

One new genus and three new species in the planthopper tribe Selizini (Hemiptera: Fulgoroidea: Flatidae) from China

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Abstract: A new flatid genus in the tribe Selizini (Hemiptera: Fulgoromorpha: Flatidae) from southwestern China is proposed: *Wattlea* Peng, Ai & Zhang **gen. nov.** based on *W. distincta* Ai, Peng & Zhang **sp. nov.** and *W. wandingsensis* Peng, Ai & Zhang **sp. nov.** from Yunnan, China. A third new species in a different genus, *Zecheuna curva* Ai, Peng & Zhang **sp. nov.** from Hainan, China, is described. Diagnoses, detailed descriptions, and illustrations are provided for each taxon, as well as comparisons with closely-related genera.

Key words: Auchenorrhyncha; Fulgoromorpha; taxonomy

中国涩蛾蜡蝉族一新属三新种记述（半翅目：蜡蝉总科：蛾蜡蝉科）

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摘要: 记述中国云南蛾蜡蝉科涩蛾蜡蝉族 1 新属: 荆蛾蜡蝉属 *Wattlea* Peng, Ai & Zhang **gen. nov.**, 2 新种: 显荆蛾蜡蝉 *W. distincta* Ai, Peng & Zhang **sp. nov.** 和畹荆蛾蜡蝉 *W. wandingsensis* Peng, Ai & Zhang **sp. nov.**。记述中国海南泽蛾蜡蝉属 1 新种: 弯泽蛾蜡蝉 *Zecheuna curva* Ai, Peng & Zhang **sp. nov.**。文中提供了鉴别特征、详细的特征描述和外部形态及生殖器特征图, 并与近缘属、种进行了比较。

关键词: 头喙亚目; 蜡蝉次目; 分类

Introduction

Selizini Melichar, 1923 is one of the most species-rich tribes in Flatinae Spinola, 1839 (Hemiptera: Fulgoroidea: Flatidae) (Bourgoin 2025). Members of the Selizini can be recognized by the following combination of characters: body brown or dark brown; body size small (about 10 mm); antennal segment I very short, ring-like, segment II tubular; pronotum with postocular eminence conical; tegmen elongated, usually twice as long as wide, with a

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raised bulla at base of vein ScP+RA, apical margin sinuate or truncate, and vein Pcu and A₁ strongly elevated and heavily postulate (Melichar 1923; Medler 2006; Peng *et al.* 2010; Świerczewski & Stroiński 2019). Considering all recently described taxa, this tribe is currently comprised of 201 species in 56 genera, of which 19 genera are distributed in the Neotropical region, 13 genera in the Oriental region, seven genera in the Australasian region, 14 genera in the Afrotropical region, nine genera in the Palaearctic region and two genera in the Nearctic region (Bourgoin 2025). Seven genera with a total of nine species have been recorded in China (*Armorseliza* Ai, Wang & Zhang, 2019; *Gomeda* Distant, 1906; *Meulona* Zia, 1935; *Pseudoseliza* Peng, Wang & Zhang, 2010; *Satapa* Distant, 1906; *Seliza* Stål, 1862; and *Zecheuna* Zia, 1935).

This paper establishes one new Selizini genus and three new species, with very peculiar morphological features: *Wattlea* Peng, Ai & Zhang **gen. nov.** with two new species of *W. distincta* Ai, Peng & Zhang **sp. nov.** and *W. wandingensis* Peng, Ai & Zhang **sp. nov.** from Yunnan, China, and the third new species in *Zecheuna curva* Ai, Peng & Zhang **sp. nov.** from Hainan, China.

Material and methods

The venation terminology follows Bourgoin *et al.* (2015), male genitalia terminology follows Bourgoin (1987), and female genitalia terminology follows Bourgoin (1993). All measurements are in millimeters (mm). External morphology was observed under an Olympus SZX10 stereomicroscope. Male genitalia were treated with 10% NaOH solution at 100°C for several minutes, rinsed with water, immersed in 2–3 droplets of glycerol and dissected following standard procedures. They were observed under an Olympus SZX10 stereomicroscope. Measurements of bodies and tegmina were made with a Vernier caliper. Photographs of the specimens were made using a ZEISS SteREO Discovery V20 stereomicroscope equipped with a ZEISS AxioCamICc 5 camera that provided measurements. All drawings were made using an Olympus drawing tube.

Abbreviations for collections mentioned in the text are as follows: NWAUFU — Entomological Museum, Northwest Agricultural & Forestry University, Yangling, China; CAU — China Agricultural University, Beijing, China; GIZ — Institute of Zoology, Guangdong Academy of Sciences, Guangzhou, China.

The following measurements are used in this study: Total length — length of specimen from head apex to tegmina apex (in dorsal view); Length of tegmen — length from the base to the posterior margin of tegmen; Width of tegmen — width at the widest part of tegmen; Width of costal membrane versus costal cell — width of costal membrane at the widest part versus width of costal cell at the widest part.

Taxonomy

Class Insecta Linnaeus, 1758

Order Hemiptera Linnaeus, 1758

Suborder Fulgoromorpha Evans, 1946
 Superfamily Fulgoroidea Latreille, 1807
 Family Flatidae Spinola, 1839
 Subfamily Flatinae Spinola, 1839
 Tribe Selizini Melichar, 1923

***Wattlea* Peng, Ai & Zhang gen. nov. (Figs. 1–4)**

Type species. *Wattlea wandingensis* Peng, Ai & Zhang **sp. nov.**

Small-sized planthoppers. Body and tegmina yellowish-brown.

