

22. STEUDNERA K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 5: 114. 1862.

泉七属 *quan qi shu*

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Herbs, medium sized to robust, latex-bearing, usually evergreen, sometimes seasonally dormant. Stem epigeal, erect or creeping, stout, covered with fibrous remains of leaves and cataphylls. Leaves solitary or few to several together; petiole sheath very short; leaf blade peltate, ovate or ovate-oblong, base often emarginate, apex acuminate; basal veins short, well developed, primary lateral veins pinnate, forming a submarginal collective vein very near margin, marginal vein also present, secondary and tertiary laterals arising from primaries at a wide angle, then arching toward leaf margin and forming a ± conspicuous interprimary collective vein, higher order venation reticulate. Inflorescence solitary; peduncle shorter than petioles. Spathe barely convolute at base, ± fully expanded at anthesis, yellow, yellow and red or ± dark purple within, ovate or ovate-lanceolate, not constricted, apex acuminate; basal part persistent to fruiting stage; apical part becoming reflexed and revolute, marcescent. Spadix much shorter than spathe, densely flowered; female zone cylindric, often longer than male zone, mostly adnate to spathe; male zone contiguous with female zone, cylindric, ellipsoid, or subglobose, fertile to apex, obtuse. Flowers unisexual, naked. Gynoecium surrounded by whorl of 2–5 short, claviform staminodes, more rarely staminodes absent; ovary subglobose to ovoid, 1-loculed; ovules numerous, hemiorthotropous; funicle distinct; placentae 2–5, parietal, in basal part only or extending from base to apex, defined styler region ± lacking; stigma strongly 2–5-lobed. Male flowers 3–6-anded; stamens connate into a strongly lobed, apically truncate synandrium; common connective relatively small, impressed at apex; thecae contiguous, oblong, dehiscing by apical pore. Fruit ovoid, many seeded. Seeds ovoid to ellipsoid; testa costate; embryo axile, conic, short; endosperm copious.

About nine species: tropical and subtropical Asia; four species in China.

- 1a. Spathe inside concolorous purple 3. *S. kerrii*
- 1b. Spathe inside variously yellow.
 - 2a. Spathe inside greenish yellow, inside basal half brownish; stigma 2-lobed 4. *S. henryana*
 - 2b. Spathe inside golden yellow with or without a red basal patch; stigma entire or 4- or 5-lobed.
 - 3a. Female flowers with associated staminodes, stigma 4- or 5-lobed; leaves paler but not glaucous abaxially 1. *S. colocasiifolia*
 - 3b. Female flowers without associated staminodes, stigma entire; leaves strikingly white glaucous abaxially 2. *S. griffithii*

1. *Stuednera colocasiifolia* K. Koch, Wochenschr. Vereines Beförd. Gartenbaues Königl. Preuss. Staaten 5: 114. 1862 [*“colocasiaefolia”*].

泉七 *quan qi*

Gonatanthus peltatus Van Houtte.

Stem short, creeping and ascending; persistent cataphylls brown, not netted. Petiole green, cylindric, 30–50 cm, slender, base sheathing; leaf blade paler but not glaucous abaxially, green adaxially, ovate or obovate, 20–30 × 12–17 cm, subleathery, base obtuse, apex acuminate or acute. Peduncle green or violet, much shorter than petioles, 8–15 cm. Spathe reflexed, concolorous yellow, ovate-lanceolate or oblong-lanceolate, 10–15 × 5–7 cm, apex long acuminate. Spadix 3–4 cm; female zone cylindric, 2–2.5 cm, 2–3 mm in diam., ca. 3/4 of length adnate to spathe; ovary subglobose, stigma 4- or 5-lobed, mixed with clavate staminodes; male zone ellipsoid, 1–1.5 cm × 5–6 mm, obtuse. Fl. Mar–Apr.

Dense forests, wet meadows, by streams; 600–1400 m. Guangxi, Yunnan [Bangladesh, NE India, N Laos, N Myanmar, N Thailand, N Vietnam].

The poisonous stem is used to treat injuries, cuts, snake and insect bites, vasculitis, and skin ulcers.

2. *Stuednera griffithii* (Schott) Schott, Bonplandia (Hannover)

10: 222. 1862.

全缘泉七 *quan yuan quan qi*

Gonatanthus griffithii Schott, Prodr. Syst. Aroid. 143. 1860.

