

广西楼梯草属研究随记

韦毅刚¹, 王文采^{2*}(1. 广西壮族自治区 广西植物研究所, 广西 桂林 541006; 2. 中国科学院植物研究所
中国科学院)

系统与进化植物学国家重点实验室, 北京 100093)

摘要: 描述了在中国广西发现的楼梯草属 4 新种和 1 新变种: 软毛草楼梯 (*Elatostema malacotrichum* W. T. Wang & Y. G. Wei) 可能与骤尖楼梯草 (*E. cupidatum* Wight) 近缘, 但茎有短柔毛, 叶顶端急尖或短渐尖, 下面被短柔毛, 侧脉在狭侧 4 条, 托叶披针形或狭卵形, 淡绿色, 无脉, 近无毛, 雌花序托有短柔毛, 苞片无角状突起而明显不同。隆脉楼梯草 (*E. phanerophlebium* W. T. Wang & Y. G. Wei) 在亲缘关系上与显脉楼梯草接近, 但茎被短柔毛, 叶斜长椭圆形, 宽 1.8—5 cm, 顶端渐长尖, 基部狭侧钝, 宽侧耳形, 具半离基三出脉, 托叶无钟乳体, 雄花序成对腋生, 雄花四基数, 而与后者区别。凤山楼梯草 (*E. fengshanense* W. T. Wang & Y. G. Wei) 与环江楼梯草 (*E. huanjiangense* W. T. Wang & Y. G. Wei) 在亲缘关系上甚为接近, 但叶边缘有较多小齿, 上面有糙伏毛, 雌苞片扁宽卵形或宽卵形, 顶端有角状突起, 小苞片宽条形或匙形, 雌花均生于花序托上而与后者区别。棱茎楼梯草 (*E. angulaticaulis* W. T. Wang & Y. G. Wei) 在亲缘关系方面可能与薄叶楼梯草接近, 但茎无毛, 有密集的钟乳体。叶的钟乳体较小, 长 0.1—0.3 mm, 雌花序成对腋生, 花序托无毛, 苞片稍明显, 顶端有长 0.2 mm 的短尖头, 小苞片匙形, 而与后者区别。变种的茎较细, 基部粗 2.8 mm, 暗褐色, 近顶部被反曲短柔毛而与模式变种相区别。补充描述了上林楼梯草 (*E. shanglinense* W. T. Wang) 雌花序等的特征。

关键词: 楼梯草属; 荨麻科; 新种; 补充描述, 广西; 中国

中图分类号: Q949 文献标识码: A 文章编号: 1000-3142(2009)06-0711-08

Notes on *Elatostema* J. R. et G. Forst.
(Urticaceae) from GuangxiWEI Yi-Gang¹, WANG Wen-Tsai^{2*}(1. Guangxi Institute of Botany, Guangxi Zhuang Autonomous Region and the Chinese Academy of
Sciences, Guilin 541006, China; 2. State Key Laboratory of Systematic and Evolutionary
Botany, Institute of Botany, Chinese Academy of Sciences, Beijing 100093, China)

Abstract: 4 new species and 1 new variety of *Elatostema* (Urticaceae) are described and supply describe for *Elatostema shanglinense* from Guangxi, China.

Key words: *Elatostema*; supply describe; Urticaceae; new species; Guangxi; China

组 2. 骤尖楼梯草组 Sect. 2. *Elatostema*系 1. 骤尖楼梯草系 Ser. 1. *Cuspidata* W. T. Wang1. 软毛楼梯草 *Elatostema malacotrichum* W. T. Wang & Y. G. Wei2. 隆脉楼梯草 *Elatostema phanerophlebium* W. T. Wang & Y. G. Wei系 2. 樟叶楼梯草系 Ser. 2. *Petelotiava* Wang

收稿日期: 2008-08-12 修回日期: 2009-02-19

基金项目: 中国科学院知识创新工程项目(科技基础设施建设专项)[Supported by the Knowledge Innovation Project of the Chinese Academy of Sciences]

作者简介: 韦毅刚(1967-), 男, 广西桂林人, 副研究员, 从事植物分类和区系研究工作, (E-mail) weiyigang@yahoo.com.cn.

* 通讯作者(Author for correspondence): 王文采(1926-), 男, 教授/研究员, 中国科学院院士, 从事有花植物分类学研究。

3. 凤山楼梯草 *Elatostema fengshanense* W. T. Wang & Y. G. Wei

系 3. 南川楼梯草系 Ser. 3. Nanchuanensia Wang

4. 棱茎楼梯草 *Elatostema angulaticaulis* W. T. Wang & Y. G. Weivar. *angulaticaulis*毛棱茎楼梯草 var. *lasiodadum* W. T. Wang & Y. G. Wei

1. 软毛楼梯草 新种 图 1:F-I

Elatostema malacotrichum W. T. Wang & Y. G. Wei,
sp. nov. Fig. 1:F-I.

Species nova est fortasse affinis *E. cuspidato* Wight, quod caulibus glabris, foliis apice cuspidatis vel longe cuspidatis subtus glabris, eorum nervis lateralibus latere angustiore 2, stipulis linearibus vel linearilanceolatis albis 1-viridi-nervibus, receptaculis pistillatis glabris, bracteis pistillatis apice corniculatis statim distinguitur.

