A new species of *Dromanthomorphus Pic*, 1921 with flabellate antennae from Malaysia

(Coleoptera: Malachiidae)

LS. PLONSKI

Abstract

A new species of Dromanthomorphus PIC, 1921 (Malachiidae: Malachiinae: Apalochrini), D. schoenmanni sp.n., is described from Tioman Island (W Malaysia).

Key words: Coleoptera, Melyridae s.l., Malachiidae, Malachiinae, Apalochrini, Dromanthomorphus, taxonomy, Malaysia, Tioman Island.

Introduction

The SE Asian species of *Dromanthomorphus Pic*, 1921 were reviewed by TSHERNYSHEV (2016), who listed a total of 18 species for the genus, which is known so far only from the Oriental Region and São Tomé Island (Afrotropical Region).

It must, however, be stressed, that the genus is still in need of a thorough revision. The generic placements of several species described by G.C. Champion, M. Pic and W. Wittmer still need reassessment and validation. This task is currently undertaken by the author. The present paper is a collateral result of that study.

Material and methods

The holotype was obtained from David Hauck (Brno, Czechia) at the 68th Viennese Entomological Meeting in Gerasdorf, Austria (February 2015), and eventually deposited in the Natural History Museum Vienna (NMW).

Methodology of dissection and preparation of terminalia, and details about label data citation are described in PLONSKI (2014).

General external characters were examined with a Leica MZ6 stereomicroscope. Details of the microsculpture of the integument were assessed with a Nikon SMZ1500 stereomicroscope. The drawings were made using a camera lucida mounted on an Olympus BX40 microscope (terminalia), and a Leica MZ6 stereomicroscope (other body parts).

Abbreviations for morphometric measurements and indices: HL = head length; HW = head width; IOW = interocular width; AL = antennal length; PL = pronotal length; PW = pronotal width; SW = shoulder width; EL = elytral length; EW = elytral width.

Abbreviations for label data: pr = printed; r = red paper; w = white paper.

Dromanthomorphus schoenmanni sp.n.

TYPE LOCALITY: Tioman Island (see label data for additional information), Pahang State, Malaysia.

TYPE MATERIAL: Holotype ♂ (NMW): "MALAYSIA; Tioman; 0-100m \ rd. [road] Kampong Tekek - K. [Kampong] Juara \ 4.-16.iii. 1998; 2°48'N 104°11'E \ D. Hauck leg." [w, pr], "HOLOTYPUS \ Dromanthomorphus \ schoenmanni \ spec.nov. \ det. I. Plonski 2018" [r, pr].

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Fig. 1: Dromanthomorphus schoenmanni, holotype.

DESCRIPTION: Habitus as in Fig. 1. Length: 3.1 mm. Coloration: Head capsule, thorax and elytra black to dark brown (sepia); elytral base with a blue (lazuline) hue; scape, pedicel, antennomeres III–IV, forelegs and middle legs reddish (terracotta), but scape on upper side, tips of antennomeres, and bases of femora and tibiae darker (rust brown); antennomeres V–XI and hind legs chestnut brown.

Pubescence: Integument with a basal pubescence consisting of short adpressed white setae, which are sparsely intermixed with much longer erect black setae on pronotum and elytra.

Head capsule: About as long as wide (HL/HW: 1.02); without impressions or elevations in frontoclypeal region; integument with punctation as on pronotum (see below). Compound eyes normal (HW/IOW: 1.55), not very large and not hemispherical.

Antennae (Fig. 2): Exceeding base of pronotum by almost one third of their length; antennomeres VI–X strongly flabellate; fifth pectinate; sixth to tenth antennomeres similarly long, but sixth and tenth with shorter ramus; scape clavate, slightly curved, 2.2 times as long as wide, broadest in apical half; pedicel subspherical, well visible, not entirely sunken into scape; antennomere III elongate, conical, mesal margin slightly sinuate, apical margin subconcave, mesal apical corner slightly produced, rounded; apical margin of antennomere IV slightly concave, mesal apical corner distinctly produced, subacute; antennomere V slightly longer than preceding antennomere, mesal apical corner distinctly produced and acute; antennomere VI similar in length to preceding antennomere, but provided with a ramus; antennomeres VII–X more elongate and slender than antennomere VI; antennomere XI elongate and slightly incurved, five times as long as wide.

Thorax: Pronotum transverse (PW/PL: 1.34), broadest at middle; base very slightly bisinuate, anterior margin subarcuate, lateral margins arcuate; basal corners more rounded than anterior ones; with shallow depressions near posterior corners; all margins rimmed; densely covered with very small tubercles; interstices smooth, without visible microsculpture. Scutellum transverse, semicircular. Metaventrite with median appendage with sword-shaped tip. Elytra elongate, almost two times as long as wide (EL/EW: 1.96), broadest at second third, about at level of hind coxae. Hind wings well developed.

Legs: Tarsi pentamerous; claws thickened from base to middle, each with a small rounded ungual appendage; protarsi with a tarsal comb on second segment, which overarches the third; comb consisting of ten thick and stiff setae, connate at base. Protibiae (Fig. 3) thickened in the middle, thus ventral margin appearing bisinuate in lateral view. Mesal margin of middle tibiae (Fig. 4) excavated in apical third.

