

93. DUNBARIA Wight & Arnott, Prodr. Fl. Ind. Orient. 258. 1834.

野扁豆属 *ye bian dou shu*

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Herbs or woody vines, prostrate or twining. Leaves pinnately 3-foliolate; stipules caducous or absent; stipels usually absent; leaflets with obvious sessile glands abaxially. Inflorescence axillary, 1-flowered to racemose. Bracts caducous or absent; bracteoles usually absent. Calyx campanulate; lobes lanceolate or triangular, lowest one longest. Corolla ± longer than calyx; standard almost circular, obovate or transversely elliptic, base with auricles; wings usually with auricles; keels shorter than wings, slightly curved. Stamens diadelphous; vexillary stamen free; anthers uniform. Ovary stipitate or sessile; ovules many; style filiform, introrse, glabrous; stigma small, terminal, capitate. Legume linear or linear-oblong, dehiscent. Seed hilum long or short; strophiole thin and small.

About 20 species: Asia, Oceania; eight species in China.

Dunbaria was revised by Maesen (Wageningen Agric. Univ. Pap. 98(1). 1998).

Dunbaria merrillii Elmer (usually treated as a synonym of *D. cumingiana* Benth), otherwise known from Indonesia and the Philippines, was recorded from Taiwan (Lan Yu) (Fl. Taiwan, ed. 2, 3: 275, t. 134. 1993). However, the illustration provided is more suggestive of a species of *Cajanus* as it shows a large legume, 10–12 cm, distinctly constricted between the seeds, and twisted after dehiscence.

- 1a. Terminal leaflet usually ca. 2 × as long as wide; ovary and legume sessile or subsessile.
 - 2a. Leaflets ovate, ovate-lanceolate, or lanceolate, 5–9.5 × 2.5–4 cm; flowers in extended racemelike inflorescence, purple 1. *D. fusca*
 - 2b. Leaflets elliptic, ovate-elliptic, or oblong, 1.6–2.6 × 0.5–0.7 cm; flowers solitary, yellow 2. *D. debilis*
- 1b. Terminal leaflet usually about as long as wide; ovary and legume sessile, subsessile, or stipitate.
 - 3a. Ovary sessile; legume stipe absent or extremely short.
 - 4a. Terminal leaflet more than 5 cm, abaxial surface and legume tomentose; inflorescence a long, robust, many-flowered raceme; flowers purple 3. *D. incana*
 - 4b. Terminal leaflet 1.5–4 cm, abaxial surface and legume glabrous or sparsely pubescent; inflorescence a 1- to few-flowered fascicle or short raceme; flowers yellow.
 - 5a. Terminal leaflet orbicular-rhomboid; inflorescence a 1- or 2-flowered fascicle 4. *D. rotundifolia*
 - 5b. Terminal leaflet rhomboid or almost triangular; inflorescence a short raceme, few flowered 5. *D. villosa*
 - 3b. Ovary stipitate; legume stipe more than 6 mm.
 - 6a. Terminal leaflet obtriangular or obovate, both leaf surfaces and legume sparsely pubescent or glabrous; legume stipe 6–10 mm 8. *D. truncata*
 - 6b. Terminal leaflet almost rhomboid or ovate-rhomboid; legume stipe 15–20 mm.
 - 7a. Terminal leaflet usually 1.8–4 cm long and wide, apex acute, both leaf surfaces and legume densely grayish pubescent; legume stipe 15–17 mm 6. *D. podocarpa*
 - 7b. Terminal leaflet usually 5–6 cm long and wide, apex acuminate, both leaf surfaces and legume sparsely pubescent or glabrous; legume stipe ca. 20 mm 7. *D. circinalis*

1. *Dunbaria fusca* (Wallich) Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 45: 225. 1877.

黄毛野扁豆 *huang mao ye bian dou*

Phaseolus fuscus Wallich, Pl. Asiat. Rar. 1: 6. 1830; *Atylosia crinita* Dunn.

