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CRAPE MYRTLE

Crape myrtle is a deciduous shrub or small tree native to southeast Asia. It has been cultivated there for centuries and was a favorite of Chinese Emperors. Its popularity continues today and it is grown world-wide in appreciation of its summer flowers.

Crape myrtle, the "Lilac of the South", was introduced to the Southern U. S. over one 150 years ago and provides landscape interest year-round. Flowering begins as early as May in some cultivars and continues into fall. Flower clusters develop on the branch tips and is composed of hundreds of 1 to 2 inch red, pink, white, lavender or purple flowers. The leaves are often tinged red in the spring, dark green in summer and in northern Florida turn yellow, orange or red in autumn. The trunk and branches of tree-form plants have an attractive gnarled character with smooth bark varying in color from pale cream to dark cinnamon to rich brown. Some bark peels off in early summer to reveal mottled new bark ranging from tan to light pink to pale green.

It is one of the most versatile plants for sunny locations. Breeding and selection programs have resulted in plants of various sizes, shapes, flower and fall foliage colors and bark characteristics. They are available for use as small trees, shrubs, groundcovers, large perennial bedding plants and hanging baskets. Shrub-form crape myrtles make an excellent accent in a shrub border when planted in groups. Dwarf plants are effective as large groundcovers or container plants. Miniature and some dwarf crape myrtles are used in perennial flower beds and hanging baskets. For best results and minimum maintenance, be sure to choose a cultivar whose growth habits and ultimate size fits the intended use.

Crape myrtle is adapted to climatic conditions throughout Florida but has a low salt tolerance. It shouldn't be irrigated with saline water or used near the coast unless protected from saline conditions. It tolerates a wide range of soil types but grows poorly in wet soils. It does best in loamy soils that are slightly acid (pH 5.0 to 6.5).

They transplant easily. Container grown plants are set out during early summer when in active growth. Bare root or balled and burlapped plants are planted when dormant. Apply 3 inches of mulch over plant roots.

Irrigate newly planted trees regularly for the first few weeks to aid in establishment. Trees with a trunk diameter greater than 1 inch benefit from regular irrigation for several months. Crape myrtle is drought tolerant once established but moist soils stimulate growth.

These plants have a low fertility requirement. Established plants usually don't need fertilizer because root systems extend into lawns where the can absorb nutrients from applied lawn fertilizers.

Young trees characteristically develop multiple stems. If grown as a small tree, the smallest stems should be removed leaving 1 main stem for a single trunk specimen or 2 to 4 main stems for a multi-trunked tree. They require little pruning. "Suckers" or water sprouts along the lower portions of main stems or from roots should be removed when using as a tree. Remove old flower clusters to promote recurrent blooming. Small twiggy growth should be thinned from underneath and within the canopy. This allows air circulation and helps prevent leaf diseases.

If pruning is necessary to improve plant shape or form, prune after the leaves have fallen. If plants are pruned too early in the fall, new growth may emerge and be killed by a freeze. Pruning when plants are dormant will not interfere with bud formation since flowers form on new growth.
They shouldn't be pruned hard on a regular basis. Severe pruning can induce excess vegetative growth, basal sprouting, and fewer, but larger flowers and spoils the beautiful winter branch structure.

Primary pests are powdery mildew and the crape myrtle aphid with its associated sootymold.

Powdery mildew is caused by a fungus. It first appears on new shoots as a whitish powder that spreads to the surface of leaves, stems and flowers. It causes them to become distorted and stunted. Shady, humid locations encourage powdery mildew as does frequent wetting of the foliage by irrigation and is more prevalent in spring and fall. To avoid powdery mildew select one of the cultivars bred for resistance or tolerance to mildew. Crape myrtle should be planted in a sunny location allowing free air movement so that the foliage will dry quickly. Full sun also promotes flowering and development of a full, symmetrical crown. Consult F.S. ENH-52 for varieties resistant to powdery mildew.

