Integrated Pest Management Program



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Greenhouse Pest Message, February 22, 2024 Leanne Pundt, UConn Extension

Everyone is busy planting plugs, with more greenhouses filling up as everyone is getting ready for spring.

Propagation houses

I have been hearing from a few growers who have been releasing generalist predatory **lacewing larvae** in their propagation houses, especially when growing vegetable transplants.

Lacewings (*Chrysopa carnea* and *Chyrysoperla rufilabris*) are commercially available from many different BCA suppliers. *C. rufilabris* is reported to be more useful where humidity tends to be higher in greenhouses.

Lacewing adults feed on pollen and honeydew. The voracious **lacewing larvae** are generalist predators that prefer to feed upon **aphids** as prey (so they are known as 'aphid lions') but will also feed upon **whiteflies**, **spider mites**, **thrips**, **lepidopteran eggs** and **mealybug larvae**. If prey is scarce, the older larvae may eat the younger larvae.

Lacewings are commercially available as eggs on cards, or as larvae shipped with a food source in an inert material in a small container. Larvae may survive better than eggs and are quicker acting. A reduction in aphid population should occur after approximately two weeks. Larvae are mainly active at night.

Green lacewings also available as adults shipped in a small cardboard container. Look on the underside of leaves for the eggs laid on extended stalks.



Figure 1 Releasing lacewing larvae, lacewing larvae (close-up), and lacewing eggs. Photos by L. Pundt

Tips for Use

- Lacewing larvae are best released in localized hot spots of pest activity
- Look for clean, new growth as a sign that aphids have been killed
- Ants and slugs will eat lacewing eggs on the cards so need to be controlled
- Lacewings may be less effective on plants with hairy leaves

UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES For more on using **biological control agents**, see the **Guide to Biological Control Agents for Greenhouse Pests** from MSU Extension, in collaboration with Kansas State University, and Ontario Ministry of Ag, Food and Rural Affairs, this gives you an overview of the key facts to help you use BCA's in the greenhouse.

Guide to Biological Control Agents for Greenhouse Pests:

https://www.canr.msu.edu/resources/commercially_available_biological_control_agents_ for_common_greenhouse_inse

Some of the BCA's listed such as *Anystis* and American hoverfly may only be available in Canada. (But, *Dicyphus hesperus* and *Amblyseius degenerus* are available in the US).

If you are looking for chemical options for aphids and other pests on **Vegetable transplants**, see the Vegetable Transplant section of the New England Vegetable Management Guide available online at: <u>https://nevegetable.org/vegetable-transplant-production</u>

See Insecticides Labeled for Insects and Mites on Vegetable Transplants: <u>https://nevegetable.org/table-20-insecticides-labeled-insects-and-mites-vegetable-transplants</u>

If you are looking for **chemical options** for aphids and other pests on greenhouse ornamentals, see: **New England Greenhouse Floriculture Guide:** <u>https://greenhouseguide.cahnr.uconn.edu/</u> (available online)

Or order the New York and New England Management Guidelines for Greenhouse Floriculture and Herbaceous Ornamentals <u>https://www.negreenhouse.org/pest-guides.html</u>

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