HORTICULTURE NEWSLETTER

Spring 2025

"Around and About the Garden with Annette"

Martin-Gatton College of Agriculture, Food and Environment
University of Kentucky

Cooperative Extension Service
Daviess County
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Tips From Annette

- Continue to watch the weather and prepare to cover tender plants if a frost or freeze is predicted.
- Remove weeds quickly to prevent them from producing more seeds.
- The best time to fertilize the lawn is in the fall.
- The best time to fertilize most trees and shrubs is in the fall.
- Don't forget a hat and sunscreen while gardening.

Farmers' Market

The Owensboro Regional Farmers' Market is now open at 1205 Triplett Street in Owensboro. Saturday hours are from 8:00 a.m. to 12:00 p.m. Tuesday and Thursday hours start in June.

Weather Alert App

This app from the UK Ag Weather Center is an excellent resource for staying safe and informed. It provides daily and hourly forecasts, high-resolution radar, and National Weather Service alerts sent directly to your phone. Without any distracting ads, this app can act as another reliable warning source during severe weather. To download via iOS, visit https://apple.co/3wN3645, download via Android, visit https://bit.ly/4dUyxdq.

Upcoming Events

Tuesday, May 20, 2025
"Start Your Summer with Extension" Open House, 5-7:00 p.m. at the Daviess County Extension Service Office.

Thursday, May 29, 2025
Living with Alpha-Gal Syndrome Webinar Event, 6:00 - 7:30 p.m.

Tuesday, June 3, 2025
"Know and Glow" Learn all about lightning bugs, 6:00 - 8:00 p.m. at the Western Kentucky Botanical Garden.

Tuesday, July 15, 2025
Fair entry drop-off, 4-7:00 p.m. at Daviess County Lions Club Fairgrounds.
Fair entries are judged on 5 categories:

- Condition
- Quality
- Uniformity
- Trueness to type
- Size

Information on what is accepted as fruit, vegetable, flower, and houseplant entries is available at the Daviess County Cooperative Extension Office or https://daviess.ca.uky.edu/dc-fair.

Wednesday July 16-Saturday July 19, 2025
Daviess County Lions Club Fair

Home Remedy Pest Control

By: Tad Campbell, Extension Associate for Pesticide Safety Education Program

Source: Kentucky Pest News, April 2025

The rise of "homemade" or "DIY" pest control remedies has prompted many individuals to experiment with natural solutions in an effort to avoid harsh chemicals and save on costs. However, before using or making your own pesticides, it's essential to understand their potential risks, legal implications, and effectiveness. Here's a look into the concerns and legalities surrounding homemade pesticides.

Are Homemade Pesticides Legal?

In the United States, homemade pesticides fall under the jurisdiction of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). FIFRA mandates that all pesticides, whether homemade or commercial, must be registered with the Environmental Protection Agency (EPA) or qualify for an exemption. Products registered by the EPA have been thoroughly tested for effectiveness and safety to applicators, consumers, the environment, and plants. When products are used according to label instructions, we can be assured they are not harmful. While natural ingredients like garlic or vinegar might seem harmless, these mixtures are still considered pesticides and are subject to the same regulations as store-bought products.

The issue lies in the lack of oversight on homemade remedies. Since many DIY concoctions are not registered, users can unknowingly violate FIFRA regulations. Even if the ingredients themselves are considered safe, improper usage or inadequate labeling can create risks, making it crucial to verify whether a homemade pesticide complies with regulatory standards.

In addition to FIFRA, Section 408 of the Federal Food, Drug, and Cosmetic Act (FFDCA) provides the EPA authorization to set tolerances and maximum residue limits for pesticides on foods. Tolerances set by the EPA are "safe" or there is "reasonable certainty that no harm will result from aggregate exposure to the pesticide residue." (Source- EPA Summary of FFDCA website)

Effectiveness of Homemade Remedies

Although some homemade remedies, such as soapy water or vinegar-based sprays, are often touted as effective pest control solutions, their actual efficacy is highly variable. Unlike commercial products that are rigorously tested for performance, homemade pesticides lack scientific data to support their reliability in controlling pests. Many online recipes simply do not have the potency or consistency required to target pests effectively, and misuse can even exacerbate the problem.

