

# Johnson grass (*Sorghum halepense*)

## Weed management guide

Weed type  
**Grass**

November 2022

[www.lls.nsw.gov.au/regions/central-west](http://www.lls.nsw.gov.au/regions/central-west)



In NSW, weeds are regulated by the NSW Biosecurity Act, 2015. All land managers have a General Biosecurity Duty to contain the spread of weeds.

*“General Biosecurity Duty means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable).”*

The Regional priority for Johnson grass is to protect assets from the weed’s impacts and to prevent its arrival and establishment in the region. In order to achieve this, Land Managers are asked to: *Mitigate the risk of new weeds being introduced to their land and reduce impacts on priority assets. The plant should not be bought, sold, grown, carried or released into the environment.*

For further information, contact your local Biosecurity (Weeds) Officer via Central West Local Land Services or visit NSW WeedWise.

NSW WeedWise



# Habit and description

Johnson grass is a tussock-forming perennial grass with a creeping, purple-spotted rhizome. It can grow to 2m tall with erect, upright stems. Leaves are hairless, 20 to 50cm long with a ligule where the sheath and leaf blade meet. Inflorescence is an open, purple spike with a shape that resembles a pyramid. Johnson grass is a summer flowering species. Johnson grass prefers wet areas such as irrigated farmland, waterways and drainage lines.





# Reproduction and spread

Johnson grass is predominately spread via seed, which is small and light weight and readily spread by wind and water. Seeds can also spread by attaching to animal fur and clothing. Seeds can also remain intact after digestion by animals, so the seed is viable after passing through an animal. In favourable conditions, plants can produce 80,000 or more seeds which can be stored in the seed bank where they can lie dormant for several years. However, most seed will germinate in the first or second year. Johnson grass can also reproduce vegetatively as shoots from the underground rhizomes.

## Impacts

### Agriculture



- Considered one of ten worst weeds in the world.
- Can cause severe losses in crops from competition.
- Can chemically inhibit growth of other plants.
- Harbours pests and diseases of crops.
- Potentially toxic to livestock.

### Native vegetation



- Can invade native vegetation from adjoining agricultural land.
- Harbours pest species which prey or displace native fauna.

