Horticulture 2012 Newsletter
No. 26    July 3, 2012

Video of the Week: Watering Young Trees

UPCOMING EVENTS

K-State Bedding Plant Field Day

Thursday, July 26, 2012
1:00 - 7:00 p.m.
K-State Horticulture Research and Extension Center
35230 W. 135th St., Olathe, KS
For more information, go to http://www.hfrr.ksu.edu/doc3429.ashx

VEGETABLES

Harvesting Potatoes

Potatoes are ready to harvest when the vines are about half dead. Potatoes dug too early have tender skins and are easily bruised. Delaying digging will allow the soil to heat because it is no longer shaded by foliage. High soil temperatures can lead to sprouting potatoes. Allow potatoes to "set" by keeping them in a shady, dry location for a day or so. Move them to a cool, moist environment such as a cellar or cool basement for longer storage. (WU)
Pulling Onions

Onions are ready to harvest when about half the plants have tops that have fallen over. This is a sign that the onions are mature and need to be pulled out of the ground. Bulbs may sunburn without the foliage to protect them. The secret to onions keeping well is to allow the tops to dry completely before storage. Move onions to a shaded, well-ventilated area after harvest. After tops are completely dry, store in a cool, dry location. Large-necked onions take more time to dry than small-necked onions such as Bermuda types. Avoid storage in plastic bags because the lack of air circulation will shorten storage life. Use an open, mesh bag instead. (WU)

Weird Squash

Occasionally we receive a call from someone who has a squash (or cucumber or melon) that just doesn’t look like what was supposedly planted. They often wish to know if that fruit had cross-pollinated with another vegetable close by. In such cases, the gardener is assuming that cross-pollination will affect the fruit. Such is not the case. The characteristics of the fruit is determined by the mother plant and is not affected by cross-pollination. However, there will be a problem if seed is saved for the next year from a flower that was cross-pollinated. All bets are off on what you will get if that happens.

So how do we end up with this weird fruit? Though it could be that the gardener had forgotten exactly what he planted, more likely is that the seed he planted had been cross-pollinated. Another possibility is that it came from seed that came from fruit that had rotted in the garden the previous year. Regardless, don’t worry about planting different cultivars of squash or cucumbers or melons close to one another. Though cross-pollination may occur, the fruit will not be affected. (WU)
Tomatoes and Stinkbugs

Look for tomatoes with golden-yellow, pink or white spots on the fruit. This type of damage is often caused by stinkbugs, the shield-shaped insects that emit a foul odor when disturbed. The stinkbug injures the fruit by using its mouthparts to probe. Color development is affected where probing occurs, which results in the off color, cloudy spots. Heavy feeding causes spots to spread, so tomatoes may develop a golden color. If you look closely, you can see the pinprick-sized puncture wounds in the middle of the spots. Hard, whitish, callous tissue develops beneath the skin at the area of wounding. By the time you notice the spots, stinkbugs are often gone, so control is impossible. Affected tomatoes are safe to eat. (WU)

ORNAMENTALS

Trees Losing Leaves

There are three situations we may run into regarding tree leaf loss this summer. The tree may produce yellow leaves scattered throughout the canopy of the tree, all the leaves on a tree may turn yellow and drop or the leaves may turn brown but stick to the branches.

If falling leaves are well distributed throughout the tree and result in a general thinning of the leaves, the problem is not serious. Trees will often set more leaves in the spring than they can support during the summer. Heat and drought stress will cause the tree to lose leaves that it cannot support with the available soil moisture. Leaves that drop are most often yellow with no discernible disease spots. However, at times, we can have green leaves drop that appear perfectly healthy. As long as the leaf drop results in a gradual thinning of the leaves, the tree should be fine if it is kept watered during dry periods.

In some cases we may see virtually all of the leaves drop. Certain trees such as hackberry can drop all of the leaves and enter summer dormancy. Trees that are summer dormant should have supple twigs and healthy buds. Usually, the effect on the health of the tree is very minor and the tree leafs out normally next spring. However, this year, a number of trees are already under a great deal of stress due to the drought last summer, the warm, dry winter and the extreme
temperatures recently. As long as the tree has enough stored energy reserves to make through to next spring, it will survive. The twigs and buds tell the story. If the buds die and the twigs become brittle, at least that part of the tree is dead.

