

刺膝螽属一新亚属和一新种

(直翅目: 螽斯总科: 蛩螽科)

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摘要: 记述中国刺膝螽属 *Cyrtopsis* Bey-Bienko, 1962 1 新亚属和 1 新种, 制作了亚属及种的检索表, 模式标本保存在中国科学院上海昆虫博物馆。

关键词: 直翅目; 蛩螽科; 刺膝螽属; 新亚属; 新种; 中国

中图分类号: Q969.26*3.1 文献标识码: A

文章编号: 1000-7482(2007)02-0085-07

刺膝螽属 *Cyrtopsis* Bey-Bienko, 1962

Cyrtopsis Bey-Bienko, 1962, *Trudy Zool. Inst. Akad. Nauk SSSR*, 30: 132; Jin et Xia, 1994. *Jour. Orth. Res.*, 3 (1): 26; Gorochov, 1998. *Zoosystematica Rossica*, 7(1): 120.

模式种: *Cyrtopsis scutigera* Bey-Bienko, 1962.

头项圆锥形, 背面具沟。下颚须端节约等长于亚端节。前胸背板较大, 几乎占体长的 1/2, 沟后区强隆起, 具宽圆的后缘; 侧片较低, 长约为高 3 倍, 后缘倾斜, 无肩凹。前翅短于前胸背板, 几乎完全隐藏于前胸背板之下, 雄性具发音器。前足基节具刺, 各足股节腹面无刺, 后足膝叶具端刺(图 11), 前足胫节内外两侧听器均为开放型, 腹面具可活动的刺, 后足胫节具 3 对端距。雄性第 10 腹节背板具突起或叶, 尾须较简单, 下生殖板具腹突, 外生殖器具革质的阳具背叶。

该属与蛩螽族 *Meconematini* 其它已知属的显著区别在于后足股节膝叶具端刺。Bey-Bienko (1962) 认为这个属比较近似于地中海的穹螽属 *Cyrtaopsis*, 而 Gorochov (1998) 则认为更近似于东洋区的类剑螽属 *Xiphidonema* Ingrisch, 1987。

分亚属、种检索表

- 1(4) 雄性第 10 腹节背板具强突出的中叶; 肛上板退化 *Cyrtopsis* (*Cyrtopsis*) Bey-Bienko
- 2(3) 雄性第 10 腹节背板中叶端部具 1 对短突起; 尾须具叶.....
..... *Cyrtopsis* (*Cyrtopsis*) *scutigera* Bey-Bienko
- 3(2) 雄性第 10 腹节背板中叶端部具 1 对长突起; 尾须无叶.....
..... *Cyrtopsis* (*Cyrtopsis*) *robusta*, sp. nov.
- 4(1) 雄性第 10 腹节背板具 1 对短侧叶; 肛上板发达 *Cyrtopsis* (*Neocyrtopsis*), subgen. nov.
- 5(5) 雄性腹端如图 13~15 所示 *Cyrtopsis* (*Neocyrtopsis*) *variabilis* Hsia et Liu

