**ACTINIDIACEAE**

猕猴桃科 mi hou ke

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Trees, shrubs, or woody vines. Leaves alternate, simple, shortly or long petiolate, not stipulate. Flowers bisexual or unisexual or plants polygamous or functionally dioecious, usually fascicled, cymose, or paniculate. Sepals (2 or 3 or 5), imbricate, rarely valvate. Petals (4 or)5, sometimes more, imbricate. Stamens 10 to numerous, distinct or adnate to base of petals, hypogynous; anthers 2-celled, versatile, dehiscing by apical pores or longitudinally. Ovary superior, disk absent, locules and carpels 3–5 or more; placentation axile; ovules anatropous with a single integument, 10 or more perlocule; styles as many as carpels, distinct or connate (then only one style), generally persistent. Fruit a berry or leathery capsule. Seeds not arillate, with usually large embryos and abundant endosperm.

Three genera and ca. 357 species: Asia and the Americas; three genera (one endemic) and 66 species (52 endemic) in China.

Economically, kiwifruit (*Actinidia chinensis* var. *deliciosa*) is an important fruit, which originated in central China and is especially common along the Yangtze River (well known as yang-tao). Now it is widely cultivated throughout the world.

For additional information see the paper by X. W. Li, J. Q. Li, and D. D. Soejarto (Acta Phytotax. Sin. 45: 633–660. 2007).


1a. Trees or shrubs; flowers bisexual or plants functionally dioecious ................................................................. 3. *Sauraria*

1b. Woody vines; flowers bisexual, plants monoecious or dioecious.

2a. Ovary 15–30-loculed and -styled, styles distinct; fruit a berry without a ridge; seeds numerous; stamens 15–130 .................................................................................................................. 1. *Actinidia*

2b. Ovary 5-loculed and -styled, styles connate; fruit berrylike or a dry leathery capsule, 5-ridged; seeds usually 5; stamens 10 .............................................................................................................. 2. *Clematoclethra*


猕猴桃属 mi hou shu

*Kalomikta* Regel; *Trochostigma* Siebold & Zuccarini.

Climbing shrubs, glabrous or hairy, indumentum of stellate or simple hairs; pith solid or lamellate. Branches usually with linear, lengthwise lenticels; winter buds small, enclosed in swollen base of petiole or exposed. Leaves often long petiolate; stipules minute, obsolete, or absent; leaf blade membranous, papery, or leathery, venation penniveined, veins reticulate, usually in cross-bars, margin serrate or dentate, rarely entire. Inflorescences cymose, axillary, often pseudo-umbellate, few- or many flowered, or flowers solitary; bracts present, minute. Flowers white, pink, red, yellow, or green, bisexual, plants polygamous or functionally dioecious. Sepals (2–)5(6), distinct or connate at base, imbricate, rarely valvate, persistent or not. Petals (4 or)5(6) or more than 5, imbricate. Stamens numerous, in functionally female flowers often with shorter filaments and smaller sterile anthers; filaments slender; anthers yellow, (2–)5(6) or more, distinct or adnate to base of petals, hypogynous; anthers oblong to linear, 2.5–4 mm; styles as many as carpels (15–30), usually reflexed, persistent, radiating, in functionally female flower elongating after anthesis; rudimentary ovary in functionally male flower very small, with minute styles. Fruit a berry, globose, ovoid, or oblong, spotted with lenticels or not, glabrous or hairy. Seeds numerous, oblong, small, immersed in pulp; testa cartilaginous, reticulate-pitted; albumen copious and abundant; embryo comparatively large, cylindrical, straight, at center of albumen; cotyledons short.

About 55 species: E and S Asia; 52 species (44 endemic) in China.

*Actinidia pentapetala* R. G. Li & J. W. Li (Ann. Bot. Fenn. 43: 462. 2006) was regarded as a dubious species by X. W. Li and J. Q. Li (loc. cit.) because no fruits had been seen. The name was originally published by R. G. Li and J. W. Li (Guihaia 23: 194. 2003) but not validly so because no type was indicated (Vienna Code, Art. 37.6).

1a. Fruit not spotted with lenticels.

2a. Pith solid, white; flowers white; sepals 2–5; petals 5–12.

3a. Sepals (4 or)5; petals 5; leaves adaxially sparsely strigillose ........................................................................... 5. *A. polygama*

3b. Sepals 2 or 3; petals 5–12; leaves adaxially not strigillose.

4a. Fruit ovoid to obovoid, rostrum on apex ± conspicuous; seeds ca. 3 mm, ca. 2.5 mm in diam.; sepals (2 or)3; petals 5–9; anthers oblong to linear, 2.5–4 mm .......................................................... 6. *A. valvata*

4b. Fruit globose, rostrum on apex inconspicuous; seeds 4–5 mm, ca. 3 mm in diam.; sepals 2 or 3; petals 5–12; anthers ovoid, 1.5–2.5 mm ............................................................. 7. *A. macrosperma*

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2b. Pith lamellate, white or brown; flowers greenish, white, or red; sepals 4–6; petals 5.
5a. Ovary bottle-shaped; flowers white or greenish; apex of fruit rostrate; pith white to brown; leaves abaxially glaucous or not.
6a. Leaf blade abaxially usually not glaucous, ovate to broadly ovate or orbicular, sometimes
   ovate-oblong, membranous to papery ................................................................. 1. A. arguta
6b. Leaf blade abaxially usually glaucous, ovate-lanceolate, ovate-oblong, oblong, or ovate,
   occasionally orbicular, papery to leathery .......................................................... 2. A. melanandra
5b. Ovary cylindric; flowers white to pink; apex of fruit not rostrate; pith brown; leaves abaxially not
   glaucous.
7a. Flowers pink or white, 5(or 6)-merous; leaves abaxially with ± conspicuous tufts of white hairs in
   axils of lateral veins .............................................................................................. 3. A. kolomikta
7b. Flowers white, 4-merous, rarely 5-merous; leaves abaxially with very conspicuous white tufts of
   hairs in axils of lateral veins .................................................................................. 4. A. tetramera
1b. Fruit spotted with lenticels.
8a. Leaves normally abaxially glabrous or occasionally hairy, but hairs not stellate or imperfectly stellate.
9a. Branches and petioles pubescent, hairs usually rigid and long.
10a. Ovary setose; sepals abaxially hispidulous .......................................................... 22. A. holotricha
10b. Ovary and sepals tomentose (sepals occasionally glabrous).
   11a. Leaf margin irregularly setose-serrulate (usually with 2 short teeth in between 2 long ones) ...... 23. A. rubus
   11b. Leaf margin regularly serrulate to serrate.
   12a. Leaf blade orbicular-obovate, apex truncate and emarginate or rounded and
cuspidate ..................................................................................................................... 24. A. chengkouensis
   12b. Leaf blade oblong-lanceolate, ovate, or oblong-elliptic to oblong-obovate, apex
   acute to acuminate.
   13a. Fruit oblong to globose, more than 1.5 cm in diam.
   14a. Leaf blade oblong-lanceolate to -ovate, abaxially glaucous ................................. 28. A. hemsleyana
   14b. Leaf blade oblong-ovate to broadly ovate, abaxially not glaucous ...................... 29. A. vitifolia
13b. Fruit cylindric, less than 1 cm in diam.
   15a. Leaves ferruginous hispid, abaxially prominently glaucous .............................. 25. A. melliana
   15b. Leaves strigose or puberulent, abaxially not or slightly glaucous.
   16a. Both surfaces of leaves usually densely strigose, occasionally so on
   midvein and lateral veins to rarely glabrous, abaxially not glaucous;
   branchlets strigose, hairs basally not dilated ..................................................... 26. A. rudis
   16b. Both surfaces of leaves often glabrous or slightly puberulent, adaxially
   occasionally sparsely strigose, abaxially glaucous or not; branchlets
   hispid-strigose, hairs basally obviously dilated .................................................. 27. A. henryi
9b. Branches and petioles usually glabrous, if hairy, then hairs fine and soft, occasionally strigose on
   branchlets and petioles in A. fortunatii and A. callosa.
17a. Pith solid.
   18a. Flowers 2–6, in subsessile, axillary clusters ...................................................... 8. A. fasciculoides
   18b. Flowers solitary or in pedunculate clusters; peduncles or pedicels 1–2 cm.
   19a. Inflorescences umbellate, usually 3–5-flowered .............................................. 9. A. umbelloides
   19b. Inflorescences cymose, usually 1-flowered ...................................................... 10. A. rubricaulis
17b. Pith lamellate.
   20a. Leaves abaxially not glaucous.
   21a. Branchlets tomentose; inflorescence usually 3–9- or more flowered ....................... 11. A. rufa
   21b. Branchlets rarely tomentose; inflorescence usually 1–3-flowered.
      22a. Leaf margin inconspicuously mucronulate on current year leaves or shallowly
      crenate-serrate on two-year leaves; pith white to brown .................................... 14. A. cylindrica
      22b. Leaf margin ciliate-serrulate to coarsely serrate; pith brown.
      23a. Lenticels sparse, inconspicuous on branches; leaves with strongly raised
      parallel cross-bars on veinlets; flowers reddish ........................................... 12. A. ulmifolia
      23b. Lenticels dense, conspicuous on branches; leaves with slightly raised
      parallel cross-bars on veinlets; flowers white ..................................................... 13. A. callosa
   20b. Leaves abaxially glaucous.
   24a. Branchlets with very conspicuous lenticels; leaves leathery to thickly leathery .......... 15. A. laevisissima
   24b. Branchlets with inconspicuous to conspicuous lenticels; leaves papery to leathery.
      25a. Pith white; flowers red; leaves basally distinctly cordatulate to auriculate
cordate ...................................................................................................................... 16. A. fortunatii
      25b. Pith brown; flowers white or yellow; leaves basally cuneate to truncate or
rounded, occasionally cordatulate.

26a. Young branchlets, young leaves abaxially on midvein and lateral veins, and inflorescences rusty glandular-tomentose.

27a. Flowers yellow; leaf margin crenate-serrate; sepals on fruit persistent, reflexed  ............................................................... 17. *A. chrysantha*

27b. Flowers white; leaf margin subentire to inconspicuously and remotely crenate-serrulate or serrulate toward apex; sepals not persistent on fruit .............................................................................. 18. *A. indica*

26b. Young branchlets, young leaves abaxially on midvein and lateral veins, and inflorescences not rusty glandular-tomentose.

28a. Leaves on flowering branchlets apically rounded ........................................ 21. *A. sabiifolia*

28b. Leaves on flowering branchlets never apically rounded.

29a. Leaf blade often narrowly ovate, base rounded, petiole 1.5–2.5 cm ............................................................... 19. *A. glaucocallosa*

29b. Leaf blade often oblong-ovate, base truncate, petiole 2.5–5 cm ............................................................... 20. *A. trichogyna*

30a. Abaxial surface of leaves imperfectly stellate pubescent.

31a. Leaves minutely imperfectly stellate- or arachnoid pubescent.

32a. Abaxial surface of leaves with minute hairs, and ± conspicuous parallel cross-bars on veinlets ............................................................... 47. *A. stellatopilosa*

32b. Abaxial surface of leaves with arachnoid hairs, and very prominent parallel cross-bars on veinlets ..................................................................................................................................... 48. *A. venosa*

31b. Leaves imperfectly long stellate, easily visible.

33a. Petals 5, 1–1.1 cm; pith white or brownish ............................................................... 46. *A. pilosula*

33b. Petals 5 or 6, 1–1.6 cm; pith brown.

34a. Inflorescence 3–7-flowered; flowers pink or rosy; leaf blade ovate-lanceolate ..... 44. *A. zhejiangensis*

34b. Inflorescence 1–3-flowered; flowers yellow; leaf blade obovate ............................... 45. *A. grandiflora*

30b. Abaxial surface of leaves perfectly stellate pubescent.

35a. Leaves usually with sparse, easily caducous, stellate hairs, hairs nearly fallen at fruiting.

36a. Inflorescences 3- or 4-branched, 10- or more flowered ............................................................... 32. *A. latifolia*

36b. Inflorescences 1- or 2-branched, 1–7-flowered.

37a. Fruit glabrous when mature.

38a. Sepals 3–6, margin tomentose; petals 5 or 6, 7–9 mm  ............................................................... 40. *A. hubeiensis*

38b. Sepals 4–6, both surfaces tomentose; petals 5–8, 9–20 mm.

39a. Petals 7 or 8; sepals 5 or 6; leaves leathery ............................................................... 41. *A. sorbifolia*

39b. Petals 5 or 6; sepals 4 or 5; leaves papery.

40a. Leaf blade obovate to oblong-ovate, apex abruptly acute to truncate ............................................................... 42. *A. obovata*

40b. Leaf blade broadly ovate or broadly obovate to obovate, apex acute to abruptly acuminate to cuspidate ............................................................... 43. *A. lijiangensis*

37b. Fruit tomentose when mature.

41a. Fruit sparsely tomentose when mature; leaves obovate-ovate to broadly ovate when mature.

42a. Leaves abaxially glaucous near margins, reticulate veins not prominent ... 49. *A. persicina*

42b. Leaves abaxially not glaucous, reticulate veins prominent ........................ 50. *A. rongshuiensis*

41b. Fruit densely tomentose when mature; leaves broadly ovate to orbicular when mature.

43a. Fruit uniformly oblong, 2–4 cm ............................................................... 51. *A. longicarpa*

43b. Fruit ovoid to oblong, ca. 1.7 cm ............................................................... 52. *A. linguensis*

35b. Leaves usually with ± dense persistent stellate hairs.

44a. Both surfaces of leaves usually hairy, adaxially at least setose or strigose on midvein and lateral veins.

45a. Peduncles subsessile; flowers in nearly fasciculate clusters; tomentum on leaves thickly cottony or not.

46a. Branchlets and petioles thickly lanate-pubescent ............................................................... 30. *A. farinosa*

46b. Branchlets and petioles setose-pubescent ............................................................... 31. *A. rufotricha*

45b. Peduncles easily visible; flowers in cymose clusters; tomentum on leaves not cottony.

47a. Inflorescences 3- or 4-branched, 10- or more flowered ............................................................... 32. *A. latifolia*

47b. Inflorescences 1- or 2-branched, 1–7-flowered.
48a. Leaves abaxially sparsely tomentose; branchlets and petioles brownish velutinous ................................................................. 33. *A. fulvicoma*

48b. Leaves abaxially tomentose; branchlets and petioles densely tomentose or hirsute, occasionally velutinous.

49a. Branchlets and petioles tomentose ........................................... 33. *A. fulvicoma*

49b. Branchlets and petioles hirsute or hirsute-setose.

50a. Adaxial surface of leaves densely softly setose, branchlets and petioles hirsute ................................................................. 33. *A. fulvicoma*

50b. Adaxial surface of leaves densely scabrid-hispid, branchlets and petioles hispid-setose ......................................................... 34. *A. chinensis*

44b. Leaves abaxially hairy, adaxially glabrous or hairy when young, but glabrescent when mature.

51a. Inflorescence 1-branched, 1–3-flowered; leaves abaxially long stellate, easily observed.

52a. Branchlets, buds, abaxial leaf surface, petioles, inflorescence, sepals, and fruit always with white indumentum ........................................... 38. *A. eriantha*

52b. Branchlets and entire plant with yellowish brown or ferruginous indumentum, at least hairs on sepals and fruit yellowish brown.

53a. Leaf blade ovate, base cordate, lateral veins arcuate, often not furcate; fruit cylindrical, to 1 cm in diam. ........................................... 39. *A. liangguangensis*

53b. Leaf blade obovate, base truncate or obtuse, lateral veins spreading, often furcate on upper part; fruit cylindrical-globose or obovate ....................... 34. *A. chinensis*

51b. Inflorescence 2–4-branched or racemiform, 5–10- or more flowered; leaves abaxially shortly stellate, not easily observed.

