

Horticulture 2017 Newsletter

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Video of the Week:

[Mulch: Trees Need to Breathe](#)

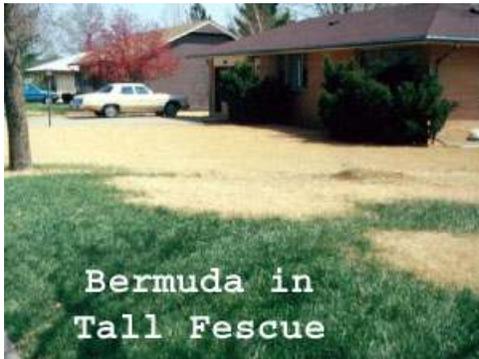
UPCOMING EVENTS

July 25 K-State Bedding Plant Field Day, Olathe
July 29 Open House, K-State Research & Extension Center, Olathe
August 3 Turf & Ornamentals Field Day, Wichita

<http://www.kansasturfgrassfoundation.com/annual-ktf-field-day.html>

TURFGRASS

Bermudagrass Control



Bermudagrass can make a nice lawn if you don't mind its invasiveness and short growing season. But many people dislike both these characteristics. Warm-season grasses, such as bermudagrass, zoysiagrass and buffalograss, green up later than cool-season grasses such as tall fescue and Kentucky bluegrass. They also go dormant earlier in the fall, which can make a lawn unattractive.

Bermuda that invades a cool-season lawn will be brown during much of the spring and fall while the tall fescue portion of the lawn is green. Bermuda is much more

drought and heat resistant than cool-season grasses, so it will take over a cool-season lawn during the summer months if it is in full sun.

So, how do you control bermudagrass that has invaded a cool-season lawn? Research conducted in 1996 showed that glyphosate (Round-up, Kleen-up, Killzall, Kleeraway) is the best herbicide for the job. Glyphosate is a nonselective herbicide and will kill everything— including tall fescue or Kentucky bluegrass. Therefore, you will need to reseed treated areas. In our study, we applied a 2% solution of glyphosate on July 15 and again on August 15 on a bermudagrass plot that was more than 15 years old. More than one year later, we saw no regrowth. Glyphosate works best if bermuda is growing well. The better the bermudagrass is growing, the more chemical is taken up and pushed into the roots. Water and fertilize if needed to get it going.

Spray about the middle of July (or when the bermuda is growing well). Use glyphosate (2% solution). Wait two weeks and scalp the lawn (mow as low as possible and remove clippings.) This will prevent dead grass from covering any bermuda that starts to recover. Wait another two weeks and spray again with glyphosate if there is any green. Wait two more weeks and reseed. (Ward Upham)

ORNAMENTALS

Watering Newly Planted Trees and Shrubs



Newly planted trees have not established the extensive root system needed to absorb enough water during hot, dry, windy summers. Even trees two or three years old should receive special care.

Deep, infrequent watering and mulching can help trees become established. Newly transplanted trees need at least 10 gallons of water per week, and on sandy soils they will need that much applied twice a week. The secret is getting that water to soak deeply into the soil, so it evaporates more slowly and is available to the tree's roots longer. One way to do this is to punch a small hole in the side of a 5-gallon bucket and fill it with water. Let the water dribble out slowly next to the tree. Refill the bucket once, and you have applied 10 gallons. Very large transplanted trees and trees that were transplanted two to three years ago will require more water.

A perforated soaker hose is a great way to water a newly established bed or foundation planting.

In sunbaked soil, you may need to rough up the surface with a hoe or tiller to get water to infiltrate easily. It may be helpful to set the kitchen oven timer, so you remember to move the hose or shut off the faucet. If you are seeing surface runoff, reduce the flow, or build a berm with at least a 4-foot diameter around the base of the tree to allow the water to percolate down through the soil, instead of spreading out.

Regardless of method used, soil should be wet at least 12 inches deep. Use a metal rod, wooden dowel, electric fence post or something similar to check depth. Dry soil is much harder to push through than wet. (Ward Upham)

Inexpensive Method of Watering Trees



We mentioned in an accompanying article about using a soaker hose to water trees. We thought it might be helpful to provide more details.

Soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. On small trees, circling the tree several times with the soaker hoses

will even out the amount of water applied but this isn't practical for larger trees. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore provide a more uniform watering. The specific parts you need are shown in the photo above and include the soaker hose, Y-adapter and female to female connector.

It is also helpful if the Y-adapter has shut off valves so the volume of flow can be controlled. Too high a flow rate can allow water to run off rather than soak in.

On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least ½ the distance to the dripline. The dripline of the tree is outermost reach of the branches. On smaller trees, you may circle the tree several times so that only soil which has tree roots will be watered. (Ward Upham)

PESTS

Sweet Corn Earworm



Corn earworm tends to be a problem every year on sweet corn in Kansas. The earworm moth lays eggs on developing silks at night. When the egg hatches, the larva crawls down the silk and into the ear. Feeding starts at the tip of the ear and works down. Though several earworms may hatch and attack a single ear, only one is usually present at harvest due to the cannibalistic nature of the insect. Control is challenging as silks continue to grow over a period of time. This means that even if silks are treated, new silk will

appear that hasn't been protected. Applications every 2 to 3 days are needed for insecticides to be effective, especially in early July when peak flight of these moths usually appear.

