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## Some faunistic report about histeridae (Coleoptera) in Elazığ (Turkey) with a new records: *Onthophilus punctatus punctatus* (Muller, 1776)

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### Abstract

This study was carried out in 2014-2017 in Elazığ city environs in Turkey. Ten species were collected or reported in the course of this study. These species are as follows: *Acritus minutus* Herbst, 1791, *Platysoma (Platysoma) compressum* Herbst, 1783, *Saprinus subnitescens* Bickhardt, 1909, *Saprinus calatravensis* Fuente, 1899, *Saprinus vitescens*, *Margarinotus punctiventer* Marseul, 1854, *Saprinus godet* Brullé, 1832, *Saprinus tenuistrius sparsutus* Solsky, 1876, *Chaetabraeus convexus* Reitter, 1884, *Onthophilus punctatus punctatus* (Muller, 1776). *A. minutus*, *P. compressum*, *O. punctatus punctatus* have been collected on decay fruit material. *S. subnitescens*, *S. calatravensis*, *S. vitescens*, *S. godet* *M. punctiventer*, *S. tenuistrius sparsutus*, *C. convexus* have been collected pork cadavre and egg traps. *Margarinotus punctiventer* has been collected near environs. All of species firstly determined in Elazığ province. This study datas have firstly data about forensic entomology. With interest about *Chaetabraeus convexus* Reitter, 1884 were given firstly locality record with this study. *O. punctatus punctatus* (Muller, 1776) species is first recorded on Histeridae fauna of Turkey.

**Keywords:** Coleoptera histeridae, new regional records, *Onthophilus punctatus punctatus*, first record, elazığ, Turkey

### Introduction

The family Histeridae contains about 330 genera and 3900 species (Mazur, 2007). These beetles usually occur decaying organic matter carrion, dung, decaying plants, and apparently feed on other insects attracted to these materials. In the last fourthy years; Faunistic studies on Histeridae beetles of Turkey have been conducted by Mazur (1981)<sup>[8]</sup>, Tezcan & Yelamos, (2004), Anlaş *et al.*, (2007)<sup>[2]</sup>, Özdemir and Sert (2008)<sup>[5]</sup>, Rozner (2010)<sup>[11]</sup>, Özgen *et al.* (2016)<sup>[7]</sup> and Polat and Yıldırım (2017)<sup>[10]</sup>. This study has given additional notes about Histeridae fauna in Elazığ province of Turkey.

### Material and Methods

Specimens have been collected by sweeping of vegetation, pig pork, egg traps, decay fruit material, and pitfall traps between 2013 to 2017 years in Elazığ province of Turkey. Within each subfamily, all taxa have been listed in alphabetical order. Material have been determined by Dr. Tomáš Lackner (Germany).

### Results And Discussion

In this study, 10 species and subspecies belonging to Abraeinae, Histerinae and Saprininae subfamilies of Histeridae were reported in Turkey.

Subfamily Abraeinae W.S. MacLeay, 1819

Tribe Acritini Wenzel, 1944

*Acritus minutus* (Herbst, 1791)

**Material examined:** Elazığ, Sütluçe village, 10.11.2016., 3 exc

**Distribution in Turkey:** Manisa (Özgen *et al.*, 2016)

**Note:** It has been found on decay melon. This species was firstly collecting in East Anatolia.

**Distribution in World:** According to Mazur (2004)<sup>[4]</sup>, this species is occur in Europe, North Africa, Cyprus, Kazakhstan, Turkey and West Siberia.

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Tribe Abraeini W.S. Macleay, 1819  
*Chaetabraeus (Mazureus) convexus* (Reitter, 1884)

**Material examined:** Elazığ, Harbut, Obuz village, 20.07.2013, 3 exc

**Distribution in Turkey:** This species was known in Turkey. But this study have given firstly locality record.

**Distribution in World:** Syria, Greece, Turkey, Jordan, Israel, Bulgaria, Crimea. (Löbl and Löbl, 2015).

Tribe Platysomatini Bickhardt, 1914  
*Platysoma (Platysoma) compressum* (Herbst, 1783)

**Material examined:** Elazığ, 11.09.2017, 2 exc

**Distribution in Turkey:** European Turkey (Anonymous, 2017) <sup>[1]</sup>.

**Note:** It has been firstly recorded in East Anatolia

Subfamily Sapriniinae C. E. Blanchard, 1845  
*Saprinus subnitescens* (Bickhardt, 1909)

**Material examined:** Elazığ, Harbut, Obuz village, 20. 07. 2013, 13 exc.

**Distribution in Turkey:** Ankara, Erzurum, Eskişehir, İzmir (Tezcan and Yelamos, 2004; Özdemir and Sert, 2008 <sup>[5]</sup>; Özdemir and Sert, 2009 <sup>[9]</sup>; Polat and Yıldırım, 2017; Altunsoy *et al.*, 2017) <sup>[10]</sup>.

