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The genus *Branchiosyllis* Ehlers, 1887 from Philippines Islands, with the description of two new species

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Abstract

The species of *Branchiosyllis* from Philippines Islands, *B. maculata*, *B. australis* new comb. and *B. exilis*, have been reviewed, with particular emphasis on the study of worldwide material of the latter. In addition, *Branchiosyllis mayae* and *Branchiosyllis tagalog* are described as new species. The former is characterized by its bidentate claw-shaped chaetae, unique in the genus, short dorsal cirri, and orange body with black stripes on prostomium (less pigmented), peristomium, and anterior four to seven segments (more pigmented at bases of cirrophores). The latter is characterized by presence of only two claw-shaped chaetae per parapodium, ventral one larger than dorsal one, spindle-shaped tentacular cirri and dorsal cirri with small pores and papillae, peristomium not visible dorsally and strongly dorsoventrally flattened body, pigmented with dark central spot surrounded by two horizontal wide bands and faint coloured circles on each parapodia. A comparative table of all the species of the genus is also provided.

Key words: *Branchiosyllis*, Syllidae, new species, taxonomy, species-complex

Introduction

The family Syllidae Grube, 1850 is one of the largest and most diversified families of polychaetes (Annelida). They are present in nearly all marine benthic habitats and include more than 700 species and around 70 genera (Pleijel 2001; San Martín 2003; Aguado *et al.* 2007; Aguado & San Martín 2009). The Syllidae are currently monophyletic, with the proventricle, a specialization of the digestive tube, being its synapomorphy (Glasby 1993; Fauchald & Rouse 1997; Aguado & San Martín 2009; Aguado *et al.* 2012). The family comprises the genera *Anguillosyllis*, *Amblyosyllis*, and *Perkinsyllis*, which have uncertain positions (Aguado *et al.* 2012) and five monophyletic subfamilies: Anoplosyllinae Aguado & San Martín, 2009; Syllinae Grube, 1850; Exogoninae Langerhans, 1879; Autolytinae Langerhans, 1879 and Eusyllinae Malaquin, 1893(emended by Aguado *et al.* 2012).

Branchiosyllis Ehlers, 1887, included in the Syllinae, is easily recognized by claw-shaped chaetae or unguulae (term suggested by Góngora *et al.* 2011) which are present in all the species (San Martín 2003; San Martín *et al.* 2008; Aguado *et al.* 2012). The generic name refers to the branchiae, evaginations of the dorsal side of parapodial lobes, with an unknown function, that are present only in a few species. By contrast, the unguulae are present in all the species at least in posterior parapodia (Table 1) and they are considered the main diagnostic character of the genus (Aguado *et al.* 2008). The unguulae are modified falcigers exhibiting a reduction of the upper part of the blades and with expanded blades and shafts. The insertion area between the blade and shaft also increases and this allows the blade to rotate 180°. San Martín *et al.* (2008) which divides species of *Branchiosyllis* into two groups, one with cylindrical body shape, lack of branchiae and unguulae only in posterior segments, and the other with a dorsoventrally flattened body shape, with branchiae and unguulae in anterior and posterior segments; however, several species share features of both groups (Table 1). The relationships within the genus require further studies (San Martín *et al.* 2008; Góngora *et al.* 2011).