Pomegranate (Punica granatum L.) may have potential as an alternative crop for citrus in Florida and also as a crop for small farmers. If you are not familiar with the plant and fruit, that's okay. It is sufficient to know that both the plant and the fruit are beautiful and the juice is very healthy. Pomegranate is also very well suited to an edible landscape.

First reason: The health benefits associated with pomegranate fruit and juice are well known. Dark-colored berry fruit like pomegranate generally are loaded with antioxidants and other components that aid your health (see Antioxidant Activity of Pomegranate Juice and Its Relationship with Phenolic Composition and Processing, University of California, J. Agric. Food Chem., 2000, 48 (10), pp 4581–4589). The pomegranate has been described as "the most medicinal fruit in the world" partly because it is rich in thiamin, riboflavin, niacin, vitamins B6, B9, and C, calcium, iron, magnesium, phosphorus, potassium, and zinc.

Second reason: They are fun to grow and eat!

Third reason: The range of cultivars and their traits is eye-opening. The fruit has been cultivated for centuries and is well established as a species of considerable ethnic importance. There are selections used commercially for their fruit and juice, other selections that are dwarf and others used as ornamentals. Fruit size and color range from yellow to pink to bright red with the portion that you eat (the aril) also varying in color from white to pink to dark red. Seed texture can be hard (essentially inedible) to medium to soft. Those selections with soft seeds allow a consumer to open the fruit and scoop out the contents and eat everything without having to separate the pulp from the seeds.

Pomegranate Botany

The pomegranate is a naturally bushy, multi-stemmed plant that tends to maintain its bushiness because of suckers routinely arising from the base. Plants grow to heights of ca. 10-12 feet and commercially are often trained to a single trunk or sometimes three stems. The plant is normally deciduous. New spring shoots tend to be thin and weepy with thorns. The leaves are shiny and dark green. The plant is essentially monoecious (male and hermaphroditic flowers both produced on the same plant) with both types of showy flowers produced on new growth each spring. Flowering may occur over several months with some flowers still being produced into late summer/early fall, but the major bloom period is the spring.

A flower is either male or hermaphroditic. The latter flower type is bell-shaped and self-fertile. Hermaphroditic flowers produce fruit. Male flowers are more trumpet-shaped and do not set fruit. Flower color for many cultivars is orange-red to brilliant red and there are some, especially...
Pomegranates in North Florida? Yes! Continued

ornamental types, with “double” flowers (i.e., with extra petals) or some that are pink, white, or some combination of those colors and red. Pollination primarily by insects (bees) leads to fruit set and the development of the inferior ovary.

The mature pomegranate fruit is large, usually 3 inches in diameter, and sometimes as large as 4 to 5 inches. Fruit generally mature in 5 to 8 months and often change from round to a slightly squared-out shape. The fruit of different cultivars are quite diverse in their color, taste, and certain other traits. Peel color ranges from a light yellow to “black” or very dark red/purple. The fruit is distinctive because it retains the calyx (petals + sepals) at one end of the fruit giving the fruit the appearance at maturity of having a small crown attached to it. Internally, the fruit consists of a series of chambers (locules) separated by a membranous septum. Inside each chamber are the seeds which each have a fleshy outgrowth (aril) that contains the edible juice. The seeds range in hardness from very hard (not edible) to soft (easily consumed). The color of the arils also ranges from a light, virtually white, color to very dark red or purple. The flavor of the juice can be indelibly tart to bland to sweet or sweet/tart depending on acidity.

Pomegranate Culture

The pomegranate plant is adaptive to a wide range of environmental and soil conditions, but is usually described as requiring a long, hot, dry season to crop properly. There are mixed reviews about its tolerance to salinity and calcareous soils indicating the need for further investigation. The plant is very cold hardy, but is not tolerant of wet conditions. It is responsive to irrigation as a recommended practice, perhaps with water not containing more than 2,000 ppm salt. However, plants in Israel have been irrigated with 4,000 to 6,000 ppm saline water with effects on vegetative growth but without significant injury to the plant.

