It is that time year to be aware of and prevent damage from the ash/lilac borer (Podosesia syringae). Ash/lilac borer adults are generally active from late-April through June, although the extended cool period we experienced in April more than likely shifted initial activity into early to mid-May. Adults are brown, clearwing moths that resemble paper wasps. Adult females lay tan, oval-shaped eggs in cracks and crevices, or wounds at the base of plant stems. A single female can live about one week and lay up to 400 eggs. Below are nine items related to the life history parameters and management strategies associated with the ash/lilac borer:

1. The larvae cause plant damage by creating tunnels and feeding within the bark (cambium). In addition, larvae can tunnel further into the wood and feed within the sapwood and heartwood.

2. Larval feeding restricts the flow of water and nutrients resulting in shoot or branch dieback. Ash/lilac borer feeds primarily at the base of plant stems creating swollen areas or cracks, and where major branches attach to the trunk.

3. Evidence of larval feeding includes the presence of light-colored sawdust (frass) that accumulates at the base of infected trees or shrubs.

4. Ash/lilac borer overwinters as a late-instar larva located in feeding tunnels or galleries.

5. Trees or shrubs that have been infested with ash/lilac borers will have brown papery pupal cases protruding from the bark. These are where the adults emerged from.

6. In Kansas, there is generally one generation per year.

7. The best way to minimize problems with ash/lilac borer is to avoid ‘plant stress’ by providing
proper cultural practices, such as; irrigation (watering), fertilization, pruning, and mulching. Stressed plants, in general, 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 prevents injury from lawn mowers and weed-trimmers, which can girdle trees and shrubs thus leading to ‘stress.’ Furthermore, avoid pruning plants in late spring through early summer (under usual weather conditions) as this is when adults are typically present and the volatiles emitted from pruning cuts may attract adult females.

8. Insecticides containing the active ingredients, permethrin (Hi-Yield Garden, Pet, and Livestock Insect Control and 38 Plus Turf, Termite & Ornamental Insect Control) or bifenthrin can 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 after eggs hatch. Ash/lilac borer larvae crawl on the bark searching for entry points, which exposes them to insecticide residues.

9. Pheromone traps are commercially available that capture adult males, which helps to estimate when females will be laying eggs. Pheromone traps help in timing insecticide applications. Insecticide spray applications should begin 7 to 10 days after capturing the first adults. Be sure to also check pheromone traps two to three times per week and record the number of newly captured adult males. (Raymond Cloyd)

Editor’s Note: If you are unable to use traps, apply the first spray when the Vanhoutte spirea is in full to late bloom and a second spray four weeks later. Vanhoutte spirea is the white-flowered spirea with arching branches that is in bloom now in the Manhattan area.

Asparagus Beetles

Asparagus is doing well, but be on the lookout for asparagus beetles. Both the adult and larvae of asparagus beetles feed on asparagus spears by chewing the tips and spear surfaces, leading to scarring and staining of the spear tips. Asparagus beetles overwinter as adults in trash near the garden. The adults are a blue/black beetle with a red prothorax with yellow spots. The larvae are a soft, greenish grub. Small, elongated, black eggs — sticking out long ways from the side of asparagus spears — are laid on developing spears.

Early control of beetles is important to reduce feeding damage later. Sevin will provide control (a one-day wait before harvest is required). Some products with permethrin are also labeled including Bonide Eight Vegetable, Fruit & Flower Concentrate and Hi Yield Lawn, Garden, Pet and Livestock Insect Control but require a 3-day waiting period between spraying and harvest. (Ward Upham)
Cucumber Beetle

If you had cucumbers or muskmelons that suddenly turned brown and died last year, you may have had a disease known as bacterial wilt. The cucumber beetle carries this disease. Once a plant is infected, there is no cure, so prevention is the key. Because cucumber beetles overwinter as adults, early control measures are essential.

There are two types of cucumber beetles: striped and spotted. The striped cucumber beetle is the most common. The 1/4-inch-long beetles are conspicuously colored: black head and antennae, straw-yellow thorax, and yellowish wing covers with three distinct parallel and longitudinal black stripes. Young plants can be protected with row covers, cones, or other types of mechanical barriers. Edges must be sealed to ensure that the beetles do not find a place to enter.