Herba perennis. Caulis circ. 40 cm altus, basi 1 cm crassus, succulentus, viridulus, inferne obscure superne manifeste quadrangulatus, prope apicem puberulus, supra basin breviter 1-ramosus. Folia sessilia; laminae papyraceae, oblique angusteque obovatae, 6.5—12.5 cm longae, 2.5—4.5 cm latae, apice acutae vel breviter acuminatae, basi oblique cuneatae vel latere latiore rotundato-obtusae, margine latere angustiore praeter partem tertiam inferiorem integram denticulatae latere latiore supra basin denticulatae, utrinque puberulae, cystolithis densis bacilliformibus 0.2—0.4 mm longis, semitriplinerves, nervis lateralibus circ. 4-jugatis cum eis basalibus subtus prominentibus; stipulae lanceolatae vel anguste ovatae, 6—10 mm longae, 2—2.2 mm latae, apice attenuatae, viridulae, subglabrae, enerves. Inflorescentiae staminatae ignotae. Inflorescentiae pistillatae singulariter axillares; pedunculi robustissimi, 1.1 mm longi, 2 mm crassi, puberuli; receptacula subquadrata, 2.5—3 mm longa et lata, puberula; bractae circ. 10, late ovatae vel deltoideae, 0.5—0.8 mm longae, 1 mm latae, sparse puberulae; bracteolae numerosae, spathulato-lineares, 0.6—1 mm longae, apice ciliatae. Flores pistillati; pedicellus brevis, crassus; peranthium obscurum; ovarium anguste ovoideum, 0.4 mm longum, stigmato penicillato 0.2 mm longo. Achenia brunneola, ovoidea, 0.7 mm longa, 0.4 mm lata, longitudinaliter tenuiterque 8-costata.

多年生草本。茎高约 40 cm, 基部粗 1 cm, 多汁,

淡绿色, 下部不明显, 上部明显四棱形, 近顶部被短柔毛, 基部之上有 1 条短枝。叶无柄; 叶片纸质, 斜狭倒卵形, 长 6.5—12.5 cm, 宽 2.5—4.5 cm, 顶端急尖或短渐尖, 基部斜楔形或宽侧圆钝, 边缘狭侧下部三分之一全缘, 其他部分有小牙齿, 宽侧在基部之上有小牙齿, 两面被短柔毛, 钟乳体密, 杆状, 长 0.2—0.4 mm, 半离基三出脉, 侧脉约 4 对, 与基出脉在下面均隆起; 托叶披针形或狭卵形, 长 6—10 mm, 宽 2—2.2 mm, 顶端渐狭, 淡绿色, 近无毛, 无脉。雌花序单生叶腋; 花序梗粗壮, 长 1.1 mm, 粗 2 mm, 被短柔毛; 花序托近方形, 长和宽 2.5—3 mm, 被短柔毛; 苞片约 10, 宽卵形或正三角形, 长 0.5—0.8 mm, 宽 1 mm, 疏被短柔毛; 小苞片多数, 匙状条形, 长 0.6—1 mm, 顶端被缘毛。雌花: 花梗短, 粗; 花被不明显; 子房狭卵球形, 长 0.4 mm, 画笔状柱头长 0.2 mm。瘦果淡褐色, 卵球形, 长 0.7 mm, 宽 0.4 mm, 具 8 条纵细肋。

广西(Guangxi): 龙州(Longzhou), 金龙(Jinlong), 石灰岩石山(Limestone hill), 2006-03-31, 韦毅刚(Y. G. Wei) 06031 (holotype, PE; isotype, IBK).

本种可能与骤尖楼梯草 *E. cuspidatum* Wight 近缘, 但茎有短柔毛, 叶顶端急尖或短渐尖, 下面被短柔毛, 侧脉在狭侧 4 条, 托叶披针形或狭卵形, 淡绿色, 无脉, 近无毛, 雌花序托有短柔毛, 苞片无角状突起而明显不同。在骤尖楼梯草, 茎无毛, 叶顶端骤尖或长骤尖, 下面无毛, 侧脉在狭侧 2 条, 托叶条形或条状披针形, 白色, 有 1 条绿色中脉, 无毛。

2. 隆脉楼梯草 新种 图 1:A-E

Elatostema phanerophlebium W. T. Wang & Y. G. Wei, sp. nov. Fig. 1:A-E.

Species nova est affinis *E. longistipulato* Hand-Mazz., quod caule saepe strigoso, foliis lanceolatis 1.3—2.5 cm latis apice longe acuminatis vel caudato-acuminatis basi saepe oblique cuneatis trinervibus, stipulis cystolithis minutis densis notatis, inflorescentiis staminatis singulariter axillaribus, floribus staminatis pentameris bene differt.

Herba perennis, monoecia. Caulis circ. 45 cm altus, inferne compresse quadrangulatus, 7 mm crassus,