The last case involves trees that have leaves that die and remain attached to the tree. This can happen seemingly overnight. In such cases, the tree couldn’t keep up with moisture demands and died quickly. As in the last case, the twigs and buds are the most important clue as to the health of the tree. As long as the buds are alive and the twigs are supple, do not remove the tree. It still has life.

If you limited ability to water and need to prioritize, trees should come first because they are the most difficult and expensive to replace. They also take the most time to reach an acceptable size.

We have two publications on watering trees. They are listed and linked to below.

Watering Newly Planted Young Trees and Shrubs
Watering Established Trees and Shrubs
(WU)

PESTS

Squash Vine Borer

If you have squash or related plants that suddenly wilt and die, you may have squash vine borer. This insect will bore into the stems of squash, zucchini, pumpkins and gourds. Hubbard squash are a favorite, and butternuts are less likely to be attacked than other squash. Cucumbers and melons are usually not a target, although both can be affected by a disease that causes similar symptoms, known as bacterial wilt. (See the May 15 issue of this newsletter.)

The adult of this insect is a clear-winged moth that resembles a wasp. The forewings are a dark metallic green but the rear wings are clear. The abdomen is orange with black spots. The larva is cream-colored and rather wrinkled. Adults emerge in the spring and lay eggs on or near susceptible plants. Larva bore into the plant and feed for about a month as they move toward the base. Mature larva will exit the plant, burrow into the soil and pupate where they remain until the next year. Each plant can have numerous borers.

If you suspect squash vine borer, split the stem of a collapsed plant near where it enters the ground. Infested plants will be hollowed out and mushy and may contain borers. Unfortunately, there isn't much you can do at this late stage. Control measures should center on prevention. Suggested preventative controls would include crushing the dull red eggs before they hatch, excavating larvae from stems before they cause much damage or using insecticide applications. Applications should begin when the vines begin to run (too late for that) and reapplied every seven to 10 days for three to five weeks. Direct the spray at the crown of the plant and the base of
runners. Chemicals used for borer control in gardens are rotenone, permethrin (Bug-No-More Yard & Garden Insect Spray; Eight Vegetable, Fruit & Flower Concentrate; Lawn, Garden, Pet and Livestock Insect Control; Lawn & Garden Insect Killer), bifenthrin (Hi-Yield Bug Blaster II, Bug-B-Gon Max Garden Insect Killer) or carbaryl (Sevin), applied as sprays or dusts. Continue on a 7 to 10 day reapplication schedule for 3 to 5 weeks. If plants wilt, look for the presence of holes and ooze. However, in extreme heat, these plants will wilt in the afternoon even if undamaged by this insect. (WU)

MISCELLANEOUS

Controlling Grassy Sandbur

Hot, dry years often lead to problems with grassy sandbur. Mature plants are difficult to control with products that won’t hurt the lawn. Glyphosate (Roundup) works well but kills whatever it hits. The best control for grassy sandbur is to use a preemergence herbicide in the spring before the plant comes up. However, not all preemergence herbicides are effective. The three products that are effective are oryzalin, pendimethalin and prodiamine.

Oryzalin is sold under the trade names of Surflan and Weed Impede. It can be used on all warm-season grasses as well as tall fescue. It should not be used on cool-season grasses other than tall fescue such as Kentucky bluegrass. Apply oryzalin about April 15 when redbud trees approach full bloom.

Pendimethalin is sold commercially as Pendulum as well as several other names. On the homeowner side, it is sold as Scotts Halts. Pendimethalin is best applied as a split application with the first half applied about April 15 and the second about June 1. Alternatively, make the first application when redbud trees approach full bloom and the second six weeks later.

Prodiamine is sold under the commercial name of Barricade. It is also the active ingredient in a number of homeowner products. It can be used on all of our common lawn grasses. Apply as is done for oryzalin, about April 15 or when redbud trees approach full bloom. Only one application is needed per year.