For instance, while dish soap may kill certain pests by suffocating them, its detergent properties can also harm plants by stripping protective waxes from their leaves. Furthermore, formulations of household products such as dish soap may change without any obvious indication on the packaging, resulting in different effects on plants from batch to batch of homemade pest control remedies. This is just one example of how homemade mixtures, while seemingly harmless, may cause damage to your plants or the environment. In contrast, registered commercial pesticides are designed to work more effectively without posing harm to plants when used according to instructions.

Health & Environmental Concerns

Homemade pesticides may seem like an environmentally friendly alternative to chemical-laden commercial products, but they often come with hidden dangers. For example, some homemade solutions can be toxic to pets or children, especially if ingested or improperly stored. Furthermore, because these solutions are not tested for safety, their long-term environmental impact remains unclear.

Home Remedy Pest Control continued

By: Tad Campbell, Extension Associate for Pesticide Safety Education Program
Source: Kentucky Pest News, April 2025

Ingredients of household products can sometimes be more hazardous when mixed. For example, mixing substances like hydrogen peroxide and vinegar produce peracetic/peroxyacetic acid which is highly corrosive and may lead to irritation of skin, eyes, and respiratory system. Additionally, there is no clear guidance on the appropriate storage or disposal of these mixtures, leading to potential risks of poisoning or environmental contamination.

Lack of Instructions & Safety Guidelines

Another concern is that homemade pesticides generally lack the detailed instructions that are provided with commercially available products. The labels on commercial pesticides contain important information, such as safe application methods, recommended dilution ratios, and first-aid steps in case of exposure. Without these guidelines, users are more likely to misuse the product or expose themselves to health risks.

This is a critical issue, as improper handling of homemade pesticides can result in chemical burns, inhalation of toxic fumes, or skin irritation. Worse, improperly stored mixtures can be mistaken for food or beverage containers, which has led to several poisoning incidents, particularly among children.

Alternatives to Homemade Pesticides

Rather than relying on potentially harmful or ineffective home remedies, consider alternative pest control methods. Integrated Pest Management (IPM) offers a more sustainable approach, using a combination of biological, physical, and cultural practices to manage pest populations. For example, encouraging natural predators like ladybugs can help control aphids, while maintaining a healthy garden environment can naturally discourage pests.

When pest problems arise, it's important to carefully evaluate your options and consider professional pest control products or services that are safe, legal, and effective. Though homemade remedies may seem like a cost-saving, natural solution, they come with risks that may outweigh the benefits.

Conclusion

While homemade pesticides may seem like an appealing, natural alternative to chemical pesticides, they carry significant risks, both in terms of safety and legality. Homemade mixtures are often unregulated, untested, and may be harmful to humans, pets, and the environment. If you're considering using a homemade pesticide, it's essential to understand the legal implications, risks, and potential harms involved.

Instead of relying on unproven remedies, it may be more prudent to seek out safer, scientifically validated pest control solutions, such as those available through professional services or well-researched commercial products. When in doubt, always prioritize safety and compliance with local regulations to ensure the well-being of your household and the environment.

Cooperative Extension Service

Webinar Event

Living with Alpha-gal Syndrome

Learn more about AGS (red meat allergy) and how to reduce your risk with University of Kentucky Cooperative Extension

Thursday, May 29th
6-7:30pm CDT

Topics Covered

- AGS basics
- Tick bite prevention
- Diet & lifestyle management
- Q/A session

To watch at home, register at ukfcs.net/AgS or scan the QR code

To watch with a group at the OCTC Technical Building Room 100, call the Daviess County Cooperative Extension Office at (270) 685-8480 to reserve a seat.

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

Lexington, KY 40506

Cooperative Extension Service

Western Kentucky Botanical Garden

KNOW & GLOW

LEARN ALL ABOUT LIGHTNING BUGS!

June 3, 2025

6:00-8:30 p.m.

Western Kentucky Botanical Garden

2731 W 2nd St, Owensboro, KY 42301

Daviess County Cooperative Extension Office and the Western Kentucky Botanical Garden

Free Family Event

University of Kentucky Extension Entomologist, Dr. Jonathan Larson, shares his knowledge of lightning bugs.

