
**猕猴桃属** mi hou tao 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, veinlets reticulate, usually in cross-bars, margin serrate or dentate, rarely entire. Inflorescences cymose, axillary, often pseudo-umbel late, 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(or 6), distinct or connate at base, imbricate, rarely valvate, persistent or not. Petals (4 or)5(or more than 5), imbricate. Stamens numerous, in functionally female flowers often with shorter filaments and smaller sterile anthers; filaments slender; anthers yellow, brown, purple, or black, versatile, attached at middle, 2-celled, dehiscing lengthwise, usually divaricate at base. Disk absent. Ovary ovoid, cylindrical, or bottle-shaped, glabrous or hairy, many loculed; ovules numerous per locule; 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 (Guhaiia 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 obvoid, 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*

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 ferrugineous 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 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. laevissima
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. indochinensis

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. sabifolia
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

8b. Leaves abaxially ± tomentose, hairs stellate or imperfectly stellate.

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 obtriangular-obovate, 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 oblong-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.
42a. Leaf blade obovate to obtriangular-obovate, apex abruptly acute to truncate ........................................ 42. A. obovata
42b. Leaf blade broadly ovate or broadly obovate to obovate, apex acute to abruptly acuminate to cuspidate ........................................ 43. A. lijiangensis
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 hispid-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 cylindric, 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 cylindric-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. Pith 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. Pith brown; leaf blade 2–3 cm wide, apex shortly acuminate to 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 axis 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-flowered, 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 oblanceolate, 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, oblanceolate, 1.5–2 mm, sagittate at base. Ovary bottle-shaped, 6–7 mm; glabrous; styles 3.5–4 mm. Fruit greenish yellow or purpurea, 1.5–2 mm, sagittate at base. Ovary bottle-shaped, 6–7 mm, sagittate at base. Ovary bottle-shaped, 6–7 mm, sagittate at base.
conspicuous to subconspicuous, adaxially inconspicuous, base cuneate to rounded or truncate, occasionally cordate, sometimes oblique, margin sharply serrate or minutely serrulate, apex shortly acuminate to acuminate. Inflorescences cymose, slightly tomentose, 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 to yellowish white or paper-white. Sepals (4 or 5), ovate to oblong-obovate, 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, 2–3.5 mm, sagittate at base. Ovary bottle-shaped, ca. 7 mm, glabrous; styles 4–5 mm. Fruit globose to oblong, 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

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

- Leaves abaxially barbate in axils of lateral veins ............................................. 2a. var. melanandra
- Leaves abaxially not barbate in axils of lateral veins ................................. 2b. var. glabrescens

2b. Actinidia melanandra var. glabrescens

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


- Leaves abaxially barbate in axils of lateral veins ............................................. 2a. var. melanandra
- Leaves abaxially not barbate in axils of lateral veins ................................. 2b. var. glabrescens

3. Actinidia kolomikta var. melanandra

- Leaves abaxially barbate in axils of lateral veins ............................................. 2a. var. melanandra
- Leaves abaxially not barbate in axils of lateral veins ................................. 2b. var. glabrescens

3b. Actinidia kolomikta var. glabrescens

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


- Leaves abaxially barbate in axils of lateral veins ............................................. 2a. var. melanandra
- Leaves abaxially not barbate in axils of lateral veins ................................. 2b. var. glabrescens

4. Actinidia tetramera var. badongensis C. F. Liang; Clematocephra giraldii Diels.

- Climbing shrubs, mid-sized, deciduous. Branchlets grayish to reddish, glabrous, lenticels conspicuous; pith brown, lamellate. Petiole yellowish white to reddish brown, 2.5–5 cm, sparsely pubescent to glabrous; leaf blade broadly ovate to oblong-obovate or oblong-elliptic, 6–15 × 5–10 cm, membranous to thinly papery, abaxially glabrous to subglabrous, sometimes barbate at vein axils, adaxially sparsely strigillate, 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 biserate, 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 tomentose; bracts linear, minute. Flowers pink or white. Sepals 5, ovate to oblong-ovate, 4–6 mm, glabrous, margin ciliate, apex acute. Petals 5 or 6, obovate, 6–10 mm. Filaments 3–6 mm; anthers yellow, oblong, 2.5–2.5 mm, sagittate at base. Ovary globose, ca. 3 mm, glabrous. Fruit pale 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, Fujian, Hebei, Heilongjiang, Hebei, Jiangsu, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Yunnan [Japan, Korea, Russia].

- Actinidia kolomikta var. shihmienensis 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.

- Actinidia tetramera var. badongensis C. F. Liang; Clematocephra giraldii Diels.

- Climbing shrubs, mid-sized, deciduous. Branchlets grayish to reddish, glabrous, lenticels conspicuous; pith brown, lamellate. Petiole yellowish white to reddish brown, 2.5–5 cm, sparsely pubescent to glabrous; leaf blade broadly ovate to oblong-obovate or oblong-elliptic, 4–8 × 2–4 cm, thinly papery, abaxially glabrous to slightly strigillate on midvein, always very conspicuously white barbate at axils of lateral veins, adaxially glabrous to sparsely strigillate 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, obovate, 7–10 mm. Filaments ca. 4 mm; anthers yellow, oblong, ca. 1.5 mm, both ends rounded. Ovary cylindric 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 zo mi hou tao


Climbing shrubs, large, deciduous. Branchlets glabrous, lenticels 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 ca. 1.5 cm; peduncles 6–7 mm; pedicels 0.9–1.5 cm; bracts linear to lanceolate, minute. Flowers white. Sepals usually 2. Petals 7–12 .......... 7a. var. macrosperma


**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, lenticels 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-ovobate, 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 obvoid, 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*.

