

117. DENDROLOBIUM (Wight & Arnott) Bentham in Miquel, Pl. Jungh. 215, 216. 1852.

假木豆属 *jia mu dou shu*

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Desmodium subg. *Dendrolobium* Wight & Arnott, Prodr. Fl. Ind. Orient. 223. 1834.

Shrubs or small trees. Leaves 3-foliolate or rarely 1-foliolate, stipulate and stipellate; leaflets entire or shallowly undulate, terminal leaflet larger than lateral ones, lateral leaflets often oblique at base. Inflorescences axillary, subumbellate or umbellate to shortly racemose, densely flowered; bracts scarious, striate. Calyx campanulate or tubular, 5-lobed; upper 2 lobes connate, appearing 4-lobed or minutely 2-toothed at apex; lower lobe longer than others. Corolla white or pale yellow; standard obovate, elliptic, or nearly orbicular, clawed, not auriculate; wings narrowly oblong, clawed, auriculate or not. Stamens monadelphous. Ovary sessile, (1 or)2–8-ovuled. Legume ± moniliform, 1–8-jointed, indehiscent when mature. Seed distinctly rim-arillate; cotyledons epigeous.

Eighteen species: tropical and subtropical Asia and Australia; five species (one endemic) in China.

- 1a. Legume 1-jointed; terminal leaflet narrowly oblong to narrowly oblong-lanceolate, 2–5 × 0.9–1.9 cm 1. *D. lanceolatum*
- 1b. Legume 2–8-jointed; terminal leaflet usually elliptic-ovate to broadly elliptic-ovate, length:width ratio < 2:1.
 - 2a. Legume usually 2-jointed; terminal leaflet shorter than 3 cm; lateral veins 5–9 on each side of midvein and not reaching margin 2. *D. dispersum*
 - 2b. Legume 3–8-jointed; terminal leaflet longer than 3 cm; lateral veins 7–17 on each side of midvein and reaching margin.
 - 3a. Lower calyx lobes ca. as long as other lobes; terminal leaflet acute or obtuse at apex 4. *D. umbellatum*
 - 3b. Lower calyx lobes longer than other lobes; terminal leaflet acuminate, rounded, or sometimes acute at apex.
 - 4a. Young shoots sharply triangular; terminal leaflet narrowly obovate-elliptic, apex acuminate to long acuminate; umbels 20–30-flowered 3. *D. triangulare*
 - 4b. Young shoots terete; terminal leaflet not as above; umbels 10–20-flowered.
 - 5a. Terminal leaflet elliptic to orbicular or ovate to broadly ovate, lateral leaflets ± oblique at base; keel distinctly broader than wings 4. *D. umbellatum*
 - 5b. Terminal leaflet rhombic or obovate, lateral leaflets usually distinctly oblique at base; keel slightly broader than wings 5. *D. rugosum*

1. *Dendrolobium lanceolatum* (Dunn) Schindler, Repert. Spec. Nov. Regni Veg. 20: 278. 1924.

单节假木豆 *dan jie jia mu dou*

Shrubs, usually 1–3 m tall. Branches glabrescent. Leaves 3-foliolate; petiole 0.5–2 cm; terminal leaflet blade oblong or oblong-lanceolate, 2–5 × 0.9–1.9 cm, lateral leaflets smaller, abaxially appressed pubescent, adaxially glabrous, lateral veins 4–7 on each side of midvein, not reaching margin, both ends obtuse or acute. Inflorescences subumbellate, 1–1.5 cm, ca. 10-flowered. Pedicel ca. 2 mm, densely appressed pubescent. Calyx ca. 4 mm; upper lobe broader, other lobes narrower. Corolla white or pale yellow; standard elliptic, 6–9 × 5–6 mm, clawed; wings narrowly oblong, 5–6 × 1.5–2 mm; keel nearly falcate, 7–9 × ca. 2.5 mm. Stamens 7–8 mm. Pistil 7–8 mm; ovary pilose; style ca. 7 mm. Legume broadly elliptic or nearly orbicular, 4–10 × 3–7 mm, sessile, 1-jointed, glabrous, distinctly reticulate veined. Seed broadly elliptic, ca. 3 × 2 mm. Fl. May–Aug, fr. Sep–Nov.