Repeated presentation times:

6:15 p.m.

6:45 p.m.

7:15 p.m.

Activities:

- Lightning bug safari
- Bug Catchers
- Face painting
- Crafts
- Food for purchase

Bring your own lawn chair or blanket!

Please, only spray insect repellant in the parking lot, not inside the garden.

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Lexington, KY 40506

Proper Vegetable Garden Planning for Disease Prevention

By: Kim Leonberger, Plant Pathology Extension Associate, and Nicole Gauthier,
Plant Pathology Extension Specialist for Vegetables
Source: Kentucky Pest News, April 2025

Warmer temperatures mean spring is right around the corner, and gardeners everywhere are ready to get plants in the ground. However, prior to planting, growers should develop a plan for this year's vegetable garden. A thoughtful approach to garden layout and preparation can influence disease pressure as well as the overall success of the crop. Here are few areas to consider to get ahead of diseases as you make your vegetable garden plans.

Planting Site

The best vegetable garden sites are sunny with adequate moisture and fertile, well-drained soil. Avoid low spots, which can worsen soilborne diseases, and shady locations, which can worsen foliar diseases. Prior to planting, it is advisable to draw a planting map. This allows consideration into site limitations and succession planting. Scale models of the garden space can be drawn on graph paper, made in Microsoft Excel, or designed using one of many available apps (Figure 1). Choose perennial locations carefully to make tilling more convenient. Taller crops, such as sweet corn or tomatoes, should be planted on the north or west side of the garden to avoid shading shorter plants. Retain these maps from year to year, and refer when planning next season.

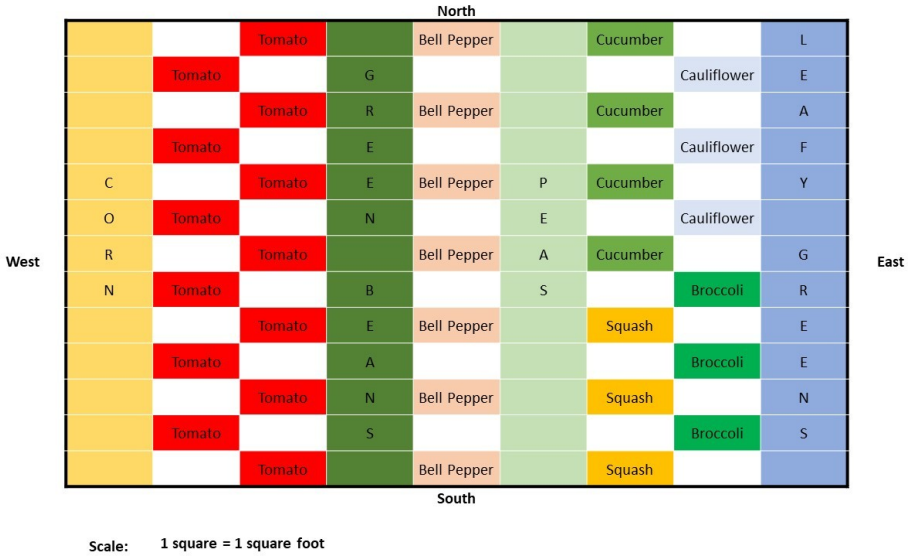

Figure 1: *An example of a garden map made in Microsoft Excel. (Image: Kim Leonberger, UK)*

Crop Rotation

If the same garden site is used each year, avoid planting the same or closely related crops in an identical place each year. A three-year rotation is recommended, however, even a year or two out of a certain plant family can be beneficial. Crop rotation prevents disease-causing pathogens from building up in soil. Multiple vegetable crops are closely related and are prone to many of the same disease issues. Closely related crops are listed below.

