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First record of the genus *Discotylenchus* Siddiqi, 1980 (Nematoda: Tylenchidae) from Iran, with description of one new and data on two known species

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Abstract

The genus *Discotylenchus* is reported for the first time from Iran. *Discotylenchus iranicus* n. sp. is described and illustrated based on morphological and morphometric characters. The new species is characterized by a combination of the following morphological features: lip region continuous and smooth, tapering to an offset prominent labial disc, lateral field with four incisures, stylet length of 14–15 μ m, vulva position at 70.8–76.5 %, tail length of 81–100 μ m, conoid with a rounded tip and presence of males. The Iranian population of *D. brevicaudatus* shows a wider morphometric range compared to the original description and the male of this species is described for the first time. The morphological characters and range of morphometric data of *D. discretus* are in full agreement with the original population.

Key words: *Discotylenchus iranicus* n. sp., *D. brevicaudatus*, *D. discretus*, first report, Northern Khorasan province, south-western Iran, *Zea mays*.

Introduction

The genus *Discotylenchus* Siddiqi, 1980 was erected by Siddiqi (1980) and currently contains 6 valid species (Geraert, 2008): *D. attenuatus* Siddiqi, 1980, *D. azadkashmirensis* (Maqbool & Shahina, 1985) Siddiqi & Lal, 1992, *D. brevicaudatus* Brzeski, 1985, *D. discolabialis* (Mizukubo, 1993) Siddiqi, 2000, *D. discretus* Siddiqi, 1980 and *D. longicauda* (Maqbool & Shahina, 1985) Siddiqi & Lal, 1992. It is similar to *Filenchus* Andr assy, 1954 in most respects, except a tapering lip region bearing a terminal flat disc. Siddiqi (1980) described two new species, *D. attenuatus* and *D. discretus* while establishing the genus. Later, Brzeski (1985) added a third species from Mexico: *D. brevicaudatus*. Siddiqi and Lal, (1992) enriched the genus by transferring two other species from *Ottolenchus* Husain & Khan, 1967 to *Discotylenchus*, formerly described by Maqbool and Shahina (1985) from Pakistan as *O. azadkashmirensis* and *O. longicauda*. The last species added to *Discotylenchus* was first described as *Filenchus discolabialis* (Mizukubo, 1993) and transferred to the genus by Siddiqi (2000). During our extensive survey of plant-parasitic nematodes in north-eastern, south and south-western Iran, three species of the genus *Discotylenchus* were found for the first time. Two populations belong to two known species, namely *D. discretus* and *D. brevicaudatus*; the third population belongs to a previously unknown species and is herein described and illustrated as *Discotylenchus iranicus* n. sp.

Materials and methods

Up to 220 soil samples were collected from across the country during 2008–2011. Nematodes were extracted from soil samples using the centrifugal-flotation method (Jenkins, 1964). The collected specimens were killed in hot 4%