There is a three-week period from silking to harvest, but there is only a two-week period from when the silks appear to when they begin to dry. Since moths prefer juicy silks and shun those that have started to dry, insecticides are only needed the first two weeks of silking.

Homeowners can use cyfluthrin (Baythroid; Bayer Vegetable and Garden Insect Killer) or spinosad (SpinTor; Captain Jack's Dead Bug Brew; Conserve; Borer, Bagworm, Tent Caterpillar & Leafminer Spray). Spinosad is an organic product. Commercial growers have additional choices including zeta-cypermethrin (Mustang Max), bifenthrin+zeta-cypermethrin (Hero), spinetoram (Radiant) and flubendiamide (Belt).

Though more time consuming, mineral or other light horticultural oils may also be used as an organic control. The oil is placed inside the silk end of the ear with a medicine dropper (½ to ¾ of a dropper) when the tips of the silks begin to wilt and turn brown. This will coat the earworms already present and likely suffocate them and earworms that enter the ear after the mineral oil is applied will also be controlled. Applying the oil before the silk has begun to brown may interfere with pollination, leading to incompletely filled ears. (Ward Upham)

Walnut Caterpillars



If you notice leaves disappearing from walnut trees, it may be walnut caterpillars. Walnut caterpillars attack primarily black walnut, pecan, and several species of hickory trees, but may also attack birch, oak, willow, honey locust, and apple trees.

Walnut caterpillars overwinter as pupae underground beneath host trees. In late spring, moths emerge and deposit egg clusters on lower leaves. By the end of June, newly emerged and gregarious larvae skeletonize leaves. Larger hairy, brick-red larvae consume greater amounts of leaf tissue, and nearly matured gray larvae devour entire leaves, including petioles.

As mentioned earlier, walnut caterpillars are gregarious. In other words, they feed in groups. A single tree may contain several groups. When disturbed, larvae arch their bodies in what looks like a defensive move. Larvae crowd together on the lower parts of trees to molt and leave an ugly patch of hairy skins. Mature larvae, 2 inches long, descend or drop to the ground where they enter the soil to pupate. A second generation occurs soon, creating the overwintering pupae.

Removing leaves with egg masses is an effective way to control walnut caterpillars. This may be impractical with large trees or when too many infested leaves are present. Bands of Tree Tanglefoot pest barrier may be used to snare larvae as they migrate to main branches or the trunk to molt. Insecticides such as spinosad (Conserve; Captain Jack's Dead Bug Brew; Borer, Bagworm, Leafminer and Tent Caterpillar Spray) permethrin (numerous trade names) malathion or cyfluthrin (Tempo, Bayer Vegetable and Garden Insect Spray) may provide the most practical means of control. The spinosad products are organic controls. (Ward Upham)

Japanese Beetles



Japanese beetles feed on over 300 species of plants including rose, birch, linden, crabapple, grape, Virginia creeper, and buckeye. Adults are approximately 7/16-inch long and metallic green with coppery wing covers. They sport a series of white dots made up of tufts of hair that project from under the edges of the wing covers on the back half of the insect. This characteristic is used to distinguish Japanese beetles from other similar beetles. Japanese beetles feed on leaves, flowers and wounded or mushy fruit.

Adults often feed on the green material on the upper surface of the leaf leaving a lacelike or "cellophane" appearance. Most feeding activity occurs over a 4 to 6 week period though individual beetles usually live about 30 to 45 days.

Japanese beetles tend to be gregarious and feed in groups, starting at the top of a plant and working down. Warm, sunny weather is preferred with beetles favoring plants in full sun. When disturbed, adults fold their legs and drop from foliage. Adult beetles can be killed by shaking the beetles from the plant into a jar or bucket containing soapy water. This is best done in the morning when the insects are sluggish.

Numerous insecticides can be used including pyrethroid products such as cyfluthrin (Tempo, Bayer Vegetable & Garden Insect Spray), bifenthrin (Hi-Yield Bug Blaster II) and cyhalothrin (Bonide Beetle Killer, Spectracide Bug Stop Indoor + Outdoor Insect Killer, Spectracide Triazicide, Bonide Caterpillar Killer). Carbaryl (Sevin) can also be used. The pyrethroid products normally give 2 to 3 weeks protection with carbaryl not lasting as long; usually 1 to 2 weeks. All of the above insecticides are detrimental to natural controls such as parasitoids and predators or other pests including the two-spotted spider mite. Neem products (Natural Guard Neem-Py, Fertilome Triple Action Plus) and Pyola (pyrethrins in canola oil) will provide deterrence for 3 to 4 days. Japanese beetle traps tend to attract more beetles than they kill and often do more harm than good and therefore are not recommended. (Ward Upham)

To view Upcoming Events: <http://hnr.k-state.edu/events/index.html>

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

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