

46. **DISPOROPSIS** Hance, J. Bot. 21: 278. 1883.

竹根七属 zhu gen qi shu

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*Aulisconema* Hua.

Herbs perennial, rhizomatous, sympodial, terrestrial. Rhizome horizontally creeping, terete or moniliform, fleshy. Stem usually arching, rarely erect, simple, glabrous. Leaves cauline, lateral and pseudoterminal, usually alternate, rarely subopposite, shortly petiole, glabrous. Inflorescences axillary, each a solitary flower or cluster of 2 to several flowers; bracts usually absent, rarely present. Flowers bisexual; pedicel articulate apically. Perianth campanulate; segments 6, imbricate, ± fleshy, proximally connate and forming a tube for up to 1/2 their length. Corona attached near apex of perianth tube, fleshy or membranous; lobes 6, alternate to or opposite perianth segments, apex often 2-cleft into lobelets, sometimes emarginate, rarely entire. Anthers 6, opposite perianth segments, attached at lobe sinus, lobelet sinus, or lobe apex of corona, dorsifixed, introrse. Ovary 3-loculed; ovules 4–6 per locule. Style short; stigma capitate to slightly 3-lobed. Fruit a berry, several seeded.

Six species: China, Laos, Philippines, Thailand, Vietnam; six species (four endemic) in China.

Hayata (Icon. Pl. Formos. 5: 230–233, 1915) interpreted the corona of *Disporopsis* as a product of fusion of dilated filaments.

- 1a. Flowers in clusters of 5–10; corona lobes not exceeding anthers, fleshy; berries white; plants 60–100 cm tall; perianth 0.8–1 cm ..... 1. *D. longifolia*
- 1b. Flowers solitary or in clusters of 2 or 3; corona lobes exceeding anthers, membranous; berries purplish; plants 6–50(–90) cm tall; perianth (0.8–)1–2.2 cm.
  - 2a. Rhizome moniliform; perianth 1.5–2.2 cm ..... 6. *D. fuscopicta*
  - 2b. Rhizome terete; perianth (0.8–)1–1.5(–2) cm.
    - 3a. Plants 6–10 cm tall; leaves (1 or)2(or 3); apex of corona lobes often entire, sometimes slightly emarginate ..... 2. *D. jinfushanensis*
    - 3b. Plants (10–)20–40(–90) cm tall; leaves more than 3; apex of corona lobes ± 2-cleft.
      - 4a. Leaf margin undulate ..... 4. *D. undulata*
      - 4b. Leaf margin entire.
        - 5a. Corona lobes usually opposite perianth segments, rarely alternate to them; leaf base rounded to obtuse; perianth white abaxially ..... 5. *D. pernyi*
        - 5b. Corona lobes alternate to perianth segments; leaf base usually slightly cordate to truncate; perianth greenish yellow abaxially, ± spotted with lilac ..... 3. *D. aspersa*

1. ***Disporopsis longifolia*** Craib, Bull. Misc. Inform. Kew 1912: 410. 1912.

长叶竹根七 chang ye zhu gen qi

*Polygonatum laoticum* Gagnepain; *P. tonkinense* Gagnepain.

Rhizome moniliform, 1–2 cm thick. Stem arching, (30–)60–100(–110) cm. Leaves alternate; petiole 5–8 mm; leaf blade lanceolate to elliptic, 10–20(–30) × 2.5–6(–10) cm, base cuneate-rounded to cuneate-obtuse, apex attenuate-acuminate. Bracts absent. Flowers in clusters of 5–10; pedicel 1.2–1.5 cm. Perianth white, 8–10 mm; tube 3–5 mm, slightly constricted near mouth; lobes narrowly elliptic, 4–7 × 1.6–4.5 mm. Corona lobes opposite perianth lobes, 1.5–2 × ca. 0.8 mm, fleshy, apex slightly emarginate. Anthers attached at hollowed point of corona lobe apex, oblong, 2.5–3 mm, base emarginate-cordate. Ovary ovoid, ca. 3 mm. Style 1–2 mm, base constricted. Berries white at maturity, ovoid-globose, 1.2–1.5 cm in diam., 2–5-seeded. Fl. May–Jun, fr. Oct–Dec. *2n* = 40\*.

