

New Records of Tenebrioninae and Pimeliinae (Coleoptera: Tenebrionidae) from Turkey

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ABSTRACT

Three species belonging to subfamilies of Tenebrioninae and Pimeliinae of Tenebrionidae were determined as new records for Turkey. Specimens were collected from different regions of Turkey. With this study which aims to contribute to fauna of Turkey, the number of species belonging *Tentyria* and *Probatiscus* from Turkey were increased.

Key words: Tenebrionidae, Turkey, *Tentyria*, *Probatiscus*, new records.

INTRODUCTION

The Tenebrionidae, the darkling beetles, are the most highly evolved and diverse family of Tenebrionoidea and one of the biggest families of Coleoptera (Fattorini, 2000; Bouchard *et al.*, 2005).

According to the recent catalogue of Palaearctic Coleoptera, 500 species and 41 subspecies are known from Turkey, except for nomen dubia (Löbl *et al.*, 2008). Also Turkish distribution of 19 taxa did not mentioned in the catalogue of Palaearctic Coleoptera but Ferrer and Soldati (1999), Ghahari *et al.* (2010), Kaszab (1968), Keskin and Ferrer (2006), Keskin (1999), Keskin (2005), Lillig and Aydın (2006), Mercan *et al.* (2004), Tezcan *et al.* (2004) gave distribution of these species from Turkey. These species are; *Adesmia anthracina* Klug, 1830, *Alphitobius diaperinus* Panzer, 1796, *Alphitobius laevigatus* Fabricius, 1781, *Blaps abbreviata indagator* Reiche & Saulcy, 1857, *Centorus procerus moldaviensis* Reitter, 1920, *Clitobius oblongiusculus oblongiusculus* Fairmaire, 1875, *Colpotus reitteri* Zürcher, 1911, *Dichillus iranicus* Kaszab, 1936, *Erodium semenovi* Bogatchev, 1950, *Laena hopffgarteni* Weise, 1878, *Laena pulchella* Fischer von Waldheim, 1823, *Mesostena puncticollis* Solier, 1835, *Odocnemis exaratus* Germar, 1817, *Opatroides punctulatus punctulatus* Brulle, 1832, *Probatiscus tarsatus* Küster, 1850, *Tentyria nomas taurica* Tauscher, 1812, *Tentyria rotundata rotundata* Brullé, 1832, *Tentyria tessulata rugipleuris* Bogdanov-Katjkov, 1916, and *Xanthomus ovulus* Seidlitz, 1896. After the publication of the Palaearctic catalogue, this number is increased to 536 species 46 subspecies with new species and new records by local and foreign researchers (Ferrer and Avgın, 2011;

Nabozhenko, 2008, 2011a, b, c; Nabozhenko and Keskin, 2009, 2010; Nabozhenko and Tichy, 2011; Keskin and Nabozhenko, 2010, 2011; Keskin and Yağmur, 2008). Fifty-two genera, 214 species and 13 subspecies are included within Tenebrioninae, and 26 genera, 87 species and 23 subspecies are known within Pimeliinae are known from Turkey (Löbl *et al.*, 2008; Nabozhenko and Keskin, 2010).

The number of species of genera *Tentyria*, and *Probatiscus* in Palaearctic region and Turkey are as follows; *Tentyria* is recorded 84 species, 40 subspecies in Palaearctic region with 6 species, 8 subspecies from Turkey. *Probatiscus* is recorded 62 species, 4 subspecies with 21 species, 1 subspecies from Turkey (Löbl *et al.*, 2008).

MATERIAL AND METHODS

This study is based on materials from the collection of Zoological Museum of Gazi University (ZMGU). Investigated 34 (24 ♂♂, 10 ♀♀) specimens were collected by hand and a few of them by pitfall trap methods from provinces Antalya, Artvin, İçel, Karaman, Niğde, Manisa in 1994, 2001 and 2004-2007. Subfamilies and tribes are given in phylogenetic order and species are listed alphabetically within each tribe.

Specimens were identified according to the keys by Reitter (1900, 1922). Distributional data refer to Reiche and Saulcy (1857), Reitter (1900, 1922), Kühnelt (1957, 1965), Kaszab (1968), Picka (1984), Medvedev and Nepesova (1985), Chikatunov *et al.* (1997), Chikatunov *et al.* (1999), Ferrer and Soldati (1999), Fattorini *et al.* (1999), Sfenthourakis and Legakis (2001), Fattorini (2002) and Löbl *et al.* (2008).

