

Two new species of Ceropria Laporte & Brullé from West Malaysia and Sumatra (Coleoptera: Tenebrionidae: Diaperini)

Author: Grimm, Roland

Source: Stuttgarter Beiträge zur Naturkunde A, 10(10) : 181-183

Published By: Stuttgart State Museum of Natural History

URL: https://doi.org/10.18476/sbna.v10.a5

The BioOne Digital Library (<u>https://bioone.org/</u>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<u>https://bioone.org/subscribe</u>), the BioOne Complete Archive (<u>https://bioone.org/archive</u>), and the BioOne eBooks program offerings ESA eBook Collection (<u>https://bioone.org/esa-ebooks</u>) and CSIRO Publishing BioSelect Collection (<u>https://bioone.org/csiro-ebooks</u>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <u>www.bioone.org/terms-of-use</u>.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Two new species of *Ceropria* Laporte & Brullé from West Malaysia and Sumatra (Coleoptera: Tenebrionidae: Diaperini)

ROLAND GRIMM

Abstract

Ceropria adelpha **n. sp.** from West Malaysia and *C. foveata* **n. sp.** from Sumatra are described, illustrated, and compared with the similar species *C. speciosissima* Gebien, 1914. The male of *C. adelpha* is distinguished by different shape of elytral mucro and aedeagus, different structure of last abdominal ventrite, and densely punctured elytral striae. The female is unknown. *C. foveata* is known only from the female, but the species is readily identifiable by foveate outer punctural rows of elytra.

K e y w o r d s : Tenebrionidae, Diaperini, Ceropria, new species, West Malaysia, Sumatra.

Zusammenfassung

Ceropria adelpha **n. sp.** von West Malaysia und *C. foveata* **n. sp.** von Sumatra werden beschrieben, abgebildet und mit *C. speciosissima* Gebien, 1914 verglichen. Das Männchen von *C. adelpha* zeichnet sich durch die kurze und eingekerbte Mukro, die unterschiedliche Struktur des letzten abdominalen Ventrites, die dicht punktierten Punktstreifen der Elytren sowie die Form des Aedoeagus aus. Von *C. foveata* ist nur das Weibchen bekannt, aber die Art ist kleiner und anhand der grubenartigen Punkte der äußeren Punktreihen leicht zu erkennen.

Contents

1	Introduction	. 181
2	Description of the new species	. 181
	References	

1 Introduction

The species of the genus Ceropria Laporte & Brullé, 1831 (Tenebrionidae: Diaperinae: Diaperini) are found in decaying, fungous wood in the tropical and subtropical parts of the Ethiopian, Oriental, Papuan, and Australian Regions. The Asian species were revised by GEBIEN (1925) and MASUMOTO (1994, 1995a, b). GEBIEN (1914) described Ceropria speciosissima Gebien, 1914, a conspicuous metallically iridescent species on the basis of a single female. For a long time only additional females became known (GEBIEN 1925, MASUMOTO 1994). GRIMM (2017) reported a male specimen of C. speciosissima from Borneo, went into details of sexual dimorphism, and figured the specimen including aedeagus. Within the material of Tenebrionidae in the SMNS the author found two unknown species similar to C. speciosissima which are described in the present paper.

Acknowledgements

I am grateful to JOHANNES REIBNITZ (Stuttgart) for taking the photographs and assembling the plate. Drs. OTTÓ MERKL (Budapest) and WOLFGANG SCHAWALLER (Stuttgart) reviewed the manuscript.

Acronym of depository

SMNS Staatliches Museum für Naturkunde Stuttgart, Germany

2 Description of the new species

Ceropria adelpha **n. sp.** (Figs. 1, 1a–b)

Holotype S: W Malaysia, Pahang, Banjaran Benom Mts., 20 km S of Kampong Ulu Dong, 1500–1900 m, 17.–23. IV.1997, leg. P. ČECHOVSKÝ (SMNS) / Ceropria speciosissima Geb., det. T. ICHIYANAGI, 2010.

Etymology Αδελφικός (Greek) = sisterly.

Description

Oblong oval, dorsal side metallic shining, iridescent; head greenish black; pronotum dark coppery purplish, partly with greenish hue. Elytra with a basal and an apical vague concentric green, purple, golden iridescent patch (their visibility depending on intensity and angle of incidence of light); between these patches with zigzagging iridescent green, blue, purplish golden transversal bands; sutural interval dark green; second interval basally and apically coppery purplish, greenish to golden in the middle; 9th stria blue; humeral callosity purplish. Ventral side and legs black, shining; antennae black, matt. Body length 12.0 mm, width 6.2 mm.

