

## 中国茜草科资料(五)

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## MATERIALS FOR CHINESE RUBIACEAE (V)

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关键词 茜草科; 野丁香属; 茜草属

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### 野丁香属 *Leptodermis* Wall.

#### 1 德浚野丁香 *Leptodermis yui* Lo, sp. nov. 新种

Frutex 0.5-1.5 m altus; rami ramulique graciles, illi veteres purpureo-rubri glabri, illi juvenes pubescentiis 2 serialibus tecti. Folia laxa membranacea late ovata vel lanceolata, 1.5-4.5 cm longa, 0.7-2 cm lata, apice obtusa vel subacuta, interdum rotunda, basi late cuneata vel cuneata, supra nigri-grisea in sicco strigas dispersa, subtus leviter glauca glabra vel hispida secus costam, margine fimbriato-ciliata, costis subtus impresissimis, nervis lateralibus gracilibus utrinsecus c. 4-5, subtus prominentibus; petioli 0.3-0.6 cm longi; stipulae in superne ramulis breves, c. 1 mm longae, apice laciniatae glandulosae, in inferne ramulis triangulares, c. 2 mm longae, margine glandulosae. Flores sessili, 1-3 terminales; bracteolae 2, basi connatae (c. 1 mm), partibus distinctis lanceolatis vel ensato-lanceolatis, c. 2 mm longis, sparsim hispidis, margine interdum glandiferis; tubus calycis c. 2 mm longus, lobis 5, angustate triangularibus, longitudine tubum superantibus acuminatis, hispido-ciliatis; corolla purpurea, late infundibuliformis, apice villis fasciculatis, tubo 9-10 mm longo, extus glabro, intus villosio albo, lobis 5, latis, transverse ellipticis, c. 5 mm latis, apice trifidis, margine crispis, utrimque villosis; stamina 5, in inferne fauce inserta, filamentis brevis, antheris oblongo-linearibus, c. 2 mm longis, inclusa; styli paulo exserti, stigmatibus 2, lobis filiformibus. Fructus ignotus.

四川(Sichuan): 木里(Muli), 海拔2500 m, 生林缘, 灌木, 高0.6-1.2 m, 花紫色, 偶见, 1937年7月5日, 俞德浚7241(Typus, PE).

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## 2 西藏野丁香 *Leptodermis xizangensis* Lo, sp. nov. 新种

Frutex 50–80 cm altus; rami teretes, paulo crassi purpureo-nigri, glabri vel pubescentes; calcaria usque 1 cm longa, nodis confertis, internodiis brevibus. Folia a brachyblastis producta, crasso-chartacea vel leviter carnosa, ovato-elliptica vel lanceolato-oblonga, 0.7–1.2 cm longa, 4–6 mm lata, apice acuta vel obtusa, basi late cuneata, in sicco supra nigra subtus brunneola, glabra praeter marginem ciliatum, costis subtus prominentibus, nervis lateralibus laxi inevidentes; petioli breves vel subsessili; stipulae longe triangulares, c. 2–2.5 mm longae, apice cuspidato-caudatae, interdum bilateribus cum petiolo connatae. Flores sessili, usque 3 in apicibus brachyblastarum; bracteolae 2, siccitate membranaceae, hyalinae, 4.5 mm longae, ad medium connatae, loborum apicis cum uno mucrone aciculare; tubus calycis c. 2.5 mm longus, lobis 5, triangularibus, c. 0.6 mm longis, acutis, dense ciliatis; corolla purpurea, in sicco nigra, late infundibuliformis, c. 1.6 mm longa, extus glabra, intus sparsim villosa vel subglabra, fauce expansa c. 5 mm in diam., lobis 5, late ovato-suborbicularibus, c. 4 mm longis, apice trifidis vel cuspidatis, mucrone obtuso; stamina 5, in inferne fauce inserta, filamentis brevissimis, antheris lanceolato-linearibus, c. 2 mm longis; styli 3(?), c. 2 mm longi, lineares. Fructus ignotus.

西藏(Xizang): 吉隆(Jilong), 海拔3400 m, 灌木, 高50–80 cm, 花紫色, 1972年6月22日, 西藏队(Xizang Exped.) 395 (Typus, HNWP).

