

# Buffel grass

(*Cenchrus ciliaris*)

Buffel grass (*Cenchrus ciliaris*) was introduced as a perennial pasture species for northern Australia during the early 1900s. It was widely planted for many decades because of its ability to grow rapidly after rain (providing fodder) and its high grazing and drought tolerance.



ABOVE: Burning and full-cut cultivation are likely to be the best non-chemical control options for buffel grass. Photo: Andrew Storrie, Agronomo Consulting.

## Key facts

- Buffel grass is a highly-invasive perennial grass weed with the potential to invade and threaten low-rainfall cropping regions across south-eastern Australia.
- Buffel grass is a deep-rooted perennial, which produces an abundance of seed and can tolerate long periods of drought.
- Early control of small patches will prevent the spread of buffel grass and is essential for managing this weed.
- A combination of herbicides, burning and cultivation is likely to be the most successful control strategy.

**Buffel grass thrives across a range of soil types**, but is particularly suited to lighter-textured soils. This long-lived perennial grass has a high demand for nitrogen and phosphorus and will deplete these nutrients from the soil over time.

Buffel grass is major threat to the biodiversity of native vegetation in the arid and semi-arid regions of SA. In cropping regions of SA, buffel grass has been identified along the major transport routes and is a potential threat to grain production, as a highly-active summer weed, if weed infestations become widespread.

Similar to other grass weeds in agriculture, buffel grass is a prolific seed producer and has moderate seed dormancy. Established buffel grass plants mainly flower during October in SA and produce seed during summer. New germinations of buffel grass can grow and set seed within 3–6 weeks, when conditions are favourable.

Seeds are easily dispersed by wind, water, animals, on clothing and by vehicles. Plant reproduction can also occur vegetatively

## Further information

- Herbiguide — online weed control guide [http://www.herbiguide.com.au/Descriptions/hg\\_Buffel\\_Grass.htm](http://www.herbiguide.com.au/Descriptions/hg_Buffel_Grass.htm)
- Biosecurity SA (2012). South Australia Buffel Grass Strategic Plan: A plan to reduce the weed threat of buffel grass in South Australia. Government of South Australia

## Non-chemical control

### Non-chemical control options

The threat of buffel grass can be significantly reduced if growers and land managers are disciplined in applying an integrated weed management (IWM) plan that combines herbicide application, burning and cultivation to control small areas of weed infestations along roadsides, preventing the spread into paddocks.

through rhizomes or stolons. It is estimated individual tussocks of buffel grass can live for up to 20 years.

Buffel grass is deep-rooted and can store carbohydrates at the base of its stems, which allows the grass to tolerate long periods of drought and then respond rapidly to rainfall events.

When left uncontrolled, buffel grass forms a dense monoculture that outcompetes other species. Dry buffel grass foliage is highly flammable, but can survive and regenerate after a fire event.

### Herbicide control options

There are a few herbicides registered to control buffel grass (Table 15). Plants need to be actively growing for herbicide applications to be effective — spray young plants or regrowth following a rainfall event. Established plants may require 2–3 applications for effective control. Anecdotal evidence suggests a mix of glyphosate and flupropanate is the most effective herbicide option, and when used in conjunction with burning can provide successful control.

Table 15. Registered herbicides for the control of buffel grass

Paraquat and diquat (e.g. Sprayseed®)
Haloxyfop (e.g. Verdict®)
Glyphosate (e.g. Roundup®)
Flupropanate (e.g. Taskforce®)
Fluazifop (e.g. Fusilade® Forte)