

A WORD OR TWO ABOUT GARDENING

A foolproof way to brighten a dull yard

If your yard strikes you as a monotonous sea of green the one certain recipe for relief is a few judiciously chosen white flowering plants. You don't need to know anything about the appropriate use of contrasting or complementary colors as it applies to landscaping. White is the one color that can be used safely in any part of the garden: to focus attention as a stand alone specimen plant or to frame or divide other elements of the landscape.

It is not difficult to find white flowering plants: for seasonal use as bedding plants most garden centers will have impatiens, wax begonias or petunias plus more permanent favorites such as gardenias and peace lilies (spathiphyllums). Many popular shrubs are available in white flowering forms including crepe myrtle, oleander, brugmansias (angel's trumpet) and many classes of roses. Even some of Miami-Dade's more popular sub-tropical shrubs are available in white flowering forms: *Plumbago auriculata* 'Alba' (white plumbago), chenille plant (*Acalypha hispida* 'Alba'), golden dewdrop (*Duranta erecta*) and the powderpuff (*Caliandra haematocephala* 'Alba'). If it is climbing plants that you interest you, look no further than bougainvilleas with cultivars such as 'Snow White', 'Jamaica White', 'Miss Alice' and 'Mauna Kea White'. As with previous articles dealing with garden color, archived at <http://miami-dade.ifas.ufl.edu/publications.htm>, the emphasis is on plants with at least some degree of permanency in the landscape.

Apart from the above items there are other less familiar white flowering trees, shrubs and climbers that can be used in Miami-Dade. Those described below cover a range of landscaping situations. If you have space for a large (40') white flowering specimen tree with an extensive root system consider the impressive white floss silk tree (*Ceiba insignis*), a cousin of the familiar pink flowering floss silk tree (chorisia). The tree has a green swollen trunk covered with cone shaped thorns and flowers in the fall when the tree is bare. Each flower has 5 oblong to ovate 3" white petals, with a yellow throat and is followed by large woody seed capsule filled with many fine silky fibers (can be messy). Look for grafted trees to ensure early onset of blooming. Another large tree with white flowers that is occasionally seen in Miami-Dade landscapes is the elephant apple or hondapara (*Dillenia indica*). The flowers are large, pendant, cup-shaped with large white petals and mildly fragrant, a perfect foil to the dark green deeply veined leaves. The tree can grow to 40 -50', developing a trunk with attractive red, peeling bark. The one disadvantage (for some) is the outsized rather messy fruit, purported to be edible if you can overcome the strong odor. Grow in full sun and evenly moist soil - in Miami-Dade it will probably be necessary to correct for trace element deficiency symptoms.

In general magnolias do not grow well in Miami-Dade, though if you have an area with enriched permanently moist soil you could try the native sweetbay magnolia (*Magnolia virginiana*), found scattered at hammock margins in the Everglades. The flowers are small for a magnolia but fragrant and the leaves aromatic with a conspicuous silvery underside. If you attempt to grow magnolias in Miami-Dade use

plenty of mulch, and correct expected trace element deficiencies. Scale insects are frequently a problem. The popular dwarf *M. grandiflora* 'Little Gem' is best grown in a container (large tub or planter) in Miami-Dade. Useful for a patio, but leaf drop can be a nuisance near a pool.

Also in the Magnoliaceae, but decidedly more tropical, *Michelia x alba* (a white hybrid form of *Michelia champaca*, sometimes known as the white champaca)) is better adapted to Miami-Dade than magnolia. It is grown for the glossy green foliage, and the pleasantly fragrant, attractive white flowers. The tree grows to about 25 – 30' and can tolerate drier soils than magnolia, but will require trace element supplements, particularly iron. As with magnolias, scale insects can also be a problem. The white champaca will not tolerate root disturbance, so choose a place in your landscape carefully - once in the ground it should not be transplanted. More often seen than the above trees is the white flowering orchid tree, *Bauhinia variegata* 'Candida', the leafless tree most impressive in flower against a clear blue early spring sky. Sometimes listed as *B. variegata* 'Alba', one's enthusiasm is tempered by the tree's often weedy, messy habit and weak wood. Like other bauhinias is susceptible to potassium and iron deficiencies.

