

Weed Sheet

Declared weed sheet : Cutleaf Mignonette



Government of South Australia
South Australian Murray-Darling Basin
Natural Resources Management Board

Cutleaf Mignonette

(*Reseda lutea*)

Cutleaf mignonette has the ability to significantly reduce cereal crop yields through competition and to taint milk and meat products. It is primarily spread by seed as a contaminant of seed and hay products.



Cutleaf Mignonette



What is it?

Cutleaf mignonette is a herb of Europe and Great Britain and was first recorded in South Australia in 1913. It is believed to have been introduced to the southern Yorke Peninsula via ship ballast. It is drought tolerant and occurs in association with calcareous soils.

What does it look like?

Growth habit: Erect perennial herb up to 1m high.

Leaves: The leaves are 20-60mm long, deeply cut into narrow pointed lobes.

Flowers: The flowers are greenish-yellow and numerous, appearing along an upright stem from October to mid-summer.

Fruit: Oblong angular pods approximately 10mm long, containing numerous black smooth shiny seeds.

Root: It has extensive roots that are succulent and are able to regenerate from fragments when spread by cultivation.



Why is it a problem?

Cutleaf mignonette is a persistent weed in arable land. It is an effective competitor in cereal crops, and can severely reduce yields; the cost to the South Australian grains industry is estimated at \$2.2 million per annum. The seed is difficult to remove from contaminated grain and the allowed Cutleaf mignonette contamination per 500ml sample is 1 pod. It also poses a hazard to lupin and cucurbit crops because it acts as an alternative host of the watermelon mosaic virus and the cucumber mosaic virus. It is unpalatable and can taint dairy produce and meat when no other feed is available.

Affected land uses: Cropping and grazing land uses are affected by the presence of this pest plant. It can also be found on roadside verges.



Where is it found?

Cutleaf mignonette is widespread over Yorke Peninsula and is particularly common in the southern Yorke Peninsula area. It can be found in scattered isolated infestations throughout the SA MDB NRM Board Region. It also has spread into other areas of the State that receive between 225-625mm of rain annually and occurs on alkaline soils ranging from deep sands to mallee clay loams and is a naturalised weed in Tasmania, Victoria and New South Wales.

How is it spread?

Long-range dispersal occurs as a contaminant of seed or fodder or through dung of stock. Seed is spread between properties by stock, contaminated produce and vehicles. Localised spread may occur when root fragments are moved during cultivation.

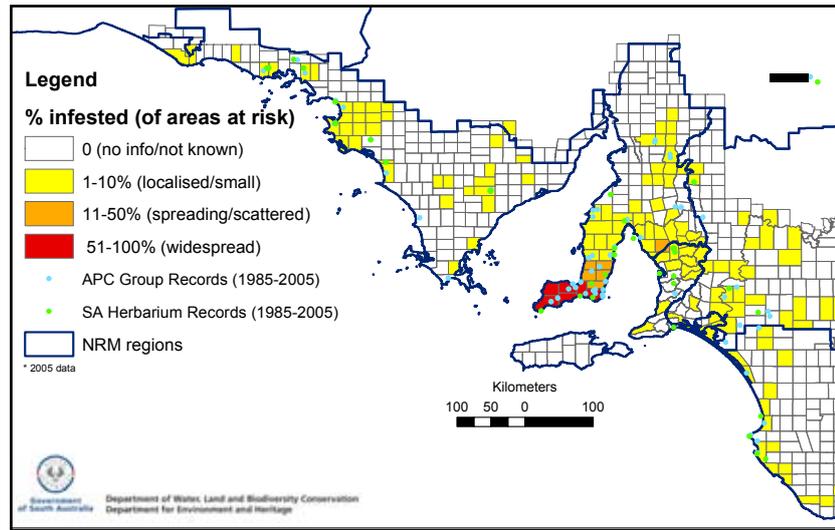
How do we control it?

Prevention: Reduce spread to clean properties by monitoring movement of stock. Do not sell hay or move machinery from infested properties, contain infestations, and reduce its density by preventing seeding, this will exhaust seed reserves in soil.

Physical control: Grazing and mowing are not successful in controlling this weed because it can regrow from tuberous roots. Suppression of Cutleaf mignonette in crops is recommended until harvest to avoid grain contamination. Cutleaf mignonette seed only remains viable for 3-4 years. Management in rotational cereal/medic systems is aimed at exhausting seed reserves by preventing fruiting. Repeated cultivation can prevent seeding and reduce density.

Chemical control: Chemicals registered in South Australia for Cutleaf mignonette control include products containing 2-4D, MCPA, and Metsulfuron-methyl. 2-4D products should only be used on seedlings and young plants, as mature plants show resistance.

Where isolated plants are in a non-crop situation e.g. roadsides, Picloram or Glyphosate products can achieve effective control. Care should



Infestation Level of CUTLEAF MIGNONETTE (*Reseda lutea*) by hundreds in the State of South Australia*

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		1	1	1							

1) Peak Period

Yearly Weed Life Cycle of CUTLEAF MIGNONETTE (*Reseda lutea*) in the State of South Australia

■ Germination	■ Active growth
■ Flowering	■ Seed set

be taken as these products are non-selective and Picloram is residual. Always read the label prior to application for rates and precautions.

Biological control:

Biological control agents for this plant are currently undergoing evaluation.

For more advice on recognising and controlling Cutleaf mignonette, contact your local Natural Resources Management Board Officer.

References:

Heap, J.W., Willcocks, M.C. and Kloot, P.M. (1995) *Reseda lutea* L. In Groves, R.H., Shepherd, R.C.H. and Richardson, R.G. (eds) *The Biology of Australian Weed*. 1: 203-216.

Parsons, W.T and Cuthbertson, E.G (2001) *Noxious Weeds of Australia* 2nd Edition, CSIRO Publishing.

Contact us



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Legislation

Cutleaf mignonette is declared under the Natural Resource Management (NRM) Act 2004.

Declared Plant Class: 2F
Declared Plant Category: 2

The following provisions of the NRM Act 2004 are to be applied to the whole of the State:

175(2) - relates to the movement of plants on public roads within a control area.

177(1)(2) - relates to the sale of plants, or produce or goods carrying plants.

182(2)(3) - relates to the obligation of an owner of land to control and keep controlled the plant and take any measures prescribed by the relevant authority.

185(1) - relates to the ability of the NRM authority to recover costs of control on roadsides from adjoining landholders.

The following provisions are to be applied in the areas of the District Council of Barunga West, District Council of the Copper Coast and District Council of Yorke Peninsula:

180(1) - relates to the notification of a plants presence to a relevant NRM authority.



Natural Heritage Trust

Helping Communities Help Australia

An Australian Government Initiative

Head Office

Mannum Road
PO Box 2343
Murray Bridge SA 5253

Telephone : (08) 8532 1432

Facsimile : (08) 8531 1843

www.samdbnrm.sa.gov.au

enquiries@samdbnrm.sa.gov.au

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