

7. DINETUS Buchanan-Hamilton ex Sweet, Brit. Fl. Gard. 2: t. 127. 1825.

飞蛾藤属 fei e teng shu

Dinetopsis Roberly.

Twiners, herbaceous. Leaves simple, petiolate, cordate, herbaceous, margin entire (lobed in 1 species), venation pectate; veins raised abaxially, often winged. Inflorescences solitary or paired, axillary, bracteate racemes or panicles; bracteoles usually minute scales (sepal-like in *D. duclouxii*), basal to calyx. Pedicel filiform. Flowers often fragrant. Sepals free and quincuncial or short connate basally and valvate distally, equally enlarged or outer 3 larger, reflexed or clasping, with (5 or) 7 or 9 (or 11) longitudinal veins basally. Corolla funnelform or nearly salverform, entire to 5-lobed, glabrous except for an apical tuft of hairs. Stamens included; filaments glabrous or basally pilose; anthers linear to sagittate; pollen 3-colpate, not spiny. Disc ringlike, 5-lobed, or absent. Pistil included; ovary unilocular; ovules 2. Style often jointed proximally; stigma ellipsoid, entire or slightly 2-lobed. Fruit papery, indehiscent. Seed 1, often longitudinally keeled, smooth, glabrous.

Eight species: Bhutan, China, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Philippines, Thailand, Vietnam; six species in China.

Fang Rhui-cheng considers *Dinetus* as a synonym of *Porana*.

- 1a. Fruiting sepals ± unequal, loosely clasping fruit; corolla 1.5–4 cm, rose, pink, lavender, blue, or violet (to yellowish or white).
 - 2a. Bracteoles 3, immediately below calyx, ± sepal-like; plants ± sticky glandular 3. *D. duclouxii*
 - 2b. Bracteoles 2, part way down pedicel, minute, scalelike; plants pubescent or glabrous, never sticky glandular.
 - 3a. Corolla funnelform, 1.7–2.3 cm, tube widening from base upward; fruiting sepals flat 1. *D. decorus*
 - 3b. Corolla nearly salverform, 3–4.5 cm; tube cylindric, with a basal swelling; fruiting sepals concave 4. *D. grandiflorus*
- 1b. Fruiting sepals ± equal, reflexed at maturity (clasping in *D. dinetoides*); corolla (not known in *D. truncatus*) typically less than 1 cm, white, with divided limb.
 - 4a. Leaves pubescent on both sides; corolla campanulate; fruiting sepals 6–10 × 1.5–3 mm, sometimes ciliate 2. *D. dinetoides*
 - 4b. Leaves subglabrous adaxially; corolla funnelform; sepals 9–21 × 2.5–5 mm.
 - 5a. Fruit ellipsoid, apex acute or apiculate 5. *D. racemosus*
 - 5b. Fruit broadly obovoid to rhomboid, apex truncate or depressed 6. *D. truncatus*

1. *Dinetus decorus* (W. W. Smith) Staples, Novon 3: 199. 1993.

白藤 bai teng

Porana decora W. W. Smith, Notes Roy. Bot. Gard. Edinburgh 8: 197. 1914; *P. mairei* Gagnepain; *P. mairei* var. *holosericea* C. Y. Wu; *P. microsepala* Handel-Mazzetti.

Herbs perennial; indumentum silvery white. Stems glabrescent. Petiole 2.5–8.4 cm; leaf blade broadly ovate-cordate, 8–14 × 4.8–10 cm, abaxially subglabrous to ± shiny grayish white sericeous, adaxially glabrous to sparsely strigillose. Panicle pendent, 21–33 cm; bracts cordate, sessile, to 4 × 2 cm, ± deciduous; bracteoles 2, filiform, ca. 3 mm. Pedicel 0.8–1.2 cm. Flowers 1.7–2.3 cm. Sepals lanceolate to subulate, equal, 2–3 mm, ± golden sericeous abaxially, apex recurved. Fruiting calyx loosely clasping; sepals tan to purplish brown, oblong to ± spatulate, flat, unequal, glabrous, outer 3 sepals 2.3–3.1 cm × 6–8 mm, inner 2 smaller. Corolla rose-pink or purplish to white, slender funnelform to nearly salverform; limb 1.5–1.8 cm in diam., subtire, apical hair tufts golden. Stamens unequal, 5–8 mm, glabrous; anthers hastate. Disc absent. Ovary ovoid-conical. Stigma broadly ellipsoid-oblong, emarginate. Fruit tan, reddish, or purple-brown, obovoid, 6–7 × 4–5 mm, glabrous, apiculate. Seed reddish tan, globose to ellipsoid, 4–5 × ca. 4 mm. Fl. Jun-Sep, fr. Oct-Dec.

Forests in river valleys, steep often rocky slopes; 1300–3500 m. S Sichuan, Yunnan [NE India, ?N Myanmar].

2. *Dinetus dinetoides* (C. K. Schneider) Staples, Novon 3: 199. 1993.

