

44. HETEROPOLYGONATUM M. N. Tamura & Ogisu in M. N. Tamura et al.,
Kew Bull. 52: 950. 1997.

异黄精属 *yi huang jing shu*

Chen Xinqi (陈心启 *Chen Sing-chi*); Minoru N. Tamura

Herbs perennial, rhizomatous, sympodial, epiphytic. Rhizome horizontally creeping, often branched, moniliform, fleshy. Stem ascending or pendulous, simple. Leaves cauline, alternate, shortly or indistinctly petiolate, entire. Inflorescences terminal and often also axillary, racemose or subumbellate, often 1- or 2-flowered, sometimes 3–6-flowered. Flowers bisexual, pendulous, ebracteate. Perianth pinkish or whitish, tubular or campanulate; segments 6, imbricate, subequal, connate proximally for 1/5–5/6 their length. Corona absent. Stamens 6, in 2 whorls, outer ones shorter than or equaling inner; filaments filiform, smooth or verrucose, proximally adnate to perianth for most of their length; anthers lanceolate to ovate, introrse. Ovary ellipsoid, 3-loculed. Style slender; stigma capitate or 3-lobed, small. Fruit a berry, orange, globose to ovoid.

• Four species: China.

- 1a. Stem pendulous, 50–100 cm; leaf blade fasciate-falcate, 20–40 cm 4. *H. pendulum*
- 1b. Stem ascending, 0.5–40 cm; leaf blade lanceolate, oblong, ovate-oblong, or oblanceolate, 3.5–14 cm.
 - 2a. Stem 20–40 cm; leaves 6–9; outer stamens shorter than inner ones 1. *H. roseolum*
 - 2b. Stem 0.5–14 cm; leaves 1 or 2; outer stamens equaling inner ones.
 - 3a. Inflorescence 2–4-flowered; stem 5–14 cm; leaves 2, thickly papery; perianth 6–8 mm; anthers 0.7–1 mm 2. *H. ginfushanicum*
 - 3b. Inflorescence 1-flowered; stem 0.5–3.5 cm; leaf 1(or 2), leathery; perianth 9–12 mm; anthers 1.5–2 mm 3. *H. xui*

1. *Heteropolygonatum roseolum* M. N. Tamura & Ogisu in M. N. Tamura et al., Kew Bull. 52: 951. 1997.

异黄精 *yi huang jing*

Rhizome 1–2 cm thick. Stem ascending, purple speckled, 20–40 cm × 2–4 mm. Leaves 6–9; petiole ca. 5 mm, base ± twisted; leaf blade lanceolate, 8–14 × 1.5–3.6 cm, leathery, 7–9-veined with prominent midvein, base obtuse, apex acuminate with blunt tip. Inflorescence (1 or)2-flowered; peduncle 7–14 mm. Pedicel 7–22 mm. Perianth pinkish, tipped greenish, tubular, 1.4–1.6 cm × 4–5 mm; lobes 6–8 mm. Outer stamens ca. 6 mm, inner ones ca. 8 mm; free part of filaments 1–1.5 mm, smooth; anthers lanceolate, ca. 2 × 1 mm. Ovary ca. 4 × 2.5 mm. Style ca. 2 mm. Berries 0.8–1 cm in diam. Fl. May. *2n* = 32*.

• Dark mossy evergreen broad-leaved forests; 1200–1300 m. EC Guangxi (Dayao Shan).

2. *Heteropolygonatum ginfushanicum* (F. T. Wang & Tang) M. N. Tamura et al., Novon 10: 157. 2000.

金佛山异黄精 *jin fo shan yi huang jing*

Smilacina ginfushanica F. T. Wang & Tang, Fl. Reipubl. Popularis Sin. 15: 249. 1978; *Polygonatum ginfushanicum* (F. T. Wang & Tang) F. T. Wang & Tang.

Rhizome pale purple, terete, 1–5 mm thick. Stem ascending, purple, 5–14 cm, slender, glabrous. Leaves 2; petiole very short; leaf blade oblong to ovate-oblong, 3.5–9 × 1.3–3.8 cm, thickly papery, glabrous, base rounded, apex acuminate. Inflorescences terminal and sometimes also axillary, racemose, 2–4-flowered. Pedicel 1–8 mm. Perianth cylindrical-campanulate, 6–8 × 3–6 mm; lobes erect, 1–1.5 mm, apically papillose abaxially. Stamens subequal; filaments very short; anthers ovate, 0.7–1 mm. Ovary 2–3 mm. Style 1.5–1.8 mm; stigma capitate. Fl.

May–Jun.

• Dense forests, shady rocks; 1300–1800 m. NE Guizhou (Jiangkou Xian), SW Hubei (Lichuan Xian), SE Sichuan (Jinfo Shan, Shizhu Xian).

3. *Heteropolygonatum xui* W. K. Bao & M. N. Tamura in W. K. Bao et al., Acta Phytotax. Geobot. 49: 143. 1998.

四川异黄精 *si chuan yi huang jing*

Rhizome 1–5 mm thick. Stem ascending, purple speckled, 0.5–3.5 cm × 0.5–1 mm. Leaf 1(or 2); petiole 1.5–2.5 mm; leaf blade abaxially whitish or occasionally purplish, linear-oblong to oblong or oblanceolate, 3.5–10 × 0.6–3 cm, leathery, 7-veined with prominent midvein, base attenuate to obtuse, apex acuminate with blunt or sharp tip. Flower 1; pedicel 2–4 cm. Perianth whitish pink adaxially, pink abaxially, tubular to campanulate, 0.9–1.2 cm × 3–5 mm; lobes lanceolate, 4.5–9.5 mm, recurved near apex. Stamens subequal; filaments 3–5 mm, free part 0.8–1 mm; anthers lanceolate, 1.5–2 mm, apex mucronate. Ovary 1.8–2.2 mm. Style 1.5–2 mm; stigma capitate. Berries 5–8 mm in diam. Fl. May, fr. Aug.

• Epiphytic in mossy mixed forests dominated by *Abies fabri*; 2600–2700 m. C Sichuan (Hongya Xian).

4. *Heteropolygonatum pendulum* (Z. G. Liu & X. H. Hu) M. N. Tamura & Ogisu in M. N. Tamura et al., Kew Bull. 52: 951. 1997.

垂茎异黄精 *chui jing yi huang jing*

Polygonatum pendulum Z. G. Liu & X. H. Hu, Acta Phytotax. Sin. 22: 426. 1984.

Rhizome 1–2 cm thick. Stem pendulous, purple streaked, 50–100 cm × ca. 2 mm, geniculate. Leaves 4–10 or more; petiole indistinct; leaf blade fasciate-falcate, 20–40 × 1.5–2.5 cm, thickly papery, 7–9-veined, base tapered-cuneate, apex obtuse. Inflorescence 2–6-flowered; peduncle 2–3 cm, slender. Pedicel

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2–3 cm, articulate in middle part. Perianth white or occasionally pinkish, campanulate, 0.9–1.3 cm; lobes oblong-ovate, 4–5 mm, apex \pm truncate and papillose. Outer stamens ca. 6 mm, inner ones ca. 7 mm; free part of filaments 1–2 mm, abaxially verrucose; anthers lanceolate, 2.5–3 \times ca. 1 mm. Ovary ca. 4.5 \times 2.5 mm. Style ca. 2 mm; stigma capitate to 3-lobed. Berries 1–1.5 cm in diam., many seeded. Fl. May–Jun, fr. Aug–Sep. $2n = 32^*$

- Forests; 2000–2200 m. WC Sichuan (Gongga Shan).

