

## **Article**



# Description of *Dorylaimoides alborzicus* sp. n. (Dorylaimida: Nematoda) from Iran, with updated compendium and key to the species of *Dorylaimoides*

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#### **Abstract**

Dorylaimoides alborzicus **sp. n.** is described. Characteristics of the new species include a lip region separated from the rest of body by a sharp constriction, 1.1-1.3 mm long body, 10-11 µm long odontostyle dorsal line and 8-10 µm long odontostyle ventral line, 15-16 µm long arcuate odontophore, anterior uterine sac 37-61 µm long (1.1-1.7) times corresponding body width), female tail straight to ventrally bent, elongate conoid with rounded terminus and 46-62 µm long and males with 31-35 µm long spicules, 5-6 ventromedian supplements and ventrally bent tail, 39-60 µm long. An updated identification key to all the valid species of *Dorylaimoides*, as well as a table of data for the species not included in the study by Peña Santiago and Peralta (1997b) is given.

Key words: Azad Kooh, new species, morphology, morphometrics

### Introduction

The genus *Dorylaimoides* Thorne & Swanger, 1936 was comprehensively revised in a series of fine papers (Peralta & Peña Santiago, 1995a, b, c; Peña Santiago & Peralta, 1997a, b), where many species were thoroughly reviewed and a key to the known species of the genus and a general diagnostic compendium of the measurements for all of them were furnished. Since then, however, thirteen new species have been described, a fourteenth species has been transferred from *Thornenema* by Andrássy (2009) and a fifteenth species, never described so far, has recently been found in the Alborz Mountains of Iran as a result of a survey of Iranian nematode fauna. In the present paper the new Iranian species is described; a compendium of the morphometric characters of the species described after 1997 is provided and the key to the species of the genus by Peña Santiago and Peralta (1997b) is updated.

#### Material and methods

Soil samples from several locations in northern cities of Iran were collected. Nematodes were extracted by suspending 200 g soil in water and using a 20 mesh sieve for collecting debris and root particles. A series of 60 and 200 mesh sieves were used to collect the nematodes. Nematodes were observed and hand picked directly under a Nikon SMZ1000 stereomicroscope. One sample from Azad Kooh, Alborz Mountains yielded a species of *Dorylaimoides* not described so far. The collected specimens were killed in hot 4% formaldehyde solution, transferred to anhydrous glycerin according to De Grisse (1969), and mounted in permanent slides. Observations were made under a Nikon E600 light microscope. Some of the best preserved specimens were photographed with an Olympus AX70 microscope and Olympus DP25 digital camera and drawings were made using a drawing tube attached to the microscope. To compare the new species with known similar species, the original data and data given in the review by Goseco *et al.*, 1976 were used. To compare with *D. bulbosus* (Brzeski & Szczygiel, 1961) Szczygiel, 1965, we used data given in its redescription (Szczygiel, 1965), and to compare with *D. arcuatus* Siddiqi, 1964, data given

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