

**A new *Yamatosa* species from China (Coleoptera: Carabidae: Rhysodini)
and new distributional records of *Omoglymmius sakuraii* (Nakane, 1973)**

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Abstract. *Yamatosa reuteri* sp. nov. from Chinese province Yunnan is described, illustrated and compared with the congeners from the region of South-East Asia. *Omoglymmius (Omoglymmius) sakuraii* (Nakane, 1973) is for the first time reported from the Chinese province Yunnan.

INTRODUCTION

The genus *Yamatosa* R. T. Bell et J. R. Bell, 1979 is a genus of Rhysodini known from South Eastern Asia and comprises seventeen known species. The species of the genus occurs in south-eastern part of the Palaearctic Region (from Kashmir in widest sense through Nepal, Bhutan and southern Chinese provinces Sichuan and Yunnan to Taiwan and Japan) and mainly in Oriental Region from Indochinese and Malay peninsula to Greater Sunda Islands Java, Sumatra and Borneo (Bell & Bell 1978, 1979, 1985, 1987, 1989, 2002, 2009; Hovorka 2010, 2015). The purpose of the present work is to describe a new palaearctic species belonging to this genus.

MATERIAL AND METHODS

The present paper is based on the study of type material of the new species described below and available congeners from the author's collection. The specimens included in the present study are deposited in the following private collections:

OHPC Oldřich Hovorka collection, Praha, Czech Republic;

CRPC Christoph Reuter collection, Hamburg, Germany;

DWPC David W. Wrase collection, Berlin, Germany.

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 Bell & Bell (1978, 1979).

All type specimens of the newly described species are provided with one red printed label: “*Yamatosa / reuteri* sp. nov. / HOLOTYPE (or PARATYPE) / det. O. Hovorka, 2018”.

DESCRIPTION OF NEW SPECIES

Yamatosa reuteri sp. nov.

(Figs. 1-8)

Type material. Holotype (♂): “China, Yunnan, SW / Jingdong, Maotou Shan / 24°23' N, 100°45' E / 1300-1600 m, 16.-18. VI. / 2014, leg. C. Reuter” (OHPC). Paratypes (2 ♀♀): the same data as holotype (CRPC, DWPC).

Description. Habitus (Fig. 1) - the new species is medium-sized, habitually very similar to its congeners. Body colour (including antennae) is dark brown, legs are brown with femora darker than tibiae and tarsi. Palpomeres yellow-brown. Body elongate, narrow. TL 7.5-7.8 mm. Head slightly shorter than wide, HL:HW 0.91-0.93. Pronotum 1.22-1.25 times wider than head, distinctly longer than wide (PL:PW 1.38-1.42). Elytrae elongate, EL:EW 2.52-2.62, widest near the midlength.

Head (Fig. 3) slightly transverse, with large, distinctly convex eyes; the eyes are large in male holotype and head is widest in the line across the eyes, head of female is widest posteriad the eyes. Antennae - antennomere XI longer than wide, acute on apex but without distinct apical stylet. Anterior tentorial pits relatively small, but distinct. Frontal and postclypeal grooves narrow, but deep and distinct, clypeal and antennal grooves very narrow, shallow, less distinct than frontal one, orbital groove present, but very short, reaching to anterior fifth of eye. Median lobe relatively long, its tip much narrower and sharper than in *Y. sinensis* or *Y. boysi*. Temporal lobe shallowly sinuate in front of obtuse-angled and rounded median angles, latter not separated; frontal space narrow, much narrower than in *Y. sinensis* or *Y. boysi*; margin of temporal lobe posterior to median angle convex, occipital angle widely rounded, indistinct. Mentum (Fig. 4) with curved row of setae along anterior margin and with group of setigerous punctures in anterior half; with a pair of large postlabial setae. Both clypeus and labrum with one pair of large setae.

