

**A NEW GENUS OF ORTHOTYLINI (HETEROPTERA:
MIRIDAE) WITH DESCRIPTIONS OF
FOUR NEW SPECIES**

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ABSTRACT. *Latizanchius*, gen. nov. (Heteroptera: Miridae) is described with four new species: *L. longicuneus*, *L. viridivittatus*, *L. yadongensis* and *L. zebrinus*. A key to the species is included. The types specimens are deposited in the Department of Biology, Nankai University, Tianjin, P. R. China except as otherwise mentioned. All measurements are in millimeters.

Key words: Taxonomy, Miridae, Orthotylineae, new taxa, China, Oriental Region.

***Latizanchius* Liu & Zheng, gen. nov.**

Type-species: *Latizanchius longicuneus* Liu & Zheng, sp. nov.

Description: Body oblong in dorsal view, gradually widened caudad, pale yellowish brown, shining, covered with long pale hairs. Eyes at antero-lateral angle of head, far away from pronotum. Head not constricted behind eyes, postocular area tumid and with long hairs, posterior margin with a transverse carina. Antennae with semi-erect long hairs, segment I almost as long as or longer than head width, laterally with a black spot or stripe (Fig. 2); segment II thicker and longer than III or IV. Rostrum reaching base or middle of abdomen. Pronotum trapezoidal, hairs pale and long; anterior margin usually straight, lateral margins slightly concave, posterior margin broadly concave at middle. Mesoscutum largely exposed, smooth, raised. Scutellum slightly raised. Hemelytra densely covered with long pale hairs; cuneus long, at least 2.0x its width; membrane milky hyaline or semihyaline. Legs pale, sometimes femora or tibiae with dark spots or stripes.

Male genitalia: Aedeagus small, as in Fig. 5, vesica with spicule; hypophysis of left paramere slender, reflexed; right paramere comparatively thick.

Remarks: *Latizanchius* is close to *Zanchius* but is differentiated by the following characters: Body more gradually widened caudadly, eyes situated at anterior half of head, postocular length almost as long as eye length; antennal segment I slender, as long as or longer than head width (including eyes), longer than vertex width, its ventral side with black spot or stripe; rostrum long, reaching base or middle of abdomen; cuneus long, length 2.0x or longer than its basal width; and membrane with a small dark spot in the large cell.

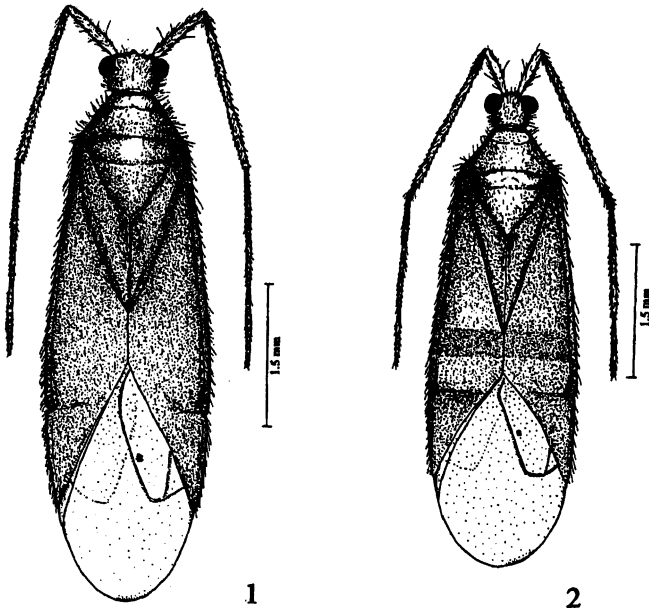
Etymology: The generic name is derived from the Latin *lati*, meaning broad + *zanchius*, the name of the genus to which it resembles.

