

**Cooperative Extension Service**

McCracken County  
2025 New Holt Road  
Paducah, KY 42001  
(270) 554-9520  
Fax: (270) 554-8283  
extension.ca.uky.edu

*Mary Hank*

Agent for Horticulture



# Horticulture Newsletter

**AUGUST  
2023**

*Inside this issue:*

- Gardening in Small Spaces
- Fusarium Wilt of Vegetables
- Mushrooms & Microgreens. Toolbox Garden Series August 1st
- Growing Your Own. A beginner's guide to gardening. Sweet Potatoes
- Apple Cranberry Waldorf Salad. Kentucky Proud Recipe

## Master Gardener Spotlight

*Lyn Meredith*

*Master Gardener Treasurer  
and Secretary*



*Class of 2014*



### Cooperative Extension Service

Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

### MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. Lexington, KY 40506



Disabilities  
accommodated  
with prior notification.

# Gardening in Small Spaces

Source: Rick Durham, Extension Horticulture Specialist

Gardening in its many forms is a popular hobby in Kentucky. It promotes healthy habits such as spending time outdoors, being physically active and raising homegrown fruits and vegetables for your family. If you live in urban areas, have little space or have limited mobility, you may think gardening won't work for you. However, raised-bed and container gardening are good solutions for these challenges.

Raised-bed gardens allow you to have control over the planting media. You can create your own soil or soilless mixes. This is great for areas with poor soil quality or poor drainage. You'll get better root growth with amended soils and typically higher yields. Raised beds are easier for those with mobility issues because they usually require less stooping and bending during weeding and watering tasks.

Vegetables usually do well in areas that receive full sun, but many will thrive and give you a good crop with less than a full day of sun. For example, carrots, lettuce, radish, spinach, onion, winter squash, cucumber, peas, cauliflower, parsley and Swiss chard will grow in areas with as little as four to six hours of daily sunlight. Make sure you put your raised beds near a good water source as they will dry out quicker than if planted directly into the ground.

Container gardening may be a great solution for those living in apartments and condominiums or those who just want to garden on the patio. You may use just about any container that holds soil and is large enough to support the plant when it's fully grown. You will need drainage holes in the bottom of any container to avoid overwatering. You don't want the plant roots standing in water. Think about clay or wood pots, plastic buckets, wheelbarrows, window boxes and hanging baskets. Try to avoid very small or dark-colored containers as they will hold heat and the root zone could get dangerously overheated in full sun.

Nearly all leafy vegetables will do well in containers. You may find many dwarf varieties of your favorite vegetables that will thrive in containers. Crops with many fruits per plant such as tomatoes are good choices.

The University of Kentucky Cooperative Extension Service has a publication with many more details about gardening in small spaces. Find and download it here <http://www2.ca.uky.edu/agcomm/pubs/ID/ID248/ID248.pdf>.

For more information on gardening, contact the McCracken County Cooperative Extension Service.

# Fusarium Wilt of Vegetables

Fusarium wilts are common in Kentucky vegetables grown in commercial fields, greenhouses, high tunnels, and backyard gardens. Tomato, peppers, eggplant, cucumber, watermelon, cantaloupe are susceptible to disease. Fusarium wilts symptoms develop when the fungus clogs vascular tissue (xylem), limiting the plant's ability to move water and nutrients. Infections ultimately result in plant death. Preventative practices and fungicides can reduce damage and limit yield loss.

## Fusarium Wilt Facts

- Symptoms often first appear as a complete or partial wilting of plants. During the early stages of infection, plants may recover during the evening or after watering, but over time, wilting becomes permanent. Affected plants become yellow and then necrotic (brown/dead tissue) (Figure 1). Discoloration of the vascular system may be present and can be observed by cutting the stem open length wise (Figure 2). Diseased plants eventually die.
- Disease may be introduced via infected crop debris, seeds, transplants, weeds or infested soil.
- Fusarium wilt is soilborne and is spread by water, such as irrigation or rain, or by movement of infested soil.
- Warm temperatures, periods of high humidity, and acidic soils favor disease development.
- Fusarium wilts are caused by the fungal pathogen *Fusarium oxysporum*. This fungus has many host-specific strains called "formae speciales" that each target different crops.



