Horticulture Newsletter





The Cut Flower Garden

Supplies

- Flower seeds mixed sizes. colors, and bloom times
- Hand trowels and cultivators
- Watering can
- Balanced fertilizer such as 10-10-10 or 20-20-20
- Straw and mulch materials

Planning the cut flower garden

- Flowers can be planted in a new garden, and existing flower bed, vegetable garden or container.
- Plants need more than 8 hours of sun with well-drained soil.
- Decide what flowers to grow.
- Plan for mature size, shape and color difference.
- Choose showy, large flowers; small, delicate flowers; brilliant blazes of color; soft pastels.
- Look for varieties with long stems; some need staking.

Planting



straw to protect from heavy rain.

- Purchase seeds and plants early; plant after last frost.
- If planting in the ground, prepare the seed bed by turning the soil, and raking level.
- Seed packets will have planting depth and directions.
- Plants transplanted in the ground need water immediately.

Maintenance

- Thin newly emerged plants if too thick.
- Supplement with water if needed.
- Fertilize twice a month with a well balanced fertilizer.
- Add 2 to 4 inches of mulch when plants are 6 inches tall.
- Removing dead blooms will promote longer blooming.
- Keep weeds out of flower bed.
- Stake flowering plants if needed.



Mary Dossett Agent for Horticulture Advisor for McCracken County Extension Master Gardeners



Savannah Gilbert Horticulture Assistant

https://mccracken.ca.uky.edu/



Designing With Flowers

Plant material

- Large blooms zinnia, black-eyed Susan, sunflower, rose, Shasta daisy, marigold
- Small blooms bachelor button, cosmos, phlox, marigold
- Showy blooms celosia, snapdragon, love-liesbleeding, grass bloom head
- Filler flowers baby's breath, statice, dill flowers, queen Anne's lace
- Greenery fern, dill, basil, ornamental grass, feverfew, asparagus fern, peony leaves

Tips for harvesting flowers out of the garden

- Harvest flowers during the coolest part of the day.
- Select blooms that are half to three-quarters open; avoid blooms that are shriveling, fading, curling or falling off; avoid peak bloom time.
- Always carry a bucket of water to place the stems; keep in shade.
- Always use a sharp, clean pair of scissors or knife to make a smooth, even cut.
- Cut long stems 5 to 18 inches long; cut stems several inches longer than needed.
- Remove foliage below the water line; foliage left in the water causes bacteria to grow and cloudy water.
- Recut stems at an angle before placing in vase.
- Consider using flowers and foliage from trees and shrubs for filler and greenery.
- Keep stems in water while designing.
- Use floral preservative for longer life of flowers.



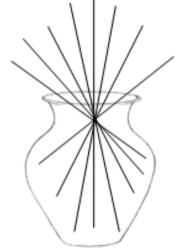
Basics of flower arranging in a vase

Supplies

- Scissors or knife
- Vases with water
- Floral preservative (optional)

Directions

- Gather materials. Select flowers and vase of choice.
- Fill vase half full of water.
- As stems are selected, remove any foliage that will be below the water line.
- Recut stems at a diagonal as this allows for a larger surface area and greater absorption of water.
- Start by placing 6 to 8 stems of greenery in a criss-cross fashion to create the base.



- Select large flowers as focal points and measure the flowers against the vase to know where to cut the stems. Stagger the height to fill the vase and create an eye-catching design.
- Fill in with smaller, secondary flowers.
- Add filler to soften the open spaces and round out the arrangement.
- Replace water every other day and use floral preservative if needed.

Donna Aufdenberg Field Specialist in Horticulture

Kid Friendly, easy-to-grow flowers



Sunflower



Zinnia

Container gardening can turn small spaces into great gardens

Container gardening turns even the smallest balcony or stoop into a pocket-sized farm. If you rent an apartment, battle heavy clay soil, or just prefer vegetables closer to the kitchen door, planting in pots lets you sidestep many headaches that come with traditional plots. The method also works for those with limited mobility as containers can sit on a sturdy table or a rolling platform, bringing those veggies up where bending and kneeling are not required.

Pots let you match each crop to its favorite microclimate. A lettuce tub can chill in afternoon shade, while an eggplant basks beside a sun-soaked brick wall that stores extra heat. Moving crops from ground to container now and then even plays a role in crop rotation; shifting soil out of the disease cycle keeps problems such as wilt or root rot from getting a foothold.