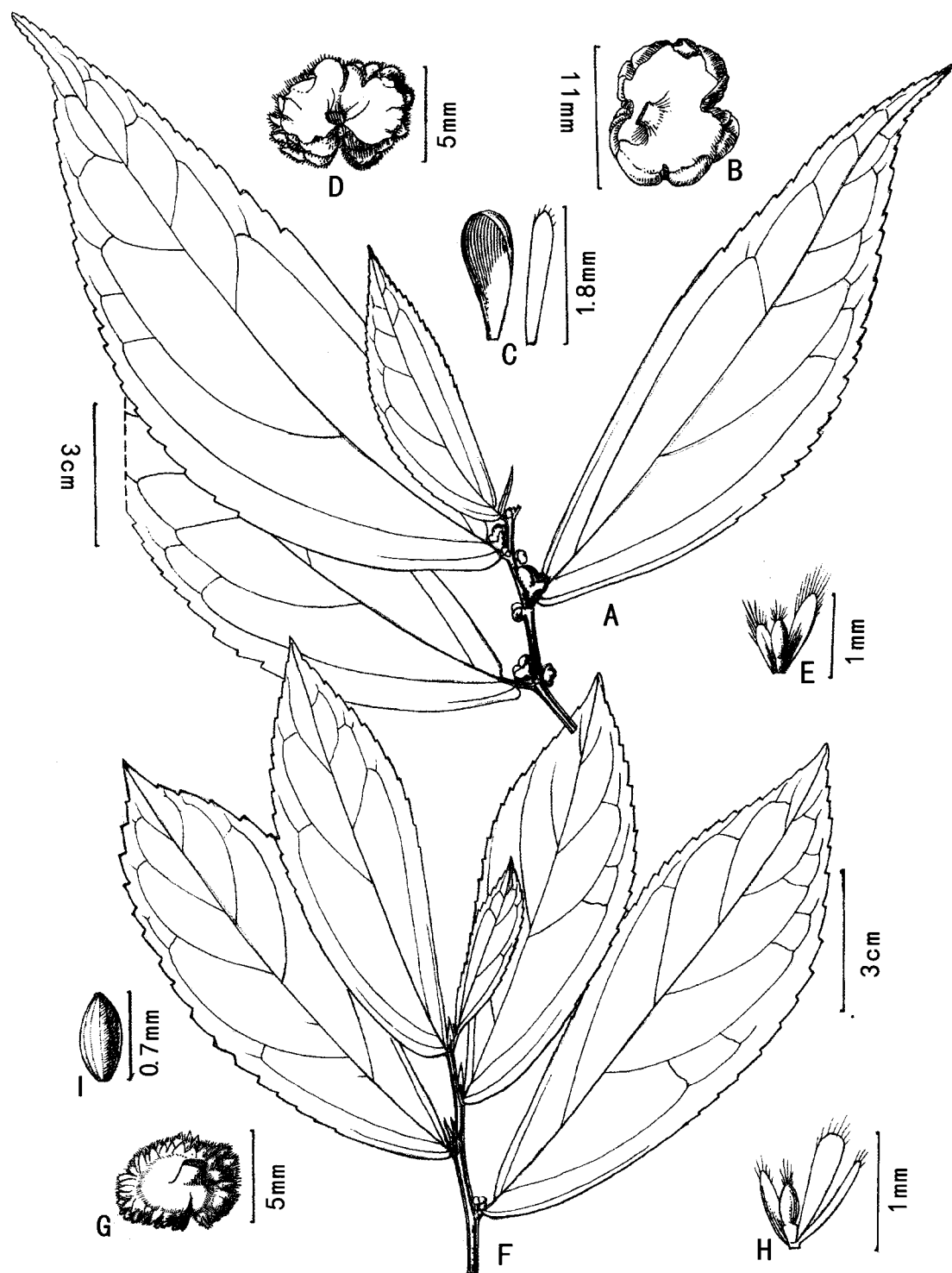


图 1 A-E. 隆脉楼梯草 A. 植株上部; B. 雄花序; C. 雄小苞片; D. 雌花序; E. 雌花和小苞片。

F-I. 软毛楼梯草 F. 植株上部; G. 雄花序; H. 雌花和小苞片; I. 瘦果。 (孙英宝 绘)

Fig. 1 A-E. *Elatostema phanerophlebium* W. T. Wang & Y. G. Wei. A. upper part of plant; B. staminate inflorescence; C. staminate bracteoles; D. pistillate inflorescence; E. pistillate flower and bracteoles. F-I. *Elatostema malachotrichum* W. T. Wang & Y. G. Wei. F. upper part of plant; G. pistillate inflorescence; H. pistillate flower and bracteoles; I. Achene. (Drawn by Sun Ying-Bao)

superne quadrangulatus et longitudinaliter 4—6-sulcatus, apice adpresso puberulus, pilis 0.25 mm longis, circ. 10-foliatus, inferne breviter 1-ramosus. Folia breviter petiolata; laminae papyraceae, oblique longeque ellipticae, 6.5—15 cm longae, 1.8—5 cm latae, apice acuminatae, basi latere angustiore obtusae eo latiore auriculatae, auriculis 2—6 mm longis interdum ciliatis, margine supra basin dense denticulatae, supra glabrae, subtus ad nervos sparse adpressoque puberulae, cystolithis densissimis bacilliformibus 0.1—0.4 mm longis, semitripplinervis, nervis lateralibus latere angustiore 3 eo latiore 4 cum eis basa libus et tertiariis subtus prominentibus retum nervulorum conspicuum formantibus; petioli 1.5—5 mm longi; stipulae linearilanceolatae, 1.2—1.9 cm longae, 2—4 mm latae, apice longe attenuatae, glabrae. Inflorescentiae staminatae binatim axillares; pedunculi robusti, 1 mm longi, glabri; receptacula late oblonga, circ. 9 mm longa, 7 mm lata, medio 2-lobata, glabra, prope pedunculum cystolithis 0.2—0.3 mm longis notata; bracteae circ. 7, inaequales, depresso lateque ovatae, 1—1.4 mm longae, 2—5 mm latae, aliquot dorso longitudinaliter breviterque 3—5-nigro-costatae; bracteolae numerosae, densissimae, obovato-naviculares vel lineares, circ. 1.8 mm longae, apice ciliolatae. Alabastra staminata 1 mm in diam., glabra, tetramera. Inflorescentiae pistillatae singulariter axillares, sessiles; receptacula late oblonga, 4—4.7 mm longa, 3 mm lata, glabra, cystolithis densis 0.1—0.2 mm longis notata; bracteae 5, inaequales, transverse lineares vel depresso lateque ovatae, 1 mm longae, 1—5 mm latae; bracteolae numerosae, densissimae, oblanceolatae, 0.7—1 mm longae, apice dense longeque ciliatae. Flores pistillati; pedicellus brevis, robustus; perianthium obscurum; ovarium anguste ellipsoideum, 0.5 mm longum, stigmatibus penicillato 0.2 mm longo.

