



**Master  
Gardener™**

An educational program of the LSU AgCenter

**ST. TAMMANY MASTER GARDENER ASSOCIATION**  
**P. O. Box 2074, Mandeville, Louisiana 70470**

Website: [stmastergardener.org](http://stmastergardener.org)

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The way a crow  
 Shook down on me  
 The dust of snow  
 From a hemlock tree.

Has given my heart  
 A change of mood  
 And saved some part  
 Of a day I rued.

Robert Frost

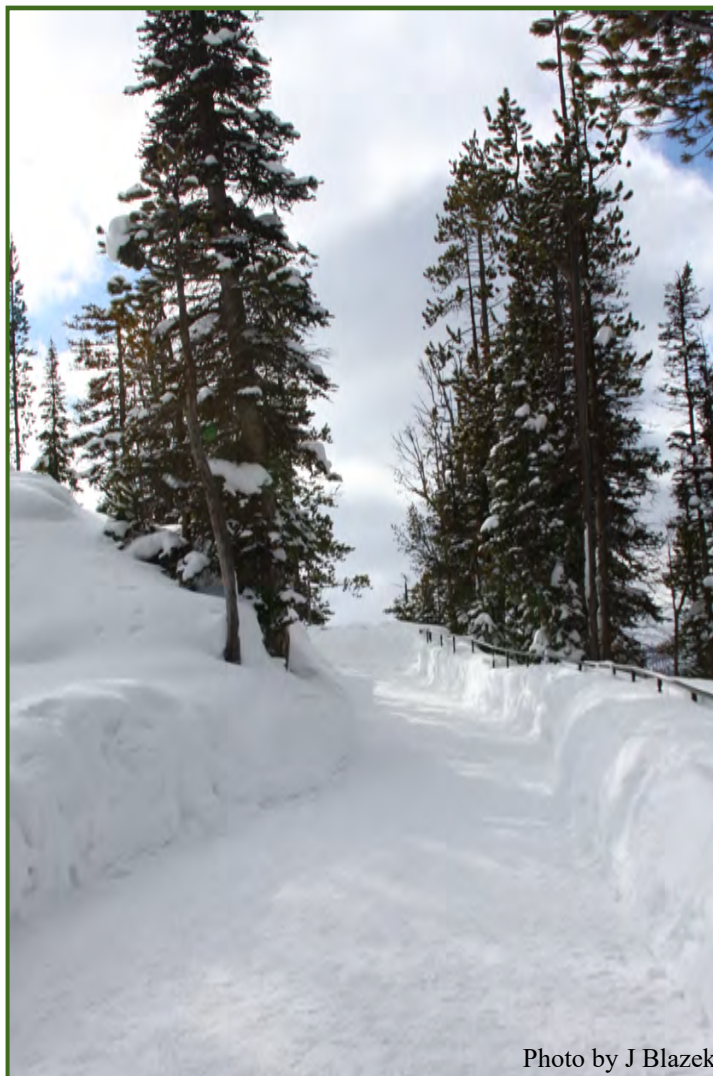


Photo by J Blazek

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# Findings, Flubs, and Favorites: A STMGA Survey Of The 2023 Growing Season



St. Tammany master gardeners were asked to complete a survey of the specific varieties of vegetables they planted in their gardens last year ... those that were successful ... and those that were flubs. The purpose of the survey was to highlight those varieties that grew well here and to help us avoid buying and planting those that did not. Melanie Edwards and Gayle Miller collected and compiled the surveys. On November 1, 2023 Melanie presented the results to the Vegucators.

## Sample Survey

Crop	Variety	Type, Description, Where Purchased, Seed or Transplant	Observations
Tomato	Fantastico	Grape, F1 hybrid; determinate; early; heavy producer; started from seed	Plant early; produces through June; few pests

## Overall Findings

**Cucumbers:** all participants started plants from seeds. Successful plantings tended to be of lesser known varieties. Successive plantings and frequent watering may improve results.

