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## New and additional records of the family Staphylinidae (Insecta: Coleoptera) from Eastern Anatolia, Turkey

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### Abstract

In the study, 15 species of the subfamily Paederinae Fleming, Steninae Latreille, and Staphylininae Latreille belonging to the family Staphylinidae recorded from Elazığ, Tunceli and Diyarbakır provinces of Eastern Anatolia, Turkey. Amongst them, *Gabrius latro* Joy, 1913 and *Quedius cinctus* (Paykull, 1790) are reported for the first time from Eastern Anatolia of Turkey. In addition, many species is newly reported to study provinces.

**Keywords:** Coleoptera, staphylinidae, paederinae, steninae, staphylininae, new records, fauna, Turkey

### Introduction

The family Staphylinidae contains about 3.500 genera and more than 58.000 species (Solodovnikov *et al.*, 2013) [29]. These beetles usually occur under stones, on flowers, creek, in decaying organic matter, dung, fungi and leaf litter, and also the nests of mammals, and social insects (Anlaş, 2009) [2]. More than 1800 species of Staphylinidae occurring in Turkey and many species are endemic to Anatolia (Anlaş, 2009; Schülke & Smetana, 2015) [2]. But, according to Anlaş (2007), compared to other countries of the western Palaearctic region, the fauna of Turkish Staphylinidae has not been studied sufficiently.

In this study, 15 species of the family Staphylinidae reported from Elazığ, Tunceli and Diyarbakır provinces of Eastern Anatolia, with new and additional records for studied area. The aim of this study is to give new and additional faunistic records on Turkish Staphylinidae.

### Material and Methods

Studied material is collected by using different collection methods in Elazığ, Tunceli and Diyarbakır provinces of Eastern Anatolia, Turkey and deposited in private collection of the author (Figure 1). Classification and nomenclature of the family Staphylinidae suggested by Schülke and Smetana (2015) [28] has been followed in this study.

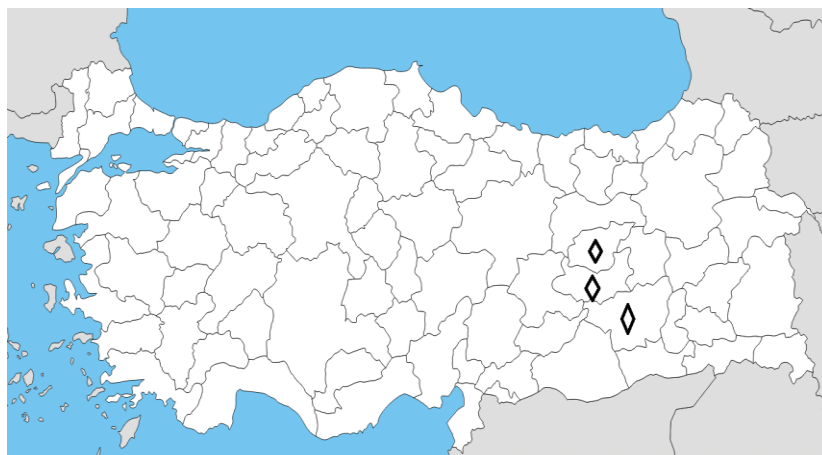


Fig 1: Survey Area of Study.

### Results

Family Staphylinidae Latreille, 1802

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**Subfamily Paederinae Fleming, 1821**

***Astenus thoracicus Baudi Di Selve, 1857***

**Material examined:** Elazığ: 1♂, 1♀, 30.III.2017, Karakoçan, Sarıçam village, leg. Özgen.

**Distribution in Turkey:** This species is widespread in Turkey (Anlaş, 2009, 2017b; Sert *et al.*, 2013; Örgel & Anlaş, 2016) [2, 6, 27], but it has not been recorded from Elazığ province up to this study.

**Distribution in the world:** Azerbaijan, Georgia, Greece, Italy, Cyprus, Iran, Syria, Turkey and Uzbekistan (Schülke & Smetana, 2015) [28].