54a. Male inflorescences racemiform, 14–20 cm; female inflorescences 1- or 2-branched, ca. 5 cm; pedicels stout .................................................. 35. *A. suberifolia*

54b. Both male and female inflorescences cymose, 2–4-branched, at most 6–7 cm; pedicels slender.

55a. Peduncle 2.5–8.5 cm, inflorescence 10- or more flowered; leaf blade basally obtuse to rounded or cordulate, more than 5 cm wide, petiole more than 3 cm ................................................................. 32. *A. latifolia*

55b. Peduncle to 1.5 cm, inflorescence 5–7-flowered; leaf blade basally cuneate to obtuse, 2–4.5 cm wide, petiole 1–2 cm.

56a. Petals white; leaf blade 4.5–5 cm wide, apex shortly acuminate, abaxially whitish tomentose with stellate hairs; branchlets, petioles, and inflorescences brownish velutinous ............................................. 36. *A. styracifolia*

56b. Petal brown; leaf blade 2–3 cm wide, apex acuminately acuminate, abaxially grayish tomentose with stellate hairs; branchlets, petioles, and inflorescences ferruginous velutinous .......... 37. *A. lanceolata*


软枣猕猴桃 ruan zao mi hou tao

Climbing shrubs, large, deciduous. Branchlets glabrous or rarely puberulent, tomentose when young, 7–15 cm; second-year branches grayish brown, glabrous, lenticels absent when young, small and inconspicuous when old; pith white to brown, lamellate. Petiole pinkish brown, 3–6(–10) cm, glabrous, sometimes rusty tomentose or setose; leaf blade abaxially green, adaxially dark green, usually ovate to broadly ovate to suborbicular, sometimes ovate-oblong, 6–12 × 5–10 cm, membranous to papery, abaxially glabrous to rusty tomentose to strigillose especially on midvein and lateral veins, barbate in axils of lateral veins or not, adaxially glabrous, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins 5–7 pairs, straight or arcuate-ascending, anastomosing, veinlets reticulate, subconspicuous abaxially, inconspicuous adaxially, base rounded to cordate, rarely broadly cuneate, symmetrical or oblique, margin sharply serrate, apex abruptly acuminate. Inflorescences cymose, axillary or lateral, 1–7-flowerved, brown to pale brown tomentose; peduncles 7–10 mm; pedicels 0.8–1.4 cm; bracts linear, 1–4 mm. Flowers greenish yellow or white, 1.2–2 cm in diam. when fully open. Sepals 4–6, ovate to obovate, 3.5–5 mm, margin ciliate, both surfaces glandular-tomentose, or abaxially slightly puberulent or glabrous. Petals 4–6, cuneate-obovate to orbicular-obovate, 7–9 mm. Filaments silky, 1.5–3 mm; anthers black or dark purple, oblong, 1.5–2 mm, sagittate at base. Ovary bottle-shaped, 6–7 mm, glabrous; styles 3.5–4 mm. Fruit greenish yellow or purplered when mature, globose to oblong, 2–3 cm, rostrate or inconspicuously so, glabrous, lenticels and persistent sepals absent. Seeds ca. 2.5 mm. Fl. Apr, fr. Aug–Oct. 2n = 58, 116*, 174, 232.

Mountain forests, thickets, streambeds, moist places, also widely cultivated; 700–3600 m. Anhui, Chongqing, Fujian, Gansu, Guangxi, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangxi, Jilin, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Japan, Korea].

1a. Leaves abaxially glabrous or very sparsely strigillose on midvein .......................... 1a. var. *arguta*
1b. Leaves abaxially rusty tomentose on midvein and lateral veins to throughout entire surface ........................................... 1b. var. giraldii

1a. Actinidia arguta var. arguta

軟枣猕猴桃（原变种） ruan zao mi hou tao (yuan bian zhong)


Leaves membranous to papery, abaxially glabrous or very sparsely strigillose on midvein, especially on lower part of midvein.

Mountain forests, thickets, streamsides, moist places, also widely cultivated; 700–3600 m. Anhui, Chongqing, Fujian, Gansu, Guangxi, Guizhou, Hebei, Henan, Hunan, Jiangxi, Jilin, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Yunnan, Zhejiang.


陕西猕猴桃 shan xi mi hou tao


Leaves papery, abaxially curly rusty tomentose on midvein and lateral veins or throughout entire surface. 2n = 58*.

- Mountain forests; 900–2400 m. Chongqing, Fujian, Gansu, Guangxi, Guizhou, Hebei, Henan, Huize, Hunan, Jiangxi, Jilin, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Yunnan, Zhejiang [Japan, Korea].


黑莓猕猴桃 hei rui mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets red-brown, puberulent, 1- or 2-branched, 1–7-flowered; peduncles 1–1.2 cm; pedicels 0.7–1.5 cm; bracts linear, minute, 1–2 mm. Flowers greenish or yellowish white or paper-white. Sepals (4 or 5), ovate to oblance-ovate, 3–7 mm, glabrous, sometimes ciliate. Petals (4 or 5) or 6, cuneate-ovate to orbicular-ovate, 0.6–1.3 cm. Filaments 2.5–3 mm; anthers black, oblong, 2.3–3.5 mm, sagittate at base. Ovary bottle-shaped, ca. 7 mm, glabrous; styles 4–5 mm. Fruit globose to oblance, 2–4.5 cm, glabrous, lenticels absent, rostrate at apex; sepals caducous. Seeds 2–3 mm. Fl. May–Jun, fr. Sep. 2n = 58*, 116*.

- Broad-leaved forests, mountain forests, moist places, also widely cultivated; 1000–1600 m. Anhui, Chongqing, Fujian, Gansu, Guizhou, Henan, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang.

1a. Leaves abaxially barbate in axils of lateral veins ........................................... 2a. var. melanandra

1b. Leaves abaxially not barbate in axils of lateral veins ........................................... 2b. var. glabrescens

2a. Actinidia melanandra var. melanandra

黑莓猕猴桃（原变种） hei rui mi hou tao (yuan bian zhong)


Leaf blade elliptic to broadly oblong to ovate, 6.2–13.5 × 2.6–4.8 cm, or broadly ovate to orbicular-ovate, 6.5–13 × 5–7.3 cm, abaxially barbate in axils of lateral veins, base broadly cuneate to rounded to cordatulate, apex acuminate to abruptly acuminate.

- Mountain forests; 900–2400 m. Chongqing, Fujian, Gansu, Guizhou, Henan, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang.


无髯猕猴桃 wu ran mi hou tao

Leaf blade narrowly elliptic, 7–10 × 2.5–3.2 cm, abaxially not barbate in axils of lateral veins, base broadly cuneate, apex abruptly acuminate.

- Mountain forests; 900–2400 m. Chongqing, Fujian, Gansu, Guizhou, Henan, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang.


狗枣猕猴桃 gou zao mi hou tao


Climbing shrubs, large, deciduous. Branchlets glabrous, lenticels inconspicuous to subconspicuous when young, con-
spicicus when old; pith brown, lamellate. Petiole yellowish white to reddish brown, 2.5–5 cm, sparsely pubescent to glabrous; leaf blade broadly ovate to oblong-ovate or oblong-ovate, 6–15 × 5–10 cm, membranous to thinly papery, abaxially glabrous to subglabrous, sometimes barbate at vein axils, adaxially sparsely strigillose, midvein and lateral veins distinct and raised abaxially, slender, inconspicuous adaxially, lateral veins 6–8 pairs, veinlets reticulate, inconspicuous on both surfaces to subconspicuous abaxially, base cordate, occasionally rounded to truncate, equal or oblique, margin serrate to biserrate, apex acute to abruptly acuminate. Inflorescences cymose, 1–3-flowered; peduncles 0.8–1.2 cm, very slender; pedicels 4–10 mm, glabrous to yellowish brown to mentose; bracts linear, minute. Flowers pink or white. Sepals 4(or 5), oblong-ovoid, 1.5–2 cm, glabrous, lenticels absent; persistent sepals 1.3 cm, glabrous; styles ca. 4 mm. Fruit orange when mature, ovoid, 2–2.5 cm, glabrous, lenticels absent; sepals caducous. Seeds ca. 2 mm. Fl. Apr–Jul, fr. Sep.–Oct. 2n = 58*, 116*.

Mountain mixed forests in open places, also widely cultivated; 1600–2900 m. Chongqing, Gansu, Hebei, Heilongjiang, Hubei, Jiangsu, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Yunnan [Japan, Korea, Russia].

Actinidia kolomikta var. shihmiensis C. Y. Chang (J. Sichuan Univ., Nat. Sci. Ed. 3: 78, 1976), described from Sichuan, could not be treated here because no material was seen by the authors.


四萼猕猴桃 | si e mi hou tao

Actinidia tetramera var. badongensis C. F. Liang; Clematoctethra giraldii Diels.

Climbing shrubs, mid-sized, deciduous. Branchlets grayish to reddish, glabrous, lenticils conspicuous; pith brown, lamellate. Petiole 1.2–3.5 cm, glabrous or sparsely setose; leaf blade oblong-ovate to oblong-elliptic or elliptic-lanceolate, 4–8 × 2–4 cm, thinly papery, abaxially glabrous to slightly strigillose on midvein, always very conspicuously white barbate at axils of lateral veins, adaxially glabrous to sparsely strigillose on midvein and lateral veins, midvein and lateral veins subconspicuous to conspicuous on both surfaces, lateral veins 6 or 7 pairs, veinlets reticulate, inconspicuous, base narrowly cuneate-rounded to rounded or truncate, usually oblique, margin serrulate, apex long acuminate. Inflorescences 1-flowered, rarely 2– or 3-flowered cymes; pedicels 1.5–2.2 cm, glabrous, bracts linear, minute. Flowers somewhat pinkish white. Sepals 4(or 5), oblong-ovate, 4–5 mm, glabrous. Petals 4(or 5), ovate, 7–10 mm. Filaments ca. 4 mm; anthers yellow, ovoid, ca. 1.5 mm, both ends rounded. Ovary cylindrical to slightly bottle-shaped, ca. 3.5 mm, glabrous; styles ca. 4 mm. Fruit orange when mature, ovoid, 1.5–2 cm, glabrous, lenticels absent; persistent sepals reflexed. Seeds ca. 2.5 mm. Fl. May–Jun, fr. Sep. 2n = 58*.

Mountain forests, thickets, moist places; 1100–2700 m. Chongqing, Gansu, Henan, Hubei, Shaanxi, Sichuan, Yunnan.


葛枣猕猴桃 | ge zao mi hou tao


Climbing shrubs, large, deciduous. Branchlets glabrous, lenticils inconspicuous; pith white, large, solid. Petiole purplish red, 1.5–3.5 cm, glabrous; leaf blade abaxially pale green, adaxially green to entirely white, sometimes only upper half white or yellowish, ovate to oblong-ovate, 7–14 × 4.5–8 cm, membranous to thinly papery, abaxially glabrous or sparsely curly-tomentose to strigillose on midvein and lateral veins, adaxially sparsely strigillose, veins conspicuous abaxially, subconspicuous adaxially, lateral veins 6 or 7 pairs, arcuate-ascending, veinlets reticulate, abaxially subconspicuous with parallel crossbars, inconspicuous adaxially, base broadly cuneate to rounded, margin serrate, apex acuminate to abruptly acuminate. Inflorescences 1-flowered, or 2- or 3-flowered in a fascicle; pedicels 6–8 mm, slightly puberulent. Flowers white. Sepals (4 or)5, ovate to oblong-ovate, 5–7 mm, both surfaces glabrous or sparsely puberulent. Petals 5, ovate to oblong-ovate, 0.8–1.3 cm. Filaments 5–6 mm; anthers yellow, ovoid, 1–1.5 mm, sagittate at base. Ovary bottle-shaped, 4–6 mm, glabrous; styles 3–4 mm. Fruit orange when mature, ovoid to cylindroid-ovoid to oblong-ovoid, 2.5–3 cm, glabrous, lenticels absent, rostrate at apex. Seeds 1.5–2 mm. Fl. Jun–Jul, fr. Sep.–Oct. 2n = 58, 116.

Mountain forests, also widely cultivated; 500–1900 m. Anhui, Chongqing, Gansu, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jilin, Liaoning, Shaanxi, Shandong, Sichuan, Yunnan [Japan, Korea, Russia].

Actinidia polygama var. puberula C. Y. Chang (J. Sichuan Univ., Nat. Sci. Ed. 3: 79, 1976), described from Sichuan, could not be treated here because no material was seen by the authors.


对萼猕猴桃 | dui e mi hou tao

Actinidia valvata var. boehmerifolia C. F. Liang; A. valvata var. longipedicellata L. L. Yu.

Climbing shrubs, mid-sized, deciduous. Branchlets glabrous, lenticils on younger branchlets inconspicuous, subconspicuous on two-year-old branchlets; pith white, solid. Petiole pale red, 1.5–2 cm, glabrous; leaf blade abaxially pale green, adaxially green, broadly ovate to narrowly ovate, 5–13 × 2.5–7.5 cm, membranous to papery, both surfaces glabrous, veins inconspicuous, lateral veins 5 or 6 pairs, base broadly cuneate or truncate, oblique, decurrent or not, margin finely to coarsely serrate, apex acuminate to rounded. Inflorescences cymose, 1–3-flowered; peduncles ca. 1.5 cm; pedicels 1–4 cm, slightly puberulent; bracts linear, minute. Flowers white. Sepals 2 or 3, ovate to oblong-ovate, 6–9 mm, valvate, abaxially glabrous to sparsely puberulent. Petals 5–9, oblong-ovate, 1–2 cm. Filaments ca. 5 mm; anthers yellow, oblong to linear, 2.5–4 mm. Ovary bottle-shaped, ca. 5 mm, glabrous. Fruit orange when
mature, ovoid to obovoid, 2–2.5 cm, not lenticellate, rostrate at apex; persistent sepals reflexed at base. Seeds 1.8–3.5 mm, ca. 2.5 mm in diam. Fl. May, fr. unknown. 2n = 116*.

- Sparse forests, thickets, low mountain valleys; ca. 1000 m. Anhui, Fujian, Guangdong, Hubei, Hunan, Jiangsu, Jiangxi, Zhejiang.


大籽猕猴桃 da zi mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets glabrous; pith pale brown, solid. Petiole 3–4.5 cm, glabrous; leaf blade abaxially green, adaxially dark green, oblom-sorbicular to rhombic-elliptic, 7–11 × 4–7.5 cm, thinly leathery, glabrous, veins conspicuous abaxially, lateral veins 6 or 7 pairs, reticulate veins dense and conspicuous with distinct and raised parallel cross-bars, base cuneate to rounded, margin serrate to coarsely serrate toward apex, apex cuspidate to shortly acuminate. Flowers unknown. Young fruit 2–6 in axis of leaves, nearly fasciculate; peduncle inconspicuous to 2 mm; fruiting pedicel 1.2–1.4 cm. Fruit blackish green, ovoid to oblong-cylindric, 1.5–2 cm, glabrous, lenticels brownish, orbicular, conspicuous. Seeds ca. 2.5 mm. Fl. unknown, fr. Sep–Nov.

- Sparse mountain forests, limestone mountains; 400–1500 m. Guangxi, Yunnan.

8a. *Actinidia fasciculoides* var. *fasciculoides*

簇花猕猴桃 cu hua mi hou tao

Climbing shrubs, large, deciduous. Branchlets glabrous, lenticels very conspicuous; pith pale brown, solid. Petiole 3–4.5 cm, glabrous; leaf blade abaxially green, adaxially dark green, oblong-sorbicular to rhombic-elliptic, 7–11 × 4–7.5 cm, thinly leathery, glabrous, veins conspicuous abaxially, lateral veins 6 or 7 pairs, reticulate veins dense and conspicuous with distinct and raised parallel cross-bars, base cuneate to rounded, margin serrate to coarsely serrate toward apex, apex cuspidate to shortly acuminate. Flowers unknown. Young fruit 2–6 in axis of leaves, nearly fasciculate; peduncle inconspicuous to 2 mm; fruiting pedicel 1.2–1.4 cm. Fruit blackish green, ovoid to oblong-cylindric, 1.5–2 cm, glabrous, lenticels brownish, orbicular, conspicuous. Seeds ca. 2.5 mm. Fl. unknown, fr. Sep–Nov.

