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云南楼梯草属二新种

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摘要: 该文描述了自云南东南部发现的荨麻科楼梯草属 2 新种。其中,文山楼梯草与上林楼梯草在亲缘关系上相近,与后者的区别在于本种的茎密被短柔毛,叶片在基部斜楔形,具半离基三出脉,雌头状花序的花序托较小,长约 1.2 mm,宽 1 mm,不分裂,其雌苞片约 12,不等大,只 3 枚在顶端具角状突起。第二种,绿突楼梯草与马关楼梯草近缘,与后者的区别在于茎密被反曲的柔毛和贴伏的短柔毛,雄花序较长,雄总苞的苞片 6 枚,排成 2 层,2 外层苞片较大,背面具 1 绿色纵列龙骨状突起和 4 或 6 绿纵肋,4 内层苞片较小,背面近中央有 1 绿色角状突起。

关键词: 荨麻科, 楼梯草属, 新种, 云南

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Two new species of *Elatostema* (Urticaceae) from Yunnan

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Abstract: Two species of the genus *Elatostema* (Urticaceae) are described as new from southeastern area of Yunnan Province. The first one, *E. wenshanense* is related *E. shanglinense* W. T. Wang, and from the latter differs in its densely puberulous stems, at base obliquely cuneate and semi-triplinerved leaf blades, smaller receptacle of pistillate capitulum, and its 12 bracts, which are unequal in size and only three of which are corniculate at apex. The second one, *E. viridicarinatum* is related to *E. maguanense* W. T. Wang, and from the latter differs in its densely retrose-pubescent and appressed-puberulous stems, longer staminate peduncle, and in its staminate involucre, which consists of 6 2-seriate bracts unequal in size, with the 2 outer ones larger abaxially longitudinally 1-green-carinate and 4-6-green-costate, and 4 inner ones smaller and abaxially 1-green-corniculate near the middle.

Key words: Urticaceae, *Elatostema*, new species, Yunnan

文山楼梯草 图 1: A-D

Elatostema wenshanense W. T. Wang, sp. nov.

[Sect. *Weddellia* (H. Schroter) W. T. Wang ser. *Shanglinensia* W. T. Wang]

Species nova haec est affinis *E. shanglinensi* W. T. Wang, a quo caulibus dense puberulis, foliorum laminis

basi oblique cuneatis semi-triplinervibus, capituli pistillati receptaculo minore ca. 1.2 mm longo 1 mm lato indiviso, ejus bracteis pistillatis ca. 12 inaequimagnis tantum tribus apice corniculatis ceteris haud corniculatis differt. In *E. shanglinensi*, caules pistillati subglabri vel tantum apice sparse puberuli, foliorum laminae basi lat-

