

Pest Management



MATURE FORM



EARLY ROSETTE FORM



PARTHENIUM

Scientific Name: *Parthenium hysterocephalus*

Parthenium is a Weed of National Significance (WONS) and 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).

References for Further Reading

- [Parthenium \(daf.qld.gov.au\)](http://daf.qld.gov.au)
- [Parthenium | Business Queensland](#)
- [Parthenium hysterocephalus | WEEDS AUSTRALIA - profiles \(ala.org.au\)](#)

General Information

Parthenium is a toxic, fast-growing, annual plant with a deep tap root and creamy white, star shaped flowers (4-10mm diameter) which form on the tips of stems.

Although it prefers growing in alkaline, clay loams, Parthenium will grow in all soil types and can grow erect up to 2 metres in height.

Parthenium has ribbed stems and many branches in its top half. It also features pale green, deeply lobed leaves that are covered in fine soft hairs.

Each average-sized plant can produce up to 15,000 seeds that can remain viable in the ground for up to 10 years. The seeds germinate in both spring and early summer, maturing quickly (sometimes within four weeks) and produce flowers and seeds continuously during the growing season. Although most plants die back in late autumn, some can continue to flower and produce seed at any time of year in favourable conditions.

At risk in the Lockyer Valley region

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



How it spreads

- By wind and water - especially after flood events.
- By animals in their coat and hooves.
- By clothing, vehicles, and machinery.
- In contaminated seed and stock feed.

Its impact

- Quickly dominates pasture, particularly after overgrazing or soil disturbance.
- Mature plants release allelopathic chemicals into the soil that suppress the growth of nearby crop and pasture plants.
- Can cause allergic respiratory problems in humans and severe contact dermatitis in both humans and stock.
- Is systemically toxic to livestock if grazed, causing illness and sometimes death.
- Can taint the quality of livestock's milk and meat products.
- Degrades natural areas, reducing habitat for native fauna.
- Decreases 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 Parthenium seed and the establishment of new infestations.

What do I need to do?

- Learn to recognise Parthenium before it flowers and sets seed, so early action can be taken. Each average sized plant can produce up to 15,000 seeds that can remain viable in the ground for up to 10 years.
- Reduce the risk of Parthenium spread from your property by establishing weed free buffers along property boundaries, entrances, and drainage areas (sites where vehicles, people and animals regularly access).
- Establish and maintain property weed hygiene practices, such as spelling new stock in holding yards and stock feeding in locations that enable regular monitoring for new infestations.
- Manage animal numbers and grazing rate to maintain a dense cover of pasture.

For small, isolated infestations

- Act immediately to prevent the infestation becoming worse.
- Wearing gloves to protect the skin from the plant's toxin, dig out or hand pull without dislodging seeds, bag then solarise the plant and dispose at waste facility or bury to a depth that does not allow re-establishment. (*Biosecurity Regulation 2016 Part 3, Division 1, Subdivision 1, Section 11*)
- Manage animal numbers and grazing rate to maintain a dense cover of pasture during the spring - summer growing period.

For larger scattered infestations

- Spot spray the weed and surrounding soil using a selective herbicide preferably with residual action, as per label or permit directions.
- Manage animal numbers and grazing rate to maintain a dense cover of pasture during the spring - summer growing period.

For larger dense infestations

- Boom spray the weed and surrounding soil using a selective herbicide preferably with residual action, as per label or permit directions, then follow up with spot spraying of missed plants.
- Rest the paddock during the spring - summer growing period to allow grasses to set seed and re-establish new pasture.