



Horticulture 2014 Newsletter No. 23 June 10, 2014

Video of the Week: [Bacterial Spot on Peach Trees](#)

UPCOMING EVENTS

Kansas Community Garden Conference

July 7 & 8, 2014

K-State Union, Manhattan

For more information, go to:

<http://www.hfr.ksu.edu/doc3943.ashx>

Bedding Plant Field Day

July 22, 2014

K-State Research & Extension Center, Olathe

Horticulture Research Center Open House

July 26, 2014

K-State Research & Extension Center, Olathe

Turfgrass Field Day

Thursday, August 7, 2014

Rocky Ford Turfgrass Research Cntr., Manhattan

For more information, go to: <http://www.hfr.ksu.edu/doc3960.ashx>

ORNAMENTALS

Pruning Storm Damaged Trees

Summer storms may cause serious tree damage. Often you will have to decide whether a tree can be saved or not. Here is a checklist on care of a storm-damaged landscape.

1. Be safe: Check for downed power lines or hanging branches. Don't venture under the tree until it is safe. If large limbs are hanging precariously, a certified arborist has the tools, training and knowledge to do the work safely.

2. Cleanup: Remove debris so you don't trip over it.

3. Decide whether it is feasible to save a tree. If the bark has been split so the cambium is exposed or the main trunk split, the tree probably will not survive and should be removed. If there are so many broken limbs that the tree's form is destroyed, replacement is the best option. Topping, where all the main branches are cut and there are only stubs left, is not a recommended pruning procedure. Though new branches will normally arise from the stubs, they are not as firmly attached as the original branches and more likely to break in subsequent storms. Also, the tree must use a lot of energy to develop new branches, leaving less to fight off diseases and insect attacks. Often, the topped tree's life is shortened.

4. Prune broken branches to the next larger branch or to the trunk. If cutting back to the trunk, do not cut flush with the trunk but rather at the collar area between the branch and the trunk. Cutting flush with the trunk leaves a much larger wound than cutting at the collar and takes longer to heal. Middle-aged or younger vigorous trees can have up to one-third of the crown removed and still make a surprisingly swift comeback.

5. Take large limbs off in stages. If you try to take off a large limb in one cut, it will often break before the cut is finished and strip bark from the tree. Instead, first make a cut about 15 inches from the trunk. Start from the bottom and cut one-third of the way up through the limb. Make the second cut from the top down but start 2 inches further away from the trunk than the first. The branch will break away as you make the second cut. The third cut, made at the collar area, removes the stub that is left.

Note: Pruning can be dangerous. Consider hiring a trained arborist to do major work such as this. Also, a good arborist knows how to prune trees so that storm breakage is less likely to occur. Preventing damage is better than trying to fix it once it has happened. The Arbor Day Foundation maintains an excellent Web site that contains detailed information. The URL is: <http://www.arborday.org/media/stormindex.cfm> (Ward Upham)

Rust on Hollyhock



Watch for rust on hollyhock. This is the most common disease on hollyhock and can cause serious injury as leaves are progressively killed through the summer. Look for yellow spots on the surface of the leaves and orangish to brown pustules on the underside. Infections can also take place on stems and green flower parts.

The first line of defense is to remove all hollyhock stalks, leaves and other debris in the fall and destroy them. Remove any infected foliage you see now. Just be sure the foliage is dry so you don't spread the disease. Continue to remove diseased

leaves as soon as they show spots. Try using a fungicide such as sulfur or myclobutanil (Immunox or Immunox Plus) to protect healthy foliage. Note that sulfur may burn leaves if the air temperature is over 85 degrees within 24 hours of application. Follow label directions for timing and rate. (Ward Upham)

VEGETABLES

New Potatoes



Many gardeners look forward to harvesting new potatoes this time of year. New potatoes are immature and should be about the size of walnuts. Pull soil away from the base of the plants to see if the tubers are the desired size. If they are, dig entire plants and allow the skins of the exposed tubers to dry for several hours before gathering. These young potatoes are very tender and prone to the skin “slipping” unless they are given a few hours to dry. Even then these immature potatoes will not store well. Red-skinned varieties are often

preferred as they are the earliest to produce. (Ward Upham)

