

## New *Grouvellina* species from Eastern Madagascar (Coleoptera, Carabidae: Rhysodini) - II.

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**Taxonomy, description, new species, Coleoptera, Carabidae, Rhysodini, *Grouvellina*, Madagascar.**

**Abstract.** *Grouvellina moraveci* sp. n. from Eastern Madagascar is described and illustrated. The new species is compared with the morphologically most similar congeners.

### INTRODUCTION

The genus *Grouvellina* R. T. Bell et J. R. Bell, 1978 is the only genus of Rhysodini known from Madagascar and comprises seventeen species. They are known exclusively from Madagascar and the nearby Comoro Islands. The purpose of recent paper is to describe the new species belonging to the genus *Grouvellina*.

### MATERIAL AND METHODS

This paper is based on the study of type material of the new species described below and few representatives of similar species. The type specimens of newly described species are deposited in the author's collection.

Measurements were made with a MBS-10 stereoscopic microscope, at magnifications of 8x, 16x and 32x. Measurements of body parts and corresponding abbreviations used in the text are as follows:

EL = elytral length - length of left elytron measured along sutura from basal border to apex;

EW = elytral width - maximal width of both elytra combined;

HL = length of head - measured from apex of clypeus to posterior margin of temporal lobe;

HW = width of head - maximal width of head (including eyes);

PL = pronotal length - length of pronotum measured along mid-line;

PW = pronotal width - maximal width of pronotum;

TL = total length - length measured from the apex of left mandible (mandibles closed) to the apex of left elytron.

The morphological terms used in this study are adopted from Bell & Bell (1978, 1979).

All type specimens of newly described species are provided with one red printed label: “*Grouvellina moraveci* sp. nov., HOLOTYPE or PARATYPE, det. O. Hovorka, 2009”.

## DESCRIPTION

### *Grouvellina moraveci* sp. n.

(Figs 1-3)

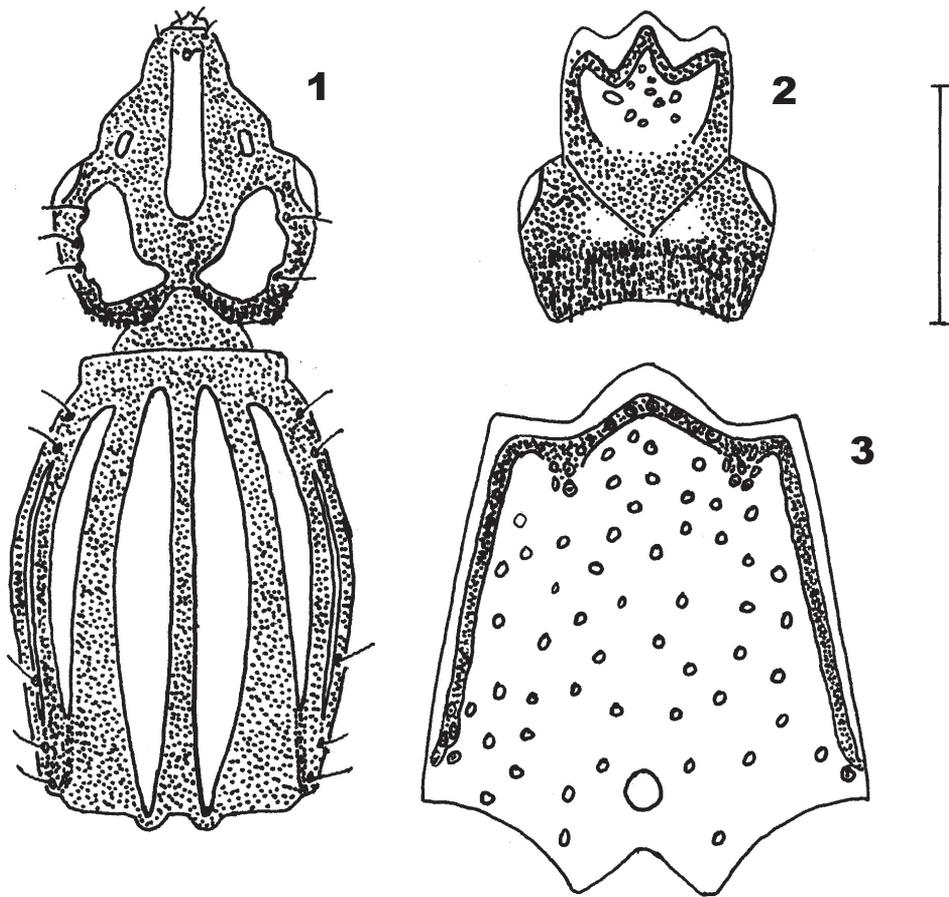
**Type material.** Holotype (♀) labelled: “Madagascar Est 1300-400 m, Massiv Ambondrombe, J. Janák + P. Moravec lgt.”, “Ikoka env. 11.-12.iii.1996, forêt humide, sous écorces, crête Amboasa, camp 3”. Paratype (1 ♀): the same data as holotype.

