

## **Good Guys or Bad Guys? Insects in the Garden**

Of the almost one million species of insects roaming the earth today, there are comparatively very few troublemakers – very few species that actually feed on and destroy plants. So, as we well know, troublemakers tend to find similar company . . . and seem to multiply overnight. But, did you know that there are also insect good guys too?

Generally, beneficial insects are either predatory or parasitic - either consuming their prey or using a host for larval development. Predatory insects eat throughout their life cycle and parasites destroy their hosts. So, recognizing their larval or nymph stages will help you build your own formidable army of natural enemies.

### **Predators – and the *BAD GUYS* they eat:**

#### **✓ Lady Beetles**

- Adults are round or oval, spotted. Larvae are elongate, dark with yellow or orange spots.
- Prey: Soft-bodied insects, aphids, mealybugs, scale

Note: Larvae (below) are often misidentified, as they look very different than the adults.

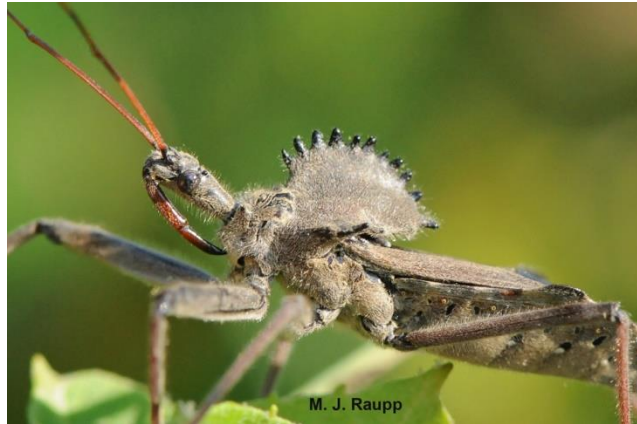


#### **✓ Lacewings**

- Adults are pale green with lacy wings held overhead. Larvae (“aphid lions”) are elongate, light brown or green, with distinctive curved jaws out the front of their head.
- Prey: Aphids and small caterpillars

#### **✓ Damself Bugs**

- Adults: Slender brownish bugs (Nymphs look similar but lack wings).
- Prey: Aphids, insect eggs, larvae, soft-bodied arthropods
- ✓ **Assassin Bugs (Best known: Wheel Bug)**
  - Wheel bugs are large and gray, with a spiny vertical “wheel” projecting from the top of the thorax.
  - Prey: A wide variety of insects!



### **Parasites – and the BAD GUYS they destroy:**

- ✓ **Brachonid Wasps**
  - Small to medium sized wasps
  - Aphids (smallest species), sawflies, caterpillars, beetles
- ✓ **Ichneumonid Wasps**
  - Larger and closely related to the Brachonid
  - Caterpillars, flies, beetles, other insects
  - Note: Can also attack parasitized hosts, therefore killing also some of the beneficial parasite population
- ✓ **Trichogrammatid Wasps and Tachinid Flies**
  - These are barely distinguishable by the naked eye, but interesting nonetheless. The Trichogrammatid wasps lay eggs inside the egg of the host (moth), and the larvae develop inside the egg, therefore destroying it. The Tachinid flies lay their eggs inside the heads of caterpillars, beetles and other bugs, killing the host as they hatch and feed.

Learn to recognize both the larval and adult stages of these beneficial insects and the methods of natural biological control they can provide to the healthy garden.

Consult OSU Fact Sheet [EPP-7307: Beneficial Insects](#) for excellent photographs and a more complete list of these natural garden enemies.