

Wang, W.T. 1992c

Notulae de Gesneriaceis Sinensibus (X).

Guihaia 12(4): 289-300.

REFNO: 2151

KEYWORDS:

Ancylostemon, China, Chirita, Chiritopsis, Lysionotus, Opithandra

With the compliments + sincer regards of the author

广西植物 Guihaia 12(4): 289-300. Nov. 1992

中国苦苣苔科的研究(十)

王文采

(中国科学院植物研究所, 北京100044)

NOTULAE DE GESNERIACEIS SINENSIBUS (X)

Wang Wentsai

(Institutum Botanicum Academiae Sinicae, Beijing)

直瓣苣苔属 *Ancylostemon* Craib

泡叶直瓣苣苔 新种 图1: 1-3

Ancylostemon bullatus W. T. Wang et K. Y. Pan, sp. nov.

Affinis *A. gamosepalo* K. Y. Pan, quod foliis paulo majoribus apice acutis basi plerumque cuneatis planis haud bullatis, petiolis brunneo-villosis, calycis lobis omnibus margine denticulatis, corollae labio postico distincte 2-lobato recedit.

Herba perennis. Rhizomata brevia, crassa. Folia c. 10, omnia basalia, longe vel breviter petiolata; laminae papyraceae, ovatae vel ovato-rhomboidae 2-3.4 cm longae, 1.6-2.9 cm latae, apice obtusae vel rotundatae, basi late cuneatae vel rotundatae, margine obtuse duplicato-dentatae, supra plus minusve bullatae, in areolis nervulorum dense puberulae, subtus ad nervos dense albo-puberulae et ad costas et nervos laterales prominentes atro-brunneo-villosae, nervis lateralibus utrinsecus 4-5; petioli 1-3 cm longi, dense atro-brunneo-villosi. Cymae c. 4, umbelliformes, 2-5-flori; pedunculi 3.5-6.5 cm longi, patule puberuli; bracteae 2, lineares, 2.8-3.2 mm longae, 0.7 mm latae, puberulae; pedicelli 0.8-1.3 cm longi, patule puberuli. Calyx campanulatus, c. 4 mm longus, ad medium 5-lobatus, extus puberulus, lobis triangularibus apice obtusis 2 majoribus margine uno latere 1-denticulatis ceteris integris ciliolatis. Corolla aurantiaca, c. 2.4 cm longa, extus puberula, intus inferne sparse puberula, tubo tubulari c. 1.7 cm longo cre 5.5 mm diam., limbo conspicue bilabiato, labio postico late subtrapezoideo 4.5 mm longo 5 mm lato inconspicue 2-lobulato, lobis inter se imbricatis subsemiorbicularibus 0.8 mm longis, labio antico 6.5 mm longo 5.6 mm lato prope basin 3-fido, lobo mediano obovato-oblongo, lobis lateralibus minoribus oblongis c. 5 mm

承冀朝贞同志为本文绘图, 作者谨表示衷心感谢。

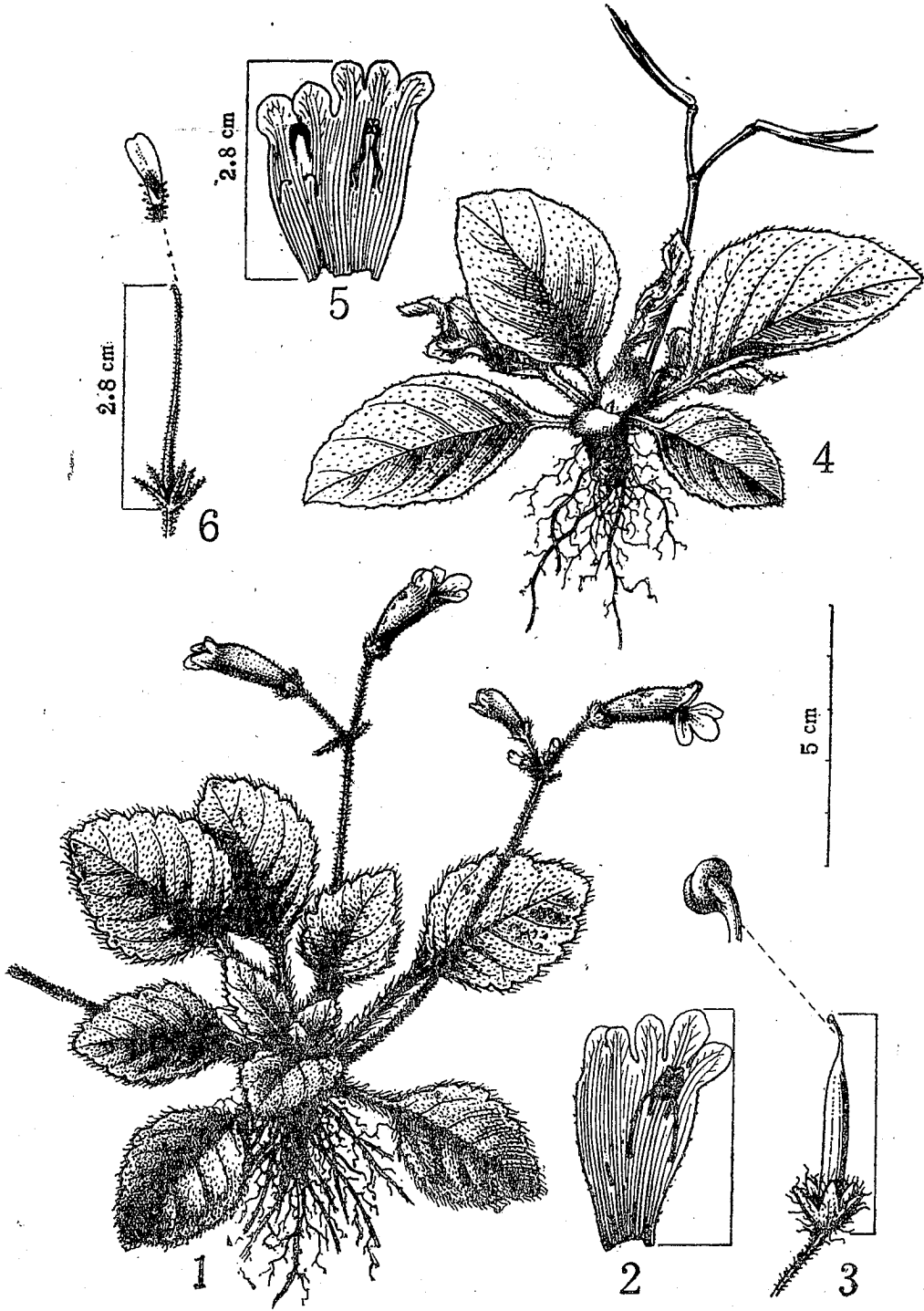


图 1

1—3. 泡叶直瓣苣苔 *Ancylostemon bullatus* W. T. Wang et K. Y. Pan: 1. 开花植株全形, 2. 花冠打开, 3. 花萼及雌蕊。4—6. 九万山唇柱苣苔 *Chirita jiuwanshanica* W. T. Wang: 4. 结果植株全形, 5. 花冠打开, 6. 花萼及雌蕊。

longis. Stamina 4, glabra, postica 9 mm supra corollae basin inserta, filamentis anguste linearibus 8.5 mm longis, antica 13 mm supra corollae basin inserta, filamentis 4.5 mm longis, antheris subglobosis 1 mm diam. per paria cohaerentibus. Staminodium 6.5 mm supra corolla basin insertum, 0.6 mm longum. Discus subcupuliformis, c. 1.8 mm altus, 1.1 mm diam. Pistillum c. 1.9 cm longum, glabrum, ovario lineari 1.5cm longo 1.5 mm lato, stylo 4 mm longo, stigmatibus 2 parvis.

