

Inside Grundy County
By Patrick Derdzinski, Grundy County Extension Director
June 11, 2010

Some friends and I were gathered on the front porch recently and we were talking landscaping and other important items of life. The conversation turned to what's eating all the flowers, beets, and other plant species. The list of culprits is endless, but a few past friends have come back this year to pay us a visit and dine on our beloved landscape and garden plants. They are the earwig and variegated cutworm. In addition, I have entertained questions on maple trees related primarily to leaf galls and the cottony maple scale.

There are several earwig species in the *Forficula* genus but all are easy to recognize by the prominent pincers or forceps on the end of the abdomen. Adults are about 5/8 inch long and dark brown with a reddish head and pale yellow-brown legs.

Earwigs can be a household pest when they wander indoors by accident. They do not cause any harm inside the house. Earwigs are primarily outdoor insects that hide during day in damp areas such as under mulch, dead leaves, boards, stones and other debris.

Earwigs are nocturnal, searching for food and moisture. Earwigs feed on a wide variety of materials including decaying organic matter, other insects, and plants such as vegetables, flowers and ornamental plants. Outdoor control includes eliminate damp, moist conditions near the house, repair dripping faucets and air-conditioning units and channel water from rain gutters and spouts away from the house foundation.

Remove landscape mulch and debris (wood chips, gravel, old boards and bricks, etc.) against the house and in areas of high numbers. As a last resort insecticides can be sprayed around the house or in earwig habitats to reduce the population. Select a home garden or turfgrass insecticide such as carbaryl (Sevin), cyfluthrin, permethrin, etc. labeled for this purpose and apply according to label directions. Applications in late afternoon are preferred. Use sufficient spray water (or post-treatment irrigation) to move the insecticide through mulch materials to the hiding places underneath.

The variegated cutworm, *Peridroma saucia*, is the larva of a moth and the most widely distributed cutworm in North America. This insect can be a major pest in some areas of the country and can cause serious damage to crops like potatoes. Unlike the black cutworm which always eats plants and cuts them near the ground surface, this larva will climb many different

plant species to dine on. However, later larval stages may cut plants. They are nocturnal feeders like the earwig and hide just under the soil surface during the day. There can also be two or more generations per season.

The larva are light grey to light brown in color but are easily distinguished by small 4 to 7 yellow dots on their back segments. One way to find them is to run a rake or fingers just under plants like hostas or potatoes. I have also found them inside my leaf lettuce. When these larva pose a large problem for you, variegated cutworms can be controlled by treating the soil around damaged plants with products containing carbaryl, permethrin, cyfluthrin, bifenthrin, and others. If treating vegetable crops, select only insecticides approved for application to those edible crops.

Several individuals have approached me with leaf samples from their maple trees. These leaves were covered with leaf galls, primarily the maple spindle and maple bladder galls. They are both red structures with the bladder gall being round and the spindle is hair-like. Both galls are caused by mites. According to an Ohio State University Extension fact sheet, in spring, mites migrate from their over-wintering site in bark crevices to expanding buds and begin to feed on the undersurface of leaf buds.

This causes the formation of a blister which expands into a hollow bladder or spindle as the leaf expands. The mites enter the cavity and continue to feed within its protective walls. This stage reproduces asexually within the galls and the new mites mature by late June to mid-July. At this time the galls dry out and the tiny entrance hole opens up to allow escape of the mites. These mites then seek out overwintering sites. The good news is the only damage to maple trees is that of aesthetics. No control is warranted.

Last but not least, the cottony maple scale. It has been numerous years since I last saw an outbreak of this nuisance. Most people notice the scale either when the scale's excretion drips from trees onto their decks, cars, etc. This sap-like liquid is referred to as "honey dew". Or homeowners notice them when the female emits the white, cotton-like egg sacs that can engulf branches.

Control is rarely needed because predators eventually keep them in check. In addition, insecticides do not work if applied to egg sacs and adults which are resistant to sprays. But every so often, the outbreaks can be severe and some trees can be overwhelmed by the sheer number of

scales. This is when control products may have to be applied. However, the timing must occur when the “crawler” stage occurs.

Crawlers are the newly hatched scales that emerge from the egg scales and migrate to feed on leaves. This occurs from mid-June to August. According to OSU Extension, soaps and horticultural oils can be very effective in managing freshly settled crawlers. These materials also have a minimal adverse affect on the adult lady beetles and parasites already in settled crawlers. Insecticidal soaps or 1.5% horticultural oil must be applied thoroughly to the leaves, both to the underside and upper surfaces, in order to kill the scales. Soaps and oils only kill the pests on contact. Application of soaps or oils should be made in early to mid-July and again in early August, if additional crawlers are found.

Several insecticides are registered for control of scale crawlers and newly settled crawlers. These pesticides, again, often need to be applied in sufficient spray quantity to wet both the leaf upper and lower surfaces. Apply registered products in early to mid-July and again in early August for best control. Use products labeled for scales.