Horticulture 2010 Newsletter
No. 30    July 28, 2010

UPCOMING EVENTS

Bedding Plant Field Day
Thursday, July 29
1:00 - 8:00 p.m.
K-State Research & Extension Center, Olathe
Cost: $45.00 (includes barbeque)
For more information, go to

K-State Research & Extension Center Field Day
Saturday, July 31
8:00 a.m. - 3:00 p.m.
35230 West 135th St., Olathe
Cost: $5.00 (purchase at the gate)
For more information, go to

Kansas Turfgrass Field Day
Thursday, August 5, 2010
Rocky Ford Research Center, Manhattan, KS
8:00 a.m. - 1:30 p.m.
Cost: $30.00 (includes lunch)
For more information, go to

VEGETABLES

Squash Vine Borer

If you have squash or related plants that suddenly wilt and die, you may have squash vine borer. This insect will bore into the stems of squash, zucchini, pumpkins and gourds. Hubbard squash are a favorite, and butternuts are less likely to be attacked than other squash. Cucumbers and melons are usually not a target, although both can be affected by a disease that causes similar symptoms, known as bacterial wilt. (See the May 13 issue of this newsletter.)

The adult of this insect is a clear-winged moth that resembles a wasp. The forewings are a dark metallic green but the rear wings are clear. The
abdomen is orange with black spots. The larva is cream-colored and rather wrinkled. Adults emerge in the spring and lay eggs on or near susceptible plants. Larva bore into the plant and feed for about a month as they move toward the base. Mature larva will exit the plant, burrow into the soil and pupate where they remain until the next year. Each plant can have numerous borers.

If you suspect squash vine borer, split the stem of a collapsed plant near where it enters the ground. Infested plants will be hollowed out and mushy and may contain borers. Unfortunately, there isn't much you can do at this late stage. Control measures should center on prevention. Suggested preventative controls would include crushing the dull red eggs before they hatch, excavating larvae from stems before they cause much damage or using insecticide applications. Applications should begin when the vines begin to run and reapplied every seven to 10 days for three to five weeks. Direct the spray at the crown of the plant and the base of runners. Effective insecticides would include permethrin (numerous trade names), esfenvalerate (Monterey Bug Buster). (WU)

**Orange Tomatoes and Heat**

Tomato color can be affected by heat. When temperatures rise above 95 degrees F, red pigments don't form properly though the orange and yellow pigments do. This results in orange fruit. This doesn't affect the edibility of the tomato, but often gardeners want that deep red color back. Though you can't change the color of tomatoes that have completely ripened, you can pick them when they are just starting to turn and have them ripen in cooler temperatures (75 to 85 degrees F is best). Such tomatoes will develop normal coloration. (WU)

**Heat Stops Tomatoes from Setting Fruit**

Temperatures that remain above 75 degrees F at night and day temperatures above 95 degrees F with dry, hot winds will cause poor fruit set on tomatoes. High temperatures interfere with pollen viability and/or cause excessive style growth leading to a lack of pollination.

It usually takes about 3 weeks for tomato flowers to develop into fruit large enough to notice that something is wrong and an additional week before tomatoes are full size and ready to start ripening.

Though there are "heat-set" tomatoes such as Florida 91, Sun Leaper and Sun Master that will set fruit at higher temperatures, that difference is normally only 2 to 3 degrees. Cooler temperatures will allow flowers to resume fruit set. (WU)
FLOWERS

Budworms on Garden Plants

If you have noticed a small hole in the buds of some of your flowers, you may have tobacco (geranium) budworm (Helicoverpa virescens). Though a number of flowers can serve as hosts, geranium and petunias are most commonly attacked. The larva of this insect damages the buds by boring into them before they open. The caterpillars feed on the flowers for about a month and then drop to the soil to pupate. There are normally two generations per year, with the second causing the most harm. The striped caterpillars vary widely in color with green, red, light brown and dark forms possible. The color of the larva is related to the color of the flowers on which they feed. The adult of this insect is a moth. Damaged buds often fail to open. Those that do will show evidence of feeding on the petals. Damage normally peaks in late summer because of increased numbers from the second generation.
Control of the budworm is difficult. Handpicking at dusk can be effective on small plantings. For larger plantings, chemical control may be the only practical option. Look for products with synthetic pyrethroid active ingredients such as permethrin, esfenvalerate, cyfluthrin, bifenthrin, lambda-cyhalothrin or related compounds.

Severe winters can be a natural form of control from one year to the next. Temperatures below 20 degrees F are hard enough to kill overwintering pupa. Because pupal cases are usually 2 to 6 inches deep, most exposed areas in Kansas will provide good control during a cold winter. However, microclimates next to heated buildings may allow survival. (WU)

ORNAMENTALS

Mycosphaerella Leaf Spot on Ash

We often see a great deal of mycosphaerella leaf spot on ash trees in areas that had wet summers. This year is no exception. Small, brown spots can enlarge to become blotches and may result in early leaf drop. Though this disease looks serious, it is not. Defoliation this late in the growing season will not hurt the health of the tree. Therefore, because this disease appears sporadically and tree health is not harmed, we do not recommend treatment. Furthermore, treatment would have to be preventative and applied before the disease had infected the leaves. Applying a fungicide now would have no effect. (WU)

Contributors:
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