Yunnan (云南): Luoping (罗平). Dabailashan (大白蜡山), alt. 2000 m, ad rupes in declivitate fruticoso-graminea collis calcarei, fl. aurantiaci, 3 Jun. 1989, Exped. Hongshuiho. Inst. Bot. Kunming (昆明植物所红水河队) 1987 (holotypus, PE).

多年生草本。根状茎, 粗。叶约10枚, 均基生, 具长或短柄; 叶片纸质, 卵形或卵状菱形, 长2—3.4厘米, 宽1.6—2.9厘米, 顶端钝或圆形, 基部宽楔形或圆形, 边缘有钝重牙齿, 上面多少泡状, 在细脉形成的小空间中密被短柔毛, 下面脉上密被白色短柔毛, 在隆起的中脉和侧脉上还被暗褐色长柔毛, 侧脉每侧4—5条; 叶柄长1—3厘米, 密被暗褐色长柔毛。聚伞花序约4条, 伞状, 有2—5花; 花序梗长3.5—6.5厘米; 有开展短柔毛; 苞片2, 条形, 长2.8—3.2厘米, 宽0.7毫米, 被短柔毛; 花梗长0.8—1.3厘米, 被开展短柔毛。花萼钟状, 长约4毫米, 5裂达中部, 外面被短柔毛, 裂片三角形, 顶端钝, 2枚较大的裂片边缘一侧有1小齿, 其他裂片的裂片全缘, 被睫毛。花冠橙黄色, 长约2.4厘米, 外面被短柔毛, 内面下部疏被短柔毛; 筒筒状, 长约1.7厘米, 口部直径5.5毫米; 檐部明显二唇形, 上唇近宽梯形, 长4.5毫米, 宽5毫米, 不明显2浅裂, 裂片近半圆形, 互相覆压, 长0.8毫米, 下唇长6.5毫米, 宽5.6毫米, 3裂近基部, 中裂片倒卵状长圆形, 侧裂片较小, 长圆形, 长约5毫米。雄蕊4, 无毛, 上雄蕊着生于距花冠基部9毫米处, 花丝狭条形, 长8.5毫米, 下雄蕊着生于距花冠基部13毫米处, 花丝长4.5毫米, 花药近球形, 直径1毫米, 成对连着。退化雄蕊着生于距花冠基部6.5毫米处, 长0.6毫米。花盘近杯状, 高约1.8毫米, 直径1.1毫米。雌蕊长约1.9厘米, 无毛, 子房条形, 长1.5厘米, 宽1.5毫米, 花柱长4毫米, 柱头2, 小。

本种接近黄花直瓣苣苔 *A. gamosepalus* K. Y. Pan, 后者的叶较大, 顶端急尖, 基部多为楔形, 表面平, 不呈泡状, 叶柄被褐色长柔毛, 花萼所有裂片的边缘均具小齿, 花冠上唇明显2裂, 而与本种不同。

后蕊苣苔属 *Opithandra* Burt

裂檐后蕊苣苔组, 新等级

Sect. *Schistolobos* (W. T. Wang) W. T. Wang, st. nov. — Gen. *Schistolobos* W. T. Wang in Bot. Res. no. 1:15. 1983; et in Fl. Reip. Pop. Sin. 69:270. 1990.

裂檐后蕊苣苔 裂檐苣苔



图2

1—3. 崑山唇柱苣苔 *Chirita langshanica* W. T. Wang: 1. 开花植株全形, 2. 花冠打开, 3. 花萼及雌蕊。
4. 阳春小花苣苔 *Chiritopsis subulata* W. T. Wang var. *yangchunensis* W. T. Wang, 基生叶。

Opithandra pumila (W. T. Wang) W. T. Wang, comb. nov. —
Schistolobos pumilus W. T. Wang in Bot. Res. no. 1:17, fig. 2. 1983; et in Fl.
 Reip. Sin. 69:270, pl. 70. 1990.

裂檐苣苔属 *Schistolobos* 与后蕊苣苔属 *Opithandra* 的区别, 只在于花冠檐部分裂这一个特征, 暂时降级做为组为宜。

唇柱苣苔属 *Chirita* D. Don

崑山唇柱苣苔 新种 图 2 : 1—3

Chirita langshanica W. T. Wang, sp. nov.

Affinis *C. linglingensi* W. T. Wang, quae foliis minoribus omnibus breviter petiolatis, petiolis c. 4-plo brevioribus usque ad 2 cm longis, pedunculis 2—5-plo brevioribus 3—5 cm longis, bracteis 3—4-plo brevioribus, calyce minore 7—9 mm longo, lobis lanceolatis, staminodiis puberulis distinguitur.

Herba perennis. Rhizomata subteretia, c. 4 cm longa, superne 1.4 cm crassa. Folia c. 8, omnia basalia, plerumque longe petiolata; laminae papyraceae, rhomboideo-ovatae vel subrhomboideae, 4.8—10 cm longae, 3.8—7 cm latae, apice obtusae, basi cuneatae, margine supra basin grosse dentatae, supra pilis 0.2—0.7 mm longis 1—3-cellularibus densiusculis et eis 1—3 mm longis 4—9-cellularibus sparsis tectae, subtus adpresse puberulae, trinerves, nervis lateralibus 1—2-jugis e costa sub angulo acuto sursum fere ad apicem laminae patentibus; petioli complanati, (1—)8—9 cm longi, basi (5—)10—16 mm superne 7—9 mm lati. Cymi c. 2, longe pedunculati, 6—10 cm diam., bis vel ter ramosi, 10—16-flori; pedunculi 16.5—17.4 cm longi, 2 mm crassi, densiuscule puberuli; bractee 2, lanceolato-lineares, 2—2.5 cm longae, 3—3.5 mm latae, puberulae; pedicelli 1.6—5 cm longi, glanduloso-puberuli. Calyx 1.2—1.4 cm longus, ad basin 5-sectus, segmentis anguste lanceolato-linearibus supra basin 1.4—1.8 mm supra medium 0.8 mm latis apice subulato-attenuatis, utrinque puberulis. Corolla purpurella, c. 4.4 cm longa, extus sparse puberula, intus infra labium posticum ad maculas flavidas sparse puberula, tubo subtubulari paulo curvato c. 3 cm longo ore 1 cm diam. supra basin 5 mm diam., labio postico 9 mm longo prope basin 2-fido, labio antico 14 mm longo ad medium 3-lobato, lobis oblongo-ovatis apice rotundatis. Stamina 2, 1.6 cm supra corollae basin inserta, filamentis lineari-subulatis 10 mm longis supra basin geniculatis superne glanduloso-puberulis, antheris suboblongis 3 mm longis dorso puberulis. Staminodia 2, 1.2 cm supra corollae basin inserta, anguste linearia, 5 mm longa, apice dilatata, glabra. Discus annularis, c. 0.7

mm altus. Pistillum c. 2.9 cm longum, ovario lineari 1.4 cm longo cum stylo 1.2 cm longo dense puberulo, stigmati lineari 3 mm longo apice 2-lobulato, lobulis 0.5 mm longis.

Hunan (湖南): Xinning (新宁), planta in Inst. Sylv. Xinning. cultivata, e Monte Langshan (崑山) in comitatu Xinning. intrducta, fl purpurelli, 29 Sept. 1987, Luo Yibo (罗毅波) 3442 (holotypus, PE).