**Figure 1:** *Fusarium wilt symptoms begin as wilting, followed by yellowing and necrosis. (Photo: Gerald Holmes, Strawberry Center, Cal Poly San Luis Obispo, Bugwood.org)*

**Figure 2:** *Vascular discoloration is characteristic of Fusarium wilt. (Photo: Clemson-USDA CES Slide Series, Bugwood.org)*



## Management

- Purchase certified disease-free seeds or transplants.
- Select cultivars with resistance.
- Utilize soil solarization.
- Manage weeds in or near plantings.
- Rotate crops away from susceptible crops for a minimum of 5 years.
- Increase soil pH to near neutral (pH 7), depending on crop.
- Remove and destroy infected plants or plant parts.
- Clean and sanitize tools, pots, and equipment.
- Remove and destroy plant debris at the end of the season

Commercial growers can find information on fungicides in the Vegetable Production Guide for Commercial Growers (ID-36) and the Southeast U.S. Vegetable Crop Handbook. Homeowners should consult Home Vegetable Gardening (ID-128) for fungicide information or contact a county extension agent for additional information and recommendations regarding fungicides.

## Additional Resources

Fusarium Wilts of Vegetable Crops (PPFS-VG-15)

Home Vegetable Gardening (ID-128)

Vegetable Production Guide for Commercial Growers (ID-36)

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



MUSHROOMS

&

MICROGREENS

# MASTER GARDENER

TOOLBOX SERIES

AUGUST 1<sup>ST</sup>, 2023

5PM CST



University of Kentucky  
College of Agriculture,  
Food and Environment  
Cooperative Extension Service



Join the Master Gardeners in welcoming Marina Narloch, from Wild Love Farm. She will be educating the public on all things mushrooms and microgreens. Such as growing them and their benefits. This event is open to the public.



McCracken County  
Cooperative Extension Service

2025 New Holt Road  
Paducah, Ky 42001  
(270)-554-9520

Mary Hank  
Agent for Horticulture

Mkha270@uky.edu

Contact the McCracken County  
Cooperative Extension Service at  
(270)-554-9520 to learn more

If inclement weather closes McCracken  
County Schools, programs are canceled

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

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.

LEXINGTON, KY 40546



Disabilities  
accommodated  
with prior notification.

# Growing Your Own

## A beginner's guide to gardening

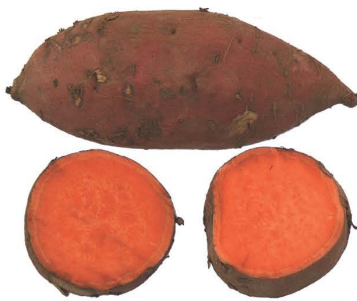
### Sweet Potatoes

Add sweet potatoes to your garden this year if you have enough space. Despite what their name suggests, sweet potatoes (sometimes written as the single-word “sweetpotatoes”) are not related to white potatoes. They like to grow in warm weather. They are healthy and a good source of vitamin A and vitamin C.

#### Varieties

The following varieties are known to grow well in Kentucky.

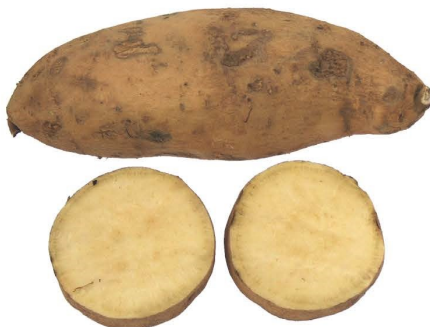
- **Beauregard** has copper skin and deep-orange flesh.
- **Hernandez** has brighter orange skin and colored flesh. It also has a tapered root that can be quite long.
- **O'Henry** is white skinned and has a pale flesh.
- **Japanese/Murasaki** has rare purple skin and a drier, white flesh.
- **Covington** has copper and rose-colored skin with orange flesh.



Beauregard

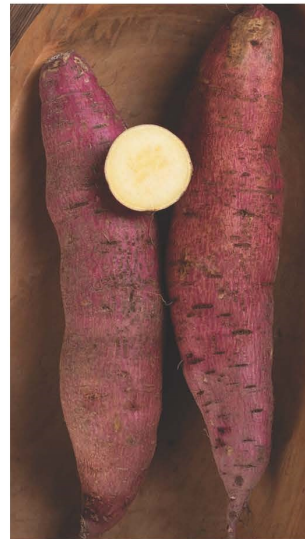


Hernandez



O'Henry

University of Kentucky Cooperative Extension



Murasaki



Covington

Johnny's Selected Seeds

## How much to plant

On average, a 10-foot row will yield at least 10 pounds of sweet potatoes.

## How and when to plant

Sweet potatoes are grown from slips, which are plant shoots that grow from one end of a mature sweet potato. You can buy slips or grow them from mature sweet potatoes. Sweet potatoes placed in moist potting soil will often grow slips in a few weeks. You should start them indoors about a month before planting outdoors. Once the slips root, break them off from the sweet potato and move them to the garden when the weather is warm. You can get many slips from one sweet potato. Plant slips 12 to 15 inches apart in 36-inch-wide rows to allow vines to grow.



