Cooperative Extension Service

HORTICULTURE NEWSLETTER

FROM THE GROUND UP

September 2025

Clark County Extension Service • 1400 Fortune Drive • Winchester, KY 40391 • 859-744-4682 • clark.ext@uky.edu • http://clark.ca.uky.edu/

~ Extension Office will be closed Monday, September 1st ~

A Word from the Agent . . .

Hello my friends and happy September to you! Hopefully this newsletter brings in cooler weather and some rain to you. With the completion of the dog days of summer and the hopeful cooler weather, there's a list of things that we can be getting done in the great outdoors.

Vegetable garden spaces no longer in use can be tucked away for the year. A layer of mulch, compost, straw, or some other organic matter can help with weeds for the next year and soil erosion over the winter months. The upcoming fall weather also makes for a great time to plant trees and shrubs, so start making plans for that. Perennials that are overcrowded can be lifted and divided as they wind down for the year. Lastly, set aside October 4th to come to our 4th annual Fall Fest! It's always a great time and you will not want to miss out. See the flyer in this newsletter for more details, and be sure to watch our social medias for updates and sneak peeks.

As always, don't hesitate to call me with those questions and we'll see you around the county!

Carrie Spry
Clark County Extension Agent
for Horticulture
carrie.spry@uky.edu

Clark / Powell
Beekeepers Association

Monday, September 8, 2025

6:30 pm

Clark County Extension Service
1400 Fortune Drive, Winchester, Kentucky

~ POT-LUCK MEAL ~

KEEPING YOU Informed

Find us on Facebook
https://www.facebook.com/ClarkCountyExtension

Follow us on Instagram
clarkextensionhort

Hot weather can cause tomato flowers to wither and become brittle, falling off the plant easily.

How Excessive Heat Affects the Vegetable Garden

Authors: *Marissa Schuh and Natalie Hoidal, Extension Food Systems Educators, University of Minnesota*

During long stretches of hot days in the 80s and 90s, you may experience disappointing yields in your vegetable garden. Bushy cucumber plants with no fruit, tomatoes not ripening, and beans with no flowers are typical.

The causes behind many of these phenomena are related to persistent high temperatures. High temperatures affect Kentucky's vegetables in various ways.

Plants Look Healthy, But No Vegetables Develop

- **Potential Issue 1:**
  - Hot day and nighttime temperatures cause flowers to drop

If you are still seeing flowers, but aren't getting the tomatoes, peppers, beans, or zucchini you expect, there may be a few heat-related factors at play.

One possible factor is flower abortion: flowers form but then die and fall off the plant before they can develop into fruit. This can also occur in vegetables and other flowering garden plants. Flower abortion can happen at temperatures ranging from 75°F to 95°F.

Some plants may retain their flowers, but if they are not pollinated, no fruit results. Tomatoes produce new flowers frequently, and these flowers have a 50-hour window in which they can be pollinated.

When tomatoes are exposed to sustained hot temperatures (more than 85°F during the day and 70°F at night), the tomato plant becomes stressed and depletes its energy stores. This changes the flowers, making it harder for them to be pollinated, and the blossom often drops without pollination occurring. During 50-hour periods with hot days and especially hot nights, a round of tomato flowers is likely to drop off without pollination.

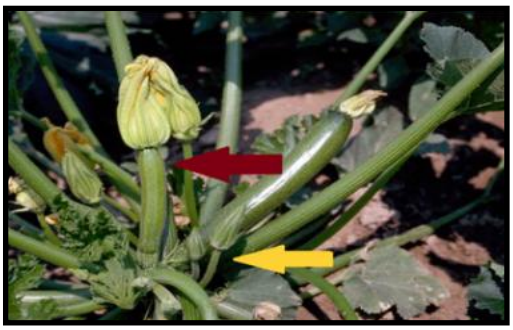
You may start to notice something similar happening with green beans, which can also abort flowers in hot temperatures (over 95°F), especially if the soil is dry.

- **Potential Issue 2:**
  - Hot temperatures change the type of flowers some vegetables produce

Vining vegetables in the cucurbit family (including pumpkins, squash, melons, cucumbers, and the like) produce both male and female flowers. Look at the base of the flower to tell the sex.

- *Female cucurbit flowers will be swollen underneath in the area that will eventually become the pumpkin, zucchini, etc.*
- *Male flowers will have just a straight stem.*

Depending on the variety of the vine crops, hot temperatures can alter the ratio of male to female flowers. Typically, high temperatures (over 90°F during the day and 70°F at night) develop more male flowers than female flowers. This means that you may see zucchini plants with prolific flowers and few fruits, because the flowers are all male.



The maroon arrow points to a female zucchini flower, while the yellow arrow points to a male flower. Photo: Howard F. Schwartz, Colorado State University, Bugwood.org

- Continued on next page

- *Continued from previous page*

- **Potential Issue 3:**

  - Many bees don't like hot

In crops that depend on pollinators, such as members of the vine crop family, hot weather can impact bee activity, causing reduced fruit set. Just as we like to take it easy and rest in the shade on a hot day, so do many bees.