- Forest margins on low mountains, thickets, low mountain slopes. Anhui, Guangdong, Hubei, Jiangsu, Jiangxi, Zhejiang, Zhejiang.


**大籽猕猴桃** da zi mi hou tao

Climbing shrubs, mid-sized, deciduous. Branchlets glabrous; pith white, solid. Petiole 1–2.2 cm, glabrous to setose; leaf blade abaxially pale green, adaxially green, ovate or elliptic, 3.8–8 × 1.7–5 cm, membranous when young, leathery when mature, abaxially glabrous to strigillose on midvein, barbate in vein axils or not, adaxially glabrous, midvein and lateral veins subconspicuous abaxially, inconspicuous adaxially, lateral veins 4 or 5 pairs, base broadly cuneate to rounded, equal or oblique, margin serrate or crenate, subentire when mature, apex acute to acuminate, occasionally rounded. Inflorescences often 1-flowered; peduncles 6–7 mm; pedicels 0.9–1.5 cm; bracts linear to lanceolate, minute. Flowers white. Sepals 2 or 3, ovate to narrowly ovate, 0.6–1.2 cm, glabrous, rostrate at apex. Petals 5–12, orbicular-ovobate, 1–1.5 cm. Filaments 3–7 mm; anthers yellow, ovoid, 1.5–2.5 mm, sagittate at base. Ovary bottle-shaped, 6–8 mm, glabrous; styles ca. 5 mm. Fruit orange when mature, globose to ovoid, 3–3.5 cm, glabrous, mammilliform-rostrate at apex, lenticels absent; sepals persistent or caducous. Seeds 4–5 mm, ca. 3 mm in diam. Fl. Apr–May, fr. Sep–Oct. 2n = 116*.

- Forest margins on low mountains, thickets, low mountain slopes. Anhui, Guangdong, Hubei, Jiangsu, Jiangxi, Zhejiang.

7a. **Actinidia macrosperrma** var. **macrosperrma**

**大籽猕猴桃（原变种）** da zi mi hou tao (yuan bian zhong)

Leaf blade ca. 8 × 5 cm, margin crenate-serrate, subentire when mature, midvein and petiole not setose; sepals usually 2, petals 5 or 6(–9) ............................................ 7a. var. **macrosperrma**

1b. Leaf blade 3–8 × 1.7–3.5 cm, margin serrate, midvein and petiole sparsely setose; sepals 2 or 3; petals 7–12 ........... 7b. var. **mumoides**


Climbing shrubs, large, deciduous. Branchlets glabrous, lenticels conspicuous; pith pale brown, solid. Petiole 3–4.5 cm, glabrous; leaf blade axially dark green, adaxially dark green, oblong-suborbicular 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 axes 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.

1a. Leaf blade obovate to rhombic-elliptic, base cuneate .............................................. 8c. var. cuneata

1b. Leaf blade suborbicular, base rounded.

2a. Leaf blade 7–11 × 5.5–7.5 cm, upper part of margin conspicuously serrate, lateral veins 7 pairs, petiole 2.5–3.5 cm; peduncle inconspicuous; fruiting pedicel ca. 1.2 cm ..... 2b. var. fasciculoides

2b. Leaf blade ca. 7 × 4.5 cm, upper part of margin minutely serrate, lateral veins 5 pairs, petiole 3–8 cm; peduncle ca. 2 mm; fruiting pedicel ca. 1.4 cm ......................... 8b. var. orbiculata

8a. Actinidia fasciculoides var. fasciculoides


伞花猕猴桃 san hua mi hou tao

Leaf blade ovate to elliptic, 7–14 × 6.5–7.5 cm ............................. 9a. var. umbelloides

9a. Actinidia umbelloides var. umbelloides


暑叶猕猴桃 shan ye mi hou tao

Leaf blade suborbicular to obovate, 6–7 × 4.5–5.5 cm. ............................. 9b. var. flabellifolia


红茎猕猴桃 hong jing mi hou tao

Leaf blade suborbicular to obovate, 6–7 × 4.5–5.5 cm. ............................. 9b. var. flabellifolia

- Mixed forests; 1800–2000 m. Yunnan (Jingdong, Tengchong).
blade oblong-lanceolate to elliptic to oblanceolate, 8–16 × 1.2–5 cm, papery to thickly leathery, midvein and lateral veins raised or slightly raised abaxially, inconspicuous or pubescent adaxially, lateral veins 6 or 7 pairs, veinlets reticulate, inconspicuous on both surfaces or subconspicuous abaxially, base cuneate to rounded, margin laxly serrulate to sharply serrate, teeth sometimes glandular, apex acuminate to acute. Inflorescences often 1-flowered, sometimes 2–5-flowered cymes along short, distally leafy, proximally leafless branches; pedicels 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].

1a. Flowers white; ovary soon glabrescent; leaves papery ............................................. 10a. var. rubricaulis

1b. Flowers reddish; ovary white pubescent until formation of young fruit; leaves thickly leathery ............................................. 10b. var. coriacea

10a. Actinidia rubricaulis var. rubricaulis

红茎猕猴桃


革叶猕猴桃
gè yè mǐ hòu táo


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.


山梨猕猴桃

Shān lǐ mǐ hòu táo


Climbing shrubs, large, deciduous. Floral branchlets glabrous, rarely stigose, lenticels very conspicuous; pith brown, lamellate, or sometimes solid; buds densely rusty stigose; two-year-old branches grayish, with rugose striae when dry, lenticels dehiscent or not, 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 pubescent on both surfaces or subconspicuous abaxially, slightly pubescent along collateral veins, 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

Yìng chì mǐ hòu táo

Climbing shrubs, large, deciduous. Floral branchlets glabrous, rarely stigose, lenticels very conspicuous; pith brown, lamellate, or sometimes solid; buds densely rusty stigose; two-year-old branches grayish, with rugose striae when dry, lenticels dehiscent or not, pith brown, lamellate. Petiole reddish, 2–8 cm, glabrous, rarely stigose; leaf blade abaxially pale green, adaxially dark green, 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 adaxially, lateral veins 6 or 7 pairs, reticulate veinlets conspicuous with subconspicuous parallel cross-bars, base rounded to truncate or cordulate, 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.
uous 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. 2n = 58, 116.