***Leptobium gracile Gravenhorst, 1802***

**Material examined:** Elazığ: 1♂, 09.IV.2011, Günbağı, 38°34'45"N, 38°57'20"E, leg. Özgen.

**Diyarbakır:** 2♂, 24.V.2011, Hani, Topuzlu village, leg. Özgen & Khachikov. 2♂, 1♀, 23.V.2011, Yalıntaş vilage, leg. Özgen.

**Distribution in Turkey:** This species is widespread in Turkey (Anlaş, 2009, 2012, 2017c; Sert *et al.*, 2013) [2, 3, 7, 27], but it has not been recorded from Elazığ province up to now.

**Distribution in the world:** This species is distributed from Canary Islands to Middle Asia (Assing, 2005; Schülke & Smetana, 2015) [15, 28].

***Luzea graeca Kraatz, 1857***

**Material examined:** Elazığ: 1♂, 08.IV.2018, Sivrice, Elmasuyu village, leg. Özgen. 1♂, 01.IV.2018, Sivrice, creek bank, leg. Özgen.

**Distribution in Turkey:** Adana, Ankara, Antalya, Çanakkale, Elazığ, Diyarbakır, Gaziantep, Gümüşhane, Hakkari, Isparta, Kahramanmaraş, Kars, Kastamonu, Kayseri, Konya, Mersin, Siirt, Sinop, Sivas, Tokat, Yozgat (Anlaş, 2009, Anlaş & Rose, 2009; Özgen *et al.*, 2010, 2018) [2, 11, 22, 23, 26].

**Distribution in the world:** Turkey, Cyprus, Middle East and Southeastern Europe (Schülke & Smetana, 2015) [28].

***Pseudomedon obsoletus Nordmann, 1837***

**Material examined:** Tunceli: 2♂, 29.V.2018, Pertek, Akdemir village, leg. Özgen.

**Distribution in Turkey:** Çanakkale, Erzurum, Istanbul, Izmir, Kayseri, Manisa, Muğla, Samsun, Trabzon (Anlaş & Çevik, 2008; Anlaş, 2009, Assing, 2009; Tezcan & Anlaş, 2009) [2, 16, 30]. This species is here reported for the first time from Tunceli province.

**Distribution in the world:** Cosmopolitan species (Assing, 2009; Schülke & Smetana, 2015) [16, 28].

***Paederus mesopotamicus Eppelsheim, 1889***

**Material examined:** Diyarbakır: 1♂, 1♀, 10.IV.2018, Ergani, Yoncalı village, leg. Özgen. **Tunceli:** 1♂, 29.V.2018, Pertek, Akdemir village, leg. Özgen.

**Distribution in Turkey:** Elazığ, Erzincan, Gümüşhane, Siirt, Sivas, Tunceli (Anlaş, 2009, 2018) [2, 8]. This species is here

reported for the first time from Diyarbakır province.

**Distribution in the world:** The species is known from Iran, Iraq, Syria and Turkey (Willers, 2011) [31].

***Scopaeus efesi Frisch, 2002* [18]**

**Material examined:** Elazığ: 1♂, 2♀, 01.V.2017, central province, Yedigöze village, leg. Özgen. **Tunceli:** 1♂, 04.IV.2018, central province, Geyiksuyu village, leg. Özgen.

**Distribution in Turkey:** Adana, Diyarbakır, Elazığ, Kahramanmaraş, Malatya, Tunceli (Frisch, 2002; Anlaş & Frisch, 2014) [18, 13].

**Distribution in the world:** This species is known only from Turkey (Anlaş & Frisch, 2014) [13]. Endemic.

***Scopaeus gracilis (Sperk, 1835)***

**Material examined:** Elazığ: 1♂, 1♀, 12.IV.2018, Baskil, Şahaplı village, leg. Özgen. **Tunceli:** 2♂, 29.V.2018, Pertek, Akdemir, leg. Özgen.

**Distribution in Turkey:** This species is widespread and common in Turkey (Anlaş, 2009, Anlaş & Frisch, 2014) [2, 13].

**Distribution in the world:** This species is widespread in Palaearctic and Afrotropical Regions (Schülke & Smetana, 2015) [28].