Head. Head with compound eyes narrower than pronotum in dorsal view (Figs. 1C, 3C). Vertex wider at base than long in middle line; apex evenly rounded; lateral margin slightly raised and subparallel; posterior margin slightly emarginate, disc deeply depressed (Figs. 1B, 1C, 3B, 3C). Frons in profile rounding almost smoothly onto vertex; broader at widest part than long in middle, nearly hexagonal in ventral view; widest part at the level of basal part of frons in middle line; lateral margins carinate, arched in ventral view, elevated in lateral view; upper margin almost truncate; median longitudinal carina slightly raised and extending to the apex of head; slightly weaker near frontoclypeal suture portion (Figs. 1D, 3D). Frontoclypeal suture arcuate. Clypeus convex and triangular, with a median longitudinal carina. Rostrum extending to hind coxae level (Figs. 1D, 3D). Compound eyes roundish, with narrow callus at posterior margin (Figs. 1A–D, 3A–D). Ocelli present (Figs. 1B, 3B). Antennae very short, basal segment short and ring-like; second segment cylindrical (Figs. 1B, 1C, 3B, 3C).

Thorax. Pronotum with anterior margin slightly convex, apex distinctly truncate, reaching the midlength of compound eyes; posterior margin roundly concave; without median carina; postocular eminence conical (Figs. 1B, 1C, 3B, 3C). Mesonotum slightly broader than long; anterior margin roundly convex; disc of mesonotum apical part arched and other part flat; with three obviously short longitudinal carinae in anterior part (Figs. 1B, 1C, 3B, 3C). Tegmina longer than wide, nearly rectangular; costal area gradually narrowed apicad, with subparallel transverse veins, broader than postcostal cell at the level of bulla; postcostal cell without transverse veins; basal cell strongly elongated; costal margin slightly sinuate, apical margin apparently convex. Three veins (ScP+R, MP, CuA) arising from basal cell before bulla; ScP+R stem short; ScP+RA crossing raised bulla; ScP+RA with fork distinctly after RP fork, ending on costal margin; RP with fork before MP fork, ending on costal margin; MP with fork ending on apical margin; clavus in basal half elevated; Pcu and A₁ joined slightly anterior to clavus apex; veins of apical cell subparallel; one subapical line present (Figs. 3A, 4A). Sensory and wax gland-plates concentrated on clavus area (especially on the area between Pcu and A₁ and basal part between A₁ and A₂), with a few scattered on the whole tegmina (Figs. 1A, 2A, 3A, 4A). Metatibiae obviously longer than metafemora, with groove on external side (basal part deep and apical part shallow), with one lateral spine placed subapically and an apical row of spines. Second segment of metatarsus with two lateral spines and median pad with setae.

Male genitalia. Anal tube, in lateral view, short and slightly deflexed, basal part wider than apical part; in dorsal view, basal part narrower than apical part, apical margin broadly concave in middle, apex with two wide prominences on both sides; anal foramen nearly placed at median portion (Figs. 1E, 1F, 2B, 2C, 3E, 3F, 4B, 4C). Pygofer, in lateral view, dorsal margin obviously

shorter than ventral margin, anterior margin strongly convex, posterior margin slightly sinuate in lateral view (Figs. 1E, 2B, 3E, 4B). Genital style elongate, with a single broad process oriented anteriorly at dorsocaudal portion; ventral margin convex; posterior margin roundly convex (Figs. 1E, 2B, 3E, 4B). Phallic complex bent upwards in lateral view (Figs. 1G, 2D, 3I, 4D). Periandrium in lateral view, tubular, shorter than aedeagus; lateral split reaching apical 2/5 of periandrium (Figs. 1G, 2D, 2G, 3I, 3G, 4B, 4G). Dorsal part of periandrium apparently longer than ventral part in lateral view, median lobe evenly convex (Figs. 1L, 2H, 3J, 4H). Each side of part of periandrium with a cephalad process at ventral apex and an ear-like prominence at dorsal apex. Ventral part of periandrium distinctly tapering apically in ventral view (Figs. 2I, 3K, 4I). Aedeagus, in dorsal view, bipartite, symmetrical, with a deep median longitudinal split, nearly reaching to basal margin; in lateral view, aedeagus bent upwards, each side of apex without process; apex of lateral portion near apex with two ear-like prominences (Figs. 1M, 1N, 2J–L, 3H, 4J–L).

Etymology. The generic epithet is derived from the English word “wattle” meaning dark-colored sticks, which refers to the yellowish-brown color of the long and narrow body. The gender is feminine.

Remarks. This new genus differs from other genera of Selizini in China by the following characters: 1) apical margin of head in dorsal view slightly rounded (Figs. 1C, 3C), apical part of aedeagus without process (Figs. 2J, 4J), whereas in *Armorseliza* Ai, Wang & Zhang, 2019, apical margin of head in dorsal view evenly truncate, apical part of aedeagus with a pair of short processes and a pair of long processes; 2) disc of vertex sunken without median longitudinal carina (Figs. 1C, 3C), frons wider than long, mesonotum with three obviously short longitudinal carinae in anterior part (Figs. 1C, 3C), whereas in *Gomeda* Distant, 1906, disc of vertex plate with median longitudinal carina; frons longer than wide, mesonotum with obscure long longitudinal carinae; 3) tegmina with longitudinal veins ScP+RA and RP as a short stem ScP+R from basal cell (Figs. 2A, 4A), whereas in *Seliza* Stål, 1862, tegmina with longitudinal veins ScP+RA and RP separately arising from basal cell; 4) metatibia with one lateral spine, whereas in *Armorseliza* Ai, Wang & Zhang, 2019, metatibia with two lateral spines, and in *Satapa* Distant 1906, without lateral spine.

Diversity and distribution. This genus contains two species: *W. distincta* Ai, Peng & Zhang **sp. nov.** and *W. wandingsensis* Peng, Ai & Zhang **sp. nov.** from Yunnan, China.

Key to species of the genus *Wattlea*

1. Pronotum with an obscure median longitudinal line, lateral part of periandrium with a short, unbranched process *W. distincta*
- . Pronotum without median longitudinal carina or line, lateral part of periandrium with a long and forked process *W. wandingsensis*

1. *Wattlea distincta* Ai, Peng & Zhang **sp. nov.** (Figs. 1, 2)

Description. Measurement. Male length ($n=1$) (including tegmen) 7.6 mm; tegmina length 6.8 mm, width 2.7 mm.

