ISSN 1211-8788 *Acta Musei Moraviae, Scientiae biologicae*
104(2): 109–115, 2019

A revision of Palaearctic *Lobrathium*. VII. A new species from Greece, a revalidation, and additional records (Coleoptera: Staphylinidae: Paederinae)

VOLKER ASSING

Gabelsbergerstr. 2, D-30163 Hannover, Germany; e-mail: vassing.hann@t-online.de

ASSING V. 2019: A revision of Palaearctic *Lobrathium*. VII. A new species from Greece, a revalidation, and additional records (Coleoptera: Staphylinidae: Paederinae). *Acta Musei Moraviae, Scientiae biologicae* **104(2):** 109–115. – *Lobrathium moreanum* sp. nov. (Greece: Pelopónnisos: Menalo Oros), a close relative of *L. multipunctum* (Gravenhorst, 1802), is described and illustrated. *Lobrathium gallienii* (Fagniez, 1917), previously a synonym of *L. multipunctum*, is revalidated. Additional records of seven species from Turkey, Iran, and China are reported. The genus is now represented in the Palaearctic region by 153 species.

Keywords. Coleoptera, Staphylinidae, Paederinae, *Lobrathium*, taxonomy, new species, revalidation, new records, Palaearctic region, Greece

Introduction

The species of the paederine genus *Lobrathium* Mulsant et Rey, 1878 recorded from the Palaearctic region have been treated in six previous contributions, especially in three synoptic studies of the West and East Palaearctic faunas (ASSING 2007, 2010, 2012a). According to the latest supplement (ASSING 2017), the genus was represented in the Palaearctic region by 144 described species and one subspecies. In the meantime, seven additional species have been described from Japan (ITO 2017, 2018a, b).

Staphylinid by-catches from Greece and Cyprus kindly made available to me by Michael Balkenohl (Denzlingen) included a *Lobrathium* male from the Pelopónnisos, Greece. An examination of its primary and sexual characters revealed that it represented a new species, which is described in this paper. Moreover, additional records of several species are provided.

Finally, based on material from the vicinity of the type locality of *L. gallienii* (Fagniez, 1917) and a subsequent study of the holotype, Marc Tronquet, Molitg-les-Bains, discovered that the previously proposed synonymy of *L. gallienii* with *L. multipunctum* (Gravenhorst, 1802) (see ASSING 2007) is incorrect and that *L. gallienii* in fact represents a distinct species.

Material and methods

The material treated in this study is deposited in the following collections:

NHMW . . . . . Naturhistorisches Museum Wien (H. Schillhammer)
NMP . . . . . National Museum of Natural History, Prague (J. Hájek)
cAss . . . . . author´s private collection
cFel . . . . . private collection Benedikt Feldmann, Münster

The morphological studies were conducted using a Stemi SV 11 microscope (Zeiss) and a Discovery V12 microscope (Zeiss). The images were created using a digital camera (Axiocam ERc 5s), as well as Labscope and Picolay software.

Body length was measured from the anterior margin of the mandibles (in resting position) to the abdominal apex, the length of the forebody from the anterior margin of the mandibles to the posterior margin of the elytra, head length from the anterior margin of the frons to the posterior constriction of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra, and the length of the aedeagus from the apex of the ventral process to the base of the aedeagal capsule. The "parameral" side (i.e., the side where the sperm duct enters) is referred to as the ventral, the opposite side as the dorsal aspect.

Results

Lobrathium gallienii (Fagniez, 1917), revalidated (Figs 6–8)

Lathrobium gallienii Fagniez, 1917: 311 f.
as synonym of *Lobrathium multipunctum* (Gravenhorst, 1802): Assing (2007).

Comment. The original description of *L. gallienii* is based on "un seul exemplaire" from "Lozère : col de Jalcreste" (Fagniez 1917) in the Massif Central, France. Based on circumstantial evidence, the name was placed in synonymy with *L. multipunctum* by Assing (2007).