## 3 华山野丁香 *Leptodermis huashanica* Lo, sp. nov. 新种

Frutex; rami graciles, corticem externum lamellatum griseo-album tecti, postea cortice externo deciduo, brunneolo-rubri, glabri. Folia sparsa, raro in brachyblastis fasciculata, tenuicoriacea, lanceolata vel ovata, interdum oblonga vel elliptica, 7–15 mm longa, 3–6 mm lata, apice obtusa vel acuta, basi cuneata, margine revoluta, supra frequenter rugas irregulares instructa, sparsim strigosa, subtus glabra vel sparsim hispidula secus costas, nervis lateralibus utrinque inevidentibus vel supra manifeste impressis; petioli c. 1 mm longi; stipulae triangulari-lanceolatae, c. 1.5–2 mm longae, acuminatae, prope marginem duos nervos arcuatos et connexos in apice praebent. Flores sessili, usque 3 in apicibus ramorum fasciculati; bracteolae tenues, siccitate membranaceae, hyalinae, c. 2/3 connatae, 4.5 mm longae, apice cuspidatae cum uno mucrone aciculare, interdum acuminatae; tubus calycis c. 2.5 mm longus, lobis subovatis, c. 0.7 mm longis, breve acuminatis, ciliatis; corolla infundibuliformis, c. 9–10 mm longa vel leviter ultra, tubo gracili, plus minusve curvato, puberulo, lobis subovatis, c. 2.5 mm longis, apice incurvatis, extus glabris; stamina in superne fauce inserta, antheris linearibus, semi-exsertis; styli inclusi.

陕西(Shaanxi): 华山(Huashan), 刘慎谔(Liou, T. N.) 10652, 1939年6月9日 (Typus, IBSC), 西北大学生物系(Dept. of Biology, Northwest Univ.) 513.

#### 4 毛花野丁香 *Leptodermis velutiniflora* Lo, sp. nov. 新种

Frutex, 0.5–1 m altus; rami teretes, graciles firmique, dense pubescentes. Folia chartacea, elliptica, oblonga vel lanceolata, 10–40 mm longa, 5–20 mm lata, apice acuta vel acuminata, basi cuneata vel late cuneata, in sicco supra denigrata, pilos adpressos dispersa, subtus brunneola, villosa secus costas nervosque; nervis lateralibus utrinsecus 4–5, gracilibus, subtus manifestis; petioli c. 3–6 mm longi, dense pubescentes; stipulae c. 1.5 mm longae, basi late triangulares, apice unum mucronem acicularem habentes, interdum margine cum glandula petiolata. Flores brachystyli 2–5 in apicibus ramorum fasciculati vel axillares in superne ramulis; pedicelli usque 2–6 mm longi, interdum ad 8 mm longi, villosi; bractae 2, parvae, c. 1.2 mm longae, inferne 1/3 connatae, lobis triangularibus, c. 7 mm longis, pubescentibus; tubus calycis c. 2 mm longus, glaber, lobis 5, triangularibus, c. 0.4 mm longis, acutis, margine hirsutis; corolla infundibuliformis vel late infundibuliformis, c. 14 mm longa, extus bruneo-tomentosa, intus albo-villosa in fauce, lobis 5, triangulari-ovatis, c. 3–3.5 mm longis, c. 4 mm latis, apice obtusis, margine tenuibus et latis; stamina in fauce inserta, filamentis c. 2 mm longis, antheris 2.5 mm longis, exsertis; styli ad medium tubi calycis extensi; stigma 4-lobata, lobis 0.5–0.6 mm longis. Fructus ignotus.

四川(Sichuan): 冕宁(Mianning), 西南师范学院(Southwest Norm. Coll. Exped.) 12225; 美姑(Meigu), 西南师范学院(Southwest Norm. Coll. Exped.) 12994; 会理(Huili), 赵清盛(Q. S. Zhao) 5695; 雷波(Leibo), 阿河沟, 海拔2400 m, 灌木, 高0.5 m, 花白或微紫, 1973年6月20日, 四川大学(Sichuan Univ. Exped.) 110626(Typus, SZ).

#### 4a 薄叶野丁香 var. *tenera* Lo, var. nov. 新变种

A typo foliis chartaceis et corollis glabris differt.

云南(Yunnan): 宾川(Binchuan), 海拔2400 m, 蔡希陶(H. T. Tsai) 52930; 维西(Weixi), 冯国楣(G. M. Feng) 4834, 4841.

四川(Sichuan): 木里(Muli), 俞德浚(T. T. Yu) 7499; 同地(ibid.), 张清龙(Q. L. Zhang) 5926; 盐源(Yanyuan), 张清龙(Q. L. Zhang) 1824; 无地点(no locality), 郑万均(W. C. Cheng) 6303.