**Subfamily Steninae Latreille, 1797**

***Stenus picipes Stephens, 1833***

**Material examined:** Diyarbakır: 1♂, 1♀, 31.V.2010, Çermik 7 km NE, Artuk, 38°09'35"N, 39°31'12"E, 900 m, leg. Özgen; 2♂, 4♀, 25.V.2010, near Çüngüş, Çayıcı, 38°16'11"N, 39°19'32"E, 1750 m, leg. Özgen.

**Distribution in Turkey:** Antalya, Burdur, Gaziantep, Izmir, Kahramanmaraş, Kırklareli, Konya, Osmaniye (Anlaş & Puthz, 2019) [14]. This species is here reported for the first time from Diyarbakır province.

**Distribution in the world:** Europe, Middle East, Iran and Turkey (Schülke & Smetana, 2015) [28].

***Stenus turbulentus Bondroit, 1912***

**Material examined:** Elazığ: 1♂, 23.IV.2017, Hazarbaba, leg. Özgen.

**Distribution in Turkey:** This species is widespread in Turkey (Anlaş & Puthz, 2019) [14], but it has not been recorded from Elazığ province up to this study.

**Distribution in the world:** Greece, Turkey, Cyprus, Israel (Schülke & Smetana, 2015) [28].

**Subfamily Staphylininae Latreille, 1802**

***Gabrius latro Joy, 1913***

**Material examined:** Elazığ: 1♂, 2♀, 23.IV.2017, Maden, Durmuşkaya, leg. Özgen.

**Distribution in Turkey:** Adıyaman, Antalya, Diyarbakır, Istanbul, İzmir, Samsun (Anlaş, 2009; Anlaş & Rose, 2009b; Özgen & Khachikov, 2013) [2, 12, 24]. The species is reported for the first time from Eastern Anatolia.

**Distribution in the world:** Europe, Afghanistan, Pakisatan, Middle East, Turkey (Schülke & Smetana, 2015) <sup>[28]</sup>.

***Staphylinus caesareus* Cederhjelm, 1798**

**Material examined:** Elazığ: 1♂, 1♀, 08.IV.2018, Sivrice, Elmasuyu village, leg. Özgen.

**Distribution in Turkey:** This species is widespread in Turkey (Anlaş, 2009, Kesdek *et al.*, 2009; Japhosvili & Anlaş, 2011, Fırat & Sert, 2016) <sup>[2, 20, 19, 17]</sup>.

**Distribution in the world:** Europe, Algeria, Middle East, Cyprus, Iran and Turkey (Schülke & Smetana, 2015) <sup>[28]</sup>.

***Quedius cinctus* Paykull, 1790**

**Material examined:** Elazığ: 2♂, 09.IV.2018, Baskil, Şahaplı, leg. Özgen.

**Distribution in Turkey:** Ankara, Antalya, Bolu, Istanbul (Yedikule), Izmir, Karaman, Kırşehir, Mersin, Nevşehir, Rize, Siirt (Anlaş, 2009; Anlaş & Rose, 2009b; Özgen & Anlaş, 2010; Fırat & Sert, 2016) <sup>[2, 12, 22, 23, 17]</sup>. The species is reported for the first time from Eastern Anatolia.

**Distribution in the world:** Europe, North Africa, Middle East, Cyprus, Turkey and Nearctic Region (Schülke & Smetana, 2015) <sup>[28]</sup>.

***Gauropterus fulgidus* Fabricius, 1787**

**Material examined:** Elazığ: 2♂, 2♀, 09.IV.2018, Baskil, Şahaplı, leg. Özgen.

**Distribution in Turkey:** Antalya, Batman, Bilecik, Elazığ, Muğla, Mersin (Anlaş, 2009; Özgen *et al.*, 2015) <sup>[2, 25]</sup>.

**Distribution in the world:** According to Schülke & Smetana (2015) <sup>[28]</sup>, this species is widespread in Palaearctic and Nearctic Regions.

***Xantholinus audrasi* Coiffait, 1956**

**Material examined:** Elazığ: 1♂, 2♀, 21.III.2018, Sütluçe, leg. Özgen.

**Distribution in Turkey:** This species is widespread in Turkey (Anlaş, 2009, 2014, 2017b) <sup>[2, 4, 13, 6]</sup>, but it has not been recorded from Elazığ province up to this study.

