Common Garden Questions
Sarah Denkler, MU Extension Horticulture Specialist

My tomatoes are growing and have flowers but I am getting no fruit - There are two reasons why flowers can be prolific on vegetables but produce little or no fruit. One is poor pollination. Tomatoes are pollinated by the wind or more specifically by vibrations that free the pollen from the flower to float to the ovule of the flower. If fruit is not setting you may try vibrating the plants with an electric toothbrush. The other reason for lack of fruit is a physiological response to temperatures or an inability to physically produce fruit. Missouri summers can lead to problems with blossom set when night temperatures are lower than 55° F, when day temperatures are higher than 95° F, or when night temperatures remain above 75° F. This leads to plants having poor fruit production. Different varieties will behave differently and hot drying winds may intensify the problem. As temperatures level out, plants begin to produce.

Bag Worms - Many ornamental shrubs and trees, such as bald cypress or juniper, may be showing signs of defoliation. If you look closely you may see football shaped bags hanging from these plants commonly called bagworms. In August these bags contain mature larvae that will pupate and emerge to mate in September. The female does not leave the protection of the bag but lays her eggs there, where they are protected through the winter. There are many species of bagworm, each feeding on leaf tissue and using the tissue to create the sacks they

Continued to page 2
live in. Larvae emerge from bags in late May and immediately begin building their own bag. This is the only window of opportunity available in the year to spray for chemical control of the insect. Chemical controls include Bt, acephate, cyfluthrin or spinosad. Late May is the only time of year controls can be applied so hand picking the bags that can be reached is more effective through the year as long as they are burned after removal.

**Ants on peony or in the garden** It is possible to see ants crawling all over a vegetable in the garden or on flowers in the landscape. These plants may have apparent damage and many would assume the ants are causing an issue. In most cases the ants are harmless. Most red or black ants that are found on plants are there to extract honeydew from the surface of the plant. Honeydew is excreted from insects that suck the sap from plants. Honeydew is sugary and thus a food source for ants. Damage that may be apparent is from the insects feeding on the plant. Aphids, spider mites, thrips, scales, whiteflies and leafhoppers all feed on plant sap and produce honeydew. These insects are very common in Missouri and most are so small as to go undetected, giving the ants the benefit a bad name.

---

**Native Plant of the Month:**

**Cardinal Flower**

*Lobelia cardinalis*

**Herbaceous perennial**

**Height:** 2 to 4 feet

**Flower:** scarlet red to white to pink

**Bloom time:** July to October (through frost)

**Comments:** Found in wet areas, steam sides, ditches, sloughs, and lakes so it is ideal for rain gardens. The bright red flowers attract hummingbirds, various swallowtail butterflies, and some types of bees.

**Information sources:** Missouri Botanical Garden, Missouri Wildflowers, and Illinois Wildflowers

Picture courtesy of [http://www.illinoiswildflowers.info/wetland/plants/cardinal.htm](http://www.illinoiswildflowers.info/wetland/plants/cardinal.htm)
Outdoor Flowering Plants and Ornamentals

- Keep newly planted trees and shrubs well watered.
- Clean up fallen rose and peony leaves. They can harbor disease and insect pests over the winter if allowed to remain on the ground.
- Think ahead! For dried winter arrangements, flowers with petals in bright yellow, orange, pink and blue colors preserve best. Red and purple become darker and less attractive; white flowers usually become buff or tan in a short time.
- During hot, dry August days, avoid deep cultivation in your flower beds. Loosening the soil under these conditions reduces water uptake and make plants often look much worse after cultivation than before.
- Continue spraying roses that are susceptible to black spot and other fungus diseases.
- Keep an eye out for spider mites on ornamentals! They love it hot and dry.
- Avoid any temptation to prune shrubs and trees. Doing so will promote new growth that will not harden by winter which can lead to winter damage.

Vegetable Gardening

- Many herbs self-sow if the flowers are not removed. Dill and sage seeds fall around the parent plant and come up as volunteers the following spring.
- Harvest winter squash and pumpkins by cutting with 2 or 3 inches of stem; they'll keep better in storage that way than if stemless.
- Plant a winter cover crop to enrich your garden soil. Annual rye, red clover, and hairy vetch are good choices.
- Fall vegetables can be planted until the 15th of this month. Vegetables include lettuce, radishes, cabbage, broccoli, cauliflower, spinach and turnips.
- Compost plant materials from the garden as crops are harvested. Avoid composting any plants that are disease or insect infested.

Fruits and Nuts

- If your apples are lumpy, they may have apple maggots. Be sure that fruit is not left lying on the ground because the maggots live in fallen apples and then pupate in the soil.
- Heavy rains at harvest can dilute the sugars in melons. Watermelons can re-concentrate the sugar if left for a few dry days however cantaloupes cannot do this.
- To reduce the number of pests on your fruit tree for the coming year, pick up and destroy all fallen fruit. Worms hide in the fruit and then pupate into the soil. They will be ready to lay eggs next year.
- Watch for fall webworm activity now.

