Managing baled materials 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 storing and moving baled hay, straw or sugarcane mulch 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.

Baled materials, such as hay, straw and sugarcane mulch, are considered high risk materials requiring careful management to help prevent the spread of fire ants.

What do I need to do?

The Biosecurity Regulation 2016 (Regulation) outlines how baled materials such as hay, straw or sugarcane mulch must be managed in fire ant biosecurity zones. Follow the methods outlined in this document unless the material:

- is moved directly to a waste facility, subject to zone restrictions below, or
- has been at the property for less than 24 hours.

Raking and baling

To be considered treated, the final two rakings must be conducted within 24 hours of each other, and cut material must be baled within 24 hours of the last raking.

Baled materials must then be moved off the paddock within 24 hours of baling.

Storing

If materials are to remain on the property for more than 24 hours, you must use the following storage options:

- off-ground and covered, or
- on-ground and covered on a fire ant resistant surface such as:
  - concrete or bitumen (with no cracks), or
  - a barrier that cannot be penetrated by fire ants (e.g. 200 micron unperforated continuous plastic sheeting), or
  - compacted ground (other than sand) that has been treated with an appropriate chemical product before materials are stored.
Pallets are not considered an adequate form of off-ground storage as the material can easily fall through gaps and form an untreated ‘bridge’, potentially allowing fire ants to infest the material. Off-ground storage must be able to prevent infestation.

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 the material is to be stored on compacted ground, where appropriate, the whole surface area must also be treated, and an impermeable barrier applied over the treated surface to protect the material from residue contamination (e.g. plastic sheeting applied over the treated soil before the material is stored).

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). You can search for permits on the APVMA website at portal.apvma.gov.au/permits.

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.

Chemical treatment is not appropriate for materials destined for animal consumption.

Receiving baled materials
As fire ants can travel undetected in materials, recipients can help to protect themselves from fire ant infestation by asking the producer, supplier, or the delivery driver questions such as:

- Was the material grown or loaded within a fire ant biosecurity zone? If so, ask the supplier:
  - Do you know how the material was produced?
  - Have the bales been left in a paddock for more than 24 hours?
  - How have the bales been stored?
  - Have the bales been stored or treated in accordance with the Regulation?

Checking your property
It is recommended that material storage sites and adjacent areas are checked for fire ants every month. This can be done easily in conjunction with your existing weed seed and herd monitoring. The top spots to look for fire ants include:

- dams and irrigation lines
- edges of cultivated land
- post-harvest crop land
- fence lines
- piles of organic matter
- in paddock areas where stock is fed.

Keeping a record
You should keep a written record of the steps you have taken to ensure the materials are stored correctly, including any chemical treatments applied and/or disturbance activities undertaken. These records should 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.