

Garden Good Guys – Minute Pirate Bugs

By Nanette Londeree

Have you noticed that the common descriptive names of many beneficial insects don't sound all that friendly – like assassin bugs and soldier beetles? It must have to do with their predatory nature. Another to add to the list is the minute pirate bug (*Oris tristicolor*). These true bugs, in the family *Anthocoridae*, are one of seventy species found in the U.S.



Minute pirate bugs range in size from 1/12 to 1/5 inch in length, about the same to twice the size of an aphid. The adults are somewhat oval shaped, black to purplish in color with white markings and a tiny, triangular head. They display overlapping folded wings, a characteristic true bug X-shape or chevron on their back. The fast moving nymphs are small, wingless, usually pear-shaped and yellowish or reddish brown with red eyes, turning

brown as they mature. They undergo an incomplete metamorphosis through five stages, each stage increasing in size and looking more like adults.

The females lay more than 100 eggs during their brief lifetime (about 35 days). The difficult to see eggs are laid individually in leaf stems or veins two to three days after mating. Incubation is generally three to five days, followed by a very short development phase, three weeks from egg to adult if conditions are right. Several generations may occur during a single growing season. These little bugs are often the first and most common predaceous insects to appear in the spring, working best between 70 - 90°F and day lengths of 14 or more hours.

Both the nymphs and adults are fierce, generalist predators feasting on aphids, leafhoppers, mites, psyllids, thrips, whiteflies, small caterpillars and other tiny insects and their eggs on a variety of crops including alfalfa, corn, cotton, small grains, soybeans, and tomatoes, ornamentals and landscape plants. They feed by sucking juices from their prey through a sharp needle-like beak, characteristic of all true bugs. One of these hungry critters can consume 30 or more spider mites per day!

Minute pirate bugs are most common where there are spring and summer flowering shrubs and weeds, since they feed on pollen and plant juices when prey aren't available. They're attracted to alfalfa, corn (a favorite), daisies, goldenrod, yarrow, stinging nettles, clover and vetch, found on flowers or under loose bark, in leaf litter or in decaying fungi. These helpful bugs can have their numbers greatly reduced with the use of systemic insecticides, either foliar or soil applications because of their habit of sucking plant juices.



These little guys are great to have in the garden, but do be careful, because like assassin bugs, they can inflict an irritating bite to humans if threatened.

Photos courtesy of UC IPM website