

Orijinal araştırma (Original article)

A new species and additional records of the genus *Leptobium* Casey, 1905 (Coleoptera: Staphylinidae, Paederinae) from Turkey

Türkiye'den *Leptobium* Casey, 1905 (Coleoptera: Staphylinidae, Paederinae) cinsine ait bir yeni tür ve ek kayıtlar

Sinan ANLAŞ^{1*}

Summary

Leptobium nabozenkoi sp. n. from Turkey is described, illustrated and distinguished from related congeners. Additional records of 10 species of *Leptobium* Casey are reported. A total of 16 species are now known from Turkey.

Key words: Staphylinidae, Paederinae, *Leptobium*, Turkey, new species.

Özet

Leptobium nabozenkoi sp. n. türü Türkiye'den tanımlanmış, şekillendirilmiş ve benzer türlerinden farklılıkları gösterilmiştir. Ayrıca *Leptobium* Casey cinsine ait 10 türe ait ek kayıtlar verilmiş, böylece Türkiye'den bilinen tür sayısı 16 olmuştur.

Anahtar sözcükler: Staphylinidae, Paederinae, *Leptobium*, Türkiye, yeni tür.

¹ Alaşehir Vocational School, Celal Bayar University, TR-45600, Alaşehir, Manisa, Turkey

* Sorumlu yazar (Corresponding author) e-mail: sinan.anlas@gmail.com

Alınış (Received): 25.07.2011 Kabul edilmiş (Accepted): 12.09.2011

Introduction

Leptobium Casey, 1905 species occur in many places, but the majority of species has been found in unforested habitats such as meadows and pastures, as well as near river banks and lakeshores.

According to recent contributions, the genus *Leptobium* is represented by 67 valid species in the Palaearctic region, 15 of which occur in Turkey, with 10 of them known only from Turkey (Smetana 2004; Assing 2005, 2006, 2009, 2010; Anlaş, 2009).

Brachyptery of most *Leptobium* species led to an assumption of a high degree of species endemism within this genus, which in turn caused numerous species descriptions. However, a recent revision of *Leptobium* (Assing, 2005), which included a study of inter- and intraspecific morphological variability, drastically reduced the number of valid species by placing about 70 previously described species in synonymy. One of the main explanations for this high degree of synonymy is an underestimation of morphological intraspecific variation by earlier authors. According to the revised concept, *Leptobium* species have very low degree of interspecific divergence of characters, which may occasionally be even less pronounced than the degree of intraspecific variation displayed by some species of the genus.

In this study, a new species and an additional described species are reported, so that a total of 16 species are now known from Turkey.

Material and Methods

The present paper is based on material collected during recent field studies in different parts of Turkey. Classification and nomenclature of *Leptobium* suggested by Smetana (2004) and Assing (2005) have been followed in this study. The material referred to in this study is deposited in the author's private collection.

The following abbreviations are used for the measurements, which are given in mm:

AL length of antenna; AW maximal width of abdomen; EL length of elytra along suture, from apex of scutellum to posterior margin; EW combined width of elytra; HL head length from anterior margin of clypeus to neck; HW maximal head width; ML length of aedeagus from base to apex of dorsal plate; PL length of pronotum along midline; PW maximal width of pronotum; TaL length of metatarsus; TiL length of metatibia; TL body length from mandibles to posterior margin of abdominal tergite VIII.

Results

In this study, 10 species of the genus *Leptobium* belonging to Paederinae (Staphylinidae) are reported from different parts of Turkey. *Leptobium nabozenkoi* sp. n. from Karaman is described, illustrated and distinguished from related congeners.

Leptobium anlasi Assing, 2009

Material examined: Manisa: 14 exs., Gölarmara, 1 km NE Beyler, 120 m, 38°42'10"N, 27°58'56"E, 30.X.2010, leg. Anlaş.

Comment: This recently described species is recorded again from its type locality.

Leptobium bicarinatum Assing, 2005

Material examined: Gaziantep: 5 exs., Karataş 5 km NW, 700 m, ca. 37°01'N, 37°23'E, 17.V.2007, leg. Yağmur; 1 ex., Şahinbey, Sarısalkım 1 km NE, 1040 m, 37°05'54"N, 37°17'07"E, 13.XI.2010, leg. Anlaş. Hatay: 1 ex., Samandağ, Tekepınar (Batiyaz) shifter, 525 m, 36°10'39"N, 35°59'28"E, 29.VII.2010, leg. Yağmur.

Leptobium bozdagense Assing, 2006

Material examined: İzmir: 1 ex., Bozdağ Kayak Merkezi environs, ca. 2000 m, 29.V.2010, leg. Anlaş. Manisa: 2 exs., Turgutlu, near Çıkrıkçı-Baktırlı road, 30.X.2010, leg. Anlaş.