- Sparse mountain forests, limestone mountains; 400–1500 m. Guangxi, Yunnan.

8c. *Actinidia fasciculoides* var. *cunealota*

簇花猕猴桃 cu hua mi hou tao (yuan bian zhong)

Peduncle 2.5–3.5 cm; leaf blade oblong-sorbicular, 7–11 × 5.5–7.5 cm, lateral veins 7 pairs, petiole 2.5–3.5 cm; peduncle inconspicuous; fruiting pedicel ca. 1.2 cm. Flowers unknown. Young fruit 2–6 in axis of leaves, nearly fasciculate; peduncle inconspicuous to 2 mm; fruiting pedicel 1.2–1.4 cm.

伞花猕猴桃  san hua mi hou tao

Climbing shrubs, large, deciduous. Branchlets glabrous, lenticels numerous, conspicuous; pith brown, solid. Petiole 4–5 cm, glabrous; leaf blade adaxially dark green, ovate or oblong-ovate to rhombic-suborbicular, 6–14 × 4–8 cm, thinly leathery, both surfaces glabrous, veins conspicuous abaxially, lateral veins 6 or 7 pairs, reticulate veins dense and conspicuous with distinct and raised parallel cross-bars, base obtuse to rounded, oblique, margin callose-crenate-serrate, apex acute or obtuse. Female inflorescences 3–5-flowered, umbelliform, all pedicels crowded on peduncles; peduncles 2.2–5 cm; pedicels ca. 1 cm, both surfaces slightly rusty tomentose; bracts subulate, ca. 3 mm. Flowers unknown. Fruit ovoid, 1.5–2 cm. Fl. May, fr. Nov.

- Mixed forests; 1800–2000 m. Yunnan.

1a. Leaf blade ovate to elliptic, 7–14 × 6.5–7.5 cm.

1b. Leaf blade suborbicular to obovate, 6–7 × 4.5–5.5 cm.

9a. Actinidia umbelloides var. umbelloides

伞花猕猴桃(原变种)  san hua mi hou tao (yuan bian zhong)

Leaf blade ovate to elliptic, 7–14 × 6.5–7.5 cm.

- Mixed forests; 1800–2000 m. Yunnan (Jingdong, Tengchong).


扇叶猕猴桃  shan ye mi hou tao

Leaf blade suborbicular to obovate, 6–7 × 4–5.5 cm.

- Mixed forests; ca. 1800 m. Yunnan (Menghai).


红茎猕猴桃  hong jing mi hou tao

Climbing shrubs, large, deciduous. Branchlets reddish, brownish puberulent; branches glabrous, lenticels small, conspicuous; pith brown, small, lamellate. Petiole 2–4 cm, slightly pubescent, glabrous when mature; leaf blade ovate to broadly ovate or orbicular, 4–16 × 3.5–9.5 cm, papery, both surfaces glabrous except vein axes abaxially barbate, midvein and lateral veins conspicuous abaxially, sulcate axially, lateral veins 6 or 7 pairs, reticulate veinslets conspicuous with sub-conspicuous parallel cross-bars, base rounded to truncate or cordate-ovate, oblique or not, margin shallowly mucronate-serrate, teeth produced by tips of veinlets, reddish, glandular, apex to 2.5 cm. Flowers white to reddish. Sepals 5, ovate to oblong, 4–5 mm, glabrous or sometimes puberulent adaxially, margin ciliate. Petals 5, oblong-ovate to suborbicular, 7–10 mm. Filaments 1–3.5 cm; anthers yellow, ovoid, slightly sagittate at base, rounded at apex. Ovary oblong-ovoid or conical, to 2.5 mm, white pubescent, glabrescent; styles to 3 mm. Fruit dark green, ovoid to globose, 1.5–2 cm, glabrous when mature, lenticels brown; persistent sepals reflexed. Fl. Apr–May, fr. Sep–Nov. 2n = 58*.

- Broad-leaved forests; 300–2900 m. Chongqing, NW Guangxi, Guizhou, Hubei, W Hunan, Sichuan, Yunnan [Thailand].


Leaves thickly leathery. Flowers reddish. Ovary white pubescent until formation of young fruit.

- Broad-leaved forests; above 1000 m. Chongqing, NW Guangxi, Guizhou, W Hubei, W Hunan, Sichuan, Yunnan.

10b. Actinidia rubricaulis var. rubricaulis

红茎猕猴桃(原变种)  hong jing mi hou tao (yuan bian zhong)

Leaves papery. Flowers white. Ovary soon glabrescent.

- Broad-leaved forests; 300–1800 m. Chongqing, NW Guangxi, Guizhou, W Hubei, Sichuan, Yunnan.


山梨猕猴桃  shan li mi hou tao


Climbing shrubs, large, deciduous. Floral branchlets reddish, brownish puberulent; branches glabrous, lenticels small, conspicuous; pith brown, small, lamellate. Petiole 2–4 cm, slightly pubescent, glabrous when mature; leaf blade ovate to broadly ovate or orbicular, 4–16 × 3.5–9.5 cm, papery, both surfaces glabrous except vein axes abaxially barbate, midvein and lateral veins conspicuous abaxially, sulcate axially, lateral veins 6 or 7 pairs, reticulate veinslets conspicuous with sub-conspicuous parallel cross-bars, base rounded to truncate or cordate-ovate, oblique or not, margin shallowly mucronate-serrate, teeth produced by tips of veinlets, reddish, glandular, apex
obtuse to mucronate or long acuminate. Inflorescences cymose, axillary, brownish velutinous. Male inflorescences many flowered. Female inflorescences few flowered. Flowers white. Sepals 5, ovate, ca. 5 mm, both surfaces brownish velutinous, apex acute. Petals obovate, ca. 1 cm. Ovary globose, ca. 6 mm, densely brownish tomentose. Fruit oblong to ovoid, 1.5–2.5 cm, glabrous, lenticels obscure. Fl. and fr. unknown.

Mountain forests; 1000–2000 m. Taiwan [Japan, Korea].

**Actinidia rufa** var. **parvifolia** Dunn (J. Linn. Soc., Bot. 39: 403. 1911), described from Hubei, could not be treated here because no material was seen by the authors.


**榆叶猕猴桃** yu ye mi hou tao

Climbing shrubs, mid-sized, deciduous. Floral branchlets sparsely tomentose, lenticels inconspicuous; two-year-old branches black when dry, striate, with sparse relict strigose hairs, lenticels inconspicuous; pith brown, lamellate. Petiole 2–2.5 cm, glabrous; leaf blade obovate, 6–8.5 × 3.5–5.5 cm, glabrous, midvein and lateral veins conspicuous abaxially, slightly sulcate adaxially, lateral veins 7 or 8 pairs, straight, reticulate veins subconspicuous abaxially with distinct raised parallel cross-bars, base obtuse, margin ciliate-serrulate, apex acute to rounded. Male inflorescences cymose, 1–3-flowered, densely brownish velutinous; peduncles 3–4 mm; pedicels ca. 1 cm; bracts subulate, ca. 2 mm. Flowers reddish. Sepals 5, ovate to oblong-ovate, 6–7 mm, both surfaces densely brownish tomentose. Petals 6, spatulate-ovate, 1.2–1.4 cm, basally gradually narrowed, apex rounded. Filaments 6–8 mm; anthers ovoid, ca. 2.5 mm, sagittate at base; sterile ovary brownish tomentose. Female flowers and fruit unknown. Fl. May, fr. unknown.

- Mountain forests; ca. 900 m. Sichuan (Pingshan).


**硬齿猕猴桃** ying chi mi hou tao

Climbing shrubs, large, deciduous. Floral branchlets glabrous, rarely strigose, lenticels very conspicuous; pith brown, lamellate, or sometimes solid; buds densely rusty strigose; two-year-old branches grayish, with rugose striae when dry, lenticels dehiscent or not, pith brown, lamellate. Petiole reddish, 2–8 cm, glabrous, rarely strigose; leaf blade abaxially pale green, adaxially dark green, ovate to broadly ovate to obvate or elliptic, 5–12 × 3.5–8.5 cm, abaxially glabrous except for barbate vein axes, adaxially glabrous or occasionally strigillose, midvein and lateral veins conspicuous abaxially, slightly sulcate adaxially, lateral veins 6–8 pairs, reticulate veins subconspicuous to conspicuous, with slightly raised parallel cross-bars, base broadly cuneate to rounded to truncate or cordate, margin setose-serrate to serrate to undulate-serrate or subentire, tips of serrations usually callose, apex acute to acuminate to obtuse or rounded. Inflorescences cymose, 1–3-flowered, glabrous or slightly puberulent; peduncles 0.7–1.5 cm; pedicels 1.1–1.7 cm. Flowers white. Sepals 5, ovate, 4–5 mm, glabrous, or abaxially glabrous and adaxially tomentose. Petals 5, obovate, 8–10 mm. Filaments 3–5 mm; anthers yellow, ovoid, 1.5–2 mm, sagittate at base. Ovary subglobose, densely white pubescent; styles slightly longer than ovary. Fruit grayish green, subglobose to ovoid or mammilliform, 1.5–5 cm, glabrous, lenticels brownish, orbicular, conspicuous. Seeds 2–2.5 mm. Fl. Apr–Jun, fr. Sep–Oct. n = 58, 116.

- Forests, forest margins, thickets, slopes, valleys, streamsides, moist places, also widely cultivated; 400–2600 m. Anhui, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [Bhutan, India, Nepal].

The taxonomy of this species remains a complex issue open to further investigation.

1a. Inflorescences slightly hairy or not; sepals hairy.

2a. Inflorescences sparsely tomentose or not; sepals appressed tomentose ... 13a. var. **callosa**

2b. Inflorescences and sepals long tomentose ........................................ 13b. var. **acuminata**

1b. Inflorescences and sepals glabrous.

3a. Leaves adaxially sparsely strigillose ........................................... 13c. var. **strigillosa**

3b. Leaves adaxially glabrous.

4a. Leaf blade often ovate to elliptic-ovate to obvate, margin often sharply to minutely serrate, abaxially often barbate on lateral vein axes; fruit mammilliform to cylindric, to 5 cm .................. 13d. var. **henryi**

4b. Leaf blade elliptic or oblong-elliptic to obvate, margin often coarsely or crenately serrate, abaxially usually not barbate on lateral vein axes; fruit subglobose or ovoid, 1.5–2 cm ........................................ 13e. var. **discolor**

13a. **Actinidia callosa** var. **callosa**

**硬齿猕猴桃(原变种)** ying chi mi hou tao (yu an bian zhong)

**Actinidia arisanensis** Hayata; A. callosa var. formosana Finet & Gagnepain; A. callosa var. pubiramula C. Y. Wu; A. formosana (Finet & Gagnepain) Hayata; A. rankanensis Hayata; A. remogrenensis Hayata.

Branchlets sparsely tomentose or not. Leaf blade obovate-lanceolate to ovate to oblong-ovate or oblong-lanceolate, 5–10 × 2.5–6 cm, papery, abaxially with barbate lateral vein axes. Inflorescences sparsely tomentose or not. Sepals appressed tomentose.

- Forests; thickets; 800–2300 m. Taiwan, Yunnan [Bhutan, India, Nepal].


**尖叶猕猴桃** jian ye mi hou tao

Branchlets glabrous. Leaf blade ovate, 10–15 × 6–8 cm, base rounded, apex long acuminate. Inflorescences and sepals long tomentose.

- Hunan (Rucheng).

毛叶硬齿猕猴桃 mao ye ying chi mi hou tao

Leaf blade broadly ovate to narrowly oblong-ovate, 8–10 × 4–5.5 cm, papery, abaxially with barbate lateral vein axis, margin sharply to slightly serrate, occasionally slightly saddle-shaped biserrate. Fruit mammilliform to cylindric, to 5 cm, papery, abaxially often with barbate lateral vein axils, adaxially sparsely strigillosa, base rounded, margin setose-serrulate, apex acute. Inflorescences and sepals glabrous.

- Mountain forests, valleys; 700–1400 m. Guizhou.


京梨猕猴桃 jing li mi hou tao

Actinidia callosa var. ephippioidea C. F. Liang; A. curvipes Dunn.

Leaf blade abaxially usually ovate to elliptic-ovate to obovate, 8–10 × 4–5.5 cm, papery, abaxially often with barbate lateral vein axis, margin sharply to slightly serrate, occasionally slightly saddle-shaped biserrate. Fruit mammilliform to cylindric, to 5 cm. 2n = 116*.

- Forests, thickets, valleys; 500–2600 m. Chongqing, Fujian, Gansu, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Xizang, Yunnan, Zhejiang.


异色猕猴桃 yi se mi hou tao


Leaf blade abaxially usually grayish yellow when dry, adaxially dark, elliptic to oblong-elliptic to obovate, 6–12 × 3.5–6 cm, firmly papery, both surfaces often glabrous, midvein and lateral veins strongly raised abaxially, base broadly cuneate to obtuse, margin coarsely serrate to undulate-serrate, serration on upper margin larger, apex acute. Inflorescences and sepals glabrous. Fruit subglobose to ovoid, 1.5–2 cm. Fl. May, fr. Oct. 2n = 58*, 116*.

- Mountain forests, thickets, forest margins, thickets, valleys; 400–2000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Sichuan, Taiyuan, Yunnan, Zhejiang.


柱果猕猴桃 (原变种) zhu guo mi hou tao (yuan bian zhong)

Actinidia cylindrica f. obtusifolia C. F. Liang.

Leaf blade abaxially with midvein and lateral veins subconspicuous and reticulate veinlets inconspicuous, lateral veins occasionally conspicuous, base obtuse to rounded.

- Low mountain forests, thickets; 400–800 m. Guangxi (Rongshui).

"Actinidia albicalyx" (R. G. Li & J. W. Li, Guihaia 22: 385. 2002) belong here but were not validly published because no type was indicated (Fenna Code, Art. 37.1, 37.6).

14a. Actinidia cylindrica var. cylindrica

柱果猕猴桃 (原变种) zhu guo mi hou tao (yuan bian zhong)

Actinidia cylindrica f. obtusifolia C. F. Liang.

Leaf blade abaxially with midvein, lateral veins, and reticulate veinlets conspicuous, base auriculate-cordate.

- Low mountain forests, thickets; 600–700 m. Guangxi (Rongshui).


网脉猕猴桃 wang mai mi hou tao

Leaf blade abaxially with midvein, lateral veins, and reticulate veinlets conspicuous, base auriculate-cordate.

- Low mountain forests, thickets; 600–700 m. Guangxi (Rongshui).


滑叶猕猴桃 hua ye mi hou tao

Actinidia jiangouensis S. D. Shi & Z. S. Zhang; A. laevisissima var. floscula S. D. Shi.

Climbing shrubs, mid-sized, deciduous. Branchlets glabrous, lenticels conspicuously raised; buds densely rusty strigose; pith white or brown, lamellate. Petiole 2.5–5 cm, glabrous; leaf blade abaxially glaucous, adaxially green, orbicular or ovate to narrowly ovate or oblong-ovate, 6–11.5 × 4–7 cm, thickly leathery, abaxially glabrous, adaxially glabrous or sparsely strigillosa, midvein and lateral veins subconspicuous abaxially, lateral veins 7 or 8 pairs, base obtuse to cordate or rounded, margin usually setose-serrulate, occasionally coarsely dentate, apex cuspitate to abruptly acute to acuminate. Inflorescences 1-flowered; pedicels 1–1.5 cm, glabrous. Flowers pink or white. Sepals 4, oblong, 4–5 mm, pubescent abaxially near margin and adaxially throughout. Petals 4 or 5, obovate, 8–9 mm. Filaments 2.5–3.5 mm; anthers yellow, ovoid, ca. 1 mm.
Ovary subglobose, ca. 3 mm, thinly grayish pubescent; styles slightly longer than ovary. Fruit dark green, cylindric, ca. 1.5 cm, ca. 8 mm in diam., glabrous, lenticels yellowish brown. Seeds 1–1.5 mm. Fl. May–Jun, fr. unknown.