The crape myrtle aphid was apparently introduced into the U.S. with the crape myrtle, its host plant. They are pale yellow in color with adults having black wings and protuberances. Found on underside of leaves, they are attracted to new growth. Crape myrtle aphids aren't found on any other plant, nor do other aphid species infest crape myrtle. If heavy infestations distort leaves and stunt new growth, sprays of insecticidal soaps or hortic ulture oils are the safest pesticides to use. If possible, tolerate a slight infestation of aphids since they provide a "feeding station" for a variety of beneficial insects.

During feeding, aphids secrete droplets of a solution (honeydew) which falls onto leaves and stems below. This solution promotes growth of sooty mold fungi. It appears as a black powdery coating on the leaves and stems. It is unsightly but doesn't harm the plant. However, the fungus shades the leaves and interferes with photosynthesis, potentially reducing the vigor of the plant. Control of the aphids will halt further development of the sooty mold. Existing mold will eventually wear off. The insecticidal soaps and horticultural oils sprays that control the aphids will loosen and remove the mold.

Crape myrtle is propagated vegetatively by softwood, hardwood, or root cuttings. Softwood cuttings root easily when taken in spring or summer. Hardwood cuttings from dormant plants also root easily. Use of a rooting hormone improve percentages.

Seed capsules ripening in the fall may be collected, dried and stored in sealed containers. No pre-treatment is necessary and seeds will germinate within 3 weeks after sowing. Best results are obtained when sown during the lengthening days of spring.

Many cultivars have been developed. Subsequent hybridization resulted in highly ornamental plants with resistance to powdery mildew. Source: Gary W. Knox, Florida Master Gardener Conference, Aug., 1998

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CHAIN SAW SAFETY

Using a chain saw to clear debris can cause serious injuries. To avoid harm, follow these directions: ALWAYS keep both hands on the saw handle. Cut only on the right side of your body. Always make cut below your head; never above it. Cut with the lower edge of the blade whenever possible; cutting with the tip of the saw is inviting injury. Watch out when cutting limbs or branches that are bent. They may snap back and hit you. Let the chain saw do the work; don't try to force it.
Wear protective clothing: hard hat, goggles, safety shoes, gloves and trim-fitting clothes. Source: IFAS Publication DH 537

FLORIDA CRACKER CATTLE

Researchers looking for the perfect cow for Florida's beef industry-one that can tolerate the heat and insects and reach reproductive maturity at an early age- need look no further than their own backyard.

Living essentially wild at several locations around the state, including a herd on Paynes Prairie near Gainesville, is a breed of cattle that has lived in Florida for nearly 400 years. They handle the heat and insects and are adapted to living on scrub and native vegetation.

The Florida cracker cattle, also known as scrub cattle, are related to the Texas Longhorn. The cracker has horns similar to, but not as long as, its Texas cousin and both are related to the "criollo" cattle brought to this country from Spain.

Tim Olson, a breeding specialist with the Institute of Food and Agricultural Sciences, said the cracker cow is important to maintain as a breed because it is so well adapted to the Florida climate. He says it's important for the state to maintain these herds because of genes that they might have. It's justification for trying to preserve these genetic resources--these rare, old breeds.

Olson says they may have genes that are useful for current production even though their own production level isn't sufficient to make them useful in modern day agricultural systems. The cattle have been here for over 400 years and are quite adapted to minimal nutrition and all the problems they had to face before modern cattle production systems were incorporated in Florida.

The cracker cattle, he says, could hold any number of desired attributes including heat tolerance, disease and/or internal parasite resistance. But he says the breed is not commercially viable on its own because it just doesn't get as big as popular cattle like the Angus or the Brahman and doesn't grow fast enough to meet the needs of the modern rancher.

There is enough interest that there are a few private herds around in addition to the semi-wild crackers on state land. Olson owns a few head himself and will buy more when they are sold on the livestock market.