Forests, forest margins, thickets; 100–1800 m. Guangxi, S Yunnan [Laos, Thailand, Vietnam].

2. ***Disporopsis jinfushanensis*** Z. Y. Liu, Acta Phytotax. Sin.

25: 67. 1987.

金佛山竹根七 jin fo shan zhu gen qi

Rhizome terete, 3–5 mm thick. Stem erect, lilac spotted, 6–10 cm. Leaves (1 or)2(or 3), subopposite; petiole lilac spotted, 3–6 mm; leaf blade ovate-elliptic, 3.5–4.5 × 1.5–2.5 cm, subleathery, base slightly cordate or obtuse-rounded, apex cuspidate-acuminate. Bracts absent. Flower solitary; pedicel 4–8 mm. Perianth white, tinged with yellowish green, ca. 10 mm; tube ca. 2.5 mm, not constricted; lobes narrowly elliptic, ca. 7.5 × 3–4 mm. Corona lobes alternate to perianth lobes, ovate, ca. 1 mm, membranous, apex acute and entire or occasionally slightly emarginate. Anthers attached at corona lobe sinus, ca. 1 mm. Ovary subglobose, ca. 3 mm. Style ca. 2 mm. Berries brown-purple at maturity, subglobose, 7–8 mm in diam., 2–4-seeded. Fl. May–Jun, fr. Jul–Sep.

• Broad-leaved forests; 1600–1700 m. SE Sichuan (Nanchuan Xian).

3. ***Disporopsis aspersa*** (Hua) Engler in Engler & Prantl, Nat. Pflanzenfam., ed. 2, 15a: 370. 1930.

散斑竹根七 san ban zhu gen qi

*Aulisconema aspersa* Hua, J. Bot. (Morot) 6: 471. 1892.

Rhizome terete, 3–11 mm thick. Stem arching, 10–40(–90) cm. Leaves alternate; petiole 5–12 mm; leaf blade ovate-lanceolate to ovate-elliptic, 3–9 × 1–5 cm, base usually slightly cordate to truncate, apex acuminate to attenuate-acuminate. Bracts absent. Flowers solitary or paired; pedicel 1–1.4 cm. Perianth yellowish green, ± spotted with blackish lilac, (8–)10–14 mm; tube 3–5 mm, not constricted; lobes suboblong, 7–10 × 3–4 mm. Corona lobes alternate to perianth lobes, lanceolate, 3–4 mm, membranous, apex ± 2-cleft. Anthers attached at corona lobe sinus, ca. 1 mm. Ovary ovoid-globose, 2–3 mm. Style equaling ovary. Berries blue-purple at maturity, subglobose, ca. 8 mm in diam., 2–4-seeded. Fl. May–Jun, fr. Sep–Oct.  $2n = 40^*$ .

• Forests, shady places along valleys or streams; 700–2900 m. Guangxi, Hubei, Hunan, Sichuan, Yunnan.

**4. *Disporopsis undulata*** M. N. Tamura & Ogisu, Acta Phytotax. Geobot. 49: 34. 1998.

峨眉竹根七 e mei zhu gen qi

Rhizome terete, 0.8–1.3 cm thick. Stem arching, mottled with lilac basally, 20–30 cm. Leaves alternate; petiole longitudinally lilac striped, 2–7 mm; leaf blade adaxially often dark green checkered along longitudinal and transverse veinlets, oblong-lanceolate to ovate, 5–7 × 1.9–3.7 cm, base slightly cordate to truncate, margin undulate, apex acuminate to slightly aristate. Bracts linear, to 7 mm, or absent. Flowers solitary or in clusters of 2 or 3; pedicel 5–8 mm. Perianth cream, distally dark reddish purple adaxially and often yellowish green or reddish purple abaxially, 1.1–1.2 cm; tube ca. 3 mm, slightly constricted near mouth; lobes oblong, 8–9 × 4.5–6 mm. Corona lobes opposite perianth lobes, 3–5 × 2.1–2.7 mm, membranous, apex deeply 2-cleft into lobelets. Anthers attached at corona lobelet sinus, ovoid, ca. 2 mm. Ovary depressed ovoid, ca. 2.7 mm, with 3 shallow grooves along sutures. Style ca. 1.6 mm. Fl. May.

