
菝葜属 ba qia shu

Chen Xinqi (陈心启 Chen Sing-chi); Tetsuo Koyama1

Vines climbing or shrubs, woody, less often suberect or herbs, dioecious, usually with short, thick rhizomes. Stems and branches usually prickly. Petiole usually narrowly winged proximally, with an abscission zone between winged portion and apex; tendrils often present. Leaf blade usually ovate to lanceolate, main veins 3–7, connected by a network of cross veins and veinlets. Inflorescence borne in axil of leaf or scalelike bract, of 1–3 umbels or a panicle, raceme, or spike of umbels; peduncle sometimes with a scalelike prophyll at base. Flowers small; tepals 6, usually free (connate in *Smilax synandra*). Male flowers: stamens 6, rarely 8 or more, inserted at base of tepals; anthers mostly 1-loculed. Female flowers: ovary 3-loculed; ovules 1 or 2 per locule; style very short; stigmas 3; staminodes absent to 6. Fruit a berry, red to black, usually 1- or 2-seeded. Seeds dark brown.

About 300 species: tropical, subtropical, and temperate regions of both hemispheres; 79 species (39 endemic) in China.

1a. Rhizomes stoloniferous, creeping, elongate.
2a. Peduncle with a prophyll at base; leaves not glaucous abaxially ................................................................. 65. *S. pinfaensis*

2b. Peduncle without a prophyll at base; leaves glaucous abaxially.

3a. Petiole 1–2 mm, narrowly winged for ca. 2/3 its length; stem much branched .................................................. 26. *S. nana*

3b. Petiole 4–13 mm, scarcely winged; stem slightly branched or not ................................................................. 25. *S. pachysandroides*

1b. Rhizomes not stoloniferous, usually tuberous, short.

4a. Inflorescence a spike of umbels with 5–25 sessile umbels on a common axis.

5a. Branches terete, ridged-angled, sparsely prickly; leaf blade 6–11 cm ................................................................. 78. *S. aspera*

5b. Branches 4-angled, not prickly; leaf blade 20–30 cm ................................................................................... 79. *S. elegantissima*

4b. Inflorescence a solitary umbel or a raceme of umbels with 2 to many stalked umbels on a common axis.

6a. Branches verruculose or bristly.

7a. Branches densely bristly.

8a. Petiole not bristly; peduncle without a prophyll at base ................................................................. 19. *S. horridiramula*

8b. Petiole densely bristly; peduncle with a prophyll at base ........................................................................ 74. *S. setiramula*

7b. Branches verruculose, sometimes young branches minutely bristly.

9a. Peduncle without a prophyll at base.

10a. Branches minutely verruculose, not prickly; inflorescence borne in axil of well-developed leaf ................................................................. 49. *S. nervomarginata*

10b. Branches verruculose or spinulose-verruculose, ± sparsely prickly; inflorescence borne in axil of young leaf on new branches .................................................. 13. *S. lebrunii*

9b. Peduncle with a prophyll at base.

11a. Young branches, petiole, and leaf base minutely bristly ................................................................. 57. *S. kwangsiensis*

11b. Young branches, petiole, and leaf base not bristly.

12a. Leaf blade orbicular or nearly so, thickly leathery ........................................................................ 70. *S. bauhinioides*

12b. Leaf blade not orbicular, leathery or papery.

13a. Petiole wingless, tendrils absent; receptacle suboblong ........................................................................ 67. *S. fooningensis*

13b. Petiole winged, tendrils usually present; receptacle subglobose.

14a. Inflorescence 1-umbellate; branches usually 2- or 3-angled ................................................................. 54. *S. chapaensis*

14b. Inflorescence 2–5-umbellate, forming a raceme of umbels; branches not angled.

15a. Inflorescence with 3–7 umbels; petiole 10–15 mm, tendrils usually present ......................................... 61. *S. aspericaulis*

15b. Inflorescence with 2 umbels; petiole 7–12 mm, tendrils usually absent ......................................... 63. *S. malipoensis*

6b. Branches neither verruculose nor bristly.

16a. Inflorescence of 2 to many umbels (if a solitary umbel, then peduncle articulate in proximal part with a prophyll at base).

17a. Branches ± 4-angled.

18a. Branches not zigzagged, angles narrowly winged ........................................................................ 72. *S. gagnepainii*

18b. Branches strongly zigzagged, angles wingless ........................................................................ 68. *S. quadrata*

17b. Branches terete, not angled.

19a. Tepals of male flowers longitudinally wrinkled; stamens 8–10 ................................................................. 50. *S. luei*

19b. Tepals of male flowers not wrinkled; stamens 6.

20a. Petiole wings well developed, each 4–13 mm wide.

21a. Petiole wings not clasping node at base ................................................................. 75. *S. griffithii*

---

1 College of Bioresource Sciences, Nihon University, 1866 Kameino, Fujisawa City, Kanagawa 252, Japan.
21b. Petiole wings deeply clasping node at base.
   22a. Inflorescence of 2–7 solitary umbels; filaments proximally connate, forming a short column ...... 76. *S. ocreata*
   22b. Inflorescence of 10–30 umbels, umbels 2- or 4-subwhorled or nearly clustered; filaments free ...................................................................................................................... 77. *S. perfoliata*

20b. Petiole wings weakly developed, each less than 4 mm wide.
   23a. Filaments proximally connate, forming a short column.
      24a. Receptacle subglobular, 3–6 × 2–4.5 mm; outer tepals of male flowers ca. 5 mm ................. 56. *S. hemsleyana*
      24b. Receptacle subglobose, 2–3 mm in diam.; outer tepals of male flowers 7–8 mm .......... 55. *S. vanchingshanensis*

23b. Filaments free.
   25a. Branches densely prickly; petiole verruculose-prickly .......................................................... 73. *S. densibarbata*
   25b. Branches smooth or sparsely prickly; petiole not verruculose-prickly.

26a. Leaf blade 8–14(–20) cm wide .................................................................................................. 62. *S. ovalifolia*
   26b. Leaf blade 1–5(–7) cm wide.
      27a. Petiole laterally compressed, winged portion 1–3 cm ...................................................... 71. *S. planipes*
      27b. Petiole subterete, winged portion less than 0.9 cm.

28a. Umbels 2- or 3-flowered; peduncle 1–3 mm; petiole 2.5–5 mm; stem and branches 2- or 4-angled ................................................................. 66. *S. basilata*
   28b. Umbels 3–15-flowered; peduncle and petiole both more than 5 mm; stem and branches not or indistinctly obtusely angled.

29a. Stamens very short, less than 1 mm, 1/5–1/3 as long as tepals .................................................. 64. *S. cocculoides*
   29b. Stamens 3–6 mm, more than 1/2 as long as tepals.

30a. Leaf blade thickly leathery, orbicular to elliptic, with 3 main veins concave adaxially and veinlets indistinct; petiole scarcely winged ........................................ 69. *S. lunglingensis*
   30b. Leaf blade leathery or papery, variable in shape, with 3–5 main veins raised or sometimes midvein slightly concave adaxially; petiole winged.

31a. Inflorescence with 3–7 umbels.
   32a. Leaf blade leathery, apex acuminate; raceme with terminal umbel abortive; receptacle ellipsoid ................................................................. 59. *S. yunnanensis*
   32b. Leaf blade papery, apex mucronate; raceme with terminal umbel well developed; receptacle subglobose.

33a. Berries 1.5–2 cm in diam.; petiole 1.5–5 cm; inflorescence of 2 or 3 umbels; male flowers with tepals greenish yellow ...................................................... 58. *S. megacarpa*
   33b. Berries 5–7 mm in diam.; petiole 1–2 cm; inflorescence of 3–6(–10) umbels; male flowers with tepals dull red ............................................. 60. *S. bracteata*

31b. Inflorescence with 1 umbel.
   34a. Berries 1.5–2 cm in diam. ...................................................................................................... 58. *S. megacarpa*
   34b. Berries 0.6–1 cm in diam.

35a. Seeds smooth; leaf blade becoming dark green or sometimes tinged black when dried, not wrinkled adaxially .......................................................... 52. *S. lanceifolia*
   35b. Seeds deeply 5- or 6-furrowed; leaf blade becoming grayish when dried, wrinkled along main veins adaxially ..................................................... 53. *S. astroperma*

16b. Inflorescence a solitary umbel; peduncle not articulate, usually without a prophyll at base.
   36a. Stems usually annual, herbaceous.
      37a. Leaf blade abaxially pale green, usually glabrous or papillose-puberulent, not white powdery ........ 2. *S. riparia*
      37b. Leaf blade abaxially glaucous, white powdery.

38a. Petiole scarcely winged, tendrils (when developed) borne in proximal part ................................ 1. *S. nipponica*
   38b. Petiole narrowly winged, tendrils borne at middle or in distal part ........................................... 3. *S. pottingeri*

36b. Stems perennial, becoming woody.
   39a. Petiole wings lacerate-fimbriate at margin.
      40a. Branchlets usually 4-angled; leaf blade usually rhombic-ovate, with 3(–5) main veins raised adaxially, base cuneate; prickles sparse or absent ......................................................... 44. *S. myrtillus*
      40b. Branchlets 2- or 3-angled; leaf blade cordate to ovate, with 3–5 main veins slightly concave adaxially, base truncate to cordate; prickles rather dense .................................................... 45. *S. munita*

39b. Petiole wings subentire at margin.
   41a. Petiole with abscission zone below apex, hence leaf blade abscising together with distal part of petiole.
      42a. Leaf blade abaxially pubescent, papillose-pubescent, or powdery-scaprous.
      43a. Peduncle 0.5–3 cm; receptacle thickened and elongate ............................................. 12. *S. chinii*
      43b. Peduncle 3–5 cm; receptacle scarcely thickened, not elongate ........................................... 37. *S. aberrans*
   42b. Leaf blade abaxially glabrous.
44a. Peduncle 0.1–0.3 cm ................................................................. 46. *S. bapouensis*
44b. Peduncle 0.4–5 cm.