**Eggplant:** waiting to transplant eggplant until temperatures were in the 80's seemed to positively impact production. Oriental types were more often reported although one standard eggplant was still producing into September.

**Green Beans:** Asian-type beans can be started much later than traditional bush beans. Use of plastic weed barrier was questionable.

## Findings, Flubs, and Favorites, continued



### Overall Findings, continued

Peppers: Fooled You Hybrid Jalapenos (very mild variety) are highly recommended.

Tomatoes: container growing is possible. Well known cherry-type tomatoes seem to be more consistent year after year



### Flubs ... not recommended

Some issues with quality or productivity of cucumbers (Mexican Sour Gherkin and Straight Eight).

Black plastic weed barrier caused issues with water retention in excessively high temperatures.

Extreme heat and drought had a significant impact on all gardens. Keeping gardens adequately watered was difficult.

Free tomato seeds (came with regular order) produced well but were a mass of tangled, extremely tall, leggy bushes making harvesting difficult.

### Recommended Favorites

Suyo Long cucumber: great taste, small or no seeds, prolific.

Oriental eggplant: great producers until frost, not bitter, great for grilling.

Fooled You Jalapeno pepper: no heat, produces non-stop until first freeze.

Cherry, grape, or small tomatoes produced better than larger tomatoes.

Pollinator plants (mostly perennial) play an important role in our gardens.

**Special thanks to all the STMGA master gardeners who participated in this survey.**

Melanie Edwards  
Master Gardener  
Vegucator

Gayle Miller  
Master Gardener  
Vegucator

St. Tammany Master Gardener Association

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9 am to 3 pm**

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[www.stmastergardener.org](http://www.stmastergardener.org)



# Toads: Powerful Pest Control For Garden And Yard



On October 4, 2023, Laura Steffee presented a lecture to the STMGA Vegucators on the benefits of toads in your garden.

Why would anyone want toads in their garden?

- If you want organic pest control in your garden. Toads are a great choice.
- Each toad eats an average of 100 insects per night. That means each toad in your garden can eat an average of 3000 pests per month.
- Toads will eat any creature they can fit in their mouths. Their diet includes the following garden pests:

slugs	snails	caterpillars
beetles	earwigs	cut worms
mosquitoes	flies	cockroaches
squash bugs	larvae	nymphs
cabbage worm	army worm	



Toad facts:

- All toads are frogs but not all frogs are toads. Toads are a subspecies of frogs.
- Toads breed in water but spend most of their adult lives on land.
- Toads are amphibians. Amphibians, as a group, are greatly threatened and are suffering serious population declines. Their greatest threats arise from habitat loss and the prevalence of chemical contaminants.
- Toads are important bio indicators.
- An existing toad population is indicative of a healthy organic garden.
- Toads are especially sensitive to pesticides, herbicides and chemical fertilizers.



To encourage toads to make a home in your yard or garden you should:

- provide water.
- provide shelter.
- avoid using chemical fertilizers and pesticides.



# Toads: Powerful Pest Control For Garden And Yard



Toads drink with their butt!

- Toads need water but they do not drink with their mouths.
- They have vascularized skin on the undersides of their legs and bellies.
- They sit in water and absorb it through their skin.
- To provide water for a toad, place a “bath” (a shallow saucer of water) in a shady spot near their shelter.



Toads need shelter

- Rocks, logs, pieces of untreated lumber and broken clay pots all provide great toad houses.
- Toads prefer moist, tight spaces where they can wedge their body and bury themselves in the soil.
- Toads are territorial. If you want multiple toads, provide multiple shelters and water saucers.