西藏(Xizang): 波密(Bomi), 海拔2800–3100 m, 林下或林缘, 黄荣福(R. F. Huang) 652 (Typus, HNWP); 同地(ibid.), 郭本兆和王为义(P. C. Kuo & W. Y. Wang) 21723; 林芝(Linzi), 西藏药队(Xizang Medicine Exped.) 3518; 米林(Milin), 西藏药队(Xizang Medicine Exped.) 1900.

#### 5 管萼野丁香 *Leptodermis tubicalyx* Lo, sp. nov. 新种

Frutex, c. 2 m altus, interdum ad 3 m altus; rami teretes, graciles, villos in 2 seriebus tecti. Folia membranaceo-chartacea, late ovata, lanceolata, interdum elliptica, usque 1–

5 cm longa, 0.5–1.5 cm lata, apice acuta vel acuminata, basi cuneata vel leviter decurrentia, in sicco denigrata vel ferreo-grisea, utrinque villos albos adnatos tecta, nervis lateralibus utrinsecus 4–5, gracilibus, supra immanifestis subtus minute prominentibus; petioli 0.3–0.8 cm longi, villosi; stipulae subtriangulares vel longe triangulares, c. 1.5–2 mm longae, apice mucronatae, basi pilosae. Flores sessili, 3–5 in apicibus ramorum fasciculati; bracteolae 2, c. 1.5 mm longae, inferne 1/3 connatae, lobis triangularibus, glabris; calyx in sicco niger, tubo glabro, obovoideo, c. 3.4 mm longo, limbo tubuloso c. 1.4 mm longo, lobis 5, glabris, c. 0.7 mm longis, glabris vel hirsutis in alabastro; apex alabastri albo-hirsutus; corolla late infundibuliformis, c. 11 mm longa, alba vel subrosea vel purpurea, in sicco denigrata, intus villis albidis annulatis in fauce oblecta, lobis 5, late ovato-triangularibus, c. 4 mm longis, margine tenuibus, inclusis, c. 1 mm latis, c. 2 mm latis in medio, apice inclusis et rostratis; stamina 5, in medio tubi corollae inserta, filamentis brevissimis, antheris anguste lanceolatis, c. 2 mm longis, inclusis; styli 9.5 mm longi; stigma 2–3-lobata, lobis linearibus, c. 2 mm longis, leviter exsertis. Capsulae 7 mm longae; semina ellipsoidea, arillis reticulatis cum testis adnatis.

西藏(Xizang): 亚东(Yadong), 海拔2750 m, 林下, 灌木, 高2 m, 花紫色, 1975年6月3日, 青藏队(Qinghai-Xizang Exped.) 750174 (Typus, HNWP); 同地(ibid), 青藏队(Qinghai-Xizang Exped.) 750310; 错那(Cuona), 青藏队(Qinghai-Xizang Exped.) 751791, 751633; 郎县(Langxian), 郭本兆和王为义(P. C. Kuo & W. Y. Wang) 23187; 察隅(Cha'ou), 黄荣福(R. F. Huang) 76.

#### 6 矮小野丁香 *Leptodermis pumila* Lo, sp. nov. 新种

Frutex nanus, 5–10 cm altus; radices principales lignosae, brunneae; rami breviores, multinodi, puberuli. Folia in superne brachyblastis dense crescentia, chartacea, elliptica vel oblonga, interdum subovata, 5–15 mm longa, 3–7 mm lata, apice acuta, basi cuneata, utrinque secus costas et nervos laterales pilosa; nervis lateralibus 3–4 paribus, subtus minute prominentibus; petioli c. 1–2 mm longi; stipulae crassae, triangulares, c. 1.5–2 mm longae, dense villosae ciliolataeque. Flores sessili, 3 in apicibus calcarium fasciculati; bracteolae 2, infra medium connatae, superne distinctae, lobis triangularibus, pubescentibus, calycibus leviter brevioribus vel subaequantibus; tubus calycis obconicus, c. 1.8 mm longus, lobis 5, subovatis, c. 1 mm longis, apice acutis, ciliolatis; corolla pallide rubra, infundibuliformis, tubo 1.1–1.2 mm longo, extus dense pubescente, intus villosus, lobis 5, c. 3.5 mm longis, margine tenuibus et latis; stamina 5, in superne fauce inserta, filamentis brevis, antheris linearibus, c. 3 mm longis, leviter exsertis; styli 7–8 mm longi, stigmatibus 3, filiformibus, c. 2 mm longis. Fructus ignotus.

