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FIRST DISCOVERY OF THE MALE OF *TERATURA* (*STENOTERATURA*) *KRYZHANOVSKII* (BEY-BIENKO, 1957) (ORTHOPTERA: TETTIGONIIDAE: MECONEMATINAE)

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Summary. The previously unknown male of *Teratura* (*Stenoteratura*) *kryzhanovskii* (Bey-Bienko, 1957) is described and illustrated. The female of this species is also redescribed and illustrated based on examination of the holotype and additional specimen.

Key words: Orthoptera, Tettigoniidae, *Teratura kryzhanovskii*, male, description, China.

Т. Ванг, Ф. М. Ши. Находка самца *Teratura* (*Stenoteratura*) *kryzhanovskii* (Bey-Bienko, 1957) (Orthoptera: Tettigoniidae: Meconematinae) // Дальневосточный энтомолог. 2018. N 358. С. 19-23.

Резюме. Описан ранее неизвестный самец *Teratura* (*Stenoteratura*) *kryzhanovskii* (Bey-Bienko, 1957). Приведено переописание самки этого вида на основании изучения голотипа и дополнительного материала.

INTRODUCTION

The subgenus *Stenoteratura* Gorochov, 1993 of the genus *Teratura* Redtenbacher, 1891 was proposed with *Xiphidiopsis yunnanea* Bey-Bienko, 1957 as the type species (Gorochov, 1993). The diagnosis of this subgenus is as follows: posterior processes of male 10th abdominal tergite narrow and rather short; cerci strongly curved, with teeth on the internal margins; apex of epiproct only with lateral hook-like processes; subgenital plate of female with short and wide apical half provided with 3 lobes. Up to now, the subgenus includes five species, namely *T.* (*S.*) *bhutanica* Ingrisch, 2002, *T.* (*S.*) *janetscheki* (Bey-Bienko, 1968), *T.* (*S.*) *kryzhanovskii* (Bey-Bienko, 1957), *T.* (*S.*) *subtilis* Gorochov et Kang, 2005, and *T.* (*S.*) *yunnanea* (Bey-Bienko, 1957) (Bey-Bienko, 1957, 1968; Ingrisch, 2002; Gorochov *et al.*, 2005; Cigliano *et al.*, 2018).

Xiphidiopsis kryzhanovskii Bey-Bienko, 1957 was described based on the female type specimen collected in Jingdong, Yunnan. Later it was transferred to the subgenus *Stenoteratura* by Gorochov (1993). Until now, the male of this species is unknown. We collected a pair of specimens of this species (1 male and 1 female) in Jingdong, Yunnan Province in 2017. In this paper we describe the previously unknown male, give supplementary description of the female, and provide the morphological photographs. The specimens examined are preserved in the Museum of Hebei University (MHU).

Morphological images were acquired using Leica M205A digital imaging system. The following conventions were adopted for the specimen measurements: body length – distance from apex of fastigium verticis to posterior margin of last abdominal tergite; pronotum length – distance from anterior to posterior margin of pronotum; tegmen length – distance from base of tegmen to the apex; hind femur length – distance from base of hind femur to apex of genicular lobe; ovipositor length – distance from base of subgenital plate to apex of ovipositor.

***Teratura* (*Stenoteratura*) *kryzhanovskii* (Bey-Bienko, 1957)**
Figs 1–14

Xiphidiopsis kryzhanovskii Bey-Bienko, 1957: 409, 416; Bey-Bienko, 1971: 844.
Teratura (*Stenoteratura*) *kryzhanovskii*: Gorochov, 1993: 71; Gorochov, 1998: 106; Gorochov *et al*., 2005: 70; Qiu & Shi, 2010: 49.

