

2. MELASTOMA Linnaeus, Sp. Pl. 1: 389. 1753.

野牡丹属 ye mu dan shu

Otanthera Blume.

Shrubs or small shrubs. Stems 4-sided or nearly terete, often squamose-strigose. Leaves opposite, petiolate; leaf blade pubescent on both surfaces, secondary veins 2 or 3(or 4) on each side of midvein, margin entire. Flowers terminal or on top of branches, solitary, clustered, or paniced, 5-merous, showy. Hypanthium globose-urceolate, pubescent or squamose strigose. Calyx lobes lanceolate to ovate, lobulate or not. Petals usually obovate, oblique. Stamens 10, whorls very unequal in length. Longer stamens with purple anthers; connective long extended at base, adaxially with 2 tubercles. Shorter stamens with yellow anthers; connective not extended but with 2 abaxial tubercles. Ovary half inferior, ovoid, 5-celled, apex with dense trichomes; placenta axile, sometimes fleshy in fruit. Style filiform, as long as petals. Fruit a capsule or sometimes berrylike, porose dehiscence or transverse dehiscence at middle, pubescent or squamosly strigose. Seeds numerous, small, cochleate, densely punctate.

Twenty-two species: SE Asia, N Australia, Pacific islands; five species (one endemic) in China.

The genus was revised by Meyer (Blumea 46: 351–398. 2001).

- 1a. Shrublets to 0.3 m tall, sometimes repent; leaf blade smaller than 4 × 3 cm.
 - 2a. Leaf blade ovate to elliptic, 1–4 × 0.8–2(–3) cm 1. *M. dodecandrum*
 - 2b. Leaf blade oblong to lanceolate-ovate, 2–4 × 1–1.5 cm 2. *M. intermedium*
- 1b. Shrubs or trees, 0.5–3(–7) m tall, erect; leaf blade larger than 4 × 3 cm.
 - 3a. Hypanthium spreading hispid; fruit with stiff often retroflexed trichomes 3. *M. sanguineum*
 - 3b. Hypanthium squamose or compressed strigose; fruit densely appressed squamose strigose.
 - 4a. Petiole 1.8–6.5 cm; leaf blade broadly ovate to broadly elliptic, 5.5–13.5 cm wide, secondary veins (2 or)3 on each side of midvein 4. *M. imbricatum*
 - 4b. Petiole 0.5–1.9 cm; leaf blade ovate, elliptic, or elliptic-lanceolate, 1.7–3.5(–6) cm wide, secondary veins 2(or 3) on each side of midvein 5. *M. malabathricum*

1. *Melastoma dodecandrum* Loureiro, Fl. Cochinch. 1: 274. 1790.

地蕊 di nie

Asterostoma repens (Desrousseau) Blume; *Melastoma repens* Desrousseau; *Osbeckia repens* (Desrousseau) Candolle.

Shrublets 10–30 cm tall. Stems often repent; branchlets numerous, procumbent, strigose when young, later glabrous. Petiole 0.2–0.6(–1.5) cm; leaf blade ovate to elliptic, 1–4 × 0.8–2(–3) cm, stiffly papery, abaxially very remotely strigose along veins, adaxially usually strigose at margin only or sometimes sparsely strigose among veins, secondary veins 1 or 2 on each side of midvein, tertiary veins numerous and parallel, base broadly cuneate, margin densely serrulate or entire, apex acute. Inflorescences terminal, cymose, (1–)3-flowered, with 2 leaflike bracts at base. Pedicel 2–10 mm, strigose, apically 2-bracteolate; bracteoles ovate, 2–3 × ca. 1.5 mm, abaxially strigose, margin ciliate. Hypanthium ca. 5 mm, strigose, base of trichomes conically inflated. Calyx lobes lanceolate, 2–3 mm, sparsely strigose, margin bristly ciliate. Petals lavender to purple, rhomboid-obovate, 1.2–2 × 1–1.5 cm, apically oblique. Longer stamens with purple anthers; connective long extended at base, curved, apex 2-tuberculate. Shorter stamens with connective not extended, apex 2-tuberculate. Ovary inferior, apically bristly. Fruit urceolate-globular, 7–9 × ca. 7 mm, succulent, strigose. Fl. May–Jul, fr. Jul–Sep.

Open fields, thickets, grasslands, trailsides; below 1300 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hunan, Jiangxi, Zhejiang [Vietnam].

