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CAPE JASMINE

Cape jasmine (Gardenia jasminoides), a plant of the Deep South, has a fragrance that lingers in the memory. There are over 20 cultivars selected for various qualities of bloom, growth configuration, and time of flowering.

"Belmont" is the most hardy and insect free of the cultivars. This is important with the trend toward organic gardening and minimal pesticide use. The blooms are double and 4" to 5" across.

Most gardenias bloom from March through June in 2 bloom cycles. The "Veitchii" has a longer bloom period having 3 bloom cycles with smaller flowers, but the extra bloom time is worth the loss in flower size.

"Veitchii Supreme", a hybrid between "Veitchii" and "Miami Supreme" has a compact growth habit and smaller leaf of "Veitchii" but the big blooms of "Miami Supreme". Flowers are 6" to 8" and full in the middle.

"Miami Supreme" and "Coral Gables" are similar in a number of ways. They are more cold sensitive than others and tend toward yellow-green leaves in winter. The blooms on "Miami Supreme" are 3" to 6" and 4" to 5" on "Coral Gables", which produces a heavy crop of flowers.

"Aimee Yashioka" and "Glazerii" both have 3" to 5" blooms. "Aimee" is an open, upright grower with dark green leaves. The flowers are so perfect they look artificial. "Glazerii" is a compact growing plant with flat blooms that are ideal for corsages.

"Pixie Queen", a hybrid of "Veitchii" and Gardenia "Radicans", is a tight growing plant and a late blooming dwarf shrub. "Pixie Queen" has 1" to 2" blooms and tiny leaves of Gardenia "Radicans" and the larger growth habit of "Veitchii".

Gardenias are subject to a number of pests. Nematodes attacking the root system are the worst. Gardenias are grafted on Gardenia thunbergia rootstock to avoid the nematode menace. Look for plants which appear to be spliced together on the lower stem. Scale, mealybugs, aphids, whitefly, spider mites, and thrips can also be a problem. Systemics such as Cygon and Orthene offer effective control.

Gardenias are hardy anywhere in Zones 9 and 10 if soil is acidic. Fertilize in March, June, and October with a fertilizer containing manganese, magnesium, iron and other micronutrients essential for growth in alkaline soils. Plant away from sidewalks and buildings containing cement. The leaves tend to fade and yellow in these growing conditions.

Prune from July to September if necessary to control excessive size, or to make the plant more dense. Source: Robert Haehle, Florida Gardening, Apr/May, 1998

HELPFUL HINT: Set lawnmower to cut at 3" to 4" for Bahia and St. Augustine grass. It helps to make the roots grow deeper and discourages weeds. You'll use less water and weed killer, helping the environment.

CYPRESS

Swamps dominated by cypress occupy about 1.6 million acres of Florida's landscape. Cypress is a species of Taxodiaceae Family, often called the Bald Cypress Family. Bald Cypress and Pond Cypress are two varieties which grow in distinct habitats. Bald Cypress grows in and along flowing water such as river floodplains, stream banks, spring runs, and lake shores. Pond Cypress is limited to depressions which form ponds with still or slow-moving water.

During the first half of the 20th Century logging removed the large, old-growth trees in virtually all the swamps in the state. The durability, decay resistance, and appearance of the wood
made it prized throughout the U.S. Other benefits include wildlife habitat, recreation parks and preserves, wastewater recycling, flood control and groundwater recharge. Today, many trees are of marketable size again and harvesting of both varieties has increased to produce two major products: lumber and landscape mulch.

Cypress swamps are wetlands dominated by cypress trees. Swamps often have long periods of flooding, and cypress is the most flood-tolerant of all Florida tree species. They can live for hundreds of years, have "knees" that protrude above the soil, and lose leaves in the winter, hence the name "bald" cypress. It is said to be the largest tree in North America east of the Rockies.

Bald Cypress grows to 150 feet tall and more than 6 feet in diameter. Its leaves are flat, ½" to ¾" long and grow on both sides of the horizontal branchlets. Pond Cypress is a smaller tree with awl-shaped leaves pressed close to its pendulous branchlets. Differences are distinct at some locations but not others, because the two can interbreed causing varied characteristics to appear on the same tree. Both lose leaves in winter.

Historically, interest in the commercial value of swamps centered around timber harvest and drainage for land development.

Today, with interest in the multiple benefits and uses of swamps, more thought is being given to multiple-resource management. Understanding cypress swamps as isolated ecosystems and as part of the interdependent whole has become important to maintaining the health of cypress wetlands providing recreation, water storage and recharge.

Of the 42 million cubic feet of timber harvested each year about 53% is cut into lumber and 49% is chipped for mulch. The mulch industry began by using waste wood produced from sawing operations. The growing use of cypress for mulch has contributed to the cutting of trees considered too small to be marketable and to the increase in pondcypress harvesting.

