A new species and new record of the leafhopper genus *Seriana* Dworakowska (Hemiptera, Cicadellidae, Typhlocybinae) from China

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Academic editor: M. Webb  |  Received 28 August 2011  |  Accepted 22 February 2012  |  Published 1 March 2012

Citation: Song Y, Li Z (2012) A new species and new record of the leafhopper genus *Seriana* Dworakowska (Hemiptera, Cicadellidae, Typhlocybinae) from China. ZooKeys 172: 1–6. doi: 10.3897/zookeys.172.1741

Abstract

*Seriana menglaensis* sp. n. (Hemiptera: Cicadellidae: Typhlocybinae: Erythroneurini) is described and illustrated from Southwest China. *S. equata* (Singh, 1969) is recorded for the first time from China.

Keywords

Hemiptera, morphology, taxonomy

Introduction

The leafhopper genus *Seriana* was established by Dworakowska (1971) in the tribe Erythroneurini of Typhlocybinae with *Seriana frater* Dworakowska, 1971 as the type species. *Seriana* consists of thirty-three species in the world distributed in Oriental and Palaearctic regions. The genus can be distinguished by the body fuscous, the crown usually with median dark patch on anterior margin of vertex, the pronotum with five
oval grey impressed patches near anterior margin; the pygofer hind margin acutely produced, with oblique dorsolateral internal ridge and basolateral setae in distinct group and the pygofer dorsal appendage not movably articulated; the subgenital plate pocket-like apically, with 2–4 basal macrosetae and several short rigid setae on upper margin subbasally; the style apex truncate; the aedeagus usually with pair of processes and the connective nearly Y-shaped.

Only two species, *S. indefinita* Dworakowska, 1971 from Guangzhou and *S. ochrata* Dworakowska, 1971 from Taiwan were so far reported from China. We describe a new species from Yunnan Province, China and provide illustrations for both the new species and *S. equata* (Singh) recorded for the first time from China.

**Methods and materials**

The specimens were obtained by sweep net method and were studied under Olympus SZX7 and CX41 microscopes. Morphological techniques and terminology follow Dietrich and Dmitriev (2006). Measurements of the new species are given in millimeters; body length is measured from the apex of the head to the apex of the fore wing in repose. All specimens examined are deposited to the collection of the Institute of Entomology, Guizhou University, Guiyang, China (GUGC).

**Taxonomy**

**Key to species of *Seriana* from China**

1. Aedeagus with paired processes ................................................................. 2
   – Aedeagus with unpaired processes (Figs. 18, 19) *S. indefinita* Dworakowska
2. The paired processes arising from the base of aedeagal shaft (Figs. 6, 7) ......
   ........................................................................................................... *S. menglaensis* sp. n.
   – The paired processes arising from the midlength of aedeagal shaft .......... 3
3. The paired processes shorter, hook-like (Figs. 16, 17) .......... *S. equata* (Singh)
   – The paired processes longer, finger-like (Figs. 20, 21) ..........................
   ........................................................................................................... *S. ochrata* Dworakowska

**Seriana menglaensis** Song & Li, sp. n.
urn:lsid:zoobank.org:act:80FEEE6B-1EEA-491F-AE03-7EBADD04AF0F
http://species-id.net/wiki/Seriana_menglaensis
Figures 1–10

**Description.** General color fuscous. Head (Fig. 1) with vertex dirty yellow, with an irregular brown spot at anterior margin medially; eyes black. Pronotum (Fig. 1) with
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five whitish oval impressed patches near anterior margin. Forewing light testaceous, without markings; brochosome field blackish brown.

Head (Fig. 1) distinctly narrower than pronotum; vertex bluntly rounded.

Abdominal apodemes (Fig. 2) small, acuminate apically, not extended beyond hind margin of 3rd sternite.