多年生草本,雌雄同株。茎高约 45 cm,下部扁四棱形,粗 7 mm,上部四棱形,并有 4—6 条纵沟,顶端被贴伏状短柔毛(毛长 0.25 mm),约有 10 叶,下部具 1 条短枝,叶具短柄;叶片纸质,斜长椭圆形,长 6.5—15 cm,宽 1.8—5 cm,顶端渐尖,基部狭侧

钝,宽侧耳形(耳垂部分长 2—6 mm,有时被缘毛),边缘在基部之上有密小牙齿,上面无毛,下面在脉上疏被贴伏短柔毛,钟乳体极密,杆状,长 0.1—0.4 mm,半离基三出脉,侧脉在狭侧 3 条,在宽侧 4 条,与基出脉和三级脉在下面均隆起,并形成明显脉网;叶柄长 1.5—5 mm;托叶条状披针形,长 1.2—1.9 mm,宽 2—4 mm,顶端长渐狭,无毛。雄花序成对腋生;花序梗粗壮,长 1 mm,无毛,花序托宽长圆形,长约 9 mm,宽 7 mm,在中部 2 浅裂,无毛,近花序梗处有长 0.2—0.3 mm 的钟乳体;苞片约 7,不等大,扁宽卵形,长 1—1.4 mm,宽 2—5 mm,有些苞片在背面有 3—5 条黑色短纵肋;小苞片多数,极密,倒卵状船形或条形,长约 1.8 mm,顶端有短缘毛,雄花蕾直径 1 mm,无毛,四基数。雌花序单生叶腋,无梗;花序托宽长圆形,长 4—4.7 mm,宽 3 mm,无毛,钟乳体密,长 0.1—0.2 mm;苞片约 5,不等大,横条形或扁宽卵形,长 1 mm,宽 1—5 mm;小苞片多数,极密,倒披针形,长 0.7—1 mm,顶端密被长缘毛。雌花:花梗短,粗壮;花被不明显;子房狭椭圆球形,长 0.5 mm,画笔状柱头长 0.2 mm。

广西(Guangxi):河池至九圩途中(On the way from Hechi to Jiuxu),石灰岩石山(Limestone hill), 2008-05-21, 韦毅刚(Y. G. Wei) 0805 (holotype, PE; isotype, IBK)。

本种在亲缘关系上与显脉楼梯草 *E. longisitipulum* Hand.-Mazz. 接近,但茎被短柔毛,叶斜长椭圆形,宽 1.8—5 cm,顶端渐尖,基部狭侧钝,宽侧耳形,具半离基三出脉,托叶无钟乳体,雄花序成对腋生,雄花四基数,而与后者不同。在显脉楼梯草,茎常被糙伏毛,叶披针形,宽 1.3—2.5 cm,顶端长渐尖或尾状渐尖,基部通常斜楔形,具三出脉,托叶有密钟乳体,雄花序单生叶腋,雄花五基数。

3. 凤山楼梯草 新种 图 2:E-G

Elatostema fengshanense W. T. Wang & Y. G. Wei, sp. nov. Fig. 2:E-G.

Species nova est arcte affinis *E. huanjianensi* W. T. Wang & Y. G. Wei, quod foliis margine superne 2—4-crenatis vel subintegris utrinque glabris, bracteis pistillatis triangularibus apice haud corniculatis, bracteolis linearibus vel lanceolato-linearibus, floribus pistillatis ad apicem ramuli brevis 2-bracteolati ad receptaculum crescentis singulariter terminantibus ab ea facile distat.

