

from base of calyx, exceeding the purple-tipped keel. (White-flowered forms have also been reported but are rare.)

Pod 60-80mm long, 16-25mm wide, greatly inflated, densely covered with short spreading white or brown-tipped hairs, dark brown or black when ripe, containing 8-10 seeds. Seeds c. 7mm long, 4.5mm wide, 3mm thick, more or less oval, blackish brown, with a prominent aril around the point of attachment.

Vicia

Soft herbs with pinnate leaves, the rachis ending in a usually branched tendril, lacking stipels. Flowers purple or bluish white, small to medium-sized, single in leaf axils or in axillary racemes, lacking bracteoles. Stamens 10, 9 filaments joined in a dorsally split tube, 1 free or more or less joined. Style with a few hairs. Pod flattened, 2-several seeded.

Key to species

1. Peduncles less than 15mm long or absent, shorter than the flowers
Peduncles more than 10mm long, longer than the flowers
2. Flowers 2-8mm long; pods 2-5mm wide
Flowers 10-15mm long; pods 6-9mm wide
3. Flowers 2-4mm long; pods 2-seeded
Flowers 5-8mm long; pods 4-seeded
4. Stipules deeply divided into 2 parts
Stipules entire or with a short tooth close to the base

V. sativa var. *angustifolia*
2

3
4

V. hirsuta
V. tetrasperma

V. monantha
V. villosa

Vicia hirsuta

Hairy vetch

Annual with slender stems climbing to c. 0.8m. Stems angular, hairless or almost hairless. Stipules 3-4mm long, entire or with 2-4 teeth, hairless or with a few hairs, persistent. Leaves with 5-10 pairs of opposite or somewhat alternating leaflets. Petioles 0-2mm long, rachis 15-65mm long to the terminal leaflet pair, thereafter extended into a 10-30mm branched tendril. Leaflets 5-15mm long, 1-3mm wide, broadest about the mid-point, the tip usually square or broadly rounded, mucronate, hairless except for a few hairs along the mid-rib on the underside.

Inflorescence an axillary raceme 20-60mm long, including the 10-40mm peduncle. Flowers 2-6, clustered towards the tip of the inflorescence. Calyx 2.5-3mm long, covered with minute loosely adpressed hairs, the five teeth similar, narrow and finely pointed, more or less equalling the tube. Corolla 2-4mm long, the standard white, c.

Distribution: Co. Also P.N.G. A monotypic genus occurring in open forest and rainforest margins in eastern Cape York.

Notes: Roots were roasted and eaten by Aborigines. A species of no grazing significance.

References: 266; as *Hardenbergia retusa*, 17, 70, 99, 224, 262; as *Vandesia retusa*, 255; as *Vandasia retusa*, 306.



Vicia hirsuta, Somerset Dam, 27°05'S, 152°33'E.

3mm tall, 2.5mm wide, the wings c. 4mm long from base of calyx, longer than the purple-tipped keel.

Pod 6-10mm long, 2-4mm wide, plump, usually covered with spreading hairs, brown or black when ripe, containing 2 seeds. Seeds almost spherical, c. 2mm in diameter, dark reddish purple, dull.

Distribution: D.D., Mo. Also naturalized in all states except N.T. and at higher altitudes in Indonesia and P.N.G. Native of the Mediterranean region, north and north-western Africa and parts of Asia.

Notes: Palatable to stock. Nodulates.

References: 3, 16, 17, 26, 111, 141, 163, 180, 287, 306.

Vicia monantha

Spurred vetch

Annual with stems to c. 0.8m long, trailing or climbing by means of leaf tendrils. Stems angular, sparsely covered with short ascending hairs. Stipules 2-6mm long, with 2 narrow lobes pointing to either side of the stem, sparsely hairy, persistent. Leaves with 4-8 pairs of opposite or somewhat alternating leaflets. Petioles 3-8mm long, rachis 25-70mm long to the terminal leaflet pair, extending into a 10-30mm usually branched tendril. Leaflets 5-27mm long, 1-5mm wide, the margins parallel or tapering to the base, the tip usually rounded and minutely mucronate, sparsely covered with loosely adpressed hairs on the lower surface.

Inflorescence a 1-4 flowered axillary raceme 15-80mm long, including the 10-70mm peduncle, the 1-4 flowers borne towards the tip, each on a 1-2mm pedicel, the inflorescence rachis extended into a short spur. Calyx 5-6mm long, softly hairy, the lower teeth a little longer than the upper teeth, less than $\frac{1}{2}$ the length of the tube. Corolla 10-15mm long, purple.

Pod 15-35mm long, 6-9mm wide, flattened, hairless, yellow-brown when ripe, containing 5-8 seeds. Seeds 4-5mm long and wide, almost spherical, purplish black, indistinctly mottled with black.

Distribution: Bur., D.D., Lei., Ma., P.C. Also all mainland states. Native of the Mediterranean region and south-western Asia.

Notes: Palatable to stock. May cause weed problems on arable land sown to winter crops. Nodulates.

References: 3, 111, 121, 163, 172, 180, 287.

Vicia sativa var. *angustifolia*

Narrow-leaf vetch

Slender annual with stems to c. 0.6m long, climbing by means of leaf tendrils. Stems

angular, sparsely covered with minute spreading hairs. Stipules 3-6mm long, entire or extending to fine points on either side of the stem, frequently also with 1-2 additional teeth, minutely hairy, persistent. Leaves with 3-8 pairs of opposite or somewhat alternate leaflets. Petioles 3-8mm long, rachis 10-30mm long to the terminal leaflet pair, thereafter extended into a 10-50mm branched tendril. Leaflets 5-25mm long, 1-7mm wide, variable in shape but commonly broadest close to the mid-point, with margins tapering to the base, the tip rounded or broadly angled, sometimes indented, provided with a 0.5-2mm mucro, rather sparsely covered with ascending hairs on both surfaces.