Quinclorac (Drive) can provide some postemergence control especially if the sandbur is in the seedling stage. Quinclorac is also found in a number of combination products that control both broadleaf weeds and crabgrass. Mature sandbur will be very difficult to control with anything other than glyphosate. (WU)
Herbicide Damage to Trees, Shrubs and Gardens

Every year we see damage caused by exposure to herbicides. Symptoms vary with herbicide applied, plants exposed, concentration of product and environmental factors, especially hot temperatures. Here is a list of the types of damage commonly seen.

**Broadleaf herbicide drift.** A number of herbicides used on farms and on home lawns are essentially plant growth hormones. These include 2,4-D, triclopyr, and dicamba and are commonly used to control broadleaf weeds in lawns, pastures, or grassy crops. These products may become a gas (volatilize) at high temperatures, causing them to drift and damage nontarget plants such as trees and shrubs. Symptoms may include twisting and distortion of plant foliage, leaf yellowing, and, in severe cases, branch dieback. One of the trademark signs of this damage is the curly-Q twisting of leaf petioles or stems. Though tomatoes, redbud trees, and grapes are sensitive to these herbicides, a number of species will show some damage if drift has occurred. If you see twisting on more than one species, chances are that herbicide drift has occurred. Often, plants recover from drift due to volatilization. We have seen a great deal of this kind of damage recently due to high temperatures and high weed populations.

**Damage to vegetable gardens.** Though drift is the most common cause of herbicide damage on vegetables, other potential problems exist as well. Cattle fed prairie hay from pasture treated with picloram (Tordon) can have manure tainted with the herbicide. If this manure is used on a vegetable garden, plants may sicken and die. Also, lawn clippings treated with quinclorac (a crabgrass killer) and used as mulch can have the same effect. Both products can remain active for up to 24 months.

**Damage from stump or sprout treatments.** Tree stumps often are treated to prevent resprouting. Two commonly used products are picloram (Tordon) and triclopyr (Remedy, Stump Killer, Brush-B-Gon, etc.). Be careful when applying these herbicides to prevent contamination of the soil. Nearby trees may be damaged if they pick up enough herbicide. Foresters warn that picloram also may leach from roots of a treated tree into the soil and be absorbed by roots of another tree species. This does not occur with triclopyr. Be very careful about using these products near valuable trees and shrubs.

Sprouts are often treated to keep them from growing where they interfere with the aesthetics of a lawn or other landscaped area. Never use a herbicide to treat sprouts coming from a root system of a tree you want to keep. A number of tree species including honey locust, black locust, hackberry, western soapberry, persimmon, and occasionally, maples may send up sprouts from their roots.

Treating these sprouts will effectively treat the tree to which they are attached. This may ultimately kill the tree. Also remember that trees of the same species growing next to one another may share a root system as a result of root grafting. Treating one tree in the group is like treating
all of the trees.

If treating volunteer sprouts, use a product such as Monterey Sucker Stopper or Fertilome Prune Smart Sprout Inhibitor RTU. Neither will harm the plant to which the sprouts are attached.

**Liquid Weed Edgers.** Herbicides are often used along fences, on sidewalks or gravel drives to prevent plant growth. Some of these, including glyphosate (Roundup) and glufosinate (Finale) rarely cause damage unless sprayed directly on the foliage of a shrub or tree. Other liquid weed edger products are soil sterilants and have a long residual (months to years) in soil and are highly toxic to trees and shrubs. Symptoms may include yellowing, marginal leaf scorching, branch dieback and tree mortality. Once the tree takes up these products through their roots, they suffer permanent damage. Never use these soil sterilants in areas where tree roots may be exposed. Remember that tree roots extend well beyond the drip line. It is almost impossible to use liquid weed edgers in the landscape without coming in contact with tree roots. Also remember that some of these products, such as prometon, will move with water until they become affixed to the soil. (WU)

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To view Upcoming Events: [http://tinyurl.com/fswqe](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 cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

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