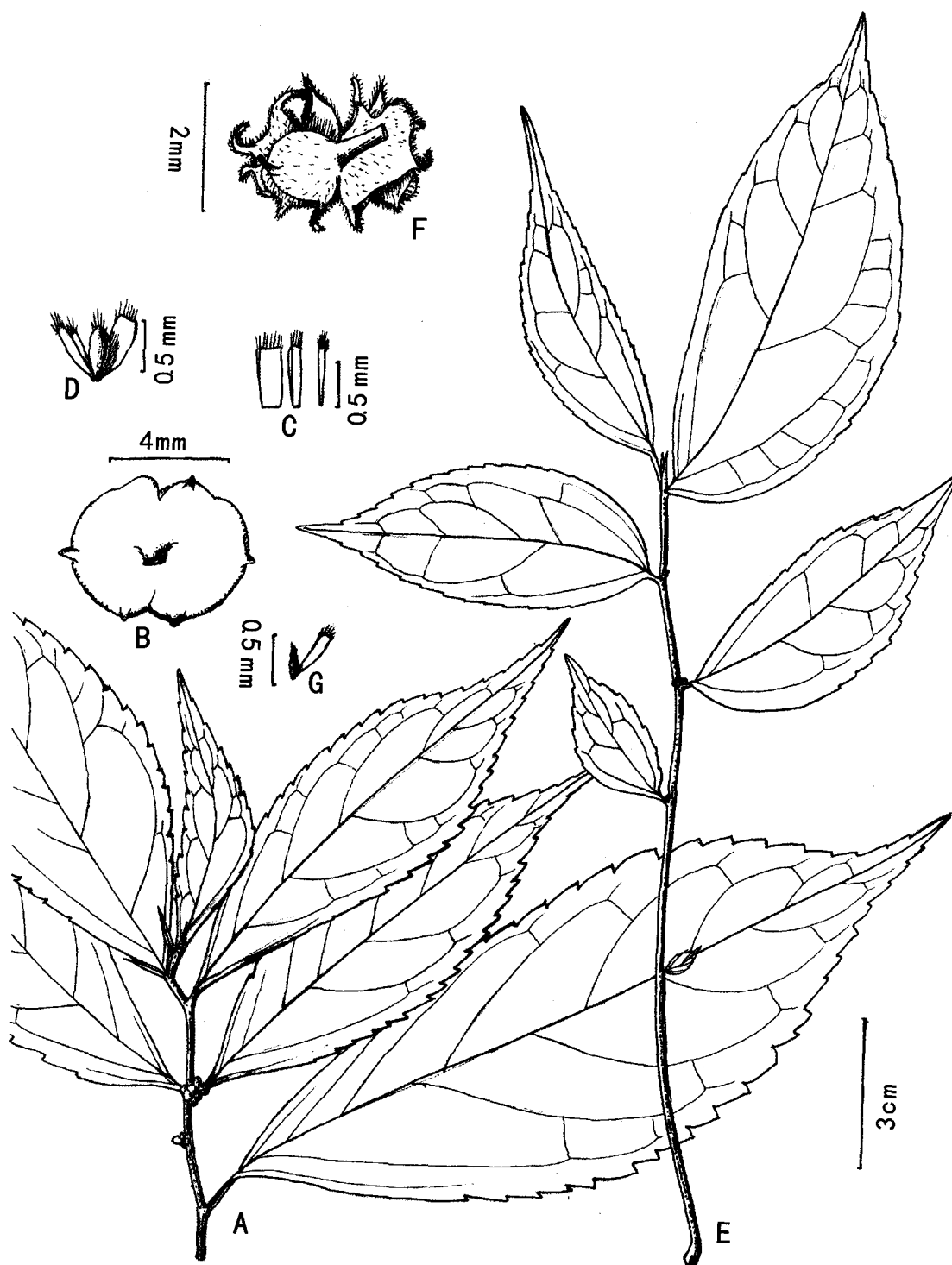


图 2 A-D. 棱茎楼梯草 A. 植株上部; B. 雌花序(下面观); C. 小苞片, D. 雌花和小苞片。

E-G. 凤山楼梯草 E. 植株; F. 雌花序(下面观); G. 雌花和小苞片。(孙英宝 绘)

Fig. 2 A-D. *Elatostema angulaticaulis* W. T. Wang & Y. G. Wei var. *angulaticaulis* W. T. Wang & Y. G. Wei A. upper part of plant; B. pistillate inflorescence (lower view); C. bracteoles; D. pistillate flower and bracteoles. E-G. *Elatostema fengshanense* W. T. Wang & Y. G. Wei. E. habit; F. pistillate inflorescence (lower view); G. pistillate flower and bracteole. (Drawn by Sun Ying-bao)

Herba. Caulis gracilis, circ. 16 cm altus, basi 2 mm crassus, atroviridis, glaber, simplex, circ. 6-foliatus. Folia breviter petiolata; laminae papyraceae, oblique angustaeque ellipticae vel anguste ovatae, (0.7—)3—10 cm longae, (0.5—)1.3—4 cm latae, apice acuminatae vel longe acuminatae, acuminibus integris, basi latere angustiore cuneatae eo latiore rotundatae, margine latere angustiore obscure 5—11-crenatae eo latiore obscure 5—14-crenatae, supra sparse strigosae, subtus glabrae, cystolithis densiusculis bacilliformibus 0.1—0.2 mm longis, trinerves, nervis lateralibus 3—4-jugatis; petioli 0.5—3.5 mm longi, glabri; stipulae anguste ovatae vel lanceolatae, 7 mm longae, 2—2.6 mm latae, glabrae, viridulo-albae, 1-viridi-nerves. Inflorescentiae staminatae ignotae. Inflorescentiae pistillatae binatim axillares; pedunculi robusti, 0.5 mm longi, glabri; receptacula late oblonga, circ. 2.6 mm longa, 2 mm lata, medio 2-lobata, glabra; bractae 2 oppositae majores, depresso lateque ovatae, 0.5—0.6 mm longae, 1—1.2 mm latae, apice corniculatae, cornibus 0.8—1 mm longis, 6 ceterae minores, late ovatae, 0.3—0.4 mm longae, 0.6 mm latae, cornibus 0.5 mm longis, puberulae; bracteolae numerosae, densissimae, late lineares vel spathulatae, 0.3—0.5 mm longae, apice truncatae et dense ciliatae. Flores pistillati; pedicellus brevis; peranthium obscurum; ovarium ellipsoideum, 0.2 mm longum, stigmate penicillato ovario aequilongo.