Slips can grow from a mature sweet potato.  
*University of Kentucky Cooperative Extension*

Region	Transplanting Date
Eastern Kentucky	Mid-June
Central Kentucky	Early June
Western Kentucky	Early June

Once your sweet potatoes are in the ground, they will take 90 to 140 days to mature, based on the variety.

Go easy on the fertilizer. Check with your county Extension agent about doing a soil test. They will give you guidelines to make your soil perfect for sweet potatoes. Too much nitrogen in the soil might lower your yield of sweet potatoes. Follow the guide in [Growing Your Own: Preparing Your Garden \(NEP-219\)](#), and do not add extra nitrogen in the summer. Sweet potatoes favor loose, sandy soil that drains well. Try mounding soil into a hilled row before planting to help with drainage. Ensuring the soil around the sweet potatoes does not dry too much will help prevent the sweet potatoes from splitting.

## Pests and diseases

Wireworms can cause problems when growing root vegetables. Wireworms are common when planting in a place where lawn grass was grown previously. Flea beetles can also pose a problem with a sweet potato crop. Flea beetles are insects around one-tenth of an inch long that feed on the leaves and stems of sweet potatoes.

If possible, buy your slips from approved vendors that have certified clean (disease-free) stock. A disease, such as scurf, can be on the slips that you buy and can spread to other sweet potatoes. If you are buying slips from an unreliable source or growing your own slips from mature sweet potatoes, you may get these problems on the plants. Call your local county [Extension](#) office for ways to handle pests.



A close-up photograph of a wireworm.  
*University of Kentucky Cooperative Extension*



Wireworms will eat their way through root vegetables such as sweet potatoes.  
*University of Kentucky Cooperative Extension*



Flea beetles and the damage they cause to plant leaves.  
 Whitney Cranshaw, Colorado State University, Bugwood.org, CC BY 3.0



Blackened spots show scurf damage on a sweet potato crop.  
 Charles Averre, North Carolina State University, Bugwood.org, CC BY-NC 3.0



It is helpful to leave sweet potatoes in the field for a couple of hours after harvesting to make sure they dry before curing.  
 Lance Cheung, USDA, via Flickr

## Harvesting

Sweet potatoes will keep growing as long as their vines stay alive. This depends on water and warm weather. The vines will die from frost or by a gardener deciding to harvest the crop. Clip the vines back to soil level before the first frost or when you are ready to harvest. This will make it simpler to harvest the sweet potatoes. Harvest sweet potatoes with a spade, shovel, or hand trowel. The hand trowel may be hard to use, but it is less likely to hurt the sweet potatoes.

## Serving

Sweet potatoes are a good source of fiber, complex carbohydrates, and vitamins A and C.

Choose small to medium-sized sweet potatoes with smooth, unbruised skin. Scrub well. Leave whole or peel, then slice, dice, or shred.

**Baking:** Pierce skin in several places and rub with margarine, if desired. Arrange on a baking sheet in a single layer and bake uncovered at 375 degrees F until soft when squeezed (45 to 60 minutes).

**Boiling:** In a three-quart pan, boil four whole, medium-sized potatoes, covered in two inches of water, until tender when pierced with a fork or knife. Drain.

**Microwaving:** Pierce skin and place on a paper towel in microwave. If cooking more than two at a time, arrange like spokes of a wheel. Microwave on high, turning half-way through cooking time. Allow four to five minutes for one potato.

## Curing and storing

After harvesting, cure your sweet potatoes for three to five days at 80 degrees F to 85 degrees F in high humidity. The right place can often be found under the shade of a tree on a warm day. Curing the sweet potatoes gives them time to heal any cuts from harvesting and stretches storage time. During this time, sweet potatoes make more sugar, giving them better flavor. After being cured, move the sweet potatoes to an unfinished basement or root cellar. This room should stay around 55 degrees F. Avoid storing at temperatures below 50 degrees F.

## Clean up

After the season, make sure to clean up any leftover vegetation from the beds. If your sweet potatoes had any evidence of diseases or pests, don't compost them to avoid spreading the problem to your whole garden.

### Authors

Daniel Bowen, Extension Associate  
Rick Durham, Extension Consumer  
Horticulture Specialist  
Rachel Rudolph, Extension Vegetable Specialist

### Contributors

Jann Knappage, Food System Specialist  
Rita May, Senior Extension Associate  
Michele West, Marketing and Social  
Media Specialist

## Summary

### Varieties

There are many varieties of sweet potatoes. Varieties that grow well in Kentucky are Beauregard, Hernandez, O'Henry, Japanese/Murasaki, and Covington.

