

Two new species of *Omoglymmius* from Moluccas (Coleoptera: Carabidae: Rhysodinae)

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Taxonomy, new species, descriptions, Coleoptera, Carabidae, Rhysodinae, *Omoglymmius* (*Omoglymmius*), Indonesia, Moluccas

Abstract. *Omoglymmius* (*Omoglymmius*) *taliabuensis* sp. nov. and *Omoglymmius* (*Omoglymmius*) *aruensis* sp. nov., both from Moluccas, are described, illustrated and compared with related congeners.

INTRODUCTION

The nominotypical subgenus of the nearly cosmopolitan genus *Omoglymmius* Ganglbauer, 1892 belongs with about one hundred of described species to the largest taxa of Rhysodini. The whole genus was revised by R. T. Bell & J. R. Bell in 1982, subsequently described species were included in the revised key to *Omoglymmius* (*Omoglymmius*) (R. T. Bell & J. R. Bell 1993). Six additional species of *Omoglymmius* (s.str.) were described later (R. T. Bell & J. R. Bell 2000, 2009; Hovorka 2015, 2017). Eleven species of *Omoglymmius* (s.str.) was so far known from Moluccas (or Maluku Islands) - *O. (O.) batchianus* (Arrow, 1901) from Batjan (= Batchian = Bacan) Islands, *O. (O.) continuus* R. T. Bell & J. R. Bell, 1982 and *O. (O.) wittmeri* R. T. Bell & J. R. Bell, 1982 from Sula Islands, *O. (O.) humeralis* (Grouvelle, 1895) from Ternate and Halmahera, *O. (O.) morditus* R. T. Bell & J. R. Bell, 1982 from Morotai, *O. (O.) nasalis* R. T. Bell & J. R. Bell, 1982 and *O. (O.) priscae* Hovorka, 2015 from Buru, *O. (O.) opticus* R.T. Bell & J.R. Bell, 1982 from Barat Daya Islands (Damar Isl.), *O. (O.) quadraticollis* (Arrow, 1901) from Tanimbar Islands, *O. (O.) vadosus* R. T. Bell & J. R. Bell, 1982 from Ambon and *O. (O.) viduus* R. T. Bell & J. R. Bell, 1982 from Kai (= Kei) Islands. The purpose of this paper is to describe two additional species belonging to the mentioned subgenus *Omoglymmius* (s.str.), one from West Moluccas (Sula Islands) and second from South-East Moluccas (Aru Islands).

MATERIAL AND METHODS

This paper is based on the study of type material of the new species described below and their congeners from the author's collection (OHPC - Oldřich Hovorka collection, Praha, 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 from humerus 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).

The colour photographs of the habitus and diagnostic characters were taken by the author with a Canon EOS 600D digital camera in Entomological department, National Museum, Prague.

All type specimens of newly described species are provided with one red printed label: “*Omoglymmius (Omoglymmius) taliabuensis* sp. nov., HOLOTYPE (or PARATYPE), det. O. Hovorka, 2022” or “*Omoglymmius (Omoglymmius) aruensis* sp. nov., HOLOTYPE, det. O. Hovorka, 2022”.

DESCRIPTIONS

Omoglymmius (Omoglymmius) taliabuensis sp. nov.

(Figs. 1-2)

Type material. Holotype (♂) labelled: “Indonesia, W Moluccas, Sula Archipelago, ix. 2019, Taliabu Isl., local collector leg.” (OHPC). Paratype (1 ♂): the same data as Holotype (OHPC).

Description. Habitus - the new species is medium-sized, habitually very similar to its congeners (Fig. 1). Body colour (including antennae and legs) is dark brown to brown-black, only terminal tarso- and antennomeres are slightly lighter. Body elongate, narrow. TL 6.4-8.0 mm. Head distinctly longer than wide, HL:HW 1.18-1.25. Pronotum 1.38-1.45 times wider than head, slightly longer than wide (PL:PW 1.11-1.14). Elytra elongate, EL:EW 2.00-2.08, widest approximately in the midlength.

Head (Fig. 1) relatively elongate, with large eyes. Antennomeres I-X punctate, distal antennomeres more sparsely than basal ones. Basal setae absent. Scapus dorsally covered by pollinosity, pedicellus and 2-3 basal flagellomeres with pollinose punctures, other flagellomeres with punctures without distinct pollinosity. Antennomeres V-X with narrow apical ring of minute setae. Frontal and postclypeal grooves deep, antennal groove shallow, pollinose, posteriorly prolonged in narrow orbital groove. Median lobe long, lanceolate with shallow basal constriction and narrowly rounded or subacute tip, without (Holotype) or with 2 small punctures (Paratype). Frontal space narrow, deep, transverse, widely U-shaped. Temporal lobe with median margin distinctly emarginate, medial angles obtuse, distinctly separated; posterior medial margin very slightly and indistinctly concave, nearly straight;

surface with 10-12 punctures, predominantly on posterior and lateral parts; 1 temporal seta present. Postorbital and suborbital tubercles absent. Mentum and submentum with only posterior V-shaped pollinose band, most of their surface glabrous. Mentum irregularly densely punctured. Three pairs of prelabial setae and one pair of postlabial setae present.

