

云南秋海棠属新分类群^{*}

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摘要 记述了云南产秋海棠属 9 个新种。即：麻栗坡秋海棠，吉林箐秋海棠，圆叶秋海棠，圭山秋海棠，大围山秋海棠，马关秋海棠，红斑秋海棠，紫叶秋海棠，河口秋海棠。

关键词 秋海棠科，秋海棠属，新分类群

NEW TAXA OF BEGONIA FROM YUNNAN

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Abstract Nine new species of the genus *Begonia* are described from Yunnan, China. They are *Begonia malipoensis*, *B. gulinqingensis*, *B. rotundilimba*, *B. guishanensis*, *B. daweishanensis*, *B. maguanensis*, *B. rubropunctata*, *B. purpureofolia*, *B. gesnerioides*.

Key words Begoniaceae, *Begonia*, New taxa

1. 麻栗坡秋海棠 新种 图 1

Begonia malipoensis S.H.Huang et Shui, sp. nov.

Species *B. repenticauli*, Irmsch., affinis, sed foliis valde oblique ovatis, 5—6-lobatis, lobis triangulatis, apice acutis, caule, laminis, petiolis, floribusque rubro-hirsutis differt.

Herba perennis. Caulis repens, apice ascendens, rubro-hirsutus, ad nodos radicans, parce foliatus, internodiis 4—7 cm longis. Stipulae ovato-triangulatae, 1 cm longae, 5 mm latae, apice acuminatae, basi rotundatae, extus puberulae. Petoli 5—15 cm longi, rubri, dense rubro-hirsuti; laminae herbaceae, valde oblique ovatae, 7—8 cm longae, 9—11 cm latae, apice acutae, basi valde oblique cordatae, supra virides, albo-punctatae, parce setulosae, subtus albae, dense hirsutae, margine ciliatae, integrae vel interdum repandae, serratae, 5—6-lobatae, lobis triangulatis, nervis rubris, prominentibus, basilaribus extrorsis 4, introrsis 2. Dichasium terminale, pedunculo 5—8 cm longo, rubro, dense rubro-hirsuto. Flores ♂ in alabastrum minores: pedicelli 0.7 cm longi, rubri, dense rubro-hirsuti; tepala 4, rosea, exteriores 2 late elliptica, 8 mm longa, 5 mm lata, interiores 2 minores, suborbiculata, 4 mm in diam., extus rubro-hirsuta; stamina numerosa, distincta, filamentis 1 mm longis, antheris obovato-oblongis, flavo-viridibus, 1 mm longis, connectivis apice dilatatis, obtusis. Flores ♀: pedicelli 1.1 longi; tepala 4, rosea, exteriores 2 leviter

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maiores, obovato-oblonga, 2.5 cm longa, 1.5 cm lata in medio, apice rotundata, interiores 2 leviter minores, extus parce rubro-setulosa; ovarium triloculare, rubrum, hirsutum, inaequaliter trialatum; styli 3, basi leviter connati, stigmatibus 2-ramosis, spiraliter contortis, papillosis; laminae placentarii 2. Capsula obovata, 1 cm longa, 0.8 cm lata, inaequaliter trialata, ala majore linguiforme, 1 cm longa, 0.8 cm lata, apice obtusa, margine superiore horizontaliter extensa, inferiore leviter ascendente, rubro-hirsuto, alis ceteris minimis, aequalibus, oblongis, 3 mm longis, 1 cm latis; pedicello 1.2 cm longo, rubro-hirsuto.

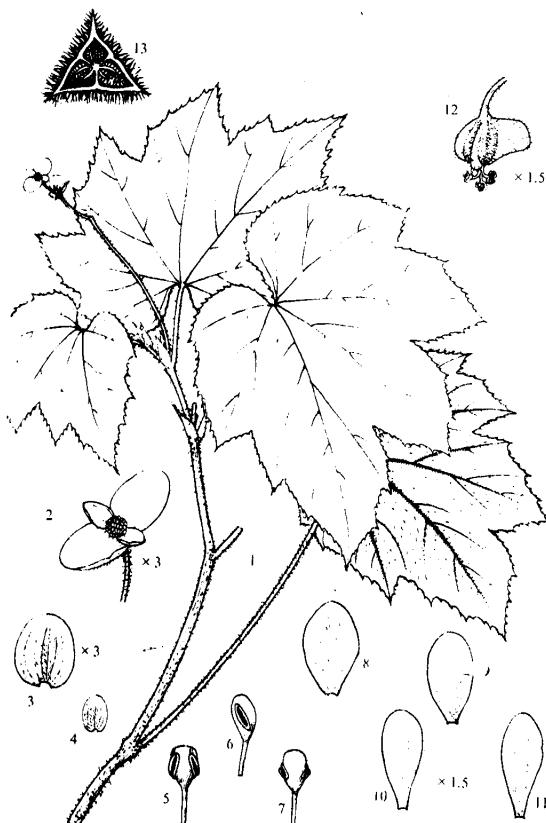


图 1. 麻栗坡秋海棠 *Begonia malipoensis* S.H.Huang & Shui, sp. nov. 1. 花枝; 2. 雄花; 3—4. 雄花内外花被片; 5—7. 雄蕊; 8—11. 雌花内外花被片; 12. 果实; 13. 果实横切面。(李锡麟绘)

Yunnan (云南): Malipo Xian (麻栗坡县) Douchidian (冻豆店) alt. 1300 m, VI. 1991, Shui Yumin (税玉民) B91-181 (Type in YUNU).

本种近似于匍茎秋海棠 *Begonia repenticaulis* Irmsch. 但叶为极偏斜的卵形, 具5—6浅裂, 裂片三角形, 先端锐尖, 茎、叶片、叶柄、花被均被红色糙毛而异。

2. 古林箐秋海棠 新种 图 2

Begonia gulinqingensis S. H. Huang et Shui, sp. nov.

Species *B. leplosae* Hance, similis, sed foliis tenuoribus rugosisque, capsulis trilocularibus, alis brevi-triangulatis differt.