Fertilization

There are few reports on formal fertilization studies, but supplying the usual essential elements apparently improves commercial performance. In Israel, Spain, India, and other regions, pomegranates are fertigated while in other places the plants are supplied with dry fertilizers. Some attempts have been made to establish leaf nutrient standards through research and some data have been developed privately, e.g., in California. Some evidence suggests that careful attention to certain nutrients can affect aril weight and fruit size without altering juice quality.

Propagation, Orchard Design, Tree Training

Pomegranates are readily propagated from stem cuttings of various size and age. They root easily with application of commercial hormone products and placement in a mist bed. They can also root when placed directly into orchard soil. Pomegranates can be propagated from seed. They have a relatively short juvenile period and can begin flowering in one year, but more typically after 2 or 3 years.

Good light interception is considered essential for cropping and fruit development. Thus, plants are usually widely spaced, ca. 10-12 x 20 ft. and trained to a form that minimizes the willowy young branches that bend under the weight of fruit. The plants are often trained to one to three trunks with an open vase canopy. In some instances, a single trunk is formed and three main branches diverge 1 or 2 ft. from the ground to form the open vase.

Pests and Diseases

Reviews of pomegranate culture have long lists of pests and diseases that include various insects, fungi, and bacteria. Among the insects, aphids appear to be common to most regions where pomegranates are grown especially among young plants at the propagation stage. Other insect pests are some of those common to citrus in Florida like mealy bugs, thrips, and various mites, but pomegranates are not listed as a significant host for Med fly (Thomas et al., 2010). Less information appears to be known about the Caribfly which has been found in much of peninsula Florida infesting guava and other soft fruits and occasionally citrus. In one study conducted only in the Miami area without any observation on seasonality of infestation, pomegranate was listed as a host of this pest (see Swanson and Baranowski and the DPI publication). Root knot nematode, Meloidogyne incognita, has been reported to be a serious pest.

The more serious problems are diseases caused by fungi and bacteria. Among these are leaf spotting that can lead to leaf drop, caused by Cercospora punicae fruit blemishes also caused by Cercospora sp., and fruit decay that renders fruit inedible. The bacterial genera Botryosphaeria and Alternaria along with others are implicated as sources of fruit rot problems.

Pomegranates as an Alternative Commercial Enterprise in North Florida

The pomegranate has a certain natural appeal because it is such an unusual fruit, one that is quite different from the common fruits such as bananas and apples consumed in the U.S. Part of its appeal may relate to its long history of cultivation. The pomegranate is an edible fruit of antiquity that ranks right along with the date, fig, and olive. Also, there is considerable current consumer interest in pomegranate because of its reputation as a healthy fruit and juice.
The major producers of pomegranate are India, Iran, Turkey, and Spain, and in the U.S, California is the major grower. The reputation of pomegranate has benefitted considerably from the aggressive marketing effort of a California company and their product, POM Wonderful® which is derived from the ‘Wonderful’ cultivar. Their efforts have greatly raised the awareness of pomegranate.

The pomegranate is native to regions of the Middle East (Persia, e.g., Iran), and Southeast Asia (e.g., Turkmenistan and Afghanistan), areas with relatively cold winters and arid, but hot summers. The species is not generally considered to be suitable for climates such as those of the southeastern U.S. where the winters can be cold, but the weather is humid during the warmer months of the year. Nevertheless, pomegranates have been a dooryard plant in South Georgia and Florida for decades. Researchers at UF have discovered plants in the Florida Panhandle area near Marianna and Perry that are ca. 100 and 80 years old, respectively. However, the origin of many dooryard plants is unknown. Furthermore, as they have visited nurseries to add plants to their collection, it became clear that it would be helpful to establish a collection of known cultivars and begin a systematic evaluation of their potential in various parts of Florida.

Determining the commercial potential of pomegranate in Florida is only now being investigated. Therefore, UF, IFAS Extension has initiated a pomegranate project with these objectives:

1. Collect pomegranate selections and cultivars and establish mother blocks.
2. Propagate from the collection and provide plants to interested grower.
3. Establish cooperative projects and evaluate the selections.

