Horticulture 2013 Newsletter
No. 36  September 10, 2013

Video of the Week:  Saving Flower Seed

UPCOMING EVENTS

Vegetable Production Twilight Meeting
September 26 - 6:00 - 7:30 p.m.
John C. Pair Horticulture Research Center, 1901 E. 95th St. South, Haysville
For more information, http://www.hfrr.ksu.edu/doc3821.ashx

ORNAMENTALS

Watering Landscape Plants

Many parts of Kansas went through an extremely wet period during the first half of August. Remember that too much rain can be as damaging to root systems as too little. Roots need to breathe. Therefore, root systems that had already been damaged from the previous drought now may have suffered further damage. Therefore, we need to give these plants some extra care to give root systems a chance to recover.

Watering is the most important practice to help a tree recover from stress. If your soil is getting dry, be sure to water your trees to a soil depth of 10 to 12 inches. You can check this with a metal rod or wooden dowel. It will stop when it hits dry soil. Water trees planted in the last couple of years every week and all others every other week.

So is there an easy way to water trees? Consider the following method that uses soaker hoses. I normally don’t recommend soaker hoses because they 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. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and provides 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. You may also want to include a backflow preventer.

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)

VEGETABLES

Asparagus and Rhubarb in the Autumn Season

Harvest is long past but now is the time asparagus and rhubarb plants build up needed reserves for the next year. Be sure to water during dry weather and keep plants weed free. Foliage should be left until all green is gone. It can then be removed or left for the winter to help collect snow. (Ward Upham)

Harvesting Sweet Potatoes

Sweet potatoes should be harvested no later than the first fall freeze because cold temperatures can damage the sensitive roots. However, you may want to harvest earlier if you prefer a smaller sweet potato. Test dig a hill to see if they are the size you want.

Sweet potatoes should be cured after being dug. The digging process often damages the tender skin, and curing helps these small wounds heal. Place the roots in a warm, humid location for 5 to 10 days immediately after digging. A location with a temperature around 85 to 90 degrees is ideal. A space heater can be used to heat a small room or other area. Raise the humidity by placing moist towels in the room. The curing process not only heals wounds but also helps convert starches to sugars. This process improves the texture and flavor of the roots.

Sweet potatoes should be stored above 55 degrees. Storage at temperatures below that injures the roots, shortens storage life and gives them an off flavor. (Ward Upham)
FLOWERS

Reblooming Christmas and Thanksgiving Cacti

Christmas Cactus (*Schlumbergera bridgesii*) and Thanksgiving Cactus (*Schlumbergera truncate*) are popular flowering holiday plants. Both are epiphytes native to the jungles of South America. Epiphytic plants grow on other plants and use them for support but not for nutrients. Though these cacti are different species, they will hybridize and produce varying stem shapes. Christmas cactus normally has smooth stem segments. Thanksgiving Cactus has hook-like appendages on each segment.

Flowering will not occur unless induced by temperature and light treatment. If the temperature is held at 50 to 55 degrees F, flowering will occur regardless of day length. But flowering usually is not uniform.

Temperatures below 50 degrees F prevent flowering. Nights greater than 12 hours long and temperatures between 59 and 69 degrees also can generate flowers. Twenty-five consecutive long nights is enough for flower initiation. Nights will naturally become greater than 12 hours close to the fall equinox, which is on September 23 this year. A plant receiving natural sunlight but no artificial light during night hours, will have this 25-day requirement met about October 20. It takes an additional nine to 10 weeks for flowers to complete development and bloom.

Both of these cacti like bright indirect light. Too much sun may cause leaves to turn yellow. Common household temperatures are fine. Keep soil constantly moist but not waterlogged. These plants seem to flower best if kept a little pot bound. If you need to repot, try waiting until spring. (Ward Upham)

TURFGRASS

Controlling Grassy Sandbur

We have received a number of calls recently regarding grassy sandbur. This late in the season, we don’t have many choices as the plants are mature. Mature plants are difficult to control with products that won’t hurt the lawn. Glyphosate (Roundup, Killzall, others) works well but kills whatever it hits.

