

3. AMPELOPSIS Michaux, Fl. Bor.-Amer. 1: 159. 1803.

蛇葡萄属 she pu tao shu

Chen Zhiduan (陈之端); Jun Wen (文军)

Lianas, woody, hermaphroditic or polygamo-monoecious. Tendrils 2- or 3-branched. Leaves simple, 1- or 2-pinnately or palmately compound. Inflorescence a corymbose cyme, leaf-opposed or pseudoterminal, often at tips of tendrils. Flowers 5-merous. Calyx saucer-shaped. Petals 5, free. Disk well developed, margin undulately lobed. Stamens 5. Style conspicuous; stigma inconspicuously expanded. Berry spherical, 1–4-seeded. Seed obovoid, base rostrate, apex rounded; cross-section of endosperm M-shaped.

About 30 species: Asia, Central and North America, with most species in E Asia and two species in SW Asia; 17 species (13 endemic) in China.

- 1a. Leaves simple, undivided or 3–5-divided, but not deeply so to base.
 - 2a. Branchlets, petioles, and leaf blade glabrous or abaxially with tufts of hairs limited to vein axils.
 - 3a. Leaves conspicuously 3–5-divided.
 - 4a. Leaves with 3–5 broad lobes (lobed up to middle), notch obtuse or acute 6. *A. humulifolia*
 - 4b. Leaves with 3–5 deep lobes, notch rounded 7. *A. acerifolia*
 - 3b. Leaves undivided or slightly 3–5-cleft.
 - 5a. Leaf margin irregularly toothed, usually with large, elliptic, triangular, or narrowly triangular teeth (to 1 cm) 3. *A. acutidentata*
 - 5b. Leaf margin with shallow, broadly triangular teeth.
 - 6a. Leaf abaxially pale green, upper two lobes short or inconspicuous 1. *A. bodinieri*
 - 6b. Leaf abaxially green, upper two lobes triangular, conspicuous, and slightly extending outward 2. *A. glandulosa*
 - 2b. Branchlets, petioles, and leaf blade abaxially pubescent with soft hairs or villous.
 - 7a. Leaves 3–5-divided, lobed conspicuously to middle, rarely only slightly lobed or undivided.
 - 8a. Pedicels usually 1–1.5 mm, rarely to 2 mm 2. *A. glandulosa*
 - 8b. Pedicels 2–3 mm.
 - 9a. Leaves elliptic-ovate, usually 5-divided, abaxially with dense grayish hairs 1. *A. bodinieri*
 - 9b. Leaves elliptical-pentangular or cordate-pentangular, usually 3-divided with lobes to middle, abaxially with short hairs 6. *A. humulifolia*
 - 7b. Leaves undivided or slightly 3–5-cleft.
 - 10a. Leaves pentangular-ovate or cordate, 3–5-lobed, margin with large, sharp teeth 2. *A. glandulosa*
 - 10b. Leaves ovate or cordate, margin with rounded teeth.
 - 11a. Blades undivided, base conspicuously cordate, margin with regular teeth, both surfaces pubescent 2. *A. glandulosa*
 - 11b. Blades slightly 3–5-divided, margin with irregular teeth.
 - 12a. Upper part of leaves irregularly divided, leaves with dense grayish appressed hairs 4. *A. mollifolia*
 - 12b. Upper part of leaves conspicuously 3-lobed, leaves densely scabrous 5. *A. tomentosa*
- 1b. Leaves palmately or pinnately compound.
 - 13a. Leaves 3–7-palmate.
 - 14a. Branchlets, petioles, or leaf blade abaxially sparsely pubescent; leaves 3- or 5-foliolate.
 - 15a. Leaves 3-foliolate, leaflets undivided, or only base of lateral leaflets divided 8. *A. delavayana*
 - 15b. Leaves 5-foliolate, leaflets pinnatifidly divided, or margin with coarse teeth 9. *A. aconitifolia*
 - 14b. Branchlets, petioles, and leaf blade abaxially glabrous; leaves 3–5-foliolate.
 - 16a. Leaflets pinnatipartite, lower half attenuate into wings 10. *A. japonica*
 - 16b. Leaflets toothed or lobed at margin, not pinnatipartite 8. *A. delavayana*
 - 13b. Leaves pinnate to bipinnate.
 - 17a. Branchlets, petioles, and inflorescences glabrous.
 - 18a. Leaves green on both surfaces, leaflet margin with large, conspicuous teeth.
 - 19a. Tendril trifurcate; leaflets 4–12 × 2–6 cm 11. *A. megalophylla*
 - 19b. Tendril bifurcate; leaflets 2–5 × 1–2.5 cm 17. *A. grossedentata*
 - 18b. Leaves abaxially strongly glaucous, leaflet margin entire or with fine teeth.
 - 20a. Leaflets 2 or 3 pairs, blades 7–15 × 3–7 cm 14. *A. chaffanjonii*
 - 20b. Leaflets usually 4–6 pairs, blades 2.5–6 × 1–3.5 cm 16. *A. hypoglauca*
 - 17b. Branchlets, petioles, and inflorescence rachises pubescent.
 - 21a. Branchlets, petioles, and inflorescence rachises pubescent with short gray hairs; branchlets terete.
 - 22a. Dried leaflets light green, margin coarsely toothed, central leaflet ovate-elliptic 11. *A. megalophylla*
 - 22b. Dried leaflets abaxially yellowish brown, margin ± undulate, central leaflet obovate or ovate 13. *A. cantoniensis*

- 21b. Branchlets, petioles, rachises, pedicels, and leaflets abaxially ferruginous pilose; branchlets conspicuously 4–6-ridged.
 23a. Leaflets 3.5–14 × 2–6.5 cm, margin 5–15-toothed, abaxially densely ferruginous pilose; berries 8–15 mm in diam. 12. *A. rubifolia*
 23b. Leaflets 3–6 × 0.5–3 cm, margin entire or with 1 to several inconspicuous teeth, midvein abaxially sparsely pilose; berries 5–7 mm in diam. 15. *A. gongshanensis*

1. *Ampelopsis bodinieri* (H. Lévêillé & Vaniot) Rehder, J. Arnold Arbor. 15: 23. 1934.