Forests, forest margins, thickets, slopes, valleys, stream-sides, 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 apressed tomentose .....

13a. Actinidia callosa

13a. Actinidia callosa var. calliosa

硬齿猕猴桃 (原变种) ying chi mi hou tao (yuan bian zhong)

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

Branchlets sparsely tomentose or not. Leaf blade ovate-lanceolate to ovate-oblong-ovate or oblong-lanceolate, 5–10 × 2.5–6 cm, papery, abaxially with barbate lateral vein axis. Inflorescences sparsely tomentose or not. Sepals apressed 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, 10–12.5 × 6.5–8.5 cm, thinly papery, abaxially with barbate lateral vein axis, adaxially sparsely strigillose, base rounded, margin setose-serrate, 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. curvidens Dunn.

Leaf blade often 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. 2n = 58*, 116*.

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


柱果猕猴桃 zhu guo mi hou tao

Climbing shrubs, small to mid-sized, semi-evergreen.
Brances glabrous, lenticels inconspicuous when young, sub-
 conspicuous when old; pith white or brown, lamellate; buds conical, glabrous. Petiole 1.3–2.3 cm, glabrous; leaf blade abax-
ially pale green, adaxially green, elliptic to oblong to obovate or obovate-lanceolate, 5–13 × 2.5–5.5 cm, firmly membranous,  
but leathery on two-year-old leaves, glabrous, midvein and lat-
eral veins slightly or strongly raised abaxially, subconspicuous 
adxially, lateral veins 7 or 8 pairs, base obtuse to rounded or 
rounded, margin usually setose-serrulate, occasionally coarsely 
dentate, apex cuspidate to abruptly acute to acuminate. Inflo-
enceses 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 (Jiang-
kou, Yingjiang), Hubei (Xuan’en).

France 53: 574. 1906 [“fortunati”].

条叶猕猴桃  tiao ye mi hou tao

Actinidia asymmetrica F. Chun; A. dielsii H. Léveillé; A. 
glaucophylla F. Chun; A. glaucophylla var. asymmetrica (F. 
Chun) C. F. Liang; A. glaucophylla var. robusta C. F. Liang; A. 
glaucophylla var. rotunda C. F. Liang; A. gracilis C. F. Liang; 
A. longicauda F. Chun.

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, adax-
ially green, lanceolate to oblong-elliptic to obovate-lanceolate, 
or ovate to broadly ovate to suborbicular, 7–17 × 1.8–5 cm, 
abaxially glaucous, or sometimes puberulent on midvein and 
lateral veins, adaxially glabrous, occasionally sparsely strigil-
lose when young, midvein and lateral veins raised and distinct 
abaxially, subconspicuous adaxially, lateral veins 6 or 7 pairs, 
reticulate veinslets subconspicuous abaxially, inconspicuous 
adaxially, base obtuse to auriculate-cordate, usually distinctly 
oblite, margin finely serrulate, apex abruptly acuminate to 
long acuminate. Inflorescences cymose, 1–3–flowered, glabrous 
or slightly reddish brown tomentose; peduncle 2–10 mm; pedi-
cels 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; 
persistent sepals reflexed or not. Seeds small, ca. 1 mm. Fl. 
Apr–Jun, fr. Nov. 2n = 58*.

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


金花猕猴桃  jin hua mi hou tao

Climbing shrubs, large, deciduous. Floral branchlets rusty-
and glandular-tomentose in part, glabrous when fruiting, with conspicuous lenticels; pith brown, lamellate. Petiole 2.5–5 cm, glabrous; leaf blade abaxially glaucous, adaxially green, lanceolate-ovate to broadly ovate, 7–14 × 4.5–6.5 cm, papery, abaxially glabrous or slightly rusty- and glandular-tomentose on midvein and lateral veins when young, adaxially glabrous, base cordatulate or truncate, slightly decurrent, or broadly cuneate, margin conspicuously crenate, apex acuminate to shortly acuminate. Inflorescences cymose, 1–3-flowered, rusty- and glandular-tomentose; peduncle 6–9 mm; pedicel ca. 7 mm; bracts ovate, ca. 1 mm. Flowers yellow. Sepals 5, ovate or oblong, 4–5 mm, both surfaces rusty- and glandular-tomentose. Petals 5, spatulate-ovate, 7–8 mm. Filaments 3–4 mm; anthers yellow, ca. 1.5 mm. Ovary cylindric-globose, densely rusty tomentose. Fruit subglobose, to 4.5 × 4 cm, lenticels yellowish brown; sepals caducous. Fl. Mar–Apr, fr. Sep–Oct. 2n = 116*.

- Sparse forests, thickets, open sunny places in forests; 900–1300 m. Guangdong, Guangxi, Hunan, Jiangxi.


**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 or 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 conspicuously abaxial, 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; peduncle 4–9 mm; pedicel 4–11 mm; bracts linear, 1.5–2 mm. Flowers white, rarely yellowish. Sepals 5, ovate, both surfaces rusty- and glandular-tomentose, apex obtuse. Petals 5, oblong-ovate, 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; sepal 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. *indochinensis*

1b. Leaf blade broadly ovate to orbicular, adaxially sparsely puberulent ................... 18b. var. *ovatifolia*

18a. *Actinidia indochinensis* var. *indochinensis*

**中越猕猴桃** zhong yue mi hou tao

Leaf blade oblong-elliptic to ovate, papery to thinly leathery, adaxially glabrous, base broadly cuneate to rounded, apex acute to acuminate or obtuse to abruptly acuminate.