The best control for any weed is a good, thick lawn. Overseeding a thin lawn this fall can prevent grassy sandbur next year as it must come
from seed. If overseeding, use a glyphosate product to kill the grassy sandbur. Wait two weeks after spraying to allow the grassy sandbur to die before overseeding.

If the lawn is still thin next spring, use a preemergence herbicide before the sandbur comes up. However, not all preemergence herbicides are effective. The three products that can help minimize grassy sandbur 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 such as one of the following.

* Ortho Weed-B-Gon Max + Crabgrass Control
* Bayer All-in-One Lawn Weed and Crabgrass Killer.
* Drive in Monterey Lawn and Garden Fertilome Weed Out with Q
* Trimec Crabgrass Plus Lawn Weed Killer
* Bonide Weed Beater Plus Crabgrass & Broadleaf Weed Killer
* Spectracide Weed Stop for Lawns Plus Crabgrass Killer

Again, the best control for grassy sandbur is a good thick lawn. (Ward Upham)

**MISCELLANEOUS**

**Ornamental Sweet Potatoes**

We often receive the question as to whether ornamental sweetpotatoes are safe to eat. The answer is yes. Note that they are chosen for ornamental qualities rather than flavor and so may not have the quality of our traditional types. (Ward Upham)
PESTS

Spotted Wing Drosophila: Another New Insect Pest!

Kansas is the proud recipient of another new insect pest...spotted wing drosophila. Spotted wing drosophila (Drosophila suzukii) was detected in south-central Kansas in August by the Kansas Department of Agriculture. Spotted wing drosophila, which is a vinegar fruit fly native to Japan and Southeast Asia, was first found in Michigan in 2008 and has since spread throughout North America. This insect pest attacks a wide range of berry crops including raspberries, blackberries, strawberries, blueberries, boysenberries, and grapes. In general, raspberries appear to be more susceptible than blackberries, strawberries, and blueberries. Spotted wing drosophila will also attack a number of tree fruit crops such as apples, cherries, figs, nectarines, peaches, persimmons, and plums. Although spotted wing drosophila has been found to attack tomatoes in high tunnels, tomatoes don’t appear to be a preferred host crop. It is important to note that this insect is not a regulated pest, and the rapid spread of the spotted wing drosophila is likely due to human-assisted product transportation.

Identification is essential to avoid confusing spotted wing drosophila with other native fruit flies. For example, spotted wing drosophila males possess two distinct spots near the tip (on the outer edge) of the wings and they have two darkened bands on the forelegs. Females do not have spots on their wings. However, they do have a characteristic serrated (saw-like) ovipositor with two rows of serrations, which are larger than the native fruit flies. Spotted wing drosophila flies during the day and prefers cool temperatures (68ºF) and moist conditions. Females use their sawlike or serrated ovipositor to cut into ripe fruit, just under the skin, and deposit eggs. More than one egg may be laid in one berry or fruit. Females prefer to lay eggs in thin-skinned berries and/or fruit. In order to observe the “stings” from females a 10X or higher magnifying lens is required. The wounds created after egg-laying may serve as entry sites for soft rots and fungal diseases. Adult females can live for approximately 2 weeks; laying between 7 to 16 eggs per day from spring through fall with the potential to deposit over 300 eggs. Eggs hatch into white larvae, which feed within berries or fruit for 5 to 7 days. Eventually, larvae leave the fruit to pupate although it has been reported that pupation occurs within the fruit. Spotted wing drosophila females are capable of laying eggs almost immediately after emerging from pupae. Most native fruit flies lay eggs into already-damaged or rotting fruit. However, females of the spotted wing drosophila attack healthy, ripening berries and/or fruit, but they will also attack damaged or split fruit. Larvae and pupae may be present during harvesting, which is usually not the case for other fruit flies. Furthermore, sap or picnic beetle larvae may be found in fruit but their larvae possess distinctive head capsules whereas spotted wing drosophila larvae have no head capsule. Spotted wing drosophila may attack berries and/or fruit throughout the growing season, and can complete development in fallen or rotting berries or fruit. This fruit fly insect pest reproduces rapidly with up to 12 generations per year depending on geographic location.
Spotted wing drosophila overwinters as an adult, and the severity of winter may influence the survival of overwintering adults.

