

1. OSBECKIA Linnaeus, Sp. Pl. 1: 345. 1753.

金锦香属 jin jin xiang shu

Herbs, shrublets, or shrubs, erect. Stems (3 or)4-sided, pubescent. Leaves opposite or sometimes 3-whorled, petiolate or sessile; leaf blade usually pubescent, secondary veins 1–3 on each side of midvein, tertiary veins numerous and parallel, margin entire. Inflorescences terminal, capitate or paniced. Flowers 4- or 5-merous, purple or white, usually bracteate. Hypanthium urceolate or flask-shaped, often setiform tuberculate, stellate appendaged, pectinate tuberculate or with polycyclic setiform stellate trichomes on stalks. Calyx lobes linear, lanceolate, or ovate-lanceolate, margin ciliate. Petals obovate or broadly ovate, margin ciliate or not. Stamens twice as many as perianth segments, isomorphic, equal or subequal; filaments shorter or as long as anthers; anthers oblong or oblong-ovate, beak long or short; connective decurrent, base abaxially slightly inflated or shortly spurred and sometimes with 1 or 2 setose, adaxially lengthened tubercles. Ovary half inferior, 4- or 5-celled, ± adherent to hypanthium, apex with a setose ring. Style filiform. Capsule ribbed, middle often contracted, dehiscing at truncate apex by 4 or 5 pores. Seeds numerous, curved (cochleate), small, densely granulate.

About 50 species: tropical W Africa, tropical and subtropical Asia; five species in China.

The Asian species of *Osbeckia* were revised by Hansen (Ginkgoana 4: 1–150, pl. 1–20. 1977).

- 1a. Hypanthium 0.4–0.7 cm.
 - 2a. Petiole to 1 cm; flowers and fruit upright 1. *O. chinensis*
 - 2b. Petiole 1.5–2 cm; flowers and fruit hanging 2. *O. nutans*
- 1b. Hypanthium 1–2.3 cm.
 - 3a. Leaf blade 1.7–2.5 cm 3. *O. capitata*
 - 3b. Leaf blade 4–9(–13) cm.
 - 4a. Flowers 5-merous; capsule ovoid-globose, ca. 8 × 6 mm, apically with rings of strigose setae 4. *O. nepalensis*
 - 4b. Flowers 4-merous; capsule long urceolate (flask-shaped), contracted at middle, 1.0–1.6(–2) × 0.5–0.8 cm, with rows of setiform stellate trichomes on stalks, ± glabrous in old specimens or basally setose, apically glabrous 5. *O. stellata*

1. *Osbeckia chinensis* Linnaeus, Sp. Pl. 1: 345. 1753.

金锦香 jin jin xiang

Herbs or shrubs, 20–100 cm tall, erect. Stems 4-sided, appressed strigose. Petiole very short or up to 1 cm, strigose; leaf blade linear, linear-lanceolate, oblong-ovate, elliptic-ovate, or sometimes ovate-lanceolate, 2–5(–9) × 0.3–1(–3.2) cm, stiffly papery, both surfaces strigose, secondary veins 1 or 2 on each side of midvein, tertiary veins inconspicuous, base obtuse, subrounded, rounded, or subcordate, margin entire, apex acute. Inflorescences terminal, capitate, 2–8-flowered, with 2–6 bracteal leaves at base; bracts sessile, ovate, pubescent or adaxially glabrous. Hypanthium usually pink, 6–6.5 mm, glabrous or 1–5 setose tuberculate. Calyx lobes 4(or 5), triangular-lanceolate, margin ciliate, setose between lobes. Petals 4 or 5, pink to pale purple, obovate, 1–1.5 × ca. 1.3 cm, margin ciliate, apex apiculate or rounded. Stamens 8 or 10, inclined to one side; filaments as long as anthers; anthers narrowly lanceolate, beaked; connective bases slightly inflated. Ovary subglobose, 4- or 5-celled, apex densely setose or strigose. Capsule purplish red, ovoid-globose, ca. 6 × 4 mm, glabrous or setiform tuberculate.

Grasslands on mountain slopes, grassy areas on open slopes, sparse forests, trailsides; near sea level to 2800 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Sichuan, Taiwan, Xizang (Mêdog), Yunnan, Zhejiang [Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; Australia].

- 1a. Plants 20–60 cm tall; leaf blade linear, linear-lanceolate, or very rarely ovate-lanceolate, 2–4(–5) × 0.3–0.8(–1.5) cm,

- base obtuse to subrounded; hypanthium glabrous or with 1–5 setiform tubercles 1a. var. *chinensis*
- 1b. Plants 80–100 cm tall; leaf blade oblong-ovate to elliptic-ovate, (2–)3–5(–9) × (0.3–)0.6–1(–3.2) cm, base rounded to subcordate; hypanthium with 5 to numerous setiform tubercles 1b. var. *angustifolia*

1a. *Osbeckia chinensis* var. *chinensis*

金锦香(原变种) jin jin xiang (yuan bian zhong)

Osbeckia kainantensis Masamune.