Almost any vegetable will grow this way, yet leafy greens, herbs, bush beans, peppers, and cherry tomatoes shine. Plant breeders have created compact "patio" versions that load fruit on short stems. One large pot can hold a cherry tomato, another supports a dwarf pepper, and a shallow tray brims with spinach. Remember that every plant sharing a container must enjoy the same amount of sunlight and moisture, or one partner will suffer.

The container itself matters less than drainage, volume, and weight. Clay and wooden pots breathe, so roots rarely drown, though you'll water more often on hot days. Plastic, metal, or glazed ceramic hang onto moisture longer, which is handy during vacations but demands restraint with the hose. No matter the material, drill or punch several quarter-inch holes near the bottom and raise the base on bricks or pot feet so extra water can escape. Dark, pint-sized pots heat up fast; keep them out of relentless sun unless you're growing chilies that adore warm roots.

Fill your vessel with fresh soilless mix, not ground soil. The bagged blend of peat or coir, vermiculite, and compost stays light, resists compaction, and comes free of weeds. Moisten it the day before planting; dry peat sloughs off water at first, so give it time to drink. Mix a slow-release fertilizer into the top few inches or plan to feed weekly with a half-strength liquid fertilizer once seedlings sport their second set of leaves.

Tall or vining crops need backup from the start. Slide a tomato cage, bamboo stakes, or a small trellis into place at planting so roots remain undisturbed later. On a windy balcony, lash cages to the railing or slip the container inside a larger, heavier planter for ballast.

Check moisture by sticking a finger two knuckles deep; water only when the mix feels dry. Soak until you see water run from the holes, then empty saucers so roots don't sit in a swamp. During blistering weather, move pots to temporary shade or cluster them together where foliage casts mutual cover.

When lettuce bolts or beans finish, pull the spent plants, toss the used mix onto a compost heap or garden bed, scrub the container with a 10% bleach solution, and start planning the next round. With a small stash of pots, fresh mix, and a bit of attention, you'll harvest salads, salsas, and stir-fry ingredients right outside the back door—no backyard required.

Contact McCracken County Extension office for more information on creating great container gardens



June Gardening Ideas

- Monitor and treat plants for pests
- Promote plant growth with regular fertilizing and watering
- Plant vegetables for a second harvest
- Check hoses and purchase new ones if needed
- Deadhead any bulb flowers that have bloomed (iris, daylillies, hyacinth)
- Remove weeds from garden beds / landscaping



MyIPM for Vegetables: A Grower Resource

The MyIPM for Vegetables app is a resource available for commercial vegetable growers and includes resources for production of tomatoes and cucurbits (cucumber, pumpkin, squash, and watermelon).



Growers can access information about plant diseases and insect pests that might affect their crop. Management recommendations include chemical, biological, and cultural practices. The application was developed by specialists at universities that participate in the Southeastern Vegetable Extension Workers Group, of which the University of Kentucky is a participating member. The app is available for both Apple and Android devices and is free to download. Instructions on using the MyIPM for Vegetables app can be found <u>here</u>.

After using the app, developers are seeking feedback to improve the platform through a survey, which can be accessed <u>here</u> or through the QR code below.



Figure 2: QR code to provide feedback.

Flea Beetle Management with Vegetables

Flea beetles are common pests of a wide variety of vegetable plants and can cause extensive damage to some, particularly leafy greens. While there are dozens of species of flea beetles, any specific vegetable plant may only be attacked by a few species. For that reason, in fields with a mixed planting of vegetables, some crops may experience high numbers while others are without beetles or damage. Flea beetle adult feeding is characterized by small round holes in leaves that can slow the establishment of new transplants and growth of young seedlings or kill small plants. Damage is common in the early spring, particularly when weather conditions do not favor rapid seedling growth and establishment. Fortunately, with arrival of good growing conditions, many crops can quickly recover from moderate flea beetle damage.



Figure 1. Flea beetle damage to tomato transplant (Photo: Ric Bessin, UK).



Figure 2. A flea beetle and damage to eggplant (Photo: Ric Bessin, UK).