Where to locate a toad shelter

- Toads prefer moist, shady, secluded spots where they are safe from foot traffic, pets and weather.
- Rock piles, deep leaf cover or mulch under permanent perennials or shrubs are ideal.
- Toads are creatures of habit. If they find a home they like, they may stay for a decade or more. Toads can live up to 30 years in captivity.
- In addition to water and shelter, toads need food. They will happily dine on unwanted garden pests.
- However toads do not like to travel far from home.
- If you want a toad to eat your garden pests, place the shelters and water saucers in protected spots within 10 to 15 feet of your plants.
- Do not place toad shelters or water saucers near the following plants because they are all harmful to amphibians:

eggplant	rhubarb	potatoes
snow peas	azaleas	daffodils
hyacinth	honeysuckle	hydrangeas

# Toads: Powerful Pest Control For Garden And Yard



An appealing toad habitat includes:

- An organic garden or yard free of chemical fertilizers and pesticides.
- Lots of pests to eat.
- Saucers of clean water for drinking and keeping cool.
- Moist shady shelters to keep them safe from sun and predators.
- Densely planted areas with compost and leaf litter.
- If you create an appealing habitat your toad(s) will move in.
- Never try to capture and relocate toads to your garden.
- They probably will not stay and may not survive the move.



Are toads dangerous?



- If you handle a toad you will not get warts, but you could harm the toad.
- For the sake of the toad, it is best to wash your hands prior to handling one.
- Toads breathe and absorb water through their skin, this makes them highly vulnerable to any chemical substance you may have on your hands, such as, lotion, sunblock, sanitizer, etc. They will absorb it.
- Understandably, toads do not like to be eaten, licked or chewed. They defend themselves by releasing toxic substances from parotoid glands on their skin when threatened.
- Most toads in the U.S. are only mildly toxic.

So how do you keep pets, small children and toads safe? Fence your garden to keep out pets and children (and deer, rabbits, and armadillos). Your plants and toads will thank you. Place toad shelters and water saucers in protected out-of-the-way areas. Toads hunt at night, so keep pets away from your garden from dusk to dawn.

Truly dangerous toads are only found in a few, very specific, parts of the country and **nowhere** in Louisiana. If your pet eats or licks a toad in our state the symptoms may be dramatic but are seldom life-threatening. If your dog exhibits excessive drooling, foaming, pawing at the mouth, or vomiting it might have grabbed, licked or eaten a toad. If your pet has the symptoms, immediately rinse their mouths with continuous running water for 5-10 minutes. Make sure to keep their head pointing down so the water runs from back to front and out ... not down the throat. If your pet does not recover soon, take it to a veterinarian as quickly as possible. Enjoy your toads from a distance. Holding a toad puts both toad and human at risk. In addition to excreting an irritating substance when handled, toads are also known to pee in self-defense when picked up.

## Toads: Powerful Pest Control For Garden And Yard



### How to make more toads

Amphibians, including toads, are suffering from a critical population decline. By giving your toads a place to breed you will be helping the environment as well as your natural pest control program. Toads breed by laying eggs in water. The eggs hatch to become tadpoles. Standing water with a muddy bottom is the ideal breeding site for toads. A small pond or ditch that continuously holds water is a typical spot for toads to lay eggs. If you do not have something suitable near your garden you can create a breeding “pool” by digging a depression, adding a pond liner and replacing some of the soil into the bottom of your “toad pond”. A preformed plastic baby or dog pool sunk into the ground with soil added to the bottom also works. Locate your



pool in a partially shaded area near your garden. Add a small pile of rocks and plant some native grasses, perennials, and shrubs along the edge for shelter and protection from predators. A pool with sloping sides or rocks will allow the toads and emerging baby toads to easily enter and exit. Place a rock or log in the water for basking in the sun. Fill your pond with rainwater or chemical-free water. Native plantings in and around the pond will provide cover from predators and weather, oxygenate the water, and help attract insects to feed your toads. Do not aerate the water. Toads need still water for breeding.

