

A new species in the genus *Pseudoeoscyllina* (Orthoptera: Acrididae) from Inner Mongolia, China

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Abstract: One new species in the genus *Pseudoeoscyllina* from Inner Mongolia is described, e.g. *Pseudoeoscyllina xilingensis* sp. nov. A key to all known species of this genus is given. Type specimens are deposited in the Institute of Zoology, Shaanxi Normal University.

Key words: Caelifera; Acridoidea; taxonomy

内蒙古拟埃蝗属一新种记述（直翅目：剑角蝗科）

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摘要: 记述采自内蒙古锡林浩特地区拟埃蝗属 1 新种, 即锡林拟埃蝗 *Pseudoeoscyllina xilingensis* sp. nov. 附有拟埃蝗属分种检索表。新种的模式标本保存于陕西师范大学动物研究所昆虫标本室。

关键词: 蝗亚目; 蝗总科; 分类

Introduction

The genus *Pseudoeoscyllina* was erected by Liang and Jia in 1992, with *Pseudoeoscyllina longicornis* Liang & Jia, 1992 as the type species. Zheng *et al.* (2006) described *Pseudoeoscyllina xinjiangensis* Zheng & Yang, 2006. Sun *et al.* (2008) described *Pseudoeoscyllina brevipennis* Sun & Zheng, 2008 and transferred *Eoscyllina rufitibialis* Li & Liu, 1992 into the genus *Pseudoeoscyllina*. Zhang *et al.* (2012) described *Pseudoeoscyllina brevipennsoides* Zhang, Zheng & Yang, 2012 and *Pseudoeoscyllina helanshanensis* Zheng, Zeng & Zhang, 2012. Zheng & Chen (2012) described *Pseudoeoscyllina golmudensis* Zheng & Chen, 2012. At this point, the genus *Pseudoeoscyllina* included seven species distributed in Inner Mongolia, Xinjiang, Heilongjiang and Guangxi.

During August 2014, one new species of the genus *Pseudoeoscyllina* in Catantopidae was found in a grasshopper survey in the Xilingol League of the Inner Mongolia Autonomous Region and is described below. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University.

