

*Ulex europaeus*

Gorse, furze

Dense spiny shrub to 2m tall. Stems ribbed, ending in spines, when young covered with fine spreading hairs. Stipules lacking. Leaves reduced to sharp, rigid dorsally flattened 8-25mm long spines which subtend similar but usually branched spiny shoots.

Inflorescence a short axillary raceme sometimes reduced to a single flower. Flowers scented, borne on hairy 4-9mm peduncles which bear a pair of 2-4mm bracteoles beneath the calyx. Calyx 10-15mm long, densely covered with short ascending hairs, 2-lipped to near the base, the upper lip minutely 2-toothed, the lower lip minutely 3-toothed. Corolla bright yellow, 15-20mm long, the standard indented at the tip.

Pod 10-20mm long, c. 4mm wide, densely covered with ascending rust-coloured hairs, dark greenish brown to blackish when ripe, containing c. 8-10 seeds. Seeds c. 2.5mm long, 2mm wide, oval to pear-shaped, with a distinct whitish strophiole at the point of attachment, dark olive-brown.

*Distribution:* D.D., Mo. Also all states except N.T. A European species occasionally naturalized in south-east Queensland.

*Notes:* Of no grazing significance. In southern states may become a troublesome weed. Utilized as a hedge plant at higher altitudes in Java. Cross-pollinating, nodulates.

*References:* 3, 16, 26, 136, 163, 203, 287.

*Uraria*

Herbs with pinnate leaves with 3-7 leaflets or with a single leaflet. Stipels present. Flowers small, purple, pink or whitish, lacking bracteoles, in dense or lax terminal racemes. Stamens 10, 9 filaments joined in a dorsally split tube, 1 free. Style hairless in the upper part. Pods 2-7 jointed, folded zig-zag fashion, breaking up at maturity.

*Key to species*

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|-------------------------------------------------------------------------------|------------------------|
| 1. Racemes long and slender; upper leaves with 3-9 usually narrow leaflets    | <i>U. picta</i>        |
| Racemes dense, more or less cylindrical; upper leaves with 1-3 broad leaflets | 2                      |
| 2. Leaves with 1 or 3 leaflets, the leaflets 1-2 times as long as broad       | <i>U. lagopodoides</i> |
| Upper leaves with 3 leaflets, the terminal leaflet 2-5 times as long as broad | <i>U. cylindracea</i>  |

*Uraria cylindracea*

Purple clover-weed

Perennial with erect, ascending or prostrate herbaceous stems to 0.8m long from a woody rootstock. Stems densely covered with spreading hooked hairs. Stipules 4-8mm long, broadest near the base but narrowing abruptly to a fine point, persistent, spreading with maturity. Upper leaves with three leaflets, the lower leaves with one leaflet. Petiole 7-35mm long, rachis 4-20mm long; stipels 1-2mm long. Terminal leaflet on upper leaves 40-110mm long, 15-35mm wide, 2-5 times as long as broad, broadest towards the rounded base, the margins tapering to the broadly rounded mucronate tip, the lateral leaflets about half the length of the terminal leaflet, the lower surface with erect hooked hairs along the reticulate veins, the upper surface similarly but more sparsely hairy.



*Uraria cylindracea*, Pentland, 20°32'S, 145°24'E, Cult.

Inflorescence a rather dense terminal or axillary raceme 40-100mm long including the 0-30mm peduncle. Flowers crowded, borne in pairs within the axils of broad 5-7mm rather persistent hairy bracts, each on a c. 6mm pedicel which bends

inwards with maturity. Calyx c. 6mm long, the sepals joined towards the base, the three lower teeth long and narrow, densely covered with spreading tubercle-based hairs, the two dorsal teeth minute. Corolla purple fading to pale blue, the standard c. 7mm tall and wide. Wings and keel c. 6mm long from base of calyx.

Pod consisting of 1-2 1-seeded articles folded zig-zag fashion, shiny, hairless, each article c. 3mm long and wide, pale grey. Seeds c. 2.5mm long, 2mm wide, kidney-shaped, plump, olive-green.

*Distribution:* Bk., Co., N.K., P.C. Also N.T., W.A. Sandy or lateritic soils, eucalypt woodlands.

*Notes:* Of no grazing significance. Self-pollinating, nodulates.

*References:* 17, 57, 132, 153.

### *Uraria lagopodoides*

Perennial with ascending, erect or prostrate stems from a woody rootstock, sometimes rooting at the nodes. Stems covered with spreading hooked hairs. Stipules 4-8mm long, broad near the base but narrowing abruptly to a fine point, persistent, somewhat spreading. Leaves all with a single leaflet or more usually upper leaves with three leaflets. Petioles 7-20mm long, rachis 4-20mm long; stipels 1-3mm long. Leaflets of upper leaves 30-90mm long, 20-65mm wide, rarely as much as twice as long as broad, the lateral leaflets, where present, much smaller than the terminal one, broadest at or close to the mid-point, the margins curving to the broadly rounded sometimes shallowly indented base and to the rounded or broadly angled mucronate tip, the lower surface with erect hooked hairs along the reticulate veins,



*Uraria lagopodoides*, Mareeba, 16°50'S, 145°13'E, Cult.

the upper surface similarly but more sparsely hairy and often with irregular but well-defined areas of light green coloration.

