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Triprocessoides, a new leafhopper genus from China (Hemiptera: Cicadellidae: Evacanthinae: Nirvanini)

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Abstract

A new leafhopper genus of the tribe Nirvanini (Hemiptera: Cicadellidae: Evacanthinae) from China, *Triprocessoides* **gen. nov.**, with *Triprocessoides lii* **sp. nov.** as type species, is described and illustrated. A key to Chinese genera of Nirvanini is provided. The type specimens of the new species are deposited in the Institute of Entomology, Guizhou University, Guiyang, China (GUGC).

Key words: Homoptera, morphology, new taxa, taxonomy

Introduction

The tribe Nirvanini Baker, 1923 has a pantropical distribution and is particularly diverse in the Oriental region, with 16 genera distributed in China and several of these apparently endemic to this country (Li *et al*., 2020). Many new Chinese genera and species have been described recently (Li *et al.*, 2020).

Recently, during a study of the Chinese Evacanthinae, our research team discovered a new Oriental Nirvanini genus. Here we describe *Triprocessoides* **gen. nov.** based on one species *Triprocessoides lii* **sp. nov.** from Guizhou Province, China. A key to Chinese genera of Nirvanini is provided. The type specimens of the new species are deposited in the Institute of Entomology, Guizhou University, Guiyang, China (GUGC).

Material and methods

Dry male specimens were used for the descriptions and illustrations. External morphology was observed under a stereoscopic microscope and characters were measured with an ocular micrometer. Color pictures for adult habitus and male genitalia were obtained using a KEYENCE VHX-6000 system. The genital segments of the examined specimens were macerated in 10% NaOH. Illustrations were imported into Adobe Photoshop CS8 for labeling and plate composition.

The morphological terminology used in the descriptions mainly follows Li *et al.* (2011), however, that of leg setal rows follows Rakitov (1998). Absolute measurements, in millimeters (mm), are reported for the body.

Key to genera of Nirvanini from China

1.	Crown longer than width between eyes	2
	Crown shoter than or equal to the width between eyes	10
2.	Dorsum with pair of orange-yellow longitudinal stripes extended from crown to scutellum	*Ophiuchus* Distant
	Dorsum without such stripes	3

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3.	Apical margin of male pygofer deeply concave in lateral view	*Concaveplana* Chen & Li
	Apical margin of male pygofer not deeply concave in lateral view	4
4.	Male pygofer with inwardly projecting process extending ventrally	*Extensus* Huang
	Male pygofer without inwardly projecting process extending ventrally	5
5.	Apex of male pygofer bifurcated, ventral margin without process	*Aequoreus* Huang
	Apex of male pygofer bifurcated, ventral margin with process	6
6.	Crown more than twice as long as width between eyes	*Longiheada* Li, Li & Xing
	Crown not more than twice as long as width between eyes	7
7.	Forewing with more than three triangular pale yellow markings	*Triprocessoides* **gen. nov.**
	Forewings with fewer than three triangular pale yellow markings	8
8.	Crown slightly elevated	*Sinonirvana* Gao & Zhang
	Crown flat	9
9.	Male subgenital plate slender, with length-to-width ratio approaching 8:1	*Nirvana* Kirkaldy
	Male subgenital plate broad and short, with length-to-width ratio less than 6:1	*Sophonia* Walker
10.	Frontoclypeus strongly convex, nearly globular	*Convexfronta* Li
	Frontoclypeus less convex, not globular	11
11.	Pronotum and scutellum with black markings	*Longiconnecta* Li & Xing
	Pronotum and scutellum without black markings	12
12.	Forewing with dark brown transverse bands	*Extenda* Li, Li & Xing
	Forewing without dark brown transverse bands	13
13.	Male pygofer with dorsolateral and ventrolateral extensions apically	*Biprocessa* Li, Li & Xing
	Male pygofer without such extensions	14
14.	Aedeagus bent ventrad at acute angle near midlength in lateral view	*Decursusnirvana* Gao & Zhang
	Aedeagus not as above	15
15.	Male pygofer with long proces on ventral margin	*Kana* Distant
	Male pygofer without long proces on ventral margin	16
16.	Apical half of aedeagus membranous and sac-like	*Chudania* Distant
	Apical half of aedeagus not membranous and sac-like	*Oniella* Matsumura