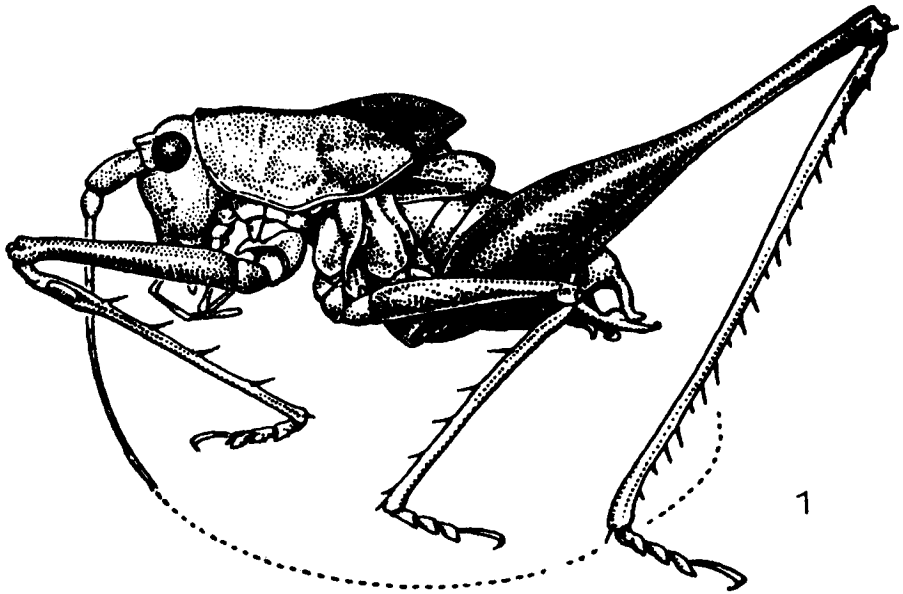


图 1 蚰蜒刺膝蝻 *Cyrtopsis (Cyrtopsis) scutigera* (after Bey-Bienko, 1962)
1. 雄性整体侧面观(♂ body, lateral view)

1. 蚰蜒刺膝蝻 *Cyrtopsis (Cyrtopsis) scutigera* Bey-Bienko, 1962 (图 2~6)

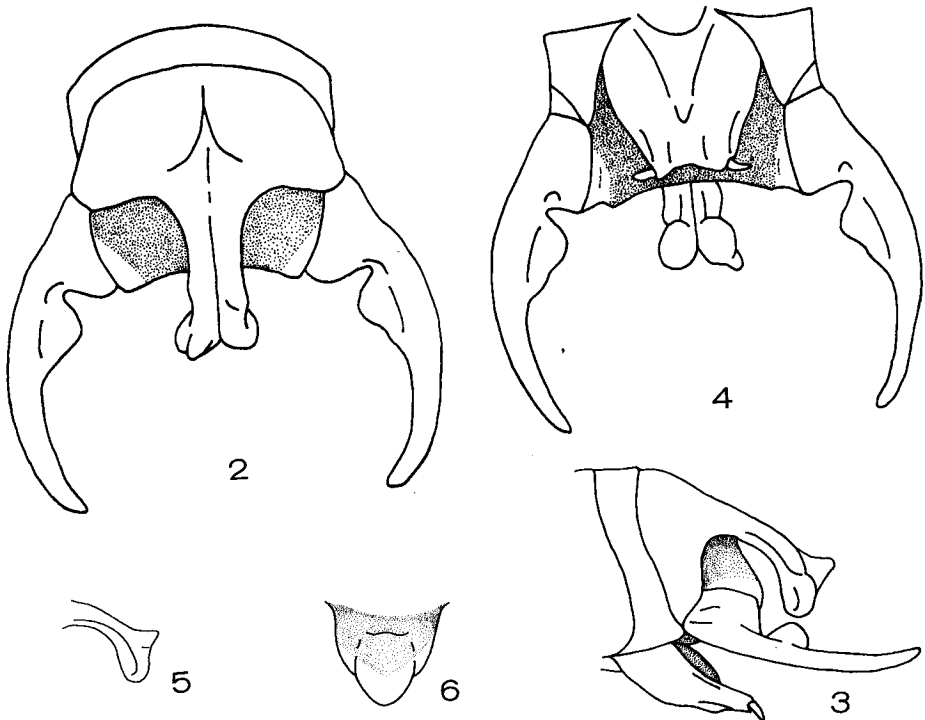


图 2~6 蚰蜒刺膝蝻 *Cyrtopsis (Cyrtopsis) scutigera* Bey-Bienko, 1962 (after Gorochov, 1998)

- 2. 雄性腹端背面观(♂ end of abdominal, dorsal view);
- 3. 雄性腹端侧面观(♂ end of abdominal, lateral view);
- 4. 雄性腹端腹面观(♂ end of abdominal, ventral view);
- 5. 第 10 腹节背板上突起侧面观(mid process of ♂ tenth abdominal tergite, dorsal view);
- 6. 雄性外生殖器背面观(♂ genitalia, dorsal view)

Cyrtopsis scutigera Bey-Bienko, 1962: *Trudy Zool. Inst. Akad. Nauk SSSR*, 30: 132; Gorochov, 1998, *Zoosystematica Rossica*, 7(1): 120.