We chose these objectives because, while it is already apparent that pomegranate plants will grow in at least central Florida and northward into southern Georgia, it is not known whether the plants will produce acceptable quantities of good quality fruit especially for commercial purposes. We see these options:

1. Fresh fruit grown conventionally or organically. Particularly intriguing would be to grow the fruit as a small farm enterprise and market it locally.
2. Fruit grown by either method for juice which might alter the cultural program towards less use of pesticides. Particularly appealing with this option is to grow fruit for juicing in a small retail outlet and possibly blending with other juices such as blueberry or peach. Equipment for countertop operations to produce single glasses of juice or small quantities for bottling is readily available via the internet.
3. Pomegranates grown as an ornamental for the homeowner and the Edible Landscape.
4. Produce fruit for extracting and marketing of the arils. A brief search of the internet will reveal the variety of commercial equipment available for juicing the fruit and extracting and packaging arils.

The University of Florida, Putnam County Extension Office is hosting a class; “Growing Pomegranates in North Florida” on Saturday, October 20th, from 10:00am till noon. The class will be held at the UF, IFAS Putnam County Extension Office at 111 Yelvington Rd., in East Palatka. Seating is limited and pre-registration is required. You can call the office at: 386-329-0318 of stop by. The cost is $5.00 per person and includes light refreshments and all reading materials. You can also visit our website at: http://putnam.ifas.ufl.edu.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information, and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions, or affiliations. U.S. Department of Agriculture, Cooperative Extension Service, University of Florida, IFAS, Florida A&M University Cooperative Extension Program, and Boards of County Commissioners Cooperating.
Many people think that the world would be better without bees, but actually life here on earth would be much more difficult without bees. If all bees vanished, many people would die of starvation. Many fruits and vegetables would be so rare and expensive that few could afford them. Grasses and grains, and a few nuts, which are wind pollinated, would still be available, but there simply would not be enough food because bees do more pollination than any other kind of pollinator. There are thousands of kinds of pollinators - bees, flies, wasps, butterflies and moths, birds, bats, and even a few more exotic ones. All pollinators have their value, but the pollinators that do the greatest amount of pollination on earth are bees and without them we would be lost! Many of our fruits and vegetables are 90% dependent on bees for pollination and without them would be unable to complete their reproductive cycle that provides us with the food we eat. It is estimated that one-third of the human food supply depends on insect pollination, most of which is accomplished by bees. Think of a world without apples, without bees, the cross-pollination needed to produce apples just wouldn't happen. Blueberries, besides being loaded with antioxidants, are also delicious on top of pancakes, in muffins, and of course, in pie. The loss of the blueberry crop wouldn't just be felt at the kitchen table, however, the nation's blueberry crop, most of which comes from Maine, is valued at more than $593 million, 90 percent of which is pollinated by honeybees. Watermelon, the prospect of a summer without this refreshing, juicy fruit is certainly a strange one. Not only is 90 percent of the watermelon crop dependent on honeybees, but pollination by bees is essential to ensure a melon that is evenly shaped and symmetrical. Rapeseed, better known for its common end product, canola oil, isn't exactly a tear jerker but it is one that is almost completely dependent on honeybees for pollination. Ninety percent of the avocados grown in the United States rely on honeybees for pollination. How does that saying go? No avos means no guac, No guac means no party! Thanksgiving just wouldn't be the same without cranberry sauce, and we're pretty sure there would be a pretty big buzz about it around dinner tables across America if, one day, there just wasn't anymore. How about pumpkin, no pumpkin carving--no pumpkin pie! Grapefruit is just one of many kinds of citrus almost entirely dependent on honeybees for pollination. It probably goes without saying that if you're going to bring up grapefruit, you have to bring up oranges. And the data actually do back this up; like grapefruit, oranges are 90 percent dependent on honeybees for production. That morning cup of orange juice would get a lot more expensive. Maybe we'll just import our way out of this one — except, colony collapse disorder is a worldwide problem. From 1972 to 2006, there was a dramatic reduction in the number of honey bees in the U.S., which are now almost absent. At the same time there was a significant gradual decline in the number of colonies maintained by beekeepers. This decline includes the losses from all factors, such as urbanization, pesticide use, tracheal and Varroa mites, and commercial beekeepers' retiring and going out of business. However, in late 2006 and early 2007 the term colony collapse disorder was coined to describe the sudden disappearances. They are finding that that may be a problem we created! (What’s new?) Bees are important to our survival so please be vigilant about the use of pesticides in your landscape and protect our most important pollinators! Happy Gardening!

