

【原文刊载】“楼梯草属二新种”已于“中国知网 (CNKI)”单篇优先数字出版,《广西植物》待刊。

楼梯草属二新种

王文采

(中国科学院植物研究所 系统与进化植物学国家重点实验室, 北京 100093)

摘要: 描述了荨麻科楼梯草属 2 新种, 其中发现自贵州的安龙楼梯草与条叶楼梯草近缘, 与后者的区别在于此新种的茎和叶无毛, 叶片椭圆形或狭倒卵形, 较宽, 雄苞片无角状突起, 雌头状花序无梗, 其花序托不等 3~4 裂, 柱头画笔头状; 自广西发现的厚序楼梯草与福贡楼梯草近缘, 与后者的区别在于此新种的叶片质地较薄, 呈膜质, 上面疏被糙伏毛, 叶柄较短, 长达 2 mm 或不存在, 雄花序梗圆柱形, 较长, 密被短柔毛, 雄总苞由一层不具角状突起的苞片组成。

关键词: 荨麻科, 楼梯草属, 新种, 中国

中图分类号: Q949 **文献标识码:** A **文章编号:** 1000-3142(2016)增刊 1-0148-04

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

WANG Wen-Tsai

(State Key Laboratory of Systematic and Evolutionary Botany, Institute of Botany, Chinese Academy of Sciences, Beijing 100093, China)

Abstract: Two species of the genus *Elatostema* (Urticaceae) are described as new, of which, *E. anlongense* was discovered from Guizhou Province, and is related to *E. sublineare* W. T. Wang, differing from the latter in its glabrous stems and leaves, broader long elliptic or narrowly obovate leaf blades, not corniculate staminate bracts, sessile pistillate capitula, 3–4-lobed pistillate receptacles, and penicillate stigma. The other new species, *E. pachycephalum* was discovered from Guangxi Autonomous Region, and is related to *E. fugongense* W. T. Wang, differing from the latter in its thinner membranous adaxially strigose leaf blades, shorter petioles, longer terete and densely puberulous staminate penduncles, and the staminate involucre consisting of 1-seriate, not corniculate bracts.

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

安龙楼梯草 图 1: A-F

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

Fig. 1: A-F

[Sect. *Weddellia* (H. Schröter) W. T. Wang ser. *Sublinearia* W. T. Wang]

Species nova haec est fortasse affinis *E. sublineari* W. T. Wang, a quo caulibus et foliis glabris, foliorum

laminis longe ellipticis vel anguste obovatis latioribus (2.8–3.4 cm latis), bracteis staminatis haud corniculatis, bracteolis staminatis glabris, capitulis pistillatis sessilibus, eorum receptaculis inaequaliter 3–4-lobatis, bracteolis pistillatis glabris, stigmatibus penicillatis recedit. In *E. sublineari*, caules et folia pubescentia, foliorum laminae anguste oblanceolatae vel lineari-oblan-

