



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**

Lacewings

(*Mallada signata*)

Broad Spectrum Biological Control

Lacewings are small green insects with four clear wings. Their life span is approximately 3-4 weeks long and females can lay 600 eggs over their their life time. Lacewing larvae have spines on their back that they impale the remains of their prey on to help camouflage themselves. Lacewings are a broad spectrum biological product; they prey on aphids, two spotted mites, green house whitefly, scales, mealy bugs and moth eggs and caterpillars.



Adult Lacewing

BENEFITS

- ❖ Lacewings feed on a wide range of pests
- ❖ They are very good at preying on aphids, eating up to 60 aphids in an hour
- ❖ Lacewings are tolerant to a wide range of climatic conditions

DELIVERY

Lacewings are supplied to growers as eggs which hatch in transit. Each unit contains either 100 or 500 eggs on shredded paper.

Sterilised moth eggs are supplied as a food source; however, the larvae should be released as soon as they have all hatched.



Lacewing larvae feeding on an aphid

APPLICATION

Actual release rates and timing are determined through monitoring. The shredded paper should be spread throughout the paddock to ensure the larvae are widespread. Otherwise, the larvae may be spread into small release boxes and suspended in trees.

Release Rates:

- ❖ Field Crops – release rates are highly variable, depending on the crop and target pest(s). A recommended starting rate is 2-5 units (500 lacewings) per hectare.
- ❖ Nurseries – minimum rate of 1-5 insects per plant

There should be 2-3 releases of Lacewings, 10-14 days apart. This will help establish a healthy predator population.

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



Lacewing larvae being released

INTERESTED?

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

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