Key to species of *Latizanchius*

1. Femora unicolorous, without any black spot or stripe2
- Femora with irregular black spots or stripes3
2. Antennal segment I with a T-shaped black stripe, antennal segment II blackish brown at base and apex; hemelytra with a light green transverse band at posterior half of corium
.....*L. viridivittatus* Liu & Zheng, sp. nov.
- Antennal segment I with a long black stripe; hemelytra without a green band*L. yadongensis* Liu & Zheng, sp. nov.
3. Antennal segment I with a black spot and a black stripe ventrally; hemelytra unicolorous*L. longicuneus* Liu & Zheng, sp. nov.
- Antennal segment I black ventrally; hemelytra with a medial fascia
.....*L. zebrinus* Liu & Zheng, sp. nov.

1. *Latizanchius longicuneus* Liu & Zheng, sp. nov. (Figs. 1, 5)

Diagnostic characters: Femora with irregular black spots or stripes; first antennal segment with a black spot and a black stripe at ventral side; 2nd antennal segment blackish brown at base; hemelytra unicolorous.



Figs. 1-2. 1, *Latizanchius longicuneus*, dorsal view of adult; 2, *L. viridivittatus*, dorsal view of adult.

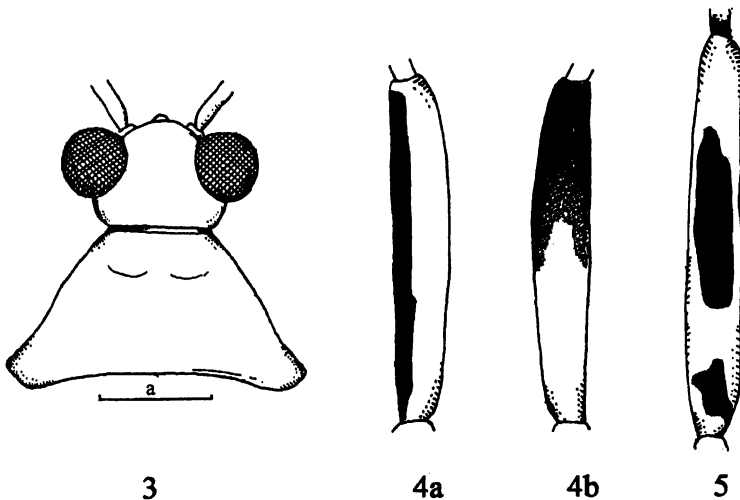
Body elongate oval, 3.2x as long as broad, pale yellowish brown, slightly shining, covered with long pale hairs. Head length 5.7x width. Eye length as long as postocular area; postocular area tumid and with long hairs. Antennal segment I with an irregular black spot and a black stripe laterally; segment II blackish brown basally, length 2.4x head width. Rostrum almost reaching middle of abdomen. Pronotum covered with long long hairs, hairs on posterior margin brown; length 2.8x width and 1.78x head width. Scutellum shorter than basal width. Hemelytra covered with dense, long, pale hairs; corium length 3.92x width of head, 2.2x pronotum width; cuneus length 2.0x basal width, 2.0x scutellum length; membrane hyaline, veins yellowish brown, with a spot in large cell. Legs slender, with long pale hairs; front femur yellowish brown, apical half dorsally with an interrupted black stripe; middle femur dorsally with four black spots on apical half; hind femur with five black oblique spots, the apical one longer than the others; tibiae slender, hind tibia with short black spines arranged in lines.

Measurements: Body length 5.8, width 1.8; head length 0.5, width 0.7 (including eyes); postocular length 0.2; vertex width 0.52; antennal segment lengths: I:II:III:IV = 0.65:1.7:1.25:0.85; pronotum length 0.6, width 1.25; scutellum length 0.5, width 0.7; embolium length 2.75; cuneus length 1.0, base width 0.5; claval commissure length 1.0.

Holotype: ♀, P. R. CHINA: Gansu Prov.: Wenxian County: Qiu-jia-ba, 2400m., 22.vii.1988, Coll. Guo-Qing Liu. (In Dept. of Biology, Nankai University).

Distribution: P. R. China: Gansu Prov.

Etymology: The new species is named for its long cuneus.

