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# Backyard Gardener



UF/IFAS EXTENSION, VOLUSIA COUNTY

## Galls on Oaks and Other Plants in the Landscape

Joe Sowards

UF/IFAS Extension, Volusia County  
Urban Horticulture Agent and Master Gardener Coordinator



Stem or Potato Gall on Oak

We get lots of calls every year about galls that form on the leaves and twigs of landscape plants. In particular, oaks are often the host for a variety of different species of gall-forming insects. The good news is that the vast majority of these are harmless to the overall health of the tree; especially if it is an otherwise healthy, well-established tree. There is no need to spray anything or even do anything. Although it may look strange and to some, even alarming, it is usually no more harmful to the tree as acne is to humans.

### What are galls?

Galls are the growth of plant tissue in response to chemical stimulus from either insects, mites or some fungi. This stimulus increases the plant's production of growth hormones (auxins, cytokinins, gibberellins, etc.) which, in turn, causes either more numerous cells or larger than normal plant cells to be produced. This causes plant organs whose growth and development has been altered into unusual shapes. The galls form because of the plant's response to the insect's egg laying, presence of the egg, and /or feeding by the larva. The plant tissue surrounds the egg or larva and protects as well as provides nutrients to the gall maker.



*Callirhytis quercusbatatoides*  
The Cause of Oak Potato Gall

### Where are these galls found?

They usually occur at the tips of the plants where growth is the fastest.

The adult will lay eggs on new growth that is developing quickly as well as on flowers, roots, leaves and buds. The problem with that is; most of these gall makers are very small and go undetected until the gall is formed.



Stem or Bullet Galls on Oak

### What do galls look like?

They look like warts, blisters, fuzzy bumps, small bullets etc. In other words, they can be fairly conspicuous, especially on smaller trees and shrubs. They aren't as conspicuous on large, mature

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trees (obviously) unless the leaves or branches fall on the ground. This is when they are usually brought in to us. Lots of folks think the branch or leaves fell as a result of the gall. This usually isn't the case.

#### What commonly causes these galls?

Most galls are caused by insects such as aphids, phylloxerans, psyllids, midges or gall wasps. There are over 2000 different gall-making insects in the U.S. and over 1700 species are either midges or wasps. A few are caused by bacteria or fungi.



**Azalea Leaf Gall**  
Caused by a Fungus

#### Do they damage my plants?

In most cases, the galls don't damage plants; especially well-established, healthy shrubs and trees. Some galls are caused by disease organisms and can be damaging (not the galls but the disease that caused them). An example would be crown gall (a bacterium) that is often found on roses. The overwhelming majority of galls caused by the various insect species are, although unsightly, harmless. Plants might lose some leaves but not enough to cause damage. If galls appear, in large numbers, on smaller, recently planted trees, it might be a good idea to prune them off so that the new growth won't be deformed.

#### What should I do?

For the most part, don't do anything! As I have said, they are mostly harmless. Besides, by the time they are noticed, the gall insect has already created the protective covering over their body or has already exited. Besides, if these occur on a larger, established tree, spraying is not practical, especially if you live in a residential area where spray drift might cause problems with your neighbors. Most gall-makers on oaks are native species of insects and are not regulatory pests of concern.



**Oak Rosette Galls**

## Know Your Plants

### Walter's Viburnum

*Viburnum obovatum*

Mary Wright, Master Gardener

A great go-to plant that fits most wish lists for Central Florida is Walter's Viburnum also known as Blackhaw. The botanical name is *Viburnum obovatum*. Take a look around and I'll bet you have walked by this terrific plant many times without noticing its many attributes.

Walters can be a five foot shrub or a tall tree reaching heights of 25 feet or more under ideal conditions. Depending on the variety you choose, the architectural look can be weeping, upright, spreading or dwarf. There is something there for everyone's tastes!

And even better; this is a Florida Friendly choice that is a Florida native, drought tolerant, the blooms attract butterflies, the plant can take shearing and has no pests or diseases of major concern. Walter's thrives in most soils but is not salt tolerant. It can be found from zone 7A to 10B. This plant fits almost every requirement of a carefree perfect plant in any landscape.

The next time someone asks you for landscape ideas, remember Walter!