多年生草本。根状茎近圆柱形，长约4厘米，上部粗1.4厘米。叶约8枚，均基生，多具长柄；叶片纸质，菱状卵形或近菱形，长4.8—10厘米，宽3.8—7厘米，顶端钝，基部楔形，边缘基部以上有粗牙齿，上面有一种毛稍密，长0.2—0.7毫米，具1—3细胞，另一种毛稀疏，长1—3毫米，有4—9细胞，下面被贴伏短柔毛，具三出脉，侧脉1—2对，与中脉成锐角展出，向上几达叶片顶端；叶柄扁，长(1—)8—9厘米，基部宽(5—)10—16毫米，上部宽7—9毫米。聚伞花序约2条，具长梗，直径6—10厘米，2或3回分枝，有10—16花；花序梗长16.5—17.4厘米，粗2毫米，稍密被短柔毛；苞片2，长圆状条形，长2—2.5厘米，宽3—3.5毫米，被短柔毛；花梗长1.6—5厘米，被短腺毛。花萼长1.2—1.4厘米，5裂达基部；裂片狭披针状条形，基部之上宽1.4—1.8毫米，中部之上宽0.8毫米，顶端钻状渐狭，两面被短柔毛。花冠淡紫色，长约4.4厘米，外面疏被短柔毛，内面上唇之下的黄斑块上疏被短柔毛；筒近筒状，稍弯曲，长约3厘米，口部直径1厘米，基部之上直径5毫米；上唇长9毫米，2裂近基部，下唇长14毫米，3裂达中部，裂片长圆状卵形，顶端圆形。雄蕊2，着生于距花冠基部1.6厘米处，花丝条状钻形，长10毫米，基部之上膝状弯曲，上部被短腺毛，花药近长圆形，长3毫米，背面被短柔毛。退化雄蕊2，着生于距花冠基部1.2厘米处，狭条形，长5毫米，顶端变宽，无毛。花盘环状，高约0.7毫米。雌蕊长约2.9厘米，子房长1.4厘米，与花柱(长1.2厘米)均被短柔毛，柱头条形，长3毫米，顶端2浅裂，裂片长0.5毫米。

本种接近零陵唇柱苣苔 *C. linglingensis* W. T. Wang, 但后者的叶较小，均具短柄，叶柄约短4倍，长达2厘米，花序梗短2—5倍，长3—5厘米，苞片短3—4倍，花萼较小，长7—9毫米，裂片披针形，退化雄蕊被短柔毛，而与本种区别。

九万山唇柱苣苔 新种 图1: 4—6

Chirita jiuwanshanica W. T. Wang, sp. nov.

Affinis *C. fimbriepalae* Hand.-Mazz., quae foliis majoribus haud variegatis margine saepe dentatis, bracteis triangularibus vel anguste lanceolatis, corolla majore 4.2—6.4 cm longa, stigmati 2-lobato differt.

Herba perennis. Rhizomata brevia, c. 1.4 cm longa, apice 7 mm crassa. Folia c. 5, omnia basalia, breviter petiolata; laminae papyraceae, ellipticae, 3—4.8 cm longae, 1.5—3 cm latae, apice acutiusculae, basi oblique cuneatae, margine crenatae, supra virides, secus costas et nervos laterales viridescenti-albae et variegatae, pilis 0.2—0.4 mm longis 2—4-cellularibus et eis 0.8—2 mm longis 6—12-cellularibus tectae, subtus pilis 0.4—1 mm longis tectae, nervis lateralibus utrinsecus 4; petioli 0.7—1.1 cm longi, 2.2—2.6 mm

lati. Cymus c. 2-florus; pedunculus c. 6 cm longus, puberulus; bracteae 2, ovatae vel anguste ellipticae, c. 8 mm longae, puberulae; pedicelli usque ad 1.2 cm longi. Calyx c. 5 mm longus, ad basin 5-sectus, segmentis lanceolato-linearibus vel anguste lanceolatis 0.9—1.2 mm latis margine utrinsecus 1—2-denticulatis extus puberulis intus superne sparse puberulis. Corolla purpureo-caerulea, c. 2.7 cm longa, extus puberula, intus infra labium posticum ad strias duas atro-purpureas puberula, tubo infundibuliformi-tubulari c. 2 cm longo ore 9 mm diam. supra basin 3.5 mm diam., labio postico 3.5 mm longo ad basin 2-fido, eo antico 7 mm longo ad medium 3-lobato, lobis ovatis. Stamina 2, cum staminodiis 1 cm supra corollae basin inserta, filamentis 9 mm longis supra basin 0.9 mm latis geniculatis et sursum sensim angustatis superne 0.3 mm latis et glanduloso-puberulis, antheris oblongis 2.8—3 mm longis apice purpureo-strigosis. Staminodia 2, anguste linearia, 3 mm longa, glabra. Discus annularis, c. 0.5 mm altus. Pistillum c. 2.8 cm longum, ovario lineari 1 cm longo dense puberulo, stylo 1.6 cm longo glanduloso-puberulo, stigmatate ligulato-lineari 2 mm longo 0.6 mm lato apice subtruncato emarginato. Capsula lanceolato-linearis, c. 2.5 cm longa, 1.5 mm lata.

Beijing (北京): Planta in Hort. Bot. Inst. Bot. Acad. Sin. cultivata, e Monte Jiuwanshan (九万山) introducta, fl. purpureo-caerulei, 2 Jun. 1989, Li Zhenyu (李振宇) 89200 (holotypus, PE). Guangxi (广西): Rungshui (融水), Jiuwanshan (九万山), Vall. Ruhogou (如火沟), alt. 650 m, ad rupes sub frutices, 25 Apr. 1989, Wang Wentsai, Li Zhenyu et Long Guangri (王文采, 李振宇, 龙光日), sine num. (PE).

多年生草本。根状茎短, 长约1.4厘米, 顶端粗7毫米。叶约5枚, 均基生, 具短柄; 叶片纸质, 椭圆形, 长3—4.8厘米, 宽1.5—3厘米, 顶端微尖, 基部斜楔形, 边缘有浅钝齿, 上面绿色, 沿中脉和侧脉绿白色, 有一种毛长0.2—0.4毫米, 具2—4细胞, 另一种毛长0.8—2毫米, 具6—12细胞, 下面被长0.4—1毫米的毛, 侧脉每侧4条; 叶柄长0.7—1.1厘米, 宽2.2—2.6毫米。聚伞花序约有2花; 花序梗长约6厘米, 被短柔毛; 苞片2, 卵形或狭椭圆形, 长约8毫米, 被短柔毛; 花梗长达1.2厘米, 花萼长约5毫米, 5裂达基部; 裂片披针状条形或狭披针形, 宽0.9—1.2毫米, 边缘每侧有1—2小齿, 外面被短柔毛, 内面上部疏被短柔毛。花冠紫蓝色, 长约2.7厘米, 外面被短柔毛, 内面在上唇之下的2暗紫色条纹上被短柔毛; 筒漏斗状筒形, 长约2厘米, 口部直径9毫米, 基部之上直径3.5毫米; 上唇长3.5毫米, 2裂达基部, 下唇长7毫米, 3裂达中部, 裂片卵形。雄蕊2, 与退化雄蕊均着生于距花冠基部1厘米处, 花丝长9毫米, 基部之上宽0.9毫米, 膝状弯曲, 向上渐变狭, 上部宽0.3毫米, 被短腺毛, 花药长圆形, 长2.8—3毫米, 顶端有紫色糙伏毛。退化雄蕊2, 狭条形, 长3毫米, 无毛。花盘环状, 高约0.5毫米。雌蕊长约2.8厘米, 子房条形, 长1厘米, 密被短柔毛, 花柱长1.6厘米, 被短腺毛, 柱头舌状条形, 长2毫米, 宽0.6毫米, 顶端近截形, 微凹。蒴果披针状条形, 长约2.5厘米, 宽1.5毫米。

本种接近蚂蝗七 *C. fimbrisejala* Hand.-Mazz., 但后者的叶较大, 无淡色斑纹, 边缘常有牙齿, 花序苞片三角形或狭披针形, 花冠较大, 长4.2—6.4厘米, 柱头2浅裂, 可以区别。

鼎湖唇柱苣苔 (变种)

Chirita fordii (Hemsl.) Wood var. *dolichotricha* (W. T. Wang) W. T. Wang, comb. nov. — *C. gueilinensis* W. T. Wang var. *dolichotricha* W. T. Wang in Bull. Bot. Res. 2 (4): 50. 1982 et 5 (3): 48. 1985.