云南(Yunnan): 丽江(Lijiang), 草坡, 草本状灌木, 花淡红色, 海拔3000 m, 常见, 1937年5月27日, 俞德浚(T. T. Yu) 15076 (Typus, IBSC).

**7 北川野丁香 *Leptodermis beichuanensis* Lo, sp. nov. 新种**

Frutex c. 2 m altus; rami tenues, teretes, grisei vel griseo-brunnei, pilos in 2 series tecti. Folia chartacea, anguste lanceolata vel oblongo-lanceolata, interdum subovata vel elliptica, 0.8–3.5 cm longa, 0.3–1 cm lata, apice acuminata vel acuta, basi cuneata, in sicco olivacea, supra minute scabra, subtus strigosa secus costas, costis nervisque lateralibus utrinque minute prominentibus, nervis lateralibus utrinsecus 3–4; petioli 1–3 mm longi; stipulae parvae, subtriangulares, c. 1 mm longae, mucronatae, plerumque deciduae. Flores 1–3 terminales, sessiles; bracteolae squamatae, subtriangulares, vix 1 mm longae, mucronatae; tubus calycis c. 1.8 mm longus, lobis late triangularibus, latioribus quam longioribus, c. 0.6 mm longis, margine interdum denticulatis; corolla ignota. Fructus immaturi subovoidei, c. 3 mm longi; semina arillis cum testis adnatis oblecta.

四川(Sichuan): 北川(Beichuan), 青片羌藏脚, 磨房沟, 海拔1350 m, 1984年8月12日, 唐昌林129 (Typus, CDBI); 同地(ibid.), 唐昌林(C. L. Tang) 433.

**8 绵毛野丁香 *Leptodermis lanata* Lo, sp. nov. 新种**

Frutex 0.5–1 m altus; rami crassi, teretes, purpureo-rubri, subglabri. Brachyblasti in basi stipulis squamatis numerosis persistentibus dense tecti. Folia in calacaribus dense crescentia, chartacea, elliptica vel obovata, interdum oblonga, 5–10 mm longa, 2–4 mm lata, apice acuta, basi cuneata, margine revoluta, supra breve tomentosa, subtus griseo-albo-lanata; nervis lateralibus immanifestis; petioli c. 1 mm longi or sessili; stipulae longe triangulares, 1.5–2 mm longae, acuminatae. Flores sessili, usque 3 in apice ramulorum fasciculati vel prope apices calcarium axillares; bracteolae 2, siccato membranaceae, breve tomentosa, apice cuspidatae, infra medium connatae, parte connata dentibus paulo longiora vel ea subaequilonga; tubus calycis c. 2 mm longus, subglaber, lobis 5, oblongo-lanceolatis, tubo leviter brevioribus, breve acuminatis, puberulis breve ciliatisque; corolla pallide rubra, infundibuliformis, 12–14 mm longa, extus breve tomentosa, tubo corollae gracili, deorsum curvato, lobis oblongo-lanceolatis vel oblongo-ovatis, c. 2 mm longis; stamina 5, illa dolichostyli in inferne fauce inserta, antheris linearibus, inclusa, illa brachistyli in superne fauce inserta, antheris leviter exsertis, stigma 2(?) lobata, lobis filiformibus. Fructus c. 6 mm longus; semina arillis reticulatis cum testis adnatis oblecta.

云南(Yunnan): 宁蒗(Ninglang), 松林下, 海拔2500 m, 灌木, 高1 m, 花微红, 罕见, 1939年5月17日, 俞德浚(T. T. Yu) 5395 (Typus, IBSC); 同地(ibid.), 俞德浚(T. T. Yu) 5207.

**9 拉萨野丁香 *Leptodermis hirsutiflora* Lo, sp. nov. 新种**

Frutex; rami teretes, internodiis evidentibus; brachyblasti usque 1 cm longi, juventute pubescentes, veto glabri. Folia oblonga vel elliptica, interdum lanceolata vel ovata, illa in