蓝果蛇葡萄 lan guo she pu tao

Branchlets terete, with longitudinal ridges, glabrous; tendrils bifurcate. Leaves simple; petiole 2.5–6 cm, glabrous; leaflets ovate or ovate-elliptic, undivided or slightly 3-lobed, 7–12.5 × 5–12 cm, basal veins 5, lateral veins 4–6 pairs, veinlets inconspicuously raised, base cordate or slightly so, margin with 9–19 sharp teeth, apex cuspidate or acuminate. Compound dichasium loose; peduncle 2.5–6 cm, glabrous. Pedicel 2.5–3 mm, glabrous. Buds elliptic, 2.5–3 mm. Calyx teeth inconspicuous, glabrous, margin undulate. Petals elliptic, 2–2.5 mm. Filaments filiform; anthers yellow, elliptic. Disk 5-lobed. Ovary conical; style slightly enlarged at base. Berry 6–8 mm in diam., 3- or 4-seeded. Seed ovoid-elliptic, slightly flat, rostrum acute, surface smooth, chalazal knot zonate and attenuate, ventral holes furrowed. Fl. Apr–Jun, fr. Jul–Aug.

• Forests or shrublands in valleys or on hillsides; 200–3000 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Shaanxi, Sichuan, Yunnan.

- 1a. Leaves glabrous 1a. var. *bodinieri*
 1b. Leaves abaxially with gray hairs 1b. var. *cinerea*

1a. *Ampelopsis bodinieri* var. *bodinieri*

蓝果蛇葡萄(原变种) lan guo she pu tao (yuan bian zhong)

Vitis bodinieri H. Lévêillé & Vaniot, Bull. Soc. Agric. Sarthe 40: 36. 1905; *Ampelopsis micans* Rehder; *V. micans* (Rehder) Bean.

Leaves glabrous.

• Forests in valleys, shrublands on shaded hillsides; 200–3000 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Shaanxi, Sichuan, Yunnan.

1b. *Ampelopsis bodinieri* var. *cinerea* (Gagnepain) Rehder, J. Arnold Arbor. 15: 23. 1934.

灰毛蛇葡萄 hui mao she pu tao

Ampelopsis heterophylla (Thunberg) Siebold & Zuccarini var. *cinerea* Gagnepain in Sargent, Pl. Wilson. 1: 101. 1911; *A. micans* var. *cinerea* (Gagnepain) Rehder; *Vitis lyjoannis* H. Lévêillé.

Leaves abaxially gray pubescent.

• Forests or shrublands on hillsides; ca. 1300 m. Hunan, Shaanxi, Sichuan.

2. *Ampelopsis glandulosa* (Wallich) Momiyama, Bull. Univ. Mus. Univ. Tokyo 2: 78. 1971.

蛇葡萄 she pu tao

Branchlets terete, with longitudinal ridges; tendrils 2- or 3-branched. Leaves simple, 3–5-cleft, usually mixed with some undivided leaves; petiole 1–7 cm; leaf blade 3.5–14 × 3–11 cm, basal veins 5, lateral veins 4 or 5 pairs, veinlets inconspicuously raised, base cordate, notches nearly obtuse, rarely rounded, margin with acute teeth, apex acute. Peduncle 1–2.5 cm. Pedicel 1–3 mm. Buds ovoid, 1–2 mm, apex rounded. Petals ovate-elliptic, 0.8–1.8 mm. Anthers narrowly elliptic. Lower part of ovary adnate to disk; style slightly enlarged at base. Berry 5–8 mm in diam., 2–4-seeded. Seed narrowly elliptic. Fl. Apr–Aug, fr. Jul–Oct.

Forests in valleys, shrublands on hillsides, on trees or shrubs; below 100–2200 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shandong, Sichuan, Taiwan, Yunnan, Zhejiang [India, Japan, Myanmar, Nepal, Philippines, Vietnam].

Ampelopsis brevipedunculata (Maximowicz) Trautvetter f. *puberula* W. T. Wang (Acta Phytotax. Sin. 17(3): 78. 1979), described from Jiangxi, probably belongs here but could not be identified with a particular variety because no material was seen by the authors.

- 1a. Leaves abaxially glabrous or only with tufts of hairs at joints of veins.
 2a. Leaves on flowering branches unlobed 2c. var. *hancei*
 2b. Leaves on flowering branches 5-angular, with 2 conspicuous lobes on upper half 2e. var. *kulingensis*
 1b. Leaves abaxially or only veins pilose or crinite.
 3a. Leaves abaxially ferruginous crinite 2a. var. *glandulosa*
 3b. Leaves abaxially sparsely pilose on veins.
 4a. Leaves cordate, often 3–5-lobed to middle 2b. var. *heterophylla*
 4b. Leaves cordate or sometimes 3–5-lobed 2d. var. *brevipedunculata*

2a. *Ampelopsis glandulosa* var. *glandulosa*

蛇葡萄(原变种) she pu tao (yuan bian zhong)

Vitis glandulosa Wallich in Roxburgh, Fl. Ind. 2: 479. 1824; *Ampelopsis brevipedunculata* (Maximowicz) Trautvetter var. *ciliata* (Nakai) F. Y. Lu; *A. brevipedunculata* var. *vestita* (Rehder) Rehder; *A. glandulosa* var. *ciliata* (Nakai) Momiyama; *A. glandulosa* var. *vestita* (Rehder) Momiyama; *A. heterophylla* (Thunberg) Siebold & Zuccarini var. *ciliata* Nakai; *A. heterophylla* subvar. *wallichii* Planchon; *A. heterophylla* var. *sinica* (Miquel) Merrill; *A. heterophylla* var. *vestita* Rehder; *A. sinica* (Miquel) W. T. Wang; *V. sinica* Miquel.