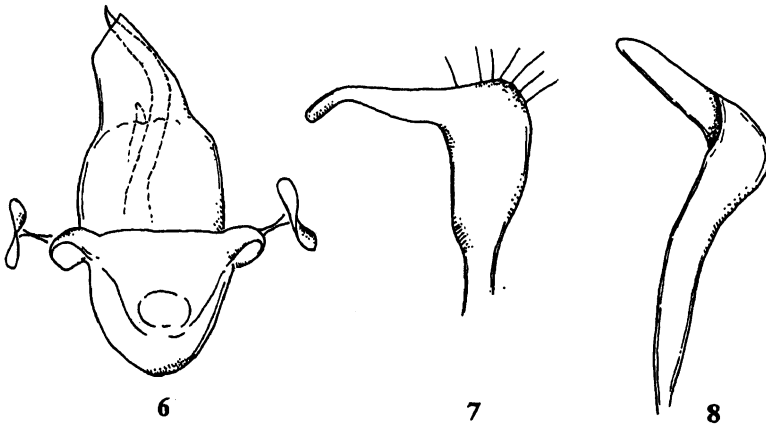


Figs. 3-5. 3, *Latizanchius yadongensis*, dorsal view of head and pronotum; 4a-4b, *L. viridivittatus*, antennal segment I; 5, *L. longicuneus*, antennal segment I. Scale for Fig. 1: a=0.2mm.

2. *Latizanchius viridivittatus* Liu & Zheng, sp. nov. (Figs. 2, 4a, 4b, 6-8)

Diagnostic characters: First antennal segment with a T-shaped black stripe; antennal segment II blackish brown at base and apex; posterior half of corium with a light green transverse band; femora without black spot or stripe.

Body oblong, light yellowish brown, covered with long pale hairs, slightly shining. Head light yellowish brown. Eyes large, as wide as interocular width, longer than postocular length. Postocular area with a few long hairs. Antennal segment I with dense semierect hairs and a few long setae among them, with a T-shaped black stripe; segment II light yellowish brown except for blackish brown base and apex, 4.0x as long as pronotum, 3.04x head width, light yellowish brown at extreme base; rostrum long, reaching base of abdomen. Pronotum slightly shining; anterior margin slightly concave, apical half of lateral margin slightly concave, lateral angles weakly reflexed; hind margin of calli shallowly furrowed, calli slightly tumid; pronotal length 0.5x width. Scutellum smooth, shining, light yellow, with semierect hairs. Hemelytra pale green, with a light green transverse band at posterior half of corium; embolium length 3.9x head width, 1.29x length of antennal segment II; cuneus 2.0x as long as wide; membrane pale, semihyaline, veins green, with a dark spot in large cell. Legs pale yellowish brown, covered with pale semierect hairs; with a few long hairs at ventral side of femora; apical half of tarsi blackish brown.



Figs. 6-8. *Latizanchius viridivittatus*: 6, aedeagus; 7, left paramere; 8, right paramere.

Male genitalia: Aedeagus small, Phallosome tapered toward apex, vesica with slender spiculum; hypophysis of left paramere slender, bent, apex round; hypophysis of right paramere straight.

Measurements: Body length 5-5.4, width 1.7; head length 0.4, width 0.68 (including eyes); interocular length 0.23; postocular length 0.13; vertex width 0.45; antennal segments length: I:II:III:IV = 0.6:2.05:1.3:0.75; pronotum length 0.5, width 1.1; embolium length 2.65; claval commissure length 1.05; scutellum length 0.5, width 0.6; cuneus length 1.0, width 0.5.

Holotype: ♂, CHINA: TAIWAN: Kao Feag (3.2km from Wu Sheh), 1260 m., 17.i. 1962, Coll. C. M. Yoshimoto. (In Bishop Museum).

Paratypes: China: 2 ♂, same data as in holotype; Yunnan Prov.: Lüchun County, 1 ♀, 30.v.1996, Coll. Wen-Jun Bu; Taiwan: Musha, 1 ♀, 5.xii.1963, Coll. T. C. Maa (in Bishop Museum).