Early in the 20th century when 800 to 900 year old virgin cypress were harvested, large trees with abundant heartwood produced decay-resistant products for outdoor use such as shingles, decking, paneling, water pipes, water tanks, and even grave markers.

Pond Cypress was often used for poles and fence posts. Even though cypress has the reputation for durability, the smaller second-growth trees have very little heartwood and wood preservatives are necessary.

Cypress swamps provide a habitat for many wildlife species, including some that are rare and endangered. The density of plants create a favorable habitat for large mammals and the abundance of hollow trees provide homes for many birds and tree dependant mammals. Wood ducks are common residents and are consumers of cypress seeds giving them a reputation of being good seed disseminators, contributing to the regeneration of cypress.

Cypress swamps are popular for recreation areas. They are especially interesting to the public in areas where they can be accessed by boardwalks and nature trails. This access provide opportunities for educating the public about the benefits of wetlands to the state.

These swamps can help in maintaining and enhancing water quality. Cypress ponds have been documented to remove both phosphorus and nitrogen from secondarily treated wastewater, by soil processes and plant uptake. After taking up the nutrients, cypress growth can increase dramatically but there is some concern about the impact on wildlife populations; the wastewater may affect plants and small organisms which animals depend on for food and shelter.

Cypress ponds are depressions that have the ability to hold more water than soil of the same volume. Runoff from storms can be stored in these ponds making them excellent flood control prospects.

After the rainy season ends and water tables drop, these ponds can contribute to recharging groundwater. It isn't clear yet how purposely directing runoff to ponds might impact plant and animal communities in the ponds. Call (321) 697-3000 for more information on where to visit a cypress swamp in our area. Source: Master Gardener News, Vol. 12, Issue 1, Winter '99
**CHARD**

Chard is a member of the beet family, but differs in that it does not have a bulbous, enlarged root. As a leaf crop, the large, green, crinkly leaves can be cut from the plant as it grows. Leaves may be boiled like spinach, used in salads, or on sandwiches instead of lettuce. It can be grown anywhere in the U.S. and one of its virtues is the ability to withstand summer temperatures. Recommended varieties are: Fordhook Giant, Rhubarb Chard, Lucullus, or Large Ribbed Dark Green.

In mild climates seeds are sown any time of the year. Plant seeds ½ in. deep in good fertile soil, in a sunny location. Leave 18 to 24 inches between rows. Thin plants to 12 inches apart. Use thinnings for greens or transplant to extend the crop. Chard matures in 60 days.

The only possible way to fail in growing chard is to fail to water or allow it to become coarse and woody before picking. Cut outer leaves regularly.

Chard is generally free of disease and insects are of little consequence. Occasional infestations of aphids are easily controlled by blasting them with a jet of water from a hose. Source: Vegetable Gardening, A Sunset Book

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**PREPARE FOR HURRICANES**

Many of us are familiar with how to prepare the home when a hurricane threatens: boarding up windows, gassing up vehicles, purchasing extra food supplies, water, flashlights, portable radios, batteries, etc. These tips are for preparing the landscape around the home. Trees should be inspected early and necessary steps taken to make them safe.

Identify and prune out large decayed, broken or poorly attached limbs. Remove dead branches or branch stubs since they can lead to serious trunk decay.

Remove branches with embedded bark having narrow V-shaped crotches in favor of a wider-angled U-shaped crotches. Trees that are properly and regularly pruned suffer less damage in wind storms than those not regularly pruned. A potentially damaging wind passes through trees which are thinned and trained to appropriate structure, thus keeping them intact in a storm. The method of branch removal has a large impact on tree health. Never remove a branch with a flush cut, instead, use a collar cut. The trunk is likely to decay or crack following a flush cut, making the tree unsafe. If unable to dispose of tree trimmings before the storm hits your area, pile them up in one area, drive stakes on each side and tie down to secure. For more information on tree care and pruning ask for Circulars 1019 and 853.

Anchor or tie down outdoor lawn furniture, bicycles, light weight outdoor equipment, bird baths, etc. Place all hanging potted plants in a secure place. Group potted plants together. Put any or all of these items inside if room is available. Fill garbage cans with water.

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**SUPER TERMITES**

The new Formosan "super termite" infestations in Palm Beach, Martin and St. Lucie counties indicate the pest is spreading at an alarming rate throughout the state.

"Populations of this destructive termite should be treated like a contagious disease," said Nan-Yao Su, entomologist with the U.F. Institute of Food and Agriculture Sciences.

He says if we don't step up control measures, the Formosan termite could become firmly established throughout the state within 20 to 30 years. The problem in some Florida communities could eventually become like the one in New Orleans, where more than 90% of the buildings in the French Quarter are infested.

The new infestation in Palm Beach Gardens is about 45 miles north of the nearest known
Formosan sites in Ft. Lauderdale, and the Jensen Beach infestation is another 35 miles north of that. It's safe to assume the pest also has found its way into neighboring St. Lucie county. The new infestations are likely caused by people accidentally moving infested materials.

