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Two new *Omoglymmius* (*Omoglymmius*) species from Wallacea (Coleoptera: Carabidae: Rhysodini)

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Abstract. *Omoglymmius* (*Omoglymmius*) *horaki* sp. nov. from Timor and *O*. (*O*.) *priscae* sp. nov. from Buru Island are described, illustrated and compared with the congeners from the region of Wallacea.

INTRODUCTION

The Wallacea region is a group of islands separated by deep water straits from the Asian and Australian continental shelves. It is separated from the Sundaland on the west by the Wallace Line, and from the Near Oceania (including Australia and New Guinea) on the east and south by the Lyddeker's Line. Key to the thirteen species of *Omoglymmius* (*Omoglymmius*) of this region, and at the same time descriptions of the most species known in the region, was given by R. T. Bell & J. R. Bell (1982). Four additional species were described by the same authors later (R. T. Bell & J. R. Bell 1988), so that recently 17 species of *Omoglymmius* (s. str.) is known from Wallacea. The purpose of this paper is to describe two additional species, one from Timor (Lesser Sunda Islands) and second one from Buru (South Moluccas).

MATERIAL AND METHODS

This paper is based on the study of type material of the new species described below. The specimens included in this study are deposited in the following institutional and private collections:

JHPC Jan Horák collection, Praha - Dubeč, Czech Republic;
OHPC Oldřich Hovorka collection, Praha, Czech Republic;
SMRP Středočeské muzeum v Roztokách u Prahy, Roztoky u Prahy, Czech Republic.

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 suture 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 R. T. Bell & J. R. Bell (1978, 1979).

All type specimens of newly described species are provided with one red printed label: "*Omoglymmius* (*Omoglymmius*) *specificepithet* sp. nov., HOLOTYPE (or PARATYPE), det. O. Hovorka, 2015".

DESCRIPTIONS

Omoglymmius (*Omoglymmius*) *horaki* sp. nov.

(Figs. 1-5)

Type material. Holotype (♂) labelled: „Indonesia, Lesser Sunda, Timor Is., Baun env., 10°17.28'S 123°44.60'E, 1.-2.i.2014 J. Horák leg." (OHPC). Paratypes: (1 ♂, 3 ♀♀,): the same data as holotype, (SMRP, JHPC, OHPC); (1 ♀): labelled: "Lesser Sundas, West Timor, Amarassi distr., 300 m a.s.l., Buraen env., 7.-14.iv., leg. St. Jakl 2007", (OHPC).

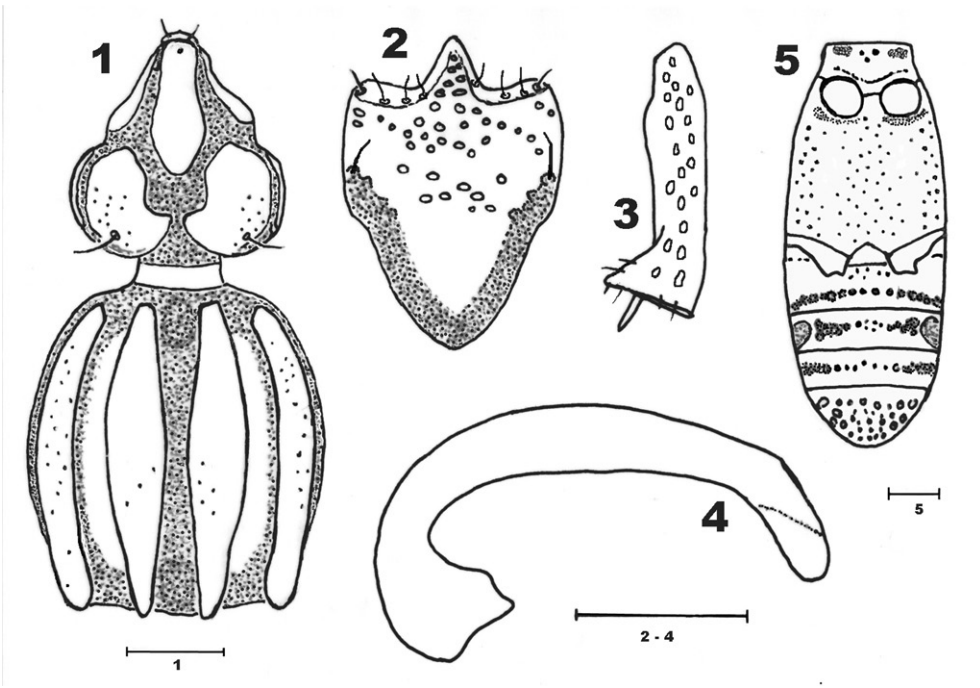
Description. Habitus - the new species is medium-sized, habitually very similar to its congeners. Body colour (including antennae) is dark brown to brown-black, legs are brown-red, with femora darker than tibiae and tarsi. Palpomeres yellow-brown. Body elongate, narrow. TL 5.9-6.9 mm. Head slightly longer than wide, HL:HW 1.02-1.11. Pronotum 1.30-1.41 times wider than head, distinctly longer than wide (PL:PW 1.10-1.19). Elytra elongate, EL:EW 2.13-2.25, widest near the midlength.