In an e-mail (1 April, 2018), Marc Tronquet informed me that he had studied a male from Massif Central (Génolhac, Lozère), not far from the type locality, that matched the description of *L. gallienii*, but was not conspecific with *L. multipunctum*. A subsequent examination of the holotype in the Jarrige collection (box no. 60) at the Muséum National d'Histoire Naturelle, Paris confirmed that the specimen from Génolhac was conspecific with the holotype of *L. gallienii* and that the latter represented a distinct species (Tronquet, e-mail 20 May, 2018). In consequence, *L. gallienii* is revalidated. A third specimen from the vicinity of the type locality (Lozère, Gatuzières, Sources de la Jonte, 1320 m, sifted from moist litter on stream bank, 27.IV.2018, leg. Debussche) (Tronquet, e-mail 15 Nov., 2019) was found only recently. The habitus and the male sexual characters are illustrated in Figs 6–8.

Lobrathium schillhammeri Assing et Schülke, 2002

Material examined. Turkey: 7 exs., Adıyaman, Nemrut Dağý, Karadut env., 28.VI.1993, leg. Klíma (NMP, cAss); 2♀♀, Van, Muradiye, 27.VI.1993, leg. Klíma (NMP).

Comment. This species has been reported only from Şanlıurfa and Adıyaman provinces, South Turkey (Assing 2013, 2017).

Lobrathium farsicum Assing, 2007

Material examined. Iran: 3♂♂, Bushehr, Bandar-e Ganave, 11.V.1999, leg. Klíma (NMP, cAss).

Comment. The known distribution of *L. farsicum* is confined to Southwest Iran (Assing 2007, 2013).

Lobrathium moreanum sp. nov. (Figs 1–5)

Type material. Holotype ♂: "GREECE – Pelopónnisos, Oros Menalo, S Elati, Vytina env., 37°35.95′N, 22°09.23′E, 6.VI.2019, leg. M. Balkenohl / Holotypus ♂ *Lobrathium moreanum* sp. n., det. V. Assing 2019" (cAss).

Description. Body length 8.7 mm; length of forebody 4.1 mm. Habitus as in Fig. 1. Coloration: head and pronotum black; elytra blackish-brown with the posterior margin slightly paler; abdomen blackish with the posterior margin of tergite VII and segments VIII–X dark-reddish; forelegs brown; mid- and hindlegs dark-yellow; antennae dark-brown with antennomeres I–III dark-reddish to reddish-brown.

Head (Fig. 2) 1.07 times as long as broad, strongly convex in cross-section; punctation coarse and dense, somewhat less dense in median dorsal portion; interstices without microsculpture. Eyes of moderate size, little more than half as long as distance from posterior margin of eye to posterior constriction of head. Antenna 2.3 mm long.

Pronotum (Fig. 2) 1.33 times as long as broad and 0.97 times as broad as head, strongly convex in cross-section; punctation similar to that of head; impunctate median band narrow; microsculpture absent.

Elytra (Fig. 2) approximately 0.8 times as long as pronotum; humeral angles moderately marked; punctation coarse and seriate; interstices without microsculpture. Hind wings present, but probably of reduced length.

Abdomen: anterior impressions of tergites III–VI with coarse punctation; punctation of remainder of tergal surfaces fine and dense, more distinct and denser on anterior than on posterior tergites; interstices with fine transverse microsculpture; posterior margin of tergite VII with narrow palisade fringe; posterior margin of tergite VIII weakly angled in the middle.

♂: sternite VII (Fig. 3) anteriorly with a pair of distinct tubercles, in postero-median portion shallowly impressed; sternite VIII (Fig. 3) extensively impressed along middle, with deeply U-shaped posterior excision, pubescence not distinctly modified; aedeagus (Figs 4–5) 1.0 mm long; ventral process short, strongly angled, projecting ventrad in lateral view.

♀: unknown.

Comparative notes. Based on the similar general morphology of the aedeagus and the similarly derived modifications of the male sternite VII, *L. moreanum* is evidently closely allied to the widespread variable and wing-dimorphic *L. multipunctum*. Aside from this species, only three species have been recorded from Greece: the widespread *L. rugipenne*