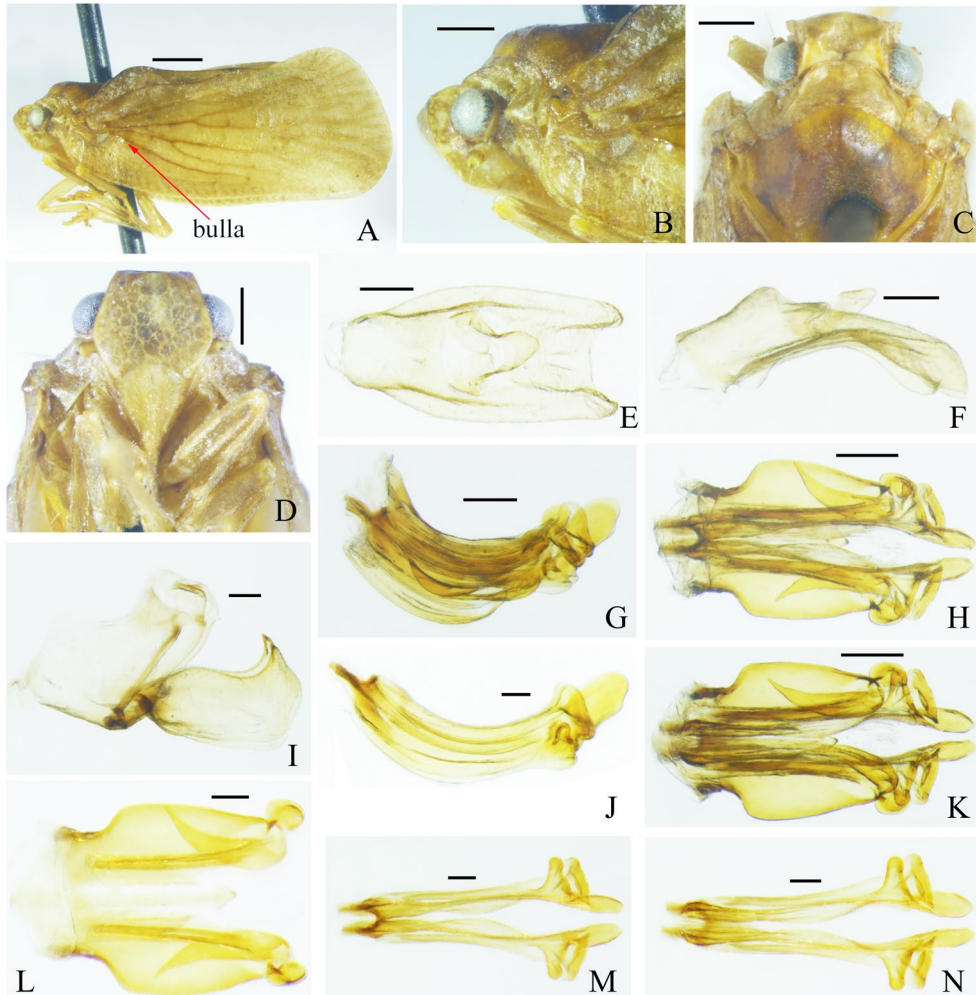


Figure 1. *Wattlea distincta* sp. nov. A. Habitus, left lateral view; B, C. Head and thorax, left lateral and dorsal views; D. Frons; E, F. Male anal tube, dorsal and right lateral views; G, H, K. Phallic complex, right lateral, dorsal and ventral views; I. Male genitalia (male anal tube and phallic complex removed), right lateral view; J, M, N. Aedeagus, right lateral, dorsal and ventral views; L. Perianthrium, dorsal view. Scale bars = 1 mm (A); 0.5 mm (B–D); 0.2 mm (E–I, K); 0.1 mm (J, L–N).

Coloration. Body and tegmina yellowish brown. Head brown, with margins dark fuscous; vertex lightly brown and slightly orange; frons brown, apex darker than basal portion; clypeus with oblique stripes; compound eyes black, ocelli red; pronotum and legs brown; mesonotum dark brown; tegmina fuscous, apex lighter, with veins slightly darker; hind wings grayish (Figs. 1A–D).

Head. Vertex wider at base than long in middle line (1.56 : 1) (Fig. 1C). Frons broader at widest part than long in middle (1.28 : 1), widest part at the level of basal third of frons in middle line (Fig. 1D).

Thorax. Pronotum, in dorsal view, with an obscure median longitudinal line. Tegmina

longer than wide (2.5 : 1), vein MP with fork slightly before CuA fork (Fig. 2A). Metatibia with apical spines in formula 2 longer (external) + 5 slightly shorter (internal). Basitarsomere of metatarsus with apical spines in formula 2 a bit longer (external) + 3 shorter (internal). Metatibiotarsal formula: 1-(2+5)/(2+3)/2.