Herbs, rarely shrubs, 20–60 cm tall. Petiole 2–10 mm; leaf blade linear, linear-lanceolate, or rarely ovate-lanceolate, 2–4(–8) × 0.3–0.8(–2.1) cm, base obtuse to subrounded, apex acute. Petals 0.8–1.5 cm. Hypanthium glabrous or with 1–5 setiform tubercles. Fl. Jul–Dec, fr. Sep–Nov.

Grasslands on mountain slopes, sparse forests, trailsides; near sea level to 1500 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin (Changbai Shan), Sichuan, Taiwan, Yunnan, Zhejiang [Cambodia, India, Indonesia, Japan, Laos, Malaysia, Myanmar, Nepal, Philippines, Thailand, Vietnam; Australia].

In FRPS (53(1): 151. 1984), where *Osbeckia kainantensis* was an accepted species, the specific epithet was incorrectly spelled “*hainantensis*.”

- 1b. *Osbeckia chinensis* var. *angustifolia* (D. Don) C. Y. Wu & C. Chen, Fl. Yunnan. 2: 80. 1979.

宽叶金锦香 kuan ye jin jin xiang

Osbeckia angustifolia D. Don, Prodr. Fl. Nepal. 221. 1825.

Shrublets 80–100 cm tall. Leaves subsessile; leaf blade oblong-ovate to elliptic-ovate, (2–)3–5(–9) × (0.3–)0.6–1(–3.2) cm, base rounded to subcordate, apex acute. Petals 1.1–1.3 cm. Hypanthium with 5 to numerous setiform tubercles. Fl. Jun, fr. Aug–Nov.

Grassy areas on open slopes, trailsides; 500–2800 m. Hainan, SW Sichuan, NW and SW Yunnan [Cambodia, India, Laos, Myanmar, Nepal, Thailand, Vietnam].

2. *Osbeckia nutans* Wallich ex C. B. Clarke in Hooker, Fl. Brit. India 2: 521. 1879.

花头金锦香 hua tou jin jin xiang

Shrubs to 1.5 m tall. Branches densely covered with appressed short trichomes. Petiole 1.5–2 cm; leaf blades narrowly ovate or lanceolate, 3.6–5.5 × 0.5–1 cm, abaxially glabrous or almost so but scabrous on veins, adaxially glabrous-striolate, secondary veins 1(or 2) on each side of midvein, base acute to broadly rounded, apex narrowly acute to acute. Inflorescences terminal clusters of up to 4 flowers, with 2–4 bracteal leaves at base; bracts sessile, ovate, both surfaces glabrous or sparsely strigose only on midvein. Hypanthium 4–4.5 × 4–4.5 mm, glabrous, with pectinate scalelike trichomes between bases of calyx lobes. Calyx lobes broadly lanceolate, 6.5–7.5 mm, glabrous, margin ciliate. Capsule usually nodding, 6.5–8.5 × 5–6.5 mm, ovary exceeding hypanthium by 1.5–3 mm.

Grasslands; 2000–3000 m. Xizang (Cona, Mêdog) [Bhutan, NE India, Nepal].

3. *Osbeckia capitata* Benthham ex Walpers, Nov. Actorum Acad. Caes. Leop.-Carol. Nat. Cur., Suppl. 1: 331. 1843.

头序金锦香 tou xu jin jin xiang

Herbs or shrublets, 8–25 cm tall, erect. Stems 4-sided, sparsely appressed strigose. Petiole very short, strigose; leaf blade ovate, 1.7–2.5 × 0.9–1.3 cm, stiffly papery, both surfaces strigose, secondary veins 2 on each side of midvein, tertiary veins inconspicuous, base rounded to subcordate, margin entire, apex acute. Inflorescences terminal, capitate, 2- or 3-flowered, with 2–4 bracteal leaves at base; bracts sessile, ovate, both surfaces glabrous or sparsely strigose only on midvein. Hypanthium often reddish, ca. 1.5 cm, glabrous. Calyx lobes 4, ovate, ca. 1.5 cm, setiform tuberculate among lobes, margin ciliate. Petals 4, purple to pale purple, obovate, ca. 1.5 cm, margin ciliate. Stamens 8, inclined to one side; filaments of equal lengths; anthers narrowly lanceolate, long beaked; connective abaxially with a short basal spur, adaxially slightly inflated tuberculate. Ovary ovoid, 4-celled, apex with 16–20 setae. Capsule purplish red, ovoid, ca. 7 × 7 mm, glabrous. Fl. and fr. Jun–Sep.

Grassland on mountain slopes, trailsides; 1500–2500 m. Yunnan [Bhutan, India].

4. *Osbeckia nepalensis* J. D. Hooker, Exot. Fl. 1: t. 31. 1823.