In addition to their potential use in research, he says cracker bulls are sometimes used in rodeos. Source: IMPACT, VOL.15, NO.2 (Editors note: This has nothing to do with growing plants but is interesting how the cattle survived with minimal care for so many years.)

STRESS RELIEF

In a relatively new area of horticultural research, Professor Jennifer Bradley and graduate researcher Tammy Kohlleppel found that walks in botanic gardens lower visitors' perceptions of their stress levels.
Bradley says the research on this is very limited, and the field is wide open. They don't know what happens with a botanic garden but know there is something about being in nature, being in the outdoors that has a positive effect on people.

Bradley and Kohlleppel used questionnaires to survey visitors to three Florida gardens. The 312 questionnaires filled out and returned indicated a statistically significant drop in visitors' perception of their stress levels.

"The implications for health and well-being are obvious," said Bradley. "And for public gardens and the horticulture industry, the implications are good, too. Funding for public gardens is getting harder and harder to come by, so this kind of information gives botanic gardens and arboreta a way to market themselves and more ammunition in seeking funding."

Bradley said botanic gardens and arboreta were being built at a rate of 2 or 3 a year at the turn of the century. In the last decade 8 to 12 new gardens have opened each year. What they want to know is why they are gaining in popularity and why so many visitors are going to them.

Kohllepel said botanic gardens had a greater beneficial effect for visitors who had a lower perception of their well being. Upon departing these visitors reported a much improved outlook. She says that people who needed a coping mechanism got more out of their visit.

Bradley said that as society has moved indoors and urbanized, overall interest in gardening has increased. Society is demanding more of these places to go to. The more we moved indoors the more we crave the outdoors. SOURCE: Cindy Spence, Impact, Vol.15, No.2

CELERY

Celery grows best in natural muck land, a soil that is rich in organic matter. It can be approximated by working in large amounts of humus (well rotted manure or processed steer manure) into the existing soil.

Only patient gardeners should grow celery; it takes 4 to 5 months to reach full maturity from seed, or about 3 months from small plants.

The two main types are green and the self blanching (golden) celery. Of the two, green celery is easiest to grow.

It can be grown in most regions of the U.S. and is best suited to a climate where days are warm and sunny but nights are cool. Recommended varieties for Florida are Floribelle-M9, Florida Slobolt-M68-29-5, June Belle, Florida 683 and Florida 1622.

Celery is frequently planted in early spring. In areas where winters are mild, celery is grown as a winter crop. Planting time in Central Florida is September through March and South Florida from October through March. A few very cold nights may cause "bolting" or flowering.

Start seeds in flats or pots indoors, planting 1/16 inch deep. Since germination is slow 8 weeks or more is required to bring the seedlings to planting size. If only a few plants are needed save time by
purchasing them. Plant the seedlings in double rows, 8 inches apart, with 14 inches between rows. For a successful crop add commercial fertilizer and a large amount of well rotted manure dug in 12 inches deep.

Water is the number one requirement of celery once is has been planted. Soak ground around plants thoroughly and often. Every 2 to 3 weeks apply a liquid fertilizer along with one of the watering sessions.

Work up some soil around the plants as they grow. This not only will help plants grow upright, but will also result in a certain amount of blanching of the stalk. Be careful not to get dirt into the center.

Celery can be blanched for a week or so before harvesting by blocking off sun with plant collars or boards. This is an extra that hardly seems worth the trouble since the difference in flavor is very subtle and not necessarily an improvement.

One need not wait for full maturity before harvesting celery. Harvest some of the younger stalks when plants are 3 to 4 weeks from full growth. It stores well if dug and kept with roots in soil in a cool place.

A number of pest and leaf blights are drawn to celery. A simple control of aphids is insecticidal soap or horticultural oils. For control of other pests or blights contact the plant clinic at (321) 697-3000 Source: Vegetable Gardening, A Sunset Book.