Flowers single or in groups of 2 or 3 in leaf axils, lacking peduncles or with peduncles less than 15mm long. Calyx 8-11mm long, covered with soft spreading hairs, the five teeth similar, narrow and tapering to fine points, longer or shorter than the tube. Corolla purple, the standard c. 9mm tall, 10mm wide. Wings 10-18mm long from base of calyx, much exceeding the keel.

Pod 20-50mm long, 3-6mm wide, plump, straight or slightly upturned towards the tip; indistinctly covered with minute spreading hairs, dark brown to black when ripe, containing 5-9 seeds. Seeds almost spherical, c. 3mm in diameter, brown flecked with black, dull.

Distribution: Bur., D.D., Lei., Mo., P.C., S.K., W.B. A native of Europe, and northern and eastern Africa, widely naturalized in moister districts of south-east Queensland, in all states except N.T., and higher altitudes of Indonesia and P.N.G.

Notes: A palatable species which may improve milk production in cooler parts of the south-east



Vicia sativa var. *angustifolia*, Brisbane, 27°30'S, 152°57'E.

but regeneration after grazing is often poor. Contains the gluco-alkaloids convicine and vicine and the cyanogenetic glucoside vicianin, but few cases of poisoning have been reported. Nodulates, self- or cross-pollinating.

References: 3, 17, 26, 46, 87, 111, 112, 130, 141, 163, 164, 180, 204, 287, 306.

Vicia tetrasperma
Slender vetch

Annual with slender stems to c. 0.5m long, trailing or climbing by means of leaf tendrils. Stems angled, sparsely covered with fine spreading hairs. Stipules 3-6mm long, entire or with a short tooth at the base, hairy, persistent. Leaves with 3-6 pairs of opposite or somewhat alternate leaflets. Petioles 2-5mm long, rachis 15-20mm long to the terminal leaflet pair, thereafter extended into a simple or sparingly branched 5-20mm tendril. Leaflets 3-22mm long, 1-3mm wide, the margins mostly more or less parallel, the tip angled or rounded, minutely mucronate, covered with ascending hairs on the lower surface.

Inflorescence an axillary raceme 15-40mm long, the 1-3 flowers towards the tip of the long, slender peduncle, borne on 2-3mm pedicels. Calyx c. 2.5mm long, sparsely hairy, the lower tooth rather longer than the upper teeth and equal to or slightly shorter than the tube. Corolla 5-8mm long, pale purple or pale blue.

Pod 9-12mm long, c. 3mm wide, plump, hairless, yellow-brown when ripe, containing 4, rarely 3 seeds. Seeds almost spherical, c. 2mm in diameter, very dark purple, indistinctly mottled.

Distribution: W.B. Also all states except N.T., W.A. A native of the Mediterranean region, rarely naturalized in south-east Queensland.

Notes: Palatable to stock but of no agricultural significance. Nodulates.

References: 3, 26, 163, 180, 287.

Vicia villosa ssp. *dasycarpa*
Woolly-pod vetch

Weak-stemmed annual with stems to c. 1m long, climbing to c. 0.8m by means of leaf tendrils, sometimes sprawling and becoming dense and bushy. Stems fluted, covered with loosely adpressed to spreading hairs. Stipules 3-4mm long, entire or with a small tooth at the base, hairy, persistent. Leaves with



Vicia villosa ssp. *dasycarpa*, Marburg, 27°34'S, 152°34'E.

4-12 pairs of leaflets, the pairs more or less opposite or alternating. Petioles 1-5mm long, rachis 20-60mm long to the terminal leaflet pair thereafter extended into a 10-30mm branched tendril. Leaflets 7-25mm long, 2-6mm wide, broadest close to the mid-point, the tip and base broadly angled, mucronate, covered with silky loosely adpressed hairs on both surfaces.

Inflorescence an axillary raceme 40-140mm long, including the 20-60mm peduncle, the 5-15 or more flowers crowded on one side in the upper half, borne on 1-3mm pedicels. Calyx 4.5-6mm long, sparsely covered with loosely adpressed silky hairs, the lower tooth 4-5 times the length of the two dorsal teeth, the laterals intermediate in length. Corolla 12-15mm long, reddish purple, the standard c. 4mm tall, 3mm wide, the wings longer than the keel which is pale pink to white, with a dark purple spot at the tip.

Pod 15-30mm long, 6-10mm wide, flattened, indistinctly covered with fine adpressed hairs, but not woolly, brown when ripe, containing 2-5 seeds. Seeds globular to compressed, 3-5mm in diameter, blackish brown with obscure mottling.

Distribution: Mo. Also N.S.W. Native of southern Europe, occasionally found as a roadside plant in south-east Queensland.

Notes: A valuable fodder species in Europe. The cultivar Namoi is now also finding a place in cooler parts of south-east Queensland and is adapted to both light and heavy alkaline or acid soils.

In the north-west wheat belt of N.S.W. it has outyielded clovers, medics and lucerne in winter and early spring and withstands heavy grazing by sheep. Nodulates, self-pollinating.

References: 3, 121, 163; as *V. dasycarpa*, 22.