

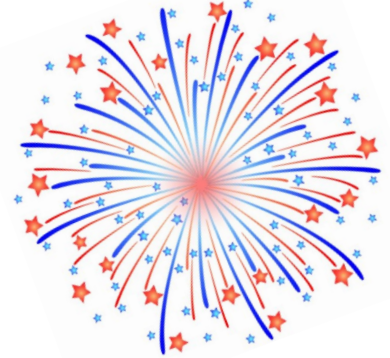
# Taylor County Horticulture Newsletter



**Cooperative Extension Service**  
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# July 2023



## Upcoming Events

Eastern Standard Time

Monday, July 3	4-H Horticulture Judging Practice	3:30 PM
Tuesday, July 11	Busy Bloomer Garden Club—Tour of Jan Bardin's Garden, 1547 Davis Rd., Campbellsville, KY 42718 (Alternate Rain Date—Thursday, July 13, 10:30 AM)	10:30 AM
Monday, July 10	4-H Horticulture Judging Practice	3:30 PM
Saturday, July 15	Farmers' Market Health Fair	9:00 AM—12:00 PM
Tuesday, July 18	4-H Horticulture Judging Practice	3:30 PM
Thursday, July 20	Green River Beekeepers—Casey County Extension Office	7:00 PM
Monday, July 24	4-H Horticulture Judging Practice	3:30 PM

**Taylor County Farmers' Market**  
**Open Saturday's**  
**8:00 AM—2:00 PM**

*Kara Back*

Kara Back  
Extension Agent  
For Horticulture

**Cooperative Extension Service**  
Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

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Disabilities  
accommodated  
with prior notification.

# Tips to Help Prevent Plant Disease

- > Plant far enough apart to allow good air circulation.
- > Destroy any infected plants and try to keep them away from other plants.
- > Do not throw infected plants into compost pile.
- > Sanitize your tools between use, especially if you are working with a diseased plant. Clean your pruners or other tools with a bleach solution, or alcohol, and wipe with sanitizing wipes. Dry tools before storing them away.
- > Do not water plants overhead.
- > Diseases can spread through the soil, air and through water vapor.
- > Diseases affect plants worse in hot, humid areas. One way is when rainfall splashes on the undersides of the leaves of the plant. Diseases usually start at the bottom of the plant and work their way up.
- > When you see a diseased area on your leaves, prune it off. Hopefully this will help prevent spread, before it gets worse.
- > Besides rainfall splashing on the leaves, when it's hot and humid, the way we water plants can cause disease as well. The best way to water is slow drip irrigation. This uses less water, and it doesn't splash on the plant. It is a slow, steady drip irrigation at the bottom of the plant and soaks down deep around the base of the plant.
- > If you can't use the slow drip irrigation then water with a wand or use a water hose and let it run slowly at the base of the plant for a minute or two at each plant. This way helps keep the leaves of the plant dry and will help minimize disease spread and keep plants healthy.

By: Karen Redford, Master Gardener

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## Using Straw as Mulch

Wheat straw bales is a byproduct of wheat that is grown for food. Is it used for many products, such as bread. The wheat seeds are harvested first and the straw that is left is made into bales. Straw can be used for many purposes, especially as mulch in your garden beds. By putting it around your plants, such as strawberries and tomatoes, it can help keep the produce from lying on the ground and rotting. It is also good to place around your plants during the dry season, because it helps hold in moisture around your plants.

The wheat bales need to be prepared first, before applying them around your plants. They need to be aged first, for at least 2-3 months. When they are first made into bales, there are still wheat seeds in the straw that will germinate. If you apply this around your plants, after being freshly cut, you will be fighting wheat grass in your garden. You will be constantly having to weed the wheat out, or having to just wait until it dies out completely. It can overtake your garden quickly. Let your wheat straw bales sit and age a while before use. It would be best to purchase the straw in advance, before you are going to need it, preferably aging it for at least 2-3 months. By doing this the seeds will rot in the bale. If you see wheat growing from the bales before you are ready to use it, you can spray distilled white vinegar, on the wheat plants, and it will help kill it out. Apply it using a spray bottle, and if it doesn't burn it out in a week or so, you can repeat the process of spraying it again with distilled white vinegar.



