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## A NEW SPECIES OF THE GENUS *TAMDAOTETTIX* (ORTHOPTERA: RHAPHIDOPHORIDAE) FROM YUNNAN WITH A KEY TO CHINESE SPECIES

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**Summary.** A new species *Tamdaotettix* (*Laotettix*) *truncatus* Qin, Wang et Li, **sp. n.** is described from China (Yunnan). New species is most similar to *T. (L.) curvatus* Gorochov et Storozhenko, 2015 but differs from the latter in the shape of male 6th and 7th abdominal tergites and the shape of female subgenital plate. A key to the Chinese species of the genus is provided.

**Key words:** Orthoptera, Rhaphidophoridae, *Tamdaotettix*, taxonomy, key, new species, South Asia.

**Я. Цинь, Х. Ванг, К. Ли. Новый вид рода *Tamdaotettix* (Orthoptera: Rhaphidophoridae) из провинции Юньнань с определительной таблицей китайских видов // Дальневосточный энтомолог. 2019. N 387. С. 1-6.**

**Резюме.** Из провинции Юньнань (Китай) описан новый вид *Tamdaotettix* (*Laotettix*) *truncatus* Qin, Wang et Li, **sp. n.** Новый вид наиболее близок к *T. (L.) curvatus* Gorochov et Storozhenko, 2015, но отличается от него формой 6-го и 7-го тергитов брюшка самца и генитальной пластинки самки. Также приведена определительная таблица известных из Китая видов рода.

## INTRODUCTION

The genus *Tamdaotettix* Gorochov, 1998 consists of 17 species distributed in Laos, Vietnam and South China (Gorochov & Storozhenko, 1992; Gorochov, 1998; Gorochov & Storozhenko, 2015; Qin *et al.*, 2016; Zhu *et al.*, 2018; Cigliano *et al.*, 2019; Gorochov & Storozhenko, 2019). It was divided into two subgenera: *Tamdaotettix* s. str. and *Laotettix* Gorochov et Storozhenko, 2015. Up to now, there are 11 species in the nominotypical subgenus: *T. (T.) aculeatus* Gorochov et Storozhenko, 2015 (Vietnam), *T. (T.) ailaoshanicus* Gorochov et Storozhenko, 2019 (China: Yunnan), *T. (T.) dilutus* (Gorochov, 1998) (Vietnam; China: Yunnan), *T. (T.) flexus* Gorochov et Storozhenko, 2015 (Vietnam), *T. (T.) laocai* Gorochov et Storozhenko, 2015 (Vietnam), *T. (T.) longituberus* Zhu, Bian et Shi, 2018 (China: Guangxi), *T. (T.) minipullus* Gorochov et Storozhenko, 2019 (Vietnam), *T. (T.) pullus* (Gorochov, 1998) (Vietnam), *T. (T.) semipullus* (Gorochov, 1998) (Vietnam), *T. (T.) tridenticulatus* Qin, Liu et Li, 2016 (China: Guangxi, Guizhou), and *T. (T.) vinhphuensis* (Gorochov, 1992) (Vietnam). The subgenus *Laotettix* consists of five species: *T. (L.) curvatus* Gorochov et Storozhenko, 2015 (Laos, China: Yunnan), *T. (L.) inflatus* Gorochov et Storozhenko, 2015 (Laos), *T. (L.) minutus* Gorochov et Storozhenko, 2015 (Laos), *T. (L.) sympatricus* Gorochov et Storozhenko, 2015 (Laos), and *T. (L.) tarasovi* Gorochov et Storozhenko, 2015 (Laos). The subgeneric position of *Tamdaotettix robustus* Gorochov et Storozhenko, 2015 from Vietnam is uncertain.

In this paper, a new species of the subgenus *Laotettix* is described and a key to species of the genus *Tamdaotettix* distributed in China is provided.

## MATERIAL AND METHODS

The type specimens are deposited in Shanghai Entomological Museum, Chinese Academy of Sciences (SEM). Morphological characteristics were examined using a Leica MZ 125 dissecting microscope and illustrated with aid of a drawing tube attached to the microscope. Line arts were produced by Adobe Illustrator CS5 graphic software.

## TAXONOMY

### Family Rhaphidophoridae Walker, 1869

### Subfamily Aemodogryllinae Jacobson, 1905

### Tribe Diestramimini Gorochov, 1998

### Genus *Tamdaotettix* Gorochov, 1998

*Tamdaotettix* Gorochov, 1998: 81; Storozhenko & Dawwrueng, 2014: 289; Gorochov & Storozhenko, 2015: 52; Qin *et al.*, 2016: 339; Zhu *et al.*, 2018: 294; Gorochov & Storozhenko, 2019: 151.

Type species: *Tamdaotettix dilutus* Gorochov, 1998, by original designation.