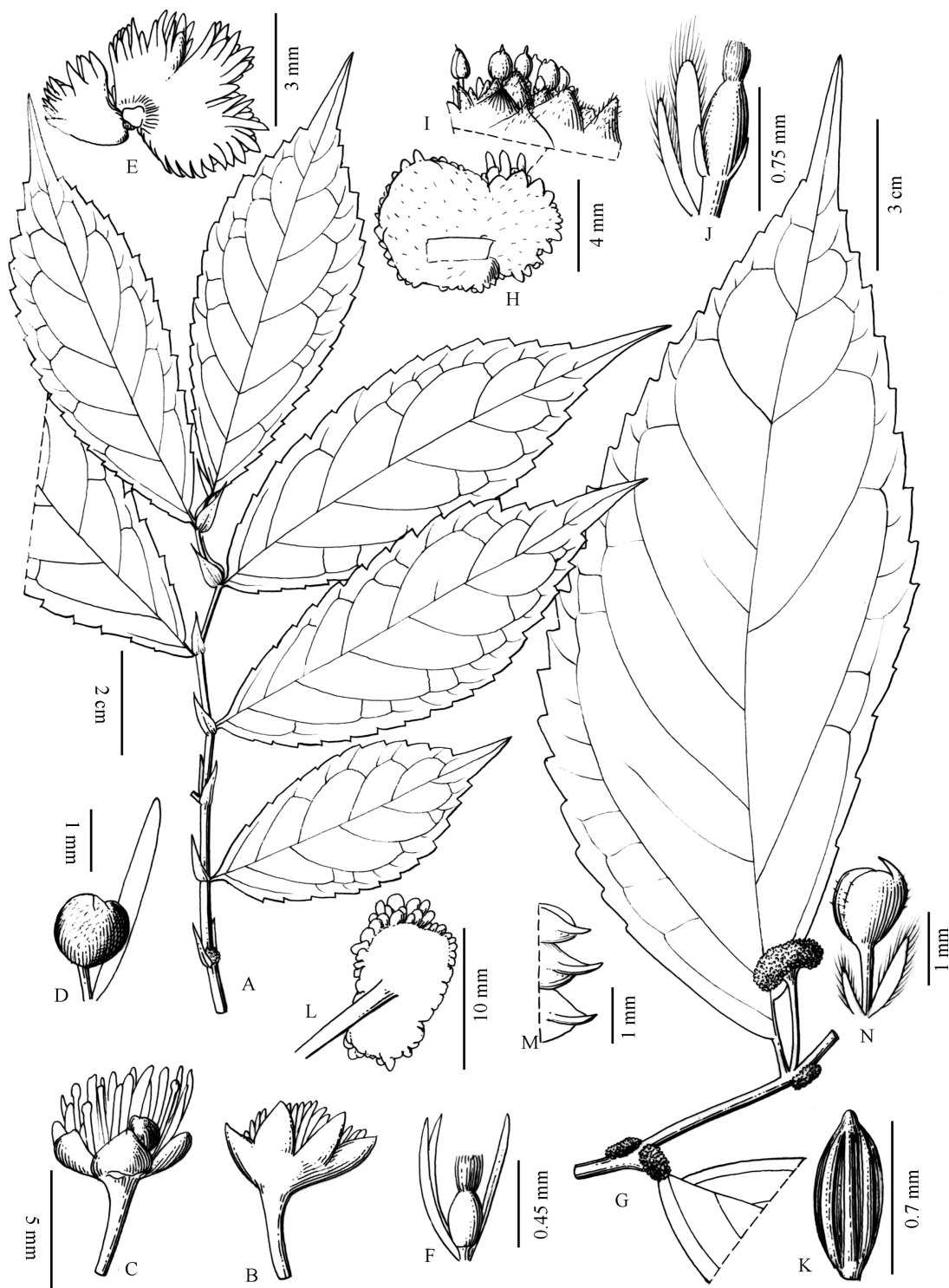


图 1 A-F. 安龙楼梯草 A. 开花茎上部; B. 雄头状花序(侧下面观); C. 同 B, 侧面观; D. 雄小苞片和雄花蕾; E. 雌头状花序(下面观); F. 雌小苞片和雌花。G-N. 厚序楼梯草 G. 2 叶和一腋生雄头状花序以及一对腋生雌头状花序; H. 雌头状花序(下面观); I. 外层雌苞片和 5 内层雌苞片; J. 雌小苞片和雌花; K. 瘦果; L. 雄头状花序(下面观); M. 3 雄苞片; N. 雄小苞片和雄花蕾。