草本。茎纤细，高约 16 cm，基部粗 2 mm，暗绿色，无毛，不分枝，约有 6 叶。叶具短柄；叶片纸质，斜狭椭圆形或狭卵形，长 (0.7)3—10 cm，宽 (0.5—)1.3—4 cm，顶端渐尖或长渐尖（渐尖头全缘），基部狭侧楔形，宽侧圆形，边缘在狭侧有不明显 5—11 小齿，在宽侧有不明显 5—14 小齿，上面疏被糙伏毛，下面无毛，钟乳体稍密，杆状，长 0.1—0.2 mm，三出脉，侧脉 3—4 对；叶柄长 0.5—3.5 mm，无毛；托叶狭卵形或披针形，长 7 mm，宽 2—2.6 mm，无毛，绿白色，有 1 条绿色中脉。雌花序成对腋生；花序梗粗壮，长 0.5 mm，无毛；花序托宽长圆形，长约 2.6 mm，宽 2 mm，在中部 2 浅裂，无毛；2 对生苞片较大，扁宽卵形，长 0.5—0.6 mm，宽 1—1.2 mm，顶

端具角状突起（突起长 0.8—1 mm），其他 6 枚苞片较小，宽卵形，长 0.3—0.4 mm，宽 0.6 mm，具长约 0.5 mm 的角状突起，被短柔毛；小苞片多数，极密，宽条形或匙形，长 0.3—0.5 mm，顶端截形并密被缘毛。雌花：花梗短；花被不明显；子房椭圆状形，长 0.2 mm，画笔状柱头与子房等长。

广西 (Guangxi): 凤山 (Fengshan), 石灰岩山 (in lime-stone hills), 2008-04-22, 韦毅刚 (Y. G. Wei) 08018 (holotype, PE; isotype, IBK).

本种与环江楼梯草 *E. huanjiangense* W. T. Wang & Y. G. Wei (Wang & Wei, 2007) 在亲缘关系上甚为接近，但叶边缘有较多小齿，上面有糙伏毛，雌苞片扁宽卵形或宽卵形，顶端有角状突起，小苞片宽条形或匙形，雌花均生于花序托上而与后者区别。在环江楼梯草，叶边缘上部只有 2—4 小齿或近全缘，两面无毛，雌苞片三角形，顶端无角状突起，小苞片呈条形或披针状条形，雌花单生于自花序托出生的具 2 小苞片的短小枝顶端。

4. 棱茎楼梯草 新种 图 2: A-D

Elatostema angulaticaulis W. T. Wang & Y. G. Wei, sp. nov. Fig. 2: A-D.

Species nova est fortasse affinis *E. tenuifolium* W. T. Wang, quod caule puberulo cystolithis carente, foliorum cystolithis majoribus usque ad 0.5 mm longis, inflorescentiis pistillatis singulariter axillaribus, receptaculis puberulis, bracteis minimis apice corniculatis, cornibus lanceolato-lanceolatis 0.8—2.5 mm longis, bracteolis spathulatis bene differt.

4a. 棱茎楼梯草

var. *angusticaule*

Herba perennis. Caulis circ. 40 cm altus, inferne quadrangulatus et longitudinaliter 4-sulcatus, 3.5 mm crassus, viridulus, breviter 2-ramosus, supra medium cystolithis densis 0.1—0.3 mm longis notatus, glaber, circ. 10-foliatus. Folia breviter petiolata; laminae papyraceae, oblique angustaeque obovatae, 5—15 cm longae, 1.5—5.5 cm latae, apice acuminatae, basi oblique cuneatae, margine supra basin dentatae vel serratae, supra sparse strigosae, subtus ad nervos strigosae, saepe glabrescentes, cystolithis densis bacilliformibus 0.1—0.3 mm longis, penninerves, nervis lateralibus circ. 4—6-

jugatis subtus prominulis; petioli 3—8 mm longi, glabri; stipulae lanceolatae, circ. 13 mm longae, 3 mm latae, glabrae. Inflorescentiae staminatae ignotae. Inflorescentiae pistillatae binatim axillares, subsessiles; receptacula elliptica, circ. 4.2 mm longa, 2.5 mm lata, glabra; bracteae depresso ovatae, 2 exteriores oppositae majores, 0.5 mm longae, 3 mm latae, 4 interiores minores, circ. 0.5 mm longae, 1.2—2 mm latae, omnes apice crasse mucronatae, mucronibus 0.2 mm longis, glabrae; bracteolae numerosae, densissimae, oblongae, lineares vel anguste lineares, 0.7 mm longae, apice truncatae et dense ciliatae. Flores pistillati; pedicellus brevis, crassus; perianthium obscurum; ovarium anguste ellipsoideum, 0.4 mm longum, stigmate penicillato 0.2 mm longo.

