

中国露螽科三新种 (直翅目: 螽蜥总科, 露螽科)

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摘要 本文报道中国露螽科(Phaneropteridae)三新种: 双色素木螽 *Shirakisotima bicolor*, 新种。采自四川马边; 短板异缘螽 *Poecilopsyra brevis*, 新种和澜沧绿螽 *Holochlora lancangensis*, 新种, 采自云南澜沧。新种模式标本均保存在陕西师范大学生物系。

关键词 露螽科 双色素木螽 短板异缘螽 澜沧绿螽

双色素木螽 *Shirakisotima bicolor*, 新种(图1—4)

雄性 头顶侧扁, 狭于触角第一节, 背面具沟。复眼卵圆形, 突出。前胸背板缺侧隆线; 侧片膨胀, 长大于高, 肩凹不明显。前、后翅均发育完全。前翅颇远地超过后足股节端部, Sc脉和R脉从基部分开, 中部一段较紧密地靠拢; R脉具4分枝, Rs脉简单。后翅长于前翅。前足基节缺刺。各足股节腹面均缺刺, 膝叶具2刺。前足和中足胫节具背距, 前足胫节内、外两侧听器均为开放型。第十腹节背板不变形。肛上板较小, 舌形。尾须较粗壮, 较强地向内弯曲, 从背面观中部最细(图1); 从侧面观末端向背后方突出(图2)。下生殖板狭长, 深裂成两叶, 裂叶较宽地分开, 其端部稍向外弯, 顶端钝圆; 内缘和外缘具较密的毛。

体暗褐色。头部背面褐色, 触角(除基节外)黑色, 具稀疏的白色环纹。前胸背板赤褐色, 背面具黑色侧条纹, 侧片下部暗色。前翅暗褐色, 前缘脉域黄色。足暗黑色, 基节赤褐色, 后足胫节刺淡褐色。

雌性 前翅稍微超过后足股节端部, 基部较宽, 向端部稍趋狭。下生殖板近三角形, 端部截形。产卵瓣端部较钝, 边缘具细齿; 下产卵瓣近基部具一小突起(图4)。

体黄褐色至暗褐色。前胸背板背面黄褐色, 具黑色侧条纹或完全暗黑色。前翅褐绿色或墨绿色, 前缘脉域黄绿色。足暗褐色。

体长 ♂ 27.0mm, ♀ 25.5—27.0mm;

前胸背板长 ♂ 5.9mm, ♀ 5.9—6.0mm;

前翅长 ♂ 34.0mm, ♀ 29.0—30.0mm;

后足股节长 ♂ 26.0mm, ♀ 25.5—26.0mm;

产卵瓣长 ♀ 8.0—8.0mm。

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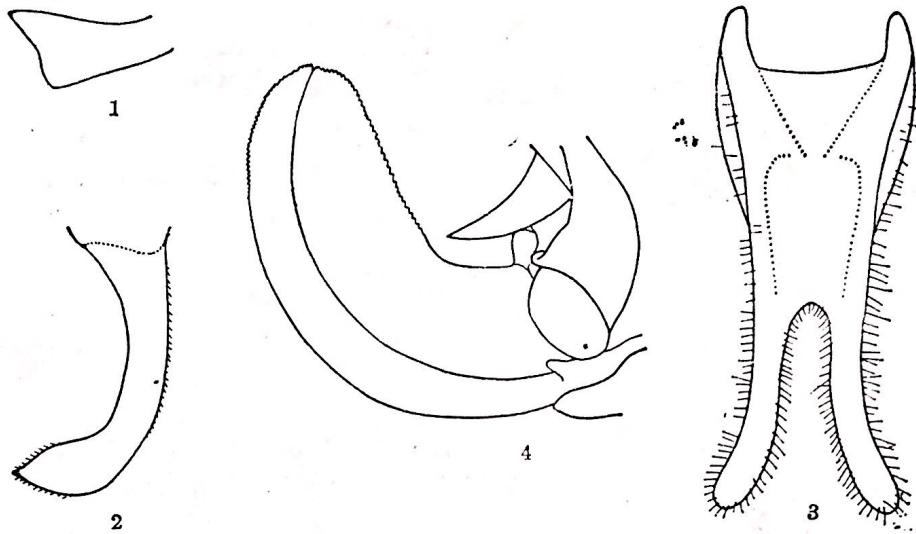


图 1—4 双色素木蠹, 新种

1. 雄性尾须背面观; 2. 雄性尾须端部侧面观; 3. 雄性下生殖板腹面观; 4. 雌性腹端侧面观

Figs. 1—4. *Shirakisotima bicolor*, n. sp.