(Hochhuth, 1851) and two species with restricted distributions, *L. angulatum* Assing, 2005 (North Greece: Ipiros) and *L. candicum* Bordoni, 2009 (Crete). The new species is distinguished from all its congeners by the shape of the aedeagus and the modifications of the male sternite VII. It additionally differs from the four species previously known from Greece as follows:

from *L. multipunctum* by darker forelegs and antennae, more oblong antennomeres IV–X, shorter elytra, and the position of the tubercles on the male sternite VII (in *L. multipunctum* in median position);

from *L. rugipenne* by significantly smaller size and a more slender habitus, a more convex head and pronotum, darker coloration of the forelegs, the coloration of the elytra (*L. rugipenne*: elytra usually distinctly bicoloured with the anterior portion blackish and the posterior portion reddish), much shorter elytra, and by the shape and chaetotaxy of the male sternite VIII;

from *L. angulatum* by darker coloration of the body (especially of the elytra), more slender antennae with more oblong antennomeres IV–X, elytra with parallel lateral margins and moderately marked humeral angles (*L. angulatum*: elytra with posteriorly diverging lateral margins and very weakly marked humeral angles), the presence of hind wings (completely reduced in *L. angulatum*), the presence of a palisade fringe at the posterior margin of tergite VII (absent in *L. angulatum*), and the completely different shapes and chaetotaxy of the male sternites VII and VIII;

from *L. candicum* by much shorter elytra, a more slender habitus with a smaller and more convex head and a more slender and more convex pronotum, uniformly dark elytra (bicoloured in *L. candicum*), and by the different shapes and chaetotaxy of the male sternites VII and VIII.

For illustrations of the compared species see Coiffait (1982), Assing (2005, 2012b), and Bordoni (2009).

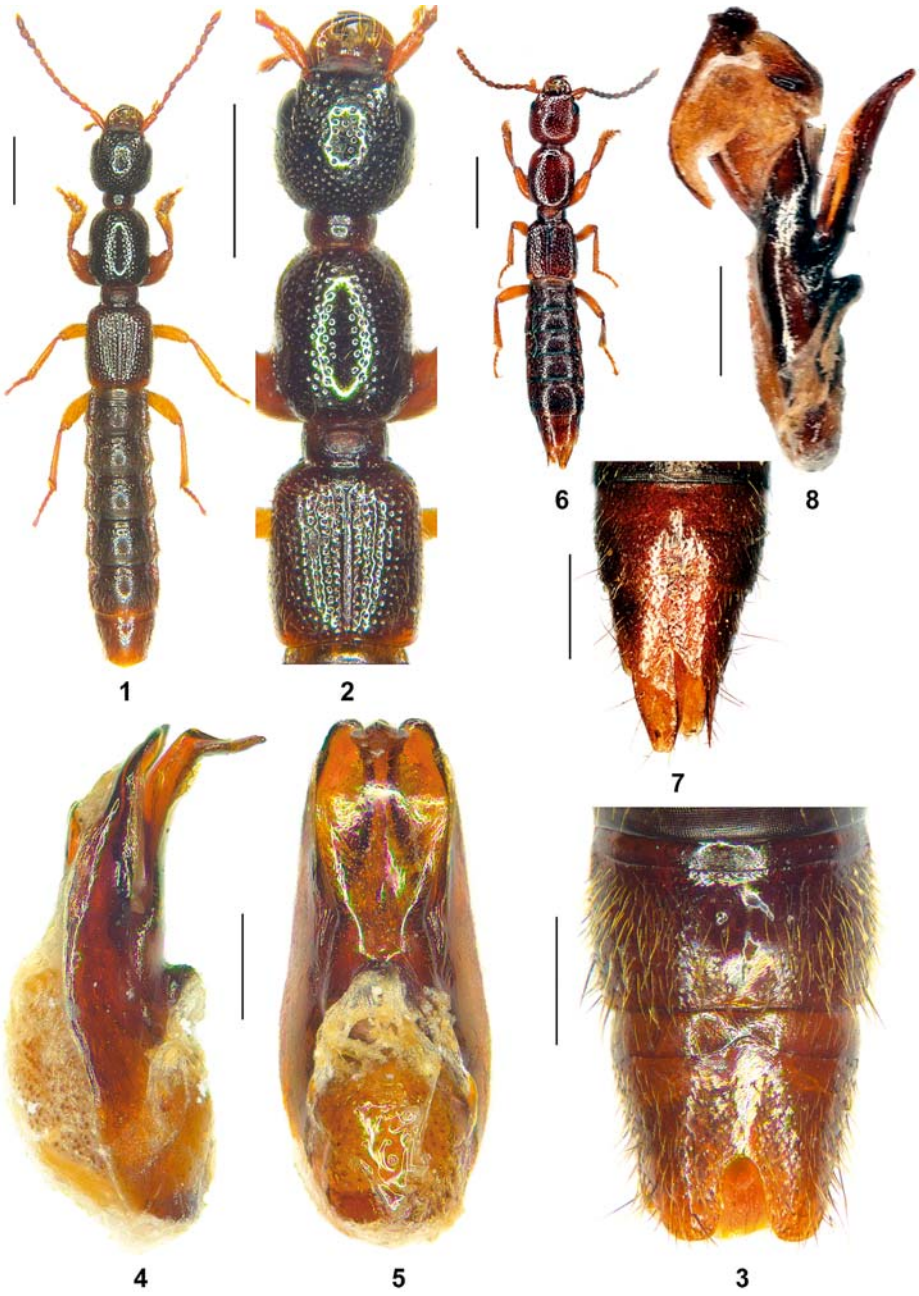
Distribution. The type locality is situated in the Menalo range, Pelopónnisos, Greece. Additional data are not available.