Head (Fig. 1) relatively short, broad, with large eyes. Antennomeres I-X punctate. Scapus dorsally covered by pollinosity, pedicellus with large pollinose punctures sometimes connected on dorsal surface by pollinose bands, first and second flagellomere with apical narrow pollinose band. Antennomeres V-X with narrow apical ring of minute setae, without pollinosity. Frontal, postclypeal and antennal grooves deep. Orbital groove shallow, narrow but distinct and complete. Median lobe long, lanceolate with basal constriction and rounded, blunt tip. Frontal space broad, transverse, deep. Temporal lobe with median margin strongly emarginate, medial angles obtuse, only very slightly separated; posterior medial margin convex; surface with 10-18 punctures, predominantly on posterior and lateral parts; one temporal seta present. Postorbital and suborbital tubercles absent. Mentum and submentum with only posterior U-shaped pollinose band (Fig. 2), most of their surface glabrous. Mentum punctured, punctures arranged in irregular transverse rows. Four pairs of prelabial setae and one pair of postlabial setae present.

Pronotum (Fig. 1) elongate, its sides slightly convex, widest point in the middle, slightly narrowed at base, more strongly at apex. Lateral pronotal margin not sinuate anterior to hind angle, both lateral setae and angular seta absent. Pronotal carinae wide, much wider than grooves, convex; both pairs straight, inner ones strongly narrowed on both sides, outer carinae less narrowed, more strongly towards base, less narrowed and transversely cut towards apex. Inner carina impunctate (male paratype) or with 4-8 very small punctures in

posterior half. Outer carina with 9-19 small or middle-sized punctures along whole length (but punctures scarce in basal third). Inner carina 1.5 times wider than outer carina at middle. Median groove with both anterior and posterior median pit developed, similarly large and deep. Basal impression wide, fully pollinose, paramedian groove complete, pollinose fully only at apex, most of its length pollinose on outer side only (on border with outer carina). Epipleuron of pronotum with several punctures posteriad. Precoxal carina absent. Prosternite with few punctures medio-anteriad of coxal cavities, proepisternite with few punctures. There is wide stripe of pollinosity, going from anterior margin of coxal cavities anteriad, connected with perpendicular transverse stripe of pollinosity on anterior margin of prosternite and proepisternite. Prosternal process with deep, longitudinally oval median pit between coxal cavities and terminally with deep, transverse fovea, both pollinose on bottom.

Elytral striae impressed, densely punctate, narrow, interstriae slightly convex (more strongly convex in female paratype from West Timor – Buraen). Basal pollinose longitudinal scarp on stria IV developed, sloped basal elytral part distinctly, strongly pollinose between the first and fourth stria. Elytral stria IV with 1 seta near apex; stria VII with 2-4 setae in apical part; apical tubercle with 1 seta. Metasternum without pollinosity except two transverse stripes posteriad each mesocoxa, punctured mainly along lateral margin and middle part, lateral punctures larger and distinctly pollinose on bottom. Both female and male (Fig. 5) with large lateral pits in sternum IV. Sterna III.-V. with continuous transverse row of



Figs. 1-5. *Omoglymmius* (*Omoglymmius*) *horaki* sp. nov.: 1- head and pronotum, dorsal view; 2- mentum and submentum; 3- posterior tibia of male; 4- median lobe of aedeagus, lateral view; 5- mesosternum, metasternum and abdomen. Scale bars 0.5 mm.

punctures; lateral punctures connected by pollinosity. Last visible sternite wholly punctured, laterally with large, pollinose punctures (pits), and with a pair of setae near posterior margin in both sexes.