Herba perennis, acaulis. Rhizoma repens, crispulo-villosum dense foliatum, internodiis brevissimis. Stipulae triangulato-lanceolatae, 1.2 cm longae, basi 6 mm latae, apice acuminatae, margine parce villosae. Folia basalia, petioli 4—15 cm longi, 3—4 mm in diam., dense rubro-crispulo-villosi; laminae papyraceae, suborbiculatae, circ. 6—10

cm longae et latae, apice rotundatae, basi anguste cordatae, supra rugosae, virides, interdum flavidopunctatae, parce setulosae, subtus viridulae, secus nervos dense crispulo-villosae, margine breviter ciliatae, irregulariter denticulatae. Cymae rhizomatiae, pedunculo circ. 9 cm longo. Flores ♂: pedicelli 3.5 cm longi, crispulo-villosi; tepala 4, rosea, exteriores 2 maiores, suborbiculata, circ. 1.8 cm in diam., apice rotundata, basi leviter cordata, interiores 2 minores, elliptica, 1.3 cm longa, 6—7 mm lata, apice rotundata, basi angusta, glabra; stamina numerosa, basi connata, androphoro 2.5—3 mm longo, filamentis 1.5 mm longis, antheris obovatis, flavis, connectivis apice dilatatis, rotundatis. Flores ♀: pedicelli 1 cm longi; tepala 5, exteriores elliptica, 1 cm longa, 0.8 cm lata, interiores sensim diminuta, 0.8 cm longa, 0.35 cm lata; ovarium pubescens, triloculare, leviter inaequaliter trialatum; styli 3, distincti, stigmatibus 2-ramosis,

contortis, lunatis, papilllosis; laminae placentarii 2. Capsula elliptica, 1 cm longa, 0.8 cm lata, extus pubescens, leviter inaequaliter trialata, ala majore breviter triangulata, 4 mm longa, 6 mm lata in medio, margine superiore descendentis inferiore ascendentis, alis ceteris 2 minoribus, circ. 2.5 mm longis, 10 mm latis; pedicello 1 cm longo.

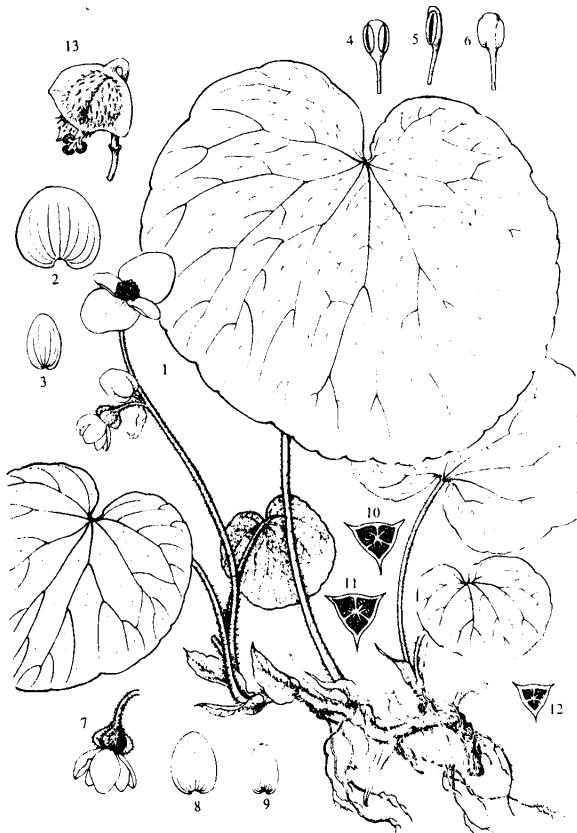


图 2 古林箐秋海棠 *Begonia gulingingensis* S.H. Huang & Shui, sp. nov. 1. 花枝; 2—3. 雄花内外花被片; 4—6. 雄蕊; 7. 雌花; 8—9. 雌花内外花被片; 10—12. 果实横切面 (上、中、下部); 13. 果实 (李锡畴绘)

longi, 3—4 mm in diam, dense villosi; laminae chartaceae, oblique ovatae vel suborbiculatae, 5—8.5 cm longae, 6—9.5 cm latae. apice rotundatae vel leviter acutae, basi oblique cordatae, supra laevigatae, parce setulosae vel subglabrae, subtus secus nervos dense villosae, margine brevi-ciliatae, leviter repandae, irregulares denticulatae, nervis palmatis, supra obscuris, subtus prominentibus, basilaribus extrorsis 3—4, introrsis 2—3. Dichasium ad apicem rhizomatis insertum, pauciflorum, pedunculo 8—10 cm longo, parce villoso; bracteae 2, ovato-lanceolatae, 1.2—1.5 cm longae, basi 4—5 mm latae, apice acuminatae, mucronatae, margine parce villosae. Flores ♂: pedicelli 1.8 cm longi, subglabri, basi 2-bracteolatae, ovato-triangulatae, 1.3—1.4 cm longae, 4 mm latae, apice acuminatae, glabrae; tepala 4, pallida, exteriores 2 majores, suborbiculata, 1.7 cm longa, 1.6 cm lata, apice rotundata, basi cordata, glabra, interiores 2 minores, 1.3 cm longa, 1 cm lata; stamina numerosa, basi leviter connata, androphoro circ. 0.5 mm longo, filamentis 1.8 mm longis, antheris oblongis, 1.8 mm longis, connectivis apice leviter dilatatis.

Yunnan (云南): Maguan Xian (马关县) Gulinqing (古林箐), alt. 1730 m, in wood, XII, 1991, Shui Yumin (税玉民) B91—448 (Type in YUNU).

本种外形似团扇叶秋海棠 *Begonia leprosa* Hance, 但叶较薄而皱折, 蒴果3室, 具短三角形的翅而异。

3. 圆叶秋海棠 新种 图3

***Begonia rotundilimba* S.H.Huang et Shui, sp. nov.**

Species *B. ruboides*, C.M.Hu ex C.Y.Wu, affinis, sed rhizome et petiolis dense crispulo-villosis, foliis supra parce setulosis vel glabris, nervis obscuris, subtus secus nervos dense villosis, capsulis subaequaliter alatis, apice obtusis differt.