Pronotum (Fig. 1) relatively short, only slightly longer than wide, its sides convex, widest point anterior to middle, narrowed at the base, more strongly at apex. Lateral pronotal margin distinctly strongly sinuate anterior to hind angle, both lateral setae and angular seta absent. Pronotal carinae very similar, convex, punctate. Inner carinae only very slightly and indistinctly wider than outer carinae, straight, strongly narrowed towards base, slightly narrowed anteriorly. Outer carinae slightly convergent anteriorly, more strongly narrowed towards base than anteriorly. Inner carina with 10-14 punctures, outer carina with 26-33 punctures. Median groove with both anterior and posterior median pit developed, both pits about the same size. Basal impression wide, almost not pollinose, paramedian groove complete. Epipleuron of pronotum with irregular and sparse row of punctures along whole length. Precoxal carina absent. Prosternite punctured only posteriorly and in central part of prosternal process, its whole surface pollinose.

Inner elytral striae (I-III) only slightly impressed, densely punctate, narrow, interstriae very slightly convex, outer striae (IV-VII) gradually deeper, interstriae more convex. All interstriae with irregular rows of small punctures. Base of stria IV with short indistinct longitudinal pollinose scarp, rather with additional pollinose puncture on basal sloping part connected with other punctures of stria IV by shallow pollinose stripe. Elytral chaetotaxy strongly reduced, discal striae without setae, only stria VII with 3-5 preapical setae, one of them can be more or less on apical tubercle. Metasternum without pollinosity, punctured sparsely on whole surface, lateral punctures larger and more distinctly pollinose on bottom. Male with large lateral pits in sternum IV (Fig. 2) and with relatively small, but distinct punctures on whole surface of all abdominal sternites. Last visible sternite with large, shallow, towards middle not distinctly delimited, more or less triangular lateral impressions and without setae near posterior margin.

Anterior femur with small but distinct ventral tooth in male. Male middle tibia widened at apex, inner side with sharp distinct calcar, nearly as long as spur. Hind tibia of male with large, subtriangular, subacute calcar, very similar by size and shape to this of *O. (O.) tamblinganensis* Hovorka, 2017.

Female. Unknown.

Differential diagnosis. *O. (O.) taliabuensis* sp. nov. is the first species of the nominotypical subgenus of *Omoglymmius* known from the Taliabu Island. Two other species known from Sula Islands (*O. (O.) continuus* and *O. (O.) wittmeri*) were both described from Mangole Island. Those species seems to be related to *O. (O.) taliabuensis* sp. nov., as they share some important characters with the new species and have probably common ancestor. The shared characters are: fifth interstria normal, outer carina not setose, pronotal carinae of nearly equal width at middle, head only slightly longer than wide, absence of both post- and suborbital tubercles, temporal lobe rounded, abdominal sterna without lateral pollinosity and presence



Figs. 1-2. *Omoglymmius (Omoglymmius) taliabuensis* sp. nov., holotype: 1- habitus, dorsal view; 2- habitus, ventral view. Without scale.

of extensive pollinosity on anterior part of temporal lobe. *O. (O.) taliabuensis* sp. nov. share with *O. (O.) continuus* shallow elytral striae I-III, very small longitudinal scarp on base of stria IV, reduction of elytral setae etc.; main differences are shape of pronotum (subquadrate in *O. (O.) continuus*), absence of swelling on scapus, much more elongated median lobe, much higher number of punctures on outer pronotal carina etc. in *O. (O.) taliabuensis* sp. nov. *O. (O.) wittmeri* differs from the newly described species by following characters: median lobe with obtuse apex, lateral pronotal margins not strongly incised before posterior angles, inner pronotal carina with only 4-5 punctures, elytral stria IV with seta near apex, hind calcar of different shape (triangular). *O. (O.) taliabuensis* sp. nov. differs moreover from both related species by presence of fine punctures on elytral interstriae.

Name derivation. The species is named according to its type locality, Taliabu Island in Sula Archipelago (Western Moluccas).

***Omoglymmius (Omoglymmius) aruensis* sp. nov.**
(Figs. 3-4)

Type material. Holotype (♀) labelled: "Indonesia, SE Moluccas, Aru Isl., Wokam I., 17 km NE of Wakua vill., 1.-7. ii. 2022 St. Jákl leg." (OHPC).

Description. Habitus (Fig. 3) - the new species is medium-sized, habitually similar to its congeners. Body colour is dark brown to brown-black, antennae and legs are slightly lighter, palpomeres are yellow-brown. Body elongate, narrow. TL 7.2 mm. Head very slightly wider than long, HL:HW 0.96. Pronotum 1.30 times wider than head, slightly longer than wide (PL:PW 1.11). Elytra elongate, EL:EW 2.08, widest approximately in the midlength.

