Many gardeners assume that shade equals disaster in the garden. However, during the brutal summer months in Florida, shade can be a real blessing. It is possible for plants to grow in lower light conditions. The key to creating a gorgeous shade garden is to identify the amount and intensity or the shade found in the garden and then pick the plants best suited for that level of intensity. Light is critical for plant growth and essential for turf grass. Lawn grasses in particular are difficult to grow in moderate to deep shade. They typically need at least 6 hours of sun, although certain species and cultivars can adapt to slightly less. Additionally, vegetable and fruit crops do not usually do well in the shade.

The side of the house (north, south, east or west), microclimates, and number of hours of shade or sun can play a critical role in the success of different plant species. When deciding what plants to grow and where to grow them, it’s important to carefully consider how sunlight falls in your yard. A location that seems like a lovely sunny space in early spring may be shaded by a canopy of trees later in the season. Shade will also change as trees grow and mature. Your home also casts shadows on the landscape, and exactly where depends on the time of year and the time of day.

Assess the level of shade by watching the sun’s movement throughout your garden area. Record where the sun shines most in and how long it lasts. After some observation, you should be able to determine the levels of shade found throughout your garden area. The four basic levels of shade are:

- **Dense** – There is no direct sunlight or indirect light. Many north-facing spaces are in full shade. St Augustine grass grows poorly in shady areas and under trees.

- **Deep or full** – There is no direct sunlight and very little indirect light. It may be dark with difficult or limiting areas to plant. Plants such as ivy, hosta, most types of ferns, and pachysandra do well here.

- **Medium or partial** – There is little direct sunlight, plenty of indirect light, 4 to 6 hours of sun maximum. Wax begonias, impatiens, day lilies and some flowering shrubs perform well here.

- **Open or intermittent** – There is direct sunlight in varying degrees for up to 3 or 4 hours per day. Daffodils, primrose, a variety of perennials and wildflowers perform well in these light conditions.

(Continued on page 2)
Shade in the Garden
continued

Once you have evaluated the available sunlight in your landscape, remember right plant/right place. Consider the light requirements of the plants you would like to grow and then match the right plants to the right area in your yard. A plant that needs full sun will not bloom in shade and will generally produce spindly growth; shade-loving plants will burn and produce spindly growth in full sun. Plants whose cultural requirements are matched to the site will be healthier and develop fewer problems with insects and diseases than mismatched ones.

Some plants for a shady garden are impatiens, viburnum, azaleas, caladium, pansy, English ivy, lilyturf, hosta, many ferns, coleus, camellia, wax begonia, hydrangea, honeysuckle, and white trillium. We can always count on cast iron plant to perform well in deep shade. To add light and color, use bright, light-colored, or patterned foliage plants and flowers, plants that produce light-colored or variegated foliage or bright flowers. Examples include firespike, ti plant, beautyberry, begonias, gingers, caladiums, orchids, and bromeliads can all bring light and color to a dark corner of the yard. Camellias give color in the winter when most plants are dormant. They bloom with long lasting rose-like flowers. Choosing a lighter-colored mulch can also help.

A benefit of areas under tree canopy tend to be warmer, frost-free spots more amenable to cold-tender plants. Digging among the roots of trees and shrubs is difficult, so start with smaller plants that do not need a large planting hole. Water them frequently until they are established. Remember that fertilizer cannot compensate for inadequate light. Any lawns that do exist in shaded areas should be mowed higher. For more information, please see: https://edis.ifas.ufl.edu/ep457

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Palm Trees: No Worries or False Securities
By: Nick Jurasevich, UF/IFAS Extension Marion County Master Gardener and
Maxine Hunter, UF/IFAS Extension Marion County Urban Horticulture Agent

As we all might agree, life can be so full of anxieties, pressures, and just plain worries. I am currently a Master Gardener who just relocated to Marion County. For my wife and I such a time was at the beginning of this year. We were living in Fort Myers, Florida and our home was going up for sale. Our intent was to move to the Ocala area and to sell our home, and we wanted everything to be “picture perfect” both inside and out. We worried that everything inside our home would pass any buyer inspection and we worried that the curb appeal of our home would remain as inviting as possible to prospective buyers. We felt (continued on page 5).
Edibles for Your Landscape

By: Amanda Marek, Florida Friendly Landscaping™ Extension Agent 1; UF/IFAS Extension Marion County