45a. Petiole wings semicircular, each 3–5 mm wide, occupying entire length of petiole .......... 16. *S. discotis*
45b. Petiole wings not as above.

46a. Petiole wings each with a lanceolate auricle at apex, hence leaf blade abscising with almost no part of petiole.  
46b. Petiole with abscission zone immediately above winged portion.  
46c. Filaments ± connate, forming a column.  
47a. Outer tepals free; filaments connate in proximal part ................................................. 24. *S. emeiensis*
47b. Outer tepals connate for ca. 1/2 their length, forming a tube; filaments connate throughout ................................................................. 33. *S. synandra*

48a. Inflorescence arising from branches or branchlets with leaves fully developed.
48b. Inflorescence arising from young branches or branchlets with leaves not fully developed.

50a. Inflorescence usually racemose; pedicel erect in fruit ........................................... 36. *S. austrozejiangensis*
50b. Inflorescence umbellate; pedicel bent downward in fruit ........................................ 38. *S. retroflexa*

51a. Peduncle slightly shorter or longer than petiole; female flowers with 6 staminodes ..... 4. *S. sieboldii*
51b. Peduncle much shorter than petiole (usually less than 1/2 as long); female flowers with 3 staminodes .............................................................. 5. *S. scobinicaulis*

53a. Leaf blade ovate; petiole winged for ca. 1/2 its length ................................................. 17. *S. glaucochina*
53b. Leaf blade elliptic to oblanceolate; petiole winged for ca. 2/3 its length ....................... 18. *S. elongatoambellata*

55a. Receptacle oblong or ellipsoid, ± elongate.
55b. Receptacle subglobose.

56a. Petiole winged for 2/3–4/5 its length ................................................................. 10. *S. ferox*
56b. Petiole winged for 1/3–1/2 its length ................................................................. 11. *S. megalantha*

59a. Petiole wings each 2–4 mm wide, wider than petiole; tendrils short, slender .... 8. *S. davidiana*
59b. Petiole wings each 0.5–1 mm wide, about as wide as petiole; tendrils long, rather thick.

60a. Tepals of male flowers greenish to yellowish green, recurved at anthesis, outer ones 1.8–2.5 mm wide ................................................................. 6. *S. china*
60b. Tepals of male flowers yellow, tinged pinkish red, spreading at anthesis, outer ones 1.3–1.5 mm wide ................................................................. 7. *S. nantoensis*

41b. Petiole with abscission zone at apex, hence leaf blade abscising with almost no part of petiole.

61a. Leaves and inflorescences becoming blackish or blackish brown when dried.
61b. Leaves and inflorescences not becoming blackish or blackish brown when dried.

64a. Petiole wings each with a lanceolate auricle at apex.
65a. Outer tepals connate for ca. 1/2 their length, inner ones adnate to filament column ......... 33. *S. synandra*
65b. All tepals free.

66a. Plants suberect or subscandent; tendrils absent.
67a. Leaf blade rhombic-elliptic or ovate-rhombic; peduncle 7–22 mm; auricles of petiole wings 1–1.5 mm ................................................................. 35. *S. hayatae*
67b. Leaf blade ovate; peduncle 3–4 mm; auricles of petiole wings 0.3–0.5 mm .................... 40. *S. mairei*
66b. Vines climbing; tendrils wholly or partly developed.

68a. Leaf blade thinly papery, ovate-lanceolate to broadly lanceolate; branchlets zigzagged; female flowers with 6 staminodes ......................................................... 31. *S. elegans*
68b. Leaf blade leathery, ovate to elliptic; branchlets not zigzagged; female flowers with 3

Simadae

(C. H. Wright) Kitagawa; S. oblonga subsp. C. H. Wright; longa var. bai bei niu wei cai


Smilax nipponica herbacea Linnaeus var. nipponica

Herbs annual, erect or sometimes slightly climbing. Stem simple, terete, 8–100 cm, smooth, hollow and slightly pithy. Petiole 1.5–4.5 cm, scarcely winged; abscission zone distal; tendrils sometimes present. Leaf blade ovate to oblong, 4–20 × 2–14 cm, abaxially glaucous and usually powdery-pubescent. Inflorescence of 1 umbel, basally not prophyllate; peduncle 3–9 cm, slightly compressed; umbels of both sexes 20–30-flowered, base thickened. Male flowers: tepals usually reflexed at anthesis, greenish yellow or white, ca. 4 × 1 mm; stamens 2.5–3.5 mm. Female flowers: tepals subequaling male ones; staminodes 6. Berries blue-black, globose, 6–7 mm in diam., white powdery. Fl. Apr–May, fr. Aug–Sep.

Forests, grassy slopes, moist places along streams; 200–1400 m.
2. Smilax riparia

Smilax riparia

- Vines annual or sometimes perennial (in S China), climbing.
- Stem branched, terete, 1–2 m, herbaceous or slightly woody near base, smooth or pubescent, hollow and slightly pithy. Petiole 0.7–2 cm, scarcely winged; abscission zone distal; tendrils usually present. Leaf blade usually ovate to elliptic, 7–15 × 5–11 cm, herbaceous, abaxially glabrous, papillose-puberulent, or pubescent. Inflorescence of 1 umbel, basally not prophyllate; peduncle rather slender, 3–5(–10) cm, slightly compressed; umbels of both sexes 5–20(–30)-flowered, base thickened; bracteoles 1–2 mm, not caducous. Male flowers: tepals yellowish green, 4–5 × 0.6–1 mm; stamens 4–5 mm. Female flowers: tepaloid 1–2 mm, not caducous. Male flowers: tepals yellowish green, 4–5 × 0.6–1 mm; stamens 4–5 mm. Female flowers: tepals slightly smaller than male ones. Berries blue-black, globose, 7–9 mm in diam. Fl. Jun–Jul, fr. Oct.

1a. Leaf blade abaxially glabrous ................. 2a. var. riparia

1b. Leaf blade abaxially papillose-puberulent

or pubescent.

2a. Stem, branches, and inflorescence

glabrous ................................. 2b. var. riparia

2b. Stem, branches, and inflorescence

glabrous ..................................... 2c. var. pubescens

2c. Stem, branches, and inflorescence

pubescent .................................. 2d. var. pubescens


2a. Smilax riparia var. riparia


- Smilax riparia var. acuminata (C. H. Wright) F. T. Wang & Tang

- Vines herbaceous, becoming blackish when dried. Stem terete, rigid, slightly woody proximally, smooth. Petiole 2–5 cm, slightly compressed, narrowly winged; wings 1–2.5 cm × ca. 1 mm, apically minutely auriculate; abscission zone inconspicuous; tendrils commonly present. Leaf blade abaxially glaucous, ovate to broadly so, 10–18 × 6–17 cm, herbaceous to thinly papery, abaxially white powdery, main veins 5–7. Male inflorescence of 1 umbel, basally not prophyllate; peduncle 3–6 cm; umbel densely 40–70-flowered, base 3–4 mm in diam. Male flowers: tepals 4–5 × 1–1.5 mm; stamens slightly shorter than tepals. Female flowers unknown.


- Stem, branches, leaves, and inflorescence glabrous. Female flowers: staminodes absent.

- Smilax herbacea Linnaeus var. acuminata

- Vines climbing. Stem branched, subterete, 1–2 m, ± woody; stem and branches with scattered, blackish, needlelike prickles. Petiole 1–2 cm, narrowly winged for ca. 1/2 its length; abscission zone distal; tendrils well developed. Leaf blade ovate to broadly so, 3–9 × 2–5(–8) cm, herbaceous. Inflorescence of 1 umbel, basally not prophyllate; peduncle slender, 1–2.5 cm, subequalling or longer than petiole; umbels of both sexes usually 3–8-flowered, base scarcely thickened. Male flowers: tepals yellowish green, 4–5 × 1.2–1.4 mm, inner ones slightly...

Forests, thickets, grassy slopes; near sea level to 1800(–2500) m. Anhui, Fujian, Jiangsu, Liaoning, Shandong, Taiwan, Zhejiang [Japan, Korea].


短梗菝葜 duan geng ba qia


Vines climbing. Stem branched, terete, 1–2 m, ± woody; stem and branches sparsely prickly, rarely scarcely so; prickles blackish, needlelike, 4–5 mm. Petiole 0.5–1.5 cm, narrowly winged for ca. 1/2 its length; abscission zone distal; tendrils well developed. Leaf blade sometimes becoming blackish when dried, ovate to elliptic-ovate, 4–12.5 × 2.5–8 cm, herbaceous. Inflorescence of 1 umbel, basally not prophyllate; peduncle 1–2 cm; umbels of both sexes 3–13-flowered, base not thickened. Male flowers: tepals yellow, tinged pinkish red, 4.5–5 × 1.3–1.5 mm; stamens 4–4.5 mm. Female flowers: tepals 2.5–3 × 1.7–1.9 mm; staminodes 3. Berries red, globose, 6–8 mm in diam.

• Forest margins, grassy forest openings; 800–900 m. C Taiwan.


菝葜 ba qia

*Coprosmanthus japonicus* Kunth; *Smilax chinensis* f. *obtusa* H. Léveillé; *S. china* var. *taiheiensis* (Hayata) T. Koyama; *S. pteropus* Miquel; *S. taiheiensis* Hayata.

Vines climbing. Stem branched, terete, 1–5 m, woody, sparsely prickly. Petiole 0.5–1.5 cm, narrowly winged for 1/2–2/3 its length; abscission zone just as long as petiole portion; tendrils usually present. Leaf blade elliptic to orbicular, 3–10 × 1.5–6(–10) cm. Inflorescence borne in axil of young leaf or bract on new branches, of 1 umbel, basally not prophyllate; peduncle 5–10 mm; umbels of both sexes 3–10-flowered, base neither thickened nor elongate. Male flowers: tepals yellow, tinged pinkish red, 4.5–5 × 1.3–1.5 mm; stamens 4–4.5 mm. Female flowers: tepals 2.5–3 × 1.7–1.9 mm; staminodes 3. Berries red, globose, 6–8 mm in diam.