Grassy riverbanks, thickets or sparse forests on mountain slopes; 100–800 m. Fujian, Hainan [Cambodia, Laos, Thailand, Vietnam].

- 1a. Legume broadly elliptic or nearly orbicular, 8–10 × 6–7 mm 1a. var. *lanceolatum*
- 1b. Legume nearly orbicular, 4–5.5 × 3–4 mm 1b. var. *microcarpum*

1a. *Dendrolobium lanceolatum* var. *lanceolatum*

单节假木豆(原变种) *dan jie jia mu dou (yuan bian zhong)*

Lespedeza lanceolata Dunn, J. Linn. Soc., Bot. 35: 488. 1903; *Desmodium dunnii* Merrill.

Legume broadly elliptic or nearly orbicular, 8–10 × 6–7 mm.

Grassy riverbanks, thickets or sparse forests on mountain slopes; 100–800 m. Hainan [Cambodia, Laos, Thailand, Vietnam].

1b. *Dendrolobium lanceolatum* var. *microcarpum* H. Ohashi, Ginkgoana 1: 65. 1973.

小果单节假木豆 *xiao guo dan jie jia mu dou*

Legume nearly orbicular, 4–5.5 × 3–4 mm.

Fujian [Thailand].

2. *Dendrolobium dispersum* (Hayata) Schindler, Repert. Spec. Nov. Regni Veg. 22: 271. 1926.

两节假木豆 *liang jie jia mu dou*

Desmodium dispersum Hayata, Icon. Pl. Formosan. 3: 69. 1913.

Shrubs or small trees, 2–3 m tall. Branches glabrescent.

Leaves 3-foliolate; petiole 5–12 mm; terminal leaflet blade obovate or elliptic, 1.3–2.5 × 1–1.5 cm, lateral leaflets nearly equal or slightly smaller, abaxially densely appressed sericeous especially on midvein, adaxially sparsely pubescent, lateral veins 5–9 on each side of midvein, not reaching margin. Inflorescences shortly racemose, 1–2 cm, 5–7-flowered. Pedicel 2.5–5 mm. Calyx campanulate; lower lobes narrowly triangular; upper lobe broadly ovate, entire or minutely 2-toothed at apex. Corolla white; standard broadly elliptic or nearly orbicular, 8–11 × 7–9 mm; wings 7–10 × 2.5–3 mm, clawed at base; keel 8–11 × ca. 3 mm, base shortly clawed. Stamens ca. 8 mm. Pistil ca. 1 cm; ovary densely sericeous; style ca. 7 mm, glabrous. Legume narrowly oblong, 1–2 × 0.5–0.6 cm, usually 2-jointed, extremely rarely 1-jointed, densely appressed sericeous, reticulate veined. Seed elliptic, ca. 4 × 3 mm. Fl. Oct, fr. Oct–Nov.

• Thicket margins near the sea, open places; sea level to 200 m. S Taiwan.

3. *Dendrolobium triangulare* (Retzius) Schindler, Repert. Spec. Nov. Regni Veg. 20: 279. 1924.

假木豆 jia mu dou

Hedysarum triangulare Retzius, Observ. Bot. 3: 40. 1783; *Desmodium cephalotes* (Roxburgh) Wight & Arnott; *D. triangulare* (Retzius) Merrill; *H. cephalotes* Roxburgh.

Shrubs, 1–2 m tall. Young shoots sharply triangular, densely gray sericeous. Leaves 3-foliolate; petiole 1–2.5 cm; terminal leaflet blade narrowly obovate-elliptic, 7–15 × 3–6 cm, lateral leaflets slightly smaller, abaxially long sericeous especially on veins, adaxially glabrous, lateral veins 10–17 on each side of midvein, straight, reaching margin. Umbels 20–30-flowered. Pedicels not equal, densely appressed sericeous. Calyx 5–9 mm; tube 1.8–3 mm. Corolla white or pale yellow; standard broadly elliptic, shortly clawed; wings and keel oblong, base clawed. Stamens 0.8–1.2 cm. Pistil 0.7–1.4 cm; ovary densely pubescent; style 7–12 mm. Legume 2–2.5 cm, slightly arcuate, appressed sericeous, sessile, 3–6-jointed. Seed elliptic, 2.5–3.5 × 2–2.5 mm. Fl. Aug–Oct, fr. Oct–Dec. $2n = 22^*$.

