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**Description of *Trischistoma abharensis* n. sp. (Nematoda: Trischistomatidae) and first record of *Tripylella intermedia* (Bütschli, 1873) Brzeski & Winiszewska-Ślipinska, 1993 (Nematoda: Tripylidae) from Iran**

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**Abstract**

Two populations of the genera *Trischistoma* and *Tripylella* were recovered from the rhizosphere of grapevines and mosses growing on alder trees in Zanjan and Guilan provinces, respectively, Iran. The nematodes were identified as *Trischistoma abharensis* n. sp. and *Tripylella intermedia*, respectively. *Trischistoma abharensis* n. sp. is characterized by having females with body length 1069–1322 µm, presence of sparse somatic setae on the sublateral body, absence of ventromedian cervical setae, a distinct dorsal tooth directed anteriorly, absence of post-vulval uterine sac, and tail with one pair of sub-dorsal caudal setae. Males were not found. *Tripylella intermedia* is characterised by having females with body length 905–990 µm, annulated cuticle, stoma with two chambers: with dorsal tooth lying in posterior buccal chamber, and one large subventral and one small subventral tooth, respectively lying in posterior and anterior buccal chambers, cardiac glands large, composed of six fused cells, and tail 121–155 µm long, ventrally bent, anterior half broad, then suddenly narrowing, with posterior half tapered narrowly and cylindrically. The phylogenetic relationships of both species were analysed using sequences of the partial small subunit (SSU) and D2/D3 expansion segments of large subunit (partial LSU) of ribosomal RNA genes and are discussed.

**Key words:** first report, Iran, morphology, new species, phylogeny, SEM, 28S and 18S rRNA genes, Trischistomatidae, Tripylidae

**Introduction**

*Trischistoma* Cobb, 1913 and *Tripylella* (Bütschli, 1873) Brzeski & Winiszewska-Ślipinska, 1993 were found in soil, limnic and in moss (Andrássy, 2006b; 2007). The genera *Trischistoma* and *Tripylella* belong to the family Trischistomatidae and Tripylidae de Man, 1876, respectively, which are assigned to either the Enoplida (Andrássy, 2007; Zhao, 2011) or Triplonchida (De Ley & Blaxter, 2004; Zullini, 2006).

Zullini (2006) considered six valid genera, including *Trischistoma* Cobb, 1913; *Tripylina* Brzeski, 1963; *Tripyla* Bastian, 1865; *Tripylella* Brzeski & Winiszewska-Ślipinska 1993; *Tobrilia* Andrásy, 1967 and *Abunema* Khera, 1971 and placed them in the family Tripylidae, order Triplonchida. Andrásy (2007) placed these genera in three subfamilies within the family Tripylidae, order Enoplida: a) subfamily Tripylinae including *Tripyla*, *Tripylina*, and *Tripylella*; b) subfamily Trischistomatinae consisting of one genus, *Trischistoma*; and c) subfamily Tobriliinae including one genus, *Tobrilia*. The genus *Abunema* was synonymized with *Tripylina* by Andrásy