

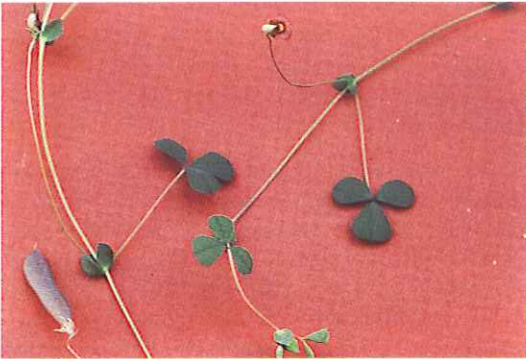
*Muelleranthus stipularis*

Sand pea

Spreading perennial, the stems prostrate, up to 0.6m long, radiating from a central taproot, usually densely covered with spreading hairs. Stipules adpressed, more or less spreading with age, heart-shaped, 3-7mm long, 2-5mm wide. Petiole 5-25mm long. Leaflets dark green, 3-15mm long, 2-5mm wide, broadest towards the bluntly pointed or rounded mucronate tip, hairless or hairy on the upper surface, hairy on the lower surface.

Flowers leaf-opposed, borne singly, the peduncle 15-45mm long, the pedicel c. 3mm long with a deciduous bract at the base and 2 small bracteoles towards the tip. Calyx 3-5mm long, more or less hairy, the two dorsal sepals joined for c.  $\frac{3}{4}$  their length, the sepals otherwise joined for c.  $\frac{1}{2}$  their length. Standard c. 4mm tall, 3-6mm wide, grey-purple, yellow-green in the throat edged with darker purple. Wings dark purple, c. 6mm long from base of calyx, shorter by 1mm than the green keel.

Pod 15-33mm long, 4-7mm wide, hairless, rather flat, a short stalk above the calyx, pinkish brown when ripe, containing 4-9 seeds. Seeds irregularly spherical, c. 2.5mm diameter, marbled with black, yellow-brown and chestnut-brown.



*Muelleranthus stipularis*, Thargomindah-Jundah, 27°38'S, 144°03'E, Cult.

*Distribution:* D.D., G.N., G.S., Wa. Also N.T., W.A., S.A., N.S.W. Occurs on sandy soils in western districts, especially in spinifex country.

*Notes:* A moderately palatable species (R. Silcock, pers. comm.) but rarely abundant.

*References:* 111, 172, 200, 203, 287.

*Muelleranthus trifoliolatus*

Spinifex pea

Plant prostrate, the stems to 0.6m long radiating from a central taproot, hairless or sparsely covered with adpressed hairs. Stipules 1.5-3mm long, 1-3mm wide, usually heart-shaped. Petiole 5-15mm long. Leaflets 2-6mm long, 2-6mm wide, more or less heart-shaped and broadest towards the usually indented tip, usually hairless.

Flowers single (rarely in a 2-3 flowered raceme), leaf-opposed, the peduncle 15-30mm long, the pedicel 2-3.5mm long, a deciduous bract at the base and two minute bracteoles close to the tip. Calyx c. 3mm long, hairless, the two dorsal sepals joined for c.  $\frac{1}{2}$  their length, the sepals otherwise joined for c.  $\frac{1}{2}$  their length. Standard variable, 2-7mm tall, shorter than or equal to the keel, 9-14mm wide, yellow with curving lines of purple dots towards the tip. Wings yellow, 7-15mm long from base of calyx, longer than the 7-9mm yellow, purple-dotted keel.

Pod 15-25mm long including the short stalk equal in length to the calyx, 3.5-5mm wide, flat, hairless, pinkish brown when ripe, containing 6-9 seeds. Seeds spherical, mottled brick-red and pale.

*Distribution:* Ma., Wa. Also N.T., W.A., S.A., N.S.W. Occurs on sandy soils in western spinifex sandplains. Rare.

*Notes:* Not noted as being palatable to stock. Self-pollinating.