Pronotum (Fig. 2) elongate, its sides slightly convex, widest point posteriad the middle, slightly narrowed at the base, more strongly at apex. Lateral pronotal margin sinuate before hind angle, without lateral setae. Marginal grooves complete. Discal striole extending anteriorly to 0.60 pronotal length. Precoxal carina absent. Prosternal process with central elongate medial impression between coxal cavities and terminally with slightly deeper transverse fovea.

Elytral striae I-V impressed so that intervals convex, with deep, slightly elongate punctures, striae VI and VII not impressed, formed only by rows of shallow punctures.



Figs. 1-8. *Yamatosa reuteri* sp. nov.: 1- habitus (male holotype); 2- head and pronotum, dorsal view; 3- head of male holotype, dorsal view; 4- head of female paratype, ventral view; 5- metasternum and abdomen; 6- hind tibia of male; 7- median lobe of aedeagus in left lateral view and left paramere; 8- aedeagus in dorso-apical view. Without scales.

Elytral striae II and III slightly, striae V, VI and VII very distinctly abbreviated at base; striae VI and VII strongly reduced, stria VI shortened not only basally, but also apically; stria VII present only on posterior half of elytron. Humeral tubercle moderately prominent. Elytral setae absent, only transverse apical portion of elytral stria VII with row of 4-7 setae. Metasternum (Fig. 5) with only one irregular row of punctures along lateral margins, in the middle posteriorly with shallow longitudinal depression.

Abdominal sternites (Fig. 5) punctured, towards the middle punctures smaller and sparser. Abdominal sternite III with shallow basal elongate depression, abdominal sternite

IV with distinct lateral pits. Anterior femur with ventral tooth in both sexes, male without modifications of anterior tibia, but with much larger femoral tooth than female. Hind calcar of male (Fig. 6) relatively large, its tip sharp. Median lobe of aedeagus and left paramere as in Figs. 7-8.

Differential diagnosis. The newly described species is characterized by unique set of characters and differs from all its congeners by the following combination of characters: pronotal marginal groove complete, prothoracic pleuron impunctate, discal striole of pronotum extending anteriorly to 0.6 length of pronotum, prosternum without distinct precoxal carina, antennomere XI without stylet, mentum with punctures medially, profemoral tooth present in both sexes, eyes not reduced, head widest across the eyes in male, elytral striae VI and VII strongly reduced, but not absent, hind calcar of male relatively large with sharp tip.

Species with absent or reduced pronotal marginal groove (*Y. sinensis* R. T. Bell et J. R. Bell, 1987, *Y. reitteri* (R. T. Bell, 1977), *Y. schawalleri* R. T. Bell et J. R. Bell, 2002 and *Y. haucki* Hovorka, 2015) are easily recognizable from *Yamatosa reuteri* sp. nov. (but the species *Y. schawalleri* shares with the new species some important characters, as reduction of elytral striae VI and VII, reduced elytral chaetotaxy, presence of femoral tooth etc.).

Y. reuteri sp. nov. differs from its congeners with complete pronotal marginal groove by impunctate prothoracic pleuron (x *Y. kryzhanovskiyi* R. T. Bell et J. R. Bell, 1985), by relatively short discal pronotal striole (x *Y. arrowi* (Grouvelle, 1908)), by absence of precoxal carina (x *Y. longior* (Grouvelle, 1903) and *Y. peninsularis* (Arrow, 1942)), by absence of antennal stylet (x *Y. niponensis* (Lewis, 1888), *Y. kabakovi* R. T. Bell et J. R. Bell, 1985, *Y. phuka* R. T. Bell et J. R. Bell, 2009 and *Y. laotina* Hovorka, 2015), by presence of profemoral tooth (x *Y. smetanorum* R. T. Bell et J. R. Bell, 1989 and *Y. bacca* R. T. Bell et J. R. Bell, 2011), by not reduced eyes (x *Y. draco* (R. T. Bell, 1977) and *Y. boysi* (Arrow, 1901)) and by medially punctured mentum and widely rounded occipital angle of temporal lobe (x *Y. jakli* Hovorka, 2010).