Branchlets, petioles, abaxial leaf surface, and rachises fer-

ruginous crinite. Pedicel, calyx, and petals ferruginous pubescent. Fl. Jun–Aug, fr. Sep–Jan.

Forests in valleys, shrublands on shaded hillsides; below 100–2200 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Henan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [India, Myanmar, Nepal].

2b. *Ampelopsis glandulosa* var. *heterophylla* (Thunberg) Momiyama, J. Jap. Bot. 52: 30. 1977.

异叶蛇葡萄 yi ye she pu tao

Vitis heterophylla Thunberg in Murray, Syst. Veg., ed. 14, 244. 1784; *Ampelopsis brevipedunculata* var. *heterophylla* (Thunberg) H. Hara; *A. brevipedunculata* var. *maximowiczii* (Regel) Rehder; *A. heterophylla* (Thunberg) Siebold & Zuccarini (1845), not Blume (1825); *A. humulifolia* Bunge var. *heterophylla* (Thunberg) K. Koch; *A. regeliana* Carrière; *V. heterophylla* var. *maximowiczii* Regel.

Branchlets, petioles, and peduncles sparsely pilose. Leaves often 3–5-lobed to middle, cordate or ovate, abaxially sparsely pilose on veins, adaxially glabrous. Pedicel and calyx sparsely pubescent. Petals subglabrate. Fl. Apr–Jun, fr. Jul–Oct.

200–1800 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shandong, Sichuan, Yunnan, Zhejiang [Japan].

2c. *Ampelopsis glandulosa* var. *hancei* (Planchon) Momiyama, J. Jap. Bot. 52: 30. 1977.

光叶蛇葡萄 guang ye she pu tao

Ampelopsis heterophylla var. *hancei* Planchon in A. Candolle & C. Candolle, Monogr. Phan. 5: 475. 1887; *A. brevipedunculata* var. *hancei* (Planchon) Rehder; *A. sinica* var. *hancei* (Planchon) W. T. Wang.

Branchlets, petioles, and leaves usually glabrous. Leaves on flowering branches unlobed. Fl. Apr–Jun, fr. Aug–Oct.

100–600 m. Fujian, Guangdong, Guangxi, Guizhou, Henan, Hunan, Jiangsu, Jiangxi, Shandong, Sichuan, Taiwan, Yunnan [Japan, Philippines].

2d. *Ampelopsis glandulosa* var. *brevipedunculata* (Maximowicz) Momiyama, J. Jap. Bot. 52: 30. 1977.

东北蛇葡萄 dong bei she pu tao

Cissus brevipedunculata Maximowicz, Mém. Acad. Imp. Sci. St.-Petersbourg Divers Savans 9: 68. 1859; *Ampelopsis brevipedunculata* (Maximowicz) Trautvetter; *A. heterophylla* var. *amurensis* Planchon; *A. heterophylla* var. *brevipedunculata* (Maximowicz) C. L. Li; *C. humulifolia* (Bunge) Regel var. *brevipedunculata* (Maximowicz) Regel; *Vitis brevipedunculata* (Maximowicz) Dippel.

Leaves cordate or slightly 3–5-lobed, abaxially sparsely pilose on veins, adaxially glabrous, margin with obtuse to sharp teeth. Fl. Jul–Aug, fr. Sep–Oct.

• On trees in valleys, on shrubs on hillsides; 100–600 m. Heilongjiang, Jilin, Liaoning.

2e. *Ampelopsis glandulosa* var. *kulingensis* (Rehder) Momiyama, J. Jap. Bot. 52: 31. 1977.

牯岭蛇葡萄 gu ling she pu tao

Ampelopsis brevipedunculata var. *kulingensis* Rehder, Gentes Herb. 1: 36. 1920; *A. heterophylla* var. *kulingensis* (Rehder) C. L. Li.

Plants pubescent to nearly glabrous. Leaves on flowering branches conspicuously 5-angled, upper 2 lobes conspicuously extended. Fl. May–Jul, fr. Aug–Sep.

• Forests in valleys, shrublands on hillsides; 300–1600 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangsu, Jiangxi, Sichuan, Zhejiang.

3. *Ampelopsis acutidentata* W. T. Wang, Acta Phytotax. Sin. 17(3): 78. 1979.

尖齿蛇葡萄 jian chi she pu tao

Branchlets terete, with longitudinal ridges, glabrous; tendrils bifurcate. Leaves simple; stipules caducous; petiole 1.5–4 cm, glabrous; leaf blade ovate, 2.5–7.5 × 3–7 cm, glabrous, basal veins 5, lateral veins 3 or 4 pairs, veinlets inconspicuously raised, base truncate or subtruncate, margin with several, irregular, sharp, acute teeth, apex acute or acuminate. Inflorescence a corymbose polychasium, pseudoterminal or leaf-opposed; peduncle 1.3–3 cm, glabrous. Pedicel 2–3 mm, glabrous. Buds ovoid, 1.5–2 mm, apex rounded. Calyx glabrous, lobed. Petals ovate-elliptic, 1.3–1.8 mm, glabrous. Anthers oval. Ovary adnate to disk at lower part; style conical. Berry 7–8 mm in diam., 1-seeded. Seed obovoid, chalazal knot elliptic. Fl. Jun–Aug, fr. Sep–Oct.