Mulching Garden Crops



Now is a good time to mulch garden vegetables if you haven't done so already. Mulches provide several benefits including weed prevention, reduced watering due to less evaporation and cooler soils that enhance root growth. Straw and hay are popular mulches in Kansas due to their availability. However, both may contain weed seeds that will germinate if the thatch layer is not thick enough. Grass clippings can also be used if the lawn has not been treated with weed killers. Add only a thin layer of clippings at a time and allow to dry for 2 to 3 days before adding more. A

thick layer will form a mold that is almost impervious to water. A mulch layer one-half to three-quarters inch thick is about right for grass clippings but hay or straw should be at a depth of 2 to 4 inches. (Ward Upham)

Do Not Over-Fertilize Tomatoes



Though tomatoes need to be fertilized to yield well, too much nitrogen can result in large plants with little to no fruit. Tomatoes should be fertilized before planting and sidedressed with a nitrogen fertilizer three times during the season.

The first sidedressing should go down one to two weeks before the first tomato ripens. The second should be applied two weeks after the first tomato ripens and the third one month after the second.

Common sources of nitrogen-only fertilizers include nitrate of soda, urea, and ammonium sulfate. Blood meal is an organic fertilizer that contains primarily, but not exclusively, nitrogen.

Use only one of the listed fertilizers and apply at the rate given below.

Nitrate of soda (16-0-0): Apply 2/3 pound (1.5 cups) fertilizer per 30 feet of row.

Blood Meal (12-1.5-.6): Apply 14 ounces (1.75 cups) fertilizer per 30 feet of row.

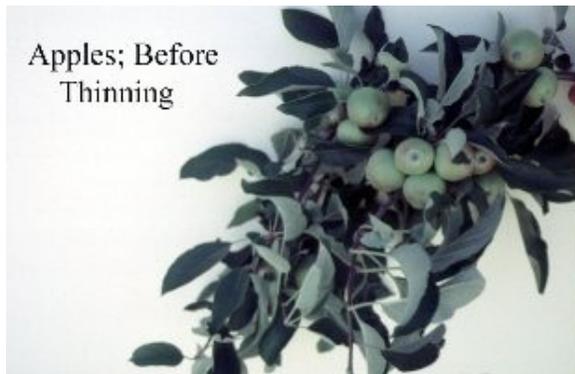
Urea (46-0-0): Apply 4 ounces (1/2 cup) fertilizer per 30 feet of row.

Ammonium Sulfate (21-0-0): Apply 0.5 pounds (1 cup) fertilizer per 30 feet of row.

If you cannot find the above materials, you can use a lawn fertilizer that is about 30 percent nitrogen (nitrogen is the first number in the set of three) and apply it at the rate of 1/3 pound (3/4 cup) per 30 feet of row. Do not use a fertilizer that contains a weed killer or weed preventer. (Ward Upham)

FRUIT

Fruit Reminders



* Remove fruit from heavily loaded apples and peaches (if the flower buds weren't killed by frost) to improve fruit size and prevent limbs from breaking. Apples should be spaced every 4 inches and peaches every 6 to 8. Note that is an average spacing. Two fruit can be closer together if the average is correct.

* Remove sucker growth from the base of fruit trees and grape vines.

* Remove water sprout growth from fruit trees. Water sprouts grow straight up.

* "Comb" new growth on grape vines so these new shoots hang down for greater exposure to sunlight.

* Continue disease and insect control to prevent fruit damage. (Ward Upham)

PESTS

Lecanium Scale



There are about a dozen different species of soft scales collectively known as lecanium scale. But life histories are similar enough to treat them as a single entity for the purposes of this article.

Normally, damage from lecanium scale is slight with "honeydew" raining down on anything under affected trees. Sooty mold, a fungus that feeds on the honeydew, can turn branches and leaves black.

