

St. John's Wort (*Hypericum perforatum*)

Weed management guide

Weed type
Herb

April 2023

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, minimize or eliminate the biosecurity risk (as far as is reasonably practicable).”

The Regional priority for St. John's wort is asset protection. 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

St. John's wort is a perennial herb that grows up to 1.2 metres in height. Its stems are characterised into two: non-flowering and flowering. The non-flowering stem grows from crowns which have develop from buds in the lateral roots. These can form tangled thickets and are present in autumn and winter. The flowering stems on the other hand are branched near the top and are produced in spring. The flowering stems stand upright and have a reddish tinge while two opposite ridges run through its length. The leaves are arranged opposite each other along the stem and are sessile (stalkless). Leaves are paler in colour on the underside and spotted with oil glands. The oil glands appear like holes when leaves are held against light (Thornhill, 2021). The flowers are bright yellow and have five petals; three bundles of long-thread like stamens emanate from the centre of the flower. These transform into a fruit-capsule that split open when ripe. The seeds are light brown to black and with a pitted seed coat. This plant has two main strains in Australia: broad-leaved and narrow-leaved. The broad-leaved strain has wider leaves (10-12 mm), flowers earlier, and has larger seed capsules while the narrow-leaved strain has narrower leaves (7-9 mm), flowers later, and has smaller seed capsules.

The plant grows on a wide range of soils and thrives in areas that receive either summer or winter rainfall. It occurs mainly in hilly, forested areas but are especially problematic when it invades pasture lands.



Photo: © John Hosking | NSW DPI



Photo: © Birgitte Verbeek | NSW DPI



Photo: © Birgitte Verbeek | NSW DPI

Reproduction and spread

St. John's wort can reproduce sexually (seeds) and asexually (other plant parts). The seed capsules can attach to animals. It can also survive in the digestive track of grazing animals. Wind is also able to carry seeds over short distances. Water, machinery, and humans can spread seeds and plant parts over large distances. New plants and root suckers can grow from plant fragments and cultivation can move these fragments into new areas.

Impacts

Agriculture



- The plant can cause poisoning in livestock that feeds on it. It causes the animal to become sensitive to light.
- It can compete with pasture grasses which make it more susceptible to being ingested by livestock.
- St. John's wort can contaminate wool with "vegetable fault".

Native vegetation



- Dry stems that are left standing during summer become a fire hazard.
- St. John's wort can invade natural habitats and may significantly impact native flora and fauna.