A varietate typica differt foliis ventre pilis sparsis brevioribus 0.8—1.5 mm, longioribus 4—5 mm longis, calycis segmentis anguste triangularibus vel lanceolatis 1—1.5 mm latis, corolla longiore usque ad 3.9 cm longa, antheris sparse puberulis.

广东: 肇庆, 鼎湖山, 石国良 12822 (holotypus, SCBI), 492.

本变种的叶上面被短的和长的两种毛, 过去被我处理为桂林唇柱苣苔 *C. gueilinensis* W. T. Wang (叶上面有长度一样的毛) 的变种, 是不恰当的, 作为桂粤唇柱苣苔 *C. fordii* (Hemsl.) Wood 的变种较好。在桂粤唇柱苣苔中, 本变种与模式变种的差别: 叶上面的毛稀疏, 较短毛长0.8—1.5毫米, 较长毛长4—5毫米, 花萼裂片狭三角形或披针形, 宽1—1.5毫米, 花冠长达3.9厘米, 花药疏被柔毛; 在模式变种, 叶上面密被柔毛, 较短毛长0.3—0.9毫米, 较长毛长2—4毫米, 花萼裂片较狭, 披针状条形, 宽0.8—1毫米, 花冠较小, 长2.3—3.3厘米, 花药无毛。

小花苣苔属 *Chiritopsis* W. T. Wang

作者根据3种建立了小花苣苔属 (王文采, 1981)¹⁾, 在中国苦苣苔科志中这个属增加到7种 (王文采, 1990)⁴⁾, 在这科志付印期间 (刘晓龙, 郭新弧, 1989)⁵⁾ 和最近 (方鼎等, 1992)⁶⁾ 又先后发现了2种, 到现在, 这个属增加到9种。其中, 8种分布于广西和广东西部的喀斯特岩溶地区, 1种间断地分布于安徽南部。形成这个间断分布现象的原因, 可能还是由于第四纪冰川的影响所致 (王文采, 1989)³⁾。本属的分布中心显然是华南喀斯特地区。而本属的近缘属唇柱苣苔属 *Chirita* 的原始群唇柱苣苔组 sect. *Gibbosaccus* 的分布中心位于云南东南、贵州南部、广西和广东的喀斯特地区 (王文采, 1985)²⁾。根据上述情况, 推测 *Chirita* 和 *Chiritopsis* 可能是一对姐妹群 sister group, 在华南喀斯特地区共同起源于同一祖先群。

对本属的9种植物进行了外部形态的观察之后, 可看到以上演化趋形: (1) 叶从不分

1) 王文采, 1981: 苦苣苔科五新属。植物研究, 1 (3): 21—51。

2) —, 1985: 中国唇柱苣苔属校订 (I)。植物研究, 5 (2): 71—97。

3) —, 1989: 中国植物区系中的一些间断分布现象。植物研究, 9 (1): 1—16。

4) —, 1990: 小花苣苔属。中国植物志 66卷: 406—418页, 科学出版社。

5) 刘晓龙、郭新弧, 1989: 安徽小花苣苔属一新种。植物研究, 9 (3): 51—54。

6) 方鼎、曾玲、覃德海, 1992: 广西苦苣苔科新植物。植物分类学报, 30: ×××。

裂到分裂: 在苦苣苔科中, 叶少有分裂。在我国55属, 约420种的这科植物中, 只有金盏苣苔属 *Isometrum*, 唇柱苣苔属 *Chirita*, 长蒴苣苔属 *Didymocarpus*, 以及本属的少数种具分裂的叶。叶分裂在苦苣苔科以及在本属显然是进化的现象。(2) 本属中, 8种的叶具羽状脉, 只2种的叶具掌状或近掌状脉(*C. lobulata* 和 *C. glandulosa*)。在苦苣苔科中, 多数植物的叶具羽状脉, 少数的叶具掌状脉, 后一现象可能是进化的。(3) 本属中只有 *C. mollifolia* 和 *C. subulata* 这两个种的雄蕊着生于近花冠筒基部处, 在其他种, 雄蕊均着生于花冠筒中部稍下处。雄蕊着生于近花冠基部实际上是花丝的很小部分与花冠愈合的现象, 应是原始的, 而着生于花冠筒中部之下实际上是花丝更多部分与花冠愈合的现象, 应是进化的。(4) 本属多数种具退化雄蕊(退化雄蕊3, 2或1枚), 只有 *C. subulata* 无退化雄蕊, *C. glandulosa* 有时无退化雄蕊。在苦苣苔科中, 少数属(如辐花苣苔属 *Thamnocharis*, 四数苣苔属 *Bournea*)的一朵花的雄蕊全部能育, 大多数属的花出现退化雄蕊, 其数目由1枚演化到3枚, 能育雄蕊的数目由4枚演化到2枚。本属具2枚能育雄蕊, 所以具3枚退化雄蕊是原始现象, 而具2枚退化雄蕊(即有1枚退化雄蕊完全消失), 具1枚退化雄蕊(即有2枚退化雄蕊完全消失), 和无退化雄蕊(即3枚退化雄蕊均完全消失)是进化现象。(5) 在本属大多数种, 柱头均2浅裂, 只有 *C. mollifolia* 一个种的柱头不分裂。象近缘属唇柱苣苔属 *Chirita* 一样, 本属的雌蕊具1枚柱头, 乃是由于后柱头消失的结果(王文采1985)²⁾, 柱头不分裂(象四数苣苔属, 马铃苣苔属 *Oreocharis*, 后蕊苣苔属 *Opithandra* 的柱头)是原始的现象, 而柱头出现2裂的情况可能是后来发生的现象。

大致根据上述的有关外部形态特征, 现将小花苣苔属 *Chiritopsis* 的9种植物作出如下的分类和排列:

1. *Folia indivisa* (Sect. 1. *Chiritopsis*, sect. nov. Typus: *C. repanda* W. T. Wang).
2. *Stigma indivisum*; *stamina prope corollae basin inserta*; *folia suborbicularia*, *utrinque densissime puberula*, *pilis superficies totam laminae tegentibus* (Ser. 1. *Mollifoliae* W. T. Wang, ser. nov. Typus: *C. mollifolia* D. Fang et W. T. Wang) (Yishan, Guangxi).....1. *C. mollifolia* D. Fang et W. T. Wang
2. *Stigma 2-lobatum*; *stamina infra medium tubi corollae, raro prope corollae basin (in C. subulata) inserta*; *folia elliptica, ovata vel cordata*, *pilis superficies totam laminae haud tegentibus*(Ser. 2. *Chiritopsis*, ser. nov. Typus: *C. repanda* W. T. Wang)
3. *Folia basi late cuneata vel attenuata*.
4. *Flores laxi*; *pedicelli 2—25 mm longi*; *corollae labium posticum eo antico subaequilongum vel eo leviter brevius*.
5. *Rhizoma robustum, teres, usque ad 5 cm longum*; *folia papyracea, densiuscule pubescentia*; *cyma bis vel ter ramosa*; *pedicelli 3—8 mm longi*.....
.....2. *C. repanda* W. T. Wang
6. *Folia basi attenuata* (Tiane, Guangxi).....2a. var. *repanda*
6. *Folia basi late cuneata* (Guilin, Guangxi).....
.....2b. var. *guilinesis* W. T. Wang
5. *Rhizoma parvum, subtuberiforme, usque ad 1 cm diam.*; *folia tenuiter herbacea, sparse pubescentia*; *cyma semel vel bis ramosa*; *pedicelli 8—25 mm*

