



## Department of Primary Industries

### Prickly acacia

#### *Vachellia nilotica*

**PROHIBITED MATTER:** If you see this plant report it. Call the NSW Biosecurity Helpline 1800 680 244



Prickly acacia has ball-shaped, fluffy yellow flowers. (Photo: Colin G. Wilson)

- This plant must not be sold anywhere in NSW

### Profile

#### How does this weed affect you?

Prickly acacia is a small tree that can form dense prickly thickets. It:

- can halve livestock productivity
- makes livestock mustering difficult
- restricts animal access to water and shade
- reduces habitat and food for native animals
- reduces biodiversity in grasslands

- has negative impacts on tourism and land use by indigenous people.

## What does it look like?

Prickly acacia is a thorny, spreading tree. It usually grows to 4–5 m but occasionally is up to 10 m tall.

### Leaves:

- are fern-like with 3–10 pairs of primary leaf segments which are further divided into 10–25 pairs of leaflets
- usually have a gland just below or between the two primary leaf segments closest to the stem.

The leaflets are

- green
- oblong
- 3–6 mm long and 0.5–1.5 mm wide.

### Spines are:

- in pairs at the base of the leaves
- light grey
- straight
- 1–5 cm long
- some spines drop off as the plant matures.

### Flowers are:

- bright yellow fluffy balls that look like wattle flowers
- 10–12 mm in diameter
- in groups of 2–6 flower heads at the base of each leaf joint.

### Seeds pods are:

- grey-green, white, or grey
- brown when dry
- 6–25 cm long and 1.4–1.7 cm wide
- flat with up to 16 seeds
- constricted between each seed with the size of the gap between seeds varying down the pod
- covered in fine hairs.

### Seeds are:

- 7 mm long
- hard with a brown coat.

### Stems are:

- covered in orange and/or green tinged bark when young and dark, rough bark when mature
- branched near the soil surface, with the branches rising like single trunks.

### Roots:

Prickly acacia has a deep taproot.

## Similar looking species

Prickly acacia looks like:

- Karroo thorn (*Vachellia karroo*) which has much larger spines (up to 25 cm long).
- Mesquite (*Prosopis* spp.) which has cylindrical greenish-cream flowers up to 8 cm long.
- Mimosa bush (*Vachellia farnesiana*) which has short prickles (usually up to 2.5 cm long) and cigar-shaped seed pods.
- Parkinsonia (*Parkinsonia aculeata*) which has flowers with 5 petals, short curved spines (up to 1 cm) and does not have fern-like leaves.

Call the NSW DPI Biosecurity Helpline if you see a tree that you suspect might be prickly acacia or any other introduced acacia species.

## Where is it found?

Currently, there are no known infestations in NSW. A single cultivated plant was found in the Greater Sydney region in 2016. This plant was removed and destroyed. Prickly acacia could invade grasslands such as the North Western Plains.

Prickly acacia is native to arid and semi-arid regions of Africa and Asia.

It was brought to QLD in the early 1900s as a shade, fodder, and ornamental tree. The tree invaded vast areas of the Mitchell Grass Downs in Queensland during the 1950s and 1970s.

## What type of environment does it grow in?

Prickly acacia grows in arid and semi arid regions with warm temperate or subtropical climates. It grows well in cracking clay soils with high water holding capacity, but it can also grow on sandy soils when water is abundant. Prickly acacia often grows along waterways, around bore drains, and on seasonal floodplains with an annual rainfall of 350–1500 mm.

## How does it spread?

### By seed

A medium sized prickly acacia tree produces about 175,000 seeds each year. The seeds can survive in the soil for at least 6 years before germinating.

The seeds are spread long distances by water and cattle. Cattle eat the ripe pods and excrete the seeds up to six days later. At least 40% of these seeds remain viable. The manure provides extra moisture and nutrients for seed germination and seedling growth. Goats and sheep chew the seeds and are less likely to spread the weed.

Seeds are also spread by water and in mud on vehicles.

## More information

- Prickly acacia model by Rachel Klyve ([www.rachelklyve.com](http://www.rachelklyve.com)) (<https://sketchfab.com/models/25724f5b278f436b9390fb3085d116d5/embed>)

## Control

*Please do not attempt to treat or dispose of this weed yourself. Report this plant if you see it anywhere in NSW by calling the helpline listed at the top of this page immediately.*

*NSW DPIRD, Agriculture and Biosecurity will lead an initial response for the treatment and disposal of the plant to stop it from spreading.*

## Prevention

Livestock, particularly cattle, from affected areas in QLD should be held in a clean paddock for at least seven days before being moved to areas that are not infested with prickly acacia. Check quarantine paddocks regularly and remove any prickly acacia seedlings. The quarantine areas need to be checked for prickly acacia seedlings for seven years.