Leptobium gracile (Gravenhorst, 1802)

Material examined: Afyonkarahisar: 2 exs., Sinanpaşa 15 km SW, Elvan 3 km SW, 1600 m, 38°42'48"N, 30°04'40"E, 23.IV.2010, leg. Anlaş; 1 ex., Sinanpaşa, Uluköy 2 km N, 1590 m, 38°45'28"N, 30°00'43"E, 23.IV.2010, leg. Anlaş. Artvin: 1 ex., central province, VI.2001, leg. Nabozhenko. Bayburt: 4 exs., Bayburt-Demirözü road, Demirözü 13 km NE, 15.V.2011, leg. Anlaş, Özgen & Khachikov; 14 exs., central province 5 km SW, 1644 m, 40°14'49"N, 40°10'27"E, 15.V.2011, leg. Anlaş, Özgen & Khachikov. Diyarbakır: 4 exs., Eğil road 5 km E, 780 m, 38°08'34"N, 40°03'27"E, 23.IV.2010, leg. Özgen & Yağmur; 1 ex., Eğil, Kalkan village, ca. 700 m, 38°08'N, 40°03'E, 21.V.2010, leg. Özgen; 12 exs., Üzümlü, Çağlayan, Kalecik, 1468 m, 39°34'11"N, 39°44'08"E, 18.V.2011, leg. Anlaş & Özgen; 8 exs., Erzincan-Refahiye road, Refahiye 30 Km SE, Akbudak environs, 17.V.2011, leg. Anlaş, Özgen & Khachikov. Kütahya: 2 exs. Simav 10 km NW, near Simav Gölü, 720 m, 39°10'32"N, 28°55'21"E, 24.IV.2010, leg. Anlaş. Şanlıurfa: 2 exs., Siverek 40 km NE, 1100 m, 37°49'12"N, 39°38'01"E, 16.XI.2010, leg. Anlaş & Yağmur.

Leptobium illyricum (Erichson, 1840)

Material examined: Mersin: 1 ex., central province, VI.2001, leg. Nabozhenko; 2 exs., central province, 1476 m, 37°01'09"N, 34°17'09"E, 16.IV.2007, leg. Nabozhenko.

Leptobium ponticum Assing, 2005

Material examined: Sinop: 2 exs., Nisi Lake environs, Karakum, 10.IV.2009 and 07.IV.2011, leg. Koç.

Leptobium schuelkei Assing, 2005

Material examined: Hatay: 3 exs., Samandağ, Tekepınar 5 km N, 340 m, 36°12'17"N, 35°57'45"E, 14.XI.2010, leg. Anlaş & Yağmur.

Comment: This recently described species is recorded again from the surroundings of its type locality.

Leptobium syriacum (Saulcy, 1865)

Material examined: Gaziantep: 1 ex., Nurdağı, Sakçagözü 2 km NE, 1010 m, 37°10'53"N, 36°57'20"E, 13.XI.2010, leg. Anlaş; 4 exs., İslahiye, Kabaklar, 775 m, 37°02'08"N, 36°34'03"E, 15.XI.2010 and 18.XI.2010, leg. Anlaş & Yağmur; 2 exs., Şehitkamil, Sofalıcı, 37°07'37"N, 37°07'01"E, 20.V.2011, leg. Yağmur. Kilis: 3 exs., Polateli road 2 km S, 400 m, 36°46'06"N, 37°04'17"E, 01.III.2008, leg. Yağmur. Şırnak: 12 exs., İdil, Cizre 20 km N, 684 m, 37°21'57"N, 41°59'58"E, 12.IV.2011, leg. Yağmur & Özgen; 6 exs., Cizre 5 km N, 535 m, 37°20'31"N, 42°09'35"E, 12.IV.2011, leg. Yağmur & Özgen.

Leptobium tauricum Gusarov, 1988

Material examined: Izmir: 2 exs., Izmir-Karaburun road, 10 m, 38°21'02"N, 26°38'20"E, 19.XII.2008, leg. Anlaş; 3 exs., Karaburun 5 km W, 415 m, 38°38'17"N, 26°24'13"E, 19.XII.2008, leg. Anlaş; 4 exs., Karaburun, Parlak, 170 m, 38°35'59"N, 26°23'18"E, 19.XII.2008, leg. Anlaş.

Leptobium wunderlei Bordoni, 1994

Material examined: Antalya: 3 exs., Alanya, Taşatan Yaylası, 1057 m, 36°37'53"N, 32°03'53"E, 09.I.2010, leg. Yağmur & Kunt; 2 exs., Alanya, İncekum, 24 m, 36°38'23"N, 31°45'30"E, 08.I.2010, leg. Yağmur & Kunt; 1 ex., Gazipaşa, Beyrebucağı, 36°13'10"N, 32°24'17"E, 03.I.2010, leg. Kunt.