• Shrublands, rocky places on hillsides; 2000–3200 m. Sichuan, Xizang, Yunnan.

4. *Ampelopsis mollifolia* W. T. Wang, Bull. Bot. Res., Harbin 6(4): 21. 1986.

毛叶蛇葡萄 mao ye she pu tao

Branchlets terete, with longitudinal ridges, with dense, long white-grayish hairs. Leaves simple; stipules brown, ovate, ca. 2 × 1–2.5 mm, membranous; petiole 1–2.5 cm, with dense white-grayish crinite hairs; leaf blade ovate, 4–6.5 × 3–6 cm, abaxially densely grayish crinite, adaxially densely pilose, hairs grayish and curly, basal veins 3, lateral veins 3 or 4 pairs, veinlets raised abaxially, inconspicuous adaxially, base broadly cuneate to nearly truncate, margin with 12–16 rounded teeth on each side, apex acute. Inflorescence a polychasium or compound dichasium, leaf-opposed; peduncle 1–2.5 cm, densely gray-white crinite. Pedicel 2–2.5 mm, glabrous. Buds oval, 1.8–2.5 mm, apex rounded. Calyx glabrous, undulately lobed. Petals ovate, 1.6–2.3 mm, glabrous. Anthers oval. Lower part of ovary adnate to disk; style conical. Fl. Jul.

• Riverside shrublands; ca. 1300 m. Sichuan.

5. *Ampelopsis tomentosa* Planchon ex Franchet, Bull. Soc. Bot. France 33: 459. 1886.

绒毛蛇葡萄 rong mao she pu tao

Branchlets terete, with longitudinal ridges. Leaves simple; stipules brown, membranous, caducous; petiole very short, ca. 2 cm; leaf blade 2–5.5 × 2–5 cm, basal veins 3, lateral veins 3 or

4, veinlets inconspicuously raised, base nearly truncate or broadly cuneate, margin with 8–10 obtuse teeth on each side, apex often slightly 3-lobed. Inflorescence a polychasium, leaf-opposed or terminal; peduncle 2–5 cm. Pedicel 1–1.2 mm, glabrous. Buds ovoid, 1.3–1.6 mm, apex rounded. Calyx glabrous. Petals 5. Filaments flat; anthers yellow, ovoid. Style short. Berry 2- or 3-seeded. Seeds triangular-obovoid, surface with raised obtuse ribs, ventral holes short, raphe conspicuous. Fl. Jul, fr. Jun or Sep.

- Forests, grasslands. Yunnan.

1a. Branchlets and leaves scabrous 5a. var. *tomentosa*
1b. Plants glabrous throughout 5b. var. *glabrescens*

5a. *Ampelopsis tomentosa* var. *tomentosa*

绒毛蛇葡萄(原变种) rong mao she pu tao (yuan bian zhong)

Branchlets grayish or grayish brown scabrous. Petiole densely scabrous; leaves abaxially densely gray scabrous, adaxially appressed scabrous. Peduncle densely gray scabrous. Fl. Jul, fr. Sep.

- Forests, grasslands. Yunnan.

5b. *Ampelopsis tomentosa* var. *glabrescens* C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

脱绒蛇葡萄 tuo rong she pu tao

Plants glabrous. Fr. Jun.

- Below 1800 m. Yunnan.

6. *Ampelopsis humulifolia* Bunge, Enum. Pl. China Bor. 12. 1833.

葎叶蛇葡萄 lu ye she pu tao

Ampelopsis heterophylla (Thunberg) Siebold & Zuccarini var. *bungei* Planchon; *A. heterophylla* var. *humulifolia* (Bunge) Merrill; *Cissus davidiana* Carrière; *C. humulifolia* (Bunge) Regel; *Vitis davidiana* (Carrière) N. E. Brown; *V. heterophylla* Thunberg var. *humulifolia* (Bunge) Hooker.

Branchlets terete, with longitudinal ridges, glabrous; tendrils bifurcate. Leaves simple, 3–5-lobed or cleft, rarely mixed with undivided leaves; stipules caducous; petiole 3–5 cm, glabrous or sparsely pilose; leaf blade cordate or roughly so with 5 angles, 6–12 × 5–10 cm, abaxially glabrous or sparsely pilose on veins, base cordate, notch rounded, margin with large, sharp teeth, apex acuminate. Polychasium leaf-opposed; peduncle 3–6 cm, glabrous or sparsely pilose. Pedicel 2–3 mm, appressed pubescent. Buds oval, 1.5–2 mm, apex rounded. Calyx glabrous. Petals elliptic, 1.3–1.8 mm, glabrous. Anthers oval. Lower part of ovary adnate to disk; stigma unexpanded. Berry globose, 6–10 mm in diam., 2–4-seeded. Seeds obovoid. Fl. May–Jul, fr. May–Sep.

- Forests, shrublands; 400–1100 m. Hebei, Henan, Liaoning, Nei Mongol, Qinghai, Shaanxi, Shandong, Shanxi.

7. *Ampelopsis acerifolia* W. T. Wang, Acta Phytotax. Sin. 17(3): 78. 1979.

槭叶蛇葡萄 qi ye she pu tao

Plants slender. Branchlets gray-brown, conspicuously 5-

ridged, glabrous; tendrils bifurcate. Leaves simple; stipules caducous; petiole 1–2.5 cm, glabrous; leaf blade ovate-pentagonal, 0.8–6 × 1–7 cm, glabrous, basal veins 3–5, veinlets inconspicuously raised, margin with 5 deep lobes, notch cordate, lobes lanceolate or narrowly rhombic, apex acuminate. Compound dichasium leaf-opposed; peduncle 2.2–3 cm, glabrous. Pedicel 2–4 mm, glabrous. Buds oval, ca. 3 mm, apex obtuse. Calyx ca. 2.5 mm, glabrous. Anthers oval. Lower part of ovary adnate to disk; style conical. Fl. May.

