

New mouthless nematode of the genus *Parastomonema* Kito, 1989 (Nematoda: Siphonolaimidae) from a mangrove forest on the coast of Thailand, and erection of the new subfamily Astomonematinae within the Siphonolaimidae

KENJI KITO¹ & CHITTIMA ARYUTHAKA²

¹Department of Biology, School of Medicine, Sapporo Medical University, Sapporo 060-8556, Japan. E-mail: kito@sapmed.ac.jp

²Department of Marine Science, Faculty of Fisheries, Kasetsart University, Bangkok 10900, Thailand. E-mail: ffiscta@ku.ac.th

Abstract

A new species of mouthless nematode *Parastomonema papillosum* sp. nov. was described based on specimens collected in muddy sediments of a mangrove forest in Samut Songkhram, Thailand. *Parastomonema papillosum* sp. nov. is the second species of the genus and differs from the type species *P. fijiense* Kito, 1989 in having short body length (1.5–3.0 mm), short cephalic setae (1.5–2.6 µm), and a weakly cuticularized gubernacular apophysis in the male. Astomonematinae subfam. nov. was erected for the two mouthless genera *Astomonema* and *Parastomonema* in the Siphonolaimidae based on the diagnostic feature of a degenerate alimentary canal and female reproductive system with paired ovaries.

Key words: Nematoda, Siphonolaimidae, Astomonematinae, *Parastomonema*, muddy sediments, mangrove forest, Gulf of Thailand

Introduction

As a result of a study on the free-living marine nematodes carried out on the coast of the Gulf of Thailand in 2003, an undescribed mouthless species was found from muddy sediments in a mangrove forest. The former species was similar to members of the mouthless genera *Astomonema* Ott, Rieger, Rieger & Enderes, 1982 and *Parastomonema* Kito, 1989 in the family Siphonolaimidae Filipjev, 1918. Preliminary observations suggested that it had only 4 cephalic setae like *Parastomonema*, which is characterized by the 0+0+4 arrangement of head sensilla. However, the precise examination revealed that the present species had minute cephalic papilla besides the cephalic setae on the head as in *Astomonema* with the 0+6+4 arrangement of head sensilla. As a result of the taxonomic