In this study all specimens used from the master thesis called "Systematic and Faunistic Evaluations of Specimens of Tenebrionidae (Coleoptera) in Zoological Museum of Gazi University" submitted by first author.

RESULTS

Basing on our field sampling, three new taxa are recorded for the first time from Turkey, namely two Pimeliinae species: *Tentyria (Tentyria) herculeana*, *Tentyria (Tentyria) robustoides* and one Tenebrioninae taxon: *Probatiscus (Probatiscus) mori*.

Subfamily: Pimeliinae Latreille, 1802

Tribe: Tentyriini Eschscholtz, 1831

Tentyria (Tentyria) herculeana Reiche and Saulcy, 1857 (Fig. 1, 2.1)

Material examined: Niğde, Ulukışla, Kozluca village, 1210m, 37°31'N, 34°40'E, 05.06.2006, 4♂♂; Niğde, Ulukışla, between Gümüşler-Özyurt villages, 1625m, 37°59'N, 34°51'E, 01.07.2007, 2♂♂; Manisa, Turgutlu, Çampınar village, Domuz creek, 18.04.2004, 2♂♂, 1♀; Antalya, Alanya, Gökbel Plateau, 36°35'N, 32°20'E, 1400m, 30.06.2001, 3♂♂, 1♀; Manisa, Turgutlu, between Çampınar-Musluca, Aysekiz hill, 18.04.2004, 1♂; Karaman, Ayrancı, Çatköy, 1547m, 37°10'N, 33°51'E, 23.07.2006, 1♂; Manisa, Turgutlu, Çaldağı, 38°36'N, 27°46'E, 600m, 24.04.2005, 1♂; Manisa, Turgutlu, Çaldağı, 38°36'N, 27°46'E, 600m, 04.06.2006, 1♂; Niğde, Ulukışla, Emirler village, 37°29'N, 34°31'E, 1599 m, 10.07.2007, 1♂, 1♀; Niğde, Ulukışla, Çanakçı village, 1237m, 37°32'N, 34°40'E, 26.06.2007, (pitfall trap), 2♂♂; Karaman, Ayrancı, Çatköy-Akpınar turnout, 1486m, 37°12'N, 33°51'E, 22.07.2006, 2♀♀; Niğde, Ulukışla, Çanakçı

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village, 1237m, 37°32'N, 34°40'E, 08.06.2007, 1♀; Niğde, Ulukışla, Niğde-Kayseri road, 1581m, 37°35'N, 34°32'E, 01.07.2007, 1♀, leg. A. Hasbenli

Distribution: Israel, Lebanon, Syria, Palestine, Jordan (Reiche and Saulcy, 1857; Reitter, 1900; Chikatunov *et al.*, 1997; Chikatunov *et al.*, 1999; Löbl *et al.*, 2008)

***Tentyria (Tentyria) robustoides* Reitter, 1900** (Fig. 1, 2.2)

Material examined: Artvin, Yusufeli, between Kılıçkaya-Yusufeli, Yeşeli hill, 40°44'N, 41°28'E, 700m, 16.05.2004, 4♂♂, 2♀♀, leg. A. Hasbenli.

Distribution: Afghanistan, Iran, Turkmenistan (Reitter, 1900; Kühnelt, 1957; Kaszab, 1968; Medvedev and Nepesova, 1985; Löbl *et al.*, 2008)

Subfamily: Tenebrioninae Latreille, 1802

Tribe: Helopini Latreille, 1802

***Probaticus (Probaticus) mori* Brullé, 1832** (Fig. 1, 2.3)

Material examined: İçel, Mut, Çamlıca, 36°36'N, 33°13'E, 501m, 11.06.2006, 1♀, leg. A. Hasbenli.