The tadpoles will eat any mosquito larvae developing in the water. Adult toads in your garden will also happily eat any mosquito larvae and adults before they become a problem. Flush toad baths every other day. You will keep the water clean and prevent mosquito larvae from developing. If you have well water that is not chemically treated, a blast from a garden hose is all that is needed. If you are using treated water, fill a large container with water and let it sit overnight to allow the chlorine to dissipate before using. To keep mosquito larvae from forming in a toad pond prior to tadpoles hatching it is considered safe to use Bt in the form of commercial Mosquito Dunks. If you already have a healthy toad population then treating the water is likely not necessary. Tadpoles are omnivores who eat both plant and animal matter. They burrow in mud at the bottom of the pond and filter feed algae and other organisms. If mosquitoes are still a problem, consider adding some bat houses to help control them. One bat can eat 3000 mosquito-sized insects every night. Purple martin houses will NOT help control mosquitoes.



## Toads: Powerful Pest Control For Garden And Yard



Ladybugs, assassin bugs and lacewings are well known for helping with control of garden pests. In addition to toads, organic gardeners will benefit from supporting other lesser known or appreciated pest predators, such as, lizards, garter snakes, dragonflies, and bats.

If you value pest predators in your organic garden do not overlook the American toad. While bees, butterflies and ladybugs get better press, the often forgotten toad can transform a vegetable garden. A healthy toad population is one of the best natural pest controls available. Toad populations, as well as those of other amphibians, are declining at an alarming rate. By supporting toads in your garden you will be helping your plants and the environment.

### Resources

1. Toads vs Frogs; Mississippi State University Extension: <https://extension.msstate.edu>
2. Attracting Toads & Frogs to Your Landscape: [www.milorganite.com](http://www.milorganite.com)
3. Toads: [www.nwf.org](http://www.nwf.org)
4. The Trouble with Toads: Getting to the Bottom of This Toxic Threat: [www.asPCA.org](http://www.asPCA.org)
5. Toads in the Garden- How to Attract Toads; [www.gardeningknowhow.com](http://www.gardeningknowhow.com)
6. How to Attract Frogs and Toads to Your Garden: <https://growagoodlife.com>
7. Why Garden Toads are Valuable in the Backyard by David Mizejewski: [www.birdsandblooms.com](http://www.birdsandblooms.com)
8. Garden Friends by Kerry Lake, Master Gardener: [www.wmmga.org](http://www.wmmga.org)
9. Smart Gardening for Shorelands, Keep it Clean to Protect Frogs & Toads, Michigan State University Extension Services: [www.canr.msu.edu](http://www.canr.msu.edu)
10. 8 Ways to Attract Toads & Frogs to the Garden: <https://balconygardenweb.com>
11. Backyard Bats, US Fish & Wildlife Service: [www.fws.gov](http://www.fws.gov)
12. The Benefits of Bats; Bureau of Land Management: [www.blm.gov](http://www.blm.gov)

Laura Steffee  
Master Gardener  
Vegucator, Chair

# STMGA Christmas Party

On Friday, December 15, 2023 the St. Tammany Master Gardener Association celebrated the holidays with a luncheon at the Lake Pontchartrain Maritime Museum in Madisonville, Louisiana.



All photos by E. Jaster

Earlyn Jaster  
Master Gardener  
STMGA Vice-President

# Mulberry Trees



On October 4, 2023, Jennifer Anderson presented a lecture on Mulberry Trees to the Vegucators. Mulberry trees are of the genus *Morus*, a flowering plant in the Moraceae family. This plant family consists of diverse species of deciduous trees, all commonly known as mulberries. They grow both wild and under cultivation in many temperate world regions.

There are three main types of mulberry:

- Red Mulberry (*Morus rubra*)
- Black Mulberry (*Morus Nigra*)
- White Mulberry (*Morus alba*)

Red mulberry is a species native to the entire Eastern United States. It is also called American Mulberry. The trees produce reddish or black fruits that are considered to be good quality. Red mulberry trees grow quickly and can reach heights of 70 feet tall. Lifespan of the tree is 125 years.