- longi (Xiuning, Anhui) 3. *C. xiuningensis* X. L. Liu et X. H. Guo
4. Flores densi; pedicelli 0.2—2 mm longi; corollae labium posticum eo antico
2.5-plo brevius (Yangshan, Guangdong)
..... 4. *C. confertiflora* W. T. Wang
3. Folia basi cordata vel truncato-cordata.
7. Foliorum laminae usque ad 8.5 cm longae, basi cordatae; petioli usque ad 16.5
cm longi; corolla 14 mm longa; stamina 3 mm supra corollae basin inserta,
filamentis anguste linearibus; staminodia 2 (Liujiang, Guangxi)
..... 5. *C. cordifolia* D. Fang et W. T. Wang
7. Foliorum laminae minores, usque ad 4—6.6 cm longae; petioli usque ad 7 cm
longi; corolla minor, 8.5—10 mm longa; stamina 1—1.5 mm supra corollae
basin inserta, filamentis lanceolato-subulatis; staminodia nulla
..... 6. *C. subulata* W. T. Wang
8. Folia basi cordata, apice acuta; cyma bis ramosa (Zhaoqing, Guangdong)
..... 6a. var. *subulata*
8. Folia basi truncato-cordata, apice obtusa; cyma quater ramosa (Yangchun,
Guangdong) 6b. var. *yangchunensis* W. T. Wang
1. Folia divisa (Sect. 2. Schistophyllos W. T. Wang, sect. nov. Typus: *C. bipinnatifida*
W. T. Wang).
9. Folia ambitu ovata, pinnatifida; staminodia 3 (Ser. 1. Bipinnatifidae W. T. Wang,
ser. nov. Typus: *C. bipinnatifida* W. T. Wang) (Lingui, Guangxi)
..... 7. *C. bipinnatifida* W. T. Wang
9. Folia cordato-orbicularia vel reniformia, palmatim vel subpalmatim lobata (Ser. 2.
Lobulatae W. T. Wang, ser. nov. Typus: *C. lobulata* W. T. Wang).
10. Folia tenuiter herbacea; petioli, pedunculi, pedicelli calyxque albo-pubescenti,
corolla c. 7.8 mm longa; stamina discusque glaber; staminodium 1 (Yangshan,
Guangdong) 8. *C. lobulata* W. T. Wang
10. Folia crassiora, papyracea; petioli, pedunculi, pedicelli calyxque purpureo-
puberulus et purpureo-glandulosus; corolla major, 11—13 mm longa; stamina
discusque; pilifer staminodia (2—) 3 vel nulla (Pingle, Guangxi)
..... 9. *C. glandulosa* D. Fang et al.
1. 叶不分裂 (组1.小花苣苔组 sect. Chiritopsis).
2. 柱头不分裂; 雄蕊着生于近花冠基部处; 叶近圆形, 两面密被短柔毛, 毛遮盖叶片整个表面 (系1.密
毛小花苣苔系 ser. Mollifoliae W. T. Wang) (广西宜山)
..... 1. 密毛小花苣苔 *C. mollifolia* D. Fang et W. T. Wang
2. 柱头2浅裂; 雄蕊着生于花冠筒中部之下, 稀近花冠基部 (*C. subulata*); 叶椭圆形, 卵形或心形,
被较疏柔毛 (系2.小花苣苔系 ser. Chiritopsis).
3. 叶基部宽楔形或渐狭。
4. 花稀疏; 花梗长2—25毫米; 花冠上唇与下唇近等长或稍短。
5. 根状茎粗壮, 圆柱形, 长达5厘米; 叶纸质, 稍密被柔毛; 聚伞花序2或3回分枝; 花梗长
3—8毫米 2. 小花苣苔 *C. repanda* W. T. Wang

6. 叶基部渐狭(广西天峨).....2a. 模式变种 *var. repanda*
6. 叶基部宽楔形(广西桂林, 上林).....
.....2b. 桂林小花苣苔 *var. guilinensis* W. T. Wang
5. 根状茎小, 近块状, 直径达1厘米; 叶薄草质, 疏被柔毛; 聚伞花序1或2回分枝; 花梗长8—25毫米(安徽休宁).....
.....3. 休宁小花苣苔 *C. xiuningensis* X. L. Liu et X. H. Guo
4. 花密集; 花梗较短, 长0.2—2毫米; 花冠上唇比下唇短2.5倍(广东阳山).....
.....4. 密小花苣苔 *C. confertiflora* W. T. Wang
3. 叶基部心形或截状心形。
7. 叶片长达8.5厘米, 基部心形, 叶柄长16.5厘米; 花冠长14毫米; 雄蕊着生于距花冠基部3毫米处, 花丝狭条形; 退化雄蕊2(广西柳江).....
.....5. 心叶小花苣苔 *C. cordifolia* D. Fang et W. T. Wang
7. 叶片较小, 长达4—6.6厘米, 叶柄长达7厘米; 花冠较小, 长8.5—10毫米; 雄蕊着生于距花冠基部1—1.5毫米处, 花丝披针状钻形; 退化雄蕊不存在.....
.....6. 钻丝小花苣苔 *C. subulata* W. T. Wang
8. 叶基部心形, 顶端急尖; 聚伞花序2回分枝(广东肇庆).....6a. 模式变种 *var. subulata*
8. 叶基部截状心形, 顶端钝; 聚伞花序4回分枝(广东阳春).....
.....6b. 阳春小花苣苔 *var. yangchunensis* W. T. Wang
1. 叶分裂(组2. 羽裂小花苣苔组 *sec. Schistophyllos* W. T. Wang)。
9. 叶轮廓卵形, 羽状深裂; 退化雄蕊3(系1. 羽裂小花苣苔系 *ser. Bipinnatifidae* W. T. Wang)(广西临桂).....7. 羽裂小花苣苔 *C. bipinnatifida* W. T. Wang
9. 叶心状圆形或肾形, 掌状或近掌状浅裂(系2. 浅裂小花苣苔系 *ser. Lobulatae* W. T. Wang)。
10. 叶薄草质; 叶柄、花序梗、花梗和花萼被白色柔毛; 花冠长约7.8毫米; 雄蕊和花盘无毛; 退化雄蕊1(广东阳山).....8. 浅裂小花苣苔 *C. lobulata* W. T. Wang
10. 叶较厚, 纸质; 叶柄、花序梗、花梗和花萼被紫色短柔毛和紫色腺体; 花冠较大, 长11—13毫米; 雄蕊和花盘有毛; 退化雄蕊2—3, 或不存在(广西平乐).....
.....9. 紫腺小花苣苔 *C. glandulosa* D. Fang et

桂林小花苣苔 新变种

Chiritopsis repanda W. T. Wang *var. guilinensis* W. T. Wang, *var. nov.*

— *C. repanda* W. T. Wang in *Bull. Bot. Res.* 1(3): 23, p. p. *excl. holotypum.*

A typo differt foliis basi oblique lateque cuneatis haud attenuatis.

Guangxi(广西); Guilin(桂林), Jiangjunqiao(将军桥), 11 Aug. 1960, Yang Yuyu(杨玉庾) 6517 (holotypus, PE); *ibidem*(同地), *Hotus Qixingyan.* (七星岩公园), 3 Nov. 1985, *Exped. Liangguang. Inst. Bot.* (植物所两广队) 516 (PE).

阳春小花苣苔 新变种 图2:4

Chiritopsis subulata W. T. Wang *var. yangchunensis* W. T. Wang, *var. nov.*

A typo differt foliis apice obtusis basi truncatocordatis vel rotundatis, cyma quater ramosa.