蒙自飞蛾藤 meng zhi fei e teng

Porana dinetoides C. K. Schneider in Sargent, Pl. Wilson. 3: 360. 1916. *P. brevissepala* C. Y. Wu & S. H. Huang; *P. dinetoides* var. *mianningensis* S. H. Huang; *P. megathyrsa* C. Y. Wu.

Herbs perennial; indumentum yellowish. Stems tomentose-pilose, glabrescent. Petiole 2.3–7 cm; leaf blade cordate to broadly ovate-cordate, 5.8–11 × 4.3–8.7 cm, abaxially tomentose, densest along veins, adaxially ± sericeous. Panicle 18–35 cm; bracts ovate; bracteoles 2, minute scales. Pedicel 4–5 mm. Flowers 4–7 mm. Sepals narrowly navicular, 1–2 mm, short connate basally, margin reddish sericeous or glabrous abaxially. Fruiting calyx clasping; sepals spatulate to linear-oblong, ± equal, 6–10 × 1.5–3 mm, sometimes ciliate. Corolla white, campanulate; limb 4–6 mm, entire. Stamens unequal, 2 (or 3) reaching throat; filaments pilose basally; anthers sagittate. Disc ringlike. Ovary conical. Stigma ellipsoid-globose, emarginate. Fruit tan to brownish, ellipsoid-ovoid, rarely obovoid, 6–8 × 4–5 mm, glabrous, apiculate. Seed brownish, ellipsoid, ca. 3

□ 2 mm. Fl. Jul-Oct, fr. Nov.

Forest margins and grassy slopes in mountainous areas; 1200–2200 m. Sichuan, Yunnan [NE India, ?N Myanmar].

3. *Dinetus duclouxii* (Gagnepain & Courchet) Staples, Novon 3: 199. 1993.

三列飞蛾藤 shan lie fei e teng

Porana duclouxii Gagnepain & Courchet, Notul. Syst. (Paris) 3: 153. 1915; *P. duclouxii* var. *lasia* (C. K. Schneider) Handel-Mazzetti; *P. lobata* C. Y. Wu; *P. lutingensis* Lingelsheim; *P. triserialis* C. K. Schneider; *P. triserialis* var. *lasia* C. K. Schneider.

Herbs perennial; indumentum sticky glandulose. Stems tomentose to glabrous. Petiole 2.2–7 cm; leaf blade broadly ovate to variously lobed or incised, 6.4–11.5 × 4.3–9.6 cm, glabrous to ± sticky; veinlets minutely pustulate abaxially. Panicle or raceme 8–17(–40) cm; bracts ovate to linear-subulate; bracteoles 3, at base of calyx, sepal-like, unequal, enlarged in fruit. Pedicel 6–11 mm. Flowers 2.2–3.5 cm. Sepals triangular-ovate to linear-subulate, outer 3 sepals 3–8 mm. Fruiting calyx clasping; sepals tan to purple-brown, narrowly ovate to elliptic, outer 3 sepals 1.9–3.7 □ 0.7–1.3 cm, inner 2 smaller. Corolla blue, reddish, purplish, yellow, or white, salverform to narrowly funnelform; limb 1.7–3.4 cm in diam., 5-parted. Stamens unequal, 5–10 mm; filaments villous basally; anthers linear. Disc ± 5-lobed, or absent. Ovary ovoid. Stigma oblong-obovoid, ± 2-lobed. Fruit yellowish to brown, globose-ellipsoid, 5–8 □ 5–7 mm, glabrous, apiculate. Seed reddish to black-brown, ± globose, 5–6 mm, scaly at first, glabrescent. Fl. May-Dec, fr. Sep-Dec.

• Roadsides, field margins, meadows, stream banks, hillsides, sometimes on calcareous soils; 100–4000 m. W Hubei, Sichuan, Yunnan.

4. *Dinetus grandiflorus* (Wallich) Staples, Novon 3: 199. 1993.

藏飞蛾藤 zang fei e teng

Porana grandiflora Wallich in Roxburgh, Fl. Ind., 2: 41. 1824; *Dinetopsis grandiflora* (Wallich) Roberty.

Herbs perennial; indumentum dull yellow to golden. Stems ± puberulent. Petiole 2.8–8.5(–14) cm; leaf blade ± cordate, rarely subhastate, (8.7–)10.3–12.5(–17.1) □ (5.3–)7.2–9(–13) cm, subglabrous to velutinous. Racemes 1 (or 2), pendent; bracts subulate-linear; bracteoles 2, golden pilose. Pedicel 0.6–1.6 cm. Flowers 3–4.5 cm. Sepals subulate-triangular, equal, 3.5–6 mm, marginally (or entirely) golden sericeous abaxially. Fruiting calyx loosely clasping; sepals tan to brown, narrowly ellipsoid-oblong, concave, unequal, glabrous, outer 3 sepals 3.2–4.2 □ 0.9–1.6 cm, inner 2 smaller. Corolla mauve or rose-purple, with a white eye, ± salverform; tube cylindric, swollen basally; limb 2.8–4.4 cm in diam., shallowly 5-lobed, hair tufts golden. Stamens equal, inside basal swelling of corolla tube; filaments pubescent basally; anthers linear. Disc absent. Ovary ovoid-globose; stigma ellipsoid. Fruit greenish tan with darker lines, broadly obovoid to globose, (1–)1.4–1.6 □ 0.9–1.3 cm, glabrous, apiculate. Seed dark brown, ellipsoid, ca. 11 □ 9.5 mm. Fl.