Did You Know?

One tree can remove 26 pounds of carbon dioxide from the atmosphere annually, equaling 11,000 miles of car emissions. Landscape plants, such as shrubs and turf, remove smoke, dust, and other pollutants from the air. One study showed that 1 acre of trees has the ability to remove 13 tons of particles and gases annually. So —let’s plant trees in our landscapes!
Hollies (Ilex spp.) are reliable, low-maintenance plants for Florida landscapes. Diverse sizes, forms, and textures exist, ranging from large trees to dwarf shrubs (see pictures). Some hollies can be used as informal or formal hedges or as foundation plants, while others make beautiful accent or specimen plants. Many are valued for their colorful berries, which provide food for birds and brighten the fall and winter seasons. Several hollies are native to Florida.

**Description**
Most hollies are evergreen. A few native hollies lose their leaves in winter but are rarely commercially grown and sold in Florida. Hollies are dioecious plants, meaning male and female flowers are located on separate plants. Female plants produce berries; male plants do not. For this reason, nurserymen often propagate only female plants. Male and female plants produce small white blooms in spring. Bees are the primary pollinators, carrying pollen from male hollies 1.5–2 miles, so it is not necessary to have a male holly in the immediate area. For a complete list of hollies for Florida go to the University of Florida EDIS website.

**General Culture**
Hollies generally prefer partial shade, but most grow satisfactorily in full sun. Slightly acidic, well-drained soils are essential for most hollies, although a few, like Dahoon holly (Ilex cassine), are native to moist areas and can be planted on wetter sites.

**Planting**
Container-grown hollies can be planted at any time of the year with proper postplanting care. The planting hole should be 1 foot wider than the root ball and slightly shallower than the height of the root ball. The planting site should be watered thoroughly to settle soil around the roots. A 2–3 inch depth of organic mulch should be added and maintained to moderate soil temperature, conserve moisture, and help control weeds; however, mulch should not be placed over the root ball. Trees and shrubs that are regularly irrigated through the first growing season after transplanting require from 3 months (USDA Plant Hardiness Zones 9–11) to 6 months (USDA Plant Hardiness Zone 8) to become well established. More detailed planting procedures are provided in Specifications for Planting Trees and Shrubs in the Southeastern U.S. (http://edis.ifas.ufl.edu/ep112).

**Watering and Fertilizing**
Irrigation is necessary to establish newly planted hollies and to encourage optimal growth. Care should be taken not to waterlog the soil since holly roots require good aeration. Established hollies should be watered as needed during dry periods.

Fertilize newly planted and established hollies in March and September if faster growth is desired or when plants exhibit nutrient deficiencies. For more information, see Fertilization and Irrigation Needs for Florida Lawns and Landscapes (http://edis.ifas.ufl.edu/ep110).

**Pruning**
Hollies may need occasional light grooming to maintain their form. Major structural pruning may be necessary to maintain a single leader (trunk) on a specimen tree or when training plants for special purposes. As can be seen from the photo, hollies can be pruned to special shapes. Detailed pruning techniques are provided in Pruning Landscape Trees and Shrub (http://edis.ifas.ufl.edu/mg087).

**Propagation**
Hollies are primarily propagated from tip cuttings in order to produce plants with the same characteristics as the parent plant. Cuttings should be 3–5 inches long and treated with a rooting hormone. For optimal rooting, hollies require a humid environment to minimize water loss and tissue desiccation. Growing holly from seed takes longer to produce new plants and results in seedlings that do not have the same characteristics as the mother plant.
Hollies at a Glance
Continued

Pests

Insects and diseases are not a major problem when hollies are selected, planted, and cared for properly. Poor performance is usually associated with inadequate growing conditions, such as poor soil aeration, drought, improper planting, or lack of fertilization.

