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New and little-known species of the tribe Phylini DOUGLAS & SCOTT from China (Insecta: Heteroptera: Miridae)

With 23 Figures

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Abstract. The paper deals with five species of the tribe Phylini from China. Among them, *Tuponia* (*s. str.*) *brevicula* spec. nov. is described as new for science, the two little-known species *Leucopterus* *candidatum* REUTER, 1879 and *Oncotylus vitticeps* REUTER, 1879 are redescribed for further study on the genera.

Introduction

The present paper deals with five species of the tribe Phylini of Miridae from China. In genus *Tuponia* REUTER, one new species *Tuponia* (*Tuponia*) *breviculus* spec. nov. is described and two little-known species to China, *Tuponia* (*Tuponia*) *arcufera* REUTER, 1879 and *T. (s. str.) mongolica* DRAPOLYUK, 1980 are noted. Another two genera *Leucopterus* REUTER, 1879 and *Oncotylus* FIEBER, 1858 are here reported in China for the first time, in which two little-known species *Leucopterus* *candidatum* REUTER, 1879 and *Oncotylus vitticeps* REUTER, 1879 are redescribed for further study on the genera.

Type series of the new species and materials of the little-known ones will be deposited in the Biological Faculty, Inner Mongolia Teachers' University, Huhe-hot, P.R. China.

Genus *Tuponia* REUTER, 1875

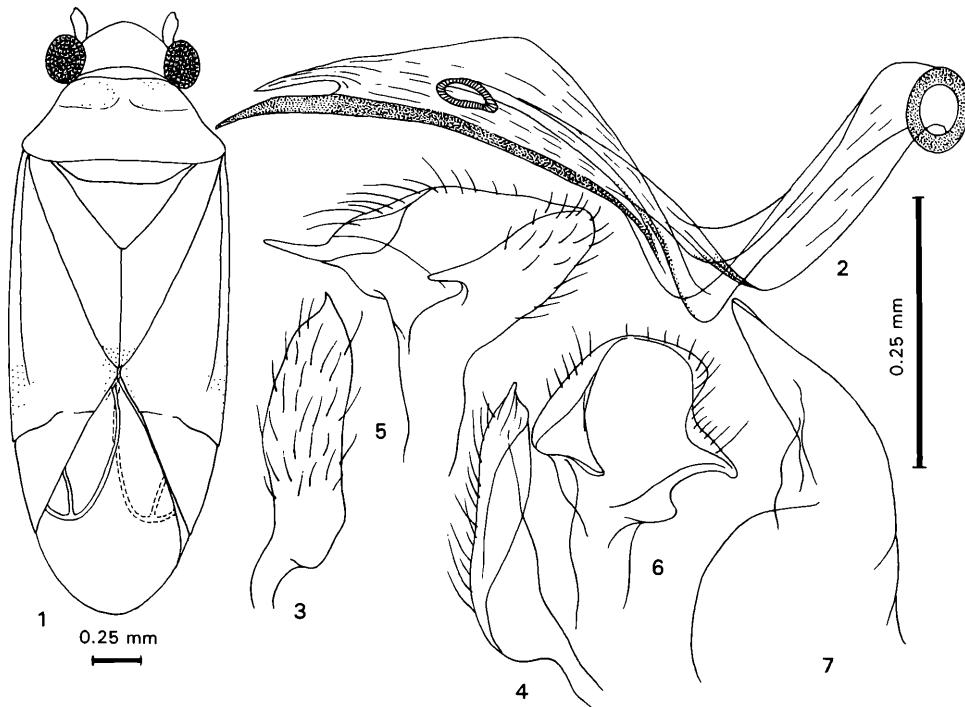
Six species of this genus from China were reported by ZHENG & LI (1992). Here is the supplement of three species also from China.

Tuponia (*Tuponia*) *arcufera* REUTER, 1879

This European species is previously known from Russia and Mongolia (REUTER, 1879; DRAPOLYUK, 1980). Here it is recorded for the first time for China: 16 ♂♂, 5 ♀♀, Alashan League (Alashanyouqi: 39°06'N, 101°42'E, 1600 m), Inner Mongolia Autonomus Region, 13. VIII. 1984, Nonnaizab coll. (on *Tamarix* spec.).

