

# Two new species of the genus *Triplehornia* Matthews & Lawrence from Borneo and the Philippines (Coleoptera: Tenebrionidae)

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## Abstract

*Triplehornia floreni* n. sp. (East Malaysia/Sabah) and *T. philippinensis* n. sp. (Philippines/Leyte) are described and compared with *T. metallica* Matthews & Lawrence, 2005 (Australia/Queensland).

**Key words:** Tenebrionidae, *Triplehornia*, Borneo, Philippines, new species.

## Zusammenfassung

*Triplehornia floreni* n. sp. (Ost-Malaysia/Sabah) und *T. philippinensis* n. sp. (Philippinen/Leyte) werden beschrieben und mit *Triplehornia metallica* Matthews & Lawrence, 2005 (Australien/Queensland) verglichen.

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## 1 Introduction

The genus *Triplehornia* was described by MATTHEWS & LAWRENCE (2005), based on the single (type) species *T. metallica* Matthews & Lawrence, 2005 from Australia. According to the authors the genus is probably a member of the subfamily Diaperinae, but its tribal position is still unknown. MATTHEWS & BOUCHARD (2008) noted that a similar species (or even the same one) has been collected in the Philippines. The study of the material revealed that the species from the Philippines is new to science. An additional species was collected by tree fogging in East Malaysia by Dr. ANDREAS FLOREN (Würzburg).

### Acknowledgements

Cordial thanks are due to Dts. ANDREAS FLOREN (Würzburg), ERIC G. MATTHEWS (Adelaide), and WOLFGANG SCHAWALLER (Stuttgart) for gift and/or loan of material. Dr. WOLFGANG SCHAWALLER (Stuttgart) gave the hint to *Triplehornia* with respect to the Bornean specimens. JOHANNES REIBNITZ (Stuttgart) prepared the photographs and arranged the figures on plates. Furthermore, I am grateful to Dr. OTTÓ MERKL (Budapest) and Dr. WOLFGANG SCHAWALLER for reviewing the manuscript.

### Acronyms of depositories

CAF	Collection Dr. ANDREAS FLOREN, University of Würzburg, Germany
CRG	Collection Dr. ROLAND GRIMM, Tübingen, Germany
SMNS	Staatliches Museum für Naturkunde, Stuttgart, Germany

## 2 Descriptions of new species

### *Triplehornia floreni* n. sp. (Figs. 1, 3)

**Holotype** (sex not examined): [Borneo, Malaysia, Sabah], Pulau Gaya, *Elaeocarpus pedunculatus* 27, 22.VIII.2009, A. FLOREN leg. (CRG).