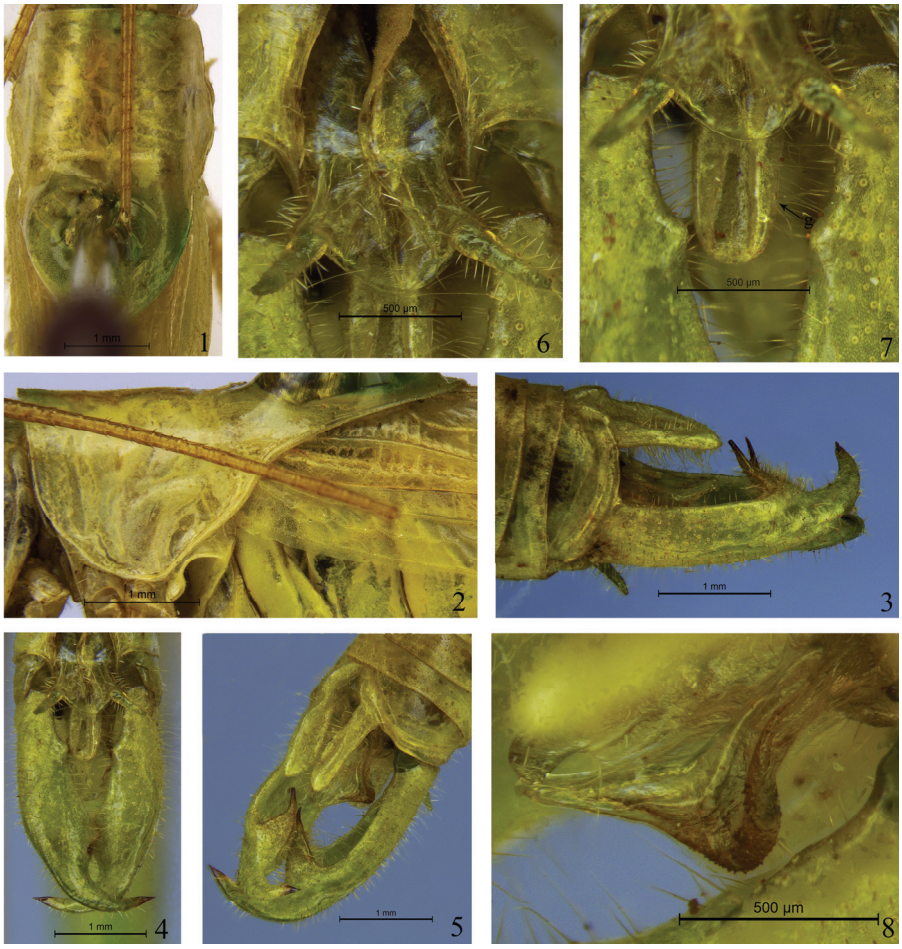
TYPE MATERIAL. Holotype – female; **China**: Yunnan Province, 30km N of Kingtun, 25.V 1956, coll. O. Kryzhanovskij; deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS); examined. OTHER MATERIAL EXAMINED. **China**: Yunnan Province, Jingdong, Jingfu, 12.VIII 2017, 1 ♂, coll. Tao Wang; the same locality, 11.VIII 2017, 1 ♀, coll. Tao Wang (MHU).

DESCRIPTION. MALE (*novum*). Fastigium verticis conical, narrower than antennal scape, blunt apically and grooved dorsally. Eyes globular, obviously protruding forwards. Apical segment of maxillary palpus nearly equal to subapical one, apex slightly swelled, truncate.

Anterior margin of pronotum straight, posterior margin rounded-angular (Fig. 1); lateral lobe wider than long, ventral margin arc-shaped, posterior margin undulating, humeral sinus distinct (Fig. 2).

Femora unarmed on ventral surface. Fore coxae with a short spine; inner margins of ventral surface of fore tibiae with 5 spines, outer margins with 6 spines, tympanal organ opened on both sides, oval. Middle tibiae with 5 inner and 6 outer spines on ventral margin. Genicular lobes of hind femora obtusely rounded; hind tibiae with 4 inner and 8 outer spines on ventral margin, 26–31 dorsal spines on each side, 2 pairs of ventral apical spurs and 1 pair of dorsal apical spurs.

Posterior processes of 10th abdominal tergite slightly long and compressed, apices obtusely rounded, slightly directed inwards, nearly touching each other at the apices, the basal area between posterior processes with a V-shaped notch. Cerci complex, nearly 1/3 basal areas cylindrical, inner margins of 2/3 apical areas concave, sulci-shaped (Fig. 5); inner margins of ventral surface of cercus 1/3 basal area with a hill-shaped process; inner margins of dorsal surface of cercus 1/3 apical area with a triangular process, terminal acute, directed dorso-forwards (Fig. 4); inner margins of ventral surface of cercus 1/3 apical area with a broad and short dentate process, terminal somewhat subacute; apices of cerci acute, strongly incurved, gently laterally compressed (Figs 3, 5). Subgenital plate nearly rectangular, posterior margin arc-shaped protruding backwards; styli long and conical, apices obtusely rounded, inserted on subapex of subgenital plate (Fig. 6). Male epiproct nearly rectangular in dorsal view, apex with a U-shaped notch, two lateral lobes protruding backwards, and curved inwards, hook-like, overlapping each other at apical part, apex of epiproct slightly directed dorso-backwards, subapex with a hill-shaped process, apex ronuded, directed downwards (Fig. 8). The male genitalia long and tongue-shaped, apex rounded, in the middle of ventral surface with a wide longitudinal sulcus (Fig. 7).