If you prefer a smaller, white flowering tree, then the Texas wild olive (*Cordia boissieri* (locally known as the white Geiger) is gaining in popularity. Throughout the warmer months of the year, the tree produces chalk white flowers with crinkled petals against rough surfaced 4-6" grey-green leaves. Unlike the more widely planted orange Geiger (*C. sebestena*), the foliage of *C. boissieri* is not disfigured by the Geiger tree beetle. It is essential to choose a full sun site with perfectly draining soil, and once established keep the soil relatively dry. There are other white flowering cordias, one of which (*C. superba*, locally of limited availability) is claimed to be better adapted to Miami-Dade's wet summer climate.

Less widely planted, the fried egg tree (*Oncoba spinosa*) like *C. boissieri* requires minimal care and can be maintained at no more than 15 -20'. The tree has 3" serrated leaves, pinkish red at first, becoming dark green and is heavily armed with stout 1-2½" spines. In late spring through summer, particularly after heavy rainfall, the tree produces 2-3" white camellia like flowers with a large central 'yolk' of prominent yellow stamens. Individual flowers last little more than a day, but apart from the visual appeal have a delicious melon like fragrance. Endemic to areas of dry open woodland of E. Africa, this is a tough tree that exhibits excellent drought tolerance. The tree is semi-deciduous, leaf loss depending on the extent of cold weather exposure. Avoid heavy pruning as this will induce pronounced suckering.

One of the most exquisite small white flowering trees is the impressive *Portlandia grandifolia* (bellflower). Of limited availability (difficult to propagate), it is native to Jamaica's cockpit country (limestone karst) as a rarely found under story plant. The new leaves are at first wine colored becoming a glossy mid to deep green. With the rainfall and rising temperatures of spring, large pleated cone shaped buds form, opening into stunning, white 6-7" elongated bell shaped flowers. The flowers resemble an Easter lily, but have a satiny sheen and emit a sweet vanilla fragrance at night. Initially developing top growth on a single thin stem, the base eventually fills out and despite a slow rate of growth, flowering commences within 2 years.

Depending on how it is pruned, *P. grandiflora* can be grown as a small (10 -15') tree or shrub. Choose a sheltered site with some light afternoon shade (improves flower quality) and keep soil evenly moist during warmer months of the year with only occasional watering in winter. During periods of cold weather leaves will become discolored (reddish brown blotches). This is an ideal container plant for a patio.

The family Apocynaceae contains many white flowering shrubs, trees and vines of which the best known are the plumerias (frangipanis). There are white cultivars of the familiar *Plumeria rubra* such as 'Bridal White' as well as less familiar white flowering species (*P. alba* and *P. obtusa*- commonly called Singapore white). Of comparatively recent interest *P. pudica* (bridal boquet) grows to about 12'. It has panicles of intensely white, funnel-form flowers with a yellow throat and unusual spatulate (spoon-shaped) leaves. Although not fragrant, this species has the distinct advantage of being resistant to frangipani rust. The salt tolerance and compact growth make it an ideal choice for coastal gardens.

Another member of the Apocynaceae that is well adapted to coastal landscapes is *Ochrosia elliptica*, a 15' shrub or small tree with whorls of thick shiny leaves and in fall, clusters of small white fragrant flowers. Although both salt and drought tolerant there is concern that this tree can be invasive, at least in coastal locations. The flowers are followed by numerous paired bright red plum-like fruit. Beware - although highly ornamental, the fruit is very poisonous. *Ochrosia elliptica* is sometime misleadingly referred to by the common name kopsia, which is actually the name of a related genus of trees and shrubs. *Kopsia pruniformis* has larger, white, pinwheel like flowers than *O. elliptica* and purplish blue fruit (also poisonous) and can easily be distinguished by its' paired leaves.. Pinwheel shaped flowers are a feature of another member of the Apocynaceae, the popular *Carissa macrocarpa* (Natal plum). This is a slow growing sprawling shrub with small spine-tipped glossy green leaves and stems with forked spines in the leaf axils. An ideal choice for coastal plantings, especially as a barrier shrub, it can also tolerate salt and drought as well as partial shade (providing there is good air circulation). The decorative red fruit, unlike the two above plants, is edible (sometimes referred to as strawberries and cream).

