



Paracanthonchus multisupplementatus sp. n. and *Cyatholaimus minor* sp. n. (Nematoda) from the coast of Vietnam

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Abstract

Two nematode species found on the coast of Vietnam are described and illustrated. *Paracanthonchus multisupplementatus* sp. n. is morphologically close to *P. multitubifer* Timm, 1961, but differs from it the longer and slender tail ($c = 9.1\text{--}11.0$, $c' = 3.0\text{--}3.4$ in males, $c = 8.1\text{--}8.7$, $c' = 3.6\text{--}4.1$ in females versus $c = 11.4\text{--}14.0$, $c' = 2.3\text{--}2.8$ in males, $c = 10.2\text{--}10.4$, $c' = 2.1\text{--}2.8$ in females), bigger dorsal tooth in stoma, larger diameter of amphidial fovea (40–55% of corresponding body width versus 15% of corresponding body width), longer spicules and gubernaculum (spicules 56–61 μm long, gubernaculum 36–43 μm long versus spicules 36 μm long, gubernaculum 28 μm long) and more number of supplement organs (57–62 in number versus 21–22 in number). *Cyatholaimus minor* sp. n. is close related to *C. ocellatus* Bastian, 1865, but is clearly distinct in the shorter body ($L = 532\text{--}710$ μm versus $L = 1100\text{--}1790$ μm), slenderer tail ($c' = 3.5\text{--}4.3$ versus $c' = 2.5\text{--}2.8$), bigger dorsal tooth in stoma and shorter spicules and gubernaculum (spicules 21–22 μm long, gubernaculum 19–20 μm long versus spicules 60 μm long, gubernaculum 52 μm long).

Key words: free-living marine nematodes, new species, taxonomy, coastal Vietnam

Introduction

The free-living nematode fauna of Vietnam has been studied in connection with the creation of a new database for the biomonitoring assessment of water quality in watershed and wetland ecosystems of Vietnam in its entirety. This work, conducted during 2007–2010, is part of the Vietnam National Project studying biodiversity and free-living nematodes of the coast of Vietnam near Ho Chi Minh City.

Material and methods

Nematode samples were collected in March 2010 from the littoral zone in the South China Sea on the northern coast of Vietnam. Samples were taken from a boat using a Ponar grab. At each station one grab was collected with three replicates for nematode analysis. All samples were fixed in hot 10% formalin. The nematodes were extracted using Ludox-TM 50 solution with flocculation and decantation, then gradually transferred to anhydrous glycerine and finally mounted on permanent slides.

Abbreviations:

- a.d.—anal or cloacal body diameter, in μm ;
- am.w.—width of the amphid (amphidial fovea), in μm ;
- diam.c.s.—body diameter at the level of cephalic setae, in μm ;
- diam.midb.—mid-body diameter, in μm ;
- dis.am—distance from the cephalic apex to the anterior rim of the amphid, in μm ;
- dis.ey.—distance from the cephalic apex to the eyespots, in μm ;
- dis.ph.cl.—distance from the pharynx base to the cloaca, in μm ;