多年生草本。茎高约 40 cm, 下部四棱形并具 4 条纵沟, 粗约 3.5 mm, 淡绿色, 有 2 短枝, 中部以上有密布的长 0.1—0.3 mm 的钟乳体, 无毛, 约有 10 叶。叶具短柄; 叶片纸质, 斜狭倒卵形, 长 5—15 cm, 宽 1.5—5.5 cm, 顶端渐尖, 基部斜楔形, 边缘基部之上具牙齿或锯齿, 上面疏被糙伏毛, 下面脉上被糙伏毛, 常变无毛, 钟乳体密, 杆状, 长 0.1—0.3 mm, 羽状脉, 侧脉 4—6 对; 叶柄长 3—8 mm, 无毛; 托叶披针形, 长 13 mm, 宽 3 mm, 无毛。雌花序成对腋生, 近无梗; 花序托椭圆形, 长 4.2 mm, 宽 2.5 mm, 无毛; 苞片扁宽卵形, 外方 2 枚对生, 较大, 长约 0.5 mm, 宽 3 mm, 内方 4 枚较小, 长约 0.5 mm, 宽 1.2—2 mm, 所有苞片顶端均具长约 0.2 mm 的粗短尖头, 无毛; 小苞片多数极密, 长圆形; 条形或狭条形, 长 0.7 mm, 顶端截形, 密被缘毛。雌花; 花梗短, 粗; 花被不明显; 子房狭椭圆球形, 长 0.4 mm, 画笔状柱头长 0.2 mm。

广西(Guangxi): 西林(Xilin), 古障(Guzhang), 2006-06-07, 韦毅刚(Y. G. Wei) 06178 (holotype, PE; isotype, IBK)。

本种在亲缘关系方面可能与薄叶楼梯草 *E. tenuifolium* W. T. Wang 接近, 但茎无毛, 有密集的钟乳体。叶的钟乳体较小, 长 0.1—0.3 mm, 雌花序成对腋生, 花序托无毛, 苞片稍明显, 顶端有长 0.2 mm 的短尖头, 小苞片匙形, 而与后者区别。在薄叶楼梯草, 茎上部被短柔毛, 无钟乳体, 叶的钟乳体较大, 长达 0.5 mm, 雌花序单生叶腋, 花序托被

短柔毛, 苞片极小, 不明显, 项端有长 0.8—2.5 mm 披针状条形的角状突起。

4b. 毛棱茎楼梯草

var. *lasiocladum* W. T. Wang & Y. G. Wei, var. nov.

A var. *angulaticauli* differt caule graciliore basi 2.8 mm crasso atrobrunneo prope apicem retorso-puberulo.

广西(Guangxi): 东兰(Donglan), 石灰岩山(in line-stone hills), 2008-04-21, 韦毅刚(Y. G. Wei) 08023 (holotype, PE; isotype, IBK)。

本变种的茎较细, 基部粗 2.8 mm, 暗褐色, 近顶部被反曲短柔毛而与模式变种相区别。

5. 上林楼梯草(广西植物)图 3: A-C

Elatostema shanglinense W. T. Wang in Guahuaia 2(3): 118, fig. 5-6. 1982.

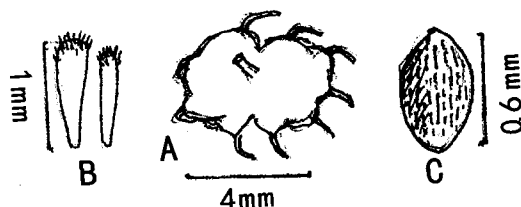


图 3 上林楼梯草 A. 雌花序; B. 小苞片; C. 瘦果。(孙英宝 绘)
Fig. 3 *Elatostema shanglinense* W. T. Wang A. pistillate inflorescence; B. bracteoles; C. achene. (Drawn by Sun Ying-Bao)

广西(Guangxi): Shanglin(上林), 1951-08-14, Cai Can-xing (蔡灿星) 5151 (♂, holotype, IBK); Longan(隆安), 2007-5-15, Wei Yi Gang (韦毅刚) 07253 (IBK, PE)。

补充描述: 多年生小草本。根状茎短, 生出长 1.5—7 cm 的细根。茎约 5 条丛生, 高 6—11 cm, 基部粗 0.8—1.1 mm, 近顶部有稀疏短柔毛或近无毛, 常有密集钟乳体(杆状, 长 0.1—0.25 mm), 通常不分枝, 有 6—8 叶。叶具短柄; 叶片草质, 斜长卵形或斜椭圆形, 长 1—4.2 cm, 宽 0.6—1.5 cm, 顶端长渐尖、尾状或渐尖(尖头三角状条形或条形, 全缘), 基部狭侧楔形, 宽侧圆形, 边缘基部之上有小牙齿, 上面疏被糙伏毛, 下面在基出脉和侧脉上疏被糙伏毛, 钟乳体密或稍密, 不明显或明显, 杆状, 长 0.1—0.3 mm, 三出脉, 侧脉在狭侧 1—2 条, 在宽侧 2—3 条; 叶柄长 0.5—1 mm; 托叶早落, 膜质, 披针形, 长 3.5 mm, 宽 1 mm, 白色, 中央绿色, 无毛。雌花序单生叶腋, 具短梗; 花序梗长约 1 mm, 无毛; 花

序托长圆形,长约 4 mm,宽约 2.4 mm,在中部 2 浅裂,无毛;苞片约 10,正三角形长 0.5—0.8 mm,宽 0.8—1 mm,顶端有长 1—1.5 mm 的绿色角状突,边缘上部有稀疏短柔毛;小苞片密,楔状条形或条形,长约 1 mm,顶端绿色,密被短柔毛。瘦果椭圆形,长约 0.6 mm,宽 0.3 mm 有密的褐色短纵条纹。