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Figs. 1–7: *Tuponia (Tuponia) brevicula* spec. nov.

1 – male; 2 – vesica; 3–4 – right paramere (different views); 5–6 – left paramere (different views); 7 – phallotheca. (Scale bar = 0,25 mm).

***Tuponia (Tuponia) mongolica* DRAPOLYUK, 1980**

This Asian species previously known from Mongolia (DRAPOLYUK, 1980) is here recorded for the first time for China: 5 ♂♂, 6 ♀♀, Alashan League (Alashan mountains: 38°50'N, 105°50'E, 2700 m), Inner Mongolia Autonomous Region, 7. VII. 1992, Yang Yong-Qi coll.

***Tuponia (Tuponia) brevicula* spec. nov. (Figs. 1–7)**

Elongately oval. General coloration light brownish yellow. Head, pronotum and scutellum sometimes with green coloration. Pubescence sparse, silver and short. Head light brownish yellow, sometimes with green color. Vertex 1.8 (♂) or 2.0 (♀) times the width of eye. The eyes brown with light brownish yellow stripes and around margin. Antennae light brownish yellow, with adpressed light colored pubescence, the 2nd antennal segment almost as long as the width of the head, comparatively thicker (♂) or as thick (♀) as tibia. Rostrum light brownish yellow with apex dark brown. Pronotum light brownish green or light brownish yellow. Scutellum same color as the pronotum, only with apex slightly dark. Apex of clavus and corium with indistinctly darkened color band. Cuneus light brownish yellow with apical part slightly dark. Membrane light brownish yellow with apex and spots behind cells light brown, veins light colored. Legs light brownish green, tibial spines light, claws and tarsus brown. Body beneath light brownish green or light brownish yellow. Right paramere (Figs. 3, 4) narrow leaf-like, hypophysis pointed. Left paramere (Figs. 5, 6) robust, hypophysis slender finger-like, sensory lobe short, finger-like. Vesica (Fig. 2) L-shaped, comparatively robust, apical part with two spicules,

one thick and pointed, strongly sclerotized, the other one shorter than the former, weakly sclerotized and continuous with a broad triangular membrane. Secondary gonopore almost situated in middle of the membrane. Phallotheca (Fig. 7) with one ear-like keel at near base.

Body length: male 2.92–2.97 mm, female 3.03–3.25 mm. Body width: male 1.16 mm, female 1.27 mm. Head width: male 0.83 mm, female 0.86 mm. Vertex width: male 0.39 mm, female 0.44 mm. Eye width: male 0.22 mm, female 0.16 mm. Antennal segments length: male 0.17:0.83–0.88:0.50–0.61:0.28 mm, female 0.22:0.88–0.94:0.55–0.61:0.30–0.33 mm. Pronotum length: male 0.50 mm, female 0.55 mm. Promotum width: male 1.10 mm, female 1.10–1.16 mm.

Holotype, ♂, and paratypes, 1 ♂ 7 ♀♀: Ruo Qiang county (39°00'N, 88°10'E, 3 000 m), Xinkiang Weiur Autonomous Region, 6. VII. 1993, Qi Bao-Ying coll. (on *Tamarix* spec.).

This new species is systematically related to *T. (s. str.) elegantulus* ZHENG et LI, 1992, but can be identified by the following characters: Body comparatively short and small, without orange color, coloration band on clavus and corium indistinct; tibial spines light colored; vesica with one strongly sclerotized spicule and another weakly sclerotized one which is shorter than the former and not surrounded but continuous to broad triangular membrane; sensory lobe of the left paramere slender finger-like; phallotheca with only one ear-like keel.

