

Melilotus

Erect annual or biennial herbs with pinnate leaves with three conspicuously toothed leaflets, lacking stipels. Flowers small, yellow or white, lacking bracteoles. Stamens 10, 9 filaments joined in a dorsally split tube for c. $\frac{2}{3}$ their length, 1 free or cohering with the others. Style hairless. Pods small, containing 1-2 seeds.

Key to species

Flowers yellow, less than 3mm long
Flowers white, more than 4mm long

M. indica
M. alba

Melilotus alba

Bokhara clover

Erect, well-branched biennial to 1.5m tall, the stems sparsely and minutely hairy. Stipules c. 4mm long, narrow and finely pointed, persistent, joined to the petiole at the base. Petiole 10-50mm long, rachis 2-6mm long. Leaflets 7-30mm long, 2-15mm wide, broadest above the mid-point, the margins tapering to the base and toothed and curving to the rounded or indented mucronate tip, hairless or sparsely hairy.



Melilotus alba, Toowoomba, 27°30'S, 151°54'E.

Inflorescence an axillary raceme 40-160mm long including the 10-60mm peduncle. Flowers fairly dense, borne singly, each on a c. 1mm pedicel in the axil of a c. 1mm persistent bract. Calyx c. 2mm long, sparsely and minutely hairy, the sepals similarly joined for $\frac{1}{2}$ - $\frac{2}{3}$ their length. Standard white, c. 3mm tall, 3mm wide. Wings white, c. 3mm long from base of calyx, the same length as the white keel.

Pod 3-5mm long, c. 2mm wide, oval, plump, hairless, dark brown to black when ripe, containing 1 or occasionally 2 seeds. Seed c. 2mm long, 1mm wide, oval, plump, yellow-brown.

Distribution: Bur., D.D., Lei., Mi., S.K., Wa., W.B. Also all states except N.T. A common

roadside plant in the south-east. Native of Europe and the Mediterranean region.

Notes: Quite palatable but contains the compound coumarin which in some circumstances is converted to the toxic dicoumarol. Poisoning has not been recorded in Australia. Not adversely affected by moderate levels of alkalinity or salinity. Attractive to honey bees. Nodulates. Self- or cross-pollinating.

References: 3, 17, 18, 26, 96, 111, 121, 130, 136, 141, 180, 287.

Melilotus indica

Hexham scent

Erect well-branched annual to c. 0.7m tall. Stems sparsely covered with minute hairs or hairless. Stipules 4-10mm long, tapering to a fine point, joined to the petiole at the base, adpressed, persistent. Petiole 5-40mm long, rachis 3-6mm long. Leaflets 10-30mm long, 2-15mm wide, broadest above the mid-point, the margins tapering to the base, the tip rounded or indented and with toothed margins, hairless or sparsely covered with minute hairs on both surfaces.

Inflorescence a dense axillary raceme 40-100mm long, including the 10-40mm peduncle.



Melilotus indica, Toowoomba, 27°30'S, 151°54'E.

Flowers dense, borne singly, each on a c. 0.5mm pedicel within the axil of a minute persistent bract. Calyx c. 1.5mm long, almost hairless, the sepals similarly joined for c. $\frac{1}{2}$ their length. Standard yellow, c. 1.5mm tall, 1mm wide. Wings yellow, c. 2.5mm long from base of calyx, the same length as the yellow keel.

Pod 2-3mm long, c. 1.5mm wide, plump, hairless, almost black when ripe, containing a single seed. Seed c. 1.5mm long, 1mm wide, oval, plump, yellow-brown.

Distribution: Bur., Co., D.D., Lei., Ma., Mi.,

Mo., N.K., P.C., Wa. Also all states except N.T. Native of the Mediterranean region and central Asia to India. It prefers neutral to slightly alkaline soils.

Notes: A rather unpalatable species which contains coumarin; it may taint milk, but not proven to be toxic. Long cultivated as a forage in India. May cause weed problems in wheat fields. Attractive to honey bees. Salt-tolerant. Nodulates, self-pollinating.

References: 3, 26, 46, 96, 111, 121, 130, 140, 141, 174, 180, 204, 287; as *M. parviflora*, 17.

Mimosa

Annual or perennial herbs with more or less prickly stems and sensitive bipinnate leaves. Flowers pink, in dense spherical heads. Stamens 4 or 8. Pods prickly along the margins, breaking up at maturity.

Key to species

Leaves with 3-10 pairs of pinnae
Leaves with 1-2 pairs of pinnae

M. invisa
M. pudica

Mimosa invisa

Giant sensitive plant

Scrambling, tangled shrub, the stems to 5m long, densely covered with downward-pointing curved spines. Stipules c. 5mm long, narrow and pointed, adpressed, persistent. Leaves sensitive, with 3-10 pairs of pinnae, each bearing 11-30 pairs of leaflets. Petiole 40-80mm long, rachis 30-60mm long, both prickly. Leaflets 2-6mm long, 0.7-1.5mm wide, almost parallel-sided, covered with minute spreading hairs.

Inflorescence an almost globose pink to purplish head 5-10mm in diameter borne on a 3-13mm peduncle, 1-3 heads appearing in each leaf axil. Calyx minute. Corolla 1.5-2mm long, green-tipped, 4-lobed. Stamens 8.

Pod 15-35mm long, 4-4.5mm wide, flat, prickly along the margins and over the seeds, dark brown when ripe, containing 3-4 seeds. Seeds c. 3.5mm long, yellow-brown, shiny.

Distribution: Co., N.K., S.K. Also P.N.G. and Indonesia. A native of Central America.

Notes: May cause serious weed problems in pastures and crops in the wet tropics. Has been cultivated as a cover crop; for this purpose the non-prickly var. *inermis* is preferable. Nodulates.

References: 3, 8, 9, 16, 19, 180, 306.

Mimosa pudica

Sensitive plant

Annual or perennial with often prostrate stems to 1.5m long. Stems hairless to densely hairy, sparsely provided with sharp, downward-pointing black-tipped spines. Stipules 3-8mm long, broad towards the base, tapering to a fine point,



Mimosa pudica, Dunk Is., 17°55'S, 146°08'E.

persistent. Leaves very sensitive, with 1-2 pairs of pinnae 15-50mm long, each bearing 10-26 pairs of leaflets. Petiole 15-55mm long, rachis c. 2mm long. Leaflets folding inwards when the plant is touched, 4-15mm long, 1-3mm wide, parallel-sided, sparsely hairy only along the margins.