• Forest margins, grassy forest openings; 800–900 m. C Taiwan.


小果菝葜 xiao guo ba qia

*Smilax china* Linnaeus var. *brachypoda* Rehder.

Vines climbing. Stem branched, 1–2(–4) m, terete, slightly woody, sparsely prickly. Petiole usually 5–7 mm, winged for 1/2–2/3 its length; wings 2–4 mm wide; abscission zone just above winged portion; tendrils rather short. Leaf blade usually elliptic, 3–7(–14) × 2–4.5(–12) cm. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 5–14 mm; umbels of both sexes 3–13-flowered, base thickened, sometimes slightly elongate; bracteoles persistent. Female flowers: tepals yellowish green, 3.5–4 × 1–2 mm. Female flowers: tepals subequaling male ones, staminodes 6. Berries globose, 5–6 mm in diam. Fl. Mar–Apr, fr. Oct–Nov.

Forests, thickets; 400–1700 m. Fujian, Guizhou, Hunan, Jiangxi, Zhejiang [Japan].


三脉菝葜 san mai ba qia


Subshrubs suberect or slightly climbing, deciduous. Stem branched, 0.5–2 m, unarmred or sparsely prickly. Petiole 3–5 mm, narrowly winged for ca. 2/3 its length; abscission zone just above winged portion; tendrils usually present. Leaf blade abaxially glaucous, usually elliptic, 2.5 × 1–2.5 cm, papery. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel or raceme, basally not prophyllate; peduncle 3–7 mm; umbel 1–5-flowered, base not thickened. Male flowers: tepals yellowish green, ca. 4 × 0.8–1.5 mm. Female flowers: tepals ca. 4 mm; staminodes 6. Berries red, globose, 5–6 mm in diam. Fl. Mar–Apr, fr. Oct–Nov.

Forests, thickets; 400–1700 m. Fujian, Guizhou, Hunan, Jiangxi, Zhejiang [Japan, Korea].


长托菝葜 chang tuo ba qia

Vines climbing. Stem branched, terete, woody, usually sparsely prickly. Petiole 4–7(–13) mm, winged for 2/3 to nearly all its length; wings 1.5–2.5 mm wide; abscission zone distal; tendrils only occasionally developed on old stem or branches. Leaf blade abaxially often glaucous, oblong-lanceolate, 3.5–9(–12) × 1.5–3.5(–6) cm, papery to leathery. Inflorescence borne in axil of young leaf, of 1 umbel, basally not prophyllate; peduncle 1–1.6(–2.5) cm; umbels of both sexes 4–11-flowered, usually ± racemose due to elongate base, base thickened, 2–4 × 1–2 mm; bracteoles present. Male flowers: tepals 7–8 × 3.5–4 mm. Female flowers: tepals slightly smaller than male ones; staminodes 6. Berries red, globose, 1–1.4 cm in diam. Fl. Mar–Apr, fr. Nov–Dec.

• Forests, thickets, grassy slopes, shaded places along valleys or streams; 700–1600(–2800) m. Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Yunnan.


大花菝葜 da hua ba qia

Smilax cineerea Warburg; S. loupouensis H. Léveillé; S. megalantha var. alata F. T. Wang & Tang; S. tortuosa Diels.

Vines climbing. Stem branched, terete, to 5 m, woody, sparsely prickly. Petiole 1–2.5 cm, winged; wings 1–2 mm wide; abscission zone just above winged portion; tendrils sometimes present. Leaf blade abaxially usually glaucous, elliptic to oblone-ovate, thickly leathery, 6–16 × 2.5–9 cm. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 1–2.5 cm, occasionally articulate; umbels of both sexes 4–13-flowered, usually ± racemose due to elongate base, base thickened, 2–4 × 1–2 mm; bracteoles persistent. Male flowers: tepals yellowish green or white, 6–8 × 2–3 mm. Female flowers: tepals slightly smaller than male ones, staminodes 6. Berries red, globose, 1–1.5 cm in diam. Fl. Mar–Apr, fr. Oct–Nov.

• Forests, thickets, shaded places; 900–3400 m. Guizhou, Hubei, Sichuan, Yunnan.


柔毛菝葜 rou mao ba qia

Smilax chingii var. papillosifolia J. M. Xu; S. megalantha C. H. Wright var. ferruginea F. T. Wang; S. megalantha var. maclurei Merrill.

Vines climbing. Stem branched, terete, 1–7 m, woody, sparsely prickly. Petiole 0.5–2 cm, winged; wings 3–10 × 2–3 mm; abscission zone just above winged portion; tendrils usually absent. Leaf blade ovate-elliptic to oblone-lanceolate, 5–18 × 1.5–7(–11) cm, abaxially brownish or white pubescent. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 0.5–3 cm, occasionally articulate; umbels of both sexes several flowered, usually slightly racemose due to elongate base, base thickened, 2–4 × 1–2 mm; bracteoles present. Male flowers: tepals 7–8 × 3.5–4 mm. Female flowers: tepals slightly smaller than male ones; staminodes 6. Berries red, globose, 1–1.4 cm in diam. Fl. Mar–Apr, fr. Nov–Dec.

• Forests, thickets, grassy slopes, shaded places along valleys or streams; 700–1600(–2800) m. Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Yunnan.


粗糙菝葜 cu cao ba qia


Vines climbing. Stem branched, 1–2 m, terete, woody; branches ± verruculose or spinulose-verruculose. Petiole 0.5–1.5 cm, winged; wings 4–10 × 2–3 mm; abscission zone distal; tendrils sometimes present. Leaf blade elliptic, ovate, or lanceolate, 4–10 × 1.5–5.5 cm. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 1–2.5 cm; umbels of both sexes several flowered, base slightly thickened, sometimes elongate. Male flowers: outer tepals yellowish green, 4.5–5 × 1.8–2 mm. Female flowers: tepals 4.5–5 mm; staminodes 6. Berries red, globose, 1–1.5 cm in diam. Fl. Mar–Apr, fr. Oct–Nov.

• Forests, thickets, grassy slopes, shaded places on slopes; 800–2900 m. Gansu, Guangxi, Guizhou, Hunan, Sichuan, Yunnan [Myanmar].


红果菝葜 hong guo ba qia

Vines climbing. Stem branched, to 7 m, woody, scarcely prickly. Petiole 5–10(–20) mm, winged; wings 3–5 × 1–2 mm; abscission zone just above winged portion; tendrils partly present. Leaf blade abaxially glaucous, elliptic to ovate, 4–7(–12) × 2.5–4(–6) cm. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 0.5–3 cm; umbels of both sexes 3–13-flowered, base usually slightly thickened, sometimes elongate; bracteoles several, persistent. Male flowers: tepals yellowish green, 3.5–4.5 × 1.2–2 mm. Female flowers: tepals subequaling male ones; staminodes 6. Berries red, globose, 7–8 mm in diam., white powdery. Fl. Apr–May, fr. Sep–Oct.

• Forests, thickets, shaded places on slopes; 900–2200 m. Guangxi, Guizhou, Hubei, Hunan, Sichuan.


武当菝葜 wu dang ba qia


Vines climbing. Stem branched, 2–3 m, woody, scarcely prickly. Petiole 5–10 mm, winged; wings 3–5 × 1–2 mm; abscission zone just above winged portion; tendrils sometimes present. Leaf blade elliptic to ovate, 4–10 × 2.4–5 cm. Inflorescence borne in axil of young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 5–12 mm; umbels of

- Forests, thickets, shaded hillsides along valleys or streams; 1100–2100 m. Hubei, Jiangxi, Sichuan.


托柄菝葜 tuo bing ba qia

Plants shrubby, suberect to subscandent. Stem branched, terete, 0.5–3 m, scarcely or sparsely prickly. Petiole 4–5(–15) mm, broadly winged for all its length; wings ± shell-shaped, 3–5 mm wide; abscission zone apical; tendrils sometimes present. Leaf blade abaxially glaucous, usually subelliptic, 4–10(–20) × 2–5(–10) cm, base cordate. Inflorescence borne in axil of rather young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 1–4 cm; umbels of both sexes several flowered, base slightly thickened, sometimes elongate; bracteoles small. Male flowers: tepals yellowish green, ca. 4 × 1–1.8 mm. Female flowers: tepals slightly smaller than male ones; staminodes 3. Berries black, globose, 6–8 mm in diam., white powderly. Fl. Apr.–May, fr. Oct.

- Forests, thickets, shaded places on slopes; 600–2100 m. Anhui, Fujian, Gansu, Guizhou, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Yunnan, Zhejiang.


黑果菝葜 hei guo ba qia

Smilax bodinieri H. Léveillé & Vaniot; S. sebeana Miquel var. glaucochina (Warburg) T. Koyama.

Vines climbing. Stem branched, terete, 0.5–4 m, woody, scarcely or sparsely prickly. Petiole 0.7–1.5(–2.5) cm, winged, wings 1.5–2 cm; abscission zone distal; tendrils usually present. Leaf blade abaxially glaucous, elliptic, 5–8(–20) × 2.5–5(–14) cm, thickly papery, occasionally abaxially white powderly. Inflorescence borne in axil of rather young leaf on new branchlets, of 1 umbel, basally not prophyllate; peduncle 0.7–2 cm; umbels of both sexes 4–14-flowered, base slightly thickened. Male flowers: tepals yellowish green, 5–6 × 1.5–3 mm. Female flowers: tepals subequaling male ones; staminodes 3. Berries black, globose, 7–8 mm in diam., white powderly. Fl. Mar.–May, fr. Oct.–Nov.

- Forests, thickets, grassy slopes; near sea level to 1600 m. Anhui, Gansu, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shanxi, Sichuan, Taiwan, Zhejiang.


台湾菝葜 tai wan ba qia

Smilax elongatareticulata Hayata; S. elongatoumbellata f. elongatareticulata (Hayata) T. Koyama.

