Cooperative Extension Service

Cooperative Extension Service
Taylor County
1143 South Columbia Avenue
Campbellsville, KY 42718
(270) 465-4511 Fax: (270) 789-2455

Taylor County Horticulture July Newsletter

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Sincerely,

Kara Back

Kara Back
Extension Agent
For Horticulture

Alternatives to Popular Annuals

By: Kerena Stauffer, Master Gardener

These tried and true annuals have made a permanent home for themselves in the gardens of Kentucky homeowners and hobbyists for years, but if you want to try something new, here are alternative options to some of the best loved annual flowers!

Instead of Geraniums, try Lantana.
Lantana is a species of flowering plant within the verbena family, native to the American tropics. It is a very adaptable species, which can inhabit a wide variety of ecosystems. The bright, multi-bloomed flowerheads of Lantana give the same striking presence as a geranium, with excellent heat and drought tolerance, and a tidy growth habit. They will bloom all summer long and attract pollinators with their eye-catching colors.

Instead of Petunias, try Calibrachoa, aka Million Bells.
Love the look of petunias but hate the dead-heading? Calibrachoa is a vigorous trailing plant that has the same growth habit and flower shape as Petunias, but require no dead-heading and little maintenance. They perform great in hanging baskets and planters to add that pop of color, and rebloom consistently. Their color range is just as diverse as petunias and even come in double-petaled varieties,

Instead of Impatients, try Tuberous Begonias.
The stunning rosette, double petaled flowers of tuberous begonias bring the bright colors of spring into the shady areas of your garden. Vigorous, long lasting flowers will bloom well from spring to summer, with a wide color spectrum to choose from. This plant prefers shade, but can handle a few hours of sun. No need to dead-head.

JULY 2024

Upcoming Events

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4  Office Closed	5	6 Farmers' Market 8:00 a.m.-2:00 p.m.
7	8 Busy Bloomers Garden Club Topic: Dave's Gardening Notes from 2023 & 2024 1:00 p.m.	9	10	11	12	13 Farmers' Market 8:00 a.m.-2:00 p.m. Summer Bash 9:00 a.m.-12:00 p.m.
14	15	16 4-H County Fair Project Day 3:30 p.m. Register on Eventbrite	17	18 4-H Leaf Collection 10:00 a.m. Register on Eventbrite *Green River Beekeepers	19	20 Farmers' Market 8:00 a.m.-2:00 p.m.
21	22 Bird Club Topic: Oriole Feeder 1:00 p.m.	23	24	25	26	27 Farmers' Market 8:00 a.m.-2:00 p.m. Kids Activity Day (Reptiles) 9:00 a.m.-12:00 p.m.
28	29	30	31	*Green River Beekeepers At Taylor County Extension Office at 7:00 p.m. ET		

To RSVP for the classes, call the Extension office at 270-465-4511.

Vertical Gardening

By: Karen Redford, Master Gardener

For years people have used different ways for planting vine crops. Vertical gardening has become a great way to use your place for growing some types of food, or just for a wall of beautiful flowers! You can use trellises, walls, fences, or even the side of your home to help support vines. Cattle panels come in handy to use as a way to support vines. This kind of planting can provide shade for other plants that need to be shielded. This can be a great help in dry seasons, because it can help hold moisture for those types of plants. It can also be used as a windbreaker instead of trees, when you have limited space. This is because the root system of your vertical garden will not spread out as much as the root system of trees, which can end up causing damage to water lines. That happened to me just this past winter.

Another good thing about vertical planting is that it will be easy to change out your plants at any time. Rotating them just like you do the rest of your garden crops. It can save you lots of space in your garden as well as having vines growing up instead of spreading out into other plants. You can use this for cucumbers, beans, peas, grapes, and even tomatoes. Berries, such as blackberries and raspberries, can use this type of gardening. Vertical gardening can also help from having to weed as much when you have them climb compared to when plants are spreading on the ground.