DIAGNOSIS. Body is smaller than in majority of the other genera of Diestramini. Pronotum with dorsal edge arcuate and convex. Male posteromedian process of 7th abdominal tergite rather short; posteromedian process of 6th abdominal often angular or spine-like. Male paraproct simple. Male genitalia consists of six rather simple and completely membranous lobes (three dorsal and three ventral lobes; the ventrolateral lobes not very long and undivided). Female paraproct simple; upper valve of ovipositor with distinct dorsal notch near apex or without it. *Tamdaotettix* is most similar to the genus *Mimadiestra* Storozhenko et Dawwrueng, 2014 but differs from the latter in characters given in a key (Gorochov & Storozhenko, 2015).

COMPOSITION. There are 17 species known from Laos, Vietnam and South China. Up to now five species has been recorded from Yunnan, Guizhou and Guangxi provinces of China. One new species is described in present paper. A key to six Chinese species is given below.

#### Key to Chinese species of *Tamdaotettix*

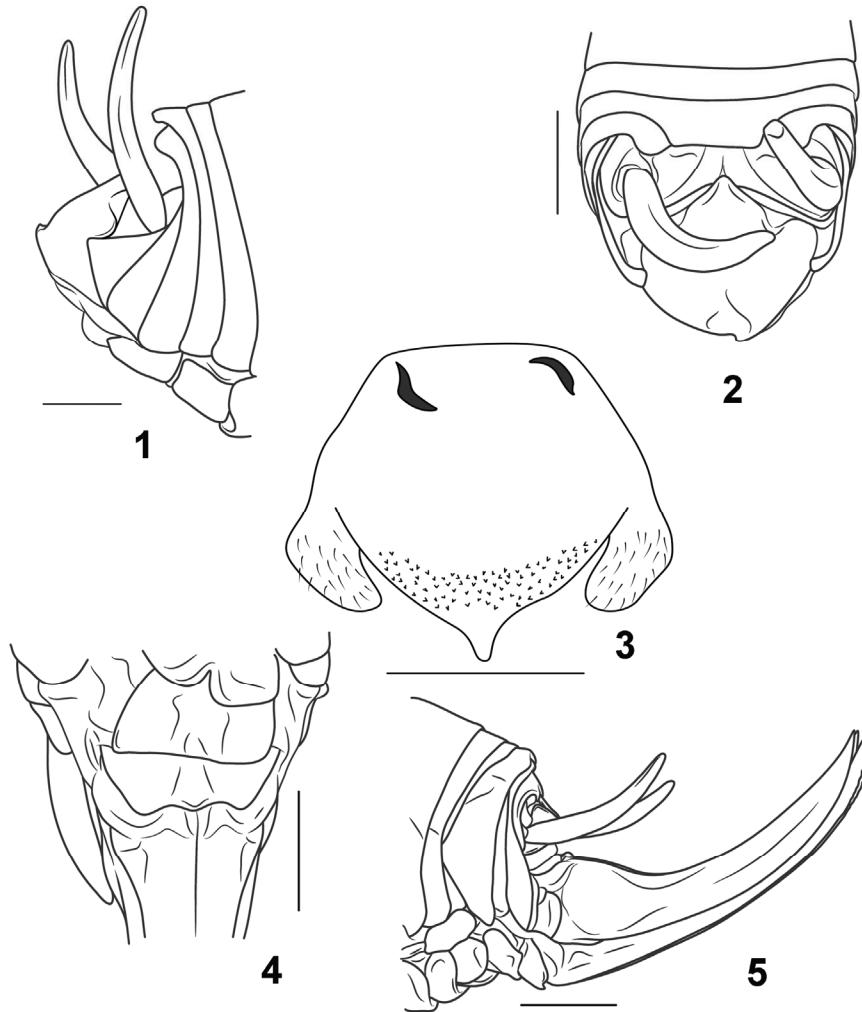
1. Male: posteromedian process of 6th abdominal tergite with apex angular or spine-like. Female: subgenital plate slightly transverse and apex not truncated (subgenus *Tamdaotettix* s. str.) ..... 2
  - Male: posteromedian process of 6th abdominal tergite without angular or spine-like apex; subgenital plate of female strongly transverse and apex almost truncated or concave (subgenus *Laotettix*) ..... 5
2. Male: posteromedian process of 6th abdominal tergite with a long spine-like projection, its apex obviously reaching apex of process of 7th abdominal tergite ..... *T. (T.) longituberus* Zhu, Bian et Shi, 2018
  - Male: posteromedian process of 6th abdominal tergite with a short spine-like projection, its apex not reaching apex of process of 7th abdominal tergite ..... 3
3. Male: posteromedian process of 6th abdominal tergite with a small angular projection, its apex obviously shorter than the process of 7th abdominal tergite; process of 7th abdominal tergite with 3 spines in hind margin ..... *T. (T.) tridenticulatus* Qin, Liu et Li, 2016
  - Male: posteromedian process of 6th abdominal tergite triangular, basal area slightly broad, gradually narrowing to apex, its apex almost equal to process of 7th abdominal tergite; process of 7th abdominal tergite short and broad, apex acute ..... 4
4. Male: posteromedian process of 6th abdominal tergite without apical denticles ..... *T. (T.) dilutus* Gorochov, 1998
  - Male: posteromedian process of 6th abdominal tergite with a pair of apical denticles ..... *T. (T.) ailaoshanicus* Gorochov et Storozhenko, 2019
5. Male: posteromedian process of 6th abdominal tergite with apex blunt, the apex not reaching apex of process of 7th abdominal tergite. Female: subgenital plate roundly truncate at apex ..... *T. (L.) curvatus* Gorochov et Storozhenko, 2015
  - Male: posteromedian process of 6th abdominal tergite with apex truncated, the apex reaching apex of process of 7th abdominal tergite. Female: subgenital plate distinctly concave at apex ..... *T. (L.) truncatus* Qin, Wang et Li, **sp. n.**