Herba perennis, acaulis.
Rhizoma repens, dense
crispulo-villosum, ad nodos radicans, internodiis 2—3 cm longis, 3—4 mm in diam. Stipulae ovato-triangulatae, 7 mm longae, basi 4 mm latae, apice acuminatae et mucronatae, glabrae.

Folia basalia; petoli 13—16.5 cm

longi, 3—4 mm in diam, dense villosi; laminae chartaceae, oblique ovatae vel suborbiculatae, 5—8.5 cm longae, 6—9.5 cm latae. apice rotundatae vel leviter acutae, basi oblique cordatae, supra laevigatae, parce setulosae vel subglabrae, subtus secus nervos dense villosae, margine brevi-ciliatae, leviter repandae, irregulares denticulatae, nervis palmatis, supra obscuris, subtus prominentibus, basilaribus extrorsis 3—4, introrsis 2—3. Dichasium ad apicem rhizomatis insertum, pauciflorum, pedunculo 8—10 cm longo, parce villoso; bracteae 2, ovato-lanceolatae, 1.2—1.5 cm longae, basi 4—5 mm latae, apice acuminatae, mucronatae, margine parce villosae. Flores ♂: pedicelli 1.8 cm longi, subglabri, basi 2-bracteolatae, ovato-triangulatae, 1.3—1.4 cm longae, 4 mm latae, apice acuminatae, glabrae; tepala 4, pallida, exteriores 2 majores, suborbiculata, 1.7 cm longa, 1.6 cm lata, apice rotundata, basi cordata, glabra, interiores 2 minores, 1.3 cm longa, 1 cm lata; stamina numerosa, basi leviter connata, androphoro circ. 0.5 mm longo, filamentis 1.8 mm longis, antheris oblongis, 1.8 mm longis, connectivis apice leviter dilatatis.

Flores ♀ : pedicelli circ. 2.5 longi; tepala 5, exteriores orbiculata, 1.2 cm in diam, interiores sensim diminuta, elliptica, 1—1.2 cm longa, 4—6 mm lata; ovarium triloculare; styli 3, stigmatibus 2—ramosis, contortis; laminae placentarii 2. Capsula elliptica, circ. 1.4 cm longa, 1.2 cm lata, subaequaliter trialata, ala breve triangulata, leviter majore 6 mm longa, 1.4 cm lata, margine superiore descendente, margine inferiore ascendentem, alis ceteris 4—5.5 mm longis, 1.4 cm latis, marginibus superioribus subhorizontaliter extensis, inferioribus ascendentibus, basi capsulam leviter superantibus.

Yunnan (云南): Pingbian Xian (屏边县), Timi (底咪), alt. 1600—1800 m, IV, 1959, Exped. Univ. Yunnan 59-8 (Type in YUNU); ibid. VII, 1991, Shui Yumin (税玉民) B91-470 (Fr.).

本种近悬钩子叶秋海棠 *Begonia ruboides* C.M. Hu ex C.Y.Wu, 但根状茎, 叶柄密被卷曲长柔毛, 叶面疏被小刚毛或无毛, 脉不显, 背面沿脉密被长柔毛, 蒴果具近相等的翅, 翅先端钝而异。

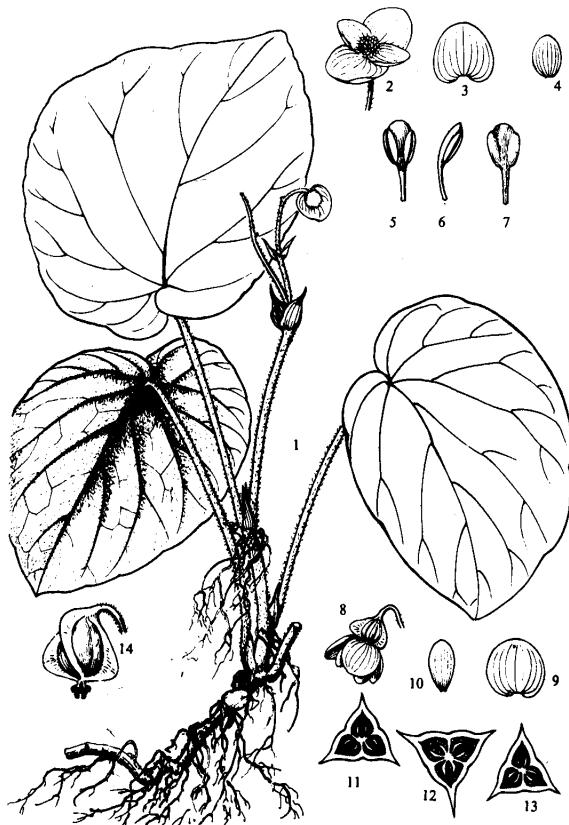


图 3 圆叶秋海棠 *Begonia rotundilimba* S.H. Huang & Shui, sp. nov. 1. 植株; 2—4. 雄花内外花被片; 5—7. 雄蕊; 8—10. 雌花内外花被片; 11—13. 果实横切面 (上、中、下部); 14. 果实 (李锡畴绘)

♂ : pedicelli 1.8 cm longi, basi 2-bracteolae, ovato-lanceolatae, 4 mm longae, 2.5 mm latae, apice acutae, basi obtusae, margine pilosae; tepala 4, punicea, exteriores 2. ovato-rotundata, 1 cm longa, prope basim 0.9 cm lata, apice obtusa, basi attenuata, glabra, interiores 2 minores, obovato-oblonga, 7—8 mm longa, 2 mm lata, apice obtusa, basi attenuata, glabra; stamina numerosa, androphoro 1 mm longo, filamentis 1.5 mm longis, glabris, antheris obovatis, flavis, 1 mm longis, connectivis apice leviter dilatatis, obtusis. Flores

4. 圭山秋海棠 新种 图 4

Begonia guishanensis S.H.Huang et Shui, sp. nov.

Species *B. labordei*, Lévl., affinis, sed cymis paucifloris, 3—5-floris, tepalis puniceis, capsulis minoris, valde inaequaliter trialatis differt.