Far less well known members of the Apocynaceae are shrubs and trees in the genus *Wrightia* which have only recently stimulated some local interest. The water jasmine (*W. religiosa*) is a small (to 10') slow growing tree with thin branches, simple 2" leaves, and mildly fragrant diminutive white flowers that hang in clusters like snowdrops. Provide moist but free draining soil and grow in full sun to light shade. The smaller *W. antidysenterica* is a slow growing shrub sometimes referred to as milky way or snowflake, with larger intensely white, star shaped flowers. This is a very effective shrub, especially when three or four are grouped together. In addition to moisture it prefers acid soils so it will be necessary to correct for trace element deficiencies, particularly iron. Incidentally the specific epithet *antidysenterica* refers to a rare alkaloid present in the plant used as a cure for dysentery.

For particularly showy flowers, two further closely related members of the Apocynaceae, are especially worthy of consideration. First is *Stemmadenia littoralis* (lecheso), a small (20') tree that is becoming increasingly popular for both the 8" glossy leaves and fragrant 4" white salverform flowers. Native to coastal forests of Central America, lecheso exhibits good salt tolerance and is moderately drought tolerant. Although growing in full sun, some light afternoon shade is beneficial in late spring to summer.

The related pinwheel jasmine, *Tabernaemontana divaricata* is a 6 - 10' shrub with glossy, prominently veined leaves. The white, propeller shaped flowers have five broad petals with a small yellow center and are pleasantly fragrant at night. The cv. 'Flore Plena' has double flowers and is commonly known as crepe jasmine, or in the past as Florida gardenia. It is a good substitute for the common gardenia, being less prone to nutritional problems. The cv. 'Grandifolia', in addition to double flowers, also has larger leaves and is especially effective when grown as a small tree. Choose a site in full sun preferably with some light afternoon shade, and grow in enriched moist soil. Compared to lecheso, *T. divaricata* is not as tolerant of salt or dry soil and should be watered during periods of hot dry weather. In winter some leaf drop is to be expected for both plants during cold weather.

Several shrubs have modified leaf-like structures, bracts or enlarged sepals that contribute color rather than the true flower. Bougainvilleas are one of the best known examples but there are many others. From early November through December as it flowers, the many cyathophylls (bracts) convert *Euphorbia leucocephala* (little Christmas flower) from an ordinary 8- 10 shrub into a giant ball of white lace. Grow *E. leucocephala* in full sun in a free draining soil. During the warmer months of the year mussaendas can be the source of continuous color in the landscape. This is due to one or more specially enlarged sepals (calycophylls). An outstanding white form is *Mussaenda philippica* 'Dona Aurorae', a sprawling shrub growing to more than 10'. Smaller and more compact *Pseudomussaenda flava* can be maintained at less than 5' and grown in groups of 3 -4. Mussaendas require enriched moist soil (keep mulched) and benefit from some light afternoon shade.

Before concluding this month's article, we double back to the Apocynaceae to consider three outstanding vines - flowering vines are under utilized in local landscapes. If you have room and can provide a large sturdy support, herald's trumpet (*Beaumontia grandiflora*) is a magnificent woody vine/liana with large glossy leaves and fragrant, white, 7" trumpet shaped flowers having flared somewhat crinkled lobes. The flowers resemble those of the *Portlandia* above but are not as stiff with more distinct reflexed lobes. Prune lightly after flowering (flowering occurs on previous seasons wood). Grow in moist soil with a full sun exposure. Where space is limited substitute the yellow throated white flowers of *Mandevilla boliviensis*, a vine most amenable to container culture (the only option if you have problems with parasitic soil nematodes). Provide an arch or 6' trellis and keep the roots cool (mulch) and provide some shade from hot afternoon sun. Mandevillas have brittle fleshy roots that are easily damaged and for this reason once established they should not be transplanted. The final vine, the bridal vine (*Stephanotis floribunda*) is an old time favorite that is a little less finicky than

Mandevilla as to growing conditions. Like Mandevilla the roots need to be kept cool while the top growth benefits from some high dappled shade during the summer. Maintain even moisture, allowing the soil to dry out somewhat in winter (expect some leaves to yellow and drop). Prune lightly during late winter removing shriveled stems and those with yellowing leaves (cut back to a node). As days lengthen and nights become warmer enjoy the clusters of sweetly fragrant, white, waxy salverform flowers as a reward for your diligence.

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June 21, 2005