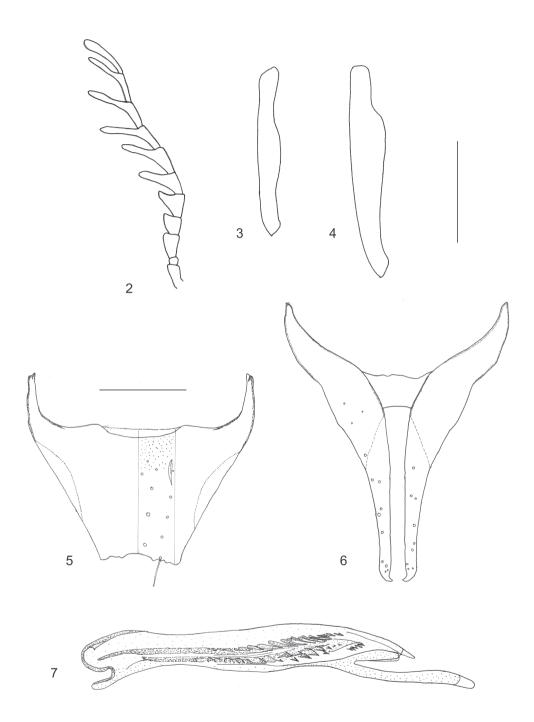
Abdomen: Sternites IV–V without special structures.

Terminalia: Pygidium (Fig. 5) trapezoidal, with prominent basal struts, apical edge irregular, basal fourth with fine punctation and feather-shaped scale-like short setae, apical three fourths with punctures, interstices (without microsculpture) equal about seven times their diameters, and with longer normal setae in apical fourth. Sternite VIII (Fig. 6) bipartite, each half with very long apex with claw-like tip. Tegmen lost during mounting after dissection. Median lobe as in Fig. 7.

Measurements: HL: 0.74 mm; HW: 0.73 mm; IOW: 0.44 mm; AL: ~1.9 mm; PL: 0.56 mm; PW: 0.76 mm; SW: 0.89 mm; EL: 2.29 mm; EW: 1.16 mm.

DIAGNOSIS: The new taxon differs from all congeners known to have flabellate antennae, among other characters, in the long claw-like tip of sternite VIII.

HABITAT: The holotype was collected in Lowland Dipterocarp Forest (see LATIFF et al. 1999 for details about the vegetation of Tioman). Further collecting circumstances are unknown.



Figs. 2–7: *Dromanthomorphus schoenmanni*, 2) right antenna, 3) right protibia, lateral view, 4) right middle tibia, lateral view, 5) pygidium, dorsal view, punctures and setae only partly illustrated, 6) sternite VIII, ventral view, 7) median lobe, lateral view.

DISTRIBUTION: So far known only from the type locality.

ETYMOLOGY: The new taxon is dedicated to Dr. Heinrich Schönmann († 2017), esteemed friend and first revisor of the genus *Pelthydrus* ORCHYMONT, 1919 (Coleoptera: Hydrophilidae), who supported my coleopterological studies at the NMW from the very beginning.

Discussion

In the key to the species of *Dromanthomorphus* published by TSHERNYSHEV (2016) the new species keys out to couplet 9. It must, however, be noted, that in this key couplets 8–18 are incorrectly numbered (S.E. Tshernyshev, pers. comm. by email, February 2018). In fact, couplet 8 is 7, couplet 9 is 8, etc.

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Isidor S. PLONSKI

Rembrandtstraße 1/4, A – 1020 Wien, Austria (isidor.plonski@gmx.at)

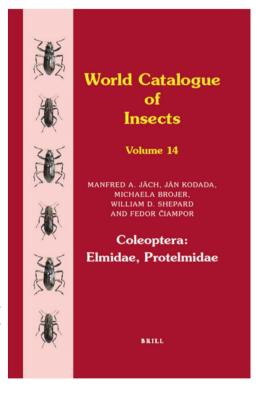
World Catalogue of Insects. Volume 14

Coleoptera: Elmidae, Protelmidae

The world catalogue of the families Elmidae and Protelmidae (Coleoptera) contains a complete list of subfamilies, tribes, subtribes, genera, subgenera, species and subspecies, and their synonyms described before 2015.

Protelmidae are elevated from tribal rank to family rank. Other new nomenclatorial and taxonomic acts include a new substitute name, seven new generic and specific synonymies, four new combinations, two designations of type species and seven mandatory corrections of incorrect original spellings.

Detailed information about the geographical distribution of each species is provided. The catalogue includes extant taxa (147 genera and 1498 species of Elmidae, four genera and six species of Protelmidae) as well as fossil taxa (two nominal genera and six species of Elmidae).



It is the first world catalogue of Elmidae published since 1910.

Unavailable names are also listed. Detailed explanations are provided concerning the availability and spelling of taxa names, identity and spelling of author names, publication dates, and type localities.

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