- Sparse mountain forests, thickets; 800–2000 m. Guizhou (Jiangkou, Yingjiang), Hubei (Xuan’en).


条叶猕猴桃 tiao ye mi hou tao


shrubs, small to high-climbing, deciduous. Branches blackish brown or yellowish gray, sometimes young branchlets long- and rusty tomentose, glabrous when mature; pith white, lamellate. Petiole 1–2.5 cm, glabrous or occasionally slightly reddish brown tomentose; leaf blade abaxially glaucous, adaxially green, lanceolate to oblong-elliptic to obovate-lanceolate, or ovate to broadly ovate to suborbicular, 7–17 × 1.8–5 cm, abaxially glabrous, or sometimes puberulent on midvein and lateral veins, adaxially glabrous, occasionally sparsely strigillose when young, midvein and lateral veins raised and distinct abaxially, subconspicuous adaxially, lateral veins 6 or 7 pairs, reticulate veinlets subconspicuous abaxially, inconspicuously adaxially, base obtuse to auriculate-cordate, usually distinctly oblique, margin finely serrulate, apex abruptly acuminate to long acuminate. Inflorescences cymose, 1–3-flowered, glabrous or slightly reddish brown tomentose; peduncle 2–10 mm; pedicels 3–5 mm; bracts subulate, 2–4 mm. Flowers reddish. Sepals 5, ovate, 3–5 mm. petals 5, obovate, 4–6 mm. Filaments 1.5–4 mm; anthers yellow, 1.5–2 mm, slightly sagittate at base, rounded at apex. Ovary cylindric, 2.5–3 mm, pellucid-pilose. Fruit grayish green, cylindric or ovoid-cylindric, 1.5–1.8 cm; rounded at apex. Ovary cylindric, 2.5–3 mm, pellucid-pilose. 4 mm; anthers yellow, 1.5–2 mm, slightly sagittate at base, rounded at apex. Ovary cylindric, 2.5–3 mm, pellucid-pilose. Flowers white, rarely yellowish. Sepals 5, ovate, both surfaces rusty- and glandular-tomentose, apex obtuse. Filaments 5, obovate to oblong-obovate, ca. 8 mm. Filaments ca. 2 mm; anthers yellow, ovoid, ca. 1 mm. Ovary globose, densely rusty tomentose. Fruit subglobose, to 4.5 × 4 cm, lenticels yellowish brown; sepals caducous. Fl. Mar–Apr, fr. Sep–Oct. 2n = 58*.

- Low mountain forests, thickets, slopes, valleys; ca. 1000 m. Guangdong, Guizhou, Hunan.


金花猕猴桃 jin hua mi hou tao

Climbing shrubs, large, deciduous. Floral branchlets glabrous or slightly rusty- and glandular-tomentose, glabrous when fruiting; branchlets with conspicuous lenticels; pith brown, lamellate. Petiole 2–3 cm, glabrous or rusty- and glandular-tomentose; leaf blade abaxially glaucous, adaxially green, ovate to elliptic to oblong-ovate or oblong-elliptic, 4–10 × 3.5–5 cm, membranous when young, leathery when old, abaxially rusty- and glandular-tomentose on midvein and lateral veins, adaxially glabrous or sparsely puberulent, midvein and lateral veins conspicuous abaxially, lateral veins 5–7 pairs, veinlets reticulate with subconspicuous cross-bars on both surfaces, base broadly cuneate to rounded, margin subentire to inconspicuously and remotely crenate toward apex, apex obtuse to acute to acuminate. Inflorescences cymose, 1–3-flowered, rusty- and glandular-tomentose; peduncles 4–9 mm; pedicels 4–11 mm; bracts linear, 1.5–2 cm. Flowers white, rarely yellowish. Sepals 5, ovate, both surfaces rusty- and glandular-tomentose, apex obtuse. Filaments 5, obovate to oblong-obovate, ca. 8 mm. Filaments ca. 2 mm; anthers yellow, ovoid, ca. 1 mm. Ovary globose, densely rusty tomentose. Fruit subglobose, to 4.5 × 4 cm, lenticels yellowish brown; sepals caducous. Fl. Mar–Apr, fr. Sep–Oct. 2n = 58*.

- Dense mountain forests; 600–1300 m. Fujian, Guangdong, Guangxi, Yunnan [N Vietnam].

1a. Leaf blade oblong-elliptic to ovate, adaxially glabrous ................. 18a. var. inochoinis
1b. Leaf blade broadly ovate to orbicular, adaxially sparsely puberulent ........... 18b. var. ovatifolia

18a. Actinidia chinensis var. inochoinis

中越猕猴桃 zhong yue mi hou tao

Climbing shrubs, large, deciduous. Floral branchlets glabrous or slightly rusty- and glandular-tomentose, glabrous when fruiting; branchlets with conspicuous lenticels; pith brown, lamellate. Petiole 2–3 cm, glabrous or rusty- and glandular-tomentose; leaf blade abaxially glaucous, adaxially green, ovate to elliptic to oblong-ovate or oblong-elliptic, 4–10 × 3.5–5 cm, membranous when young, leathery when old, abaxially rusty- and glandular-tomentose on midvein and lateral veins, adaxially glabrous or sparsely puberulent, midvein and lateral veins conspicuous abaxially, lateral veins 5–7 pairs, veinlets reticulate with subconspicuous cross-bars on both surfaces, base broadly cuneate to rounded, margin subentire to inconspicuously and remotely crenate toward apex, apex obtuse to acute to acuminate. Inflorescences cymose, 1–3-flowered, rusty- and glandular-tomentose; peduncles 4–9 mm; pedicels 4–11 mm; bracts linear, 1.5–2 cm. Flowers white, rarely yellowish. Sepals 5, ovate, both surfaces rusty- and glandular-tomentose, apex obtuse. Filaments 5, obovate to oblong-obovate, ca. 8 mm. Filaments ca. 2 mm; anthers yellow, ovoid, ca. 1 mm. Ovary globose, densely rusty tomentose. Fruit subglobose, to 4.5 × 4 cm, lenticels yellowish brown; sepals caducous. Fl. Mar–Apr, fr. Sep–Oct. 2n = 58*.

- Dense mountain forests; 600–1300 m. Fujian, Guangdong, Guangxi, Yunnan [N Vietnam].

18b. Actinidia chinensis var. ovatifolia

卵圆叶猕猴桃 luan yuan ye mi hou tao

Type: China. Guangxi: Guilin, research orchard of Guang-
xi Institute of Botany, 4 Apr 1993, M. Y. Liang & R. G. Li 9302 (male fl.) (holotype, IBK).


Leaf blade broadly ovate to orbicular, papery, adaxially sparsely puberulent, base rounded, apex abruptly acuminate.

● Guangxi (Shangsi).

This variety is cultivated at the Guangxi Institute of Botany. The name was not validly published by Li et al. in 2002 because no type was indicated (Vienna Code, Art. 37.1).


粉叶猕猴桃 fen ye mi hou tao

Climbing shrubs, large, deciduous. Branches reddish purple, with pale elliptic lenticels, inconspicuous when young, conspicuous when old, glabrous or very young branchlets brownish puberulent; pith brown, lamellate or solid. Petiole 1.5–2.5 cm, glabrous; leaf blade abaxially glaucous, adaxially green, ovate to narrowly ovate to oblong-lanceolate, 3.5–12 × 2.5–5 cm, papery, both surfaces glabrous, midvein and lateral veins distinct and raised abaxially, sulcate adaxially, lateral veins 5–8 pairs, base broadly cuneate to rounded, margin callose-serrulate, apex acuminate to long acuminate. Inflorescences cymose, axillary, 2– or 3-flowered, glabrous to sparsely rusty tomentose; peduncles ca. 1 cm; pedicels ca. 0.7–1.5 cm; bracts linear, 1.5–2.5 mm. Flowers greenish yellow. Sepals 5 or 6, ovate, ca. 5 mm, abaxially glabrous, adaxially rusty tomentose, apex obtuse. Petals 5–7, ovate to obovate, ca. 1 cm, narrowly at base, apex rounded. Filaments ca. 4 mm; anthers yellow, ovoid. Ovary oblong, ca. 2 mm, ca. 1.5 mm in diam., densely brown tomentose. Fruit globose, ca. 3 mm in diam., densely tomentose when young, glabrous when mature, lenticels brown. Seeds ca. 1.5 mm. Fl. May–Jun, fr. Jul–Oct.

● Broad-leaved evergreen forests, valleys; 2300–2800 m. Yunnan (Jingdong, Longling, Tengchong).


毛蕊猕猴桃 mao rui mi hou tao

Actinidia callosa Lindley var. trichogyna (Franchet) Finet & Gagnepain.

Climbing shrubs, mid-sized, deciduous. Branchlets strigate, densely reddish brown hispid, glabrescent when old. Petiole 2–2.5 cm, terete, densely reddish hispid; leaf blade abaxially brown, adaxially green, suborbicular, ca. 5.2 × 5 cm, papery, both surfaces sparsely strigose, midvein and lateral veins raised abaxially, lateral veins 7–9 pairs, base cordate, margin setose-serrate, apex shortly cuspidate. Inflorescences cymose, 2– or 3-flowered, reddest brown stigose; pedicels ca. 1.5 cm; bracts 2, subulate, long stigose, ciliate, apex acute. Flowers polygamous, ca. 1.5 cm in diam. Sepals 5, elliptic, abaxially hispidulous, apex obtuse to acute. Petals 5, obovate, ca. 1.5 × as long as sepals. Filaments slender; anthers ovoid, ca. 1/3 as long as stamens, sagittate at base. Ovary ovoid, setose; styles numerous, slender. Fruit unknown. Fl. May–Jun, fr. unknown.

● Yunnan (Zhaotong).


全毛猕猴桃 quan mao mi hou tao

Climbing shrubs, small, deciduous. Branchlets glabrous, lenticels conspicuous; pith brown, lamellate. Petiole purplish, ca. 2 cm, glabrous; leaf blade abaxially green and glaucous, adaxially dark green, ovate to narrowly ovate, elliptic, or orbicular, 4–8 × 3–4 cm, papery, both surfaces glabrous, midvein and lateral veins purplish and distinct but not raised abaxially, inconspicuous axially, lateral veins 5 or 6 pairs, reticulate veins dense, purplish and conspicuous abaxially, base obtuse or rounded, equal or oblique, margin subconspicuously crenate, apex rounded to obtuse and emerginate, or acute to acuminate. Inflorescences cymose, 1–3-flowered, glabrous; pedicels ca. 5 mm; pedicels ca. 1 cm; bracts linear, ca. 1 mm. Flowers white. Sepals 5 or 6, ovate to oblong, 2–3 mm, glabrous, ciliate along margins. Petals 5, obovate, 5–6 mm. Filaments ca. 2 mm; anthers yellow, ovoid, ca. 1 mm. Ovary globose, rusty tomentose. Fruit dark green when mature, ovoid, 1.5–1.8 cm, glabrous, with small lenticels. Fl. May, fr. unknown. 2n = 58*.

● Sparse forests on mountain slopes and summits; above 1000 m. Anhui, Fujian, Hunan, Jiangxi.


昭通猕猴桃 zhao tong mi hou tao

cheng kou mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets densely brownish or reddish hirsute; pith brown, lamellate. Petiole 2.5–6 cm, densely hirsute; leaf blade broadly ovate to orbicular, 6–12 × 7–12 cm, papery, abaxially hirsute on midvein and lateral veins, adaxially strigillose, hairs on midvein and lateral veins longer; midvein and lateral veins distinct and raised abaxially, sulcate abaxially, lateral veins 7 or 8 pairs, furcate at tips, reticulate veins conspicuous abaxially with cross-bars, inconspicuous adaxially, base truncate-cordatulate, margin serrate-serrulate, apex acuminate to long acuminate. Inflorescences cymose, 1–3-flowered, yellowish brown tomentose; peduncles 1–1.5 cm; pedicels 7–10 mm; bractlets subulate, ca. 4 mm. Flowers white. Sepals 4, oblong-ovate, ca. 6 mm, both surfaces yellowish brown tomentose. Flowers white. Sepals 5, ovate, unequal, ca. 6 mm, abaxially glabrous, apex acute. Petals 5, obovate, slightly unequal, 1–1.1 cm, apex rounded. Filaments ca. 4 mm; anthers yellow, ca. 1.2 cm, sagittate. Ovary ovoid, ca. 2.5 mm, densely pubescent; styles ca. 3 mm. Fruit unknown. Fl. Jun, fr. unknown.


cao ye mi hou tao

Climbing shrubs, large, deciduous. Branchlets and petioles densely yellowish or brownish rigidly strigose; pith white, lamellate. Petiole 1.5–7 cm; leaf blade pale abaxially, dark adaxially when dry, ovate to narrowly ovate, 12–15 × 5.5–7 cm, papery, both surfaces sparsely to densely strigose, rarely only strigose or tomentose on midvein or glabrous on one or both surfaces, midvein and lateral veins conspicuous and raised abaxially, inconspicuous adaxially, secondary veins 7–10(–11), base cordatulate to cordate, or rounded to truncate, margin minutely serrate, apex acute to acuminate. Inflorescences densely fasciculate, 3–5-flowered, densely ferruginous tomentose; pedicels ca. 5 mm. Flowers white. Sepals 5, ovate, ca. 3 mm, glabrous, apex acute. Petals 5, oblong-ovate, 5–6 mm, apex rounded. Anthers yellow, linear, ca. 1 mm. Ovary oblong, densely villous. Fruit cylindric, ca. 1.7 cm, tomentose when young, glabrous when mature, lenticellate. Fl. May–Jun, fr. Jul–Sep.

26a. Actinidia rudis var. rudis

cao ye mi hou tao (yuan bian zhong)

Actinidia petelotii Diels.

Two-year-old branches sparsely and rigidly strigose. Leaves ± strigose to glabrous on one or both surfaces, basally cordatulate to truncate.


guang jing mi hou tao

Actinidia henryi Dunn var. glabricaulis (C. Y. Wu) C. F. Liang.
Two-year-old branches glabrous. Leaves abaxially tomentose on midvein and lateral veins, basally rounded to truncate.

- Thickets, roadides; 1300–2300 m. Yunnan (Magain, Malipo, Xichou).


蒙自猕猴桃 meng zi mi hou tao

*Actinidia carnosifolia* C. Y. Wu; *A. carnosifolia* var. *glaucescens* C. F. Liang; *A. henryi* var. *polyodontia* Handel-Mazzetti.

Climbing shrubs, mid-sized to large, semi-evergreen. Young branchlets reddish brown tomentose, branchlets sparsely to densely hispid, bases of hairs dilated; pith whitish, small, lamellate. Petiole 1.5–4 cm, ferruginous tomentose; leaf blade glaucous to not and carneous or paler abaxially, ovate to oblong-ovate to oblong-lanceolate, 7–14 × 3–6.5 cm, papery to leathery, abaxially glabrous to puberulent or hispid on midvein and lateral veins, adaxially sparsely tomentose throughout or puberulent on veins to glabrous, midvein and veins subconspicuous abaxially, lateral veins 8–10 pairs, arcuate-ascending, anastomosing near margins, reticulate veins subconspicuous to conspicuously abaxially, inconspicuous adaxially, base rounded to cordate, margin mucromate-serrulate, apex acuminate. Inflorescences cymose, 1–5-flowered, densely reddish or rusty villous; peduncles absent to 4 mm; petals absent to 1 cm. Flowers white to pink. Sepals 5, ovate, ca. 3 mm, abaxially puberulent, apex acute. Petals 5, ovate, ca. 6 mm, narrowed at base, apex rounded. Filaments ca. 2 mm; anthers yellow, ovoid, ca. 1.5 mm, base sagittate. Ovary globose, ca. 2 mm, densely pubescent. Fruit cylindric to oblong-ovoid, 1.5–3 cm, glabrous, lenticellate. Fl. May–Jun, fr. Oct.

