

Aeschynomene

Low or tall-growing herbs or shrubs. Leaves pinnate, lacking stipels, with or without a terminal leaflet. Flowers small, in few-flowered axillary racemes. Stamens 10, the filaments all joined in a tube split towards the keel or on both sides or rarely 1 free. Pods jointed, breaking up at maturity.

Key to species

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| 1. Leaflets with 2-several major longitudinal veins | 2 |
| Leaflets with a single longitudinal vein | 3 |
| 2. Flowers 5-10mm long; leaflets 4-15mm long | <i>A. americana</i> |
| Flowers 3-5mm long; leaflets to 8mm long | <i>A. villosa</i> |
| 3. Leaves with 5-9 leaflets | 4 |
| Leaves with more than 30 leaflets | <i>A. indica</i> |
| 4. Stems and leaves with adpressed hairs; pod with a 6-14mm stalk at the base | <i>A. falcata</i> |
| Stems and leaves often with few or many tubercle-based hairs as well as loosely adpressed hairs; pod with a 2-7mm stalk at the base | <i>A. brevifolia</i> |

Aeschynomene americana

American jointvetch

Erect annual shrub to c. 2m tall. Upper young stems densely covered with glandular 1-2mm hairs, the stems becoming red with age. Stipules extending above and below the point of attachment, usually 10-25mm long, 1-4mm wide. Leaves with 24-68 leaflets, the rachis up to c. 70mm long. Leaflets 4-15mm long, 1-2mm wide, sensitive to the touch, with 2-3 major longitudinal veins, hairless except for a row of hairs along the veins on the underside.

Inflorescence a few-flowered axillary raceme as long as or longer than the subtending leaf, the flowers borne within the axils of 2-4mm bracts, the pedicels bearing a pair of narrow 2-4mm bracteoles. Flowers 5-10mm long, the calyx 3-6mm long. Corolla purplish, the standard yellow at the base, 5-10mm wide, indented and often minutely hairy at the tip.

Pod c. 12-40mm long, 2.5-5mm wide, not prominently stalked above the calyx, straight, consisting of 3-9 articles 3-6mm long, almost straight along the upper margin, markedly constricted between the seeds along the lower margin, breaking up at maturity. Seeds 2-3mm long, 1.5-2mm wide, grey-green to light or dark brown.

Distribution: Not naturalized at time of writing but likely to become naturalized in low-lying wet coastal situations. Native to Central and South America.

Notes: Cultivar Glenn was released in 1984. It is palatable to stock and productive in wet coastal

districts. A very variable species in the Americas. Nodulates, self-pollinating.

References: 34, 242, 271.

Aeschynomene brevifolia

A delicate low-growing perennial with slender often ascending stems to c. 0.7m tall. Stems sometimes hairless, more often with adpressed simple or spreading tubercle-based hairs. Stipules 2-3mm long, more or less spreading, attached by the base, persistent, hairy along the margins. Leaves with 5-9 leaflets, the pairs slightly alternating. Petiole 2-9mm long, rachis 2-10mm long, both hairy with adpressed and spreading tubercle-based hairs. Leaflets 3-9mm long, 2-4mm wide, broadest towards the rounded tip and slightly tapering to the rounded base, a network of veins on either side of the single mid-rib, sparsely covered with adpressed,



Aeschynomene brevifolia, Munduberra, 25°24'S, 150°52'E.

sometimes tubercle-based hairs on the underside and along the margins, mucronate.

Inflorescences borne in leaf axils, 1-3 flowered, each flower borne on a 3-8mm pedicel within the axil of a 1mm bract. Calyx c. 3mm long, minutely hairy, with a pair of 2mm hair-fringed bracteoles on either side, the two dorsal sepals joined for c. $\frac{3}{4}$ their length, the sepals otherwise joined for c. $\frac{2}{3}$ their length. Standard yellow-orange, with a red ring towards the base on the front, flushed with pink on the back, c. 6mm tall and wide. Wings yellow-orange, c. 7mm long from base of calyx, the same length as the greenish keel.

Pod 8-15mm long, 3mm wide, consisting of 2-4 c. 3mm long articles, with a narrow 2-7mm stalk at the base, slightly indented along the upper margin, very deeply indented along the lower margin, minutely hairy.

Distribution: Bk., Bur., Co., Mi., Mo., N.K., P.C., S.K. A relatively widespread native species, but not common.

Notes: Probably grazed where it occurs.

References: 98, 273, 277, 287; as *A. falcata*, 17.

Aeschynomene falcata

Jointvetch

Perennial with prostrate or weakly ascending herbaceous stems to c. 0.5m long from a short taproot. Stems covered with adpressed hairs. Stipules 5-8mm long, broad-based and tapering to a point, persistent. Leaves with 5-9 leaflets. Petiole 3-5mm long; rachis c. 4-8mm long. Leaflets 6-10mm long, 3-4mm wide, broadest at or above the mid-point, the tip broadly rounded and mucronate, a network of veins on either side



Aeschynomene falcata, Brisbane, 27°21'S, 152°53'E, Cult. pasture.

of the mid-rib, sparsely covered with adpressed hairs on both surfaces.