Fig. 1 A-F. *Elatostema anlongense* A. Upper part of flowering stem; B. Staminate capitulum, seen from the lateral bottom; C. The same as B, seen from one side; D. Staminate bracteole and staminate flower bud; E. Pistillate capitulum, seen from beneath; F. Pistillate bracteoles and pistillate flower. (from holotype) G-N. *E. pachycephalum* G. Two leaves and an axillary staminate capitulum and a pair of axillary pistillate capitula; H. Pistillate capitulum, seen from beneath; I. One outer pistillate bract and five inner pistillate bracts; J. Pistillate bracteoles and pistillate flower; K. Achene; L. Staminate capitulum, seen from beneath; M. Three staminate bracts; N. Staminate bracteoles and staminate flower bud. (from holotype)

ceolatae 1.2–2.2 cm latae, bracteae staminatae apice corniculatae, bracteolae staminatae dense ciliatae, capitula pistillata breviter pedunculata, eorum receptacula indivisa vel 2-lobata, bracteolae pistillatae longe ciliatae, et stigmata breviter teretia sunt.

Perennial herb, monoecious. Stem ca. 36 cm tall, near base 2 mm in diam., glabrous, simple, ca. 7-leaved. Leaves alternate, sessile or shortly petiolate, glabrous; blades papery, obliquely long elliptic or narrowly obovate, $6-9.6 \times 2.8-3.4$ cm, apex acuminate, base obliquely cuneate, margin denticulate; nervation pinnate, with 5–6 pairs of inconspicuous secondary nerves; cystoliths not dense, bacilliform, 0.1–0.3 mm long; petioles 0–1 mm long; stipules white, membranous, narrowly triangular, $7-9 \times 3-4$ mm, 1-nerved. Staminate capitula singly axillary, pedunculate; peduncle white, ca. 3 mm long, glabrous; receptacle small, subquadrate, ca. 2 mm long, glabrous; bracts ca. 7, white, membranous, broadly triangular or broadly ovate, $1-2 \times 1.2-2$ mm, subglabrous; bracteoles ca. 10, white, membranous, semi-hyaline, linear, $2.5-3 \times 0.3-0.4$ mm, glabrous. Staminate flower: Pedicel white, 0.4–1.5 mm long, glabrous. Staminate flower bud subglobose, ca. 1.2 mm in diam., tetramerous, glabrous, near apex brown-punctulate. Pistillate capitula singly axillary, sessile; receptacle subpentagonal, ca. 4×5 mm, glabrous, unequally 3–4-lobed; bracts ca. 40, membranous, linear or narrowly triangular, $0.8-1 \times 0.2-0.3$ mm, glabrous; bracteoles numerous, dense, near apex green, narrowly linear, $0.6-1 \times 0.1-0.2$ mm, glabrous. Pistillate flower: Pedicel ca. 0.1 mm long, glabrous. Tepals wanting. Pistil ca. 4.5 mm long; ovary ellipsoid, ca. 0.25 mm long, glabrous; stigma penicillate, with dense hairs ca. 0.2 mm long.

贵州(**Guizhou**): 安龙县(Anlong Xian), 石灰岩山(in lime-stone hill), 2010-05, 韦毅刚(Y. G. Wei) 6681 (**Holotype**, PE).

本种在亲缘关系上可能接近条叶楼梯草(*E. sub-lineare* W. T. Wang), 与后者的区别在于本种的茎和叶均无毛, 叶片长椭圆形或狭倒卵形, 较宽(宽 2.8~3.4 cm), 雄苞片无角状突起, 雄小苞片无毛, 雌头状花序无梗, 其花序托不等 3~4 裂, 雌小苞片无毛, 柱头画笔头状。在条叶楼梯草, 茎和叶均被柔毛, 叶片

狭倒披针形或条状倒披针形, 宽 1.2~2.2 cm, 雄苞片顶端具角状突起, 雄小苞片密被缘毛, 雌头状花序具短梗, 其花序托不分裂或 2 裂, 雌小苞片被长缘毛, 柱头短圆柱状。(王文采, 2014)