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**CARE OF LAWN GRASSES**

Mow both St. Augustine and Bahia grasses at intervals of every 7 to 10 days at a height of 3 inches. Irrigate established lawns on an "as needed" basis applying 3/4 to 1 inch of water per application. Usually folded leaf blades, a grayish color or foot prints left on grass indicate the need of water. Since water conservation is critical, during prolonged droughts water only when the lawn indicates the need.

The most serious insect for bahiagrass is the mole cricket. For St. Augustine, chinch bugs, armyworms, sod webworms and grass loopers are a problem.

Both types of grasses should be fertilized again in September with a 16-4-8, 10-10-10, 8-8-8 or 6-6-6.

For more detailed information for care of a particular lawn, call the Osceola County Extension Office, (321) 697-3000 and ask for a bulletin.

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**ANOTHER NEW TERMITICIDE**

A new chemical researched at the University of Florida kills subterranean termites, including the Formosan "super termite". It may even be able to kill the destructive pests that are already inside homes.
Phil Koehler, professor of entomology with the Institute of Food and Agriculture Sciences, said the termiticide can eliminate termites from entire areas around homes. The chemical, marketed under the name Termidor by Aventis CropScience, is effective because the insects themselves spread it.

Koehler said the termites contact the Termidor-treated soil, then go to where other termites are. They are groomed and groom other individuals and the insecticide spreads through the colony by contact resulting in massive termite kills. He said they found that termites up in structures, as well as those in the soil and even 20 to 30 feet away from the building will die as a result of this spread. It's possible to kill those up in the building that are damaging the wood by just treating the soil.

Because Florida's environment is so hospitable to subterranean termites, homes face more of a challenge than in other parts of the country.

The standard protection for most new construction is to treat the soil under the slab and around the perimeter with chemicals. The problem is that these barriers are completely ineffective if the treated soil is disturbed by construction or landscaping.

Termidor joins other chemicals such as Premise and Dursban that kill termites rather than repel them. Before development of contact poisons such as Termidor, the only other alternative to barrier treatments were bait systems that used stakes in the ground with wood to attract termites. When termites got into the monitoring stations, the wood in the station is replaced with a bait. The termites eat the toxic bait, and the poison is transferred to other members of the colony potentially eliminating the colony.

Even though Termidor is already on the market, Koehler said it's not for the do-it-yourselfer because of the special equipment and procedures.

Termidor is applied in a trench dug around the perimeter of an existing house. The pest control company will also need to drill holes in the slab and adjacent walkways and patios to put the chemical in the soil underneath and around the house.

Gainesville-based Florida Pest Control is licensed to treat new and existing homes with Termidor. Bruce McCown, a technical director with the company, said time will tell if the Termidor is the ultimate solution to Florida's termite problems. SOURCE: UF/IFAS News Release

SOIL SOLARIZATION

For home gardeners there is no chemical control for nematodes and soil solarization may offer a solution for this problem. It consists of covering the area to be treated with a clear polyethylene tarp for 4 to 6 weeks during the hot period of the year when the soil will receive maximum direct sunlight. This method has reduced a wide range of soil borne fungi, weed seeds and nematodes in test areas.

Soil should be covered at least 4 weeks or longer, during the hottest and sunniest period of the year. June and July seem to be most suitable for Florida, since air and soil temperatures are highest, and day length and angle of the sun provide maximum solar energy hitting the soil.
Soil must be well tilled before tarping, destroy clods and plant debris which might interfere with uniform conduction of heat through the soil, and which may protect some organisms from the full effect of the treatment. After tilling, smooth surface before tarp is applied so that there is maximum contact between the tarp and soil. Air pockets will interfere with direct heating by incident sunlight. All other incidental preparations (fertilization and drip irrigation) should be completed before applying the tarp. This will minimize disturbing the soil before planting.

Soil moisture must be high when the tarp is applied. Results may be further improved by re-wetting the soil during solarization, if irrigation can be easily applied under the covered bed. Heat is more easily conducted and will achieve a deeper treatment through wet rather than dry soil.

