BIOLOGICAL CONTROL:
Bigeyed Bug, *Geocoris punctipes, uliginosis* & *bullatus*

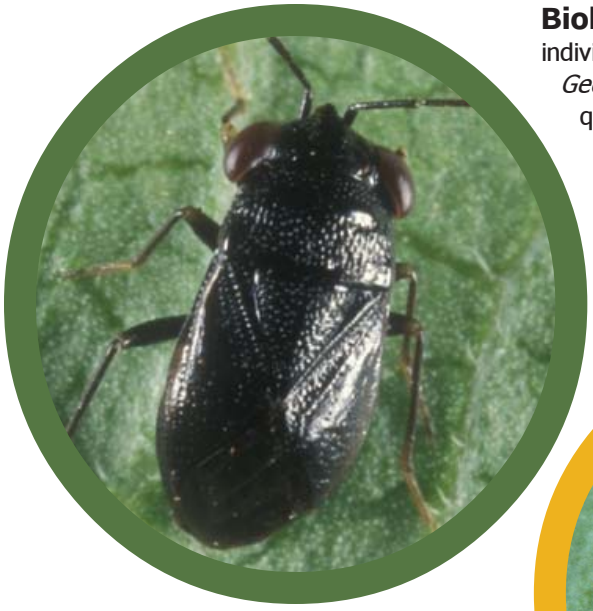

Figure 1. Adult *Geocoris uliginosis*. Photograph by: Lyle Buss.

Figure 2. Nymphal *Geocoris uliginosis*. Photograph by: Lyle Buss.

Figure 3. Adult bigeyed bug, *Geocoris* sp. feeding on a whitefly nymph. Photograph by: Jack Dykinga, USDA.

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Biology and Lifecycle: Eggs are laid on plants. The biologies of the individual species of bigeyed bugs in Florida are somewhat similar. Females of *Geocoris punctipes* lay 75 to 150 eggs, depending on the quantity and quality insect prey. Eggs hatch in 6 to 10 days. Development of the nymphal instars requires almost 20 days, depending on temperature. The adults live over three weeks.

Environmental Factors: Bigeyed bugs overwinter in northern Florida from November to March as mated females in reproductive diapause. A combination of day-length and temperature influences the onset and duration of reproductive diapause. A portion of the population remains active during the winter in Florida, even in the northern part of the state.

Adult: Small oblong, elliptical bugs about 1/16 inch in length. Several features separate bigeyed bugs from similar bugs. The head is broader than long and the prominent eyes curve backward and overlap the front of the pronotum. The color of *G. uliginosis* is nearly all black except for a pale border along each side. The other species are pale above.

Immatures: The nymphal instars are oblong, elliptical. Late instars have wingpads. The color of the head and thorax of *G. uliginosis* late instar nymphs is dark brown. The color of the head and thorax of the nymphs of other species is pale.

Host Species: Abundant on crop and wild plant species.

Habitat/Nutritional Requirements: These predatory bugs feed on plant juices without causing damage to the plants. These predators are generalists feeding on many small insects and insect eggs.

Effectiveness: Integrated pest management programs are designed to conserve populations of predatory bugs and other natural enemies through the use of cultural tactics, pest resistant crop cultivars and reduced-risk insecticides. This predator feeds on aphids, mites, whiteflies, thrips and the eggs of numerous species of pests.

References:

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