Herba perennis, decidua, basi tuberifera, tuberibus subglobosis, 1 cm diam. Caulis florifer 3—5 cm longus, 1—2-foliatus. Stipulae caducae. Folia basalia, petioli 5—8 cm longi, crispulo-pilos; laminae chartaceae, oblique late cordatae usque suborbiculatae, 4—10 cm longae, 5—10 cm latae, apice acutae vel acuminatae, basi leviter oblique cordatae, margine repandae vel irregulariter lobatae, lobis triangulatis, raro serratae, superne dense setulosae, subtus secus nervos parce pilosae, nervis palmatis, basilaribus 3—4 et lateralibus 2—3, Cymae terminales, 3—5-florae, pedunculo 10—25 cm longo; bracteae minimae, ovato-lanceolatae, 4 mm longae, 2.5 mm latae, apice acutae, basi obtusae, margine parce pilosae. Flores

♂ : pedicelli 1.8 cm longi, basi 2-bracteolae, ovato-lanceolatae, 4 mm longae, 2.5 mm latae, apice acutae, basi obtusae, margine pilosae; tepala 4, punicea, exteriores 2. ovato-rotundata, 1 cm longa, prope basim 0.9 cm lata, apice obtusa, basi attenuata, glabra, interiores 2 minores, obovato-oblonga, 7—8 mm longa, 2 mm lata, apice obtusa, basi attenuata, glabra; stamina numerosa, androphoro 1 mm longo, filamentis 1.5 mm longis, glabris, antheris obovatis, flavis, 1 mm longis, connectivis apice leviter dilatatis, obtusis. Flores

♀: pedicelli 1 cm longi; tepala 3(4), punicea, exteriores 2 rotundata, 1 cm in diam, interiores minores, oblonga, 1 cm longa, 2.5 mm lata, apice obtusa, basi attenuata, glabra; ovarium obovato-oblongum, 8 mm altum, 4 mm latum, crispulo-pilosum, triloculare, inaequaliter trialatum, styl 3, distincti, 1.5 mm longi, stigmatibus lunatis papillosis; laminae placentarii 2. Capsula obovato-oblonga, inaequaliter trialata, ala majore longilinguiforme, ascendente, 2.6 cm longa, 0.5 cm lata, apice obtusa, reticulatis, alis ceteris minoribus, angusti-triangulatis, laviter inaequalibus, 6—7 mm longis, basi 3 mm latis.

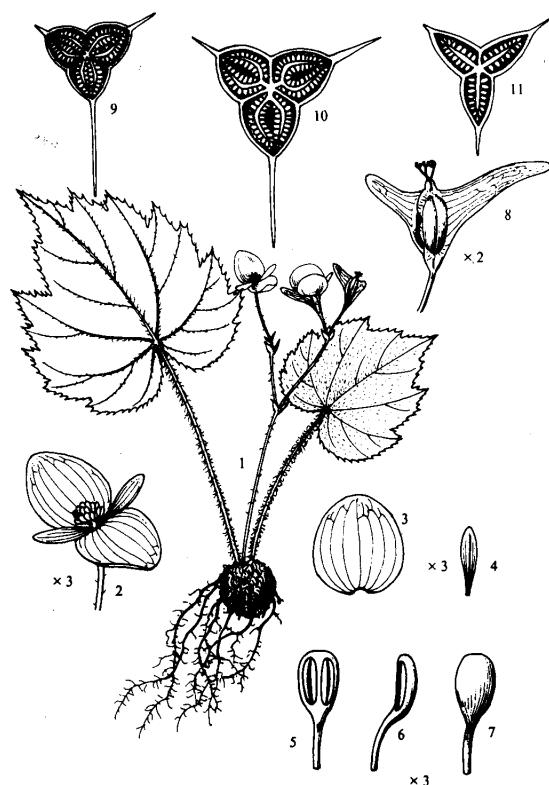


图 4 圭山秋海棠 *Begonia guishanensis* S.H.Huang & Shui, sp. nov. 1. 植株; 2. 雄花; 3—4. 雄花内外花被片; 5—7. 雄蕊; 8. 果实; 9—11. 果实横切面(上、中、下部)。(李锡畴绘)

chartaceae, oblique ovatae, 8—12 cm longae, 7—10 cm latae, apice caudato-acuminatae, vel acutae, basi oblique cordatae, supra virides, subglabrae vel valde parce setulosae, subtus virides vel interdum rubrae, secus nervos dense pubescentes, margine subintegrae vel repandae; nervis palmatis. Cymae pauciflorae, 3—4-florae, pedunculo 3 cm longo, pubescente, in medio 1-foliolato; bracteae oblongae, 1.2 cm longae, 4—5 mm latae, apice acutae. Flores ♂: pedicelli circ. 1.2 cm longi, puberuli; tepala 4, rosea, exteriores 2 late ovata, 1.8 cm longa, 1.2 cm lata, extus puberula, interiores 2 minores, oblonga, 7—8 mm longa, 5 mm lata, glabra; stamina numerosa, androphoro 4 mm longo, filamentis 1—1.2 mm longis, antheris obovato-oblongis, 1 mm longis, flavis, connectivis apice leviter dilatatis. Flores ♀: pedicelli circ. 1.2 cm longi, puberuli; tepala 5, exteriores 2 majores, late ovata, 1.8 cm longa, 1 cm lata, extus puberula, interiores sensim diminuta, oblonga, 1—1.2 cm longa, 4—5 mm lata, glabra; ovarium obovatum, 1 cm longum, 5

Yunnan (云南): Lunan Xian (路南县), Guishan (圭山), alt. 1990 m, VII, 1991, Shui Yumin (税玉民) B91—651 (Type in YUNU); ibid. VIII, 1990, Shui Yumin B90—44.

本种外形似心叶秋海棠 *Begonia labordei* Lévl., 但雾伞花序少花, 3—5朵, 花被片深红色, 蒴果较小, 具极不等的3翅而异。

5. 大围山秋海棠 新种 图 5

Begonia daweihsianensis S.H.Huang et Shui, sp. nov.