Herbs, annual. Stems twining, up to 3 mm thick, densely pubescent. Leaves pinnately 3-foliolate; stipules absent or deciduous; petiole 3–6.5 cm, densely pubescent; petiolules 1–2 cm; leaflets papery, subequal; terminal leaflet ovate, ovate-lanceolate, or lanceolate, 5–9.5 × 2.5–4 cm, abaxial surface densely pubescent and with reddish glands, adaxial surface glabrous or sparsely pubescent, basal veins 3, lateral veins 3 or 4 pairs, flat or slightly convex, base rounded or subcuneate, apex acute to acuminate; lateral leaflets similar but smaller. Raceme axillary, slightly robust, 4–15 cm, glabrous or sparsely pubescent, usually several or more flowered; bracts absent. Flower ca. 1.5 cm;

pedicel 2–4 mm. Calyx campanulate, 4–7 mm, hirsute, glabrescent, and with brown glands, 4-lobed; lobes triangular or almost triangular, shorter than tube, lowest longer, linear-lanceolate. Corolla purple, ca. 1.3 cm; standard transversely elliptic, base auriculate on both sides; wings oblong, auriculate on one side; keels inflexed to almost right angle. Ovary sessile, densely golden hirsute. Legume black-brown, linear-oblong, 4–6 × 0.4–0.7 cm, hirsute; stipe absent. Seeds 5–7, brown, semiorbicular, ca. 4 × 4 mm. Fl. Jul–Sep, fr. Oct–Dec.

Slopes, open grasslands; 200–1200 m. Guangdong, Guangxi, Hainan, Yunnan [India, Laos, Malaysia, Myanmar, Thailand, Vietnam].

2. *Dunbaria debilis* Baker in J. D. Hooker, Fl. Brit. India 2: 218. 1876.

小叶野扁豆 xiao ye ye bian dou

Dunbaria parvifolia X. X. Chen; *D. singuliflora* F. Mueller.

Herbs. Stems twining, slender, pubescent. Leaves pinnately 3-foliolate; stipules lanceolate, 1.5–3 mm, pubescent; petiole slender, 0.5–2 cm, sparsely pubescent; stipels extremely small or inconspicuous; petiolules short, ca. 1 mm, pubescent; leaflets papery; terminal leaflet elliptic, ovate-elliptic, or oblong, 1.6–2.6 × 0.5–0.7 cm, both surfaces densely pubescent, abaxial surface with light brown sessile glands, basal veins 3, slender, base rounded, apex obtuse or almost round; lateral leaflets obliquely elliptic, 1–2.1 × 0.5–0.8 cm. Inflorescence 1-flowered; pedicel ca. 4 mm. Calyx campanulate, pubescent; lobes lanceolate, lowest longest, ca. 5 mm, longer than tube. Corolla yellow, 0.9–1.1 cm; standard suborbicular, base with lobed auricles on both sides, apex slightly emarginate; wings oblong, base with acute auricles; keels slightly shorter than wings, almost round. Ovary sessile, pubescent, with light brown glands; style slender; stigma small. Legume oblong, 3.5–4 × ca. 0.7 cm, slightly curved, compressed, pubescent, apex beaked; stipe absent. Fl. Jun–Aug, fr. Mar–Nov.

Mountain slopes, roadsides, grasslands. Guangxi [NE India; Australia].

3. *Dunbaria incana* (Zollinger & Moritzi) Maesen, Wageningen Agric. Univ. Pap. 98(1): 61. 1998.

白背野扁豆 bai bei ye bian dou

Phaseolus incanus Zollinger & Moritzi, Syst. Verz. 4: 1846; *Dunbaria harmandii* Gagnepain; *D. nivea* Miquel.

Herbs. Stems twining, densely villous. Leaves pinnately 3-foliolate; stipules small, deciduous; petiole 4–8(–11) cm, densely tomentose; terminal leaflet rhomboid, 5–7(–9.5) × 4.5–6.5 cm, abaxial surface tomentose, with obvious dark brown sessile glands, basal veins 5, lateral veins 2–4 pairs, visible from both sides, base broadly cuneate, rounded, or nearly truncate, margin slightly sinuate, apex acuminate to acute; lateral leaflets smaller, obliquely ovate, apex mucronate. Racemes axillary or lateral, robust, 5–15 cm, densely villous; bracts ovate-lanceolate, deciduous; pedicel 2–5 mm, densely tomentose. Calyx campanulate, 5–8 mm, tomentose, with red glands; lobes triangular, unequal, lowest longest, shorter than tube. Corolla purple; standard oblate, with 2 acute auricles at base; wings obovate-oblong, base with obtuse auricles; keels curved to semicircular. Ovary sessile, filiform, villous and red glandular. Legume linear-oblong, 4–6.5 × 0.7–0.9 cm, tomentose, apex with beak 2–3 mm; stipe absent. Seeds 6–8, almost circular, ca. 5 mm in diam. Fl. Feb–Apr, fr. May–Jun.

Open forests. Hainan [Indonesia (Java), Laos, Malaysia, Thailand, Vietnam].

4. *Dunbaria rotundifolia* (Loureiro) Merrill, Philipp. J. Sci.

15: 242. 1919.