**Note:** It has found on egg traps

*Saprinus calatravensis* (Fuente, 1899)

**Material examined:** Elazığ, Harbut, Obuz village, 20.07.2013, 3 exc

**Distribution in Turkey:** İzmir, Eskişehir (Tezcan and Yelamos, 2004; Altunsoy *et al.*, 2017).

**Remarks:** This species was firstly found in East Anatolia. It has found on egg traps

*Saprinus virescens* (Paykull, 1798)

**Material examined:** Elazığ, Harput, Obuz village, 20.07.2013, 3 exc

**Distribution in Turkey:** Kars (Rozner, 2010) <sup>[11]</sup>

**Remarks:** It has found on egg traps. This record was second faunistic report in Turkey.

*Margarinotus punctiventer* (Marseul, 1854)

**Material examined:** Elazığ, Ağın, 23.05.2015.3 exc.

**Distribution in Turkey:** European part of Turkey (Anonymous, 2017) <sup>[1]</sup>.

**Remarks:** This record was firstly faunistic report in East Anatolia. It has been collect on near the small ponds.

*Saprinus godet* (Brullé, 1832)

**Material examined:** Elazığ, Baskil, Şahaplı village, 23.05.2015, 35 exc.

**Distribution in Turkey:** Eskişehir (Altunsoy *et al.*, 2017).

**Remarks:** This record was firstly faunistic report in EastAnatolia. It has been found on pig carcass

*Saprinus tenuistrius sparsutus* (Solsky, 1876)

**Material examined:** Elazığ, Harbut, Obuz village, 20.07.2013, 7 exc

**Distribution in Turkey:** Erzurum, Eskişehir (Polat and Yıldırım, 2017; Altunsoy *et al.*, 2017) <sup>[10]</sup>.

**Remarks:** It has been firstly found in Elazığ province

Subfamily Onthophilinae W.S. Macleay, 1819

*Onthophilus punctatus punctatus* (Muller, 1776) (Figure 1.)

### Synonymy

*Scolytus punctatus* subsp. *punctatus* Muller, 1776

*Hister punctatus* subsp. *nanus* Piller & Mitterpacher, 1783

*Scarabaeus punctatus* subsp. *sulcatus* Geoffroy, 1785

**Material examined:** Elazığ, Sütlüce village, 20.11.2016., 3 exc

**Distribution in Turkey:** New record of Turkish Fauna

**Distribution in World:** Austria, Albania, Andorra, Belgium, Bulgaria, Bosnia and Herzegovina, Corsica, Croatia, Czech Republic, Germany, Greek mainland, Hungary, Italian mainland, Poland, Netherlands, Romania, Sardinia, Sicily, Slovakia, Slovenia, Spanish mainland, Switzerland (Anonymous, 2017) <sup>[1]</sup>.

**Remarks:** It has been found on decay melon. This species was firstly collecting in Turkey *S. godet* which is among the species obtained in this study was obtained from pig carcass. There is no detailed study of the Forensic entomology field in the previous year in Eastern Anatolia. This study will provide basic data for forensic entomology studies due to the material in which the samples are found. In addition, since the species obtained from the Harput/Obuz site in the study were derived from decayed eggs, it is important to determine the protein-directed Histeridae species. *A. minutus*, *P. compressum* and *O. punctatus punctatus* species obtained from the study were provided from decayed melon (*Cucumis melo*) and these is first data to be found in the decay melon flora. The study is important both in terms of the materials in which the species are found and the data content about the forensic entomology as well as the first study about the Histeridae fauna in Elazığ province.



**Fig 1:** Habitus (Dorsal and Ventral) of *Onthophilus punctatus punctatus* (Muller, 1776).

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