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


**毛瓣叶猕猴桃** mao bai mi hou tao


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 oblong 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; peduncle ca. 1 cm; pedicel 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, narrowed at base, apex rounded. Filaments ca. 4 mm; anthers yellow, ovoid. Ovary oblong, ca. 2 mm, apex 1.5 mm in diam., densely brown tomentose. Fruit globose, ca. 3 cm 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).


**毛瓣叶猕猴桃** mao bai mi hou tao

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

Climbing shrubs, mid-sized, deciduous. Branchlets gla-
brous, buds densely rusty strigose, lenticels inconspicuous on younger branches, subconspicuous on mature ones; pith brown, lamellate. Petiole 2.5–5 cm, glabrous; leaf blade abaxially glaucous, adaxially green, ovate to narrowly ovate, 5–10 × 3–6 cm, papery when young, softly leathery when old, both surfaces glabrous, midvein and lateral veins subconspicuous abaxially, lateral veins 6 or 7 pairs, base usually truncate, margin finely serrulate, apex acute to acuminate. Inflorescences cymose, 1–3-flowered, glabrous; peduncles 2–3 mm; pedicels 7–8 mm; bracts narrowly triangular, ca. 1.5 mm. Flowers white. Sepals 5, oblong, 5–6 mm, grayish yellow tomentose abaxially at margins and adaxially throughout. Petals 5, obovate, 9–10 mm. Filaments 4–6 mm; anthers yellow, oblong, 2.5–3 mm. Ovary cylindric-globose, ca. 3 mm, sparsely grayish yellow tomentose. Fruit dark green when mature, subglobose or ovoid to cylindric-oblong, 1.5–3 cm, glabrous, lenticels brown. Seeds ca. 2 mm. Fl. May–Jul, fr. Oct.


Climbing shrubs, mid-sized, deciduous. One- and two-year-old branches densely long rusty hispid, lenticels conspicuous; pith white, lamellate. Petiole 1–1.8 cm, densely long rusty hispid; leaf blade abaxially glaucous, oblong-elliptic to oblong-lanceolate or oblong-oblata, 6–15 × 2.5–9 cm, membranous to papery, both surfaces densely rusty hispid-hirsute throughout or only on midvein and lateral veins, midvein and lateral veins conspicuous abaxially, subconspicuous adaxially, lateral veins 7 or 8 pairs, reticulate veinlets subconspicuous on both surfaces, base cordatulate, margin entire with numerous sharp rigid pointed hairs, apex shortly acuminate to long acuminate. Inflorescences cymose, axillary, 2-branched, up to 10-flowered, densely long rusty hispid; peduncles 3–10 mm; pedicels 5–12 mm; bracts subulate, 4–5 mm. Flowers white. Sepals 5, oblong-ovate, 4–5 mm, abaxially sparsely tomentose. Petals 5, obovate, 8–9 mm, apex rounded. Filaments ca. 2.5 mm; anthers yellow, ca. 1 mm. Ovary globose, densely rusty tomentose; styles ca. 3 mm. Fruit cylindric, 1.6–2.2 cm, glabrous, with conspicuous lenticels and reflexed sepals. Fl. May–Jun, fr. unknown. 2n = 58.

- Mountain forests, thickets; 200–1300 m. Guangdong, Guangxi, Hainan, Hunan, Jiangxi.

26a. Actinidia rudis var. rudis

Climbing shrubs, large, deciduous. Branchlets and petioles densely yellowish or brownish rigidly stigrose; 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 stigrose, rarely only stigrose 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 serrulate, 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.

- Sparse forests, thickets, stream sides, moist places, roadsides; 1200–2300 m. Yunnan.

1a. Leaves ± strigose to glabrous on one or both surfaces, basally cordatulate to cordate ....... 26a. var. rudis

1b. Leaves abaxially tomentose on midvein and lateral veins, basally rounded to truncate ........................................ 26b. var. glabricaulis

26a. Actinidia rudis var. rudis

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

- Sparse forests, stream sides, moist places; 1200–1400 m. Yunnan (Mengzi, Pingbian).


- Thickets, roadsides; 1300–2300 m. Yunnan (Maguan, Malipo, Xichou).


Two-year-old branches glabrous. Leaves abaxially tomentose on midvein and lateral veins, basally rounded to truncate.

- Thickets, roadsides; 1300–2300 m. Yunnan (Maguan, Malipo, Xichou).


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 stigrose; leaf blade glaucous or 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 stigrose throughout or puberulent on veins to glabrous, midvein and veinlets subconspicuous abaxially, lateral veins 8–10 pairs, arcuate-ascending, anastomosing near margins, reticulate veins subconspicuous to conspicuous abaxially, inconspicuous adaxially, base rounded to cordate, margin mucronate-serrulate, apex acumin ate. Inflorescences cymose, 1–5-flowered, densely reddish or rusty vil lous; peduncles absent to 4 mm; pedicels to 1 cm. Flowers white to pink. Sepals 5, ovate, ca. 3 mm, abaxially puberulent, apex acute. Petals 5, obovate, 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.


Climbing shrubs, large, deciduous. One- and two-year-old branches glabrous or with some relict stigrose 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, velutinose. Flowers reddish. Sepals 5, ovate, ca. 5 mm, densely brownish tomentose. Petals 5, obovate, 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 tomentose to tomentose, lenticellate; pith white to brown, laminellate. Petiole 3.5–6 cm, brown tomentose 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 strigillose on veins, midvein and lateral veins distinct and raised abaxially, sulcate adaxially, lateral veins 6–10 pairs, base rounded to cordate, margin finely serrulate, 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, obovate to suborbicular, 0.7–1.6 cm, apex rounded. Filaments to 2.5 mm; anthers ovoid, ca. 4 mm, base sagittate. Ovary globose to globose-cylindric, 2–3.5 cm, glabrous, when mature, lenticellate. Seeds small, ca. 1.2 mm. Fl. May–Jun, fr. Sep.–Oct.

