
大翼豆属 da yi dou shu

Wu Delin (吴德邻 Wu Te-lin); Mats Thulin


Erect or climbing herbs. Stipules not produced below point of insertion, strongly striate; stipels similar but smaller; leaves pinnately 3-foliolate. Racemes long, flowers paired or several at nodes of rachis. Bracts sometimes persistent. Calyx tube narrowly campanulate or cylindric; lobes 5, equal or unequal. Corolla white, purplish, violet, or black; standard reflexed, obovate or orbicular, with 2 small reflexed auricles at base; wings long, much longer than standard, very broad, obovate or suborbicular, erect, 2-auricled below base of limb, long clawed, claw partly adnate to staminal tube; keel twisted, long clawed. Stamens diadelphous; vexillary stamen free, remainder connate; anthers uniform. Ovary subsessile, few to many ovuled; style twice ca. 90° incurved, thickened in upper part. Legumes linear, subterete or compressed, straight or falcate. Seeds numerous or few; hilum short.

About 20 species: tropical America; introduced and cultivated elsewhere; two species (both introduced) in China.

1a. Plants perennial, prostrate; stipules ovate, 4–5 mm; leaflets ovate to rhombic, abaxially silvery tomentose, adaxially pubescent ............................................................................................................................................ 1. M. atropurpureum

1b. Plants annual or biennial, erect, sometimes prostrate or climbing; stipules lanceolate, 5–10 mm; leaflets narrowly elliptic to ovate-lanceolate, abaxially densely pubescent or sparsely pilose, adaxially glabrous .................. 2. M. lathyroides


紫花大翼豆 zi hua da yi dou

Phaseolus atropurpureus Mociño & Sessé ex Candolle, Prodr. 2: 395. 1825.

Perennial prostrate herbs, sometimes rooting at nodes. Stems pubescent or tomentose. Stipules ovate, 4–5 mm, pilose; petiole 0.5–5 cm; leaflets ovate to rhombic, 1.5–7 × 1.3–5 cm, sometimes lobed, lateral ones oblique, lobed on outer side, abaxially silvery tomentose, adaxially pubescent, base rounded, apex obtuse or acute. Inflorescences with peduncle 10–25 cm and rachis 1–8 cm. Calyx campanulate, ca. 6 mm, white pilose. Corolla deeply blackish purple; standard 1.5–2 cm, with long claw. Legumes linear, 5–9 cm × ca. 4 mm, apex rostrate, 12–15-seeded. Seeds marbled with brown and black striae, oblong-elliptic, ca. 4 mm.

Cultivated. Guangdong, Taiwan (also naturalized) [native to tropical America; widely cultivated and naturalized in the tropics].

This species is used for forage.


大翼豆 da yi dou


Annual or biennial herbs, erect, 0.6–1.5 m tall, sometimes prostrate or twining. Stems densely pubescent. Stipules lanceolate, 5–10 mm; petiole 0.5–5 cm; leaflets narrowly elliptic to ovate-lanceolate, 3–8 × 1–3.5 cm, abaxially densely pubescent or sparsely pilose, adaxially glabrous, sometimes slightly lobed, base cuneate, apex acute. Inflorescences with peduncles 15–40 cm, flowers paired in upper part of rachis. Calyx tubular-campanulate; teeth shortly triangular. Corolla purple-red; standard suborbicular, ca. 1.5 cm, with pale claw. Legumes linear, 5.5–10 cm × 2–3 mm, densely pubescent, 18–30-seeded. Seeds brown or with brown and black markings, obliquely oblong, ca. 3 mm.

Cultivated. Fujian, Guangdong, Taiwan (also naturalized) [native to tropical America; widely cultivated and naturalized in the tropics].

This species is used as a cover crop.