雄性：前翅延伸到第5腹节背板（Gorochov, 1998年原始描述为第3节）；前足胫节腹面具4个内刺和4个外刺（不包括端距），中足胫节具3个内刺和5个外刺（不包括端距）；后足胫节背面内外缘各具18个刺。雄性第10腹节背板、尾须、下生殖板的形状如图2~5所示。外生殖器的阳具背叶具略革质化的侧部和端部（图6）。

雌性未知。

体黄色杂褐色。前胸背板背面具紫褐色纵带，边缘镶黑褐色边。

量度（mm，♂）：体长12.5，前胸背板长5.9，前翅长3.0，后足股节长12.7。

分布：云南（屏边）。

2. 粗壮刺膝蚤 *Cyrtopsis (Cyrtopsis) robusta*, 新种 (图7~11)

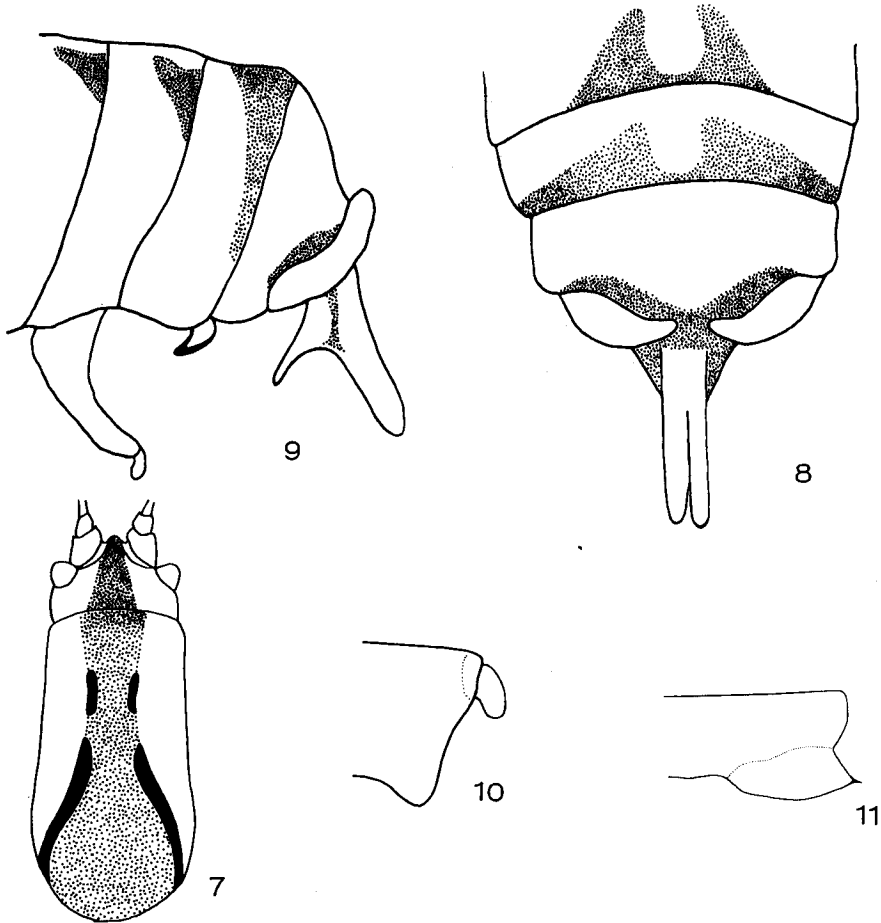


图7~11 粗壮刺膝蚤 *Cyrtopsis (Cyrtopsis) robusta* sp. nov.

7. 雄性头和前胸背板背面观(♂ head and pronotum, dorsal view); 8. 雄性腹端背面观(♂ end of abdominal, dorsal view); 9. 雄性腹端侧面观(♂ end of abdominal, lateral view); 10. 雄性外生殖器端部侧面观(apex of ♂ genitalia, lateral view); 11. 雄性后足膝叶侧面观(♂ hind knee, lateral view)

雄性：前翅到达第2腹节背板中部；前足胫节腹面具4个内刺和4个外刺（不包括端距），中足胫节具3个内刺和5个外刺（不包括端距）；后足胫节背面内外缘各具26~28个刺。第10腹节背板，尾须和下生殖板如图8~9所示，外生殖器的阳具背叶端部具突出的侧角和下弯的中叶（图10）。