- Broad-leaved evergreen 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 densely lanate; pith dirty white, laminellate. 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 ± strigillose on midvein and lateral veins, midvein and lateral veins conspicuous abaxially, lateral veins 7 or 8 pairs, base cordate, margin inconspicuously callose-apiculate-serrulate, apex cuspidate. Inflorescences cymose, 1–3-flowered, densely tomentose; peduncles very short; pedicels 5–6 mm; bracts subulate, ca. 4.5 mm. Flowers pink, ca. 5 mm in diam. Sepals ovate, 3.5–4 mm, abaxially densely tomentose. Petals 5, obovate to oblong-ovate, ca. 3.5 mm. Filaments shorter than anthers; anthers ca. 1.5 mm. Ovary cylindric, ca. 2 mm, densely brownish tomentose; styles ca. 0.5 mm. Fruit ovoid-cylindric, glabrescent, lenticellate. Fl. Jun, fr. unknown.

- Sunny places, roadsides; 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, laminellate. 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 striate on midvein and lateral veins, midvein and lateral veins raised abaxially, lateral veins 5 or 6 pairs, anastomosing, base rounded to cordate, margin setose-serrulate, apex long caudate. 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, obovate, 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, fr. Nov.

- Broad-leaved evergreen forests, valleys, roadsides; 900–1500 m. NW and SW Guangxi, Guizhou, Yunnan.

31a. var. rufotricha

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

31b. var. glomerata

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

31a. var. rufotricha

红毛猕猴桃(原变种) hong mao mi hou tao (yuan bian zhong)

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

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

31b. var. glomerata

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 kuo ye mi hou tao

Climbing shrubs, large, deciduous. Branchlets glabrous, with whitish lenticils, slightly puberulent or densely tomentose when young; pith white, laminellate, solid, or hollow. Petiole 3–7 cm, glabrous to sparsely velutinous; leaf blade abaxially pale green, adaxially green, usually broadly ovate to broadly obo-
vate, sometimes orbicular to narrowly ovate, 8–13(–15) × 5–8.5(–12) cm, abaxially glabrescent to densely appressed stellate tomentose, adaxially glabrescent to puberulent, midvein 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 calloserrulate, apex acute to acuminate. Inflorescences 3- or 4-branched, 10- or more flowered, 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, 8–8 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 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) kuo ye mi hou tao (yuan bian zhong)


Leaves abaxially 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 chang rong 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 huang mao mi hou tao

Climbing shrubs, small to mid-sized, semi-evergreen. Floral branchlets densely brownish tomentose to ferruginous 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 cy- mose, 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 obovate, 0.6–1.7 cm. Filaments 3–7 mm; anthers yellow, ovoid, ca. 1 mm, sagittate at base. Ovary globose, ca. 3.5 mm in diam., densely yellowish villous; styles ca. 4 mm. Fruit ovoid to oblong-ovoid, 1.5–2 cm, glabrous when mature, lenticellate; persistent sepals reflexed. Seeds ca. 1 mm. Fl. May–Jun, fr. Oct.

* Mountain forests, sparse forests, thickets, mountain slopes; 100–1800 m. Fujian, Guangdong, Guangxi, Guizhou, Huan, S Jiangxi, Yunnan.

33a. Actinidia fulvicoma var. fulvicoma

黄毛猕猴桃 (原变种) huang mao mi hou tao (yuan bian zhong)

Actinidia fulvicoma f. arachnoidea C. F. Liang.

Young branchlets brownish tomentose, occasionally velutinous. Petiole densely tomentose, occasionally velutinous; leaf blade oblong-ovate to suborbicular, papery, abaxially densely stellate tomentose, occasionally sparsely stellate tomentose, adaxially densely softly strigose or sparsely strigose or pilose,
sometimes only strigose or pilose on midvein and lateral veins, rarely glabrous. \(2n = 58^*\).

- Sparse forests, thickets, mountain slopes; 100–400 m. Fujian, C and N Guangdong, Guangxi, Guizhou, Hunan, S Jiangxi, Yunnan.

“Actinidia diversicolor” (R. G. Li, Guihaia 23: 195. 2003) belongs here but was not validly published because no type was indicated (Vienna Code, Art. 37.1).


**中华猕猴桃**


**中华猕猴桃** zhong hua mi hou tao

Actinidia chinensis var. jinggangshanensis C. F. Liang; 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, ± hispid when mature.

2a. Young branchlets and petioles brownish strigose; leaves adaxially usually glabrous ......................... 34b. var. deliciosa

2b. Young branchlets and petioles ferruginous hispid-setose; leaves adaxially usually scabrid-hispid ........ 34c. var. setosa

34a. *Actinidia chinensis* var. *chinensis"
tomentose, glabrous when mature or not. Leaves adaxially usually glabrous, occasionally ± puberulent, especially more densely so on midvein and lateral veins. Fruit subglobose, 4–4.5 cm, densely tomentose, soon glabrous.

- Sparse secondary forests, tall grassy thickets on low mountains, thickets, also widely cultivated; 200–600 m. Anhui, Fujian, Guangdong, Guangxi, Henan, Hubei, Hunan, Jiangsu, Jiangxi, S Shaanxi, Yunnan, Zhejiang.


