



Swedish Plectida (Nematoda). Part 1. *Domorganus suecicus* sp. n. from Skagerrak

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Abstract

A new species of *Domorganus*, *D. suecicus* sp. n., is described from bottom sediments collected in Skagerrak off the west coast of Sweden. It is characterised by its long body (1.3–1.6 mm), lateral field originating immediately posterior to amphid, excretory pore located at the level of basal pharyngeal bulb, absence of advulval sensilla, straight spicules and absence of gubernaculum. The new species has a unique set of characters (position of excretory pore and absence of the gubernaculum) separating it from all other known species of the genus. It shows some resemblance to the previously described species *D. acutus* and *D. subtilis* in body size and most measurements, but can be easily separated from both by the relatively longer tail, shorter spicules, position of the anterior end of the lateral field near amphid, position of the excretory pore anterior to pharyngo-intestinal junction, and absence of gubernaculum. A tabular compendium of species of the genus *Domorganus* is also given.

Key words: *Domorganus*, key, new species, Skagerrak, Sweden, taxonomy

Introduction

The genus *Domorganus* Goodey, 1947 includes eight valid species found in marine, freshwater and terrestrial habitats in Europe and Asia. The type species of the genus, *Domorganus macronephriticus* Goodey, 1947 was described on the basis of specimens obtained from soil samples and recovered during the examination of the earthworms from England. Subsequently, this species was found and redescribed from Germany and Russia (Tchesunov & Sturhan, 2004) and is widely distributed in Europe, including Sweden (pers. obs.). The second species, *Domorganus oligochaetophilus* Thun, 1967 was collected in the intestine of *Lumbriculus lineatus* from the Kiel Bay in Germany (von Thun, 1967), and later from the intestine of *Enchytraeus albidus* from the Kandalaksha Bay in Russia (Valovaya, 1989). Subsequently, three more species were described in this genus from marine (Valovaya, 1989) and terrestrial habitats (Hernández & Jordana, 1990). At the same time, Lorenzen (1981) synonymised three monotypic genera *Ochridius* Gerlach & Riemann, 1973, *Leoberginema* Tsalolikhin, 1977 and *Mikinema* Tchesunov, 1978 with *Domorganus*, thus bringing the total number of species to eight. Only one population of *Domorganus* has been found outside Eurasia, in Costa Rica (Holovachov & De Ley, 2006) but this was not identified to species level.

Three species of the genus *Domorganus*, namely *D. macronephriticus*, *D. oligochaetophilus* and *D. beklemishevi* Valovaya 1989, are symbiotically associated with terrestrial and marine oligochaete worms (Tchesunov & Sturhan, 2004; von Thun, 1967; Valovaya, 1989) but at least *D. macronephriticus* can also be found in soil samples alongside free-living nematodes. It is therefore impossible to judge if the other five species of *Domorganus* described either from soil, freshwater or marine environments are indeed free-living species. In this paper a new species of *Domorganus*, *D. suecicus* sp. n., is described from bottom sediments collected in Skagerrak off the west coast of Sweden.