

## 6. EDGEWORTHIA Meisner, Pl. Vasc. Gen. 1: 330, 2: 242. 1841.

结香属 *jie xiang shu*

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Shrubs, deciduous, much branched. Leaves alternate, usually clustered apically; petiole short; leaf blade narrowly elliptic to oblanceolate, thickly membranous. Inflorescence terminal or axillary, densely capitate; peduncle long or short; involucre present; bracts caducous, small. Flowers bisexual, 4-merous; pedicel present, articulate. Calyx tube cylindrical, incurved, interior yellow or white, exterior densely white pilose; lobes 4, spreading. Petaloid appendages absent. Stamens twice as many as calyx lobes, in two series; filaments very short. Disk cup-shaped, lobed. Ovary sessile, pilose, 1-loculed; style long, sometimes puberulous; stigma rounded or clavate, papillose. Fruit dry or slightly succulent, base enclosed by persistent calyx.

Five species: Asia; four species (three endemic) in China.

- 1a. Leaves deciduous, absent at flowering ..... 3. *E. chrysantha*  
1b. Leaves evergreen or biennial, present at flowering.  
2a. Inflorescences 10–17-flowered ..... 1. *E. eriosolenoides*  
2b. Inflorescences 30–50-flowered.  
3a. Calyx interior yellow; ovary uniformly hairy; stigma rounded ..... 2. *E. gardneri*  
3b. Calyx interior white; ovary base glabrous, apex hairy; stigma clavate ..... 4. *E. albiflora*

**1. *Edgeworthia eriosolenoides*** K. M. Feng & S. C. Huang, Acta Bot. Yunnan. 7: 281. 1985.

西畴结香 *xi chou jie xiang*

Shrubs, branching trichotomous. Branchlets brown, pubescent. Petiole 0.6–1 mm, appressed sericeous; leaf blade green adaxially, grayish green abaxially, elliptic to elliptic-lanceolate, 5.5–15 × 1.7–4.7 cm, thinly papery, both surfaces sparsely appressed sericeous, more densely so abaxially, base gradually narrowed, apex acuminate; lateral veins 10–13 pairs, conspicuous, reticulate veins visible. Inflorescences axillary, capitate, 10–17-flowered; peduncle 1.5–2 cm, densely sericeous. Calyx ca. 20 × 1.5 mm, exterior densely white shiny sericeous; lobes 4, ovate-lanceolate, ca. 4 × 1.5 mm. Anthers lanceolate, ca. 1.5 mm. Disk shallowly cup-shaped. Ovary ellipsoid, ca. 3 mm, apex white sericeous; style filiform, ca. 3 mm; stigma clavate, ca. 2 mm. Fl. spring.

• SE Yunnan (Xichou).

**2. *Edgeworthia gardneri*** Meisner, Denkschr. Regensburg. Bot. Ges. 3: 280. 1841.

滇结香 *dian jie xiang*

*Daphne gardneri* Wallich, Asiat. Res. 13: 388. 1820.

Trees small, to 3–4 m tall. Stem brownish red; branchlets glabrous or sparsely sericeous at apex. Petiole 4–8 mm, puberulous; leaf blade narrowly elliptic to elliptic-lanceolate, 6–10 × 2.5–3.4 cm, both surfaces appressed pubescent, base cuneate, apex acute; lateral veins 8 or 9 pairs, conspicuous. Inflorescences terminal and axillary, capitate, 3.5–4 cm in diam., 30–50-flowered; peduncle pendulous, 2–2.5(–5) cm, white sericeous at anthesis, glabrescent; bracts caducous, leaflike, narrowly lanceolate. Calyx ca. 15 mm, exterior densely white sericeous; lobes 4, yellow adaxially, ovate, ca. 3.5 × 2.5 mm, abaxially densely sericeous, apex acute or rounded. Disk scale lacerate. Ovary ellipsoid, ca. 5 mm, uniformly densely grayish white sericeous; style pubescent, ca. 2 mm; stigma globose, ca. 3 mm. Drupe ovoid, densely sericeous. Fl. late winter and early spring, fr. summer.

