



One new species of the genus *Neophlugioloopsis* Pan & Bian, 2024 (Orthoptera: Tettigoniidae: Meconematinae) from Guangxi, China

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The genus *Neophlugioloopsis* was established by Pan & Bian (2024), with *Neophlugioloopsis longipropera* Pan & Bian, 2024 as the type species. It resembles *Phlugioloopsis* Zeuner, 1940, *Paraphlugioloopsis* Bian & Shi, 2014, *Aphlugioloopsis* Wang, Liu & Li, 2015, *Pseudophlugioloopsis* Wang, Zhou & Chang, 2020 and *Guangxia* An, Chen & Shi, 2023, but can be distinguished from them mainly by the following characters: tegmina reach the middle of abdomen, and posterior area of male tenth abdominal tergite is strongly produced posteriorly into a long process.

In this paper, a new species from Guangxi, China is described and tentatively assigned to the genus *Neophlugioloopsis*. All type specimens are deposited in the Museum of Hebei University.

Specimens were examined under a Nikon-SMZ-1500 stereomicroscope. Morphological images were captured using a Leica DFC450 camera coupled to a Leica M205A imaging system. Photographs were edited in Adobe Photoshop 2024. Measurements were taken with vernier calipers.

The following measurements were used: body length—distance from apex of fastigium verticis to posterior margin of tenth abdominal tergite in the midline; pronotum length—distance from anterior to posterior margins of pronotum in the midline; tegmen length—distance from base of tegmen to the apex; hind femur length—distance from base of hind femur to apex of genicular lobe.

Genus *Neophlugioloopsis* Pan & Bian, 2024

Neophlugioloopsis Pan & Bian, 2024, *Zootaxa*, 5474 (2): 192.Type species: *Neophlugioloopsis longipropera* Pan & Bian, 2024.

Generic diagnosis. Body small. Fastigium verticis conical, apex rounded, dorsal surface with a fine median sulcus. Apical segment of maxillary palpus slightly longer than subapical one, apex slightly swollen. Lateral lobes of pronotum narrowing posteriorly, humeral sinus indistinct. Tegmina short, reaching the middle of abdomen; hind wings slightly shorter than tegmina. Fore coxa with one small spine; all femora unarmed ventrally, apices of genicular lobes of hind femora rounded. Fore tibial tympana open on both sides; hind tibia with 1 pair of dorsal apical spurs and 2 pairs of ventral apical spurs. Posterior margin of male tenth abdominal tergite with a pair of long processes. Male cerci bilaterally symmetrical; genitalia membranous; subgenital plate with styli. Female ovipositor with dorsal and ventral margins smooth; apices of dorsal valvulae acute, ones of ventral valvulae hooked. Body brown. Disc of pronotum brown, lateral margins slightly darker.

Neophlugioloopsis? nigrivertex sp. nov., Chinese name 黑顶新吟螽

(Figs. 1–2)

Description. Male. Body small. *Head.* Fastigium verticis conical, apex rounded, dorsal surface with a fine median sulcus. Eyes nearly globular, projecting anteriorly (Fig. 1A–B). Apical segment of maxillary palpus slightly longer than subapical one, apex slightly swollen.

Thorax. Pronotum short, anterior margin straight, posterior margin obtusely rounded; lateral lobes longer than high, gradually narrowing posteriorly, humeral sinus indistinct (Fig. 1A–B).

Tegmina and wings. Tegmina reaching the middle of fourth abdominal tergite, bluntly rounded at apices. Hind wings slightly shorter than tegmina.

Legs. All femora unarmed ventrally; apices of genicular lobes of hind femora rounded. Fore coxa with 1 short spine; fore tibial tympana open on both sides; fore tibia with 4 and 5 long spines on inner and outer ventral margins, respectively, and bearing 1 pair of short ventral apical spurs. Middle tibia with 4 and 5 long spines on inner and outer ventral margins, respectively, and bearing 1 pair of ventral apical spurs. Hind tibia with 27–33 short spines on each dorsal margin; ventral surface with 2–3 short spines on inner margin and 6–7 short spines on outer margin, and bearing 1 pair of dorsal apical spurs and 2 pairs of ventral apical spurs.

Abdomen. Posterior area of tenth abdominal tergite produced medially into a long, slightly flattened process curved ventrad; base of process slightly narrow, basal 2/3 with a longitudinal sulcus; ventral margin slightly expanded ventrad near middle area; apical 1/3 longitudinally split; apical area gradually narrowing, lamellate, slightly curved outward, apex rounded (Fig. 1E–F). Cercus short, distinctly incurved; basal half cylindrical; ventral surface near middle area with a finger-like process, slightly curved dorsad; apical half laterally compressed, apex bluntly rounded (Fig. 1C–D). Subgenital plate with basal half rectangular and apical half nearly triangular, slightly bent dorsad; posterior margin arcuate. Styli short, arising from the ventrolateral margins near the apex of subgenital plate (Fig. 1C).

Coloration. Body yellowish brown when alive. Eyes dark brown. Inner margins of antennal sockets, scape, pedicel and first flagellomere dark brown; some flagellomeres with brown rings. Dorsal surface of head black, with a pale median stripe. Disc of pronotum with a broad brown median stripe, outer margins slightly darker; middle area of metazona pale (Fig. 1A–B). Apices of fore and mid tibiae and all tarsi dark brown; spines of fore and mid tibiae dark brown; apices of dorsal spines on hind tibia black; inner and outer surfaces of hind femur each with a dark brown longitudinal stripe. Tegmina brown with black spots. Abdominal tergites with a broad dark brown median stripe; ninth abdominal tergite and lateral margins of tenth abdominal tergite dark brown (Fig. 1E–F); subgenital plate dark brown (Fig. 1C).

