belong to *Alcyonosyllis*, such as *Syllis onkylochaeta* Hartmann-Schröder, 1991, from an aquarium in Germany; and *Syllis exiliformis* Imajima, 2003, from Japan, as well other species without formal specific names: *Syllis* sp. (Aguado *et al.* 2008, from Japan) and Genus sp. A (San Martín *et al.* 2010, from Australia). These latter species have similar diagnostic features to *Alcyonosyllis*, with the exception of some small compound chaetae on parapodia. All of the known species have been reported as symbionts with anthozoans. *Alcyonosyllis phili*, *A. bisetosa* and *A. aidae* n.

not common in Syllidae and up to now it has been only reported in some species of its sister group, *Trypanosyllis* Claparède, 1864 (Okada 1933; Jonson 1902; Izuka 1906; Potts 1913; Nogueira & Fukuda 2008).

Acknowledgments

We are grateful to Javier Sánchez Almazán (MNCN) for loaning the comparative material and to Enrique Rodríguez (SIDI, UAM) for help with the SEM images. We wish to express our gratitude to Christina Pietrowski, California Academy of Sciences, who kindly provided us with the specimens of *Alcyonosyllis hinterkircheri*. This study was supported by the project “Caracterización Taxonómica y Sistemática de la familia Syllidae (Polychaeta) basada en datos moleculares y morfológicos. El problema de las especies cosmopolitas y Biodiversidad en el Pacífico”, founded by the “Ministerio de Ciencia e Innovación” of the Spanish Government, Project number CGL2009–12292 BOS.

References

- Aguado, M.T. & San Martín, G. (2009) Phylogeny of Syllidae (Polychaeta) based on morphological data. *Zoologica Scripta*, 38 (4), 379–402.
<http://dx.doi.org/10.1111/j.1463-6409.2008.00380.x>
- Aguado, M.T., San Martín, G. & Ten Hove, H.A. (2008) Syllidae (Annelida: Polychaeta) from Indonesia collected by the Siboga (1899–1900) and Snellius II (1984) expeditions. *Zootaxa*, 1673, 1–48.
- Aguado, M.T., San Martín, G. & Siddall, M.E. (2012) Systematics and evolution of syllids (Annelida, Syllidae). *Cladistics*, 28, 234–250.
<http://dx.doi.org/10.1111/j.1096-0031.2011.00377.x>
- Britayev, T.A. & Antokhina, T.I. (2012) Symbiotic polychaetes from Nhatrang Bay, Vietnam. In: Britayev, T.A., Pavlov, D.S. (Eds.), *Benthic fauna of the Bay of Nhatrang, Southern Vietnam. Vol. 2*. Moscow, KMK, pp. 11–54.
- Glasby, C.J. & Aguado, M.T. (2009) A new species and new records of the anthozoan comensal genus *Alcyonosyllis* (Polychaeta: Syllidae: Syllinae). *The Beagle, Records of the Museums and Art Galleries of the Northern Territory*, 25, 55–63.
- Glasby, C.J. & Watson, C. (2001) A new genus and species of Syllidae (Annelida: Polychaeta) commensal with octocorals. *The Beagle, Records of the Museums and Art Galleries of the Northern Territory*, 17, 43–51.
- Hartmann-Schröder, G. (1960) Polychaeten aus dem Roten Meer. *Kiel Meeresforsch.*, 16 (1), 69–125.
- Hartmann-Schröder, G. (1990) Teil 15. Die Polychaeten der subtropisch-tropischen und tropischen Ostküste Australiens zwischen Lake Macquarie (New South Wales) im Süden und Gladstone (Queensland) im Norden. *Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut*, 87, 41–87.
- Hartmann-Schröder, G. (1991) *Syllis onkylochaeta* sp. n., ein korallenfressender Polychaet (Syllidae) aus dem Korallenaquarium des Löbbecke-Museums. *Helgoländer Meeresuntersuchungen*, 45, 59–63.
<http://dx.doi.org/10.1007/bf02365636>
- Hartmann-Schröder, G. (1993) *Haplosyllis xeniaeicola*, ein neuer polychaet (Syllidae) von den Molukken (Indonesien). *Helgoländer Meeresuntersuchungen*, 47, 305–310.
<http://dx.doi.org/10.1007/bf02367171>
- Imajima, M. (2003) Polychaetous Annelids from Sagami Bay and Sagami Sea Collected by the Emperor Showa of Japan and Deposited at the Showa Memorial Institute, National Science Museum, Tokyo (II). Orders included within the Phyllocladida, Amphinomida, Spintherida and Eunicida. *National Science Museum Monographs*, 23, 1–221.
- Izuka, A. (1906) On a case of collateral budding in syllid annelid (*Trypanosyllis misakiensis*, n. sp.). *Annotations zoology Japan*, 5, 283–287.
- Johnson, H.P. (1902) Collateral budding in annelids of the genus *Trypanosyllis*. *American Naturalist*, 36, 295–315.
<http://dx.doi.org/10.1086/278120>
- Malaquin, A. (1893) Recherches sur les syllidiens. *Mémoires de la Société des Sciences, de l'Agriculture et des Arts de Lille 4ème série*, 18, 1–477.
- Nogueira, J. & Fukuda, M.V. (2008) A new species of *Trypanosyllis* (Polychaeta: Syllidae) from Brazil, with a redescription of Brazilian material of *Trypanosyllis zebra*. *Journal of the Marine Biological Association of the United Kingdom*, 88 (5), 913–924.
<http://dx.doi.org/10.1017/s0025315408001707>
- Okada, Y.K. (1933) Two interesting syllids, with remarks on their asexual reproduction. *Memories of the College of Science, Kyoto Imperial University*, B, 7, 325–338.
- Potts, F.A. (1911) Methods of reproduction in the syllids. *Ergebnisse und Fortschritte der Zoologie*, 3 (1), 1–72.

- Potts, F.A. (1913) Stolon formation in certain species of *Trypanosyllis*. *Quarterly Journal of Microscopical Science*, 58, 411–446.
- San Martín, G. (2003) Annelida Polychaeta II: Syllidae. In: Ramos, M.A. et al. (Eds.), *Fauna Ibérica. Vol. 21. Museo Nacional de Ciencias Naturales*. CSIC, Madrid, Spain, 554 pp.
- San Martín, G., Hutchings, P. & Aguado, M.T. (2010) Syllinae (Polychaeta: Syllidae) from Australia. Part 3. Genera *Alcyonosyllis*, Genus A, *Parahaplosyllis*, and *Trypanosyllis* (*Trypanobia*). *Zootaxa*, 2493, 35–48.
- San Martín, G. & Nishi, E. (2003) A New species of *Alcyonosyllis* Glasby and Watson, 2001 (Polychaeta: Syllidae: Syllinae) from Shimoda, Japan. Commensal with the Gorgonian *Melithaea flabellifera*. *Zoological Science*, 20, 371–375.
<http://dx.doi.org/10.2108/zsj.20.371>
- Sun, R. & Yang, D.J. (2004) Invertebrata. Vol. 33. Annelida, Polychaeta II. Nereidida (=Nereimorpha). Nereididae, Syllidae, Hesionidae, Pilargidae, Nephtyidae. In: Huo, C. & Zhao, G. (Eds.), *Fauna Sinica*. China Science Press, Beijing, 550 pp.