New species of the genus *Rhopalotettix* Hancock, 1910 (Orthoptera: Tetrigidae, Metrodorinae) from Vietnam

Новый вид рода *Rhopalotettix* Hancock, 1910 (Orthoptera: Tetrigidae, Metrodorinae) из Вьетнама

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Rhopalotettix vietnamensis sp. nov. is described from Vietnam. The new species is similar to R. chinensis Tinkham, 1939 in a distinct median carina of the fastigium (in all the other congeners, median carina is absent) and differs from the latter species by the rostrum with almost parallel lateral sides and by a narrow tegmen, visible part of which is 2.3 times narrower than mid femur (in R. chinensis, rostrum with the lateral sides gradually converging to the acute apex, and visible part of tegmen is almost as broad as mid femur).

Из Вьетнама описан *Rhopalotettix vietnamensis* **sp. nov.** По наличию срединного киля на вершине темени новый вид сходен с R. chinensis Tinkham, 1939 и ясно отличается от всех остальных видов рода, у которых вершина темени лишена срединного киля. Однако, у нового вида вершина темени с параллельными сторонами и надкрылья очень узкие, в 2.3 раза уже среднего бедра, тогда как у R. chinensis темя ясно сужается к вершине, а ширина видимой части надкрылья равна ширине среднего бедра.

**Key words:** pygmy grasshoppers, taxonomy, Vietnam, Orthoptera, Tetrigidae, Metrodorinae, *Rhopalotettix*, new species

**Ключевые слова:** прыгунчики, таксономия, Вьетнам, Orthoptera, Tetrigidae, Metrodorinae, *Rhopalotettix*, новый вид

### **INTRODUCTION**

The genus *Rhopalotettix* Hancock, 1910 consists of eight species distributed in the Oriental Region, namely *R. chinensis* Tinkham, 1939 from China (Guangdong), *R. clavipes* Hancock, 1910 with two subspecies, *R. c. clavipes* s. str. from Indonesia (Sumatra) and *R. c. borneensis* Tinkham, 1939 from Malaysia (Borneo), *R. gracilis* (Willemse, 1928) from Indonesia (Sumatra), *R. guangxiensis* Zheng et Jiang, 1998 from China (Guangxi), *R. hainanensis* Tinkham, 1939 from China (Hainan), *R. taipeien-*

sis Zhang, Yin et Yin, 2003 from Taiwan, R. taiwanensis Liang, 1993 from Taiwan, and R. uncusivertex Zheng, 2003 from China (Guangxi) (Hancock, 1910; Willemse, 1928; Tinkham, 1939; Liang, 1993; Jiang & Zheng, 1998; Liang & Zheng, 1998; Zhang et al., 2003; Zheng, 2003, 2005; Eades et al., 2015). One new species of this genus is found in Vietnam.

The photographs were made using a Canon EOS D6 digital camera with EF 100 mm f/2.8L Macro IS USM macro lens, Falcon Eyes Slk-2400S flash, and Combine ZM imaging software. The morphological

terminology follows Storozhenko and Paik (2007), except for the detailed terminology of the carinae that follows Devriese (1999). Length of body is measured from the frontal ridge to the apex of subgenital plate; all the other measurements are standardized for Tetrigidae (Tumbrinck, 2014). Holotype of the new species is deposited at the Zoological Institute of the Russian Academy of Sciences, St Petersburg.

### **SYSTEMATICS**

## Genus *Rhopalotettix* Hancock, 1910

Type species *Rhopalotettix clavipes* Hancock, 1910, by monotypy.

Note. Rhopalotettix clavipes is still (Eades et al., 2015) considered as the type species of this genus by subsequent designation of Willemse (1928). In original description of Rhopalotettix, only one species was included in this genus (Hancock, 1910); therefore according to the Article 68.3 of the Code of Zoological Nomenclature (International Commission on Zoological Nomenclature, 1999), type species of this genus is R. clavipes by monotypy.

