2. MYRISTICA Gronovius, Fl. Orient. 141. 1755, nom. cons.

肉豆蔻属 rou dou kou shu

Evergreen trees, sometimes with aerial roots at base. Leaf blade papery, abaxial surface white papillose or with rusty pubescence; midvein often sunken adaxially, lateral veins nearly parallel or curving, connected at margin, tertiary veins not parallel, reticulate, sunken adaxially. Inflorescences often axillary or arising from axils of deciduous leaves, tuberculate or with smooth peduncle at apex often dichotomous or trichotomous; flowers densely racemose or subumbellate, at apex of peduncle; bracts caducous; bracteole at base of perianth, rarely deciduous. Flowers urceolate or bell-shaped, rarely tubular, pedicellate. Perianth (2 or)3-lobed. Filaments connate into staminal column; anthers slender, 7–30, connate abaxially; synandrium often longer than basal stalk. Ovary glabrous or hairy; style almost absent; stigma bifid. Pericarp thickly leathery, glabrous or pubescent. Aril red, laciniate to base.

About 150 species: S Asia from E India to the Philippines, New Guinea, Pacific islands (W Polynesia); two species (one introduced) in China.

In addition to the relatively widely cultivated crop *Myristica fragrans* (nutmeg and mace), the following three species, all native to the Philippines, are very locally cultivated in China for medicine and ornament: *M. cagayanensis* Merrill (*M. heterophylla* Hayata; *M. philippensis* Kanehira & Sasaki) is cultivated in Taiwan (Lan Yu, Taibei); *M. guatteriifolia* A. Candolle is cultivated in Hong Kong; and *M. simiarum* A. Candolle (*M. discolor* Merrill) is cultivated off SE coast of Taiwan (Lan Yu).

1a. Leaf blade large, lateral veins more than 16 pairs; male inflorescences stout, dichotomous or trichotomous,
flowers terminal, subumbellate; fruit ellipsoid, hairy
1b. Leaf blade small, lateral veins less than 16 pairs; male inflorescences slender, simple or dichotomous, flowers
racemose; fruit broadly pyriform or globose, glabrescent; cultivated

1. Myristica yunnanensis Y. H. Li, Acta Phytotax. Sin. 14(1): 94. 1976.

The seeds contain only 6%-7% fat.

云南肉豆蔻 yun nan rou dou kou

Trees to 30 m tall, 30-70 cm d.b.h., with few aerial roots at base; bark grayish brown; juvenile branches and buds with dense rusty minute pubescence, soon glabrescent; old branches sometimes tubercled, brown. Petioles 2.2-3.5(-4) cm, glabrous; leaf blade oblong-lanceolate or oblong-oblanceolate, (24-)30- $38(-45) \times 8-14(-18)$ cm, papery, abaxially with dense rusty minute dendritic hairs, partly glabrescent, adaxially glossy, glabrous, base cuneate to nearly rounded, apex shortly acuminate; lateral veins 20-32 pairs, prominent abaxially, sunken adaxially, tertiary veins obscure. Male inflorescences 2.5-4 cm, with 3-5 flowers, axillary to deciduous leaves, shortly pedunculate, dichotomous or trichotomous, flowers in terminal umbels; peduncle stout, 1.6-1.8 cm, pubescent. Male flowers: pedicel ca. 4 mm; bracteole ovate-elliptic, inserted at base of perianth, tightly enclosing flower; perianth urceolate, $5-6 \times 4-5$ mm, 3-lobed, lobes triangular-ovate, with dense rusty minute tomentum, darkish purple inside; stamens 7-10; sterile apex of synandrium slightly produced, base of column hairy. Female flowers not known. Infructescences axillary to deciduous leaves: peduncle rather strong, short, densely rusty tomentose, with 1 or 2 fruits; fruiting pedicel ca. 6×5 mm. Fruit ellipsoid, $4-5.5 \times ca. 3$ cm, base with ringlike perianth-scar, 1.5-2.5 mm wide, densely lanose hairy, apex oblique; pericarp 4-5 mm thick when dry. Seeds dark brown when dry, ovoid-ellipsoid, $3.5-4.2 \times 2.2-2.4$ cm, base subtruncate, apex rounded; aril red. Fl. Sep-Dec, fr. Mar-Jun.

Dense forests on mountain slopes or in ravines; 500-600 m. S Yunnan [N Thailand].

2. Myristica fragrans Houttuyn, Nat. Hist. 2(3): 333. 1774.

肉豆蔻 rou dou kou

Small trees, to 10 m tall; branches slender, minutely pubescent, early glabrescent. Petiole 6-12 mm; leaf blade elliptic or elliptic-lanceolate, 4-8 cm, nearly leathery, both surfaces glabrous, base broadly cuneate or nearly rounded, apex shortly acuminate; lateral veins 6-10 pairs. Male inflorescences 2.5-5 cm, glabrous, shortly peduncled, simple or forked, with 4-8 or more flowers on slender branches. Male flowers: pedicel 10-15 mm; bracteole caducous; perianth trigonous-ovoid, 5-7 mm, lobes 3(or 4), with minute tomentum outside; anthers 9-12; synandrium ca. 5 mm, column ca. 2 mm, sterile apex ca. 0.5 mm. Female inflorescences 1- or few flowered. Female flowers: pedicel 8-12 mm; bracteole inserted on base of perianth, leaving ringlike scar after abscission; perianth ca. 6×4 mm; ovary ellipsoid, with dense rusty pubescence; style extremely short; stigmas 2, minute. Fruiting pedicel 10-15 mm. Fruits 1 or 2, orange or yellow, pyriform or subglobose, 3.5-5 cm in diam. Seeds ellipsoid, $2-3 \times ca$. 2 cm; aril red, irregularly deeply lacerate; cotyledons short, curled, connate at base.

Cultivated. Guangdong, Taiwan, Yunnan [native to Indonesia (Moluccas); widely cultivated in the tropics].

This species is a famous spice (nutmeg and mace) and medicinal plant. The seeds contain 40%–73% fat and are used in industry. Other parts are used medicinally to treat, for example, dysentery and rheumatic pains and can be used as insect repellant.

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