## Herbicide options

### WARNING - ALWAYS READ THE LABEL

Users of agricultural or veterinary chemical products must always read the label and any permit, before using the product, and strictly comply with the directions on the label and the conditions of any permit. Users are not absolved from compliance with the directions on the label or the conditions of the permit by reason of any statement made or not made in this information. To view permits or product labels go to the Australian Pesticides and Veterinary Medicines Authority website [www.apvma.gov.au](http://www.apvma.gov.au)

See Using herbicides (<http://www.dpi.nsw.gov.au/biosecurity/weeds/weed-control>) for more information.

**Aminocyclopyrachlor 240 g/L (Method® 240 SL)**

Rate: 200-500 mL per 100 L of water

Comments: Spray with handgun, a hand-held or backpack sprayer. Spray plant short enough to cover all of the foliage. Thoroughly and uniformly wet the foliage but avoid spraying to the point of run off.

Withholding period: Nil for domestic grazing. See label for livestock export conditions.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Fluroxypyr 333 g/L (Starane™ Advanced)**

Rate: 450 mL in 100 L of water + Uptake® Spraying Oil or equivalent at the rate of 500 mL/100 L of spray mix.

Comments: Spot spray actively growing seedlings and young plants up to 2 m tall.

Withholding period: Do not graze failed crops and treated pastures or cut for stock food for 7 days after application. See label for more information.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Fluroxypyr 333 g/L (Starane™ Advanced)**

Rate: 900 mL per 100 L of diesel or Biosafe

Comments: Basal bark application for plants up to 10 cm diameter. Spray or paint the mixture around the base of each stem from ground level to at least 30 cm from the ground, wetting the bark to the point of runoff. Old rough bark will require more spray than smooth or young thin bark.

Withholding period: Do not graze failed crops and treated pastures or cut for stock food for 7 days after application. See label for more information.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Fluroxypyr 333 g/L (Starane™ Advanced)**

Rate: 900 mL per 100 L of diesel or Biosafe

Comments: Cut stump method for trees with a base diameter up to 10 cm. Cut the trunk then spray or paint the mixture around the base of each stem from ground level to a height of at least 30 cm from the ground, wetting the bark to the point of runoff. Do not apply to wet stems.

Withholding period: Do not graze failed crops and treated pastures or cut for stock food for 7 days after application. See label for more information.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Glyphosate 700 g/kg (Di-Bak G)**

Rate: 1 capsule for every 10 cm of circumference (minimum of 2 capsules per tree)

Comments: Capsule herbicide: See critical comments on the label for details on how to apply and seal the capsule into the trunk.

Withholding period: Do not allow stock to graze surrounding the treated areas until complete browning of treated tree has occurred.

Herbicide group: 9 (previously group M), Inhibition of 5-enolpyruvyl shikimate-3 phosphate synthase (EPSP inhibition)

Resistance risk: Moderate

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**Picloram 44.7 g/L + Aminopyralid 4.47 g/L (Vigilant II ®)**

Rate: Undiluted

Comments: Cut stump. Apply a 3–5 mm layer of gel onto stems less than 2 cm diameter. Apply 5 mm layer on stems above 2 cm diameter.

Withholding period: Nil.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Triclopyr 240 g/L + Picloram 120 g/L (Access™)**

Rate: 1.0 L in 60 L of diesel (or biodiesel such as Biosafe).

Comments: Basal bark application for plants with stems up to 10 cm diameter at the base. Cut stump application for plants with stems greater than 10 cm diameter at the base.

Withholding period: Nil

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

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**Triclopyr 600 g/L (Garlon® 600)**

Rate: 500 mL in 60 L of diesel

Comments: Basal bark application for stems up to 10 cm diameter at the base. Spray or paint the mixture all the way around the stem from ground level up to 30 cm high, wetting to the point of runoff. Cut stump application for plants with stems up to and greater than 10 cm diameter at the base. Stems should be cut less than 15 cm above the ground. Do not apply to wet stems.

Withholding period: Not required when used as directed. If use is off-label check permit.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

## Biosecurity duty

The content provided here is for information purposes only and is taken from the *Biosecurity Act 2015* and its subordinate legislation, and the Regional Strategic Weed Management Plans (published by each Local Land Services region in NSW). It describes the state and regional priorities for weeds in New South Wales, Australia.

Area	Duty
All of NSW	<b>General Biosecurity Duty</b> <i>All pest plants are regulated with a <b>general biosecurity duty</b> to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.</i>
All of NSW	<b>Prohibited Matter</b> <i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i>



Prickly acacia is a thorny tree that usually grows 4–5m high. (Photo: Colin G. Wilson)



Spines can be up to 5 cm long and tend to drop off older stems. (Photo: Colin G. Wilson)



Prickly acacia can form dense thickets - a roadside infestation in West Timor, Indonesia. (Photo: Colin G. Wilson)



Prickly acacia leaves are made up of 10–25 pairs of very small leaflets. (Photo: Philip Blackmore NSW DPI)



Prickly acacia seed pods are constricted between seeds. (Photo: Colin G. Wilson)

Reviewed 2025