## Weed It and Reap

# Martin-Gatton College of Agriculture, Food and Environment

FRANKLIN COUNTY
COOPERATIVE EXTENSION
MAY 2024 NEWSLETTER

Franklin County 101 Lakeview Court Frankfort, KY 40601-8750 (502) 695-9035 Fax: (502) 695-9309



# Don't Get Burned by Fire Blight

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

Fire blight is an important disease of apple, crabapple, pear, and flowering pear in Kentucky. Symptoms are often not observed until late spring or early summer; however, initial infections occur at bloom. The pathogen survives winter in dead, dying, and diseased wood and in cankers. Removal of these pathogen sources can reduce spread of fire blight and should be completed in late winter while the pathogen is dormant.

### **Fire Blight Facts**

• Early symptoms include wilt of flower cluster and blossom death (Figure 1). Disease spreads to shoots or branches where tips wilt and rapidly die (blight) to form a characteristic 'shepherd's crook' (Figure 2). Dark brown, sunken cankers (stem lesions) develop and expand to girdle branches, resulting in branch death (Figure 3). (Continued on pg. 2)

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### (Continued from pg. 1, Don't' Get Burned By Fire Blight)

- Potential hosts include apples, pears, and several landscape woody ornamentals in the rose family.
- Primary infection occurs at bloom and may continue through petal fall or until shoot elongation ends.
- Rainy conditions, periods of high humidity, and temperatures between 65°F and 70°F favor disease development.
- Caused by the bacterium Erwinia amylovora.
- Bacterial cells overwinter in dead, dying, and diseased wood.



**Figure 1:** Apple flower clusters infected with fire blight. (Photo: Nicole Gauthier, UK)



**Figure 2:** Rapid shoot death from fire blight may result in a 'shepherd's crook' appearance. (Photo: Nicole Gauthier, UK)



brown, shrunken cankers develop and expand to girdle branches. (Photo: Nicole Gauthier, UK)

#### **Management Options**

- Select cultivars that are tolerant or resistant to fire blight.
- Maintain plant health with proper nutrition and irrigation practices.
- Prune to increase air flow through the plant canopy.
- Remove infected plant tissues during winter when plants and pathogens are dormant. Do not prune when trees are wet.
   Burn, bury, or otherwise dispose of diseased material.
- Bactericides should be applied preventatively. Once infection occurs, sprays are not effective. Homeowners can apply copper during dormancy to reduce overwintering inoculum. Additional bactericides available for commercial growers are presented in the *Commercial Fruit Pest Management Guide* (ID-232). Always follow label directions when utilizing bactericides.
- Fire blight risk throughout the season can be determined by the disease development models available through the <u>UK Ag Weather</u> Center website.



Office of the State Entomologist

# CITIZEN SCIENCE PROGRAM!

Join our

Kentucky's Office of the State Entomologist monitors for new invasive pests that threaten Kentucky's agriculture and natural resources. We are seeking volunteers for our Citizen Science program to help monitor invasive species in Kentucky!

## **EARLY DETECTION OF INVASIVE PESTS IS KEY!**

If you are interested in monitoring invasive pests and helping to protect Kentucky's agriculture and natural resources, please join our Citizen Science program!

### **APPLY TODAY!**

Scan the QR code or visit the URL below.



https://ose-uky-edu.hub.arcgis.com/pages/citizen-scientist

### Effective Strategies to Prevent Plant Diseases in Your Garden

Source: Rick Durham, Extension Professor, Department of Horticulture

In the unseen sphere of our vegetable gardens, plant pathogens including fungi, bacteria, nematodes and viruses are everpresent threats. However, with proactive measures, gardeners can successfully manage these threats and maintain healthy vegetable gardens.

Selecting the right location for your garden is the first step in prevention. Opt for a sunny area with well-drained soil to discourage the growth of pathogens. Raised beds can be an effective solution for improving drainage and air circulation around plants. It's also crucial to clear out old plant debris, which can harbor diseases from the previous season.

When choosing plants, prioritize diseaseresistant varieties and inspect any transplants for signs of disease before introducing them to your garden. For seeds, consider those that have been treated with fungicide to give them a better chance of thriving. Planting in warm soil and ensuring proper spacing between plants are additional measures that can minimize stress and disease susceptibility.

Crop rotation is an invaluable strategy, especially in smaller gardens. Changing what's planted in a specific area every few years can prevent the buildup of soil-borne diseases. For crops that are particularly disease-prone, consider skipping their cultivation for a few years or growing them in

containers separate from the garden.

