Ash/Lilac Borer: Do Not Get “W-holed” Down By This Borer

We are receiving inquiries regarding the ash/lilac borer (*Podosesia syringae*). It is important to note that this is not the same insect pest as the Emerald ash borer (*Agrilus planipennis*). The Emerald ash borer is a wood-boring beetle whereas the ash/lilac is a wood-boring caterpillar. Ash/lilac borer adults are typically active from mid-to-late-April through early-May. The adults are brown, clearwing moths that resemble paper wasps. Peak moth activity usually occurs from May through June although this depends on temperature. Adult females lay tan-colored, oval-shaped eggs in cracks and crevices, or wounds at the base of plant stems. A single mated female may lay about one week and lay up to 400 eggs. Below are the major biological and management parameters associated with this insect pest:

* Larvae cause plant damage by creating tunnels and feeding within the bark (cambium). The larvae may also bore further into the wood and feed within the sapwood and heartwood.

* Larval feeding restricts the flow of water and nutrients causing shoot or branch dieback. Ash/lilac borer typically feeds near the base of plant stems creating swollen areas or cracks at the base of plants, and where major branches attach to the trunk.

* Evidence of larval feeding includes the presence of light-colored sawdust that accumulates at the base of infected trees or shrubs. Clear-wing borer larvae expel sawdust from cracks in the bark that accumulate at the base of infested trees and shrubs while beetle borers (particularly flat-headed borers) pack their galleries with sawdust-like frass.

* Ash/lilac borer overwinters as late-instar larvae located in feeding tunnels or galleries.
* One way to determine if trees or shrubs are or have been infested with ash/lilac borers is the presence of brown papery pupal cases that protrude from the bark (Figure 1 and Figure 2). These pupal cases are where adults emerge from.

* In Kansas, there is one generation per year.

* The primary means of alleviating problems with ash/lilac borer is to avoid “plant stress” by properly implementing cultural practices such as irrigation (watering), fertility, pruning, and mulching. Stressed plants are more susceptible to attack than so called “healthy plants.” A two to three foot wide mulched area around the base of trees and shrubs will prevent injury from lawn mowers and weed-trimmers. Furthermore, avoid pruning plants in late spring through early summer (under usual weather conditions), because this time period is when moths are typically present.

* Insecticides containing the active ingredients, permethrin or bifenthrin may be applied to the bark, at least up to six feet from the base, in order to prevent ash/lilac borer larvae from entering plants. Clear-wing borer larvae crawl on the bark in search of entry points, which exposes them to insecticide residues.

* Pheromone traps are commercially available for capturing adult males, which helps to determine when females will be laying eggs. The use of pheromone traps helps in timing applications of insecticides. Insecticide spray applications should begin seven to 10 days after capturing the first moths. Also, be sure to check traps two to three times per week and record the number of newly captured males.
* For more information regarding ash/lilac borer management contact your county or state extension specialist.

I want to acknowledge Jeff Otto of Wichita, KS. Jeff keeps me abreast of the “bug situation” in south-central Kansas. Also, the images associated with Figures 1 and 2 are courtesy of Jeff. If anyone wants to act as a “bug scout” and provide me with information on what “bug” activity is going on in Kansas throughout the year, just like Jeff, please contact me at 785-532-4750 or rcloyd@ksu.edu.

Raymond Cloyd

**Wheat Aphids**

Wheat aphids, primarily bird cherry-oat and greenbugs, continue to migrate into Kansas on southern winds.
The most common question this last week then is whether to add insecticide to a fungicide application to kill the aphids. First of all, we do not recommend pesticide applications unless justified, and the mere presence of aphids in wheat does not justify an insecticide application. Aphids need to be at densities of 20+ aphids/tiller when wheat is in the boot to heading stages before aphids begin to impact wheat simply due to their feeding. Even then, their feeding is more impactful on plants that are already stressed by less than ideal growing conditions and when there are few beneficials present, i.e. lady beetles, lacewings, parasitic wasps, etc. Recent rains seem to have really helped alleviate the previous dry conditions- so growing conditions are not stressing the wheat. When an insecticide is added to a justified fungicide application, the insecticide will kill the aphids, as well as all the beneficials. The aphids will continue to migrate into the state but the beneficials will be gone and much slower to re-populate. Foliar insecticide applications made to control aphids with the aim of reducing the transmission of Barley yellow dwarf viruses has not been proven and thus is not recommended. At the present time there seem to be good populations of lady beetles and parasitic wasps in wheat fields to help mitigate aphid populations.
Alfalfa - Weevils and Aphids

Alfalfa weevil feeding seems to be slowing as pupation has started, but there are quite a few larvae still active.
The photo below is of our insecticide plots which were treated 8 days after the surrounding alfalfa field, thus the dramatic visual difference insecticide timing can make.
Also, there are some aphids present in the alfalfa. Dr. Stu Duncan, KSU Agronomist, reported some spotted alfalfa aphids from the AltaVista area and we have a few in our plots in Dickinson Co. Pea aphids have been present since early March and continue to be found in relatively low numbers.

Insect Diagnostic Laboratory Report

http://entomology.k-state.edu/extension/diagnostician/recent-samples.html
Sincerely,

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