

About food plants, biology and habitat type of *Rhopalus (Aeschyntelus) maculatus* (Fieber, 1837) (Insecta: Heteroptera) and in Türkiye distribution

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ABSTRACT: The food plants, habitat type and Turkish distribution of *Rhopalus (Aeschyntelus) maculatus* (Fieber, 1837) was studied in this paper. In addition, this study provides the second record of this species from Çankırı province. The specimens were collected from Işık Mountains, in this province.

KEYWORDS: *Rhopalus maculatus*, food plants, habitat type, distribution, Türkiye

Rhopalidae is a small family consisting of 18 genera and 209 recognized species worldwide. There are 31 species belonging to 12 genera of the family in Türkiye (Dolling, 2006; Çerçi et al., 2024). Ecological, biological and faunal data of this family species in Türkiye are rare.

In this study, information about the ecology, biology, distribution and Turkish fauna of *Rhopalus maculatus* (Fieber, 1837) is given according to literatures records and my collection data. (Önder et al., 2006; Dursun, 2009; Yazıcı et al., 2022; Yıldırım et al., 2011; Matocq et al.,

2014; Kiyak & Akar, 2010; Küçükbaşmacı & Kiyak, 2015; Çerçi et al., 2018; Bolu, 2020; Fent & Dursun 2019; Bolu, 2020; Kerzhner & Yachevskii, 1964; Hoberlandt, 1955; Pehlivan, 1981; Stichel, 1955 -1962)

In 1993, a female of *Rhopalus maculatus* was collected and described from the Işık Mountains (Fig. 1). The specimens were described by the author and deposited in the insect collection of the Zoology Museum of Gazi University (ZMGU), Faculty of Sciences, Ankara, Türkiye.

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Genus: *Rhopalus* Schilling, 1827**Subgenus: *Aeschynteles* Stål, 1872*****Rhopalus (Aeschyntelus) maculatus* (Fieber, 1837) (Fig. 1)**

Corizus maculatus Fieber, 1837; *Coreus crassicornis* Latreille, 1804; *Coreus clavicornis* Boitard, 1828; *Corizus maculatus* Herrich-Schaeffer, 1840; *Rhopalus chinensis* Dallas, 1852; *Corizus ledi* Boheman, 1852; *Corizus meridionalis* Jakovlev, 1869; *Rhopalus maculatus decolor* Wagner, 1962.

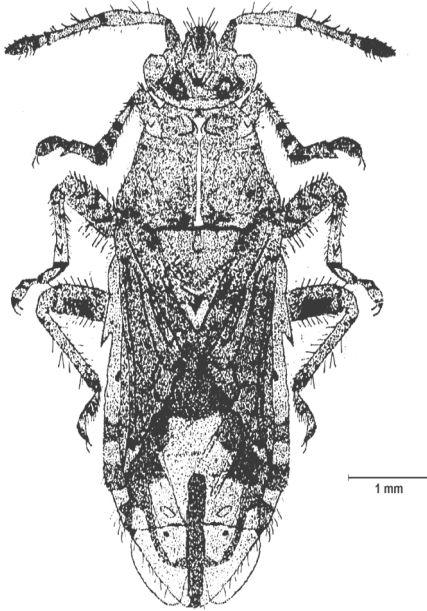


Fig.1. *Rhopalus (Aeschyntelus) maculatus* (Fieber, 1837) Dorsal view

Morphology: Proboscis extends to hind coxa - Hairs dense and light. The body is reddish brown. The abdomen is reddish yellow and has a broad, black jagged stripe along the edge.

Black pores present on body. Scutellum light brown distally. Corium with black spots. Paratergites covered with black spots distally. The connexive shows round black spots on each segment. Dorsum black on sides.

Ventral yellowish-red with black pores on ventral side. Reddish brown and best distinguished by heavily red pigmented corium, widespread yellowish-red abdomen and serrated blackish dorsal abdominal

markings. Spots on connexivum usually small and rounded. Length: 7.0 mm

Biology: This species is in the egg stage in May-June, nymphs are found in July-August, adults are found between August-June. Winters as adults, and can be observed from May onwards after hibernations, and new generation emerges in August.(URL-3)

Habitat types and Food Plants: *Rhopalus (Aeschyntelus) maculatus* is phytophagous and feeds primarily on the fruits and leaves of its host plants. This species prefers maquis and meadows, wet meadows, grass vegetation, peat bogs and swamps as habitats. Host plants for adult food are: *Epilobium*; *Hypericum pulchrum*; *Cirsium palustre*, *Lythrum*; *Oryza sativa*; *Ranunculus*; *Rhododendron tomentosum*. (Önder et al., 2006; URL-2; URL-3)

Material examined: Çankırı, Çerkeş, northeast of Işık mountains, north of Kısaçlı village, 1 female, 26.08.1993, ca. 1450 m. Found among grass vegetation in juniper forest.