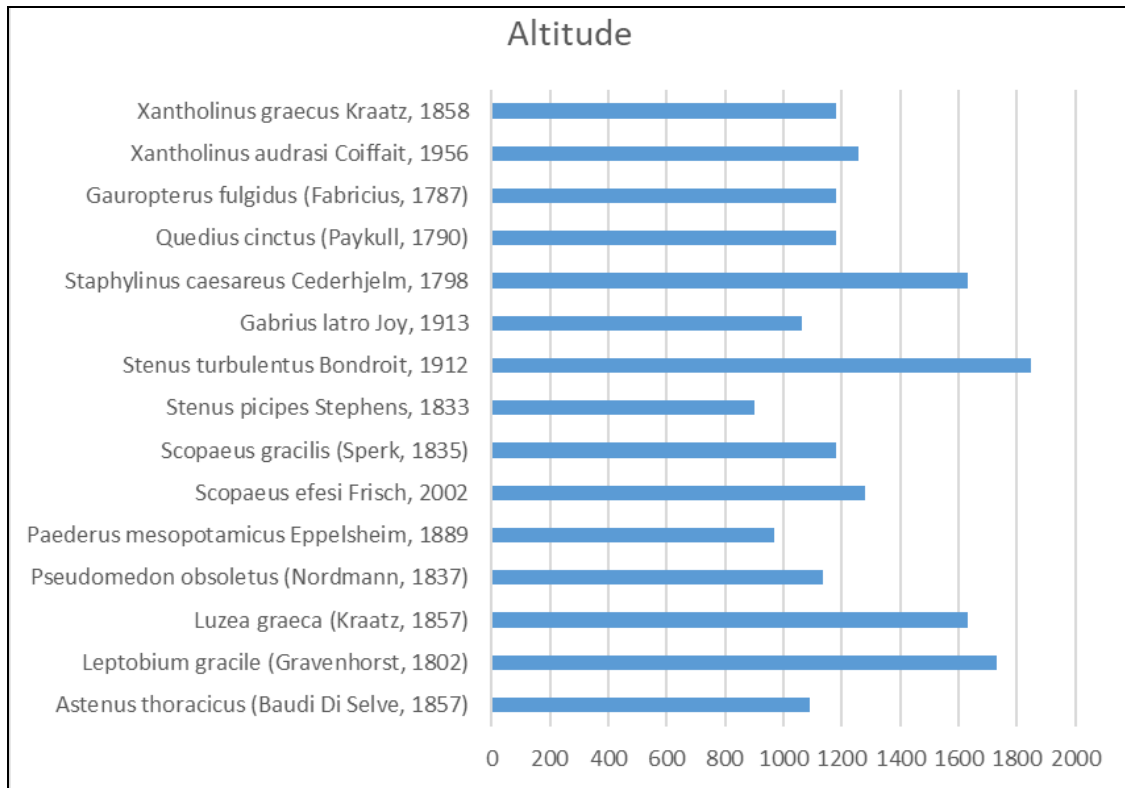
**Distribution in the world:** Europe, Iran and Turkey (Schülke & Smetana, 2015) <sup>[28]</sup>.

***Xantholinus graecus* Kraatz, 1858**

**Material examined:** Elazığ: 2♂, 3♀, 09.IV.2018, Baskil, Şahaplı, leg. Özgen.

**Distribution in Turkey:** Adana, Afyonkarahisar, Antalya, Bursa, Denizli, Diyarbakır, Elazığ, Gaziantep, Hatay, Isparta, Izmir, Kahramanmaraş, Kastamonu, Kırklareli, Kütahya, Manisa, Mersin, Muğla, Osmaniye, Sinop, Uşak, (Anlaş, 2009, 2014, 2019) <sup>[2, 4, 13]</sup>.

**Distribution in the world:** Albania, Greece, Italy, Macedonia, Cyprus, Israel, Lebanon and Turkey (Schülke & Smetana, 2015) <sup>[28]</sup>.



**Fig 2:** The Distribution to according to altitude of species.

The collected species spread from 900 meters to 1890 m. The most widespread distribution of the species was between 1100 and 1250 m (Figure 2).

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