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A revision of *Leptobium* CASEY. VIII. A new species from Iran, a new synonymy, and additional records (Coleoptera: Staphylinidae: Paederinae)

Volker ASSING

A b s t r a c t : *Leptobium iranicum* nov.sp. (Iran: Yazd province) is described and illustrated. One synonymy is proposed: *Leptobium carinatum* ASSING, 2005 = nabozhenkoi ANLAŞ, 2012, nov.syn. Additional records of 25 species and subspecies are reported. The genus now includes a total of 68 species and two subspecies.

K e y w o r d s : Coleoptera, Staphylinidae, Paederinae, *Leptobium*, Palaearctic region, Iran, taxonomy, new species, new synonymy, new records.

Introduction

The basic revision of the Palaearctic genus *Leptobium* CASEY, 1905 was conducted in two parts, the first one focusing on the fauna of the Canary Islands and the second, more comprehensive one dealing with the remaining species (ASSING 1999, 2005). This revision, in which 58 species and three subspecies were recognized, was continued in six supplements (ASSING 2006, 2009a-c, 2010a-b). In these subsequent contributions, numerous new records were reported, eight new species were described, one name was revalidated, and one subspecific name was synonymized. An additional new species from Turkey was described by ANLAŞ (2012). Thus, prior to the presents study, the total number of *Leptobium* species amounted to 68 species and two subspecies. SCHÜLKE & SMETANA (2015) indicate a total of 70 species, but this catalogue treats *Leptobium ruficolle* (WOLLASTON, 1862) as a valid species, although this name is now a subspecies of *L. nigricolle* (WOLLASTON, 1862), and erroneously includes *L. minusculum* COIFFAIT, 1981, a junior synonym of *Philonthus dimidiatipennis* ERICHSON, 1840 (ASSING 2005).

Although the Mediterranean region and the Middle East are diversity hotspots of *Leptobium*, only three species have been recorded from Iran, two of them widespread and one with a restricted distribution. Recently examined material included one male from Central Iran, which evidently represented an undescribed species. Moreover, the validity of one recently described species from Turkey was an unclarified issue. Finally, numerous additional records are reported, among them new country records.

Material, methods, and measurements

The material referred to in this study is deposited in the following public institutions and private collections:

 BMNH
 The Natural History Museum, London (R.G. Booth)

 MNB
 Museum für Naturkunde Berlin (J. Frisch, M. Schülke, J. Willers)

 NHMB
 Naturhistorisches Museum Basel (M. Geiser, I. Zürcher)

 NME
 Naturkundemuseum Erfurt (M. Hartmann, assisted by W. Apfel)

 SMNS
 Staatliches Museum für Naturkunde, Stuttgart (W. Schawaller)

 cAss
 author's private collection

 cFel
 private collection Benedikt Feldmann, Münster

 cKoc
 private collection Matúš Kocian, Praha

 cSha
 private collection Alexey Shavrin, Daugavpils

 cSme
 private collection Aleš Smetana, Ottawa

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using a photographing device constructed by Arved Lompe (Nienburg) and CombineZ software, as well as a digital camera (Nikon Coolpix 995).

The "parameral" side of the aedeagus (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

The measurements are given in mm and abbreviated as follows: HL = head length from the anterior margin of the frons to the posterior margin of the head; HW = maximal head width; PL = length of pronotum along middle; PW = maximal width of pronotum; EL = length of elytra at suture, from apex of scutellum to posterior margin of elytra; HTiL = length of metatibia; HTaL = length of metatarsus; ML = length of median lobe of aedeagus; TL = total length from the mandibles (in resting position) to the apex of the abdomen.