If you are considering putting a trellis out in a more permanent place, be careful not to put it close to a house where water from the eaves or gutters are pouring on it every time it rains. This can cause damage or kill your plants, especially in the winter when they could be coated in ice when temperatures fall. Be careful when planting close to your house

foundation or porch. Plants need to be at least 18 inches away from your house. Another thing to be aware of when planting certain vines near your home is how big and heavy some vines will grow. Wisteria is one variety that can become very heavy, as it can grow to be the size of a small tree. I have seen one break down the trellis it was growing on as it became too heavy for the trellis.

Gourds are also great vines that can be grown vertically. Luffa gourds grow as vines and need something to climb on. I have yet to grow luffa, but it is something I would like to try. Luffa can be used different ways once it is dried. After being dried, they can be used to scrub your dishes or used to bathe with bringing a healthy glow to your skin.

If you are wondering what sign to plant your vines in, the answer is different depending on what you are planting. Planting in Virgo helps produce fine stalks and vines that would provide you with good shade or a veil. A good sign to plant vining food crops such as pole beans, cucumber, and squash is Scorpio. Cancer is a good sign to plant in for medium height, and stronger stem plants such as tomatoes. Planting in Pisces will result in shorter vines, but produces better fruit. Either way never plant in bone dry soil, plants need moisture and warmth to be in the soil when planted.

It might take a little extra time when starting, especially getting something for the plants to climb up. Hopefully it will save space, and maybe your back, when harvesting fruit.

Happy gardening, be blessed, and be a blessing to others! Share your fruits with others!

IN OBSERVEANCE OF

FOURTH OF JULY

TAYLOR COUNTY COOPERATIVE EXTENSION OFFICE WILL BE CLOSED

THURSDAY, JULY 4

Busy Bloomer Garden Club

Monday, July 8, 1:00 p.m.

Topic: Dave's Gardening Notes from 2023 & 2024

Bird Club

Monday, July 22 1:00 p.m.

Learn about making a Oriole feeder!

Call the Extension Office at 270-465-4511 to RSVP!

Cooperative Extension Service

Horticulture Judging

Learn how to identify and judge fruits, vegetables, and landscaping plants with our Horticulture Agent, Kara Back.

*No registration required!

Tuesday, July 2
10:30 a.m. & 3:30 p.m.

Tuesday, July 9
10:30 a.m. & 3:30 p.m.

Tuesday, July 16, 10:30 a.m.

Monday, July 22
10:30 a.m. & 3:30 p.m

Cooperative Extension Service

Taylor County Farmers' Market

Kids' Activity Day at the Market

REPTILES

Saturday, July 27
9:00 a.m. - 12:00 p.m.

*Market hours are 8:00 a.m. - 2:00 p.m.

The Taylor County Farmers' Market is located at 73 Animal Shelter Road, past Wal-Mart.


TAYLOR COUNTY FARMERS' MARKET
Summer Bash
SATURDAY, JULY 13
9:00 A.M. - 12:00 P.M.
SPECIAL CRAFTS AND ACTIVITIES FOR KIDS WILL BE AVAILABLE
MARKET HOURS ARE 8:00 A.M. - 2:00 P.M.
LOCATED AT 73 ANIMAL SHELTER ROAD, PAST WAL-MART
FOR MORE INFORMATION CALL THE EXTENSION OFFICE AT 270-465-4511
Cooperative Extension Service
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Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development
MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT
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Lexington, KY 40506
Disabilities accommodated with prior notification.

Bacterial Wilt of Cucurbits

By: Kim Leonberger, Plant Pathology Extension Associate, and Nicole Gauthier, Plant Pathology Extension Specialist

Bacterial wilt of cucurbit crops is a common issue for homeowners and commercial producers in Kentucky. Cucumbers and muskmelon (cantaloupe) are highly susceptible to bacterial wilt, while squash and pumpkin are less susceptible. Watermelon is known to be resistant to bacterial wilt. Infected plants quickly collapse, resulting in crop loss. Preventative practices are critical for avoiding yield loss.