Forests, moist places; 1000–2500(–3500) m. E Xizang, NW Yunnan [Bhutan, India, N Myanmar, Nepal].

**3. *Edgeworthia chrysantha*** Lindley, J. Hort. Soc. London 1: 148. 1846.

结香 *jie xiang*

*Edgeworthia papyrifera* Siebold & Zuccarini; *E. tomentosa* (Thunberg) Nakai, comb. rej.; *Magnolia tomentosa* Thunberg, nom. utique rej.

Shrubs to 0.7–1.5 m tall, deciduous, branching usually trichotomous. Branchlets brown, strong, stout, usually pubescent when young. Leaves falling before anthesis; leaf blade oblong, lanceolate, or oblanceolate, 8–20 × 2.5–5.5 cm, both surfaces whitish gray sericeous, more densely so abaxially, base gradually narrowed, cuneate, apex apiculate; lateral veins 10–13 pairs, slender, curved, pubescent. Inflorescences terminal and axillary, capitate, 30–50-flowered; peduncle 1–2 cm, grayish white hirsute; bracts ca. 10, pilose. Flowers fragrant. Calyx yellow inside, 13–20 × 4–5 mm; tube exterior densely white sericeous; lobes 4, ovate-lanceolate, ca. 3.5 × 3 mm. Anthers subovoid, ca. 2 mm. Disk shallowly cup-shaped, margin irregular. Ovary ovoid, ca. 4 × 2 mm, apex sericeous; style glabrous, ca. 2 mm; stigma globose, ca. 3 mm. Drupe ellipsoid, ca. 8 × 3.5 mm, apex pubescent. Fl. late winter and early spring, fr. spring–summer. *2n* = 36\*.

• Forests, shrubby slopes, also cultivated. Fujian, Guangdong, Guangxi, Guizhou, Henan, Hunan, Jiangxi, Yunnan, Zhejiang [cultivated and naturalized in Japan].

The name *Edgeworthia chrysantha* was published a few weeks earlier in 1846 than *E. papyrifera* and therefore has priority. The oldest name, *Magnolia tomentosa*, was never generally taken up and was formally rejected to protect *E. papyrifera*. This means that Nakai's *E. tomentosa* is also rejected. "*Daphne papyrifera*" is not a validly published name: D. Don (Prodr. Fl. Nepal.: 68. 1825) merely cited "*D. papyrifera* Buchanan-Hamilton" as a synonym of *D. odora*; later, Siebold (Verh. Batav. Genootsch. Kunsten 12: 22. 1830) commented on the value of "*D. papyrifera*" for paper-making, referring to *E. chrysantha* as currently understood, but this is not acceptable as a validating description or diagnosis (see Art. 32.3 of the *Vienna Code*).

4. *Edgeworthia albiflora* Nakai, J. Arnold Arbor. 5: 82. 1924.

白结香 bai jie xiang

Shrubs to 1–5 m tall, branching usually trichotomous. Branchlets brownish yellow, slender; leaf scars visible, ca. 2 mm wide. Leaves lasting 2 years; petiole 2–10 mm, pubescent; leaf blade green adaxially, grayish green abaxially, oblanceolate, 3.5–15 × 1–6 cm, abaxially glabrous or puberulous along midrib, adaxially glabrous, base gradually narrowed, margin slightly revolute, apex acute; lateral veins 8–10 pairs, conspic-

uous. Inflorescences subterminal on branches, capitate, 30–50-flowered; peduncle 0.5–2.3 cm, densely sericeous. Calyx white inside, ca. 14 mm, exterior densely white sericeous; lobes 4, broadly ovate, 2.5–3 × ca. 1 mm, apex acute. Anthers oblong, ca. 1.5 mm, base rounded. Disk lacerate. Ovary ellipsoid, ca. 3.5 mm, apex fascicled white sericeous; style puberulous, ca. 3 mm; stigma clavate, ca. 2 mm. Drupe ovoid, ca. 4 mm, apex sericeous.

- Forests, valleys; 1000–1200 m. SW Sichuan (Huili, Miya).

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