



***Dialychone*, *Jasmineira* and *Paradialychone* (Annelida: Polychaeta: Sabellidae) from Japan and adjacent waters, including four new species descriptions**

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Abstract

The genus *Chone* Krøyer, 1856, and related genera of the family Sabellidae (Polychaeta) are common members of soft-bottom communities. Four new species from Japanese waters are described herein: *Dialychone okudai* n. sp., from Hokkaido, *Paradialychone katsuraensis* n. sp., from Katsura, Boso Peninsula; *P. edomae* n. sp., from Tokyo Bay and *Jasmineira kikuchii* n. sp., from Ariake Sound, Kyushu. A re-description is also provided for a poorly known species *C. cincta* Zachs, 1933. This species, originally described from the Peter the Great Bay, Eastern Russia was recorded in this study from Amakusa and Ariake Sound, Kyushu and transferred to *Paradialychone*. *Jasmineira kikuchii* is the first record of the genus from Japan. The Japanese species described here are compared with other conspecifics of the world and a key for the sabellid genera with a glandular girdle on chaetiger 2 and thoracic acicular uncini is provided.

Key words: *Chone*, *Dialychone*, *Paradialychone*, *Jasmineira*, feather duster worms, Japan

Introduction

The polychaete genera *Amphicorina* Claparède, 1864, *Chone* Krøyer, 1856, *Claviramus* Fitzhugh, 2002, *Desdemona* Banse, 1957, *Euchone* Malmgren, 1867, *Myxicola* Meneghini in Renier, 1847, *Jasmineira* Langerhans, 1880, *Fabrisabella* Hartman, 1969, *Panousea* Rullier and Amoureux, 1970, *Panoumethus* Fitzhugh, 2002 and *Potamethus* Chamberlin, 1919, are plesiomorphic members of the paraphyletic family Sabellidae (Kupriyanova and Rouse 2008). These genera share the presence of a glandular girdle on chaetiger 2 and acicular thoracic uncini (Fitzhugh 2002).

Chone, *Euchone*, *Jasmineira*, and other related genera mentioned above, are filter-feeding worms that are common and important members in soft-bottom benthic communities (Yun 1988). Taxonomy of the members of *Chone* was studied by Banse (1972), Giangrande (1992), Tovar-Hernández (2005, 2007a, b), Tovar-Hernández and Sosa-Rodríguez (2006) and Tovar-Hernández *et al.* (2007). A recent cladistic analysis by Tovar-Hernández (2008) revealed three monophyletic genera –*Chone*, *Dialychone* Claparède, 1864, and *Paradialychone* Tovar-Hernández, 2008– whose respective members were previously assigned to *Chone*.

Up to now four species of *Chone* have been recorded for the Japanese waters: *C. duneri* Malmgren, 1867, from Kyushu, *C. ecaudata* (Moore 1923) from Hokkaido, *C. infundibuliformis* Krøyer, 1856, from central Pacific side of Japan, and *C. teres* Bush in Moore, 1904, from Hokkaido (Okuda 1946; Uchida 1968; Imajima 1961, 1963; Yun and Kikuchi 1991). According to Tovar-Hernández (2008), *C. duneri* and *C.*