The ideal range for pollination for many species of bees is between 60°F and 90°F, with hotter temperatures in this range promoting more pollination. Once the temperature reaches 90°F, many bees slow down and pollinate less. This can be especially pronounced in crops like cucumbers, whose small flowers aren't particularly attractive to many bees.

Pollination may occur, but not at a high enough level. This can lead to deformed cucumbers, summer squash and melons.

Plants Look Healthy

- **Potential Issue 1:**

  - Poor pollination results in fruit that can't grow

This pumpkin was poorly pollinated, resulting in its death and subsequent rot.

Photo: Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org

Small squashes, pumpkins and melons form but then rot. You may think that this is caused by disease, as the small fruit are often breaking down, soft, and covered in mold.

A more common cause is poor pollination. Just as poor pollination can result in misshapen fruits, it can also result in fruit that form and then quickly die.

Green beans can have similar issues. During periods of hot weather bean flowers produce less pollen, which cascades into fewer, smaller pods containing fewer, smaller beans.

- **Potential Issue 2:**

  - Hot nights mean fruit doesn't ripen

Tomato ripening happens in two stages. In the first stage of ripening, the tomato becomes mature and is green, seeds form, and the area around them becomes soft and gelatinous. (If you've ever had fried green tomatoes, you are eating a mature green tomato.) In the second stage, the tomato fruit turns red.

The optimum temperature range for tomato maturation is between 68°F and 77° F, while the pigments that turn ripe tomatoes red aren't produced above 85°F. Once you start to experience some cooler nights, tomatoes will again have several hours within their ideal ripening temperature range, allowing them to fully ripen and redden.

Ripe green tomatoes will have fully formed seeds surrounded by clear jelly. These green tomatoes are almost ripe.

- **Potential Issue 3:**

  - You need to be patient

Vegetables take time to get ripe. There may be nothing out of the ordinary going on in the garden. Tomatoes can take six to eight weeks to fully ripen and change color, and some vine crops, like pumpkins, can take just as long.

Unfortunately, there really isn't much to be done but wait out the hot temperatures. Cool nights will solve many of these issues. You can check the latest 30-day forecast from the National Weather Service to see when relief is in sight.

Take notes on how your vegetable varieties are performing, and consider trying a new heat-tolerant variety in the future.

Spotted Lanternfly Management Options

Figure 1: *Spotted lanternfly is an invasive pest that is beginning to appear more frequently in northern Kentucky. They have a unique mixture of spots and stripes and red back wings as adults.*

Photo: Lawrence Barringer, Pennsylvania Department of Ag,, Bugwood.org

As spotted lanternfly (SLF) populations grow in the Bluegrass, there are lots of questions about what can be done to deal with this troublesome and eye-catching bug . Responses can vary by the location of the problem and the severity of the infestation. In counties where there have not been reports before, it would be appreciated if folks would reach out to the Office of the State Entomologist or the UK Department of Entomology. If you live in an already reported county and have hundreds of spotted insects hopping around your trees, there are also some options for management.

What is SLF and what is the situation in Kentucky?

As previously mentioned here in KPN, this insect is an invasive species that has been known in Kentucky since 2023. Populations were first found in Gallatin County, though there have been subsequent finds in Carrol, Boone, Kenton, Henry, Owen, Grant, and Campbell Counties in 2024. The early years of the invasion are marked by noticing the pest in more and more locations in a county. After about five years, the populations should be quite high in invaded areas before a slow decline. In our infested counties, things are still in the "ramping up stage" of the invasive species roller coaster. While SLF is unlikely to kill many trees in Kentucky, the size of their populations and the prodigious amounts of honeydew they produce can be annoying.

Figure 2: *Northern Kentucky counties are experiencing an invasion of spotted lanternfly. The areas with confirmed infestations are highlighted in red.*

Those finding a spotted lanternfly in counties not highlighted in the map can help by alerting entomologists in the state at reportapest@uky.edu or consulting with your local Extension office. When making a report, please include an image or a physical sample of the suspect, otherwise it will be difficult to confirm the problem. It is also important to include geographic information about where it was found so entomologists can travel to confirm the severity of the situation.

Managing SLF in Kentucky

Residents in counties with growing infestations will find predominantly or only adults as of August 2025 and going into the fall. SLF will mostly be found feeding on tree of heaven, black walnut, grape, river birch, red or silver maples, willow or sumac at this time of year, though it's not impossible you will find them on other plants.

Kentuckians can choose to pluck and squish SLF or to pull them off plants and put them in buckets of soapy water. Penn State has also provided detailed instructions on how to build a "circle trap" to help suppress problematic populations. Check those out here.