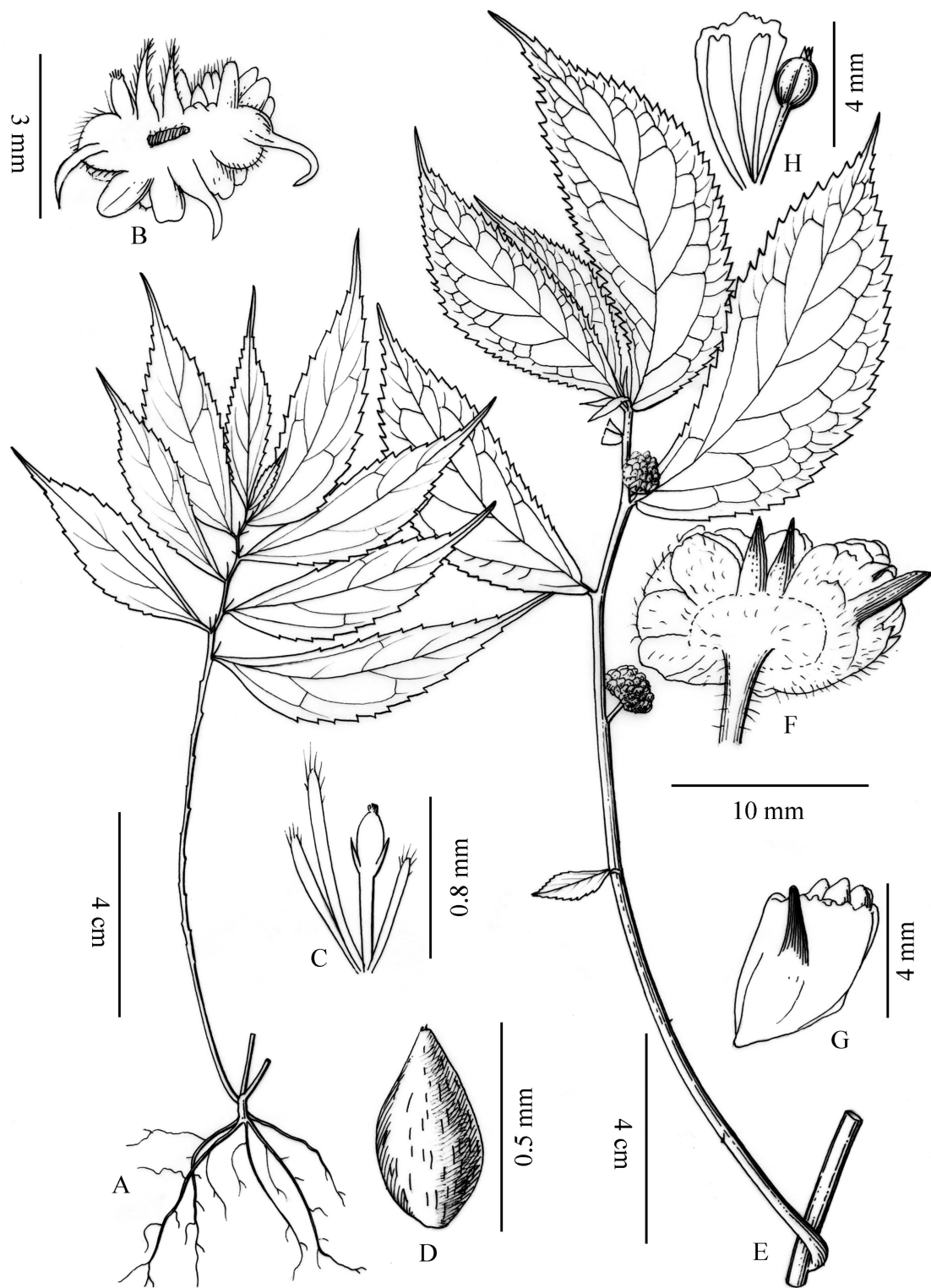


图 1 A-D. 文山楼梯草 A. 开花雌茎; B. 雌头状花序(下面观); C. 雌小苞片和雌花; D. 瘦果。E-H. 绿突楼梯草 E. 开花雄茎的一枝条; F. 雄头状花序(下面观); G. 一内层雄苞片; H. 雄小苞片和雄花蕾。

Fig. 1 A-D. *Elaeostema wenshanense* A. A flowering pistillate stem; B. Pistillate capitulum, seen from beneath; C. Pistillate bracteoles and pistillate flower; D. Achene. (from holotype). E-H. *E. viridicarinatum* E. A branch of flowering staminate stem; F. Staminate capitulum, seen from beneath; G. A inner staminate bract; H. Staminate bracteoles and staminate flower bud. (from holotype)

ere latiore rotundatae vel auriculatae trinerves, capituli pistillati receptaculum majus ca. 4 mm longum 2.4 mm latum medio 2-lobatum, ejus bracteae pistillatae ca. decem aequimagnae omnes apice corniculatae sunt.

