

## 21. Tribe PSORALEEAE

补骨脂族 bu gu zhi zu

Wei Zhi (韦直); Michael G. Gilbert

Small trees, shrubs, or subshrubs, rarely herbs, glandular-punctate. Leaves pinnate or simple or reduced to scales, entire or denticulate, alternate to distichous; stipules adnate to petiole, fused or free, amplexicaul; stipels absent. Inflorescences spicate, racemose, or capitate, or leafy-paniculate. Flowers fasciculate, 1–6 per node. Calyx campanulate, upper lobes partially fused. Corolla papilionaceous, petals free from staminal tube; standard weakly clawed, rarely with appendages; wings sculptured, lamellate; keel purple tipped. Vexillary stamen free from base or fused with others into an adaxially split sheath, rarely into a closed tube; anthers uniform, alternately versatile and basifixed. Ovary 1-ovuled, hairy or sparsely covered with recurved club-shaped glands; style upcurved, penicillate. Legumes indehiscent, usually 1-seeded. Seeds exarillate.

Nine genera and ca. 185 species: five genera in North America south to Mexico, two genera ± restricted to S Africa, one genus in the Mediterranean region, and one genus (*Cullen*) mostly in Australia; one species in China.

### 134. CULLEN Medikus, Vorles. Churpfälz. Phys.-Öcon. Ges. 2: 381. 1787.

补骨脂属 bu gu zhi shu

Shrublets or herbs, with black glands, especially on calyx. Leaves digitately or pinnately 1–5-foliolate; stipules embracing stem by broad base; leaflets entire or denticulate. Inflorescences axillary, capitate, spicate, racemose, or fasciculate; bracts membranous, each often embracing 2 or 3 flowers. Calyx 5-toothed. Corolla purple, blue, or white; petals subequal in length, clawed. Stamens diadelphous; vexillary stamen free or ± connate with others. Ovary sessile or shortly stipitate, 1-ovuled. Legume ovoid, indehiscent, with persistent calyx; pericarp adhering to seed. Seed without strophiole, with very short funicle.

About 33 species: mostly in Australia (ca. 23 species), one in Indonesia, one from China through India and Oman to Somalia, three in SW Asia, two in the Mediterranean region, and about three in S Africa; one species in China.

**1. *Cullen corylifolium*** (Linnaeus) Medikus, Vorles. Churpfälz. Phys.-Öcon. Ges. 2: 381. 1787.

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*Psoralea corylifolia* Linnaeus, Sp. Pl. 2: 762. 1753;  
*Lotodes corylifolia* (Linnaeus) Kuntze; *P. pattersoniae* Schönland; *Trifolium unifolium* Forsskål.

Herbs, annual, 60–150 cm tall. Stems erect, branched, sparsely white puberulent, gland-dotted. Leaves 1-foliolate, sometimes with a much smaller lateral leaflet; stipules falcate, 7–8 mm; petiole 2–4.5 cm; leaf blade broadly ovate, 4.5–9 × 3–6 cm, both surfaces subglabrescent and black gland-dotted, base

rounded or subcordate, margin undulate or irregularly coarsely dentate, apex obtuse or acute. Inflorescence axillary, densely congested, capitate or shortly racemose, 10–30-flowered; peduncles 3–7 cm; bracts membranous. Calyx 4–6 mm. Corolla blue to yellowish; standard obovate, ca. 5.5 mm. Legume black, ovoid, ca. 5 mm, glabrous, apex with a short tip, irregularly reticulate. Seed dark brown, reniform, 3–5 × 2–4 mm. Fl. Jul–Aug, fr. Sep–Oct.

Warm valleys, cultivated in C and E China. Guizhou, Sichuan, Yunnan [Bangladesh, India, Indonesia, Malaysia, Myanmar, Pakistan, Sri Lanka; E Africa (Somalia), SW Asia (S Arabian Peninsula)].

*Cullen corylifolium* is used medicinally.