# **Rhopalotettix vietnamensis** Storozhenko, sp. nov. (Figs 1–3)

Holotype. Female; Vietnam, Binh Phuok Prov., 13 km NE of Bu Gia Map Vill., Bu Gia Map National Park, 12°11′37′′N, 107°12′21′′E, 18–31 May 2011, L.N. Anisytkin, A.E. Anichkin.

Description. Female. Body of moderate size for genus, slender. Antennae filiform, 15-segmented; length of antenna 1.3 times as long as fore femur; mid segments of antennae 6.6–6.9 times as long as wide. Antennal sockets situated at level of lower margin of eyes. Eye protruding above pronotum. Fastigium of vertex forming rostrum directed forwards and 1.2 times as long as horizontal diameter of eye in lateral view; fastigium between eyes 1.4 times as wide as one eye in dorsal view; median carina of fastigium distinct; supraocular lobes absent; in dorsal

view, rostrum with parallel lateral sides and triangle apex. Frontal ridge in lateral view with deep excision between eyes; apex of ridge directed forward; length of median carina of frontal ridge 7.5 times as long as width of first antennal segment; lateral carinae of frontal ridge in frontal view weakly divergent below antennal socket; first antennal segment twice as wide as frontal ridge between antennae.

Pronotum in dorsal view with straight anterior margin; posterior process of pronotum projected behind apex of hind femora for 1 mm. Median carina of pronotum in lateral view low, almost straight; lateral carinae in prozona distinct, also straight; prozona 1.1 times as wide as long; humero-apical carinae distinct; external lateral carinae almost straight; extralateral carinae reaching apex of pronotum; interhumeral carinae long. Posterior margin of lateral lobe of pronotum in lateral view bisinuate: tegminal (upper) sinus clearly shallower than ventral sinus; lower part of lateral lobes with large truncate projection directed partly backwards and outwards.

Visible part of tegmen narrow, 3.6 times as long as wide, and 2.3 times narrower than maximal width of mid femora. Hind wing long, projected behind apex of posterior pronotal process for 0.3 mm.

Fore and mid femora with straight upper and lower margins; fore femur 4.7 times and mid femur 4.1 times as long as wide. Fore tarsi with basitarsus as wide as second segment and distinctly shorter than this segment without claws. Hind femur 3.4 times as long as wide, with gently dentate upper and lower carinae. Dorsal side of hind tibia with 3–5 outer and 3 inner spines and numerous denticles between them. Hind tarsi with basitarsus 1.2 times shorter than third segment without claws; this basitarsus with three almost equal triangular pads on dorsal side and with two rows of denticles on ventral side.

Epiproct narrowly triangular, with pointed apex. Subgenital plate 1.1 times as long as wide, with angular posteromedian



Figs 1–3. Rhopalotettix vietnamensis sp. nov., female: 1, body, lateral view; 2, same, dorsal view; 3, head and pronotum, frontal view. Scale bar: 1 mm.

projection, and with distinct longitudinal creases situated near base of this projection. Cerci strongly widened basally and distinctly attenuated in distal half. Valves of ovipositor narrow; upper valve dorsally and lower valve ventrally with row of small denticles; each denticle armed by long setae; upper valve 5.6 times and lower valve 7.5 times as long as their maximum width.

General coloration of body dark brown. Antennae brown with light brown preapical segments. Eyes light brown. Legs blackish brown, excepting hind tarsi: their basitarsus and second segment black dorsally and light brown ventrally, third segment light brown with blackish distal part, and claws brown.

Male unknown.

Length in mm. Body 12; pronotum 11.1;

antenna 3.6; tegmen 1.1; fore femur 2.8; mid femur 2.8; hind femur 6.7; hind tibia 5.2; ovipositor 1.6.

*Distribution.* Vietnam: Binh Phuok Province.

Comparison. The new species is similar to *R. chinensis* in a long median carina of the fastigium (in all the other congeners, the median carina of fastigium is absent), but it differs from the latter species by the shape of rostrum in the dorsal view and a narrow tegmen (in *R. chinensis*, the rostrum is gradually converging to the acute apex and visible part of the tegmen is almost as wide as mid femur).

*Etymology*. The new species is named after Vietnam where this species was collected.

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