1. Cerci of male, dorsal view; 2. Apex of male cerci, lateral view; 3. Subgenital plate of male, ventral view; 4. End of female abdomen, lateral view

正模♂, 配模♀, 副模1♀, 四川(马边), 1986. VII. 25, 廉振民采。

素木蠹属 *Shirakisotima* 系 Furukawa(1963)根据日本的 *Isotima japonica* Matsumura & Shiraki, 1908 所建立。该属与条蠹属 *Ducetia* Stal 1874 和安蠹属 *Anisotima* Bey-Bienko 1951 较接近, 区别在于股节腹面通常缺刺, 雄性下生殖板裂叶端部向外弯。Kang et Yang 1989 报道中国湖南的 *Ducetia multipunctata* 应归属于素木蠹属。本新种前翅的颜色以及雄性尾须的形状明显不同于属内其他已知种。

短板异缘蠹 *Poecilopsyra brevis*, 新种(图5—7)

雄性 头顶侧扁, 狭于触角第一节, 背面具沟。复眼卵圆形, 突出。前胸背板缺侧隆线; 侧片高大于长, 肩凹明显。前、后翅均发育完全。前翅颇远地超过后足股节端部, 缺光泽和非透明; C脉退化; Sc脉和R脉较紧密地靠拢, 近端部稍分开; Rs脉从R脉中部之前分出, 具分叉。后翅长于前翅。前足基节具刺。股节腹面具小刺, 前足和中足股节膝叶缺刺, 后足股节膝叶具1个刺。前足和中足胫节缺背距; 前足胫节内侧听器为封闭型, 外侧听器为开放型。第十腹节背板后缘平截形。肛上板较短宽, 侧缘近乎平行。端部呈三角形突出(图6)。尾须细长, 较强地内弯, 顶端尖锐。下生殖板较短, 端部开裂成两尖形的裂叶(图7), 缺刺突。阳具末端分裂成两枝, 上枝稍长于下枝。