Branch dieback is possible with large populations. Predators and parasites normally keep lecanium

scale under control, but there are times when the population of beneficials is too low to provide immediate control. Unfortunately, later instars and adults are virtually impossible to control with insecticides. Only the crawler stage is susceptible, and the time of crawler emergence varies from year to year. If you feel insecticides are necessary, target the crawler stage as it migrates from the dead mother's body to the leaves. This usually occurs about the time yucca plants flower. Trapping adults has shown that this week is a good time to apply treatments in Wichita as the crawlers are out. Apply a followup spray in another 10 days. More northern locations may want to wait until the yucca flowers.

Registered products include permethrin (numerous trade names) cyfluthrin (Tempo, Bayer Vegetable and Garden Insect Spray), dinotefuran (Ortho Tree & Shrub Insect Control Ready To Use Granules), carbaryl (Sevin) and malathion. Though too late to apply now, imidacloprid (Bayer Tree and Shrub Insect Control, Bonide Systemic Granules IC) can be applied in the fall. (Ward Upham)

Now Is Time To “Nail” Those Bagworms



It is now time to “do battle” (I love military metaphors) with that “infamous” of insect pests known as the bagworm (*Thyridopteryx ephemeraeformis*). Throughout most of Kansas, bagworm eggs have hatched and the young caterpillars are out-and-about feeding on both broadleaf and evergreen trees and shrubs. Bagworms were first considered a pest of primarily conifers but over the years they have expanded their host range to include a number of broadleaf plants including rose, honeylocust, and flowering

plum. I have even seen them “eating chicken wire” at the Sunset Zoo (Manhattan, KS). At this time of year, what is the best way to deal with bagworm caterpillars and thus prevent them from causing damage? Handpicking any small caterpillars (along with their accompanying bag) and

placing them into a container of soapy water will kill them directly. This is highly therapeutic and, if feasible, will quickly remove populations before they can cause substantial plant damage. You should consider having a weekend “bagworm handpicking party” with prizes awarded to those individuals that collect the most bags.

For those less interested in the pleasures of handpicking, there are a number of insecticides labeled for use against bagworms including those with the following active ingredients (trade name in parentheses): acephate (Orthene), *Bacillus thuringiensis* subsp. *kurstaki* (Dipel/Thuricide), cyfluthrin (Tempo), lambda-cyhalothrin (Scimitar), trichlorfon (Dylox), indoxacarb (Provaunt), chlorantraniliprole (Acelepryn), and spinosad (Conserve). Many of these active ingredients are commercially available and sold under different trade names or generic products. However, several insecticides may not be directly available to homeowners. The key to dealing with bagworms when using insecticides is to make applications early and frequently enough in order to kill the highly susceptible young caterpillars that are feeding aggressively on plant foliage. Older caterpillars that develop later in the season, in the bags, may be 3/4-inches long, and are typically more difficult to kill with insecticides. In addition, females tend to feed less as they prepare for reproduction, which reduces their susceptibility to spray applications and any residues. The bacterium *Bacillus thuringiensis* subsp. *kurstaki* is active on young caterpillars; however, the active ingredient must be consumed to be effective, so thorough coverage of all plant parts and frequent applications are required to avoid having to deal with later stages. This compound is sensitive to ultra-violet light degradation and rainfall, which reduces any residual activity. Spinosad is the active ingredient in a number of homeowner products (including Borer, Bagworm, Tent Caterpillar & Leafminer Spray; Captain Jack’s DeadBug Brew; and Monterey Garden Insect Spray) and works by contact and ingestion (stomach poison); however, it is most effective when ingested and it can be used against older or larger bagworm caterpillars. Cyfluthrin, lambda-cyhalothrin, trichlorfon, chlorantraniliprole, and indoxacarb may be used against both the young and the older caterpillars. However, thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are required. The reason why multiple applications will be needed when bagworms are first detected is because bagworms “blow in” (called ‘ballooning’) from neighboring plants. If left unchecked, bagworms can cause significant damage, thus ruining the aesthetic quality of plants. In addition, they may actually kill plants, especially evergreens since they don’t usually produce another flush of growth, and newly transplanted small plants.

If you have any questions regarding the management of bagworms, contact your county horticultural agent, or university-based or state extension entomologist. (Raymond Cloyd)

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To view Upcoming Events: <http://tinyurl.com/fswqe>

The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to cipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

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