**Paratypes:** Same data, 1 ♂ and 1 unsexed specimen (CRG), 1 ♂ (without head) and 1 unsexed specimen (CAF).

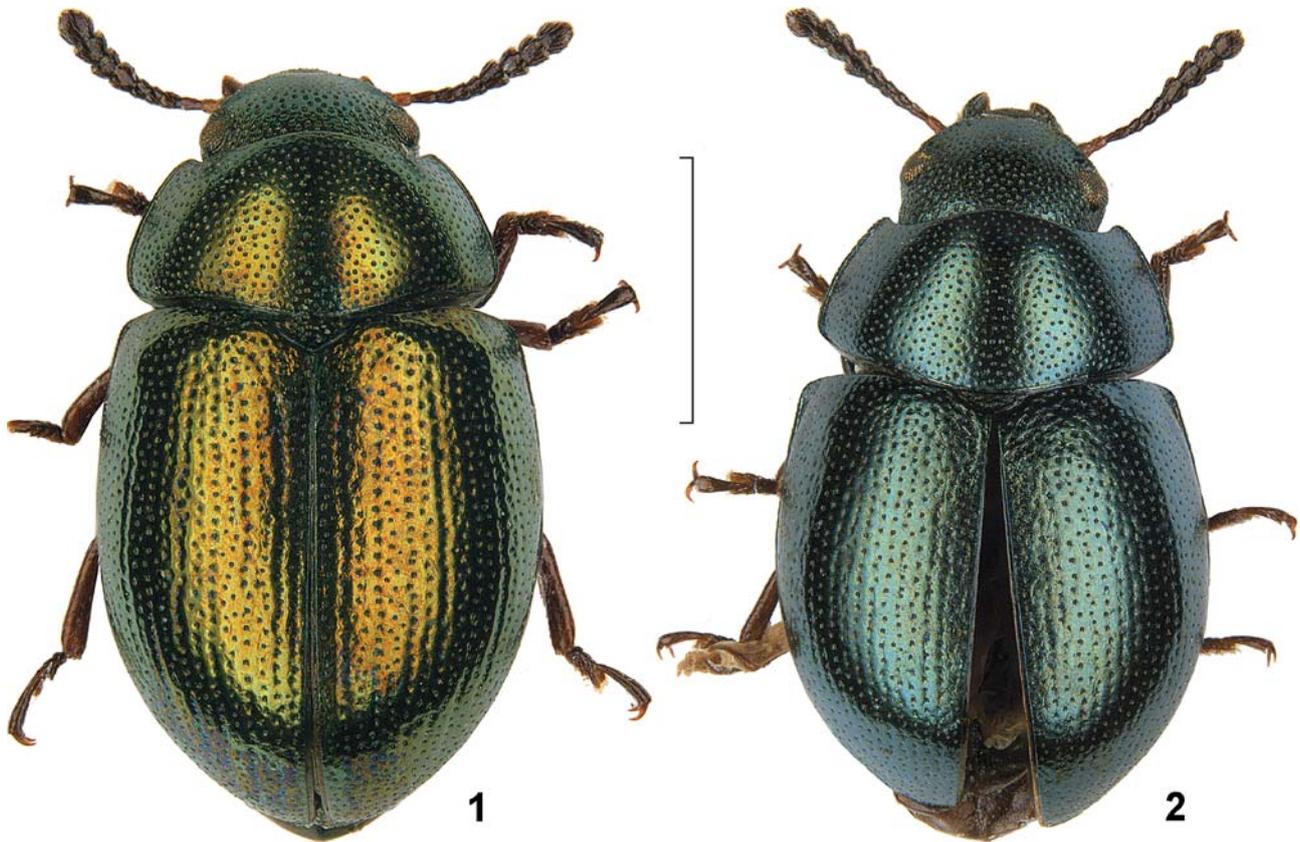
### Etymology

Named in honour of Dr. ANDREAS FLOREN (Würzburg) the collector of the type series.

### Description

Broadly oval, convex, glabrous, dorsal side metallic green, sometimes with coppery reflections; surface between punctures with variable, mainly indistinct microreticulation. Body length 2.9–3.0 mm, body width 1.7–1.8 mm.

Head subtrapezoidal, anterior border of clypeus nearly straight, forming obtuse, slightly rounded angles with lateral edges of head running straight to ends of eye canthi. Frontoclypeal suture complete, but indistinct. Surface evenly and coarsely punctured. Eyes reniform, dorsal part larger than ventral part. Antennae 10-segmented, short, not reaching base of pronotum; black with scape and pedicel fulvous, distal four antennomeres enlarged into a club.



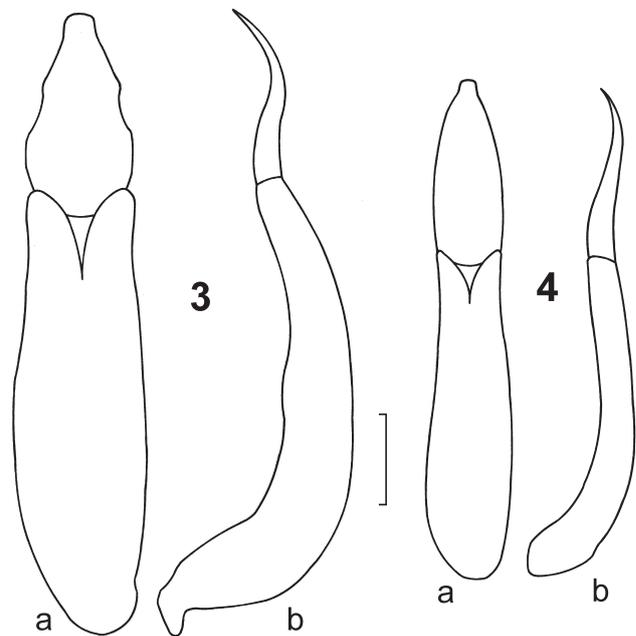
**Figs. 1–2.** *Triplehornia* spp., dorsal view. – 1. *Triplehornia floreni* n. sp., holotype (CRG). 2. *T. philippinensis* n. sp., paratype (SMNS). – Scale: 1 mm.