Grassy riverbanks, thickets on mountain slopes; 100–1400 m. Guangdong, Guangxi, Guizhou, Hainan, Taiwan, Yunnan [Cambodia, India, Laos, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand, Vietnam; Africa].

The roots are used medicinally to strengthen bones and build muscle.

4. *Dendrolobium umbellatum* (Linnaeus) Benth in Miquel, Pl. Jungh. 218. 1852.

伞花假木豆 san hua jia mu dou

Hedysarum umbellatum Linnaeus, Sp. Pl. 2: 747. 1753; *Desmodium umbellatum* (Linnaeus) Candolle.

Dwarf shrubs to shrubs or small trees, to 3 m tall. Young shoots terete, densely appressed sericeous. Leaves 3-foliolate; petiole 2–5 cm; terminal leaflet blade elliptic or ovate to orbicular or broadly ovate, 5–14(–17) × 3–7(–8.5) cm, lateral leaflets slightly smaller, abaxially appressed long hairy, adaxially glabrescent, lateral veins 7–12 on each side of midvein, reaching

margin. Umbels often 10–20-flowered. Pedicel 3–7 mm at anthesis, 5–12 mm in fruit. Calyx 4–5 mm, upper lobe 2-toothed at apex. Corolla white; standard broadly obovate or elliptic, 1–1.3 cm × 6–10 mm, clawed; wings narrowly elliptic, 1.1–1.2 cm × 1–2 mm, clawed; keel broader than wings, 1.1–1.2 cm × 3–5 mm, clawed. Stamens ca. 1 cm. Pistil to 1.5 cm; ovary sericeous; style ca. 1.2 cm, glabrous. Legume narrowly oblong, 2–3.5 × 0.4–0.6 cm, (3–)8-jointed; articles broadly elliptic or oblong. Seed elliptic or broadly elliptic, ca. 4 × 3 mm. Fl. Aug–Oct, fr. Nov–Mar.

Seashores. S Taiwan [Cambodia, India, Indonesia, S Japan (Ryukyu Islands), Malaysia, Myanmar, Sri Lanka, Thailand, Vietnam; Africa, Australia, Pacific islands].

5. *Dendrolobium rugosum* (Prain) Schindler, Repert. Spec. Nov. Regni Veg. 20: 279. 1924.

多皱假木豆 duo zhou jia mu dou

Desmodium rugosum Prain, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 66: 137. 1897.

Shrubs, to 2.5 m tall. Branches terete, glabrescent; young shoots 4–6-sided. Leaves 3-foliolate; petiole 1.5–7 cm; terminal leaflet blade rhombic to broadly obovate, 5–15(–17) × (3–)4–13 cm, lateral leaflets 3.5–13 × 2–8 cm, densely appressed tomentose on both surfaces, becoming glabrescent adaxially, lateral veins 9–15 on each side of midvein and reaching margin. Umbels often 10–20-flowered. Pedicel 2–3 mm at anthesis, afterward 3–7 mm. Calyx 5.5–6.5 mm, 4-lobed; upper lobes entire or minutely 2-toothed at apex. Corolla white; standard broadly obovate or broadly elliptic, 9–12.5 × 7.5–10.5 mm, shortly clawed; wings narrowly elliptic, 9.5–12.5 × 3–4.5 mm, base auriculate on both sides, claw 2.5–3 mm; keel 9.5–11.5 × 3.5–4.5 mm, claw 2.5–3 mm. Stamens 10–11 mm. Pistil 11–13.5 mm; ovary densely puberulent; style 9–11.5 mm, puberulent in lower half. Legume narrowly oblong, 13–27 × 4–5.5 mm, 2–5-jointed, densely appressed sericeous, both sutures undulate; articles broadly elliptic or nearly orbicular, 5–8 × 3–5 mm. Seeds transversely elliptic, 2.5–2.7 × 3.7–4 mm.

Snow-mountain ranges, streamsides; 800–2800 m. Yunnan [Cambodia, Laos, Myanmar, Thailand].