ramis 7–9 mm longa, illa in brachyblastis 2–3 mm longa, apice obtusa vel minute rotunda, basi cuneata, utrinque subglabra, nervis lateralibus immanifestis; petioli c. 0.5 mm longi vel subsessili; stipulae late triangulares, c. 1 mm longae, apice mucronatae. Flores sessili, terminales in ramulis et axillares, plerumque densifloriferi; bracteolae 2, membranaceae, obovatae, c. 3.5 mm longae, infra medium connate vel unilateraliter distinctae, nervos brunneos praebentes, extus hirsutae, lobis mucronatis; flores dolichostyli: tubus calycis obovoideus, c. 2 mm longus, glaber, lobis 5, anguste triangulari-lanceolatis, c. 2 mm longis, dense hirsutis; corolla azurea, anguste infundibuliformis, extus dense hirsuta, tubo corollae 8–9 mm longo, intus villosa, basi c. 1 mm in diam., fauce c. 2.5 mm in diam., lobis 5, subovatis, c. 2.5 mm longis, apice incurvis, rostro c. 0.5 mm longo; stamina 5, in basi fauce inserta, filamentis brevissimis vel nullis, antheris linearibus, c. 2 mm longis, subinclusis; styli 11–12 mm longi, stigma 4–5-lobata, lobis linearibus, exsertis; flores brachystyli: illi dolichostyli similes, sed lobis calycis 1.4 mm longis, acutis; tubus corollae extus pubetes brevissimes obtectus; stamina in superne fauce inserta, filamentis 0.8 mm longis, antheris exsertis; styli 5.5 mm longi, stigma 3–4-lobata, inclusa. Fructus 5 mm longus, lobis calycis persistentibus 2.5–3 mm longis, hirsutis; semina c. 4 mm longa, arillis reticulatis testas adnatis.

西藏(Xizang): 拉萨(Lhasa), 海拔4000 m, 花蓝色, 1977年7月27日, 郭本兆和王为义(P. C. Kuo et W. Y. Wang) 22075 (Typus, HNWP), 22150; 同地(ibid.), 李继均(J. J. Li) 46; 同地(ibid.), 黄荣福(R. F. Huang) C. G. 559a; 同地(ibid.), 西藏队(Xizang Exped.) 41, 15436; 同地(ibid.), F. Ludlow & G. Sherriff 9624; 郎县(Langxian), 郭本兆和王为义(P. C. Kuo et W. Y. Wang) 23127; 泽当至隆子(Zedang to Longzi), 郭本兆和王为义(P. C. Kuo et W. Y. Wang) 22477; 泽当(Zedang), 吴征镒(C. Y. Wu) 75-776; 加查(Jiacha), 西藏队(Xizang Exped.) 4570(?).

9a. 光萼野丁香 var. *ciliata* Lo, var. nov. 新变种

A typo corollis pubescentibus, lobis calycis glabris praeter margines ciliatos recedit.

西藏(Xizang): 加查(Jiacha), 海拔4100 m, 疏林下, 灌丛中, 花紫色, 1975年7月25日, 青藏队(Qinhai-Xizang Exped.) 750686 (Typus, HNWP).

10 黄杨叶野丁香 *Leptodermis buxifolia* Lo, sp. nov. 新种

Frutex 0.5–2 m altus; rami teretes, leviter crassi, nigri vel interdum lividii, glabri, ramulis leviter elongatis vel abbreviatis. Folia sparsim crescentia vel in calcaribus axillaribus fasciculata, chartacea, ovata, lanceolata, elliptica vel oblonga, 5–12 mm longa, usque 8 mm non superantia, raro ad 15 mm, 2–5 mm lata, apice obtusa vel rotunda, interdum subacuta, margine revoluta, utrinque glabra, supra minute rugosa et nitida, costis subtus prominentibus, nervis lateralibus immanifestis; petioli brevi vel subsessili; stipulae

triangulares, c. 1.2 mm longae. glabrae. Cymae terminales vel axillares, plerumque 3-floriferae, interdum thyrsos angustos compositae; flores subsessili; bracteolae hyalinae, c. 2 mm, c. 3/4 connatae, lobis brevis, apice apiculatis, glabris; calyx parvus, tubo c. 1 mm longo, lobis ovatis, c. 0.4–0.5 mm longis, densissime fimbriato-ciliatis; corolla pallide purpurea, anguste infundibuliformis, 9–10 mm longa (interdum 14 mm longa, H. Smith 4606), tubo gracile, extus pulverato-pubescente, intus piloso, plerumque pendulo, lobis 5, lanceolatis, c. 2 mm longis; stamina 5, in superne fauce inserta, antheris linearibus, semi-exsertis; styli longitudine 1/2 corollae partes aequantes, stigma 5-lobata (2-lobata, Nanping Exped. 1183), lobis filiformibus, inclusis. Fructus 4–4.5 mm longus; semina arillis reticulatis cum testis adnatis obtecta.

