Horticulture 2012 Newsletter
No. 28     July 17, 2012

Video of the Week:  Dividing Iris

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

K-State Horticulture Research and Extension Center Public Open House
Saturday, July 28, 2012
For more information, go to http://www.johnson.ksu.edu/p.aspx?tabid=681#Free_Seminars

Kansas Turfgrass Field Day
Thursday, August 2, 2012
Rocky Ford Research Center, Manhattan

VEGETABLES

How to Pick a Ripe Melon

Telling when a melon is ready to be harvested can be a challenge, or it may be quite easy. It all depends on the type of melon. Let’s start with the easy one.

Muskmelons are one of those crops that tell you when they are ready to be picked. This can help you not
only harvest melons at the correct time but also choose good melons when shopping. As a melon ripens, a layer of cells around the stem softens so the melon detaches easily from the vine. This is called “slipping” and will leave a dish-shaped scar at the point of stem attachment. When harvesting melons, put a little pressure where the vine attaches to the fruit. If ripe, it will release or “slip.” When choosing a melon from those that have already been harvested, look for a clean, dish-shaped scar. Also, ripe melons have a pleasant, musky aroma if the melons are at room temperature (not refrigerated).

Watermelons can be more difficult and growers often use several techniques to tell when to harvest.

1. Look for the tendril that attaches at the same point as the melon to dry and turn brown. On some varieties this will need to be completely dried before the watermelon is ripe. On others it will only need to be in the process of turning brown.

2. The surface of a ripening melon develops a surface roughness (sometimes called “sugar bumps”) near the base of the fruit.

3. Ripe watermelons normally develop a yellow color on the “ground spot” when ripe. This is the area of the melon that contacts the ground.

Honeydew melons are the most difficult to tell when they are ripe because they do not “slip” like muskmelons. Actually, there is one variety that does slip called Earlidew, but it is the exception to the rule. Ripe honeydew melons become soft on the flower end of the fruit. The “flower end” is the end opposite where the stem attaches. Also, honeydews should change to a light or yellowish color when ripe, but this varies with variety. (WU)

**FRUIT**

**Watering Fruit Trees During Hot Summers**

When temperatures exceed 90 degrees F, fruit plants lose water quickly. When this happens, moisture is withdrawn from the fruit to supply the tree. Stress from high temperatures, along with a moisture deficit in the root environment, may cause fruit to drop or fail to increase in size.

The stress may also reduce the development of fruit buds for next year's fruit crop. If you have fruit plants such as trees, vines, canes, and such, check soil moisture at the roots. Insert a spade or shovel or a pointed metal or wood probe -- a long screwdriver works well for this. Shove these into the soil about 8 to 12 inches. If the soil is hard, dry, and difficult to penetrate, the moisture level is very low, and plants should be irrigated to prevent drooping and promote fruit enlargement.
Water can be added to the soil using sprinklers, soaker hose, drip irrigation, or even a small trickle of water running from the hose for a few hours. The amount of time you irrigate should depend upon the size of plants and the volume of water you are applying. Add enough moisture so you can easily penetrate the soil in the root area of the plant with a metal rod, wooden dowel or other probe. When hot, dry weather continues, continue to check soil moisture at least once a week.

Strawberries have a shallow root system and may need to be watered more often – maybe twice a week during extreme weather. Also, newly planted fruit trees sited on sandy soils may also need water twice a week. (WU)

**FLOWERS**

**Dividing Iris**

Bearded irises are well adapted to Kansas and multiply quickly. After several years, the centers of the clumps tend to lose vigor, and flowering occurs toward the outside. Dividing iris every three to five years will help rejuvenate them and increase flowering. Iris may be divided from late July through August, but late July through early August is ideal.

Because iris clumps are fairly shallow, it is easy to dig up the entire clump. The root system of the plant consists of thick rhizomes and smaller feeder roots. Use a sharp knife to cut the rhizomes apart so each division consists of a fan of leaves and a section of rhizome. The best divisions are made from a double fan that consists of two small rhizomes attached to a larger one, which forms a Y-shaped division. Each of these small rhizomes has a fan of leaves. The rhizomes that do not split produce single fans. The double fans are preferred because they produce more flowers the first year after planting. Single fans take a year to build up strength.