Genus *Leucopterus* REUTER, 1879

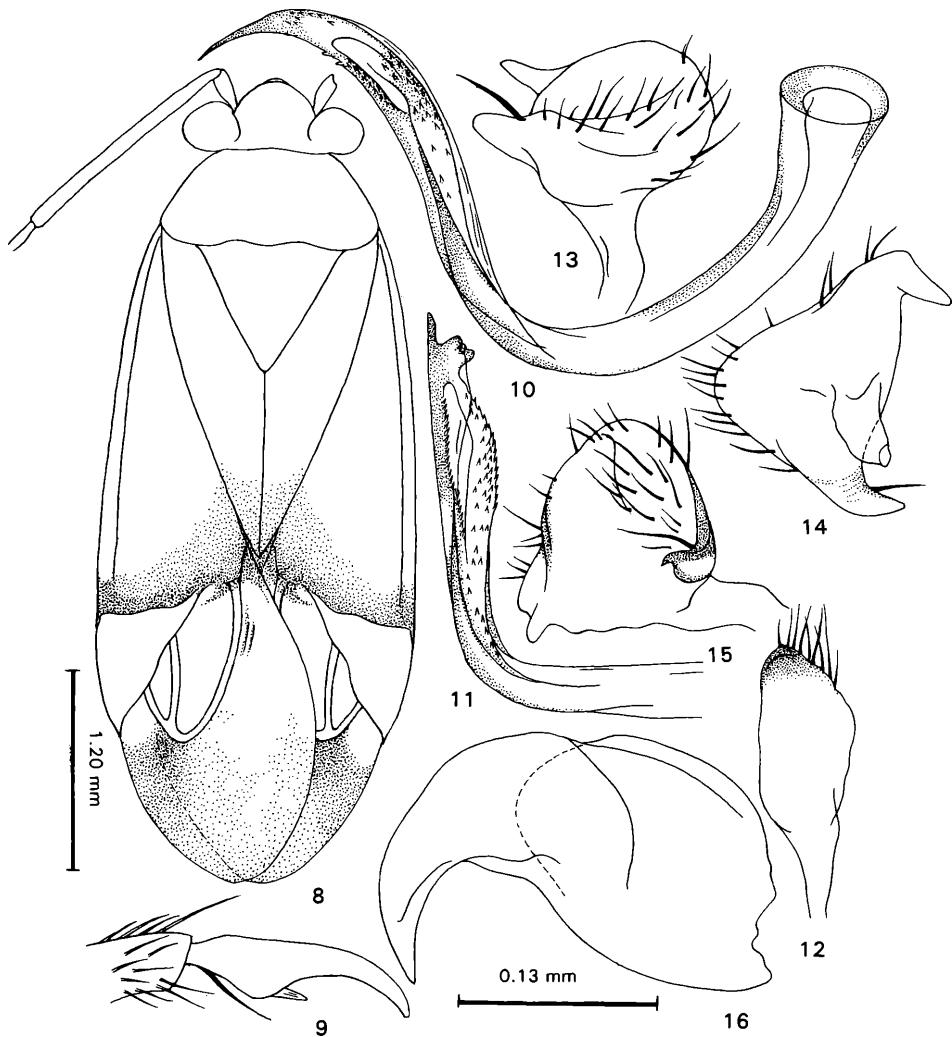
This genus is here recorded for the first time for China.

Leucopterus candidatum REUTER, 1879 (Figs. 8–16)

This European species previously known from Georgia and Russia (Carvalho, 1958) is here recorded from China: 53 ♂♂, 48 ♀♀, Miquan county, Xinkiang Weiur Autonomous Region, 14. VII. 1993, Qi Bao-Ying coll. (on *Artemisia* spec.).

Redescription. Male: Size rather larger for the subgenus. Head white-red-yellow with only brown compound eyes than any other dark trace, with suberect silver hairs which are denser on front, posterior margin of the head, and proximal part of tylus; antennae white-red-yellow with suberect silver short hairs; rostrum white-red-yellow with most part of the 3rd segment dark and apex reaching only to posterior margin of mesosternum. Pronotum greenish yellow with suberect silver hairs, calli and its around area yellowish with silver hairs denser and longer, disc of the pronotum more convex, brilliant, hairs short and sparse, almost invisible. Scutellum greenish yellow, more convex, posterior margin of mesotergum exposed and light yellow with adpressed short silver hairs, a broad brown stripe traverses distal margin of corium and apex of clavus where with some adpressed brown hairs which are denser and longer than that of exocorium; cuneus light yellow with adpressed common hairs; membrane light greyish yellow with distal half part light brown, veins light colored and a distinct long-triangular yellow stripe next to the vein of large cell. Legs white-red-yellow, hind femura dark brown, or part of it dark brown in some individuals; tibia with suberect light colored spines without dark spots at the base; the 3rd segment of tarsus longer than the 1st and 2nd ones together, distal part of the 3rd segment and claw dark, pseudarolia minute. Venter yellow or greenish yellow with adpressed light colored pubescence, only sternum dark brown. Gonopore triangular, vesica with one untoothed spine-like process and many minute sclerotized dentes. Left paramere with short apophysis and short and robust sensory lobe, right paramere leaf-like with apex slightly bent.