Figure 1: *Initial symptoms include dull green, wilted leaves. (Photo: William Nesmith, UK)*

Bacterial Wilt Facts

- Symptoms often first appear as dull green, wilted leaves or groups of leaves (Figure 1). Over time, wilting becomes prominent throughout the plant; collapsed foliage and vines turn brown, shrivel, and die (Figure 2).

Figure 2: *Infected plants eventually collapse with vines becoming brown and shriveled. (Photo: Edward Sikora, Auburn University, Bugwood.org)*

- Field diagnosis can be conducted using a simple "bacterial ooze test." For cucumber and muskmelon, select a wilted vine (not dead), and using a sharp knife, make a cut near the crown. Touch the cut ends together for 3 to 5 seconds and then slowly pull them apart, looking for fine thread-like strands of bacterial ooze connecting the two parts (Figure 3). To diagnose bacterial wilt in all cucurbits, including squash and pumpkin, place cut pieces of affected vines into a clear glass container filled with water. When the bacterium is present, a cloudy string or mass of bacterial ooze will flow into the water from cut stem pieces (Figure 4 on the next page).

Figure 3*: In cucumber and muskmelon, diagnosis in the field can be conducted by cutting a wilted vine, touching the two end together, pulling them apart, and looking for the presence of thread-link strands connecting the pieces. (Photo: Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org)*

- Striped and spotted cucumber beetles transmit the bacterial pathogen during feeding (Figure 5 on the next page). The pathogen overwinters in the gut of these vectors.

- Spring temperatures above 55°F promote growth of cucurbit seedlings, as well as striped and spotted cucumber beetle feeding on all plant parts.

Bacterial wilt is caused by the bacterial pathogen *Erwinia tracheiphila*.

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Management

Once plants become infected with bacterial wilt, no disease management practices are effective. Preventative strategies should be used to limit introductions and spread of disease.

- Select resistant or tolerant cultivars.
- Rotate crops away from cucurbits for a minimum of 2 years.
- Manage weeds.
- An insecticide management program should be implemented as soon as seedlings emerge or after transplanting. An effective program should include one or more of the following.
- Contact or systemic insecticides
- Trap cropping
- Physical barriers (netting) and mulches
- Remove and destroy infected plants.

Commercial growers can find information on insecticides in the Vegetable Production Guide for Commercial Growers (ID-36) and the Southeastern U.S. Vegetable Crop Handbook (SEVEW). Homeowners should consult Home Vegetable Gardening (ID-128) for insecticide information. Contact the Taylor County Extension Office for these publications, additional I nformation and recommendations regarding insecticides.

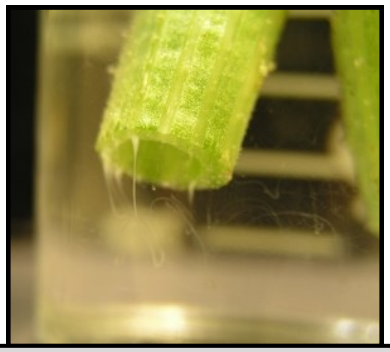

Figure 4: *Diagnosis of bacterial wilt in cucurbits, including squash and pumpkins, can be achieved by placing a cut stem in water inside of a glass jar. The appearance of a cloudy mass or string indicates presence of the bacterium. (Photo: Bruce Watt, University of Maine, Bugwood.org)*

Figure 5: *Striped (left) and spotted (right) cucumber beetles transmit bacterial wilt during feeding. (Photo: Ric Bessin, UK)*

Attack of the Flying Spiders

By: Jonathan L. Larson, Entomology Extension Specialist

Over the past week, there has been a lot of media coverage focused on an introduced spider species known as the Joro spider. While this species doesn't belong here in the USA, it is spreading in the Southeast and much of the press this year is focused on the chances it may appear further north in places like New York City. It's easy to see why this orb weaving wonder might tingle the spine. Fully-grown females are around 4 inches wide when you include the legs, but luckily they pose little to no hazard to people.

