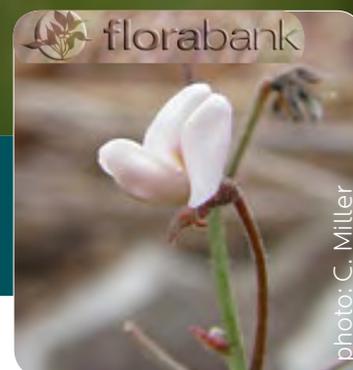




# Desmodium varians



*Desmodium varians* is a long-lived prostrate or climbing herb with a thick rootstock, and very variable leaf shape and colour, from green to reddish [7]. Common names are Variable Tick-trefoil [1] or Slender Tick Trefoil [5].

Population map:  
[www.ala.org.au/explore/species-maps/](http://www.ala.org.au/explore/species-maps/)

## Natural Populations

*Desmodium varians* can occur on a variety of soil types but prefers more fertile loam [9]. It is widespread but often overlooked until seeds or fruits develop [9].

*D. varians* is widespread across Qld, NSW, Vic, and Tas [2]. It is found in eucalypt forests, woodlands and grassy woodlands [6, 7].



## Flowering and Seeds

Flowering occurs mostly from spring to summer but some flowering occurs throughout the year [6, 7, 8]. The white to pink flowers are typically pea-shaped but small and inconspicuous.

The seed pods, are arranged in about 5 segments which separate at maturity, each containing one seed, about 2.8 x 1.8 mm in size [7]. Pod segments stick to animals or clothes and can be widely distributed [5, 7]. Seeds are mature from October to April. Like most native legumes the seed drops very soon after maturity. Monitor fruits closely, bag maturing fruits or place groundsheets under plants to catch seed (although ants

also harvest the seed). Alternatively, the pods can be harvested close to maturity (when they turn brown) and fully dried in a warm area [3].

The seed has a hard seed coat, which causes physical dormancy [7] but it germinates well after scarification [7, 9] or hot water (just off the boil, then allowed to soak for a few hours) [3]. The use of hot water is recommended as it is potentially less damaging to the seed [4]. If hot or boiling water treatment has been used, the seed should be dried before sowing. Germination should occur in 3-4 weeks [4]. It could be included in direct seeding after scarification, but because seed quantity is likely to be low, it is better suited to tubestock propagation.

Seed has a long storage life [4].

## Cultivation and Uses

While it is not a showy plant, it can be interesting when grown trailing among other shrubs [9]. It is hardy in sheltered situations and is also frost hardy [9].

*D. varians* resprouts after fire, and also has a soil-stored seedbank [7]. As a leguminous species, it has nitrogen-fixing *Rhizobium* nodules on the roots [7].

It is palatable to stock, which makes this species vulnerable to intense grazing [9].

To source seeds or plants:

[www.grassywoodlands.org.au](http://www.grassywoodlands.org.au)



## References

(a) Pictures under license from the Australian National Botanic Gardens.

[1] Cunningham, G.M., Mulham, W.E., Milthorpe, P.L. and Leigh, J.H. (1981). *Plants of Western New South Wales*. D. West: NSW Government Printing Office.

[2] Harden, G. (ed.) (1990-1993). *Flora of New South Wales*. Volume 2, p. 411. Sydney, NSW: NSW University Press, Kensington.

[3] Ralph, M. (1993). *Seed Collection of Australian Native Plants For Revegetation, Tree Planting and Direct Seeding*. 2nd ed. Fitzroy, Victoria: Bushland Horticulture.

[4] Ralph, M. (1997). *Growing Australian Native Plants from Seed For Revegetation, Tree Planting and Direct Seeding*. Fitzroy, Victoria: Murray Ralph/Bushland Horticulture.

[5] Eddy, D., Mallinson, D., Rehwinkel, R. and Sharp, S. (1998). *Grassland Flora, a field guide for the Southern Tablelands (NSW&ACT)*. Canberra, ACT.

## Internet links

[6] PlantNET National Herbarium of New South Wales: <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=s&p&name=Desmodium~varians>

[7] Botanic Gardens Trust: [http://www.rbgsyd.nsw.gov.au/science/Evolutionary\\_Ecology\\_Research/Ecology\\_of\\_Cumberland\\_Plain\\_Woodland/woodland\\_plants/desmodium\\_varians](http://www.rbgsyd.nsw.gov.au/science/Evolutionary_Ecology_Research/Ecology_of_Cumberland_Plain_Woodland/woodland_plants/desmodium_varians)

[8] Melbourne water, Appendix F - Threatened Flora Species Descriptions and Locations: [http://www.melbournewater.com.au/.../water\\_distribution/project\\_impact\\_assessment\\_report/appx\\_8-15\\_ff.pdf](http://www.melbournewater.com.au/.../water_distribution/project_impact_assessment_report/appx_8-15_ff.pdf) - 2008-02-18

[9] Australian National Botanic Gardens & Australian National Herbarium, Harden Species List: <http://www.anbg.gov.au/greening-grainbelt/harden-species-list.xls>