Inflorescence a dense cylindrical terminal or axillary raceme 30-60mm long, including the 0-10mm peduncle. Flowers very crowded, borne in pairs within the axils of broad, hairy c. 7mm persistent bracts, each on a 4-8mm pedicel which turns inwards at maturity. Calyx c. 6mm long, the sepals joined towards the base, the three lower teeth long and densely covered with spreading, often tubercle-based hairs, the two upper teeth minute. Corolla pink to purple fading to pale blue, the standard 6-7mm tall and wide, the wings and keel c. 6mm long from base of calyx.

Pod consisting of 1-2 1-seeded articles folded zig-zag fashion, shiny, hairless or with a few hairs, each article 2.5-3mm long, 2mm wide, pale grey or black. Seeds c. 2.5mm long, 1.5mm wide, kidney-shaped, plump, yellow.

*Distribution:* Co., Mo., N.K., P.C., S.K., W.B. Also N.T., southern Asia, South-East Asia, Indonesia and P.N.G. A plant of sandy soils in eucalypt forests.

*Notes:* An unproductive species unlikely to be palatable to stock. Sensitive to flooding. Self-pollinating, nodulates. (This species is also spelt *U. lagopodioides*; the preferred spelling above follows Verdcourt 1979.)

*References:* 3, 16, 50, 150, 153, 227, 287, 306; as *U. lagopoides*, 17, 132.

### *Uraria picta*

Perennial with trailing or erect herbaceous stems to c. 0.5m long from a woody rootstock. Stems covered with short spreading hooked hairs.



*Uraria picta*, Townsville-Ayr, 19°30'S, 147°06'E, Cult.

Stipules 4-8mm long, broad near the base but narrowing abruptly to a fine point, persistent, spreading with maturity. Upper leaves with 3-9 leaflets, the lower leaves with fewer leaflets, these shorter and broader. Petiole 15-40mm long, rachis 4-45mm long; stipels 1-4mm long. Leaflets leathery, dark green, often with a greyish green area close to the mid-rib, those on upper leaves 30-110mm long, 8-20mm wide, broadest close to the rounded, often slightly indented base, the margins curving or tapering to the bluntly angled minutely mucronate tip, hairless and shiny on the upper surface, the lower surface usually with short erect hooked hairs along the reticulate veins.

Inflorescence a narrow terminal or axillary, occasionally branched raceme 50-300mm long including the 10-100mm peduncle, the axis densely covered with short, spreading hooked hairs. Flowers crowded, borne in pairs within the axils of broad 4-6mm very deciduous bracts, each on a 4-9mm pedicel which bends inwards with

maturity. Calyx 3-4mm long, the sepals joined for less than  $\frac{1}{2}$  their length, the teeth very narrow, covered with long tubercle-based spreading hairs. Corolla pink to purple, the standard c. 8mm tall and wide, with two "eyes" at the base. Wings and keel c. 7mm long from base of calyx.

Pod consisting of 3-6 1-seeded articles folded zig-zag fashion, shiny, hairless, each article 2.5-3mm long and wide, greyish white. Seeds oval, c. 2.5mm long, 1.5mm wide, flattened, heavily mottled red-brown on yellow-brown.

*Distribution:* Bur., Co., Mo., N.K., P.C. Also tropical Africa, southern Asia, South-East Asia, Indonesia and P.N.G. Widespread in northern eucalypt woodlands. Sandy soils.

*Notes:* Rarely a major component of the herbaceous vegetation. Not noted as being palatable to stock. Self-pollinating, nodulates.

*References:* 16, 17, 141, 227, 277, 285, 287, 306.

## *Vandasina*

Prostrate or twining perennial vine, the leaves pinnate, with three leaflets and prominent stipels. Flowers purple, in long, showy racemes, the bracteoles minute or absent. Stamens 10, 9 filaments joined in a dorsally split tube, 1 free. Style hairless. Pods very inflated, containing 8-10 seeds.

### *Vandasina retusa*

Perennial with twining or prostrate stems to 5m or more long. Young stems sparsely covered with adpressed hairs, becoming hairless. Stipules 3-5mm long, somewhat clasping at the base, broadly triangular, persistent. Petioles 40-140mm long, rachis 5-20mm long. Stipels 2-3mm long, heart-shaped. Leaflets 30-140mm long, 30-125mm wide, broadest towards the tip which is broadly but shallowly indented and prominently mucronate, the margins curving to the rounded base, hairless or sparsely and minutely hairy on the upper surface, covered with minute adpressed hairs on the lower surface.

Inflorescence an axillary, terminal or leaf-opposed raceme, sometimes sparingly branched, 150-500mm long including the 20-100mm peduncle. Flowers borne in clusters of 2-5 within the axils of deciduous c. 3mm bracts, successive flowers being borne from the same node, leaving a 3-6mm spur if pods are not set, each flower on



*Vandasina retusa*, Cooktown, 15°15'S, 145°13'E.

a 2-4mm pedicel which often bears a pair of minute bracteoles at the tip. Calyx 3-4mm long, densely covered with short loosely adpressed hairs, bell-shaped, the upper two teeth joined, the other three teeth broadly triangular and short. Standard purple with a green centre, c. 7-8mm tall, 10mm wide. Wings purple, c. 8mm long