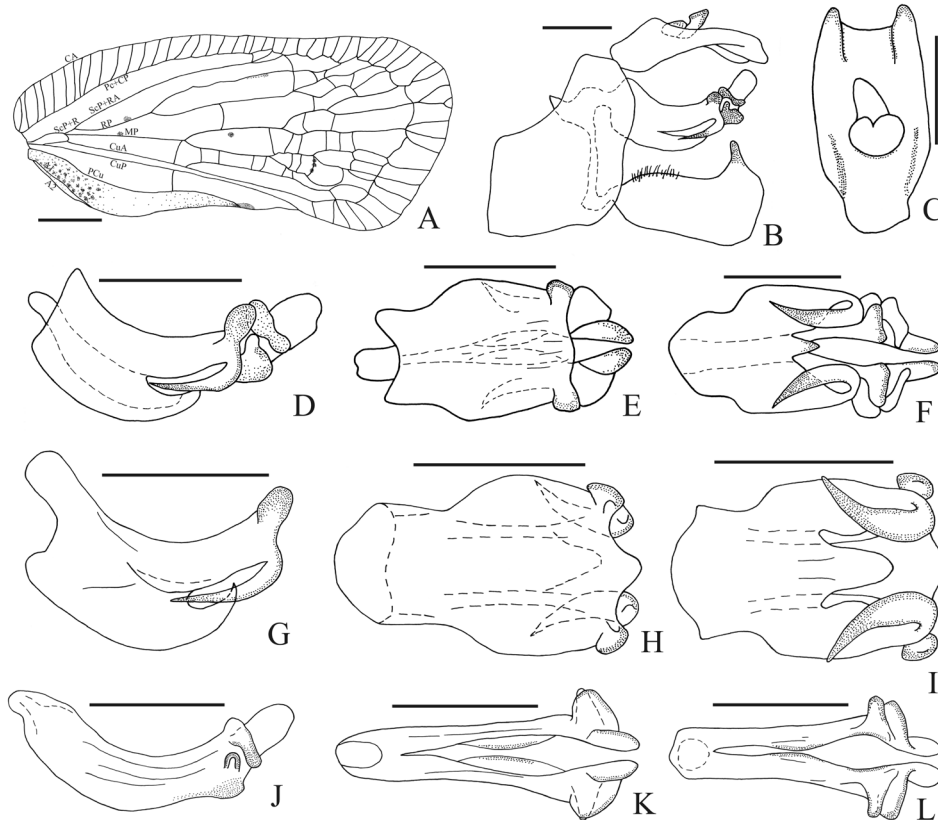


Figure 2. *Wattlea distincta* sp. nov. A. Tegmen; B. Male genitalia, right lateral view; C. Male anal tube, dorsal view; D–F. Phallic complex, right lateral, dorsal and ventral views; G–I. Periandrium, right lateral, dorsal and ventral views; J–L. Aedeagus, right lateral, dorsal and ventral views. Scale bars = 1 mm (A); 0.5 mm (B–L).

Male genitalia. Genital style with a single process with apex narrowed, slightly sinuate and oriented antieriad at dorsocaudal portion (Figs. 1I, 2B). Each side of lateral part of periandrium with a short, cephalad and not-forked process at ventral apex, and an ear-like prominence at dorsal apex (Figs. 1G, 2G).

Holotype. ♂, China, Yunnan, Ruili, 750 m, 05-V-1981, Fasheng LI leg. (CAU).

Etymology. The specific epithet is derived from the Latin word “distinctus”, which refers to the lateral part of periandrium having a distinct process.

Remarks. This new species resembles *W. wandingsensis* sp. nov. but differs from the latter in the following characters: pronotum with an obscure median longitudinal line (Fig. 1C); male anal tube slightly deflexed (Fig. 1F); and lateral part of periandrium with a short, unbranched

process (Fig. 2D).

2. *Wattlea wandingsensis* Peng, Ai & Zhang sp. nov. (Figs. 3, 4)

Description. Measurement. Male length ($n = 1$) (including tegmen) 8.6 mm; tegmina length 6.9 mm, width 2.8 mm.

Coloration. Body and tegmina yellowish brown. Head light brown, with lateral margins slightly darker; vertex lightly brown, apex dark brown, posterior margin of vertex dark brown; frons fuscous, apex darker than basal portion; clypeus with oblique yellowish-brown stripes; compound eyes black, ocelli slightly red; pronotum and legs light brown; mesonotum dark brown, with black dots; tegmina fuscous, with veins slightly darker; hind wings grayish (Figs. 3A–D).

