

## گزارش کوتاه علمی

( ) *Antennoseius*

A. (*Antennoseius*) *bacatus* Berlese (Mesostigmata: Ascidae)

A. (*Antennoseius*) Athias-Henriot, 1961 ☒

*maltzevi* Eidelberg, 1994

A. (*Antennoseius*) *hispaniensis*

A. (*Antennoseius*) *maltzevi* :

Carabidae ☒ shahroozkazemi@yahoo.com

(1, 2)

A. (*Antennoseius*) *Antennoseius* Berlese, 1916

*hispaniensis* Ascidae

) *Antennoseius*

) *Vitzthomia* Thor, 1930 (

j1 (1, 4) (

z1 ( )

) ( )

) *Antennoseius*

*Vitzthomia*

A. (*Vitzthomia*) *kamalii* Moraza & Kazemi, 2009

(st1) (3, 4)

*Antennoseius*

( )

A. (*Antennoseius*) *hispaniensis* Bernhard, 1963

( )

Z5

( ) ( )

st4 st3

*Antennoseius maltzevi*

( )

ji

( )

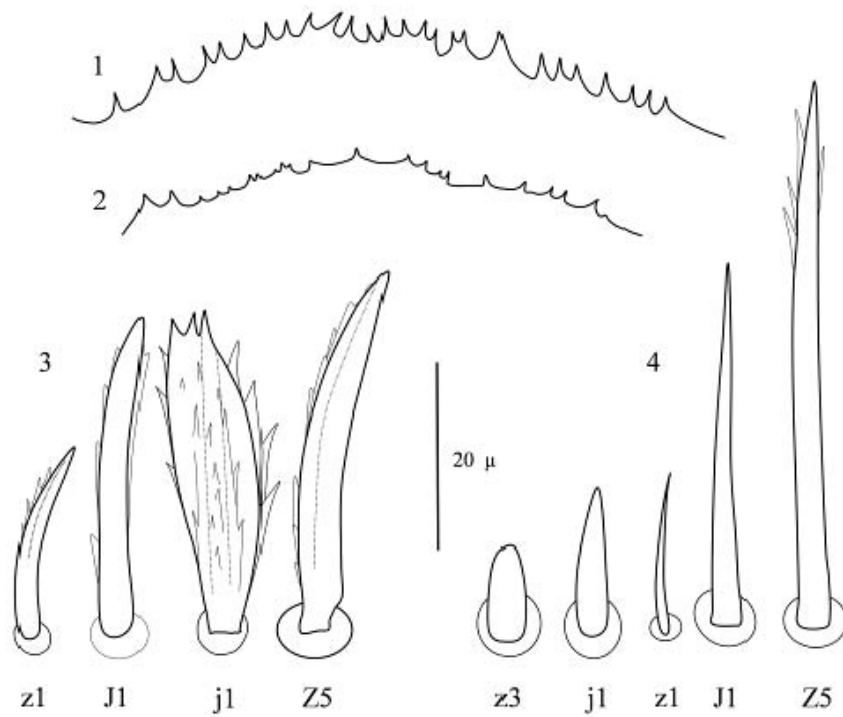
z1 ( )

s4 z2-z4 j2-j5

( )

S5 Z5

( )



*A. (Antennoseius) maltzevi*

*A. (Antennoseius) hispaniensis*

*Antennoseius* spp.

*A. (Antennoseius) maltzevi*

*A. (Antennoseius) hispaniensis*

**Figures 1-4.** *Antennoseius* spp.: 1. *A. (Antennoseius) hispaniensis*, tectum, 2. *A. (Antennoseius) maltzevi*, tectum, 3. *A. (Antennoseius) hispaniensis*, some setae of dorsal shields, 4. *A. (Antennoseius) maltzevi*, some setae of dorsal shields.

**Two new records of the genus *Antennoseius* Berlese (Mesostigmata: Ascidae) from Iran. Sh. Kazemi<sup>1</sup>✉ and Sh. Yazdanpanah<sup>2</sup>,** 1- Department of Biodiversity, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran; 2- Department of Entomology, Science and Research Branch, Islamic Azad University, Fars, Iran; Corresponding author: shahroozkazemi@yahoo.com ✉.

