

A new species of *Airapus* Stebnicka & Howden, 1996 (Coleoptera: Scarabaeidae: Eupariini) from Sumatra

Łukasz MINKINA

os. Polana Szaflarska 4/39, 34-400 Nowy Targ, Poland
e-mail: klekel@interia.eu

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Abstract. A new species of the genus *Airapus* Stebnicka & Howden, 1996 from Sumatra is described and illustrated: *A. aegialiformis* sp. nov. The new species shows some similarities to *Aegialiinae* Laporte, 1840 from Australia.

INTRODUCTION

During examination of material in my collection I found two specimens of a quite unusual species of Eupariini Schmidt, 1910 from Sumatra. At first glance it looks like a member of genus *Saprus* Blackburn, 1904, but after precise identification it turned out to be a member of genus *Airapus* Stebnicka & Howden, 1996. Interestingly, its body shape is more similar to some members of that genus from Australia, but the aedeagus is characteristic rather to members from Papua New Guinea, which can suggest the primal body shape and I hope it can be helpful in the future to establish evolutionary correlations within the genus.

MATERIAL AND METHODS

The specimens were observed with a Nikon SMZ-U stereoscopic microscope. The photos published here were taken by the use of the Canon EOS 5D Mark III connected with Canon MP-E 65mm macro lens. Photos were edited in the Helicon Focus programme.

For morphological terms used in the description of specimens I follow Dellacasa et al. (2010).

Type specimens of new species are indicated by a red, printed label and bearing the status of the specimen, its name, name of the author, month and year of the designation.

The holotype and the paratype are deposited in private collection of Łukasz Minkina deposited in Institute of Systematics and Evolution of Animals in Kraków (Poland).

TAXONOMY

Airapus aegialiformis sp. nov. (Figs. 1-6)

Type material. Holotype (♂): Indonesia, Sumatra, Bukit Lawang, 3°33'16.05''N, 98°06'21.60''E, 03-18.iv.2019, leg. V. Ustinov. Paratype: (1 spec.): same data as holotype.

Description. Dorsum (Fig. 1). Body length of holotype 4.3 mm, elongate, shiny, brownish, glabrous.

Head (Fig. 4) relatively wide, trapezoidal, strongly and evenly convex, shiny, without microreticulation. Clypeus gently bordered, distinctly sinuate anteriorly, widely rounded laterally, not notched before genae, clypeal border without macrosetae. Genae obtusely rounded, distinctly exceeding eyes, without macrosetation. Frontal suture not visible, without gibbositities; central epistomal gibbosity distinct, transverse. Clypeus distinctly punctate: punctures dense, rather not fine, quite regularly spaced, basally becoming slightly coarser.

Epipharynx (Fig. 5) transverse, with sides broadly rounded, anterior margin of pedia quite distinctly convex, corypha recessed, very wide, rather combined with very wide “ball-shaped” epitorma, with six relatively short celtes (two basal, which are shorter and plumper, and four apical), epitorma apically densely covered by dense fenestrae, chaetopariae and adelochaetae dense and relatively long. Tormae quite thin, long.

Pronotum transverse, slightly wider than base of elytra, with almost straight sides, distinctly convex, shiny, without microreticulation, with double punctuation: smaller punctures fine, irregularly spaced, not so dense, larger punctures: rather coarse, irregularly spaced, slightly irregular in size, with diameter approximately four to seven times as large as in smaller punctures. Flattened near anterior angles; an additional shallow, transverse impression is located medially on the sides; anterior angles nearly rectangular, sides before hind angles distinctly sinuate; base before hind angles distinctly sinuate too; basal and lateral margins distinctly, widely bordered.