Figure 1: *Adult Joro spider females are large and in charge. Handling them isn't encouraged, but they are not an aggressive species. (Photo: Carly Mirabile, University of Georgia, Bugwood.org)*

Joro Spider Basics

The native range for the Joro spider is in southeastern Asia and Japan. Since their first detection in Georgia, they have spread to Tennessee, North and South Carolina, Alabama, West Virginia, Maryland, and Oklahoma.

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As with many spiders, the male and female Joro spider look quite different. The female is the larger one; their actual body is about 1.25 inches long. They are quite colorful with an abdomen featuring banded markings of yellow and silver-green on top, and yellow and red markings on the belly-side. Their legs are banded yellow and black. Males, on the other hand, are only about a quarter inch long and dull-colored. They reach maturity and mate in the late summer or early autumn and overwinter as eggs in a sac produced by the mother.

They don't truly "fly" in the sky. Flapping spider legs won't produce lift. However, like many other spiders, when the eggs hatch, the spiderlings often release a silk thread that will catch on the wind and take the spider to the skies. They are at the mercies of the weather at that point, but this skill will aid them as they continue to move through the eastern U.S.

Figure 2: *Joro spider webs can be extensive and annoying. People in Georgia and other states report difficulty in navigating their yards as they try to avoid accidentally walking into the webbing (Photo: Carly Mirabile, University of Georgia, Bugwood.org).*

Issues with Joro spider

Broadly speaking, Joro spiders don't pose a hazard to people. Like all spiders they are equipped with venom, though theirs is relatively weak compared to other spiders. They don't look to bite unless directly handled or provoked. They want to use the venom to subdue their prey rather than for defensive purposes. Joro spiders can serve as beneficial predators in the landscape, potentially eating pest mosquitoes, moths, and even invasive species, such as the spotted lanternfly.

However, they can be annoying in the late summer and early fall. When they reach maturity, their webs can be quite large. The webbing itself has a golden luster to it but not all that glitters is enjoyable in this case. People often have dozens of webs on their property, making mowing and outdoor leisure difficult. Nobody likes to walk into a spider web.

Look-alikes in Kentucky

The Joro spider has not been located in Kentucky as of the publication of this article. However, it is not far away from the state since it has been found in Tennessee and West Virginia, so there is potential it could arrive here soon. However, many Kentuckians have mistaken two other species of large orb weavers for this introduced one: (1) the black and yellow garden spider and (2) the banded garden spider. As seen in the images below, there are distinct differences in the colors, markings, and legs of these species but, at first glance, they can all look alike. Another important distinction is the "zipper" or zig-zag often seen in garden spider webs is not common with Joro spiders. If you see that marking, you likely have one of our usual arachnid pals.

Figure 3: *A comparison of the common garden spiders of Kentucky and the Joro spider.*

If you believe you have seen a Joro spider, you can send in photos and your county location to reportapest@uky.edu

It Is Time for the Great Pumpkin!

By: Laura Howard, Master Gardener

It may be the heat of summer, but now is the time to start thinking about fall gardens, especially if you are planning on harvesting pumpkins. Believe it or not, fall will be here before we know it!

Pumpkins, though harvested in fall, are actually a warm weather crop and do not do well below 60° F. If interested in planting, pay attention to the maturity date on the seed packet so pumpkins do not rot on the vine before needed. Plant the seed one to two inches deep with five feet between the hills of seeds and any where between six to 12 feet between the rows.

The choice of planting sites is paramount with pumpkins. One must use crop rotation with this flowering fruit, and the current crop need not be where pumpkins, vine crops, peppers, or tomatoes have been for at least the last three years. A solid crop rotation schedule can help prevent unnecessary insect infestation and help to control plant disease. Disease can actually survive in the soil. and crop rotation helps to avoid re-infestation.

