

Short communication

A new record of genus *Anurophorus* (Collembola: Isotomidae) for Iranian fauna

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گزارش جدید جنس *Anurophorus* (Collembola: Isotomidae) برای فون ایران

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چکیده

در بررسی فونستیک پادمان استان مازندران، گونه *Anurophorus septentrionalis* از خاک و خزه تنه درختان جمع‌آوری شد. این گونه برای اولین بار از ایران گزارش می‌شود. به این ترتیب تعداد گونه‌های جنس *Anurophorus* در ایران به دو گونه افزایش می‌یابد.

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The genus *Anurophorus* Nicolet, 1842 belongs to the subfamily of Anurophorinae (690 species) (Bellinger *et al.*, 1996–2019). The members of Anurophorinae were recognized by characters such as: lacking or reduced furca, few sensilla on the body and few anterior manubrial setae. *Anurophorus* species are xerophilic and mostly occurring on different microhabitats including mosses and lichens on tree trunks and rocks in forests and also in dry coniferous litter (Potapov, 2001). Members of this genus are easily distinguished by their medium size, usually dark color and the absence of furca and spines. They often occur in abundance in field and move slowly (Fjellberg, 2007).

At present, the genus *Anurophorus* contains 53 species worldwide (Bellinger *et al.*, 2019). Only one identified species of this genus, *A. coiffaiti* Cassagnau and Delamare, 1955 was reported from Iran (Daghighi *et al.*, 2013; Falahati Hossein Abad *et al.*, 2013; Kahrarian *et al.*, 2015).

In this study, *A. septentrionalis* Palisia, 1966 is reported for the first time from Iran. The specimens of *A. septentrionalis* were collected from Mazandaran province in 2017 from soil and mosses on trees. They were extracted by Berese funnel and stored in 85% ethanol. The

specimens were cleared in KOH 10% and mounted in Hoyer's medium on permanent slides. Then, they were identified using valid keys.

Material examined: 6 specimens, IRAN-MAZANDARAN-The specimens were collected from Amol region, Baliran village (N36°21'E52°25') from soil in March 2017, and Nowshahr region, Sisangan forest park (N36°57'E51°81') from mosses on the tree in May 2017. The specimens were preserved in laboratory of Sari University of Agricultural Sciences and Natural Resources and laboratory of Dr. Dariusz Szarzynski in Zoological Institute of Wroclaw of Poland.

Description: Body length 1.5-1.8 mm. Blackish-grey (Fig. 1). Dorsal integument with distinct reticulation. The first antennal segment with one ventrolateral sensilla. Third antennal segment without additional sensilla. Head with 8+8 ommatidia, G and H smaller (Fig. 2). Post antennal organ (PAO) normal, 2 times as long as Ommatidium diameter. Claw without inner tooth. Empodium on all legs shorter than 1/4 of the inner edge of the claw (Fig. 3). Tibiotarsi with 2, 3, 3 dorsal clavate tenent hairs. Upper subcoxa of hind leg with 3-5 setae. Tip of abdomen with enlarged polygons and thick. Macrochaetotaxy: 1, 1 / 0, 0, 0, 2. Sensilla formula: 2, 2 / 1, 1, 1, 2, 4. Ventral chaeta: Th I-III with 0+0, 0+0, 3-5+ 3-5 medial setae.

A. coiffaiti differing from *A. septentrionalis* by: 2-5 additional sensilla of third antennal segment and empodium about 2/4 and 1/2 of the inner edge of claw on leg I and III, respectively.

Distribution: India, General distribution: Palearctic.



Fig. 1. Dorsal habitus of *Anurophorus septentrionalis* Palisia, 1966 (Magnification 10x)



Fig. 2. Ommatidia 8+8, G and H smaller in *Anurophorus septentrionalis* (Magnification 40x)



Fig. 3. Claw without inner tooth and empodium in *Anurophorus septentrionalis* (Magnification 40x)

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