雌性未知。

体黄色杂褐色。头部背面具1条赭色中带，延伸至腹端，中带的两侧具间断的黑褐色边（图7）。后足股节端部略变暗，后足胫节刺黑褐色。

量度（mm，♂）：体长14.0~15.0，前胸背板长7.0，前翅长2.0，后足股节长13.5~14.5。

正模：♂，广西龙胜内粗江，1979-VII-26；副模：1♂，广西龙胜内粗江，1963-VI-07，常绿林采。

本新种与蚰蜒刺膝螽 *Cyrtopsis (Cyrtopsis) scutigera* Bey-Bienko, 1962 十分相似，区别在于体明显较大，雄性第10腹节背板中叶背面的突起较长；尾须简单，无突起或叶；外生殖器端部具突出的侧角和下弯的中叶。

新刺膝螽亚属 *Neocyrtopsis*, 新亚属

模式种: *Cyrtopsis variabilis* Hsia et Liu, 1993.

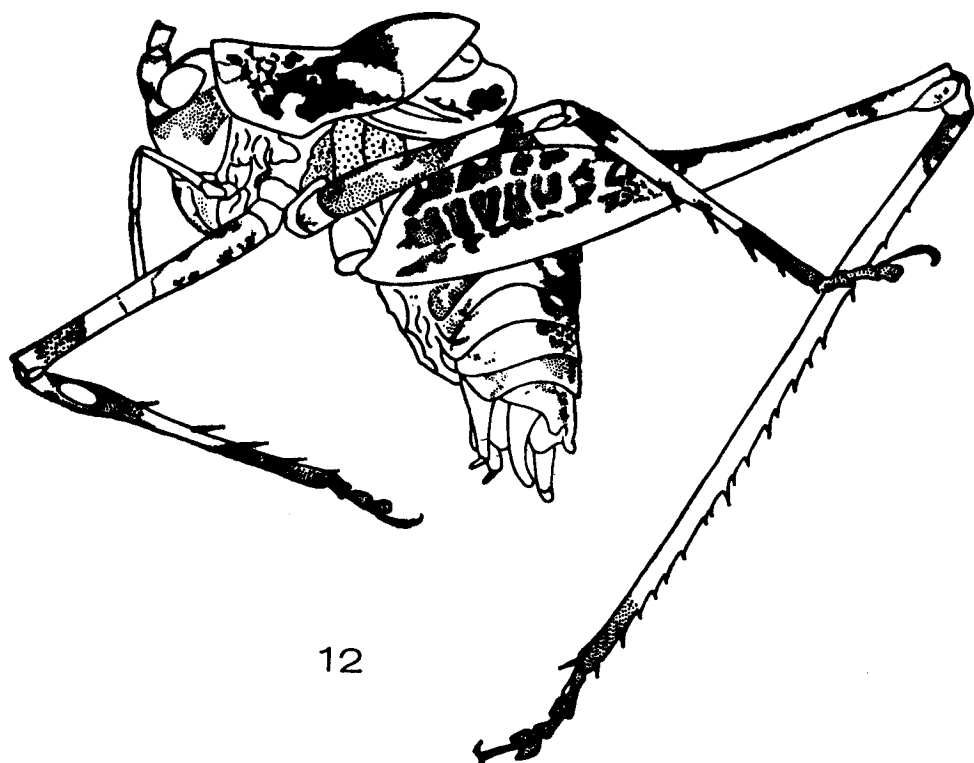


图12 杂色新刺膝螽 *Cyrtopsis variabilis* Hsia et Liu, 1993
12. 雄性整体侧面观 (♂ body, lateral view)

前胸背板略大, 约体长的 $1/2$, 沟后区强隆起, 具宽圆的后缘; 侧片较低, 后缘倾斜, 无肩凹。前翅短于前胸背板, 大部分隐藏于前胸背板之下, 雄性具发音器。前足基节具刺, 各足股节腹面无刺, 后足膝叶具端刺, 前足胫节内外两侧听器均为开放型, 腹面具可活动的刺, 后胫节具 3 对端距。雄性第 10 腹节背板具一对侧叶, 肛上板发达, 下生殖板具腹突。

新亚属与指名亚属的区别在于雄性第 10 腹节背板非变形, 肛上板较发达。该亚属已知仅 1 种, 分布中国。

3. 杂色新刺膝螽 *Cyrtopsis (Neocyrtopsis) variabilis* Hsia et Liu, 1993 (图 12~15)

Cyrtopsis variabilis Hsia et Liu, 1993. In Huang: *Insects of Wuling Mountains area, South Western China*, 95.

