© 2021 Senckenberg Gesellschaft für Naturforschung

**71** (2): 233–236 2021

SENCKENBERG

# On the *Lathrobiina* of Taiwan II. A new species and an additional record of *Lobrathium* (Coleoptera: Staphylinidae: Paederinae)

With 6 figures

VOLKER ASSING 1

<sup>1</sup> Gabelsbergerstraße 2, 30163 Hannover, Germany. – vassing.hann@t-online.de Published on 2021–12–31 DOI: 10.21248/contrib.entomol.71.2.233-236

## Abstract

A micropterous species of *Lobrathium Mulsant & Rey*, 1878 of the *L. stimulans* group from Taiwan is described and illustrated: *L. colligatum*. spec. nov. (Hualien Hsien: Taroko National Park). An additional record of *L. bilobatum* Assing, 2010 is reported. The subtribe Lathrobiina is now represented in Taiwan by 44 species.

#### Taxonomic acts

Lobrathium colligatum spec. nov. - urn:lsid:zoobank.org:act:DCE3C230-644E-4D99-A4BD-8CB763152699

#### Key words

Coleoptera, Staphylinidae, Paederinae, Lobrathium, Palaearctic region, Taiwan, taxonomy, new species, new record.

#### Zusammenfassung

Eine flugunfähige Art der Gattung *Lobrathium* MULSANT & REY, 1878 von Taiwan wird beschrieben und abgebildet: *L. colligatum*. spec. nov. (Hualien Hsien: Taroko Nationalpark). Die Art gehört in die *L. stimulans*-Gruppe. Ein weiterer Nachweis von *L. bilobatum* Assing, 2010 wird gemeldet. Die Subtribus Lathrobiina ist derzeit mit 44 Arten in Taiwan vertreten.

#### Schlüsselwörter

Coleoptera, Staphylinidae, Paederinae, Lobrathium, Paläarktis, Taiwan, Taxonomie, neue Art, neuer Nachweis.

### Introduction

According to a previous comprehensive study (Assing 2010), the subtribe Lathrobiina was represented in Taiwan by 38 described species, 20 of *Lobrathium* 

MULSANT & REY, 1878, 13 of Lathrobium GRAVEN-HORST, 1802, two of Platydomene GANGLBAUER, 1895, two of Pseulolathra and one of Domene FAUVEL, 1873.

ISSN 0005-805X 233

In the meantime, five additional species and one genus have been described or recorded from Taiwan, one of *Lobrathium* (Assing 2017), two of *Domene* (Assing & Feldmann 2014, Assing 2021), one of *Pseudolathra* (Assing 2013b, 2014), and one of *Elytrobium* Assing, 2013 (Assing 2013a).

Recently, Benedikt Feldmann (Münster) made a male Lobrathium available, which he had already identified as undescribed and which had been collected by Andreas Hetzel (Hildesheim) during a field trip to Taiwan in summer 2018. Including this species, 44 species of *Lathrobiina* are now known from Taiwan.

### Material and methods

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

cAss author's private collection cFel private collection Benedikt Feldmann, Münster

The morphological studies were conducted using Stemi SV 11 (Zeiss) and Discovery V12 (Zeiss) microscopes. 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 posterior margin of abdominal tergite VIII, 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 (at the suture), 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 bilobatum Assing, 2010

Material examined: Taiwan: 1 ♂ [identified by B. Feldmann], Hualien, Guanyuan, 24°11′22″N, 121°20′22″E, 2460 m, pine forest, sifted, 1. VIII.2018, leg. Hetzel (cFel).

Comment: This wing-polymorphic species has been reported only from Taiwan. The original description is based on numerous type specimens from Chiayi, Ilan, Nantou, Kaohsiung, Taichung, and Hualien (Assing 2010).

Lobrathium colligatum spec. nov. urn:lsid:zoobank.org:act:DCE3C230-644E-4D99-A4BD-8CB763152699 (Figs 1–6)

Type material: Holotype  $\sigma$ : "TAIWAN, Hualien, Guanyuan, pine forest, sifted, 2459 m, 24°11'22"N, 121°20'22"E, 1.VIII.2018, Hetzel leg. / Holotypus  $\sigma$  Lobrathium colligatum sp. n. det. V. Assing 2021" (cAss).

**Etymology**: The specific epithet is the past participle of the Latin verb colligare (to connect). It alludes to the apically fused lobes of the ventral process of the aedeagus.

**Description**: Body length 8.8 mm; length of forebody 4.6 mm. Habitus as in Fig. 1. Coloration: body blackish-brown; legs dark-yellow with the profemora and protibiae dark-brown; antennae blackish-brown.

Head (Fig. 2) 1.06 times as long as broad, widest across eyes (Fig. 98); posterior angles obsolete, lateral contours behind eyes smoothly convex in dorsal view; dorsal surface with coarse and relatively dense punctation, median dorsal portion and frons with sparser punctation; interstices glossy, without microsculpture; eyes relatively small, little more than one-third the length of postocular region from posterior margin of eyes to posterior constriction of head in dorsal view. Antenna 2.8 mm long.

Pronotum (Fig. 2) 1.15 times as long as broad and of similar width as head; lateral margins rather strongly convex in dorsal view; punctation less dense and on average slightly coarser than that of head; midline usually impunctate; interstices without microsculpture.

