

## A new genus and species of Oxypodini from Sichuan, China (Coleoptera: Staphylinidae: Aleocharinae)

VOLKER ASSING

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

ASSING V. 2021: A new genus and species of Oxypodini from Sichuan, China (Coleoptera: Staphylinidae: Aleocharinae). *Acta Musei Moraviae, Scientiae biologicae* **106(2)**: 323–327. – *Sinolophus* gen. nov. of the Oxypodini (tentative subtribal assignment: Oxypodina) and its type species *Sinolophus rubellus* sp. nov. (China: Sichuan) are described and illustrated. The new genus combines a remarkable mix of characters of *Eurylophus* J. Sahlberg, 1876 on the one hand and of *Echidnoglossa* Wollaston, 1864 and allied genera on the other.

**Keywords.** Coleoptera, Staphylinidae, Aleocharinae, Oxypodini, new genus, new species, description, taxonomy, China

### Introduction

The megadiverse tribe Oxypodini of the Aleocharinae is represented in the Palaearctic region by more than 70 genera in five subtribes, with several genera not assigned to any of the subtribes (SCHÜLKE & SMETANA 2015, ASSING 2019, 2021). While some of these genera include a large number of species, with *Oxypoda* Mannerheim, 1830 alone accounting for nearly 500 species in the Palaearctic region (ASSING 2018a), there are others with only one or few species (ASSING 2019a, b). In general, there is a trend for less speciose genera to have more restricted distributions than larger taxa. Several monotypical genera of Oxypodini are currently known only from China (ASSING 2018c, 2019a).

Among unidentified Aleocharinae made available to me by Michael Schülke (Berlin), a remarkable and enigmatic male of Oxypodini was discovered. An examination of various body parts including the mouthparts and the male genitalia revealed that it combines a remarkable mix of characters otherwise found in *Eurylophus* J. Sahlberg, 1876 of the Oxypodina on the one hand and in *Echidnoglossa* Wollaston, 1864 and related genera of the Dinardina on the other, but that it cannot be assigned to any of them. *Eurylophus* and *Echidnoglossa* and allied genera were revised recently by ASSING (2018b, 2019a, 2021).

### Material and methods

The holotype is deposited in the Museum für Naturkunde, Berlin (MNB: coll. Schülke).

The morphological studies were conducted using Stemi SV 11 (Zeiss) and Discovery V12 (Zeiss) microscopes, and a Jenalab compound microscope (Carl Zeiss Jena). The images were created using digital cameras (Axiocam ERc 5s, Nikon Coolpix 995), as well as Labscope and Picolay software.

Body length was measured from the anterior margin of the labrum to the apex of the abdomen, the length of the forebody from the anterior margin of the labrum to the posterior margin of the elytra, head length from the anterior margin of the clypeus 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.

### Taxonomy

#### *Sinolophus* gen. nov.

**Type species:** *Sinolophus rubellus* sp. nov.

**Description.** Body relatively small; head large in relation to remainder of body (Figs 1–2); pronotum slender, strongly convex in cross-section, and small in relation to head (Figs 1–2); abdomen broad (Figs 1, 4). Forebody (Fig. 2) with long and sub-erect to erect pubescence. Whole body glossy.

Head (Fig. 2) approximately as long as broad, with parallel lateral margins in dorsal view, posteriorly with distinct constriction (“neck”) of approximately half the width of head; punctuation very fine and sparse; gular sutures broadly separated. Antennae (Fig. 1) short and apically distinctly incrassate, with strongly transverse preapical antennomeres. Labrum (Fig. 2) strongly transverse and with truncate anterior margin, with a pair of very stout setae near anterior margin. Labium (Fig. 3): palpi three-jointed, apical palpomere very long; ligula very short, apically weakly incised and with pair of microsensilla. Maxilla not distinctive. Mandibles (Fig. 2) very long, slender, medially distinctly bent, and apically very acute. Ventral aspect of thorax not distinctive. Tarsal formula 5, 5, 5; tarsi short; metatarsomere I barely as long as the combined length of tarsomeres II and III.

Abdominal tergites III–V with, tergite VI without pronounced anterior impressions (Fig. 4).

♂: median lobe of aedeagus (Figs 6–7) of similar general morphology as in *Eurylophus*; paramere (Fig. 8) with long and apically acute apical lobe.

♀: unknown.