Taxonomy

Tribe Nirvanini

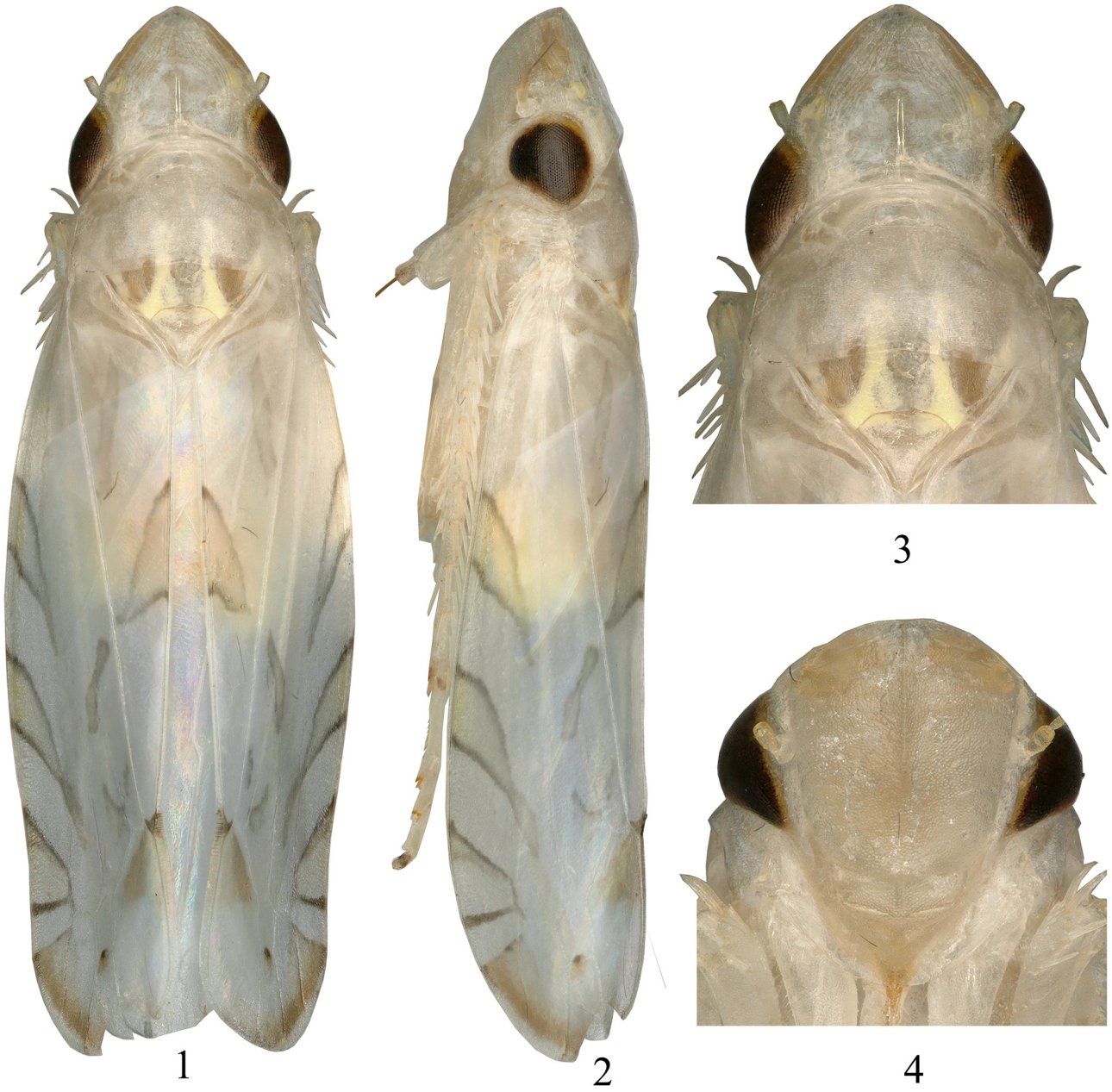
Genus *Triprocessoides* gen. nov.

Type species: *Triprocessoides lii* **sp. nov.**

Description. Body medium-sized. Predominant color usually milky white or pale greyish-white, with a translucent, waxy sheen.

Head including eyes narrower than greatest width of pronotum. Crown strongly produced, distinctly longer than width between eyes, middle of posterior region elevated. Eyes black. Pronotum coloration similar that of rest of body, with central pale markings. Ocelli pale yellow, located at lateral edges of crown anterad of eyes. Frontoclypeus milky white and convex, distinctly longer than wide, with a median longtudinal ridge in dorsal two thirds. Forewing venation indistinct, markings including two transcommusural and three costal triangles outlined with dark brown lines; preapical false eyespot present. Front femur with setae AM1 and AV1enlarged; intercalary row with 9–11 setae with more distal setae progressively larger; row AV with two enlarged basal setae and ca. 10 shorter setae more distad; PV setae absent. Fore femur with IC setae fine, row AM with 1 stout seta, intercalary row with 12 setae, and row AV with several short setae in basal half. Fore tibia dorsal surface rounded, row AD with one macroseta, row PD with 5 macrosetae; row AV with approximately 20 macrosetae and row PV with 2 macrosetae. Hind femur apical setal formula 2+1+1; tarsus elongate, tarsomere I longer than II and III combined, with pair of dorsoapical setae and single longitudinal row of plantar setae; pecten of tarsomeres I and II each with three tapered setae, platellae absent. Hind tibia flattened and nearly straight, row PD with approximately 21–23 macrosetae; row AD with approximately 12–14 long stout setae and 1–3 shorter stout setae between each long seta.