Anterior femur with ventral tooth in male, which is only indicated in female by stronger convexity. Male middle tibia widened at apex, inner side with sharp angle but without distinct calcar. Hind tibia of male with large, subacute calcar (Fig. 3); in female both middle and hind tibia simple.

Aedeagus as on Fig. 4.

Differential diagnosis. *Omoglymmius* (*O.*) *horaki* sp. nov. is the first species of the nominotypical subgenus of *Omoglymmius* known from the Timor. The species differs from congeners occurring in region of Wallacea by following combination of characters: elytral intervals not carinate; head only slightly longer than wide; male with tooth on anterior femur; temporal seta present; pronotal carinae punctate; postorbital and suborbital tubercle absent; lateral margin of temporal lobe rounded, its anterior part not extensively pollinose and posteromedial margin convex, so that occipital angle indistinct; abdominal sterna with distinct punctures; pronotum not subquadrate, with sides curved; orbital groove long, complete, connected with pollinosity on posterior part of temporal lobe.

Most of characters are shared with *O.* (*O.*) *viduus* R. T. Bell & J. R. Bell, 1982 from Kei Islands, which differs by reduced orbital groove, more than 20 punctures on temporal lobe, more elongate prothorax, different shape and proportions of temporal lobe and pronotal carinae etc. and seems to be at the moment the nearest relative of *O.* (*O.*) *horaki* sp. nov.

Collection circumstances. The series of specimens from vicinity of Baun were collected at night on fallen trunk of some hardwooded tree, partially without bark, running out of larval galleries (tunnels) of some xylophagous beetles (J. Horák, pers. comm.).

Name derivation. The species is named in honour of Jan Horák, Czech entomologist, specialist in Mordellidae and collector of the large part of type series of the new species.

Omoglymmius (*Omoglymmius*) *priscae* sp. nov.

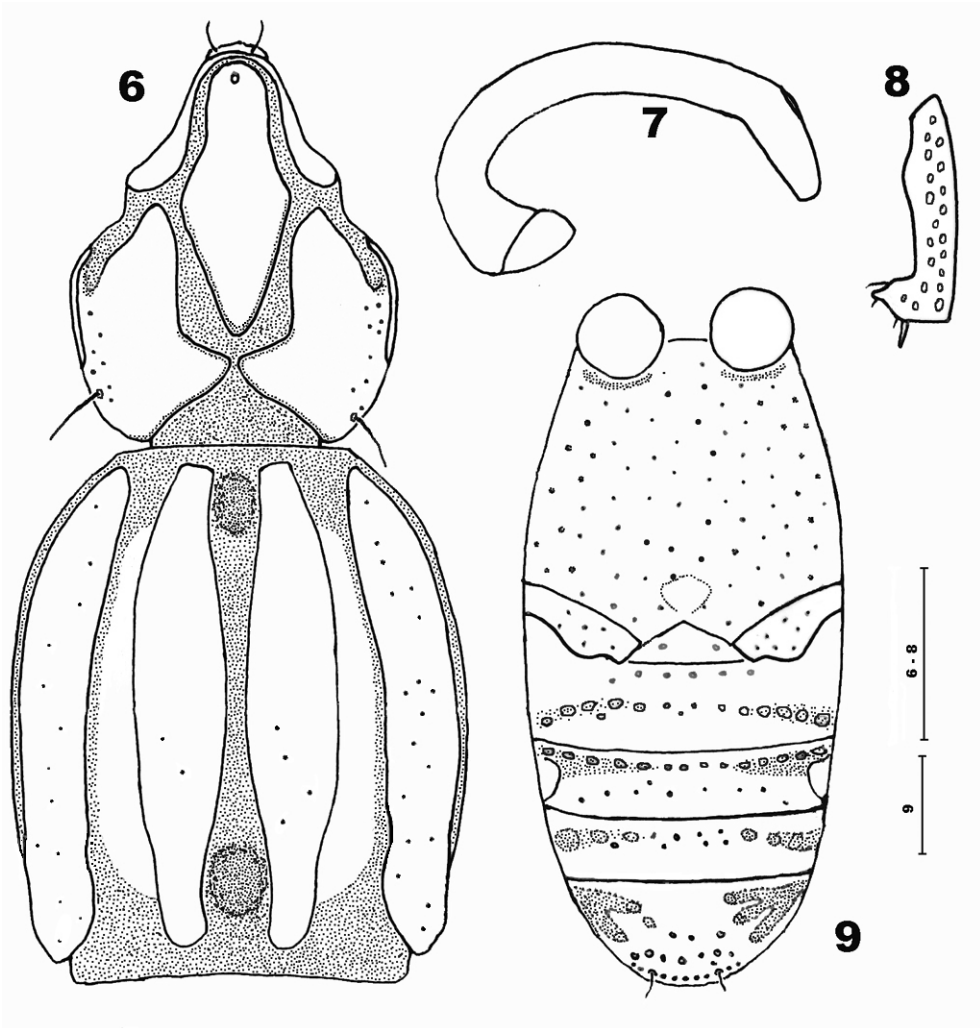
(Figs. 6-9)