Species *B. rockii*, Irmsch., affinis, sed plantis omnino pubescentibus, petiolis pubescentibus, foliis supra subglabris, subtus pubescentibus, floribus majoribus differt.

Herba perennis, acaulis. Rhizoma repens, dense cinereo-pubescentis, internodiis circ. 1 cm longis, 0.5—0.7 cm in diam. Stipulae ovatae, 1.3—1.6 cm longae, apice caudatae, basi rotundatae, extus pubescentes. Folia basalia; petioli 15—30 cm longi, fusci-rubri, dense cinerei-pubescentes; Iaminae

mm latum, puberulum, biloculatum, inaequaliter trialatum; laminae placentarii 2, bifidis; stylis 2, distincti, stigmatibus 2-ramosis, contortis. Capsula obovata, nutans, 12 mm longa, 7 mm lata, inaequaliter trialata, ala majore linguiforme, 18 mm longa, 8 mm lata, margine superiore descendente, inferiore leviter ascendent, apice rotundata, reticulatis, alis ceteris minoribus, aequaliter, oblongis, 6 mm longis, 12 mm latis, margine superiore horizontalibus, inferiore ascendentibus.

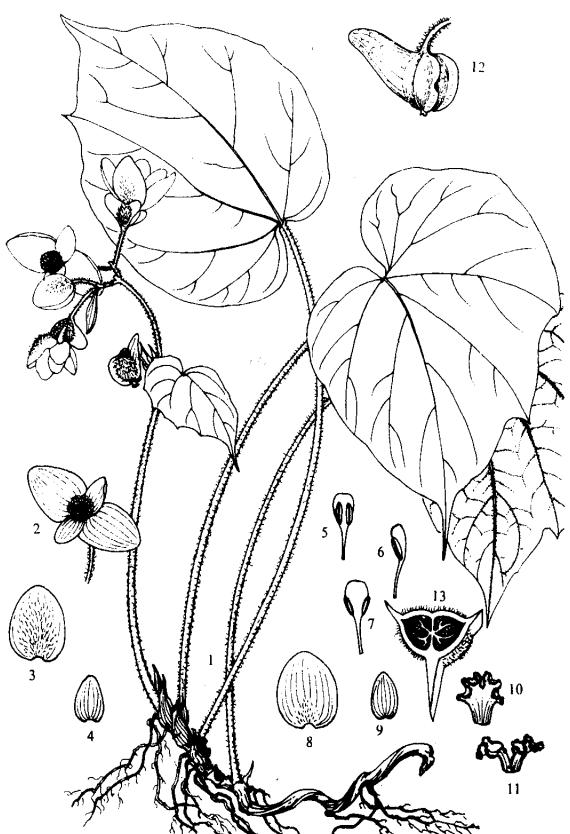


图 5 大围山秋海棠 *Begonia daweishanensis* S.H. Huang & Shui, sp. nov. 1. 植株; 2. 雄花; 3—4. 雄花内外花被片; 5—7. 雄蕊; 8—9. 雌花内外花被片; 10—11. 柱头; 12. 果实; 13. 果实横切面 (李锡畴绘)

mm in diam, parce hirsuti; laminae ambitu suborbicularibus, 13—22 cm longae, 8—16 cm latae, apice acuminatae, basi subaequaliter vel leviter inaequaliter cordatae, margine parce setosis, serratis, supra parce hirsutae, subtus secus nervos parce hirsutis, 5—7-partitae, lobo medio longissimo, oblongo, lobis lateralibus leviter brevibus, lobis basilaribus brevissimis, triangularibus. Cymae terminales, 3—5-florae, pedunculo circ. 13 cm longo, leviter hirsuto; bracteae ovatae, 1.5—2 cm longae, 1.5 cm latae, apice acutae, glabrae, caducae. Flores ♂: pedicelli 3.2 cm longi, setulosi; tepala 4, rosea, extus in medio dense hirsuta vel glabra, interiores 2 minores, elliptica, 2 cm longa, 1.3 cm lata, glabra; stamina numerosa, basi connata, androphoro 4 mm longo, filamentis circ. 2.5 mm longis, antheris obovato-oblongis, flavis, 1 mm longis, connectivis apice

Yunna (云南): Pingbian Xian (屏边县), Daweishan (大围山), alt. 1420—1750 m, XII, 1990, Shui Yumin et Wang Xinyu (税玉民, 王新宇) B90-27 (Type in YUNU); ibid. Shui Yumin et Wang Xinyu B90-19.

本种外形似滇缅秋海棠 *Begonia rockii* Irmsch., 但全株被短柔毛, 叶柄被短柔毛, 叶面近无毛, 背面被短柔毛, 花较大而异。

6. 马关秋海棠 新种 图 6

***Begonia maguanensis* S.H. Huang et Shui, sp. nov.**

Species *B. laminariae*, Irmsch., affinis, sed laminis foliorum 5—7-partitis, parce hirsutis, lobis triangulatis usque oblongis, margine serratis, floribus majoribus, exterioribus tepalis hirsutis vel glabris, capsulis hirsutis differt.

Herba perennis acaulis. Rhizoma repens, dense foliatum, ad nodos radicans, internodiis brevibus. Stipulae ovato-triangulatae, 6—7 mm longae, 4—6 mm latae, apice acutae, glabrae, caducae. Folia basalia; petioli 15—22 cm longi, 3—4

mm in diam, parce hirsuti; laminae ambitu suborbicularibus, 13—22 cm longae, 8—16 cm latae, apice acuminatae, basi subaequaliter vel leviter inaequaliter cordatae, margine parce setosis, serratis, supra parce hirsutae, subtus secus nervos parce hirsutis, 5—7-partitae, lobo medio longissimo, oblongo, lobis lateralibus leviter brevibus, lobis basilaribus brevissimis, triangularibus. Cymae terminales, 3—5-florae, pedunculo circ. 13 cm longo, leviter hirsuto; bracteae ovatae, 1.5—2 cm longae, 1.5 cm latae, apice acutae, glabrae, caducae. Flores ♂: pedicelli 3.2 cm longi, setulosi; tepala 4, rosea, extus in medio dense hirsuta vel glabra, interiores 2 minores, elliptica, 2 cm longa, 1.3 cm lata, glabra; stamina numerosa, basi connata, androphoro 4 mm longo, filamentis circ. 2.5 mm longis, antheris obovato-oblongis, flavis, 1 mm longis, connectivis apice