Additional records

Leptobium gracile (GRAVENHORST, 1802)

M a t e r i a l e x a m i n e d : <u>Tunisia</u>: 1 ex. [det. Feldmann], Sousse, lagune 8 km S Hergla, Sebkhet Helk el Menzel, 35°58'N, 10°30'E, 0 m, 29.II.2012, leg. Hetzel (cFel); 1 ex., Sousse, 1 km W Hergla, estuary, 36°02'24"N, 10°29'20"E, 0 m, 29.II.2012, leg. Hetzel (cFel). <u>Ukraine</u>: 1 ex., Odessa region, Majaki village, Dnestr river, at light, 18.-19.VIII.2005, leg. Cibulskis (cSha). <u>Albania</u>: 1 ex., Lushnjë, W Divjakë, 41°01'N; 19°30'E, 15 m, coastal pine forest, 11.VI.2012, leg. Schnitter (NME). <u>Turkey</u>: 1 ex., Antalya, Bey Dağları, Elmalı env., cedar research station, 1900 m, 18.-29.V.1987, leg. Korge (MNB); 1 ex., Isparta, Eğridir, 1000 m, 29.III.1978, leg. Heinz (MNB).

C o m m e n t : *Leptobium gracile* is the most widespread species of the genus, its distribution ranging from the Canary Islands eastwards to Middle Asia and West Siberia (ASSING 2005).

Leptobium chinense AssING, 2005

Material examined: <u>China</u>: 13, Hebei, Yongnian, VI-XI.1995, leg. S. Li (SMNS).

C o m m e n t : The above specimen was collected together with the type material; the label data are practically identical.

Leptobium illyricum (ERICHSON, 1840)

M a t e r i a l e x a m i n e d : <u>Croatia</u>: 1 q, Cres Island, 1 km W Beli, 45.117°N, 14.338°E, 300 m, 21.III.2004, leg. Walther (NME); 2 exs., Zadar, 3.IV.1926, leg. Kämmerer (MNB); 1 ex., Zadar, 2.IV.1925 (MNB); 1 ex., Zadar region, Pag Island, 44°41'N, 14°46'E, 100 m, olive grove, 1.IX.2014, leg. Frenzel (NME); 1 ex., Biokovo planina, pass E Podgora, 1000-1200 m, 7.IV.1968, leg. Heinz (MNB). <u>Montenegro</u>: 2 exs., NW Cetinje, pass from Cekanje, 1000-1200 m, 9.IV.1968, leg. Heinz (MNB). <u>Bosnia-Herzegovina</u>: 7 exs., Duzi, 1903 (MNB); 1 ex., Nevesinje env., Grebak, 1000 m, 11.V.1958, leg. Heinz (MNB). <u>Greece</u>: 1 J, Ioánina, road Kaletsi-Ioanina, Ellinikó, 39°33'N, 20°55'E, 750 m, subterranean pitfall trap, 6.VI.2011-20.VI.2014, leg. Giachino & Vailati (cAss); 2 q q, Pelopónnisos, Parnon, NE Agriani, 37°08'N, 22°38'E, 1430 m, *Abies cephalonica* forest, 20.IV.2007, leg. Schnitter & Arndt (NME, cAss); 1 J [det. Feldmann], Pelopónnisos, Taygetos, Bapbapa Vavara, 36°57'N, 22°22'E, ca. 1500 m, 15.V.2007, leg. Aßmann (cFel); 1 J, Ithaca, above Perachori, 200 m, macchia, 24.IV.2013, leg. Margens (cAss); J J, Pelopónnisos, Exochori, Messinia, 36°53'N, 22°15'E, 370 m, 5.VI.2011, leg. Eifler (cAss). <u>Turkey</u>: 1 J, 3 q q, 7 exs., Antalya, Anamur env., 8.III.2013, leg. Snižek (NME, cAss).

C o m m e n t : The above records are within the known distribution, which ranges from Syria and Iran across Turkey and the Balkans northeastwards to Croatia and Slovenia (ASSING 2005).