Figure 3. Flea beetles and damage to potato. (Photo: Ric Bessin, UK)

Flea Beetle Description

Flea beetles are small, oval-shaped beetles, mostly shiny or darkcolored, but some species have stripes. Their name derives from their large hind legs and ability to jump when disturbed. Flea beetles overwinter as adults outside of fields in protected areas, such as along fencerows and wood lines, although a few species may overwinter in field soil. Flea beetle adults become active in April and May to feed on weeds and early planted vegetables. As they are generally good fliers, they can disperse over long distances to find suitable hosts. Most female flea beetles lay their eggs in or on the soil near host crop plants, but some may lay their eggs in clusters on leaves. The larvae of many species feed on roots of their hosts and are rarely seen.

Scouting

In terms of scouting flea beetles, generally scout weekly for both the adult presence and the damage that they cause. With most species, the damage appears as small roundish holes in the leaves, but with some others (like corn flea beetle) the damage can appear as long narrow scratches to the leaf.

Management

There are several options for management of flea beetles in vegetables that depend on the type of vegetable grown and size of the planting.

- Exclusion is an option for organic producers as well as smaller plantings. This is done with fine-mesh netting fastened securely around the edges to keep flea beetles out. This needs to be done preventively on the day of seeding or transplanting.
- There are some seed treatments for vegetables that can provide short duration protection after the seedlings emerge.
- For transplanted crops there are systemic treatments that can provide a few weeks of protection.
- The last option is to control flea beetles as needed using foliar applications.



For a list of commercial treatments for flea beetles in vegetables, see ID-36, Vegetable Production Guide for Vegetables, 2024-2025. By Ric Bessin, Extension Entomologist

Kentucky Strawberry Growers at Risk for Neopestalotiopsis Disease

In late August, Neopestalotiopsis disease was confirmed in strawberry cuttings across Kentucky. Some cuttings showed symptoms quickly, while others developed symptoms several days after becoming infected.

Neopestalotiopsis disease is caused by a fungus that can infect both cuttings and mature plants. Symptoms can range from leaf spots (Figure 1) to crown and root rots to fruit infections (Figure 2). The pathogen overwinters in debris and as melanized spores in soil. Once introduced to fields, it can survive 3 to 5 years.



Figure 1: Neopestalotiopsis leaf spots symptoms. (Photo: P. Brannen, University of Georgia)



Figure 2: Neopestalotiopsis fruit rot symptoms. (Photo: N. Peres, University of Florida)

Symptoms

Symptoms on leaves begin as light-colored spots with dark borders; spots expand rapidly to cause blighting and plant dieback. Leaf symptoms are easily confused with strawberry leaf spot and strawberry leaf blight. Fruit symptoms begin as tan lesions that turn orange and sunken. Fruit become mummified and develop large black fruiting bodies. Fruit symptoms can resemble anthracnose fruit rot. Symptoms progress rapidly under warm, humid conditions (68 to 85°F, 90 to 100% RH).

Spores are spread short distances by water splash and long distances by movement of infected plants. In Kentucky, Neopestalotiopsis disease was introduced by rooted cuttings and propagation material.

Management

- Avoid planting symptomatic plants or those sourced from a supplier with a history of Neopestalotiopsis disease.
- Infected plants cannot be cured.
- If you have been contacted by your cutting producer regarding potential infection, it is recommended to destroy plants immediately.
- Take extra caution to sanitize surfaces and tools. Avoid tracking soil/media to clean greenhouses and fields. The following resources provide additional information on best practices for sanitation.
 - Fruit and Orchard Sanitation (PPFS-GEN-05)
 - Greenhouse Sanitation (PPFS-GH-04)
 - Cleaning and Disinfesting Commercial Greenhouse Surfaces (PPFS-GH-07)
- Growers who need disease confirmation should work through their local Extension agent for diagnostic sample submission.
- Fungicides Switch and Thiram can suppress disease, but research trials have documented only 50% effectiveness in the highest rated spray treatments.
- Healthy plants can be protected with Switch, Bravo, or one of the fungicides listed in the Southeast Regional Strawberry IPM Guide.
- Organic producers should protect healthy plants with a rotation of Serenade Opti and Actigard. Organic management options are limited.

Additional Resources

Neopestalotiopsis Disease of Strawberry (<u>PPFS-FR-S-12</u>), Southeast Regional Strawberry IPM Guide (<u>Link</u>), Neopestalotiopsis disease in strawberry: what do we know? (<u>Southern Region Small Fruit Consortium</u>), Pestalotia Leaf Spot and Fruit Rot of Strawberry (<u>University of Florida</u>)

By Nicole Gauthier, Plant Pathology Extension Specialist

Indoor Plants - Watering

The main cause of death of potted plants is over-watering. Roots need both water and oxygen, and when surrounded by water, they cannot take up oxygen. These roots may rot and eventually the whole plant may die. The symptoms of over-watering and underwatering are similar. Both lead to poor root health, root decline and possibly death of the plant. A common question from gardeners is "How often should I water my plants?" There is no pat answer to this question. The amount and frequency of watering depends on many factors, such as the plant species, its growth stage, its location, the type and size of its pot, soil mix characteristics and variable weather conditions.