Rhizomes that show signs of damage due to iris borers or soft rot may be discarded, but you may want to physically remove borers from rhizomes and replant if the damage is not severe. It is possible to treat mild cases of soft rot by scraping out the affected tissue, allowing it to dry in the sun and dipping it in a 10 percent solution of household bleach. Make the bleach solution by mixing one-part bleach with nine parts water. Rinse the treated rhizomes with water and allow them to dry before replanting.

Cut the leaves back by two-thirds before replanting. Prepare the soil by removing weeds and fertilizing. Fertilize according to soil test recommendations or by applying a complete fertilizer, such as a 10-10-10, at the rate of 1 pound per 100 square feet. Mix the fertilizer into the soil to a depth of 6 inches. Be wary of using a complete fertilizer in areas that have been fertilized heavily in the past. A
growing number of soil tests show phosphorus levels that are high enough to interfere with the uptake of other nutrients. In such cases, use a fertilizer that has a much higher first number (nitrogen) than second (phosphorus). (WU)

MISCELLANEOUS

Field Dodder

Field dodder (*Cuscuta campestris*) is a unique parasitic annual plant that also is known as strangleweed or devil's hair. It is composed of golden yellow "threads" that twine over other plants and attach themselves with short, suction-cup-like suckers that arise from the bottom of the dodder stems. These suckers penetrate the stems of host plants to obtain nourishment. Flowers are small, whitish, and 1/4 inch in diameter. They are produced from April to October and will produce a seedpod that is two-celled and four-seeded.

Because dodder is an annual, it must reproduce from seed. Plants present now will be killed by the first frost this fall. Seed may sprout in the spring or lie dormant for a number of years. Germination takes place in the soil, but roots die as soon as the plant finds an acceptable host. After attachment, dodder lives completely off the host plant. A single dodder plant can spread by branching and attacking additional host plants.

Destroying the host plants can control dodder, but this may not be an acceptable solution for many people. Dodder cannot be destroyed by pulling it off the host plants because remaining stem pieces will continue to grow. Trifluralin (Preen, Miracle-Gro Garden Weed Preventer, Treflan, Hi-Yield Herbicide Granules Weed and Grass Stopper) is a preemergence herbicide that can be used for control if applied before the dodder seed germinates. Also, glyphosate (Round-up, Kleen-up, Killzall, etc.) is effective on dodder. However, glyphosate is nonselective and will kill whatever it hits, including the host plants. (WU)

PESTS

Green June Beetle

These large beetles feed on sweet corn, blackberries, and peaches. They look much like the common May beetle, or June bug, but have a dull, velvety green color. The underside is more of an iridescent green. These beetles have poor navigational skills and seem to fly until they hit something. They also make a buzzing sound somewhat like a bumblebee. Unfortunately, they
are also about the size of a bumblebee and so cause concern for many gardeners even though they cannot harm people. As noted above, they may damage crops.

A number of general use insecticides, including Sevin and malathion, may be used to discourage feeding. Sevin has a two-day waiting period between spraying and harvest on sweet corn and a three-day waiting period on peaches. There is a seven-day waiting period for Sevin on blackberries, so malathion, with a one-day waiting period, may be a better choice. (WU)

**Blister Beetles Are “Irritating” Insects**

We have received numerous inquiries associated with blister beetles feeding on plants. In fact, in some cases, plants are “literally covered” with blister beetle adults. Blister beetles are large, slender beetles that vary in color from orange, gray, to black. The thorax (middle portion of insect between the head and abdomen) is typically narrower than the head and wing covers.