体淡绿色, 具赤褐色散点。前足股节具黑褐色斑点, 背面尤为明显。前翅径脉域和中脉域具暗点, 左前翅发音部具一较大的暗斑。

雌性未知。

体长 22.0 mm; 前胸背板长 5.5 mm; 前翅长 36.5 mm; 后足股节长 19.0 mm。

正模♂, 云南(澜沧), 1980. IX. 22, 廉振民采。

该属为中国首次记录。本新种类似 *P. octoseriata* (Haan, 1842), 区别在于雄性第

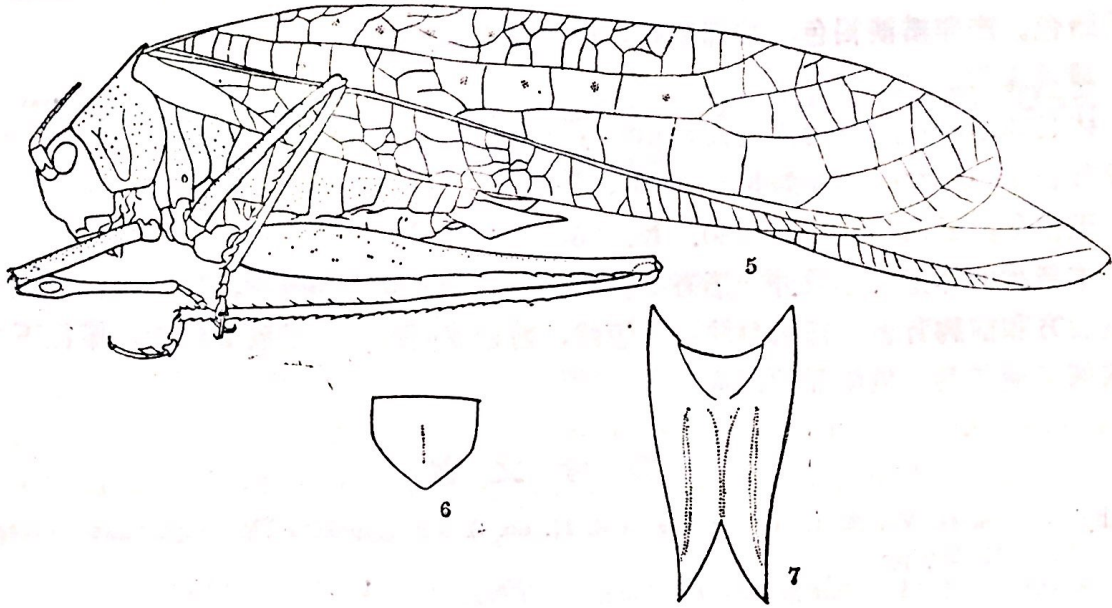


图 5—7 短板异缘螽，新种

5. 雄性整体侧面观；6. 雄性肛上板背面观；7. 雄性下生殖板腹面观

Figs. 5—7. *Poecilopsyra brevis*, n. sp.

5. Body of male, lateral view; 6. Supra-anal plate of male, dorsal view; 7. Subgenital plate of male, ventral view

十腹节背板后缘平截形；肛上板较短宽，侧缘近乎平行，端部呈三角形突出；下生殖板较短，端部开裂成两尖形的裂叶。

澜沧绿螽 *Holochlora lancangensis*, 新种(图8)

雌性 头顶侧扁，狭于触角第一节，背面具沟。复眼卵圆形，突出。前胸背板缺侧隆线；侧片高大于长，肩凹明显。前、后翅均发育完全。前翅颇远地超过后足股节端部，较宽阔，约为前胸背板长度的2倍；C脉发达；Sc脉和R脉除近末端外，较紧密地靠拢和几乎毗连；Rs脉从R脉中部分出，具分叉。后翅长于前翅。前足基节具刺。前足股节腹面内隆线具5个小刺，中足股节腹面外隆线具1—2个小刺，后足股节腹面内隆线具7个刺，外隆线具5个刺；各足股节膝叶均具2个刺。前足和中足胫节具背距；前足胫节内侧听器为封闭型，外侧听器为开放型。尾须甚短，圆锥形，端部稍内弯。下生殖板近似三角形，近基部两侧各具一较明显的凹缘(图8)，端部具三角形凹口。产卵瓣较宽阔，基部具横隆褶，背缘端部1/3较弱地斜截形，边缘具细齿，侧表面具颗粒状突起。

体黄绿色。前翅绿色，股节腹面刺的顶端褐色，前足胫节听器区背侧、后足胫节基

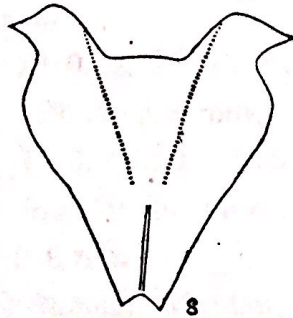


图 8 澜沧绿螽，新种雌性下生殖板腹面观

Fig. 8. *Holochlora lancangensis* n. sp. Subgenital plate of female, ventral view

部具暗色。产卵瓣淡褐色，端部变暗，横隆褐上部黑色。

雄性未知。

体长 30.0mm；前胸背板长 8.0mm；前翅长 58.0mm；前翅最大宽幅 16.0mm；后足股节长 38.0mm；产卵瓣长 9.0mm。

正模♀，云南(澜沧)，1980. IX. 23，郑哲民采。

本新种的体形大小及外部形态类似 *H. fuscospinosa* Brunner, 1891，区别在于头部复眼后方和前胸背板前部两侧缺褐色短线，前翅缺暗斑。后足股节较长，雌性下生殖板近基部两侧各具一较明显的凹缘。

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THREE NEW SPECIES OF FAMILY PHANEROPTERIDAE FROM CHINA

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Three new species of the Phaneropteridae are described and illustrated from China, i.e. *Shirakisotima bicolor*, sp. nov, were collected from Sichuan Mabian, *Poecilopsyra brevis* and *Holochlora lancangensis* spp. nov, were collected from Yunnan Lancang. The type specimens are deposited in the Department of Biology, Shaanxi Normal University.