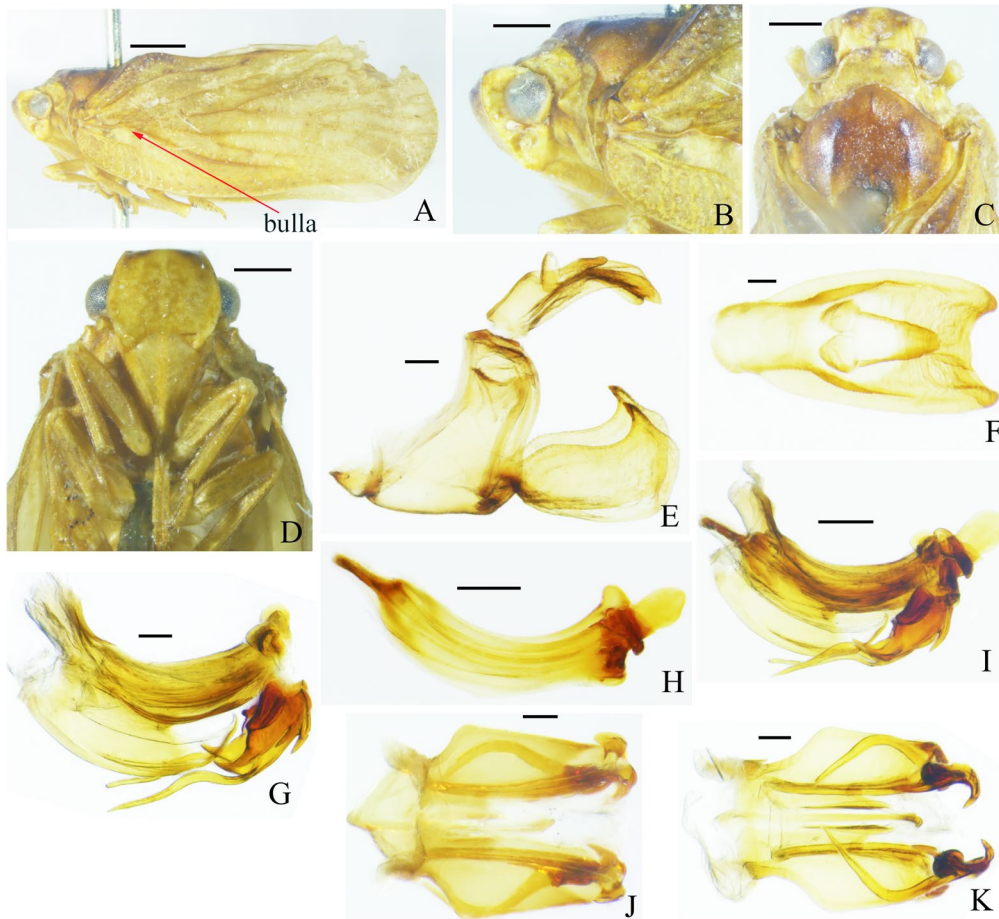


Figure 3. *Wattlea wandingsensis* sp. nov. A. Habitus, left lateral view; B, C. Head and thorax, left lateral and dorsal views; D. Frons; E. Male genitalia (phallic complex removed), right lateral view; F. Male anal tube, dorsal view; G, J, K. Periandrium, right lateral, dorsal and ventral views; H. Aedeagus, right lateral view; I. Phallic complex, right lateral view. Scale bars = 1 mm (A); 0.5 mm (B–D); 0.2 mm (E, H, I); 0.1 mm (F, G, J, K).

Head. Vertex wider at base than long in middle line (1.92 : 1) (Fig. 3C). Frons broader at

widest part than long in middle (1.36 : 1); widest part at the level of basal fourth of frons in middle line (Fig. 3D).

Thorax. Pronotum, in dorsal view, without median longitudinal carina or line. Tegmina longer than wide (2.5 : 1), vein MP with fork slightly after CuA fork (Fig. 4A). Metatibia with apical spines in formula 2 longer (external) + 6 slightly shorter (internal). Basitarsomere of metatarsus with apical spines in formula 2 a bit longer (external) + 3 shorter (internal). Metatibiotarsal formula: 1-(2+5)/(2+3)/2.

Male genitalia. Genital style with a single process with apex wide, triangular and oriented anteriad at dorsocaudal portion (Figs. 3E, 4B). Each side of lateral part of perianthrium with a strong and long process with four branched processes at ventral apex, and an ear-like prominence at dorsal apex (Figs. 3G, 4G).

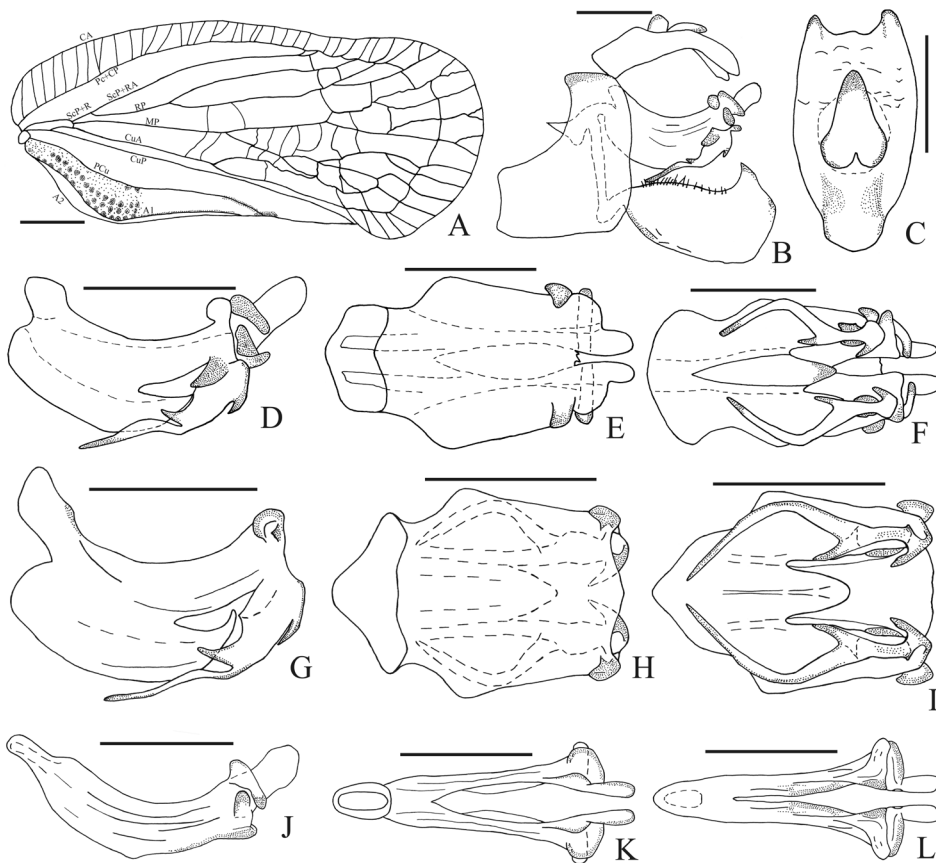


Figure 4. *Wattlea wandengensis* sp. nov. A. Tegmen; B. Male genitalia, right lateral view; C. Male anal tube, dorsal view; D–F. Phallic complex, right lateral, dorsal and ventral views; G–I. Perianthrium, right lateral, dorsal and ventral views; J–L. Aedeagus, right lateral, dorsal and ventral views. Scale bars = 1 mm (A); 0.5 mm (B–L).

Holotype. ♂, **China**, Yunnan, Dehong, Wandeng Forestry Farm, 820 m, 09-VI-1979, Zhijun WANG leg. (NWAUFU).

Etymology. The specific epithet refers to the type locality, Wanding, Yunnan.

Remarks. This species differs from other members of this genus by the following characters: male anal tube obviously arched in lateral view (Figs. 3E, 4B); the process of lateral part of periandrium is long and forked; the process of genital style with apex wide and triangular at dorsocaudal portion (Figs. 3G, 4G).