Red Mulberry

Black mulberry is native to western Asia. This mulberry tree produces what many consider the highest quality mulberry fruit. The fruit is almost always black. The trees prefer warmer dryer areas, like California. Select cultivars have the best fruiting characteristics with large black berries up to two inches long that taste like seedless blackberries. It is the smallest mulberry tree with a lifespan of 500 to 1000 years.



Black Mulberry

White mulberry is native to China and is the preferred food source for silkworms. Despite the name, fruit color can be pink, black, purple, or white. White mulberry trees actually get their name from the color of the flower buds. Most often the fruit is red to purple when fully ripe. It is not as sweet when compared to red and black mulberries. This is a large tree that grows up to 60 feet tall and has some tolerance to salt and wind. Lifespan of the tree is 50 to 250 years.



White Mulberry



## Mulberry Trees, continued



A lesser known variety of mulberry is Pakistan Mulberry, *Morus Macroura*. This fruit is four inches long and red or purple when fully ripe. It is non-staining and less juicy. The flavor is between a raspberry and purple grape. This tree grows 25 to 30 feet high. It is limited to USDA zones 8b-10.



Female flower



Male flower

Mulberry trees can be monoecious (having male and female flowers on one plant) or dioecious (male and female flowers on separate plants) depending on the species. If you choose a dioecious species, and want fruit, you must plant both male and female trees. Sometimes trees have been known to change sex. The tree flowers occur in late spring on new wood and on spurs of last year wood. The pollen from male trees is extremely allergenic, more so than the female flowers.



Mulberry trees produce sweet fruits that resemble slender blackberries which are very popular with wildlife. Birds are less attracted to the white fruit. The fruit drops when ripe and can be harvested by shaking the tree. Unripe fruit does not ripen once picked. You can hand pick or lay a tarp under the mulberry tree and shake the branch gently. Berries ripen in late spring or summer. Pruning the branches after the spring harvest can encourage a new fruiting cycle.

Because the dark fruits stain badly, avoid planting mulberry trees near walkways and driveways or where fruit will be tracked inside. White colored fruit of white mulberry trees make the best-tasting dried mulberries. The unripe fruit of the mulberry contains latex and causes mild illness, such as, nausea and hallucinations. Always wait until the fruit is fully ripe before picking and eating it to avoid illness.



## Mulberry Trees, continued



### Propagating mulberry trees:

Seeds can take a few weeks to several months to germinate. Planting a hardwood cutting is the popular method. Use a seven to eight inch cutting. Remove all but one or two leaves. Plant in potting soil. Keep the cuttings in shade for about a month until roots have formed. Slowly introduce to sun. Some cultivars are harder to root. Grafting is another option. Best time is right after leaves appear in the spring.

### Location for planting:

Choose a site that receives full sun to partial shade. The site should be far away from buried utility lines or septic systems, as their fast-growing roots can cause serious damage. Mulberries prefer well-drained fertile soil and tolerate most conditions except wet soils. They can withstand drought and salt conditions. Plant mulberry trees 25 to 30 feet apart. Mulberries do well in USDA Zone 4 to 10

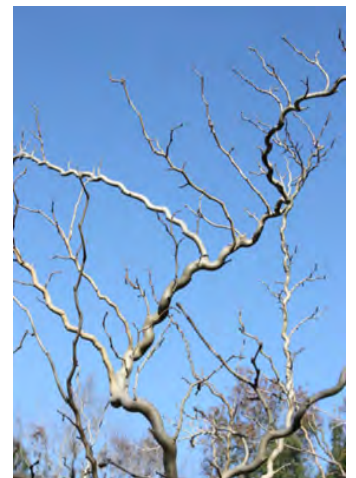


### Maintenance:

Mulberry trees require very little maintenance. They rarely require irrigation after establishment and generally do not require fertilization. Prune lightly when trees are young to help create a strong framework of branches. Be careful when pruning. Mulberry trees have milky sap which can cause skin rashes in some people. It is best to prune in the winter.