Guangdong (广东): Yangchun (阳春), ad rupes in spelunca collis, folia carnosa, fl. albi, stamina 2 fertilia, 8 Sept. 1956, C. Wang (黄志) 4211 (holotypus, IBG).

吊石苣苔属 *Lysionotus* D. Don

桑植吊石苣苔

Lysionotus sangzhiensis W. T. Wang in *Guihaia* 6 (3):164, fig. 2:1-4. 1986, et in *Fl. Reip. Pop. Sin.* 69:555, pl. 152, fig. 1-4. 1990.

Ad diagnosin addo descriptionem capsulae seminumque: Capsula anguste linearis, stipite 4-5 mm longo incluso 4-5.4 cm longa, 1.8-2.5 mm crassa, glabra, stylo persistente c. 11 mm longo saepe deciduo. Semina brunneola, fusiformia, c. 1 mm longa, appendicibus subulatis 0.2-0.6 mm longis.

Hunan (湖南): Sangzhi (桑植), Tianpingshan (天平山), alt. 1400 m, in valle, 11-14 Sept. 1990, Cao Tieru (曹铁如) 90207, 90311 (PE).

蒴果和种子的补充描述: 蒴果狭条形, 包括雌蕊柄(长4-5毫米)长4-5.4厘米, 粗1.8-2.5毫米, 无毛, 宿存花柱长约11毫米, 常脱落。种子淡褐色, 纺锤形, 长约1毫米; 附属物钻形, 长0.2-0.6毫米。

吊石苣苔属 *Lysionotus* 有30种, 绝大多数种的萼片分生, 萼片合生(无疑是进化现象)的种有3个, 桑植吊石苣苔是其中之一。在这属中只有3种的种子具极短(0.1-0.2毫米)附属物, 大多数种的种子附属物与种子近等长, 或比种子长1倍左右, 长0.6-2毫米。桑植吊石苣苔的种子附属物长度约为种子长度之半或更短, 因此是比较原始的。从桑植吊石苣苔这个例子可以看到, 在同一分类群可能同时存在原始的和进化的特征。

Wang Wentsai, 1992. "Notulae de Gesneriaceis Sinensibus (X)," *Guihaia* 12(4): 289-300.

"Studies on the Gesneriads of China (Ten)"

[289]

Wang Wencai [Wang Wen-tsai]

(Institute of Botany of the Academia Sinica, Beijing)

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THE STRAIGHT- GESNERIAD *Ancylostemon* Craib

THE BUBBLE-LEAVED ANCYLOSTEMON New species Figure 1:1-3

Ancylostemon bullatus W. T. Wang et K. Y. Pan, sp. nov.

.....

Figure 1 1-3. *Ancylostemon bullatus* W. T. Wang et K. Y. Pan: 1. Habit with opened flowers, [290]
2. corolla opened, 3. calyx and pistil. 4-6. *Chirita jiuwanshanica* W. T. Wang: 4. Habit, 5. corolla
opened, 6. calyx and pistil.

Perennial herb. Rhizomes stout. Leaves ca. 10, all basal, long- or short-petiolate; leaf blades [291]
chartaceous, ovate or ovate rhombic, 1-3.4 cm long, 1.6-2.9 cm broad, apex obtuse or rotund, base broadly cuneate
or rotund, margin , upper side more or less bullate, the interstices of the veinlets densely puberulent, lower
surface veins with dense white puberulence, prominent midvein and lateral veins also with dark brown villous
indument, lateral veins 4-5 on each side; petioles 1-3 cm long, with dense dark brown villous indument. Cymes
ca. 4, umbellate, 2-5-flowered; peduncles 3.5-6.5 mm long, with patent puberulence; bracts 2, linear, 2.8-3.2 cm
long, 6-7 mm broad, puberulent; pedicels 0.8-1.3 cm long, patently puberulent. Calyx campanulate, ca. 4 mm
long, of 5 lobes divided to the middle, outside puberulent, the lobes triangular, apex obtuse, the 2 larger lobe
margins with 1 small tooth on one side, the other lobes entire, ciliate. Corolla orange-yellow, ca. 2-4 cm long,
outside puberulent, inside lower part sparsely puberulent; tube tubular, ca. 1.7 cm long, middle 5.5 mm in
diameter; limb obviously bilabiate, upper lip nearly broadly, 4.5 mm long, 5 mm broad, with 2 obscure shallow
lobes, the lobes nearly semi-rotund, alternately overlapping, 0.8 mm long, lower lip 6.5 mm long, 5.6 mm broad,
the 3 lobes divided to near the base. Stamens 4, glabrous, superior stamen inserted 9 mm above the corolla base,
filaments narrowly linear, 8.5 mm long, inferior stamens inserted 13 mm above the corolla base, filaments 4.5 mm
long, anthers nearly spheric, 1 mm in diameter, coherent in pairs. Staminodes inserted 6.5 mm above the corolla
base, 0.6 mm long. Disc nearly cupulate, ca. 1.8 mm tall, 1.1 mm in diameter. Pistil ca. 1.9 cm long, glabrous,
ovary linear, 1.5 cm long, 1.5 mm broad, style 4 mm long, stigmas 2, small.

Comrade Chao drew the illustrations for this article, to whom the author extends his sincere thanks.

This species is related to *A. gamosepalus* K. Y. Pan, but the latter has larger leaves, acuminate apex, base mostly cuneate, surface smooth, not bullate, petioles with brown villous indument, all the calyx lobes with denticulate margins, and corollas upper lip obviously 2-lobed, by which it differs from this species.

THE REAR-STAMENED GESNERIAD *Opithandra* Burt

THE LOBED-LIMBED OPITHANDRA, new rank

Sect. *Schistolobos* (W. T. Wang) W. T. Wang, st. nov. . . .

SCHISTOLOBOS The Lobed-limbed Gesneriad

Figure 2 1-3. *Chirita langshanica* W. T. Wang: 1. Habit with opened flowers, 2. corolla opened, [292]
3. calyx and pistil. 4. *Chiritopsis subulata* W. T. Wang var. *yangchunensis* W. T. Wang, basal leaves.

Opithandra pumila (W. T. Wang) W. T. Wang, comb. nov. [293]

The difference between *Schistolobos* and *Opithandra* lies only in the single character of the corolla limb lobes, and so it is very tentatively made a section.

THE LIPPED-STYLE CHIRITA *Chirita* D. Don

THE LANGSHAN CHIRITA New species Figure 2:1-3

Chirita langshanica W. T. Wang, sp. nov.

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Perennial herb. Rhizomes nearly terete, ca. 4 cm long, upper part 1.4 cm thick. Leaves ca. 8, all basal, [294] mostly long-petiolate; leaf blades chartaceous, rhombic ovate or nearly rhombic, 4.8-10 cm long, 3.8-7 cm broad, apex acute, base cuneate, margin at the base, the upper side with one kind of somewhat dense indument, 0.2-0.7 mm long, 1-3-celled, the other kind of indument sparse, 1-3 mm long, 4-9-celled, the lower side with appressed puberulence, with three prominent veins, lateral veins 1-2 pairs, arising at a angle from the midvein, and then tending toward the leaf apex; petioles planate, (1-)8-9 cm long, base (5-)10-16 mm broad, upper part 7-9 mm broad. Cymes ca. 2, long-petiolate, 6-10 cm in diameter, 2 or 3 times branched, with 10-16 flowers; peduncles 16.5-17.4 cm long, 2 mm thick, somewhat densely puberulent; bracts 2, oblong linear, 2-2.5 cm long, 3-3.5 mm broad, puberulent; pedicels 1.6-5 cm long, with short glandular hairs. Calyx 1.2-1.4 cm long, of 5 lobes divided to the base; the lobes narrowly lanceolate linear, 1.4-1.8 mm above the base, 0.8 mm above the middle, apex subulate tapered, both sides puberulent. Corolla light purple, ca. 4.4 cm long, outside sparsely puberulent, inside below the upper lip with puberulent yellow blotches, tube nearly tubular, somewhat curved; ca. 3 cm long, mouth 1 cm in diameter, 5 mm in diameter above the base; upper lip 9 mm long, of 2 lobes divided to near the base, lower lip 14 mm long, of 3 lobes divided to the middle, the lobes oblong ovate, apex rotund. Stamens 2, inserted 1.6 cm above the corolla tube, filaments linear subulate, 10 mm long, geniculate above the base, upper part with short glandular hairs, anther nearly oblong, 3 mm long, dorsally puberulent. Staminodes 2, inserted 1.2 cm above the corolla base, narrowly linear, 5 mm long, apex broadening [dilated?], glabrous. Disc annular, ca. 0.7 mm tall. Pistil ca. 2.9 cm long, ovary 1.4 cm long, they and the style (1.2 cm long) all puberulent, stigma linear, 9 mm long, apex of 2 shallow lobes, the lobes 0.5 mm long.