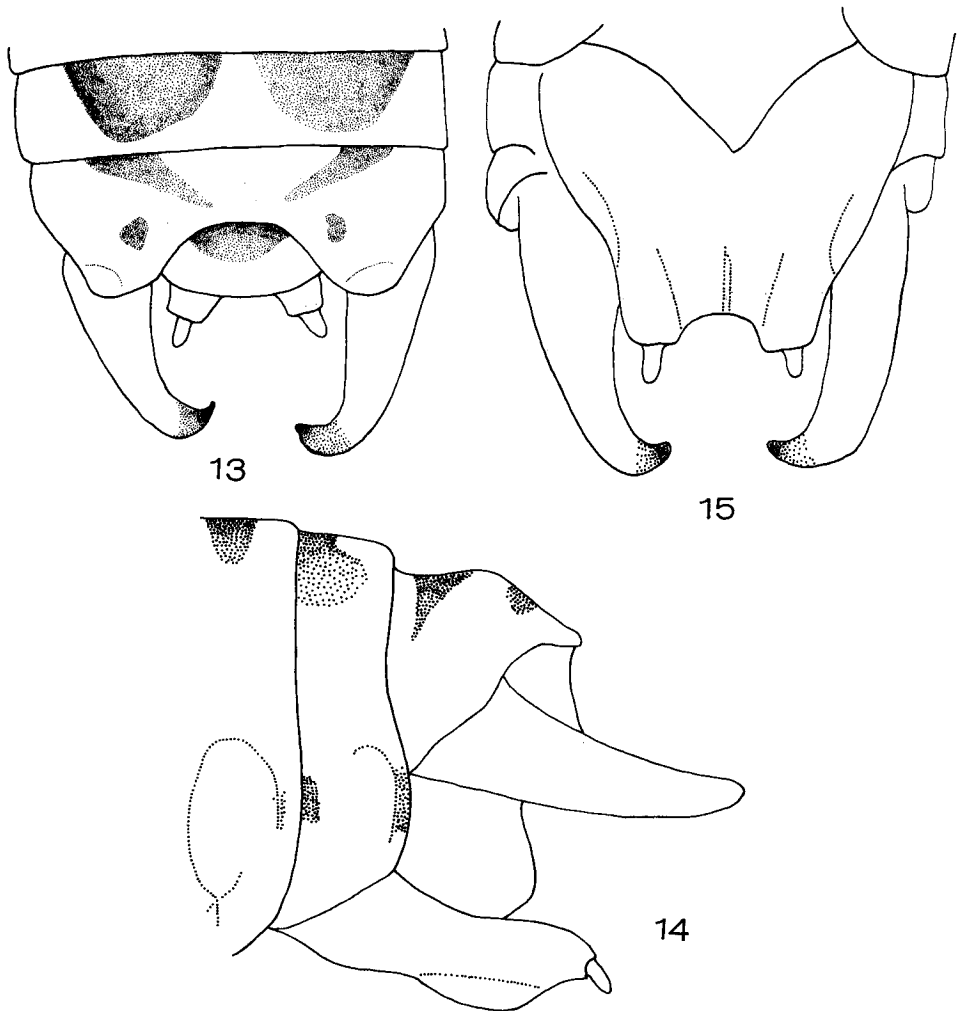


图 13~15 杂色新刺膝螽 *Cyrtopsis variabilis* Hsia et Liu, 1993

13. 雄性腹端背面观 (δ end of abdominal, dorsal view); 14. 雄性腹端侧面观 (δ end of abdominal, lateral view); 15. 雄性腹端腹面观 (δ end of abdominal, ventral view)

雄性：前翅到达第2腹节背板中部；前足胫节内外刺排列为4, 4(1, 1)型。中足胫节具3个内刺和5个外刺（不包括端距）；后足胫节背面内外缘各具18~21个刺。雄性第10腹节背板，尾须和下生殖板如图13~15所示。

雌性未知。

体黄褐色杂黑褐色。头部背面和颜面具黑褐色斑纹，头顶淡色。触角具暗色环纹，前胸背板和足具黑褐色斑纹，前胸背板沟后区两侧各具1个明显的大黄斑。前翅近端部具1暗斑。前足胫节基部和端部，中和后足胫节端部，各跗节暗色。腹部具黑褐色斑纹。