Maintaining a weed-free garden throughout the growing season is essential. Weeds can serve as hosts for pests and diseases, transferring them to your vegetable plants. Proper watering techniques can also make a significant difference; water at the base of plants to avoid wetting foliage, and if overhead watering is necessary, do so early in the day to allow leaves to dry.

Avoiding mechanical injury to plants, such as from gardening tools or rough handling, can prevent openings for pathogens.

Furthermore, refraining from working in the garden when plants are wet can reduce the spread of diseases.

By taking these steps gardeners can effectively manage plant diseases. This approach not only protects the garden from the myriad of pathogens waiting to attack but also leads to a bountiful and healthy harvest.



# **HOW TO KILL A TREE**

Few residential trees die of "old age." Mechanical damage and improper tree care kill more trees than any pests or disease. **AVOID** making these harmful mistakes and consider hiring a certified arborist to perform advanced tree care.



- "Top" your tree to encourage weak watersprouts
- Leave codominant leaders with included bark that split during winds and storms
- Plant close to house or obstacle to reduce adequate growing space
- Leave "stubs" when pruning to promote branch decay
- Leave crossing branches when pruning to rub bark wounds
- Ignore pests, diseases, and nutrient deficiencies
- Nail or attach items to tree to damage bark and girdle branches
- 8 Encourage pests by leaving broken branches on the tree
- Coat pruning cuts with paint or sealer to slow wound closure
- Cut large branches flush with the trunk to increase decay
- Damage roots and trunk with lawn equipment
- Spray herbicides on turf that accidentally poison tree
- Cut through roots when digging trenches
- Encourage rot and hinder tree growth by leaving wrap on trunk
- Leave tree staked until guy wire girdles trunk
- Pile mulch against the trunk to encourage rodent damage and bark rot
- 17 Prevent water and nutrients from reaching the roots by covering the soil with a plastic weed barrier
- Leave root ball twine on to girdle the trunk
- Leave wire basket in place to girdle roots
- Leave on treated or synthetic burlap to prevent root growth
- Leave circling roots that will strangle the tree
- Dig planting hole too narrow and overamend backfill to discourage proper root spread
- Dig hole too deep to smother the trunk flare and drown the roots
- Drown the roots by over-irrigating your lawn

### Moving Transplants to the Garden

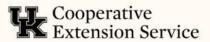
Whether you buy plants or grow your own, the time comes to plant them outside.

#### Follow these eight steps:

- 1. Transplant on a shady day to prevent wilting
- 2. Soak transplants' roots thoroughly before transplanting.
- 3. Handle the plants carefully.
- 4. Dig a hole large enough to hold the roots.
- 5. Pour 1 cup of starter solution around the plant.
- 6. Leave a slight depression for water to collect.
- 7. Shade the plants for a few days after transplanting by putting newspapers or cardboard on their south sides.
- 8. Water the plants once or twice during the next week.

Learn more by checking out Home Vegetable Gardening in Kentucky (ID-128).

An Equal Opportunity Organization.







# Navigate Stormwater Challenges This Summer

Source: Brad Lee, Department of Plant and Soil Sciences Professor

Stormwater management is a significant environmental challenge, especially in regions with extensive urban development like Kentucky. In response, Municipal Separate Storm Sewer Systems (MS4s) have been implemented in over 100 communities in 34 counties to manage and treat stormwater runoff before it reaches natural water bodies.

The University of Kentucky Martin-Gatton College of Agriculture, Food and Environment offers comprehensive educational materials to improve stormwater management within MS4-regulated communities. These resources are organized by both topic and season, ensuring they are relevant and easily accessible year-round. Just some of the many topics covered include:

- Lawn Care and Pollution Prevention:
   Instructions on proper lawn care to prevent nutrient runoff and advice on managing lawn debris and litter.
- •Water Conservation Techniques: Strategies for conserving water at home, including using rain barrels and rain gardens, which also help reduce stormwater runoff.
- •Native Plants and Biodiversity: Guidance on using native plants to enhance biodiversity and improve the absorption of rainwater.
- •DIY Rain Barrel Projects: Instructional videos and factsheets, such as "Building a Rain Barrel from a Pickle Barrel," teach

residents how to construct their own rain barrels, reducing runoff and promoting water reuse.

•Rain Garden Design and Maintenance:
Publications like "Residential Rain Garden:
Design, Construction, and Maintenance"
provide step-by-step guides on creating
effective rain gardens, which are essential for
absorbing rainwater and reducing runoff.

