

A WORD OR TWO ABOUT GARDENING

Flowering Vines: There's Space for at Least One in Every Miami-Dade Yard

Flowering vines are especially useful where room is limited, requiring vertical rather than horizontal space. For this reason they can prove ideal as a means of rapidly introducing color into the smallest of residential yards. As small/zero size lots figure ever more in local housing developments, vines become increasingly viable landscaping options to flowering trees and shrubs. Some are also amenable to use in an enclosed patio, either in free standing or hanging containers, and include 'oddities' ranging from pitcher plants to vanilla orchid. What follows is the first of two articles dealing with a selection of **vines suitable for use where space is at a premium.**

Some of the smaller less rampant climbers mentioned in the previous articles on vines may be feasible for smaller yards; the bleeding heart vine, *Allamanda* 'Cherries Jubilee' and blue clerodendron are two such climbers worth considering. In making a decision, consider not only presently available space but the future impact of what is already growing. The choice of support depends on the type of vine to be grown, available sites, and of course cost. You may be able to use a tree to support a vine such as a *Hoya* or vanilla orchid, or an open shrub for a gloriosa lily. Other options range from a wire/bamboo hoop (for container vines), to a pillar, obelisk, small wall trellis or garden arch for outdoor vines. The stems of climbers grown in raised or hanging containers can be allowed to simply cascade over the container rim.

Firecracker vines (*Manettia* sp.) are herbaceous climbers with slender stems and small cheery flowers, equally at home grown on a trellis or in a hanging container. Growing to about 12' *M. cordifolia* has dark green shiny leaves and is covered on and off winter into summer with masses of small tubular orangey red flowers. The **Brazilian firecracker vine (*M. luteorubra*)** is similar but stems twine more vigorously and are covered with somewhat sticky hairs. The tubular flowers are bright red with yellow tipped corolla lobes and appear on and off during the warmest months of the year. Outdoors choose a sheltered site that provides dappled shade or bright light (as in an enclosed patio), and plant in an organically enriched soil. Keep soil moist, with reduced watering during winter. Prune lightly as needed with more severe pruning as flowering wanes. Firecracker vines are short-lived, but are easy to propagate from stem tip cuttings. Given the flower's tubular shape and orangey red color, firecracker vines are ideally suited to attracting hummingbirds.

***Gloriosa superba* (glory lily)** is another thin stemmed climber, though rather than twining it attaches by means of leaf tendrils. It is much admired for the distinctive showy flowers, each consisting of six, 2-3", curved, slender, wavy margined yellow/red to purplish tepals (term used when petals cannot be distinguished from sepals). *Gloriosa* is unusual in that it grows seasonally (flowering summer – early fall) sprouting from a long, thin, forked tuber, stems dying back and the plant becoming dormant late fall into spring. Tubers are usually split and the limbs sold separately; they should be planted flat, 2-3" deep in a gritty organically enriched

soil, choosing a site with part light shade. A chain link fence, or wire trellis can be used as support but the vine is especially effective if allowed to climb through a nearby shrub. As growth dies down toward the end of summer withhold water and remove stems once foliage become completely yellow. Try not to remove leaves prematurely; while still green they will continue to manufacture food reserves for storage in the tuber. In Miami-Dade tubers can be left in the ground during winter. If you decide to lift them (e.g., for purposes of propagation) do so carefully. Tubers are brittle and break easily. No longer regarded as a lily (now in the Colchicaceae autumn crocus family) glory lily like most members of this plant family contains the alkaloid colchicine, making it extremely poisonous if ingested.

Bridal wreath *Stephanotis floribunda*, also known as Madagascar jasmine, is an ideal, non-aggressive, woody stemmed, twining vine which can be grown on a chain link fence, wall mounted trellis or garden arch. Each inflorescence comprises densely packed clusters of several pure white, waxy, 1-2" flowers, the corolla salverform to funnel shaped with distinctly spreading lobes. Flowers possess a delicate jasmine-like fragrance, and as an added bonus are long lasting. The opposite leaves are dull green with a prominent mid-vein and borne on short stout petioles. Situate in full sun, preferably with some high afternoon shade, planting in an enriched, moist but free draining soil and mulch to keep roots cool. In sites with sandy soil addition of organic matter and mulching will also help reduce problems from parasitic soil nematodes. Where there is a known nematode problem consider using a container or raised planter.