Figure 3: *When dealing with large numbers of spotted lanternflies, they can be treated with various insecticides to help suppress their populations*

(Photo: Louise Bugbee, USDA APHIS PPQ, Bugwood.org)

If you choose to use insecticides, there can be two approaches: treating host plants with systemic products or treating insects and plants with contact insecticides.

Trees can be treated by certified arborists with a systemic product containing the active ingredient dinotefuran until the end of September and starting again in July of next year. This product is not available for the general public to purchase and treat with themselves. It is labelled for use in Kentucky and for spotted lanternfly control specifically. Depending on the size of the tree being treated, the application may be made as a soil drench, trunk spray, or trunk injection.

There are some options to directly spray spotted lanternfly as well. These sprays do pose a potential hazard to non-target organisms (birds, butterflies, bees, fireflies, people, etc.) so consider the severity of your situation before choosing to treat. That being said, products that contain the active ingredients bifenthrin or beta-cyfluthrin will offer the most efficacy and last for longer periods of time on plant surfaces. These are pyrethroid products; they will work if sprayed on top of the insect or if the pests crawl through it later. Pyrethrin, an organic product, provides similar levels of suppression but lasts for much less time. Other organic options include neem oil or insecticidal soap, though they may not be as effective or last long after application.

By: *Jonathan L. Larson, Entomology Extension Specialist*
University of Kentucky

Cooperative Extension Service

Clark County Extension

Fall Festival

October 4, 2025 • 5PM - 7PM

Pumpkins - Photo Booth - Food
Crafts - Games - Give Aways

Free Fun for Everyone!

Clark County Extension Office
1400 Fortune Drive, Winchester, KY

Watch our Facebook for updates and sneak peeks!
Clark County Cooperative Extension, KY

Gus' QUICK TIPS for September

1. Add some fall blooming perennials to your garden. Good candidates include: Japanese anemone, Hardy ageratum, Hardy begonia, Toad lilies, noninvasive Goldenrods, Asters, Montauk daisy, Perennial mums, Joe Pye Weed, and a wide variety of ornamental grasses. Make sure to keep plants well watered and try to have them planted early enough to allow establishment before freezing weather.
2. Continue to seed and renovate lawns this month if needed. Good seed to soil contact is critical. Consider renting a power seeder if you are working with a large area.
3. Order spring flowering bulbs now or shop garden centers for the best selection. Bulbs may be planted right away or stored in a cool place for later planting.
4. Plant cover crops in the vegetable garden after plants have been harvested. These can be tilled in next spring to add valuable organic matter. Or consider killing the plants and rolling flat to serve as an effective mulch you can plant through excellent organic weed control. For more information on varieties go to: https://kentuckyhortnews.com/2016/11/01/cover-crops-for-kentucky-gardens/
5. Begin early garden cleanup with the removal of diseased plant materials. This will help prevent problems next year. Healthy plants can be left for late fall or early spring clean up.
6. Plant fall vegetables. You still have time to direct sow radishes, turnips, spinach and lettuces. You can still succeed with transplants of broccoli, and fast maturing cabbage varieties if planted right away.
7. Plant trees and shrubs. Fall is a wonderful time to plant woody ornamentals. Try to allow plants time to establish before the onset of severe weather.
8. Divide peonies, iris, and daylilies through the middle of this month.
9. Visit a local orchard or farmer's market for apples, pears, fall raspberries and other seasonal treats.

RECIPE

Chicken and Ranch Mushrooms

Servings: 4 / Serving Size: ¼ of recipe

Source: Brooke Jenkins-Howard, Extension Specialist, University of Kentucky Cooperative Extension Service

Ingredients:

- Nonstick spray
- 1 pound boneless, skinless chicken breasts, sliced into strips
- 8 ounces white mushrooms, sliced
- 2 teaspoons dry ranch dressing mix
- 1 tablespoon unsalted butter
- 1½ cups fresh spinach
- ¼ teaspoon garlic powder
- 2 cups cooked barley or brown rice

Directions:

1. Spray large skillet with nonstick spray; heat to medium. Add chicken, cover and cook for 5 minutes. Turn chicken and move to one side of pan. Add mushrooms.
2. Sprinkle ranch seasoning over chicken and mushrooms. Add butter. Sauté for 5 minutes, stirring frequently. Remove from pan.
3. Add spinach to pan and sprinkle with garlic powder. Cover and steam until spinach wilts (3-5 minutes), stirring occasionally.
4. Arrange barley or brown rice on plates. Top with spinach, chicken and mushrooms.

Nutrition Facts per serving: *320 calories; 6g total fat; 2.5g saturated fat; 0g trans fat; 90mg cholesterol; 270mg sodium; 26g carbohydrate; 4g fiber; 1g sugar; 0g added sugar; 30g protein; 80% Daily Value of vitamin D; 6% Daily Value of calcium; 10% Daily Value of iron; 15% Daily Value of potassium.*