Figs 1–8. *Teratura* (*Stenoteratura*) *kryzhanovskii*, male. 1 – pronotum, dorsal view; 2 – same, lateral view; 3 – apex of abdomen, lateral view; 4 – same, ventral view; 5 – same, dorso-lateral view; 6 – subgenital plate, ventral view; 7 – genitalia, ventral view; 8 – epiproct, dorso-lateral view.

FEMALE. Lateral margins of 9th abdominal tergite protruding backwards, apices obtusely rounded; the middle of posterior margin of 10th abdominal tergite with a wide and shallow concavity, epiproct tongue-shaped, and apex obtusely rounded. Cerci conical, directed inner-dorsally. Subgenital plate trifoliate, two lateral lobes long and narrow, apices subacute; middle lobe short and broad, not reaching the middle of lateral lobes, obtusely triangular, apex obtusely rounded (Figs 12, 13). Ovipositor straight, ensiform, ventral and dorsal margins smooth, apices of ventral valvulae hook-like (Fig. 14), lateral processes at basal area of ovipositor distinct, conical, laterally compressed, apices obtusely rounded (Figs 9, 10, 11).

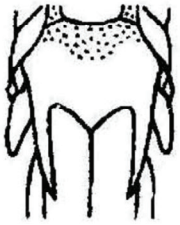
COLORATION. Body yellowish-green (alive may be green). Eyes light brown. Prozona of pronotum with two longitudinal lightly brown stripes. Tegmen uniformly colored, without

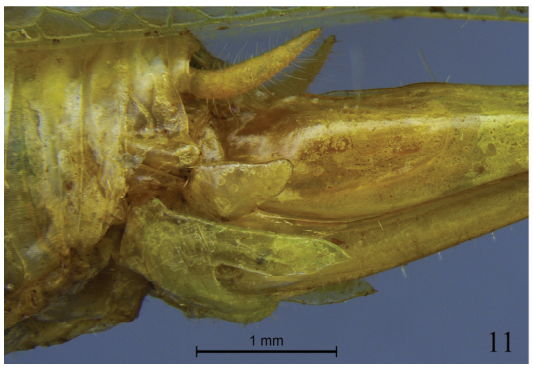
dark dot. Cerci of male light green, apices of triangular and dentate processes of cerci brown. Apical part of ovipositor light brown.

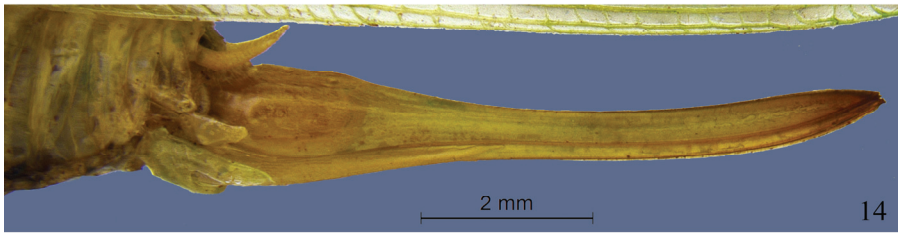
MEASUREMENTS (mm). Body: ♂ 11.7, ♀ 12.1; pronotum: ♂ 3.7, ♀ 5; hind femora: ♂ 9.7, ♀ 10.4; tegmina: ♂ 15.8, ♀ 18.8; ovipositor: 8.1.

DISTRIBUTION. China (Yunnan, Xizang).

NOTES. Gorochov *et al.* (2005) reported this species distributed in Chayu, Xizang. We do not examine the specimens and it remains to be proven whether or not they are this species.







Figs. 9–14. *Teratura* (*Stenoteratura*) *kryzhanovskii*, female. 9 – apex of abdomen, lateral view; 10, 11 – same, lateral view; 12, 13 – subgenital plate, ventral view; 14 – ovipositor, lateral view. (Fig. 9 from Bey-Bienko, 1957; Figs 10, 12 from Gorochov, 1998).

COMPARISON. The male of *T.* (*S.*) *kryzhanovskii* is remarkably different from *T.* (*S.*) *yunnanea* and *T.* (*S.*) *subtilis* by the structure of male cerci. However, the male of *T.* (*S.*) *kryzhanovskkii* is similar to *T.* (*S.*) *janetscheki*, but it differs from the latter in the triangular processes directed dorso-forwards on inner margins of dorsal surface of cerci 1/3 apical area broad and short; the processes on inner margins of ventral surface of cerci 1/3 apical area broad and short (compare Figs. 3–5 *vs*. Bey-Bienko, 1968: Fig. 11).

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