Turfgrass

- Keep lawns watered in times of drought.

More Edible Flowers

- Begonia
- Dianthus (Carnations)
- Chrysanthemums
- Cornflowers
- Fuchsia
- Gladiolas
- Hibiscus
- Hollyhock
- Johnny Jump ups
- Sweet Peas
- Purslane
- Scented Geraniums
- Snapdragons
- Tulips
- Wild Violets
- Yucca
Blister beetles are a common garden pest that feed on many of our favorite vegetables. The beetles feed in clusters on foliage or flowers of many species and on tomatoes, beans, peas, and potatoes in vegetable gardens. They also feed on field crops such as alfalfa and soybean. Blister beetles contain a fluid called cantharidin that is an irritant for both external and internal animal tissues. The typical result on human skin is large, watery, erect blisters, hence the name blister beetle. They can be toxic and in some cases lethal to horses, sheep, and cattle. Cantharidin is very stable and remains toxic in dead beetles for a long time so livestock may be poisoned by eating crushed beetles in cured hay.

Blister beetle numbers increase dramatically following a dry summer with high grasshopper populations. The immature stages are rarely seen. They live in the soil or in nests of ground-dwelling bees where they feed on eggs or larval insects. Some species are beneficial in that they prefer grasshopper eggs in the soil. The adults are rather soft-bodied, long-legged beetles with a large head and long neck. Their coloring can be orange with black stripes, solid black or grey with black. They can be very destructive in a short period of time in a garden but also tend to move on quickly. They are a much more serious problem in hay because of their toxic effects. They can be hand-picked in a garden but remember to wear rubber or plastic gloves as cloth gloves will not protect from the toxic irritant they produce.

There are insecticides labeled for blister beetles but always be sure to read the label when applying them to make sure they will control the beetles on the crop that they are harming. Garden insecticides such as permethrin, bifenthrin and carbaryl are examples of control agents. Treat plants in the late evening or nighttime when pollinators are no longer active to minimize exposure to insecticides.

If you do choose to use an insecticide, be mindful that dead beetles will still contain the same amount of toxin so carefully remove dead beetles to a place where they will not come in contact with children or pets.

**Garden Quote**

I say, if your knees aren't green by the end of the day, you ought to seriously re-examine your life.

~Bill Watterson, *Calvin & Hobbes*
I have been enjoying monarch caterpillars in my garden this year. I’d planted a new swamp milkweed in May and one day I noticed that the top was stripped. My first thought was to blame the chipmunk that had been terrorizing that flower bed until I got closer and could see the caterpillar. I only saw the caterpillar that day, the next he was gone. I looked around the area and couldn’t find it anywhere so I thought something had gotten it until the next week when I was pulling out of the drive and saw the chrysalis hang on my mailbox. After that first caterpillar, I have had many more. I have a lot of annual butterfly weed in that flower bed and they seem to really enjoy it. I’m out inspecting the plants every day to see how many caterpillars I have and see how much they have grown. People driving by probably think I’m crazy because I out in inspecting the plants closely. I had a second one use the mailbox post for its chrysalis. I’m glad several have done that because that has been the only place that I’ve been able to find them, even with all my close inspection of the plants! I finally have been seeing monarchs flying around my plants. My swamp milkweed is sending out new leaves after being eaten to a stem while the annual butterfly weed provide a food source for the next batch of caterpillars.

Honeyvine milkweed (Ampelamus albidus) has opposite, smooth leaves that are heart-shaped and lack serration. Although other milkweeds contain a milky latex sap, honeyvine milkweed does not. The weed's leaves can easily be confused with those of morning glories and bindweeds; however, morningglories and bindweeds have alternate leaves. Honeyvine milkweed cotyledons are oval-shaped, while those of morningglories are butterfly-shaped. Another distinguishing vegetative feature of honeyvine milkweed is its long petioles. Its flowers are produced in small, greenish white clusters. One of the plant's most obvious features is its fruit, an angle-shaped pod that may reach a length of 6 inches. When the fruit ripens and opens, it releases flattened seeds, which are windassisted with attached silky, white hairs. The plant may also regenerate vegetatively from its rhizome system. This is a hard to control weed in gardens, landscape beds and row crops. It is best to get control before the vine spreads very much.

Source: IPM 1021 Vine Weeds of Missouri  https://extension2.missouri.edu/ipm1021
Upcoming Events

The following Master Gardener meetings are held each month. All are welcome to attend. Please contact your local extension office to confirm location if you did not attend the previous meeting.