厚序楼梯草 图 1: G-N

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

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

Ob folia penninervia, capitula staminata longius pedunculata et receptaculis discoideis praedita et achenia longitudinaliter 6-costata species nova haec ad Sect. *Elatostema* ser. *Albopilosa* W. T. Wang pertinet, et in serie hac est affinis *E. fugongensi* W. T. Wang, a quo foliorum laminis tenuioribus membranaceis supra sparse strigosis, petiolis brevioribus vel nullis usque ad 2 mm longis, pedunculis staminatis teretibus 14–26 mm longis dense puberulis, involucris staminatis ex bracteis 1-seriatis apice haud corniculatis constantibus facile differt. In *E. fugongensi*, foliorum laminae papyraceae supra glabrae, petioli 3–4.5 mm longi, pedunculi staminati complanati breviores 12 mm longi glabri, et involucra staminata ex bracteis 2-seriatis apice breviter crasseque corniculatis constantia sunt.

Perennial herbs. Stems ca. 30 cm tall, near base ca. 3.5 mm in diam., glabrous, simple, ca. 8-leaved, longitudinally shallowly 4-sulcate. Leaves alternate, shortly petiolate or sessile; blades membranous, long elliptic or oblanceolate, $15-22 \times 4-8$ cm, apex long acuminate, base obliquely cuneate, margin obtusely denticulate; surfaces adaxially sparsely strigose, abaxially glabrous; nervation pinnate, with secondary nerves ca. 5 at leaf narrow side and 7 at broad side, and with midrib abaxially prominent; cystoliths along nerves dense, bacilliform, 0.1–0.25 mm long; petioles 0–2 mm long, glabrous; stipules not seen. Staminate capitula singly arising from axils of apical leaves; peduncle white, terete, 14–26 mm long, ca. 3 mm in diam., densely puberulous (hairs ca. 0.1 mm long); receptacle subquadrate, ca. 10×10 mm, sparsely puberulous; bracts ca. 20, white, membranous, broadly ovate, ca. 1 mm long, abaxially 1-green-ribbed; bracteoles dense, membranous, linear or triangular, $0.3-0.6 \times 0.1-0.3$ mm, densely ciliate. Staminate flower buds numerous, subglobose, ca. 1 mm in diam., pi-

lose, tetramerous, with glabrous pedicels 0.5–1.5 mm long. Pistillate capitula in pairs axillary; peduncle complanate, rectangular, ca. 1.5×2.5 mm, glabrous; receptacle thick, obliquely elliptic, ca. 5.5×4.5 mm, puberulous; bracts ca. 21, 2-seriate, white, membranous, outer bract 1, broadly triangular, ca. 0.5×1 mm, puberulous, inner bracts ca. 20, broadly triangular, deltoid or triangular, $0.4-1 \times 0.5-1$ mm, puberulous, ciliolate; bracteoles numerous, dense, membranous, linear, $0.3-0.6 \times 0.1-0.3$ mm, densely ciliate. Pistillate flower: Pedicel robust, 0.1–0.25 mm long, glabrous. Tepals 2, linear, ca. 0.25 mm long, glabrous. Pistil ca. 0.8 mm long; ovary ovoid or narrowly ovoid, 0.3–0.5 mm long, glabrous; stigma penicillate, ca. 1.5 mm long. Achenes whitish, narrowly ellipsoid, ca. 0.7 mm long, longitudinally 6-ribbed, with ribs conspicuously prominent.

广西(**Guangxi**): 那坡县, 百合乡, 北坎(Napo Xian, Baihe Xiang, Beikan), alt. 600 m, 山谷湿处(in wet places in valley), 草本直立, 花白色(herbs

erect, fls. white), 2000-10-09, 邓云飞等(Y. F. Deng et al.) 15544 (**holotype**, PE).