leviter dilatatis, rotundatis. Flores ♀: pedicelli circ. 7 mm longi, setulosi; tepala 5, ovata usque orbiculata, interiores sensim diminuta, 0.8—1.5 cm longa et lata; ovarium oblongum, biloculare, setulosum, inaequaliter trialatum; styli 2, stigmatibus 2-ramosis, ramis spiraliter contortis, papillosis; laminae placentarii 2, bipartitis. Capsula oblonga, hirsuta, inaequaliter trialata, ala mojore linguiforme, 8 mm longa, 5 mm lata, apice obtusa, leviter descendente, alis ceteris aequaliter oblongis, 0.5 cm longis, 1 cm latis; pedicello 1.4 cm longo, hirsuto.

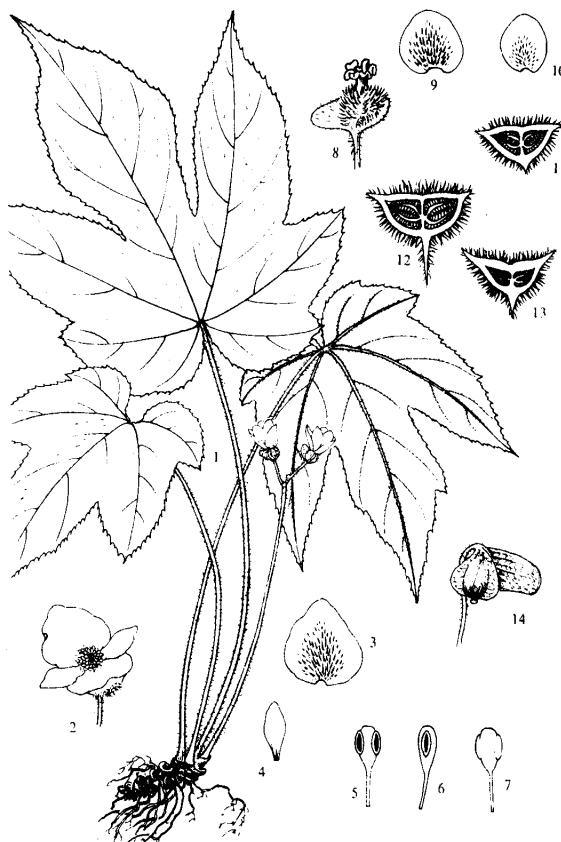


图 6 马关秋海棠 *Begonia maguanensis* S.H. Huang & Shui, sp. nov. 1. 植株; 2. 雄花; 3—4. 雄花内外花被片; 5—7. 雄蕊; 8. 幼果及柱头; 9—10. 雌花内外花被片; 11—13.

果实横切面(上、中、下部); 14. 果实。(李锡畴绘)

caudati-acuminatae, basi subaequaliter cordatae, supra virides, rubro-punctatae, vel rubentes, parce setulosae, subtus rubrae, viridulo-punctates, secus nervos parce setulosae, margine denticulatae, 5—6-palmati-partitae, lobis pinnatifidis, pinnulis 2—3, oblongo-lanceolatis. Cymae basales, 3—7-florae, dischasia 2, pedunculo 25—37 cm longo, rubro-punctato, glabro. Flores ♂: pedicelli 1 cm longi, rubelli, glabri; bracteae late ovatae, 2 cm longae, 1.2 cm latae, apice acutae, rubellae, glabrae, caducae; tepala 4, rubella, exteriores 2 majores late obovata, 2.2 cm longa, 1.5 cm lata, apice rotundata, leviter emarginata, glabra, interiores 2 minores, obovato-oblonga, 1.8 cm longa, 0.8—1 cm lata, apice crenata, rare subintegra, glabra; stamina numerosa, basi connata, androphoro 0.5 mm longo, filamentis 0.5—0.7 mm

Yunnan (云南): Maguan Xian (马关县), Gulingqing (吉林箐), alt. 1760 m, in wood, VII, 1991, Shui Yumin (税玉民) B91-444 (Type in YUNU).

本种近薄叶秋海棠 *Begonia laminariae* Irmsch., 但叶裂片较少, 5—7浅裂, 疏被糙毛, 裂片三角形至长圆形, 边缘有锯齿, 花较大, 外花被片密被糙毛或无毛, 蒴果被硬毛而异。

7. 红斑秋海棠 新种 图 7

***Begonia rubropunctata* S.H.Huang et Shui, sp. nov.**

Species *B. pedatifidae*, Lévl., affinis, sed plantis omnino subglabris vel parce setulosis, rubro-punctatis, lobis foliorum patentissimis, oblongo-lanceolatis differt.

Herba perennans, succulenta. Rhizoma repens, robustum, carnosum, 2—3 cm in diam, dense foliatum, glabrum, internodiis brevis. Stipulae ovatae, circ. 8 mm longae, apice acutae, basi 7 mm latae, glabrae. Folia basalia; petioli 15—25 cm longi, 2.5—3 mm in diam, glabri, hyalini, rubro-punctati; laminae ambitu orbicularis, 15—20 cm longae et latae, apice

caudati-acuminatae, basi subaequaliter cordatae, supra virides, rubro-punctatae, vel rubentes, parce setulosae, subtus rubrae, viridulo-punctates, secus nervos parce setulosae, margine denticulatae, 5—6-palmati-partitae, lobis pinnatifidis, pinnulis 2—3, oblongo-lanceolatis. Cymae basales, 3—7-florae, dischasia 2, pedunculo 25—37 cm longo, rubro-punctato, glabro. Flores ♂: pedicelli 1 cm longi, rubelli, glabri; bracteae late ovatae, 2 cm longae, 1.2 cm latae, apice acutae, rubellae, glabrae, caducae; tepala 4, rubella, exteriores 2 majores late obovata, 2.2 cm longa, 1.5 cm lata, apice rotundata, leviter emarginata, glabra, interiores 2 minores, obovato-oblonga, 1.8 cm longa, 0.8—1 cm lata, apice crenata, rare subintegra, glabra; stamina numerosa, basi connata, androphoro 0.5 mm longo, filamentis 0.5—0.7 mm

