

Naturalure® fruit fly bait concentrate – frequently asked questions

As part of its response to the detection of Queensland fruit fly (Qfly), the Department of Primary Industries and Regional Development (DPIRD) is using the registered organic fruit fly bait Naturalure®. The detection of Qfly is significant as it poses a serious threat to Western Australia's horticulture industry, affecting over 300 species of fruits and fruiting vegetables.

Naturalure has consistently proven effective in previous Qfly eradications across Australia.

What is Naturalure®?

Naturalure® is a protein and sugar-based bait containing the active ingredient spinosad (0.24 g/L spinosad). Spinosad is a naturally derived toxin effective on fruit flies, produced as a fermentation by-product from a soil bacterium, *Saccharopolyspora spinose*.

The sugar in Naturalure® keeps the bait moist and highly attractive to male and female flies of all fruit fly species. Before it is applied, Naturalure® is diluted by mixing 1 part of concentrate into 1.5 parts of water resulting in 0.16 g spinosad per litre of solution. Both Naturalure® and spinosad are certified to be used in an organic production system.

In the Quarantine Area, the diluted bait is applied as a 20 ml spot (i.e. containing 0.0032 g active spinosad only per spot).

Is Naturalure® commonly used?

Yes. Naturalure® is in common use in Perth and the product is favoured by organic gardeners for the control of fruit flies in home gardens.

Naturalure® has organic certification in Australia by Australian Organic Limited (formerly known as Biological Farmers of Australia, or BFA) on the list of registered allowed inputs suitable for use in Australian Certified Organic (ACO) farming systems. It has also been approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA) as an approved agricultural chemical product.

Is Naturalure® safe?

Yes. Spinosad is low in toxicity and is applied in small concentrations that are effective on fruit fly but unlikely to cause any symptoms in humans and other mammals. It also poses a low risk to non-target organisms such as beneficial insects when applied appropriately.

How is Naturalure® applied?

The bait is diluted with water and applied as a spot at or just above 1.5 metres above ground. This prevents children and pets inadvertently coming into contact with the spots. Bait is applied directly to the underside of leaves (where Qfly generally land) as well as trunks and branches, and not directly to flowers.

Are DPIRD officers trained in applying Naturalure® appropriately?

Yes, all field staff receive a thorough induction, including on the appropriate application of Naturalure®.

How long does the bait last?

The bait remains attractive for at least 10 days after application, as it adheres to sprayed surfaces and does not dry out. Re-application is recommended after 7 days as per the Naturalure® label. For eradication purposes in certain parts of the Quarantine Area, the bait will be applied twice weekly for at least 6 weeks during the eradication program. This is in line with the Australian Pesticides and Veterinary Medicines Authority (APVMA) approved Permit PER80719.

How do I know which plants/trees have been baited with Naturalure®?

Plants/trees that have been baited will generally display a visible brownish residue in baited areas. In consultation with the resident, DPIRD officers may also tag baited trees on properties with a pink ribbon.

Can I eat anything from my garden after you have baited?

Yes. Because the bait is not applied to fruit and vegetables, and there is no withholding period, fruit, vegetables and herbs that may have been in contact with Naturalure® can be eaten following washing with water.

Can I tend to/prune plants that have been baited?

As there is no withholding period, you can tend to plants and trees on your property as needed.

Nevertheless, unnecessary exposure to pesticides or other chemicals and pathogens should be avoided, and we recommend people take simple precautions to prevent contact with Naturalure®, including wearing gloves and safety glasses if tending to trees/plants. Always wash your hands afterwards.

Can Naturalure® cause/exacerbate respiratory illnesses?

As the liquid bait is applied directly to leaves, trunks and branches, it is highly unlikely to be inhaled and cause/exacerbate any respiratory illness or issues.

Should I be concerned if I am pregnant?

The available evidence indicates that spinosad does not cause birth defects or other problems with pregnancy.

Is Naturalure® harmful to bees?

While Naturalure® can be toxic to bees if ingested or bees are directly sprayed, bees are not naturally attracted to the product and bait is applied away from beehives, and flowering plants are avoided by our teams. Once the bait has dried, foraging bees will not be affected. If you have beehives on your property, please notify Qfly personnel.

Is Naturalure® harmful to birds?

No. Naturalure is not toxic to birds and during bait application, water resources (ponds, bird baths etc.) are avoided.

Is Naturalure® harmful to other animals such as dogs, cats and native possums?

Naturalure® is low in toxicity to mammals and marsupials. To avoid the chances of these animals ingesting the bait, it is applied at or just above 1.5 metres above ground and at least 4 metres from water sources. There has been no indication that the ingestion of bait, located on the leaves of host plants, has had any negative impact on possums.

Is Naturalure® harmful to aquatic organisms?

Spinosad is considered toxic to fish and aquatic invertebrates. As such, the product will not be applied in or near aquatic environments, including lakes, waterways and household ponds.

Can Naturalure® cause damage to plants?

The application via spot baiting and the further diluting of the product means the risk to plants is low.

Extensive tests show that while Naturalure® poses a low risk to plants, there are slightly different effects on different plants. Possible effects include stickiness, sooty mould accumulation, black spotting and leaf burn.

Please note that leaf burn could also be caused by salts used to stabilise the protein in the bait. If plants are burnt, it is most likely to be via the leaves and the plant/s are unlikely to die. For general enquiries, contact DPIRD's Pest and Disease Information Service (PaDIS) on (08) 9368 3080 or gfly@dpiird.wa.gov.au.

What if I don't want Naturalure® to be used on my property? Are there alternatives?

Baiting with the registered organic fruit fly bait Naturalure® has proven successful in eradicating Queensland fruit fly. If Qfly were to establish in WA it may result in the increased use of pesticides and a reduction or loss in our ability to grow and enjoy fruits and vegetables in our backyard.

DPIRD staff will door knock properties prior to applying bait. Please raise any specific concerns you have regarding the use of Naturalure® on your property so it can be assessed on a case-by-case basis.

I think the Naturalure® has made me sick. What should I do?

It is not expected that symptoms will occur due to spinosad exposure following fruit-fly eradication because of the low concentration of spinosad used in the bait. People who are

sick and believe that spinosad might be contributing to their symptoms should see their personal health care provider.

How do I get more information about Naturalure®/spinosad?

If you have any queries about Naturalure®/spinosad, please contact the department's Pest and Disease Information Service on (08) 9368 3080 or email qfly@dpird.wa.gov.au. You can also view the Naturalure® Fruit Fly Bait Safety Data (SDS) Sheet at wa.gov.au/qfly.

Important Disclaimer

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