Adults are 3/8 to 11/16 inches (9 to 18 mm) in length and are very good fliers. There are a number of blister beetle species in Kansas including the ashgray blister beetles (*Epicauta fabricii* and *E. solani*), black blister beetle (*E. pennsylvanica*), and three-striped blister beetle (*E. leminscata*). Blister beetles feed primarily on alfalfa, but may also feed on the leaves and flowers of a wide-variety of plant types and weeds including certain annuals, perennials, soybean, pigweed, goathead, and several species may be found in abundant numbers feeding on goldenrod (*Solidago spp.*) flowers in the fall. Only adults damage plants as a result of their chewing leaves and/or flowers. The larvae are actually predators of grasshopper egg pods. Adult females deposit eggs during the summer in crevices or depressions in the soil. These eggs hatch in the fall into larvae that search for grasshopper eggs. After consuming a sufficient number of grasshopper eggs, the full-grown larvae overwinter in the soil and then transform into pupae. Adults emerge from the pupae stages in late spring through early summer. There is generally one generation per year.

Blister beetles contain cantharidin in their hemolymph or blood, which is a highly toxic compound when ingested by horses or other livestock as a result of feeding on alfalfa. The degree of harmful effects depends on the number of beetles consumed by animals. Canthardin can be irritating and cause blisters at high concentrations. However, blister beetles present in landscapes and gardens generally contain relatively minimal concentrations of cantharidin; thus these blister beetles may not pose a threat when handled. Regardless, it is recommended to wear gloves when handling any blister beetles. Only blister beetle males produce cantharidin, which is stored in the body until mating has occurred. Females may obtain the compound after mating.

Management of blister beetles involves either handing-picking (again, be sure to wear gloves) or applying insecticides. There are only a few insecticides that may be used or are registered for use against blister beetles including carbaryl (Sevin) and malathion. Be sure to read the label of any insecticide to determine if blister beetles are listed. Furthermore, multiple applications may be required.
because blister beetle adults can continue to immigrate into an area from nearby field or weedy locations.

If you have any questions regarding the management of blister beetles, you can contact your county horticultural agent, or university-based or state extension entomologist. (RC)

**Lace Bugs**

Lace bugs are insects present throughout Kansas feeding on a variety of plant types although lace bugs are not generally considered a major insect pest of ornamental plants because they typically don’t inflict significant direct harm to plants. However, abundant populations may reduce the aesthetic appearance of certain plant types. Lace bugs feed on a wide-range of trees and shrubs including azalea, basswood, cotoneaster, hawthorn, linden, oak, rhododendron, and sycamore. Herbaceous plants susceptible to lace bugs include aster, chrysanthemum, and scabiosa. The major plant-feeding lace bug species include Stephanitis spp., and Corythucha spp. Stephanitis spp. are primarily pests of broad-leaved evergreens, whereas Corythucha spp., including the sycamore lace bug (Corythucha ciliata) are pests of deciduous trees and shrubs.

Lace bugs feed on the undersides of leaves; using their piercing-sucking mouthparts to withdraw plant sap from individual leaf cells, causing leaves to appear stippled and/or bleached. Lace bugs feed similar to the twospotted spider mite, Tetranynchus urticae, in which they both withdraw chlorophyll (green pigment) from plant cells. The damage is similar to that caused by spider mites and leafhoppers; however, lace bugs leave black, tar-spot-like droplets of excrement (“Lacebug poop”) on leaf undersides. The presence of this black excrement distinguishes lace bugs from spider mites and/or leafhoppers. Excessive lace bug populations and extensive feeding may reduce plant vigor, depending on age and size (especially young or newly-transplanted trees and shrubs), creating undue stress that increases susceptibility to other insects and/or diseases.

Adult lace bugs are very distinguishable and quite attractive (entomologically speaking). They possess lacy, clear, shiny wings that are held flat over the body. Adults are 1/8 to 1/4 inch (3 to 8 mm) long, and tend not to fly but move sideways when disturbed. Female lace bugs may lay between 20 to 50 eggs, during their lifespan, underneath leaves; placing them usually alongside leaf veins. Eggs are black and shaped like a wine flask. The eggs hatch into shiny, black nymphs with spines around the periphery of the body. Nymphs undergo five instar stages before reaching adulthood. Shed skins on leaf undersides are evidence of nymphs that have transformed into adults. It generally takes about 30 days to complete a generation (egg to adult). There may be up to three generations per year, depending on temperature.