**Comparative notes.** While *Sinolophus* shares with *Eurylophus* a relatively large head with short antennae, the conspicuous shape of the mandibles, a similarly shaped ligula, and a similar general morphology of the median lobe of the aedeagus, it is distinguished from this genus by significant characters such as the presence of a posterior constriction (“neck”) of the head, strongly incrassate antennae, different chaetotaxy of the labrum, a completely different shape of the pronotum (much smaller, not transverse, strongly convex in cross-section), and a differently shaped apical lobe of the paramere. The new genus differs from *Echidnoglossa* and allied genera (*Syntomenus* Bernhauer, 1930, *Kortomenus* Assing, 2019), with which it shares the posteriorly distinctly constricted

head and a small and strongly convex pronotum, by completely different head shape, much shorter and strongly incrassate antennae, a much shorter, broader, and apically weakly incised ligula, different shape and chaetotaxy of the labrum, much longer and differently shaped mandibles, shorter legs with shorter tarsi, a much shorter metatarsomere I, and different male sexual characters. For descriptions and illustrations of *Eurylophus*, *Echidnoglossa*, *Syntomenus*, and *Kortomenus* see ASSING (2018b, 2019a).

Based on the similarity of the mouthparts and male sexual characters to those of *Eurylophus*, *Sinolophus* is tentatively assigned to the Oxypodina.

**Distribution.** This monotypical genus is currently known only from Sichuan, China.

**Etymology.** The name (gender: masculine) is composed of *Sina* (Latin: China) and *-lophus* (from *Eurylophus*). It alludes to the similarity of some character conditions found in *Eurylophus* and the currently known distribution.

***Sinolophus rubellus* sp. nov.**

(Figs 1–8)

**Type material examined.** Holotype ♂: “CHINA: Sichuan (2), Qingcheng-Shan, Rückseite, 650–700 m, 30.53.56N, 103.33.01E, 18.05.1997, M. Schülke / Holotypus ♂ *Eurylophus rubellus* sp. n., det. V. Assing 2020” (MNB).

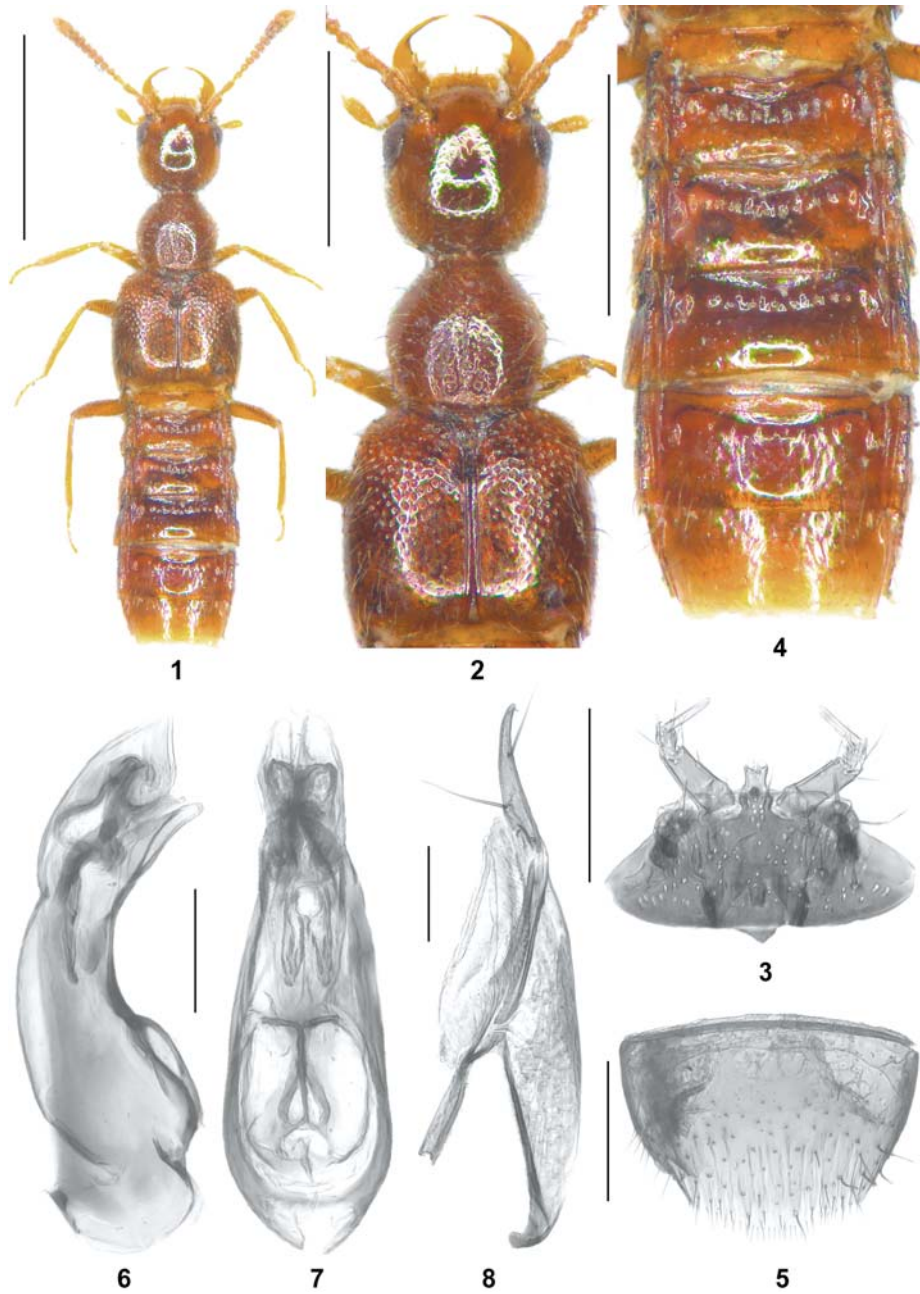
**Description.** Body length 2.9 mm; length of forebody 1.4 mm. Habitus as in Fig. 1. Colouration: head yellowish-red with the median dorsal portion darker; pronotum reddish-brown; elytra reddish-yellow with the lateral portions diffusely darker; abdomen reddish with the median portion of tergite V slightly darker; legs yellowish; antennae and mouthparts pale-reddish.