By: Karen Redford, Master Gardener



# Be on the Lookout for the New Tomato & Pepper Virus

Tomato brown rugose fruit virus (ToBRFV) is a new virus that has been sporadically detected across the U.S. and in Kentucky.

ToBRFV was first identified in Israel in 2014 and confirmed in the U.S. in 2018. It was first confirmed in Kentucky in 2022. The virus was eradicated in all U.S. cases. Nevertheless, ToBRFV has been confirmed in Canada, the Dominican Republic, France, Israel, Mexico, the Netherlands, and Spain. Imports of fruit or seeds from these countries require phytosanitary certificates or inspection certifications. ToBRFV can cause severe losses to field and greenhouse tomato and pepper plants, and plants in the nightshade family, including petunia.

## Symptoms

Symptoms include mosaic patterns on fruit and leaves. Leaf distortion and strapping known as “fern leaf,” as well as vein yellowing/chlorosis are common on foliage. Fruit symptoms include stunting, discoloration, and rough brown texture (known as rugose). Necrosis of the calyx, peduncle, and pedicel can lead to fruit drop. Symptoms may resemble other tobamoviruses such as tobacco mosaic virus (TMV) and tomato mosaic virus.

## Transmission

ToBRFV is highly transmissible and easily spread by mechanical means, including tools, equipment, and handling, as well as by cuttings, grafts, and seeds. The virus can also survive in debris, soil, tools, and surfaces for years.

## Management

Management of ToBRFV is difficult since the virus can survive for long periods outside of a host plant. Destruction of infected plant material is critical, followed by a strict sanitation program, including hand washing, tool disinfection, surface disinfestation, foot baths, and use of clean suits and gloves.

Close inspection of incoming plant material is important to prevent introduction into fields and greenhouses. If ToBRFV is suspected, contact your County Extension Agent for assistance in submitting a sample to the Plant Disease Diagnostic Lab. Quarantine the area and restrict movement until a diagnosis is confirmed. If ToBRFV is confirmed, your Extension agent and university specialist can assist you through the proper process for containment, including destroying contaminated plant material and disinfection of tools and surfaces.



Source: Nicole Gauthier, Plant Pathology Extension Specialist, University of Kentucky

## String of Pearls

String of Pearls is a succulent with modified leaves shaped as round beads. They will hang over the edge of a pot. String of Pearls can reach several feet in length. If they receive enough light they will also produce white flowers.

The key to keeping String of Pearls alive is to not over water them. It is best to keep them a little too dry, than too wet. Plant them in a fast draining potting medium.

However, don't let the pearls shrivel between waterings.

String of Pearls need a lot of sun. Place them in a west or south window.

To propagate String of Pearls make stem cuttings. Plant the cuttings in a moist potting medium. You can plant them either with the ends of the stems stuck into the medium or coiling up the cutting and placing it on top of the medium.

String of Pearls can be challenging to grow, but far from impossible.

Source: “Houseplants A Guide to Choosing and Caring for Indoor Plants” by Lisa Steinkoff



# Common Milkweed

Common milkweed blooms in midsummer. Its lovely fragrance often precedes seeing the flowers.

Common milkweed is a native, perennial herbaceous plant in the milkweed family. It commonly grows in sunny areas and ditches and is a primary part of the monarch butterfly's diet.

- Leaves are oval and opposite and plants can grow up to 5 feet tall.
- Flowers develop at the top of the stem in an umbel pattern and are typically light pink.
- Seed pods mature late in the fall.

## Essential for the Monarch butterfly life cycle

Monarch caterpillars feed exclusively on the leaves and the adult butterflies need milkweed to lay their eggs. They also feed on the nectar of the flowers, along with other flower species.