longis, antheris oblongis, flavis 1.2 mm longis, connectivis apice dilatatis, leviter productis. Flores ♀ : pedicelli 7—8 mm longi, glabri, prope apicem 2-bracteolatis; bracteolae triangulatae, 1 mm longae; tepala 4—5, suborbiculata, rosea, interiores sensim diminuta, exteriores 1 cm longa, 1.2 cm lata, apice acuta, mucronata, glabra; ovarium biloculare, inaequaliter trialatum; styli 2, breves et crassi, stigmatibus 2-ramosis, spiraliter contortis, papillosum; laminae placentarii 2. Capsula elliptica, 1.3 cm longa, 6—7 mm lata, nutans, inaequaliter trialata, ala majore linguiforme, 1.5 cm longa, 1.3 cm lata, apice rotundata, margine superiore descendente, inferiore leviter ascendente, alis ceteris aequalibus, minoribus, lunatis, 3 mm longis, 13 mm latis, glabris; pedicello 2 cm longo.

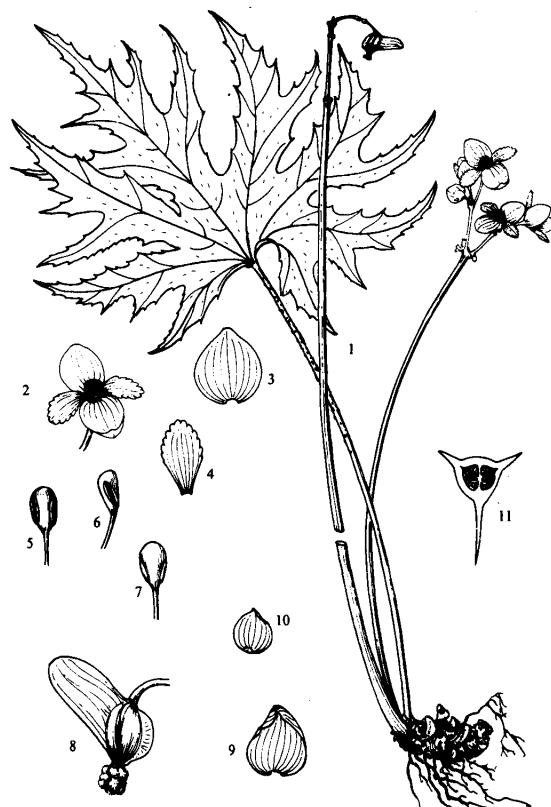


图 7 红斑秋海棠 *Begonia rubropunctata* S.H. Huang & Shui, sp. nov. 1. 植株; 2—4. 雄花内外花被片; 5—7. 雄蕊; 8. 果实; 9—10. 雌花内外花被片; 11. 果实横切面

(李锡畴绘)

laminae chartaceae, valde oblique, ovato-triangulatae, 6.5—13.5 cm longae, 4.5—10 cm latae, apice acuminate, basi oblique cordatae, margine ciliatae, irregulariter lobatae, serratae, supra virides, dense rubro-longisetosae, virido-circulares, subtus purpureae, secus nervos rubro-pilosae, nervis palmatis. Cymae axillares, pauciflorae, pedunculo 2—3 cm longo; bracteae ovato-lanceolatae, 8 mm longae, basi 4 mm latae, margine sublacerae, extus dense rubro-villosae; bracteolae leviter minores. Flores ♂ : pedicelli 1.7 cm loni, parce rubro-pilos; tepala 4, rosea, exteriores 2 ovato-rotundata, 2 cm longa, prope basim 1.3 cm lata, apice obtusa, basi obtusa, extus dense villosa, interiores 2 minores, elliptica, 1.2 cm longa, 0.8 cm lata, apice attenuata, basi attenuata, glabra; stamina numerosa, basi connata, androphoro 1.2 mm longo,

Yunnan (云南): Xishuang Banna (西双版纳), XII, 1991, Shui Yumin (税玉民) 91130 (Type in YUNU); Shui Yumin 1224.

本种近细裂秋海棠 *Begonia pedatifida* Levl., 但植物体各部近无毛, 或疏被小刚毛, 有红色斑块, 叶裂片极开展, 长圆状披针形而异。

8. 紫叶秋海棠 新种 图 8

***Begonia purpureofolia* S.H. Huang et Shui, sp. nov.**

Species *B. villifoliae*, Irmsch., affinis, sed floribus minoribus, antheris rubris, connectivis apice obtusis, capsulis inaequaliter trialatis, foliis ovato-triangulatis, subtus purpuratis differt.

Herba perennis. Rhizoma repens, crassiusculum, 0.7—1 cm in diam. Caulis 40—100 cm altus, 0.5—1.5 cm in diam. Stipulae ovato-lanceolatae, 0.8—1.3 cm longae, 5—7 mm latae, apice acutae, extus dense pilosae, margine ciliatae; petioli 4—12 cm longi, fusci-rubri, crispulo-pilos, superne breviores;

laminae chartaceae, valde oblique, ovato-triangulatae, 6.5—13.5 cm longae, 4.5—10 cm latae, apice acuminate, basi oblique cordatae, margine ciliatae, irregulariter lobatae, serratae, supra virides, dense rubro-longisetosae, virido-circulares, subtus purpureae, secus nervos rubro-pilosae, nervis palmatis. Cymae axillares, pauciflorae, pedunculo 2—3 cm longo; bracteae ovato-lanceolatae, 8 mm longae, basi 4 mm latae, margine sublacerae, extus dense rubro-villosae; bracteolae leviter minores. Flores ♂ : pedicelli 1.7 cm loni, parce rubro-pilos; tepala 4, rosea, exteriores 2 ovato-rotundata, 2 cm longa, prope basim 1.3 cm lata, apice obtusa, basi obtusa, extus dense villosa, interiores 2 minores, elliptica, 1.2 cm longa, 0.8 cm lata, apice attenuata, basi attenuata, glabra; stamina numerosa, basi connata, androphoro 1.2 mm longo,