Leptobium densiventre (FAUVEL, 1875)

M a t e r i a l e x a m i n e d : <u>Italy</u>: 1 ç, Sicilia, Palermo, SW Collesano, Isnello Munciaratti, 37°56'N, 13°58'E, 740 m, 27.V.2015, leg. Frenzel (NME). <u>Algeria</u>: 1 ∂, 1 ç, Tizi Ouzou, 21.-22.IV.1987, leg. Vít & Kubán (NHMB, cAss). <u>Tunisia</u>: 2 exs., Kef Soltana, Sbiba env., 1000 m, 4.III.1961, leg. Heinz (MNB); 1 ex., mountains SE Cape Serrat, 12.III.1961, leg. Heinz (MNB); 13 exs. [det. Feldmann], Béja Mts., Teboursuk W Djebba, 36°28'N, 9°05'E, 640 m, wet fields, under stones, 4.III.2012, leg. Hetzel (cFel); 5 exs. [det. Feldmann], Béja, mountain pass 11 km WNW Teboursouk, 36°30'N, 9°10'E, 700 m, under stones, 1.III.2012, leg. Hetzel (cFel); 4 exs. [det. Feldmann], Jendouba, S EI Feija national park, 36°29'N, 8°20'E, clearance in oak forest, under stones, 520 m, 3.III.2012, leg. Hetzel (cFel); 1 ex. [det. Feldmann], Kebili, Wadi 60 km E Kebili, 5.III.2012, leg. Hetzel (cFel).

C o m m e n t : The above records are within the known range. For a distribution map see ASSING (2005).

Leptobium syriacum (SAULCY, 1865)

M a t e r i a 1 e x a m i n e d : <u>Turkey</u>: 1♂, 1♀, Anamur, river Mellec, 16.IV.1992, leg. Janata (cKoc); 2♀♀, Mersin, Silifke, Demircili, 25.IV.1992, leg. Kocian & Maly (cKoc); 4 exs., Mersin, 25-30 km N Tarsus, Karakütük, 15.IV.1992, leg. Hovorka (cKoc); 2♀♀, Hatay, Şenköy env., 36°01'N, 36°08'E, 960 m, dry grassland, 6.V.2006, leg. Schnitter (NME, cAss); 1♀, Hatay, Uluçınar env., 11.-12.IV.1992, leg. Hovorka (cKoc); 2 exs. [det. Feldmann], Hatay, 15 km WSW Antakya, Batiayaz, Musa Dağı, ca. 500 m, pitfall trap, 6.-23.IV.2014, leg. Reuter (cFel). <u>Cyprus:</u> 1♂, Pafos, Peristerona Gorge, 35°00'N, 32°29'E, 270 m, 23.IV.2015, leg. Meybohm (cAss); 1♀, 27 km E Girne, 2 km SW Bahceli, 35°19'N, 33°37'E, 450 m, stony meadow, 1.IV.2015, leg. Frenzel (NME); 1♀, 55 km E Girne, Kaplica, 35°25'N, 33°54'E, 150 m, 2.IV.2015, leg. Frenzel (NME); 1 ex., Paphos, 4 km NE Agia Varvara, 34°46'N, 32°32'E, 260-300 m, dry slope with bushes, 30.III.2016, leg. Frenzel (NME); 1 ex., NE Lemesos, NW Alassa, Kouris Reservoir, 34°46'N, 32°55'E, 260 m, 1.IV.2016, leg. Frenzel (cAss). <u>Lebanon:</u> 1 ex., Douma env., 900-1000 m, 2.IV.1997, leg. Heinz (cSme); 1 ex., Ehden env., 1000-1100 m, 3.-13.IV.1997, leg. Heinz (cSme); 2 exs. [det. Feldmann], Batroun, Arz Tannourine, ca. 34°12'N, 35°56'E, ca. 1600 m, 10.III.2013, leg. Reuter (cFel); 1 ex. [det. Feldmann], ca. 28 km E Tripoli, Fnaideq, Djebbel