Head transverse, widest across middle of eyes; eyes roundly produced laterally, strongly protruding beyond genae; margin of genae before eyes somewhat oblique and slightly raised; clypeus slightly depressed though feebly convex in the middle, finely but less densely punctured as on frons; frontoclypeal suture distinct. Antennae as in Fig. 1, serrate, reaching base of elytra.

Pronotum transverse, subtrapezoidal, widest at base, shallowly arcuate towards apex; apex shallowly emarginate; base arcuate in the middle, straight towards posterior corners; anterior corners obtusely rounded, posterior corners subrectangular; apical margin and lateral margins distinctly bordered, basal margin unbordered; disc weakly convex, finely punctured as on frons. Propleura nearly smooth, towards outer margin weakly rugulose. Prosternal process bisulcate, acuminate behind coxae, and vertically declivous at apex.

Elytra oval, convex, with maximum width at about two-thirds of elytral length, and with nine punctural striae; punctures densely set, fine in inner striae, becoming coarser in outer striae; 2nd and 4th striae with about 80, 7th with about 60 punctures; intervals microscopically punctured, slightly convex laterally. Lateral margins visible in dorsal view, only somewhat concealed apically. Apex with short (2 mm), notched mucro. Mesoventrite sharp-edged, with V-shaped cut. Abdominal ventrites 1–3 longitudinally rugulose, with interspersed punctures; ventrites 4–5 nearly smooth, only microscopically punctured; ventrite 5 shallowly impressed before apex, apex arcuately protruding, projecting part sloping downwards.

Protibiae straight, mesotibiae somewhat incurved and notched at middle of inner side, metatibiae at apex on dorsal side with small impression. Protarsi with basal tarsomeres slightly dilated.

Aedeagus as in Figs. 1a, b.

Differential diagnosis

Ceropria adelpha n. sp. belongs to the *induta* group (*induta* subgroup) of MASUMOTO (1994) and is similar to *C. speciosissima* Gebien, 1914. However, in the latter species the punctural rows of elytra are less densely punctured (about 50 punctures in the 2^{nd} and about 30 in the 4^{th} row), the intervals are flat; the mucro is dinstinctly larger (5 mm) and not notched at apex, and the structure of last abdominal ventrite is different. The two species are distinguished by the shape of the aedeagus (compare Figs. 1a, 1b with GRIMM 2017: figs. 4a, 4b).

Ceropria foveata n. sp. (Fig. 2)

Holotype \mathcal{Q} : [Indonesia], N-Sulawesi, Medan, Bukit Lawang, 11.–12.X.1990, leg. A. RIEDEL (SMNS) / Ceropria speciosissima Geb., det. K. ANDO, 1998.

Etymology Foveata (Lat.) = foveate, with foveae, pitted.

Description

Oval, dorsal side metallic shining, iridescent; head black, partly with greenish or purplish hue; pronotum purplish. Elytra with one basal and one apical vague concentric blue, purple, golden green iridescent patch; between these patches with blue and golden-coppery transversal band; sutural interval basally and apically purplish, in the middle greenish; second interval basally and apically greenish, in the middle golden purplish. Ventral side and legs black, shining; antennae black, matt, with basal 3 antennomeres paler, fuscous. Body length 9.0 mm, width 5.0 mm.

Head transverse, widest across middle of eyes, finely punctured; eyes roundly produced laterally, strongly protruding beyond genae; margin of genae before eyes somewhat oblique and slightly raised; clypeus feebly convex in the middle; frontoclypeal suture distinct. Antennae as in Fig. 2, serrate, reaching base of elytra.