Here is Walter trained as a tree



In dwarf form: *Viburnum obovatum compactum*

## Ornamental Peppers

Rebecca Turner

You can have Christmas in July; in fact darn near all year long in your garden. Simply follow the trend and plant Ornamental Peppers! Talk about fruiting bodies! May through Frost you are smitten by colorful perennial shrubs that have orange, yellow, red and purple fruits against a backdrop of fresh green leaves, growing to about 20 inches in height. They are guaranteed to wake up a ho hum flower bed whose Spring flowerings have all too soon come and gone. Not so with the little peppers which persist on these ornamental shrubs while new ones are being freshly displayed. Not only this, but aside from an occasional leaf chewer, Ornamental Pepper plants are not readily affected by pests. You might have to deal with pests if you tried to grow them as a food crop and not as an ornamental, because pests know the difference. Of course, purchasing pest resistant varieties of any plant is best in Florida. They are not frost tolerant, so if they don't overwinter well, think of them as annuals and simply replace with new ones.

The *Capsicum Annuum* is part of the New World family Solanaceae, mostly native to South America and Mexico. They are related to the tomato, potato and eggplant vegetables, and the Petunia and Brunfelsia (Yesterday, Today and Tomorrow) garden



plants. The family also takes in the Tobacco plant and a few nasty weeds like deadly nightshade, jimson weed and tropical soda apple. The plants

contain glycoalkaloids either more or less, responsible for both the heat in edible peppers or the vomiting and death from the berries of the nightshade (personally I'll go with the heat from the peppers). Even potato skins, tomatoes and the flesh and seeds of the eggplant contain the alkaloids. Ornamental

peppers can be eaten, but sometimes they can be way up on the Scoville scale of heat so be careful. This is why they advise that some varieties not be planted close to walkways or where children might be distracted by the colorful fruits. There are varieties which are milder, however.



Growing Ornamental Peppers is relatively easy. They like organic, well-drained soil (6.5) and are moderately drought tolerant - they just need adequate water in order to keep producing fruit. Fertilize with a lower nitrogen, higher phosphate mix. They have a moderate growth rate and can be propagated by seed which, by the way, should not be covered with soil. Varieties have names like Fiesta, Firecracker, Little Dickens, and even Jingle Bells!

And there are exciting cultivars on the market which have dark purple fruits and green, purple and cream leaves, the Calico, and the Black Pearl, with deep purple leaves and black peppers that turn to red. The Sangria has red and purple fruit and produces almost non-stop fruits growing to 18 inches wide.



It may be that you are so enthused about your Ornamental Pepper plants that you want to "branch out" and try all sorts of peppers: Tabasco, Habenero, Jalapeno - they will all 'fiestasize' your landscape and when someone asks a neighborhood gathering who is the most colorful character on the block, people will point toward your house. Your Ornamental Peppers say it for them.



## Surprising Food Facts!

Did you know the eggplant is actually a berry?



The fruit is botanically classified as a [berry](#) and contains numerous small, soft [seeds](#) which are edible.

## Calendar of Public Events

| Topic  | Date                           | Location                      |
|--|--------------------------------|-------------------------------|
| Citrus Care 1.5 CEUs                               | November 8 10:00—11:30         | DeBary Hall                   |
| Florida Friendly Landscape                         | November 12 10:00—12:00        | Daytona Beach Library         |
| Preparing Your Landscape for Winter 1.5 CEU        | November 13 1-2:30 pm          | DeBary Hall                   |
| <b>Citrus Culture in the Home Landscape 2 CEUs</b> | <b>November 15 10:00-12:00</b> | <b>Ag Center Cost \$5.00</b>  |
| Master Gardener Plant Clinic                       | November 18 1:00-3:00          | New Smyrna Beach Library      |
| Sugar Mill Garden Q&A Workday                      | November 19 9:00-11:00         | Sugar Mill Garden             |
| Cold Protection 1 CEU                              | November 20 1:00-2:00          | Ormond Beach Regional Library |
| Ormond Beach Library Plant Clinic                  | December 1 10:00-12:00         | Ormond Beach Library          |

**For more details Master Gardeners should check the VMS calendar.  
The general public may contact the Volusia County Agricultural Center.**

**Volusia County Agricultural Center  
3100 E. New York Ave. (S.R. 44),  
Deland, FL 32724**

*At the Volusia County Fair Grounds*

**West Volusia... 386-822-5778    Daytona Beach... 386-257-6012    New Smyrna Beach... 386-423-3368**

## We Get Calls

Jean Porter  
Master Gardener

**Q:** What kind of tree can I plant over a septic tank? I need to shade my car that I park in the driveway.

**A:** Trees have roots that look for water and nutrients and in doing so can infiltrate your septic tank system if it is close by. Edible fruit from trees planted over the septic system will be contaminated and unsafe to eat. A rule of thumb: If a tree will be 30' high at maturity, keep it at least 30' plus 25% from the drain field. Some trees need at least 100' because they have an aggressive root system and the nutrients will attract the roots further.

