



The Hon Mark Furner MP
Minister for Agricultural Industry Development and Fisheries
and Minister for Rural Communities

Our ref: CTS 20830/22
Your ref: A991650

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16/12/2022

Mr Neil Laurie
The Clerk of the Parliament
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Dear Mr Laurie

Thank you for your email of 1 December 2022, regarding Petition No. 3824-22 received by the Queensland Legislative Assembly on 29 November 2022.

Since fire ants were first reported in South East Queensland in 2001, the National Red Imported Fire Ant Eradication Program has successfully eradicated nine different incursions of fire ants in Australia, including an 8 000 hectare infestation; the largest eradication of any invasive ant species anywhere in the world.

The Program, the largest of its type in the world, has made considerable progress in containing fire ants to Southeast Queensland and reducing the density of fire ants in western parts of the infested area. Without the Program, fire ants would have spread to more than one fifth of the Australian continent, as far south as Canberra, to Bowen in the north and past Longreach in the west.

The Program understands that to win this battle, the Queensland community is a vital stakeholder. As such, communication and engagement plans are implemented in fire ant treatment areas which aim to build awareness and understanding among community members of the Program's treatment approach. This includes ensuring access to information about the types of fire ant bait used, the method of application and how they can help keep their properties fire ant free.

Fire ant treatment information is provided to property owners in flyers sent to their mailboxes, as well as through website content, social media, roadside signage, community forums and pop-up information stalls.

Prior to any property receiving baiting treatment, program officers engage with property owners to gather as much information about the property as possible. This includes determining locations of habitable buildings, use of land, livestock, hazards and crops. The property owner will then be advised that the Program will undertake a combination of aerial baiting and ground baiting over a minimum two-year period and a total of six treatment rounds. The property owner is also advised that ground treatment will occur, in most cases, following the aerial baiting to ensure a property is completely treated.

Where a property is identified as having crops or other restrictions impacting of aerial treatment, program officers will undertake the following steps or actions:

Cropping Sites / Livestock

- Visit the site prior to treatment and determine what crops are planted and how long it will be until the plot is fallow. This same process applies for any livestock or animals on site
- Identify areas on the property that can have aerial baiting applied
- Approximately a week before scheduled treatment, program officers will revisit the property to see if there are any changes to the crop from the initial visit
- Contact details of the property owner confirmed and, no less than 48 hours before, treatment property owners receive a bulk message service (SMS), where contact details are available, advising of the aerial treatment window. If the area is known to have mobile reception concerns, a voice call is made
- Any properties identified as having known hazards (crops or livestock) are contacted at least 24 hours before the aerial baiting flights and the morning of the flight
- Customer Liaison Officers (CLO) are also in attendance in the area of treatment and available to aid property owners. The CLO has direct contact with the helicopter pilot to advise of any hazards both to the helicopter and to the property e.g., disturbed livestock.

General Sites

- The same process of engagement is followed as above
- No less than 48 hours before the treatment property owners receive a bulk message service (SMS), where contact details are available, advising of the aerial treatment window. If the area is known to have mobile reception concerns a voice call is made
- Any properties identified as having known hazards are contacted at least 24 hours before the aerial baiting flights and the morning of the flight
- CLOs are also in attendance at the area of treatment and available to aid property owners. The CLO has direct contact with the helicopter pilot to advise of any hazards both to the helicopter and to the property e.g., disturbed livestock.

Prior to the Program treating fire ants in a particular area, a number of factors are considered, in particular the ants' morphology, which assists in determining how we treat and the area we treat.

When the Program detects a new infestation, evidence is gathered such as the maturity of the nest, if the nest is reproducing, the size of the nest and how many other nests are located. This evidence determines the area potentially at risk of likely infestation, with the understanding that a fertile queen can fly five kilometres in any direction.

The Program cannot identify all potential nests in an area, as a nest takes time to establish and become visible above ground. The Program takes a risk based scientific approach to identify areas at risk based on the biology of the ant that accounts for natural spread (by fertile queens) and possible human assisted movement. On face value, it may appear that the Program is treating areas with no 'visible' fire ants; however this is carried out due to the evidence and risk analysis available.

The treatments used by the Program are assessed by the Australian Pesticides and Veterinary Medicines Authority (APVMA) prior to use.

As a condition of the initial bait permits issued to the Program, the APVMA stipulated that the Program must monitor water bodies in proximity to properties receiving treatment to ensure residues did not exceed limits of 0.01 micrograms/L of water, and 0.01 micrograms/kg of sediment. Results from this monitoring showed that residue levels in streams adjacent to treated sites did not exceed these limits.

Residue testing has been conducted in soils and pasture to confirm the concentration of active ingredient present after bait application and determine how long it took for breakdown to occur. Soil and pasture samples analysed from four trial sites showed an average of 0.02 mg/kg of pyriproxyfen in soil and an average of 0.05 mg/kg of pyriproxyfen in pasture samples at 14 days after treatment had occurred. These levels are below the recommended maximum residue level for stock feeds.

The Program also performs routine monitoring of ant communities in treatment areas to document the effects of treatment on non-target ants and to ensure fire ant treatment activities do not cause long-term harm to the native ant communities.

In 2016, a study was published about the impacts of pyriproxyfen on human health, including the incidence of birth defects (specifically microcephaly) in populations exposed to pyriproxyfen treated water sources (Albuquerque et al. 2016). Researchers used data collected from areas of Brazil subject to mosquito control programs over several years, comparing the reported incidence of microcephaly in human populations exposed to pyriproxyfen treated drinking water to reports from populations who had not been exposed. The study found there was no correlation between the use of pyriproxyfen treated drinking water and microcephaly.

In 2018, a case-control study by de Araujo et al. (2018) also reported no association between microcephaly and exposure to pyriproxyfen during pregnancy.

It should be noted that the Program uses significantly lower doses of pyriproxyfen in the baits used to treat fire ant nests (i.e., the results are not impactful 'environmentally').

If you require further information, please contact my office on 07 3719 7420.

Yours sincerely

A handwritten signature in black ink that reads "Mark Furner". The signature is written in a cursive style with a large initial 'M'.

MARK FURNER MP

**Minister for Agricultural Industry Development and Fisheries and
Minister for Rural Communities**