美味猕猴桃 mei wei mi hou tao


Young branchlets and petioles brownish strigose, hairs not easily lost. Leaves usually glabrous adaxially, occasionally ± puberulent, especially more densely so on midvein and lateral veins. Fruit subglobose to cylindric or ovoid, 5–6 cm, densely hispid, ± so when mature. 2n = 116*, 174*, 358*.

- Mountain forests; 800–1400 m. Chongqing, Gansu, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan [widely cultivated elsewhere].

Actinidia chinensis var. delicosa is the widely cultivated kiwifruit. This taxon was recognized as a species under the name A. delicosa (Liang & Ferguson, Guihaia 4: 181. 1984) by elevating the status of A. latifolia var. delicosa. Kiwifruit cultivars grown in commercial orchards outside of China were derived from seeds introduced to New Zealand in 1904 (Ferguson & Bollard in Warrington & Weston, Kiwifruit Sci. Managem. 165–246, 1990).

34c. Actinidia chinensis var. setosa H. L. Li, J. Arnold Arbor. 33: 56. 1952.

刺毛猕猴桃 ci mao mi hou tao

Actinidia setosa (H. L. Li) C. F. Liang & A. R. Ferguson.

Young branchlets and petioles brownish hispid-setose. Leaves usually scabrid-hispid adaxially. Fruit subglobose or ellipsoidal, densely hispid.

- Mountain forests, thickets; (500–)1300–2600 m. Taiwan.

There are transitional forms in between var. delicosa and var. setosa with leaves densely setose adaxially and occasionally hispid-setose on stems and petioles.


栓叶猕猴桃 shuan ye mi hou tao

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, lenticellate. Fl. Apr, fr. unknown.

- Dry thickets; 900–1000 m. Yunnan (Mengzi, Pingbian).


安息香猕猴桃 an xi xiang 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 surfaces densely brownish velutinous. Petals 5 or 6, oblong to oblong-obovate, 6–8 mm. Filaments 4–5 mm; anthers oblong, ca. 1.5 mm. Ovary globose, ca. 4 mm in diam., densely brownish velutinous; styles ca. 6 mm. Fruit cylindric, ca. 1.6 cm, densely tomentose; persistent sepals not reflected. Fl. May, fr. unknown.

- 600–900 m. Fujian, Guizhou, Hunan, Jiangxi.


小叶猕猴桃 xiao ye mi hou tao

Climbing shrubs, small, deciduous. Floral branchlets densely ferruginous velutinous, lenticels inconspicuous; pith brown, lamellate. Petiole 0.8–2 cm, densely ferruginous velutinous; leaf blade abaxially glaucous, adaxially green, elliptic-ovate to elliptic-lanceolate, 4–7 × 2–3 cm, papery, abaxially densely pressed stellate with very short, grayish hairs, adaxially glabrous to very sparsely glandular-puberulent, midvein and lateral veins conspicuous abaxially, inconspicuous adaxially, lateral veins 5 or 6 pairs, reticulate veinlets and transverse veins incon-
spicuous abaxially, base cuneate to obtuse, margin serrulate on upper parts, apex acuminate to shortly acuminate. Inflorescences cymose, 2-branched, to 7-flowered, densely ferruginous velutinous; peduncles 3–6 mm; pedicels 2–4 mm; bracts linear, 1–1.5 mm. Flowers greenish. Sepals 3–5, ovate to oblong, 3–4 mm, abaxially ferruginous puberulent, adaxially sparsely puberulent. Petals 5, oblong to spatulate-obovate, 4–5.5 mm. Filaments 1–4 mm; anthers yellow, oblong, 1–1.5 mm. Ovary subglobose to ovoid, ca. 1.5 mm in diam., densely ferruginous tomentose; styles ca. 1.5 mm. Fruit ovoid, small, 7–9 mm, abaxially densely tomentose. Petals 5, obovate, 9–10 mm, gradually narrowed at base, apex rounded. Filaments 4–6 mm; anthers yellow, ovoid, ca. 1.5 mm, 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 sepal reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Nov. 2n = 58*.

- Sparse forests, forest margins, tall grassy thickets; 200–800 m. Anhui, Fujian, Guangdong, Hunan, Jiangxi, Zhejiang.


毛花猕猴桃  mao hua mi hou tao

Actinidia davidii Franchet; A. eriantha f. alba C. F. Gan; A. eriantha var. brunnea C. F. Liang; A. eriantha var. calvescens C. F. Liang; A. fulvicoma Hance var. lanata (Hemsley) C. F. Liang; A. lanata Hemsley.

Climbing shrubs, large, deciduous. Young branchlets, pedi- oles, inflorescences, and sepal densely tomentose with milky- white to dirty yellow hairs to appressed-lanate, two-year-old branches ± with relict 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 cal- lose-serrulate, apex 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 lacticase-tomentose. Petals 5, ovate or obovate, 1.5 cm, apex and margin orange, middle and base pink. Filaments 5–7 mm, slender; anthers yellow, oblong, ca. 1 mm. Ovary glo- buse, densely milky-white tomentose; styles 3–4 mm. Fruit cylindric-ovoid, 3.5–4.5 cm, always densely and persistently milky-white tomentose; persistent sepal reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Nov. 2n = 58*.

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


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 white, lamellate. Petiole 2–7 cm, thinly brown velutinous; leaf blade pale green abaxially, green adax- ially, ovate to oblong, 7–13 × 4–9 cm, softly leathery, abaxially densely brownish appressed stellate tomentose, adaxially gla- brous, lateral veins 8 or 9 pairs, veinlets reticulate, inconspicuous with subconspicuous transverse veins abaxially, base rounded or cordulate, margin callose-serrulate, apex acute to cupulately. 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, obovate, 9–10 mm, gradually narrowed at base, apex rounded. Filaments 4–6 mm; anthers yellow, ovoid, ca. 1.5 mm, 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 sepal reflexed. Seeds small, 1–1.5 mm. Fl. Apr–May, fr. Nov. 2n = 58*.

