



# Article

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## New species of the genera *Draconema* Cobb, 1913 and *Paradraconema* Allen & Noffsinger, 1978 (Nematoda: Draconematidae) from the Andaman Islands, Indian Ocean, with keys to the species

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### Abstract

Two new species of Family Draconematidae Filipjev, 1918, *Draconema andamanense* **sp. nov.** and *Paradraconema pachylumbus* **sp. nov.**, are described from the coast of the Andaman Islands, India. Both species were extracted from sediments among the intertidal macroalgae. *Draconema andamanense* resembles *D. japonicum* in having the gubernaculum with peculiar distal dilation in males. However, it differs from all the congeneric species including *D. japonicum* by the smaller number of subventral adhesion tubes (10–11 in male and 12–14 in female). *Paradraconema pachylumbus* differs from all the congeneric species by having the cloacal region remarkably enlarged towards the dorsal side and the conico-cylindrical tail abruptly narrowing. *Paradraconema pachylumbus* most resembles *P. floridense* with longitudinally areolated annules, elongate loop-shaped amphids, prominent eyespots, subventral precloacal Acan-set and gubernaculum with lateral dilation, but is distinguishable from it by the number of setae on the tail in males and females, and the gubernaculum length and tail length in males, as well as the peculiar feature of an enlarged cloacal region in males.

**Key words:** Nematoda, Draconematidae, *Draconema*, *Paradraconema*, Andaman Islands, India, taxonomy, new species

### Introduction

Draconematids with sigmoid bodies are well known as peculiar nematodes moving in an “inchworm-like” manner (Allen & Noffsinger, 1978), and are poorly known from India. *Draconema cephalatum* Cobb, 1913 was recorded in the species list of meiofauna from the Andaman and Nicobar Islands (Rao, 1980, 1987, 1988). *Draconema* spp. were recorded from the east and west coasts of India (e.g., Rao & Ganapati, 1968; Chinnaduri & Fernando, 2011; Nanajkar *et al.*, 2011). The present paper gives the first detailed taxonomic study of Indian draconematids and describes new species belonging to the genera *Draconema* Cobb, 1913 and *Paradraconema* Allen & Noffsinger, 1978 from the Andaman Islands.

### Materials and methods

Material studied in this paper was collected from Wandoor (11°40.55'N, 92°45.12'E) and Burmanalla (11°33.45'N, 92°43.78'E) in South Andaman, Andaman Islands, India, among sediments of intertidal macroalgae. The draconematids were sorted with a dissecting stereomicroscope and preserved into ethanol (70%). They were mounted in anhydrous glycerine and examined from either side of the body using a compound light microscope with differential interference contrast. Morphometric data were obtained from camera lucida drawings or by using a digital camera system (Olympus DP-25 with DP2-BSW software and Wacom Cintiq 21UX Pen Display). All measurements were in  $\mu\text{m}$ ; range and/or mean $\pm$ standard deviation are given in parentheses. When data on bilaterally paired structures are presented, separate reference is made to feature as the right/left hand side of the