There are weeping and contorted mulberry trees that are used as ornamentals.



## Mulberry Trees, continued



There are some diseases and pests that can affect the leaves, twigs, and bark of the mulberry. None of these seem to slow the trees down much since they have a rapid growth rate.

Popcorn disease affects the fruit. The berries swell to look like popped corn. Since the disease overwinters in the fruit, the best prevention is to gather and destroy affected fruits. White mulberry varieties and hybrids are more susceptible to popcorn disease. This disease appears only in southern states.



### Food Use

The fruit, leaves, twigs and root bark can be consumed. Young tender leaves can be eaten raw or cooked. Leaves, twigs and root bark can be brewed into teas. Leaves are known to help cows produce more milk. For winter livestock feed, cut the branches in the fall with leaves still attached. Hang them upside down. The leaves will stay green.



Mulberry tea has many potential benefits. It has been used in folk medicine to

- improve heart health
- improve poor eyesight
- reduce inflammation
- reduce blood sugar level
- help with insomnia
- aid in digestion
- reduce the risk of cancer
- reduce appearance of age spots
- lower cholesterol
- prevent cataracts
- promote brain health



- support the immune system
- improve blood circulation
- boost metabolism



Mulberry fruit and leaves are rich in vitamins A, C, and E, calcium, iron, potassium, zinc, and other trace minerals. The tea is low in sugar and has no caffeine.

## Mulberry Trees, continued



Resources for more information on mulberry trees and fruit:

<https://gardeningsolutions.ifas.ufl.edu/plants/trees-and-shrubs/trees/mulberry.html>

[https://www.extension.purdue.edu/extmedia/fnr/fnr\\_237.pdf](https://www.extension.purdue.edu/extmedia/fnr/fnr_237.pdf)

<https://ohiodnr.gov/discover-and-learn/plants-trees/broad-leaf-trees/mulberry-Morus-species>

<https://www.mofga.org/resources/mulberries/mulberries/:~:text=Mulberries%20prefer%20a%20well-drained,30%20feet%20around%20each%20tree>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6130672/>

<https://sites.redlands.edu/trees/species-accounts/whitemulberry/>



Jennifer Anderson  
Vegucator  
Master Gardener

*Editor's Note: None of the traditional uses for mulberries have been researched or confirmed by western medicine standards. There are several promising active ingredients, but more definitive research is needed on each mulberry species. When consumed as food, mulberries are considered safe except for people with allergies to latex. There is a theoretical potential drug interaction between mulberry and medications prescribed for diabetes control. Consult your healthcare provider before starting any new nutritional supplement.*

Editor's additional resources:

[Nutritional constituents of Mulberry. NNCIH \(nih.gov\)](#)

[White Mulberry Leaf | NCCIH \(nih.gov\)](#)

[Natural medicines. TRC healthcare](#)

# The Power And Science Of Plants



Fibonacci spirals, named after an Italian mathematician, make up over 90% of current leaf spiral patterns. This paper discusses the evolution of leaf spiral patterns: <https://scitechdaily.com/natures-secret-code-new-findings-shatter-long-held-beliefs-about-fibonacci-spirals/>

An article that challenges traditional distinctions between beneficial and harmful plant pathogens:

<https://scitechdaily.com/genetic-cluster-in-root-fungus-found-to-be-the-on-off-switch-for-disease-causing-behavior/>



There are 125 families of moths. Here are a few interesting moth facts:

<https://phys.org/news/2023-09-unveiling-enigmatic-world-moths-ancient.html>

How farmers are using technology to artificially pollinate crops:

<https://www.bbc.com/news/business-66807456>



This article scrutinizes the assertions of two books about the hidden life of trees. Do trees really have feelings?

