

Garden Good Guys – Assassin Bugs

By Nanette Londeree

Murderers lurking in garden shadows sounds like something out of a gothic novel. And certainly not something you'd think you'd want roaming around on your tranquil piece of land, but if they're of the insect type, you definitely do. Meet the assassin bugs.

These aptly named beneficial insects are voracious predators of a wide variety of insects including aphids, caterpillars, cucumber beetles, earwigs, leafhoppers and other bugs (including some other beneficials); some species feed on the blood of mammals. They may be seen stalking or laying in wait for their prey and once captured, injecting it with deadly venom.

There are nearly 3000 species of assassin bugs worldwide with more than 160 species in North America. The adult members of the Reduviidae family of insects are slender black, brown or brightly-colored; they range in size from 1/2 to 3/4 inch in length and have a long narrow head, round beady eyes, and a strong, extended, three-segmented, needle-like beak. They feed by inserting their beak into their victim's body and injecting a lethal toxin that kills the prey, then liquefies the prey's innards. They then use that same beak to suck out the contents, leaving only an empty exterior shell. As they too can also be preyed upon, these fierce creatures defend themselves from their enemies by using that same beak to squirt venom at their attacker as far as a foot away!



Each fall, the female deposits masses of brown, cylindrical eggs in cracks and crevices that hatch the following spring. Assassin bugs go through an incomplete metamorphosis, passing through five molts (instars) before fully maturing late in the season. Nymphs resemble the adults but are wingless; adults are poor fliers, and both adults and nymphs move rapidly when disturbed. They may live for several years and overwinter as adults.

Assassins are not particular about where they hunt; they can be found in all kinds of vegetation - weeds, shrubs, trees and flowering plants. And despite their success as an aggressor, they are rarely seen in large numbers because they are in turn hunted by many other natural enemies.

When you're working in the garden, be on the lookout for this beneficial insect. That same strong beak that dispatches prey so effectively can also pierce human skin. Their saliva can cause severe irritation and induce a very painful "bite." If you're fortunate enough to have them in your garden, leave these assassins alone.

Photo courtesy of Baldo Villegas