Stephanitis spp. overwinter as eggs that are cemented onto leaves and Corythucha spp. overwinter as adults in bark crevices and branch crotches. Adult activity begins in the spring when leaves unfold. Lace
bugs tend to be more abundant on plants such as rhododendron and azalea that are exposed to full sun rather than on plants in shady locations. Management of lace bugs is generally not a concern because lace bugs are susceptible to many natural enemies including predators such as green lacewings, plant bugs, assassin bugs, minute pirate bugs, and spiders. If feasible, using a forceful water spray may be effective in washing off lace bugs from plants. However, if necessary, there are a number of contact insecticides registered for use against lace bugs. Be sure to read the label to make sure lace bugs are listed. It is important to thoroughly cover leaf undersides, which is where lace bugs are primarily located, to enhance the effectiveness of the application.

If you have any questions regarding the management of lace bugs be sure to contact your county horticultural agent, or university-based or state extension entomologist. (RC)

**Wasps**

There are many different species of wasps with different life histories and habits. Different species likely have their individual moisture requirements. In normal years they may be out-of-sight, out-of-mind because they visit normal natural sources of water. During droughty periods when those sources have dried up, wasps will seek out alternative sources. There have been recent reports of wasps around pool areas.

What is important to note is that colony-type wasps (namely vespids such as “paper wasps,” yellow jackets, baldfaced hornets) while likely to sting in defense of their homes/colonies, are not aggressive when alone and out foraging or seeking water. It is when people begin swatting at these wasps that they justifiably react in a defensive manner.

If there are “mellow fellows” (well in the world of wasps because only female wasps are capable of stinging ---so “mellow ladies”), solitary wasps are notably nonaggressive. The most “familiar” solitary wasps are sphecids of which there are many species.

Mud daubers are noted for their mud “nests” (a series of cells) which they construct in any conceivable location. After a cell is completed, the female wasp seeks out their specific prey species. Using her stinger, she paralyzes her prey which she then carries back to the mud cell. After sufficient numbers of prey are stored, the wasp deposits a single egg in the cell and seals the cell with a mud cap. The wasp then constructs another cell, and so on. All of the cells then form “the mud nest.” The larva in each cell feeds and develops on the provisioned food.
Cicada killer wasps and sand wasps prefer loose, sandy soils or areas of sand which they can easily excavate. They create a main tunnel off of which they construct individual galleries. The wasps then provision each gallery in a manner similar to mud daubers.

As stated earlier, solitary wasps are not the least bit aggressive. People sometimes become alarmed at the frenzied flights of wasps which may congregate in an area. The frenzied fliers are male wasps coursing about in territorial rituals. They do not possess a stinger. Females, on the other hand (although capable of stinging) ignore people, rather, tending to their business.

A good form of fascinating entertainment is to sit and watch sphecid wasps. Mud dauber wasps will frequent areas where soil has been moistened (a flower bed for instance). Watch them as they alight, use their mandibles to gather up and form a small ball of mud which they then carry to where they are constructing their mud cells.

They will repeatedly return to gather more mud. You will then gain an appreciation for their dedicated hard work ---- trip after trip after trip after. Finally, they will have completed a cell. This is followed by repeated trips to capture prey to provide for their eventual offspring. Over and over and over. How can one not be fascinated by and have an admiration for such industrious creatures?

Cicada killer and sand wasps are similarly fascinating. And if you put your nose right next to a hole where the female is digging, you will feel the spray of sand particles as she uses her legs to “kick out” the excavated sand particles.

Do not fear them. Enjoy them. (BB)

**Contributors:** Bob Bauernfeind, Entomologist; Ray Cloyd, Entomologist; Ward Upham, Extension Associate

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.

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.

**“Knowledge for Life”**

Kansas State University Agricultural Experiment Station and Cooperative Extension Service