***Tamdaotettix (Laotettix) truncatus* Qin, Wang et Li, sp. n.**

<http://zoobank.org/NomenclaturalActs/9D16AB12-3ED1-439E-A3C2-2D67BE2063BA>

Figs 1–5

TYPE MATERIAL. Holotype – ♂, **China**: Yunnan province, Nabanhe N. R., Bangganhani, 2200–2300 m, 29.IV 2009, leg. Jia-Yao Hu & Zi-Wei Yin (SEM). Paratypes: 1♂, 2♀, the same data as the holotype (SEM).



Figs. 1–5. *Tamdaotettix (Laotettix) truncatus* sp. n. 1 – male abdominal apex, lateral view; 2 – male abdominal apex, dorsal view; 3 – male genitalia, dorsal view; 4 – female abdominal apex, ventral view; 5 – female abdominal apex, lateral view. Scale bar = 1mm.

DESCRIPTION. MALE. Body small, shining. Head with fastigium of vertex divided into two conical tubercles, completely fused. Legs slender; fore femur about 1.3 times as long as the pronotum, beneath unarmed, external genicular lobe with a long movable spine; fore tibiae beneath with 2 external and 2 internal movable spines, between the paired apical spurs with a short spur. Mid femur with a long movable spine on the external and internal genicular lobe; mid tibiae beneath with 2 external and 1 internal movable spines, between the paired apical spurs with a short spur. Hind femur beneath with 5–6 external small spines and without external spines; hind tibiae above with 50–54 outer spines and 45–49 inter spines, inner supra apical spur of hind tibiae slightly longer than the hind metatarsus. Hind metatarsus with 2–3 dorsal spines, including the apical spine. Posteromedian process of 6th abdominal tergite with a truncated apex, reaching the apex of 7th abdominal tergite, its apex obviously wider than apex of 6th abdominal tergite (Figs 1, 2). Male genitalia: dorsolateral lobes short, dorsomedian lobe broad with lingua-like apical part (Fig. 3).

FEMALE. Subgenital plate transverse, at middle part of hind margin with a small projection (Fig. 4). Ovipositor shorter than the half of hind femur; upper valve of ovipositor without dorsal notch near apex (Fig. 5).

COLORATION. Body dark brown, shining. Tergites with a greyish white band, the length of band is variable in different specimens. Frons light, with four dark longitudinal bands from vertex to clypeus. Legs dark brown, without obvious stripes.

MEASUREMENTS (length in mm). Body: ♂ 8.0–10.0, ♀ 8.5–10.0; pronotum: ♂ 4.5–5.0, ♀ 4.5; fore femora: ♂ 6.0–6.5, ♀ 5.5–6.0; hind femora: ♂ 13.0–13.5, ♀ missing femora; hind tibiae: ♂ 13.5–14.5, ♀ missing tibiae; ovipositor ♀ 6.0–6.5.

DIAGNOSIS. The new species is similar to *Tamdaotettix* (*Laotettix*) *curvatus* Gorochov et Storozhenko, 2015, but differs from the latter in the male posteromedian process of 6th abdominal tergite with a truncated apex, which reaches apex of process of 7th abdominal tergite, but the process of 7th tergite obviously wider than the former (Figs 1, 2) (in *T. curvatus*, the process of 6th abdominal tergite with blunt apex, process of 7th abdominal tergite with concave apex, apex of 6th tergite process not reaching apex of 7th tergite process).

DISTRIBUTION. China (Yunnan).

ETHYMOLOGY. This species is named after a truncated apex of male posteromedian process of 6th abdominal tergite.

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