Leptobium nabozhenkoi n. sp.

Type material. Holotype: TURKEY: ♂, "TR. Karaman, Ayrancı, Berendi village 7 km S, ca 2000 m, 37°19'N, 34°01'E, 19.IV.2008, leg. Nabozhenko / Holotypus ♂, *Leptobium nabozhenkoi* sp. n. det. S. Anlaş 2011.

Description. Measurements (in mm) and ratios: AL: 2.12; HL: 1.12; HW: 1.01; PL: 1.24; PW: 1.02; EL: 0.90; EW: 0.87; AW: 1.15; TiL: 0.98; TaL: 0.83; ML: 1.72; TL: 8,1; HL/HW: 1.11; PW/HW: 1.01; PL/PW: 1.21; EL/PL: 0.72; EW/PW: 0.85; AW/EW: 1.32; TiL/TaL: 1.18.

Species of moderate size (see measurements); Habitus and forebody as in Figs. 1a and b. Coloration: Head blackish, abdominal segments III–VI black; pronotum, elytra, and abdominal segments VII–X rufous; legs reddish yellow.; antennae reddish brown.

Head oblong (see ratio HL/HW); posterior angles weakly marked; puncturation rather sparse, interstices on dorsal surface on average twice as wide as diameter of punctures; eyes moderately large, temples slightly less than twice the length of eyes in dorsal view. Antennae with antennomere III almost 1.5 times as long as II. Pronotum distinctly oblong and approximately as wide as head (see ratios PL/PW and PW/HW); puncturation similar to that of head, but slightly denser. Elytra distinctly shorter than pronotum (see ratio EL/PL); puncturation less well-defined and slightly denser than that of pronotum. Hind wings absent. Legs relatively slender (see measurements and ratio TaL/TiL). Abdomen wider than elytra; puncturation of segments III–VI dense and shallow; microsculpture distinct and composed of transverse striae; posterior margin of tergite VII with indistinct rudiments of a palisade fringe.

♂: sternite VII with weakly concave posterior margin, posteriorly with cluster of dark setae on either side of middle (Fig. 1c); sternite VIII with posterior incision more than $\frac{1}{3}$ the length of sternite (Fig. 1d); aedeagus as in Figures 1e and f.

Comparative notes. The species is distinguished from other congeners of similar size and coloration recorded from Turkey by the male primary and secondary sexual characters.

