

Coolatai Grass (*Hyparrhenia hirta*)

Why is it a problem?

Coolatai grass is renowned for invading native vegetation, therefore preventing regeneration of native grasses and ground cover. Coolatai grass has low digestibility and is not preferred by livestock.

Unfortunately that means in grazing areas stock will preferentially graze native species and leave Coolatai grass, allowing it to reproduce and expand rapidly. Dense stands of Coolatai grass also pose a fire risk, especially near infrastructure or urban areas.

What does it look like?

Coolatai grass is a dense tussock forming grass which can grow up to 2m tall. Its main growing period is late spring and summer, tending towards dormancy over the winter and autumn.

Coolatai grass can often be confused with similar looking native grasses, in particular the Lemon-scented Grasses such as Barbed Wire Grass (*Cymbopogon* species), Kangaroo Grass (*Themeda triandra*) and Red-leg Grass (*Bothriochloa macra*).

The leaves are thin grey-green straps with a prominent midrib, up to 30cm long and 0.5cm wide. Each leaf stem junction has a membranous ligule 2-4mm long. The leaves are harsh to touch and can turn reddish-brown or orange in winter; particularly after frost.

The flowers are a pair of grey-white racemes (spikes) up to 5cm long forming a "V" at the end of the flowering stalks. Each raceme has 5-7 paired spikelets with a single brown awn on each pair. The upright flowering stems are sometimes covered in a whitish powdery substance when young.

Coolatai grass can produce multitudes of tiny sticky seeds up to 2mm long which are contained within an awned hairy husk.



Figure 1: High Fuel load around farm infrastructure: a disaster waiting to happen.



Figure 2: A good comparison of Girraween (left) and the encroaching tide of Coolatai grass off a landholders property (right). We hope to create a more significant buffer to protect the park.

How do we control Coolatai Grass?

Coolatai grass produces thousands of tiny seeds with hairy awned husks which adhere to clothing, animals, machinery and vehicles. Seeds may also be transported via water along drainage lines.

To control the spread of seeds:

- Avoid travelling through Coolatai grass infestations, especially when the plants are seeding.
- Ensure machinery, vehicles and clothing are cleaned down after working in a known Coolatai grass area.
- Mow, slash or strategically graze to help reduce or prevent seed set. Small infestations should be grubbed out and material burnt.
- Glyphosate and Flupropanate may be applied (as per the recommended application rates on the label) to actively growing plants to aid control; however, several applications may be required to achieve control. It is recommended treatment be preceded by mowing or burning to remove old vegetation and stimulate new growth.



Figure 3: QPWS staff suited up for an intensive control of Coolatai grass. This 'muster' involves walking the ridge country of Girraween for eight hours a day carrying heavy packs of chemical for spot spraying.



Figure 4: Coolatai grass, identified by the distinctive fork in the seed head, dominating a patch of scrub, choking out biodiversity and creating a monoculture.

Quick Facts

- Coolatai Grass (*Hyparrhenia hirta*) is a highly successful and invasive introduced species which germinates and grows in a wide range of temperatures, produces vast quantities of seed and persists under heavy grazing.
- It spreads by seeds which have hairy, awned husks that stick to clothing, animals and vehicles.
- It impacts on biodiversity by out competing and replacing native plants, preventing their regeneration and reducing available fauna habitat.
- Human activities such as slashing or traffic assist in spreading the weed, especially along roadsides.
- It cannot be controlled by herbicide alone.
- Coolatai Grass infestations pose a massive fire risk to infrastructure and the environment owing to its high density, tussock forming nature.