The free-living predatory ascid mites of the genus *Antennoseius* Berlese, 1916 includes about 60 described species worldwide and divided into two subgenera *Antennoseius* (without ambulacra and claws on leg I) and *Vitzthumia* Thor, 1930 (with ambulacra and claws on leg I) (1, 4). So far, five species of the genus have been reported from Iran, two of them belong to the subgenus *Antennoseius* and three of them to *Vitzthumia*, of which *A. (Vitzthumia) kamalii* Moraza & Kazemi, 2009 had been new to science (3, 4). During an investigation on edaphic mites of the genus *Antennoseius* in Tehran and Fars Provinces, three species of the subgenus *Antennoseius* were collected from soil and litter and identified. Adult female and male specimens of *A. (Antennoseius) hispaniensis* Bernhard, 1963 were collected in agricultural fields of Faculty of Agriculture, Tarbiat Modares University in Tehran (19 December 2006) by senior author, and adult female specimens of *A. (Antennoseius) bacatus* Athias-Henriot, 1961 and *A. (Antennoseius) maltzevi* Eidelberg, 1994 were collected in oak forests in Koohmare-Sorkhi region, Fars Province (5 March 2010) by junior author. *Antennoseius (Antennoseius) hispaniensis* has been collected in soil and litter and reported before from Spain, former USSR and Japan and *A. (Antennoseius) maltzevi* associated with carabid beetles from Italy and Ukraine. These species are considered here as new records for Iran mite fauna (1, 2).

**Differential diagnosis of adult female of *A. (Antennoseius) hispaniensis*:** Dorsal shields together 640-650µm long, reticulate-granulate. Podonotal and opisthotal shields with 20 and 15 pairs of setae, respectively, without unpaired setae on opisthotal shield, dorsal setae slightly

widened and dentate, setae j1 wider (31–35 µm), setae z1 shortest (19–22 µm) and Z5 longest (45 µm), other setae sub-equal (30–35 µm) (Fig. 3). Sternal shield with two pairs of setae (st2-st3) and three pairs of lyrifissures, st1 inserted in soft cuticle anterior to shield. Epigynal shield slightly widened, posteriorly convex. Ventrianal shield bearing two pairs of pre-anal setae and three circum-anal setae. Peritrematal-exopodal shields widened and slightly continued around posterior edge of coxae IV. Tectum finely convex, with small denticles (Fig. 1). Movable digit of chelicerae bidentate, fixed digit with about 15 minute denticles, and a small sub-apical tooth. Most of leg setae, especially dorsal setae, barbed; without thick and modified setae on leg segments.

**Differential diagnosis of adult female of *A. (Antennoseius) maltzevi*:** Dorsal shields together 600-610 µm long, reticulate-lineate. Podonotal shield with 20 and opisthotal shield with 15 pairs of setae, unpaired setae on opisthotal shield absent, eight pairs of podonotal setae (j2-j5, z2-z4, s4) thick, short and blunt, ca. 10 µm long, setae j1 short (13–15 µm) and spine-like, z1 short (10–15 µm) and setiform, other setae needle-like, sub-equal in length, except Z5 as longest setae (ca. 60 µm), Z5 (Fig. 4), S5 and some posterior opisthotal setae barbed in distal half. Sternal shield bearing two pairs of setae (st1-st2) and three pairs of lyrifissures, posterior margin of shield irregularly concave, setae st3 and st4 inserted on soft cuticle. Epigynal shield narrow, nearly long and rounded posteriorly. Anal shield with three circum-anal setae. Peritrematal-exopodal shields nearly wide, not continued to posterior area of coxae IV. Tectum slightly convex, with minute denticles (Fig. 2). Movable cheliceral digit bidentate, fixed digit with several minute denticles. Most of leg setae smooth, some dorsal setae on trochanter, femur, genu and tibia I thickened.

**References:** (1) N. G. BREGETOVA, pp. 244–254, Nauka, Leningrad, 1977. (2) D. J. GWIAZDOWICZ and R. HAITLINGER, *Biologia*, 65, 99, 2010. (3) SH. KAZEMI and A. RAJAEI, *Persian J. Acarol.*, 2, 63, 2013. (4) M. L. MORAZA and SH. KAZEMI, *Int. J. Acarol.*, 35: 1, 59, 2009.

*Antennoseius* Berlese (Mesostigmata: Ascidae)

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