Video of the Week: Efficient Water Use in the Garden

UPCOMING EVENTS

The Kansas Turf & Ornamental Field Day will be held Thursday, August 4 at the John C. Pair Horticulture Research Center (1901 E. 95th St. S., Haysville, KS)

The field day program is designed for all segments of the turf & ornamentals industry - lawn care, athletic fields, golf courses, landscape, nursery, 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.

One hour of pesticide recertification credit in both 3A and 3B are available, as well as GCSAA education points.

For more information, go to www.kansasturfgrassfoundation.com, or you can register online at https://2022turfday.eventbrite.com

REMINDERS

• Water plants as needed.
• Complete final pinching of chrysanthemums.
• Check for live bagworms even if they were sprayed before and respray if needed.

VEGETABLES

Fall Gardening

Probably the last thing most gardeners are thinking of now is planting vegetables. However, fall gardens will often produce higher quality, tastier cool-season crops as the vegetables mature during cooler, less stressful temperatures.

Plant slightly deeper than you would in the spring so the seed stays cooler and the soil around the seed stays moist longer. Plant more thickly and thin later. The plants may need to be protected from rabbits through the use of fencing.

Don’t worry about fertilizing before planting as there will be enough left over from the spring crops to provide for those grown in the fall.
Following is a “calendar” of what to do when.

*Mid-July:* Plant potatoes if you can find seed stock or have saved back seed potatoes. Do not use freshly dug potatoes as they have a built-in dormancy that will prevent growth. Also, grocery store potatoes are often treated so they don’t sprout.

Cabbage, broccoli, and cauliflower can be started from seed at this time. Choose a protected place where the soil can be kept moist and rabbits will not bother them. This will not be where they will grow the entire season but these crops will be transplanted about mid-August.

*Late July:* Seed beets, carrots and beans.

*Late July to Early August:* Seed spinach and long-season maturing lettuce. Leaf lettuce will be seeded later.

*Second Week of August:* Transplant cabbage, broccoli and cauliflower to their final location.

*Mid to Late August:* Seed radishes and leaf lettuce.

No need to fertilize before planting. Sidedress two weeks after transplanting or four weeks after sowing seed by applying 2 tablespoons of a 16-0-0 or 1 tablespoon of a 27-3-3, 30-3-4 fertilizer, or something similar per plant. You may also use a liquid fertilizer such as Schultz, Peters, Miracle-Gro or Rapid Gro according to label directions. It would be a good idea to wash off the leaves with clean water to prevent burn from the fertilizer.

Watering must occur more frequently because seed should not be allowed to dry out. Overhead watering often causes soil to crust, making it more difficult for young, tender plants to emerge. Prevent this by applying a light sprinkling of peat moss, vermiculite or compost directly over the row after seeding. Even better, use a soaker hose or drip irrigation right next to the row to allow water to slowly seep into the ground. (Ward Upham)

**Weird Squash, Cucumbers or Melons**

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 are 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 was planted, more likely is that the seed that was planted had been cross-pollinated before packaging. 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 unless you will save seed from those
plants. Though cross-pollination may occur in some cases, the fruit will not be affected. (Ward Upham)

**Blister Beetles**

These beetles are notorious for quickly stripping vegetables (especially tomatoes) and ornaments of their foliage. There are several species of blister beetles which vary in size (often between 0.5-0.75 inch long) and color (such as black, gray or brown-striped), but most are recognized by their elongated, narrow, cylindrical, soft bodies with middle body part (thorax) narrower than the head or wingcovers.

Some home gardeners like to use hand picking as a nonchemical method for controlling these large insects. However, wear gloves and use caution because these beetles contain a substance called cantharidin. This chemical is an irritant capable of blistering internal and external body tissues exposed to the chemical. On tender human skin, body fluids of adult blister beetles may cause large, erect, watery blisters.

Chemical control of blister beetles is also possible and may be the only practical method of control if populations are large. Permethrin (Bonide Eight and Hi-Yield Lawn, Garden and Farm Insect Control) are recommended. Cyfluthrin and permethrin have a 0 day waiting period on tomatoes. (Ward Upham)

**FRUIT**

**Remove Suckers and Watersprouts on Fruit Trees**

Summer pruning should be done if your fruit trees develop suckers or watersprouts. Trees that were heavily pruned in the spring will likely produce numerous suckers and watersprouts during the summer. However some trees are just more likely to produce both types of growth even if not heavily pruned.

Suckers are growth that arises from the base of the tree or from roots. Watersprouts are the growth that appears on major branches and grows straight up. The included photo was taken during the dormant season to more easily identify the watersprouts. This may have to be done several times during the summer. It is important that these are removed during the growing season as removing them next spring will just encourage more watersprouts and suckers to appear. (Ward Upham)
**PESTS**

**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), 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 dust) 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 a 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 used by homeowners tend to attract more beetles than they kill though some mass trapping of beetles has shown some promise on a commercial scale. See [https://ipm.missouri.edu/MEG/2018/1/mass_trapping_japanese_beetles/](https://ipm.missouri.edu/MEG/2018/1/mass_trapping_japanese_beetles/). (Ward Upham)

**Budworms on Garden Plants**

If you have noticed a small hole in the buds of some of your flowers, you may have tobacco (geranium) budworm (*Helicoverpa virescens*). Though a number of flowers can serve as hosts, geraniums and petunias are most commonly attacked. The larva of this insect damages the buds by boring into them before they open. The caterpillars feed on the flowers for about a month and then drop to the soil to pupate. There are normally two generations per year, with the second causing the most harm. The striped caterpillars vary widely in color with green, red, light brown and dark forms possible. The color of the larva is related to the color of the flowers on
which they feed. The adult of this insect is a moth.

Damaged buds often fail to open. Those that do will show evidence of feeding on the petals. Damage normally peaks in late summer because of increased numbers from the second generation.

Control of the budworm is difficult. Handpicking at dusk can be effective on small plantings. For larger plantings, chemical control may be the only practical option. Look for products with synthetic pyrethroid active ingredients such as permethrin (Bonide Eight and Hi-Yield Lawn, Garden and Farm Insect Control), esfenvalerate (Asana, Bug Buster II), bifenthrin (Hi-Yield Bug Blaster Bifenthrin) or gamma-cyhalothrin (Spectracide Triazicide). Products with the organic active ingredient spinosad (Natural Guard Spinosad, Captain Jack’s Dead Bug Brew, Monterey Garden Insect Spray) should also be effective.

Severe winters can be a natural form of control from one year to the next. Temperatures below 20 degrees F are hard enough to kill overwintering pupa. Because pupal cases are usually 2 to 6 inches deep, most exposed areas in Kansas will provide good control during a cold winter. Microclimates next to heated buildings may allow survival. (Ward Upham)

Contributors: Ward Upham, Extension Associate