

## **Five Beneficial Garden Insects**

by Paul Thompson, County Extension Agent

Learning to recognize beneficial insects is an important part of reducing the use of pesticides. If beneficial insects are present on plants that are infested with pests, they will usually bring the pest problem under control. Here are some common beneficials that are often found in the vegetable garden and landscape.

### Aphid Lions

Aphid Lions are the larvae of a flying insect known as the green lacewing. The green lacewing is a fragile insect with a thin green body and large clear wings. They can often be seen fluttering around lights at night and can be active all year. The female lacewing lays eggs singly on the surface of leaves or stems. The eggs are small and greenish-white at the end of a thin filament. This is a unique characteristic of this insect to prevent predation of the eggs.

Eggs hatch in about 5 days. The larvae are brown with yellow markings and have large mandibles (pinchers). They feed for two to three weeks before forming a cocoon and can eat over 600 aphids in their short life.

### Hover Flies

Adult hover flies are also called flower flies or syrphid flies, and can often be seen visiting flowers for a nectar meal. There are a huge number of species of syrphid flies, and they can vary in size and coloration. They often have banded abdomens and have patterns and colors that mimic bees or wasps. Unlike bees, however, they only have one pair of wings, cannot sting, have very short antennae, and do not have hairy bodies like bees.

The female syrphid fly lays eggs in areas infested by aphids or similar pests. The eggs hatch into legless larvae called maggots which feed upon up to 400 aphids. The maggots pupate to become adults in one to two weeks. There are up to seven generations per year.

### Parasitoid Wasps

There are thousands of species of very tiny wasps which feed on plant pests which in turn benefits our gardens. These wasps do not prey on other insects in the traditional sense; instead, they insert an egg or eggs inside the host insect. The eggs hatch into small, white, legless larvae that feed inside the host. After the feeding ceases, the larvae pupate and the adult wasps emerge after a few days to mate and begin the cycle again. A parasitoid is the term given to this type of beneficial insect that spends part of its life inside another insect host.

### Lady Beetles

Of all beneficial insect predators, the lady beetle (often called ladybug) is perhaps the most numerous and well known. There are 475 different species of lady beetles in the United States and many of these can be found in South Carolina.

Lady beetles primarily feed on aphids although they also feed on scale insects, whiteflies and mites. Both the adult and larvae are active predators. There are many generations of lady beetles during the growing season. Amber-colored eggs are laid in clusters of a dozen or more usually on the undersides of leaves.

The eggs hatch in about a week, and the larvae immediately start their search for a meal. They are usually gray to black with orange markings along their sides. Larva pupate after several weeks, and the adults will live about two months. It is estimated that a single lady beetle can consume 5000 aphids over their lifetime.

### Native Bees

There are 100's of native bee species important for pollination of vegetables and fruit crops. Most of our native bees are solitary, in that the female bee spends her life of one to two months gathering pollen and nectar to provision her young that she will never see, because they

pupate and emerge the following year. They are non-aggressive and build nests in hollow reeds, borer holes in dead trees, or any naturally occurring cavities, although some excavate burrows in the ground.

Being aware of beneficial insects is environmentally smart. Pesticides have their place as a tool to control pests, but cultural and biological controls are also an integral part of managing pests and producing healthy plants. For further information on how to attract beneficial insects to your landscape and garden go here: <https://hgic.clemson.edu/attracting-beneficial-insects/>.