Type material. Holotype (♂) labelled: "Indonesia, C Moluccas, S. Buru Isl., Namrole reg., Mt. Air, 100-500 m alt., Waisili will. env., ix.2013" (OHPC). Paratypes: (1 ♂, 1 ♀): labelled "Indonesia, C Moluccas, SEE Buru Is., 200-350 m alt., Ilat vill. env., Remaja Mt., 5.-18.i.2013, St. Jakl lgt." (SMRP, OHPC).

Description. Habitus - the new species is medium-sized, habitually very similar to its congeners. Body colour (including antennae) is brown-black, legs are brown-red, with femora darker than tibiae and tarsi. Palpomeres yellow-brown. Body elongate, narrow. TL 5.0-6.2 mm. Head slightly longer than wide, HL:HW 1.10-1.15. Pronotum 1.29-1.38 times wider than head, slightly but distinctly longer than wide (PL:PW 1.14-1.20). Elytra elongate, EL:EW 2.07-2.20, widest near the midlength.

Head (Fig. 6) relatively short and broad, with large eyes. Antennomeres I-X dorsally punctate (much less distinctly in female). Scapus dorsally covered by pollinosity, pedicellus

with large pollinose punctures sometimes connected on dorsal surface by pollinose bands, first and second flagellomere with apical narrow pollinose band. Antennomeres V-X with narrow apical ring of minute setae, without pollinosity. Antennal groove not so deep as frontal and postclypeal grooves. Orbital groove shallow, wide, very short, incomplete, ending near midlength of eye. Median lobe long, lanceolate with basal constriction and narrowly rounded, subacute tip, its margins narrowly pollinose. Frontal space very broad, transverse, deep. Temporal lobe with median margin very strongly emarginate, medial angles subacute, almost touching. Posterior medial margin of temporal lobe concave, forming distinct occipital angle; surface with 6-12 punctures, predominantly laterally along eye and near temporal seta;



Figs. 6-9. *Omoglymmius* (*Omoglymmius*) *priscae* sp. nov.: 6- head and pronotum, dorsal view; 7- median lobe of aedeagus, lateral view; 8- posterior tibia of male; 9- metasternum and abdomen. Scale bars 0.5 mm.

one temporal seta present. Medial margin of temporal lobe narrowly bordered by pollinosity. Postorbital and suborbital tubercles absent. Mentum and submentum generally similar as in *O. horaki* sp.n., but punctures on mentum less numerous. Mentum punctured along anterior margin only, punctures arranged in irregular transverse rows.