Qammouaa, 1300-1400 m, coniferous forest, 29.X.2012, leg. Reuter (cFel); 2 exs. [det. Feldmann], Rayfoun, 33°58'N, 35°42'E, mixed oak forest, ca. 990 m, pitfall trap, 15.III.2013, leg. Reuter (cFel); 1 ex. [det. Feldmann], Rachaya, Tannoura, 33°29'N, 35°48'E, oak forest and shrubs, pitfall trap, V.2015, leg. Reuter (cFel). <u>Israel:</u> 1 ex., Golan, El Rom, 1050 m, 28.III. & 6.IV.1995, leg. Heinz (cSme); 1 δ , Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 2.IV.2011, leg. Drees (cAss); 1 δ , Nahal Oren, 32°43'N, 34°59'E, 125 m, pitfall, 30.I.2011, leg. Drees (cAss). <u>Pakistan</u>; 1 δ , AJK, Poonch District, Sudhan-gali, 2300 m, 9.&16.VI.1997, leg. Heinz (cAss).

C o m m e n t : The above specimen from Pakistan would represent the first record of *Leptobium* from this country and expand the known range of *L. syriacum* eastwards by nearly 3000 km. However, since this record is far outside the previously known distribution, it requires confirmation. The specimen may be mislabelled; the collector was in Lebanon in the same year.

Leptobium wunderlei BORDONI, 1994

M a t e r i a l e x a m i n e d : <u>Turkey</u>: 12 exs., Antalya, ESE Manavgat, 6.III.2013, leg. Snížek (NME, cAss); 2 exs., Anamur env., 8.III.2013, leg. Snížek (NME, cAss); 1 ex., ESE Manavgat, SW Alanya, 6.III.2013, leg. Snížek (NME).

C o m m e n t : This species is endemic to central southern Anatolia (eastern Antalya province) (ASSING 2005).

Leptobium longitibiale Assing & Wunderle, 2001

M a t e r i a l e x a m i n e d : <u>Cyprus</u>: 1♂, Nikosia, Stavros tis Stegis, 35°01'N, 32°38'E, 990 m, 26.IV.2015, leg. Meybohm (cAss).

C o m m e n t : The above specimen represents the first record since the original description, which is based on a male and two females from one locality in Paphos Forest, Cyprus (ASSING 2005; ASSING & WUNDERLE 2001).

Leptobium assingi BORDONI, 1994

M a t e r i a l e x a m i n e d : <u>Turkey</u>: 2 exs., ESE Manavgat, SW Alanya, 6.III.2013, leg. Snížek (NME).

C o m m e n t : The above specimens were collected near the type locality. The distribution of *L. assingi* is confined to southern Anatolia (ASSING 2005).

Leptobium carinatum Assing, 2005

Leptobium nabozhenkoi ANLAŞ, 2012: 228 ff.; nov.syn.

M a t e r i a l e x a m i n e d : <u>Turkey</u>: 1 ♀, Antalya, Bey Dağları, Elmalı env., cedar research station, 1900 m, 18.-29.V.1987, leg. Korge (MNB); 1 ♀, Antalya, S Elmalı, 1100 m, 17,.-25.V.1987, leg. Korge (MNB).

C o m m e n t : The original description of *L. carinatum* is based on material from various localities in Muğla and Antalya provinces, southwestern Anatolia (ASSING 2005), that of *L. nabozhenkoi* on a single male from Karaman, a province adjacent to Antalya (ANLAŞ 2012). In coloration, habitus, and the shapes and chaetotaxy of the male sternites VII and VIII the holotype of *L. nabozenkhoi* is identical to *L. carinatum*. The same is true of the aedeagus, except that it is of slightly smaller size. ANLAŞ (2012) states that it is also of different shape in lateral view, but this conclusion is evidently based on an artefact: the aedeagus in figure 1f is shown in ventro-lateral and not in lateral view.