- About 500 m. Sichuan.

8. *Ampelopsis delavayana* Planchon ex Franchet, Bull. Soc. Bot. France 33: 460. 1886.

三裂蛇葡萄 san lie she pu tao

Branchlets terete, with longitudinal ridges; tendrils 2- or 3-branched. Leaves compound; petiole 3–10 cm; central leaflet petiolate or sessile, lanceolate or elliptic-lanceolate, 5–13 × 2–4 cm, base nearly rounded, apex acuminate; lateral leaflets sessile, ovate-elliptic or ovate-lanceolate, 4.5–11.5 × 2–4 cm, base asymmetric and nearly truncate, margin with coarse, sharp teeth, leaflets with lateral veins 5–7 pairs, veinlets inconspicuous. Polychasium leaf-opposed; peduncle 2–4 cm. Pedicel 1–2.5 mm. Buds ovoid, 1.5–2.5 mm, apex rounded. Petals ovate-elliptic, 1.3–2.3 mm, glabrous. Anthers oval, nearly square. Disk 5-lobed. Lower part of ovary adnate to disk. Berry globose, ca. 8 mm in diam., 2- or 3-seeded. Seeds obovoid, apex rounded. Fl. May–Aug, fr. Jul–Nov.

- Forests, shrublands, hillsides, valleys, fields; below 100–2700 m. Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Henan, Hubei, Jiangsu, Jilin, Liaoning, Nei Mongol, Shaanxi, Shandong, Sichuan, Yunnan.

- 1a. Leaves 3-foliolate.
2a. Branchlets sparsely pubescent, becoming glabrescent 8a. var. *delavayana*
2b. Branchlets densely ferruginous pubescent 8b. var. *setulosa*
1b. Leaves 3–7-foliolate.
3a. Leaves 3–5-foliolate, glabrous 8c. var. *glabra*
3b. Leaves 3–7-foliolate, pubescent .. 8d. var. *tomentella*

8a. *Ampelopsis delavayana* var. *delavayana*

三裂蛇葡萄(原变种) san lie she pu tao (yuan bian zhong)

Ampelopsis heterophylla (Thunberg) Siebold & Zuccarini var. *delavayana* (Planchon ex Franchet) Gagnepain; *Vitis rigida* H. Léveillé & Vaniot.

Branchlets sparsely pubescent, then nearly glabrescent. Leaves 3-foliolate, adaxially sparsely pubescent when young, then glabrescent; lateral leaflets sparsely pilose. Peduncle pubescent. Pedicel appressed pubescent. Fl. Jun–Aug, fr. Sep–Nov.

- Forests, shrublands; below 100–2200 m. Chongqing, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Sichuan, Yunnan.

8b. *Ampelopsis delavayana* var. *setulosa* (Diels & Gilg) C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

毛三裂蛇葡萄 mao san lie she pu tao

Ampelopsis aconitifolia Bunge var. *setulosa* Diels & Gilg, Bot. Jahrb. Syst. 29: 465. 1900; *A. delavayana* var. *gentiliana* (H. Léveillé & Vaniot) Handel-Mazzetti; *A. heterophylla* var. *gentiliana* (H. Léveillé & Vaniot) Gagnepain; *Vitis gentiliana* H. Léveillé & Vaniot.

Branchlets, petioles, and inflorescence densely ferruginous pubescent. Leaves 3-foliolate. Fl. Jun–Jul, fr. Sep–Nov.

• Forests, hillsides; 500–2200 m. Gansu, Guizhou, Hebei, Henan, Shaanxi, Sichuan, Yunnan.

8c. *Ampelopsis delavayana* var. *glabra* (Diels & Gilg) C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

掌裂蛇葡萄 zhang lie she pu tao

Ampelopsis aconitifolia var. *glabra* Diels & Gilg, Bot. Jahrb. Syst. 29: 465. 1900; *A. aconitifolia* f. *glabra* (Diels & Gilg) Kitagawa.

Plants glabrous. Leaves 3–5-foliolate. Fl. May–Jun, fr. Jul–Sep.

• Hillsides, valleys, fields; 300–800 m. Hebei, Henan, Hubei, Jiangsu, Jilin, Liaoning, Nei Mongol, Shandong.

8d. *Ampelopsis delavayana* var. *tomentella* (Diels & Gilg) C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

狭叶蛇葡萄 xia ye she pu tao

Ampelopsis aconitifolia var. *tomentella* Diels & Gilg, Bot. Jahrb. Syst. 29: 465. 1900.

Branchlets, petioles, and leaflets tomentose to pilose. Leaves 3–7-foliolate; leaflets narrow or lanceolate. Fl. May–Jun, fr. Jul–Oct.

• Forests, shrublands; 700–2700 m. Hubei, Sichuan.

9. *Ampelopsis aconitifolia* Bunge, Enum. Pl. China Bor. 12. 1833.

乌头叶蛇葡萄 wu tou ye she pu tao

Branchlets terete, with longitudinal ridges; tendrils 2- or 3-branched. Leaves palmately 5-foliolate; stipules brownish, ovate-lanceolate, ca. 2.3 × 1–2 mm, membranous, glabrous or sparsely pubescent, apex obtuse; petiole 1.5–2.5 cm, glabrous or sparsely pubescent; leaflets nearly sessile; leaf blade lanceolate or rhombic-lanceolate, 4–9 × 1.5–6 cm, lateral veins 3–6 pairs, veinlets inconspicuous, base cuneate, apex acuminate. Compound corymbose dichasium, usually leaf-opposed or pseudoterminal; peduncle 1.5–4 cm, glabrous or sparsely pubescent. Pedicel 1–2.5 mm, nearly glabrous. Buds ovoid, 2–3 mm, apex rounded. Calyx glabrous. Petals oval, 1.7–2.7 mm, glabrous. Anthers oval. Lower part of ovary adnate to disk; style conical. Berry globose, 6–8 mm in diam., 2- or 3-seeded. Seeds obovoid, chalazal knot rounded, raphe attenuate, ventral holes furrowed upward 1/3 from base. Fl. May–Aug, fr. Jul–Sep.

