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First record of *Leitneria pugio* (Karg) (Acari: Halolaelapidae) from Turkey

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Mesostigmatic mites are known as the best-studied soil mites worldwide (Walter and Proctor 2013). The family Halolaelapidae comprises about 80 described species in four valid genera, including *Halolaelaps* Berlese & Trouessart, *Halodarcia* Karg, *Leitneria* Evans and *Saprosecans* Karg (Halliday 2008; Lindquist *et al.* 2009). They are common predators and mostly live in the organic substrate, manure and debris. The members of *Leitneria* species are present in Central and Southern Europe and Iran (Bregetova and Shcherbak 1977; Moraza 2010; Farahi *et al.* 2018). So far only one species of the family Halolaelapidae, *Saprosecans baloghi* Karg, is recorded from Turkey (Çobanoğlu and Bayram 1998), and this is considered as the first report of *Leitneria pugio* (Karg, 1961) from the country.

The mite specimen examined in this research was collected during vegetation period from the weed plants (wild oat) with attached soil in garlic growing areas *Allium sativum* L. (Alliaceae) from Kastamonu in 2016. The mite was extracted by a Berlese funnel, cleared in lactophenol solution, stained with acid fuchsin and mounted in Hoyer's medium and examined under a phase-contrast microscope. All measurements are given in micrometers (µm). The voucher specimens of species are deposited in the mite collection of the Department of Plant Protection, University of Ankara, Turkey.

Genus *Leitneria* Evans, 1957

Leitneria pugio (Karg, 1961) (Figs. 1–2)

Sprolaelaps pugio – Karg (1961): 132.

Leitneria pugio – Karg (1962): 75.

Measurements of the Turkish specimen – Idiosoma 390 long, podonotal shield 203 long, 220 wide; opisthonotal shield 197 long and 209 wide (Fig. 1). Sternal shield 75 long from anterior to posterior margins of the shield, 57 wide at st2 level; epigynal shield 97 long, 47 wide at level of the genital setae. Anal shield 79 long, 82 wide (Fig. 2).

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Specimen examined

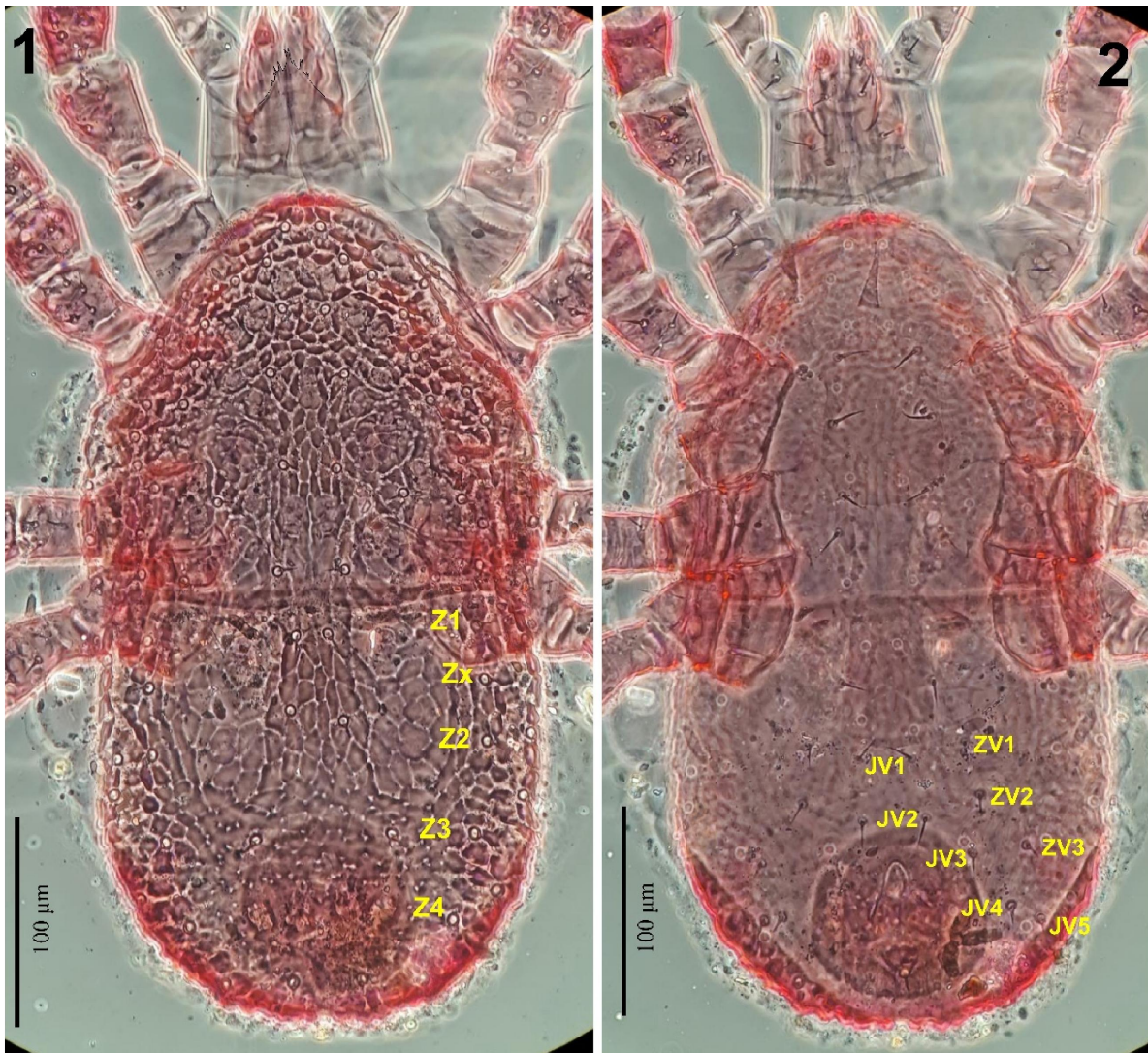
1♀, 28 April 2016, in garlic cultivation area, from weed plants (*Avena fatua* L.) (Poaceae) (YB-41), Hanönü-Kornopa Village-Kastamonu (41° 35' 23.9892" N, 34° 17' 25.008" E) collected by Cihan Cılbircioğlu.

Distribution

Austria, Crimea, Poland, Spain (Karg 1961, 1993; Gwiazdowicz and Kmita 2004; Kaczmarek and Marquardt 2008; Moraza 2010; Wissuwa *et al.* 2012), Iran (Farahi *et al.* 2018) and Turkey (this paper).

Remarks

Both the genus and species are new records for mite fauna of Turkey and second record for Asia (Farahi *et al.* 2018). The species *L. pugio* was described in genus *Saprolaelaps* but later transferred to *Leitneria* (Karg 1993). There are only two species described in this genus, *L. pugio* and *L. granulatus* (Halbert), the latter with smooth dorsal shields and considerably wider than long ventrianal shield can be separated from *L. pugio* which has reticulated dorsal shields and also the ventrianal shield width approximately equal in length.



Figures 1–2. *Leitneria pugio* (female) – 1. Dorsal view of body; 2. Ventral view of body.

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