- Forests in sunny places, thickets, mountain valleys; 200–1000 m. Anhui, Fujian, Guangdong, Hunan (Jianghua).

“Actinidia liangguangensis var. rubriflora” (R. G. Li & M. Y. Liang, Guihaia 22: 386. 2002) may belong here but was not validly published because no type was indicated (Vienna Code, Art. 37.1).


湖北猕猴桃  hu bei mi hou tao

Climbing shrubs, large, deciduous. Branches reddish, gla- brous, lenticels linear or punctiform, conspicuous; buds densely ferruginous tomentose; pith brownish, lamellate. Petiole pur- plish, 1.5–3 cm, densely velutinous when young and glabrous when mature; leaf blade abaxially pale green, adaxially dark green, narrowly ovate to broadly ovate to broadly orbicular- obovate, 6–14 × 5–13 cm, papery, abaxially very sparsely stel- late tomentose with hairs easily rubbing off, adaxially glabrous, midvein and lateral veins conspicuous abaxially, sulcate adaxi- ally, lateral veins 6–9 pairs, reticulate veinlets subconspicuous with distinct and prominent parallel cross-bars abaxially, base mostly cordate, margin ciliate-serrulate, apex abruptly acute to rounded, rarely emarginate. Female flowers solitary, puberulent; pedicels 0.7–1.5 cm. Sepals 3–6, ovate, 3–5 mm, margin densely brown tomentose. Petals 5 or 6, white to purplish, and then yellowish at base, obovate, 7–9 mm. Ovary conical, ca. 4.5 mm in diam., densely grayish tomentose; styles 4–5 mm. Sterile stamens numerous; filaments 4–5 mm; anthers yellow, re- form, 1–1.5 mm. Male flowers unknown. Fruit dark brown, ovoid to conical to subglobose, 2–3 cm, glabrescent when ma- ture, densely lenticellate, lenticels brownish; persistent sepal reflexed. Seeds ca. 2 mm. Fl. Apr–May, fr. Oct. 2n = 58*.

- Hubei (Yichang).


花楸猕猴桃  hua qiu mi hou tao

Actinidia truncatifolia C. Y. Chang & P. S. Liu.

Climbing shrubs, large, deciduous. Branchlets glabrous, young branchlets velutinous, lenticels conspicuous; pith brown,
lamellate. Petiole 1.5–4 cm, puberulent when young, glabrous when mature; leaf blade axially green, broadly ovate to oblong-ovate, 8–14 × 4.5–9 cm, thinly leathery, abaxially sparsely stellate tomentose when young, glabrous or sparsely puberulent on midvein, adaxially glabrous, lateral veins and midvein conspicuous abaxially, inconspicuous adaxially, lateral veins 5–8 pairs, reticulate veins conspicuous with distinct and raised parallel cross-bars abaxially, base narrowly rounded or cordatulate, margin inconspicuously callose-serrulate or ciliate-serrulate, apex cuspidate or shortly acuminate. Inflorescences cymose, 1–3-flowered; peduncles 3–6 mm; pedicels 1.1–1.5 cm, slightly puberulent. Flowers reddish. Sepals 5 or 6, narrowly ovate to ovate, 5–8 mm, both surfaces brownish tomentose. Petioles 7 or 8, ovate to broadly ovate, 1–2 cm, narrowed at base, apex rounded. Filaments 5–8 mm; anthers yellow, oblong, 2–2.5 mm, sagittate at base. Ovary globose, densely brownish tomentose. Fruit narrowly cylindric, 4–5 cm, glabrous, lenticels brownish, dense; persistent sepals reflexed. Fl. Apr–May, fr. Oct. 2n = 58*.


Climbing shrubs, large, deciduous or semi-evergreen. Branchlets densely brownish velutinous, lenticels linear or punctiform, subconspicuous; pith whitish or brownish, lamellate. Petiole 2–8 cm, stout, densely yellowish velutinous; leaf blade oblong to 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, veins reticulate, conspicuous with distinct and raised parallel cross-bars abaxially, base auriculate-cordatulate, apex acuminate 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 brownish tomentose. Petals 5 or 6, obovate to narrowly ovate, 1–3 cm, both surfaces densely brown tomentose. Ovary globose, 2.5–4 cm in diam., densely long whitish tomentose; persistent sepals reflexed, both surfaces densely brownish tomentose. Seeds ca. 2 mm. Fl. May, fr. Oct. 2n = 58*.


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, ovate, 9–12 × 6–8 cm, papery, abaxially sparsely white- and long pubescent, hairs simple to furcate to subpellate, adaxially subglabrous, midvein and lateral veins conspicuous abaxially, sulcate adaxially, lateral veins 6–9 pairs, reticulate veinlets subconspicuous with distinct and raised parallel cross-bars abaxially, base cordate, margin callose-serrulate, apex cuspidate to acute, rarely emarginate. 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. Petals 5 or 6, yellowish white, ovate, 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*.
abaxially inconspicuous, adaxially conspicuous, lateral veins 7 or 8 pairs, reticulate veins subconspicuous with distinct and raised parallel cross-bars abaxially, base narrowly rounded-cordate, margined 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 mm. Flowers yellowish, ca. 2 cm in diam. Sepals ovate to narrowly ovate, 5–6.5 mm, abaxially velutinous. Petals 6, spatulate-ovate, 1–1.3 cm. Filaments 4–5 mm; anthers yellow, oblong, ca. 2 mm, sagittate at base. Sterile ovary globose, densely tomentose. Fruit unknown. Fl. May–Jun, fr. unknown. 2n = 58*.