There is a wide range of watering requirements for different species of plants. Plants with large or very thin leaves and those with fine surface roots usually require more frequent watering than succulent plants with fleshy leaves and stems that are able to store water. Some plants thrive under moist conditions while other plants grow well when kept drier.

Plants may slow in growth after a flush of new growth or a heavy flowering. During these periods and while it is dormant, a plant will need less water.

Water evaporates rapidly from the sides of a porous clay pot, which requires more frequent watering than nonporous, glazed or plastic pots. A large plant in a small pot needs water more often than a small plant in a large pot.Different soil mixes require different watering schedules. Heavy, fine-textured potting media and those that contain a lot of peat moss hold more moisture than loose, porous mixtures of bark, sand and perlite.A plant in a warm, dry, sunny location needs more frequent watering than one in a cool, low-light environment.

The rule-of-thumb is to water when necessary. The following methods may be used to determine when to water:

- Touch the soil The most accurate gauge is to water when the potting mixture feels dry to the touch. Stick your finger into the mix up to the first joint; if it is dry at your fingertip it needs water.
- Tap the pot When the potting mix in a clay pot begins to dry, it shrinks away from the sides of the pot. Rap the side of the pot with the knuckles or a stick. If the sound is dull, the soil is moist; if the sound is hollow, water is needed.
- Estimate weight As potting mixtures become dry, a definite loss in weight can be observed.
- Judge soil color Potting mixtures will change from a dark to lighter color as they dry.



Snake plant or mother-in-law's tongue (Sansevieria trifasciata) is prone to rotting by over-watering. Joey Williamson, ©2015 HGIC, Clemson Extension

There are a number of watering meters available to measure moisture in the soil, indicating whether water is needed. These products vary widely in accuracy. The readings can be influenced by factors other than soil moisture content. Fertilizer and soil type can affect the reading.

When watering is required, water thoroughly. Apply water until it runs out of the bottom of the pot. This washes out the excess salts, and it guarantees that the bottom two-thirds of the pot, which contains most of the roots, receives sufficient water. Don't let the pot sit in the water that runs out. Empty the saucer.

Do not allow the soil to become excessively dry. If the salt level in the container is high, root damage may occur. If soil does become very dry and hard to rewet, use the double watering method. Water once and then again half an hour later; or place the pot in a sink or a bucket of water. Remove the pot when the soil surface is moist. Allow the pot to drain completely. If peat is allowed to dry completely, not only is it difficult to rewet, it also will not hold as much water as it could hold before it dried.

Do not water with hot or cold water. The water temperature should be between 62 and 72 °F. Do not water plants with softened water because sodium and chloride will also be added to the soil mix, possibly causing plant damage.

Although wilting is often an indication of the need to water, it is not always so. Any injury to the root system decreases a plant's ability to take up water, including root rot, which is caused by too much water. This inability to take up water will cause wilting, and under these conditions, watering may make the problem worse.

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If this document didn't answer your questions, please contact HGIC at <u>hgic@clemson.edu</u> or 1-888-656-9988.

Author(s)

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Companion Plants



Dear Reader,

As the editor of The Old Farmer's Almanac, I'm often asked about companion planting—the plant kingdom's version of neighbors helping neighbors!

It's true, like peanut butter and jelly and salt and pepper, some plant pals just belong together! Sometimes companion plants help each other in the soil, such as one aerates while the other fixes nitrogen.

Other dynamic duos attract mutually beneficial pollinators or repel each other's pests. When planted side by side, these practically perfect partners eliminate annoying weeds and can fend off invasives.

In all our publications, from our <u>Gardening Calendar</u> and annual <u>Garden Guide</u> to our series of <u>Gardener's</u> <u>Handbooks</u>, we cover companion planting in-depth and in an easy, grower-friendly way so you can employ natural methods of keeping pests at bay and improving your soil at the same time.