Elytra (Fig. 2) short, 0.65 times as long as pronotum; submarginal line absent; punctation coarse and dense, well-defined, and non-seriate. Hind wings completely reduced.

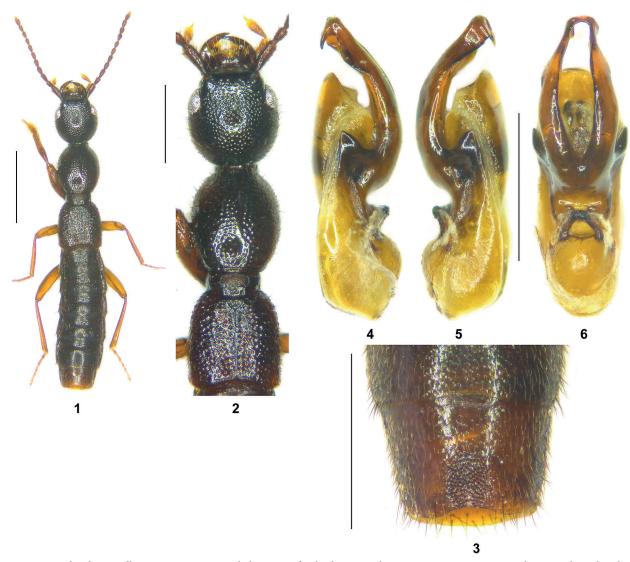
Abdomen broader than elytra; punctation of anterior impressions of tergites I–IV moderately coarse, remainder of tergal surfaces with fine and moderately dense punctation; interstices with fine transverse microsculpture; posterior margin of tergite VII without palisade fringe.

♂: sternite VII (Fig. 3) with medially concave posterior margin, otherwise unmodified; sternite VIII (Fig. 3) with impression in postero-median portion, this impression with numerous dense peg-setae, posterior margin broadly and shallowly concave; aedeagus (Figs 4–6) highly distinctive, 2.1 mm long; ventral process distinctly bilobed, the two lobes slightly asymmetric and apically connected.

♀: unknown.

Comparative notes: Based on the external and male sexual characters, *L. colligatum* belongs to the *L. stimulans* group (see Assing 2010). Using the key to the *Lobrathium* species recorded from Taiwan, *L. colligatum* would key out at couplet 17, together with *L. coalitum* from Nantou.

234 SENCKENBERG



Figs 1–6: *Lobrathium colligatum* spec. nov.: 1 – habitus; 2 – forebody; 3 – male sternites VII–VIII; 4–6 –aedeagus in lateral and in ventral view. Scale bars: 1: 2.0 mm; 2–6: 1.0 mm.

It is distinguished from this species by an oblong head (approximately as broad as long in *L. coalitum*), darker protibiae and profemora, the absence of an impression on the male sternite VII, a less strongly concave posterior margin of the male sternite VIII, and a much longer and larger aedeagus (*L. coalitum*: length of aedeagus 1.6 mm) with much longer and almost completely separated lobes of the ventral process. For illustrations of *L. coalitum* and other *Lobrathium* species recorded from Taiwan see ASSING (2010).

**Distribution and natural history**: The type locality is situated in Taroko National Park, Hualien Hsien, Northeast Taiwan. The holotype was sifted from litter in a pine forest at an altitude of 2460 m, together with *L. bilobatum*.

## Acknowledgements

I am indebted to Benedikt Feldmann (Münster) for the generous gift of the holotype of *L. colligatum*, for communicating an additional record of *L. bilobatum*, and for proof-reading and reviewing the manuscript.

#### References

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

Assing, V. 2013a: Two new genera of Lathrobiina from the East Palaearctic region (Coleoptera: Staphylinidae: Paederinae). – Contributions to Entomology **63** (2): 219–239.

Assing, V. 2013b: A revision of Palaearctic and Oriental *Pseudolathra* III. Seven new species and additional records (Coleoptera: Staphylinidae: Paederinae). – Entomologische Blätter und Coleoptera **109**: 271–284.

SENCKENBERG 235

- Assing, V. 2014: A revision of Palaearctic and Oriental *Pseudolathra*. IV. New species, new combinations and additional records (Coleoptera: Staphylinidae: Paederinae). Linzer Biologische Beiträge **46** (2): 1151–1166.
- 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.
- Assing, V. 2021: A new subgenus and a remarkable new species of *Domene* from South China, with additional records of the genus from China, Taiwan, and Vietnam (Coleoptera: Staphylinidae: Paederinae). Contributions to Entomology **71** (2): 227–231.
- Assing, V. & Feldmann, B. 2014: On *Domene scabripennis* Rougemont and its close relatives (Coleoptera: Staphylinidae: Paederinae). Linzer Biologische Beiträge **45** (1): 499–514.
- SCHÜLKE, M. & SMETANA, A. 2015: Staphylinidae, pp. 304–1134. In: LÖBL, I. & LÖBL, D. (eds), Catalogue of Palaearctic Coleoptera. Revised and updated Edition. Volume 2. Hydrophiloidea Staphylinoidea. Revised and updated edition. Brill, Leiden: xxvi + 1702 pp.

236 SENCKENBERG