Common but infrequent pests include scale, leaf miner, and spittlebug insects, as well as mites. Many different scale insects feed on hollies by sucking plant juices from leaves and stems. A substance called honeydew is secreted by some scales, and a black, sooty mold fungus grows on the honeydew. Although sooty mold does not harm plants, it is unattractive. Leaf miner larvae feed inside the leaf between the upper and lower surfaces. Blotch or serpentine miners appear on the upper surface of infested leaves. New leaves infested with leaf miners are often stunted and deformed. This pest is seldom severe enough to threaten the health of a holly. Spittlebugs are ¼ inch long, black-brown in color, and oval shaped with two orange bands across their wings. They are most common in north and northwest Florida on Ilex cassine and I. opaca plants. They feed on young leaves and stems by sucking plant juices. Leaves often are killed and dropped from the plant. Spider mites can be found on the underside of holly leaves, especially during hot, dry weather. Infested leaves turn gray or brown and fall from the plant. More information about managing pests can be found in Landscape Integrated Pest Management (http://edis.ifas.ufl.edu/Lipm) and by contacting your local county Extension office (http://solutionsforyourlife.com/map/).

Diseases known to attack hollies include stem gall, twig dieback, and root rot. Stem gall, or witches' broom (Sphaeropsis tumefaciens), is a usually fatal disease of hollies in Central and South Florida. Stem galls form on twigs and branches, causing the stems to enlarge and initiate an abnormal number of shoots, producing a broom effect (Figure 5). The disease is spread by infected pruning tools as well as by wind and rain. See Sphaeropsis Gall of Holly and Other Landscape Ornamental Plants (http://mrec.ifas.ufl.edu/jos/Sphaeropsis.htm) for more information.

God Almighty first planted a garden; and indeed it is the purest of human pleasures.
It is the greatest refreshment to the spirits of man, without which buildings and palaces are but gross handiworks. Frances Bacon

Numerous fungi can cause twig dieback, which starts at twig tips and gradually progresses toward the base. Leaves often wilt and drop from the plant. Root rots are usually associated with over irrigation or hollies planted in poorly drained, wet soils. Poor soil aeration weakens holly roots, allowing fungi to invade and cause considerable damage. Hollies with diseased roots appear weak, and branches, sections, or the whole plant can die. A particular root rot disease known as mushroom root rot can be diagnosed by scraping the bark of large roots or lower trunk tissue. If the area between the bark and the wood shows a white layer of fungal growth, mushroom root rot is involved. Mushroom fruiting bodies may appear in advanced stages of infection. Dead or dying plants affected by mushroom root rot should be removed with as much of the root system as possible, and the soil should be replaced before replanting anything. Fungicides cannot control stem gall, twig dieback, or root rot once these diseases have become established.

Article provided by the University of Florida IFAS Extension.

NOTES FOR THE OCTOBER GARDEN

Barbara Fisher, Contributor

Having just washed my car for the sixth time in as many days, I would be remiss in not mentioning the semi-annual return of Plecia nearctica a.k.a. Lovebugs. These annoying flies are members of the family Bibionidae (March flies) and were first noted in southern Louisiana in the 1920’s, and are now found as far north as Georgia and South Carolina. They are not experimental flies that escaped from labs at the U of FL. Lovebug flights occur twice a year and last for a period of 4-5 weeks. Lovebugs fly during daylight hours and when temperatures are over 68 degrees. Adults do not sting or bite and their larvae form a beneficial function by converting decaying plant matter into organic components to be used again by plants. However, as their body chemistry is slightly acidic and they congregate in the millions in grassy areas along highway, they are a danger to car finishes and to unaware drivers who try to remove the flies’ spattered remains from car windshields with wipers only. Use a hose to soak the bug bodies and then apply a mild soap solution with a sponge and/or brush. The best way to reduce the lovebug population is by encouraging the natural predators such as robins, quails, earwigs and centipedes. Nature knows best when it comes to dealing with these amorous pests.

Speaking of beneficial functions, I have spoken in the past about the concept of the “living soil” used to describe both the creatures that we can see and the not- visible- to- the- naked-eye mycorrhizae that co-exist in the soil and contribute to its’ balance and health. The use of synthetic chemical herbicides, fungicides, and fertilizers destroys this balance. If you have caterpillars and butterflies above ground and
earthworms in your dirt, you are doing something right. In a recent radio interview, Martin Blazer, M.D., professor of internal medicine and microbiology at New York University spoke about a similar unseen world of organisms called microbiota that lives in our bodies. These bacteria that we have been trained to think of as unhealthy and “dirty” actually are essential for our survival and to keep us healthy. The overuse of antibiotics, which includes hand sanitizers and eating farm animals that have been regularly dosed with antibiotics, is causing concern within the medical community. We need to use more care when we try to “micro-manage” the world in which we live.