蚂蚁花 ma yi hua

Shrubs 0.6–1(–1.5) m tall, erect. Stems 4-sided, densely strigose. Petiole 1–4 mm, densely strigose; leaf blade oblong-lanceolate to ovate-lanceolate, (5–)7–13 × (1.5–)2.5–3.8 cm,

stiffly papery, both surfaces densely strigose, secondary veins 2 on each side of midvein, base cordate to obtuse, margin entire and ciliate, apex acuminate. Inflorescences terminal, a panicle of cymes, 5–8 cm or longer; bracts leaflike. Bracteoles 2, broadly ovate, ca. 1.3 cm, abaxially midvein strigose and sericeous, adaxially glabrous, margin ciliate. Hypanthium ca. 2 cm, pectinate setose-tuberculate and among calyx lobes, base clasped by bracteoles. Calyx lobes 5, long ovate, as long as hypanthium, both surfaces glabrous, margin ciliate, apex acuminate. Petals 5, pink, white, or rarely purple, obovate, 1.5–2.5 cm, oblique, margin ciliate, apex rounded but apiculate. Stamens 10, inclined to one side; filaments as long as anthers; anthers beaked; connective slightly inflated, orbiculate, shortly spurred. Ovary ovoid-globose, 5-celled, apically densely strigose, apex with a setose ring. Capsule ovoid-globose, ca. 8 × 6 mm, apically densely strigose; hypanthium urceolate, ca. 8 mm, densely pectinate setose-tuberculate. Fl. Aug–Oct, fr. Sep–Dec.

Scrub on mountain slopes, grasslands, open slopes, forest margins, open woods, streamsides, trailsides; 500–1900 m. Guangxi, Xizang, Yunnan [Bhutan, NE India, Laos, Myanmar, Nepal, Thailand, Vietnam].

- 1a. Petals pink or rarely purple 4a. var. *nepalensis*
- 1b. Petals white 4b. var. *albiflora*

4a. *Osbeckia nepalensis* var. *nepalensis*

蚂蚁花(原变种) ma yi hua (yuan bian zhong)

Petals pink or rarely purple. Fl. Aug–Oct, fr. Sep–Dec.

Scrub on mountain slopes, grasslands, open woods, streamsides, trailsides; 500–1900 m. Guangxi, Xizang (Mêdog), Yunnan [Bhutan, NE India, Laos, Myanmar, Nepal, Thailand].

4b. *Osbeckia nepalensis* var. *albiflora* Lindley, Edwards’s Bot. Reg. 17: t. 1475. 1831.

白蚂蚁花 bai ma yi hua

Petals white. Fl. Aug–Oct, fr. Sep–Nov.

Open slopes, grasslands, forest margins, trailsides; 700–1600 m. Xizang (Mêdog), Yunnan [Nepal].

5. *Osbeckia stellata* Buchanan-Hamilton ex Kew Gawler, Bot. Reg. 8: t. 674. 1822.

星毛金锦香 xing mao jin jin xiang

Melastoma mairei H. Léveillé; *Osbeckia crinita* Benthham ex Naudin; *O. crinita* var. *yunnanensis* Cogniaux; *O. mairei* (H. Léveillé) Craib; *O. opipara* C. Y. Wu & C. Chen; *O. paludosa* Craib; *O. pulchra* Geddes; *O. rhopalotricha* C. Y. Wu; *O. rostrata* D. Don; *O. robusta* Craib; *O. sikkimensis* Craib; *O. stellata* var. *crinita* (Benthham ex Naudin) C. Hansen; *O. yunnanensis* Franchet ex Craib.

Herbs or shrublets, 0.2–1.5(–2.5) m, erect. Stems 4(or 6)-sided, sparsely or densely patently strigose or velutinous. Leaves opposite or 3 verticillate; petiole 2–10(–15) mm, strigose or velutinous; leaf blade oblong-lanceolate, ovate-lanceolate, or elliptic, 4–9(–13) × 2–3.5(–5) cm, stiffly papery, both surfaces strigose or also velutinous, secondary veins 2 on each side of midvein, tertiary veins inconspicuous, base obtuse

to subcordate, margin entire and ciliate, apex acute or acuminate. Inflorescences terminal racemose or paniced cymose, 4–22 cm; bracts 2, ovate, ca. 4 mm, abaxially glabrous or sparsely strigose, margin setiform ciliate. Pedicel short or absent. Hypanthium usually purple to dark purple, 1–2.3 cm, with several rows of up to 2.5 mm setiform stellate trichomes on stalks. Calyx lobes 4, linear-lanceolate to subulate, 0.8–1.2 cm, caducous in fruit, margin ciliate. Petals 4, pink to purple, obovate, 1.5–2 cm, margin ciliate. Stamens 8, inclined to one side; filaments \pm equal to anther lengths; anthers narrowly lanceolate, long-beaked; connective slightly inflated at base, abaxially slightly inflated, adaxially spurred. Ovary ovoid, 4-celled, apex setose. Capsule long urceolate, contracted at middle, 1.0–1.6(–2) \times 0.5–0.8 cm, with rows of setiform stellate trichomes on stalks, \pm glabrous in old specimens or basally setose, apically glabrous. Fl. Jul–Nov, fr. Oct–Dec.

Grassland on mountain slopes, sparse thickets, dry stony pastures, trailsides; 200–2300 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Xizang (Médog), Yunnan, Zhejiang [Bhutan, Cambodia, Laos, NE India, Myanmar, Nepal, Thailand, Vietnam].