This species is related to *C. longshengensis* W. T. Wang, but the latter differs from this species in that it has smaller leaves, all short petiolate, the petioles 4 times as short, to 2 cm long, peduncles 2-5 times as short, 3-5 cm long, bracts 3-4 times as short, calyx smaller, 7-9 mm long, lobes lanceolate, and staminodes puberulent.

THE JIUWAN SHAN CHIRITA New species Figure 1:4-6

Chirita jiuwanshanica W. T. Wang, sp. nov.

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Perennial herb. Rhizomes short, ca. 1.4 cm long, apex 7 mm thick. Leaves ca. 5, all basal, short-petiolate; leaf blades chartaceous, elliptic, 3-4.8 cm long, 1.5-3 cm broad, apex apiculate, base obliquely cuneate, margin shallowly crenate, upper side green, margin mid- and lateral veins green to white, with one kind of indument 0.2-0.4 mm long, of 2-4 cells, and another kind of indument 0.8-2 mm long, with 6-12 cells, lower side with indument 0.4-1 mm long; lateral veins 4 on each side; petioles 0.7-1.1 cm long, 2.2-2.6 mm broad. Cymes ca. 2-flowered; peduncles ca. 6 cm long, puberulent; bracts 2, ovate or narrowly elliptic, ca. 8 mm long, puberulent; pedicels to 1.2 cm long, calyx ca. 5 mm long, of 5 lobes divided to the base; the lobes lanceolate linear or narrowly lanceolate, 0.9-1.2 mm broad, margin with 1-2 small teeth on each side, outside puberulent, inside upper part sparsely puberulent. Corolla purple blue, ca. 2.7 cm long, outside puberulent, inside with 2 puberulent dark purple stripes below the upper lip; tube funnelliform tubular, ca. 2 cm long, mouth 9 mm in diameter, 3.5 mm in diameter above the base; upper lip 3.5 mm long, of 2 lobes divided to the base, lower lip 7 mm long, of 3 lobes divided to the middle, the lobes ovate. Stamens 2, they and the pistil all inserted 1 cm above the corolla base, filaments 9 mm long, 0.9 mm broad above the base, geniculate, tapering upward, upper part 0.3 mm broad, with short glandular hairs, anther oblong, 2.8-3 mm long, apex with purple indument. Stamines 2, narrowly linear, 3 mm long, glabrous. Disc annular, ca. 0.5 mm tall. Pistil ca. 2.8 cm long, ovary linear, 1 cm long, densely puberulent; style 1.6 cm long, with short glandular hairs, stigma ligulate linear, 2 mm long, 0.6 mm broad, apex nearly , minutely immersed. Capsule lanceolate linear, ca. 2.5 cm long, 1.5 mm broad. [295]

This species is related to *C. fimbrisepala* Hand.-Mazz., but can be distinguished in that the latter has larger leaves, without light blotches, margin frequently dentate, inflorescence bracts triangular or narrowly lanceolate, corolla larger, 4.2-6.4 cm long, and stigma of 2 shallow lobes. [296]

THE DINGHU CHIRITA (variety)

Chirita fordii (Hemsl.) Wood var. ***dolichotricha*** (W. T. Wang) W. T. Wang, comb. nov. . . .

Guangdong: qing, Dinghu Shan [mountain], Shi Guoliang 12822 (holotypus, SCBI), 492.

This variety has leaves with both long and short indument on the upper side, and formerly was considered a variety of *C. guilinensis* W. T. Wang (leaves upper side with indument of equal length), but this is inappropriate, and its assignment as a variety of *C. fordii* (Hemsl.) Wood is better. In *C. fordii*, this variety has these differences with the holotype: leaf upper side with sparse indument, the shorter hairs 0.8-1.5 mm long, the longer hairs 4-5 mm long, calyx lobes narrowly triangular or lanceolate, 1-1.5 mm broad, corollas to 3.9 cm long, anther sparsely pubescent; in the holotype, the leaves upper side are densely pubescent, the shorter hairs 0.3-0.9 mm long, the longer hairs 2-4 mm long, calyx lobes more narrow, lanceolate linear, 0.8-1 mm broad, corolla smaller, 2.3-3.3 cm long, and anther glabrous.

THE SMALL-FLOWERED GESNERIAD *Chiritopsis* W. T. Wang

The author established *Chiritopsis* (Wang Wencai [Wang Wen-tsai], 1981)1 on the basis of 3 species, and 7 species were added to this genus in the List of Chinese Gesneriads (Wang Wencai, 1990)4; and in the review [?] of this family (Liu long, Xin , 1989)5 and most recently (Fang Ding, 1992)6 were discovered 2 species, so that at the present time this genus includes 9 species. Of these, 8 species are distributed in the are of Guangxi and

southern Guangdong, and 1 species in interrupted distribution in southern Anhui. The outline of this interrupted distribution appears to be original, and could be the result of the Fourth Ice Age (Wang Wencai, 1989)³. The center of distribution of this genus clearly is the area of southern China. Furthermore, the center of distribution of the primitive taxon sect. *Gibbosaccus* of *Chirita*, clearly related to this genus is the area of southeastern Yunnan, southern Guizhou, Guangxi and Guangdong (Wang Wencai, 1985)². Based upon the above-described condition, it seems that *Chirita* and *Chiritopsis* could be sister groups, originally arising from a common ancestor in the area of the south of China.

After making an examination of the gradations of outer morphology of the 9 species of this genus, the evolutionary trends can be seen: (1) leaves from unlobed to lobed: among gesneriads, few have lobed leaves. Of this country a 55 genera, and ca. 420 species of this class, only *Isometrum*, *Chirita*, *Didymocarpus*, and a few [297] species of this genus have lobed leaves. Lobed leaves in Gesneriaceae and in this genus clearly indicates evolution. (2) In this genus, 8 species have leaves with pinnate venation, only 2 species have leaves with palmate or nearly palmate venation (*C. lobulata* and *C. glandulosa*). In Gesneriaceae, many plants have leaves with pinnate venation, and only a few with palmate venation, and the latter possibly in an evolved character. (3) In this genus only the two species *C. mollifolia* and *C. ambulata* have stamens inserted near the base of the corolla tube, while in the other species, the stamens are inserted somewhat below the middle of the corolla tube. In those with stamens inserted near the base of the corolla tube a small part of the filaments appears to be joined with the corolla, which is primitive, while in those with stamens inserted below the middle of the corolla tube many parts of the filaments appear to be joined with the corolla, which is evolved. (4) Many species of this genus have staminodes (staminodes 3, 2 or 1), only *C. ambulata* have no staminodes, and *C. glandulosa* sometimes having no staminodes. Among Gesneriads, a few genera (*Thamnocharis*, *Bournea*) have one flower with completely fertile stamens, while most genera have flowers with staminodes, the numbers varying from 1 to 3, while the number of stamens can vary from 4 to 2. This genus has 2 fertile stamens, and so 3 staminodes is a primitive condition, while have 2 staminodes (which is 2 staminode entirely absent), having 1 staminode (which is 2 staminodes entirely absent), or no staminode (which is 3 staminodes entirely absent) is an evolved condition. (5) In most species of this genus, the stigmas are of 2 shallow lobes, only the one species *C. mollifolia* has an unlobed stigma. While similar to *Chirita*, this genus has 1 stamen, the result of its absent posterior stigma (Wang Wencai [Wang Wen-tsai] 1985)², an unlobed stigma (resembling the stigma of , *Oreocharis*, and *Opithandra*), and the condition of a 2-lobed stigma is a later development [OK?].

