

## 12. SCHISMATOGLOTTIS Zollinger & Moritz in Moritz, Syst. Verz. 83. 1846.

落檐属 *luo yan shu*

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Herbs, evergreen, creeping, stoloniferous, erect or rarely ascending, colony-forming, clump-forming, or solitary, terrestrial or rheophytic. Leaves ± crowded; petiole much longer than leaf blade, proximally sheathing; leaf blade usually paler or even glaucous abaxially, green adaxially, frequently with discolored banding along midrib or between midrib and submarginal veins, less often variously spotted, cordate, sagittate, less often lanceolate, softly subfleshy to thinly leathery; primary, secondary, and tertiary lateral veins parallel, or secondary and tertiary ones partly diverging at a narrow angle from primary veins, all reaching into a submarginal vein. Inflorescences usually several together; peduncle shorter than petioles. Spathe constricted, part below constriction persistent, enveloping female zone of spadix, distal spathe circumscissile and caducous [elsewhere variously caducous, marcescent, or less often persistent]. Stipe of spadix short or absent; proximal part of spadix axis equivalent to all or part of female zone adnate to spathe; spadix elongate; proximal part female, distal part male, these separated or not by an interstice either with staminodes or less often naked; male zone of spadix fertile proximally, sterile distally, falling off later than distal part of spathe. Flowers numerous, unisexual, naked; female flowers: ovary 1-loculed, ovules rather few to very numerous, on 2–4 parietal to subbasal placentae, stigma sessile, disciform; interstillar staminodes sometimes present and female zone often with 1 or 2 rings of staminodes basally; male flowers: fertile flowers consisting of 2 or 3 connate stamens, filaments fused, connective thick, thecae excavate in center, dehiscing by a terminal pore, pollen shed in strings. Berry few to many seeded. Seeds subellipsoid, densely longitudinally grooved.

About 120 species: mostly in SE Asia, a few species in South America (although these possibly not congeneric); two species (one endemic) in China.

- 1a. Leaf blade elliptic or oblong-lanceolate, rounded or obtuse at base; spathe ca. 7 cm; spadix ca. 5 cm ..... 1. *S. hainanensis*  
1b. Leaf blade oblong, cordate at base; spathe 12–15 cm; spadix longer than 10 cm ..... 2. *S. calyprata*

1. *Schismatoglottis hainanensis* H. Li, Acta Phytotax. Sin. 15(2): 103. 1977.

落檐 *luo yan*

Herbs, stoloniferous, forming dense colonies. Petiole 20–30 cm, proximal half sheathing; leaf blade glaucous abaxially, dark green adaxially, elliptic or oblong-lanceolate, 16–17 × 5.5–7 cm, both surfaces densely and minutely impressed punctate, base rounded or obtuse, apex acuminate; primary veins 8–10 per side, adaxially always raised toward midrib; secondary and tertiary veins arising mostly from midrib. Peduncle shorter than petioles, ca. 13 cm. Spathe convolute, pale green or white, ca. 7 cm; proximal part elliptic, ca. 2.5 × 0.6 cm, persistent; distal part convolute, horn-shaped; limb caducous. Spadix ca. 5 cm; female zone adnate to spathe, ca. 2.5 cm × 4–5 mm, attenuate toward apex; pistil oblong, ca. 1 mm, 1-loculed, with 2 parietal placentae; ovules numerous, anatropous, obovoid, with longitudinal striations; funicle long and slender, carried on placentae in 2 ranks; distal sterile zone clavate, ca. 13 × 5 mm, attenuate toward base, apex obtuse; staminodes cylindrical; male zone cylindrical, ca. 15 × 4 mm; fertile stamens with anthers subcuneate, dehiscing by a terminal pore. Fl. Aug–Oct.

- Dense tropical forests, on rocks; 100–200 m. Hainan.

One of us (Li) notes that *Schismatoglottis hainanensis* differs from “*S. cadieri*” (Buchet & Gagnepain in Lecomte et al., Fl. Indo-Chine 6: 1118. 1942), from Vietnam, in having an elliptic or oblong-lanceolate leaf blade and a spadix with a sterile terminal appendix. The latter name was not validly published because no Latin description or diagnosis was provided (*Vienna Code*, Art. 36.1).