- Mountain forests, thickets; 1400–2500 m. Guangdong, Guangxi, Guizhou, Hunan, Yunnan.


长叶猕猴桃 chang ye mi hou tao


Climbing shrubs, large, deciduous. Floral branchlets sparsely rusty strigose, lenticils inconspicuous, two-year-old branches glabrous or with some relict strigose hairs; pith brown, lamellate. Petiole 1.5–5 cm, sparsely strigose to glabrous; leaf blade abaxially glaucous, adaxially green, oblong-lanceolate to oblong-ovate, or obovate-lanceolate, 8–22 × 3–8.5 cm, highly variable in shape and size, papery, abaxially glabrous to brownish pubescent on midvein and lateral veins, adaxially glabrous, lateral veins 8 or 9 pairs, base cuneate to rounded, usually oblique, margin subentire to serrulate or coarsely dentate, apex acute to obtuse. Inflorescences cymose, axillary, 1–3-flowered, densely brownish tomentose; peduncles 5–10 mm, pedicels 1.2–1.9 cm; bracts subulate, ca. 3 mm, velutinous. Flowers reddish. Sepals 5, ovate, ca. 5 mm, densely brownish tomentose. Petals 5, ovate, ca. 1 cm. Ovary appressed-globose, ca. 6 mm in diam., densely brownish tomentose. Fruit cylindric-ovoid, ca. 3 cm, glabrous when mature, lenticellate; persistent sepals reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Oct. 2n = 58*.

- Low mountain forests; 500–900 m. N Fujian, E Jiangxi, S Zhejiang.


葡萄叶猕猴桃 pu tao ye mi hou tao

Climbing shrubs, large, deciduous. Branchlets reddish or grayish brown, brown strigose to tomentose, lenticellate; pith white to brown, lamellate. Petiole 3.5–6 cm, brown strigose to tomentose; leaf blade narrowly ovate to broadly ovate, 5–14 × 4.5–9.5 cm, membranous to papery, abaxially glabrous, adaxially glabrous or sparsely strigillosse on veins, midvein and lateral veins distinct and raised abaxially, sulcate adaxially, lateral veins 6–10 pairs, base rounded to cordate, margin finely serulate, apex acuminate. Inflorescences cymose, 1–5-flowered, strigose to tomentose; peduncles ca. 8 mm; pedicels ca. 1 cm. Flowers white to pink. Sepals 4–6, ovate, 4–8 mm, both surfaces tomentose. Petals 4–6, ovate to suborbicular, 0.7–1.6 cm, apex rounded. Filaments to 2.5 mm; anthers ovoid, ca. 2 mm, base sagittate. Ovary globose to globose-cylindric, densely tomentose. Fruit globose to globose-cylindric, 2–3.5 cm, glabrous, with brownish lenticils. Fl. May–Jun, fr. Sep–Oct.

- Broad-leaved forests, forest margins, limestone mountains; 1600–1900 m. Sichuan (Ebian, Leibo, Mabian), Yunnan.


粉毛猕猴桃 fen mao mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets reddish brown tomentose; pith dirty white, lamellate. Petiole 3.5–4 cm, densely brownish lanate; leaf blade abaxially pale green, adaxially green, broadly ovate to orbicular-ovate, 9–11 × 7–8.5 cm, papery, abaxially thickly brownish cottony-tomentose, hairs easily caducous, adaxially ± strigillosse on midvein and lateral veins, midvein and lateral veins conspicuous abaxially, lateral veins 7 or 8 pairs, base cordulate, margin inconspicuously callose-apiculate-serrulate, apex cupitate. Inflorescences cymose, 1–3-flowered, densely tomentose; peduncles very short; pedicels 0.5–6 mm; bracts subulate, ca. 4.5 mm. Pedicels pink, ca. 5 mm in diam. Sepals ovate, 3.5–4 mm, abaxially densely tomentose. Petals 5, obovate to oblong-obovate, ca. 3.5 mm. Filaments shorter than anthers; anthers ca. 1.5 mm, base sagittate. Ovary globose to globose-cylindric, densely tomentose. Fruit globose to globose-cylindric, 2–3.5 cm, glabrous, with brownish lenticils. Fl. May–Jun, fr. Sep–Oct.

- Sunny places, roadides; 1000–1200 m. NW Guangxi (Tianlin).


红毛猕猴桃 hong mao mi hou tao

Climbing shrubs, mid-sized, semi-evergreen. Branchlets densely rufous setose; pith yellowish, small, lamellate. Petiole 2.5–5 cm, densely rufous setose; leaf blade oblong-lanceolate, 13–17.5 × 4–6 cm, papery, abaxially densely setose and stellate hairy with long, cottony hairs on midvein and lateral veins, but indumentum of same type becoming sparse elsewhere, adaxially strigose on midvein and lateral veins, midvein and lateral

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veins raised abaxially, lateral veins 5 or 6 pairs, anastomosing, base rounded to cordate, margin setose-serrulate, apex long cuneate. Inflorescences cymose, axillary, densely ferruginous tomentose; peduncles very short; pedicels ca. 1 cm; bracts minute, ferruginous hairy. Flowers white. Sepals 4, ovate, ca. 4 mm, abaxially ferruginous tomentose. Petals 5, ovate, ca. 5 mm, apex rounded. Filaments slender; anthers yellow, ovoid, ca. 2 mm. Ovary subglobose, ca. 1.5 mm in diam., densely pubescent. Fruit green, oblong, ca. 2 × 1 cm, pale lenticellate. Seeds small, ca. 1.2 mm. Fl. May—Jun, fr. Oct—Nov.

- Broad-leaved evergreen forests, valleys, roadsides; 900–1500 m. NW and SW Guangxi, Guizhou, Yunnan.
  1a. Leaves sparsely stellate tomentose, hairs easily observed, not readily caducous ............................................ 31a. var. rufotricha
  1b. Leaves thickly cottony-tomentose, hairs not easily observed, readily caducous ............................................ 31b. var. glomerata

31a. Actinidia rufotricha var. rufotricha

红毛猕猴桃(原变种) hong mao mi hou tao (yuán biàn zhòng)

Leaves sparsely stellate tomentose, hairs long, easily observed, not readily caducous.

- Broad-leaved evergreen forests; 1000–1500 m. Yunnan (Malipo).


密花猕猴桃 mi hua mi hou tao

Leaves thickly cottony-tomentose, stellate hairs short, not easily observed, readily caducous.

- Valleys, roadsides; 900–1500 m. NW and SW Guangxi, Guizhou (Anlong).


阔叶猕猴桃 kuò yè mi hou tao

Climbing shrubs, large, deciduous. Branchlets glabrous, with whitish lenticels, slightly puberulent or densely tomentose when young; pith white, lamellate, solid, or hollow. Petiole 3–7 cm, glabrous to sparsely velutinous; leaf blade abaxially pale green, adaxially green, usually broadly ovate to broadly obovate, sometimes orbicular to narrowly ovate, 8–13(–15) × 5–8.5(–12) cm, abaxially glabrescent to densely appressed stellate tomentose, adaxially glabrescent to densely puberulent, mid-vein and lateral veins distinct and raised abaxially, inconspicuous to subconspicuous adaxially, lateral veins 6 or 7 pairs, transverse veins distinct, base broadly cuneate to rounded, truncate or reniform, margin minutely and remotely callose-serrulate, apex acute to acuminate. Inflorescences 3- or 4-branched, 10- or more flowers, densely brownish tomentose; peduncles 2.5–8.5 cm, forked at top; pedicels 0.5–1.5 cm, elongating and enlarging at fruiting stage; bracts linear, 1–2 mm. Flowers fragrant. Sepals 5, ovate, 4–5 mm, reflexed after anthesis, both surfaces yellowish tomentose. Petals 5–8, white on upper part and margins, orange on middle of lower parts, oblong to obovate-oblong, 6–8 mm, reflexed after anthesis. Filaments 2–4 mm, slender; anthers ovoid, ca. 1 mm, sagittate at base. Ovary globose, ca. 2 mm, densely pilose; styles 2–3 mm. Fruit brown, subglobose to ovoid, 3–3.5 × 2–2.5 cm, lenticellate, glabrous when mature or only pubescent at base and apex. Seeds 2–2.5 mm. Fl. May–Jun, fr. Oct–Nov. 2n = 58*.

- Forests, thickets, mountain slopes, valleys; 400–1700 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Cambodia, Laos, Malaysia, Thailand, Vietnam].
  1a. Leaves adaxially very sparsely puberulent to glabrescent, abaxially densely stellate tomentose ............................................ 32a. var. latifolia
  1b. Leaves adaxially densely puberulent, abaxially more thickly stellate tomentose ............................................ 32b. var. mollis

32a. Actinidia latifolia var. latifolia

阔叶猕猴桃(原变种) kuò yè mi hou tao (yuán biàn zhòng)


Leaves adaxially densely appressed stellate tomentose, adaxially very sparsely puberulent to glabrescent. 2n = 58*.

- Forests, thickets, mountain slopes, valleys; 400–800 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Cambodia, Laos, Malaysia, Thailand, Vietnam].


长绒猕猴桃 cháng róng mi hou tao


Leaves abaxially very densely and thickly stellate tomentose, hairs puffy and long, densely puberulent adaxially.

- Forests, valleys; 800–1700 m. Yunnan (Pingbian, Simao).


黄毛猕猴桃 huáng mao mi hou tao

Climbing shrubs, small to mid-sized, semi-evergreen. Floral branchlets densely brownish tomentose to ferruginoius hirsute or brownish velutinous, older branches glabrous or with ± relict hairs, lenticels inconspicuous; pith white, lamellate. Petiole 1–5 cm, densely yellowish tomentose or densely brownish long hirsute or velutinous; leaf blade adaxially green, narrowly ovate to broadly ovate to orbicular-ovate, or narrowly ovate to ovate-lanceolate to oblong, 6–18 × 2.5–10 cm, papery to leathery, abaxially densely yellowish to sparsely grayish stellate tomentose, adaxially scabrous to densely softly strigose to
strigose or pilose, sometimes only strigose or pilose on midvein and lateral veins, rarely glabrous, midvein and lateral veins conspicuous abaxially, inconspicuous to subconspicuous adaxially, lateral veins 7–10 pairs, base rounded to cordate, margin setose-serrulate, apex acuminate to long acuminate. Inflorescences cymose, 1–7-flowered, densely brownish villous-pubescent; peduncles 4–10 mm; pedicels 0.7–2 cm; bracts subulate, 2–6 mm. Flowers white. Sepals 5, ovate to oblong-ovate, 4–9 mm, abaxially densely brownish tomentose. Petals 5, ovate to narrowly ovate, 0.6–1.7 cm. Filaments 3–7 mm; anthers yellow, ovoid, adaxially densely brownish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals 3–5(–8), rarely with a second whorl of 2 smaller petals, 6–10 mm, both surfaces densely yellowish tomentose. Petals

3a. Actinidia fulvicoma var. fulvicoma

Young branchlets densely brownish tomentose. Petiole densely tomentose; leaf blade oblong-ovate to lanceolate-ovate, leathery, abaxially densely brownish tomentose, adaxially very scabrous.

- Mountain forests, sparse forests, thickets, mountain slopes; 100–400 m. Fujian, Guangdong, Hunan, S Jiangxi, Yunnan.

3b. Branchlets and petioles tomentose.

- Low mountain forests; 500–1000 m. Guangdong, Hunan.


Climbing shrubs, large, deciduous. Branchlets reddish, with paler oblong lenticels, young branchlets white pubescent to brownish long strigose or densely ferruginous hispid-setose; pith whitish to brown, large, lamellate. Petiole 3–6(–10) cm, white pubescent or brownish long strigose to densely ferruginous hirsut-setose; leaf blade abaxially pale green, adaxially dark green, broadly ovate to broadly obovate or suborbicular, 6–17 × 7–15 cm, papery, abaxially whitish or brownish tomentose, adaxially usually glabrous, occasionally puberulent, especially more densely so on midvein and lateral veins, or densely scabrid-hispid throughout, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins 5–8 pairs, furcate above middle, veinlets in parallel cross-bars, conspicuous abaxially, base rounded to truncate to cordulate, margin setose-serrulate with teeth terminating tips of veinlets, apex truncate to emarginate to abruptly cuspidate or shortly acuminate. Inflorescences cymose, 1–3–flowered, white silky-tomentose or yellowish brown pubescent; peduncles 0.7–1.5 cm; pedicels 0.9–1.5 cm; bracts linear, ca. 1 mm. Flowers orange-yellow. Sepals (3–)5(–7), broadly ovate to oblong-ovate, 6–10 mm, both surfaces densely yellowish tomentose. Petals

33a. Actinidia fulvicoma var. pachyphylla

Yellow branchlets densely brownish tomentose. Petiole densely tomentose; leaf blade oblong-ovate to lanceolate-ovate, leathery, abaxially densely brownish tomentose, adaxially very scabrous.

- Mountain forests; 1000–1800 m. Guangdong, Guangxi, Yunnan.

33b. Actinidia fulvicoma var. pachyphylla (Dunn) H. L. Li, J. Arnold Arbor. 33: 57. 1952.

Yellow branchlets densely brownish tomentose. Petiole densely tomentose; leaf blade oblong-ovate to lanceolate-ovate, leathery, abaxially densely brownish tomentose, adaxially very scabrous.

- Mountain forests, sparse forests, thickets, mountain slopes; 100–400 m. Fujian, Guangdong, Hunan, S Jiangxi, Yunnan.


Climbing shrubs, large, deciduous. Branchlets reddish, with paler oblong lenticels, young branchlets white pubescent to brownish long strigose or densely ferruginous hispid-setose; pith whitish to brown, large, lamellate. Petiole 3–6(–10) cm, white pubescent or brownish long strigose to densely ferruginous hirsut-setose; leaf blade abaxially pale green, adaxially dark green, broadly ovate to broadly obovate or suborbicular, 6–17 × 7–15 cm, papery, abaxially whitish or brownish tomentose, adaxially usually glabrous, occasionally puberulent, especially more densely so on midvein and lateral veins, or densely scabrid-hispid throughout, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins 5–8 pairs, furcate above middle, veinlets in parallel cross-bars, conspicuous abaxially, base rounded to truncate to cordulate, margin setose-serrulate with teeth terminating tips of veinlets, apex truncate to emarginate to abruptly cuspidate or shortly acuminate. Inflorescences cymose, 1–3–flowered, white silky-tomentose or yellowish brown pubescent; peduncles 0.7–1.5 cm; pedicels 0.9–1.5 cm; bracts linear, ca. 1 mm. Flowers orange-yellow. Sepals (3–)5(–7), broadly ovate to oblong-ovate, 6–10 mm, both surfaces densely yellowish tomentose. Petals


Grayish branchlets hui hua mi hou tao


Young branchlets ferruginous velutinous. Petiole ferruginous velutinous; leaf blade membranous to papery, abaxially partly thinly grayish tomentose, adaxially ± softly strigose.

- Low mountain forests; 500–1000 m. Guangdong, Hunan.
broadly obovate, 1–2 cm, shortly clawed at base, rounded at apex. Filaments 5–10 mm; anthers yellow, oblong, 1.5–2 mm, sagittate at base or not, apex acute to rounded. Ovary globose, ca. 5 mm in diam., densely golden villous. Fruit subglobose to cylindric to obovoid or ellipsoidal, 4–6 cm, densely tomentose when young, glabrous when mature to densely hispid, with many brownish lenticels; persistent sepals reflexed. Fl. Apr–May, fr. Sep. 2n = 58*, 116*, 174*.

