

Three New Species of Free-living Marine Nematodes (Nematoda: Enoplida) from Northern Japan

Daisuke Shimada¹, Hiroshi Kajihara² and Shunsuke F. Mawatari²

¹Department of Natural History Sciences, Graduate School of Science, Hokkaido University,
Sapporo, 060-0810 Japan

E-mail: d-shimada@mail.sci.hokudai.ac.jp

²Department of Natural History Sciences, Faculty of Science, Hokkaido University,
Sapporo, 060-0810 Japan

E-mail: kazi@mail.sci.hokudai.ac.jp (HK); shunfm@sci.hokudai.ac.jp (SFM)

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Three new species of free-living marine nematodes, belonging to three genera, *Epacanthion* Wieser, 1953, *Enoplolaimus* De Man, 1893 (both family Enoplidae Dujardin, 1845), and *Oncholaimus* Dujardin, 1845 (family Oncholaimidae Filipjev, 1916), are described from northern Japan. *Epacanthion quadridiscus* sp. nov. is most similar to *Epacanthion enoploidiforme* (Gerlach, 1953), *E. gorgonocephalum* Warwick, 1970, and *E. georgei* Inglis, 1971 in spicule length and the absence of a precloacal supplement, but differs from them in the shape of the gubernaculum and the arrangement of the subcephalic and cervical setae in the male. *Enoplolaimus longigubernaculum* sp. nov. differs from all of its congeners in having a long and straight gubernaculum. *Oncholaimus secundicollis* sp. nov. is distinguished from all of its congeners by the presence of a precloacal papilla, postcloacal papilla, and tail papilla in the male.

Key Words: Nematoda, Enoplida, *Epacanthion*, *Enoplolaimus*, *Oncholaimus*, new species, Japan.

Introduction

Since the first description of four species of free-living marine nematodes from Japanese waters by Steiner and Hoeppli (1926), 71 species have been described from this area (Allgén 1951; Wieser 1955; Kito 1976, 1977, 1978a, b, 1981; Allen and Noffsinger 1978; Yoshimura 1980a, b, 1982; Aryuthaka 1989a, b; Kito and Hope 1999). Of these, 19 are classified in the Enoplida, while the rest belong to either the Chromadorida or the Monhysterida.

During the course of a faunal survey of free-living marine nematodes in 2007, many specimens belonging to the Enoplida were obtained from intertidal sandy sediments around Hokkaido, northern Japan (Fig. 1A). As a result of our taxonomic study of the material, we here present the descriptions of three new species of the genera *Epacanthion* Wieser, 1953, *Enoplolaimus* De Man, 1893 (family Enoplidae Dujardin, 1845), and *Oncholaimus* Dujardin, 1845 (family Oncholaimidae Filipjev, 1916).