

Article



Swedish Plectida (Nematoda). Part 2. The genus Antomicron Cobb, 1920

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Abstract

Two new species of *Antomicron* are described from bottom sediments collected in Gullmarn Fjord, west coast of Sweden. *A. quindecimpapillatus* **sp. n.** is particularly characterised by the 1390–1459 μm long body; elongate doughnut-shaped amphid; straight vagina with drop-shaped sclerotizations; female without sensilla in pharyngeal region and without supplements; male with two pairs of setiform sensilla in pharyngeal region, 15 tubular and no alveolar supplements, one pair of precloacal and four pairs of caudal setae, 26.0–29.5 μm long spicules. *A. lorenzeni* **sp. n.** is particularly characterised by the 603–676 μm long body; an inverted U-shaped amphid; straight vagina without sclerotizations; female without sensilla in pharyngeal region and without supplements; male without sensilla in pharyngeal region, two tubular and nine alveolar supplements, one pair of precloacal and four pairs of caudal setae, 23 μm long spicules. Additional information on the males of *Antomicron pellucidum*, *A. elegans*, *A. pratense* and *A. intermedius* is provided. A taxonomic review, tabular compendium and identification key of species of the genus *Antomicron* are also given.

Key words: Antomicron, Gullmarn Fjord, Leptolaimidae, Sweden, key, new species, taxonomy

Introduction

The genus Antomicron Cobb, 1920 is a rare representative of marine and brackish water nematodes, usually found in very low numbers. Only six valid species of this genus were described up to date, of which half are known only from male individuals. The type species of the genus, Antomicron pellucidum Cobb, 1920 was described from Costa Rica on the basis of a single male specimen (Cobb, 1920). The only known female of the same species was later found in Brazil (Gerlach, 1957). The second species of the genus described as Eutelolaimus elegans de Man, 1922 was originally found along the Dutch coast of the North Sea (de Man, 1922). It is now known to occur in the North Sea along the coast of the Netherlands and Germany (Lorenzen, 1966). The remaining four species of the genus are known only from their respective original descriptions (Gagarin & Nguyen Vu Thanh, 2005; Lorenzen, 1966; Villares & Pastor de Ward, 2011; Vitiello, 1971), and were never found again. Therefore, when two new species of the genus Antomicron were found during recent study of marine and terrestrial Plectida of the fauna of Sweden, it was important to re-study the type and non-type specimens of other known species of this genus. The descriptions of two new and four known species of Antomicron are given below.

Material and methods

Bottom sediment samples were collected in several locations in the southern part of Skagerrak and in Gullmarn Fjord off the west coast of Sweden. All samples were collected with a bottom dredge or box corer and further sieved in the lab. Fresh water was used during sieving to induce osmotic shock in nematodes so they will detach from the substrate. Samples were immediately fixed in 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. Additional material for several known species of the genus *Antomicron* was available for study in the form of permanent mounts on glass slides. All curved structures were measured along the curved median line.