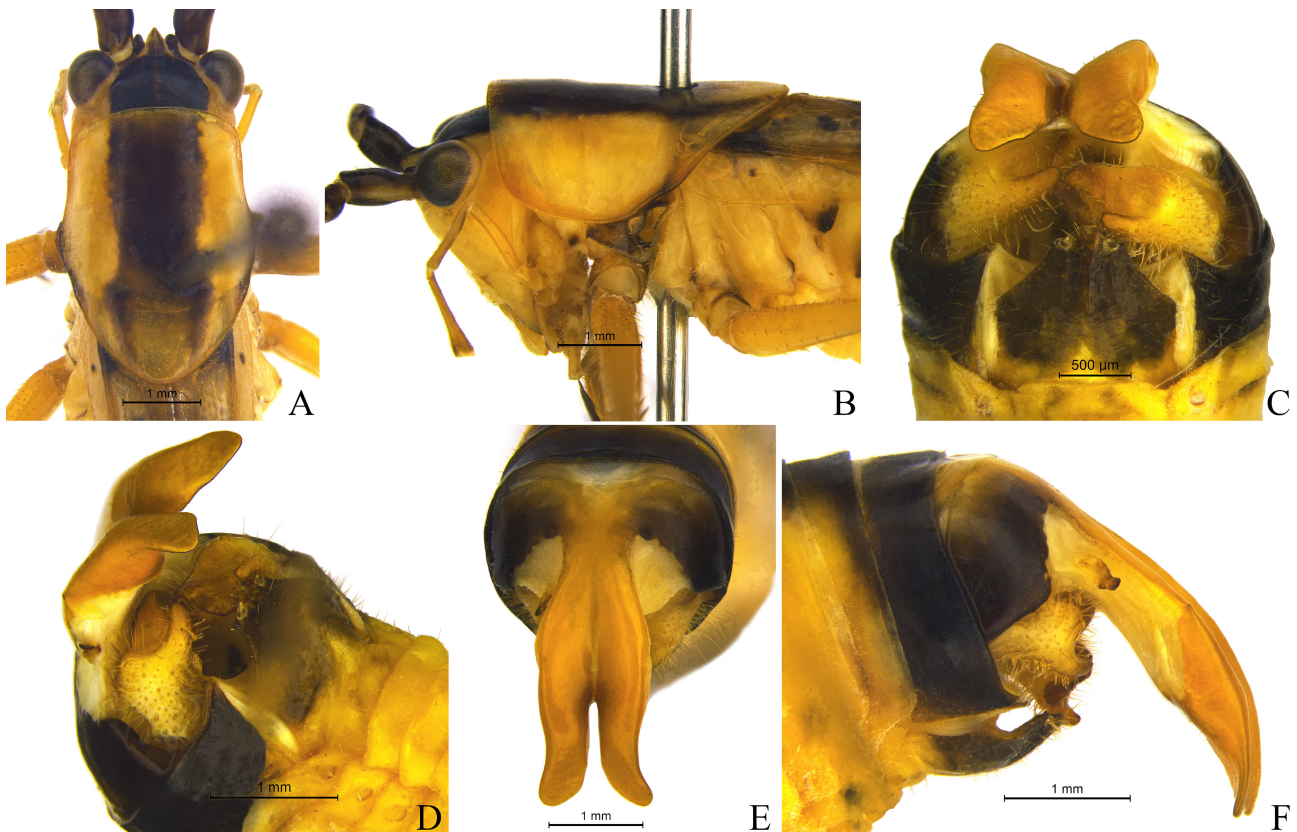


FIGURE 1. *Neophlugiolopsis? nigrivertex* sp. nov., male: **A–B.** head and pronotum: **A.** dorsal view; **B.** lateral view; **C–F.** apex of abdomen: **C.** ventral view; **D.** latero-ventral view; **E.** dorsal view; **F.** lateral view.

Female. Unknown.

Material examined. Holotype: ♂, Shengtangshan, Changdongxiang, Jinxiu, Guangxi, 19 July 2025, coll. Guanglin Xie. Paratype: 1♂, Dayaoshan, Jinxiu, Guangxi, 22 September 2025, coll. Zhilin Chen.

Measurements (mm). Body length: ♂10.9–12.9; pronotum length: ♂4.2–4.5; tegmen length: ♂3.9–4.1; hind femur length: ♂10.8–11.1.

Distribution. China (Guangxi).

Discussion. This new species resembles *Neophlugiolopsis longiprocera* Pan & Bian, 2024, the type species of the genus, but differs from it in the following characters: dorsal surface of head black, with a narrow median pale stripe; posterior area of male tenth abdominal tergite with a long, compressed process, apical 1/3 longitudinally split; cercus short and stout, distinctly incurved. Paratype slightly differs from holotype in that the ventral surface of the process on posterior area of tenth abdominal tergite bears a lamellate expansion directed ventrad near middle area. As some characters of the new species differ from the generic diagnosis of *Neophlugiolopsis*, it is tentatively assigned to this genus.

Etymology. The specific name refers to the black dorsal surface of the vertex. It is derived from Latin *nigri-*, meaning “black”, and *vertex*, meaning “top of the head”.



FIGURE 2. *Neophlugiolopsis? nigrivertex* sp. nov., male in habitat.

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