2. *Melastoma intermedium* Dunn, J. Linn. Soc., Bot. 38: 360.

1908.

细叶野牡丹 xi ye ye mu dan

Melastoma kudoii Sasaki; *M. scaberrimum* (Hayata) Y. P. Yang & H. Y. Liu; *M. suffruticosum* Merrill; *Osbeckia scaberrima* Hayata; *Otanthera scaberrima* (Hayata) Ohwi.

Shrublets 20–30 cm tall. Stems terete, appressed strigose. Petiole 2–4 mm; leaf blade oblong to lanceolate-ovate, 2–4 × 1–1.5 cm, stiffly papery, abaxially sparsely strigose but more so on veins, adaxially appressed strigose but veins glabrous, secondary veins 1 or 2 on each side of midvein, tertiary veins inconspicuous, base acute to rounded, margin entire, apex obtuse to acute. Inflorescences terminal or nearly terminal, subcapitate cymes; bracts linear-lanceolate, ca. 5 × 7.5 mm, strigose, margin ciliate. Flowers ca. 2 cm. Pedicel ca. 5 mm, densely strigose. Petals pink, obovate, 1–1.4 cm, oblique, margin minutely ciliate, apex rounded. Stamens 10 or rarely more; filaments 3.5–4 mm; anthers ovate-lanceolate, 2–2.2 mm; connective decurrent, slightly prolonged, 2-setose at base. Ovary half inferior, globose, 4–5 mm in diam., 5-celled, apically hispidulous. Fruit a berry, subglobose, ca. 6 mm in diam.; hypanthium strigose. Fl. Jul–Oct.

• Grasslands, slopes, trailsides; 100–2700 m. Taiwan.

3. *Melastoma sanguineum* Sims, Bot. Mag. 48: t. 2241. 1821.

毛蕊 mao nie

Shrubs 1.5–3 m tall. Stems, branches, petioles, pedicels, and calyces densely hirsute, trichomes basally flattened. Peti-

ole 1–2.5(–4) cm; leaf blade ovate-lanceolate to lanceolate, (4.5–)8–15(–22) × (1.7–)2.5–5(–8) cm, stiffly papery, both surfaces strigose, secondary veins 2 on each side of midvein, base obtuse to rounded, margin entire, apex long acuminate to acuminate. Inflorescences terminal, corymbose, usually 1(or 3–5)-flowered. Pedicel 2–5 mm. Hypanthium 1–2 × 1–2 cm, trichomes sometimes retroflexed. Calyx lobes 5(–7), triangular to triangular-lanceolate, 6–12 × ca. 4 mm, strigose at ridges. Petals 5(–7), pink to purple, broadly obovate, (2–)3–5 × (1.5–)2–2.2 cm, apically oblique, apex emarginate. Longer stamens with anthers ca. 1.3 cm; connective long extended at base, curved, basal-adaxially with 2 lobes. Shorter stamens with anthers ca. 9 mm; connective not extended, basal-adaxially with 2 lobes. Ovary half inferior, densely setose. Fruit urceolate-turbinate, 1.5–2.2 × 1.5–2 cm, succulent, with stiff often retroflexed trichomes. Fl. all year, fr. Aug–Oct.

Open slopes, thickets, grasslands, woodland margins on low hills, trailsides; below 400 m. Fujian, Guangdong, Guangxi, Hainan [India, Indonesia, Malaysia].

In FRPS (53(1): 159. 1984), the name *Melastoma penicillatum* Naudin was misapplied to specimens of *M. sanguineum* from Hainan.

- 1a. Branches patently hirsute, base of trichomes inflated; calyx lobes triangular to triangular-lanceolate, strigose only on ridges 3a. var. *sanguineum*
- 1b. Branches squamose strigose; calyx lobes rhomboid-oblong, bristly on ridges but otherwise sparsely puberulous 3b. var. *latisepalum*

3a. *Melastoma sanguineum* var. *sanguineum*

毛蕊(原变种) mao nie (yuan bian zhong)

Melastoma decemfidum Roxburgh; ?*M. dendrisetosum* C. Chen.

Branches patently hirsute. Leaf blade both surfaces strigose. Calyx lobes triangular to triangular-lanceolate, ca. 12 × 4 mm, strigose only on ridges. Fl. all year, fr. Aug–Oct.

Open slopes, thickets, grasslands, woodland margins on low hills, trailsides; below 400 m. Fujian, Guangdong, Guangxi, Hainan [India, Indonesia, Malaysia].