As has been shown and illustrated not only for several more common and widespread species, e.g., *L. illyricum*, *L. syriacum*, *L. gracile*, *L. artum* (KARSCH, 1881), and *L. densiventre* (FAUVEL, 1875), but also for species with more restricted distributions (e.g., *L. assingi*, *L. arabicum*), *Leptobium* species may be subject to enormous, both clinal and non-clinal intraspecific variation not only of external characters such as size and the coloration, but also of the size and shape of the aedeagus (ASSING 2005). Those indicated as distinguishing *L. nabozhenkoi* from *L. carinatum* by ANLAŞ (2012), however, are negligible by comparison. Consequently, there is little doubt that the holotype of *L. nabozhenkoi* is just a specimen at the low end of the size range of *L. carinatum*. Hence the synonymy proposed above.

Leptobium venustum (BAUDI, 1848)

- M a t e r i a l e x a m i n e d : <u>Israel</u>: 1♂, 12-16 miles W Jerusalem, El Athroun, XII.1917, leg. Austen (BMNH). <u>Jordan</u>: 1♂, Ajlun province, SW Kufranja, 32°16'N, 35°39'E, 190 m, 4.III.2014, leg. Ziegler (cAss); 3 exs. [det. Feldmann], Ajlun province, Ajlun Castle, 32°20'N, 35°43'E, 970 m, 5.III.2014, leg. Hetzel (cFel); 4 exs. [det. Feldmann], Ma'an province, N Wadi Musa, ca. 30°22'N, 35°30'E, 1660 m, snow fields, 28.II.2014, leg. Hetzel (cFel).
- C o m m e n t : The above records are within the known range.

Leptobium creticum COIFFAIT, 1973

M a t e r i a l e x a m i n e d : <u>Greece: Crete</u>: 1 ex. [head reddish], Lassithi, Psychros cave, 850 m, 24.IV.-3.V.1980, leg. Heiss (cAss); 1 ex. [head black], Thrypti, 1000 m, 18.IV.1990, leg. Heiss (cAss).

C o m m e n t : This variably coloured species has been recorded only from Crete, where it is widespread and not uncommon (ASSING 2005). For additional recent records see ASSING (2013, 2015).

Leptobium drusiacum COIFFAIT, 1969

M a t e r i a l e x a m i n e d : <u>Israel</u>: 3♂♂, Golan, Hermon Reserve, 1500 m, 29.III.-6.IV.1995, leg. Heinz (cSme, cAss); 2♂♂, Har Hermon, 33°18'N, 35°46'E, 1780 m, S-slope, pitfall, 2.IV.2011, leg. Drees (cAss); 1♀, Pura N.R., 31°30'N, 34°47'E, 210 m, grassland, pitfall, 28.I.2011, leg. Drees (cAss); 1♂, N-Golan, Hermon Reserve, 1100-1400 m, 10.IV.1985, leg. Heinz (MNB).

C o m m e n t : Leptobium drusiacum has been recorded only from Lebanon and Israel.

Leptobium obesum (FAUVEL, 1875)

M a t e r i a l e x a m i n e d : Lebanon: 1 d [det. Feldmann], Faqra, above Ayoun Al Simane, ca. 2000 m, 30.V.2016, leg. Reuter (cFel).

C o m m e n t : This species is widespread, but rare, in the Middle East.

Leptobium korgei Assing, 2005

M a t e r i a l e x a m i n e d : <u>Syria</u>: 13, 19, ca. 20 km E Homs, 500 m, 13.IV.1978, leg. Heinz (MNB).

C o m m e n t : The known distribution of this species is confined to Syria.

Leptobium convexicolle Assing, 2009

- M a t e r i a l e x a m i n e d : Iran: 1 q, Mazandaran, 40 km S Tavir, 36°25'N; 51°17'E, 660 m, meadow, 1.V.2010, leg. Frenzel (NME); 1 q, Mazandaran, S Alamdeh, Kolehsar, 1100 m, 16.VIII.1968, leg. Heinz (MNB).
- C o m m e n t : Previously, only the male holotype of this species was known.