Perennial herbs. Stems 3–5 caespitose, 4–12.5 cm tall, near base 0.8–1.2 mm in diam., densely puberulous (hairs 0.1–0.15 mm long), with dense bacilliform cystoliths 0.2–0.4 mm long, simple, rarely 1-branched. Leaves alternate, shortly petiolate or sessile; blades membranous, obliquely long elliptic, (0.5–) 2.2–6 × (0.3–) 0.8–1.4 cm, apex long acuminate, shortly cuspidate or acuminate, base obliquely cuneate, margin acutely denticulate; surfaces adaxially strigose, abaxially on nerves appressed-puberulous; nervation semi-triplinerved, with ca. 3 pairs of secondary nerves; cystoliths dense, conspicuous, bacilliform, 0.2–0.5 mm long; petioles 0–2 mm long, glabrous; stipules membranous, white, linear, 3.5–4.6 × 0.3–0.6 mm, glabrous, longitudinally 1-green-nerved. Staminate capitula and staminate flowers unknown. Pistillate capitulum singly axillary, shortly pedunculate; peduncle ca. 0.5 mm long, glabrous; receptacle broadly rectangular, ca. 1.2 × 1 mm, subglabrous; bracts ca. 12, membranous, white, unequal in size, 2 larger, opposite, subquadrate, ca. 1 × 1 mm, densely ciliate, abaxially longitudinally 1-ribbed and the rib apexes elongate into green horn-like projections 0.6–1.2 mm long, the smaller bracts 3 ovate ca. 1 × 0.3 mm, with green caudate apexes, the other 7 bracts broadly oblong, 0.8–1 × 0.2–0.4 mm and with truncate apexes and sparse cilia; bracteoles membranous, dense, nearly hyaline, linear, 0.8–1.8 × 0.1–0.2 mm, apex sparsely ciliate. Pistillate flower: Pedicel ca. 0.5 mm long, glabrous. Tepals 2, narrowly linear, ca. 0.15 mm long, glabrous. Pistil ca. 0.3 mm long; ovary ellipsoid, ca. 0.28 mm long, glabrous; stigma small, depressed-globose, ca. 0.05 mm in diam. Achenes whitish, ovoid, ca. 0.5 × 0.35 mm, longitudinally brown-lineolate.

云南(**Yunnan**): 文山县, 古木镇, 田尾洞(Wen-shan Xian, Gumu Zhen, Tianweidong), alt. 1 531 m, 石灰岩山, 石缝(in fissures of rocks in lime-stone hill), 草本直立, 罕见(herbs erect, rare), 2015-04-21, 韩孟奇, 黄金泉(M. Q. Han & J. Q. Huang) 158

(holotype, PE; isotype, IBK)。

本种在亲缘关系上接近上林楼梯草(*Elatostema shanglinense* W. T. Wang), 与后者的区别在于本种的茎密被短柔毛, 叶片基部斜楔形, 具半离基三出脉, 雌头状花序的花序托较小, 长约 1.2 mm, 宽 1 mm, 不分裂, 其苞片约 12 枚, 不等大, 只 3 枚较大者具角状突起, 其他苞片无角状突起。在上林楼梯草, 雌茎近无毛或只在顶端疏被短柔毛, 叶片基部宽侧呈圆形或耳形, 具三出脉, 雌头状花序的花序托较大, 长约 4 mm, 宽 2.4 mm, 中部 2 浅裂, 其雌苞片约 10 枚, 等大, 全部苞片在顶端具角状突起(王文采, 2014)。

绿突楼梯草 图 1: E-H

Elatostema viridicarinatum W. T. Wang, sp. nov. Fig. 1: E-H

(Sect. *Elatostema* ser. *Nanchuanensia* W. T. Wang)

Species nova haec est fortasse affinis *E. maguanensi* W. T. Wang, a quo caulibus dense retrorse pubescentibus et dense appresse puberulis, pedunculo staminato longiore (4 mm longo), involucri staminati bracteis sex 2-seriatis duabus externis majoribus dorso longitudinaliter 1-viridi-carinatis et 4–6-viridi-costatis quatuor internis minoribus dorso prope medium 1-viridi-corniculatis recedit. In *E. maguanensi*, caules superne tantum appresse hirtelli, pedunculus staminatus brevior 2 mm longus, involucri staminati bracteae ca. octo 1-seriatae omnes apice 1-corniculatae nec carinatae nec costatae sunt.