Male genitalia. Male pygofer with some strong lateral marginal setae. Subgenital plate extended well beyond pygofer, with single row of 7–10 strong setae. Aedeagus with atrium expanded laterally in ventral view, bearing pair of branched lateral processes and median ventral process; shaft curved dorsad, without processes. Connective Y-shaped, stem longer than arms. Style apex footlike.



FIGURES 1–4. *Triprocessoides lii* **sp. nov.** ♂ 1. dorsal view; 2. lateral view; 3. Head and thorax, dorsal view; 4. face.

Remarks. This genus is similar to *Neobiprocessa* Xing & Li, 2022 in external appearance, but can be distinguished by the aedeagus with three forked processes.

Etymology. The new genus name is derived from the Latin word "tri-" and "*processoides*", in reference to the aedeagus with three forked processes.

Distribution. Oriental Region (China).

***Triprocessoides lii* sp. nov.**
(Figs 1–9)

Description. Color pattern of anterior dorsum and face as in Figs 1–4. Body milky white or pale greyish-white; eyes black; ocelli pale yellow; face milky white; frontoclypeus with transverse striations on both sides of longitudinal ridge. Forewing with false eyespot small and indistinct. Basal width between eyes 1.2x longer than crown. Other external features as in generic description.

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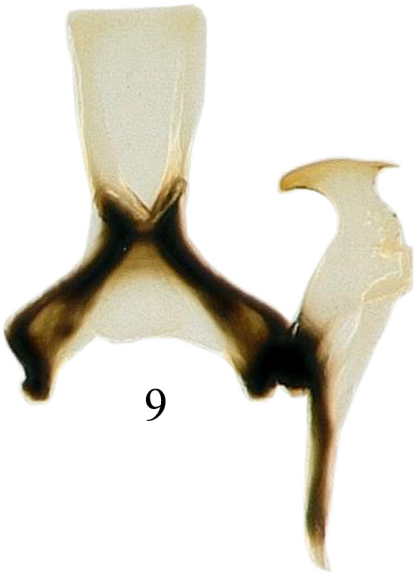

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FIGURES 5–9. *Triprocessoides lii* **sp. nov.** 5. Male pygofer side, lateral view; 6. Subgenital plates, ventral view; 7. Aedeagus, lateral view; 8. Aedeagus, ventral view; 9. Connective and style, ventral view.

Male genitalia. Pygofer (Fig. 5) side base broad, narrowed distad, triangularly produced caudally, with some setae near end. Subgenital plate long, 8 macrosetae on ventromedial row (Fig. 6). Aedeagus with paired lateral processes of atrium each branched near base with median branch half as long as lateral branch, ventral process branched at distal third; shaft broad basally, evenly tapered and curved dorsad toward apex (Figs 7–8). Connective (Fig. 9) stem slightly longer than arms. Style apex foot-like in ventral view with median toe relatively broad and lateral heel spinelike (Fig. 9).

Measurement. Length (including tegmen): ♂, 5.1–5.4 mm; ♀, 5.3–5.6mm.

Type Material. Holotype: ♂, CHINA: Guizhou Prov., Foding Mountains, 23 August 2023, coll. Guangli Gou (GUGC). Paratypes: 2♂♂1♀, same data as holotype.

Etymology. The species name is named in honor of Prof. Zizhong Li (GUGC) in recognition of his good work on leafhoppers and celebrating his 90th birthday.

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References

Li, Z.Z., Dai, R.H. & Xing, J.C. (2011) *Deltocephalinae from China (Hemiptera: Cicadellidae)*. Popular Science Press, Beijing, 336 pp. [in Chinese with English summary]

Li, Z.Z., Li, Y.J. & Xing, J.C. (2020) *Fauna Sinica Insecta vol. 72 Hemiptera: Cicadellidae (IV): Evacanthinae*. Science Press, Beijing, 550 pp.

Xing, J.C. & Li, Z.Z. (2022) New replacement name for the genus *Biprocessa* Li, Li & Xing, 2020 (Hemiptera: Cicadellidae: Evacanthinae). *Zootaxa*, 5092 (2), 249–250. https://doi.org/10.11646/zootaxa.5092.2.8

Rakitov, R.A. (1998) On differentiation of cicadellid leg chaetotaxy (Homoptera, Auchenorrhyncha, Membracoidea). *Russian Entomological Journal*, 6, 7–27.