Milkweeds have complex flowers; when you examine the individual flowers that make up the pink flower balls you will be amazed at their form and detail.



## Growing milkweed in your garden

This native plant is aggressive and can be weedy. The fluffy seeds float everywhere in the fall when the pods split open. The plants also have underground rhizomes that colonize to make a large stand of many plants. Common milkweed loves full sun and tolerates most soils, including heavy and wet sites. Try to make a place for it in your garden and you will not only enjoy the fragrance of the flowers but very likely will see monarch butterflies enjoying the plant as well.

Source: Mary H . Meyer, Extension Horticulturist, University of Minnesota Extension

## Landscape Insect-Pest Calendar for Kentucky

### ENTFACT Supplement: Landscape Insect-Pest Calendar for Kentucky

This table shows:

- ◆ when to expect insects of concern to appear,
- ◆ when population numbers can be expected to peak, and
- ◆ the usual length of time these insects are present during the season.

Please note:

- ◆ These dates are approximations only. Local weather and soil conditions in a given year will determine exact dates of first and peak appearance.
- ◆ This calendar was constructed using data from Kentucky, USA. If you are located in Kentucky or in nearby states with similar conditions, you will probably find it useful.
- ◆ These dates may not apply in your area, especially the farther you are located from Kentucky. In that case, you may wish to contact your county extension agent or agricultural consultant for information about your locality.

Key:

- ◆ - or \* indicates insect populations likely to be present
  - ◆ \* indicates peak population levels likely
- Multiple peaks indicate the particular insect species produces more than one generation per year.

Source: <https://entomology.ca.uky.edu/landscape-calendar>

Pest Activity	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Pine needle scale	.	--*	****	****	****	*_	.	.
Pine aphids	.	--	****	**_	.	.	--	****
Virginia pine sawfly	.	--**	****	-	.	.	.	.
Introduced pine sawfly	.	.	--	****	**_	****	****	--
Redheaded pine sawfly	.	--	****	****	****	****	*_	.
Dogwood borer	.	.	--**	**	.	.	.	.
Lilac borer	.	-*	****	****	--	.	.	.
Peachtree borer	.	.	.	****	****	**_	-	.
Lesser peachtree borer	.	.	--**	****	*_	----	.	.
Bronzed birch borer	.	.	--**	****	***	.	.	.
Flatheaded apple borer	.	.	--*	****	**_	--	.	.
Boxelder twig borer	.	---	--	.	--**	****	****	**_
Maple bladder gall	.	--**	****	**_	-	.	.	.
Maple petiole borer	.	--	****	**_	.	.	.	.
Elm leaf beetle	.	--	****	****	****	****	**_	-
Hackberry psyllid	--	****	****	----	----	----	--**	****
Yellow poplar weevil	--	****	****	**_	****	--	.	.
Japanese beetle	.	.	.	--**	****	**_	.	.
Bagworms	.	.	--**	****	****	****	**_	.
San Jose Scale	.	.	-*	**_	-*	****	*_	.
Oystershell scale	.	--	****	**_	.	.	.	.
Obscure scale	.	.	.	.	****	**	.	.
Walnut scale	.	.	-*	*_	----	-*	----	.
Juniper scale	.	.	--**	**_	.	.	.	.
Eastern tent caterpillar	-*	****	****	**_	.	.	.	.
Fall webworm	.	.	--**	****	--**	****	**_	.
Honeylocust plant bug	.	--**	****	---	.	.	.	.
Euonymus scale	.	--	.	.	.	.	.	.
Pine bark adelgid	.	--	.	.	.	.	.	.
Aphids (general)	.	--	.	***	**	.	.	.



# Protect Your Pumpkins: Squash Vine Borer in Flight

## Squash vine borer biology

Squash vine borer is a day-flying wasp-mimic moth. It is brightly colored with a mixture of red and silver scales covering its body. In flight, its behavior is similar to wasps, adding to the impersonation and serving as a way of helping to protect themselves.

