



# Annual ragweed

*Ambrosia artemisiifolia*

**DECLARED CLASS 2**



Annual ragweed, also called ambrosia, horseweed and asthma plant, is an introduced weed from North America.

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

Prevention of annual ragweed is more effective than control. Infestations can be minimised by maintaining healthy, dense pastures. Infestations can be controlled with pasture management, herbicide use and manual techniques.

## Description

Annual ragweed is an erect plant, one to two metres high with slightly rough fern-like leaves. The leaves are deeply divided with hairy undersides. Flowers are not conspicuous, 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.

## The problem

Annual ragweed is a fast-growing, introduced plant which can invade and suppress poorly managed pastures. Infestations can become particularly dense in pastures which are overgrazed. It is potentially a serious human health hazard. The pollen contains highly potent allergens which cause respiratory allergies such as hay fever and can aggravate asthma. This weed is a major cause of respiratory allergies in the USA, its native country.

## 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 over-winter and survive until the following autumn.

## 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.

## Declaration details

Annual ragweed is a declared Class 2 plant under the *Land Protection (Pest and Stock Route Management) Act 2002*. A **Class 2** pest is one that has already spread over substantial areas of Queensland, but its impact is so serious that we need to try and **control** it and avoid further spread onto properties that are still free of the pest. By law, all landholders must try to keep their land free of Class 2 pests and it is an offence to keep or sell these pests without a permit. A Local Government may serve a notice upon a landholder requiring control of declared pests.

## Prevention

Maintain thick, healthy pastures in order to suppress ragweed germination and growth.

Where possible, check source of hay and other stock feed before purchase. Also check origin of

stock, particularly horses which are often associated with annual ragweed and its spread in coastal areas. Also check origin of topsoil which is a major source of seed.

## Control

The best form of weed control is prevention. Always treat weed infestations when small, do not allow weeds to establish. Weed control is not cheap but it is cheaper now than next year, or the year after. Proper planning ensures you get value for each dollar spent.

Look at your weed problem carefully:

- Can you realistically eradicate it?
- Or should you contain the weed to stop new infestations developing while you reduce existing ones?
- What are you required to do by legislation?
- How does weed control fit into your property management plan?
- What can you do to restore areas and prevent re-establishment?

The best approach is usually to combine different methods. Control may include chemical, mechanical, fire and biological methods combined with land management changes. The control methods you choose should suit the specific weed and your particular situation.

## Pasture management

Although cattle will eat annual ragweed to a small extent other pasture species will be grazed in preference.

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.

With 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.**

## Herbicide control

Details of registered herbicides and application rates are 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.

## 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 limited biological control, annual ragweed is still a significant problem and other control methods are necessary.

## Physical/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.

## Further information

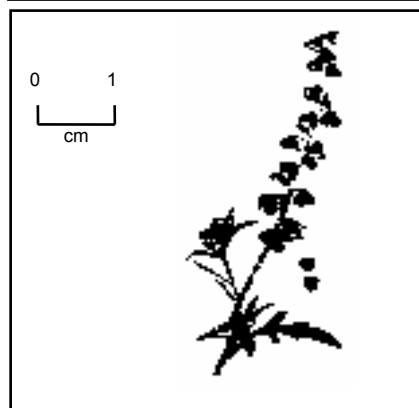
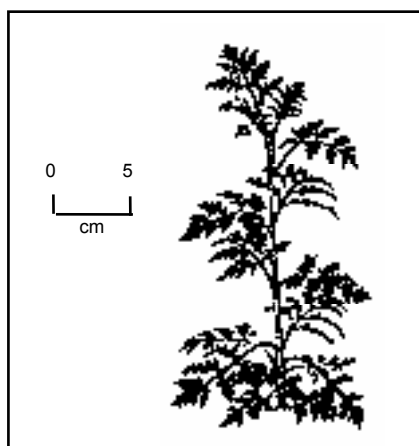
Further information is available from the vegetation management/weed control/environmental staff at your local government.

**TABLE 1 – HERBICIDES REGISTERED FOR ANNUAL RAGWEED**

| Situation <sup>1</sup>                       | Herbicide                                     | Rate   | Comments <sup>2</sup>               |
|--|---|--|-------------------------------------|
| Commercial and industrial land rights-of-way | Dicamba<br>e.g. Banvel 200 <sup>R</sup>       | 22 L/ha<br>1.5 L/100 L<br>330 mL/10-15L/150 m <sup>2</sup> | Boomspray<br>Spot spray<br>Knapsack |
| Commercial and industrial land rights-of-way | Bromacil 800g/kg<br>e.g. Hyvar X <sup>R</sup> | 3.5-6.5 kg/ha  | Boomspray                           |
| Commercial and industrial land rights-of-way | bromacil + diuron<br>e.g. Kromac <sup>R</sup> | 4.5-6.5 kg/ha  | Boomspray                           |

Notes:

1. The registered rates are for non-crop uses. Consult label for in-crop recommendations.
2. Spray plants when young before flowering, i.e. before end of December. These herbicides are not selective against legumes and damage to legume species may result.



Fact sheets are available from NRW service centres and the NRW Information Centre phone (07 3237 1435). Check our web site <[www.nrw.qld.gov.au](http://www.nrw.qld.gov.au)> to ensure you have the latest version of this fact sheet. The control methods referred to in this Pest Fact 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 utilisation 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, the Department of Natural Resources and Water does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.