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Rhyparochromus tisifone Linnavuori 1990, first record for Turkey (Heteroptera, Rhyparochromidae)

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Abstract

The holotype of *Rhyparochromus tisifone* Linnavuori 1990 was described from Iraq on a single female with legs and antennae strongly damaged. The second specimen is reported in this paper from Eastern Turkey: we add the morphological description of the parts of the body which are absent in the holotype.

Keywords: *Rhyparochromus tisifone*, first record, morphology, Eastern Turkey

1. Introduction

Heteroptera species are still less known in the Eastern Anatolia region of Turkey. During recent investigations made by the Firat University of Elazığ, Department of Bioengineering in the Region of Tunceli, the second author of the present paper found *Rhyparochromus tisifone* Linnavuori 1990, a species of ground Bugs belonging to the family of Rhyparochromidae^[1]. It is a very rare *taxon* known, till now, only in one specimen collected in Iraq (Shaklava env.) and described by Linnavuori^[2]. The holotype is a female and it is strongly damaged. The record of another female in Eastern Turkey permits us to give new morphological characters for this species. In this paper, we offer a revised description based on a comparison of the holotype with the new finding.

The new record enlarges the knowledge about this *taxon* to the Eastern Anatolia regions of Turkey.

2. Materials and Methods**2.1 Material examined**

Turkey, Tunceli, Karşılar village, 1 specimen, female, 39.1752° N, 39.4412° E, at the base of herbs, legit I. Ozgen. Depository: Collection of the Firat University, Bioengineering Department, Elazığ/Turkey. The collected specimen is preserved dried on the label, with entomological preparation, and it was photographed in dorsal and ventral positions (Figures 1 and 3). The material was identified by the first author.

The holotype (Figure 2) is preserved dried in the Linnavuori Collection of the Museum of Wales (NHMW).^[1]

2.2 Morphology

The specimen from Eastern Turkey shows the same morphological characters described by Linnavuori^[2] and confirmed by Pericart^[3]: in fact, it is easily distinguished by the red coloring and very fine and sparse pitting of dorsal parts. Head, anterior lobe of pronotum, scutellum and roundish spot on the apical part of the mesocorium are black. First antennal segments (others missing in the holotype) are black.

In the Turkish specimen, the second, third and fourth segments of the antennae are black. The proximal part of the third segment is a little pale. The second segment is 1.2 times longer than the third. The latter one is subequal to the fourth third. The rostrum extends to the middle of the coxae (Figure 3). The anterior lobe of the pronotum has black margins. The basal lobe is red with little sparse black points. The posterior margins of the thoracic segments are orange with dark pits. Both specimens have a red narrow stripe along the anterior margin of the pronotum, posterior lobe of the pronotum, tip of the scutellum, clavus, and corium of the same red-orange colour. Humeral corners of the pronotum have a small longitudinal blackish spot. A blackish stripe is present on the clavus, along the scutellar margin, but this stripe does not reach the proximal and distal corners.

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The corium has an evident, central, rounded black spot. The membrane of the elytra is dark brown coloured, the basal margin has orangish veins, and the apical margin has an indistinct pale spot. The abdomen is blackish brown. The elytra are, in both specimens, a little shorter than the abdomen. The holotype has a black femora, with the extreme tips yellow brown. The fore and middle tibiae (hind tibiae missing) and the tarsi are bright yellow brown, while the tibial and tarsal apices are brown and the tibial spines are pale. The Turkish female (Fig. 3) has forelegs with pale tibiae, apically black like in the holotype. The tarsi are yellow brown. The middle tibia, differently from the holotype, are brown. The hind tibia (absent in the holotype) are entirely black. The little divergences in the colouring of the legs are compatible with individual variations. The shape of the body is elongate, with proportions in the holotype and the Turkish specimen being similar. The body length is 8 mm.

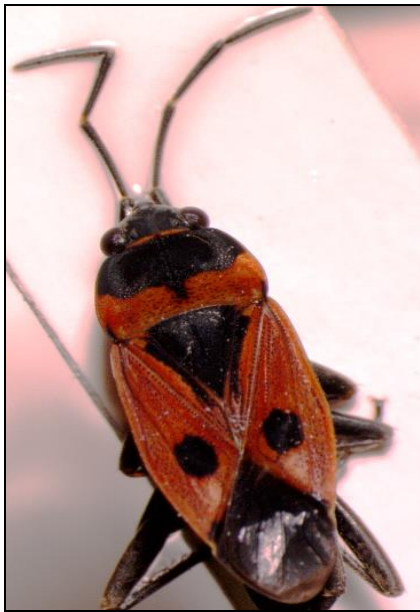


Fig 1: The specimen of *Rhyparochromus tisifone* from Turkey (Photo I.Ozgen).



Fig 2: The holotype from Iraq described by Linnavuori and preserved in the Collections of the Museum of Wales (Photo courtesy of Michael Wilson, NHMW)



Fig 3: Ventral shape of *Rhyparochromus tisifone* found in Eastern Turkey (Photo I.Ozgen).

3. Discussion

R. tisifone belongs to the *R. vulgaris* group. It can be distinguished from *R. simplex* (Turkestan) by having the lateral margins of the anterior lobe of the pronotum black. Differently from *R. maroccanus* and *R. vulgaris*, pale areas on the upper surface are completely red and the pitting is very fine and sparse. This paper adds new information to the works of Linnavuori^[2] and Pericart^[3] particularly with regard to the color of the legs and antennae which are mutilated in the holotype. However, like the two papers mentioned above, we cannot add any information about the genital capsule and the paramera of the male, because all the collected specimens so far are females. The biology and ecology of this species is unknown. The area in which *R. tisifone* was found is shown in Figure 4. This habitat has meadows, oak trees and a small stream. The search for other specimens is intense with the hope of finding a similar or different habitat: in fact many species of the genus *Rhyparochromus* (e.g. *R. vulgaris*) are found in agrarian areas with a strong presence of seeds.

4. Acknowledgements

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Fig 4: Habitat of *Rhyparochromus tisifone* found in Eastern Turkey (foto Ozgen)

5. References

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