

Centrosema

Twining perennial. Leaves pinnate, with three leaflets. Stipels present. Flowers large, pink to pale purple, inverted, the standard pointing downwards. Stamens 10, 9 filaments joined for most of their length in a dorsally split tube, 1 free. Style minutely hairy around the stigma. Pods long and narrow, thickened along each margin, many-seeded.

Centrosema pubescens

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Twining perennial, forming tangled mats or twining up shrubs to 2m or more. Stems covered with minute adpressed hairs. Stipules 2-4mm long, triangular, adpressed, persistent. Petioles 20-40mm long, rachis 5-15mm long, both minutely hairy. Stipels 1-2mm long. Leaflets dark green, 40-80mm long, 20-40mm wide, the laterals markedly smaller than the terminal leaflet, broadest below the mid-point, the base rounded, more or less attenuated to the rounded tip, hairless to sparsely hairy on both surfaces, minutely mucronate.

Inflorescence a raceme of 2-5 flowers clustered at the end of a 10-60mm peduncle. Flowers borne in pairs within the axil of a broad, deciduous bract each on a c. 7mm pedicel, each flower bud partially enclosed by a pair of deciduous bracteoles which are densely covered with minute hooked hairs. Calyx 6-11mm long, the two dorsal sepals joined almost to the tip, similar in length to the lateral sepals, the ventral sepal much longer, tapering to a fine point, all sepals minutely hairy towards the tips. Standard pink to pale purple, c. 20mm tall, 20-30mm wide, densely hairy on the back. Wings pinkish purple towards the tips.

Pod 70-150mm long, 6-7mm wide, straight or slightly curved, the tip extended into a fine point, flattened but strongly thickened along upper and



Centrosema pubescens, Gordonvale, 17°07'S, 145°45'E.

lower margins, hairless, containing 8-20 seeds, brown when ripe. Seeds 3-4mm long, 3mm wide, kidney-shaped, brown with elongated black markings, the surface dull.

Distribution: Co., N.K., W.B. Also naturalized in N.T., P.N.G. and in tropical Africa. Native to South America.

Notes: The most important pasture legume in the wet tropics. In addition to the common variety, cultivar Belalto was released in 1971. Nodulates, self-pollinating. The related annual species *C. pascuorum* (cvv. Bunday and Cavalcade) has been released as a pasture legume for the Northern Territory.

References: 3, 22, 26, 46, 50, 51, 72, 95, 141, 143, 287, 306.

Chamaecytisus

Shrubs with digitate leaves with three leaflets, lacking stipules or stipels. Stamens 10, the filaments all joined in a closed tube, the anthers alternately long and short. Style hairless.

Chamaecytisus palmensis

Tree lucerne, tagasaste

Bushy shrub or small tree to 4m or more tall with arching branches. Young stems densely covered with short spreading hairs. Leaves rather crowded. Petiole 5-20mm long, minutely hairy.

Leaf lamina 8-30mm long, 3-10mm wide, broadest at or above the mid-point, the margins slightly curving or tapering to the base and curving to the mucronate tip, sparsely hairy on the upper surface, more densely covered with adpressed hairs and with the mid-vein prominently raised on the lower surface.



Chamaecytisus palmensis, Cult.

Inflorescences terminal and at the ends of short lateral branches, the flowers crowded towards the end of a 20-40mm raceme, each borne on a 7-20mm peduncle, subtended by a long bract, with 2 long, narrow deciduous bracteoles towards the tip. Calyx c. 13mm long, densely covered with short spreading hairs, 2-lipped, the upper two

teeth and lower three teeth fused almost to the tip. Standard white or pale yellow, c. 12mm tall, 13mm wide. Wings white or pale yellow, 15-20mm long from base of calyx, spreading, c. 3mm longer than the white keel which is slightly hairy along the lower margin.

Pods 30-45mm long, 7-10mm wide, densely covered with velvety hairs, very flattened, straight or slightly curved, black when ripe, containing c. 6-7 seeds. Seeds c. 5mm long, 3-5mm wide, flattened, more or less oval and with a prominent strophiole, reddish brown to black.

Distribution: Bur., D.D. Native to the Canary Islands, this species is also naturalized in N.S.W., Vic., Tas., S.A., W.A. and New Zealand.

Notes: A potentially useful browse shrub in cooler parts of the state. Honey bees are attracted to the flowers for pollen. Nodulates.

References: 282; as *Cytisus proliferus*, 3, 128; as *Cytisus prolifer*, 203; as *Chamaecytisus proliferus*, 26, 96, 111, 287, 308.

Chorizema

Low shrub with alternate simple leaves. Inflorescence terminal. Flowers small, red and yellow. Stamens 10, the filaments free. Pods inflated, with c. 10 seeds.

Chorizema parviflorum

Delicate shrub with 1-several slender, erect or ascending stems to 0.4m tall from a woody base. Stems sparsely branched, angular, covered with adpressed hairs. Stipules minute, deciduous. Petiole c. 1mm long, the blade 5-40mm long, 1-2.5mm wide, the margins slightly curved to a rounded mucronate tip and slightly curved towards the base, the margins downwards-curved, densely covered with adpressed hairs on the undersurface and with occasional adpressed hairs on the upper surface.

Inflorescence a 5-30mm raceme of 1-12 small but showy flowers, borne on a 3-15mm terminal peduncle. Flowers borne singly within the axil of a 1mm bract, each on a 1-2mm pedicel with a pair of 0.5mm bracteoles towards the tip. Calyx c. 3mm long, covered with adpressed hairs, the teeth broadly triangular, shorter than the tube. Standard bright orange-yellow with a red semicircle towards the base, c. 3mm tall, 7mm wide, strongly indented at the tip. Wings bright yellow, red at the base, spreading, c. 6mm long from the base of calyx, longer than the keel.



Chorizema parviflorum, Durong, 26°27'S, 151°09'E.

Pods 5-7mm long, c. 4mm wide, 5mm thick, inflated, sparsely covered with adpressed hairs, dark brown when ripe, containing c. 10 seeds.

Distribution: D.D., Mo., N.K., P.C., W.B. Also N.S.W. *C. parviflorum* is the only species of this endemic Australian genus found in Queensland. Usually found on infertile sandy soils.

Notes: Of no grazing significance. Nodulates.

References: 3, 17, 26, 50, 98, 154, 287, 298, 313.