***Zecheuna* Zia, 1935**

Zecheuna Zia, 1935: 532. Type species: *Zecheuna tonkinensis* Zia, 1935. Original designation.

Diagnosis. The genus *Zecheuna* was originally described by Zia (1935), and redescribed by Medler (1999). It can be distinguished from other genera in the tribe Selizini by its small size; apex of vertex pointed in dorsal view; posterior margin of vertex before anterior margin of compound eyes; frons with median longitudinal carina extending to apex of head; postocular eminence conical; tegmen with longitudinal veins ScP+RA and RP arising as short common stem from basal cell; costal membrane much broader than costal cell; apical margin convex, sutural angle convex, with one subapical line of crossveins; vein CuP raised basally; Pcu and A₁ joined as short common stem, thick, ridgelike; and metatibia with two lateral spines. (Figs. 5A–D, 6A)

Distribution. Oriental region (China; Vietnam; Indonesia).

3. *Zecheuna curva* Ai, Peng & Zhang sp. nov. (Figs. 5, 6)

Description. Measurement. Male length ($n = 4$) (including tegmen) 6.7–7.1 mm; tegmina length 5.9–6.5 mm, width 2.6–2.9 mm. Female length ($n = 4$) 7.3–7.7 mm; tegmina length 6.5–6.8 mm, width 2.8–2.9 mm.

Coloration. Body and tegmina dark brown. Head fuscous, with lateral margin of head dark fuscous; vertex brown and slightly stramineous; frons yellowish brown, apex darker than basal portion; clypeus with oblique stripes; compound eyes black, ocelli milk white; pronotum and mesonotum dark brown; legs slightly brown; tegminal apical half with lots of fuscous spots or oblique stripes, with a black dot before the fork of MP, veins slightly darker; and hind wings grayish (Figs. 5A–D).

Head. Head with compound eyes narrower than pronotum in dorsal view (Fig. 5C). Vertex wider than long in middle line (2.04 : 1); apex distinctly pointed (about 130°); lateral margin obviously raised and subparallel; posterior margin emarginate, disc slightly convex (Figs. 5B, 5C). Frons evenly as long as broad at widest part; in profile rounding almost smoothly onto vertex; widest part at its midlength in middle line in ventral view; lateral margins highly raised in lateral view, and arched in ventral view; median longitudinal carina apparently raised and extending to the apex of head, slightly weak near frontoclypeal suture (Fig. 5D). Frontoclypeal suture slightly convex, apex nearly truncate. Clypeus convex and triangular. Rostrum extending to hind coxae level (Fig. 5D). Compound eyes roundish, with narrow callus at posterior margin (Figs. 5A–D). Ocelli present. Antennae very short, basal segment ring-like, second segment cylindrical (Figs. 5B, 5C).

