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Paride Dioli

Natural History Museum, Dept.
of Entomology, Milano, Italy

Inanc Ozgen

Firat University, Engineering
Faculty, Bioengineering
Department, Elazığ, Turkey

A rare and less known pentatomidae in turkey: *Tshingisella bella* kiritshenko, 1913

Paride Dioli and Inanc Ozgen

Abstract

In this paper, the presence of a rare species from Turkey, *Tshingisella bella* Kiritshenko, 1913 is discussed. One specimen was found in the area of Sivrice lake where is present the host plant *Astragalus* sp.

Keywords: rare species, heteroptera, *Tshingisella bella*, elazığ, Turkey

Introduction

Heteroptera species of the East Anatolia, Turkey, are still little known, if compared to the one of the other parts of the Country. Önder *et al.* (2006) listed a total of 1526 heteropteran species/subspecies for the whole Turkey, in which they included eastern species. The last works of Özgen *et al.* (2005), Bolu *et al.* (2006) Matocq and Özgen (2010)^[2], Gözüaçık *et al.* (2011)^[3], Matocq *et al.* (2014)^[5], Çerçi *et al.* (2018), Özgen *et al.* (2018) gave an good review of the studies realized in this region. For Pentatomidae family, 162 species in 54 genera are quoted in Turkey (Önder *et al.* 2006). With this study, a new locality record of *Tshingisella bella* Kiritshenko, 1913, is given.

Material and Method

The specimen was collected by visual sampling. Specimen was caught by sweep-netting under the *Astragalus* sp. Material was identified by the first author.

Results

Tshingisella bella Kiritshenko, 1913 (Figure 1).

Material examined: Elazığ, Sivrice, 1320 m, 01.04.2018, 2 exx. (Figure 2).

General distribution: Azerbaijan, Arab Emirates, Turkey, Iran, Iraq, Syria, Tadzikistan, Turkmenistan, Uzbekistan, Caucasus, South Russia (Rider, 2006; Önder *et al.* 2006; Ghahari *et al.* 2014).

Distribution in Turkey: Ankara (Pozantı) (Seidenstuecker (1957).

Host Plant: Under *Astragalus* sp. (*Fabaceae*) (Hoberlandt 1997; Péricart 2010).

The species was found on the northern slope of the Sivrice lake, where the oak and weeds are intensively distributed. The host plant, *Astragalus* sp., located on the edge of the stone, was found near to *Quercus cerris*. The height of the ridge is 1320 m. In the future, it will be necessary to examine the feeding behavior of the insect on these cultivated plants.



Fig 1: Habitus of *Tshingisella bella*

Correspondence

Paride Dioli

Natural History Museum, Dept.
of Entomology, Milano, Italy



Fig 2: The collection sites of *Tshingisella bella* Kiritshenko, 1913

Discussion

Only two species belongs to the genus *Tshingisella* Kiritshenko, 1913: *T. bella*, shown in this paper, and *T. robusta* Linnavuori, 1960, endemic from Israel. According to Pericart (2010), probably the second should be ascribed to a new genus, so many are the substantial differences that separate the two species.

Tshingisella bella, in fact, has lateral margins of pronotum not arched forwards (Fig 3A) while in *Tshingisella robusta* they are strongly arched (Fig. 3B). *T. bella* is much smaller (6 mm) and the head is shorter. A topic character is the punctuation of pronotum and scutellum that is coarse and yellow-reddish (Fig. 1), the humeral part of pronotum is few prominent and truncate. Antennae, rostrum, ventral part and legs clear.

According with Seidenstücker (1957) the species seems to live in the steppe areas of the hills and mountains. Hoberlandt (1997) reports catches between 490 and 2300 m height in Iran. It was also collected in the adult stage during the hibernation under the stones and between the roots of milkvetch (*Astragalus* sp.) which is considered a medicinal herb used in the traditional pharmacopoeia.

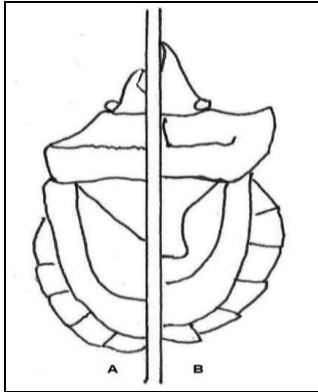


Fig 3: Profile of body A: *Tshingisella bella*; B: *Tshingisella robusta*

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