Based upon the above-described morphological characters, the 9 species of *Chiritopsis* can be arranged by taxa as below:

1. Leaves unlobed (sect. 1. sect. *Chiritopsis*).
 2. Stigmas unlobed; stamens inserted near the corolla base; leaves nearly orbicular, both sides densely puberulent, the indument obscuring the entire surface of the leaf blade (Ser. 1. ser. *Mollifolia* W. T. Wang) (Yishan, Guangxi) 1. *C. mollifolia* D. Fang et W. T. Wang
 2. Stigmas of 2 shallow lobes; stamens inserted below the middle of the corolla tube, rarely near the corolla base (in *C. subulata*); leaves elliptic, ovate or cordate, villous (Ser. 2. ser. *Chiritopsis*).

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- 1) Wang Wencai [Wang Wen-tsai], 1981: "Five New Genera of Gesneriaceae", 1(3):21-51.
 - 2) ----, 1985: Revision of the Gesneriads of China (I). *Bulletin of Botanical Research*, 5(2):71-97.
 - 3) ----, 1989: "The Disjunct Distribution among the Gesneriads of China". *Bulletin of Botanical Research*, 9(1):1-16.
 - 4) ----, 1990: *Chiritopsis*. *Flora Republicae Popularis Sinicae* 66: 406-418, Science Press.
 - 5) Liu , Xin , 1989: "A New Species of *Chiritopsis* from Anhui". *Bulletin of Botanical Research*, 9(3):51-54.
 - 6) Fang Ding, Zhang Dehai, 1992: "New Gesneriaceae from Guangxi". *Acta Phytotaxonomica Sinica*, 30:xxx.

3. Leaf base broadly connate or tapered.
4. Leaves dew [?]; pedicels 2-25 mm long; corolla upper lip of equal length with the lower lip or somewhat shorter.
5. Rhizomes stout, columnar, to 5 cm long; leaves chartaceous somewhat densely pubescent; cymes 2- or 3-times branched; pedicels 3-8 mm long 2. **CHIRITOPSIS** *C. repanda* W. T. Wang
6. Leaf base tapered (Tien'e in Guangxi) 2a. **THE TYPICAL VARIETY** var. *repanda* [299]
6. Leaf base broadly cuneate (Guilin, Changlin in Guangxi) 2b. **THE GUILIN CHIRITOPSIS** var. *guilinensis* W. T. Wang
5. Rhizomes small, nearly tubular, to 1 mm in diameter; leaves thin herbaceous, villous; cymes 1- or 2-times branched; pedicels 8-25 mm long (in Anhui) 3. **THE CHIRITOPSIS** *C. xinguensis* X. L. Liu et X. H. Guo
4. Flowered conferted; pedicels relatively short, 0.2-2 mm long; corolla upper lip 2.5 times as short as the lower 4. **THE CONFERTED CHIRITOPSIS** *C. confertiflora* W. T. Wang
3. Leaf base cordate or truncate cordate.
7. Leaf blade to 8.5 cm long, base cordate, petiole 16.5 cm long; corolla 14 mm long; stamens inserted 3 mm above the corolla base, filaments narrowly linear; staminodes 2 (jiang in Guangxi) 5. **THE CORDATE-LEAVED CHIRITOPSIS** *C. cordifolia* D. Fang et W. T. Wang
7. Leaf blades relatively small, to 4-6.6 cm long, petioles to 7 cm long; corolla relatively small, 8.5-10 mm long; stamens inserted 1-1.5 mm above the corolla base, filaments lanceolate subulate; staminodes absent 6. **THE SUBULATE-FILAMENT CHIRITOPSIS** *C. subulata* W. T. Wang
8. Leaf base cordate, apex ; cymes 2-times branched (qing in Guangdong) 6a. **THE TYPICAL VARIETY** var. *subulata*
8. Leaf base truncate cordate; apex obtuse; cymes 4-times branched (Yangchun in Guangdong) 6b. **THE YANGCHUN CHIRITOPSIS** var. *yangchunensis* W. T. Wang
1. Leaves lobes (Sect. 2. **THE PINNATELY-LOBED CHIRITOPSIS** sect. *Schistophyllos* W. T. Wang).
9. Leaf whorls ovate, deeply pinnately lobed; staminodes 3 (ser. 1. *Schistophyllos* ser. *Bipinnatifidae* W. T. Wang) (Langui, Guangxi) .. 7. **BIPINNATIFIDAE** *C. bipinnatifida* W. T. Wang
9. Leaves cordate orbicular or reniform, with palmate or nearly palmate shallow lobes (ser. 2 **THE SHALLOWLY-LOBED CHIRITOPSIS** ser. *Lobulatae* W. T. Wang).
10. Leaves thin herbaceous; petioles, peduncles, pedicels and calyx with white pubescence; corolla ca. 7.8 mm long; stamens and disc glabrous; staminode 1. (Yangshan in Guangdong) 8. **LOBULATAE** *C. lobulata* W. T. Wang
10. Leaves relatively thick, chartaceous; petioles, peduncles, pedicels and calyx with purple puberulence and purple glandular bodies; corolla relatively large, 11-13 mm long; stamens and disc with hairs; staminodes 2-3, or absent. (Pingle, Guangxi) 9. **THE PURPLE-GLANDED CHIRITOPSIS** *C. glandulosa* D. Fang et al.

THE GUILIN CHIRITOPSIS New variety

Chiritopsis repanda W. T. Wang var. *guilinensis* W. T. Wang, var. nov. . . .

THE YANGCHUN CHIRITOPSIS New variety fig. 2:4

Chiritopsis subulata W. T. Wang var. *yangchunensis* W. T. Wang, var. nov.

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Guangdong . . . C. Wang (Huang Zhi [] [300] 4211) . . .

THE LOTUS-ON-A-ROCK GESNERIAD *Lysionotus* D. Don

[300]

THE SANGZHI LYSIONOTUS

Lysionotus sangzhiensis W. T. Wang . . .

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Addition to the description of the capsule and seeds: Capsule narrowly linear, 4-5.4 cm long including the pistil stalk [?] (4-5 mm long), 1.8-2.5 mm thick, glabrous, persistent style ca. 11 mm long, frequently deciduous. Seeds light green, fusiform, ca. 1 mm long; appendage subulate 0.2-0.6 mm long.

Lysionotus has 30 species, by far the large number of species with divided calyx lobes, those with connate calyx lobes (those without are evolved) being 3 species, of which *L. sangzhiensis* is one. In this genus only 3 species have seeds with extremely absent (0.1-0.2 mm) appendages, most species have seed appendages of nearly equal length with the seeds, one more or less twice as long as the seed, 0.6-2 mm long. *L. sangzhiensis* has seed appendages about half or less the length of the seeds, and because of this is relatively primitive. From the example of *L. sangzhiensis* can be seen, that within one taxon can at the same time be found primitive and evolved characters.