Etymology. The specific epithet is an adjective derived from Morea (Latin: Pelopónnisos).

Lobrathium hongkongense (Bernhauer, 1931)

Material examined. China: Yunnan: 3 exs., 14 km SE Tengchong, Renjiafen env., 24°56′N, 98°35′E, 2025–2145 m, 23.VI.2016, leg. Hájek & Růžička (NMP); 1♂, Gaoligong Mts NNR, 2.1 km E Kongshu, 25°43′N, 98°38′E, 2035–2230 m, 1.VII.2016, leg. Hájek & Růžička (NMP).

Comment. *Lathrobium hongkongense* is one of the most widespread and common species of the genus in China. Its distribution was mapped by Assing (2013).



Figs 1–8. *Lobrathium moreanum* (**1–5**) and *L. gallienii* (**6–8**). 1, 6 – habitus; 2 – forebody; 3, 7 – male sternites VII–VIII; 4–5, 8 – aedeagus in lateral and in ventral view. Scale bars: 1–2, 6: 1.0 mm; 3, 7: 0.5 mm; 4–5, 8: 0.2 mm. Figs 6–8 were provided by Marc Tronquet.

Lobrathium demptum Assing, 2012

Material examined. China: Zhejiang: 1♂, West Tianmu Shan Nat. Res., Three Li Pavillion, 30°20′03″N, 119°26′11″E, 670 m, 26.VI.–1.VII.2017, leg. Růžička & Hájek (NMP).

Comment. This species was originally described based on material from Hubei (Assing 2012a) and subsequently reported also from Zhejiang (Li, Dai *et al.* 2013, Li, Zhao *et al.* 2013).

Lobrathium hebeatum Zheng, 1988

Material examined. China: Yunnan: 2♂♂, 1♀, Nujiang range, NE Fugong, 2300 m, 14.VI.2017, leg. Reuter (NHMW, cAss).

Comment. Assing (2012a) and Li, Zhao *et al.* (2013) recorded *L. hebeatum* from the Chinese provinces Shaanxi, Sichuan, and Yunnan. Li, Dai *et al.* (2013) subsequently reported it from Henan and Ningxia.

Lobrathium duplex Assing, 2012

Material examined. China: Sichuan: 5 exs. [identified by B. Feldmann], pass ESE Mianning, between Mianshanzhen and Yuexi, ~ 28°30′N, 102°26′E, ~ 2300 m, 22–23.VI.2017, leg. Reuter (cFel).

Comment. The original description of *L. duplex* is based on material from Sichuan and Yunnan (Assing 2012a).

Lobrathium configens Assing, 2012

Material examined. China: Sichuan: 2 exs. [identified by B. Feldmann], S Yanyuan,Chuandongzi range, ~ 27°21′05″N, 101°30′26”E, 3200 m, 8–19.VI.2017, leg. Reuter (cFel). **Yunnan:** 4 exs. [identified by B. Feldmann], Meili Xue Shan, Nanzheng pass, 28°24′02″N, 98°49′15″E, ~ 3750 m, S-slope with fir forest, 17–19.VI.2016, leg. Reuter (cFel).

Comment. This species was originally described based on material from Hubei, Shaanxi, Sichuan, and Yunnan (Assing 2012a). Li, Dai *et al.* (2013) and Li, Zhao *et al.* (2013) subsequently reported it from Qinghai, Hubei, Sichuan, and Yunnan.

