Clematis microphylla

***Clematis microphylla* is a woody vine that climbs over shrubs and trees up to 3 m [9, 11]. It is often noticed as a whitish fluffy mass hanging from trees, shrubs and fences [6]. Its common names include Small-Leafed Clematis [5], Old Man's Beard and Narrow-leaf headache Vine [6].**

Population map:

www.ala.org.au/explore/species-maps/

Natural Populations

Clematis microphylla is found in dry and wet forests of Qld, NSW, Vic, Tas, SA [5, 9, 11]. It does not occur in WA, as *Clematis microphylla* has been misapplied against the current name *Clematis linearifolia*. [13].

Flowering and Seeds

C. microphylla flowers from July to December [9]. Male and female flowers develop on different plants [3, 11]. Female plants develop fluffy, cottonwool-like fruits [4] with multiple seeds clustered at the end of stems [2]. The seed is ovate in shape, light brown in colour, and attached to a long feathery plum to 5 cm [8].

Seed is collected from early December to early March. Monitor closely as seeds are released 3-14 days after maturity [7]. Seeds turn brown and are released from the plant with minimal pressure when ripe [4]. Harvest by hand or with a portable vacuum cleaner [4]. Separate seed from plumes by rubbing [4]. To clean, Harold Grant [3] suggests first loosening the seed

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by putting the fruits into a plastic bag and beating it vigorously, then shaking the waste through a coarse then a finer sieve until fluff on the surface can be removed and the seed remains.

photo: T. Leontjeva

To source seeds or plants:
www.grassywoodlands.org.au

Cultivation and Uses

C. microphylla has about 250 seeds per gram and 22% germination has been observed in the field [2]. It is a suitable species for direct seeding [2]. *C. microphylla* has shown increased germination in the field compared to nursery and incubator, possibly indicating reliance on an environmental factor such as soil mycorrhiza, soil temperature, light, and moisture[2]. *C. microphylla* sets good quantities of seed most years, and once the fluffy awn is removed it machine direct seeds very well or can be hand seeded with the awn left on [2]. Ralph (1993) found that *C. microphylla* seed takes at least 8 weeks to germinate and seems to be short lived, with excellent germination after 1 month, but only 50 % after 6 months [4]. Germination of *C. microphylla* seeds can be speeded up or improved by removing the pericarp, by exposing seed to a cycle of wetting and drying before planting, or allowing the seed to weather in the field [1]. The embryo continues to develop during intermittent wet weather, and weathering decays the pericarp enabling germination [1].

photo: A. Callies

Sow from springtime, if growing into containers. For direct seeding sow from mid winter in the drier regions to spring in the higher rainfall areas. Place seed beneath the soil to 5 mm, cover with layer of soil or fine gravel and keep moist in open sunny position [8].

Propagation can be carried out from: softwood, semi-hardwood and hardwood cuttings [12, 15, 17].

C. microphylla is a prolific climber [9, 12, 16], which makes it useful as a fence and ground cover [17], as well as attractive ornamental for screening, cascading over rocks, walls and in containers [7]. It climbs trees without causing damage [7]. It is suitable to plant in an open, dry, well-drained position in semi-shade or sun [16, 17], and is frost hardy [17].

This plant is apparently poisonous both internally and externally [10]. However the indigenous Boonerwrung people in Victoria ate the roots (peppery when raw), often cooking and kneading them into a dough [14]. Roots were pounded for high amounts of starch [8]. The taproot can be eaten roasted [16] and the root fibres used to make string. Fraser and McJannett (1993) wrote, that *C. microphylla* can relieve headaches by crushing the leaves and inhaling the pungent aroma [17, 19]. In some areas leaves were bruised and rubbed over skin sores and areas with rheumatism and the leaves were used in steam baths to treat arthritis [7].

The related species *Clematis aristata* is a popular garden plant, which is hardy in most soils. It prefers a sunny or semi shaded position and will withstand heavy pruning. It is vigorous but is unlikely to become a problem by smothering other plants [12].

The fruit is used by birds for nest lining [8].

References

[1] Kaye, P.E. and Groves, R.H. Germination of *Clematis microphylla* seeds following weathering and other treatment. *Australian Journal of Botany* 32(2) 121 – 129. Online: **http://www.publish.csiro.au/paper/BT9840121.htm**

[2] Murphy R.G. and Dalton G.S. (1996). *Understorey establishment research. Technical Report No 249.* Primary Industries South Australia.

[3] Grant (2004). *The Australian Seedsman.* Dubbo, NSW.

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[5] Harden, G. (ed.) (1990-1993). *Flora of New South Wales.* Volume 1, p.157-158. Sydney, NSW: NSW University Press, Kensington.

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[7] Stelling, F. (ed.) (1998). *South West Slopes Revegetation Guide.* Murray Catchment Management Committee, Albury, NSW.

[8] Bonney, N. (2003). *What Seed Is That? A field guide to the identification, collection and germination of native seed in South Australia.* Tantanoola, SA: Neville Bonney.

[19] Fraser, I. and McJannett, M. (1993). *Wildflowers of the Bush Capital - A Field Guide to Canberra Nature Park.* Vertego Press Canberra.

Internet links

[9] PlantNET National Herbarium of New South Wales: **http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Clematis~microphylla**

[10] Australian National Botanic Gardens, A portfolio of illustrations of some plants known to be poisonous in S.E. Australia: **http://www.anbg.gov.au/poison-plants/C-poison.html**

[11] Victorian Department of Primary Industries: **http://www.land.vic.gov.au/dpi/vro/vrosite.nsf/pages/sip_small_leaved_clematis**

[12] Australian Society for Growing Australian Plants Plants Fact Sheet: **http://asgap.org.au/c-ari.html**

[13] FloraBase Western Australian Herbarium: **http://florabase.calm.wa.gov.au/search/current/2927**

[14] **http://www.berg.org.au/documents/BERGPosterBoonerwrungPlantUses.pdf**

[15] Dave's Garden, PlantFiles: **http://davesgarden.com/guides/pf/go/57213/**

[16] Centre for Education and Research in Environmental Strategies: **http://www.ceres.org.au/bushfoodcatalogue**

[17] Australian National Botanic Gardens website: **http://www.anbg.gov.au/apu/plants/clemmicr.html**

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

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