Leptobium pominii (GRIDELLI, 1949)

- M a t e r i a l e x a m i n e d : <u>Italy</u>: 1 ex., Puglia, Gargano, Foresta Umbra, 2.IV.1998, leg. Ausmeier (cAss).
- C o m m e n t : Leptobium pominii is endemic to Monte Gargano, Puglia, South Italy.

Leptobium nigricolle nigricolle (WOLLASTON, 1862)

M a t e r i a l e x a m i n e d : <u>Canary Islands</u>; 7 exs., Lanzarote, Tiagua, 150 m, sand dunes, 8.I.1987, leg. Heinz (MNB); 11 exs., Lanzarote, SW Haria, Mña Cañada, 300-600 m, 7.I.1987, leg. Heinz (MNB, cAss); 1 ex., Gran Canaria, S Antonio, Mña de Guia, 600 m, pine forest, I.1987, leg. Heinz (MNB); 1 ex., Gran Canaria, Pozo de las Nieves, 1600-1800 m, 12.I.1987, leg. Heinz (MNB); 3 exs., Gran Canaria, Caldera de Baudama, 350 m, 10.I.1987, leg. Heinz (MNB).

C o m m e n t : This subspecies is rather common both in Lanzarote and Gran Canaria (Assing 1999, 2005).

Leptobium nigricolle ruficolle (WOLLASTON, 1862)

M a t e r i a l e x a m i n e d : <u>Canary Islands:</u> 6 exs., Fuerteventura, La Oliva env., 350 m, I.1987, leg. Heinz (MNB).

C o m m e n t : The distribution of this subspecies is confined to Fuerteventura and the small island Los Lobos, Canary Islands (ASSING 1999, 2005). Note that in SCHÜLKE & SMETANA (2015), *L. nigricolle ruficolle* is still listed as a distinct species, although its subspecific status had been proposed by ASSING (2005).

Leptobium debilipenne (WOLLASTON, 1865)

- M a t e r i a l e x a m i n e d : <u>Canary Islands: La Gomera</u>: 1 ex., Garajonay, 1000-1400 m, 19.II.1964, leg. Heinz (MNB).
- C o m m e n t : Leptobium debilipenne is an endemic of La Gomera, Canary Islands.

Leptobium paivae (WOLLASTON, 1865)

M a t e r i a l e x a m i n e d : <u>Portugal: Selvagens Grande</u>: 2♂ ♂, 4♀♀, SE Levada, *Suaeda*, 24.IV.2014, leg. Putzer (MNB, cAss); 2♀♀, Levada do Norte, *Suaeda*, 14.IV.2014, leg. Putzer (MNB); 3♂ ♂, 7♀♀ [partly teneral], Levada do Norte, *Suaeda*, 17.IV.2014, leg. Putzer (MNB, cAss, cFel); 6♂ ♂, 8♀♀ [partly teneral], Tornozelos, 20.IV.2014, leg. Putzer (MNB, cAss); 1♂, 3♀♀ [teneral], same data, but 19.IV.2014 (MNB); 6♂ ♂, 5♀♀ (4 teneral], SE-Levada, 27.IV.2014, leg. Putzer (MNB, cFel, cAss); 2♂ ♂, 5♀♀ [partly teneral], locality not specified, IV.2014, leg. Putzer (MNB); 3♀♀ [1 teneral], locality not specified, 19.IV.2014, leg. Putzer (MNB); 1♀ [teneral], locality not specified, 19.IV.2014, leg. Putzer (MNB); 1♀ [teneral], locality not specified, 19.IV.2014, leg. Putzer (MNB); 1♀ [teneral], locality not specified, 15.IV.2014, leg. Putzer (MNB, cFel); 1♂, 2♀♀ [teneral], locality not specified, 17.IV.2014, leg. Putzer (MNB).

C o m m e n t : The distribution of this species is confined to Selvagens Grande. All the above specimens were collected from under stones. Nearly half of them are teneral.

