



Cooperative Extension Service

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Eika Wood

Erika Wood, Hopkins County Extension Agent for Horticulture

Make Your Own Hummingbird Feeding Solution

Chances are that if you have a flower garden, then you may have seen a hummingbird or two flying around to your flowers and feeding on their nectar. But what do you do if your flowers are all bloomed out or you don't have the space to put in a flower garden? Well don't fret because you can always put up a hummingbird feeder to help attract these beautiful creatures to your home! Hummingbirds love artificial

feeders, and one feeder can provide the daily nectar equivalent of 2,000 to 5,000 flowers! Wow!

Now you may be wondering what to put in your hummingbird feeder. Should you buy the pre-made mixes from the store or make your own feeder mix? Consider this, commercial mixes typically are more expensive than homemade solutions and may contain preservatives that could harm the hummingbird. We don't want to harm our feathered friends, so here is a great recipe you can make at home!

- Mix up a solution of about four parts water to one part sugar.
- Boil the water and sugar for two minutes. Boiling the solution for this long helps to slow fermentation, which is bad for the birds. Do not microwave the solution, because microwaving can change the nutritional value of the sugar.
- Cool the mixture and refrigerate.

Helpful Tips!

Reduce the amount of sugar to a 5-to-1 ratio if you are having problems with bees at the feeder.

Do not add red dye to your feeder because it may cause harm to the birds.

Keep your feeder up as long as hummingbirds are coming to it! Keeping your feeder up through the fall may help some migrating hummingbirds out on their journey!

For more information on hummingbirds and hummingbird feeders, then please see publication FOR-97 Hummingbirds: An Attractive Asset to Your Garden.

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Blossom End Rot on Tomatoes

Have you ever grown tomatoes and noticed the end of the fruit turning brown and rotting? If you have, then your tomatoes have probably suffered from Blossom end rot. Blossom end rot is a physiological disorder that can be quite the nuisance to gardeners. It begins as a small, water soaked spot on the blossom end of the developing tomato, which will then develop into a dark brown, leathery area. The spot's surface will

also shrink and become sunken or flattened. This area may affect half of the fruit.

Blossom end rot is caused by a lack of calcium in the developing fruit's distal ends. Calcium is important for binding cells together within the fruit. If there is insufficient calcium present, then the cells at the end of the fruit will fall apart. The disorder is more common on the first few fruits of the season



because calcium may be limited due to cooler soils and fewer roots on the young plants.

The disorder can be managed by providing adequate calcium to the plants. Have your soil tested to see if your soil is low in calcium. If calcium is low, then it can be applied as lime prior to planting. It is also important to maintain an even moisture supply because water can play a critical part in the uptake and distribution of calcium. Make sure you irrigate plants on a consistent basis and don't allow plants to become stressed from too little or too much water. Adding mulch to the garden bed can help to conserve soil moisture.

Another factor that influences the uptake of calcium is ammonium. Excessive amounts of ammonium can depress the uptake of calcium. When applying fertilizers, it is best to avoid fertilizers high in ammonium (NH4) and instead choose fertilizers high in nitrate (NO3).

For more information on tomato disorders, pests, and diseases, check out ID-172: An IPM Scouting Guide for Common Pests of Solanaceous Crops in Kentucky.

The Hopkins County Farmers Market is open for business!

Mahr Park Arboretum: 55 Mahr Park Drive

- Tuesdays 11 to 4 p.m.
- Saturdays 8 to 1 p.m.

Baptist Health Hospital: 900 Hospital Drive

Thursday 7 to 1 p.m.



Installing a Butterfly Garden

Faye Kuosman, UK extension horticulture agent

Honeybees, which are native to Europe and introduced to the United States, are important pollinators for home gardens. But numerous pollinator species including native bees, butterflies and moths, beetles, birds and bats benefit our gardens. Sadly, many of the pollinators have suffered from habitat loss, chemical misuse, diseases and parasites.

Gardeners play a critical role in the nurturing and conservation of both native and introduced pollinators. Gardens and landscapes provide pollinators with food, water, shelter and habitat to complete their life cycles. Urban areas typically feature large areas of pavement and buildings and offer little in the way of food and shelter for pollinators. Garden plantings can help bridge that gap.

Just like with any new flower bed, you want to pick a site for your butterfly garden with good drainage, full sun, and an area with good weed control. If you are starting a new butterfly garden, get a soil test, eliminate the weeds and add organic matter.

Honeybees and other pollinators need protein from flower pollen and carbohydrates from flower nectar. Plan to provide a variety of different types of flowers, and aim to have three different flower species in bloom throughout the growing season. Showy, colorful



flowers and massed groups of flowers, particularly in small gardens provide efficient feeding stations for the pollinators. Flowering trees and shrubs also provide excellent food sources. Native plants share a long history with their pollinators, including a wide variety of natives will make your garden a favorite destination for pollinators.

