

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 eradicating Qfly and other fruit flies.

What is Naturalure?

Naturalure is an organic 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 part 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.

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) and is on the list of registered allowable inputs suitable for use in Australian Certified Organic farming systems. It has also been approved by the Australian Pesticides and Veterinary Medicines Authority 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 negative side effects 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. Unfortunately, rain can impact on the viability of the bait. To help in ensuring that Qfly is eradicated as quickly as possible, it may be necessary to apply bait twice weekly in some areas.

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. On private property, and in consultation with the resident, DPIRD officers may also tag baited trees on properties with ribbon.

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

Yes. Because the bait is not applied directly 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. If plants are burnt, it is most likely to be via the leaves and the plant/s are unlikely to die.

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 a reduction or loss in our ability to grow and enjoy fruits and vegetables in our backyard without the ongoing use of pesticides.

Please raise any specific concerns you have regarding the use of Naturalure on your property with DPIRD field staff so it can be assessed.

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 treatment 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 DPIRS's Pest and Disease Information Service on (08) 9368 3080 or email padis@dpiird.wa.gov.au. You can also view the Naturalure Fruit Fly Bait Safety Data Sheet at wa.gov.au/qfly.

Important Disclaimer

The Chief Executive Officer of the Department of Primary Industries and Regional Development and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Copyright © State of Western Australia (Department of Primary Industries and Regional Development) 2026.