There is one tree that could be placed in that location.... a metal sculpture. However the heavy equipment is required to deliver the sculpture can damage your septic tank system.

As Erma Bombeck says, the grass is greener over the septic tank.

**Q:** Mushroom clusters with tan tops. They are growing on the base of my oak tree. Are they edible?

**A:** Yes and No! There is a mushroom that fits that description but many mushrooms have look-alike imposters. I would recommend bringing a sample to the extension office for clarification. Why? I would really like to be able to talk to you again someday.

**Q:** I have large patches in my St Augustine grass that have turned yellow. They started about one foot in diameter but are now much larger. What has caused this and what can I do.

**A:** Your lawn is experiencing a fungus infection called *Rhizoctonia* Blight commonly known as Large Patch or Brown Patch. It is caused by the fungus *Rhizoctonia solani*. Large Patch usually appears November through May. The infection is triggered by heavy rainfall, excessive irrigation, or high humidity. The fungus infects the grass leaf closest to the soil, eventually killing the leaf. A soft dark rot occurs at the base of the leaf and leaves can easily be pulled off the stem. Neither roots nor stolons are not affected by this fungus. The grass will usually recover when warm weather returns in the spring.

To control this disease avoid excessive nitrogen applications. Use a slow release fertilizer. Irrigation should occur only when necessary and during the early morning hours between 2 and 8 AM. A frequency of one inch of water once a week is usually sufficient.

Mow the infected areas last so your mower does not spread the disease to other parts of the lawn. Be sure to wash your mower of all grass clippings to avoid spreading the disease.

For further information regarding Large Patch (*Rhizoctonia solani*), go to the University of Florida Website; [solutionsforyourlife.com](http://solutionsforyourlife.com) (EDIS) and search for the publication Large Patch #SS PLP-5.

**Q:** There are little brown fuzzy balls on my oak trees. What are they and how do we control them?

**A:** The little fuzzy brown balls are woolly galls. Small gnat-like insects (wasps) lay their eggs in the oak leaves during the spring and the galls gradually develop, being most notable in late summer or fall. Galls form in response to the eggs and larva present in the leaves. The enlarged plant tissue provides food and protection for the developing insects. Eventually the insects emerge to leave the gall. The galls do not harm the tree and the wasps usually cause little or no damage and can be ignored. The older leaves with galls attached will fall from the tree and will be replaced by new leaves which will not be affected by the gall.

## Gardening by the Book:

Laura Rocco

Native Plants of the Southeast, Larry Mellichamp. Timber Press 2014.  
367 pages. ISBN-13:978-1-60469-323-2 Available at Volusia County Libraries

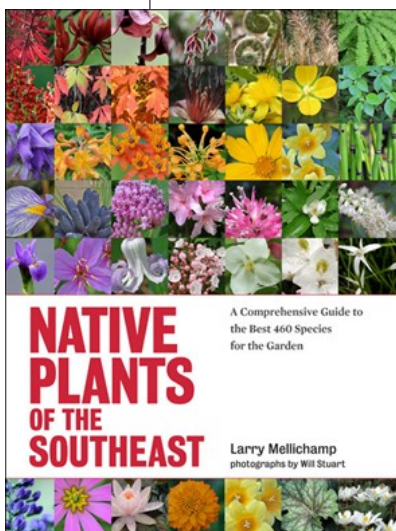
Larry Mellichamp has spent his career embracing plants. A professor of botany at the University of North Carolina at Charlotte, he is passionate about native plants and is an expert on plants in the southeast US in particular.

The subtitle of the book, "A Comprehensive Guide to the Best 460 Species for the Garden" sums up the premise of this book. After a thorough introduction to the wisdom of using native plants and how to acquire them, the book sorts plants into nine chapters covering ferns and club-mosses, grasses and grass-like plants, aquatic plants, bog plants, wildflowers, vines, shrubs, conifers, and trees. Each chapter begins with a general discussion of the plants in that category. Then individual plants are listed. The information for each plant includes the botanic name, common name and family; habitat and range; zones; soil; light; description; propagation; landscape uses; ease of cultivation; availability; and notes.

Mellichamp assigns between one to four stars to each plant. The star ratings move from useful to good plant to very good plant and ultimately outstanding plant. These are his ratings.

While the maps in the book show the southeast US extending from Virginia to the Mississippi River and south to the Florida Keys, the southernmost zone for most plants ends in zones 8 and 9.

Every plant has at least one photograph. Will Stuart's images are stunning. He uses a macro lens that gives you a bee's eye view of the tiniest blossom. If the bark is unusual or the fall foliage is remarkable, that's where he focuses. The image of a zebra swallowtail butterfly feeding on a black raspberry blossom is magical.



