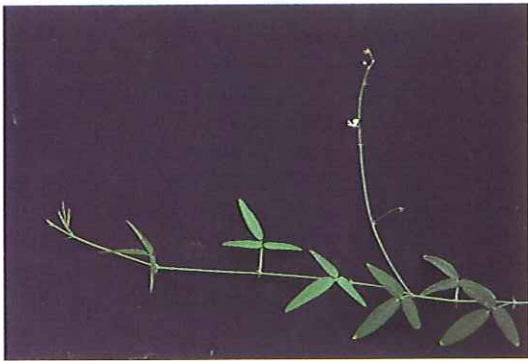


rainfall areas of the higher-altitude tropics and subtropics. Nodulates. Mainly self-pollinating. The cultivar Silverleaf was released in 1962.

References: 3, 16, 22, 23, 26, 46, 50, 73, 169, 176, 287, 306.

Desmodium varians (figure 9S)
Slender tick trefoil, variable tick trefoil

Delicate perennial with prostrate stems to 0.5m long, rooting at the nodes, or erect stems to c. 0.3m. Stems sparsely hairy or hairless. Stipules 2-4mm long, pointed, spreading, persistent. Leaves with three leaflets, the young leaves usually reddish green. Petiole 5-30mm long, rachis 3-9mm long, both sparsely hairy or hairless. Stipels



Desmodium varians, Mackay, 21°04'S, 149°13'E, Cult.

Dicerma

Erect or prostrate herbaceous shrub. Leaves pinnate, with three leaflets, the rachis minute and thus appearing digitate. Stipules long and prominent, stipels minute. Flowers pink. Stamens 10, 9 filaments joined for almost their entire length, the upper filament joined in the lower part. Style hairless. Pods 2-seeded, breaking up at maturity.

Dicerma biarticulatum

Thick trefoil

Erect or sometimes prostrate perennial with stems up to 1m long. Stems densely covered with short adpressed hairs and sometimes 1-2mm spreading hairs. Stipules 5-33mm long, joined to each other and tapering to three fine points, soon becoming brown but persistent. Petiole 4-20mm long, covered with adpressed or spreading hairs. Leaflets blue-green, 6-60mm long, 3-17mm wide, broadest at or above the mid-point, often

c. 0.5mm long. Leaflets very variable in shape within a plant, those on lower leaves more or less heart-shaped, broadest towards the tip, 6-12mm long and about the same wide, those on upper leaves 10-40mm long, 5-8mm wide, the margins almost parallel, sparsely hairy or hairless.

Inflorescence a sparse-flowered slender terminal or sometimes leaf-opposed raceme. Flowers borne singly or in pairs within the axils of c. 1mm long persistent bracts, each flower on a 5-15mm pedicel. Bracteoles lacking. Calyx c. 2mm long, minutely hairy, the sepals joined for c. ½ their length. Standard pink or white, c. 3mm tall, 3mm wide. Wings pink, c. 4mm long from base of calyx.

Pod 10-20mm long, c. 3mm wide, the articles 3.5-4.5mm long, covered with short, hooked hairs, slightly indented along the upper margin, deeply indented along the lower margin between the 3-6 seeds, the isthmus between the seeds ½ the width of the pod or less, brown and breaking up at maturity.

Distribution: Bur., Lei., Ma., Mi., Mo., N.K., P.C., S.K., Wa., W.B. Also N.S.W., Vic., Tas.

Notes: A widespread, palatable, but not very productive species. Does not respond well to application of phosphorus fertilizer. Nodulates, self-pollinating.

References: 3, 17, 26, 29, 38, 40, 41, 50, 97, 98, 111, 154, 155, 158, 287, 311.

somewhat tapered towards the base, the upper surface hairless or with adpressed hairs, the lower surface more densely covered with adpressed hairs, especially along the mid-vein and the margins, mucronate.

Inflorescence a dense 30-200mm raceme borne terminally or in upper leaf axils, the peduncle short. Flowers borne in groups of 2-5 within the axils of 3-18mm tapering bracts, each flower on a 1.5-3mm pedicel with a pair of bracteoles towards the tip. Calyx hairless or hairy, 2.5-4mm long, the two dorsal sepals joined almost to the tip, the

sepals otherwise joined for $\frac{1}{2}$ - $\frac{2}{3}$ their length. Standard usually pink, 3-4mm tall and wide. Wings c. 5mm long from base of calyx, pink to purple, the same length and colour as the keel.

Pod c. 6mm long, 3-3.5mm wide, deeply indented on upper and lower margins between the



Dicerma biarticulatum ssp. *australiense*, Coen-Moreton, 12°47'S, 142°43'E.

two seeds, covered with adpressed hairs. Seeds oval, c. 1.5mm long, 1mm wide.

Key to subspecies

- Stipules 15-33mm long; bracts 10-18mm long; petioles 12-20mm long ssp. *australiense*
 Stipules 5-8mm long; bracts 3-8mm long; petioles 4-5mm long ssp. *biarticulatum*

Distribution: Bk., Co., Mi., N.K., S.K. Also N.T., P.N.G., Indonesia and South-East Asia. A common species on sandy soils in northern eucalypt woodlands, also occurring in strand-line situations and reported as occurring on the Mitchell grass downs.

Notes: Grazing characteristics not recorded. Nodulates, self-pollinating.

References: 3, 27, 50, 208, 240, 285; as *Desmodium biarticulatum*, 17, 132, 181, 256, 262, 306.

Dichrostachys

Woody shrubs with bipinnate leaves. Flowers sessile in pendulous stalked spikes, the basal flowers sterile, the distal flowers fertile. Stamens 10, the anthers with a stalked apical gland. Pods very twisted, indehiscent.

Key to species

- Leaves with 5-10 pairs of pinnae
 Leaves with 1-2 pairs of pinnae

- D. cinerea*
D. spicata

Dichrostachys cinerea

Woody shrub or small tree from 2-8m tall. Young stems densely covered with short spreading hairs, the lateral stems persisting as rigid 5-40mm spines. Stipules 2-3mm long, 1-2mm wide at the base which clasps the petiole, adpressed, narrowing abruptly and tapering to a fine point. Leaves bipinnate, with 5-10 pairs of pinnae. Petiole 8-20mm long, primary rachis 30-40mm long, both covered with minute spreading hairs and with a cylindrical gland between each pair of pinnae. Leaflets in 10-40 opposite pairs on each pinna, 2.5-4.5mm long, 1-1.5mm wide, densely arranged, the sides parallel, rounded at each end, hairless except for a few hairs along the margins.

Inflorescence a pendulous axillary spike 60-90mm long, including the 25-40mm peduncle. Flowers borne singly, dense, the upper (proximal)



Dichrostachys cinerea, Brisbane, 27°31'S, 152°59'E.

half of the inflorescence with sterile pink flowers, becoming white, the lower half (distal) with fertile yellow flowers. Sterile flowers with calyx 0.6-1.2mm long, almost hairless, the 5 sepals similar, joined for most of their length, the teeth