

Parkinsonia

Woody shrub or small tree with bipinnate leaves with 1-2 pairs of pinnae, the leaflets minute. Flowers yellow, lacking bracteoles. Stamens 10, the filaments free. Pods 30-100mm long, containing 2-5 seeds.

Parkinsonia aculeata

Jerusalem thorn, parkinsonia

Woody shrub or tree to 10m tall, with green spreading branches armed with almost straight spines representing modified leaf rachises. Stipules minute. Leaves usually with one pair of pinnae. Petiole c. 2mm long. Pinnae flattened, green, usually 100-300mm long. Leaflets 2-4mm long, more or less alternately arranged, hairless or sparsely hairy, rounded at the tip.

Inflorescence an axillary raceme 50-200mm long, including the short peduncle. Flowers borne singly each on a c. 10mm pedicel within the axil of a c. Imm deciduous bract. Calyx c. 7mm long, the 5 sepals similar, very sparsely hairy, free. Petals bright yellow, similar, c. 10mm long, hairy towards the base.

Pod 30-100mm long, straight, much indented between the widely separated 2-5 seeds, brown when ripe. Seeds c. 8mm long, 4mm wide, oval, plump, dark brown.

Distribution: Bk., Co., G.N., Lei., Mi., Mo., N.K., P.C., S.K., Wa. Also N.T., W.A., N.S.W., Indonesia. A South American species introduced from the West Indies as a shade and



Parkinsonia aculeata, Ayr, 19°47'S, 147°14'E.

fodder tree and now widely naturalized in north-west Queensland.

Notes: Leaves are eaten by sheep but are not favoured by cattle. May cause weed problems in northern pastures. Produces little forage but has some potential overseas for production of fuel wood. A minor source of pollen for honey bees. Several studies indicate that parkinsonia does not nodulate.

References: 3, 16, 17, 18, 37, 44, 111, 128, 165, 166, 277, 287.

Petalostylis

Shrub, the leaves pinnate, with a terminal leaflet, lacking stipels. Flowers yellow and red. Stamens 5, 3 with curved 5-7mm anthers, 2 with minute staminodes. Style yellow, petal-like, boat-shaped, c. 10mm long, with a c. 5mm green stalk at the base and a minute stigma at the tip. Pod flattened, containing 4-6 seeds. The genus is endemic to Australia.

Petalostylis labichioides

Butterfly bush

Erect or spreading shrub to 2m tall. Stems sparsely to densely covered with minute adpressed hairs. Stipules 2-3mm long, very deciduous. Leaves with 1-27 pairs of usually alternate leaflets and a terminal leaflet. Petiole 3-8mm long, rachis 0-60mm long. Leaflets 3-20mm long, 2-5mm wide, broadest about the mid-point and tapering to each end or broadest above the mid-point and

rounded at the tip or heart-shaped, sparsely hairy.

Flowers single in leaf axils, borne on 10-25mm peduncles or 1-5 in a short raceme, each flower subtended by a pair of 2-3mm bracts. Calyx 10-15mm long, minutely hairy, the sepals free to the base, narrow and pointed. Petals yellow-orange, the dorsal petal with a prominent red ring towards the base, 15-20mm long, c. 15mm wide.

Pod 25-30mm long, 7-8mm wide, flat, hairless and black when ripe, containing 4-6 seeds. Seeds



Petalostylis labichioides var. *cassioides*, Burketown-Doomadgee, 17°54'S, 139°17'E.

3.5-5mm long, 2.5-3.5mm wide, flattened, pear-shaped, light brown to dark reddish brown, mottled, shiny.

Key to varieties

- Leaf rachis 10-50mm long;
leaflets narrow, tapering to a point var. *labichioides*
Leaf rachis 45-90mm long;
leaflets broader above the mid-point, the tip broadly rounded, often indented var. *cassioides*

Distribution: Bk., Co., D.D., G.N., G.S., Lei., Ma., Mi., S.K., Wa. Also N.T., W.A., S.A., N.S.W.

Notes: Rarely grazed. An attractive shrub quite common on sandy soils in semi-arid districts. This species apparently does not nodulate. Self-pollinating.

References: 3, 17, 27, 43, 53, 89, 111, 132, 165, 172, 174, 287, 331.

Phaseolus

Herb with twining stems and pinnate leaves with three leaflets. Stipels present. Flowers small, white to pink, the keel spirally twisted. Stamens 10, 9 filaments joined, 1 free. Style thin below, the apical part thickened, curving through at least 360°, bearded. Pods 50-110mm long, several-seeded.

Phaseolus lunatus

Lima bean, sieva bean

Perennial or biennial, with hairless or-hairy stems to c. 4m long. Stipules 1-3.5mm long, triangular, persistent. Petiole 15-190mm long, rachis 7-30mm long; stipels 0.5-1mm long. Leaflets 30-150mm long, 12-100mm wide, broadest towards the base, the margins almost straight or curving to the narrowly angled tip, the base more or less rounded, hairless or sparsely covered with minute hairs on both surfaces.



Phaseolus lunatus, Mexico, Cult.

Inflorescence a few to several-flowered axillary raceme 30-100mm or more long, including the peduncle. Flowers borne in clusters of 2-3 within the axils of minute bracts, each on a 2-10mm pedicel which bears a pair of 1.5-2mm bracteoles at the tip. Calyx c. 3mm long, hairy, the dorsal sepals joined to form a lip indented at the tip, the sepals otherwise joined for c. $\frac{2}{3}$ their length, the teeth broadly triangular. Standard white to pink, c. 4mm tall, 7mm wide, sometimes sparsely hairy on the back. Wings c. 9mm long from base of calyx, exceeding the narrow keel which is spirally curved for 1.5 turns.

Pod 50-110mm long, 10-25mm wide, flattened, hairless or hairy, slightly curved, containing 3-4 seeds. Seeds usually white or purple, 9-26mm long, 4-17mm wide, kidney-shaped, rather flattened.

Distribution: D.D., Mo. Native of tropical America, widely cultivated throughout the tropics, very rarely found naturalized in southern Queensland.

Notes: Cultivated for edible seeds, leaves and young pods. Seeds are toxic if eaten raw. Self- or cross-pollinating, nodulates. The related species