Management

Chemical



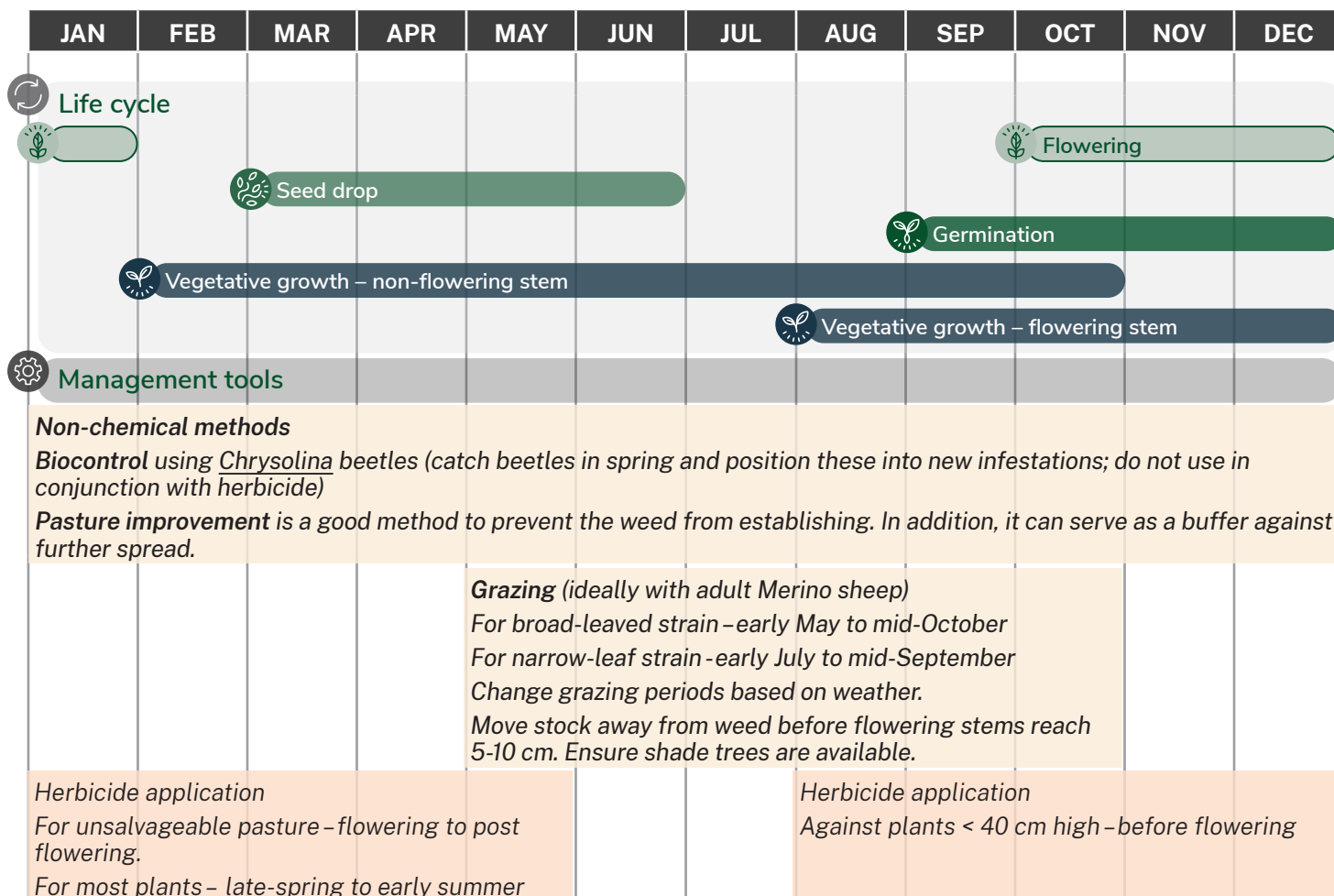
- Spot spraying can be used against isolated infestations before the flowers turn brown.
- Boom spraying is recommended for larger infestations.
- Weed wipers can also be employed for patches of this weed.
- It is important to treat plants only when it is actively growing. Treatment usually happens for two consecutive years as the plant can survive and regrow.
- Seek the guidance of an experienced Weeds Officer for expert advice on herbicide use.
- Visit www.apvma.gov.au for a list of registered products, product labels and permit requirements.
- NSW DPI (2018) provides a list of recommended herbicides for the control of St. John's wort at <https://weeds.dpi.nsw.gov.au/Weeds/StJohnsWort>

Non-chemical



- Maintaining a healthy pasture can help prevent St. John's wort from establishing.
- While it can be poisonous against livestock, the weed can still be grazed to help suppress it. The key is to graze when the level of hypericin is low (i.e. not flowering). In some areas like steep slopes, grazing will be the only feasible method for control.
- Fire can be used against seeds but the damage to pasture is usually greater compared to the target. The weed will also regrow from roots.
- There are a number of biological control agents against St. John's wort, one of which is beetles under the genus *Chrysolina*. Its larvae feed on winter growth while the adult feed on spring growth. Consult with your local weeds officer for the most suitable biocontrol for your property.

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.

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.

NSW WeedWise



References

NSW DPI. (2018). *NSW WeedWise*. <https://weeds.dpi.nsw.gov.au/Weeds/StJohnsWort>

Thornhill, A. (2021). *Hypericum perforatum*. In: Weeds Australia. Centre for Invasive Species Solutions, Canberra. <https://profiles.ala.org.au/opus/weeds-australia>.

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