

# Spiny emex

*Emex australis*



The arrangement of the spines on spiny emex ensures that one spine is always pointing upward. This allows the burr to attach to most things that are placed on it—making it easily dispersed.

Also, the weed has high levels of oxalic acid, which can cause poisoning in sheep, but generally the incidence is low.

Spiny emex competes strongly with cereal crops and legumes in early growth stages and can cause significant reductions in yield.

Although spiny emex is not a declared plant, its control is recommended.

## Legal requirements

Spiny emex is not a prohibited or restricted invasive plant under the *Biosecurity Act 2014*. However, by law, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants under their control.

Local governments must have a biosecurity plan that covers invasive plants in their area. This plan may include actions to be taken on certain species. Some of these actions may be required under local laws. Contact your local government for more information.

## Description

Spiny emex is a vigorous annual with a thick taproot. Leaves form a rosette in early growth and branch later. Prostrate stems grow from the centre of the rosette. Flowers are not conspicuous.

Fruits are very distinctive, forming clusters of spiny butts in the forks of the leaves. Burrs are woody, about 7 mm long, triangular in cross-section and bear three rigid spines.



## Habitat and distribution

Spiny emex is a native of South Africa, and is now a common weed from the southern border areas of the Moreton and Darling Downs districts to the Maranoa, Burnett and Leichhardt districts.

It occurs in disturbed sites such as cultivated paddocks, around buildings and along roadsides and in waste places. It is also common in cereal and lucerne growing areas.

## Control

As spiny emex can produce seed at an early age, any control program must aim to destroy all plants shortly after emergence.

Cultivation will kill seedlings; however, due to the plant's long germination period, cultivation alone can be impractical and it is usually better to combine with herbicide control.

## Herbicide control

Spiny emex is resistant to 2,4-D alone (except seedlings) but can be controlled by spraying with the herbicides listed in Table 1. Some products are registered, but others may be used under minor use permit PER11463.

## Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit [biosecurity.qld.gov.au](http://biosecurity.qld.gov.au).

**Table 1. Herbicides for the control of spiny emex**

Situation	Herbicide	Rate	Comments
Pastures and non-agricultural	2,4-D amine 625 g/L And other formulations (various trade names)	1.4 L/ha 140 mL/150 L water/ 1000 m <sup>2</sup> Consult label for correct rate for other formulations	Boom or spot spray Only young plants are susceptible
Agricultural non-crop areas, commercial and industrial areas, pastures and rights-of-way	2,4-D 300 g/L + picloram 75 g/L (e.g. Tordon 75-D)	300 mL/100 L water	Spot spray young rosette or seedling plants up to 8 true leaves
Commercial and industrial areas, rights-of-way, around agricultural buildings	Bromacil 800 g/kg (e.g. Hyvar X)	3.5–6.5 kg/ha (2–6.5 kg for retreatment)	Lowest rate will be effective in low rainfall areas (250 mm or less)
		20g/10 m <sup>2</sup>	Small areas
Commercial and industrial areas, forest plantations, rights-of-way and other non-agricultural areas	Glufosinate-ammonium 200 g/L (e.g. Basta)	2–5 L/ha 500 mL/100 L water 75 mL/15 L knapsack	Foliar spray (boom, hand gun or knapsack)
Non-agricultural land, rights of way, around agricultural buildings, domestic and public service areas, rights-of-way	Glyphosate 360 g/L and other formulations (multiple trade names)	2–3 L/ha	Boom spray
		500–700 mL/100 L water 75 mL/15 L knapsack	Spot spray For other formulations consult labels for rates
		1 part to 2 parts water	Wick wiper
Non-agricultural areas, domestic and public service areas, commercial and industrial areas, bushland/ native forests, roadsides, rights of way, vacant lots, wastelands, wetlands, dunal and coastal areas (PER11463)	Dicamba 500 g/L (e.g. Kamba 500)	400 mL/100L water	Spot spray seedlings only APVMA permit PER11463
	MCPA 340 g/L + Dicamba 80 g/L (e.g. Kamba M)	125 mL/ 100 L water	Permit expires 30/06/2023
	Fluroxypyr 200 g/L (e.g. Fluroxypyr 200)	500 mL–1L/ 100L water	

**Read the label carefully before use. Always use the herbicide in accordance with the directions on the label.**

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Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at [biosecurity.qld.gov.au](http://biosecurity.qld.gov.au) to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