Monitoring populations of spotted wing drosophila with traps will help time insecticide applications. Initially, traps containing apple cider vinegar or yeast/sugar solutions were used to monitor adult spotted wing drosophila populations; however, these traps are based on fermentation and spotted wing drosophila is attracted to ripe berries or fruit—not overripe berries or fruit. So, once berries or fruit starts to ripen these traps become less attractive. In addition, native fruit flies may be captured in these traps. Recent research has shown that traps with red and black banding are more attractive to spotted wing drosophila adults. One trap called CAPtiva is commercially available from Marginal Design, Oakland, CA (marginaldesign.com) for use in orchards. Spotted wing drosophila prefers to reside in the shady, humid interior of plants, which means that traps need to be positioned in these locations.

Management of spotted wing drosophila involves implementing cultural controls such harvesting crops early and sanitation, which includes removing and destroying overripe or infested fruit throughout the growing season. In addition, it is essential to remove wild host plants such as wild grape, blackberry, raspberry, American pokeweed, crabapple, dogwood, and Japanese yew from nearby locations as these wild hosts may serve as reservoirs during the growing season. Netting may be placed over crops such as blueberries or strawberries to protect them from attack by spotted wing drosophila; however, the netting must be installed before fruit ripens so flies will not be trapped inside. Furthermore, the netting must be in place after pollinators (bumble bees and honey bees) have finished their task of pollination.

Insecticides may be used to regulate spotted wing drosophila populations during the growing season. Insecticides that may be effective or have been shown to be effective against spotted wing drosophila include malathion, carbaryl (Sevin®), spinosad (Spintor® and Success™), spinetoram (Delegate®), and a number of pyrethroids (e.g., bifenthrin, esfenvalerate, fenpropathrin, and zeta-cypermethrin). The neonicotinoid insecticides (acetamiprid, imidacloprid, and thiamethoxam) tend to be less effective against the spotted wing drosophila than other insecticides. Be sure to check the label or contact manufacturers to determine those insecticides that are registered for use against the spotted wing drosophila or have received label expansions such as a 2(ee). Insecticides need to be applied to protect fruit from first color to harvest. The preference of spotted wing drosophila to reside in the plant interior makes it difficult to obtain thorough coverage with insecticide spray applications. Timing of application and coverage is critical in dealing with spotted wing drosophila. For example, insecticides must be timed (applied) to kill adults prior to egg-laying because sprays will not kill larvae already inside the berry or fruit. In addition, rain can impact the longevity of spray residues, which means repeat applications may be required. In fact, due to the number of generations per year, spray intervals of once or twice per week may be warranted. Spray interval and frequency of insecticide application impacts the effectiveness of programs designed to regulate spotted wing drosophila populations. Frequency of insecticide applications may vary depending on the environment (e.g., rainfall and temperature) and growing conditions. However, more frequent applications may result in intense selection pressure leading to resistance.

Therefore, it is critical to rotate insecticides with different modes of action in order to reduce the development of resistance. Furthermore, the application of insecticides may impact beneficial
insects and mites that naturally regulate populations of pest mites, leafminers, and scales. Organic producers have only two insecticide options: spinosad (Entrust®) and pyrethrins (Pyganic®). However, it has been reported that spotted wing drosophila females exposed to Pyganic® recovered and were able to lay fertile eggs. In addition, spotted wing drosophila populations in California have developed resistance to Pyganic®.

In conclusion, it is important not to panic, but instead understand the biology and life cycle of the spotted wing drosophila in order to effectively manage this insect pest, which requires a holistic approach including monitoring, cultural controls, sanitation, and appropriate application of insecticides. (Raymond Cloyd)

Contributors: Ward Upham, Extension Associate

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 cdipman@ksu.edu or wupham@ksu.edu listing your e-mail address in the message.

For questions or further information contact: wupham@ksu.edu

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.