Use clear polyethylene, not black mulch. Sunlight passes through clear plastic to heat the soil directly. Black plastic intercepts the sunlight and soil is heated by conduction where soil contacts the plastic. Some of the heat generated when sunlight hits black plastic is lost directly to the outside air. Clear plastic produces significantly higher soil temperatures faster.

Thin plastic (1 to 2 mil) may permit more sunlight to penetrate to the soil and has been reported to favor more rapid and deeper control of soil-borne fungi than thicker plastic (6 mil). However, equal control was eventually obtained with both thicknesses, and the thicker plastic is less likely to tear.

Leave the tarp in place until ready to plant. It will maximize the treatment and reduce the chance of recontamination before planting. Clear plastic holds soil temperatures higher than black plastic and should be removed before planting crops that prefer cool soils.

When planting be very careful to avoid bringing untreated soil into treated bed. Do not till or otherwise disturb the treated soil. Deep tillage can bring soil to the surface from depths too great for treatment to have reached. Source: RFN-005

DOORYARD FRUIT VARIETIES

There are many kinds of fruit that can be grown successfully in Florida, including temperate, tropical and subtropical fruits. Fruit growing is an interesting hobby which provides fresh fruit at the peak of its maturity. Many fruits are attractive additions to landscape situations.

Selection of species and varieties is critical for fruit production. Fruits which are not adapted to local conditions will generally fail to produce regardless of how much care and attention they receive. Weather is perhaps the most important factor which determines where fruit crops can be grown. Winters may be too cold for some, too short for others and others may suffer from summer's heat and humidity. Consequently, species and varieties should be chosen on the basis of historical weather patterns.

Many fruits which originated in temperate zones go through the winter in a dormant state (rest period). This is associated with short days, cold weather and loss of leaves. Exposure to winter temperatures for a certain length of time prepares the plant to start active growth with the onset of warmer weather.

Temperatures below 45 F are known as chilling temperatures. The number of hours below 45 F accumulate through the winter months and constitute total hours of chilling. The Florida Panhandle rarely has fewer than 500 hours of chilling, whereas south Florida rarely has more than 200. Species
and varieties differ in the amount of chilling they must have in order to complete rest and resume normal growth. This is considered the chilling requirement of the species and variety.

A plant which doesn't receive sufficient chilling to satisfy rest is usually delayed in leafing out and blooming. Often, the opening of flowers and leafing out will be scattered over a long period of time. Plants will live only a very few years with insufficient chilling, which explains why so few temperate fruits are grown in south Florida. On the other hand, rather cold winters satisfy rest early so that the plants start growing with the first warm spell. This makes them subject to injury by later cold weather, particularly late frosts, which may destroy flowers or young fruit.

Cold hardiness refers to a plant's ability to withstand cold temperatures without serious injury. Cold damage can occur in all parts of Florida, often being caused by temperatures which aren't extremely low but which occur when the plant isn't in the best condition to withstand cold. An example, the Dec. 25, 1983 freeze killed or severely damaged much of the citrus grown in north and central Florida. This freeze was much more damaging than past freezes because of the conditions preceding it. Minimum temperatures were unusually mild for more than a week prior to the freeze. Temperatures dropped dramatically leaving the trees little time to acclimate to the cold weather.

Some species and varieties are quite cold hardy; others aren't. During the rest period, temperate fruits can withstand any temperature likely to be experienced in Florida. Others would be seriously damaged or killed by temperatures which occur in central and north Florida. Bananas are killed by frost and avocados are seriously damaged by cold weather. Some cold hardy avocados can be grown in protected areas in central Florida. Most tropical fruits cannot tolerate freezing weather.

Some species will grow satisfactorily in Florida, but will not produce adequate crops of good quality due to the warm, humid weather that prevails during fruiting. Olive, pistachio and date are good examples. Plant growth is usually satisfactory, but fruit production is minimal.


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.