- Mountain forests, sparse secondary forests, tall grassy thickets on low mountains, thickets; 200–2600 m. Anhui, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Taiwan, Yunnan, Zhejiang.

The producer of kiwifruit, this taxon is widely cultivated in China and elsewhere.

*Actinidia chinensis* var. *lageniformis* S. Y. Wang & C. F. Chen (J. Henan Agric. Coll. 4: 82. 1981) and *A. chinensis* var. *nephrocarpa* S. Y. Wang & C. F. Chen (loc. cit.), both described from Henan, could not be treated here because no material was seen by the authors.

1a. Young branchlets and petioles white pubescent to roughly tomentose, glabrous when mature or not; fruit densely tomentose, soon glabrous ................... 34a. var. *chinensis*

1b. Young branchlets and petioles brownish strigose or ferruginous hispid-setose, hairs not easily lost; fruit densely hispid, ± so when mature. 2

2a. Young branchlets and petioles brownish strigose; leaves adaxially more densely ferruginous tomentose, 3–5-flowered; bracts subulate, ca. 2 mm. Flowers orange. Sepals 5, ovate, ca. 5 mm, both surfaces densely ferruginous tomentose. Petals 5, obovate, ca. 7 mm. Sterile ovary globose, densely ferruginous villous. Fruit subglobose, ca. 1.5 cm, densely ferruginous tomentose, lentilicate. Fl. Apr, fr. unknown.

- Mountain forests; 800–1400 m. Chongqing, Gansu, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Taiwan. There are transitional forms in between var. *deliciosa* and var. *setosa* with leaves densely setose adaxially and occasionally hispid-setose on stems and petioles.


Climbing shrubs, large, deciduous. Branchlets densely ferruginous tomentose; pith brownish, solid. Petiole ca. 2.5 cm, densely ferruginous tomentose; leaf blade narrowly elliptic, 9–13.5 × 4–6.5 cm, thickly papery, abaxially very densely tomentose with cinnamon-colored hairs on midvein and lateral veins, elsewhere stellate tomentose, adaxially glabrous and slightly rugose, midvein and lateral veins raised abaxially, sulcate adaxially, lateral veins 6 or 7 pairs, anastomosing, reticulate veins subconspicuous with distinct parallel cross-bars, base cuneate to rounded, never cordate, margin shallowly and remotely serrulate, apex acute to shortly acuminate. Male inflorescences racemiform, 14–20 cm, densely ferruginous tomentose, ca. 12-flowered; female inflorescences 1- or 2-branched, ca. 5 cm, densely ferruginous tomentose, 3–5-flowered; bracts subulate, ca. 2 mm. Flowers orange. Sepals 5, ovate, ca. 5 mm, both surfaces densely ferruginous tomentose. Petals 5, obovate, ca. 7 mm. Sterile ovary globose, densely ferruginous villous. Fruit subglobose, ca. 1.5 cm, densely ferruginous tomentose, lentilicate. Fl. Apr, fr. unknown.

**毛花猕猴桃** mao hua mi hou tao

Climbing shrubs, large, deciduous. Young branchlets, petioles, inflorescences, and sepals densely tomentose with milky-white to dirty yellow hairs to appressed-lanate, two-year-old branches ± with relic hairs; pith white, lamellate. Petiole short, 1.5–3 cm, thick; leaf blade abaxially pale green, adaxially green, ovate to broadly ovate, 8–16 × 6–11 cm, papery, abaxially densely white stellate tomentose, adaxially hispid-puberulent when young, glabrous to sparsely pilose only on midvein and lateral veins, midvein and lateral veins conspicuous abaxially, inconspicuous to subconspicuous adaxially, lateral veins 7 or 8 pairs, anastomosing, reticulation with many conspicuous cross-bars, base rounded or truncate to cordulate, margin callose-serrulate, apicu acute to shortly acuminate. Inflorescences cymose, 1–3-flowered; peduncles 5–10 mm; pedicels 3–5 mm; bracts subulate, 3–4 mm. Flowers rose-pink, rarely white, 2–3 cm in diam. Sepals 2–3, broadly ovate, 7–9 mm, abaxially densely lacteous-tomentose. Petals 5, ovate or oblongate, to 1.5 cm, apex and margin orange, middle and base pink. Filaments 4–5 mm; anthers yellow, oblong, ca. 1.3 cm in diam. Ovary globular, ca. 1.5 mm in diam., densely white stellate tomentose; styles 3–4 mm. Fruit cylindric-ovoid, 3.5–4.5 cm, always densely and persistently milky-white tomentose; persistent sepals reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Nov. 2n = 58*.

● Forests, tall grassy thickets on low mountains; 200–1000 m. Fujian, Guangdong, Guangxi, Hunan, Jiangxi, Zhejiang.


**小叶猕猴桃** xiao ye mi hou tao

Climbing shrubs, mid-sized, deciduous. Floral branchlets densely brownish velutinous, lenticels small and inconspicuous; two-year-old branches glabrous or sparsely scurfy-tomentose, lenticels small and inconspicuous; pith white, lamellate. Petiole 1.2–2 cm, densely brownish velutinous; leaf blade abaxially pale green, adaxially green, elliptic-ovate to obovate, 6–9 × 4.5–5 cm, papery, abaxially whitish stellate tomentose, adaxially sparsely strigillose when young, glabrous when mature, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins mostly 7 pairs, veinlets and transverse veins conspicuous abaxially, base broadly cuneate, margin mucronate-callose-serrulate, apex shortly acuminate to acute. Inflorescences cymose, 2-branched, 5–7-flowered, densely brownish velutinous; peduncles 4–8 mm; pedicels 5–7 mm; bracts subulate, 2.5–3.5 mm. Flowers reddish, ca. 1.3 cm in diam. Sepals 2 or 3, ovate or suborbicular, ca. 5 mm, both sur-


**两广猕猴桃** liang guang mi hou tao

Climbing shrubs, large, evergreen. Floral branchlets long or short, short ones densely brownish tomentose, long ones sparsely velutinous, lenticels inconspicuous, two-year-old branches glabrous; pith brown, lamellate. Petiole 2–7 cm, thinly brown velutinous; leaf blade pale green abaxially, green adaxially, ovate to oblong, 7–13 × 4–9 cm, softly leathery, abaxially densely brownish appressed stellate tomentose, adaxially glabrous, lateral veins 8 or 9 pairs, veinlets reticulate, inconspicuous with subconspicuous transverse veins abaxially, base rounded or cordulate, margin callose-serrulate, apex acute to cuspidate. Inflorescences cymose, 1–3-flowered, brownish, long tomentose; peduncles 2–7 mm; pedicels 5–6 mm; bracts linear, minute. Flowers white, ca. 1.5 cm in diam. Sepals 5, oblong, 4–5 mm, abaxially densely tomentose. Petals 5, obvate, 9–10 mm, gradually narrowed at base, apex rounded. Filaments 4–6 mm; anthers yellow, ovoid, ca. 1.5 cm, sagittate at base. Ovary globose, densely yellowish tomentose; styles ca. 4 mm. Fruit ovoid to cylindric-oblong, 2–3.5 cm, to 1 cm in diam., densely brownish tomentose when young, sparsely so when mature, lenticellate; persistent sepals present. Seeds small, 1–1.5 mm. Fl. Apr–May, fr. Nov. 2n = 58*.

● Forests in sunny places, thickets, mountain valleys; 200–1000 m. Guangdong, Guangxi, Hunan (Jianghua).

Climbing shrubs, large, deciduous. Branchlets sparsely puberulent to glabrous, lenticels conspicuous; buds densely yellowish tomentose; pith brown, lamellate. Petiole 4–4.5 cm, sparsely puberulent; leaf blade abaxially pale green, adaxially dark green, obovate to obovate-oblong, 11–14 × 6–7 cm, papery, sparsely stellate tomentose with hairs easily rubbing off, subglabrous adaxially, midvein and lateral veins conspicuous abaxially, sulcate adaxially, lateral veins 8 or 9 pairs, reticulate veins inconspicuous, with subconspicuous parallel cross-bars, base rounded and cordatulate, oblique, margin ciliate-serrulate, apex abruptly acute to truncate. Flowers white. Sepals 4 or 5, ovate, 5.5–6.5 mm, both surfaces brownish tomentose. Petals broadly obovate, 0.9–1.3 cm, narrowed at base. Filaments 2–3 mm; anthers yellow, oblong, 2.2–2.5 mm, sagittate at base. Sterile ovary globose, ca. 2.5 mm in diam., densely brownish tomentose. Fruit obvoid, glabrous. Fl. May–Jun, fr. Sep.


Climbing shrubs, large, deciduous. Young branchlets densely brownish velutinous; two-year-old branches reddish or blackish, glabrous, lenticels linear or punctiform, conspicuous; pith brown, lamellate. Petiole 3–6.5 cm, yellowish tomentose, glabrous when mature; leaf blade broadly ovate to broadly obovate to orbicular, 4.5–12 × 4–12.5 cm, papery, abaxially sparsely stellate tomentose, soon glabrous, adaxially sparsely puberulent, soon glabrous, midvein and lateral veins conspicuous abaxially, sulcate adaxially, lateral veins 6–9 pairs, reticulate veins inconspicuous with distinct and raised parallel cross-bars abaxially, base cordate, margin callose-serrulate, apex cuspidate to acute, rarely marginate. Inflorescences cymose, 1–3-flowered; brownish velutinous; peduncles 1.5–2 cm; pedicels ca. 2 cm. Flowers white. Sepals 4 or 5, broadly ovate, 6 mm, both surfaces glandular-tomentose. Filaments 2–3 mm; anthers yellow, obovate, 1.2–1.5 cm. Ovary globose, densely yellowish white tomentose; styles 7 mm. Male flowers unknown. Fruit narrowly cylindric, 4–5 cm, glabrous, lenticels brownish, dense; persistent sepals reflexed. Fl. Apr–May, fr. Oct. 2n = 58*.


Climbing shrubs, large, deciduous. Branchlets densely brownish velutinous; buds densely yellowish tomentose; pith brown, lamellate. Petiole 4–4.5 cm, sparsely puberulent; leaf blade abaxially pale green, adaxially dark green, obovate to obovate-oblong, 11–14 × 6–7 cm, papery, sparsely stellate tomentose with hairs easily rubbing off, subglabrous adaxially, midvein and lateral veins conspicuous abaxially, sulcate adaxially, lateral veins 8 or 9 pairs, reticulate veins inconspicuous, with subconspicuous parallel cross-bars, base rounded and cordatulate, oblique, margin ciliate-serrulate, apex abruptly acute to truncate. Flowers white. Sepals 4 or 5, ovate, 5.5–6.5 mm, both surfaces brownish tomentose. Petals broadly obovate, 0.9–1.3 cm, narrowed at base. Filaments 2–3 mm; anthers yellow, oblong, 2.2–2.5 mm, sagittate at base. Sterile ovary globose, ca. 2.5 mm in diam., densely brownish tomentose. Fruit obvoid, glabrous. Fl. May–Jun, fr. Sep.


Climbing shrubs, large, deciduous. Young branchlets densely brownish velutinous; two-year-old branches reddish or blackish, glabrous, lenticels linear or punctiform, conspicuous; pith brown, lamellate. Petiole 3–6.5 cm, yellowish tomentose, glabrous when mature; leaf blade broadly ovate to broadly obovate to orbicular, 4.5–12 × 4–12.5 cm, papery, abaxially sparsely stellate tomentose, soon glabrous, adaxially sparsely puberulent, soon glabrous, midvein and lateral veins conspicuous abaxially, sulcate adaxially, lateral veins 6–9 pairs, reticulate veins subconspicuous with distinct and raised parallel cross-bars abaxially, base cordate, margin callose-serrulate, apex cuspidate to acute, rarely marginate. Inflorescences cymose, 1–3-flowered; brownish velutinous; peduncles 1.5–2 cm; pedicels ca. 2 cm. Flowers white. Sepals 4 or 5, broadly ovate, ca. 6 mm, both surfaces glandular-tomentose. Filaments 5 or 6, yellowish white, obovate, 1.2–1.5 cm. Ovary globose, densely yellowish white tomentose; styles ca. 7 mm. Male flowers unknown. Fruit narrowly cylindric, 4–5 cm, glabrous, lenticels brownish, dense; persistent sepals reflexed. Fl. Apr–May, fr. Oct. 2n = 58*.

NE Guangxi.


Climbing shrubs, large, deciduous. Branchlets densely brownish velutinous, lenticels linear or punctiform, subconspicuous; pith whitish or brownish, lamel-
late. Petiole 2–8 cm, stout, densely yellowish velutinous; leaf blade oblong to ovate or narrowly elliptic to narrowly ovate-lanceolate, 5–20 × 2.5–13 cm, papery, abaxially whitish and densely brownish tomentose with imperfectly stellate hairs, hairs simple to 2-4-furcate, glabrous or not when leaves mature, adaxially green and sparsely strigillose, soon glabrous, midvein and lateral veins conspicuous abaxially, sulcate or not adaxially, lateral veins 6–10 pairs, veinlets reticulate, conspicuous with distinct and raised parallel cross-bars abaxially, base auriculate-cordatulate, apex acuminatae to long acuminate. Inflorescences 1- or 2-branched, (1–)3–7-flowered, densely yellowish brownish tomentose; peduncles 4–10 mm; pedicels 0.6–1.6 cm; bracts subulate, 3–6 mm. Flowers rose-pink. Sepals 5 or 6, ovate to narrowly ovate, 6–8 mm, both surfaces densely brown tomentose. Petals 5 or 6, obovate to narrowly obovate, 1–1.6 cm. Filaments 4–8 mm; anthers yellow, ovoid, ca. 1 mm, sagittate at base. Ovary globose, 6–8 mm in diam., densely grayish pubescent; styles ca. 5 mm. Fruit cylindric-oblong, 3–4 cm, densely long yellowish velutinous; persistent sepals reflexed, both surfaces densely brown tomentose. Seeds ca. 2 mm. Fl. May, fr. Oct. 2n = 58*.

- Fujian, Zhejiang.

“Actinidia persicina” (R. H. Huang & S. M. Wang, J. Wuhan Bot. Res. 13(2): 113. 1995) belongs here but was not validly published because the herbarium in which the type was conserved is not specified (Vienna Code, Art. 77).


大花猕猴桃 da hua mi hou tao

Climbing shrubs, large, deciduous. Floral branchlets sparsely villous, lenticels inconspicuous, two-year-old branches glabrous, lenticels subconspicuous; pith brown, lamellate. Petiole 2.5–4 cm, sparsely puberulent; leaf blade abaxially pale green, adaxially green, obovate, 9–12 × 6–8 cm, papery, abaxially sparsely white- and long pubescent, hairs simple to furlate to substellate, adaxially subglabrous, midvein and lateral veins abaxially conspicuous, adaxially inconspicuous, lateral veins 7 or 8 pairs, reticulate veinlets subconspicuous with distinct and raised parallel cross-bars abaxially, base narrowly rounded-cordatulate, margin ciliate-serrulate, apex acute to cuspidate. Inflorescences cymose, 1–3-flowered, brownish puberulent; peduncles 4–6 mm; pedicels 7–11 mm; bracts linear, ca. 2 cm. Flowers yellowish, ca. 2 cm in diam. Sepals 5, ovate, ca. 5 mm, both surfaces rusty velutinous. Petals 5, obovate-oblong, 1–1.1 cm. Filaments 4–6 mm; anthers yellow, ovoid, 1.5–2 mm, both ends rounded. Ovary narrowly cylindric, ca. 5 mm, densely brownish pubescent; styles ca. 2 mm. Fruit globose, ca. 2.3 cm, glabrous, with whitish and rounded lenticels; persistent sepals reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Sep–Oct. 2n = 58*.