Pygofer lobe (Fig. 3) broad, with distinct oblique dorsolateral internal ridge, numerous macrosetae at lower basal angle. Pygofer dorsal appendage very long and fused with dorsal margin of pygofer. Subgenital plate (Fig. 4) with three long macrosetae and short rigid setae at upper margin subbasally; several microsetae scattered on apical

**Figures 1–10.** *Seriana menglaensis* Song & Li, sp. n. (♂) 1 Head and thorax, dorsal view 2 Abdominal apodemes 3 Pygofer lobe, lateral view 4 Subgenital plate 5 Style 6 Aedeagus, ventral view 7 Aedeagus, lateral view 8 Connective 9 Forewing 10 Hind wing.
portion. Style (Fig. 5) long, apex truncate; preapical lobe large. Connective (Fig. 8) Y-shaped, stem strong, central lobe absent. Aedeagus (Figs. 6, 7) with shaft long and straight, with two pairs processes, one pair very long, arising from basolateral part of shaft; another pair placed apically very short, lamellate; gonopore at apex, on ventral margin, dorsal apodeme short, weakly expanded.

**Measurement.** Body length males 3.2 mm.
**Type material.** Holotype, male, China: Yunnan Prov., Mengla County, at light, 23 July 2008, coll. Yuehua Song. Paratype: one male, same data as holotype.

**Remarks.** The new species is similar to *S. ochrata* Dworakowska (1971), but can be distinguished from the latter by the aedeagal shaft longer and straighter, similar in width throughout length in ventral view; the paired long processes arising from the base of aedeagal shaft, not at midlength and the dorsal apodeme small.

**Etymology.** The new species is named after its type locality: Mengla.

*Seriana equata* (Singh, 1969), **rec. n.**

http://species-id.net/wiki/Seriana_equata

Figures 11–17

*Zygina equata* Singh, 1969: 344, figs 20-23

*Empoascanara* *equata* (Singh, 1969) (Sohi, 1976: 204)

*Seriana* *equata* (Singh, 1969) (Dworakowska and Viraktamath 1975: 529, no figures)

*Seriana punjabensis* Dworakowska, Nagaich & Singh, 1978: 246, figs 38-42 (Syn. by Sohi and Dworakowska 1983: 180)

**Material examined.** One male, China: Yunnan Prov., Xishuangbanna, Original Forest Park, 21 July 2008, coll. YUEHUA SONG; one male, China: Henan Prov., Luan-chuan, Heyu, 19 August 2008, coll. JIANDA LI.

**Host plant.** Grasses, potato, black gram, cowpea, Egyptian clover, groundnut, linseed, lucerne, musk melon, spinach, sweet potato, sunnhemp (Sohi and Dworakowska 1983).

**Distribution.** India; China (Henan, Yunnan).

**Acknowledgements**

The project was supported partly by the “Scientific Research Foundation for Doctor’s Degree Members, Guizhou Normal University: Taxonomic Study of Erythroneurini and Zyginellini from South China Karst Area”, the Social Development and Science & Technology of People’s Livelihood Program of Guiyang City (No. 201110362), the Key Technologies R&D Program of Guizhou Province (SY[2010]3068) and the Guizhou Provincial Natural Science Foundation of China (No. [2010]2063).

**References**

Dietrich CH, Dmitriev DA (2006) Review of the New World genera of the leafhopper tribe Erythroneurini (Hemiptera: Cicadellidae: Typhlocybinae). Illinois Natural History Survey Bulletin 37(5): 119–190.
Dworakowska I (1971) On some genera of Erythroneurini (Cicadellidae, Typhlocybinae) from the Oriental Region. Bulletin de l’Académie Polonaise des Sciences, Série des Sciences Biologiques 19(5): 341–350.

Dworakowska I (1976) On some Oriental and Ethiopian Typhlocybinae (Homoptera, Auchenorrhyncha, Cicadellidae). Reichenbachia 16(1): 1–51.

Dworakowska I, Nagaich BB, Singh S (1978) Kapsa simlensis sp.n. from India and some other Typhlocybinae (Auchenorrhyncha, Cicadellidae). Bulletin de l’Académie Polonaise des Sciences, Série des Sciences Biologiques 26(4): 243–249.

Dworakowska I, Viraktamath CA (1975) On some Typhlocybinae from India (Auchenorrhyncha, Cicadellidae). Bulletin de l’Académie Polonaise des Sciences, Série des Sciences Biologiques 23(8): 521–530.

Sohi AS, Dworakowska I (1983) A review of the indian Typhlocybinae (Homoptera: Cicadellidae) from India. Oriental Insects 17: 159–213.

Sohi AS (1976) New combinations of some Typhlocybines (Homoptera, Cicadellidae, Typhlocybinae) from India. Entomon 1(2): 203–205.