圆叶野扁豆 yuan ye ye bian dou

Indigofera rotundifolia Loureiro, Fl. Cochinch. 2: 458. 1790; *Atylosia punctata* (Wight & Arnott) Dalzell; *Dolichos punctatus* Wight & Arnott; *Dunbaria punctata* (Wight & Arnott) Benth.

Herbs, perennial. Stems twining, slender, sparsely pubescent. Leaves pinnately 3-foliolate; stipules small, deciduous; petiole 0.8–2.5 cm, densely pubescent; petiolules 1–2 mm, densely pubescent; leaflets papery; terminal leaflet orbicular-rhomboid, 1.5–2.7(–4) cm, slightly wider than long, sparsely pubescent or almost glabrous, with dark brown glands, basal veins 3, base rounded, margin sinuate, apex obtuse; lateral leaflets smaller, oblique. Inflorescence 1- or 2-flowered; bracts narrowly ovate, 1–2 mm. Calyx campanulate, 2–5 mm, pubescent, with dense red to dark brown glands; lobes ovate-lanceolate, shorter than tube. Corolla yellow, 1–1.5 cm; standard obovate-orbicular, base with 2 auricles, apex slightly emarginate; wings obovate-oblong, slightly curved, mucronate; keels falcate, apex obtusely beaked. Ovary sessile. Legume linear-oblong, 3–5 × ca. 0.8 cm, slightly curved, compressed, pubescent or almost glabrous, apex with needlelike beak, stipe absent. Seeds 6–8, dark brown, suborbicular, ca. 3 mm in diam. Fl. Sep–Oct, fr. Oct–Nov. $2n = 22$.

Slopes, grasslands; ca. 600 m. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Jiangsu, Jiangxi, Sichuan, Taiwan [Bangladesh, Cambodia, India, Indonesia, Laos, Myanmar, Nepal, Philippines, Thailand, Vietnam; Australia].

5. *Dunbaria villosa* (Thunberg) Makino, Bot. Mag. (Tokyo) 16: 35. 1902.

野扁豆 ye bian dou

Glycine villosa Thunberg in J. A. Murray, Syst. Veg., ed. 14, 659. 1784.

Herbs, perennial. Stems twining, slender, sparsely pubescent. Leaves pinnately 3-foliolate; stipules small, usually deciduous; petiole slender, 0.8–2.5 cm, pubescent; stipels extremely small; petiolules ca. 1 mm, densely pubescent; leaflets thinly papery; terminal leaflet larger, rhomboid or almost triangular, both surfaces sparsely pubescent, with reddish sessile glands, basal veins 3, lateral veins 1 or 2 pairs, base rounded, broadly cuneate, or almost truncate, apex acute or acuminate; lateral leaflets much smaller, oblique, 1.5–3.5 × 2–3.7 cm. Raceme or compound raceme axillary, 1.5–5 cm, densely pubescent, 2–7-flowered. Flower ca. 1.5 cm. Calyx campanulate, 5–9 mm, 4-lobed; lobes lanceolate or linear-lanceolate, unequal, usually lower one longest. Corolla yellow; standard almost orbicular or transversely elliptic, base auriculate on one side; keels similar to wings, but curved, shortly clawed, apex beaked. Ovary densely pubescent and with rubiginous glands. Legume linear-oblong, 3–5 × ca. 0.8 cm, compressed, pubescent or almost glabrous, apex beaked, stipe ± absent. Seeds 6 or 7, black, suborbicular, ca. 4 × 3 mm. Fl. Jul–Sep, fr. Aug–Oct.

Open places, roadsides; 1800–2100 m. Anhui, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Taiwan, Zhejiang [Cambodia, India,

Indonesia, Japan, Korea, Laos, Philippines, Thailand, Vietnam].

6. *Dunbaria podocarpa* Kurz, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 43: 185. 1874.

长柄野扁豆 chang bing ye bian dou

Herbs, perennial, 1–4 m. Stems twining, densely pubescent. Leaves pinnately 3-foliolate; stipules small, deciduous; petiole 1.5–4 cm, densely pubescent; stipules usually absent; petiolules 1–2 mm, pubescent; terminal leaflet rhomboid, 1.8–4 × 1.8–4 cm, both surfaces densely pubescent, abaxial surface with red glands, basal veins 3, lateral veins 1–3 pairs, base obtuse, rounded, or subtruncate, apex acute; lateral leaflets smaller, obliquely ovate. Raceme axillary, 1- or 2(–4)-flowered; peduncle 0.5–1 cm, densely pubescent. Flowers 1.5–2 cm; pedicel 2–6 mm, pubescent. Calyx campanulate, pubescent, with golden yellow glands; lobes ovate-lanceolate. Corolla yellow; standard transversely elliptic, longer than wide, base with 2 auricles; wings narrowly elliptic, base with curved auricle at one side; keels very curved, without auricle, apex long beaked. Ovary filiform, pubescent, with orange glands, apex with long beak. Legume linear-oblong, 5–8 × 0.9–1.1 cm, densely pubescent, with orange glands, apex with long beak; stipe 1.5–1.7 cm. Seeds 7–11, black, suborbicular, compressed, ca. 4 mm. Fl. and fr. Jun–Nov.

