14. HAPALINE Schott, Gen. Aroid. 44. 1858, nom. cons.

细柄芋属 xi bing yu shu

Li Heng (李恒 Li Hen); Peter C. Boyce

Hapale Schott.

Herbs, seasonally dormant or evergreen, small to medium sized, slender. Stems tuberous-stoloniferous with stolons terminating in further small, depressed-globose tubers. Leaves usually solitary, or few; petiole sheath short; leaf blade pale to deep green with or without silvery or paler variegation, cordate-sagittate, sagittate, or hastate, rarely elliptic and cuneate, primary lateral veins pinnate or mostly arising at petiole insertion, forming arching submarginal collective vein, 1 or 2 marginal veins also present; higher order venation reticulate. Inflorescences 1–5 per each floral sympodium, appearing with leaf; peduncle subequal to or longer than petioles, slender. Spathe slender, not distinctly constricted; tube persistent, very slender, tightly convolute around female flowers; limb erect to reflexed and \pm revolute at anthesis, oblong-lanceolate, longer than tube, marcescent. Spadix subequal to or longer than spathe, slender; female zone adnate to spathe, few flowered (2–7), \pm biseriate, separated from male zone by short sterile zone; male zone subulate to cylindric, fertile to apex or with a few sterile flowers at apex or with a long, terminal appendix [*Hapaline appendiculata* Ridley]. Flowers unisexual, naked. Gynoecium oblong to lageniform; ovary 1-loculed; ovule 1, anatropous; funicle very short; placenta parietal to subbasal (morphologically basal); stylar region very short; stigma subcapitate. Male flowers 3-androus; synandrium peltate, truncate, hexagonal, elongated in direction of spadix axis, shallow, stipitate; connective strongly dilated; thecae remote, subglobose, short, almost pendent from margin, dehiscing by pore; synandrodes with proximal ones very few, \pm remote, apiculiform; distal ones very few, consisting of tiny, peltate synandrodes. Fruit an ellipsoid to globose berry; style persistent; pericarp thin, 1seeded, white. Seed ellipsoid; testa smooth, very thin; embryo light green, ellipsoid, large; endosperm absent.

Six species: SE Asia; one species (endemic) in China.

1. Hapaline ellipticifolium C. Y. Wu & H. Li, Acta Phytotax. Sin. 15(2): 104. 1977.

细柄芋 xi bing yu

Herbs, perennial. Tuber cylindric, $1-2 \text{ cm} \times \text{ca}$. 5 mm, with many tubercles. Cataphylls lanceolate, 3-4 cm, membranous. Leaves 2 or 3; leaf blade oblong-elliptic, $10-17 \times 5-8.5$ cm, base 2-lobed, apex abruptly acuminate; lobes deltoid, $2-4 \times 1-3$ cm; primary veins multiple, pinnately diverging from midrib, secondary venation arching-anastomosing, intramarginal veins 3, conspicuous. Peduncles 2 or 3, 18-30 cm, very

slender; cataphylls ca. 8 cm. Spathe ca. 5 cm; tube convolute, ca. 2 cm \times 1–2 mm; limb spreading and finely reflexed, lanceolate, ca. 8 cm \times 8 mm. Spadix ca. 4.5 cm; female zone ca. 1.5 cm, adnate to tube of spadix; ovaries 4–12, oblong, multistriate, 1-loculed, 1-ovuled; stigma disciform; sterile zone between male and female inflorescences ca. 7 mm, naked; male zone ca. 1.5 cm; male flowers peltate, hexagonal, apex ca. 5 mm; sterile male zone at apex of spadix ca. 7 mm, with minute synandrodes. Fl. Apr.

• Tropical forest; ca. 300 m. SE Yunnan (Hekou).

Fl. China 23: 22. 2010.