模式标本蔡灿星 5151 为♂株,与韦毅刚 07253 ♀株有些区别,主要是:模式标本①原始描述中称茎无毛,未见钟乳体 ②原始描述中称叶两面无毛。

Ad descriptionem originalem addenda, planta pistillata adhuc ignota: Planta pistillata est herba parva, rhizomate brevi inconspuo, radices graciles 1.5—7 cm longas et caules circ. 5, 6—11 cm altos basi 0.8—1.1 mm crassos prope apicem sparse puberulos cystolithis bacilliformibus 0.1—0.15 mm longis dense praeditos vulgo simplices superne 6—8-foliosos edente. Folia supra sparse strigosa, subtus ad nervos basales et laterales sparse strigulosa. Inflorescentiae pistillatae singulariter axillares, breviter pedunculatae; pedunculi circ. 1 mm longi, glabri; receptacula oblonga, circ. 4 mm longa, 2—4 mm lata, medio 2-lobata, glabra; bracteae circ. 10, deltoideae, 0.5—0.8 mm longae, 0.8—1 mm latae, apice longe corniculatae, cornibus viridibus 1—1.5 mm longis, margine sparse puberulae; bracteolae

densae, cuneato-lineares vel lineares, circ. 1 mm longae, apice virides, et puberulae. Achenia ellipsoidea, circ. 0.6 mm longa, 0.3 mm lata, dense et longitudinaliter brunneo-lineolata.

致谢 黄仕训、盘波、唐文秀和骆文华参加野外调查和部分研究工作;感谢孙英宝先生为本文绘图。

参考文献:

- 王文采. 1995. 楼梯草属[A]. 中国植物志[M]. 北京:科学出版社, 23(2):187—317
- Lin Q, Friis I, Wilmot-Dear CM. 2003. *Elatostema*[M]//Wu CY, Raven PH(eds). Flora of China. Beijing: Science Press; St. Louis: Missouri Botanical Garden Press, 5:127—163
- Wang WT(王文采). 2003. Notes on *Elatostema* Forst(Urticaceae) from Yunnan Province(云南楼梯草属研究随记)[J]. *Bull Bot Res*(植物研究), 23(3):257—260
- Wang WT(王文采). 2006. Notes on *Pellionia* and *Elatostema*(Urticaceae) in southeastern Yunnan(云南东南部赤车属和楼梯草属研究随记)[J]. *Bull Bot Res*(植物研究), 26(1):15—24
- Wang WT(王文采), Wei YG(韦毅刚). 2007. Five new species of *Elatostema* J. R. et G. Forst. (Urticaceae) from Guangxi, China(广西楼梯草属五新种)[J]. *Guihaia*(广西植物), 27(6):811—816
- Wang WT(王文采), Wei YG(韦毅刚). 2008. *Elatostema duyunense*, a new species of Urticaceae from Guizhou, China(都匀楼梯草, 贵州荨麻科一新种)[J]. *Guihaia*(广西植物), 28(1):1—3
- Wei YG(韦毅刚), Wang WT(王文采). 2009. Three new species and one new variety of *Elatostema* J. R. & G. Forst. (urticaceae) from Guangxi(广西楼梯草属三新种和一新变种)[J]. *Guihaia*(广西植物), 29(2):143—148

(上接第 750 页 Continue from page 750)

- 物), 23(6):511—516
- Zhu H(朱华), Yan LC(阎丽春), Tan HN(覃海宁). 2003. Floristic composition and characteristics of Vietnamese Flora(越南植物区系的组成与特征)[J]. *Acta Univ Sunyatseni*(Sci Nat Edi)(中山大学学报·自然科学版), 42(6):98—102
- Zhu H(朱华), Yan LC(阎丽春), Tan HN(覃海宁). 2004. Floristic relationships between vietnamese flora and the floras of tropical China and Malaysia(越南植物区系与中国热带和西马来西亚植物区系的关系)[J]. *Acta Univ Sunyatseni*(Sci Nat Edi)(中山大学学报·自然科学版), 43(1):79—83
- Ayako Funabiki, Shigeko Haruyama et al. 2007. Holocene delta plain development in the Song Hong(Red River) delta, Vietnam [J]. *J Asian Earth Sci*, 30:518—529
- Zhen Li, Yoshiki Saito. 2006. Palynological record of climate change during the last deglaciation from the Song Hong(Red River) delta, Vietnam[J]. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 235:406—430
- Zhen Li, Yoshiki Saito. 2006. Climate change and human impact on the Song Hong(Red River) Delta, Vietnam, during the Holocene[J]. *Quaternary International*, 144:4—28
- Andrew L. Maxwell. 2004. Fire regimes in north-eastern Cambodian monsoonal forests, with a 9300-year sediment charcoal record [J]. *J Biogeography*(J Biogeogr), 31:225—239
- Nguyen Nghia Thin. 1998. The Fansipan Flora in Relation to the Sino-Japanese Floristic Region[R]. The University Museum and the University of Tokyo, Bulletin No. 37
- Susumu Tanabe, Yoshiki Saito, et al. 2006. Holocene evolution of the Song Hong(Red River) delta system, northern Vietnam[J]. *Sedimentary Geology*, 187:29—61
- World Conservation Monitoring Center. 1994. Biodiversity profile of the Socialist Republic of Viet Nam[R]
- World Conservation Monitoring Centre. 1994. The Socialist Republic of Viet Nam, Appendix 8-Wetlands Information[R]. WCMC