According to the literature (Yazıcı, et al., 2022), this species was recorded in July 2013 in the villages of Aşağıbozan, Eskikıymık and Bayramören in the Ilgaz district of Çankırı province and around the village of Kuzuören in the Çerkeş district of Çankırı.

Rhopalus maculatus was given secondly recorded for Çankırı (Çerkeş) province fauna of Türkiye.

Distribution in Türkiye: The species has been previously distributed in the following localities in Türkiye: Adana, Adıyaman, Ankara(Çaldağ), Artvin, Bursa, Çankırı (Ilgaz and Çerkeş), Diyarbakır, Düzce, Elazığ, Erzincan, Erzurum, Gaziantep, Gümüşhane, İstanbul, Karabük, Kastamonu, Siirt, Sivas, Tokat (Önder et al., 2006; Dursun, 2009; Yazıcı et al., 2022; Yıldırım et al., 2011; Matocq et al., 2014; Kıyak & Akar,2010; Küçükbasmacı & Kıyak, 2015; Çerçi et al., 2018; Bolu, 2020; Fent & Dursun 2019; Çerçi and Özgen, 2021). (Fig.2)

Distribution in the world: **Europe:** Albania, Slovakia, Slovenia, Spain, Sweden, Austria, Belgium, Bosnia-Herzegovina, Switzerland, Ukraine. **Asia:** Afghanistan, Bulgaria, Byelorussia, Croatia, Czech Republic, Denmark, Estonia, Finland, Asian Türkiye, China (CE NE NO NW SE SW WP) Georgia Iran Iraq Japan Kirgizia Korea Mongolia Russia (ES FE WS). Extralimital: Vietnam. (Aukema, 1995-2013)

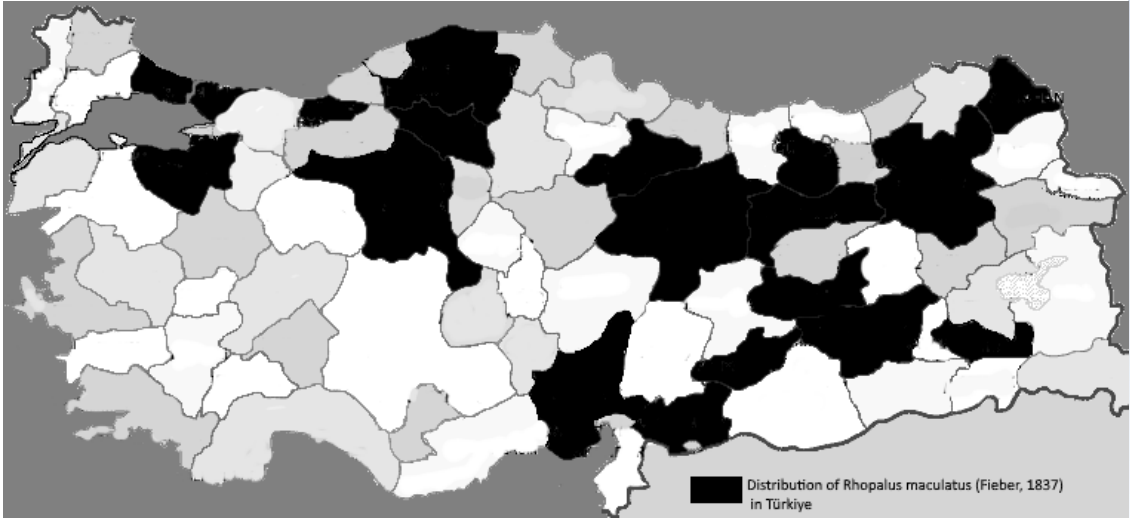


Fig.2. Distribution provinces of *Rhopalus (Aeschytelus) maculatus* (Fieber, 1837) in Türkiye

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