量度 (mm, ♂)：体长 14.0，前胸背板长 7.0，前翅长 2.0，后足股节长 13.5~14.5。

观察标本：1♂，贵州（雷山雷公山），1988-IV-30，刘祖尧采。

分布：贵州。

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A New Subgenus and New Species of the Genus *Cyrtopsis* (Orthoptera: Tettigonioidae: Meconematidae)

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In the present, a subgenus and a new species of the genus *Cyrtopsis* Bey-Bienko, 1962 from China are described, and a key to the subgenera and species is given. The type specimens are deposited in Shanghai Entomology Museum, Chinese Academy of Sciences.

Key to the subgenera and species

- 1(4) Tenth abdominal tergite of male with much elongate median lobe; epiproct reduced *Cyrtopsis* (*Cyrtopsis*) Bey-Bienko
- 2(3) Median lobe of male tenth abdominal tergite with paired short processes above; cerci of male lobed *Cyrtopsis* (*Cyrtopsis*) *scutigera* Bey-Bienko

- 3(2) Median lobe of male tenth abdominal tergite with paired very long processes above; male cerci unarmed *Cyrtopsis (Cyrtopsis) robusta* sp. nov.
 4(1) Tenth abdominal tergite of male with paired short lateral lobes; epiproct well developed
 *Cyrtopsis (Neocyrtopsis)*, subgen. nov.
 5(5) End of male abdomen as in figs. 13~15. *Cyrtopsis (Neocyrtopsis) variabilis* Hsia et Liu

***Cyrtopsis (Cyrtopsis) robusta*, sp. nov. (Figs.7~11)**

Male: Body of strong build. Tegmina extending to the middle of second abdominal tergite. Fore tibiae with 4 inner and 4 outer spines and a pair small apical spurs on ventral surface, middle tibiae with 3 inner and 5 outer spines and a pair small apical spurs; hind tibiae with 26~28 spines on each side above and 3 pairs apical spurs. Tenth abdominal tergite, cerci and subgenital plate as in figs. 8~9, dorsal lobe of genitalia with projecting lateral angle and with a curved median lobe (Fig. 10).

Female unknown.

Coloration yellowish, with a red brown band on dorsal surface, bearing blackish longitudinal stripes at side of band (Fig. 7), hind keen and tibial spines darkish.

Length of body 14.0~15.0 mm; pronotum 7.0 mm; tegmina 2.0 mm; hind femora 13.5~14.5 mm.

Holotype: ♂, Neicuijiang, Longsheng County, **Guangxi** Zhuangzu Autonomous Region, 1979- VII -26; Paratype: 1 ♂, Neicuijiang, Longsheng County, **Guangxi** Zhuangzu Autonomous Region, 1963-VI-07, CHANG Lu-Lin.

This new species is similar to *Cyrtopsis (Cyrtopsis) scutigera* Bey-Bienko, 1962. But differs from the latter in the body noticeably larger sized, longer process of tenth abdominal tergite of male and shape of cerci and genitalia.

***Neocyrtopsis* subgen. nov.**

Type- species: *Cyrtopsis variabilis* Hsia et Liu, 1993.

Description. Pronotum of male very large, almost occupied half of body, with metazoan considerably elevated and expanded, with low lateral plate and oblique hind margin, without humeral sinus. Tegmina concealed under the pronotum, with stridulatory fields in male. Fore coxae with a spine, all femora unarmed, lower lobe of hind knee spined, tibial auditory structure open on both sides, fore and mid tibiae with movable spines on lower margin, hind tibiae with 3 pairs apical spurs. Tenth abdominal tergite of male produced into two lobes, epiproct well developed, subgenital plate with styles; genitalia with sclerotized dorsal lobe.

Included species: type species only.

Comparison. This new subgenus is very similar to *Cyrtopsis (Cyrtopsis)* Bey-Bienko 1962, It differs from the latter in the tenth abdominal tergite of male hardly modified and epiproct well developed. Bey-Bienko (1962) supposed that this genus is related to the Mediterranean genus *Cyrtaspis* Fischer. Gorochoy (1998) recognized that this genus is related to the oriental genus *Xiphidonema* Ingrisch.

Key words: Orthoptera; Meconematidae; Taxonomy; *Cyrtopsis*; Meconematini; new species; China