- Tomatoes, Peppers, Potatoes, and Eggplant
- Cucumbers, Pumpkins, Squash, Watermelons, and Muskmelons
- Peas, Broad Beans, Snap beans, and Lima Beans
- Cabbage, Cauliflower, Kale, Collards, Brussels Sprouts, Broccoli, Kohlrabi, Turnips, Rutabaga, Chinese Cabbage, and Mustard
- Lettuce, Endive, and Salsify

Proper Vegetable Garden Planning continued

- Chives, Garlic, Leeks, Onions, and Shallots
- Beets, Swiss Chard, and Spinach
- Carrots, Parsley, Celery, Celeriac, and Parsnip

Compost Piles

Avoid composting diseased plants or produce, since home compost piles typically do not reach temperatures high enough to kill pathogens. Accelerate the rate of decomposition by turning compost piles at least once per month. Avoid adding fresh material to finished compost piles, as the new material will not break down in time for spring planting. Water should be added to very dry compost piles at turning to allow for more complete decomposition.

Keep Records

Each garden season is like a school year, with lessons to be learned. Whether by app or a physical garden journal, keep track of disease and pest issues as they occur, to help develop strategies to prevent or manage these issues. Also include details about cultivars and their performance, as well as, weather patterns.

Additional Resources Available through your local county Extension Office:

Bean & Pea IPM Guide for Small Acreage & Backyard Production (PPFS-VG-22)
Cole Crop IPM Guide for Small Acreage & Backyard Production (PPFS-VG-23)
Cucurbit Crop IPM Guide for Small Acreage & Backyard Production (PPFS-VG-19)
Tomato & Pepper IPM Guide for Small Acreage & Backyard Production (PPFS-VG-21)
Home Vegetable Gardening in Kentucky (ID-128)
Vegetable Cultivars for Kentucky Gardens (ID-133)
Homeowner's Guide to Fungicides (PPFS-GEN-07)
Home Composting: A Guide to Managing Yard Waste (HO-75)

Grits, Greens, and Egg Bowl

Yield: 1 serving
Serving size: 1 recipe

Ingredients:

- ¼ cup quick-cooking grits
- 2 Tablespoon shredded, sharp cheddar cheese
- Nonstick cooking spray
- ½ cup packed, fresh, chopped spinach
- Dash garlic powder
- 1 egg
- Salt, ground black pepper, hot sauce (optional)

Directions:

1. Cook grits according to package directions. Once done, stir in cheese. Set aside until the remaining ingredients are prepared.
2. While grits cook, heat a small skillet over medium heat. When the skillet is hot, coat it with cooking spray. Add spinach and garlic powder and lightly sauté until spinach is warm and tender, about 1 minute. Remove from pan and set aside.
3. Return skillet to stove. Coat the pan with cooking spray. Crack an egg into the pan and cook the egg on each side until the yolk is set.
4. Rewash hands after handling raw eggs.
5. Assemble the meal in a bowl by first adding grits, then spinach, and topping with the egg.
6. Season to taste with salt, black pepper, and hot sauce, if desired.
7. Serve immediately. Refrigerate leftovers within 2 hours.

Notes:

Try other greens like collards or kale as a substitute for spinach or reheat leftover cooked greens. If you prefer scrambled egg, prepare it instead of a fried egg.

Nutritional Analysis per serving:

390 Calories	60g carbohydrate
10g fat	0g fiber
4.5g saturated fat	0g sugar
200mg cholesterol	17g protein
170mg sodium	

Plate it up! Kentucky Proud

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

Plant of the Month

Hylotelephium spectabile
'Autumn Joy'
Formerly known as
Sedum spectabile
'Autumn Joy'

Common Name: Stonecrop
Type: Herbaceous perennial
Family: Crassulaceae
Zone: 3 to 9
Height: 1.5 to 2 feet
Spread: 1.5 to 2 feet
Bloom Time: September to October
Bloom Description: Rosy pink buds turning to red
Sun: Full sun
Water: Dry to medium
Maintenance: Low
Flower: Showy
Attracts: Butterflies
Tolerate: Drought, clay soil, dry soil, shallow-rocky soil

Source: Missouri Botanical Garden

Please "like" the Daviess County Cooperative Extension Facebook page at:
www.facebook.com/daviesscountyextension/

Be sure to visit the Daviess County Extension Office website at **www.daviess.ca.uky.edu**

For exclusive gardening information and how-to videos, also visit and "like" the Facebook of the Green River Area Extension Master Gardener Association at **www.facebook.com/graemga/**

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