Head (Fig. 3) slightly transverse, with large eyes. Antennomeres I-X punctate, distal antennomeres more sparsely than basal ones. Basal setae absent. Scapus dorsally covered by pollinosity, pedicellus and 2-3 basal flagellomeres with pollinose punctures, other flagellomeres with punctures without distinct pollinosity. Antennomeres V-X with narrow apical ring of minute setae. Frontal and postclypeal grooves deep, antennal groove shallow, pollinose, posteriorly prolonged in wide, shallow orbital groove. Median lobe relatively long, lance-shaped with relatively narrowly rounded tip, without punctures. Frontal space narrow, deep, slightly wider than long, nearly triangular. Temporal lobe with median margin slightly emarginate, medial angles obtuse, distinctly separated; posterior medial margin short, straight or very slightly convex; surface with ca 12 punctures; temporal seta absent, but probably only broken, as one of temporal punctures is very large and probably seta-bearing. Postorbital tubercles present, large, conspicuous, pollinose, divergent, clearly visible in dorsal view. Mentum and submentum with only posterior V-shaped wide pollinose band, most of their surface glabrous. Mentum irregularly, relatively sparsely punctured. Three pairs of prelabial setae and one pair of postlabial setae present.

Pronotum (Fig. 3) relatively short, only slightly longer than wide, its sides convex, widest point approximately in midlength, slightly narrowed at the base, more strongly at apex. Lateral pronotal margin shortly, but distinctly sinuate anterior to hind angle, both lateral setae and angular seta absent. Pronotal carinae dissimilar. Inner carinae distinctly wider than outer carinae, straight, strongly narrowed towards base, slightly narrowed anteriorly. Outer carinae slightly convergent anteriorly, almost not narrowed towards base, here sinuate, distinctly narrowed towards apex. Inner carina impunctate (left one with two very small punctures posteriorly), outer carina with 20-22 punctures. Median groove with both anterior and posterior median pit developed, both pits about the same size. Basal impression wide, pollinose, paramedian groove complete. Epipleuron of pronotum with irregular row of punctures along whole length. Precoxal carina absent. Prosternite punctured only posteriorly and in impression of prosternal process, its whole surface pollinose.

All elytral striae distinctly impressed, densely punctate, narrow, interstriae slightly convex, not punctured. Base of stria IV with very distinct longitudinal pollinose scarp. Elytral chaetotaxy reduced, stria IV with one seta in apical part (on left elytron on base of apical tubercle), stria VII with 2-3 preapical setae. Metasternum without pollinosity, punctured sparsely on whole surface, lateral punctures larger, not distinctly pollinose on bottom. Female (Fig. 4) with large lateral pits in sternum IV and with relatively small, but



Figs. 3-4. *Omoglymmius (Omoglymmius) aruensis* sp. nov., holotype: 3- habitus, dorsal view; 4- habitus, ventral view. Without scale.

distinct punctures on surface of all abdominal sternites, arranged in two irregular transverse rows. Last visible sternite wholly punctured, and with one pair of setae near posterior margin.

Anterior femur with small but distinct, sharp ventral tooth in female.

Male. Unknown.

Differential diagnosis. *O. (O.) aruensis* sp. nov. is the first species of the nominotypical subgenus of *Omoglymmius* known from the Wokam Island (and from Aru Islands). The species is isolated within fauna of Moluccas and has no near relatives here. There are known only two *Omoglymmius* (s. str.) species with postorbital tubercles from Moluccas - *O. (O.) quadraticollis* and *O. (O.) repetitus*, but they both differs from *O. (O.) aruensis* sp. nov. by postorbital tubercles small, visible only in lateral view, by the shape of pronotum, shape of median lobe, punctuation of pronotal carinae, elytral chaetotaxy, obtuse ventral profemoral tooth etc. and evidently strongly differs from *O. (O.) aruensis* sp. nov. Morphologically more similar to the *O. (O.) aruensis* sp. nov. are two species from New Guinea - *O. (O.) capito*

(Grouvelle, 1895) and *O. (O.) largus* R. T. Bell & J. R. Bell, 1985. They both share with the new species following characters: large and prominent postorbital tubercles, pattern of punctuation of pronotal carinae, proportions of head, acute ventral profemoral tooth in female (if known) etc. and probably are the nearest known relatives.

Name derivation. The species is named according to its type locality, Aru Islands in South-Eastern Moluccas.

ACKNOWLEDGEMENT. I am very grateful to my colleague Stanislav Jákł (Prague, Czech Republic) for the kind donation of the material of Rhsodini.

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Received: 30.11.2022

Accepted: 10.12.2022

Printed: 31.3.2023