Plants shrubby, suberect to scandent. Stem and branches scarcely or sparsely prickly. Petiole 5–8 mm, narrowly winged for ca. 2/3 its length; abscission zone distal; tendrils usually present. Leaf blade abaxially glaucous, ovate-elliptic to oblong-lanceolate, 2.5–9 × 1–4 cm, main veins (3–)5, prominent on both sides. Inflorescence borne in axil of proximal leaf, of 1 umbel, basally not prophyllate; peduncle 1–4 cm; umbels of both sexes 9–28-flowered. Male flowers: outer tepals ca. 6.5 × 3 mm, inner ones ca. 1/2 as wide as outer ones. Female flowers: tepals smaller than male ones. Berries blackish, globose, 6–8 mm in diam., white powderly. Fl. Mar.

1300–1500 m. Taiwan [Japan (Ryukyu Islands)].


刺枝菝葜 ci zhi ba qia

Vines climbing. Stem and branches densely bristly throughout; bristles horizontally spreading, slender, needlelike, ca. 5 mm, apex sometimes forked. Petiole ca. 1 cm, winged; wings ca. 5 × 1–1.5 mm; abscission zone distal; tendrils usually present. Leaf blade abaxially slightly glaucous, elliptic to oblong-ovate, 5–6 × 3–3.5 cm, papery, base rounded, apex somewhat mucronate, main veins 5. Inflorescence of 1 umbel, basally not prophyllate; peduncle 3–4 cm. Flowers unknown. Berries blue-black at maturity, globose, ca. 6 mm in diam.

- C and E Taiwan.


黑叶菝葜 hei ye ba qia

Vines climbing. Stem branched, to 2 m, woody, scarcely or sparsely prickly. Petiole 6–12 mm, narrowly winged for 1/2–2/3 its length; abscission zone distal or subapical; tendrils usually present. Leaf blade becoming blackish when dried, abaxially usually glaucous, ovate-lanceolate or ovate, 3.5–9.5 × 1.5–5 cm, papery. Inflorescence of 1 umbel, basally not prophyllate; peduncle 0.8–1.5(–2.5) cm; umbels of both sexes 4–14-flowered, base slightly thickened; bracteoles ovate. Male flowers: tepals yellowish green, ca. 2.5 × 1 mm. Female flowers: tepals slightly smaller than male ones, staminodes 6. Berries blue-black, globose, 6–8 mm in diam. Fl. Apr.–Jun, fr. Sep.–Oct.

- Forests, thickets, shaded places; 900–2500 m. Gansu, Guizhou, Hubei, Hunan, Shaanxi, Sichuan, Yunnan.


蛇柄菝葜 qiao bing ba qia

Smilax pekingensis A. de Candolle; S. tenuissima Hayata; S. vaginata Decaisne; S. vaginata var. pekingensis (A. de Candolle) T. Koyama; S. vaginata var. stans (Maximowicz) T. Koyama.

Shrubs deciduous, erect, unarmed. Stem densely branched, 0.3–3 m. Petiole 5–12 mm, abaxially striate-rigged, narrowly winged for ca. 2/3 its length; wings apically confluent to petiole; abscission zone subapical; tendrils absent. Leaf blade abaxially glaucous, ovate to suborbicular, 1.5–4(–6) × 1.2–3.5(–5) cm, sometimes abaxially slightly powdery. Inflorescence of 1 umbel, basally not prophyllate; peduncle slender, 0.7–2 cm; umbels of both sexes 1–3(–4)-flowered, base not thickened. Male
flowers: tepals yellowish green or sometimes pink, 2.5–3 × 0.7–1 mm. Female flowers: tepals slightly smaller than male ones; staminodes 6. Berries black, globose, 6–10 mm in diam., white powdery. Fl. Mar–May, fr. Oct–Nov.

Forests, thickets, shaded places on grassy slopes; 400–3200 m. Anhui, Gansu, Guangdong, Guangxi, Guizhou, ?Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Shanxi, Taiwan, ?Yunnan, Zhejiang [Japan].


糙柄菝葜

Smilax stans Maximowicz var. verruculosifolia J. M. Xu.

Shrubs deciduous, erect, unarmed. Stem and branches terete, indistinctly striate-ridged. Petiole 5–10 mm, widened toward base, abaxially striate-ridged, adaxially channeled, papillose-puberulent in distal 1/2, narrowly winged for ca. 2/3 its length; wings apically confluent to petiole; abscission zone apical; tendrils absent. Leaf blade ovate or broadly so, 2–4 × 1–3 cm, papery, abaxially papillose-puberulent on basal veins. Inflorescence of 1 umbel, basally not prophyllate. Flowers very similar to those of Smilax stans. Berries black, globose, 5–7 mm in diam. Fl. May–Jun, fr. Oct.

• Forests, thickets, shaded places on slopes; 3000–3100 m. Gansu, Henan, Hubei, Shaanxi, Sichuan.


合蕊菝葜


Subshrubs or small shrubs, deciduous, erect. Rhizome creeping, stolonlike, 1–2 mm in diam. Stem sometimes with 1 or 2 branches, terete, 10–30 cm, 2–4-leaved. Petiole 4–13 mm, abaxially striate-ridged, scarcely winged; abscission zone at middle; tendrils absent. Leaf blade abaxially very glaucous, broadly ovate, elliptic, or suborbicular, 3–7.5 × 3–6 cm, base cordate, main veins 3–5. Female inflorescence borne in axil of scalelike, membranous bract, of 1 umbel, basally not prophyllate; peduncle 1–2 cm; umbel 2–5-flowered, base not thickened. Male flowers unknown. Female flowers very small; staminodes 2 or 3. Berries ca. 7 mm in diam. (immature). Fr. Nov–Dec.

• Bamboo forests, forest margins; 1700–1900 m. W Hubei, SW Sichuan.


峨眉菝葜


• Forest margins, hillsides, grassy slopes; 2200–2700 m. C Sichuan (Emei Shan).


川鄂菝葜

Smilax umbrosa J. M. Xu.

Subshrubs or small shrubs, suberect. Rhizome creeping, stolonlike, 1–2 mm in diam. Stem with 1 or 2 branches, terete, 10–30 cm, 2–4-leaved. Petiole 4–13 mm, abaxially striate-ridged, scarcely winged; abscission zone at middle; tendrils absent. Leaf blade abaxially very glaucous, broadly ovate, elliptic, or suborbicular, 3–7.5 × 3–6 cm, base cordate, main veins 3–5. Female inflorescence borne in axil of scale-like, membranous bract, of 1 umbel, basally not prophyllate; peduncle 1–2 cm; umbel 2–5-flowered, base not thickened. Male flowers unknown. Female flowers very small; staminodes 2 or 3. Berries ca. 7 mm in diam. (immature). Fl. May–Jun, fr. Oct–Nov.

• Bamboo forests, forest margins; 1700–1900 m. W Hubei, SW Sichuan.


矮菝葜


• Mixed forests; 2400–2700 m. W Yunnan (Yangbi Xian).


防己叶菝葜

Smilax luteocaulis H. Léveillé; S. rubriflora Rehder.

Vines deciduous, climbing, unarmed. Stem branched, terete, 0.5–3 m, woody. Petiole 5–12 mm, abaxially striate-ridged, narrowly winged for 2/3–3/4 its length; wings apically confluent to petiole; abscission zone apical; tendrils usually present. Leaf blade abaxially glaucous, oblance-elliptic, 0.5–1.8 cm × 3–8 mm, papery, base obtuse, apex mucronate. Male flowers unknown. Female inflorescence of 1 umbel, basally not prophyllate; peduncle 5–7 mm; umbel 1- or 2-flowered, base not thickened; bracteoles ovate, very small; pedicels 3–5 mm. Fruit unknown.

• Mixed forests; 2400–2700 m. W Yunnan (Yangbi Xian).

学名 xi zang ba qia

Smilax parvifolia Wallich ex J. D. Hooker

Vines climbing, unarmed. Stem branched, to more than 1 m, woody, smooth; young branches zigzagged. Petiole 0.5–1.5 cm, narrowly winged for 1/3–1/2 its length; wings apically lanceolate-auriculate; abscission zone apical; tendrils commonly present. Leaf blade abaxially glaucous, ovate-lanceolate or broadly lanceolate, 3–9 × 1–3.5 cm, main veins 5–7. Inflorescence of 1 umbel, basally not prophyllate; peduncle slender, 1–5 cm; umbels of both sexes 1–4-flowered, base not thickened; bracteoles 2 or 3, lanceolate. Male flowers: tepals greenish, ca. 1.5 × 0.7 mm; stamens rather short. Female flowers: tepals ca. 1.2 × 0.5 mm; staminodes 6, subulate. Fl. Jun. 2n = 32.

Broad-leaved forests, Tsuga forests; 2200–2800 m. S Xizang [Bhutan, India, Myanmar, Nepal].

This species was misidentified in FRPS as Smilax glaucophylla Klotzsch.

32. Smilax corbularia Kunth, Enum. Pl. 5: 262. 1850.

学名 kuang tiao ba qia

Vines climbing, unarmed. Stem branched, 3–9 m, woody. Petiole 0.8–1.4 cm, narrowly winged for ca. 1/2 its length; wings each with a lanceolate auricle (2–6 mm) apically; abscission zone apical; tendrils usually present. Leaf blade abaxially glaucous, ovate to oblong-elliptic, 4–14 × 2–4.5(–7) cm, leathery, margin recurved. Inflorescence of 1 umbel, basally not prophyllate; peduncle 4–15 mm; umbels of both sexes 10–20-flowered, base thickened; bracteoles many, persistent. Male flowers: tepals not spreading, greenish yellow, outer ones cymbiform, 2.5–3 × ca. 2 mm, inner ones 2–2.5 × ca. 1 mm, thickened, abaxially concave; filaments connate, forming a short column. Female flowers: tepals 2–2.5 mm; staminodes 3. Berries dark red, globose, 6–7 mm in diam. Fl. May–Jul, fr. Dec.