Distribution: Greece (Reitter, 1922; Kühnelt, 1965; Picka, 1984; Fattorini, 2002; Fattorini *et al.*, 1999; Sfenthourakis and Legakis, 2001; Löbl *et al.*, 2008)

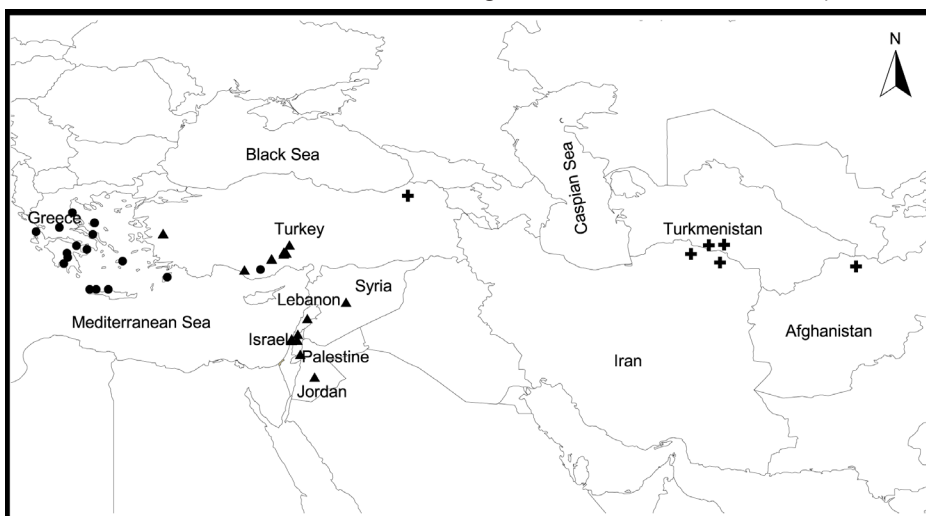


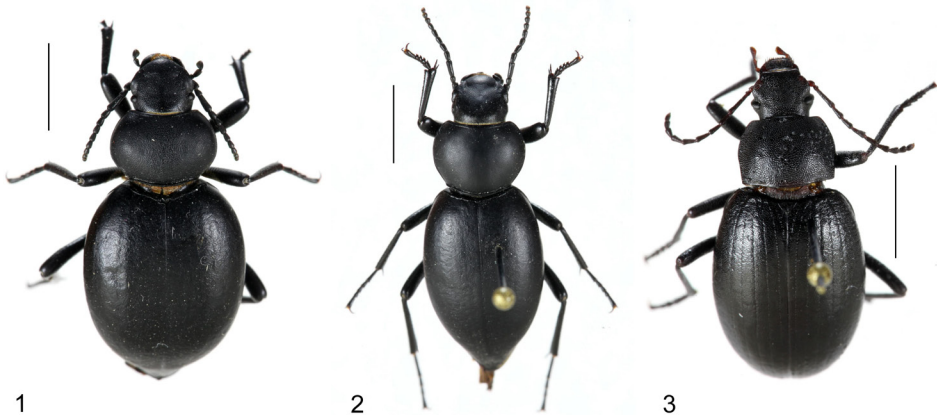
Fig. 1. Distribution of the (▲) *Tentyria herculeana*, (+) *Tentyria robustoides* and (●) *Probaticus mori*

DISCUSSION

According to results and these new records, the extant number of species within the two considered genera in Turkey as follows: *Tentyria* 8 species, 8 subspecies, *Probaticus* 22 species, 1 subspecies. As a result of the present study, the total number of tenebrionid beetles currently known from Turkey is increased to 539 species, 46 subspecies (Ferrer and Avgin, 2011; Ferrer and Soldati, 1999; Ghahari *et al.*, 2010;

Kaszab, 1968; Keskin and Ferrer, 2006; Keskin and Nabozhenko, 2010, 2011; Keskin and Yağmur, 2008; Keskin, 1999; Keskin, 2005; Lillig and Aydın, 2006; Löbl *et al.*, 2008; Mercan *et al.*, 2004; Nabozhenko and Keskin, 2009, 2010; Nabozhenko and Tichy, 2011; Nabozhenko, 2008, 2011a, b, c; Tezcan *et al.*, 2004;).

Consequently to these new records, the distribution of newly recorded species are modified and enlarged with the new records. *Tentyria (Tentyria) robustoides* was known from the Turan province, and we show that the distribution of this species is in fact extended to the southeast corner of European province (Artvin, northeast of Turkey), acceptable as an extension of the Turan-Persian subregion. *Tentyria (Tentyria) herculeana* is originated from Eastern Mediterranean province, distribution of these species extended within the Eastern Mediterranean province. *Probaticus (Probaticus) mori* was only known from Greece with new record species distribution extended further east to south of Turkey (İçel).



Figs. 2. Habitus: 1. *Tentyria herculeana*, 2. *Tentyria robustoides*, 3. *Probaticus mori*, scale: 1 cm.

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