Apply a slow release fertilizer in spring and fall. In winter reduce watering and expect some yellowing/leaf drop as temperatures fall below 50°F. During extended periods of hot dry weather (spring/summer) a lack of water will also cause foliage to yellow and supplemental water should be provided. Prune as necessary, paying particular attention to removal of dead (dried up) stems during early spring. When thinning out tangled stems avoid over pruning – since flowering occurs on old wood, restrict removal as far as possible to new growth. Locally cultivated *Stephanotis* occasionally set seed (large fleshy follicle); plants are usually propagated using cuttings taken from semi ripe growth.

Locally popular ***Mandevilla* spp.** are closely related, though somewhat more finicky in growing requirements, to *Stephanotis*. They are ideal as a means of introducing color into a small yard, twining up a pillar, on a small trellis or disguising a chain link fence. The mandevillas found in landscapes are mostly hybrids involving species such as *M. splendens* and *M. sanderi* and garden hybrids of uncertain lineage. All have handsome bright green glossy leaves, but the main attraction are the clusters of extremely showy, large, bell shaped flowers, available in an ever increasing range of colors as new cultivars are developed.

A long time favorite has been '**Alice du Pont**'; 3" cool pink flowers with a darker pink center and throat, and growing to about 15-20'. Now eclipsing 'Alice DuPont' in popularity, '**Red Riding Hood**' flowers are a deeper pink with a reddish center and bright yellow throat. Flowers are not as upright making this selection especially effective when grown on a small pergola or spilling over a tall fence. More recent cultivars include several with bright red flowers: '**Scarlet Pimpernel**', '**Crimson**

Jewel' (deep crimson fading to fuchsia), '**Sun Parasol'** (crimson with yellow throat) and '**Ruby Star'** (streaked white and pink becoming deep red). There are several white flowering cultivars including '**My Fair Lady'** (white to the palest of pink), '**White Delite'** (pale pink becoming white) and a '**Sun Parasol'** with 4-6" white flowers. Most stunning are selections with large rather blowsy double flowers (passing resemblance to the China rose 'Old Blush') including '**Tango Twirl'** (soft purplish pink) and '**Pink Parfait'** (also listed as 'Rita Marie Green') with flowers an electric pink, the color less intense in reduced sun exposure. The semi-double '**Moonlight Parfait'** (also listed as '**Monite'**) has large white flowers with a yellow throat.

Before discussing how to grow mandevilleas under local conditions, first a few words about some names that might be a source of confusion. In older gardening texts and some present day nursery catalogs the name *Dipladenia* is used; this is now regarded as a synonym for *Mandevilla* (i.e., *Dipladenia* is no longer taxonomically valid). Also vines referred to as "yellow mandevilla" are in fact either the yellow allamanda (*Allamanda cartharitica*) or a small attractive vine native to south Florida *Pentalinon luteum* (syn. *Urechites luteus*), which is also known as wild allamanda. Incidentally this latter vine is especially suited to full sun, drought tolerant and although not quite as showy as *A. cartharitica* is much better adapted to infertile limestone soils.

In a south Florida landscape provide *Mandevilla* with morning full sun exposure (up to about midday) followed by partial shade, especially from hot afternoon sun. Avoid sites prone to flooding or where drainage is slow. Soil should be organically enriched, but friable, slightly acid (\approx pH 6.5) - some sharp sand, not play sand, and Perma-Till can be added to a soil based potting mix. When planting *Mandevilla* handle with care as the fleshy roots are easily damaged. Maintain soil moisture, especially as the vine first becomes established, gently watering as the top of the soil becomes dry. Avoid over watering, especially during the cool months of winter when water needs are less – cool wet soils greatly increase the risk of root rots. Like *Stephanotis*, mulching protects roots from summer heat and helps reduce the risk of nematode damage.