For those seeking more hands-on involvement, the university facilitates workshops offering additional information and assistance on setting up rain barrels and gardens. These workshops provide practical skills and empower participants to take active roles in their community's stormwater management efforts.

Beyond educational outreach, UK is researching and developing advanced stormwater management technologies. For instance, studies on permeable pavements and low-impact development techniques are part of the university's efforts to discover more efficient ways to manage stormwater in urban settings.

To access these materials, visit <a href="https://water.ca.uky.edu/MS4">https://water.ca.uky.edu/MS4</a>.







# GARDEN CLUB

For youth ages 9-18

4-H GARDEN CLUB WILL BE GROWING AND LEARNING ABOUT:

- Seed to Supper Program
- Grow and harvest your own garden
- Pollinator Gardens
- Horticulture, Floral design and Flower Shows



3rd Thursday of the month a5:00 pm



Franklin County
Extension Office

101 Lakeview Ct.
Frankfort KY 40601

QUESTIONS? CONTACT THE FRANKLIN COUNTY EXTENSION OFFICE AT 502-695-9035 OR EMAIL THE CLUB LEADER BETSY KENNEDY @ YARNADDICTION62@GMAIL.COM











### Capital Area Extension Master Gardeners

### Paula Mullins Growing Gardeners Grant Application

The Capital Area Extension Master Gardeners (CAEMG) invites schools in Kentucky Counties to apply for grant money to seed a garden education project in the classroom or community. Pre-K through 12th grades are eligible to receive an award between \$250 - \$500. Preference will be given to new projects, and to those counties who have a CAEMG participating Member.

Project ideas include (but are not limited to!):

- School or community garden with cool weather, spring crops
- Composting food scraps and yard waste
- Tree planting
- Planting pollinator gardens
- Houseplant propagation and public sale
- Starting seedlings and selling or donating for summer vegetable gardens
- Educational trip to a botanical garden
- Student-led effort to partner with the appropriate county entity to identify and label plants at a local park to help educate the public
- Invasive plant species identification and removal project

At the conclusion of the project, students shall submit a Project Summary in the form of a trifold project board. The Project Summary should include between 10-20 pictures of the students at work, and brief captions of what is being done. Failure to submit the required Project Summary shall disqualify the awardee from future awards.

Projects that propagate plants and have available inventory at the end of April will be invited to setup a table at the annual CAEMG Plant Sale and earn money to seed future gardening projects. All sale tables shall have the trifold display with pictures of engaged students and captions about the project.

#### Interested parties should complete the CAEMG Growing Gardener Grant Application and submit to the CAEMG email by September 30.

Awards will be made in the second week of November.

Thank you for taking the time to apply for this grant. We are excited about funding as many proposals as possible, and hope you will contact us with any questions, concerns, etc. that you may have. We know you are caring, giving educators, and we want to be part of your success!

#### Submit questions and/or completed application to:

capitalareamastergardeners@gmail.com

CAEMG Growing Gardeners Grant

Lexington, KY 40506

Application Information

Cooperative **Extension Service** 

Agriculture and Natural Resources

Family and Consumer Sciences -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, sea sexual orientation, gender identity, gender capteression, pregnancy, martial status, genetic information, ago, vertera physical or mental disability or reprisal or retalization for prior civil rights activity. Reasonable accommodation of dismay be available with prior notice. Program information may be made available in languages other than English. University of Kentucky, State University, U.S. Department of Agriculture, and Kentucky Counties, Coopera

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT









### Capital Area Extension Master Gardeners

### Paula Mullins Growing Gardeners Grant Application

Application Date	County	Grade Level(s)	Requested Grant Amount (Not to exceed \$500)	
School				
Grant Coordinator Name and Title				
Contact Email				
Contact Phone				
Names of any project collaborators (optional)				
Project Title				
Target Audience				
Project Overview				
Provide a brief statement about the proposed project.				
Project Objectives				
Provide a bulleted list of objectives about the desired outcome of the proposed project.				
Desired Outcome				
Provide a statement about the desired outcome of the proposed project.				

