



### A new species of the Madagascan genus *Pseudorphnus* (Coleoptera: Scarabaeidae: Orphninae)

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*Pseudorphnus carinatus* **new species** is described from northern Madagascar (Antsiranana Province). Males of the new species differ from other species of the genus in having a long (about 8/10 the width of clypeus) transverse ridge near anterior margin of the clypeus.

*Pseudorphnus* Benderitter, 1913, is a small genus of orphnine scarab beetles endemic to Madagascar. The members of the genus, both males and females, can immediately be recognized among other orphnines by the peculiar shape of their protibiae, which have two robust outer teeth and a third much smaller tooth located at the very basal part of the protibia (Benderitter 1913, Paulian 1977). The genus previously included three species: *P. coquereli* (Fairmaire, 1868), *P. hiboni* Paulian, 1959, and *P. olsoufieffi* Paulian, 1977. The first species is known from a reasonable number of specimens collected throughout the island but mainly in the northern part. The second species was originally described from a single female specimen, but extensive sampling in the Ranomafana National Park in recent years has yielded a few additional specimens of both sexes (Frolov & Montreuil 2006). The third species is known only from the two male type specimens and a female, collected in central Madagascar and deposited in the Muséum national d'Histoire naturelle, Paris (MNHN).

Recently I was given an opportunity to study Orphninae material housed in the California Academy of Sciences, San Francisco (CASC). In this material, I found a series of *P. hiboni* from Ranomafana National Park, as well as two males from northern Madagascar. The latter two specimens proved to belong to a new species, which is described below.

Photographs of the habitus and parameres were taken with a Leica MZ9.5 stereo microscope. Partially focused serial images were combined in Helicon Focus software (Helicon Soft Ltd.) to produce completely focused images. The distribution map was generated with ArcGIS software (ESRI Ltd.). Coordinates of the localities were taken from the specimen labels.

#### *Pseudorphnus carinatus* Frolov, sp. n.

**Examined material.** Holotype, male with the following labels: “Madagascar: Province d'Antsiranana, Ampasindava, Foret d'Ambianivy, 3.9 km 181 S Ambaliha, elev. 600 m, 4–9 March 2001” and “13 47'55"S 48 9'42"E coll. Fisher, Griswold *et al.* California Acad. of Sciences, pitfall trap in rainforest, collection code: BLF3250”. Single paratype male with the same data.

Male. Length 11 mm with elongate, oval, strongly shiny body (Figs 1, 2). Color blackish brown, elytra and underside of body slightly lighter.

*Clypeus* slightly convex anteriorly, obtuse laterally, anterior margin setose and crenulate in dorsal view. Genae small, not protruding past eyes. Eyes relatively large (diameter larger than the distance between eye and gula in ventral view), incompletely divided by canthus into smaller dorsal and larger ventral parts. Frontal suture absent. *Clypeus* with a long (about 8/10 the width of clypeus) transverse low ridge near anterior margin (Figs. 5, 6). Dorsal surface of head impunctate.

*Labrum* bilobate, slightly sinuate in the middle and relatively feebly protruding past clypeus. Length in the middle is 1/8 width (in dorsal view).

*Pronotum* 1.5 times wider than long, widest medially. Anterior margin with wide border, base with fine border. Lateral margins densely punctate, appearing crenulate in dorsal view. Disc of pronotum with deep excavation in the middle, with two slender longitudinal somewhat triangular ridges bordering the excavation (Fig. 2). Surface of disc between the ridges smooth, without punctures. Sides of pronotum rugose posteriorly. Lateral margins with long, brown setae.