This species overwinters as either a pupa or as a final instar caterpillar. In the spring, it will either pupate or prepare to emerge as an adult, usually around the time their host plant vines begin "running"- often the second or third week in June. There is likely only one generation per year in Kentucky, but this insect has an exaggerated emergence period, with adults coming out through July and August as well.

Female moths will hover over host plants and lay eggs on the stem. After about 7 days, the caterpillar will emerge and tunnel into the plant, and it feed inside the stem for 2 to 4 weeks before popping out and pupating in the soil.

Early symptoms of an SVB problem include plant wilting and visible fecal material (or frass) pushed out through holes in the stem. The frass can be sawdust-like or gooey, depending on age, but it is pushed out of the host plant by actively feeding larvae inside the plant.

## Management

While discovering this pest may make your vision of a 200-pound pumpkin wither in your imagination, there are options for suppression. They are dependent on knowing when the adult moths are active, so monitoring is a gardener's best friend. Visual checks for adults and caterpillar damage can help, as can using yellow plastic bowl traps to capture adult moths in flight.

Once a moth has been captured, it alerts the gardener to initiate either physical exclusion or chemical management. A floating row cover can be placed over susceptible plants to keep moths from laying their eggs, as long as gardeners make sure that they didn't cage moths inside with the plants. Row covers are effective, but timing is tough; if plants are flowering, bees need access in order

to pollinate, and the cover can exclude them as well. Be prepared to hand pollinate, if necessary.

Insecticides can help as well. The go-to caterpillar product is usually Bt or *Bacillus thuringiensis*, but this is not an option for SVB. Bt must be consumed in order to work, and applications are on the outside of plants. Instead, plan to treat with bifenthrin, carbaryl, permethrin, cypermethrin, or spinosad. Insecticide sprays can then be applied 7 to 10 days after the first moth is noted or captured in bowl traps. Sprays should be repeated every 2 weeks through the end of July to keep the plant protected during the exaggerated emergence. It is a tight window to protect the plant; sprays need to be applied before eggs hatch, as once the caterpillar gets inside, the sprays won't be effective.

Finally, if the caterpillars are already inside the plant, it is possible to perform some squash surgery to try and save the vine. Using a clean knife, gently slice open the vine starting at the holes or cracks where frass is exuding. Once the caterpillar is reached, they can be destroyed with as much vigor as the gardener wants, and then the vine pushed back together. Mounding 1 to 2 inches of soil on top of the cut areas can encourage the plant to re-root, hopefully saving it.

This is not always successful, and vine surgery can introduce its own set of problems, so it should be used as a last resort.

Source: Ric Besson and Jonathan L. Larson, Entomology Extension Specialist, University of Kentucky



## Gardening by Month—July

### Vegetables

- Blossom-end rot of tomato and peppers occurs when soil moisture is uneven. Water when soils begin to dry; maintain a 2-3 inch layer of mulch.
- To minimize insect damage to squash and cucumber plants, try covering them with lightweight floating row covers. Remove covers once plants flower.
- Dig potatoes when the tops die. Plant fall potatoes by the 15th.
- For the fall garden, sow seeds of collards, kale, sweet corn and summer squash as earlier crops are harvested.
- Set out broccoli, cabbage, and cauliflower transplants for the fall garden.
- Sweet corn is ripe when the silks turn brown.
- Keep cucumbers well watered. Drought conditions will cause bitter fruit.
- Harvest onions and garlic when the tops turn brown.
- Sow seeds of carrots, beets, turnips, and winter radish for fall harvest.
- Cover grape clusters loosely with paper sacks to provide some protection from birds.
- Prune out and destroy old fruiting canes of raspberries after harvest is complete.
- Blackberries are ripening now.
- Apply second spray to trunks of peach trees for peach borers.
- Early peach varieties ripen now.
- Thornless blackberries ripen now.