Marion County has a new demonstration garden, and some of it is edible! No, it’s not like walking through Willy Wonka’s Chocolate Factory, but thanks to grants by the UF/IFAS Florida-Friendly Landscaping™ Program funded by the Florida Department of Environmental Protection and the Marion County Hospital District, the UF/IFAS Marion County Extension Service has a new edible ornamental demonstration landscape at the 4-H Farm. The edible ornamental demonstration landscape is approximately 11,000 square feet and is located at the Marion County 4-H Farm on Baseline Rd. Visitors are welcomed into the garden by a newly constructed arbor that will be decorated by 4-H volunteers and members. Once in the garden, you will be able to touch, smell, and even taste over 20 varieties of edible ornamental plants that are best adapted for our area. These Florida-friendly plants are a mix of native and non-native plants that are cold hardy in our climate zone (9a) and that will require minimal inputs once established, such as irrigation, fertilizer or chemical pesticides. After all, Right Plant, Right Place, is the first principle of Florida-Friendly Landscaping™. Some of the plant varieties you will be able to see include lemongrass, loquat, multiple cultivars of fig and blueberries, pineapple guava, rosemary, native pawpaw trees (Asimina triloba), Chickasaw plum, and more. Other plants included in the garden have ethnobotanical significance, such as our native coontie and beautyberry that were both utilized by Native Americans and early American settlers for medicinal and culinary purposes.

In addition to putting into practice the Right Plant, Right Place Florida-Friendly Landscaping principle, visitors will be able to personally see some design aspects that incorporate edible with non-edible plants in the landscape. For example, in the center of the landscape is a

What to Plant

**Annuals/Bedding plants**: Even though temperatures are still warm, begin planting for the cooler months ahead. Dianthus, petunia, and pansy are good annuals for the fall garden. See Annuals: [http://edis.ifas.ufl.edu/topic_annual_landscape_plants](http://edis.ifas.ufl.edu/topic_annual_landscape_plants)

**Bulbs**: Plant agapanthus, rain lily, and many varieties of lilies now for blooms next spring or summer. Add organic matter to the planting bed for best results. See Bulbs for Florida: [http://edis.ifas.ufl.edu/topic_bulbous_flowers](http://edis.ifas.ufl.edu/topic_bulbous_flowers)

**Herbs**: A wide range of herbs can be planted from seeds or plants this month. Some examples include parsley, cilantro, chives, garlic, and sage. See Herbs: [http://edis.ifas.ufl.edu/topic_herbs](http://edis.ifas.ufl.edu/topic_herbs)

**Vegetables**: Plant crops now that will grow and produce throughout the winter months. This includes broccoli, collards, kale, lettuce, and others. See Vegetable Gardening in Florida: [http://edis.ifas.ufl.edu/topic_vegetable_gardening](http://edis.ifas.ufl.edu/topic_vegetable_gardening)
specimen pineapple guava tree that draws the visitor towards the middle of the garden, and surrounding the tree are sunshine mimosas, a lovely native groundcover that is highly attractive to pollinators. Evergreen native fetterbushes (*Lyonia lucida*) that have attractive pink blooms spring to summer flank the deciduous native Chickasaw plum to maintain constant color and wildlife cover through the winter months.

This new edible ornamental demonstration garden is one part of the larger goal to make better use of our 4-H farm for educational and public outreach programs. Signage will be installed identifying each plant in the demonstration garden to educate the public about Florida-friendly edible ornamental

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**Edibles in Your Landscape**

*(Continued from page 3)*

By: Mark Bailey, UF/IFAS Extension Marion County Sustainable Agriculture & Food Systems Agent

There are times when doing nothing is better than doing something that doesn’t work or makes the situation worse. When an insect is detected on a crop, many people’s first response will be to find out what to spray to kill it. This happens all too often whether it’s for backyard vegetable gardens or vast acreage of row crops. Paradoxically, by spraying a pesticide the pest problem can go from bad to worse.

Many people will assume that if an insect is on their plant it is inherently a pest. It could be a pest that is causing significant harm or it could be a beneficial insect that is attacking the pest insects. The first step, before you rush to your collection of garden sprays, is to correctly identify if the insect is indeed a pest in the first place. So, you’ve identified the insect as a pest. Now what? Spray it, right? Wrong.

The common way of thinking is that if a crop is being attacked by a pest it needs to be blasted with the most potent pesticides available. The correct way to approach this situation is to understand your crop and how the pest may harm your crop. Some insect pests can completely destroy a crop while others nibble away a tiny fraction of the leaves. If the overall damage is minimal, applying pesticides may not be necessary at all. Accepting a tolerable amount of damage may pay off in the long run. How could holding off on spraying a pest that’s eating my crop going to help the situation? Let beneficial insects do their job.

