

## How to Introduce Good Bugs in Your Garden to Eat the Bad Bugs

Leimone Waite, Master Gardener, April 6, 2018

**Q.** I am trying to use more natural controls in my vegetable garden so I purchased some ladybugs to eat the aphids on my broccoli and released them in the garden. How can I tell if they are reproducing or have just flown off?

**A.** When people think about introducing good bugs into the garden, most think of ladybugs, also known as the convergent lady beetle, likely because ladybugs are the most well-known of the beneficial insects due to their red color and black spots.



(Photo: Ken Ruinard/Independent Mail)

Ladybugs produce one or two generations a year. They like to find cool forest areas to overwinter such as along mountain stream sides. Many will overwinter in large colonies in the Sierra Nevada and then in spring fly down to valley and coastal areas.

The larvae grow to about a quarter inch long. They're segmented, have long legs, and resemble tiny black alligators with orange spots. The eggs, laid in clusters on leaves, are yellow and oblong.

Now is the time to look for the eggs of the ladybugs in your garden. Look at the undersides of large leaves — they like the curly dock in our arboretum — for the yellow egg clusters. To see pictures of the larva and eggs of the ladybug, check out the UC IPM site at

<http://ipm.ucanr.edu/QT/ladybeetlescard.html>

Studies have shown that one large rose needed two applications of 1,500 beetles, spaced a week apart, for control of aphids. Most commercial packages contain enough to control aphids on only one shrub or a few small plants. And when the ladybugs are released into the garden, 95 percent of these will fly away within 48 hours, even if prey is abundant.



A green Lacewing can be predacious or feed on pollen. (Photo: UF/IFAS Extension)

I think you can get better aphid control with other beneficial insects such as the green lacewing. These small green insects with clear wings lack the flash and color of the ladybug but are much more reliable for insect control. Green lacewings can be purchased as larva or eggs and when released into the garden they tend to stay. They can also help control other insects besides aphids such as mites, white fly and leaf hoppers.

The larva of the green lacewings like to eat mostly insects, but the adults prefer pollen from small flowering plants. To keep a continued population of green lacewings in the garden after your initial purchase of larva, plant small flowering plants such as dill, sweet alyssum, fennel, and cornflowers so the adults will stay in the garden to lay their eggs

When applying beneficial insects to plants, make sure that you have controlled the ants first as the ants will eat or kill the beneficial insects before they let them near the aphids they are protecting.

It is also important to place them at the beneficial insect larva on the plants infected with the aphids at dawn or dusk, never in hot sun. Do not put them on plants that have been treated with insecticide — it will kill them.

If you cannot find lacewing larva for sale at the local nurseries you can order them online from our local Beneficial Insectary in Bella Vista at Green Methods, <https://greenmethods.com> or from Arbico-Organics at <https://www.arbico-organics.com>

*The Shasta Master Gardeners Program can be reached by phone at 242-2219 or email [mastergardener@shastacollege.edu](mailto:mastergardener@shastacollege.edu). The gardener office is staffed by volunteers trained by the University of California to answer gardeners' questions using information based on scientific research.*