### How much to plant

On average, a 10-foot row of sweet potatoes will yield at least 10 pounds of sweet potatoes.

### How and when to plant

Sweet potatoes are grown from slips, which are plant shoots that grow from one end of a mature sweet potato. Plant slips 12 to 15 inches apart in 36-inch-wide rows to allow vines to grow. Once your sweet potatoes are in the ground, they will take 90 to 140 days to mature, based on the variety.

### Pest and diseases

Wireworms are pests that can affect sweet potatoes. A disease that affects sweet potatoes is scurf.

### Harvesting

Sweet potatoes will keep on growing as long as their vines stay alive. Clip the vines back to soil level before the first frost or when you are ready to harvest. Harvest sweet potatoes with a spade, shovel, or hand trowel.

### Serving

Sweet potatoes can be baked, boiled, or microwaved.

### Storing

After harvesting, cure sweet potatoes for three to five days at 80 degrees F to 85 degrees F in high humidity. After being cured, move the sweet potatoes to an unfinished basement or root cellar. This room should stay around 55 degrees F and have low humidity.

### Clean up

After the season, make sure to clean up any leftover vegetation from the beds.

## Cooperative Extension Service

Agriculture and Natural Resources  
Family and Consumer Sciences  
4-H Youth Development  
Community and Economic Development

## MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity. Reasonable accommodation of disability may be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.

Lexington, KY 40506 Issued 07-2023



Disabilities  
accommodated  
with prior notification.





# Apple Cranberry Waldorf Salad

**1 cup** chopped Granny Smith apple

**1 cup** chopped Red Delicious apple

**1 cup** diced celery

**1 cup** halved seedless green grapes

**1 cup** halved seedless red grapes

**1½ cups** dried cranberries

**½ cup** chopped walnuts

**8 ounces** non-fat vanilla yogurt

**2 tablespoons** honey

**¼ teaspoon** cinnamon

**1. Combine** chopped apples and diced celery and put in a medium sized bowl. Add grapes, cranberries, and walnuts to the mixture. Stir ingredients together.

**2. In a separate bowl,** add the yogurt, honey, and cinnamon. Stir together and pour over the fruit mixture. Cover and chill before serving.

**Yield:** 8, 1 cup servings.

**Nutrition Analysis:** 210 calories, 5 g fat, 0 mg cholesterol, 35 mg sodium, 41 g carbohydrate, 3 g fiber, 34 g sugar, 3 g protein.

Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.



## Kentucky Apples

**SEASON:** Early summer through December.

**NUTRITION FACTS:** A medium size apple, about 2 to 2½ inches round, has about 75 calories and provides bulk in the diet, which helps the body digest food. The apple is low in sodium and high in potassium, making it a great natural snack.

**SELECTION:** Look for firm, crisp, well-colored fruit. Avoid those with shriveled skins, bruises, worm holes, and decayed spots. Always handle apples gently to avoid causing bruises, blemishes, or other defects.

**STORAGE:** Use those with bruises or skin breaks as soon as possible. Apples that are slightly under-ripe should be stored in a cool place to ripen. Once ripe, apples will keep a week or longer stored in the refrigerator vegetable drawer or in a plastic bag.

**PREPARATION:** Raw apples will darken when the cut surface is exposed to the air. Protect cut or peeled apples from darkening by mixing with ascorbic acid

**Source:** [www.fruitsandveggiesmatter.gov](http://www.fruitsandveggiesmatter.gov)

such as lemon or orange juice. Only work with about five apples at a time to prevent darkening. Mix 1 teaspoon ascorbic acid with 3 tablespoons of water. Toss gently with apple slices. Apples may be preserved by several methods: freezing, drying, or canning. Please contact your county Extension office for more information.

**VARIETIES:** More than 2,500 varieties are found in the United States. The following are easily available and popular in Kentucky: Lodi, Red Delicious, Rome, Winesap, Gala, Jonathan, Cortland, and Golden Delicious.

### APPLES

#### Kentucky Proud Project

County Extension Agents for Family and Consumer Sciences

University of Kentucky, Nutrition and Food Science students

**September 2011**

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. For more information, contact your county's Extension agent for Family and Consumer Sciences or visit [www.ca.uky.edu/fcs](http://www.ca.uky.edu/fcs).

COOPERATIVE  
EXTENSION  
SERVICE

