Control and Management

As with most invasive species, the early detection and management is crucial in the control of Coolatai grass. Most grass weeds are difficult to identify because they look innocuous and rarely raise land managers' attention until the species is well established. Coolatai grass is a prime example of this.

The key steps to controlling Coolatai grass are:

- Learn to identify Coolatai grass, or seek assistance in identification
- Seek assistance to Plan control methods
- **Implement** the control methods as planned and monitor for regeneration.

Spot spraying with knockdown herbicides will require 2-3 applications to achieve complete control.



Coolatai Grass seed head

Herbicide Options

Glyphosate 360 g/L with Flupropanate 745

g/L (Various products)

Rate: 200 mL glyphosate plus 20 mL flupropanate per 10 L of water

Note: Permit <u>9792</u> Expires 30/11/2025

Comments: **Spot spray** application between July and October. Only use the tank mix once

per season.

Flupropanate 745 g/L (Various products)

Rate: 300 mL per 100 L water

Comments: Apply in winter and spring

between July and October.

Whenever using herbicides ALWAYS CHECK THE LABEL for applicable withholding periods.

Acknowledgements

Much of this information was sourced from NSW Weedwise (https://weeds.dpi.nsw.gov.au/Weeds)





Coolatai Grass

Hyparrhenia hirta



Coolatai Grass dominated pasture.

Why is Coolatai grass a weed?

Coolatai grass (*Hyparrhenia hirta*) is an invasive drought and herbicide tolerant, tussock forming perennial grass.

It is also one of the few perennial grasses capable of invading undisturbed natural ecosystems and is a major threat to natural biodiversity.

Coolatai grass readily invades pastures and dominates them, particularly under set stocking. Coolatai grass dominated pasture will result in tall, rank growth of low digestibility (<40%) and protein (<7%). Sheep production will be poor and cattle will need supplementary nitrogen or protein to be able to utilise the feed.

Coolatai grass creates a fire hazard from producing large amounts of dry highly flamable material.

What does it look like?

Coolatai grass is a long lived, summer active perennial that forms a dense grass tussock and grows up to 1.5m high.

Coolatai grass has greyish green leaves giving a lime green colouring from a distance. The leaves turn a rusty, orange-red on maturity and in winter, particularly after frost. This can lead to mature Coolatai grass being misidentified as Kangaroo Grass (*Themeda australis*).

The leaves are relatively harsh to touch. The leaf blade is flat and 2-3 mm wide with the ligule 2-3 mm long.

The seedhead consists of paired rows (racemes) of 5-8 seeds per row. The paired rows are up to 35 mm long and arise from a flower bract (stem) forming a distinctive "V" shape.



Coolatai Grass seedhead in distinctive "V".

How does it spread?

Seed sheds quickly on maturity. The hairy, awned seeds readily adhere to the hair and wool of animals, clothing and is easily caught on and in vehicles.

Along roadsides the seed is spread by the common practice of slashing for 'road safety'. The light weight of the seed also facilitates the spread by air movement by passing vehicles, particularly trucks.

Coolatai grass is able to self-fertilise, meaning one plant can quickly become an established weed community if not treated.



Coolatai Grass invading a river bank.

Cattle are known to graze the heads of Coolatai grass. Research on the viability of grass seeds passing through cattle has shown around 12% of seeds remain viable.