Leptobium juani COIFFAIT, 1969

- M a t e r i a l e x a m i n e d : <u>Spain</u>: A l i c a n t e : 1 ex., SE Pego, W road CV 712, 38°49'N, 0°08'W, 550 m, 12.IV.2011, leg. Forcke (cAss); 1 ex., S Parcent, Col de Rates, 38°43'N, 0°04'W, 620 m, 14.IV.2011, leg. Forcke (cAss); 1 ex., S Parcent, Col de Rates, 38°43'N, 0°04'W, 620 m, 18.XI.2013, leg. Forcke (cAss); 2 exs., S Jalon, Sierra de Bernia, 38°40'N, 0°04'W, 11.IV.2011, leg. Forcke (cAss); 1 ex., S Jalon, Sierra de Bernia, 38°40'N, 0°04'W, 730 m, 17.XI.2013, leg. Forcke (cAss), 1 ex., W Benigembla, Pla de Petracos, 38°46'N, 0°11'W, 470 m, 23.XI.2013, leg. Forcke (cAss).
- C o m m e n t : Leptobium juani has been recorded only from Alicante, Spain.

Leptobium subglaciale (KOCH, 1937)

M a t e r i a l e x a m i n e d : <u>Morocco</u>: 1 ex., Marrakesh province, ca. 10 km SE Tahnaoute, 21.VI.2010, leg. Anichtchenko (cSha); 3 exs., Haute-Atlas, S Marrakesh, Oukaimeden env., Ait-Lekak, 1600-1700 m, 31.III.1997, leg. Heinz (MNB); 1 ex., Haute Atlas, Oukaimeden env., 31°13'N, 7°49'W, 2200-2300 m, 16.-17.VI.2010, leg. Anichtchenko (cAss).

C o m m e n t : The distribution of *L. subglaciale* is confined to the Haut Atlas in Morocco.

Leptobium sparsum (REITTER, 1887)

M a t e r i a l e x a m i n e d : <u>Russia</u>: 3 exs., Krasnodar region, Sochi National Park, 6 km NE Soloniki vill., 28.-30.V.2009, leg. Anichtchenko (cSha, cAss).

C o m m e n t : Leptobium sparsum is endemic to the West Caucasus.

Leptobium turcmenicum COIFFAIT, 1967

M a t e r i a l e x a m i n e d : <u>Kazakhstan</u>: 1♀, Taldy-Kurgan region, Ili, 43°58'N, 79°39'E, 4.VI.1993, leg. Lukhtanov (NME).

C o m m e n t : This species is widespread in Middle Asia (Assing 2005).

Leptobium arabicum COIFFAIT, 1969

M a t e r i a l e x a m i n e d : <u>Saudi Arabia</u>: 3 exs., Abha, 2000 m, 28.VIII.1982, leg. Heiss (cAss). 1♂ [slightly teneral], Wadi Aziza, 18°13'N, 42°28'E, 2400 m, 17.-18.IX.1983, leg. Büttiker (NHMB); 14 exs., Al-Hejaz ["Hedjaz"] (BMNH, cAss); 1♂, 1♀, Asir, Raydah Protectorate, 18.198°N, 42.410°E, 2440 m, 22.II.2014, leg. Sharaf (cAss).

C o m m e n t : *Leptobium arabicum* is distributed in Saudi Arabia, northern Yemen, and southern Israel (ASSING 2005, 2009c); the records from Israel are missing in the latest edition of the Palaearctic Catalogue (SCHÜLKE & SMETANA 2015). The coloration of this species is remarkably variable, that of the forebody ranges from distinctly bicoloured with the head black and the pronotum and elytra bright-reddish to uniformly reddish-brown, that of the abdominal apex from bright-reddish to reddish-brown.

Leptobium iranicum nov.sp. (Figs 1-6)

T y p e m a t e r i a l : <u>Holotype 3</u>: "IRAN Ardekan, Passs [sic] Komehe, IV.2014, leg. W. Heinz / Holotypus 3 *Leptobium iranicum* sp. n. det. V. Assing 2016" (NME).