You want to have a variety of plants, preferably native ones and non-native that will bloom throughout the growing season. Some of these are purple cone flower, black-eyed susan, asters, golden rod, yarrow, tall blazing star, milkweed, coreopsis and many more. The Kentucky Native Plant Society has an updated listing of nurseries in Kentucky that sell native plants.

Be sure to have puddling spots for butterflies to get a drink of water. Pollinators also need shelter from the wind, scorching sun and heavy rain. Fences can serve as a windbreak, which may make the garden more attractive to pollinators.

Contact the Hopkins County Extension Office of the University of Kentucky Cooperative Extension Service for information on starting a butterfly garden.

Container Gardening

Jamie Dockery, UK Extension Horticulture Agent

Not everyone has acreage or land where they can just dig in the soil. As long as you have a sunny spot, whether it be a balcony or parking lot, if you can get sunlight, you can grow flowers or vegetables in containers. It isn't difficult.

Just about any container will do, but the smaller the container, you will be more of a slave to it. Unless you work from home, are a stay at home parent, or retired, small containers do not make any sense. Don't use anything smaller than half of a bourbon barrel, 24 inches in diameter, if you are going to grow tomato plants. The more soil you can give that plant, relative to its size, the less water and maintenance you will have to do.

You can grow anything in a container, but remember, the larger the plant the more challenging it is. Lettuce, radishes and plants that don't grow tall, and don't

require a lot of water, are very easy to grow in containers. There is no denying, plants in containers depend on you for everything. Generally, watering is a daily chore and if you let plants dry out and become stressed, you will limit how much they can produce.

Being in containers, plants don't have access to the nutrients in natural soil, which is usually a potting soil or soil mix. You have the commitment of feeding or fertilizing on a regular basis. Young people are very interested in horticulture right now. They usually live in apartments before owning a home, and that makes container gardening a perfect fit.



Containers can be of any size or shape. Container gardens are elevated and do not contain native soil. Raised beds require much less watering than container gardening.

One of the most popular questions at extension offices concerning container gardening is about blossom end rot, which is associated with tomatoes, and is technically a calcium deficiency. Blossom end rot is actually the lack of consistent watering, making it hard to grow a full-sized tomato in a container without running into issues. Plant breeders have gotten around that by developing container-bred varieties which are much shorter plants. Dwarf tomato plants get about two feet tall and need only about a third of the water that a full-size tomato plant requires. There are a multitude of varieties of other vegetables that are bred for container gardening.

Contact the Hopkins County Office of the University of Kentucky Cooperative Extension Service for information on container gardening.

UPCOMING CLASSES & EVENTS

All Classes held at Hopkins County Extension Office

CONTAINER GARDENING

Gardening in small spaces and container designs.

Tuesday, June 14th from 12:00-1:00 R.S.V.P. by calling 270-821-3650



Milkweeds for Monarchs

Learn about the importance of milkweeds in the preservation of the Monarch Butterfly

Thursday, June 30th at 5:30 R.S.V.P. by calling 270-821-3650



DEER RESISTANT PLANTS

Landscape plants resistant to the appetites of deer

Thursday, July 14th at 5:30 R.S.V.P. by calling 270-821-3650



Butterflies of Kentucky

Identification guide to butterflies found in Kentucky woods and landscapes

Tuesday, July 19th from 12:00-1:00 R.S.V.P. by calling 270-821-3650



PENNYROYAL MASTER GARDENER ASSOCIATION'S 2ND ANNUAL



UPCOMING CLASSES

All Classes held at Hopkins County Extension Office

Compost Do's and Dont's

All about composting for the home gardener. Composting is another way to add to the Earth!

Thursday, August 11th at 5:30 R.S.V.P. by calling 270-821-3650



INVASIVE PLANTS TO AVOID

Landscape plants resistant to the appetites of deer

Tuesday, August 23rd at 12:00-1:00 R.S.V.P. by calling 270-821-3650



SOIL TESTING 101

Learn all about the benefits of taking a soil sample, soil pH and amendments, and how to understand a soil test.

Tuesday, September 13th from 12:00-1:00 R.S.V.P. by calling 270-821-3650



SEED SAVING WORKSHOP

Do you want to learn how to pick, store and save your flower or vegetable seeds for next year? Then come to this seed-saving workshop and find out how!

Monday, September 19th at 5:30 R.S.V.P. by calling 270-821-3650





Hopkins County Extension Horticulture Hopkins County Farmers Market Master Gardeners, Pennyroyal