四川(Sichuan): 汶川(Wenchuan), 灌木, 茎灰黑, 花淡紫, 1975年7月28日, 汶川队(Wenchuan Exped.) 8479 (Typus, IBSC); 同地(ibid.), H. Smith 2311; 松藩(Songfan), 唐贤能等(X. N. Tang et al) 634; 大金(Dajin), 同上队(Tongshang Exped.) 4747, 4741; 南坪(Nanping), 南坪队(Nanping Exped.) 1183, 傅坤俊(K. J. Fu) 2241; 小金(Xiaojin), H. Smith 4606.

甘肃(Gansu): 文县(Wenxian), 张国强等(G. Q. Zhang et al) 820576, 兰州大学队(Lanzhou Univ. Exped.) s.n., 439.

**10a 雅江野丁香 f. *strigosa* Lo, f. nov.**

A typo foliis strigosis, bracteolis pubescentibus differt.

四川(Sichuan): 雅江(Yajiang), 1960年8月19日, 管大中(D. Z. Guan) 56-0424, 海拔2850 m (Typus, IBSC).

**11 短萼野丁香 *Leptodermis brevisepala* Lo, sp. nov. 新种**

Frutex c. 40 cm altus; ramuli teretes, recti longique, ferruginei, pubescentes vel puberuli. Folia sparsim crescentia vel 4 in apicibus ramulorum fasciculata, chartacea, ovata vel lanceolata, 6–10 mm longa, 3–5 mm lata, apice breve acuminata vel subacuta, raro obtusa, margine minute revoluta, utrinque glabra, in sicco supra fere nigra, subtus obscure fusca, costis nervisque lateralibus subtus manifeste prominentibus; petioli 1–2 mm longi, interdum subsessili; stipulae subtriangulares, c. 1.6 mm longae, apice unum mucronem longum durum praebentes, subglabrae vel puberulae, tubum calycis subaequilongae; tubus calycis 1.4–1.7 mm longus, in sicco niger, lobis 5, ovato-orbicularibus vel ovato-triangularibus, latitudinem subaequilongis, c. 0.4 mm, apice obtusis vel subacutis, non ciliatis; corolla alba, infundibuliformis, 8–10 mm longa, extus puberula, intus dense albo-villosa, lobis 5, suborbicularibus, in medio crassioribus, margine tenuibus latisque, sinuatis vel erosis; stamina inferne fauce inserta, antheris linearibus, inclusis; styli exserti, stigma usque 3-lobata, involuta. Fructus ignotus.

四川(Sichuan): 会理(Huili), 海拔1750 m, 灌木, 高38 cm, 花白色, 1976年7月26日, 四川生物所(Sichuan Inst. Biol. Exped.) 12375 (Typus, CDBI).

### 茜草属 *Rubia* Linn.

#### 1 翅茎茜草 *Rubia pterygocaulis* H. S. Lo, sp. nov. 新种

Herba erecta, omnino in sicco opace viridis; radicibus lignosis robustis, ad 1 cm diam., brunneo-purpureis; caulibus caespitosis, internodiis infracentralibus manifeste alatis, alis inverse aculeatis, ramis juvenalibus obscure alis, tetragonis. Folia 4-verticillata, coriacea, ovata, 1–2 cm longa, 0.5–1 cm lata, apice cuspidate longo-acuminata, basi cordata, margine revoluta parvo-aculeata, supra leviter muricata, subtus ad nervos minuto-aculeata; triplinerviis, laterali-jugis ad fere media, costa supra manifeste impressa, subtus prominenti. Cyma axillaris et terminalis, plerumque 1.5–2.5 cm longa, pedunculis rhachidibus ramisque gracilibus; pedicellis filiformibus, 1–2 mm longis; flores parvi, corollis in sicco atro-brunneis, rotatis, lobis 5, ovatis vel lanceolatis, circ. 1–1.2 mm longis, trinerviis, apice subito acutis. Fructus ignotus. Anthesis: Jun.

四川(Sichuan): 九寨沟(Jiuzhaigou), Jun. 1981, 罗献瑞(H. S. Lo) 1747 (Typus IBSC).