Stem creeping, 10–20 cm, 3–10 mm in diam. Petiole 25–30 cm; leaf blade strikingly white glaucous abaxially, pale green adaxially, ovate-oblong, 10–25 × 6–15 cm, base emarginate or shortly 2-lobed, apex acute or cuspidate. Peduncle ca. 12 cm. Spathe reflexed, yellow-green on both surfaces, brown-purple below middle inside, 7–10 × 2.8–3 cm. Spadix 2–3.5 cm; female zone 15–25 × 1–2 mm, ca. 2/3 of length adnate to spathe; ovary without staminodes; stigma entire; some sterile flowers on distal part of female zone; male zone cylindric, ellipsoid, 5–6 mm. Berry yellowish green, broadly obovoid-cylindric, apex with persistent stigma, 1-loculed. Seeds 4–12. Fl. Mar–Jun.

Open forests, brushwood in valleys, wet places; 100–500 m. SE Yunnan [NE India, Myanmar].

3. *Stuednera kerrii* Gagnepain, Notul. Syst. (Paris) 9: 140. 1941.

广西泉七 *guang xi quan qi*

Herbs, evergreen. Stem rhizomatous, epigeal, erect, later

decumbent with age, 2–40 × 1–1.5 cm, densely covered with tattered cataphyll and leaf remains, older parts eventually naked. Leaves solitary to several together at shoot tips; petiole pale green, terete, 35–40 cm × 3–7 mm, sheath very short; leaf blade strongly glaucous abaxially, deep olive-green adaxially, peltate, ovate, 10–35 × 8–14 cm, membranous, base emarginate, sinus very shallow, posterior lobes almost absent, apex cuspidate. Inflorescence solitary, very strongly fragrant of naphtha; peduncle mid-green, terete, 6–12 cm. Spathe outside deep yellow, inside deep purple, lanceolate, 9–10 × 2–5 cm, reflexed on opening, apex long acuminate, distal part soon withering, marcescent, proximal part persistent into fruiting. Spadix ca. 2.5 cm × 5 mm; female zone pale creamy white, cylindrical, dorsally adnate to spathe; pistil subglobose, 2–3 mm high, 0.5–1 mm in diam.; style very short; stigma 4-lobed, exceeding style width, style and stigma tinged purple; male zone pale creamy white, clavate, free; synandria 4–6-androus, 1–2 mm high, 1.5–2.5 mm in diam., 10–16-lobed, shortly stipitate. Inflorescence consisting of few to many berries partially covered by persistent spathe base. Berry ripening dull red, ovoid, 6–11 × 4–7 mm.

Wet areas in seasonal evergreen forests, almost always associated with limestone; 400–600 m. SW Guangxi [N Thailand, N Vietnam].

One of us (Boyce) has collected *Stuednera kerrii* on the Chinese border in N Vietnam. The population almost certainly extends into adjacent Guangxi.

4. *Stuednera henryana* Engler, Pflanzenr. 71(IV. 23E): 13. 1920.

滇南泉七 dian nan quan qi

Herbs, evergreen, medium sized, to 45 cm. Stems short, densely covered with fibrous cataphyll remains. Leaves few together at shoot tips; petiole mid-green, terete, 30–45 cm × 4–5 mm, sheath very short; leaf blade slightly paler abaxially, mid-green adaxially, peltate, somewhat stiffly membranous, base sometimes somewhat truncate, apex acuminate. Inflorescence solitary, rarely paired; peduncle pale green, terete, 8–15 cm. Spathe golden yellow, inside with a red patch, ovate to ovate-lanceolate, 5–8 × ca. 4 cm, apex cuspidate-acuminate. Spadix up to 2.3 cm; female zone cylindrical, ca. 15 × 3 mm, dorsally adnate to spathe; pistil mid-green, depressed globose, ca. 2 mm in diam.; style very short; stigma pale yellow, 2-lobed, exceeding style; staminodes 4 or 5 per pistil, white, shorter than pistil, stoutly spatulate and very shortly apiculate;

male zone ivory, bluntly cylindrical, free; synandria 6- or 7-androus, ca. 2 × 3.5 mm. Inflorescence and fruit unknown.

Wet shaded areas in seasonal evergreen forests, habitually on limestone; 300–700 m. Yunnan [N Laos, N Vietnam].

Fl. China 23: 69–71. 2010.