Female: Similar to the male. Only most of individuals with hind femura white-red-yellow or only anterior margin dark, and mesosternum light colored.

Figs. 8–16: *Leucopterus candidatum* REUTER

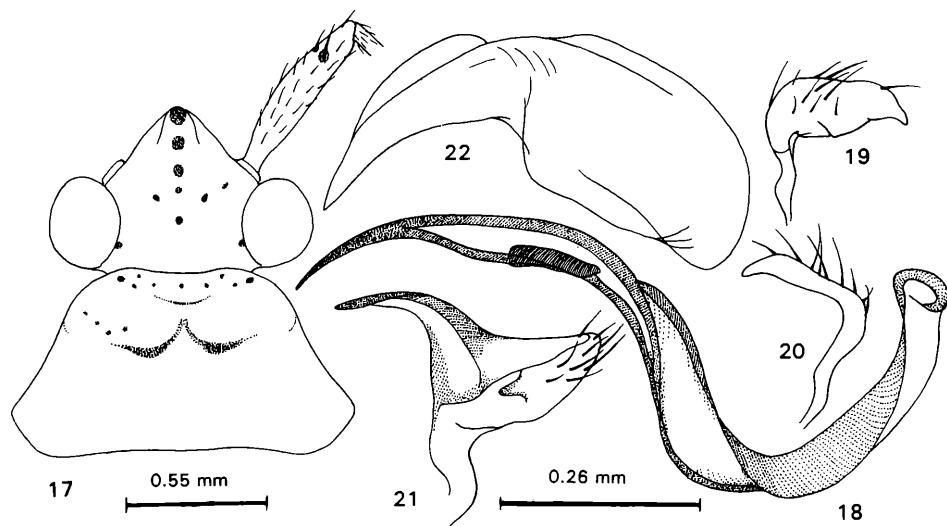
8 – male; 9 – claw (showing pseudarolium); 10–11 – vesica; 12 – right paramere; 13–15 – left paramere (different views); 16 – phallotheca.

Length. Body: male 4.92–5.04 mm, female 4.20–4.44 mm. Pronotum: male 0.60 mm, female 0.66 mm. Head: male 0.28 mm; female 0.33 mm. Antennal segments: male 0.33 : 1.27–1.32 : 0.99–1.11 : 0.44–0.50 mm, female 0.30 : 1.10 : 0.77 : 0.44 mm.

Width. Body: male 1.68–1.80 mm, female 1.74–1.80 mm. Pronotum: male 1.44 mm, female 1.56 mm. Head: male 0.94 mm, female 1.05–1.07 mm. Vertex: male 0.41 mm, female 0.50 mm.

Genus *Oncotylus* FIEBER, 1858

This genus is here recorded also for the first time for China.

Figs. 17–22: *Oncotylus (s. str.) vitticeps* FIEBER

17 – head and pronotum (dorsal view); 18 – vesica; 19–20 – right paramere (different views);
21 – left paramere; 22 – phallotheca.

Oncotylus (s. str.) vitticeps REUTER, 1879 (Figs. 17–22)