Yamatosa reuteri sp. nov. shares most diagnostic characters with species *Y. jakli* and *Y. draco*, some even with *Y. schawalleri*; however, none of these species seems to be really closely related and true sister-species to *Y. reuteri* sp. nov.

Name derivation. The species is named in honour of its collector, Christoph Reuter (Hamburg, Germany).

DISTRIBUTIONAL RECORD

Omoglymmius (Omoglymmius) sakurarii (Nakane, 1973)

Remarks. The species was described from Japan (Rjukjus), later reported by R. T. Bell & J. R. Bell (1987) from Japanese island Kyushu and particularly from Vietnam, more exactly from former Tonkin (North Vietnam), but both Bell (2003) and Huber et. al. (2017) report this species still only from Rjukjus, the record from Japanese island Kyushu was omitted.

Recently, I obtained for determination series of specimens (2 ♂♂ and 5 ♀♀ - OHPC, CRPC, DWPC) belonging evidently to this species (sensu R. T. Bell & J. R. Bell 1982, 1987) labelled: "China, Yunnan, SW / Jingdong, Maotou Shan / 24°23' N, 100°45' E / 1300-1600 m, 16.-18. VI. / 2014, leg. C. Reuter". The species is new to the fauna of China (Yunnan).

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REFERENCES

- BELL R. T. 2003: *Family Rhysodidae Laporte, 1840*. p. 78. In: LÖBL I. & SMETANA A. (Eds.): *Catalogue of Palaearctic Coleoptera. Vol. 1. Archostemata - Myxophaga - Adephaga*. Apollo Books, Stenstrup, 819 pp.
- 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. 1985: Rhysodini of the World Part IV. Revisions of *Rhysodiastes* and *Clinidium*, with new species in other genera (Coleoptera: Carabidae or Rhysodidae). *Quaestiones Entomologicae* 21(1): 1-172.
- BELL R. T. & BELL J. R. 1987: Rhysodine beetles in the Geneva collection: a new species of *Yamatosa*, and a major range extension for *Omoglymmius sakuraii* Nakane (Coleoptera: Carabidae or Rhysodidae). *Revue Suisse de Zoologie* 94: 683-686.
- BELL R. T. & BELL J. R. 1989: Rhysodine beetles in the Geneva collection II: new species of *Yamatosa* and *Omoglymmius*, descriptions of undescribed sexes in other species, and some major range extensions (Coleoptera: Carabidae or Rhysodidae). *Revue Suisse de Zoologie* 96: 637-642.
- BELL R. T. & BELL J. R. 2002: Two new species of Rhysodini (Coleoptera: Carabidae) with revised keys to *Yamatosa* Bell & Bell and *Omoglymmius* (*Pyxiglymmius*) Bell & Bell. *Stuttgarter Beiträge zur Naturkunde, Serie A (Biologie)* 636: 1-7.
- BELL R. T. & BELL J. R. 2009: Rhysodine beetles (Insecta: Coleoptera: Carabidae): new species, new data III. *Annals of Carnegie Museum* 78: 45-77.
- HOVORKA O. 2010: New *Yamatosa* species (Coleoptera: Carabidae: Rhysodini) from Borneo. *Studies and Reports, Taxonomical Series* 6: 91-94.
- HOVORKA O. 2015: Two new *Yamatosa* species (Coleoptera, Carabidae, Rhysodini) from Laos. *Folia Heyrovskyana series A* 23(1): 21-26.
- HUBER C., MARGGI W. & LÖBL I. 2017: *Family Rhysodidae Laporte, 1840*. Pp. 29-31. In: LÖBL I. & LÖBL D. (Eds) *Catalogue of Palaearctic Coleoptera. Vol. 1. Archostemata - Myxophaga - Adephaga. Revised and updated edition*. Koninklijke Brill, Leiden, XXXIV + 1443 pp.

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