CAEMG Growing Gardeners Grant



Project Implementation (Step-by-step), including Milestone Timeline:					
Outline the steps of the project, from the time					
an award is received					
through the submission					
of the required					
PowerPoint project					
summary.					
Project Budget					
Describe all items for					
purchase and estimated					
costs. Mention any co-					
funding from the school					
or other sources.					
Project Evaluation					
Provide information on					
how you will determine					
the effectiveness of the					
project or program.					
Include the method that will be used to verify the					
completion of the					
project or program.					
Project Summary Submission					
Trifold project board including pictures of students at work and captions about the					
project. Details should include the school hame, project title, objectives, timerine,					
budget, and evaluation. If students will sell at the CAEMG Annual Plant Sale, you may leave space to include picture(s) from the sale.					
Photo Releases Obtained?					
It is the teacher/school's r	Y/N				
pictured participant. CAEMG may utilize these images for promotional purposes in					
association with future grant awards.					
Do wish to reserve a table to sell available inventory					
at the CAEMG plant sale at the end of April?					
Table reservations require	V/N				
the CAEMG logo and the	Y/N				

Signature	Date

Updated 5/7/24.









Join us the 1st Thursday of every month





# vice Adult Cooking Club



Franklin County Extension Office 101 Lakeview Court, Frankfort, KY

> 5:30 - 7:30pm June 6, 2024

RSVP Required pamela.holbrook@uky.edu or call 502-695-9035

# GROW IT, EAT IT, COOK IT

GROW YOUR OWN FOOD, COOK DELICIOUS RECIPES, AND ENJOY A TASTY MEAL TOGETHER! EACH PARTICIPANT WILL GET TRANSPLANTS OR SEEDS TO GROW AT HOME.

@ 6PM

Mar 14 -Potatoes

April 18 -Broccoli & Cauliflower

**May 16** -Tomato

June 20 -Pepper

July 18 -Summer Squash

Aug 15 - Spinach

Sept 12 - Radishes

-Garlic Oct 10



SCAN THE OR CODE OR **ENTER THE LINK TO** REGISTER.



HTTPS://FORMS.GLE/SGBQOKHNX93JMJXQ6

YOU MAY ALSO CALL TO REGISTER: 502-695-9035



FRANKLIN COUNTY COOPERATIVE EXTENSION SERVICE 101 LAKEVIEW COURT, FRANKFORT, KY 40601 502-695-9035

Cooperative **Extension Service**  MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT











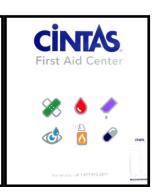
At the Franklin County Extension Office, we prioritize your safety, which is why we have installed First Aid kits and an AED device on both levels of our facility.

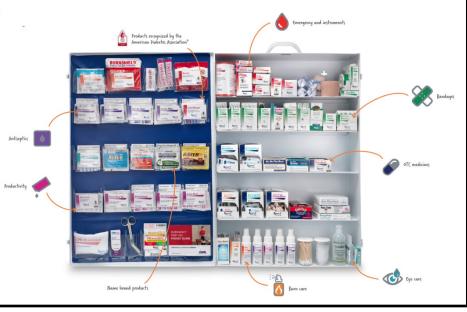
An AED is a portable electronic device that can be used to treat sudden cardiac arrest (SCA) by delivering an electric shock to the heart, helping to restore a normal rhythm. These devices are designed to be used by non-medical personnel, making them accessible to bystanders in case of an emergency.

First aid kits play a crucial role in public safety and can significantly impact outcomes during emergencies, especially when professional medical services are not immediately available.















### Easy Peach Cobbler

½ cup whole wheat flour 1½ cups sugar (divided) 1 ta

½ cup all purpose flour1½ teaspoons baking½

powder 1 pinch salt 1 cup skim milk

1/2 cup unsalted butter

**4 cups** fresh peeled peaches

**1 tablespoon** lemon juice

**1 teaspoon** ground nutmeg or cinnamon

1. Preheat the oven to 375° F. Combine the flour, baking powder, salt and ¾ cup sugar in a large mixing bowl. Add the milk and mix only until the dry ingredients are wet.

**2. Melt** the butter and **pour** into a 13 x 9 inch baking dish or pan. **Add** the flour mixture on top of the butter. Do not stir.

3. In a saucepan, heat the peaches, ¾ cup sugar and lemon juice until the sugar is dissolved and the peaches are coated. Pour evenly over the flour

**1. Preheat** the oven to 375° F. **Combine** mixture. Do not stir. **Sprinkle** with the flour, baking powder, salt and ¾ nutmeg or cinnamon.

**4. Bake** for 40 minutes or until crust is golden brown. **Remove** from oven and serve warm.

Yield: 12 servings.

Nutritional Analysis: : 190 calories, 8g fat, 5g saturated.fat, 80 mg sodium, 20mg cholesterol, 32g carbohydrate, 1g fiber, 24g sugar,

2g protein.

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

Adam Leonberger

### **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

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