

Identification of plant parasitic nematodes of Aphelenchoididae superfamily related to fruit trees in some areas of Alborz province

F. Amiri¹, M. Maleki^{2*} and R. Asghari³

Received: 16 Dec., 2018

Accepted: 30 Apr., 2019

ABSTRACT

In order to identify the plant parasitic nematodes, some soil and root tissues of plants samples were collected from different crops in of Eshtehard and Nazarabad, Alborz province, through 2017-8. After transferring the samples to the laboratory, soil and root washing operations, nematode extraction, transferring and fixing in pure glycerin were performed. Permanent microscopic slides and incisions were made from different parts of the body of some species. After microscopic observations, the necessary measurements and drawing of the required images, the extracted species were identified using different keys. During the survey and morphological studies, six nematode species of three genera were identified as follows:

Aphelenchus avenae, *Paraphelenchus myceliophthorus*, *Aphelenchoides centralis*, *Aphelenchoides fuchsi*, *Aphelenchoides parabicaudatus*, *Aphelenchoides varicaudatus*

Among the identified nematodes, the species *Aphelenchoides fuchsi* is reported for the first time in Alborz province and for the second time in the world. *Aphelenchoides varicaudatus* is also reported for the second time in Iran.

Keywords: Alborz Province, fauna, Aphelenchidae ,Aphelenchoididae

1. Former MSc. Student and Assistant Professor, respectively, Department of Plant Pathology, College of Agriculture, Varamin-Pishva Branch, Islamic Azad University, Varamin, Iran.

2. Post-Doctoral Student, Department of Plant Pathology, College of Agriculture, Zanzan University, Zanzan, Iran.

Corresponding author: mojdehmaleki@yahoo.com