Joe Sowards, Putnam County Horticultural Agent, forwarded to the Master Gardeners an article he found in a landscape blog called “ValleyCrest” entitled “Brown is the New Green. “

The article referred to the growing practice of over seeding winter dormant turf with ryegrass. Use of ryegrass on winter lawns is becoming a property status symbol. Users should recognize the drawbacks:

1) it takes a lot of water to germinate the rye seed and more water to keep it green. Dormant turf does not need to be watered on a regular basis.
2) Rye lawns require extra mowing and fertilizer, which requires more materials, fuel and labor, and this equals more money.
3) Much of the grass that is removed is bagged and finds its way to landfills.
4) The process is actually harmful to warm season grass, and will require the turf to weaken significantly over time. Why not just enjoy the brown. It’s nature’s way of giving your turf a rest.

The Cornell Lab of Ornithology reminds us to be conscious of our fall bird population. Leave some seedheads on flowers and resist pruning bushes with persistent fruit. If pruning is necessary, don’t put the berry branches or seed heads into compost piles. Arrange them into bouquets and tie them to a post or fence or birdfeeder. Rather than bagging leaves, rake them under bushes where birds can forage in them for insects and the leaves will decompose naturally, adding nutrients back into the soil. Cornell University has a “yardmap” project you might like to join. Take a look at their website: yardmap@yardmap.org.

While wandering around some flower shops and nurseries in September, I noted a succulent I had not seen before. It is commonly known as a Pancake plant. If you wish to be more formal, call it a Kalanchoe luciae ‘Flapjack’. While we are on the subject Kalanchoe can be pronounced “calan-ko-ee” or “calan-sho”. The choice is yours. This succulent comes to us from South Africa and is a fast grower that will form a clump of branches about two feet high and as wide. It is easy to grow from leaf cuttings, and the amount of reddish hue on the leaves depends upon the amount of light it gets. As with all succulents, let it dry out between watering and do not over fertilize. There is a white coating on the stem called “bloom”. Do not remove or disturb this or you will compromise future leaves. As you know, succulents are plants that store water in their stems, leaves, and/or roots. All cacti are succulents; but not all succulents are cacti. Cacti have “spine cushions” and their spines will only grow out of these areas. A succulent with prickly parts will have a more random looking thorn pattern and no cushions. ‘Flapjack’ is a succulent; but not a cactus and it has no thorns.

In the garden, plant scallions, herbs such as cilantro, parsley, rosemary, fennel, and dill. Plant beets, kale, cabbages, onions, carrots, lettuces, Swiss chard, and strawberries. Add fertilizer in a strip about 4 inches away from the seeds or plants. Grow a vegetable or herb that is new to you. Fall bedding plants such as pansies, mums, and geraniums can go in ground now.

Enjoy the native plants that are flowering now. Those yellow flowers with radial petals on six foot high stems that you see by the side of the road are the Florida Narrow-leaved sunflowers (Helianthus augusitifolius).

Track down a supplier of local honey and buy some. Research has found that local honey can suppress allergy symptoms and is a better cough suppressant than over-the-counter remedies.

Research for the above is courtesy of IFAS (Institute of Food and Agricultural Sciences) and the Putnam County Extension Service, a joint project of the University of Florida and Putnam County.
Upcoming Events and Festivals

**October 13**, 10th Annual Herbs in the Garden Festival at Washington Oaks Gardens, Palm Coast, from 10-3. At noon Ruth Micieli will show the different ways to use herbs at home in your cooking during a "Cooking with Herbs" demonstration and tasting. Plants will be available for sale.

**October 17**, Pumpkin Power and Heavenly Honey Workshop at 9.500 Cowpen Branch Road in Hastings. The Cost is $10.00. Please pre-register at 904-692-4944

**October 20**, Pomegranates in North Florida, Ag Center, 10-noon at Ag Center—Cost $5.00. Plants will be available for sale.

