

SOME SPECIES OF *Helicotylenchus* (NEMATODA: HOPLALAIMIDAE) FROM IRAN*

L. KASHI and A. KAREGAR**¹

(Received : 26.11.2012; Accepted : 16.3.2013)

Abstract

The genus *Helicotylenchus* with about 250 described species is one the largest genera in order Tylenchida or infraorder Tylenchomorpha. In order to identify the species of *Helicotylenchus*, over 500 soil and root samples collected from rhizosphere of different plants and localities of Iran, during 2009-2010. Soil samples were collected and its nematodes extracted, killed and processed to glycerin. Then the nematodes examined by light microscope, equipped with drawing tube and digital camera. In this study, in addition to 15 species of 26 previously reported species of the genus *Helicotylenchus*, a number of other known species were isolated and identified. Among the identified species, due to morphological and morphometric similarities, *H. indicus*, *H. insignis*, *H. falcatus* and *H. egyptiensis* are discussed in two groups. The ventral tail projection in the first three species usually is shorter than two body annuls width, and in *H. egyptiensis* is as long as two body annuls width or longer. The morphometric characters of the first three species are very similar and for this reason *H. insignis* and some other species were synonymized with *H. indicus* by several authors. However the shape of stylet knobs is different among these species. Stylet knobs are sloping backward in *H. indicus*, but indented forward in *H. insignis*. *H. egyptiensis* has a usually pointed tail tip. *H. insignis* and *H. falcatus*, as new records for Iranian nematode fauna are described. Also the descriptions of *H. indicus* and *H. egyptiensis* which has already been reported form Iran, presented in more details.

Keywords: Fauna, Identification, Morphology, Tylenchida, Tylenchoidea Tylenchomorpha.

See Persian text for figures and tables (Pages ۲۹۷-۳۱۵).

*: A Part of PhD Thesis, Submitted to College of Agric., Shiraz Univ., Shiraz, Iran.

** : Corresponding Author, Email: karegar@shirazu.ac.ir

1. PhD Student and Assoc. Prof. of Plant Pathol., College of Agric., Shiraz Univ., Shiraz, Iran.

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