Head (Fig. 2) approximately as long as broad, in dorso-median portion with small impression; punctation extremely fine and sparse; interstices without microsculpture. Eyes of moderate size, approximately half as long as distance from posterior margin of eye to posterior constriction of head in dorsal view. Antenna 0.7 mm long; antennomeres IV moderately transverse, V–X of gradually increasing width and increasing transverse, IX–X more than twice as broad as long, and XI nearly as long as the combined length of VIII–X.

Pronotum (Fig. 2) small in relation to head, approximately as long as broad and slightly narrower than head, broadest anteriorly, distinctly tapering posteriad, and strongly convex in cross-section; midline with fine sulcus reaching neither anterior nor posterior margins; punctation dense and fine, coarser and somewhat granulose in postero-median impression; interstices without microsculpture.

Elytra (Fig. 2) much broader than, and at suture nearly 1.1 times as long as pronotum; humeral angles pronounced; punctation rather coarse and dense in anterior and humeral portions, very fine and sparse in posterior and sutural portions; interstices without microsculpture. Hind wings present. Metatarsomere I barely as long as the combined length of metatarsomeres II and III.

Abdomen (Fig. 4) broadest at tergites V–VI; anterior impressions of tergites III–V with coarse punctation; remainder of tergal surfaces with fine and sparse punctation; interstices without microsculpture; posterior margin of tergite VII with palisade fringe.



**Figs 1–8.** *Sinolophus rubellus* sp. nov. 1 – habitus; 2 – forebody; 3 – labium; 4 – abdomen; 6 – male sternite VIII; 6–7 – median lobe of aedeagus in lateral and in ventral view; 8 – paramere. Scale bars: 1: 1.0 mm; 2, 4: 0.5 mm; 5: 0.2 mm; 3, 6–8: 0.1 mm.

♂: tergite VIII with truncate posterior margin; sternite VIII (Fig. 5) strongly transverse, weakly and broadly produced posteriorly; median lobe of aedeagus (Figs 6–7) 0.38 mm long; apex of ventral process apically acute, not incised in ventral view; paramere 0.58 mm long and shaped as in Fig. 8.

♀: unknown.

**Comparative notes.** This species is immediately distinguished from species of *Eurylophus* by the reddish colouration, the presence of a distinct neck, distinctly incrassate antennae, and several other characters (see description of genus). It differs from *Echidnoglossa*, *Syntomenus*, and *Kortomenus* species by a larger and quadrangular head, short and distinctly incrassate antennae, a broader posterior constriction of the head, and other characters indicated in the description of the genus.

**Distribution and natural history.** The type locality is situated in Qingcheng Shan to the northwest of Chengdu, Sichuan, China. The holotype was sifted from litter in degraded and fragmented subtropical forest surrounded by arable land at an altitude of 650–700 m (Schülke, pers. comm.).

**Etymology.** The specific epithet (Latin, adjective: reddish) alludes to the colouration of the body, a character immediately distinguishing this species from *Eurylophus* species.

#### Acknowledgements

Michael Schülke (Berlin) made the holotype available and provided additional information on the habitat where the specimen was collected. The comments and suggestions of two anonymous reviewers are appreciated.

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