Bug-Wise

No. 12
June 4, 2004

Office: 1-662-325-2085

Azalea Caterpillar: Fortunately these large caterpillars are not very common, because when they do occur, they can do serious damage to a planting of azaleas in a short period of time. Fully mature caterpillars are about 2 inches long, are black with rectangular-shaped yellow or white spots, and have a red colored head and legs. However, by the time they reach this size, they have usually already caused a lot of defoliation. The eggs are laid in masses in late spring, and the newly hatched larvae feed together for several days before dispersing away from the mass. Young larvae are primarily yellow with red stripes and have a black head. Detecting infestations when larvae are small is the key to avoiding serious defoliation. Infestations primarily occur in the latter half of the growing season. Hand picking works when only a few clusters of larvae are present, but insecticide sprays may be necessary to control heavy infestations. The following table provides information on the identification and control of azalea caterpillar and some of the other common insect pests of azaleas.

Recognizing and Controlling Common Insect Pests of Azaleas

Pest	Symptom or description	Control (follow label rates and instuctions)
Spider mites	Leaves become yellow-flecked with stippled areas. Fine webs on leaves may be visible with close observation. Mites are barely visible with naked eye but easily seen with a 10X hand lens.	Spray underside of leaves with Kelthane (dicofol), Ortho Systemic Insect Killer (acephate + fenbutatin-oxide) or dimethoate (Cygon). Repeat application in 5 to 7 days to control newly hatched mites before they have time to reproduce.
Azalea lacebug	Upper surface of leaves has a bleached or stippled appearance – occasionally mistaken for spider mite injury . Undersides of leaves become discolored by excrement and cast skins.	Spray underside of leaves with acephate, malathion, or dimethoate. Commercially available pre-mixed treatments containing a combination of cyfluthrin + imidacloprid are also effective. Repeat application every 10 days until control is obtained. Alternatively, apply imidacloprid (Bayer Advanced Tree & Shrub Insect Control) as a soil drench.
Whiteflies	Adults are small white insects that fly when disturbed. Immatures are scale-like insects attached to undersides of leaves. Whiteflies produce sticky honeydew which results in black sooty mold on foliage.	Apply foliar sprays of acephate. Alternatively, apply imidacloprid (Bayer Advanced Tree & Shrub Insect Control) as a soil drench.
Scale insects	Usually on twigs or branches. There are several species. Some look like bits of white cotton; other are brownish. Azalea bark scale is a common species.	Malathion or acephate can be used as spray during crawler stage. Apply 2 to 3 sprays 7 to 10 days apart. For soft scale species, such as azalea bark scale, apply imidacloprid (Bayer Advanced Tree & Shrub Insect Control) as a soil drench. Horticultural Oil sprays are also useful in controlling scale insects.
Azalea Caterpillar	Older larvae are big, red-headed caterpillars that are black with white or light yellow checks. Younger larvae have black heads and are yellow with longitudinal red lines. Causes severe defoliation, but sporadic in occurrence.	Apply foliar sprays as needed, using one of the following active ingredients: acephate, spinosad, cyfluthrin, lambda cyhalothrin, permethrin
Azalea leaf miner	Young caterpillars cause mines in leaves. Older larvae feed as leaf rollers or tie several newly emerged leaves together, causing tattered appearance of terminal growth. Adult is a very small moth.	Apply foliar sprays as needed, using one of the following active ingredients: acephate, spinosad, cyfluthrin, lambda cyhalothrin, permethrin

Tomato Fruitworm/Corn Earworm: This is the caterpillar that is so commonly encountered feeding in the ends of the ears of corn, and it is the caterpillar that can totally ruin an otherwise beautiful tomato. It also occasionally occurs in other vegetables, such as eggplant, okra, beans, and peas, but seldom in high numbers. However, it can be especially damaging to tomatillos. It is a robust, nearly hairless caterpillar that can vary in color from green or light yellow to brown or black. Mature larvae are approximately 1.5 inches long. The night flying moths are light brown in color with a single, somewhat indistinct spot in the center of each forewing. The small round eggs are laid individually on the silks of corn or on the bloom clusters of tomatoes. Initially the eggs are pearly white, but become darker as they mature. Damage is caused by the caterpillars, which bore into fruit. In corn the damage is usually restricted to the first inch or two of kernels at the tip of the ear. However, when the larvae bore into tomatoes the entire fruit is usually lost. Immature marble-sized fruit may be damaged, as well as large mature fruit.

Management Practices: Because there are several generations per year, with the population increasing with each generation, early plantings normally experience much lower infestations than fall plantings. This is an important pest of commercial row crops, such as corn, soybeans, and cotton, and egg-laying pressure in home gardens can become especially heavy late in the growing season after these crops have matured. Because of the high number of spray applications that are required to control this pest in corn, most home gardeners choose to do nothing and simply discard the damaged portion of the ear at harvest.

Control: Corn can be partially protected by spraying with a recommended insecticide at three to five day intervals, beginning at first silk, but for most home gardeners this is not worth the effort. However, heavy infestations of this insect can cause serious damage to tomatoes unless they are controlled. Begin checking tomatoes at first bloom for the presence of eggs and/or caterpillars. Apply treatments at five to seven day intervals when necessary. Many of the labeled insecticides can be tank mixed with tomato fungicides, but check the labels of both products before tank mixing. Treatments recommended for control of tomato fruitworm on home-grown **tomatoes** are listed in the following table. Note that some of these products are only labeled for use on a limited number of vegetables. Be sure to read label carefully.

Insecticides For Control of Tomato Fruitworm on Home-grown **Tomatoes**

Insecticide	**(PHI)**	**Brand Name (one example)**
Carbaryl	(3)	Garden Tech Sevin Concentrate Bug Killer
Cyfluthrin	(1)	Bayer Advanced Garden Multi-Insect Killer
Cyhalothrin	(5)	Spectracide Triazicide Soil & Turf Insect Killer
Endosulfan	(1)	Thiodan
Esfenvalerate	(1)	Ortho Bug-B-Gon Multi-Purpose Insect Killer
Permethrin	(1)	Martin's Vegetables Plus 10% Permethrin Concentrate
Spinosad	(1)	Fertilome Bore, Bagworm, Leaf Miner & Tent Caterpillar Spray

The brand names mentioned in the publication are used as examples only. No endorsement of these products is intended. Other appropriately labeled products containing similar active ingredients should provide similar levels of control. Always read and follow the insecticide label.

Blake Layton, Extension Entomologist