filamentis 1.6 mm longis, antheris obovatis, rubris, 1.5 mm longis, connectivis apice dilatatis, leviter productis, obtusis. Flores ♀ : pedicelli 2 cm longi, parce rubro-pilos; tepala 5, rosea, late elliptica, interiores sensim diminuta, 8—12 mm longa, 8—10 mm lata, apice obtusa, basi rotundata, extus rubro-pilosa; ovarium obovato-oblongum, 1.2 cm longum, 0.9 cm latum, biloculatum, dense rubro-villosum, inaequaliter trialatum; styli 2, crassiusculi, ad 1/2 in ramulos 2, stigmatibus lunatis, papillosis; laminae placentariae 2. Capsula 1.2 cm longa, 0.9 cm lata, nutans, in juventute rubro-villosa, inaequaliter trialata, ala majore latilinguiforme, 1.6 cm longa, 1.2 cm lata, margine superiore leviter descendente, margine inferiore leviter ascendentem, reticulatis, apice obtusis, alis ceteris subaequilibus, oblongis, 6 mm longis, 12 mm latis, margine superiore subhorizontaliter extensis, inferiore ascendentibus.

Yunnan (云南): Pingbian Xian (屏边县), Daweishan (大围山), alt. 1500m m, XI, 1990, Shui Yumin (税玉民) B90-41 (Type in YUNU); ibid. 1960 class. Yunnan Univ. n. 20; Jinping Xian (金平县), Mengla (猛喇), VII, 1959, 1960 class. Yunnan Univ. n. 1094.

本种近长毛秋海棠 *Begonia villifolia* Irmsch. 但花较小，花药红色，药隔先端钝，蒴果具不等的3翅，叶卵状三角形，背面紫色而异。

9. 河口秋海棠 新种 图9

***Begonia gesnerioides* S.H.Huang et Shui, sp. nov.**

Species *B. palmatae*, D.Don, affinis, sed foliis ovatis, leviter obliquis, penninervibus, valde insignis.

Herba perennis. Rhizoma repens.

Caulis erectus, 30 cm altus, dense brunneo-crispulo-vilosus. Stipulae triangulato-ovatae. 7—8 mm longae, basi 3 mm latae, extus parce villosae, margine ciliatae. Petioli foliorum, basilares 20—25 cm longi, dense brunneo-crispulo-vilosae; laminae chartaceae, ovatae, leviter obliquae, 16.5—22 cm longae, 13—15 cm latae, apice acuminatae, basi late cuneatae, margine irregulariter repandae, supra parce puberulae, subtus secus nervos dense pubescentes, penninervibus, lateralibus 5—6; folia caulina minores. Cymae terminales vel axillares, pauciflorae, pedunculo 2—4 cm longo, brunneo-crispulo-vilosae; bracteae triangulato-lanceolatae, 7 mm longae, 3 mm latae, extus parce villosae, margine parce villosae. Flores ♂ : pedicelli 1.3 cm longi, dense brunneo-crispulo-vilosae; tepala 4, rosea, exteriores 2 mayores, late ovata, 1.3



图 8 紫叶秋海棠 *Begonia purpureofolia* S.H. Huang & Shui, sp. nov. 1. 花枝; 2. 雄花; 3—5. 雄花内外花被片; 6—8. 雄蕊; 9. 雌花; 10—14. 雌花花被片; 15. 果实; 16—18.

果实横切面(上、中、下部); 19. 柱头。(李锡畴绘)

cm longa, 0.8 cm lata, apice rotundata, extus brunneo-villosa, interiores 2 minores, elliptica, 0.8 cm longa, 0.5 cm lata, apice rotundata, glabra; stamna numerosa, basi leviter connata, androphoro 1 mm longo, filamentis 1 mm longis, glabris, antheris oblongis, flavis, 1 mm longis, connectivis apice dilatatis, obtusis. Flores ♀: pedicelli 1.5 cm longi, dense brunneo-crispulo-villosi; tepala 5, rosea, interiores sensim diminuta, late ovata, 1.3—1.5 cm longa, 0.6—0.8 cm lata, apice rotundata, extus parce villosa; ovarium biloculatum, inaequaliter trialatum; styli 2, prope basim in ramulos 2 dividentes, stigmatibus spiraliter contortis; laminae placentarii 2, interdum partitis. Capsula obovato-oblonga, 1.2 cm longa, 0.6 cm lata, extus rufo-villosa, nutans, inaequaliter trialata, ala majore linguiforme, 1.5 cm longa, basi 1.2 cm lata, apice attenuata, obtusa, margine superiore leviter descendente, inferiore leviter ascendentem, brunneo-villosa, alis ceteris aequalibus, triangulatis, 0.6 cm longis, basi 1.2 cm latis, margine superiore horizontaliter extensis, inferiore ascendentibus, brunneo-villosis, pedicello 1.5 cm longo, dense brunneo-villoso.



图 9 河口秋海棠 *Begonia gesnerioides* S.H. Huang et Shui, sp. nov. 1. 植株; 2. 雌花; 3—6. 雌花内外花被片背腹面; 7. 柱头; 8. 果; 9. 果实横切面; 10. 雄花; 11—13. 雄蕊
背腹侧面观; 14—16. 雄花内外花被片。(肖溶绘)

Huang Suhua et Shui Yumin (黄素华, 稅玉民), 92073 (Type in YNU).

本种近裂叶秋海棠 *Begonia palmata* D. Don, 但叶卵形, 稍偏斜, 叶脉羽状, 极为特异。

致谢 本文承蒙吴征镒、李锡文教授审阅, 李锡畴、肖溶同志绘图。

Yunnan (云南): Hekou Xian (河口县), Nan xi (南溪) Hua Yu Dong (花鱼洞), alt. 350—400 m, X, 1992,