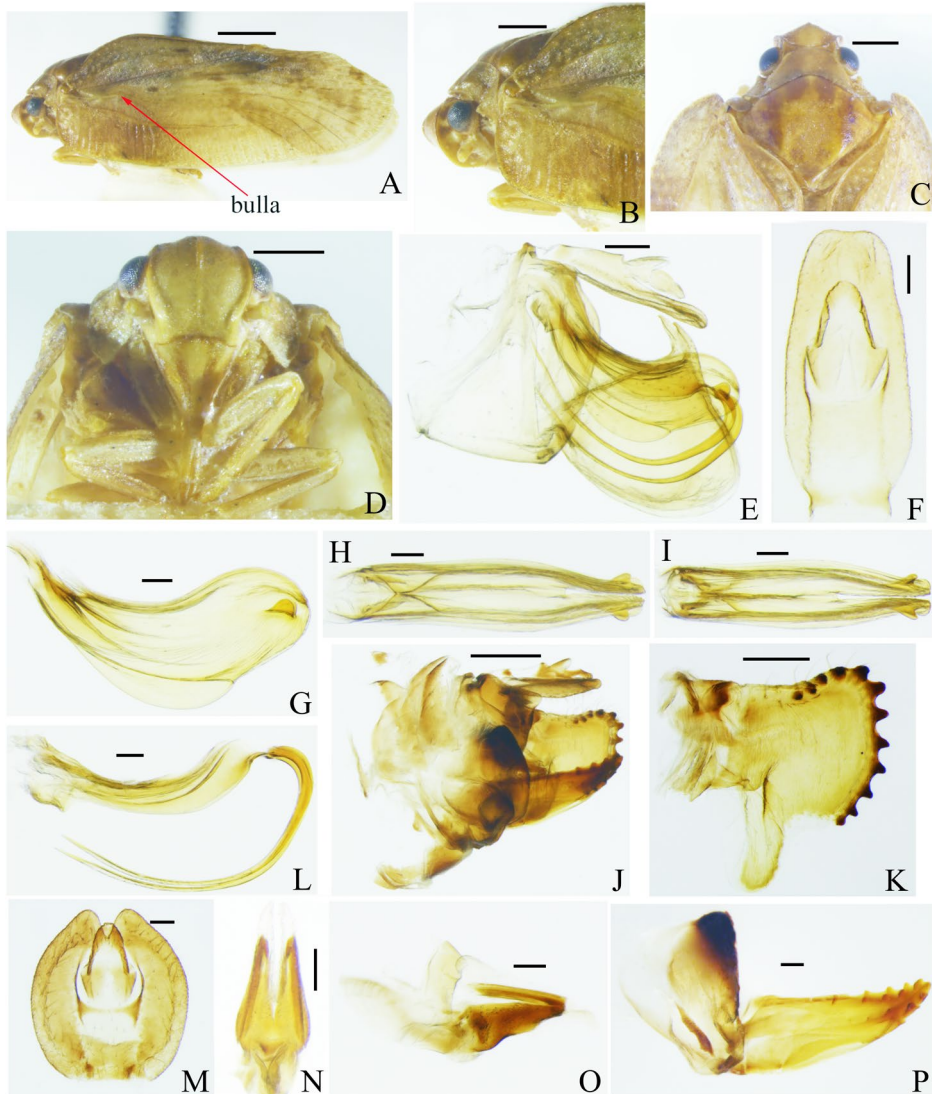


Figure 5. *Zecheuna curva* sp. nov. A. Habitus, left lateral view; B, C. Head and thorax, left lateral and dorsal views; D. Frons; E. Male genitalia, right lateral view; F. Male anal tube, dorsal view; G–I. Aedeagus, right lateral, dorsal and ventral views; J. Female genitalia, right lateral view; K. Gonoplac, right lateral outside view; L. Periandrium, right lateral view; M. Female anal tube, dorsal view; N, O. Gonapophysis IX, dorsal and right lateral views; P. Gonapophysis VIII, right lateral outside view. Scale bars = 1 mm (A); 0.5 mm (B–D, J); 0.2 mm (E, K); 0.1 mm (F–I, L–P).

Thorax. Pronotum with anterior margin slightly convex, apex evenly truncate, concave in the middle, almost reaching the apex part of compound eyes; posterior margin roundly concave; without median carina; postocular obviously with eminence conical (Figs. 5B, 5C). Mesonotum obviously broader than long; anterior margin roundly convex; disc of mesonotum apical part arched and other part flat; with three shallow short longitudinal carinae in anterior part (Fig.

5C). Tegmina longer than wide (2.3 : 1), costal area slightly narrowed apicad, with subparallel transverse veins, much wider than postcostal cell at the level of bulla; postcostal cell without transverse veins; costal margin convex at base, evenly convex or straight to apex, apical margin strongly convex. Three veins (ScP+R, MP, CuA) arising from basal cell before bulla, vein RP curved by bulla, joined with MP and then separated, as in RP+MP; ScP+RA with fork slightly before RP fork, ending on costal margin; RP with fork distinctly after MP fork, ending on costal margin; MP with fork obviously before CuA fork, and ending on apical and postclaval margins; Pcu and A₁ joined slightly anterior to clavus apex; one subapical line present, apical cell narrow and long (Figs. 5A, 6A). Metatibiae obviously longer than metafemora, with groove on external side (basal part shallow and apical part deep), with two lateral spines (first lateral spine placed subapically, second lateral spine placed on apical half of metatibiae) and apical spines in formula 2 longer (external) + 10/11 slightly shorter (internal). Basitarsomere of metatarsus with apical spines in formula 2 a bit longer (external) + 9 shorter (internal). Second segment of metatarsus with two lateral spines; median pad with setae. Metatibiotarsal formula: 2-(2+10/11)/(2+9)/2.

Male genitalia. Anal tube, in lateral view, short and straight, basal part wider than apical part (Figs. 5E, 6B); in dorsal view, shuttle-like and with apex slightly concave (Figs. 5F, 6C). Pygofer, in lateral view, dorsal margin obviously shorter than ventral margin, dorsal margin obviously concave, anterior margin strongly convex, posterior margin roundly convex (Figs. 5E, 6B). Genital style triangular, with a single narrowed process with apex oriented anteriorly at dorsocaudal portion, ventral margin roundly convex, posterior margin concave (Figs. 5E, 6B). Phallic complex slightly bent upwards in lateral view (Fig. 6D). Periandrium, in lateral view, tubular, slightly shorter than aedeagus (Figs. 5L, 6D). Dorsal part of periandrium apparently longer than ventral part in lateral view, median lobe evenly convex in dorsal view (Figs. 5L, 6D, 6H). Each side of lateral part of periandrium with a slender and long process, almost reaching base of phallobase (Figs. 5L, 6G). Ventral part of periandrium very short, apex truncate in ventral view (Figs. 5L, 6G, 6I). Aedeagus, in dorsal view, bipartite, symmetrical, with a deep median longitudinal split, nearly reaching to basal margin. Each side of aedeagus apex without process; apex of lateral portion near apex with one ear-like lobe; ventral margin strongly arched (Figs. 5G, 5H, 5I, 6J–L).

Female genitalia. Anal tube small, in dorsal view oval, apex deeply concave, anal foramen in apical half (Fig. 5M). Gonocoxa VIII nearly acutely triangular, flattened, apical part with three rows of 10–12 almost parallel external teeth; dorsal margin truncate, ventral margin slightly convex (Figs. 5P, 6O); gonapophysis IX short and triangular, tapering apicad, ventral margin sinuate in lateral view (Figs. 5O, 6P). Gonoplac unilobate, almost covering gonapophysis VIII; with four internal teeth along apical part of dorsal margin and eight external teeth along apex of dorsal margin to the apex of ventral margin; ventral margin with a strong membranous prominence (Figs. 5K, 6N).

Holotype. ♂, **China**, Hainan, Mt. Diaoluo, 31-V-2007, Yinglun WANG & Qing ZHAI leg. (NWFU). **Paratypes.** 1♂, **China**, Hainan, Bawangling, 176 m, 18-V-2008, Qiulei MEN leg. (NWFU); 1♂, Hainan, Nada, 07-XII-1974, Fasheng LI leg. (CAU); 1♂, Hainan, Nada, 09-XII-1974, Fasheng LI leg. (CAU); 4♀, Hainan, Mt. Diaoluo, 31-V-2007, Yinglun WANG & Qing ZHAI leg. (NWFU); 1♂, Hainan, Nada, Hainan University Danzhou Campus, 13-IV-

2021, Xiangxiang JIN leg. (GIZ).