Here are some of my favorite companion plants:

- For tomatoes: Plant basil and parsley in between plants to ward off thrips and deter moths that lay eggs for tomato hornworms. Basil also attracts bees, improving pollination, plant health, and flavor. Parsley attracts beneficial insects to protect and pollinate tomatoes.
- For potatoes: Plant garlic between rows alongside lettuces and cabbages. It has a strong scent that deters aphids, onion flies, ermine moths, and Japanese beetles.
- For cabbage, broccoli, and kale: Plant nasturtiums close by. They entice hungry caterpillars away from the vegetables.
- For cabbage and carrots: Plant sage to repel carrot flies. Grow it around your cabbage patch to reduce injury from cabbage moths.
- For cucumbers and pole beans: Plant sunflowers. They help provide support for climbing plants and shade for crops, which can become sun-stressed in hotter climates.
- For a kitchen garden: Plant tansy, a perennial you need only plant once; it draws pest-eating bugs such as ladybugs and predatory wasps and repels many pests, such as cutworms, which attack many common garden vegetables.

Carol Connare Editor, The Old Farmer's Almanac







Kentucky Blackberries

SEASON: June to September

NUTRITION FACTS: A one-half cup serving of raw berries contains 35 calories, has zero fat, and is a good source of potassium, vitamin C, and fiber.

SELECTION: Look for plump fruit that is uniform in color and appears fresh. Berries should be free of stems or leaves. Avoid fruit that is moldy, crushed, bruised, or contains extra moisture.

STORAGE: Store unwashed and covered berries in the refrigerator. Use within two days.

PREPARATION: Handle all berries gently. Wash berries by covering them with water and gently lifting the berries out. Remove any stems and drain on a single layer of paper

Source: www.fruitandveggiesmatter.gov

towels. Blackberries are delicious cooked, which intensifies the flavor, or eaten fresh as a snack or in a salad.

PRESERVING: Berries may be preserved by canning or freezing, or made into jellies or jam. For more information, contact your local County Extension Office.

1/2 cup all-purpose flour

BLACKBERRIES

Kentucky Proud Project County Extension Agents for Family and Consumer Sciences University of Kentucky, Nutrition and Food Science students COOI

and Food Science students June 2010

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.

(optional)

1/4 teaspoon salt

COOPERATIVE EXTENSION SERVICE

KENTUCKY



Blackberry Peach Crumble

2 cups fresh blackberries

2 cups peeled and sliced fresh peaches or 1 (16 ounce) bag frozen peach slices, thawed

1 teaspoon grated lemon peel 2 tablespoons cornstarch

¹/₃ cup, plus ¹/₂ cup packed brown sugar

Combine blackberries, peaches, lemon peel, cornstarch and ¹/₃ cup brown sugar in a large bowl.

Pour ingredients into a lightly greased 8 inch baking dish.

Mix together flour, almonds, salt, and remaining ½ cup brown sugar. With pastry blender or two knives, cut in the butter until the mixture resembles coarse meal. Sprinkle flour mixture over fruit.

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

Bake in a pre-heated 400° F oven for 30 minutes.

6 tablespoons butter, cut into pieces

1/2 cup chopped blanched almonds,

Cool 10 minutes prior to serving. Yield: 8, ½ cup servings Nutritional Analysis: 270 calories, 14 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber. Without almonds: 220 calories, 9 g fat, 25 mg cholesterol, 135 mg sodium, 35 g carbohydrate, 2 g protein, 3 g fiber.

Kentucky



2025 Horticulture Programs

5:00 - 6:00 P.M. McCracken County Extension Service 2025 New Holt Rd Paducah, KY 42001

Please RSVP for each program by calling (270) 554-9520

W Cooperative Extension Service

- JAN 7 Winter Sowing FEB 4 "Evergreens" Propagation (on-site)
- MAR 4 Native Plants
- APR 1 Fairy Gardens
- MAY 6 Container Gardening
- JUN 3 Floral Arranging
- JUL 1 Love Shack Farm (on-site)
- AUG 5 Drying & Pressing Cut Flowers
- **SEP 2** Lawn Management
- OCT 7 Pumpkin Planters
- NOV 5 Holiday Wreaths







HORTICULTURE WALKING CLUB

<u>When:</u> 11:00-12:00 Every Thursday May - June (Will not meet June 19th)

<u>Where:</u> Greenway Trail (Meet at skate park entrance)





CALL OUR OFFICE AT (270) 554-9520 TO SIGN UP!