• Shrublands, valleys, grassy areas; 200–2200 m. Gansu, Hebei, Heilongjiang, Henan, Jilin, Liaoning, Nei Mongol, Ningxia, Shaanxi, Shandong, Shanxi, Sichuan.

1a. Leaflets pinnatifidly 3–5-divided 9a. var. *aconitifolia*
1b. Leaflets mostly undivided 9b. var. *palmiloba*

9a. *Ampelopsis aconitifolia* var. *aconitifolia*

乌头叶蛇葡萄(原变种) wu tou ye she pu tao (yuan bian zhong)

Ampelopsis aconitifolia var. *cuneata* Diels & Gilg; *A. aconitifolia* var. *dissecta* (Carrière) Koehne; *Vitis aconitifolia* (Bunge) Hance; *V. dissecta* Carrière.

Branchlets sparsely pilose. Leaflets pinnatifidly 3–5-divided, central leaflet pinnatifidly, or sometimes lateral leaflets lobed or undivided, abaxially glabrous or only veins sparsely pilose, adaxially glabrous or sparsely pubescent. Fl. May–Jun, fr. Aug–Sep. $2n = 40^*$.

• Shrublands, valleys, grassy areas; 600–1800 m. Gansu, Hebei, Henan, Nei Mongol, Shaanxi, Shanxi.

9b. *Ampelopsis aconitifolia* var. *palmiloba* (Carrière) Rehder, Mitt. Deutsch. Dendrol. Ges. 21: 190. 1912.

掌裂草葡萄 zhang lie cao pu tao

Ampelopsis palmiloba Carrière, Rev. Hort. (Paris) 39: 451. 1867.

Leaflets mostly undivided, margin with large teeth, or mixed with slightly lobed leaves, glabrous or abaxially sparsely pilose. Fl. May–Aug, fr. Jul–Sep.

• Shrublands, valleys; 200–2200 m. Gansu, Hebei, Heilongjiang, Jilin, Liaoning, Nei Mongol, Ningxia, Shaanxi, Shandong, Shanxi, Sichuan.

10. *Ampelopsis japonica* (Thunberg) Makino, Bot. Mag. (Tokyo) 17: 113. 1903.

白藜 bai lian

Paullinia japonica Thunberg in Murray, Syst. Veg., ed. 14, 380. 1784; *Ampelopsis mirabilis* Diels & Gilg; *A. napiiformis* Carrière; *A. serianiifolia* Bunge; *A. tuberosa* Carrière; *Cissus serianiifolia* (Bunge) Walpers; *Vitis serianiifolia* (Bunge) Maximowicz.

Branchlets terete, with longitudinal ridges, glabrous; tendrils unbranched or with short branches near tip. Leaves palmate, 3–5-foliolate; stipules caducous; petiole 1–4 cm, glabrous; leaflets pinnatifidly, or margin deeply toothed and not divided, abaxially glabrous or sometimes sparsely pubescent on veins, pinnatifid lobes 0.5–3.5 cm wide, apex acute or acuminate; central leaflet of 5-foliolate leaves deeply divided to base with 1–3 nodes, usually winged between nodes, wing 2–6 mm wide; lateral leaflets not articulate or with 1 node; central leaflets of 3-foliolate leaves with 1 node or without nodes, base tapering, winglike, wing 2–3 mm wide. Polychasium leaf-opposed, 1–2 cm in diam.; peduncle 1.5–5 cm, often tendril-like. Pedicel short or flower nearly sessile, glabrous. Buds ovoid, 1.5–2 mm, apex rounded. Petals oval, 1.2–2.2 mm, glabrous. Anthers oval, nearly square. Lower part of ovary adnate to disk; style shortly claviform. Berry globose, 8–10 mm in diam., glaucous, 1–3-seeded. Seeds obovoid. Fl. May–Jun, fr. Jul–Sep. $2n = 40^*$.

• Shrublands, hillsides, grassy meadows; 100–900 m. Guangdong, Guangxi, Hebei, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Shaanxi, Shanxi, Sichuan, Zhejiang [cultivated in Japan].

11. *Ampelopsis megalophylla* Diels & Gilg, Bot. Jahrb. Syst. 29: 466. 1900.

大叶蛇葡萄 da ye she pu tao

Branchlets terete; tendrils trifurcate. Leaves bipinnate, with basal pinnae usually 3-foliolate, or rarely pinnately compound; petiole 3–8 cm; central petiolule 1–3 cm, lateral petiolules absent to 1 cm; leaflets oblong or ovate-elliptic, 4–12 × 2–6 cm, lateral veins 4–8 pairs, veinlets slightly raised, base slightly cordate, rounded, or subtruncate, margin 3–15-toothed on each side, apex acuminate. Inflorescence corymbose or a broad compound dichasium, terminal or leaf-opposed; peduncle 3.5–6 cm. Pedicel 2–3 mm. Buds globose, 1–1.5 mm, apex rounded. Calyx glabrous, undulately lobed or lobes triangular. Petals elliptic, 0.7–1.2 mm, glabrous. Anthers elliptic. Lower part of ovary adnate to disk; style conical. Berry slightly obovoid, 6–10 mm in diam., 1–4-seeded. Seeds obovoid, chalazal knot elliptic. Fl. May–Aug, fr. Jul–Oct.

