



First record of *Echthromyrmex platypterus* McLachlan, 1867 (Neuroptera: *Myrmeleontidae*) from Turkey

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Abstract

In this study, *Echthromyrmex platypterus* McLachlan, 1867 was collected with light and net trap in the cultivated areas of Mardin province, southeastern Turkey between April and October during 2015, 2016 and 2017 *Echthromyrmex platypterus* was added newly to the Turkish fauna. Their morphological descriptions and general distribution were given.

Key words: Neuroptera, *Echthromyrmex platypterus*, Mardin province, new record, Turkey.

Türkiye'den *Echthromyrmex platypterus* McLachlan, 1867 (Neuroptera: *Myrmeleontidae*)'un ilk kaydı

Öz

Bu çalışmada *Echthromyrmex platypterus* McLachlan, 1867 türüne ait örnekler 2015, 2016 ve 2017 yıllarında Nisan ve Ekim ayları arasında Türkiye'nin güneydoğusundaki Mardin ilinin ekili alanlarında atrap ve ışık tuzakları kullanılarak toplanılmıştır. *Echthromyrmex platypterus*, Türkiye faunası için yeni kayıttır. Türün morfolojik özellikleri ve genel dağılımı hakkında bilgi verilmiştir.

Anahtar Kelimeler: Neuroptera, *Echthromyrmex platypterus*, Mardin, yeni kayıt, Türkiye

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1. Introduction

The Myrmeleontidae (Antlion) represent the largest family of Planipennia, about 2.000 species have been described throughout the World (Hölzel, 1986). Myrmeleontidae occurs in most temperate and tropical regions of the world, with the greatest diversity being found in the intertropical area (Michel, et al., 2017). The subfamily Echthromyrmicinae has been dealt with by Markl 1954 (Mirmoayedı et al., 2015). It is so far known from the Palearctic, Ethiopian and Oriental regions of the globe and represented by only one tribe which is dealt with hereunder (Ghosh, 1984). The Echthromyrmicinae only included genus Echthromyrmex McLachlan 1867 (Michel, et al., 2017). The genus Echthromyrmex was described by McLachlan in 1867. Its representatives are very little known in the World (Koçak and Kemal, 2008a). Today Echthromyrmex genus is represented by 4 species (Echthromyrmex insularis Kimmins, 1961, Echthromyrmex orientalis McLachlan, 1873, Echthromyrmex platypterus McLachlan, 1867 and Echthromyrmex sehitlerolmez, Koçak & Kemal, 2008). Studies on Echthromyrmex platypterus are quite limited. Aspöck stated that it was spreading in Iraq and Afghanistan (Aspöck, et al. 2001). Echthromyrmex platypterus compared with Echthromyrmex insularis by Abraham and Mirmoayedı had mentioned the spread of Iran (Abraham, 2010; Mirmoayedı et al. 2015). On the other hand, has removed the fauna of the species at within the scope of this study the samples were collected from Mardin province in South Eastern Anatolian Region of Turkey. Due to its border with the country of Iraq, fauna elements of Iraq are frequently observed in Mardin province. The collected samples are identified as Echthromyrmex platypterus.

2. Material and Methods

The South Eastern Anatolian Region of Turkey is known as one of the best preserved and undamaged natural habitats of Turkey. The biological diversity is high in the region probably due to the climatic heterogeneity. It is influenced by Eremial, Mediterranean and Siberian climates (Satar and Özbay 2004). In this study, specimens were collected with light and net trap in the cultivated areas of Mardin province (Figure 1). The samples were collected between April and October during 2015, 2016 and 2017. The obtained samples were prepared according to Şengonca (1980) and Kıyak (2000) converted into a biological museum material. Samples were then examined under a stereo microscope and their diagnoses were according to Hölzel (1972) and Abraham (2010). The samples collected through this study have been kept at the Zoological Museum of the Biology Department of the Science Faculty of the Dicle University. The following abbreviations are used: Cu, cubitus; Rs, radial sector; A, anal; W, width.

2.1. Material examined

Mardin province in South Eastern Anatolian Region of Turkey (Figure 1). Mardin Province, Hurs-Soğanlı Village, 721m, 37°18'33"N 40°38'16"E, 12.VII.2015, 1♀, 07.VII.2016 2♀, 20.VII.2017 2♂, 1♀
Leylak; 1104m, 37°23'23"N, 40°41'14"E, 09.VII.2016 3♂, 24.VII.2017 1♂, 1♀