So is this a reference book useful to Volusia gardeners? With reservation. While live oak and coontie and southern bayberry are given their rightful place, and my favorite Carolina cherry-laurel gets 3 stars, Mellichamp includes red bay and gives it 2 stars (good plant). In the description he mentions that, "laurel wilt is spreading in the wild and killing trees." In the next sentence he writes, "I like to see red bay naturalizing in a woodland setting, where I can crush and smell the fragrant leaves." I doubt any of us would recommend planting one in the landscape these days.

At the end of the book are lists of plants that tolerate wet soil in sun and shade, dry soil in sun and shade, plants attracting pollinators, etc.

In summary, this is a beautiful book, coffee table quality photographs, with some fresh ideas for central Florida gardeners. Check it out from the library and decide for yourself.

## Master Gardener Vision Statement

*To be the most trusted resource for horticultural education in Florida*

## Master Gardener Program Mission Statement

*To assist extension agents in providing research based horticultural education to Florida residents.*

## Compost Tea

From *The Book of Great Garden Tips and Tonics*

This solution is great for seed starting and as an all around plant pick-me-up. Simply put several shovelfuls of compost or manure into a large trash can. Fill the can to the top with water. Allow the mixture to sit for a day or two. Stirring it several times each day. To use, dilute the tea with water until it is a light brown color. Give each plant about a cup of the tea every two weeks and your feeding worries will be over.



## Dracena

Rebecca Turner

Dracenas are wonderfully architectural. You are probably very familiar with them and may not even be aware of it. They are at once tropical and desert-like and are grown widely both in the landscape and indoors. There are up to 150 species of Dracena, trees or shrubs, native to Africa and Asia where they grow in semi-desert areas as jungle understory plants. They are in the Asparagales order, characterized by a black pigmented seed coat plus their cluster of leaves at the base of the plant or at the end of a woody stem. Flowering is at the tip of the stem. They are in their own family now, Dracenaceae, separated from Asparagaceae but they are sometimes placed in the Agavaceae family. They are closely related to the Sanseverias which are native to the same geographic areas. The Dracenas' family or sub-family may have been changed through the years, and even the spelling of the name, but, as they say, a Dracaena is still a Dracaena.

The name comes from the ancient Greek for "she-dragon". There is a red resin made from the *D. Draco*, Dragon Tree, which grows in the Canary Islands. Cordyline, which means "club", from its thickened stems at the base of the plant, is a genus of the Dracenaceae; in other words it's another close relative and is native to New Guinea and S.E. Asia. Both the Dracenas and the Cordylines don't take well to cold temperatures, below 55 degrees, yet are widely grown (and wildly popular) in N. Central Florida. They do not like fluoride so a high phosphate fertilizer with its concentrations of fluorides, is not recommended.

Many of the Dracenas are known to us as house plants. The "Lucky Bamboo" (*D. braunii* or *D. sanderiana*) – is a Dracaena! That corn plant (*D. fragrans*) that has such beautiful draping leaves and is so reliable – is a Dracaena! The *D. marginata*, with its slender trunks and narrow spiky leaves at the top,

looks awesome in a container in the home or on the patio, and its woody stems can be trained to bend for special effect. It is also known as the Madagascar Dragon Tree. *D. reflexa* or Song of India, is that gorgeous undulating green and yellow, and the leaves of the lemon-lime 'Warneckii' variety are a literal stand-out of color amongst other greenery. The Cordylines also have their cultivars of the most commonly grown *C. fruiticosa*, like "Red Sister",

"Black Magic", or "Electric Pink". All these are comfortable in a home environment of 75 degrees and well-drained soil. Many of these plants will grow well in moderate light conditions but remember to use distilled water because of the danger of fluoride toxicity from tap water. Their leaves should be wiped clean of dust once in a while and monitored for scale, mealy bug or spider mites which only infrequently may become a problem. Water bi-weekly in summer as houseplants, but cut back to sparingly in winter. Fertilize in summer

and fall with houseplant fertilizer, and mist once in a while to add humidity.

If the stems of your Dracenas get too tall, you can simply cut them and new leaves will grow from the top. Also, you can root the stem cuttings and though it may take a period of a month or more for them to root, you can have a new Dracena without much effort.

If you are reticent about planting Dracenas outdoors because of their intolerance of cold, remember that they are seen all over our area in the landscape and have remained a delight to look at through many seasons. Should they freeze, they will, more often than not, grow back. Better to plant these strikingly beautiful specimens and enjoy their exquisite foliage— so while you're gathering rosebuds in May, gather Dracenas too!