Shirakisotima bicolor, sp. nov. (figs, 1-4)

Fore wings reaching far beyond the apices of hind femora or only little in female, matt and opaque; Sc and R slightly separate from base and closely approximated mesally, R with 4 branches, Rs simple. Hind wings longer than fore wings. Fore coxae without spine. All femora without spines ventrally, genicular lobe armed with two spines. Male tenth abdominal tergite unmodified. Male supra-anal plate small, tongue-shaped. Male cerci strongly incurved, slender in median part when viewed dorsally (fig. 1), apical part produced dorso-posteriorly when viewed laterally (fig. 2). Male subgenital plate long and narrow, deeply divided into two lobes, the lobes widely separated, with round blunt apex and curved outwards (fig. 3). Ovipositor shaped as in fig. 4, with a projection at base of lower valves.

General coloration yellowish-brown. Head brown above, antennae black (except in basal first segment) with a few scattered white rings. Pronotum red-brown or yellowish-brown in female, with black lateral streaks on disc, lateral lobes with lower part darkened. Fore wings dark brown or brownish-green in female, with costal area of yellow. Legs black (dark brown in female) with coxae red-brown, spines of hind tibiae light brown.

Length of body ♂ 27.0, ♀ 25.5 mm;

Length of pronotum ♂ 5.9, ♀ 5.9 mm;

Length of fore wing ♂ 34.0, ♀ 30.0 mm; ●

Length of hind femora ♂ 26.0, ♀ 26.0 mm;

Length of ovipositor ♀ 8.0 mm.

Holotype ♂, allotype ♀, Sichuan Mabian, 25. VII. 1986

This new species may be easily recognized by the coloration of fore wings and shape of male cerci. The species *Ducetia multipunctata* kang et Yang (1989)

should be transferred to the genus *Shirakisotima*, i.e. *Sh. multipunctata* (Kang et Yang)

Poecilopsyra brevis, **sp. nov.** (fig. 5—7)

This new species is similar to *P. octoseriata* (Haan, 1942), but it differs from the male tenth abdominal tergite with the posterior margin truncated; supra-anal plate short and broad, with the lateral margins parallel and apical part protruding triangularly (fig. 6); subgenital plate shorter, apical part divided into two sharp lobes (fig. 7).

General coloration light green, with scattered red-brown spots. Fore femora with dark spots on dorsal surface, fore wings with dark spots in the radial and anterior medial areas, stridulatory region of left fore wing with a large dark patch.

Female unknown.

Length of body 22.0 mm; length of pronotum 5.5 mm; length of fore wing 36.6 mm; length of hind femora 19.0 mm.

Holotype ♂, Yunnan Lancang, 22. IX. 1980

Holochlora lancangensis, **sp. nov.** (fig. 8)

This new species in its size and general appearance resembles *H. fusco-spinosa* Brunner, 1891, but may be distinguished from it by the head without short line of brown on the behind eyes and antero-lateral margins of pronotal disc, fore wings without obscurely maculate; hind femora longer; female subgenital plate nearly triangular, with a distinct emargination near each base and a broad triangular apical incision (fig. 8).

Male unknown.

Length of body 30.0 mm; length of pronotum 8.0 mm; length of fore wing 58.0 mm, greatest width of fore wing 16.0 mm; length of hind femora 38.0 mm; length of ovipositor 9.0 mm.

Holotype ♀, Yunnan Lancang, 23. IX. 1980

Key words *Phaneropteridae* *Shirakisotima bicolor* *Poecilopsyra brevis*
Holochlora lancangensis