Jun-Sep, fr. Jul-Nov.

Thickets of moist N- or W-facing, deciduous or cloud forests, watercourses, ravines; 1700–2600 m. S Xizang (Bingmu Xian, Nyalam Xian) [Bhutan, NC India, Nepal].

Dinetus grandiflorus, the largest-flowered and most attractive species of *Dinetus*, is distributed along the S flank of the Himalayas. Its distribution barely extends into China at the border region between Nepal and Xizang.

5. *Dinetus racemosus* (Wallich) Sweet, Brit. Fl. Gard. 2: pl. 127. 1825.

飞蛾藤 fei e teng

Porana racemosa Wallich in Roxburgh, Fl. Ind., 2: 41. 1824; *P. gagnepainiana* H. Lévêille; *P. racemosa* var. *tomentella* C. Y. Wu; *P. racemosa* var. *violacea* C. Y. Wu.

Herbs annual; indumentum yellowish to silvery. Stems glabrescent. Petiole 2.9–7.7 cm; leaf blade deeply cordate, 6–16.7 □ 3.3–9.4 cm, abaxially puberulent to tomentellous, adaxially strigose. Panicle 13–45 cm; lowermost bracts cordate, prominently veined in fruit; bracteoles 2, minute scales. Pedicel 4–7 mm. Sepals lanceolate-linear, equal, 1–2 mm, glabrous to silvery or golden pubescent abaxially. Fruiting calyx reflexed, tan to purplish; sepals spatulate to oblanceolate, flat or slightly concave, equal, 0.9–1.4(–1.8) cm □ 2.5–4(–5) mm, puberulent or glabrous abaxially, glabrous adaxially, apex rounded-obtuse, apiculate. Corolla white, yellow in tube, funnelform, (7–)8–11 mm; limb (0.6–)0.8–1.2(–1.3) cm in diam., 5-parted. Stamens included, unequal, 1.5–2.5 mm; filaments pilose basally. Disc absent. Pistil included; ovary ovoid. Stigma ellipsoid to clavate, apex emarginate. Fruit tan, sometimes brown-purple striate, slenderly ellipsoid-obovoid, 5–7(–9) □ 3–4(–5) mm, glabrous, apex acute or apiculate. Seed reddish to dark brown, ellipsoid-globose, 3–5 □ 2.5–4 mm. Fl. summer-fall, fr. fall-winter. 2n = 28.

Various soil types, often weedy around human habitations and disturbed sites, thickets, forests, scrub, watercourses, hillsides; 100–3200 m. Anhui, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Shaanxi, Sichuan, Xizang, Yunnan, Zhejiang [Bhutan, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Philippines, Thailand, Vietnam].

The whole plant is used medicinally.

6. *Dinetus truncatus* (Kurz) Staples, Novon 3: 200. 1993.

毛果飞蛾藤 mao guo fei e teng

Porana truncata Kurz, J. Bot. 11: 136. 1873; *P. racemosa* Roxburgh var. *sericocarpa* C. Y. Wu.

Herbs annual; indumentum yellowish. Stems sparsely sericeous, glabrescent. Petiole 3.8–6.4 cm; leaf blade broadly ovate-cordate, 8.3–9.5 □ 5.6–6.9 cm, sparsely stellate, adaxially glabrous or sparsely strigose; veins ± sericeous with simple hairs abaxially. Inflorescences and flowers unknown. Inflorescence a lax raceme or panicle, 15–23 cm; bracts cordate. Pedicel deflexed, (0.7–)1–1.1(–1.5) cm. Fruiting calyx spreading; sepals purplish tan to brownish, slenderly elliptic to oblong, equal, (1–)1.7–2.1 cm □ (3–)4–5 mm, glabrous or sparsely pubescent, apex obtuse to rounded,

mucronulate. Fruit straw colored to rusty brown, angles often darker, pendent, inflated, broadly obovoid to rhomboid, \pm 5-angled, 4–6(–8) \square 4–6.5(–8) mm, glabrous or puberulent, truncate or depressed-concave apically. Seed yellowish to dark red-brown, ellipsoid to \pm globose, 3–5 \square (2–)3–4 mm, smooth to coarsely wrinkled. Fl. unknown, fr. Oct-Dec.

Sandy, silty, or clay soils, damp forest clearings, roadsides, thickets, fallow cultivated land; 700–2500 m. Anhui, Guangdong, Guangxi, Jiangxi, Yunnan [E Myanmar, N Thailand].