**October 20-21**, 9-5 Saturday, 9-4 Sunday, Micanopy Fall Harvest Festival. Over 300 crafters take to the streets and lake front along with plenty of food and entertainment to provide a great time. As one of the top 100 craft festivals in the country, this is good family fun! Many plants for sale among the craft items.

**October 27**, 8 am to 5 pm, McIntosh 1890s Festival. Come to stroll the dozens of arts and craft booths, many selling beautiful plants, and sample delicacies of the many concession stands.

Trees to Avoid in the Landscape

Some trees that grow quickly should be avoided in the home landscape, however, because of weak wood, numerous pests and diseases, invasive roots, a short life span, or other undesirable qualities. Here is some trees to avoid:

- **Leyland Cyprus**—Very susceptible to a host of diseases (especially bagworms), short-lived tree.
- **Bradford Pear**—its branching structure leads to large branches or whole sections of the tree simply splitting away from the trunk during winds. Life expectancy is only 15 year. Avoid at all costs!
- **Sycamore** (*Platanus occidentalis*)—Susceptable to many diseases. More important to homeowners, though, is the fact that litter from the leaves, twigs, bark, and fruiting balls pose significant problems in terms of maintaining a neat landscape.
- **Mimosa Tree** (*Albizia julibrissin*) - subject to Mimosa wilt and other diseases. The wood is weak, and is often damaged in storms. To top it all off, most folks plant it near the house so they can enjoy its lovely flowers from a patio, and as the blooms fall, they (and the leaves and seed pods) drop onto the patio, where they become a significant housekeeping issue.

DUTCHMAN’S PIPE

We saw this amazing vine growing on a fence at Washington Oaks Gardens on our recent field trip. The Calico flower, or better known as the Dutchman’s pipe, has beautiful foliage, unusual flowers, freedom from pests, and ease of growth. The flowers make a great conversation piece looking like something out of a Star Trek episode.
What to Plant

Bedding Plants: Even though temperatures are still warm, begin planting for the cooler months ahead. Digitalis (foxglove), petunia, and Shasta daisy are good plants for the fall garden.

Bulbs: There are many daffodils that are suitable for Florida. Fragrant varieties include ‘Carlton’, ‘Fortune’, ‘Silver Chimes’, ‘Thallia’, and ‘Sweetness’.

Vegetables: Plant crops now that will grow and produce through the winter months. This includes beet, Brussels sprout, carrot, and onion.

Herbs: A wide range of herbs can be planted from seeds or plants this month. Some to try are dill, fennel, oregano, and sage.

What to Do

Lawn problems: The time to control winter weeds in lawns is before they appear. Pre-emergent herbicides must be applied at the right time to be effective. Apply when nighttime temps are 55-60°F for 4-5 days. Avoid weed and feed products.

Winter Landscapes: Evergreen hollies and their bright berries add color to the landscape when other plants have died back for the winter. Water well when planting and mulch to minimize weeds.

Lawn Weeds: Healthy grass is the best defense against weeds. Avoid “weed and feed” products; only apply herbicides to areas with weed infestations.

Pine needles: Gather pine needles that are dropping and use them for a natural mulch.

Strawberries: Prepare beds and set strawberry plants this month. If there isn’t room for a bed, try planting them in large containers. Either way provide daily watering until plants are established.

Lawns: Lawns will start to lose color as the weather cools. For a green lawn all winter, overseed with annual ryegrass when daytime temps are in the low 70’s.

Lawn disease: Until May, watch for brown patch and large patch, fungal diseases that cause areas of grass to turn brown. Since treatment is difficult, prevention with proper cultural practices is key. The disease becomes active when the soil temp, measured 2-4” deep, is between 65-75°F.

Do Every Month

- Adjust irrigation based on rainfall.
- Deadhead flowers to encourage new blooms.
- Monitor the garden for insects
- Plant trees, shrubs, and perennials and water until established
- Mow lawns at recommended heights:
  St. Augustine & Bahia: 3-4”
  Centipede: 1.5-2.0”
  Dwarf St. Augustine: 2.5”
  Zoysiagrass 1.5” - 2:5 “