Mandevillas have gained a reputation for growing better in containers, rather than in-ground. Container culture is strongly recommended where there is a risk of damage from parasitic soil nematodes e.g., sandy soils; it also circumvents nutritional problems associated with local high pH limestone soils. A raised bed can also help alleviate the latter problem (the vine support can be attached to the bed walls). If using a liquid fertilizer for container plants select one having as principal nitrogen source an ammonium salt rather than nitrate. If planted in ground or a raised bed apply a slow release fertilizer in spring and summer (e.g., May and August). Prune annually in early spring if necessary to control growth/remove dead stems; mandevillas recover poorly from drastic pruning.

While the vines discussed so far are admired because of their floral display, there is one terrestrial (at least initially) orchid that is unusual not only because of its climbing habit, but in being of more interest for the fruit it produces rather than the flowers. This is *Vanilla planifolia*, one of the **vanilla orchids**. This is a group of

orchids with thick succulent stems that cling to their support (usually a tree) by means of adventitious roots (they will readily root on contact with soil). Leaves are fleshy, sometimes greatly reduced or absent and borne singly at stem nodes with flowers borne in axillary, occasionally terminal racemes or panicles. Individual flowers are large, often fragrant, white to yellow or pale green, and are followed by a pod-like fruit (termed a capsule).

Vanilla planifolia, is the best known species, commercially grown as the source of vanilla essence, but also available from a few mail order nurseries if you wish to try growing your own backyard “vanilla beans”. It requires patience however before the vine flowers (can be up to 3 years), followed by careful hand pollination in order to obtain pods. In addition pods must be carefully cured to develop the true vanilla flavor. If you are still interested, read on. Grow vanilla orchid in a moist but free draining soil mix composed of leaf mold (obtainable by mail order from orchid grower suppliers), orchid bark and Perlite or Perma-Till. The orchid can be attached to a moss covered pole or trellis (wrap a 3” layer of sphagnum moss binding it with garden twine) using plain metal bobby pins. The moss should be kept moist to encourage penetration by the orchid’s adventitious roots.

Provide dappled shade from a tree or bright light, such as a lath/shade house, or an enclosed patio, though in the latter case you will need sufficient room for the orchid to grow to at least 10’ to ensure flowering. Once it reaches about 6’ the stem should be directed to grow downward (this promotes flowering). Future growth should aim at training the vine to grow in a series of large loops to maximize flowering. Flowering is also promoted by allowing the soil to dry out slightly during winter. **To hand pollinate** first familiarize yourself with vanilla orchid’s flower structure so that you can identify the flower parts mentioned in the following instructions. Hold the flower then lift and fold back the rostellum (a beak like flap that separates the pollen bearing anther from the stigma) located at the top of the flower’s column (single structure containing fused style and stamens). You will probably need to remove some of the petals to ease access. It will now be possible to press down on the anther cap so that pollen can make contact with the sticky stigmatic cavity. If pollination was unsuccessful the entire flower will fall off after 2-3 days; otherwise the column will remain and develop into a pod like fruit.

The fruit takes 5 - 7 months to mature; once it yellows at the tip it should be removed. Freshly picked pods are devoid of the characteristic vanilla flavor which only develops after **a lengthy period of “curing”**. This involves first wilting the pods by drying in hot sun or plunging in hot water for 45 seconds. The pods are then alternatively dried in hot sun for 2-3 hours each day then “sweated” (i.e., wrapped in waxed paper and placed in a container with a tight fitting lid). This is repeated until the pods turn deep brown, after which they are slowly dried, then placed in a sealed container for several weeks. At the end of this they should be a rich chocolaty brown, somewhat sleek, oily and flexible not dry or brittle. For vanilla essence soak cured split pods in liquor (non-flavored Vodka is best) for several weeks using a jar with a tight fitting top. Once the liquor is a deep yellowish-brown remove the pods, strain and the essence is ready for use. In addition pods can be

used directly in drinks, sauces and creams (infusing in hot liquid then removing the pod, rinsing and drying for re-use).

Vanilla planifolia is native to SE Mexico but on rare occasions has been found growing in the Everglades. Several other species of *Vanilla* orchids are known to be native to the Everglades – like many other Florida native orchids they are listed as endangered.

John McLaughlin

May 8, 2007