July 3, 2008  No. 13

Bagworms: What to Use?

Bagworm caterpillars are out-and-about and this is the time to consider applying an insecticide (or pest control material). Remember, bagworm caterpillars are likely still “ballooning” so it will require more than one application to manage bagworm populations from now until mid to late July. Since bagworm caterpillars are “small” they are more susceptible to the microbial insecticide, *Bacillus thuringiensis* spp. *kurstaki* or Btk (Dipel, Thuricide, and Javelin). This is a soil-borne bacterium that must be consumed by the caterpillar in order to be effective. Bagworm caterpillars stop feeding within 24 to 48 hours, and die in approximately 3 days. Another insecticide that may be used is spinosad (Conserve). This microbial insecticide is derived from an organism called *Saccharopolyspora spinosa* that is very effective against bagworm caterpillars. It is primarily a stomach poison with contact activity. Spinosad will also kill the later instars that are not affected by Btk.

Remember, the neonicotinoid-based insecticides such as imidacloprid (Merit), thiamethoxam (Meridian), and dinotefuran (Safari) are not effective against bagworm caterpillars. In fact, most of the neonicotinoid-based insecticides have minimal if any activity on caterpillars of any sort although some activity has been observed with clothianidin (Arena or Aloft). The pyrethroid-based insecticides such as bifenthrin and lambda-cyhalothrin will also provide control of bagworm caterpillars; however, this group of insecticides is very harmful to natural enemies including parasitoids and predators that may attack or prey upon bagworm caterpillars.
Golden Tortoise Beetle

Now is the time of year to look for a very picturesque insect known as the golden tortoise beetle (*Charidotella bicolor*), which is oval in shape, and bright, metallic gold in color. They may be mistaken for ladybird beetle adults. The beetle feeds primarily on ornamental sweet potato vines and plants in the morning glory family (Convulvulaceae). The beetle creates round, irregular-shaped holes in leaves that resemble slug or snail damage; however, the beetles are usually not present. Larvae are flattened and spiny, and may be yellow to red-brown in color. They feed on the underside of leaves, and carry their cast skins and feces on their back. There is usually one generation per year. Control is typically not required since ornamental sweet potato vine produces such an abundance of leaves that damage is generally not noticeable.

Raymond Cloyd

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from June 27th to July 3rd.

June 27 2008: Johnson County – Black carpet beetles in home
June 27 2008: Clay County – Carpet beetle in home
July 01 2008: Rush County – Nitilid beetle in bee hives
July 01 2008: McPherson County – Yellowstriped armyworm on pepper plant in garden
July 01 2008: Riley County – Northern widow spider
July 02 2008: Linn County – Assassin bug nymph in home
July 02 2008: Clay County – Millipedes around foundation of house
July 02 2008: Ford County – Poplar gall aphids in cottonwood
July 03 2008: Bourbon County – Bagworms on Eastern red cedar
If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

Raymond A. Cloyd
Extension Specialist
Ornamental Entomology/Integrated Pest Management
Phone: 785-532-4750
Fax: 785-532-6232
e-mail: rcloyd@ksu.edu

Holly Davis
Insect Diagnostician
Phone: (785) 532-4739
e-mail: holly3@ksu.edu