Pronotum moderately long, widest near middle; base and apex narrowed. Lateral pronotal margins curved, scarcely sinuate in front of hind angles. Inner carina 1.4 times wider than outer carina at middle. Inner margin of outer carina slightly but distinctly sinuate near base. Inner carina tapered to base, before this narrowed basal part with 2-4 very fine punctures. Outer carina with 8-20 fine to very fine punctures, which are more numerous in posterior half. Prosternum without precoxal carina, together with propleuron minutely pollinose, so that surface is matt.

Metasternum punctured, laterally with denser, larger, pollinose punctures, towards middle are punctures sparser, smaller and not pollinose; anterior margin on each side with short, transverse, slightly curved, pollinose furrow just behind middle coxa; posteriorly with shallow, not sharply delimited medial pit.

Elytral striae impressed, punctate, narrow, interstriae slightly convex. Basal pollinose longitudinal scarp on stria IV developed, sloped basal elytral part only very slightly and indistinctly pollinose between the first and fourth striae. Elytral stria IV with 1 seta near apex; stria VII with 3-5 setae in apical part; apical tubercle with 1 seta in the end of short, basally placed apical striole and ± 12 small irregular punctures, not connected with that striole. Metasternum without pollinosity, punctured throughout, posteriorly with not sharply delimited median pit. Both female and male (Fig. 9) with large lateral pits in sternum IV. Abdominal sterna punctured; punctures laterally large, confluent, pollinose, forming short transverse sulcus, interrupted in middle third, where is very irregular row of normal, small punctures only. Last visible sternite laterally with very large, confluent pollinose punctures (pits), posterior half in middle part with normal punctures, forming 2-3 irregular transverse rows.

Anterior femur with ventral tooth in male, without trace of such structure in female. Male middle tibia widened at apex, inner side with sharp angle but without distinct calcar. Hind tibia of male with large, subacute calcar (Fig. 8); in female both middle and hind tibia simple.

Aedeagus as on Fig. 7.

Differential diagnosis. The only species of the subgenus *Omoglymmius* (s. str.) known so far from Buru is *Omoglymmius* (s. str.) *nasalis* R. T. Bell & J. R. Bell, 1982. *O. priscae* differs from *O. nasalis* in many characters, mainly in proportions of head, which is almost twice as long as broad in *nasalis* and less than 1.2 times longer than wide in *priscae*, by the shape and proportions of median lobe, by the presence of pollinose oblique ridge between antennal lobe and frontal space in *nasalis* and absence of this structure in *priscae*, by the more numerous punctures on pronotal carinae in *nasalis*, different elytral chaetotaxy - elytral stria IV without seta in *nasalis* and many other differences. The species are evidently not closely related. The new species is much more morphologically similar to *Omoglymmius* (s.str.) *vadosus* R. T. Bell & J. R. Bell, 1982, described from near island Ambon. Both species share many morphological features, like proportion of head, extremely fine punctures on head and pronotum, presence of seta in elytral stria IV, minute pollinosity on prosternite and

propleuron etc., and *O. priscae* sp. nov. is most probably a sister species of *O. vadosus*. The main differences between *O. priscae* and *O. vadosus* are as follows: median lobe in *priscae* longer and only narrowly obtuse, subacute; frontal space extremely short and transverse; pronotum less than 1.2 times longer than wide; subapical striole with seta; abdominal sternites with distinct punctures, which are coalescent only on extreme lateral margin.

Name derivation. The species is named in honour of Priska Erjani, the wife of Stanislav Jákl, Czech entomologist, specialist in Cetoniinae and collector of the type series of the new species.

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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.

Bell R. T. & Bell J. R. 1982: Rhysodini of the world. Part III. Revision of *Omoglymmius* Ganglbauer (Coleoptera: Carabidae or Rhysodidae) and substitutions for preoccupied generic names. *Quaestiones Entomologicae* 8: 127-259.

Bell R. T. & Bell J. R. 1988: Rhysodini of Sulawesi and nearby islands (Coleoptera: Carabidae or Rhysodidae). *Journal of the New York Entomological Society* 96: 7-15.

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