Distribution: China: Yunnan, Taiwan.

Etymology: The new species is named for the transverse green band on hemelytra.

3. *Latizanchius yadongensis* Liu & Zheng, sp. nov. (Figs. 9-11)

Diagnostic characters: Related to *Latizanchius viridivittatus* but differing in the shapes of aedeagus and parameres, color pattern of antennal segments I and II, and by the unicolorous corium.

Body elongate, yellowish green to yellowish brown, covered with long pale hairs, slightly shining. Head yellowish brown, with pale erect long hairs; eyes comparatively large; postocular length comparatively short; eye length 2.5x postocular length. Antennae light yellow, covered with short, semi-erect, pale hairs, segment I slightly shorter than head width, longer than vertex width, its ventral side with a blackish stripe; segment II yellowish brown at base and apex, length 2.2x width of head. Rostrum long, reaching base of abdomen. Pronotum smooth, yellow, covered with pale semi-erect long hairs, anterior margin concave; lateral margins straight, posterior margin concave, lateral angle blunt; pronotal width 2.4x its length, 1.47x width of head, 0.7x antennal segment II length. Mesoscutum yellow, smooth. Scutellum tumid, yellowish white, covered with fine long hairs. Hemelytra light green; corium unicolorous, smooth; embolium length 3.27x head width, 1.58x antennal segment II length, 2.23x pronotal width; cuneus long, color as corium, length 2.25x its width; membrane pale, semihyaline, shining, veins green, with a small green spot in large cell. Legs slender, yellowish white, with dense, semi-erect, pale hairs.

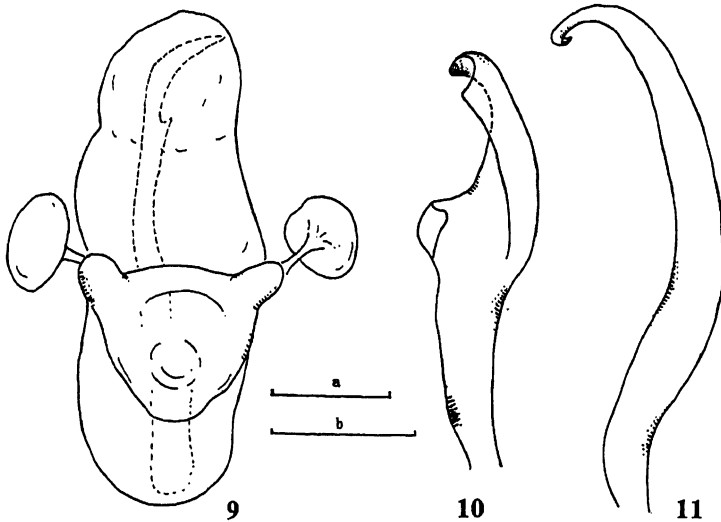
Male genitalia: Aedeagus with a spiculum as in Fig. 18; hypophysis of right paramere plate-like, somewhat curled up, apex truncate; left paramere elongate and slender without broadened sensory lobes, tapered, apex curled.

Measurements: Body length 4.75, width 1.4; head length 0.3, width 0.75 (including eyes); postocular length 0.1; interocular length 0.25; vertex width 0.5; antennal segments length: I:II:III:IV = 0.6:1.55:1.15:0.9; pronotum length 0.45, width 1.1; scutellum length 0.5, width 0.55; embolium length 2.2; cuneus length 0.9, width 0.4.

Holotype: ♂, P. R. CHINA: Xizang (=Tibet): Yadong (=Chomo, 27.4°N, 88.9°E), 2800m., 20.viii.1978, Coll. Fa-sheng Li (in Department of Plant Protection, Beijing Agricultural University, Beijing).

Distribution: P. R. China: Xizang.

Etymology: The new species is named after the type locality.



Figs. 9-11, *Latizanchius yadongensis*: 9, aedeagus; 10, right paramere; 11, left paramere. Scales: a=0.1mm (for Fig. 9); b=0.1mm (for Figs. 10, 11).