- Mountain forests; ca. 1800 m. Sichuan (Tianquan).


显脉猕猴桃 xian mai mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets reddish, glabrous, with scattered short ovoid lenticels, young branchlets white pubescent; pith white to brownish, large, lamellate. Petiole purplish, 2–3.5 cm, slightly puberulent, glabrous when mature; leaf blade ovate-oblong to ovate- orbicular, 6–11 × 5–8 cm, thinly papery, abaxially densely white pubescent throughout or ± so on midvein and lateral veins, hairs simple or 2- or 3-furcate, adaxially green and sparsely puberulent, especially on midvein and lateral veins when young, glabrous when mature, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins 8–10 pairs, reticulate veins subconspicuous with distinct and raised parallel cross-bars abaxially, base broadly truncate to rounded or cordate, often unequal, margin mucronulate-serrulate, apex acuminate. Inflorescences cymose, axillary, 5–7-flowered, brownish tomentose; peduncles 1–1.5 cm; pedicels 7–10 mm; bracts absent to 3, linear, ca. 2 mm. Flowers yellowish, ca. 2 cm in diam. Sepals 5, ovate, ca. 5 mm, both surfaces rusty velutinous. Petals 5, obovate-oblong, 1–1.1 cm. Filaments 4–6 mm; anthers yellow, ovoid, 1.5–2 mm, both ends rounded. Ovary narrowly cylindric, ca. 5 mm, densely brownish pubescent; styles ca. 2 mm. Fruit globose, ca. 2.3 cm, glabrous, with whitish and rounded lenticels; persistent sepals reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Sep–Oct. 2n = 58*.

- Mountain thickets; ca. 1200 m. Chongqing (Chengkou).


显脉猕猴桃 xian mai mi hou tao

Climbing shrubs, large, deciduous. Branches glabrous, lenticels subconspicuous, very sparsely puberulent when young; pith white, lamellate. Petiole 3–5 cm, sparsely pilose; leaf blade abaxially pale green, adaxially green, broadly ovate to broadly obovate, 8–12 × 4–8.5 cm, papery, abaxially sparsely pubescent, hairs simple or 2- or 3-furcate, adaxially glabrous, midvein and lateral veins conspicuous abaxially, inconspicuous adaxially, lateral veins 5 or 6 pairs, veinlets in conspicuous parallel cross-bars abaxially, base rounded-cordatulate, margin ciliate-serrulate, apex obtuse to abruptly acute. Inflorescences axillary, 1–3-flowered, slightly brownish velutinous; peduncles 3–5 mm; pedicels 0.8–1.2 cm; bracts subulate, 3–4 mm. Flowers white, ca. 1.8 cm in diam. Sepals 5, oblong-obovate, 5–7 mm, both surfaces densely brownish velutinous. Petals 5 or 6, broadly obovate, 1–1.2 cm. Filaments 4–6 mm; anthers yellow, oblong, ca. 2 mm, sagittate at base. Sterile ovary globose, densely yellowish velutinous. Fruit unknown. Fl. Jun, fr. unknown.
berulent, soon glabrescent; pith white, large, lamellate. Petiole 1.5–4 cm, puberulent to glabrous; leaf blade ovate-oblong to ovate or ovate-elliptic, 5–15 × 3–8 cm, thinly papery, abaxially white arachnoid-pubescent throughout or only on midvein and lateral veins, hairs simple or 2- or 3-furcate, soon glabrescent or glabrous, glaucous or not abaxially, adaxially glabrous or sparsely puberulent when young, midvein and lateral veins conspicuously raised abaxially, subconspicuous to conspicuous adaxially, lateral veins 8–11 pairs, reticulate veinslets inconspicuous to subconspicuous with numerous distinct and raised parallel cross-bars abaxially, base broadly truncate to rounded or cordate, usually oblique, margin serrulate, apex acuminate to long acuminate. Inflorescences cymose, axillary, 1–7-flowered, brownish velutinous; peduncle 0.5–1.5 cm; pedicels 0.6–1.4 cm; bracts absent to 3 per pedicel, linear, small. Flowers yellow. Sepals 5, ovate to ovate-oblong, 4–5 mm, both surfaces velutinous, apex obtuse. Petals 5, oblong to obovate, 7–9 mm. Filaments 5–6 mm; anthers yellow, ovoid, 1.5–2 mm, sagittate at base. Ovary globose, ca. 2 mm in diam., densely tomentose; styles 3–4 mm. Fruit cylindric to subglobose, 1.5–2.5 cm, glabrous when mature, lenticels small; persistent sepal reflexed. Seeds ca. 2 mm. Fl. May–Jul, fr. Oct.

- Guangxi (Rongshui).

Introduced from Rongshui Xian in 1983, this species is cultivated in the research orchard of the Guangxi Institute of Botany, Guilin. The name was not validly published by Li and Wang in 2003 because no type was indicated (Vienna Code, Art. 37.1).

51. Actinidia longicarpa R. G. Li & M. Y. Liang, sp. nov.


Climbing shrubs, deciduous, large. Branchlets brown velutinous, glabrescent, lenticels subconspicuous; second-year branches glabrous, lenticels conspicuous; pith white, laminate. Petiole 2.5–6 cm, brown velutinous when young, glabrescent; leaf blade ovate to broadly ovate, 9–20 × 5–9.5 cm, papery, abaxially glaucous near margin, stellate tomentose when young, lenticels adaxially glabrous, base rounded or cordate, margin finely serrate, apex acute. Inflorescences 1–3-flowered, brown velutinous; peduncle 3–7 mm; pedicel 0.6–1.3 cm. Flowers pink. Sepals 3–5, ovate, ca. 5 mm. Petals 5, obovate, ca. 9 mm. Ovary ovoid, whitish tomentose. Fruit ovoid or oblong, ca. 2 cm, sparsely velutinous; persistent sepal not reflexed. Fl. Apr, fr. Oct.

- Guangxi (Rongshui).

Introduced from Longsheng or Ziyuan Xian in 1981, this species is cultivated in the research orchard of the Guangxi Institute of Botany, Guilin. The name was not validly published by Li and Liang in 2003 because no type was indicated (Vienna Code, Art. 37.1).

52. Actinidia linguimensis R. G. Li & X. G. Wang, sp. nov.

Type: China. Guangxi: Guilin, research orchard of Guang-
1a. Annual branchlets setose; fruit mostly scarlet at maturity.  1a. subsp. scandens

1b. Annual branchlets not setose or very sparsely setose; fruit mostly purplish black to black at maturity.


Woody vines, deciduous. Branchlets glabrous, puberulent, tomentose, lanate, or setose. Bud scales laminated, blackish brown, leathery, hairy or not, always persistent at bases of young shoots. Leaves petiolate, leathery to papery, margin entire or finely bristle-toothed or callus-toothed. Flowers solitary or on cymose inflorescences, bisexual. Sepals 5, imbricate, connate at base, persistent. Petals 5, imbricate, connate at base, dilated toward base; anthers ovoid, versatile, 2-celled, dehiscing through 2 longitudinal slits, inserted due to inflexion of filaments after anthesis, their morphological bases apical when mature. Ovary globose, glabrous, 5-ribbed, 5-loculed; ovules 8–10 per locule; styles connate into a cylindrical to filiform, somewhat fleshy, sometimes 5-striate structure; stigma capitulate, small, 5-lobed. Fruit berry-like or a leathery capsule, 5-ribbed when dry, with 1 seed per carpel, with persistent style. Seeds oblong to oblong-elliptic, smooth, with endosperm.

● One species: China.


藤山柳属 teng shan liu shu


藤山柳 teng shan liu

Branchlets glabrous or pubescent. Leaves highly variable, usually ovate, elliptic, broadly ovate, lanceolate, or oblance-obovate, 3–15 × 1.5–8 cm, papery to leathery, both surfaces glabrous or hairy, base obtuse, rounded, cordate, or cuneate, margin finely bristle-toothed, rarely entire, apex acute to caudate. Cymes axillary, 1–12-flowered. Sepals connate at base, white or whitish green, broadly ovate, 3–4 × 2–3 mm. Petals free, white or tinged with red, broadly ovate to broadly elliptic, 5–8 × 4–5 mm. Fruit a leathery capsule, red or purple to black, subglobose, 5–7–10 mm in diam., 5-ridged. Fl. Jun–Jul, fr. Jul–Sep. 2n = 48*.

● Forests, thickets, mountain slopes, valleys; 1000–3900 m. Chongqing, Gansu, Guangxi, Guizhou, Henan, Hubei, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Yunnan.

1a. Annual branchlets setose; fruit mostly scarlet at maturity.  1a. subsp. scandens

1b. Annual branchlets not setose or very sparsely setose; fruit mostly purplish black to black at maturity.

2a. Pedicel and calyx usually woolly; inflorescences often 3–7–12-flowered.  2a. subsp. hemsleyi

2b. Pedicel and calyx usually not woolly; inflorescences 1–6-flowered.

3a. Leaves abaxially and annual branchlets usually tomentose; inflorescences often 3–6-flowered.  3a. subsp. tomentella

3b. Leaves abaxially glabrous or sparsely pilose; annual branchlets usually glabrous or puberulent; inflorescences often 1–3-flowered.  3b. subsp. actinidioides

1a. Clematoclethra scandens subsp. scandens

藤山柳(原亚种) teng shan liu (yuan ya zhong)


- Dense forests, thickets; 1100–2000 m. Chongqing, Sichuan.


绒毛藤山柳  rong mao teng shan liu


- Dense forests, mountain slopes, valleys; 1000–2500 m. Hubei, Shaanxi.


绒毛藤山柳  rong mao teng shan liu

Clematoclethra tomentella Franchet, J. Bot. (Morot) 8: 280. 1894; C. cordifolia var. tilacea (Komarov) C. Y. Chang; C. disticha Hemsley; C. floribunda W. T. Wang ex C. F. Liang & Y. C. Chen; C. tilacea Komarov.


- Dense forests, thickets; 1100–2000 m. Chongqing, Sichuan.


猕猴桃藤山柳 mi hou toa teng shan liu


- Sparse forests, thickets, mountain slopes, valleys; 1500–3900 m. Gansu, Guizhou, Henan, Hunbei, Ningxia, Qinghai, Shaanxi, Sichuan, Yunnan.


[“Saurauja”, nom. cons.]

水东哥属 shui dong ge shu

Trees or shrubs. Branchlets usually with unguiculate hairs or subulate scales. Leaves petiolate; petiole scaly or not, rarely long setose; leaf blade tomentose or not abaxially, veins with scales or stiff hairs, numerous lateral veins diverging parallel to midvein, margin serrate. Inflorescences thyrsoid, paniculate, composed of terminal cymes, solitary or fasciculate, usually scaly, tomentose or glabrous. Pedicels 2–bracteate. Flowers hermaphroditic or plants functionally dioecious. Sepals 5, strongly imbricate. Petals 5, imbricate, usually connate at base. Stamens 15–130; filaments adnate to base of petals; anthers oblong, dorsifixed, dehiscing longitudinally or poricidally. Ovary 3–5–lobed, with many ovules per locule; styles 3–5, connate below middle, rarely free; stigma simple to discoid. Fruit baccate, white to pale green, rarely red, globose or depressed-globose, usually ribbed. Seeds brown, minute, areolate.

About 300 species: Asia and the Americas, principally in tropical regions; 13 species (seven endemic) in China.

1a. Branchlets and petioles with hisrtle or setose hairs, without scales.

2a. Branchlets and petioles ferruginous long setose; stamens ca. 39 .................................................. 12. S. macrotrichia

2b. Branchlets and petioles hisrtle; stamens 50–90 .......................................................... 13. S. sinohirsuta

1b. Branchlets and petioles with unguiculate or subulate scales.

3a. Leaves abaxially not tomentose or lanate.

4a. Leaves adaxially at least setose on midvein.

5a. Cymose inflorescences in axils of leaves on young branchlets, 8–12 cm, ca. 13–flowered ................ 7. S. thyrsiflora

5b. Cymose inflorescences in axils of fallen leaves on old branches, 1–5 cm, 1–3–flowered ..................... 8. S. tristyla
4b. Leaves adaxially not setose.

6a. Inflorescences paniculate, 7–33 cm ................................................................. 9. *S. polyneura*

6b. Inflorescences cymose or flowers solitary, less than 3 cm.

7a. Flowers 3.5–4 cm in diam., solitary ................................................................. 10. *S. cerea*

7b. Flowers ca. 0.8 cm in diam., on cymose inflorescences ..................................... 11. *S. yunnanensis*

3b. Leaves abaxially tomentose or lanate.

8a. Abaxial tomentum thickly ferruginous tomentose or lanate.

9a. Inflorescences paniculate on young branchlets; sepals hairy; leaves with 37–40 pairs of lateral veins ................................................................. 1. *S. griffithii annamica*

9b. Inflorescences cymose in axes of fallen leaves on old branches; sepals glabrous; leaves with 23–30 pairs of lateral veins ................................................................. 2. *S. miniata*

8b. Abaxial tomentum sparsely brownish scurfy-tomentose.

10a. Inflorescences paniculate, 12–33 cm; leaves with 28–40(–46) pairs of lateral veins ................................................................. 3. *S. napaulensis*

10b. Inflorescences cymose, 3–7 cm; leaves with 20–34 pairs of lateral veins.

11a. Branchlets sparsely brown or ferruginous velutinous; styles 4- or 5-fid above middle ................................................................. 4. *S. erythrocarpa*

11b. Branchlets only with unguicular scales; styles 5-fid above middle.

12a. Leaf blade ovate, with 26 pairs of lateral veins; inflorescences in axes of fallen leaves on old branches; bracts elliptic, 2–3 mm; flowers 5–8 mm in diam. ................................................................. 5. *S. rubricalyx*

12b. Leaf blade narrowly elliptic to oblong-elliptic, with 25–34 pairs of lateral veins; inflorescences in axes of leaves on young branchlets; bracts broadly ovate, ca. 4 mm; flowers 1.8–2 cm in diam. ................................................................. 6. *S. punduana*


绵毛水东哥 mian mao shui dong ge

Trees ca. 8 m tall. Branchlets stout, densely brown tomentose, hairs intermixed with subulate scales. Petiole 4.5–5 cm, stout, scaly, tomentose; leaf blade broadly or narrowly elliptic-oblong, 20–40 × 8–17 cm, leathery, abaxially flocculently brown or ferruginous tomentose, adaxially glabrous, midvein and lateral veins with subulate scales buried in tomentum, lateral veins 37–40 pairs, base obtuse to rounded, symmetrical to oblique, margin remotely setose-serrate, apex abruptly acuminate. Inflorescences 15–33 cm, axillary, densely tomentose, sparsely scaly; pedicels 1–1.7 cm; bracteoles 2, above middle, narrowly elliptic, ca. 8 × 3 mm, abaxially tomentose. Sepals broadly elliptic, 4–5 mm wide, abaxially sparsely to densely tomentose. Petals unknown. Stamens 52–54. Ovary subglobose, glabrous; styles 5, connate below middle. Fruit unknown. Fl. and fr. unknown.

Broad-leaved forests; 600–1200 m. SE Xizang [Bhutan, NE India].


越南水东哥 yue nan shui dong ge

Leaf blade narrowly elliptic-oblong, 20–30 × 8–11 cm, base obtuse to rounded, oblique. Abaxial surface of leaves, inflorescences, and sepals ± sparsely tomentose.

Broad-leaved forests; 1000–1300 m. SE Xizang [N Vietnam].