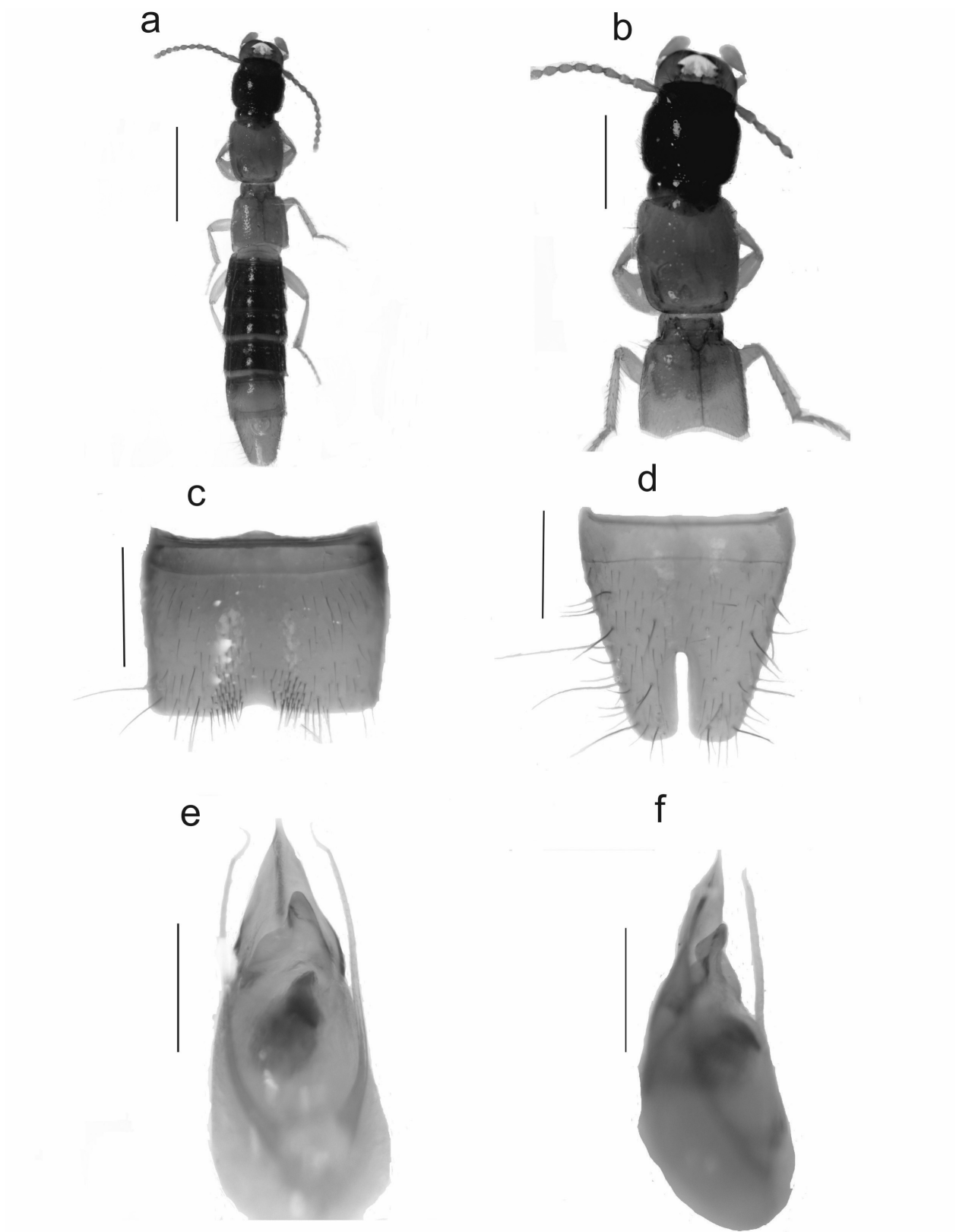


Figure 1. *Leptobium nabozenkoi* n. sp. a. Habitus; b. Forebody; c. Male sternite VII; d. Male sternite VIII; e. Aedeagus in ventral view; f. Aedeagus in lateral view. Scale bars: 2 mm (a); 1 mm (b); 0,5 mm (c-f).

The new species is distinguished as follows: from *L. carinatum* Assing 2005 (southwestern Anatolia) by the smaller body, as well as smaller aedeagus, by different aedeagus morphology especially in lateral view, by a shorter antennomere III and by a less dark anterior margin of segment VII; from *L. melanocephalum* (Reiche & Saulcy 1856) (Greece) by a much larger aedeagus, by the different shape of the ventral process and the dorsal plate of the aedeagus (both in ventral and in lateral view); other species of similar coloration (*L. mutabile* Assing 2005, *L. geminum* Assing 2005) are much smaller. In addition, *L. mutabile* (southwestern Anatolia) and *L. geminum* (Gaziantep), have a more strongly modified male sternite VII and an aedeagus of completely different morphology and much larger size.

Etymology. The species is dedicated to Dr. M. Nabozhenko, Rostov, Russia, a specialist on tenebrionids, who collected the new species.

Distribution and bionomics. The species was collected in only one locality of Bolkar Range in Karaman province of central-southern Anatolia, in moist grassland at an altitude of 2000 m. *Leptobium nabozhenkoi* n. sp. is apparently endemic to central southern Anatolia.

Acknowledgements

I would like to thank Dr. Eduard Khachikov (Rostov), Dr. Ersen A. Yağmur (Izmir), Dr. İnanç Özgen (Diyarbakır) and Kadir B. Kunt (Ankara) for their help in field studies, as well as special thanks to Maxim Nabozhenko (Rostov) for the generous gift of the holotype of the species described in this paper.

References

- Anlaş, S., 2009. Distributional checklist of the Staphylinidae (Coleoptera) of Turkey, with new and additional records. *Linzer biologische Beiträge* 41(1): 215-342.
- Assing, V., 2005. A revision of the genus *Leptobium* Casey (Coleoptera: Staphylinidae: Paederinae). *Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie)* 673: 1-182.
- Assing, V., 2006. A revision of *Leptobium* Casey Supplement I (Insecta: Coleoptera: Staphylinidae, Paederinae). *Linzer biologische Beiträge* 38 (1): 381-384.
- Assing, V., 2009. A revision of *Leptobium* Casey IV. Three new species and additional records (Coleoptera: Staphylinidae: Paederinae). *Stuttgarter Beiträge zur Naturkunde Serie A, Neue Serie* 2: 227-236.
- Assing, V., 2010. A revision of *Leptobium* Casey VII. Two new species from Turkey and Spain, and additional records (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge* 42 (2): 1037-1043.
- Smetana, A., 2004. Subfamily Paederinae, In Löbl, I. & A. Smetana (eds), *Catalogue of Palaearctic Coleoptera. Volume 2. Hydrophiloidea, Histeroidea, Staphylinoidea*. Apollo Books, Stenstrup: 579-624.