



## Swedish Plectida (Nematoda). Part 9. The genus *Leptolaimoides* Vitiello, 1971

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### Abstract

Three known and two new species of *Leptolaimoides* are described from bottom sediments collected in Skagerrak off the west coast of Sweden. The following known species are redescribed: *Leptolaimoides haploopis* Jensen, 1978, *L. tubulosus* Vitiello, 1971 and *L. hexatubulosus* Hoang Lai-Phu *et al.*, 2009. *Leptolaimoides filicaudatus* **sp. n.** is characterised by the 431–543 µm long body; cephalic sensilla papilliform; amphid 23–26 µm long, located 9–10 µm from anterior end; first body pore located 35–37 µm from anterior end; lateral field simple along most of body, areolated on tail, arising 36–40 µm from anterior end; female without supplements, vagina without *pars refringens*, vulva midventral; male without tubular and without alveolar supplements; spicules arcuate and 16 µm long. *Leptolaimoides leptomicron* **sp. n.** is characterised by the 776–847 µm long body; cephalic sensilla papilliform; amphid 15–17 µm long, located 9–13 µm from anterior end; first body pore located 40–46 µm from anterior end; lateral field areolated, arising 26–28 µm from anterior end; female without supplements, vagina without *pars refringens*, vulva midventral; male with three tubular and without alveolar supplements, spicules arcuate and 28–29 µm long. The diagnosis of the genus *Leptolaimoides* is emended and a tabular compendium and dichotomous identification key to species of the genus *Leptolaimoides* are provided.

**Key words:** key, Leptolaimidae, *Leptolaimoides*, new species, Skagerrak, Sweden, taxonomy

### Introduction

The genus *Leptolaimoides* Vitiello, 1971 currently includes only 12 species, three of which were described from North-European waters and nine from different marine habitats in Asia. Only one species is listed in the Swedish taxonomic database ([www.dyntaxa.se](http://www.dyntaxa.se)), although it was found on the Danish side of the Öresund (Jensen, 1978). Five species belonging to the genus *Leptolaimoides* were found during recent sampling in marine habitats along the Swedish coast conducted as a part of the on-going STI-supported project "Taxonomy and distribution of free-living nematodes of the order Plectida in Sweden", and are described below. Of these, two are new to the fauna of Sweden (*L. tubulosus* Vitiello, 1971 and *L. hexatubulosus* Hoang Lai-Phu *et al.*, 2009) and two are new to science.

### Material and methods

Bottom sediment samples were collected in several locations in the southern part of Skagerrak off the west coast of Sweden. All samples were collected with a bottom dredge or box corer and further sieved in the laboratory. Nematodes were extracted from samples using a decanting and sieving method (smallest mesh sizes—45 µm or 70 µm). Fresh water was used during sieving to induce osmotic shock in nematodes, detaching them from the substrate. Samples were immediately fixed in 4 % formaldehyde. Formaldehyde-preserved specimens were transferred to pure glycerine using Seinhorst's (1959) rapid method as modified by De Grisse (1969). Permanent nematode mounts on glass slides were prepared using the paraffin wax ring method. All curved structures were measured along the curved median line. The term "areolated" is used here to describe lateral fields that consist of three alae, of which the two outer alae are divided into square blocks by extensions of body annulation (Fig. 1 A, see also Maggenti & Gardner, 2005).

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