#### 2 多脉茜草 *Rubia polyphlebia* H. S. Lo, sp. nov. 新种

Herba circ. 50 cm alta, praeter florem omnino dense hirsuta vel folium modo subtus nervis pilifrum. Caulis ramusque robustus, tetragonus et 4-lato-sulcatus. Folia 4-verticillata, chartacea lato-elliptica lato-ovata vel ovata, interdum suborbiculata, circ. 2–4.5 cm longa, circ. 1–3 cm lata, apice acuta, leviter obtusa, basi lato-cuneata vel subrotunda, margine integra breviaculeate ciliata; septem-decennerviis vel interdum quinquenniis, arcuato-ascendentibus, in apice conjunctis, utrinque leviter prominentibus. Cyma floribundo-paniculiformis, axillaris et terminalis, usque 10 cm longa; bracteis praeter juga infima foliiformia, ceteris parvis, lanceolatis vel lineari-lanceolatis, 1–2 mm longis, hirsutis; pedicellis circ. 1 mm longis, glabris; tubus calycis sphaeroideus, leviter bilobatus, 0.4–0.5 mm longus, 0.5–0.6 mm latus, subglaber; corolla in sicco bubalina vel glauca, extra pilosa, intra glabra vel minute pilifera, tubus circ. 0.2–0.3 mm longus, lobus 5, ovatus vel lanceolatus, 1–1.2 mm longus vel leviter excedens, apice plus minusve incurvus; staminibus 5, ad tuborum media insertis, filamentis brevibus; stylis perbrevibus, stigmatibus 2 capitatis. Fructus subglobosus, solitarius vel geminatus, viridis (non satis maturus), 3–5 mm diam. glaber. Anthesis: Jun.–Jul.; Fructifer: Aug.–Sept.

四川(Sichuan): 九龙(Jiulong) 水打坝(Shuidabe), 20 Jun. 1974, 刘照光(Z. G. Liu) 4620 (Typus IBSC); 木里(Muli), 赵清盛(Q. S. Zhao) 8667.



**3 毛果茜草 *Rubia trichocarpa* H. S. Lo, sp. nov. 新种**

Herba scandens(?). Caules ramique tetragoni, in angulis anatropo-aculeati, in nodis hirsuti. Folia in verticillis quattuor vel sex, tenuiter chartacea, ovato-cordata, 4–12 cm longa, 2.5–7 cm lata, apice acuminata, basi profundo-cordata, lobis posticis orbiculatis, plus minusve auriculatis, in sicco griseo-viridia, supra minute scabra, sparsim appressa brevi-hirsuta vel pubescentia, subtus expanso-villosa, in costis saepe laxo-aculeata vel cicatricibus aculeorum caducis ornata; petioli quam foliorum laminae breviores, anatropo-aculeati. Cyma anguste paniculiformis, axillaris vel terminalis(?), quam folia longior, pedunculis costatis, in costis anatropo-aculeatis, rhachibus ramisque gracilibus, expanso-villosis; bracteolis lancealatis, 1.5–2 mm longis, inferis interdum foliaceis villosis. Flores ignoti. Bacca (non matura) in sicco riger, lucida, dense ferruginea expanso-villosa.

四川(Sichuan): 理县(Lixian), 1952, 何铸(Z. He) et 周子林 Z. L. Zhou 13651 (Typus IBSC).

**4 镰叶茜草 *Rubia falciformis* H. S. Lo, sp. nov. 新种**

Herba, in sicco omnino virella; caulis quadrangulus, scaber. Folia opposita, foliorum lamina crassa, coriacea, falcato-lanceolata, 11–15 cm longa, apice acuminata, obtusa, basi rotundata vel leviter cordata, margine revoluta, utrinque scabra, in nevis basalibus aculeata; quintuplinerviis, supra impressis, subtus prominentibus, nervis reticulatis obscuris in costa anatropo-aculeatus; petiolus robustus, 3–4 cm longus, strictus; stipula caduca non visa. Flores ignoti. Fructescentiae axillares, 4–7 cm longae; fructus globosus, 3.5–4 mm diam., in sicco opace aurantiacus, solitarius vel geminus. Fructifer: Oct.

云南(Yunnan): 梁河县(Lianghexian), 三叉河(Sanchahe), 21 Oct. 1974, 陶国达(G. D. Tao) 12923 (Typus IBSC).

**5 阔瓣茜草 *Rubia latipetala* H. S. Lo, sp. nov. 新种**

Herba erecta, circ. 20 cm alta; radix aliquantum robusta, purplerubra; caulis parce ramosus, ramus tetragonus, inermis, glaber. Folia quatuor in verticillis, foliorum lamina chartacea, ovata vel lateovata, 1.5–3.5 cm longa circ. 1–3 cm lata, apice acuta, basi vadose cordata vel profunde cordata, utrinque in nervis spiniformi-setosa; nervis basalibus plerumque 5, raro 3, nervis reticulatis obscuris; petiolus 0.8–1.8 cm longus. Inflorescentia terminata, raro axillaris, circ. 0.5–1 cm longa, florigra 2–5; corolla viridis, in sicco nigrescens, verticillata, circ. 3.5–4 mm longa, lobis 5, stellate explanatis, deltatis, subglabris; stamina extra tubis corollarum dilute exserta, antheris griseo-nigeribus. Fructus non visus.

