Queensland fruit fly traps for monitoring and control

The Department of Primary Industries and Regional Development (DPIRD) is using two different types of fruit fly traps as part of its Queensland fruit fly (Qfly) eradication program. These are Qfly lure (Lynfield) traps, traditionally used to monitor for the presence of Qfly, and Biotraps (V2 X), which are used in mass trapping to reduce Qfly numbers.

The combined use of these two traps will maximise Qfly surveillance and eradication outcomes.

**Qfly lure (Lynfield) traps**

The primary purpose of a Qfly lure (Lynfield) trap is to monitor and detect male Qfly. Western Australia’s permanent array of approximately 2000 Qfly surveillance lure traps across the Perth metropolitan area uses Qfly lure (Lynfield) traps. This array acts as an early warning system for outbreaks of Qfly in WA.

WA has an agreement with other Australian states and territories to conduct surveillance trapping to demonstrate area freedom for Qfly.

Qfly lure (Lynfield) traps are also used as supplementary traps following a Qfly detection.

Supplementary traps are installed around the 200m of a detection site to determine spread during an eradication program and to indicate progress of the program.

Qfly lure (Lynfield) traps use a lure to attract Qfly and an encapsulated insecticide to kill the fly. The lure is a male-only attractant (para-pheromone) that is a derivative of raspberry ketone, which lures male fruit flies into the trap where they die and are collected by DPIRD Pest Surveillance Officers.

**Biotraps**

Biotraps are used for Qfly control, rather than monitoring of Qfly numbers. Biotraps are used to suppress Qfly numbers to complement other control measures when numbers are high, or as an alternative where baiting with Naturulure® cannot be used or cannot be undertaken regularly.

Biotraps also use a lure and insecticide system to attract and kill Qfly. The benefit of a Biotrap as a complementary or alternative measure is that it attracts both male and female fruit flies.

The trap uses food-based hydrolysed proteins to attract mainly female fruit flies, but will also attract male fruit flies and other species of flies. The flies die and are collected by DPIRD Pest Surveillance Officers.
If the Biotrap attracts both male and female Qfly, why doesn’t DPIRD just use those traps?

WA’s trade agreement with other Australian states and territories that are Qfly-free stipulates the use of Qfly lure (Lynfield) traps for surveillance.

There are also disadvantages to using the Biotrap. The attractant in the Qfly lure (Lynfield) traps attract Qfly over a longer distance - estimated to be between 100 – 200 metres. The attractant in the Biotrap has an estimated effective range of between 15 – 30 metres.

Owing to the shorter range, Biotraps have to be installed as part of a ‘mass trapping’ program, which requires 50 traps per hectare to reduce Qfly numbers.

Will the traps kill beneficial insects in the area?

The attractants in the traps are designed to only attract flies.

Are the traps safe?

If used according to safety directions, Qfly lure (Lynfield) traps and Biotraps are safe for use in residential areas. The Australian Pesticides and Veterinary Medicines Authority has issued permits for both trapping systems across Australia.

DPIRD Pest Surveillance Officers will always hang traps out of reach of dogs and small children.

Please do not interfere with the traps.

If the traps kill Qfly, why is DPIRD carrying out spot baiting as well?

DPIRD is using all the tools at its disposal to eradicate this Qfly population in the shortest time possible, to minimise the risk of Qfly spreading outside of the Quarantine Area. This is why DPIRD is using added trapping systems as well as applying spot baiting of Naturalure® to tree trunks and foliage.

What kinds of trees are the traps placed in?

Traps are installed in Qfly host trees where available or in non-host shade trees if required to meet trapping densities.

Contact

For general enquiries, contact DPIRD’s Pest and Disease Information Service (PaDIS) on (08) 9368 3080 or padis@dpird.wa.gov.au

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