

## A NEW SPECIES OF THE GENUS *EOTMETHIS* BEI-BIENKO FROM CHINA ( ORTHOPTERA , ACRIDOIDEA , PAMPHAGIDAE , PRIONOTROPISINAE)

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**Abstract** A new species i. e. *Eotmethis cyanipes* sp. nov. of the genus *Eotmethis* Bei-Bienko ,1948 from China is described in this paper. The new species differs from all known species by hind femur and tibia all blue on inner side. The type specimens are deposited in College of Life Sciences , Hebei University , Baoding China.

**Key words** Orthoptera , Pamphagidae , *Eotmethis* , new species.

### 1 Introduction

The genus *Eotmethis* Bei-Bienko , 1948 belongs to Subfamily Prionotropisinae , family Pamphagidae , superfamily Acridioidea ( Zhang *et al.* , 2003 ) , including 8 species distributed mainly in Northwest China , especially Gansu , Shaanxi , Ningxia and the West of Neimenggu ( Bei-Bienko , 1948; Chang , 1978; Zheng *et al.* , 1981; Xi *et al.* , 1984; Zheng , 1985; Zheng *et al.* , 1985; Xi *et al.* , 1986; Zheng *et al.* , 1989; Zheng , 1992; Zheng , 1993; Xia *et al.* , 1994; Yin *et al.* , 1996; Yin *et al.* , 2011; Eades *et al.* , 2012) . During the identification of grasshopper specimens collected from Ningxia , China in 2003 , a new species of genus *Eotmethis* Bei-Bienko , 1948 , i. e. *E. cyanipes* sp. nov. is found and it is described below. The type specimens are deposited in College of Life Sciences , Hebei University , Baoding , China.

### 2 *Eotmethis cyanipes* sp. nov. ( Figs 1 – 2)

Holotype ♂ ; paratypes: 1 ♂ , 2 ♀ ♀ , Ningxia , Shizuishan ( 39°15'N , 106°41'E; alt. 1 180 m ) , 20 July 2003 , collected by LI Xin-Jiang and WANG Wen-Qiang.

Male ( Fig. 1) . Body medium-sized , thickset , with hairs , especially on legs. Vertex short and wide , the width between eyes is about 4 times as wide as width of frontal ridge at median ocellus; lateral aspects of vertex edged by distinct carina , extended to the middle of eyes. Fastigial furrow present. Vertex and dorsal side of head depressed , with granular tubercles. Frontal ridge distinct , between the bases of antennae projecting forward , constructed slightly under median

ocellus , widened gently downwards , widen distinctly near the base of labrum. Lateral facial carinae are distinct , but invisible in dorsal view. Eyes larger , near circle , the diameter equal to length of subocular suture. Antennae longer , 20 segments , length near equal to that of head and pronotum together , length 2.3 times width of them in the middle part. Pronotum rough , with short subuliform projection , anterior and posterior margin angled protruding; median carina elevated into lamellate , strongly incised on hind transverse sulcus; metazona almost as long as prozona , median carina of prozona cut by two transverse sulci , in metazona the carina arc-like raised. Prosternum with a strong lamellate process on anterior margin , with concave in the middle part; interspace of mesosternum lateral lobes trapezoid , wider , width of narrowest part larger than width of broadest part of lateral lobes distinctly. Tegmina shorter , reaching the 4th abdominal tergite only. Hind femur wide and compressed , length is almost equal to 4 times of width of broadest part; median carina of hind femur on the upper side serrated. Hind tibia with 9 spines on the inner side and 10 spines on the outer side ( including apical spine) . Arolium between claws of tarsus larger , its apex exceeding beyond the middle of claws. Tympanum organ developed , tympanal aperture expanded , tympanic flap smaller. Krause's organ near long triangle , with thinly rugose on surface. Abdomen dorsally with a row of tubercles in the middle. Epiproct near tongue-like , with longitudinal groove in middle. Cercus long conical. Subgenital plate short conical , apex taper.

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Figs 1–2. *Eotmethis cyanipes* sp. nov., body lateral view. 1. ♂. 2. ♀. Scale bars = 10 mm.

Female ( Fig. 2 ). Body larger and thick. Vertex extremely wider , the width between eyes was about 5 times as wide as width of frontal ridge between the bases of antennae. Length of antennae slightly shorter than length of head and pronotum together. Tegmina lobi-form , separated widely dorsum , the apex reaching the middle of second abdominal tergite , slightly longer than length of metazona. Cercus short conical. Subgenital plate projecting into an acute angle in the middle of posterior margin. Ovipositor valve tubbiness , apex hooked , outer margin of lower valve with concave behind the middle.

Coloration. Body grayish-brown. Tegmina of male with two light longitudinal stripes. Inner side of hind femur blue , pregenicular part yellowish-white. Inner side of hind tibia blue , tarsus yellowish-white.

Measurement ( in mm ) . Length of body: ♂ 23.8 – 25.2 , ♀ 32.9 – 34.1. Length of tegmina: ♂ 9.5 – 10.0 , ♀ 7.9 – 9.1. Length of hind femur: ♂ 12.5 – 12.9 , ♀ 16.1 – 16.4.

Diagnosis. The new species differs from all known species by the hind femur and tibia all blue on

inner side.

Etymology. The specific epithet is named for *cyan*- and *-pes* meaning the hind leg blue on inner side in Latin.

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## 中国突颜蝗属一新种 (直翅目, 蝗总科, 癩蝗科, 锯癩蝗亚科)

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**摘要** 记述了我国突颜蝗属1新种, 蓝足突颜蝗 *Eotmethis cyanipes* sp. nov., 模式标本保存于河北大学生命科学学院。

蓝足突颜蝗, 新种 *Eotmethis cyanipes* sp. nov. (图1~2)

新种因后足股节和胫节内侧全为蓝色而与所有已知种相区别。

**关键词** 直翅目, 癩蝗科, 突颜蝗属, 新种.

中图分类号 Q959.226

正模 ♂, 宁夏石嘴山 (39°15'N, 106°41'E; 海拔 1180 m), 2003-07-20, 李新江、王文强采。副模: 1 ♂, 2 ♀, 分布及采集同正模。

词源: 新种种名源自蓝色和后足两个单词的拉丁语。

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