

Cape broom / Montpellier broom

Keith Turnbull Research Institute, Frankston

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Common Names

Cape broom, Montpellier broom

Botanical Name

Genista monspessullana (L.) L.A.S. Johnson

Status

Cape broom is a Regionally Controlled Weed in the Wimmera, Glenelg, Corangamite, Port Phillip East, Goulburn, North East, West Gippsland and East Gippsland Catchment and Land Protection Regions. Landholders in these areas must take all reasonable steps to control Cape broom and prevent its spread on their land and the roadsides which adjoin their land.

Origin and Distribution

Cape broom is native to scrub and open woodlands in the Mediterranean region, Portugal and the Azores. It was probably introduced to Australia as a garden or hedge plant and was widely planted last century. In Victoria, cape broom infestations occur mainly on grazing lands and dry sclerophyll forests and woodlands of southern, central and north-eastern regions.

Description

Cape broom is an upright evergreen shrub up to 3m high, but more commonly 1 to 2 m, which reproduces by seed. Young plants are capable of flowering and fruiting at approximately 2 years old.

Stems - Erect, ridged (but *not* five-sided), woody; usually one main stem with many branches.

Leaves - Consist of 3 leaflets attached centrally to a short stalk, with the central leaflet slightly longer than the rest, up to 40 mm long. Leaflets have less hair on the upper surface than the lower surface.

Flowers - 0.8 to 1.3 cm long, bright yellow, pea-like, occurring singly or in clusters of up to 9 (usually 3 to 7) in the leaf axils and at the end of branches. Flowering occurs mainly from late winter to spring, but can also occur towards the end of summer.

Fruits - Brown to black flattened pods, narrow-oblong in shape, 1.5 to 2.5 cm long, 5 mm wide, densely covered with long silky hairs. The pods appear in late spring and summer and coil after the seed is released.

Seeds - Dark-brown to black, smooth, rounded and slightly flattened, 2 to 3 mm diameter, 5 to 8 per pod.

Roots - Branched taproot with shallow lateral roots.



Figure 1. *Cape broom*.

Cultivars, hybrids and closely related *Genista* species eg; Maderia broom, *Genista stenopetala* Webb & Berthel. (= *G. maderensis*), and *G. racemosa* L. are utilised in horticulture as ornamentals. Some appear to have become naturalised and have potential for further spread. A small infestation of Dyers broom, *Genista tinctoria* L. ssp. *depressa* (M.Bieb.) P.E. Gibbs, has been recorded at

Buckleys Falls, near Geelong. A hybrid *G. monspessulana* X *G. sp.* developed by the nursery trade is naturalised in Victoria at Langwarrin.

Flax-leaved broom, *Genista linifolia* L., is also a declared weed in Victoria. It can be distinguished by its stalkless or nearly stalkless leaves which have rolled edges and are densely hairy on the underside.



Figure 2. Cape broom infestation.

Properties

Cape broom is capable of forming dense thickets on grazing lands, in native vegetation and on roadsides, which exclude most other vegetation. Dense infestations of cape broom provide harbour for rabbits and foxes and increase fire fuel-loads in native vegetation and agricultural areas. In native vegetation, cape broom excludes desirable indigenous species. Cape broom is considered toxic to stock if grazed excessively, but in Australia no cases of poisoning have been reported. Fire stimulates seed germination by breaking the dormancy of soil-stored seed resulting in dense infestations of seedlings. However a small percentage of seed are not dormant and are capable of germinating immediately on exposure to suitable temperature and soil moisture conditions. This variation in

seed dormancy and germination increases the difficulty of control.

Dispersal

The seeds of cape broom are ejected with considerable force from the pod when it opens and may be dispersed several metres from the parent plant. Seeds may also be dispersed locally by ants. Road graders and earth moving equipment are probably the most important agents in longer-distance seed movement. Other means of seed dispersal include slashing, water, farm machinery and vehicles, contaminated agricultural products and animals moving through infested areas.