3b. *Melastoma sanguineum* var. *latisepalum* C. Chen, J. S. China Agric. Coll. 4(1): 36. 1983.

宽萼毛蕊 kuan e mao nie

Branches shortly squamose strigose. Leaf blade both surfaces shortly strigose. Calyx lobes rhomboid-oblong, ca. 10 × 5 mm, bristly on ridges but otherwise sparsely puberulous. Fl. Apr–Aug, fr. Aug–Oct.

- Open slopes, thickets, trailsides. Hainan, Hong Kong.

4. *Melastoma imbricatum* Wallich ex Triana, Trans. Linn. Soc. London 28: 60. 1871.

大野牡丹 da ye mu dan

Shrubs or trees, 1–5(–7) m tall. Stems 4-sided or obtusely

4-sided; branchlets numerous, densely appressed squamose strigose. Petiole 1.8–6.5 cm; leaf blade broadly ovate to broadly elliptic, 8–21 × 5.5–13.5 cm, stiffly papery, abaxially puberulous and squamose strigose, adaxially strigose and puberulous only, secondary veins (2 or)3 on each side of midvein, tertiary veins numerous, parallel, and conspicuous, base rounded to cuneate, margin entire and appressed ciliate, apex acute. Inflorescences terminal, corymbose, ca. 12-flowered, with 2 leaflike bracts at base. Pedicel 3–12 mm, squamosly strigose; bracteoles very small or absent. Hypanthium 2–2.3 cm, densely squamose strigose. Calyx lobes ovate-lanceolate 1.1–1.3 cm, caducous, inside densely strigose, margin ciliate, apex acuminate. Petals pink to red, obovate, ca. 2 × 1.5 cm, margin densely ciliate, apically oblique, apex rounded. Longer stamens with connective long extended at base, curved, apex bifid. Shorter stamens with connective not extended, 2-tuberculate at base. Ovary half inferior, apex densely bristly. Fruit urceolate-globular, ca. 1.3 × 0.9 cm, succulent, densely squamose strigose. Fl. Jun–Jul, fr. Feb–Mar or Dec.

Dense broad-leaved evergreen forests, moist places; 100–1500 m. SW Guangxi, Xizang (Médog), SE Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Thailand, Vietnam].

5. *Melastoma malabathricum* Linnaeus, Sp. Pl. 2: 390. 1753.

野牡丹 ye mu dan

Melastoma affine D. Don; *M. candidum* D. Don; *M. cavaleriei* H. Léveillé & Vaniot; *M. esquirolii* H. Léveillé; *M. malabathricum* subsp. *normale* (D. Don) K. Meyer; *M. normale* D. Don; *M. polyanthum* Blume.

Shrubs 0.5–1(–5) m tall, erect. Stems 4-sided to subterete; branchlets numerous, procumbent, densely covered with appressed scales. Petiole 0.5–1.9 cm; leaf blade ovate, elliptic, or elliptic-lanceolate, 4–14 × 1.7–3.5(–6) cm, stiffly papery, abaxially densely strigose and puberulous, adaxially densely strigose, secondary veins 2(or 3) on each side of midvein, tertiary veins numerous and parallel, base rounded to subcordate, margin entire, apex acuminate. Inflorescences subcapitate corymbose, terminal, 3–7-flowered, with 2 leaflike bracts at base. Pedicel 2–8(–10) mm, strigose, apically 2-bracteolate, bracteoles lanceolate to subulate, 2–5 mm, abaxially densely strigose, margin ciliate. Hypanthium 5–9 mm, densely compressed strigose, margin fimbriate. Calyx lobes lanceolate to ovate-lanceolate, apex acuminate, on both sides and along their margin squamosly strigose and pubescent. Petals reddish purple, 2–3(–4) cm, margin only ciliate, apex rounded. Longer stamens with connective long extended at base, curved, apex bifid. Shorter stamens with anthers 2-tuberculate at base; connective not extended. Ovary half inferior, densely strigose, apically with a ring of setae. Fruit urceolate-globular, 6–15 × 6–12 mm, succulent, densely squamose strigose. Fl. Feb–Aug, fr. Jul–Dec.

Open fields, grasslands, scrub, thickets, sparse forests, bamboo forests, trailsides; 100–2800 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hunan, Jiangxi, Sichuan, Taiwan, SE Xizang, Yunnan, Zhejiang [Cambodia, India, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; Pacific islands].

Flora of China 13: 363–365. 2007.