Pronotum transverse, convex, widest just before base, evenly and coarsely punctured, punctures somewhat finer as on head; anterior border slightly and broadly arcuate in the middle, emarginate beside anterior angles, anterior angles not protruding beyond middle of anterior border; lateral borders shallowly arcuate, converging toward anterior angles; basal border broadly arcuate in about middle third, both anterior and posterior angles broadly rounded; anterior pronotal margin only present laterally around anterior angles, widely absent in the middle; lateral margins strong, basal margin finer but distinct. Scutellum strongly transverse, triangular.

Elytra evenly convex; surface with numerous punctures arranged in about 18 rows, three lateral rows distinctly finer than remaining ones; intervals on disc narrower than punctural rows. Lateral margin in dorsal view only visible in about basal half.

Legs short. Basal tarsomeres short, ventrally lobed, their plantar surfaces bearing long, dense fine setae; last tarsomere elongate, in meso- and metatarsi longer than remaining segments combined.

Aedeagus see Fig. 3.



**Figs. 3–4.** *Triplehornia* spp., aedeagi in dorsal (a) and lateral (b) view. – 3. *Triplehornia floreni* n. sp. 4. *T. philippinensis* n. sp. – Scale: 0.1 mm.

## Differential diagnosis

See under *Triplehornia philippinensis* n. sp.

*Triplehornia philippinensis* n. sp.  
(Figs. 2, 4)

**Holotype** (♂): Philippines, Leyte, SW Abuyog, 28.II.1991, river bank, W. SCHAWALLER leg. (SMNS).

**Paratypes**: Same data as holotype, 3 specimens (SMNS).

## Etymology

Named after the Philippines, where the type-series was collected.

## Description

Broadly oval, convex, glabrous, dorsal side metallic dark blue, surface between punctures distinctly microreticulate. Body length 2.8–2.9 mm, body width 1.5–1.7 mm.

Head subtrapezoidal, anterior border of clypeus nearly straight, forming obtuse angles with lateral edges of head running straight to ends of eye canthi. Frontoclypeal suture complete, but indistinct. Surface evenly and coarsely punctured. Eyes reniform, dorsal part larger than ventral part. Antennae 10-segmented, short, not reaching base of pronotum; black with scape and pedicel fulvous, distal four antennomeres enlarged into a club.

Pronotum transverse, convex, widest just before base, evenly and coarsely punctured, punctures somewhat finer as on head; anterior border slightly and broadly arcuate in the middle, emarginate beside anterior angles, anterior angles not protruding beyond middle of anterior border; lateral borders nearly straight, converging toward anterior angles; basal border broadly arcuate, anterior angles broadly rounded, posterior angles obtusely rounded; anterior pronotal margin only present laterally around anterior

angles, widely absent in the middle; lateral margin strong, basal margin finer but distinct. Scutellum strongly transverse, triangular.

Elytra evenly convex; surface with numerous punctures arranged in about 18 rows, lateral rows indistinct and finer than remaining ones; intervals on disc as wide as punctural rows. Lateral margin in dorsal view only visible in about basal half.

Legs short. Basal tarsomeres short, ventrally lobed, their plantar surfaces bearing long, dense fine setae; last tarsomere elongated, in meso- and metatarsi longer than remaining segments combined.

Aedeagus see Fig. 4.

## Differential diagnosis

The species of *Triplehornia* are characterized by the different shapes of their aedeagi (compare Figs. 3, 4 and MATTHEWS & LAWRENCE 2005: fig. 23). They are also easily recognized by the colouration of the dorsal side: blackish with metallic bronze, blue or green reflections in *T. metallica* Matthews & Lawrence, 2005; metallic green in *T. floreni* n. sp.; metallic dark blue in *T. philippinensis* n. sp. Furthermore, *T. floreni* n. sp. is distinguished by broadly rounded posterior angles of the pronotum, *T. philippinensis* n. sp. by distinct microreticulation of the dorsal side, and *T. metallica* by wider lateral margins of the pronotum.

## 3 References

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