Managing turf in a fire ant biosecurity zone

To prevent the spread of one of the world’s most invasive pests, risk mitigation controls must be used when managing turf in fire ant biosecurity zones.

Fighting fire ants

The National Red Imported Fire Ant Eradication Program (program) is responsible for managing fire ant eradication in Australia.

The program’s 10-year Eradication Plan began in 2017 to commence eradication of the fire ant infestation in South East Queensland. By using a staged, rolling treatment program from west to east, it aims to rid Australia of this invasive pest in partnership with the Queensland community. The program is funded by all Australian states and territories, and the Commonwealth Government.

The Biosecurity Act 2014 (Act) aims to improve Queensland’s biosecurity preparedness and response capabilities by managing biosecurity risks and the significant impacts animal and plant diseases and pests could have on our economy, agricultural and other industries, environment and lifestyle.

Fire ants are a category 1 restricted matter under the Act. It is a requirement under the Act to report suspect fire ants to the program within 24 hours.

What’s a biosecurity zone?

There are two fire ant biosecurity zones established under the Act to help control the movement of materials that may carry fire ants. If you are operating or residing in these zones then you are required to undertake risk mitigation activities to prevent the human-assisted spread of fire ants. Not complying with requirements can result in penalties. Check out the fire ant biosecurity zones at [daf.qld.gov.au/fireants](daf.qld.gov.au/fireants)

Turf is considered a high risk material requiring careful management to help prevent the spread of fire ants.

The absence of visible mounds of fire ants is not a reliable indication that turf is free of infestation. Fire ant queens can be transported in turf unless appropriate chemical treatment is applied before harvesting.

What do I need to do?

The Biosecurity Regulation 2016 (Regulation) outlines how turf must be managed in fire ant biosecurity zones.

If you are buying turf, ask the seller to provide you with information that shows the turf has been treated in line with the requirements within this document.

If you are farming turf, you must follow the methods outlined in this document.

Treatment of commercial turf

Commercial turf farms operating within fire ant biosecurity zones must treat turf with an appropriate chemical. The Australian Pesticides and Veterinary Medicines Authority (APVMA) has approved the use of bifenthrin for the control of fire ants on commercial turf farms as outlined below:

- 80g/L bifenthrin (3L/ha)—APVMA permit number PER14317 (expires 31 December 2021).


Insecticides must be used in accordance with the conditions of the APVMA permit, the Safety Data Sheet (SDS) and in conjunction with the product’s label.
Treating with bifenthrin 80 g/L

PER14317— (3 L/ha or 240 g active ingredient/ha)

Bifenthrin is the preferred method of fire ant treatment for turf.

Two consecutive applications of bifenthrin are to be applied with an interval of seven days. The turf must not be lifted for at least 28 days after the second application. This method provides 12 weeks of protection.

If treated turf is not harvested, retreatment should occur seven weeks after the second treatment to maintain ongoing protection.

The treated area should be irrigated immediately after each application.

Storing

If turf has been harvested for more than 24 hours, you must use the following storage options:

- off-ground and covered with an effective barrier that prevents ants from penetrating the material, or
- on-ground and covered, either on:
  - concrete or bitumen (no cracks), or
  - a barrier that cannot be penetrated by fire ants (e.g. 200 micron unperforated plastic sheeting), or
  - compacted ground (other than sand) that has been treated with an appropriate chemical product before storage.

Chemical treatment must be applied around the perimeter of the on-ground storage area. This should be done by applying a 30 cm wide strip of insecticide containing 80 g/L bifenthrin. If turf is stored on compacted ground, the whole surface area must also be treated.

It is important to keep the treated area free of material that could form an untreated bridge to the turf.

For an insecticide registered as a horizontal or perimeter barrier for fire ants, refer to Australian Pesticides and Veterinary Medicines Authority (APVMA) permit PER14317 (expires 31 December 2021).

Moving

You may move turf within, across or outside the fire ant biosecurity zones if you:

- follow movement and storage methods outlined in this document, or
- transport the material directly to a nearby waste facility in accordance with the following zone restrictions:
  - material originating within zone 1 can be moved to a waste facility within zone 1 or 2
  - material originating within zone 2 can be moved to a waste facility within zone 2 only, or
- move the material within 24 hours of it arriving at the original place.

If you are unable to fulfil these requirements then you must request a biosecurity instrument permit (BIP) from the program by calling 13 25 23 or via daf.qld.gov.au/fireants

Keeping a record

You should keep a written record of the steps you have taken to ensure you have managed the turf in accordance with these guidelines and the permit. These records must be kept for a minimum of two years.

More information

The program conducts free training sessions about the identification of the super pest and high risk material management. Book at ants.daf.qld.gov.au

Visit daf.qld.gov.au/fireants or contact the program on 13 25 23 for further information.