



Hortus Technical Services

Hortus Technical Services is an independent agronomy company dedicated to providing efficient and cost-effective integrated pest management strategies to growers.

Due to overuse or inappropriate use of agricultural chemical the incidences of chemical resistance among pests and diseases are steadily increasing and are now common place . As the few remaining effective chemicals are used more frequently, so the risks of resistance developing to these remaining chemicals increases.

As a result, more growers are turning to alternative control options. The agronomists at Hortus are able to provide growers with a range of biological pest management options to better control pests using integrated pest management.

Hortus has a number of biological products available to growers for a wide array of pests, including:

- *Macadamia Nutborer*
- *Heliothis*
- *Silverleaf Whitefly*
- *Thrips*
- *Two-Spotted Mite*
- *Red Scale*
- *Aphids*
- *Queensland Fruit Fly*





Aphytis

(*Aphytis lingnanensis*)

Control of Red Scale

Aphytis are tiny yellow wasps. They are only capable of flying within a single tree or from tree to tree in an orchard. The wasps live for approximately 2 weeks, during this time a female can lay 100 eggs. Aphytis work by parasitising red scales. They lay their eggs underneath the scale. Once the larvae hatch, they feed on it, eventually destroying the scale. The adults emerge 3 weeks later and continue to feed on the scales.



Adult Aphytis

BENEFITS

- ❖ Aphytis are very effective predators and lay at least 100 eggs over their life cycle.
- ❖ If released before pest levels reach high numbers, they prove to be an effective form of pest control.

DELIVERY

Aphytis are supplied to growers in paper cups that contain 10 000 wasps. Each unit contains 7 paper strips for distribution.

Wasps are dispatched from the hatchery within 24-48 hours and should reach growers within a similar time frame.



Red Scale on Mandarin

APPLICATION

Actual release rates and timing are determined through monitoring. At release, each strip of paper, the paper towel, the cup and the lid (10 items) should be placed at regular intervals in the paddock. Intervals depend on the release rate.

Release Rates:

- ❖ Citrus – 2.5 cups per hectare
- ❖ Passionfruit – 5 cups per hectare

Aphytis should be released annually. Though they can build up a natural population, annual releases will help maintain the population for pest control.

Caution must be taken with insecticide and some fungicide applications prior to, and after Aphytis releases.



Lacewing larvae being released

INTERESTED?

Contact your local Hortus Technical Services for information concerning costs and distribution.

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