**Description.** Habitus - the new species is relatively large, habitually very similar to its congeners. Body colour (including appendices) dark brown to black, only tarsomeres lighter brown and palpomeres red-brown to yellow-brown. Body narrow, elongated. TL 7.0-8.3 mm. Head longer than wide, HL:HW 1.12-1.15. Pronotum 1.25-1.40 times wider than head, markedly longer than wide (PL:PW 1.33-1.41). Elytrae elongate, EL:EW 2.3-2.4, widest near the basal quarter of their length.

Head (Fig. 1) with large eyes. Antennae with tufts of minor setae on antennomeres V-X. Antennomere XI longer than wide, apical stilet prominent, approximately 0.25 as long as antennomere. Antennomeres I and II dorsally extensively pollinose, antennomeres III-X with apical but no basal band of pollinosity. Basal setae present on antennomeres V-X. Frontal, antennal and postclypeal grooves deep. Orbital groove complete. Median lobe long, narrow, parallel-sided, its tip rounded. Parafrontal bosses small, but distinct. Temporal lobe widely pollinose on margins, its glabrous area approximately 1.25 times longer than wide, shallowly sinuate anterior to obtuse median angles, latter narrowly separated. From two to four temporal setae present. Occiput and frontal pit with rufous to yellow-red pilosity. Mentum pollinose only laterally, most of its surface glabrous, postmentum contrastingly pollinose (Fig. 2); two to three pairs of both prelabial and postlabial setae present. Labrum with one pair of large setae; second (medial) pair missing.

Pronotum (Fig. 1) elongate, its sides slightly convex, widest point approximately in the middle, slightly narrowed at the base, more strongly at apex. Lateral pronotal margin not sinuate anterior to hind angle, with 3-4 lateral setae and angular seta. Pronotal carinae moderately wide, wider than the grooves, convex; both pairs straight, inner ones (sub)pointed on both sides, outer carinae obtuse at apex, not complete, but abbreviated and covered by pollinosity posteriorly. Precoxal carina present but slight, short, about 0.2 as long as distance to anterior margin of prosternum. Prosternal process with deep medial pit between coxal cavities and terminally with deep and large, transverse pollinose fovea.

Elytral striae broad, broader than interstriae, coarsely punctured, pollinose. Elytral intervals narrow, subcarinate. Humeral tubercle moderately prominent. Elytral stria I with 1-2 setae near apex, elytral stria II with 3-5 setae in apical third, elytral stria IV with 6-9 setae, elytral stria VII with 6-8 setae in apical quarter, apical tubercle with 1-2 setae. Metasternum (Fig. 3) with narrow lateral pollinose strips and large punctures, punctuation becomes



Figs 1-3. *Grouvellina moravecii* sp. n.: 1- head and pronotum, dorsal view; 2- head, ventral view; 3- metasternum.

somewhat sparser towards middle; anteriorly with transverse pollinose strip, posteriorly with deep medial pit.

Anterior femur without ventral tooth. Femora of all pairs sinuate ventrally.

Abdominal sterna transversely sulcate, last visible sternite wholly punctured.

Male: unknown.

**Differential diagnosis.** The newly described species is characterized by unique set of characters and differs from all its congeners. *Grouvellina moravecii* sp. n. differs from most

of its congeners by reduced outer pronotal carina. This character is shared with only three other species - *G. grouvellei* (Fairmaire, 1895), *G. dentipes* R. T. Bell et J. R. Bell, 1979 and *G. cinerea* R. T. Bell et J. R. Bell, 1979. *G. grouvellei* differs from *G. moraveci* e.g. by outer pronotal carina not abbreviated posteriorly, but coalescent with marginal carina and by largely pilose temporal lobe. *G. dentipes* and *G. cinerea* differs from *G. moraveci* by absence of parafrontal boss, by presence of pilosity on median lobe, by presence of conspicuous tufts on temporal lobe, by reduction in number of lateral pronotal setae etc. In fact, the reduction of the outer carina is the only important character shared by *G. moraveci* and the three mentioned species.

The true relationships of *G. moraveci* are not clear. The new species is in many aspects similar to *G. radama* R. T. Bell et J. R. Bell, 1979 and shares with this species many important characters - reduction in ventral femoral tooth on anterior legs, reduction in labrum setae, elongated and narrow median lobe, presence of precoxal carina etc., but any statement about near relationships with this species is premature. The proper phylogenetic analysis of relationships of all species belonging to this genus is necessary.

**Name derivation.** The species is named in honour of Pavel Moravec (Litoměřice), who collected part of the type series.

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## REFERENCES

- BELL R.T. & BELL J.R. 1978: Rhysodini of the world. Part I. A new classification of the tribe, and a synopsis of *Omoglymmius* subgenus *Nitiglymmius*, new subgenus (Coleoptera: Carabidae or Rhysodidae). *Quaestiones Entomologicae* 14: 43-88.
- BELL R.T. & BELL J.R. 1979: Rhysodini of the world. Part II. Revisions of the smaller genera (Coleoptera: Carabidae or Rhysodidae). *Quaestiones Entomologicae* 15: 377-446.

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