Taxonomy

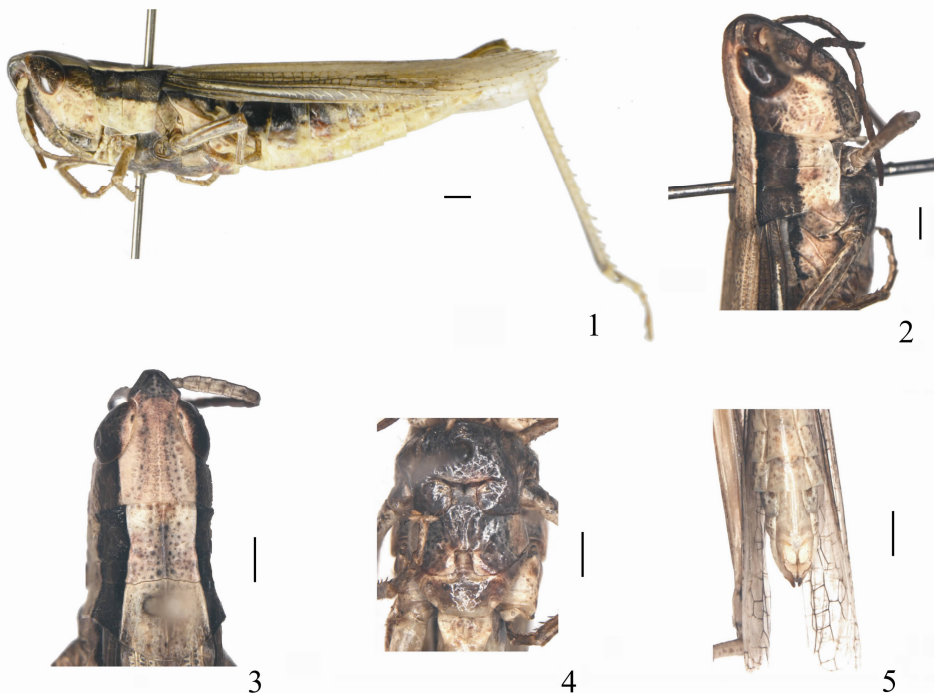
Key to species of *Pseudoeoscyllina*

1. Frontal ridge with longitudinal groove along whole length.....2
- Frontal ridge with longitudinal groove only below antennae.....4
2. Lateral margin of frontal ridge straight.....3
- Lateral margins of frontal ridge distinctly constricted above median ocellus. Tegmina (♀) reaching middle of hind femur, medial area slightly wider than cubital area. Longitudinal diameter of eyes 2 times horizontal diameter, 1.2 times length of subocular furrow. Heilongjiang (Beian).....*P. brevipennis* Sun & Zheng
3. Tegmina (♂) surpassing apex of hind femur, width of cubital area 1.3 times medial area. Longitudinal diameter of eyes 1.42 times horizontal diameter, 1.87 times length of subocular furrow. Inner Mongolia (Khorchin Youqianqi).....*P. longicorna* Liang & Jia
- Tegmina (♂) reaching middle of hind femur, width of cubital area 1.5 times medial area. Longitudinal diameter of eyes 2 times horizontal diameter, 1.6 times length of subocular furrow. Inner Mongolia (Helan Mountain).....*P. brevipennisoides* Zheng *et al.*
4. Longitudinal groove of frontal ridge emerging above median ocellus. Longitudinal diameter of eyes 1.2–1.53 times length of subocular furrow.....5
- Longitudinal groove of frontal ridge emerging below median ocellus. Longitudinal diameter of eyes 2–5 times length of subocular furrow. Hind tibia coral red. Guangxi (Leye).....*P. rufitibialis* (Li & Liu)
5. Longitudinal diameter of eyes 1.33 times length of subocular furrow. Width of medial area of tegmina 1.5 times costal area, and 1.5 times cubital area. Costal area of tegmina with a white longitudinal stripe. Hind tibia yellowish brown. Qinghai (Golmud).....*P. golmudensis* Zheng & Chen
- Longitudinal diameter of eyes 1.42–1.53 times length of subocular furrow. Width of medial area of tegmina 1.2–1.25 times costal area, or medial area narrower than costal area.....6
6. Medial area of tegmina (♂ or ♀) wider, with width 1.2–1.25 times costal area, width of costal area equal to cubital area.....7
- Medial area of tegmina (♂ or ♀) narrower, width of costal area 1.2 times medial area, width of medial area equal to cubital area; precostal and medial area with intercalary veins. Length of middle segment of antennae 2 times its width. Longitudinal diameter of eyes 1.42 times length of subocular furrow. Costal area of tegmina with a white longitudinal stripe in the basal part. Hind tibia light green. Disc of head and pronotum grey brown. Inner Mongolia (Xilinhot).....*P. xilingensis* sp. nov.
7. Length of middle segment of antennae 1.66 times its width. Longitudinal diameter of eyes 1.47 times length of subocular furrow. All surfaces of tegmina with intercalary veins. Disc of head and pronotum yellowish brown. Costal area of tegmina with a white longitudinal stripe in the basal part. Hind tibia yellowish brown. Xinjiang (Habahe and Wenquan).....*P. xinjiangensis* Zheng & Yang
- Length of middle segment of antennae 2 times its width. Longitudinal diameter of eyes 1.53 times length of subocular furrow. Only precostal area of tegmina with intercalary veins. Disc of head and pronotum red brown. Costal area of tegmina without white longitudinal stripe in basal part. Hind tibia red brown. Inner Mongolia (Helan Mountain).....*P. helanshanensis* Zheng *et al.*

Pseudoeoscyllina xilingensis sp. nov. (Figs. 1–5)