Su said experience has shown that treating individual homes or properties likely is not enough to stop the pest. Basically, if one homeowner controls the pest and the guy down the street doesn't do anything, there still could be a serious termite problem in the neighborhood. Subterranean termites roam far from their underground nests, and treated properties may be easily reinfested by nearby populations.

That's why a community-based management program should be started to eliminate colonies over a wider area—not just for single buildings but for entire neighborhoods and municipalities.

John Mangold, technical specialist with Terminis International in Clearwater said attempts to control Formosan termites with various soil termiticides failed in one Tampa home, but the pest was finally brought under control with new hexaflumuron chemical bait system developed by Su. The treated house has remained termite-free since 1993, but other homes in the neighborhood are now infested.

Su, based at U.F. Ft. Lauderdale Research and Education Center, said the community based approach is being used in New Orleans and could be used in Florida to stop the pest before it spreads.

He said conventional termite treatments may keep the pest out of buildings temporarily but they don't control colonies in the ground. Unlike traditional barrier control methods, the baiting system eliminates underground colonies of both native subterranean and Formosan termites. The system uses pesticide only when termite activity is detected.

Monitoring devices, placed in the ground, contain pieces of wood. When termites begin feeding on the wood, it is removed and replaced with the hexaflumuron bait that slowly kills the entire colony. Once the colony is killed, the system remains in place to detect any future activity.

Patented by the University of Florida and licensed to DowAgroSciences, the termite bait control system is marketed as Sentricon Termite Colony Elimination System. Contact the Cooperative Extension office for more information on termites and purchasing a pest control service.


AVOCADOS

The avocado grows in tropical and subtropical areas of the world. Florida production is located in the southern most areas, but isolated trees are found in warm locations throughout the state. The first recorded importation into Florida was in 1833.

Trees are medium to large and are classified as evergreen, but some varieties lose their leaves for a short time before blooming. Limbs are easily broken by high winds or heavy crops. Leaves are elliptic, 3” to 10” in length, reddish color when young, becoming smooth, leathery and dark green when mature.

The fruit consists of a single large seed, surrounded by a buttery pulp, containing 3 to 30% oil. The skin is variable in thickness and texture. At maturity it is green, black, purple or reddish, depending on variety. Spherical to pear shaped, they weigh from a few ounces to 5 pounds.

Varieties are classified into two types according to the manner in which the flower parts function. This was considered important in pollination, but in Florida it hasn't proven to be of significance. Bees and other insects are the main pollinators. The number of fruits which set and mature is small in relation to number of flowers produced. Varieties differ in productivity and in regularity of bearing, some producing a large crop every other year.

Grafted trees begin to produce in 3 to 4 years. Fruit matures from June through January, with greatest production from October through December.

Varieties are classified in three groups, the West Indian, Guatemalan and Mexican. Mexican and Guatemalan hybrids are the most cold hardy tolerating temperatures of 26° to 30°F as young trees. Mature trees are slightly more tolerant to 21°F. Early varieties are usually of West Indian origin whereas midseason and late varieties are hybrids of the races and have intermediate
Fruit doesn't ripen on the tree. Mature fruit ripens in 3 to 8 days after picking, and ripen best between 60° to 75°F. At higher temperatures it ripens unevenly and develops off-flavors.

Avocado do not come true from seed and must be propagated vegetatively. Propagation is easy, with veneer-grafting being the preferred method. Young, vigorously growing seedlings are used as rootstock and terminals of leafy shoots from desirable trees for scion material. Grafting is most successful during the cooler months from November through February. Propagation by cuttings and air-layering has not been successful.

The avocado will not tolerate flooding or poorly drained soils, but is adapted to many types of well drained soils. Trees grow well and produce satisfactorily in sandy and limestone soils if maintained under judicious fertilizer programs.

Young trees should receive fertilizer applications every two months during the first year starting with ¼ pound and increasing to one pound. Thereafter, three or four applications per year in amounts proportionate to the increasing size of the tree are sufficient.

Planting distance depends on soil depth and fertility. In Florida, trees are planted 20 to 30 feet apart. Formative pruning during the first two years is desirable to encourage lateral growth and multiple framework branching. After several years of production it's wise to cut back the top of the tree occasionally for ease of harvesting and to lessen storm damage. This should be done soon after harvest or during the winter months. Severe pruning does not injure the tree, but does reduce production the following season.

Many insects attack avocados but they seldom limit fruit production. Infestations are not predictable and control measures are justified only when large populations build up.

There are several diseases that attack the avocado. For more information on these and recommendations for treatment call the Osceola Cooperative Extension office at (321) 697-3000 and ask for Insect Management in Avocados.

NOTE: To simplify information in this publication, trade names of products may have been used. No endorsement of these products is intended nor criticism implied of similar products used.