3. Results

Characters: Body length male 3.5 cm (min-max 3.4-3.7) (n=6); female length 3.6 cm (3.5-3.9) (n=5) wing length male 9.5 cm (9.3-9.7), female length 9.7 cm (9.6-9.9), Antenna; basal joint not very long, the basal distance from its counterpart being hardly as long as the diameter of individual joint; pronotum; very short; wings; rather broad; heavily marked and with the costals simple; forewing: 1st branch of Rs arising before the cubital fork; Cu divergent; 1A not running directly to the margin but bent upwards as a long curve; all branches of 1A connected by crossveins; hindwing; Cu and 1A sinuously parallel for a long distance; cubital fork indistinct; legs: rather short; basal joint of tarsus short and the apical one as long as the other joints taken together; tibiae shorter than femora; spur nearly as long as the basal two tarsal segments taken together (Ghosh, 1984). Wing-pattern and coloration of the pronotum of *E. platypterus* are different from *E. sehitlerolmez* (Figs. 2, 3). Until now, There are several papers on Turkey Myrmeleontidae (Canbulat and Kıyak 2003; Satar and Özbay 2003; Özbay et al., 2005; Canbulat 2007a; 2007b; Suludere et al. 2009; Bozdoğan et al. 2013; Satar et al. 2014; Kovancı and Kovancı 2015; Bozdoğan and Bahadıroğlu 2016). The genus Echthromyrmex McLachlan, 1867 is represented by Echthromyrmex sehitlerolmez Koçak & Kemal, 2008 from Turkey (Koçak and Kemal 2008b; Kemal and Aydın 2009). *E. platypterus* occurs in Afghanistan, Iran, and Iraq (Mirmoayedı et al. 2015). In this study, the known distribution of this species is extended to the South-East of Anatolia. This is the first record of Echthromyrmex platypterus from Turkey.

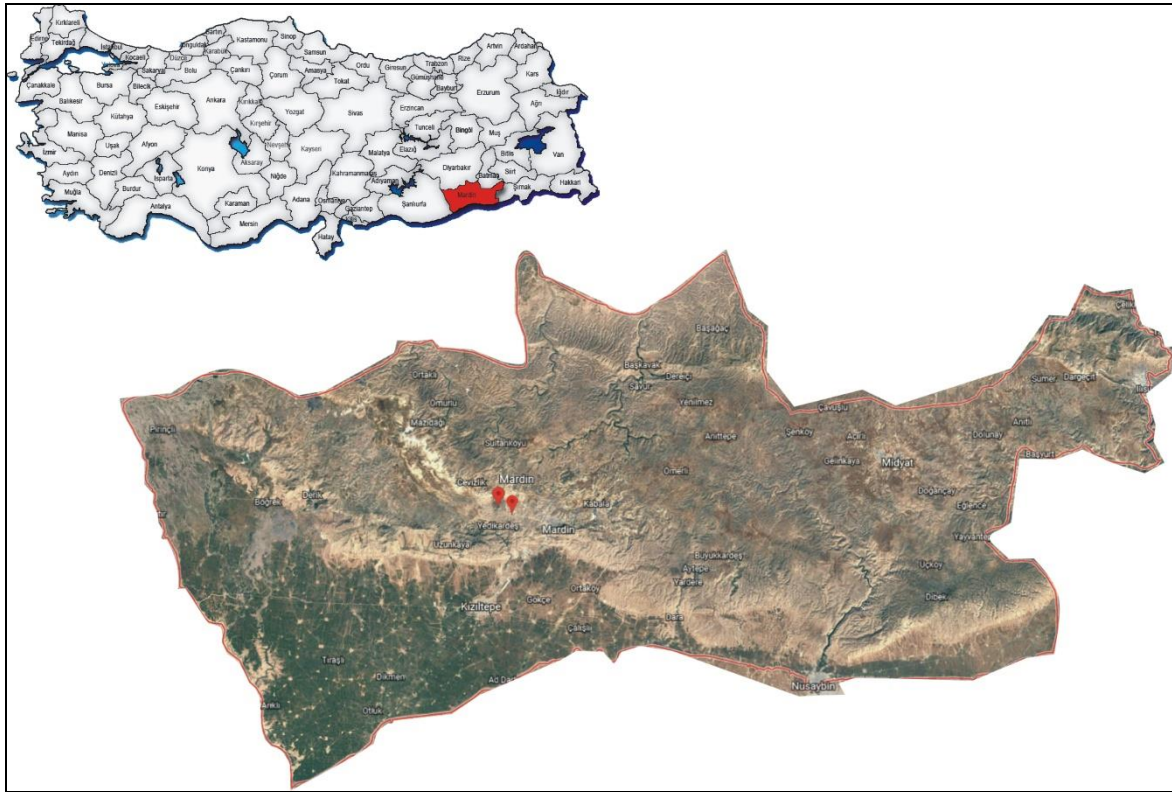


Figure 1. Map of the research area (Mardin/Turkey). Red circles indicate the sampling sites where the *Echthromyrmex platypterus* specimens were collected.



Figure 2. Wing-pattern of *E. platypterus*.



Figure 3. The coloration of the pronotum of *E. platypterus*.

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