四川(Sichuan): 马尔康(Maerkang), alt. 3350 m, 13 Aug. 1957, 采集人不明 25721 (Typus IBSC).

6 丝梗茜草 *Rubia filiformis* How ex H. S. Lo, sp. nov. 新种

Planta scandens, herbacea; caulibus ramisque in sicco griseis, nitidis, stricte tetragonis vel angusto-alatis, in angulis anatro-po-aculeatis, glabris vel subglabris. Folia opposita tenuiter coriacea vel chartacea, ovata, raro ovato-lanceolata, 2-9 cm longa, 1-4.5 cm lata, apice acuta vel acuminata, basi rotundata, interdum dilute cordata vel obscure late. Cuneata, integra, in sicco brunneo-grisea, utrinque glabra, subtus nervis basalibus plerumque papilliformi-aculeata; nervis basalibus 3 vel 5, raro 7, supra impressis, subtus prominentibus, nervis lateralibus et nervis reticulatis obscuris; petiolus saepe 3-6 mm longus, raro usque ad 2.5 cm; stipula ovata, circ. 5 mm longa, plerumque mox caduca. Flores ignoti. Infructescentiae axillares terminatricae, conicae, usque ad 15 cm longae; pedunculi ramique graciles velut filiformes, stricto-tetragoni, glabri et eaculeati; pedicelli graciles, filiformes, 7-14 mm longi. Bacca niger, globosa, 4-5 mm diam., solitaria vel didyma. Fructifer: hiemis extremum.

云南 (Yunnan): 麻栗坡 (Malipo), G. M. Feng 13057 (Typus IBSC); ibid. 王启无 (C. W. Wang) 86121, 86345.

7 柳叶茜草 *Rubia salicifolia* H. S. Lo, sp. nov. 新种

Planta scandens herbacea; ramis tetragono-teretibus, tetragonis et striatis, scabris, in angulis aculeatulis. Folia plerumque tetraverticillata, foliorum lamina tenuiter chartacea, anguste lanceolata, 3-9 cm longa, 5-8 mm lata, apice acuminata, basi rotundata, in margine dentiformi-aculeatula, sed non revoluta, in sicco griseo-brunnea, supra sub laevia, subtus in costis aculeatula; nervis basalibus 3, linearibus, subtus prominentibus; petiolus gracilis, 3-12 cm longus, dense aculeatulus. Cyma axillaris (Vel terminalis?), cymulis 3 3-floris composita; pedunculus gracilis, aculeatulus; pedicellus 3-4 mm longus; bracteola lanceolata, 1-2 mm longa; flos parvus; corolla viridis, in sicco niger, rotata, sub anthesi circ. 2.5 mm diam., lobis 5, subovatis, circ. 1 mm longis, subito acutis, intra brevi-hispidis. Fructus ignotus. Anthesis: Jun.

四川 (Sichuan): 九龙 (Jiulong), 马拉溪 (Malaxi), alt. 2 000 m, 19 Jun 1974, 刘照光 (Z. G. Liu) 4584 (Typus IBSC).

8 纤梗茜草 *Rubia tenuis* H. S. Lo, sp. nov. 新种

Planta scandens herbacea in sicco omnino olivacea; caulis tetragono-teres, in angulis anatro-po-aculeatulus. Folia sessilia, 4-verticillata, tenuiter chartacea, lato-elliptica, 1.5-4 cm longa, 0.9-2.3 cm lata, apice aubito acuta, basi rotundata vel perlato-cuneata, margine aculeatula, praeter utrinque nervos basalis scabros vel peraculeatulos, omnino sub laevia; nervis basalibus plerumque 5, subtus prominentibus. Cyma axillaris et terminalis, in inferne foliorum axillis pedunculis gracilibus et ramulis ornata, tata usque ad 14 cm;

bracteola lanceolata, 2.5–4 mm longa; corolla lutea, sub rotata, sub anthesi circ. 3 mm longa, lobis 5, anguste ovatis, circ. 2 mm longis, apice incurvis, rostratis. Fructus ignotus. Anthesis: Jul.

四川 (Sichuan): 泸定 (Luding), 马路山 (Malushan) 11 Jul. 1951, 胡文光 (W. G. Hu) et 何铸 (Z. He) 10324 (Typus IBSC).