Forests, thickets; near sea level to 1600 m. Guangdong, Guangxi, Hainan, Yunnan [Indonesia, Malaysia, Myanmar, Vietnam].

Three closely allied taxa, Smilax corbularia, S. hypoglaucua, and S. synandra, form a natural group in SE Asia. Among them, S. synandra differs rather distinctly from the others in its partly connate tepals (rather like those of Heterosmilax), the tube of which is sometimes 4-angled. Certain intermediates blur the distinction between S. corbularia and S. hypoglaucua. In addition to the key characters, the leaf blades of S. hypoglaucua tend to be thinner than those of S. corbularia, and the umbels of the former species bear far fewer flowers than those of the latter. The differences among the taxa might be ecological, in which case intensive future field investigations would be necessary.

1a. Leaf blade adaxially slightly shiny, with conspicuous, reticulate veins, base subrounded, margin slightly recurved ........................................ 32a. var. corbularia

1b. Leaf blade adaxially shiny, with inconspicuous, reticulate veins, base shallowly cordate to broadly cuneate, margin strongly recurved ................................ 32b. var. woodii

32a. Smilax corbularia var. corbularia

光叶菝葜  guang ye ba qia


Leaf blade ovate, ovate-oblong, or narrowly elliptic, adaxially slightly shiny, reticulate veins conspicuous adaxially, base subrounded, margin slightly recurved.

Forests; near sea level to 500 m. Hainan [Indonesia, Malaysia].


菱叶菝葜  ling ye ba qia

Heterosmilax erecta F. T. Wang & Tang; Smilax corbularia Kunth subsp. synandra (Gagnepain) T. Koyama.

Shrubs suberect to subscandent, unarmed. Stem and branches slightly 4-angled. Petiole 5–10 mm, narrowly winged for ca. 1/2 its length; wings each with a lanceolate auricle apically; abscission zone apical; tendrils absent. Leaf blade abaxially glaucous, oblong or ovate-oblong, 6–15 × 1.2–7 cm, papery, abaxially minutely white powdery. Inflorescence of 1 umbel, basally not prophyllate; peduncle compressed, slender, 1.2–1.5 cm; umbels of both sexes 10–20-flowered, base thickened; bracteoles many, small. Male flowers: tepals not spreading, greenish, outer ones ca. 2.5 × 1.8 mm, inner ones ca. 2.2 × 1 mm, thickened, abaxially concave; filaments connate, forming a short column. Female flowers: tepals 2.2–2.5 mm; staminodes 3. Berries globose, 8–10 mm in diam. Fl. Jul–Aug, fr. Dec.

- Forests, thicket margins; near sea level to 1300 m. Fujian, Guangdong, Guizhou, Jiangxi, ?Yunnan.

35. Smilax hayatae T. Koyama, Quart. J. Taiwan Mus. 10: 15. 1957.

菱叶菝葜  ling ye ba qia


Shrubs suberect to subscandent. Stem branched, terete, slender, smooth. Petiole 2–5(–8) mm, winged for 1/2–3/5 its length; wings ca. 3 mm, apically with a deltoid-lanceolate auricle 1–1.5 mm; abscission zone apical; tendrils absent. Leaf blade ovate-rhombic or rhombic-elliptic, 3–5(–7) × 1.2–4.5 cm. Male inflorescence of 1 umbel, basally not prophyllate; peduncle slender, 0.7–1.7(–2.2) cm; umbel 2–7-flowered, base scarcely thickened. Male flowers: tepals greenish, outer ones linear-oblong, 1–2 × 0.4–0.8 mm, inner ones ca. 1 × 0.2 mm; stamens ca. 1/2 as long as tepals; anthers subglobose. Female flowers unknown. Berries red, globose, ca. 8 mm in diam. Fl. Apr, fr. Oct.

- Forests, hillsides along valleys or streams; 900–1500 m. N Guangdong, Taiwan.


浙南菝葜  zhe nan ba qia

Shrubs suberect, unarmed. Stem branched, 50–100 cm, smooth. Petiole 2–5 mm, narrowly winged for 1/2–3/4 its length; wings apically with an ovate-lanceolate auricle ca. 1 mm; abscission zone just above winged portion; tendrils absent. Leaf blade abaxially glaucous, ovate-lanceolate, ovate, or oblong-lanceolate, 3–7.5 × 1–3 cm. Inflorescence racemose or sometimes subumbellate, basally not prophyllate; peduncle slender, 1–2 cm; umbels of both sexes 2–7-flowered; bracteoles small, persistent. Male flowers: tepals elliptic, ca. 1.5 × 0.5–0.8 mm; stamens 0.7–0.8 mm. Female flowers: tepals ca. 1 × 0.5 mm; staminodes 6. Berries orange-red, globose, 5–7 mm in diam. Fl. Apr–May, fr. Jul–Nov.

- Forests, shrubby slopes; 500–600 m. S Zhejiang.


弯梗菝葜  wan geng ba qia


Subshrubs or shrubs, suberect, unarmed. Stem branched, 0.5–2 m, smooth. Petiole 0.7–1.5 cm, papilllose distally, winged for ca. 1/3 its length; abscission zone subapical; tendrils absent. Leaf blade elliptic or ovate-elliptic, 7–12 × 2.5–6.5 cm, abaxially papillose-pubescent or powdery-scabrous particularly on reticulate veins. Inflorescence borne in axil of leaf or scalelike...
bract on young branches, of 1 umbel, basally not prophyllate; peduncle 4–6.5 cm; umbels of both sexes 5–20-flowered. Male flowers: tepals greenish yellow or pale purple, 2–2.5 × ca. 1 mm; stamens very short. Female flowers: tepals grayish white, 1.5–2 × ca. 0.8 mm; staminodes 6. Berries globose, 8–11 mm in diam.; carpodipodium recurved. Fl. Mar–Apr, fr. Dec.

Forests, thickets, shaded places along streams; near sea level to 1600 m. Guangdong, Guizhou, Yunnan [Vietnam].


芽白菝葜 cang bai ba qia


Subshrubs or shrubs, suberect, unarmed. Stem branched, to 1 m, smooth. Petiole 1–1.5 cm, widened toward base, abaxially striate-ridged, distally dilatate, usually narrowly winged for ca. 1/3 its length; abscission zone subapical; tendrils absent. Leaf blade abaxially very glaucous, elliptic to ovate, 5–11 × 2–5.5 cm, abaxially glabrous. Inflorescence borne in axil of leaf or scalelike bract on young branches, of 1 umbel, basally not prophyllate; peduncle 2–4 cm; umbels of both sexes 3–20-flowered. Male flowers: tepals ca. 2 × 1 mm; stamens very short. Female flowers: tepals slightly smaller than male ones; staminodes 3. Berries blue-black, globose, 5–7 mm in diam. Fl. May–Jun, fr. Oct–Nov.

Forests, thickets, shaded places along streams; 500–1600 m. Guizhou, Sichuan, Yunnan [Bhutan, India, Myanmar].


小叶菝葜 xiao ye ba qia

Smilax castaneiflora H. Léveillé; S. elegans Wallich ex Kunth subsp. subecta Noltie.

Vines climbing. Stem branched, 1–5 m, woody, smooth. Petiole 0.5–1.5 (–2) cm, narrowly winged for 1/2–2/3 its length; abscission zone apical; tendrils usually present. Leaf blade abaxially glaucous, ovate, oblong-ovate, or triangular-lanceolate, 3.5–9 × 1–5 cm. Inflorescence of 1 umbel, basally not prophyllate; peduncle 5–12 mm, slightly compressed, usually slightly shorter than petiole; umbels of both sexes 10–30-flowered, base thickened; bracteoles many, persistent. Male flowers: tepals greenish or reddish, 2.2–2.5 × 0.7–1 mm; stamens very short. Female flowers: tepals 2.2–2.5 mm; staminodes 6. Berries blue-black, globose, 5–7 mm in diam. Fl. May–Jun, fr. Dec.

Forests, thickets, shaded places along valleys; 1000–3000 m. Guizhou, Sichuan, Yunnan [Bhutan, India, Myanmar].

43. Smilax glabra Roxburgh, Fl. Ind., ed. 1832, 3: 792. 1832.

土伏苓 tu fu ling

Smilax blinii H. Léveillé; S. calophylla Wallich var. concolor C. H. Wright; S. dunniana H. Léveillé; S. glabra var. maculata Bodinier ex H. Léveillé; S. hookeri Kunth; S. mengmaensis R. H. Miao; S. trigona Warburg.

Vines climbing, unarmed. Stem branched, terete, 1–4 m, woody, smooth. Petiole 5–15 (–30) cm, narrowly winged for 1/4–3/5 its length; abscission zone apical; tendrils well develop-

op. Leaf blade elliptic- or ovate-lanceolate, 6–15 × 1–7 cm. Inflorescence of 1 umbel, basally not prophyllate; peduncle 1–5(–8) mm, strikingly shorter than petiole; umbels of both sexes 10–30(–60)-flowered, base thickened; bracteoles many. Male flowers: perianth greenish white, slightly 6-angled, scarcely open; outer tepals broadly obovate-ordicular, cucullate, ca. 2 × 3 mm, abaxially deeply channelled, inner ones ca. 1 mm wide, margin irregularly denticulate. Female flowers: inner tepals entire at margin; staminodes 3. Berries blue-black, 6–10 mm in diam., white powdery. Fl. Jul–Nov, fr. Nov–Apr.

Forests, thickets, thinly forested slopes along valleys, river banks; 300–1800 m. Anhui, Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, ?S Shaanxi (Qin Ling), Sichuan, Taiwan, Xizang, Yunnan, Zhejiang [India, Myanmar, Thailand, Vietnam].

The tuberlike rhizomes are used medicinally.


乌饭叶菝葜 wu fan ye ba qia

Smilax myrtillus var. dulongensis H. Li; S. rigida Wallich ex Kunth subsp. myrtillus (A. de Candolle) T. Koyama; S. rigida var. myrtillus (A. de Candolle) T. Koyama.