Any pumpkin site must have good water drainage. Heavy soiled areas should be avoided. Clay or sandy loam or those soils rich in organic matter are best for this crop. Aim for a pH of 5.5 to 6.8. Lime can be applied if the pH is low, however do not over fertilize with lime or any other material as over fertilization can delay maturity.

Especially in the heat of summer, irrigation is a must. One to two inches of water a week in a drought period is necessary for healthy pumpkins to emerge. Along with irrigation problems, pumpkins are susceptible to insects. The squash bug and the squash vine borer are two common insects that a gardener may find on a pumpkin crop. Timing is essential for crop infestation management. It is much easier to control these bugs earlier in the growing season when foliage is not as dense. Insecticides may be helpful, but note that some only affect the young nymph bug and not the egg, so application time is key. Your local extension office can provide more in depth education on insecticides and the bugs they target.

Disease control can be equally as important as insect control. Downy and powdery mildew as well as fruit rot are only a few of the diseases that can affect a pumpkin crop. Be prepared with the proper spray to treat disease as necessary. Again, your local extension office has a plethora of resources for disease treatment.

Pumpkin plants produce both male and female flowers, which are then pollinated. It is important to note that the first ten flowers or so that emerge will be male flowers. The female flowers come later and those are the flowers that actually turn into a pumpkin. Bees and pollinators will move the pollen from the male flower to the female, allowing pollination. Pumpkin flowers will naturally open at daybreak and will close by noon. Hot and dry growing conditions can inhibit these vines from flowering and opening, so it is super important to maintain an irrigation schedule, especially since only the female flowers produce a crop. If treating a crop for disease or insects, it is very important to NOT spray the crop in the morning or early afternoon hours when pollination occurs or these chemicals can kill and/or harm the bees.

When harvesting, cut pumpkins from the vine with three to four inches left on the stem. Use sharp shears or a knife when cutting to help prevent the stem from separating from the fruit. Make sure to avoid cuts and bruises when harvesting as this creates an open entry point for rot or fungi. If pumpkins are ready early for harvest, it may be possible to hold them for a bit until needed. Store in a cool, dry area with temperatures between 50° F - 55° F, being careful to not stack pumpkins on top of one another. Keep the area well ventilated and the surface of the pumpkins themselves dry. Leaving ripe pumpkins on the vine can lead to root rot and a loss of the crop, so it is better to store than to leave on the vine.

Although a wonderful crop to grow, pumpkins must have the right conditions to flourish. Luckily, the educated gardener is able to find success with these flowering fruits. When placed in the right soil that has adequate irrigation, you too, could also have ‘the great pumpkin’!

Cooperative Extension Service
Taylor County
1143 South Columbia Avenue
Campbellsville, KY 42718

Plate it up! Kentucky Proud.

Tomato Basil Salad

¼ cup fresh basil leaves
1 pint cherry, grape or other salad tomatoes, halved (2 cups)
1 large cucumber, chopped (2 cups)
3 green onions, chopped (½ cup)
1 small yellow bell pepper, seeded and diced
3 tablespoons crumbled, fat free feta cheese
3 tablespoons olive oil
2 tablespoons white balsamic or white vinegar
Salt and freshly ground pepper

Roll basil leaves lengthwise and **cut** across into ¼ inch strips. **Combine** basil, tomatoes, cucumber, green onions, bell pepper and cheese in large bowl. **Whisk** olive oil with vinegar. **Drizzle** over salad ingredients and lightly **toss** to cover. **Season** with salt and pepper to taste.

Yield: 4, 1 cup servings

Nutritional Analysis:
150 calories, 10 g fat, 1.5 g saturated fat, 0 mg cholesterol, 200 mg sodium, 11 g carbohydrate, 2 g fiber, 5 g sugars, 3 g protein.