Plants will eventually outgrow these barriers, or they will need to be removed to allow insect pollination of the flowers. Apply insecticides before beetles are noticed in the planting. Continue to spray weekly throughout the season.

Homeowners can use permethrin (Bonide Eight Vegetable, Fruit & Flower Concentrate and Hi Yield Lawn, Garden, Pet and Livestock Insect Control). Once plants have started flowering, spray in the evening after bees have returned to the hive. (Ward Upham)

VEGETABLES

Straw Bale Gardening

There has been growing interest in straw bale gardening. What better place to try this than in Kansas where straw is so abundant. First, some pointers.

- These are the “small” straw bales that are about 2 feet high and 3 feet long.
- Place the bale on edge so the twine doesn’t rot.
- Bales can be placed anywhere including concrete or asphalt. Just make sure there is plenty of sun and watering is convenient

Bale Conditioning

- Water the bales and keep them wet for 3 days. The bale will start to heat up as it breaks down.
- On days 4, 5 and 6, sprinkle fertilizer on the top of each bale with 1 cup of ammonium sulfate (21-0-0) or ½ cup of urea (46-0-0). Water the fertilizer in. This speeds the decomposition process.
On days 7, 8 and 9, continue to sprinkle fertilizer on each bale but cut the amount in half.
Stop fertilizing on day 10 but keep the bale moist.
Check for heat on the top of each bale for each day after day 10. When the temperature drops to below 100, the bale can be planted.

**Planting**
- Pocket Method: Make a hole for each plant several inches deep and fill with growing medium.
- Flat Bed Method: Cover the top of the bale with 3 to 4 inches of growing medium.
- The growing medium can be well-aged manure, compost or potting soil.

**Number of Plants per Bale**
- Cantaloupe: 2
- Cucumber: 3-4
- Peppers: 3-5
- Squash (winter): 2
- Squash (summer): 2-3
- Tomatoes: 2-3

**Watering**
Watering will be the most challenging aspect of management. The straw will dry quickly. A drip irrigation system on a timer can work well but may take some time to set up. Gardeners may also use soda bottles or milk jugs to water by poking drip holes in the lid, filling with water and then turning upside down next to the target plant.

This information was taken from an excellent publication from Washington State University that includes much more detail as well as images. See [http://cru.cahe.wsu.edu/CEPublications/FS109E/FS109E.pdf](http://cru.cahe.wsu.edu/CEPublications/FS109E/FS109E.pdf) (Ward Upham)

**Protecting New Vegetable Transplants from the Wind**
New transplants, even those hardened off in a cold frame, may need protection from strong winds when set out. Wooden shingles placed to block the wind used to be recommended but are now difficult to find. Try a plastic milk jug or a 2-liter soda bottle with both the bottom and top cut off. Push the jug or bottle into the soil far enough so it won’t blow away. In windy conditions, it may need to be stabilized with a wooden dowel or metal rod. (Ward Upham)
**MISCELLANEOUS**

**Trees Slow to Leaf Out**

We have received reports of trees being slow to leaf out. In most cases this is likely just a cool spring delaying leaf emergence and we need to give them a bit more time. However, the very warm, dry winter coupled with cold snaps may also have caused some winter damage as evidenced by delayed leaf emergence or scorched leaves. Check that twigs are still supple. If they are brittle, that part of the tree is dead. There isn’t much that can be done to speed up leaf emergence other than avoid any further stress.

Try to water plants once a week for young or recently transplanted trees if you do not receive rainfall. Established trees should be watered every three weeks. Trees should be watered to a depth of 12 to 18 inches if possible. Water from the trunk to the outer edge of the branches. Though this will not reach all the roots of a tree, it will reach the majority of them. Trees normally have at least 80 percent of their roots in the top foot of soil. Shrubs should be watered to a depth of 8 to 12 inches. Check the depth of watering by pushing a wooden dowel or metal rod into the soil. It will stop when it hits dry soil. (Ward Upham)

**Ladybird Beetles**

Both the adults and the larvae of the ladybird beetle are beneficial and do not feed on plants but rather on other insects including aphids, mealybugs, whiteflies, scale insects and the eggs of various other insects. So if you see these insects, do not spray.

The larval form looks like a very small alligator-shaped insect. Larvae are covered with spines, about 3/8-inch long, and black with orange markings. (Ward Upham)

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