Control

Management programs must be initiated in order to effectively control cape broom. In planning these programs integrated management strategies may achieve the best results.

New infestations of cape broom should be treated prior to plants reaching the flowering stage. Once plants begin seeding, control becomes more difficult and dispersal to other areas is likely. In native vegetation the avoidance of ground disturbances, particularly by vehicles and earth moving equipment, will reduce the rate of invasion of cape broom.

Treated areas should be regularly checked for regeneration, particularly after fire.

Hand-pulling

Small plants can be hand pulled in spring when the ground is soft. Large shrubs should be cut close to ground level and the stump painted with herbicide.

Slashing

Cutting seedlings when they are 5 to 10 cm high can provide effective control of regenerating plants. Thickets can be slashed with a brush cutter and any regrowth sprayed with herbicide.

Grazing

Sheep, goats and cattle eat cape broom, particularly younger seedlings, and may suppress the development of infestations. Larger plants may need to be cut or slashed to allow stock better grazing access.

Fire

Cape broom responds to fire in a similar manner to many Australian native plants. Soil-stored seed is stimulated to germinate following fire and may continue to germinate for up to 3 years following burning. Most adult plants are killed by fire, but some are capable of re-sprouting from the rootstock. Although soil-stored seed may be depleted by burning, effective control of cape broom can only be achieved by regular treatment of regenerating seedlings by hand-pulling, grazing or herbicide application for 3 to 5 years following fire.

Chemical Control

Under Victorian legislation there are controls on various aspects of the uses of agricultural chemicals. Some particular uses are prohibited and some require permits. Users of certain agricultural chemicals are required to obtain an Agricultural Chemical User Permit (ACUP) or work under the direct supervision of an ACUP holder. Additional restrictions on the use of some herbicides apply to particular geographic areas known as Chemical Control Areas (CCA).

It is the responsibility of chemical users to familiarise themselves with these controls. See Agriculture Note: Agricultural chemical user permits (ACUP) and chemical control areas(CCA) for further information.

An ACUP is required for the use of prescribed chemicals containing the active constituents marked with an asterisk (*) in the following list. Records of the use of these chemicals must be made by the user and these records must be kept for 2 years. Restrictions on use in CCAs apply to the chemicals marked with a hatch (#).

Contact the Regional Chemical Standards Officer of the Department of Natural Resources and Environment if further advice is required.

You should read the product label and follow all label instructions carefully before using any herbicide.

Use a product containing the following active constituents that is registered for use in Victoria to control cape broom in the particular situation in which you need to use chemical control, eg. in non-crop areas. Consult the product label for detailed information.

- TRICLOPYR BUTOXYETHYL ESTER*# + PICLORAM#

This list of chemicals is based on information supplied to the Department of Natural Resources and Environment by the National Registration Authority for Agricultural and Veterinary Chemicals (NRA). The State of Victoria through the Department of Natural Resources and Environment has not assessed or checked the accuracy of the information supplied to it from the NRA as that responsibility rests with the NRA.

Picloram is a residual herbicide which is very persistent in soil. Pasture legumes are sensitive to picloram and may take more than 12 months to re-establish on treated areas.

Biological Control

Cape broom, Madiera broom and flax-leaved broom have been nominated as targets for biological control. Testing and evaluation of potential biological control agents will take a number of years.

References

- Jeanes, J.A. (1996) *Genista*. Pp. 827-829 in Walsh, N.G. and Entwisle, T.J. (Eds.) *Flora of Victoria Volume 3 Docotyledons, Winteraceae to Myrtaceae*. Melbourne, Inkata Press.
- Parsons, W.T. and Cuthbertson, E.G. (1992) *Noxious Weeds of Australia*. Melbourne, Inkata Press.

Acknowledgments

Prepared by Ross Williamson, 1997. Updated by Ian Faithfull. Active constituents information supplied by Chemical Standards Branch January 1998.

The advice provided in this publication is intended as a source of information only. Always read the label before using any of the products mentioned. The State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.