本种的叶具羽状脉, 雄头状花序具较长梗和盘状花序托, 瘦果具 6 条纵肋, 根据这些特征应隶属骤尖楼梯草组疏毛楼梯草系(sect. *Elatostema* ser. *Albopilosa*), 在此系中与福贡楼梯草(*Elatostema fugongense* W. T. Wang)相近缘, 与后者的区别在于本种的叶片质地较薄, 呈膜质, 上面疏被糙伏毛, 叶柄较短或不存在, 存在时长达 2 mm, 雄花序梗圆柱形, 长 14~26 mm, 密被短柔毛, 雄总苞由一层不具角状突起的苞片组成。在福贡楼梯草, 叶片纸质, 上面无毛, 叶柄长 3~4.5 mm, 雄花序梗扁平, 较短, 长 12 mm, 无毛, 雄总苞由 2 层苞片组成, 苞片顶端具短而粗的角状突起(王文采, 2014)。

致谢 深切感谢孙英宝先生为本文绘图。

参考文献:

WANG WT, 2014. *Elatostema* (Urticaceae) in China [M]. Qingdao: Qingdao Press. [王文采, 2014. 中国楼梯草属植物 [M]. 青岛: 青岛出版社.]

(上接第 175 页 Continue from page 175)

下部无毛并具 10 条浅纵沟。叶无柄; 叶片薄纸质, 斜倒披针形或长椭圆形, 长 13~17 cm, 宽 2~4.8 cm, 顶端长渐尖, 基部狭侧长渐狭, 宽侧钝或耳形, 边缘具小牙齿, 两面极密被短柔毛(毛长 0.2~0.5 mm), 半离基三出脉, 侧脉在叶狭侧 3 条, 在宽侧 5 条, 钟乳体密集, 杆状, 长 0.2~0.5 mm; 托叶膜质, 狭披针形或条形, 长 9~11.5 mm, 宽 2~2.8 mm, 背面被短柔毛。雄聚伞花序未见。雌聚伞花序单生叶腋, 小, 长和宽均为 3 mm, 无梗, 下部自基部起有 4 条很短分枝; 苞片无柄, 卵形、狭卵形或狭披针形, 长 0.5~0.6 mm, 宽 0.2~0.35 mm, 褐色, 无毛, 顶端急尖或渐狭。雌花五基数, 未见; 宿存花被片 5, 披针状条形或狭披针形, 长 0.7~1.5 mm, 宽 0.3~0.4 mm, 褐色, 中央暗褐色, 无毛, 顶端急尖。瘦果两侧扁, 双凸, 宽卵圆形, 长约 1 mm, 宽 0.6 mm, 具纵列短线纹和极小瘤状突起, 褐色, 顶端具长约 0.2 mm 的柱头膜质残遗部分。

广西(**Guangxi**): 龙州(Longzhou), 金龙(Jinlong), alt. 250 m, 石灰岩山林中(under forest in lime-

stone hill), 2003-09-15, 税玉民, 陈文红(Y. M. Shui & W. H. Chen) B2003-038(**holotype**, PE)。

本种的突出特征是瘦果具纵列短线纹和小瘤状突起, 据此特征即可与赤车属的其他所有种相区别; 在此属其他种, 瘦果通常具瘤状突起, 在少数种光滑或具不规则条纹(marmorate)或短线纹(lineolate)(Schröter, 1936; 王文采, 1995)。此外, 本种的另一特征是叶两面均密被短柔毛, 据此一特征即可与我国赤车属的其他所有种相区别; 在我国此属其他种, 叶两面均有多少稀疏的毛, 或只上面或只下面有毛, 或两面均无毛(王文采, 1995)。

致谢 孙英宝先生为本文绘图, 深表感谢。

参考文献:

王文采, 1995. *Pellionia* [M]//中国植物志. 北京: 科学出版社, 23(2): 160–187
SCHRÖTER H, WINKLER H, 1936. *Elatostema* subgen. [M]//*Pellionia*. Monographie der Gattung *Elatostema* s. l. Repert. Sp. Nov. Regn. Veg Beih., 83(2): 2–92