Shrubs erect. Stem densely branched, 50–100 cm, sparsely prickly; branchlets usually 4-angled, with winglike edges. Petiole 1–4 mm, basally auriculate; auricles paired, lanceolate to ovate, 1–2 × ca. 0.5 mm, membranous, margin lacerate-fimbriate; abscission zone at middle; tendrils absent. Leaf blade usually rhombic-ovate, 1–5 × 0.6–2.5(–3) cm, thinly papery, main veins 3(–5), raised adaxially. Inflorescence of 1 umbel, basally not prophyllate; peduncle 5–10 mm; umbels of both sexes 2–10-flowered. Male flowers: tepals purplish green, ca. 1.5 × 0.4–0.6 mm; stamens ca. 0.5 mm. Female flowers: tepals ca. 1 × 0.3 mm; staminodes 3. Berries blue-black, globose, 6–8 mm in diam. Fl. Jul, fr. Oct–Nov.

Forest, forest margins, thickets; 1600–3100 m. SE Xizang, Yunnan [Bhutan, India, Myanmar].


劲直菝葜 jin zhi ba qia

Smilax rigida Wallich ex Kunth, Enum. Pl. 5: 156. 1850, not Solander (1794); S. myrtillus A. de Candolle var. rigida Noltie.

Shrubs erect. Stem laxly branched terete, rather slender, 2–5 m, woody. Petiole 5–20 cm, narrowly winged for ca. 1/4 its length; abscission zone subapical; tendrils well developed. Leaf blade oblong-lanceolate to narrowly ovate, 7–15 × 1–5 cm. Inflorescence borne in axil of leaf or scalelike bract, of 1 umbel, basally not prophyllate; peduncle slender, 1.5–5 cm; umbels of both sexes 7–17-flowered, base slightly thickened, 1–2 mm in diam. Male flowers: tepals purplish red or greenish yellow, 2.5–3 × ca. 1 mm. Female flowers: tepals ca. 2.2 × 0.8 mm; staminodes 3. Berries blue-black, globose, 8–10 mm in diam. Fl. May–Jul, fr. Oct–Nov.

Forests, thickets; 800–2900 m. S Gansu, Guangxi, Guizhou, Hunan, Sichuan, Xizang, Yunnan [India, Myanmar].


巴坡菝葜 ba po ba qia

Shrubs evergreen, suberect. Stem branched, 2–3 m, sparsely prickly. Petiole 5–12 cm, narrowly winged for ca. 1/2 its length; abscission zone above middle; tendrils usually present. Leaf blade ovate, 2–6 × 1–1.3 cm, leathery, main veins 5, median 3 veins elevated abaxially, base rounded, apex acute. Male flowers unknown. Female inflorescence of 1 umbel, basally not prophyllate; peduncle very short, 1–3 mm; umbel 5–8-flowered, base thickened, subglobose, ca. 2 mm in diam.; pedicels ca. 3 mm, rigid. Female flowers: tepals yellowish green, linear-oblong, ca. 2.5 × 1 mm. Berries purplish black, globose, 4–8 mm in diam. Fl. May, fr. Nov.

- Open forests, thickets, hillsides along streams and valleys. NW Yunnan (Gongshan Drung-Nu Zu Zizhixian).


西南菝葜 xi nan ba qia

Vines climbing, unarmed. Stem laxly branched terete, rather slender, 2–5 m, woody. Petiole 5–20 cm, narrowly winged for ca. 1/4 its length; abscission zone subapical; tendrils well developed. Leaf blade oblong-lanceolate to narrowly ovate, 7–15 × 1–5 cm. Inflorescence borne in axil of leaf or scalelike bract, of 1 umbel, basally not prophyllate; peduncle slender, 1.5–5 cm; umbels of both sexes 7–17-flowered, base slightly thickened, 1–2 mm in diam. Male flowers: tepals purplish red or greenish yellow, 2.5–3 × ca. 1 mm. Female flowers: tepals ca. 2.2 × 0.8 mm; staminodes 3. Berries blue-black, globose, 8–10 mm in diam. Fl. May–Jul, fr. Oct–Nov.

Forests, thickets; 800–2900 m. S Gansu, Guangxi, Guizhou, Hunan, Sichuan, Xizang, Yunnan [India, Myanmar].


建昆菝葜 jian kun ba qia

Vines climbing, unarmed, usually becoming blackish when dried. Stem terete, 4–5 mm, woody. Petiole 5–5.5 cm, narrowly winged for ca. 1/2 its length; abscission zone distal; tendrils well developed. Leaf blade ovate or ovate-oblong, ca. 18 × 10 cm, abaxially slightly white powdery. Male inflorescence of 1 umbel, basally not prophyllate; peduncle to 10 cm; umbel densely 50–100-flowered, base thickened. Male flowers: perianth greenish, campanulate; outer tepals linear-oblong, ca. 5 × 1.5 mm, slightly fleshy, inner ones slightly narrower; stamens ca. 3.2 mm; anthers ca. 1 mm. Female flowers and fruit unknown. Fl. Apr–May.

- Forested slopes; 1300–1600 m. NW Yunnan (Gongshan Drung-Nu Zu Zizhixian).

Vines climbing, unarmed. Stem branched, terete, 1–2 m, woody; branches striate-ridged, sometimes minutely verrucose. Petiole 0.6–1.8 cm, narrowly winged for ca. 1/4 its length; abscission zone subapical; tendrils well developed. Leaf blade oblong, elliptic, or ovate-elliptic, 6–12 × 1.5–4.5(–7) cm, leathery, 5–7-veined, midvein obviously raised adaxially, base obtuse, apex acuminate. Male inflorescence borne in axil of leaf or scalelike bract, of 1 umbel, basally not prophyllate; peduncle slightly compressed, slender, 1.5–4 cm; umbel 6–17-flowered, base slightly thickened. Male flowers: tepals greenish purple, 3.2–3.7 × 1–1.2 mm; stamens ca. 1.5 mm; umbels of both sexes 20–30-flowered, base slightly thickened. Male flowers: tepals yellowish green, 3–4.5 × ca. 1 mm; stamens 3–4 mm. Female flowers: tepals 1.5–2 × ca. 0.8 mm; staminodes 3. Berries purplish black, globose, ca. 8 mm in diam. Fl. Apr–May, fr. Oct–Nov.

Forests, thickets, shaded places along valleys or streams; near sea level to 1500 m. Fujian, Guangdong, Guangxi, Guizhou, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Vietnam].

52. *Smilax lanceifolia* Roxburgh, Fl. Ind., ed. 1832, 3: 792. 1832.

**马甲菝葜** *ma jia ba qia*

Vines climbing. Stem branched, terete, 1–2 m, woody; branchlets occasionally zigzagged. Petiole 1–2(–2.5) cm, narrowly winged for 1/5–1/4 its length; abscission zone at middle; tendrils usually present. Leaf blade lanceolate to ovate-oblong, 6–17 × 2–8 cm. Inflorescence of 1 (or 2) umbels, basally prophyllate; peduncle 1–1.5 cm, proximally articulate; umbels of both sexes densely 20–30-flowered, base slightly thickened. Male flowers: tepals yellowish green, 3.5–4.5 × ca. 1 mm; stamens 3–4 mm. Female flowers: tepals 1.5–2 × ca. 0.6 mm; staminodes 6. Berries yellowish red to black, globose, 6–7 mm in diam. Fl. Sep–Mar, fr. Oct–Nov.

Forests, forest margins, thickets, shaded places on slopes; 100–2800 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bhutan, Cambodia, NE India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Sikkim, Thailand, Vietnam].

This species is very difficult to treat taxonomically due to the extreme polymorphism of the included entities.

1a. Main veins obviously concave on adaxial leaf surface ........................... 52e. *var. impressinervia*

1b. Main veins raised on adaxial leaf surface (sometimes midvein slightly concave).

2a. Leaf blade usually ovate or ovate-lanceolate, usually 1–3 × as long as wide.

3a. Leaf blade usually papery, adaxially not or slightly shiny; peduncle usually shorter than petiole .......... 52a. *var. lanceifolia*

3b. Leaf blade usually leathery, adaxially shiny; peduncle usually longer than petiole ........................................ 52b. *var. opaca*

2b. Leaf blade lanceolate to narrowly oblong-lanceolate, usually 5–7 × as long as wide.

4a. Branchlets ± zigzagged; peduncle longer than petiole; tepals yellowish green ........................................ 52e. *var. elongata*

4b. Branchlets not zigzagged; peduncle shorter than or subequaling petiole; tepals purple ................................ 52d. *var. lanceolata*

暗色菝葜 an se ba qia


Leaf blade usually ovate to ovate-lanceolate, usually 1–3 x as long as wide, thickly papery to leathery, main veins raised adaxially (sometimes midvein slightly concave). Peduncle subequal to petiole. Tepals yellow-green.

Forests, thickets, shaded places on slopes; 600–2000 m. Guangxi, Guizhou, Hubei, Hunan, Sichuan, Yunnan. [Cambodia, Indonesia, Laos, Malaysia, Thailand, Vietnam].


Leaf blade lanceolate to oblong-lanceolate, thinly leathery; main veins 3, obviously concave adaxially. Peduncle subequaling petiole.

- Shaded places in forests; 1000–2000 m. Guangxi, Guizhou, Yunnan.


灰叶菝葜 hui ye ba qia

Vines climbing. Stem branched, terete, 1–2 m, woody, sometimes sparsely prickly. Petiole 1–1.5 cm, narrowly winged for 1/5–1/4 its length; abscission zone at or above middle; tendrils usually present. Leaf blade becoming grayish when dried, lanceolate, 8–12 × 2–4 cm, axially wrinkled along 3 concave main veins. Inflorescence usually of 1 umbel, basally prophyllate; peduncle 1.5–2.5 cm, proximally articulate; umbels of both sexes 3–5-flowered, base slightly thickened. Male flowers: tepals lanceolate-oblong, 3.5–4 × 0.7–1 mm. Female flowers: tepals 2.5–3 × 0.6–0.8 mm; staminodes 3 (or 4). Berries globose, 5–6 mm in diam., 1-seeded. Seeds oblate-globose, deeply 5- or 6-furrowed. Fl. Nov.