Female. Body median size. Head large, slight shorter than pronotum. Vertex triangular, with length equal to maximum width of eyes; vertex and occiput with median carinae obviously. Foveola quadrilateral, with length 3 times its width. Frons almost vertical in profile, lateral margin of frontal ridge parallel above median ocellus, broader downward to clypeus, with longitudinal groove below median ocellus. Antennae short sword-shaped, reaching

posterior margin of pronotum; basal segments wide-flat, width greater than length; other segments columnar, length greater than width; length of middle segment 2 times its width. Eyes oval, longitudinal diameter 1.83 times horizontal diameter, 1.42 times length of subocular furrow. Anterior margin of pronotum straight, posterior margin broadly obtuse-rounded; median carina obvious, lateral carinae straight, parallel, slightly separated in metazona; only posterior transverse sulcus obvious, cut off median and lateral carinae; length of prozona equal to metazona; length of lateral lobe of pronotum slightly greater than height, anterior angle obtusely rounded, posterior angle vertically rounded. Width of mesosternal lobe greater than length, inner margin arc-shaped, interspace of mesosternal lobe near square; metasternal lobes separated. Tegmina developed, surpassing apex of hind femur, apex rounded; width of costal area 1.2 times medial area, and 1.2 times cubital area, medial and cubital area with equal width; only precostal and medial area with intercalary veins. Hind femur symmetrical, apex of lower kneelobe rounded; outer side of hind tibia with 11 spines, inner side with 11 spines, lacking outer apical spine. Length of 1st segment of hind tarsus almost equal to the sum of the 2nd and 3rd segments; arolium large, reaching middle of the claw. Epiproct triangular, with wide longitudinal groove in the middle, cercus short conical. Valvula stubby, both upper and lower valves smooth, lacking serrations. Length of subgenital plate greater than width, posterior margin triangular protuberant in the middle. Ventral basivalvular plate large, with fine puncta.



Figures 1–5. *Pseudoeoscyllina xilingensis* sp. nov., ♀. 1. Body, lateral view; 2. Head and pronotum, lateral view; 3. Head and pronotum, dorsal view; 4. Thorax, ventral view; 5. Terminalia, ventral view. Scale bars = 1 mm.

Body light yellowish brown. Antennae yellowish brown, terminal half black brown. Back of head grey brown, with 2 black longitudinal stripes; postocular bands wide, black. Disc of pronotum grey brown, lateral margin light white, outer side with wide black longitudinal stripes. Tegmina yellowish brown, medial and radial area black brown, costal area with a white longitudinal stripe. Hind femur light yellowish brown, inner side with a black twill stripe in the base; hind tibia light green.

Male. Unknown.

Measurements. Length of body: ♀ 18 mm. Length of pronotum: ♀ 3 mm. Length of tegmina: ♀ 15 mm. Length of hind femur: ♀ 10 mm.

Holotype. ♀, **China**, Inner Mongolia, Xilinhot, 22-VIII-2014, collected by Zhongying QIU. **Paratypes.** 4♀, same data as holotype.

Etymology. The specific epithet is derived from the type location “Xilin”.

The new species is allied to *Pseudoeoscyllina xinjiangensis* Zheng & Yang, 2006 and *Pseudoeoscyllina helanshanensis* Zheng, Zeng & Zhang, 2012; the main differences are listed in Table 1.

Table 1. Differences between *Pseudoeoscyllina xilingensis* sp. nov. and its allies

	<i>P. xinjiangensis</i> (♀)	<i>P. xilingensis</i> sp. nov. (♀)	<i>P. helanshanensis</i> (♀)
length-width ratio of segment of antennae in the middle	1.66 times	2 times	2 times
length ratio of longitudinal diameter and subocular furrow	1.47 times	1.42 times	1.53 times
width ratio of medial and costal area of tegmina	1.25 times	0.8 times	1.2 times
width ratio of costal and cubital area of tegmina	1	1.2 times	1
intercalary vein	all area of tegmina with intercalary veins	only precostal and medial area with intercalary veins	only precostal area with intercalary veins
colour of disc of head and pronotum	yellowish brown	grey brown	red brown
costal area of tegmina	with a white longitudinal stripe	with a white longitudinal stripe	without white stripes
colour of hind tibia	yellowish brown	light green	red brown

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