

Vigna vexillata

Wild cowpea, medicine bean

Perennial with slender twining stems to 2m or more long from a narrow fleshy or sometimes woody tuberous rootstock. Stems upwardly rough, sparsely to densely covered with downward-pointing ginger or pale bristles or hairs. Stipules 4-13mm long, narrow and finely pointed, narrowly triangular or indistinctly lobed on either side of the point of attachment. Petioles 15-110mm long, rachis 4-30mm long; stipels 1-3mm long, usually not present at base of terminal leaflet. Leaflets 40-170mm long, 4-40mm wide, rounded at the base or rarely lobed, tapering from below the mid-point to the narrowly angled tip, the veins reticulate and raised on both surfaces which are more or less covered with short coarse hairs at least along the major veins and margins.

Inflorescence an axillary raceme with 1-2, rarely more, flowers clustered towards the tip of a 10-360mm upwardly rough peduncle, usually only 1 flower opening at a time. Flowers borne on 1.2-3mm pedicels which bear a pair of narrow 2-3mm (longer in overseas material) bracteoles at the tip. Calyx 9-12mm long, more or less hairy with short ascending brownish hairs, the sepals similarly joined for c. ½ their length, the teeth narrow and finely pointed. Corolla 20-30mm long, the standard pinkish purple fading to brownish, with two distinct yellow "eyes" at the base, 20-40mm wide, bilaterally asymmetrical and shallowly indented at the tip. Wings purple, about the same length as the white or pale purple keel which is twisted to one side, the beak incurved 180°, and the left-hand petal with a marked pocket. Style densely bearded on the upper side, with a small bump below the stigma, lacking a beak.

Pod 40-140mm long, 2.5-4mm wide, straight or



Vigna vexillata var. *angustifolia*, Goomeri, 26°04' S, 152°03' E, Cult.

upwardly curved when ripe, plump, covered with spreading bristly hairs, held erect, black when ripe, containing 10-20 seeds. Seeds 2.5-4.5mm long, 2-3mm wide, almost cylindrical, brown blotched or speckled with black or black all over.

Key to varieties

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|----------------------------|--------------------------|
| Leaflets 4-15mm wide, 8-15 | |
| times as long as wide | var. <i>angustifolia</i> |
| Leaflets 20-35mm wide, 2-4 | |
| times as long as wide | var. <i>youngiana</i> |

Distribution: Bur., Co., D.D., Lei., Mo., N.K., P.C., S.K., W.B. Also N.T., N.S.W. and P.N.G. Widespread in the tropics of the New and Old World.

Notes: The densely hairy var. *vexillata* from eastern Africa is unpalatable but less hairy types are palatable and nutritious. Roots are roasted and eaten by Aborigines. Used in Indonesia as a green manure crop and as a tuber and a pulse in India. Self-pollinating, nodulates.

References: 3, 16, 17, 26, 40, 46, 50, 57, 98, 99, 120, 121, 132, 139, 141, 154, 225, 285, 287, 306, 333. See also T. Low (1988), *Wild Food Plants of Australia*, Sydney: Angus & Robertson.

Viminaria

Erect shrub, the leaves alternate and reduced to petioles. Flowers small, mostly yellow, lacking bracteoles, in long terminal or axillary sometimes branched racemes. Stamens 10, the filaments free. Style narrow, hairless. Pods indehiscent, containing a single seed with a small strophiole.

A monospecific genus endemic to Australia.

Viminaria juncea

Narrow erect perennial shrub to c. 2m tall. Stems straight, hairless. Stipules minute or lacking.

Juvenile leaves with 1 or 3 leaflets; mature leaves reduced to slender cylindrical hairless petioles 50-300mm long, 0.5-1.5mm wide.

Inflorescence a raceme 80-300mm long



Viminaria juncea, Coolum, 26°32'S, 153°03'E.

including the short peduncle, borne terminally and in axils of reduced upper leaves, giving a panicle-like appearance. Flowers borne singly (but often in clusters of 2-3) within the axils of narrow 1-3mm persistent bracts, each flower on a 1-5mm pedicel. Calyx hairless, 2-3.5mm long, the sepals

similarly joined for c. $\frac{5}{6}$ their length, the teeth broadly triangular. Standard yellow, red towards the base, c. 6mm tall, 7mm wide, slightly indented at the tip. Wings yellow, 7-10mm long from base of calyx, c. 1mm longer than the pinkish yellow keel.

Pod c. 4mm long, 3mm wide, with a small beak, plump, hairless, black when ripe, usually indehiscent, single-seeded. Seed c. 3mm long, 2mm wide, oval but with a small raised area at one end, orange-brown, with a small strophiole.

Distribution: Mo., W.B. Also all states excluding N.T. Found in coastal swampy situations, often in standing water.

Notes: Of no grazing significance. Nodulates. Populations from moist shaded habitats are genetically more leafy in early seedling growth.

References: 3, 23, 26, 50, 154, 287, 298, 307; as *V. denudata*, 17.

Zornia

Perennials with herbaceous stems from a more or less stout root-stock. Leaves with a single pair of leaflets, the stipules extending above and below the point of attachment. Flowers small, usually yellow and red, lacking bracteoles, usually alternating on either side of the floral rachis and covered by a pair of stipule-like bracts. Anthers 10, alternately long and short. Pods several-seeded, breaking up at maturity, often more or less covered with soft bristles. A revision of Australian species of *Zornia* by S.T. Reynolds and A.E. Holland has been published in *Austrobaileya* 3 No. 1 (1989).

Key to species

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| 1. Floral bracts 13-18mm long | <i>Z. stirlingii</i> |
| Floral bracts less than 13mm long | 2 |
| 2. Floral bracts 3-4.5mm long; pod articles dotted with glands
but lacking bristles or hairs | <i>Z. adenophora</i> |
| Floral bracts 4-12mm long; pod articles usually not gland-dotted,
often more or less covered with bristles and/or hairs | 3 |
| 3. Flowers single | <i>Z. ramosa</i> |
| Flowers in 2-many-flowered spikes | 4 |
| 4. Tip of floral bracts broadly angled | 5 |
| Tip of floral bracts narrowly angled | 6 |
| 5. Plants erect; spikes crowded; floral bracts not gland-dotted | <i>Z. albiflora</i> |
| Plants prostrate; spikes interrupted; floral bracts densely gland-dotted | <i>Z. areolata</i> |
| 6. Leaflets densely covered with small circular glands | <i>Z. muelleriana</i> |
| Leaflets with sparse glands or glandless | 7 |
| 7. Leaflets 6-15mm wide; stems trailing | <i>Z. prostrata</i> |
| Leaflets 1-7.5mm wide | 8 |
| 8. Floral bracts well separated, not overlapping; stems trailing or ascending | <i>Z. dyctiocarpa</i> |
| Floral bracts overlapping; stems stiffly erect | <i>Z. muriculata</i> |