E t y m o l o g y : The specific epithet (adjective) is derived from Iran.

D e s c r i p t i o n : Measurements (in mm) and ratios: HL: 1.03; HW: 0.97; PW: 0.97; PL: 1.09; EL: 0.82; TiL: 0.87; TaL: 0.82; ML: 1.30; TL: 7.0; HL/HW: 1.06; PW/HW: 1.00; PL/PW: 1.13; EL/PL: 0.75; TiL/TaL: 1.05.





Figs 1-6: *Leptobium iranicum* nov.sp.: (1) forebody; (2) abdomen; (3) male sternite VIII; (4) male sternite VII; (5-6) aedeagus in lateral and in ventral view. Scale bars: 1-2: 1.0 mm; 3-6: 0.5 mm.

Coloration of the *L. melanocephalum* type: head black; pronotum and elytra pale-reddish; abdomen black with the apex (posterior portion of segment VII; segments VIII-X) reddish; legs yellowish, except for the slightly darker protibiae and protarsi; antennae dark-reddish.

Head (Fig. 1) moderately oblong (see ratio HL/HW), with sparse macropunctation and interspersed sparse micropunctation; microsculpture absent; eyes slightly more than half as long as postocular region.

Pronotum (Fig. 1) as wide as head (see ratio PW/HW); punctation uniform (not com-

posed of both macro- and micropunctation), moderately dense, and moderately fine, denser and finer than macropunctation of head.

Elytra (Fig. 1) distinctly shorter than pronotum (see ratio EL/PL); punctation similar to that of pronotum; microsculpture absent. Hind wings reduced.

Abdomen (Fig. 2) broadest at segment VI; punctation rather dense and coarse on tergites III-VI, sparser and finer on posterior tergites; integument with shallow transverse microsculpture; posterior margin of tergite VII without palisade fringe.

 δ : sternite VII (Fig. 4) in postero-median portion with a pair of clusters of dark setae, posterior margin broadly and distinctly concave; sternite VIII (Fig. 3) with the usual deep and narrow posterior incision, its depth 0.43 times the length of sternite; aedeagus (Figs 5-6) 1.3 mm long; dorsal plate basally broad, apically acute, and dorsally with two median carinae.

C o m p a r a t i v e n o t e s : The new species is particularly characterized by the morphology of the aedeagus and distinguished from other congeners known from Iran by the different coloration alone. It differs from the similarly coloured *L. arabicum* COIFFAIT, 1981 (Saudi Arabia, Yemen) by slightly smaller size, a male sternite VII with a pair of clusters with shorter and finer modified setae (*L. arabicum*: male sternite VII with one extensive cluster of longer and stouter black setae), a relatively deeper posterior excision of the male sternite VIII, and by a smaller aedeagus with a shorter and broader dorsal plate and with a ventral process of completely different shape. From other similarly coloured species of similar size from the Middle East (*L. geminum* ASSING, 2005, *L. semirufum* (FAUVEL, 1875), *L. drusiacum* COIFFAIT, 1969), it is not only distinguished by an aedeagus of completely different shape, but also by a male sternite VII of completely different shape and chaetotaxy. For illustrations of these species see ASSING (2005).

D i s t r i b u t i o n : The type locality is situated near Ardakan [= Ardekan; 32°19'N, 54°01'E] in Yazd province, Central Iran.

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Zusammenfassung

Leptobium iranicum nov.sp. (Iran: Provinz Yazd) wird beschrieben und abgebildet. Ein Name wird synonymisiert: *Leptobium carinatum* ASSING, 2005 = L. *nabozhenkoi* ANLAŞ, 2012, nov.syn. Weitere Nachweise von 24 Arten werden gemeldet. Die Gattung enthält damit derzeit insgesamt 68 Arten und zwei Unterarten.

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