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***Laubieriopsis petersenae* n. sp. and *L. cf. cabiochi* (Amoureux, 1982) (Polychaeta: Fauveliopsidae) from dredge disposal sites off Honolulu, Hawaii**

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Abstract

Fauveliopsid polychaetes have been collected at dredge disposal sites off Honolulu from 397–507 m depth. We report and describe the first Pacific record of *Laubieriopsis cf. cabiochi* (Amoureux, 1982), originally described from the North Atlantic. A new species, *Laubieriopsis petersenae*, n. sp. is described as being the species in the genus with the lowest number of body segments (15). Other distinctive features are the presence of bidentate aciculars on thoracic chaetigers, and unpaired genital papilla present on the right side of chaetiger 6/7. The new species is most similar to the *L. brevis* complex from the Atlantic and *L. hartmanae* and *L. brevis japonica* from the Pacific Ocean, but differs on the combination of the characters cited above. We provide an emended diagnosis for this genus to include the ultrastructure of the acicular with rows of spines, and a key to all described species.

Key words: Fauveliopsidae, *Laubieriopsis*, new species, taxonomy, Honolulu

Introduction

Fauveliopsids are small benthic polychaetes that are mostly found in deep bottoms. It includes 21 valid species and subspecies in two genera, *Fauveliopsis* McIntosh, 1922 (15 spp.) and *Laubieriopsis* Petersen, 2000 (5 spp., 1 ssp.); in a general way the former has papillate or rugose cuticle and variable number of chaetigers, while the latter has species with smooth, shiny transparent cuticle, and fixed number of chaetigers in adults (Petersen 2000). Species of *Fauveliopsis* inhabit gastropod or scaphopod shells, or foraminifera tests, while *Laubieriopsis* are free-living.

There are five described species and one subspecies in *Laubieriopsis*: *L. arenicola* (Riser, 1987) from New Zealand; *L. brevis* (Hartman, 1965) from northern Atlantic; *L. brevis japonica* Imajima, 2009 from off Japan; *L. cabiochi* (Amoureux, 1982) from northern Atlantic; *L. hartmanae* (Levenstein, 1970) from western Pacific and off Peru, and *L. norvegica* Zhadan & Atroshchenko, 2012 from the northeast part of the North Sea. Most described species are from the deep sea with exception of *L. arenicola*, which has been collected in shallow waters. They are mostly distinguished by the number of body segments, chaetation on thoracic region, length of chaetae from last segment in relation to pygidium, and position and number of genital papillae.

This is the first record of this family for the Hawaiian Islands and the 36 collected specimens have been assigned to two species in the genus *Laubieriopsis*, an undescribed species with the lowest number of body segments known in the genus (15) and the species *L. cf. cabiochi*.

Material and methods

Specimens were collected on dredged disposal sites off Honolulu from sediments originally from Pearl Harbor in the south shore of Oahu, Hawaii (USA). Biological samples were collected in June 14–19, 1995, by the University

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