

Pest Management



GIANT RAT'S TAIL GRASS

Scientific Name:

Sporobolus pyramidalis and *Sporobolus natalensis*

Giant Rat's Tail Grass (GRT) is a **Category three** restricted invasive plant under the *Biosecurity Act 2014*.

A person must not release these invasive plants into the environment, give away or sell as a seed, plant or something infested with its seeds.

The *Biosecurity Act 2014* requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with invasive plants under their control. This is called a General Biosecurity Obligation (GBO).

At risk in the Lockyer Valley region

- Livestock production
- Hay and fodder production
- Native areas and habitats
- Value of land assets



General Information - GRT

- Is well adapted to a range of soils of varying fertility
- Is an upright grass with strong stems growing to 2m tall
- Has a seed head up to 45cm long and 3cm wide
- Its seed head shape changes from a 'rat's tail' when young to an elongated pyramid shape at maturity
- It flowers and seeds in the frost-free period of the year, with its main seeding in late summer/autumn
- It produces up to 85,000 seeds/m² with a 90 per cent germination rate in the field
- Its seed can remain viable in the ground for up to 10 years

How it spreads

- By livestock in their manure, on their fur and in their hooves
- By vehicles and machinery (especially slashers and earthmoving equipment)
- By fast flowing watercourses

Its impact – GRT can

- Quickly dominate pasture, particularly after overgrazing or soil disturbance
- Cause losses in livestock carrying capacity and decrease production by up to 80 per cent
- Increase teeth wear of cattle and horses that graze on mature plants
- Degrade natural areas, reducing habitat for native fauna
- Decrease the value of land assets



THE CONTROL OPTIONS

The General Biosecurity Obligation requires a person to take reasonable and practical steps to minimise the risk of spreading Giant Rat's Tail grass seed and the establishment of new infestations.

What do I need to do?

- Use a combined approach of different control methods, including herbicides and mechanical land management practices that maintain soil cover and property hygiene practices that limit the risk of spread.
- Control isolated plants and stop seeding.
- Contain the spread of GRT by making a minimum 20m buffer along roadways, waterways and inside property boundaries.
- Always practice property, vehicle and equipment weed hygiene.
- Avoid moving through GRT areas when seeds are sticky, after rain or heavy dew.
- Only use reliable sources of fodder, pasture seed and equipment hire.
- Promote pasture competition using pasture grasses and legumes with runners as these are more effective than tussock grasses in outcompeting GRT.

THE CONTROL OPTIONS - CONTINUED

For entrances, roads, tracks and boundaries

- Maintain a slashed buffer on each side of these areas, to remove seedheads from the GRT and promote the growth of running grasses.
- Spot spray or wick wipe the GRT plants with glyphosate, within the slashed buffer.

For small, isolated infestations

- Hand-chip tufts, bag then solarise and dispose via waste facility or bury to a depth that does not allow re-establishment. (*Biosecurity Regulation 2016 Part 3, Subdivision 1, Section 11*)
- Spot spray with glyphosate and/or Flupropanate
- Manage grazing rate and competitive pasture species to maintain as much soil vegetative cover as possible – preference low growing grasses with runners – and apply NPK fertiliser at low rates where appropriate to encourage the growth of these runners.

For larger scattered infestations

- Spot spray with glyphosate and/or Flupropanate
- Manage grazing rate and competitive pasture species to maintain as much soil vegetative cover as possible – preference low growing grasses with runners – and apply NPK fertiliser at low rates where appropriate to encourage the growth of these runners.

For larger dense infestations

- Apply glyphosate through a pressurised wick wiper where appropriate
- Boom spray or jet spray with glyphosate and/or Flupropanate as per label or permit directions
- Manage grazing rate and competitive pasture species to maintain as much soil vegetative cover as possible – preference low growing grasses with runners – and apply NPK fertiliser at low rates where appropriate to encourage the growth of these runners
- Where appropriate burn prior to cultivating, to reduce viable seed bank
- Follow up with spot spraying or hand chip fence lines, headlands, drainage lines, shelter belts and any surviving or newly established weedy Sporobolus grasses to prevent reseeding

REFERENCES for Further Reading

- daf.qld.gov.au
- www.business.qld.gov.au
- www.agforceqld.org.au/knowledgebase/article/AGF-01041/
- futurebeef.com.au/resources/giant-rats-tail-grass-management-and-herbicides/