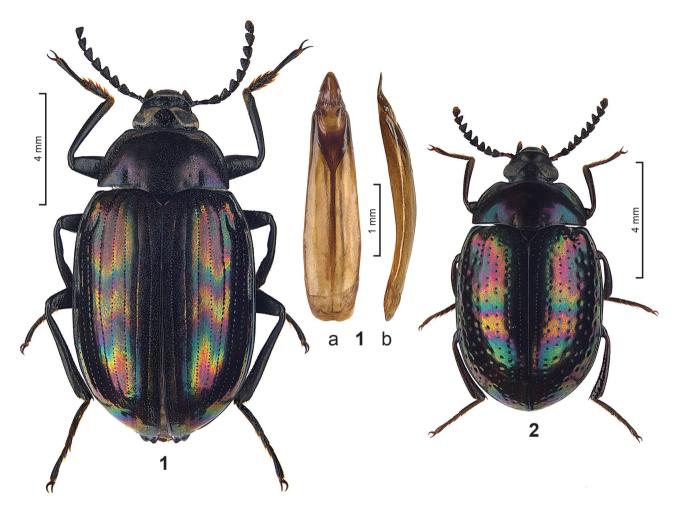
Pronotum transverse, subtrapezoidal, widest at base, evenly arcuate towards apex; apex straight in the middle, laterally somewhat diverging towards anterior corners; base arcuate in the middle, straight towards posterior corners; anterior and posterior corners obtuse; apical margin and lateral margins distinctly bordered, basal margin unbordered in the middle, finely bordered at lateral straight part; disc weakly convex, finely punctured as on head. Propleura shagreened. Prosternal process distinctly, basally broadly rimmed, acuminate behind coxae, and vertically declivous at apex.

Elytra oval, convex, with maximum width at middle of elytral length, and with 9 punctural rows; punctures broadening from inner towards outer rows, becoming foveate from 3rd to 8th row; 1st row with about 50 fine, densely set punctures; 2nd row with about 30, 3rd to 8th row with 13–20 punctures; intervals flat, slightly elevated laterally by foveate impressed punctures, microscopically punctured. Lateral margins visible in dorsal view throughout whole length. Mesoventrite sharp-edged, with V-shaped cut. Metaventrite smooth. Abdominal ventrites 1–3 obliquely rugulose, with interspersed setigerous punctures; ventrites 4–5 shagreened.

Legs without modification (male unknown).

Differential diagnosis

On the basis of the metallic iridescent bands and patches *Ceropria foveata* n. sp. might be included in the *induta*-group of MASUMOTO (1994), and is thus similar to *C. speciosissima* Gebien, 1914 and *C. adelpha* n. sp. However, *C. foveata* n. sp. is readily identifiable by the foveate outer punctural rows of the elytra. Due to the small quantity of punctures in the 4th elytral row (<40) and the rainbow-coloured iridescent elytra, this species would run to *C. speciosissima* in GEBIEN's (1925) identification key, but *C. speciosissima* has about 30 regular impressed, not foveate punctures in the 4th row.



Figs. 1–2. *Ceropria* spp., dorsal views (1, 2), aedeagus, dorsal (1a) and lateral (1a). – 1. *Ceropria adelpha* n. sp. \Im holotype. 2. *C. fove-ata* n. sp. \Im holotype.

3 References

- GEBIEN, H. (1914): Die Tenebrioniden Borneos. Erster Teil. Sarawak Museum Journal 2 (5): 1–58, pl. 1.
- GEBIEN, H. (1925): Die Tenebrioniden (Coleoptera) des indomalayischen Gebietes, unter Berücksichtigung der benachbarten Faunen, V. Die Gattung *Ceropria*. – Philippine Journal of Science **27**: 257–288, pl. 1.
- GRIMM, R. (2017): New and little known species of Tenebrionidae (Coleoptera) from Borneo (7). – Stuttgarter Beiträge zur Naturkunde A, Neue Serie 10: 175–180.
- MASUMOTO, K. (1994): A study of the Asian species of the genus *Ceropria* (Coleoptera, Tenebrionidae, Diaperinae) (Part 1). – Japanese Journal of Entomology **62**: 765–774.
- MASUMOTO, K. (1995a): A study of the Asian species of the genus *Ceropria* (Coleoptera, Tenebrionidae, Diaperinae) (Part 2). – Japanese Journal of Entomology **63**: 1–13.
- MASUMOTO, K. (1995b): A study of the Asian species of the genus *Ceropria* (Coleoptera, Tenebrionidae, Diaperinae) (Part 3). Japanese Journal of Entomology **63**: 723–734.

Author's address:

Dr. ROLAND GRIMM, Unterer Sägerweg 74, 75305 Neuenbürg, Germany; e-mail: grimm.tenebrio@t-online.de

Manuscript received: 28.X.2016, accepted 14.X.2016.