- Open forests; near sea level to 1000 m. Guangxi, Hainan.


密疣菝葜 mi you ba qia


Vines climbing. Stem branched, terete, 1–3 m, woody; branches 2- or 3-angled, densely verruculose, sometimes also sparsely prickly. Petiole 1–2–2.5 cm, narrowly winged for ca. 1/4 its length, basally slightly verruculose; abscission zone at middle or above; tendrils usually present. Leaf blade ovate to lanceolate, 8–15 × 3–6 cm. Inflorescence of 1 umbel, basally prophyllate; peduncle 1–1.5 cm, proximally articulate; umbels of both sexes 20–30-flowered, base slightly thickened. Male flowers: tepals 3–4 × ca. 1 mm; stamens 3.5–4 mm. Female flowers: tepals slightly smaller than male ones; staminodes 6. Berries globose, 6–7 mm in diam. Fl. Feb–Mar, fr. Oct–Nov.

- Forests, thickets, shaded places on slopes; 600–1500 m. Guangxi, Guizhou, Hubei, Hunan, Sichuan, Yunnan [Vietnam].


梵净山菝葜 fan jing shan ba qia


Vines climbing. Stem branched, 5 m, woody, sometimes sparsely prickly. Petiole 1–2 cm, narrowly winged for 1/5–1/3 its length; abscission zone at middle; tendrils well developed. Leaf blade ovate-oblong to lanceolate, 8–16 × 4–9 cm, adaxially slightly shiny, main veins 5. Inflorescence of 1(or...

2) umbels, basally prophyllate; peduncle 1–2(–3) cm, proximally articulate when inflorescence of 1 umbel; umbels of both sexes 10–40-flowered, base thickened. Male flowers: tepals yellowish green, 7–8 × 0.8–1.6 mm; stamens 7–8 mm; filaments basally connate, forming a short column ca. 1 mm. Female flowers: tepals 3–4 × ca. 0.5 mm; staminodes 6. Berries ca. 9 mm in diam. Fl. Sep.–Oct., fr. Dec.–Feb.

- Forests; 300–400 m. S Guangxi.


- Forests; SW Guangdong (Xinyi Xian).


Vines climbing, usually unarmed. Stem branched, terete, to 10 m, woody. Petiole 1.5–5 cm, narrowly winged for 1/3–1/2 its length; abscission zone distal; tendrils well developed. Leaf blade sometimes turning blackish when dried, ovate to elliptic, (5–)10–20 × 3–12 cm, papery or subleathery, adaxially slightly shiny, base rounded or truncate, apex submucronate. Inflorescence of (1 or)2 or 3 umbels, 3–6(–10) cm, basally prophyllate; umbels of both sexes 6–20-flowered, base slightly thickened. Male flowers: tepals greenish yellow, 6–7 × 0.6–1.5 mm. Female flowers unknown (in China). Berries dark red, globose, 1.5–2 cm in diam. Fl. Oct.–Dec., fr. May–Jun.

- Forests, thickets, shaded slopes; near sea level to 1500 m. Guangxi, Hainan, S Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Philippines, Thailand, Vietnam].

Chinese records of Smilax macrocarpa Blume (e.g., in FRPS) are referable to S. megacarpa.


- Forests; 300–400 m. S Yunnan.


Vines climbing. Stem terete, woody, occasionally sparsely prickly. Petiole 2–3.5 cm, narrowly winged for 1/3 its length; abscission zone at middle; tendrils well developed. Leaf blade ovate-lanceolate to elliptic-lanceolate, 8–18 × 3.5–5.5 cm, papery, base rounded or cuneate, apex acuminate. Male inflorescence of 1 umbel, basally prophyllate; umbels of both sexes 30–40-flowered, base thickened, ellipsoid, 4.5–5 × 3–4 cm; bracteoles many. Male flowers: tepals greenish yellow or pale yellow, linear, outer ones ca. 7 × 1.8 mm, inner ones much narrower; stamens ca. 7 mm; anthers ca. 1.2 mm. Female flowers and fruit unknown. Fl. Sep.

- Forested slopes; ca. 1000 m. S Yunnan.
61. Smilax aspericaulis  

Smilax aspericaulis represents an ecotype of S. bracteata because it differs only in its verruculose stems (vs. stems occasionally thorny but not verruculose). It is possible that S. aspericaulis represents an ecotype of S. bracteata occurring at higher elevations.

62. Smilax ovalifolia  
Roxburgh, Fl. Ind., ed. 1832, 3: 794. 1832.

Smilax ovalifolia Roxburgh.

Vines climbing. Leaf blade broadly elliptic to ovate-elliptic, 5–17 × 3–11 cm. Inflorescence a raceme of 3–6–(10) umbels, 3–7 cm, basally prophyllate; umbels of both sexes 12–25-flowered, base slightly thickened, globose, ca. 2 × 2 mm. Male flowers: tepals olive green to dark red, ca. 5 × 0.7–1.3 mm. Female flowers: tepals smaller than male ones; staminodes 3. Berries globose, 5–7 mm in diam. Fl. Nov–Feb, fr. June–Aug. 2n = 32.

Forests, thickets, shaded places on grassy slopes; near sea level to 1800 m. Fujian, Guangdong, Guangxi, S. Guizhou, Hainan, Taiwan, Yunnan [Cambodia, Indonesia, Japan, Laos, Malaysia, Philippines, Thailand, Vietnam].

63. Smilax malipoensis  

Smilax malipoensis ma li po ba qia

Vines climbing. Stem subterete, woody, furrowed when dried, sparsely verruculose. Petiole 7–12 mm, abaxially verruculous near base, winged; wings 3–5 × 1–1.6 mm, margin crisped; abscission zone at middle; tendrils absent. Leaf blade oblong to obleng-elliptic, (5.5–)11–13 × (1.5–)3–5 cm, main veins 7, abaxially convex, adaxially slightly raised. Male inflorescence of 2 umbels, 4–4.5 cm, basally prophyllate; umbels 10–20-flowered, ca. 2 cm in diam., base globose, 2–3 mm in diam. Male flowers: outer tepals greenish white, 5–6 × ca. 1.8 mm, inner ones much narrower; stamens 5.5–6 mm; anthers ca. 2 mm. Female flowers and fruit unknown. Fl. Nov.

• Mixed forests; 1600–1800 m. SE Yunnan (Malipo Xian).

64. Smilax coccoloides  

Smilax coccoloides yin ye ba qia

Smilax coccoloides Warburg var. acuminata Warburg.

Shrubs subscandent, unarmed. Stem suberect, branched, 0.5–2 m. Petiole usually curved, 5–10 mm, transversely wrinkled on proximal 1/2, basally narrowly winged; wings sometimes auriculate apically; abscission zone at middle; tendrils absent. Leaf blade abaxially grayish green, ovate, elliptic-ovate, or ovate-lanceolate, abaxially slightly shiny. Male inflorescence of 1(2) umbels, basally prophyllate; peduncle 1–2 cm, articulate 2–5 mm from base; umbels 3–15-flowered, base scarcely thickened. Male flowers: tepals yellowish green, outer ones 2.5–3.5 × 1–1.5 mm; stamens very short, ca. 0.7 mm. Female flowers unknown. Berries blackish blue, globose, ca. 8 mm in diam. Fl. Feb–Apr, fr. Nov.

• Forests, thickets; 500–1900 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Sichuan, Yunnan.

65. Smilax pinfaensis  

Smilax pinfaensis ping fa ba qia

Shrubs suberect, unarmed. Rhizome stolonlike, 2–3 mm in diam. Stem branched, smooth. Petiole 4–6 cm, basally narrowly winged; abscission zone apical; tendrils absent. Leaf blade lanceolate to oblong-lanceolate, 8–16 × 1.5–4 cm, leathery, 3-veined, with midvein concave adaxially, base subcordate, apex acuminate. Male inflorescence of 1 umbel, basally prophyllate; peduncle 8–14 cm, proximally articulate; umbel 5- or 6-flowered, base scarcely thickened; bracteoles small; pedicels 5–9 mm. Male flowers: tepals spreading, ovate or ovate-elliptic, 1.5–1.8 × ca. 1 mm; stamens very short, 0.3–0.4 mm; anthers shorter than filaments. Female flowers unknown. Fl. Mar.

• Forests, SC Guizhou (Guiding Xian).

66. Smilax basilata  

Smilax basilata ping fa ba qia

Shrubs suberect, unarmed. Rhizome stolonlike, 2–3 mm in diam. Stem branched, smooth. Petiole 4–6 cm, basally narrowly winged; abscission zone apical; tendrils absent. Leaf blade lanceolate to oblong-lanceolate, 8–16 × 1.5–4 cm, leathery, 3-veined, with midvein concave adaxially, base subcordate, apex acuminate. Male inflorescence of 1 umbel, basally prophyllate; peduncle 8–14 cm, proximally articulate; umbel 5- or 6-flowered, base scarcely thickened; bracteoles small; pedicels 5–9 mm. Male flowers: tepals spreading, ovate or ovate-elliptic, 1.5–1.8 × ca. 1 mm; stamens very short, 0.3–0.4 mm; anthers shorter than filaments. Female flowers unknown. Fl. Mar.

**Smilax siderophylla** Handel-Mazzetti.

Vines climbing. Stem branched, subterete, 1–3 m or more, woody; branches usually sparsely prickly. Petiole 2–3 cm, wingless or rarely narrowly winged for ca. 1/2 its length; abscission zone distal; tendrils usually present. Leaf blade elliptic, ovate-elliptic, or orbicular, 5–11 × 3–9 cm, thickly leathery, main veins 3, strongly convex abaxially, concave adaxially. Inflorescence a raceme of 2–4 umbels, 3–5 cm, basally prophylacte; umbels of both sexes 15–25-flowered, base subglobose. Male flowers: tepals yellow, outer ones ca. 6 × 2 mm, inner ones much narrower; stamens ca. 6 mm. Female flowers: tepals smaller than male ones; staminodes 3. Berries black, globose, 5–6 mm in diam. Fl. Mar–Apr, fr. Aug–Oct.