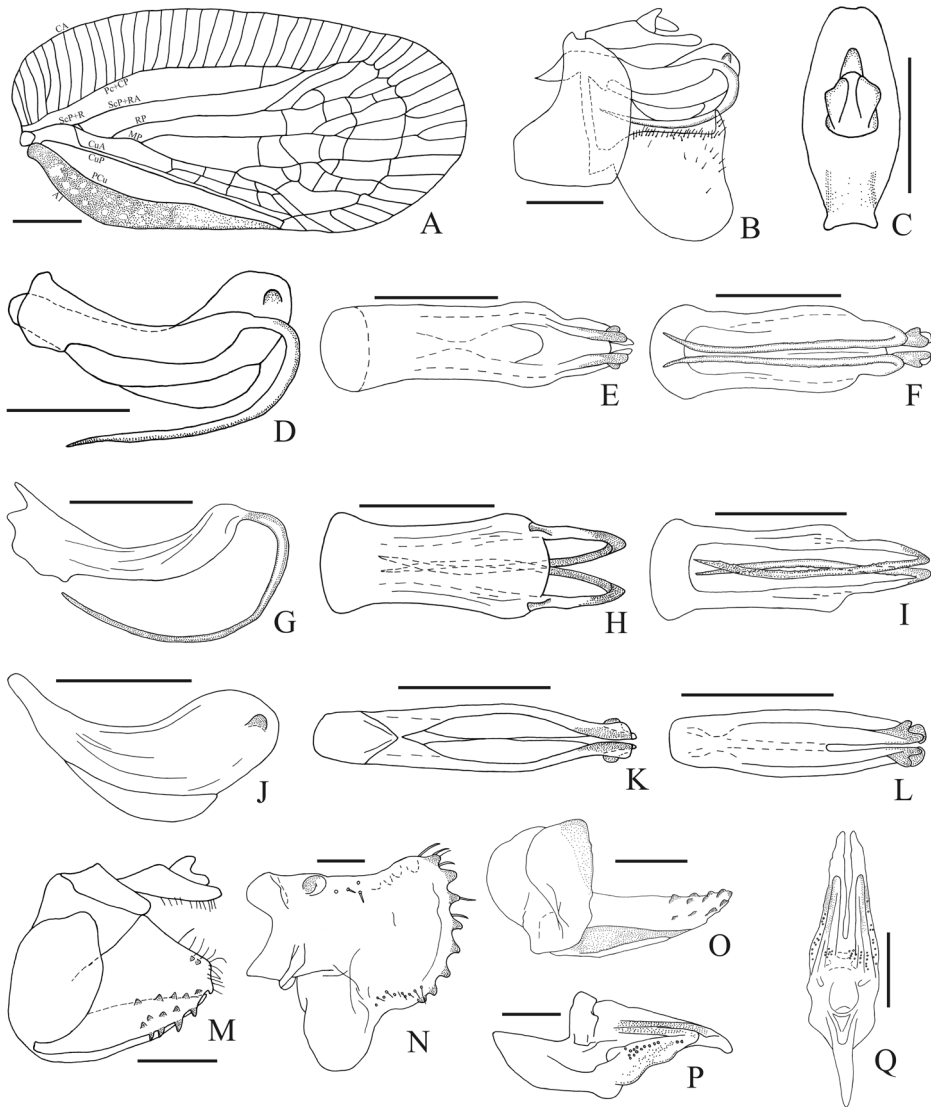


Figure 6. *Zecheuna curva* sp. nov. A. Tegmen; B. Male genitalia, right lateral view; C. Male anal tube, dorsal view; D–F. Phallic complex, right lateral, dorsal and ventral views; G–I. Periandrium, right lateral, dorsal and ventral views; J–L. Aedeagus, right lateral, dorsal and ventral views; M. Female genitalia, right lateral view; N. Gonoploc, right lateral outside view; O. Gonapophysis VIII, right lateral outside view; P, Q. Gonapophysis IX, right lateral and dorsal views. Scale bars = 1 mm (A); 0.5 mm (B–M); 0.2 mm (N–Q).

Etymology. The specific epithet is derived from the Latin word “curvus” to emphasize the lateral part of periandrium having a curved process.

Diagnosis. This species differs from other members of this genus by the following characters: metatibia with 11 or 12 apical spines; tegminal vein ScP+R stem short and not clear;

vein RP curved by bulla, joining with MP and then separated, as in RP+MP (Figs. 5A, 6A); each side of lateral part of periandrium with a slender and long process, almost reaching base of phallobase (Figs. 5L, 6G).

Discussion

By adding one new genus and three new species, the genera and species numbers of Selizini from China are respectively updated to 8 and 12.

By our comparison of morphological characters, we infer that *Wattlea* Peng, Ai & Zhang **gen. nov.** and the Chinese flatid *Armorseliza* Ai, Wang & Zhang, 2019 may be more closely related due to the following characters: 1) vertex wider at base than long in middle line; apex evenly rounded; lateral margin slightly raised and subparallel; 2) compound eyes with narrow callus at posterior margin; 3) mesonotum with three obviously short longitudinal carinae in anterior part; and 4) tegmina elongate; about 2.3–2.5 times longer than wide; vein ScP+R stem short; apical margin oblique and evenly convex; postclaval margin obviously convex.

In the planthopper family Flatidae, the tegmina positioned vertically or flat is the most important character to differentiate the two subfamilies Flatinae and Flatoidinae. However, the morphological characteristics of *Zecheuna* Zia, 1935 seem to be very specialized, with tegmina not completely vertical when resting. In addition, tegmina are usually more than two times as long as wide, the costal area obviously wider than postcostal cell; each side of lateral part of periandrium with a slender process, likely suggesting *Zecheuna* are more or less related to the Chinese Flatoidinae species (Wang, Chou & Yuan 2003; Ai, Peng & Zhang 2020).

Up to now, the relationships between Selizini and other major flatid groups, and within Selizini, remain to be investigated from a phylogenetical perspective. In the future, it will be necessary to address the systematic analysis of Selizini, and compare Selizini with other flatid groups from morphological, molecular and biogeographical approaches to clarify the phylogenetic relationships among them.

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