Parkland MGs - 1st Monday at 6:30pm, Farmington Library
Poplar Bluff MGs - 1st Tuesday at 6:00pm, Call 573-686-8064 for location.
Ste. Genevieve MGs - 2nd Thursday, at 6:30pm, Ste. Genevieve County Extension Center
Cape Girardeau MGs - 3rd Thursday at 7:00pm, Cape County Extension Center in Fall and Winter and Shawnee Park Center in Spring and Summer. Call 573-238-2420 for questions
Perry MGs - 4th Monday at 6:30pm, Perry County Extension Center

August

1-Aug 4 - St. Francois County Fair, Farmington, MO
7-11 - Washington County Fair, Potosi, MO

September

28-30 - Master Gardener State Conference at the Château on the Lake, Branson, MO. http://momg18.org/
8-15 - SEMO District Fair, Cape Girardeau, MO
13 - Master Gardener Training begins in Fredericktown, MO; Thursdays from September 13 thru November 15; See back page of newsletter.
17 - 19 - State Women in Ag Conference, Cape Girardeau Missouri.; Check out https://www.facebook.com/WomenInAgriculture/
21-22 - East Perry County Fair, Altenburg, MO

Asclepias (Milkweed)

Amber Middleton, Cape Girardeau County Master Gardener

With 110 species of Asclepias (Milkweed) you could easily get lost in the individual beauty of each plant and I encourage you to do so. While many of the 110 species can survive in Missouri for brevity's sake I will share just a few Missouri native varieties.

Once you learn what Milkweed looks like it is easily identified by small flowers clustered to form a globe. The nickname Milkweed is in reference to the milk like sap. The sap is sticky and can cause burns to the eye. Asclepias is the host plant for the Monarch butterfly and protects the Monarch in that it causes the Monarch caterpillar to not only taste bad to birds but also cause gastrointestinal upset if they can get beyond the taste. Milkweed is also host to the Queen butterfly and the Milkweed Tussock moth which uses its hairs to administer a skin irritant. The usefulness of the Milkweed plant does not end at being a host plant. Bees, all Lepidoptera species, and hummingbirds enjoy the quantity of high nectar.

Differences between species of Milkweed are evident in leaf shape, color of flowers, height of plant, and sometimes even the smell the flower emits. When familiarizing yourself with the different types of Milkweed it is important to learn the Latin names for the plant as there are numerous nicknames for each plant and it can easily confuse even the most knowledgeable gardener.

Click on blue underlined link to be taken to a corresponding website...
Asclepias (Milkweed)
Amber Middleton, Cape Girardeau County Master Gardener

Missouri has 17 native Asclepias, eight of which we will cover.
- Asclepias Syriaca (Common milkweed)
- Asclepias Incarnata (Marsh milkweed)
- Asclepias Purpurascens (Purple milkweed)
- Asclepias Tuberosa (Butterfly weed)
- Asclepias Perennis (Aquatic milkweed)
- Asclepias Viridis (Spider milkweed)
- Asclepias Hirtella (Tall Green Milkweed)
- Asclepias Verticillata (Whorled Milkweed)

The colors of these eight milkweed range from white, pink, purple, and orange. Height varies with each species but can range from two to six feet. Asclepias produce pods packed full with seeds that are attached to pieces of silk allowing them to be carried on the wind. The seeds need cold stratification. While it is possible to relocate a Milkweed plant it is not easy nor is it often successful due to several varieties having a tap root that can extend some 20 feet underground. The root system is often quite sensitive even on varieties that do not have a tap root making relocation tricky. I have had tremendous success with the seed ball method. These plants will multiply over time so employ wisdom in plant placement. The plants are not particularly picky with soil types and can easily thrive in containers. It should be noted, caution should be practiced when handling cuttings from this plant due to the chemical burn risks. Be careful not to allow the sap to come in contact with the eyes. These plants are also toxic to domestic pets and also grazing animals if ingested.

A) Butterfly Milkweed; B) Swamp Milkweed; C) Whorled Milkweed
Helping Others Learn to Grow

If you love gardening and enjoy sharing knowledge with others, the Missouri Master Gardener program needs you!

⇒ **LEARN SOMETHING**
Training includes over 30 hours of instruction from horticulture experts on a wide variety of horticulture topics.

⇒ **TEACH SOMETHING**
Master Gardeners volunteer 30 hours to educate and help beautify in local areas.

Then...

⇒ **GROW SOMETHING!**

---

Currently enrolling for Fall Classes.

Classes will be every Thursday from Sept 13 to Nov 15, 2018

**Thursday Evenings at the Madison County Extension Center in Fredericktown**
from 6 until 9 pm

Registration is $165 and includes the Master Gardener Core manual.
Registration deadline is Sept 10

For more information, contact:

Donna Aufdenberg
Horticulture Specialist
573-238-2420
aufdenbergd@missouri.edu