- Forests, thicketed, shaded and damp places on slopes; 1800–2700 m. Yunnan.

70. **Smilax bauhiniioides** Kunth. Enum. Pl. 5: 243. 1850.

This species is closely related to *Smilax lunglingensis*, which has similar inflorescences and flowers. Only sterile material of *S. bauhiniioides* has so far been collected in China; it clearly matches material of the same species from Vietnam.


64. **Smilax basilata**, from C. Guizhou (Guiyang), Inst. Biol. 7: 86. 1936.


63. **Smilax guiyangensis** C. X. Fu & C. D. Shen (Acta Phytotax. Sin. 35: 70. 1997), from C. Guizhou (Guizhang), appears to be a distinct species closely related to *S. basilata*, from which it differs in having white-marked leaf blades and rather long peduncles conspicuously longer than the petioles.


1.5–4 cm, winged for ca. 2/3 its length; wings 1–3 mm wide; abscission zone distal; tendrils sometimes present. Leaf blade ovate-lanceolate or elliptic-lanceolate, 17–25 × 4–10 cm, thickly leathery, main veins 3–(5), base rounded or broadly cuneate. Inflorescence of 1 umbel, basally prophyllate; peduncle 1.5–4 cm, proximally articulate; umbel 5–20-flowered.

Open forests; ca. 700 m. SW Guangxi, SE Yunnan [Vietnam].

Only a few sterile specimens have been collected. The description of the flowers follows Koyama (in Smitinand et al., Fl. Thailand 2: 226, 228, 1975).


密刺菝葜

Vines climbing. Stem and branches densely prickly; prickles slightly curved, sometimes forked. Petiole 1–2 cm, minutely verruculose-prickly, winged for 1/4–1/2 its length; abscission zone near middle; tendrils usually present. Leaf blade elliptic to ovate, 8–15 × 3–7 cm. Inflorescence of 1 umbel, basally prophyllate; peduncle 1.5–2.5 cm, proximally articulate; umbels of both sexes densely many flowered, base slightly thickened. Male flowers: tepals greenish, ca. 5 × 0.8–1.5 mm; stamens 5–6 mm. Female flowers: tepals slightly smaller than male ones; staminodes 5. Berries globose, 8–10 mm in diam. Fl. Jan–Feb, fr. Nov–Dec.


密刚毛菝葜

Vines climbing. Stem and branches densely prickly; prickles broadly winged for 1/2–2/3 its length; abscission zone near middle; tendrils usually present. Leaf blade ovate-lanceolate or elliptic-lanceolate, 17–25 × 4–10 cm, thickly leathery, main veins 3–(5), base rounded or broadly cuneate. Inflorescence of 1 umbel, basally prophyllate; peduncle 1.5–2.5 cm, proximally articulate; umbel 5–20-flowered. Male flowers: tepals yellowish green, ca. 4 × 0.6 mm; stamens subequaling tepals. Female flowers: inner tepals very narrow; staminodes absent. Berries dark red, globose, ca. 8 mm in diam. Fl. Mar-Jun, fr. Jul–Oct.


穗菝葜

Vines climbing. Stem and branches densely prickly; prickles sparsely curved, winged for 1/2–2/3 its length; abscission zone near middle; tendrils usually present. Leaf blade elliptic to ovate-lanceolate, 17–25 × 4–10 cm. Inflorescence of 1 umbel, basally prophyllate; peduncle 1.5–2.5 cm, proximally articulate; umbel 5–20-flowered. Male flowers: tepals yellowish green, outer ones 4–4.5 × ca. 1 mm, inner ones ca. 4 × 0.6 mm; stamens subequaling tepals. Female flowers: tepals smaller than male ones. Fruit unknown.

Broad-leaved forests; 1700–1800 m. SE Xizang (Mêdog Xian) [India, Myanmar, Thailand].

Only a few sterile specimens have been collected. The description of the flowers follows Koyama (in Smitinand et al., Fl. Thailand 2: 226, 228, 1975).


抱茎菝葜

Vines climbing. Stem and branches usually woody, sparsely prickly. Petiole 2–3.5 cm, broadly winging for 1/3–1/2 its length; wings 0.5–2 cm wide, basally deeply clasping node; abscission zone at middle or distal; tendrils commonly developed. Leaf blade ovate to elliptic, 9–20 × 4.5–15 cm, leathery. Inflorescence a raceme of 2–4(–7) umbels, 4–10 cm, basally prophyllate; umbels of both sexes not grouped, 10–30-flowered, base thickened, subglobose. Male flowers: tepals yellowish green, tinged pink, 5–6 × 0.5–1 mm; stamens 6–10 mm; filaments basally connate, forming a column ca. 2 mm. Female flowers: inner tepals very narrow; staminodes absent. Berries red, globose, ca. 8 mm in diam. Fl. Mar-Jun, fr. Jul–Oct.

Vines climbing. Stem and branches densely prickly; prickles sparsely curved, winged for 1/2–2/3 its length; abscission zone near middle; tendrils usually present. Leaf blade ovate-lanceolate or elliptic-lanceolate, 17–25 × 4–10 cm, thickly leathery, main veins 3–(5), base rounded or broadly cuneate. Inflorescence of 1 umbel, basally prophyllate; peduncle 1.5–2.5 cm, proximally articulate; umbel 5–20-flowered. Male flowers: tepals yellowish green, outer ones 4–4.5 × ca. 1 mm, inner ones ca. 4 × 0.6 mm; stamens subequaling tepals. Female flowers: tepals smaller than male ones. Fruit unknown.

Broad-leaved forests; 1700–1800 m. SE Xizang (Mêdog Xian) [India, Myanmar, Thailand].

Only a few sterile specimens have been collected. The description of the flowers follows Koyama (in Smitinand et al., Fl. Thailand 2: 226, 228, 1975).

Smilax perfoliata H. Léveillé & Vaniot.

Vines climbing. Stem and branches densely prickly; prickles sparsely curved, winged for 1/2–2/3 its length; abscission zone near middle; tendrils usually present. Leaf blade ovate-lanceolate, 17–25 × 4–10 cm. Inflorescence a raceme of 2–4(–7) umbels, 4–10 cm, basally prophyllate; umbels of both sexes not grouped, 10–30-flowered, base thickened, subglobose. Male flowers: tepals yellowish green, tinged pink, 5–6 × 0.5–1 mm; stamens 6–10 mm; filaments basally connate, forming a column ca. 2 mm. Female flowers: inner tepals very narrow; staminodes absent. Berries red, globose, ca. 8 mm in diam. Fl. Mar-Jun, fr. Jul–Oct.

Vines climbing. Stem and branches densely prickly; prickles winged for 1/2–2/3 its length; wings 7–12(–25) mm wide, basally deeply clasping node, tapering toward apex; abscission zone distal; tendrils usually developed. Leaf blade ovate to elliptic, 6–17 × 3–12 cm. Inflorescence of 10–30 umbels, 5–17 cm, basally prophyllate; rachis often slightly zigzagged; umbels of both sexes ± grouped in whorls of 2–4, densely many flowered, base ellipsoid, ca. 4 × 3 mm. Male flowers: outer tepals 5–6 × ca. 1 mm, inner ones ca. 5 × 0.3 mm; stamens ca. 5 mm. Female flowers: tepals slightly smaller than male ones; staminodes 3. Berries globose, 4–6 mm in diam. Fl. Apr, fr. Oct. 2n = 32.

Vines climbing. Stem and branches woody, smooth or somewhat scabrous, occasionally with sparse prickles. Petiole 2–5 cm, broadly winged for 1/2–2/3 its length; wings 4–13 mm wide; abscission zone distal; tendrils often developed. Leaf blade ovate-elliptic to ovate, 14–22 × 7–9.5 cm, leathery, main veins (5–)7. Inflorescence of 9–12 umbels, 7–9 cm, basally prophyllate; umbels of both sexes ± grouped in whorls of 2–4, 10–
ed. Petiole often curved or twisted, 3–4 cm, sometimes sparsely prickly, wingless; abscission zone apical; tendrils rather long. Leaf blade cordate-deltoid to ovate-lanceolate, 6–15 × 5–9.5 cm. Inflorescence a spike of 5–25 umbels, 7–45 cm, basally prophyllate; umbels of both sexes sessile on elongate rachis, 3–6-flowered, base slightly thickened; bracteoles many, broadly ovate. Male flowers: tepals white, 4–5 × ca. 1 mm; stamens 2–2.5 mm. Female flowers: tepals slightly smaller than male ones; staminodes 6. Fl. Jan–Feb, fr. Nov–Dec. 2n = 32*.

Forests; 1000–2000 m. S Xizang, SW Yunnan [Bhutan, India, Myanmar, Nepal; E and N Africa, SW Asia, C and S Europe].


四棱菝葜 si leng ba qia


Vines climbing, unarmed. Stem and branches woody; branches 4-angled, angles narrowly winged. Petiole 6–7 cm, laterally compressed, narrowly winged for ca. 1/3 its length; abscission zone apical; tendrils rather long. Leaf blade abaxially glaucous, elliptic to ovate-elliptic, 20–30 × 8–13 cm, leathery. Inflorescence a spike of 7–12 umbels, 11–28 cm, basally prophyllate; umbels sessile on elongate, slightly zigzagged rachis, 4–12-flowered, base thickened; bracteoles many, broadly ovate. Male flowers: tepals pale yellow, outer ones ca. 5 × 1.5–2 mm; stamens ca. 1/2 as long as tepals; filaments very short; anthers ca. 1.5 mm. Female flowers unknown. Berries globose, ca. 1 cm in diam. Fl. Aug.

Forests; ca. 1500 m. SE Yunnan [Vietnam].