Perennial herbs. Stems 16–40 cm tall, near base 1.5–2 mm in diam., densely retrorsely pubescent (hairs 0.8–1.5 mm long) and densely appressed-puberulous (hairs 0.05–0.2 mm long), branched or simple. Leaves alternate, shortly petiolate or sessile; blades papery, obliquely long elliptic or narrowly obovate, (1.5–) 4–9 × (0.5–) 1.4–3.5 cm, apex acuminate (acumen 2–4-denticulate), base obliquely cuneate, margin densely denticulate; surfaces adaxially sparsely strigose, abaxially on nerves pubescent; nervation pinnate, with secondary nerves 4–6 at leaf narrow side and 5–7 at broad side; cystoliths dense, conspicuous, bacilliform, 0.1–0.25 mm long; petioles 0–0.15 mm long; stipules membranous, white, linear-triangular or triangular, 5–8 × 1.5–2 mm, glabrous, longitudinally 1-green-nerved.

Staminate capitula singly axillary, pedunculate; peduncle terete, ca. 4 mm long, pilose; receptacle subquadrate, ca. 4×4 mm, pilose; bracts 6, membranous, white, 2-seriate, 2 outer bracts larger, opposite, transversely flabellate-rectangular, ca. 4×8 mm, sparsely puberulous, at apex erose, abaxially longitudinally 1-green-carinate and shortly 4-6-ribbed, with the rib apices projecting into small spines, 4 inner bracts smaller, subquadrate, ca. 4×3 mm, subglabrous, at apex erose, abaxially near the middle thickly 1-green-corniculate, with horn-like projections ca. 2 mm long; bracteoles dense, membranous, white, cuneate-rectangular, cuneate-linear or linear, $2.5-4.8 \times 0.2-2.2$ mm, glabrous, at apex often erose. Staminate flower buds long pedicellate, broadly elliptic, ca. 1.5 mm long, glabrous. Pistillate capitula and pistillate flowers unknown.

云南 (Yunnan): 广南县, 莲城镇, 里卡村, 穿洞 (Guangnan Xian, Liancheng Zhen, Lika Cun, Chuan-dong), alt. 1 489 m, 石灰山石缝 (in fissures of rocks in lime-stone hill), 草本直立, 罕见 (herbs erect, rare), 2015-04-14, 韩孟奇, 黄金全 (M. Q. Han & J.

Q. Huang) 199 (**holotype**, PE; isotype, IBK); 砚山县, 阿舍乡, 阿舍小寨 (Yanshan Xian, Ashe Xiang, Ashexiaozhai), alt. 1 574 m, 石灰岩山石缝 (in fissures of rocks in lime-stone hill), 2015-04-20, 韩孟奇, 黄金全 115 (IBK, PE)。

本种在亲缘关系方面可能与马关楼梯草 (*Elatostema maguanense* W. T. Wang) 接近, 与后者的区别在于本种的茎密被反曲柔毛和贴伏短柔毛, 雄花序梗较长 (长 4 mm), 雄总苞的苞片 6 枚, 排列成 2 层, 2 外层苞片较大, 背面具 1 纵列绿色龙骨状突起和 4~6 条纵列绿色短肋, 4 内层苞片较小, 在背面近中部有 1 枚绿色角状突起。在马关楼梯草, 茎只在上部被贴伏短硬毛, 雄花序梗较短, 长 2 mm, 雄总苞的苞片 8 枚, 排列成 1 层, 所有苞片均在顶端具 1 枚角状突起, 不具龙骨状突起和纵肋 (王文采, 2014)。

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2014-07-10, 段长虹 (C. H. Duan) 0263 (**holotype**, PE); 同地 (same locality), alt. 2 847 m, 高山草地 (on alpine meadow), 2014-07-10, 段长虹 0254 (paratype, PE)。

本种在体态上相似于砾地毛茛 (*Ranunculus glareosus* Hand.-Mazz.), 与后者的区别在于本种的基生叶均为三深裂, 两面被贴伏柔毛, 花瓣的蜜槽具鳞片, 心皮具短而粗的花柱和微小柱头。在砾地毛茛, 基生叶三深裂或三全裂, 无毛, 花瓣的蜜槽无鳞片, 心皮具稍伸长的钻形花柱, 不具柱头 (Wang & Gilbert, 2001)。

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