Acknowledgements

I am indebted to the colleagues indicated in the material section for the loan of material from the collections under their care, in particular to Michael Balkenohl for the generous gift of Staphylinidae from Greece and Cyprus, this material also including the holotype of *L. moreanum*. Marc Tronquet kindly provided important photos and important information on the identity of *L. gallienii*. Benedikt Feldmann communicated additional records of two species. The comments and suggestions of Benedikt Feldmann and an anonymous reviewer are much appreciated.

References

Assing V. 2005: A new species of *Lobrathium* Mulsant & Rey from Greece (Coleoptera: Staphylinidae, Paederinae). *Entomologische Blätter* **100 (3):** 197–200.

Assing V. 2007: A revision of Palaearctic *Lobrathium* Mulsant & Rey. III. New species, new synonyms, and additional records (Coleoptera: Staphylinidae, Paederinae). *Linzer Biologische Beiträge* **39 (2):** 731–755.

Assing V. 2010: On the Lathrobiina of Taiwan (Coleoptera: Staphylinidae: Paederinae). *Beiträge zur Entomologie, Keltern* **60 (2):** 301–361.

Assing V. 2012a: A revision of East Palaearctic *Lobrathium* (Coleoptera: Staphylinidae: Paederinae). *Bonn Zoological Bulletin* **61 (1):** 49–128.

Assing V. 2012b: *Unterfamilie Paederinae Fleming, 1821*. pp. 322–369, 380–383. In: Assing V. & Schülke M. (eds), Freude–Harde–Lohse–Klausnitzer: *Die Käfer Mitteleuropas. Band 4. Staphylinidae I. Zweite neubearbeitete Auflage*. Heidelberg and Berlin: Spektrum Akademischer Verlag, I–XII, 1–560.

Assing V. 2013: A revision of Palaearctic *Lobrathium*. IV. Three new species from Nepal and China, a new combination, and additional records (Coleoptera: Staphylinidae: Paederinae). *Linzer Biologische Beiträge* **45 (1):** 191–204.

Assing V. 2017: A revision of Palaearctic *Lobrathium*. VI. Two new species from Armenia and Taiwan, and additional records (Coleoptera: Staphylinidae: Paederinae). *Linzer Biologische Beiträge* **49 (1):** 299–306.

Bordoni A. 2009: Palaearctic Lathrobiina of the Museum of Zoology of Lund with description of *Lobrathium candicum* n. sp. from Crete (Coleoptera Staphylindae) [sic]. *Bollettino della Società Entomologica Italiana* **141 (3):** 139–142.

Coiffait H. 1982: Coléoptères Staphylinidae de la région paléarctique occidentale. IV. Sous famille Paederinae. Tribu Paederini 1 (Paederi, Lathrobii). *Supplément à la Nouvelle Revue d'Entomologie* **12 (4):** 1–440.

Fagniez C. 1917: Description d'un *Lathrobium* nouveau de France (Col. Staphylinidae). Bulletin de la Société Entomologique de France **1916:** 311–312.

Ito T. 2017: Notes on the species of Staphylinidae from Japan. XXI. The descriptions of two additional species of *Lobrathium* Mulsant et Rey from Shikoku (Coleoptera). *Special Bulletin of the Coleopterological Society of Japan* **1:** 73–76.

Ito T. 2018a: Notes on the species of Staphylinidae (Coleoptera) from Japan. XXII. The descriptions of three new species of *Lobrathium* Mulsant et Rey from Honshu. *Elytra, Tokyo, New Series* **8 (1):** 213–218.

Ito T. 2018b: Notes on the species of Staphylinidae (Coleoptera) from Japan. XXIII. The descriptions of two new species of *Lobrathium* Mulsant et Rey. *Elytra, Tokyo, New Series* **8 (2):** 385–389.

Li W.-R., Dai C.-C. & Li L.-Z. 2013: A new species and additional records of *Lobrathium* Mulsant & Rey (Coleoptera, Staphylinidae, Paederinae) from China. *ZooKeys* **326:** 47–53.

Li W.-R., Zhao M.-J., Dai C.-C. & Li L.-Z. 2013: New species and records of *Lobrathium* Mulsant & Rey (Coleoptera, Staphylinidae, Paederinae) from China. *ZooKeys* **304:** 49–81.