• Forests, shrublands in valleys, mountain slopes, hilltops, valleys; 600–2000 m. Chongqing, Gansu, Guizhou, Hubei, Jiangxi, Shaanxi, Sichuan, Yunnan.

1a. Petiole and peduncle glabrous 11a. var. *megalophylla*
1b. Petiole and peduncle pubescent 11b. var. *jiangxiensis*

11a. *Ampelopsis megalophylla* var. *megalophylla*

大叶蛇葡萄(原变种) da ye she pu tao (yuan bian zhong)

Branchlets, leaves, petioles, peduncles, or pedicels glabrous. Fl. Jun–Aug, fr. Jul–Oct.

• Forests, valleys; 1000–2000 m. Chongqing, Gansu, Guizhou, Hubei, Shaanxi, Sichuan, Yunnan.

11b. *Ampelopsis megalophylla* var. *jiangxiensis* (W. T. Wang) C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

柔毛大叶蛇葡萄 rou mao da ye she pu tao

Ampelopsis jiangxiensis W. T. Wang, Bull. Bot. Res., Harbin 1(1–2): 170. 1981.

Leaves, petioles, peduncles, or pedicels pubescent. Fl. May–Jul.

• Shrublands in valleys; 600–700 m. Jiangxi.

12. *Ampelopsis rubifolia* (Wallich) Planchon in A. Candolle & C. Candolle, Monogr. Phan. 5: 463. 1887.

毛枝蛇葡萄 mao zhi she pu tao

Vitis rubifolia Wallich in Roxburgh, Fl. Ind. 2: 480. 1824; *Ampelopsis megalophylla* Diels & Gilg var. *puberula* W. T. Wang.

Branchlets longitudinally 5–7-ridged, densely curly and ferruginous pilose; tendrils bifurcate. Leaves 1- or 2-pinnate, base of bipinnate leaf usually 3-foliolate; petiole 1–8 cm, densely curly and ferruginous pilose; petiolule absent to 1.5 cm; leaflets ovate-elliptic or oval, 3.5–14 × 2–6.5 cm, abaxially densely ferruginous pilose, then less so, adaxially pubescent

when young, then glabrescent, lateral veins 5–7 pairs, veinlets raised abaxially, inconspicuous adaxially, base slightly cordate or rounded, margin 5–15-toothed on each side, apex acute, acuminate, or mucronate. Corymbose polychasium pseudoterminal or leaf-opposed; peduncle 2–6 cm, densely curly and ferruginous pilose. Pedicel 1–1.5 mm, densely ferruginous pilose. Buds oval, 1.5–2 mm, apex rounded. Calyx nearly glabrous. Petals ovate-elliptic, 1.3–1.8 mm, pubescent. Anthers elliptic. Lower part of ovary adnate to disk; style conical. Berry globose, 0.8–1.5 cm in diam., 1–4-seeded. Seeds obovoid, chalazal knot elliptic, raphe raised, surface with raised and obtuse ribs. Fl. Jun–Jul, fr. Sep–Oct.

Forests, shrublands, valleys; 900–1200 m. Guangxi, Guizhou, Hunan, Jiangxi, Sichuan, Yunnan [India].

13. *Ampelopsis cantoniensis* (Hooker & Arnott) K. Koch, Hort. Dendrol. 48. 1853.

广东蛇葡萄 guang dong she pu tao

Cissus cantoniensis Hooker & Arnott, Bot. Beechey Voy. 175. 1833; *Ampelopsis leeooides* (Maximowicz) Planchon; *Leea theifera* H. Léveillé; *Vitis cantoniensis* (Hooker & Arnott) Seemann; *V. leeooides* Maximowicz (1874), not J. H. Veitch (1904); *V. multijugata* H. Léveillé & Vaniot.

Branchlets terete, with longitudinal ridges, ± pubescent when young; tendrils bifurcate. Leaves bipinnate, or pinnate on upper branches, basal pinnae of bipinnate leaves usually 3-foliolate; petiole 2–8 cm; central petiolule 1–3 cm, lateral petiolules absent to 2.5 cm, sparsely pubescent when young, then glabrescent; leaflets ovate, ovate-elliptic, or oblong, 3–11 × 1.5–6 cm, abaxially sparsely pubescent on veins, then glabrescent, lateral veins 4–7 pairs, veinlets conspicuous but not raised, base truncate, apex acute, acuminate, or cuspidate. Inflorescence corymbose, terminal or leaf-opposed; rachis pubescent; peduncle 2–4 cm, ± sparsely pubescent. Pedicel 1–3 mm, nearly glabrous. Buds oval, 2–3 mm, apex rounded. Calyx glabrous. Petals ovate-elliptic, 1.7–2.7 mm, glabrous. Anthers ovoid-elliptic. Lower part of ovary adnate to disk. Berry globose, 6–8 mm in diam., 2–4-seeded. Seeds obovoid, chalazal knot elliptic, raphe raised, surface with ribs, ventral holes inconspicuous and retuse. Fl. Apr–Jul, fr. Aug–Nov.

Forests or shrublands in valleys; 100–900 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Taiwan, Xizang, Yunnan, Zhejiang [Japan, Malaysia, Thailand, Vietnam].

The leaflets vary greatly in size and shape, even on the same individual.

The intended new combination "*Ampelopsis cantoniensis* var. *leeooides*" [sic] (F. Y. Lu, Fl. Taiwan 3: 667. 1977) was not validly published because no full and direct reference was given to the author and place of valid publication of the basionym, *Vitis leeooides* Maximowicz (Vienna Code, Art. 33.4).

14. *Ampelopsis chaffanjonii* (H. Léveillé & Vaniot) Rehder, J. Arnold Arbor. 15: 25. 1934 ["*chaffanjonii*"].