The vast majority of crop pests will eventually be attacked by beneficial insects that act as natural predators. These can bring down the pest population to a level that is tolerable. Some of the most common predatory insects include: ladybugs, assassin bugs, green lacewings, and praying mantises. Perhaps the most effective beneficial insects on a large scale are parasitoids. A parasitoid, which most commonly includes wasps and flies, will usually inject an egg into the host insect which will then be eaten from the inside out. These take some time to effectively reduce the pest population, so a little bit of patience can allow you to forgo spraying pesticides entirely.

In addition to encouraging beneficial insects, there are a lot of other pest management strategies that should be implemented. Choose the best possible crop varieties that are adapted for your area. Plant the crop as early as possible to avoid the times of year pests are most prevalent. Give your crop what it needs in order to grow as vigorously as possible.

When you have no other choice, only then should pesticides be considered. You will need to apply the right pesticide for the task at hand, and it must be in accordance with the label. The product label contains key information on *(Continued on page 5)*
Palm Trees: No Worries or False Securities

(Continued from page 2)

everything was in order and ready for several prospective buyer showings. “No worries” we said as we were as ready as we could be to show our home. This feeling of comfort was soon shattered and replaced by anxiety and disbelief by a neighbor’s knock on the door. Our neighbor asked if we had noticed a change in one of the palm trees that grew in the front of the house. I looked and saw one of the queen palms with fronds that were drooped, discolored, and seemingly dried. Somehow, I had not previously noticed these symptoms, but I was sure the problem manifested itself very quickly. Fusarium wilt is a disease where symptoms normally appear first on the oldest (lowest) living leaves, and then progressively move upward in the canopy until the palm is killed. Palms often die quickly, within two to three months after initial symptoms are observed. The only other disease that the leaf symptoms could be confused with is petiole (rachis) blight. I was somewhat familiar with the word “Fusarium” when I lived in Indiana as it pertained to a type of turf disease. But now, Fusarium, with my queen palm, in Florida… and just as I am putting my house on the market!!!

I did as much research as I could to see what my alternatives, or better yet, the silver bullet was to make my queen palm well. It became apparent that my palm was in fact affected with Fusarium wilt and caused by a fungus (Fusarium oxysporum f. sp. palmarum). The leaf symptoms included yellowing and necrosis of the leaf blades. It seemed that the disease symptoms appeared first on the bottom leaves and working upward. The necrotic leaves did not droop or shed but rather remained relatively rigid looking and dry as if a lack of water was the cause. Unfortunately, the words that stood out as I read about this disease was “no cure”. There was no a chemical treatment, no fertilizer, no magic potion to make it go away. The fungus, I learned, causes a vascular wilt of the palm. It obstructs the water conducting tissue which results in the symptoms of leaf dehydration and death. The fungus produces short- and long-lived spores as well as spores that can live in the plant tissue and the soil for a long period of time, even years. Fusarium wilt has been documented in parts of Texas as well as throughout Florida.

As previously mentioned, there is no cure for Fusarium wilt and there is no method for preventing this disease. Of note, I had noticed several other queen palms in our community with the same symptoms. The pathogen, I learned, appears to be spread primarily by airborne spores (conidia) moved by wind and possibly insects or birds. Further, it is believed that Fusarium wilt may be transmitted from queen palm to queen palm by way of pruning equipment. The equipment used to remove leaves from an infected palm can and most likely will have fungus infested material remaining on the blades. Therefore, it is extremely important to sanitize the tools used before they are used on another plant. I called our homeowners association (HOA) to request that they insist that contracted landscapers recognize and practice proper and effective sanitation in their equipment. I further requested that the HOA have their contracted landscapers report possible diseased flora that they come across such as the queen palm, to help assure that they be removed as soon as possible and that a different type of tree or palm serve as a replacement. For me, the diseased queen palm was removed quickly and replaced by a different palm type. The result was maintaining excellent curb appeal without the eyesore of a dead palm. One week later we accepted an offer and “No Worries” …everything inside and outside looked great.

For more information, please see: https://edis.ifas.ufl.edu/pp278
and https://shadetreeexpert.com/palm-diseases-fusarium-wilt/

The Pest Paradox

Continued from page 4)

how, where, and when to apply the pesticide product. A source of concern for misapplication of pesticides is not only harm to beneficial insects, but to the development of resistance to the pesticide by the pest itself. All things considered, making the right decision might be to do nothing at all.

Further information on pesticide use:
Interpreting pesticide labeling: https://edis.ifas.ufl.edu/pi071