Inflorescence a 1-5 flowered 10-70mm axillary raceme, longer than the subtending leaf, the flowers borne within the axils of persistent 1-2mm bracts, the pedicels c. 5mm long, bearing 1-2mm bracteoles at the base of the calyx. Calyx 3-4mm long, very sparsely hairy, the teeth shorter than the tube. Corolla orange-yellow, the standard 5-7mm tall and wide, sparsely hairy on the back, the veins reddish towards the base, the wings and keel 7-8mm long.

Pod c. 25-30mm long, including the 6-14mm stalk above the calyx, 2.5-3.5mm wide, straight or curved, very deeply indented along the lower margin between the 6-8 articles, covered with adpressed hairs, dark brown to almost black and breaking up at maturity. Seeds kidney-shaped, c. 2mm long, 1.5mm wide, flattened, yellowish brown to almost black.

Distribution: Not known to be naturalized in Queensland. Native to South America.

Notes: The cultivar Bargoo was released in 1973. Persistent and productive as a pasture legume in parts of north-eastern N.S.W. and south-east Queensland. Withstands heavy grazing and tolerant of mild frosts, but limited quantities have been sown due to low seed availability. Nodulates, but requires a specific rhizobium for best results.

References: 83, 210, 271.

Aeschynomene indica

Budda pea

Annual or occasionally perennial, usually erect, up to 2m tall. Stems usually slender, but sometimes thick (25mm) and spongy at the base when growing in water, bearing sparse often tubercle-based hairs. Stipules 7-10mm long, hairless, tapering to a point above and below the point of attachment, abscising soon after leaf expansion, leaving a scar. Leaves with 30-60 leaflets, no terminal leaflet. Petiole 5-10mm long, rachis 30-80mm long, both sparsely covered with spreading tubercle-based hairs. Leaflets blue-green, 2-10mm long, 1-2mm wide, progressively shorter towards the tip of the rachis, the margins parallel, rounded at either end, hairless, mucronate, with a single longitudinal mid-rib, the venation otherwise obscure.

Inflorescences usually axillary, the rachis 15-



Aeschynomene indica, Quilpie-Windorah, 26°15'S, 143°33'E, Cult.

60mm long, leafy. Peduncle 15-60mm long, bearing 1-4 flowers, each borne on a 1-8mm pedicel within the axil of a 3-6mm bract. Bracteoles immediately beneath the calyx, c. 3mm long. Calyx 4-6mm long, the two upper and three lower sepals united for almost their entire length, hairless. Standard pale yellow, veined with red, c. 5-6mm tall, 4-5mm wide. Wings and keel 6-8mm long from base of calyx.

Pod 20-65mm long, 3-4mm wide, with a narrow 4-9mm stalk above the calyx, consisting of 3-10 articles, almost straight along the upper margin, slightly indented between the articles along the lower margin, biscuit-coloured when mature and breaking up, hairless or with sparse tubercle-based hairs, often warty towards the centre of each article. Seeds 3mm long, 2mm wide, flattish, kidney-shaped, smooth, olive green.

Distribution: Bk., Co., D.D., G.N., Ma., Mi., Mo., N.K., P.C., S.K., Wa., W.B. Also N.T., W.A., S.A., N.S.W. Widespread species frequently found on clay, alkaline and some saline soils subject to periodic flooding. Native to the Old World tropics, including Australia, probably introduced to the New World.

Notes: Self-pollinating, nodulates. Used as a

Alysicarpus

Herbs. Leaves with a single leaflet; stipels present. Flowers small, in slender racemes. Stamens 10, 9 filaments joined for most of their length, 1 free. Style hairless. Pods jointed, breaking up at maturity.

Key to species

1. Pods with almost straight margins, not or only slightly constricted between the articles 2
- Pods strongly constricted between the articles 4

green manure crop in India and Indonesia. Moderately palatable, also grazed after plants have died off, but has been suspected of toxicity. May cause weed problems in summer crops.

References: 1, 3, 16, 17, 26, 27, 37, 46, 50, 53, 111, 132, 141, 150, 165, 172, 180, 256, 272, 287, 306.

Aeschynomene villosa

Herbaceous plant with prostrate to weakly erect stems to c. 0.6m long. Stems covered with 1mm tubercle-based spreading hairs. Stipules 10-15mm long, attached close to the mid-point, hairy, persistent. Leaves with 10-25 pairs of leaflets, alternating on either side of the rachis. Petiole 2-3mm long, rachis 15-60mm long, both covered with spreading, tubercle-based hairs. Leaflets up to 8mm long, 1.5mm wide, progressively shorter towards the tip of the rachis, with 3-5 clearly distinguishable parallel nerves, the margins more or less parallel but one margin tapering towards the pointed tip, toothed along one margin, sensitive to touch.

Inflorescence axillary, leafy, 3-10 flowered. Bracts tapering to a point, 1.5-6mm long, 1-2mm wide. Flowers 3-5mm long. Calyx 2-4mm long, hairy with a pair of hair-fringed 2.5mm bracteoles on either side. Standard 4-5mm long.

Pod usually 15-22mm long, with a short stalk at the base, 4-6 seeded, the articulations distinct or lacking, articles 2.5-3(-4)mm in diameter, straw-coloured when ripe, the venation inconspicuous, sparsely covered with hairs with dark tuberculate bases. Seeds 2-2.5mm long, 1.5-2mm wide, blackish.

Distribution: Bk., Co., N.K., P.C., S.K. Also W.A., N.T., S.A. A New World species introduced into the Old World.

Notes: Nodulates. May have potential as a pasture species.

References: 271, 272, 306.