One of us (Boyce) is very doubtful that *Schismatoglottis hainanensis* is distinct from *S. calyprata*. A final decision is deferred pending examination of the type of *S. hainanensis*.

2. *Schismatoglottis calyprata* (Roxburgh) Zollinger & Moritz in Moritz, Syst. Verz. 83. 1846.

广西落檐 *guang xi luo yan*

*Calla calyprata* Roxburgh, Fl. Ind., ed. 1832, 3: 514. 1832; *Colocasia humilis* Hasskarl; *C. kotoensis* Hayata; *C. neoguineensis* Linden ex André; *Homalomena calyprata* (Roxburgh) Kunth; *Schismatoglottis acutangula* Engler; *S. angustifolia* Alderwerelt van Rosenburgh; *S. bitaeniata* Engler; *S. calyprata* var. *ornata* Ridley ex Engler; *S. calypratoides* Alderwerelt van Rosenburgh; *S. cordifolia* Ridley; *S. djamuensis* Engler; *S. dorensis* Gibbs; *S. emarginata* Engler; *S. hellwigiana* Engler; *S. hellwigiana* var. *subcordata* Engler; *S. klossii* Ridley; *S. kotoensis* (Hayata) T. C. Huang, J. L. Hsiao & H. Y. Yeh; *S. longipes* Miquel; *S. maculata* Alderwerelt van Rosenburgh; *S. neoguineensis* (Linden ex André) N. E. Brown; *S. nieuwenhuisii* Engler; *S. parvifolia* Alderwerelt van Rosenburgh; *S. picta* Schott; *S. potamophila* Alderwerelt van Rosenburgh; *S. pseudocalyprata* Alderwerelt van Rosenburgh; *S. riparia* Schott; *S. ruttanii* Alderwerelt van Rosenburgh; *S. subclaxiflora* Alderwerelt van Rosenburgh; *S. tenuifolia* Engler; *S. vanvuureni* Alderwerelt van Rosenburgh; *Zantedeschia calyprata* (Roxburgh) K. Koch.

Herbs, stoloniferous, 15–60 cm tall. Petiole 5–50 cm, smooth, proximal 1/3 sheathing, sheath persistent; leaf blade mid-green, sometimes variegated, cordate to sagittate, 7–35 × 4–18 cm; midrib abaxially prominent, primary lateral veins 6–15 per side, entirely raised abaxially, nearly always raised adaxially toward midrib, marginally impressed, secondary venation arising mostly from midrib. Inflorescences 1–8 together; peduncle erect at anthesis, then deflexed, 6–20 cm. Spathe 3.5–12 cm, basal part green, narrowly ovoid, ca. 1/2 length of whole spathe limb, differentiated by an abrupt constriction, at female anthesis much inflated, creamy to pale greenish yellow, narrowing and

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turbinate, completely surrounding spadix and gaping ventrally or with margins loosely overlapping, conspicuously mucronate at apex, caducous immediately after female anthesis. Spadix ca. 3/4 length of spathe, narrowly hourglass-shaped; female zone ca. 1/2 length of spadix, obliquely inserted or partially adnate to spathe, 5–8 mm in diam., distally tapering; pistils congested, pale green, flask-shaped, ca.  $1 \times 0.5$  mm, distally more widely spaced and subglobose; interpistillar staminodes few, white, clavate, taller than pistils; sterile zone absent; male zone ivory, narrowly obconic, ca. 1/2 length of female zone, distally 0.5–1

cm in diam.; anthers dumbbell-shaped, ca.  $0.5 \times 1$  mm; appendix creamy yellow, bullet-shaped, basally somewhat wider than apex of male zone; appendix staminodes columnar, irregularly polygonal, ca. 0.5 mm in diam. Fruiting spathe declined, urceolate. Fl. Jun.

Dense tropical forests, forest understories, on rocks; 700–900 m. Guangxi (Longling, Longzhou), Taiwan [SE Asia, Pacific islands].

The stems are used as a tonic medicine to treat lumbago and arthralgia.

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