



Article

Review of the genus *Scutylenchus* Jairajpuri, 1971 (Nematoda: Tylenchida), with description of *Scutylenchus dongtingensis* n. sp. from rhizosphere soil of grass in China

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Abstract

The genus *Scutylenchus* Jairajpuri 1971 (Nematoda: Tylenchida) is reviewed, and a compendium of the most important diagnostic characters with a key to the species are given. A new species, *Scutylenchus dongtingensis* n. sp., is described from China, extracted from rhizosphere soil around grass near Dongting Lake in Hunan province. The new species is characterized by having body cuticle with 16–20 longitudinal striae forming blocks; lateral field with 6 incisures forming 5 bands without areolation or any other decoration; a slightly offset head with 7 striae; slender stylet 22–25 µm long, with cone about three fifths of stylet length; excretory pore inconspicuous under light microscope, located in region of anterior part of gland bulb in lateral view; female vulva slit transverse with small epiptygma in lateral view; conspicuous dot-like phasmid located at about one third of tail length posterior to anus; female tail subcylindrical, terminus round, annulated, terminal cuticle thickened; spicule slender, well developed, 27–32 µm long, usually not protruded from cloaca; gubernaculum crescent-shaped, may be protruded from cloaca; bursa conspicuous, extending over tail terminus in ventral view.

Key words: new species, morphological characteristics, taxonomy, ITS, plant nematodes, grass

Introduction

Since the genus *Tylenchorhynchus* was established by Cobb (1913), many more species have been identified and described according to morphological characteristics, making the genus unwieldy. In order to distinguish or define species, the genus was split and new genera were established to accommodate species with distinct morphological differences from *Tylenchorhynchus*, i.e., *Scutylenchus* Jairajpuri 1971 and *Merlinius* Siddiqi 1970, mainly distinguished by having 6 incisures in the lateral fields. Siddiqi (1970) established the genus *Merlinius* to accommodate those species previously in *Tylenchorhynchus* that have 6 incisures in the lateral field, a small trough-shaped non-protrusible gubernaculum, and stout spicules with distal ends notched. Jairajpuri (1971) established *Scutylenchus* to accommodate one species *S. mamillatus* (Tobar-Jiménez 1966) Jairajpuri 1971 from the genus *Tylenchorhynchus*, which is characterized by scutellum-like phasmids, subdigitate female tail and areolated lateral fields. The genus *Geocenamus* was established by Thorne and Malek (1968) and distinguished from other genera by a labial disc with a slender stylet guide extending back almost one-third the length of an exceedingly slender stylet, and a weakly developed cephalic framework. Even though these genera were established with distinctive diagnostic characteristics, their species were very similar in morphology, i.e., having similar body shape, cephalic region and framework, structure and morphology of pharynx and genital gland. Different nematologists have different opinions on these similar genera according to the particular emphases they place on morphological characters, and these genera and their species have been discussed frequently by nematologists (Tarjan 1973; Fortuner & Luc 1978; Siddiqi 1979; Brzeski 1991; Siddiqi 2000).