• Stony places in evergreen broad-leaved forests; 1000–1100 m. Sichuan (Emei Shan).

**5. *Disporopsis pernyi*** (Hua) Diels, Bot. Jahrb. Syst. 29: 239. 1900.

深裂竹根七 shen lie zhu gen qi

*Aulisconema pernyi* Hua, J. Bot. (Morot) 6: 472. 1892; *Disporopsis arisanensis* Hayata; *D. leptophylla* Hayata; *D. taiwanensis* S. S. Ying; *Polygonatum bodinieri* H. Léveillé; *P. ensifolium* H. Léveillé; *P. ensifolium* var. *didymocarpum* H. Léveillé.

Rhizome terete, 4–10 mm thick. Stem arching, purple spotted, 20–40(–80) cm. Leaves alternate; petiole 0.5–1.5 cm; leaf blade lanceolate to elliptic, 5–14 × 1.2–6 cm, base rounded to obtuse, apex acuminate to attenuate-acuminate. Bracts absent. Flowers usually solitary, occasionally in clusters of 2 or 3; pedicel (0.2–)1–2 cm. Perianth white, occasionally dark reddish adaxially, (0.9–)1.2–1.5(–2) cm; tube 3–6(–9) mm, not constricted; lobes suboblong, (2–)8–10(–12) × 3–5 mm. Corona lobes usually opposite perianth lobes, rarely alternate to them, lanceolate to linear-lanceolate, 3–4(–5) mm, membranous, apex deeply 2-cleft into lobelets. Anthers attached usually at corona

lobelet sinus, rarely at corona lobe sinus, suboblong-lanceolate, 1.5–3 mm. Ovary subglobose, 3–5 mm. Style (1.5–)2.5–3.5(–5) mm. Berries dark purple or brown-purple at maturity, subglobose, rarely slightly depressed, 4–10 mm in diam., 1–3-seeded. Fl. Apr–May, fr. Nov–Dec.  $2n = 40^*$ .

• Rocky places in forests, shady places along valleys or streams; 300–2500 m. Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang.

**6. *Disporopsis fuscopieta*** Hance, J. Bot. 21: 278. 1883.

竹根七 zhu gen qi

*Disporum luzoniense* Merrill.

Rhizome moniliform, (0.4–)1–1.5 cm thick. Stem arching, 25–50(–80) cm. Leaves alternate; petiole 0.5–1.5 cm; leaf blade ovate or elliptic to oblong-lanceolate, 4–11(–15) × 1.6–5 cm, base obtuse to subcuneate, rarely slightly cordate, apex acuminate. Bracts absent. Flowers solitary or paired; pedicel 7–14(–25) mm. Perianth white, purple tinged adaxially, (1.3–)1.5–2.2 cm; tube 4–9 mm, not constricted; lobes suboblong, 0.8–1.3 cm × 4–4.5 mm. Corona lobes alternate to perianth lobes, ovate-lanceolate, (4–)5 mm, membranous, apex usually 2- or 3-denticulate or 2-lobed. Anthers attached at corona lobe sinus, (1–)2–2.5 mm. Ovary ovoid, 4–4.5 mm. Style slightly shorter than or equaling ovary. Berries purplish at maturity, subglobose, 0.7–1.4 cm in diam., 2–8-seeded. Fl. Apr–May, fr. Nov.  $2n = 40^*$ .

Forests, hillsides along valleys; 500–1400(–2500) m. Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Sichuan, Yunnan [Philippines].