羽叶蛇葡萄 yu ye she pu tao

Vitis chaffanjonii H. Léveillé & Vaniot, Bull. Soc. Agric. Sarthe 40: 37. 1905 ["*chaffanjonii*"]; *Ampelopsis watsoniana* E. H. Wilson; *Leea dielsii* H. Léveillé; ?*Meliosma cavaleriei* H.

Léveillé; *V. leeoides* J. H. Veitch (1904), not Maximowicz (1874); *V. watsoniana* (E. H. Wilson) Bean.

Branchlets terete, with longitudinal ridges, glabrous; tendrils bifurcate. Leaves pinnate, usually with 2 or 3 pairs of leaflets; petiole 2–4.5 cm; central petiolule 2.5–4.5 cm, lateral petiolules absent to 1.8 cm, glabrous; leaflets oblong or ovate-elliptic, 7–15 × 3–7 cm, glabrous, lateral veins 5–7 pairs, veinlets slightly raised, base rounded or broadly cuneate, margin 5–11-toothed on each side, teeth apiculate and sharp, apex acute or acuminate. Corymbose polychasium terminal or leaf-opposed; peduncle 3–5 cm, glabrous. Pedicel 1.5–2 mm, glabrous. Buds oval, 1.5–2 mm, apex rounded. Calyx triangular, glabrous. Petals ovate-elliptic, 1.2–1.7 mm, glabrous. Anthers ovoid-elliptic. Lower part of ovary adnate to disk; style conical. Berry globose, 8–10 mm in diam., 2- or 3-seeded. Seeds obovoid, base with a short, sharp rostrum, apex rounded, chalazal knot elliptic, with obtuse and raised ribs. Fl. May–Jul, fr. Jul–Sep.

• Forests or shrublands in valleys; 500–2000 m. Anhui, Chongqing, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Yunnan.

15. *Ampelopsis gongshanensis* C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

贡山蛇葡萄 gong shan she pu tao

Branchlets ferruginous pilose. Leaves pinnate, usually with 3 pairs of leaflets; petiole 2–2.5 cm; central petiolule 1–1.5 cm, lateral petiolules 1–3 mm, ferruginous pilose; leaflets oval or ovate-elliptic, 3–6 × 0.5–3 cm, only abaxially sparsely pilose on midvein, lateral veins 5–7 pairs, veinlets conspicuous abaxially but not raised, veinlets adaxially retuse, base rounded, margin entire or inconspicuously denticulate, apex acuminate. Compound dichasium leaf-opposed. Berry globose, 5–7 mm in diam., 3- or 4-seeded. Seeds obovoid, apex rounded and obtuse, chalazal knot elliptic, obtuse ribs conspicuously raised. Fr. Nov.

• Forests; ca. 1300 m. Yunnan.

16. *Ampelopsis hypoglauca* (Hance) C. L. Li, Chin. J. Appl. Environ. Biol. 2: 48. 1996.

粉叶蛇葡萄 fen ye she pu tao

Hedera hypoglauca Hance, Ann. Bot. Syst. 2: 724. 1852.

Branchlets terete, glabrous; tendrils bifurcate, sometimes apex with reduced trace of inflorescences. Leaves bipinnate, basal pinnae 3-foliolate; stipules caducous; petiole 2–3 cm; leaflets elliptic or ovate-elliptic, 2.5–6 × 1–3.5 cm, glabrous, lateral veins 4 or 5 pairs, veinlets abaxially slightly raised, adaxially inconspicuous, base cuneate or broadly so, margin with 1–5 fine teeth on each side, apex acute or acuminate; central leaflet nearly sessile or shortly petiolulate, glabrous. Corymbose polychasium leaf-opposed; peduncle 1.5–3 cm, glabrous. Pedicel 1.5–3 mm, glabrous. Buds oval, 2–3 mm, apex rounded. Calyx glabrous, entire or undulate. Petals ovate-elliptic, 1.8–2.8 mm, glabrous. Anthers ovoid-elliptic. Lower part of ovary adnate to disk; style filiform. Berry obovoid-elliptic, 8–10 mm in diam., 1–3-seeded. Seeds obovoid, chalazal knot ovate-elliptic, with rounded prominent ribs. Fl. Apr–Jun, fr. Jul–Aug.

• Forests, shrublands; 100–600 m. Fujian, Guangdong, Jiangxi.

17. *Ampelopsis grossedentata* (Handel-Mazzetti) W. T. Wang, Acta Phytotax. Sin. 17(3): 79. 1979.

显齿蛇葡萄 xian chi she pu tao

Ampelopsis cantoniensis (Hooker & Arnott) K. Koch var. *grossedentata* Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 59: 105. 1922.

Branchlets terete, with conspicuous and longitudinal ridges, glabrous; tendrils bifurcate. Leaves 1- or 2-pinnate, basal pinnae 3-foliolate; stipules caducous; petiole 1–2 cm, glabrous; leaflets ovate, ovate-elliptic, or oblong, 2–5 × 1–2.5 cm, glabrous, lateral veins 3–5 pairs, veinlets slightly raised, base broadly truncate or nearly rounded, margin with 2–5 teeth on each side, apex acute or acuminate. Corymbose polychasium leaf-opposed; peduncle 1.5–3.5 cm, glabrous. Pedicel 1.5–2 mm, glabrous. Buds oval, 1.5–2 mm, glabrous, apex rounded. Calyx glabrous. Petals oval, 1.2–1.7 mm, glabrous. Anthers oval. Lower part of ovary adnate to disk; style conical. Berry globose, 6–10 mm in diam., 2–4-seeded. Seeds obovoid, chalazal knot elliptic, surface with raised and obtuse ribs. Fl. May–Aug, fr. Aug–Dec.

Forests, shrublands; 200–1500 m. Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Yunnan [Vietnam].