<https://phys.org/news/2023-09-anthropomorphize-forest.html>



## The Power And Science Of Plants, continued

Scientists using 3D models of proteins to detect how some bacteria cause disease in plants:

<https://scitechdaily.com/preventing-220-billion-in-damages-scientists-discover-potential-way-to-disarm-a-mysterious-family-of-microbial-proteins>



The importance of bee diversity in orchards world-wide:  
<https://phys.org/news/2023-10-international-characterizes-diversity-bees-apple.html>

10 award winning photographs of birds:

<https://www.smithsonianmag.com/smart-news/see-ten-stunning-images-from-the-bird-photographer-of-the-year-awards-180982955/>



Ever wonder how "meat" is grown in labs. Here's an easy to read article on how it is accomplished.

<https://www.inverse.com/health/lab-grown-chicken-meat-just-approved-uses-decades-old-technique>

A study from UC San Diego measuring herbicide levels in adolescents:

<https://medicalxpress.com/news/2023-10-commonly-used-herbicide-adolescent-brain-function.html>



Wild grasses borrow genetic material from neighboring plants:  
<https://phys.org/news/2023-10-natural-genetically-crops-grasses-evolutionary.html>

## The Power And Science Of Plants, continued

The honeydew excreted by latternflies can become a source of food for honey bees. This honeydew has antibacterial properties:

[https://lancasteronline.com/features/home\\_garden/spotted-lanternflies-are-still-a-pest-but-the-smoky-honey-they-help-make-could-be/article\\_0b375094-63c1-11ee-91de-9b34b422f32e.html](https://lancasteronline.com/features/home_garden/spotted-lanternflies-are-still-a-pest-but-the-smoky-honey-they-help-make-could-be/article_0b375094-63c1-11ee-91de-9b34b422f32e.html)



TY LOHR digital staff



Pixabay:CC0 public domain

Bonnet mushrooms thrive on dead trees. Can they also infect living hosts?

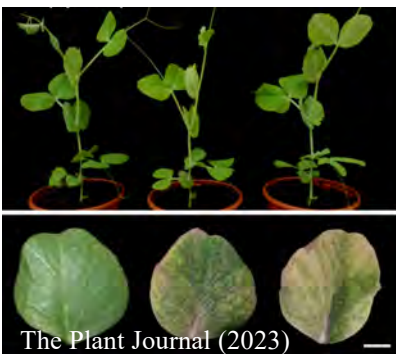
[Fungal evolution discovered: Mycena can now invade living hosts \(phys.org\)](https://phys.org)

A plant that helps clean indoor air pollutants:

<https://www.housedigest.com/1439339/ivy-indoor-houseplant-clean-air-mold/>



Albina Yalunina/Getty Images



The Plant Journal (2023)

Iron fortified vegetable crops and cereals:

<https://phys.org/news/2023-10-power-peas-genetic-discovery-high-iron.html>

Joro spiders is another invasive species:

<https://www.usatoday.com/story/news/nation/2023/11/03/joro-spiders-study-spreading-us-states/71435278007>



Getty image

Jamie Blazek  
Master Gardener  
Vegucator  
Editor, *The Gardengoer*

# WANTED

**WHO:** STMGA Master Gardeners

**REASON:** To write articles for *The Gardengoer*

**IDEAS:** Any gardening topic that interests you,  
such as (but not limited to):  
Creating new gardens  
Tour of a garden (public or private)  
Growing specific plants, vegetables,  
fruit, herbs, spices  
Overcoming a garden problem  
Gardening tools and equipment  
Pollinators and other garden insects

**REWARD:** Volunteer hours  
Admiration of other master gardeners  
Enhanced self-esteem

Submit articles and questions to  
[jamieblazek@bellsouth.net](mailto:jamieblazek@bellsouth.net)  
Write "Gardengoer" in subject line

Jamie Blazek  
Master Gardener  
Vegucator  
Editor, *The Gardengoer*



THE GARDENGOER  
THE NEWSLETTER OF THE  
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