## Management

### Chemical



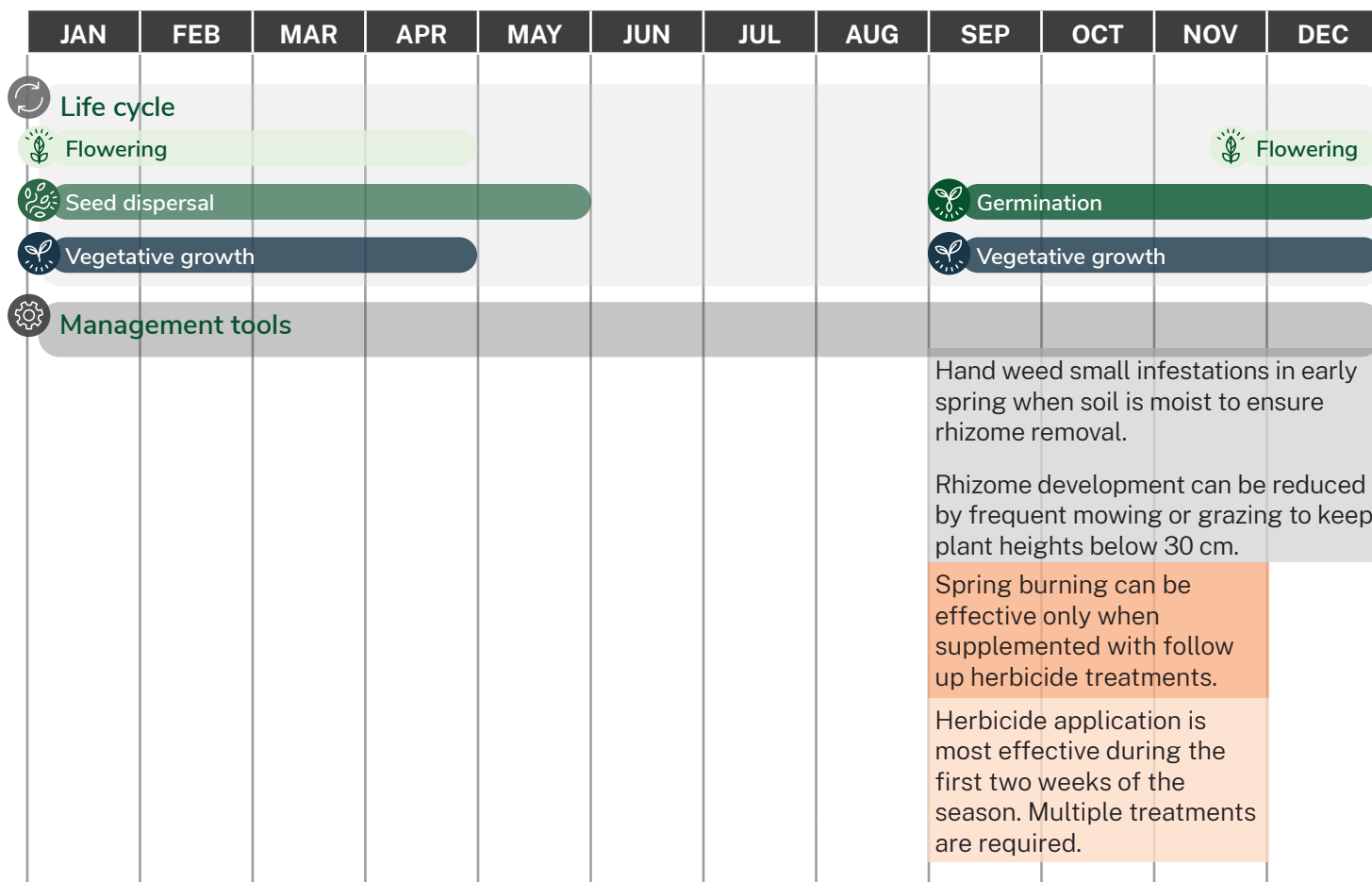
- Herbicide application is most effective during the first few weeks of the growing season (September).
- Follow up with spot spraying to kill seedlings and regrowth.
- Seek the guidance of an experienced Weeds Officer for expert advice on herbicide use.
- Visit [www.apvma.gov.au](http://www.apvma.gov.au) for a list of registered products, product labels and permit requirements.
- NSW DPI (2021) provides a list of recommended herbicides for the control of Johnson grass at <https://weeds.dpi.nsw.gov.au/Weeds/JohnsonGrass>.

### Non-chemical



- Small infestations can be removed by hand, but it is laborious and rhizomes need to be completely removed to prevent resprouting.
- Bulldozers can be used to remove large infestations, but rhizome removal would need to occur post bulldozing.
- Fire can be used to control above ground biomass, but it does not kill underground rhizomes.

# Management calendar



Optimal control options may vary depending on your location and climate. Consult an experienced Weeds Officer based in your local government area for control methods suited to your conditions.

All herbicides must be used in accordance with the herbicide label and permit requirements.

## Further information

For more information on your general biosecurity duties, visit [www.dpi.nsw.gov.au/biosecurity](http://www.dpi.nsw.gov.au/biosecurity).

For the best guidance on how to meet this duty on your property, contact your expert Weeds Officer at your local council or via Local Land Services [www.lls.nsw.gov.au/regions/central-west](http://www.lls.nsw.gov.au/regions/central-west).

NSW WeedWise



## References

Weeds Australia. (2021). *Arundo donax*, Weeds Australia — Profiles. <https://profiles.ala.org.au/opus/weeds-australia/profile/Arundo%20donax>

NSW DPI. (2017). *Weed categories*. <https://www.dpi.nsw.gov.au/biosecurity/weeds/weed-categories>

NSW DPI. (2021). *NSW WeedWise*. <https://weeds.dpi.nsw.gov.au/Weeds/JohnsonGrass>

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