*References:* 111, 172, 174, 200, 203, 287.

*Neonotonia*

Robust twining perennial with pinnate leaves with three leaflets. Stipels present. Flowers small, white to purple, borne in clusters on an axillary raceme. Stamens 10, the filaments all joined in a dorsally split tube or the upper one free. Style hairless. Pods flattened, hairy or hairless, containing 3-7 seeds.

*Neonotonia wightii*

## Glycine

Vigorous perennial with twining stems to several metres long, in favourable conditions covering tall shrubs. Stems densely covered with downward-pointing, usually rust-coloured hairs. Stipules 1-5mm long, more or less spreading, persistent. Petiole 20-120mm long, rachis 2-20mm long, both covered with downward-pointing hairs. Stipels 1-3.5mm long. Leaflets 30-100mm long, 15-70mm wide, broadest about the mid-point, the margins curving to the rounded base and broadly angled mucronate tip, hairy on both surfaces, particularly along the veins on the undersurface.

Inflorescence an axillary raceme 40-280mm long, including the 20-100mm peduncle. Flowers in clusters of 2-7 within the axils of 2.5-3.5mm persistent bracts, each on a 0.5-1mm pedicel, a



*Neonotonia wightii*, Atherton, 17°16' S, 145°28' E.

pair of c. 3mm bracteoles at the tip. Calyx 4-5.5mm long, densely covered with long usually rust-coloured hairs, the two dorsal sepals joined almost to the tip, the sepals otherwise joined for c. 1/3 their length, the teeth narrow and tapering. Standard c. 4mm tall, 4mm wide, slightly indented at the tip, white or mauve-blue, sometimes pink or mauve at the centre. Wings c. 6mm long from base of calyx, white or purplish, slightly longer than the white keel.

Pod 15-35mm long, 2.5-5mm wide, more or less constricted between the 3-7 seeds, more or less covered with adpressed or spreading hairs or hairless, black when ripe. Seeds 2-4mm long, 1.5-3mm wide, almost rectangular, flattened, reddish brown, minutely granular.

*Distribution:* Co., Mo., N.K., W.B. Also naturalized in N.S.W. Native of India, Malaysia, Indonesia and tropical Africa.

*Notes:* A valuable pasture legume in coastal and subcoastal districts with 750-1500mm annual rainfall and fertile soils and has some potential as a forage plant for honey bees. Meat of lambs grazing pure swards of this species may develop an objectionable flavour and odour (Park and Minson (1972), *J. Agric. Sci., Camb.* 79, 473-478). Nodulates, self-pollinating. Cultivars Tinaroo, Cooper and Clarence were all released in 1962 and Malawi in 1976. They differ in leaflet shape, stem coarseness, branching and hairiness.

*References:* 74, 210, 287; as *Glycine javanica*, 2, 50, 162, 182, 268, 306; as *Glycine wightii*, 22, 26, 44, 46, 121, 141.

*Neptunia*

Prostrate or erect herbs with bipinnate leaves. Flowers in spherical heads, yellow, the lower flowers usually sterile. Stamens 5, rarely fewer. Pods flattened, 5-13mm wide, 1-several seeded.

*Key to species*

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| 1. Stipules 4-11mm wide; pods with 2-4 seeds<br>Stipules less than 4mm wide   | <i>N. amplexicaulis</i><br>2                 |
| 2. Stipels present at base of each pair of pinnae; plants prostrate or weakly ascending<br>Stipels lacking; plants erect or ascending | 3<br>4                                       |
| 3. Pods with 1, rarely 2 seeds (western and northern)<br>Pods with 3-8 seeds (widespread)   | <i>N. dimorphantha</i><br><i>N. gracilis</i> |
| 4. Plants erect, to 3m tall; pods 3-6 seeded<br>Plants to 0.9m tall; pods 1, rarely 2 seeded  | <i>N. major</i><br><i>N. monosperma</i>      |