朱毛水东哥 zhu mao shui dong ge

Small trees or shrubs, 2–8 m tall. Branchlets densely ferruginous tomentose, hairs intermixed with unguicular scales, scales occasionally truncate-tipped or 2-fid. Petiole 2–2.5 cm, densely ferruginous tomentose and sparsely scaly; leaf blade oblong-elliptic, 19–24 × 6–14 cm, leathery, abaxially thickly tomentose, hairs intermixed with subulate scales on midvein and lateral veins, adaxially glabrous, with subulate scales on midvein, lateral veins 23–30 pairs, base obtuse to subrounded, margin mucronate-serrate, apex acute or shortly acuminate. Inflorescences 2.5–7 cm, axillary, 3- or 4-fascicled on old branches, ferruginous tomentose and sparsely scaly; peduncles 5–10 mm, with 4 or 5 bracts at apex; bracts broadly elliptic to ovate-triangular, 2–6 mm, ciliate; pedicels ca. 1.2 cm, ferruginous tomentose and sparsely scaly, with 2 bracteoles at base; bracteoles ca. 1 mm. Flowers pink, small, ca. 8 mm in diam. Sepals elliptic to broadly elliptic, 3–4 mm. Petals oblong, ca. 5 mm. Stamens 45–75. Ovary subglobose, glabrous; styles 5, connate below middle. Fruit green to white, depressed-globose, 3–5 mm in diam. Fl. May–Jun, fr. Oct. 2n = 78*.

- Mountain forests, thickets on riverbanks, valleys; 500–1500 m. NW Guangxi, SE Yunnan.

尼泊尔水东哥    ni bo er shui dong ge


Trees 4–20 m tall. Branchlets brown pubescent to glabrescent, with setose hairs intermixed with subulate scales. Petiole 2.5–5 cm, pubescent to glabrescent, with minute hairs intermixed with subulate and unguiculate scales; leaf blade narrowly elliptic to oblong-obovate, 13–36 × 7–15 cm, thinly leathery, abaxially sparsely ferruginous tomentose, indumentum caducous or not, sparsely scaly on midvein and lateral veins, adaxially glabrescent or not, sparsely scaly on midvein and lateral veins, with minute hairs intermixed with unguiculate scales. Fl. Sep–Oct, fr. Oct–Nov.

4a. Saurauia erythrocarpa var. erythrocarpa

红果水东哥(原变种)  hong guo shui dong ge (yuan bian zhong)

Trees. Branchlets and petioles ferruginous- to brown tomentose, with sparse unguiculate hairs or scales, some scales truncate or 2-fid at apex. Leaf blade narrowly elliptic, unguiculate-scaly on midvein and lateral veins. Inflorescences subglobose; styles 4 or 5, connate below ovary, ca. 5 mm. Petals suborbicular. Fruit depressed-globose or subglobose. Fl. Sep–Oct, fr. Oct–Nov.

● Mountain forests, valleys; 800–2500 m. SE Xizang, Yunnan.


粗齿水东哥    cu chi shui dong ge

Shrubs. Branchlets and petioles tomentose or not, with dense subulate scales, and proximally with some unguiculate hairs, scales truncate or 2-fid at apex. Leaf blade narrowly to broadly elliptic-ovobate, subulate scaly on veins abaxially, base obtuse to rounded. Inflorescences ca. 3 cm, slender, with 1 bract at base of each branch; bract broadly ovate, large, 5–9 mm. Petals broadly elliptic to suborbicular. Fl. Sep–Oct, fr. Oct–Nov.

● Sparse mountain forests, valleys; 1200–1400 m. S Yunnan.


红萼水东哥    hong e shui dong ge

Shrubs. Ca. 3 m tall. Branchlets with fine subulate scales. Petiole 1.3–3.5 cm, scaly; leaf blade ovate, 9–23 × 5–10 cm, leathery, abaxially glandular-puberulent, sparsely scaly on midvein and lateral veins, axially glabrous, sparsely scaly on midvein, lateral veins ca. 26 pairs, reticulate veins conspicuous, base broadly cuneate, margin biserate, apex shortly acuminate. Inflorescences 3.5–4.5 cm, 1–3-fascicled on old branches, 2- or 3-flowered; bracts 2 at base of branches, elliptic, 2–3 mm; pedicels ca. 1.5 cm, with 2 bracteoles at middle; bracteoles ca. 2 mm. Flowers small, 5–8 mm in diam. Sepals red, elliptic, unequal. Petals and stamens unknown. Ovary subglobose; styles 5, connate below middle. Fruit unknown. Fl. and fr. unknown.

● Margins of broad-leaved forests, mountain slopes; 1600–2000 m. SE Xizang.


大花水东哥    da hua shui dong ge

Trees ca. 6 m tall. Branchlets pubescent to glabrescent with minute scurfy hairs intermixed with unguiculate scales. Petiole 3–5 cm, with similar pubescence as branchlets; leaf blade narrowly elliptic to narrowly obovate, ca. 33 × 11 cm, thinly leathery, abaxially densely brown scurfy-puberulent, with sparse scales on midvein and lateral veins, adaxially glabrous but scaly on midvein, lateral veins 25–34 pairs, base cuneate,
margin finely biserrate, apex shortly acuminate. Inflorescences ca. 5 cm, axillary, 1–3-fascicled, 2- or 3-flowered, glabrous, scaly; pedicels slender; bracts broadly elliptic, ca. 4 mm. Flowers pinkish white, large, 1.8–2 cm in diam. Sepals: outer 2 broadly elliptic, inner 3 narrowly elliptic to orbicular, enlarged when in fruit. Petals oblong, ca. 1.2 × 1.1 cm. Stamens ca. 90. Ovary subglobose, ribbed; styles 5, connate below middle. Fruit unknown. Fl. and fr. unknown.

Broad-leaved forests on mountains; 700–1700 m. SE Xizang [Bhutan, India, Myanmar].


8a. Saurauia polyneura

Small trees or shrubs, 2–4 m tall. Branchlets with scurfy tomentum, intermixed with subulate scales. Petiole 1.5–4 cm, brown puberulent, with subulate scales; leaf blade oblong-elliptic, 14–26 × 5.5–11 cm, membranous, both surfaces sparsely brown tomentose when young, sparsely setose on midvein and lateral veins abaxially, sparsely setose on midvein and lateral veins and occasionally in between veins adaxially, lateral veins 12–15 pairs, base obtuse to rounded, margin finely serrate, apex shortly acuminate to acute. Inflorescences axillary, 8–12 cm, brown puberulent and subulate-scaly, ca. 13-flowered; bracts more than 2 at base of each branch, elliptic, 2–5 mm, sometimes leaflike, to 1.6 cm; pedicels 1–1.7 cm, with 2 bracteoles at base. Flowers pink, 0.8–1 cm in diam. Sepals white to greenish white, outer 3 broadly elliptic, inner 2 narrowly elliptic, ca. 5 mm, abaxially brown tomentose, margin occasionally ciliate. Petals oblong, connate at base. Stamens 48–65. Ovary subglobose; styles 3 or 4(or 5), connate below middle. Fruit green, subglobose, 0.8–1.2 cm in diam., slightly 5-ribbed. Fl. May–Jul, fr. Aug–Dec.

- Mountain forests, thickets, valleys; 500–1500 m. W Guangxi.

8b. Saurauia polyneura

Small trees or shrubs, 3–6(–12) m tall. Branchlets tomentose or not, with unguiculate hairs or subulate scales. Petiole tomentose or not, with unguiculate hairs or subulate scales; leaf blade narrowly obovate-lanceolate to narrowly oblong, rarely obovate-lanceolate, 16–32 × 5–8.5 cm, membranous to thinly leathery, lateral veins 28–40 pairs or more, base cuneate to obtuse, margin finely serrate, apex acute to rounded. Inflorescences solitary, axillary, 7–33 cm, with sparsely distributed scales; pedicels 0.8–1.5 cm, with 2 bracteoles below middle; bracteoles narrowly ovate, ca. 2 mm. Flowers pink to white, 6–10 mm in diam. Sepals elliptic to broadly elliptic, 4–5 mm, abaxially glabrous to very sparsely tomentose. Petals oblong, 5–6 mm, connate at base. Stamens 50–64. Ovary subglobose, 6–8 mm in diam. Fl. Jul–Sep, fr. Sep–Nov.

- Forests, valleys; 1200–3200 m. SE Xizang, NW and W Yunnan.

9a. Saurauia polyneura var. polynulera

Leaf blade narrowly obovate-lanceolate to narrowly oblong, base often cuneate, lateral veins 28–40 pairs or more ......... 9a. var. polynulera

9b. Saurauia polyneura var. paucinervis

Leaf blade obovate-elliptic to narrowly so to elliptic or narrowly so, base attenuate, lateral veins 22–30 pairs .... 9b. var. paucinervis

9c. Saurauia polyneura var. duomai

Leaf blade narrowly obovate-lanceolate to narrowly oblong, base often cuneate, lateral veins 28–40 pairs or more; bracts more than 2 at base of each branch, elliptic, 2–5 mm, sometimes leaflike, to 1.6 cm; pedicels 1–1.7 cm, with 2 bracteoles at base. Flowers pink, 0.8–1 cm in diam. Sepals white to greenish white, outer 3 broadly elliptic, inner 2 narrowly elliptic, 5 mm, abaxially brown tomentose, margin occasionally ciliate. Petals oblong, connate at base. Stamens 48–65. Ovary subglobose; styles 3 or 4(or 5), connate below middle. Fruit green, subglobose, 0.8–1.2 cm in diam., slightly 5-ribbed. Fl. May–Jul, fr. Aug–Dec.

- Mountain forests, thickets, valleys; 500–1500 m. W Guangxi.

9d. Saurauia polyneura var. duomai

Leaf blade narrowly obovate-lanceolate to narrowly oblong, rarely obovate-lanceolate, 16–32 × 5–8.5 cm, membranous to thinly leathery, lateral veins 28–40 pairs or more, base often cuneate, occasionally obtuse, margin finely serrate, apex acute.

- Forests, valleys; 1200–3200 m. SE Xizang, NW and W Yunnan.

9e. Saurauia polyneura var. shaomai

Leaf blade narrowly obovate-lanceolate to narrowly oblong, rarely obovate-lanceolate, 16–32 × 5–8.5 cm, membranous to thinly leathery, lateral veins 28–40 pairs or more; bracts more than 2 at base of each branch, elliptic, 2–5 mm, sometimes leaflike, to 1.6 cm; pedicels 1–1.7 cm, with 2 bracteoles at base. Flowers pink, 0.8–1 cm in diam. Sepals white to greenish white, outer 3 broadly elliptic, inner 2 narrowly elliptic, 5 mm, abaxially brown tomentose, margin occasionally ciliate. Petals oblong, connate at base. Stamens 48–65. Ovary subglobose; styles 3 or 4(or 5), connate below middle. Fruit green, subglobose, 0.8–1.2 cm in diam., slightly 5-ribbed. Fl. May–Jul, fr. Aug–Dec.

- Mountain forests, thickets, valleys; 500–1500 m. W Guangxi.

9f. Saurauia polyneura var. duomai

Leaf blade narrowly obovate-lanceolate to narrowly oblong, rarely obovate-lanceolate, 16–32 × 5–8.5 cm, membranous to thinly leathery, lateral veins 28–40 pairs or more, base often cuneate, occasionally obtuse, margin finely serrate, apex acute.
10. Saurauia cerea  
蜡质水东哥 la zhi shui dong ge

Trees 5–15 m tall. Branchlets stout, with dense unguiculate hairs or subulate scales, not tomentose. Petiole 1.1–3.5 cm, stout, with subulate scales; leaf blade obovate, 17–36 × 12–20 cm, leathery, abaxially yellowish tomentose when young, glabrous when old, unguiculate-scaly on midvein and lateral veins on both surfaces, lateral veins 23–29 pairs, base cuneate, rarely obtuse, margin densely setose-serrate, apex acute. Inflorescences 1-flowered, fascicled on old branches; pedicels to 1.5 cm, somewhat thick, with yellowish indumentum and scales, with 2 bracts below middle; bracts ovate, 5–7 mm, abaxially hairy and scaly. Flowers large, 3.5–4 cm in diam. or larger. Sepals ca. 1 cm, outer 3 elliptic, inner 2 orbicular, abaxially yellowish tomentose and scaly, adaxially yellowish white pubescent at base. Petals white to pink, purple at base, oblong, ca. 1.9 × 1.2 cm. Stamens 120–130. Ovary subglobose, yellowish brown tomentose; styles 4 or 5, distinct. Fruit greenish white, depressed-globose, ca. 8 mm in diam., 5-ribbed, yellowish brown tomentose. Fl. Jul–Sep, fr. Oct–Nov.

Moist mountain forests, valleys; 400–2200 m. SE Xizang, S Yunnan [India, Myanmar].

11. Saurauia yunnanensis  
云南水东哥 yun nan shui dong ge

Small trees or shrubs, 4–5 m tall. Branchlets with sparse fine unguiculate scales, with tomentose indumentum or not. Petiole 1.5–2.5 cm, sparsely scaly; leaf blade narrowly obovate-lanceolate, 6–22 × 1.2–5.2 cm, thinly leathery, midvein and lateral veins with sparse unguiculate scales on both surfaces, lateral veins 12–14 pairs, base obtuse, margin serrate, apex shortly acuminate. Inflorescences 2.5–3.3 cm, few flowered, sparsely scaly, with 2 bracts at base of branches; bracts lanceolate, 1.5–3 mm; pedicels ca. 1.2 cm, with 2 bracteoles proximally; bracteoles ovate-triangular, 1–2 mm. Flowers pink, ca. 8 mm in diam. Sepals: outer 2 elliptic, ca. 3.5 mm, inner 3 broadly elliptic to suborbicular, 3.5–5 mm. Fruit unknown. Fl. and fr. unknown.

● Shaded moist places in forests, thickets, valleys, by marshes; 400–1700 m. Guangxi, Guizhou, Yunnan.

12. Saurauia macrotricha  
长毛水东哥 chang mao shui dong ge

Small trees or shrubs, 1–5 m tall. Branchlets stout, dark reddish ferruginous pubescent, hairs setose, long. Petiole 2–3.8 cm, densely ferruginous pubescent with long setose hairs; leaf blade narrowly lanceolate, 20–28 × 3.7–6.8 cm, papery, both surfaces setose, lateral veins 17 pairs, base obtuse, margin setose-serrate, apex acuminate. Inflorescences ca. 2.5 cm, axillary, 2- or 3-fascicled, 1–3-flowered, on young branchlets; peduncles ca. 8 mm, with 2 bracts at base of branches; bracts nearly opposite, lanceolate, 2–3 mm; pedicels 8–11 mm, densely setose with long, ferruginous hairs. Flowers pink, ca. 8 mm in diam. Sepals elliptic to suborbicular, ca. 5 mm, conrate at base. Petals suborbicular, connate at base. Stamens ca. 39. Ovary depressed-globose, glabrous; styles 5, connate below middle. Fruit unknown. Fl. and fr. unknown.

Mountain forests, valleys; 900–1400 m. NW and W Yunnan [India, Myanmar].

13. Saurauia sinohirsuta  
J. Q. Li & Soejarto, nom. nov.
糙毛水东哥 cao mao shui dong ge

Replaced synonym: Saurauia hirsuta C. F. Liang, Guihaia 6: 175. 1986, not Saurauia hirsuta Blume, Bijdr. 128. 1825 [“Saurania”].

Trees small, 3–5 m tall. Young branches hirsute, old branches glabrescent to glabrous. Leaf blade obovate, 15–25 × 9–15 cm, softly leathery, abaxially densely appressed-hirsute, hairs on midvein and lateral veins thicker, adaxially sparsely setulose, hairs on midvein and lateral veins longer, lateral veins ca. 18 pairs, base obtuse, margin densely setose-serrate, apex shortly acute. Flowers solitary, axillary on young branchlets; pedicels 1–1.3 cm, hirsute; bracts ca. 4 mm. Sepals sanguineous, ovate to oblong, 8–10 mm, densely hirsute. Petals pink, spatulate-oblong, 1.1–1.2 cm. Stamens 50–90, 3–4 mm. Ovary subglobose, hirsute; styles 4. Fruit unknown. Fl. and fr. unknown.

● Semi-evergreen forests on mountains; 800–1700 m. SE Xizang.