

## **BENEFICIAL INSECTS IN THE YARD AND GARDEN**

Beneficial insects usually won't solve all your pest problems because it is to the benefit of the beneficials to allow some of their prey to feed and reproduce. However, they will keep pest populations in check or at a minimal level which in turn keeps damage and alternative control measures at a minimum.

Five beneficial insects likely to be in your yard and garden are described below. Two common natural enemies, praying mantis and adult ladybugs, are not mentioned because they are generally well-known. Learn to recognize ladybug larvae which also are very effective predators. Pre-daceous mites and tiny parasitoid wasps are not discussed because they are very small and not easily seen, but don't discount the impact of these important beneficials on pest insects. When you see swollen, tannish-gold colored aphids on the undersides of foliage or caterpillars with small white "cigars" (actually cocoons) sticking out of their bodies, you know these tiny beneficial organisms have been at work.

Assassin bugs (family Reduviidae), like praying mantis, are generalist predators. They feed on a variety of insects. The assassin bug is about  $\frac{3}{4}$  to 1 inch long with an elongated head which is often cocked upward. A long beak projects from the front of head and curves under the body. Most range in color from light brownish green to dark brown although some species are brightly colored. Nymphs are wingless, but otherwise similar to the adults.

Damsel bugs (family Nabidae) somewhat resemble assassin bugs. They are gray to brown,  $\frac{1}{2}$  inch long, slender insects which can be attracted by a cover crop. Squash bugs (family Coreidae), an important pest in vegetable gardens, may be confused with assassin bugs but these  $\frac{1}{2}$  inch long bugs are dark brown and do not have a narrow elongated head.

Bigeyed bugs (*Geocoris* spp.) feed on aphids, caterpillars, mites and other pests and their eggs in vegetable gardens and orchards. Plant some soybean and goldenrod near the garden or in the border to provide pollen and cover. Leave some weed plants along the border. Bigeyed bugs are small ( $\frac{1}{8}$  –  $\frac{1}{4}$  inch), black and silver insects with very large eyes and clear wings. The nymphal stage is wingless and can be blue, red or black, depending on the species, but otherwise resembles the adult.

Ground beetles (family Carabidae) are predators of soil-dwelling pests, including slugs and snails. They also may be found feeding on insects on plants. Both the larval and adult stages are among the most common and valuable natural enemies in the garden. The adult is  $\frac{1}{4}$  - 1 inch long, iridescent black or brown. The larva is brown or black, worm or caterpillar-like with 10 body segments and six legs. These beetles will seek cover in permanent pathways and in perennial beds.

Ichneumonid wasps (family Ichneumonidae) are predators and parasites of caterpillars, beetle larvae and other soft-bodied insects. Adult females of some species kill prey immediately by stinging them and feeding on their body fluids. The parasitic larvae feed and develop in their hosts, emerging as adults. Ichneumonid wasps range in size from  $\frac{1}{10}$  – 1 inch, have long abdomens and are usually brownish black or red and black. They are attracted to pollen- and nectar-producing plants.

Minute pirate bugs (family Anthocoridae) feed on spider mites, caterpillars, thrips and other insects and their eggs. Adults are  $\frac{1}{4}$  inch long, silver and black; the tips of their forewings are black. The nymphs, which are also effective natural enemies, are wingless and change color from yellow-orange to brown as they mature. For more information on insecticides and the importance of beneficial insects, contact the Pierce County Extension Service.