

## First record of *Metatropis rufescens* (Hemiptera: Heteroptera: Berytidae) from Turkey

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**Abstract:** The stilt bug *Metatropis rufescens* (Herrich-Schaeffer, 1835) (Hemiptera: Heteroptera: Berytidae) is reported as a new record for Turkey and also represents the first record of the tribe Metatropini Henry, 1997 for the Turkish fauna. The specimens of the species were collected from its host plant, *Circaea lutetiana* L. (Onagraceae), in the forest area of Rize Province. The biology and habitat characteristics of the species are briefly discussed.

**Key words:** Heteroptera, Berytidae, *Metatropis rufescens*, faunistics, Anatolia, Turkey

Stilt bugs (Berytidae) constitute a rather small family of the superfamily Lygaeoidea, which includes approximately 36 genera and 175 species that are distributed worldwide (Henry, 2009; Cai and Bu, 2011; Cai et al., 2011). Stilt bugs are characterized by an elongated body and long, slender appendages. Most of them are phytophages, frequently tied to viscous glandular plants, although some are predators (Péricart, 2001). Unlike some other families, the Berytidae fauna of Turkey has received little recent attention, with the exception of an excellent biological paper by Morkel (2007) that described arachnophily in some of the Euro-Mediterranean species. So far, 5 genera and 21 species and subspecies of Berytidae have been reported from Turkey (7 from European Turkey and 20 from Asian Turkey) (Péricart, 2001). Here we report a new genus and species record, the first from the tribe Metatropini Henry, 1997.

***Metatropis rufescens* (Herrich-Schaeffer, 1835) (Figure)**

**Material examined:** ASIAN TURKEY: Rize Province: İkizdere, forest margin at the small Ottoman bridge at the village margin, 40°46'25"N, 40°33'47"E, 782 m a.s.l., on *Circaea lutetiana*, 7.vii.2011, 3 males and 2 females (1 couple in copula), P. Kment lgt. et det., coll. National Museum, Prague (= NMPC; 1 male, 1 female) and Trakya University, Edirne (2 males, 1 female). **GEORGIA: Abkhazia:** Azgara Levys Ptysh [= Ptysh Levyy], 22.vii.1983, 1 male 1 female, no collector, P. Kment det. (NMPC). **RUSSIA: Krasnodar Territory:** Sochi, vi.1961, 1 female, J. Král lgt., P. Kment det. (NMPC).

**Identification:** *Metatropis rufescens* is classified in the subfamily Metacanthinae, tribe Metatropini (Péricart, 1984, 2001). The species is easy to recognize among the remaining Euro-Mediterranean Berytidae by the following combination of characters: frons of head convex, without anterior process; scutellum without

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Figure. *Metatropis rufescens* (Herrich-Schaeffer, 1835), female specimen from İlkizdere (Rize Province, Turkey), dorsal view, 8.4 mm.

an erect spine dorsally; metathoracic scent gland peritremes not visible in dorsal view; abdominal venter impunctate (Péricart, 1984). For description of larval instars, see Péricart (1984).

**Bionomy and host plants:** Univoltine species; adults overwinter under moss or bark, always under conditions of high humidity, and reappear in spring. Oviposition takes place at the beginning of summer (Péricart, 1984). In Central Europe, *M. rufescens* feeds on *Circaea* species (*C. lutetiana* L., *C. alpina* L., and

their hybrid *C. × intermedia* Ehrh.) (Onagraceae); in Scandinavia it was also found on *Linnaea borealis* L. (Caprifoliaceae) (Péricart, 1984; Špryňar and Kment, 2005).

**Habitat:** *Circaea* species are inconspicuous plants growing in undergrowth in humid, shaded, nutrient-rich places in floodplain forests; along small streams; in deep valleys in deciduous or mixed forests, and in montane scree forests (plant associations *Alno-Ulmion*, *Fagion*, and *Tilio-Acerion*); the plants often grow along forest roads and trails (Kment and Bryja, 2001; Špryňar and Kment, 2005; Goula et al., 2008). *M. rufescens* is generally considered a rare species (Péricart, 1984), but this is partly due to the patchy distribution and inconspicuousness of the host plant. This was proven by recent surveys in the Czech Republic and Slovakia, which revealed *M. rufescens* living on any larger sampled population of the host plant (Kment and Bryja, 2001; Špryňar and Kment, 2005). However, *Circaea* species are mostly bound to remnants of natural and seminatural forests (Špryňar and Kment, 2005); they are endangered by aggressive methods of timber extraction and/or the establishment of forest monocultures, especially coniferous monocultures (Goula et al., 2008).

**General distribution:** Euro-Siberian species distributed from Ireland, Great Britain, France, and Norway in the west towards the Russian Far East and Japan in the east (Misja, 1973; Péricart, 1984, 2001; Protić, 2001a, 2001b; Derjanschi and Matocq, 2005). In the north, it approaches the polar circle in Sweden and Finland and reaches its southern limit in northeastern Spain, southern France, northern Italy, Croatia, Serbia, northern Bulgaria, Romania, and Moldavia. In the Mediterranean region, there are only isolated historical records from southern Italy, Greece, and Albania (Misja, 1973; Péricart, 1984: Map 22; Goula et al., 2008); the host plants are limited in Mediterranean region to mountain areas. There is also an isolated area of distribution in Crimea (Putshkov, 1974) and on the eastern coast of the Black Sea and in the Caucasus (Russia: Adygea, Krasnodar Territory; Georgia: Abkhazia; Armenia) (Putshkov, 1974; Péricart, 1984, 2001; Neimorovets, 2010). The occurrence of the species in southern Portugal and Palestine seems highly unlikely (Péricart, 1984).

**Distribution, habitat, and host plants in Turkey:** Thus far known only from a single locality in Rize Province, northeastern Anatolia, on the northern

slopes of the Kaçkar Mountains facing the Black Sea. This part of Turkey is characterized by a humid euxinian climate, rainfall throughout the year with more than 2000 mm of precipitation, and dense humid forests with evergreen shrubs in the undergrowth (e.g., *Rhododendron* spp.) (Avcı, 2005). We may expect *Metatropis rufescens* to be more widely distributed in Turkey, following its host plants. According to Chamberlain and Raven (1972), *Circaea lutetiana* is mostly distributed in northern Anatolia along the Marmara and Black Sea coasts on shady banks, in deciduous or coniferous forest, 50-2100 m a.s.l. (İstanbul, Bursa, Bolu, Zonguldak, Sinop, Ordu, Trabzon, Rize, and Artvin provinces), with

isolated occurrences in the mountains of western and southern Anatolia (İzmir Province: Bozdağ, 1300 m a.s.l.; Osmaniye Province: Döldül Dağı, 1500-2100 m a.s.l.). Distribution of *Circaea alpina* is even more restricted, occurring only along the southeastern Black Sea coast on shady banks, in mixed forest, 900-1900 m a.s.l. (Ordu, Trabzon, and Artvin provinces) (Chamberlain and Raven, 1972).

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