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


贡山猕猴桃 gong shan 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 puberulous, 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, 1–7-flowered, brownish pubescent; peduncle 1.5–4 cm, puberulent to glabrous; leaf blade ovate-oblong to ovate-orbicular, 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 veins 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 pubescent; peduncles 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. Styles 3–4 mm. Fruit cylindric to subglobose, 1.5–2.5 cm, glabrous when mature, lenticels small; persistent sepals reflexed. Seeds ca. 2 mm. Fl. May–Jun, fr. Sep–Oct.

- Mountain forests; ca. 2000 m. Yunnan (Gongshan).


星毛猕猴桃 xing mao mi hou tao

Climbing shrubs, large, deciduous. Branchlets 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, reticulate veins in conspicuous parallel cross-bars abaxially, base rounded-cordate, 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-ovate, 5–7 mm, both surfaces densely brownish velutinous. Petals 5 or 6, broadly ovate, 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.

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


显脉猕猴桃 xian mai mi hou tao

Actinidia venosa f. pubescens H. L. Li; A. venosa var. pubescens (H. L. Li) C. Y. Chang.

Climbing shrubs, large, deciduous. Branchlets reddish to purplish, lenticels conspicuous; young branchlets whitish puberulent, soon glabrescent; pith white, large, lamellate. Petiole 1.5–4 cm, puberulent to glabrous; leaf blade ovate-oblong to ovate-orbicular, 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 veins 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 pubescent; peduncles 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, ovate to ovate-oblong, 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 sepals reflexed. Seeds ca. 2 mm. Fl. May–Jul, fr. Sep.

- Mountain forests; 1200–2400 m. Sichuan, Xizang, Yunnan.

49. Actinidia persicina R. G. Li & L. Mo, sp. nov.

桃花猕猴桃 tao hua mi hou tao


Climbing shrubs, deciduous, large. Branchlets brown velutinous, lenticels conspicuous; second-year branches glabrous, lenticels conspicuous; pith brown, lamellate. 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, glabrescent, lateral veins 6–8 pairs, adaxially glabrous, base rounded or cordulate, 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 sepals not reflexed. Fl. Apr, fr. Oct.

Guangxi (Rongshui).

Introduced from Rongshui Xian in 1992, this species is cultivated in the research orchard of the Guangxi Institute of Botany, Guilin. The name was not validly published by Li and Mo in 2003 because no type was indicated (Vienna Code, Art. 37.1). The apparent earlier homonym, “Actinidia persicina” (R. H. Huang & S. M. Wang, J. Wuhan Bot. Res. 13(2): 113. 1995) was not validly published because the herbarium in which the type is conserved was not specified (Art. 37.7).

50. Actinidia rongshuiensis R. G. Li & X. G. Wang, sp. nov.
融水猕猴桃 rong shui mi hou tao


Climbing shrubs, deciduous, large. Branchlets brown velutinous, glabrescent, lenticels subconspicuous; lenticels conspicuous on second-year branches; pith white, laminate. Petiole 2–4.5 cm, velutinous, glabrescent; leaf blade ovate-oblong to broadly ovate, 7–21 × 4–11 cm, papery, abaxially stellate tomentose, glabrescent, lateral veins 8 or 9 pairs, reticulate veins prominent, adaxially slightly puberulent, soon glabrous, base cordulate, margin finely serrate, apex acuminate. Inflorescences 1–3-flowered, velutinous; peduncle 1–2 mm; pedicel 1.2–1.5 cm. Flowers red. Sepals 3–6, ovate, 6–7 mm. Petals 5 or 6, broadly ovate, 1.1–1.4 cm. Ovary globose, whitish tomentose. Fruit cylindric, ca. 2.3 cm, tomentose; persistent sepals not reflexed. Fl. Jun, fr. Oct–Nov.

Guangxi (Rongshui).

Introduced from Rongshui Xian in 1992, this species is cultivated in the research orchard of the Guangxi Institute of Botany, Guilin. The name was not validly published by Li and Mo in 2003 because no type was indicated (Vienna Code, Art. 37.1). The apparent earlier homonym, “Actinidia persicina” (R. H. Huang & S. M. Wang, J. Wuhan Bot. Res. 13(2): 113. 1995) was not validly published because the herbarium in which the type is conserved was not specified (Art. 37.7).

51. Actinidia longicarpa R. G. Li & M. Y. Liang, sp. nov.
长果猕猴桃 chang guo mi hou tao


Validating Latin diagnosis: that of “Actinidia longicarpa” (R. G. Li & M. Y. Liang, Guihaia 23: 198. 2003) also belongs here but was not validly published for the same reason.

Climbing shrubs, deciduous, large. Branchlets velutinous, glabrescent, lenticels conspicuous; second-year branches glabrous, lenticels conspicuous; pith brown, laminate. Petiole 4–6 cm, velutinous, glabrescent; leaf blade ovate to orbicular, 8–14 × 4.5–10 cm, papery, abaxially stellate tomentose, glabrescent, adaxially pubescent, soon glabrous, lateral veins 8 pairs, base cordulate, margin finely serrate, apex acuminate. Inflorescences 1–3-flowered, velutinous; peduncle 0.6–1.4 cm; pedicel
1–1.8 cm. Flowers pink or pinkish yellow. Sepals 4–6, broadly ovate, 5–7 mm, velutinous. Petals 5–7, ovate or narrowly ovate, 1–1.3 cm. Ovary globose, ca. 4 mm, whitish tomentose. Fruit oblong to ovoid, ca. 1.7 cm, tomentose, with persistent sepals. Fl. Apr–Jun, fr. Oct–Nov.

● Guangxi (Lingui).

Introduced from Wantian Village, Lingui Xian in 1991, 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). “Actinidia wantianensis” (R. G. Li & L. Mo, Guihaia 23: 201. 2003) also belongs here but was not validly published for the same reason.