

This fact sheet is developed with funding support from the Land Protection Fund.

Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at www.biosecurity.qld.gov.au to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

Annual ragweed

Ambrosia, horseweed or asthma plant

Ambrosia artemisiifolia



Annual ragweed (also called ambrosia, horseweed or asthma plant) is a fast-growing plant introduced from North America.

It can invade and suppress weak and overgrazed pastures, reducing productivity. The pollen of this plant can cause health problems such as hay fever and can aggravate asthma.

Legal requirements

Annual ragweed is a restricted invasive plant under the *Biosecurity Act 2014*. It must not be given away, sold, or released into the environment without a permit. The Act requires everyone to take all reasonable and practical steps to minimise the risks associated with invasive plants and animals under their control. This is called a general biosecurity obligation (GBO). This fact sheet gives examples of how you can meet your GBO.

At a local level, each local government must have a biosecurity plan that covers invasive plants and animals in its area. This plan may include actions to be taken on certain species. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Annual ragweed is an erect plant, 1–2 m high with slightly rough, fern-like leaves. The leaves are deeply divided with hairy undersides. Flowers are not conspicuous. They are small, greenish and in spikes up to 20 cm long in the upper part of the plant. Flower spikes appear yellow when mature because of pollen production. Male flowers are at the top of the spike and females at the base. Seeds are black, small, top-shaped and rough.

Life cycle

As the name suggests the plant establishes each year, normally germinating from spring through to summer. Germination can occur at other times of the year if conditions are suitable. Flowering usually occurs from mid to late March, after which plants die. Late-germinating plants may survive over winter until the following autumn.

Methods of spread

Seeds spread by floodwater, stock, or in fodder or topsoil from infested areas.

Habitat and distribution

Annual ragweed is a native of eastern North America and is now naturalised in south-eastern Queensland and northern New South Wales. Infestations also occur near Stanthorpe, Inglewood, Gympie, Gin Gin and Atherton.

Annual ragweed often colonises bare areas on roadsides and banks of watercourses. It may invade pasture from these areas. Seed may be spread by floodwater, be introduced with stock or arrive as a contaminant in fodder or topsoil from infested areas. Horse paddocks are often infested in coastal areas.

Control

Managing annual ragweed

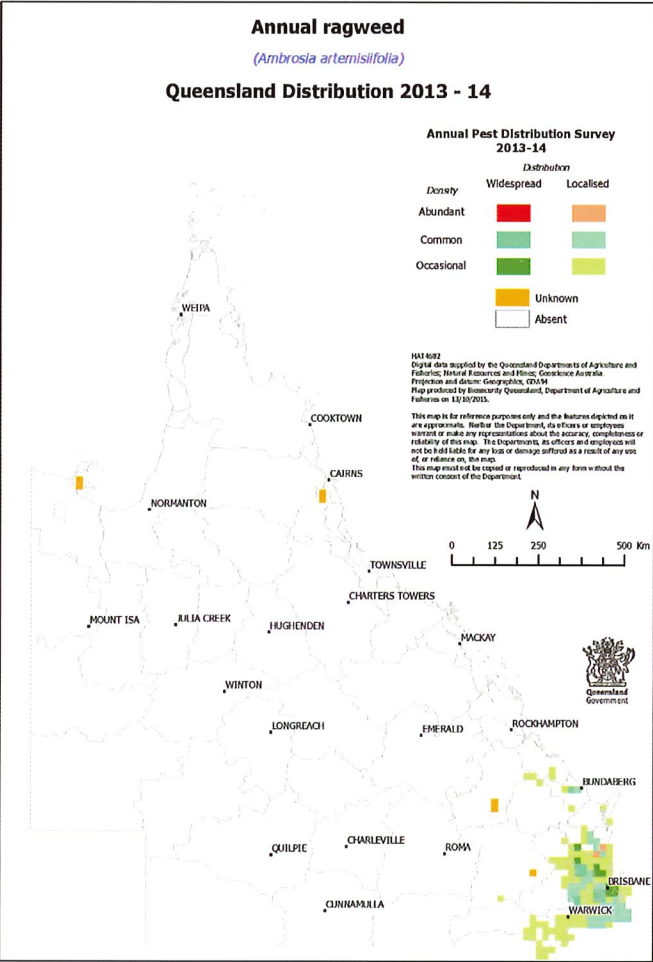
The GBO requires a person to take reasonable and practical steps to minimise the risks posed by annual ragweed. This fact sheet provides information and some options for controlling annual ragweed.

Annual ragweed infestations can be controlled with biological, mechanical and herbicide controls and pasture management.

Prevention and early detection

Prevention of annual ragweed is more effective than control. Infestations can be minimised by maintaining healthy, dense pastures that suppress ragweed germination and growth.

Map 1. Distribution of annual ragweed in Queensland



Where possible, check the source of hay and other stockfeed before purchase. Also check the origin of stock (particularly horses, which are often associated with annual ragweed and its spread in coastal areas). Also check the origin of topsoil, which is a major source of seed.

Mechanical control

Where feasible, plants can be pulled by hand; however, if anyone is prone to allergies, contact with flowering plants and pollen should be avoided.

Plants may be slashed or mown prior to setting seed (i.e. at the early flowering stage or immediately prior to flowering). Checks should be carried out to ensure flowering is prevented in any regrowth that occurs. Regrowth may occur from soil seed banks and these plants must also be controlled.

Pasture management

Although cattle will eat annual ragweed to a small extent, they prefer other pasture species.

Overgrazing will result in the loss of grass cover and a population explosion of annual ragweed and other weeds. Stock will only occasionally eat ragweed when it has set seed, and will subsequently pass the seed.

Most improved pasture grasses will suppress annual ragweed, provided a dense, healthy ground cover is maintained.

For heavy infestations, opportunistic burning can be a useful tool in controlling annual ragweed if paddocks have not been overgrazed. Burning needs to be done when adequate soil moisture will allow good grass cover to grow back. Follow-up herbicide treatment is essential.

Biological control

A leaf-eating beetle and a stem-galling moth have been introduced into Queensland and have reduced the size and vigour of annual ragweed. Despite this biological control, annual ragweed is still a significant problem and other control methods are necessary.

Table 1. Herbicides for the control of annual ragweed

Situation	Herbicide	Rate	Method ²
Non-crop situations	Dicamba 500 g/L (e.g. Kamba 500)	8.8 L/ha 600 mL/100 L 130 mL/15 L/100 m ²	Boom spray Spot spray Knapsack (consult label)
Commercial and industrial areas, rights-of-way and around agricultural buildings	Bromacil 800 g/kg (e.g. Hyvar X [®])	3.5 to 6.5 kg/ha 2 to 6.5 kg/ha 20 g/10 m ²	Boom spray Retreatment Small areas (consult label)
Specific crop situations (asparagus, citrus and pineapples)	Bromacil 800 g/kg (e.g. Hyvar X [®])	Consult label	Consult label

The above herbicides are not selective against legumes and damage to legume species may result.

Read the label carefully before use and always use the herbicide in accordance with the directions on the label.



Herbicide control

Details of registered herbicides and application rates are listed in Table 1. Before using any herbicide always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label. These herbicides may damage legume species. Spray plants when young, before flowering e.g. before the end of December.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit www.biosecurity.qld.gov.au.