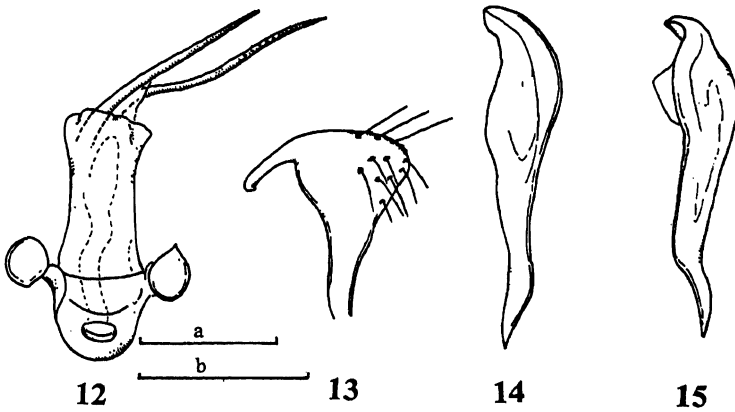
4. *Latizanchius zebrinus* Liu & Zheng, sp. nov. (Figs. 12-15)

Diagnostic characters: Related to *L. longicuneus* but with antennal segment I black ventrally, and with a wider, transverse, green band on the posterior half of corium.

Body oblong, light green, slightly shining, covered with long pale hairs and a few brown hairs. Head yellowish green, vertex flat, covered with fluffy pale hairs; postocular area tumid, with long straight hairs; eye almost orbiculate. Antennal segment I slightly shorter than head width, covered with dense, semierect, long, pale hairs, yellowish green dorsally, black ventrally and at base; segment II slender, yellowish brown, basally and apically blackish brown, length 2.7x segment I; color of segment III same as II, with base yellowish green. Rostrum reaching hind coxa. Pronotum shining, covered with long, erect, pale hairs, with sparse, long, brown hairs at lateral angles and posterior margin; anterior and lateral margins straight; posterior margin concave medially; calli slightly swollen; pronotal width 2.2x length, 1.33x head width, 0.63x antennal segment II. Scutellum pale green, covered with pale hairs, basal width as long as length. Hemelytra green, slightly shining, covered with semi-erect, pale hairs; embolium length 2.8x head width, 1.3x antennal segment II, 1.6x pronotal width; corium with a rather wide green

transverse band at posterior half; cuneus pale green, green at basal margin and apical angle, length 2.8x width. Membrane pale, semi-hyaline, veins green, with a brown spot in large cell. Legs yellowish green, covered with semi-erect pale hairs, front and middle femora dorsally with a black long stripe at apical half; basal half of hind femur dorsally with a long wider black stripe and 3-4 irregular spots.

Male genitalia: Right paramere elongate, as in Figs. 14 and 15; hypophysis of left paramere slender, with sparse long hairs at sensory lobes (Fig. 13); aedeagus as in Fig. 12, vesica with 2 slender and elongate spiculi.



Figs. 12-15, *Latizanchius zebrinus*: 12, aedeagus; 13, left paramere; 14, 15, right paramere in different views. Scales: a=0.1mm (for Fig. 12); b=0.2mm (for Figs. 13,14,15).

Measurements: Body length 4.85, width 1.2; head length 0.4, width 0.75; interocular length 0.3; postocular length 0.13; vertex width 0.55; antennal segment lengths: I:II:III:IV = 0.6:1.6:1.05:0.75; pronotum length 0.45, width 1.0; scutellum length 0.5, width 0.55; embolium length 2.1; cuneus length 0.8, basal width 0.35; claval commissure length 0.85.

Holotype: ♂, P. R. CHINA: Yunnan Prov.: Pingbian County: Dawei Mt., 1700 m, 22.v.1996, Coll. Le-Yi Zheng. (in Dept. of Zoology, Nankai University).

Distribution: P. R. China: Yunnan.

Etymology: The new species is named for the black stripes on its femora.

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