**Video of the Week:**  Dividing Iris

**UPCOMING EVENTS**

**Turf & Ornamentals Field Day**
Thursday, August 1
K-State Research & Extension Center, Olathe

The K-State Turf and Ornamentals Field Day will be held Thursday, August 1 at the Research & Extension Center in Olathe (35230 W. 135th). The field day program is designed for all segments of the turf industry - lawn care, athletic fields, golf courses, and grounds maintenance. Included on the program are research presentations, problem diagnosis, commercial exhibitors, and equipment displays. There will be time to see current research, talk to the experts and get answers to your questions.

1 hour of pesticide recertification credit is available in both 3A and 3B, as well as GCSAA education points. For more information and to register, go to: [https://2019turfday.eventbrite.com](https://2019turfday.eventbrite.com)

**VEGETABLES**

**Tomatoes Slow to Ripen?**

The hot weather we have had recently not only interferes with flower pollination (see accompanying article), but also can affect how quickly fruit matures. The best temperature for tomato growth and fruit development is 85 to 90F. When temperatures exceed 100 degrees, the plant goes into survival mode and concentrates on moving water. Fruit development slows to a crawl. When temperatures moderate, even to the low to mid 90s, the fruit will ripen more quickly.

Tomato color can also be affected by heat. When temperatures rise above 95 degrees F, red pigments don't form properly though the orange and yellow pigments do. This results in orange fruit. This doesn't affect the edibility of the tomato, but often gardeners want that deep red color back.
So, can we do anything to help our tomatoes ripen and have good color during extreme heat? Sure, there is. We can pick tomatoes in the “breaker” stage. Breaker stage tomatoes are those that have started to turn color. At this point, the tomato has cut itself off from the vine and nothing will be gained by keeping it on the plant. If tomatoes are picked at this stage and brought into an air-conditioned house, they will ripen more quickly and develop a good, red color. A temperature of 75 to 85 degrees F will work well. (Ward Upham)

**Heat Stops Tomatoes from Setting Fruit**

Temperatures that remain above 75 degrees F at night and day temperatures above 95 degrees F with dry, hot winds will cause poor fruit set on tomatoes though cherry tomatoes seem to be more heat tolerant than slicers. High temperatures interfere with pollen viability and/or cause excessive style growth leading to a lack of pollination. Tomatoes that have already formed are not affected.

It usually takes about 3 weeks for tomato flowers to develop into fruit about the size of golf balls. Growth then becomes more rapid with the mature size being reached in an additional three to six weeks. A few more days are then needed to change color.

Though there are "heat-set" slicing tomatoes such as Florida 91, Sun Leaper and Sun Master that will set fruit at higher temperatures, that difference is normally only 2 to 3 degrees. Cooler temperatures will allow flowers to resume fruit set. (Ward Upham)

**FRUIT**

**When to Harvest Grapes**

It takes more than color to determine when to harvest grapes. Grapes often are fully colored before they are fully ripe. Look for a whitish coating on the fruit and look for the seeds to change from green to brown. The final test is to taste the berries for sweetness. Grapes don’t continue to ripen once they are removed from the vine so be sure the quality is there before harvesting.

Once harvested, grapes can be stored for up to eight weeks if kept at 32 degrees with 85 percent relative humidity. Other attractive options are available as well including making juice, jellies, jams and wine. (Ward Upham)

**When to Pick Peaches**

Peaches are best when ripened on the tree but fruit growers may wish to pick a bit early to prevent damage from birds, have a higher pectin content for jams and jellies or to have firmer fruit for canning.
Peaches that are mature enough to pick are still hard. They do not give when lightly squeezed. However, these peaches will ripen off the tree and will have very good quality. They may not be quite as sweet as a tree-ripened peach but are still very good. So what do we look for to tell if a peach is mature enough to harvest? Let’s look at a couple of factors.

**Color:** The reddish coloration is not a good indicator. Look instead for what is called the “ground color.” This is the part of the peach that does not turn red; for example, around the stem. The ground color of the peach will lose its greenish tinge and turn yellow when the peach is mature enough to harvest. I use this characteristic more to determine when NOT to pick a peach. If there is any green in the ground color, it is too early. If the ground color is yellow, then I move to the next characteristic.

**Ease of Removal:** A mature peach will separate easily from the branch if the peach is lifted and twisted. If it doesn’t, it is not mature enough to pick yet. All peaches will not be ready to pick at the same time. Pick only those that are ready and come back later for more. It often takes 3 to 5 pickings to harvest a peach tree.

Peaches that are picked early but will be used for fresh eating should be allowed to ripen inside at room temperature. Once they are ripe, they can be refrigerated to preserve them for enjoyment over a longer period of time. (Ward Upham)

**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 the planting 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 high levels of phosphorus. In such cases, use a fertilizer that has a much higher first number (nitrogen) than second (phosphorus). (Ward Upham)

**PESTS**

**Pine Needle Scale Control Window Approaching**

Pine needle scale is an armored scale that is found across the United States but especially in the eastern half of the country. Pine needle scale appears as conspicuous white specks on the needles. Scales feed by sucking sap from needles causing them to yellow and eventually brown. Heavy infestations can kill twigs, branches and even entire trees.

Though both female and males are white, the female is larger (1/8-inch long) and wider at one end with the narrow end sporting a yellow or orange cap. Males are 1/32-inch long and narrow. Crawlers are bright red to purple to brown.

Pine needle scale overwinters as eggs underneath female covers. Each female produces about 100 eggs. There are two generations per year in Kansas with crawlers appearing in May to early June and again in mid- to late-July. So now is the time to start looking for the second-generation crawlers. Use a hand lens to look for the crawlers. Crawlers may be easier to see by wrapping a group of needles with one of the following:
- double sticky tape
- white tape smeared with petroleum jelly
- colored electrical tape smeared with petroleum jelly.

Choose a color that allows the crawlers to show up. Spray when the crawlers start showing up on the tape.

Effective insecticides include but are not limited to acephate (Acephate, Orthene), cyfluthrin (Tempo, BioAdvanced Vegetable & Garden Insect Spray), and permethrin (38 Plus Turf, Termite & Ornamental Insect Spray, Eight Vegetable, Fruit & Flower Concentrate or Lawn, Garden, Pet, & Livestock Insect Spray). Remember, insecticides must be applied to crawlers soon after they emerge. Once the scale has settled down and formed its waxy cover, insecticides are ineffective. (Ward Upham)

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