

# Horticulture 2023 Newsletter

## No. 27 July 11, 2023

1712 Claflin, 2021 Throckmorton Plant Science Cntr.  
Manhattan, KS 66506 (785) 532-6173

---

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](http://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)

### **Cross-Pollination**



It is a common misunderstanding that planting two different varieties of squash next to each other will affect the type of produce harvested that year. The fruit that results from this year's planting is determined by the mother plant. If you have purchased from a reliable seed source, the resulting produce should reflect that. If you are harvesting "weird-looking" squash, cucumbers or melons this season it is likely a result of cross-pollination that happened last year. The seeds may have been gathered from cross-pollinated plants or perhaps the plant is one that sprouted on its own after a fruit with cross-pollinated

seeds decomposed in the garden last growing season. (Cynthia Domenghini)

## Blister Beetles



*Description:* There are several varieties of blister beetles. Colors vary including solid black, black with a gray or cream-colored band, and grayish-brown with yellow stripes. The relatively soft body can be ½-inch to about one-inch in length. They have a broad head with a narrow neck-like structure attaching it to the rest of the body. The wings are soft and the mature adult has long legs. The antennae are about 1/3 the length of the body.

*Life Cycle:* Adult blister beetles lay masses of eggs in the soil during late summer. When the larvae hatch, they search for nests of grasshopper eggs and begin feeding on them. Throughout several molts the larvae develop more prominent legs. The late-stage larvae are the most active and leave the grasshopper nest to pupate underground the following summer. The adult emerges 10 to 20 days later. There is one generation per year.

*Damage:* Blister beetles feed primarily on flowers but will consume leaves as well. Though damage can defoliate a plant entirely, blister beetles can also be great natural predators against grasshoppers. The name blister beetle is derived from the oily substance the insect emits, cantharidin, that is toxic and can leave blisters on human skin if it comes in contact.

*Control:* If removing manually, wear rubber gloves to protect the skin from blistering. If using chemical control for larger populations, permethrin (Bonide Eight and Hi-Yield Lawn, Garden and Farm Insect Control) is recommended. Permethrin has a 0-day waiting period for tomatoes. (Cynthia Domenghini)

## 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



*Description:* Similar in appearance to other June bugs, the adult Japanese beetle is 3/8 to 1/4-inch long with a shiny, metallic-green head. The body has bronze wing covers and five clumps of hair that border the sides of the abdomen. The larvae are cream-colored grubs with a light brown head about 1 1/4-inch long at maturity.

*Life Cycle:* Adult female Japanese beetles lay eggs in July beneath wet lawns. Upon hatching, larvae feed on the sod roots and overwinter until the following summer. In June, the larvae pupate and

adult beetles emerge to feed above-ground.

*Damage:* An extremely destructive pest, Japanese beetles feed on every part of the plant. The beetles skeletonize leaves and consume flowers and fruit entirely. Hundreds of varieties of plants can play host to this non-selective pest.

*Control:* Controlling Japanese beetles is a challenge this time of year as new adult beetles emerge from underground daily over several weeks. In small quantities, beetles can be manually removed from plants and dropped into a bucket of soapy water. Check plants daily to look for symptoms of this pest. Mornings are the best time to observe as beetles are slower and easier to catch.

There are many traps available that lure Japanese beetles into a container where the pests can be gathered and disposed of. However, some sources caution against using traps as the pheromones used to attract the beetles can draw in even more beetles than would naturally appear. Not all of these beetles may end up in the traps and the result could be greater damage to the plants.

Insecticides 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) can be used for Japanese beetle control with about two to three weeks protection. Carbaryl (Sevin dust) can also be effective but only for about one to two weeks. The downside of using such products is they will also eliminate parasitoids and other natural predators.

Neem products (Natural Guard Neem-Py, Fertilome Triple Action Plus) and Pyola (pyrethrins in canola oil) can offer control for three to four days. (Cynthia Domenghini)

## Budworms on Garden Plants



*Description:* Budworms can be brown, purple, red or green depending on the host plant it's consuming. It has white stripes on the abdomen that run the length of the 1 ¾-inch body. There are hairs on the body as well. Adult moths are greenish-brown with a wingspan of about 1 ¼-inches.

*Life Cycle:* There are two generations of budworms each year with the second generation typically being the more destructive. They can overwinter as pupae several inches beneath the soil surface during mild

winters outdoors or in container plants that are brought indoors as well as in the soil of protected patios.

*Damage:* Budworms are common on petunias, geraniums, nicotiana, roses and other ornamentals. The larvae bore a hole through the flower buds and feed on the petals. Buds may drop prematurely or, if not, the resulting bloom will show damage from the feeding. Larvae also drop black feces on the buds.

*Control:* Manual removal can be effective if plants are monitored regularly. Winters with temperatures that drop below 20 degrees F can kill overwintering pupae if they are not in protected environments.

Chemical controls 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) may also be effective. (Cynthia Domenghini)

## MISCELLANEOUS

### Gardening in a Heat Wave



The heat is on and some simple gardening practices can protect your plants from suffering. It is tempting to automatically water plants on hot afternoons, but this is not always what's best. On average, vegetables gardens need about one-inch of water per week. During a heat wave (above 90 degrees F) it may be necessary to water daily or every other day. Before adding water to your garden insert your finger one to two inches into the soil and check for moisture. If the soil is wet, hold off watering.

In advance of a heat wave consider adding several inches of straw mulch around your plants. This will help reduce evaporation from the soil and will regulate the soil temperature keeping

plant roots cooler.

Make sure the plants are well-watered prior to the heat wave. Water as early as possible in the morning to reduce the amount of evaporation and prevent plants from drying out. Drip irrigation is ideal, but regardless of the method, avoid watering the leaves. Keep the source of water as close to the soil as possible. If you're using sprinklers, opt for the type that keep the water spray closer to the ground to minimize evaporation. (Cynthia Domenghini)

**Contributors:**

Cynthia Domenghini, Instructor ([cdom@ksu.edu](mailto:cdom@ksu.edu))

Ward Upham, Extension Associate ([wupham@ksu.edu](mailto:wupham@ksu.edu))

---

Division of Horticulture  
1712 Claflin, 2021 Throckmorton  
Manhattan, KS 66506  
(785) 532-6173

For questions or further information, contact: [wupham@ksu.edu](mailto:wupham@ksu.edu) OR [cdipman@ksu.edu](mailto:cdipman@ksu.edu)

This newsletter is also available on the World Wide Web at:

<http://hnr.k-state.edu/extension/info-center/newsletters/index.html>

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](mailto:cdipman@ksu.edu) or [wupham@ksu.edu](mailto:wupham@ksu.edu) listing your e-mail address in the message.

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

K-State Research and Extension is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision or hearing disability, or a dietary restriction please contact Extension Horticulture at (785) 532-6173.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service K-State Research and Extension is an equal opportunity employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, and United States Department of Agriculture Cooperating, Ernie Minton, Dean.