Source: Missouri Botanical Garden

### Ornamentals

- Provide water in the garden for the birds, especially during dry weather.
- Remove infected leaves from roses. Pick up fallen leaves. Continue fungicidal sprays as needed.
- While spraying roses with fungicides, mix extra and spray hardy phlox to prevent powdery mildew.
- Newly planted trees and shrubs should continue to be watered thoroughly, once a week.
- Fertilize container plants every 2 weeks with a water soluble solution.
- Keep weeds from making seeds now. This will mean less weeding next year.
- Keep deadheading spent annual flowers for continued bloom.
- Perennials that have finished blooming should be deadheaded. Cut back the foliage some to encourage tidier appearance.
- Plant zinnia seed by July 4th for late bloom in annual border.
- Spray hollies for leaf miner control.
- Prune climbing roses and rambler roses after bloom.
- Apply final treatment for borers on hardwood trees.
- Apply no fertilizers to trees and shrubs after July 4th. Fertilizing late may cause lush growth that is apt to winter kill.
- Hot, dry weather is ideal for spider mite development. With spider mite damage, leaves may be speckled above and yellowed below. Evergreen needles appear dull gray-green to yellow or brown. Damage may be present even before webs are noticed.
- Fall webworms begin nest building near the ends of branches of infested trees. Prune off webs. Spray with Bt if defoliation becomes severe.
- Divide and reset oriental poppies after flowering as the foliage dies.
- Semi-hardwood cuttings of spring flowering shrubs can be made now.
- Summer pruning of shade trees can be done now.
- Powdery mildew is unsightly on lilacs, but rarely harmful. Shrubs grown in full sun are less prone to this disease.
- Divide bearded iris now.
- Don't pinch mums after mid-July or you may delay flowering.



University of Kentucky  
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## Summer Garden Lasagna

<b>5</b> medium zucchini	<b>8 ounces</b> plain Greek yogurt	<b>1</b> medium yellow onion, diced $\frac{1}{4}$ inch	<b>10 ounces</b> fresh spinach
<b>2</b> yellow summer squash	<b>2 cups</b> low fat cottage cheese	<b><math>\frac{1}{4}</math> cup</b> fresh chives, chopped	<b>1</b> (24 ounce) jar spaghetti sauce
<b>3 tablespoons</b> olive oil	<b><math>\frac{1}{2}</math> cup</b> chopped fresh basil	<b>2</b> garlic cloves, pressed	<b>8 ounces</b> shredded mozzarella cheese
<b>2</b> large eggplants, sliced $\frac{1}{2}$ inch	<b>2 teaspoons</b> salt		Garnish with fresh basil leaves

Thinly **slice** zucchini and summer squash  $\frac{1}{4}$  inch thick and **toss** with 1 tablespoon olive oil and 1 teaspoon salt. **Roast** in oven at 400 degrees F for 20 minutes, turn slices after 10 minutes. **Slice** eggplants, **toss** with 1 tablespoon olive oil; **place** on baking sheet. **Roast** in oven at 400 degrees F for 20 minutes, turn slices after 10 minutes. If needed, place under boiler for 5 minutes to reduce excess moisture. **Mix** together yogurt, cottage cheese, fresh basil, 1 teaspoon salt, diced onion and chives. **Sauté** garlic in remaining olive oil until golden. **Add** spinach to pan and **cook** until wilted. **Spoon** half of roasted zucchini,

squash, and sautéed garlic into a greased 9-by-11 inch baking dish. **Coat** evenly with half of the cottage cheese and yogurt mixture. **Place** an even layer of eggplants on cottage cheese mixture. **Spread** a layer of spaghetti sauce on eggplants and sprinkle with mozzarella cheese. **Repeat** process for one more layer. **Bake** at 425 degrees F for 40 to 45 minutes. **Sprinkle** with chopped basil and cheese for garnish. **Yield:** 10, 1 cup servings.

**Nutritional Analysis:** 240 calories, 10 g fat, 4 g saturated fat, 20 mg cholesterol, 840 mg sodium, 20 g carbohydrate, 6 g fiber, 7 g sugars, 17 g protein.



Plate it up!