Mountain slopes, roadsides, open fields; below 100–800 m. Fujian, Guangdong, Guangxi, Hainan [Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Thailand, Vietnam].

7. *Dunbaria circinalis* (Benth) Baker in J. D. Hooker, Fl. Brit. India 2: 219. 1876.

卷圈野扁豆 juan quan ye bian dou

Atylosia circinalis Benth in Miquel, Pl. Jungh. 244. 1852.

Vines, woody. Stems slender, pubescent when young, then glabrous to almost glabrous. Leaves pinnately 3-foliolate; stipules small, narrowly triangular, ca. 2 mm, usually deciduous; petiole 2–4 cm, pubescent; petiolules 1–2 mm, pubescent; leaflets thinly papery; terminal leaflet larger, almost rhomboid or broadly ovate-rhomboid, 5–6 × 4–5.8 cm, abaxial surface sparsely pubescent and with dense yellowish brown sessile glands, adaxial surface almost glabrous, basal veins 3, base broadly rounded or subcuneate, apex acuminate; lateral leaflets obviously small, broadly obliquely ovate. Raceme axillary, 8–13 cm, pubescent, many flowered; pedicels 1–2 mm. Calyx ca. 8 mm, 5-lobed; lower lobe longest, subequal to tube. Corolla yellow, usually longer than calyx; standard transversely elliptic, 1–1.4 × 1.5–2 cm, base with 2 auricles; wings obovate-elliptic, base long clawed with auricle at one side; keels semiorbicular, long clawed. Legume linear-oblong, 5–7.5 × 0.8–1.2 cm, pubescent when young, later glabrous, apex with small beak, stipe ca. 2 cm. Seeds 6–10, dark brown, suborbicular, ca. 4 × 5 mm, with obvious strophiole. Fl. Sep–Oct, fr. Oct–Jan.

Grassy slopes. Yunnan [India, Indonesia, Laos, Myanmar, Thailand, Vietnam].

8. *Dunbaria truncata* (Miquel) Maesen, Wageningen Agric. Univ. Pap. 98(1): 89. 1998.

鸽子豆 ge zi dou

Dolichos truncatus Miquel, Fl. Ned. Ind. 1: 186. 1855;
Dunbaria henryi Y. C. Wu.

Herbs. Stems twining, slender, sparsely pubescent. Leaves pinnately 3-foliolate; stipules small, linear-lanceolate, ca. 3 mm, deciduous; petiole 1.1–4 cm, sparsely pubescent; petiolules ca. 1 mm, pubescent; leaflets thinly papery; terminal leaflet broadly triangular or broadly ovate, 1.8–4.5 × 1.8–4.5 cm, both surfaces pubescent, sometimes with orange sessile glands, denser abaxially, basal veins 3, lateral veins 2 or 3 pairs, base almost truncate or sometimes broadly cuneate, apex acute or acuminate; lateral leaflets smaller, broadly ovate, usually oblique. Raceme axillary, 1.5–6 cm, sparsely pubescent, 2- to several flowered. Flower 1.5–1.7 cm; pedicel ca. 2 mm, pubescent; bracteoles small, linear-lanceolate. Calyx ca. 8 mm, densely pubescent, with red glands; lobes linear-lanceolate, unequal, shorter than or subequal to tube. Corolla yellow; standard almost orbicular, longer than wide, base with 2 auricles; wings obovate, inflexed, base with curved auricles; keels slightly inflexed, semicircular. Ovary stipitate, pubescent, with glands; ovules 7–10; style slender, upper glabrous, apex slightly inflated. Legume linear-oblong, 3–6 × 0.5–0.8 mm, compressed, sparsely pubescent, acute at both sides, apex beaked, stipe 0.6–1 cm. Seeds 5–8, reddish brown, almost orbicular, 3–4.5 mm in diam. Fl. Feb–Nov, fr. Jun–Dec.

Roadsides, open fields; 100–800 m. Guangxi, Hainan [Indonesia, Myanmar, Vietnam; Australasia].

