

*Galactia*

Twining herbs with pinnate leaves with three leaflets. Stipels present. Flowers pink, with bracteoles, the two dorsal sepals totally fused. Stamens 10, 9 filaments joined in a dorsally split tube, 1 free. Style hairless. Pods 5-10 seeded.

*Key to species*

- Leaflets with sparse adpressed hairs on upper surface, more dense on lower surface; racemes few-flowered, the flowers 8-10mm long (widespread)
- Leaflets silky-hairy; racemes many-flowered, the flowers usually more than 14mm long (northern)

*G. tenuiflora**G. muelleri**Galactia muelleri*

Twining perennial with slender stems rarely exceeding 1m long. Stems densely covered with short, white, adpressed or spreading hairs. Stipules 1.5-2.5mm long, adpressed, persistent. Petioles 5-60mm long, rachis 3-5mm long; stipels 0.5-2mm long. Leaflets 25-70mm long, 6-60mm wide, usually 2-3 times as long as wide, more rarely up to 5 times as long as wide, broadest about the mid-point, the margins curving to the broadly rounded base and broadly rounded sometimes indented tip, densely covered with minute hairs on both surfaces, giving a silky texture.

Inflorescence a lax-flowered axillary raceme up to 200mm long, including the 40-70mm peduncle. Flowers in clusters of 3-6, borne within the axils of minute bracts, each on a 2-3mm pedicel which has a pair of bracteoles at the tip. Calyx c. 8mm long, minutely hairy, the two dorsal sepals totally fused, the sepals otherwise joined for c.  $\frac{2}{3}$  their length. Standard pink, greenish in the throat, c. 11mm tall, 11mm wide. Wings pink, c. 14mm long from base of calyx, longer than the keel.

Pod 30-50mm long, 4.5-6mm wide, almost straight, covered with short adpressed hairs, brown when ripe, containing 5-10 seeds. Seeds oval, plump, 3-5mm long, 2-4mm wide, flecked or mottled with black on dark brown.

*Distribution:* Bk., Co., Lei., N.K., P.C., S.K. Also N.T. A common species on sandy soils in northern eucalypt woodlands.

*Notes:* Although common in native rangelands, no information is available on acceptability to stock. Fire-tolerant but sensitive to flooding. Self-pollinating. The unusually prolific growth of the plant shown in the photograph was the result of a recent fire.

*References:* 17, 70, 132, 150, 276, 285.



*Galactia muelleri*, Batavia Downs-Weipa, 12°44'S, 142°16'E.

*Galactia tenuiflora*

Twining or trailing perennial with slender stems to 1m or more long. Stems covered with minute spreading hairs. Stipules 2-3mm long, narrow and tapering, persistent. Petioles 10-50mm long, rachis 3-5mm long; stipels c. 0.5mm long. Leaflets dark green above, grey-green beneath, 20-65mm long, 5-30mm wide, broadest about the mid-point, the margins almost parallel in narrow-leaflet forms, otherwise curving to the rounded or bluntly angled tip and rounded base, sparsely



*Galactia tenuiflora*, Pentland, 20°32'S, 145°24'E, Cult.

hairy on the upper surface, more densely covered with minute adpressed hairs on the lower surface.

Inflorescence an axillary 1-10 flowered raceme 50-150mm long, including the peduncle. Flowers borne in groups of 2-3 within the axils of c. 1mm bracts, each on a 1.5-2mm pedicel which bears a pair of 1mm bracteoles at the tip. Calyx 6-9mm long, minutely hairy, the two dorsal sepals totally fused, the sepals otherwise joined for less than  $\frac{1}{2}$  their length, the teeth narrow and pointed. Standard pink, 7-8mm tall, c. 7mm wide, indented at the tip. Wings pink, c. 10mm long from base of calyx, about the same length as the pink keel.

Pod 20-60mm long, 5-7mm wide, covered with adpressed hairs, rather flattened, dark brown

when ripe, containing 6-10 seeds. Seeds 4-5mm long, c. 3mm wide, kidney-shaped, indistinctly blotched orange on yellow-orange.

*Distribution:* Bk., Bur., Co., D.D., Lei., Mi., Mo., N.K., P.C., S.K. Also N.T., W.A., N.S.W., tropical Africa, southern Asia, South-East Asia, Indonesia and P.N.G.

*Notes:* An extremely variable species. One of the more common herbaceous legumes of eastern eucalypt woodlands. Grazing characteristics not recorded, but probably contributes to animal production. Self-pollinating, nodulates.

*References:* 3, 16, 17, 26, 91, 131, 132, 141, 154, 172, 277, 287, 306, 333.

## *Gastrolobium*

Perennial shrub with simple, opposite or alternate leaves. Flowers large, showy, red. Stamens 10, the filaments free to the base. Style hairless. Pods with 1 or 2 strophiolate seeds. The genus is endemic to Australia.

### *Gastrolobium grandiflorum*

Heart-leaf poison, wallflower poison

Perennial shrub to c. 2m tall, with sparingly branched erect stems from an underground tuber. Young stems silky hairy. Stipules c. 5mm long, narrow and hair-like, persistent. Leaves simple, opposite below, the upper alternate, dull green or silver-grey. Petiole 3-9mm long; stipels lacking. Leaf blade 25-75mm long, 10-27mm wide, broadest about the mid-point, the margins curving to the broadly rounded often indented tip and curving or tapering to the angled base, silky hairy when young, becoming hairless with age.

Inflorescence a showy terminal or axillary raceme 30-100mm long, including the short peduncle, the flowers borne within the axils of deciduous bracts, each on a c. 6mm pedicel. Calyx 8-11mm long, densely covered with adpressed or spreading hairs, the two dorsal sepals fused almost to the tip, the teeth rounded, the other 3 sepals fused for c.  $\frac{3}{4}$  their length, the teeth triangular, c. 3mm long. Standard c. 15mm tall, 16-20mm wide, orange-red with darker red venation. Wings c. 20mm long from base of calyx, dark red, slightly longer than the dark red keel.

Pod c. 20mm long, including the 7-8mm stalk above the calyx, c. 6mm wide, the tip extended into a fine point, rounded in section, covered



*Gastrolobium grandiflorum*, Einasleigh, 18°37'S, 143°49'E.

with 2mm long spreading hairs, brown when ripe, containing 1 or 2 seeds. Seeds c. 4.5mm long, 2.5mm wide, kidney-shaped, plump, dark brown, with a prominent strophiole.

*Distribution:* Bk., Co., G.N., Lei., Mi., N.K., S.K. Also N.T., W.A. Locally common on yellow sandy soils in infertile "desert" country in the north of the state.

*Notes:* A very toxic species to livestock. The toxic principle is monofluoroacetic acid. Plants should be grubbed out or poisoned; seedlings may be eliminated with heavy grazing.

*References:* 8, 17, 18, 27, 63, 125, 130, 132, 147, 148, 172, 256, 277, 332.