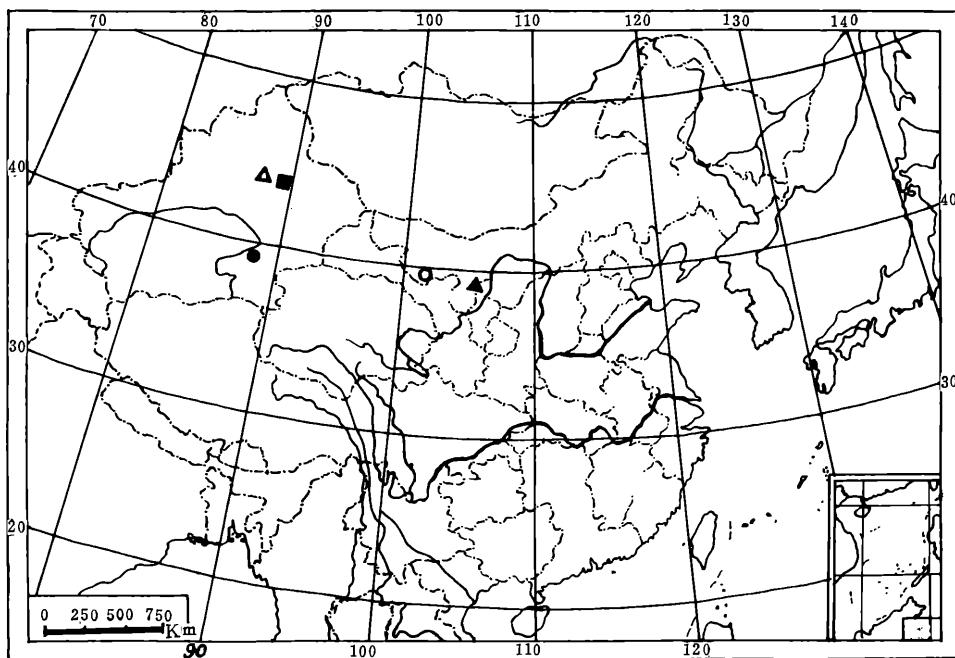
This European species previously known from Caucasus, Russia, Tauria and Turkestan (CARVALHO, 1958) is here recorded from China: 39 ♂♂, 20 ♀♀, Jimusar county, Xinkiang Weiur Autonomous Region, 21–22. VII. 1993, 20. VIII. 1993, Qi Bao-Ying coll. (on *Artemisia* spec.)

Redescription. Male: Body elongated ovate, light greyish with adpressed black hairs on hemelytra but suberect on pronotum and posterior margin of head. Head triangular on dorsal view, brilliant, light yellowish green with dark brown compound eyes and some black spots on upper side arranged as shown in Fig. 17. Antennae linear and long, brownish yellow with suberect dark hairs, the 1st segment yellowish green with two black spots on dorsum. Rostrum brownish yellow, apex part of the 2nd segment and whole 3rd one black, its apex not reaching to posterior margin of mesosternum. Pronotum ladder-shaped, greyish green, lateral margin straight, posterior margin emarginate forward, with small dark brown spots on anterior and posterior margin and posterior margin of calli. Scutellum greyish green or yellowish green. Hemelytra light greyish green, only internal margin and connexivum of clavus indistinctly dark; membrane greyish brown or light grey, only cells and near area greyish brown, veins light yellow. Legs long, light yellowish green or light brownish yellow with adpressed short black hairs, distal end of tibia, whole tarsus and claws black, femura with black spots, tibia with dark spines on small black spots. Venter yellowish green with adpressed light colored pubescence, sometimes that of thorax brownish yellow. Gonopore long triangular; vesica with one spine-like process which is the continuation of both lateral margins of the vesica, secondary gonopore submedially; right paramere sickle-shaped, left one with long and bent aphopysis and small sensory lobe.

Female: Similar to the male in major characteristics. Only distinguished by broader body, especially broader abdomen.

Length. Body: male 6.36 mm, female 6.48–6.96 mm. Pronotum: male 0.66–0.72 mm, female 0.84 mm. Head: male 0.60 mm, female 0.60–0.72 mm. Antennal segments: male 0.60 : 2.28 : 2.04 : 0.84, female 0.60 : 2.04–2.28 : 1.44 : 0.60 mm.

Width. Body: male 1.68–1.92 mm, female 2.40–2.64 mm. Pronotum: male 1.44–1.50 mm, female 1.62–1.74 mm. Head: male 1.08 mm, female 1.14–1.26 mm. Vertex: male 0.54 mm, female 0.60 mm.



- *Tuponia (s. str.) brevicula* spec. nov.
- *Tuponia (s. str.) mongolica* DRAPOLYUK
- *Oncotylus (s. str.) vitticeps* REUTER
- *Tuponia (s. str.) arcufera* REUTER
- △ *Leucopterum candidatum* REUTER

Fig. 23: Distribution map of the species listed.

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