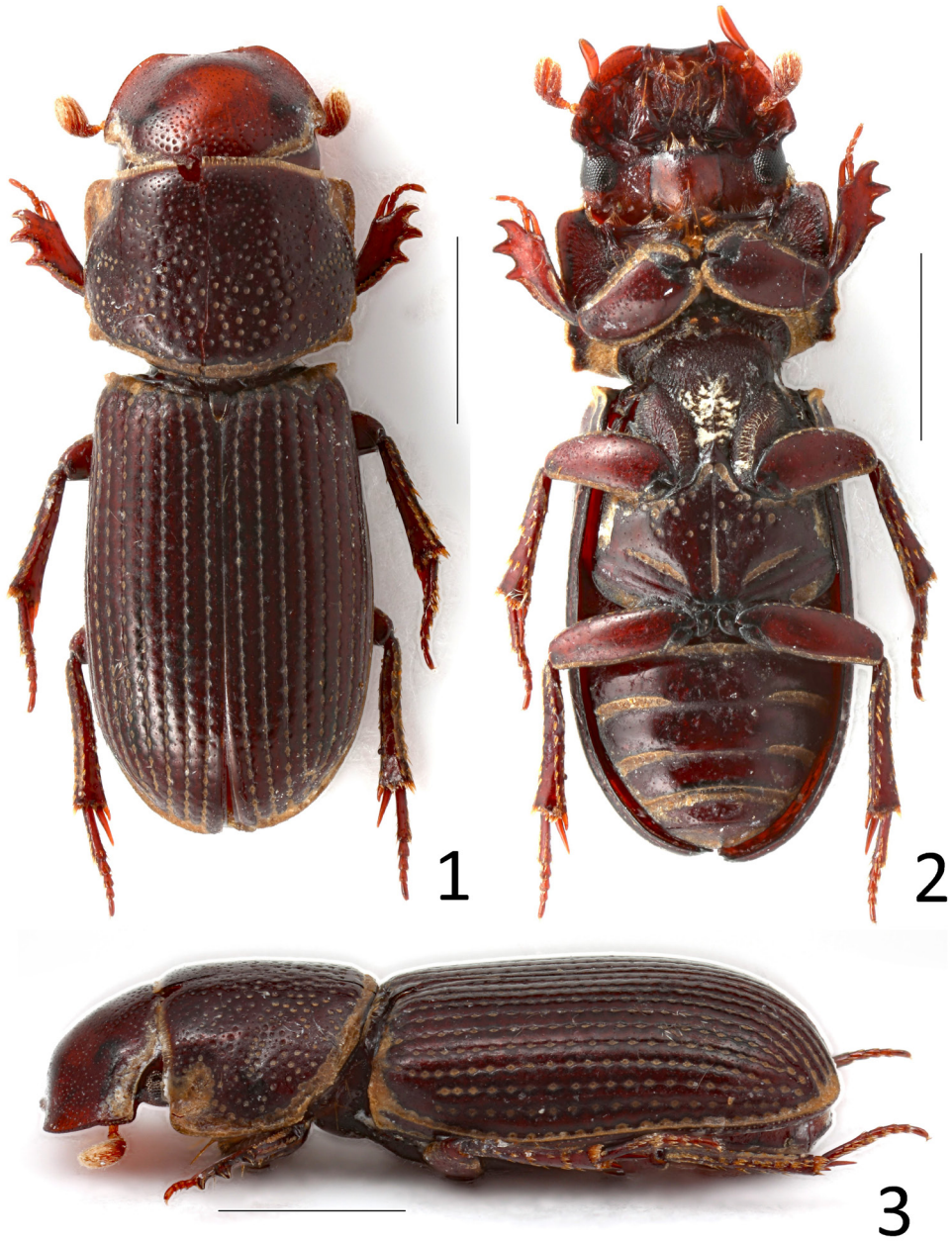
Scutellum small, narrowly triangular, without punctures, shiny.

Elytra elongate, distinctly convex, nearly parallel-sided, widest near the middle; with rather small, but distinct, acute humeral denticles; with ten striae and ten intervals. Striae not fine, distinctly, very densely and coarsely punctate; punctures distinctly indenting margins of intervals. First, second, third, ninth and tenth, fifth and sixth, seventh and eighth striae joined before apex, fourth stria fourth is shortened before apex, eighth and ninth striae shortened before base.

Legs. Femora shiny, without microreticulation; profemora moderately, irregularly and quite densely punctate, meso- and metafemora finely and sparsely punctate; femora distinctly bordered nearby margins. Protibiae tridentate laterally, sides not serrulate, apical spur long, rather thin, gently bent downwardly and outwardly. Meso- and metatibiae without transverse carinae, fimbriate apically with row of short spinules of unequal length. Metatibiae with superior apical spur slightly shorter than basimetatarsomere, the latter approximately long as next four following metatarsomeres combined. Claws short, thin, distinctly arcuate.

Macropterous.

Venter (Fig. 2). Meso-metaventral plate shiny, flat, with not very wide longitudinal furrow in the middle; surface with coarse punctures apically and fine punctures basally. Abdominal ventrites shiny, without microreticulation, sparsely, finely punctate. Only last but one abdominal ventrite with fluting apically, rest of them without fluting apically; second and third abdominal ventrites with fluting basally, in middle third. Pygidium with distinct median impression.



Figs. 1-3. *Airapus aegialiformis* sp. nov., ♂, holotype: 1- dorsal view, 2- ventral view, 3- lateral view. Figs. 1-3: scale lines: 1.0 mm.



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5



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Figs. 4-6: *Airapus aegialiformis* sp. nov. (♂), holotype: 4- head, 5- epipharynx, 6- aedeagus in lateral view. Fig. 4: scale line: 1.0 mm. Figs. 5-6: scale lines: 0.2 mm.

Aedeagus (Fig. 6). Parameres slightly shorter than phallobase, downwardly bent, widely rounded at apex in lateral view, with membranous process on surface of basal situation.

Differential diagnosis. Because of elongate body, density of larger punctation of pronotum, shape of pronotum nearby hind angles and general shape of elytra the newly described species at first glance looks like a member of Australian genus *Saprus* Blackburn, 1904 from the Aegialiinae Laporte, 1840. The distinctly different shape of head, shape of mouth apparatus and a lot of other features definitely point it to Eupariini Schmidt, 1910. However I think, it is good to notice that there are species clearly defined to Eupariini but with bodies so similar to some Aegialiinae. In my opinion, the newly described species clearly belongs to genus *Airapus* Stebnicka & Howden, 1996 because of shape of coxae, abdominal ventrites, meso-metaventral plate, as well by shallow transverse impressions which occur on sides of pronotum. General shape of body is more characteristic rather to species known from Australia, but aedeagus is much more similar to some species from Papua New Guinea. Only *Airapus sumatrae* Fairmaire, 1896 is known from Sumatra. *Airapus aegialiformis* sp. nov. can be easily distinguished from it, as well from all other known species of genus by: finer punctation of head, larger punctation of pronotum much sparser, sides of pronotum nearly straight, distinctly sinuate near hind angles, with base of pronotum distinctly sinuate near hind angles too and by shape of the meso-metaventral plate which is always quite unique in different species.

Etymology. The specific name consist of the combining form: „*aegiali-*“, (from Aegialiinae Laporte, 1840, because newly described here species have general shape of body like member of that subfamily) and „*formis*“ concerning the shape.

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