



Roses in Your Miami-Dade Landscape

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For many home owners a garden is not complete without a rose bed. However these are plants that have gained a reputation for being difficult to grow in South Florida. Below is a check list for those considering the inclusion of roses in their Miami - Dade landscape. Also included are the names and addresses of suppliers of roses suitable for Miami-Dade County.

Where in the landscape. There are two imperatives when considering where to install roses: the first is adequate exposure to sun (6 -8 hours, preferably including morning), and the second is root competition. Roses are heavy feeders so avoid competition with tree roots for available nutrients. Consider the future spread of roots if trees are not already fully grown. Plan ahead and envisage what other plants you wish to put in the yard: roses do not thrive in a crowded landscape. Even if you only have a small patio, providing you have adequate daily exposure to sun you could still grow 2 or 3 small roses in planters. For climbing roses you will need to instal a suitable support (e.g. pillar or archway), or in some instances it may be possible to use an existing feature such as a chain link fence.

Plant Selection:

(a) *Own root or grafted?* In most instances only roses grafted on to a Rosa x fortuniana rootstock should be grown in Miami - Dade. In areas on limestone or where the soil is not too sandy, it should be possible to grow Tea, China, Noisette and some Bourbon roses on their own roots. All of the modern roses, including hybrid teas, should be grafted; unless you don't mind replanting every two years, avoid varieties using Rosa multiflora as rootstock. Look for the name tag which should indicate that the rose is on the correct "fortuniana" rootstock.

(b) *Class of rose* There are a large number of different classes of roses, however the most extensively grown worldwide are the hybrid teas. These come in a stunning range of colors, and some can do quite well in our tropical conditions if they are on the correct rootstock. They are however a high maintenance rose, requiring routine spraying for disease, and regular application of fertilizer plus supplemental watering if rainfall is not sufficient.

Roses that do particularly well in our sub-tropical climate are Chinas and Teas, as well as some Noisettes and Bourbons (latter more disease prone). The so- called "Bermuda Mystery Roses" are also well adapted to conditions in Miami-Dade County. All of the last five groups of roses are often referred to as "heirloom roses." More detailed information on these roses is available in a separate publication, "Old Roses for Miami-Dade County" available from the Miami-Dade Extension Office.

Planting:

(a) *Time of year* The first consideration when planting a rose is the time of year, and this will be determined in part by availability. It is usual, in Miami - Dade, to plant roses in late winter to early spring to allow the plants time to establish so that they are more able to withstand the stress imposed by the heat and humidity of summer. It is advisable to avoid the hottest and wettest months of the year when planting roses.

(b) *Bare root or container grown* Another consideration is whether bare root or container plants are to be used. If possible use container plants, though mail order plants are often shipped bare root. In the latter instance have the planting hole ready in advance, and upon receipt of the rose the roots should be immersed in water overnight and the plant installed the following day.

(c) *The planting hole and soil* The hole should be 12 -18" deep, dish shaped and at least 3 -4' in width, larger for a substantial shrub rose. The planting hole can be lined with Canadian peat or well rotted compost, the rose installed and backfilled with a rich organic free draining soil. Where sufficient top soil is present, this can be used if stones and rubble are first removed, and organic amendments such as Canadian peat, compost, bone meal and dried blood are then added. Use a 1 : 1 mix of soil and peat and/or compost, plus a cup of bone meal and 3 cups of dried blood per planting. Alternatively, bagged rose soil is available and this should be mixed with top soil as directed on the sack. In the absence of workable topsoil (e.g. limestone areas of South Dade) use a bagged potting soil (such as Hyponex) amended 2:1 with the above organic components. Tamp the soil down gently and water, then apply a 3" layer of organic mulch leaving the area around the crown of the plant clear. The rose should be positioned at or slightly above the soil line. For bare root roses first spread the roots over a mound of soil so that the crown is level with the soil line, then continue as above. A slow release rose fertilizer can be sprinkled on the soil before mulching.

There are claims that soil that has previously been used to grow roses inhibits rose growth (allelopathy), especially teas, chinas and hybrid teas. For this reason, many rose growers use fresh soil when installing plants in an area that has already been used for roses.

(d) *Planters and raised beds* Use a potting soil based mix as described above and mulch. Make sure that the soil is thoroughly mixed and if dry moisten before adding it to the planter.

Routine Care

Water and Nutritional Requirements Roses should receive a total of 2-3" of water per week (including rainfall), more if planted in a raised bed. When required, water should be given early morning as a deep soaking 2-3 times per week, keeping as much as possible off the foliage. Note that some of the large old Tea and China roses are more drought resistant than most modern roses and once established can be watered every 7-10 days. Using a slow release rose fertilizer, roses should be fed every 6-8 weeks, with a foliar application of a liquid fertilizer (e.g. Miracle Grow) in between. In place of the liquid fertilizer, a spray containing trace elements (i.e. Perk or Microplex) can be applied every 3 months. Mineral deficiencies are most likely on the highly alkaline

lime stone based “soils” of southern Miami-Dade. In such locations it may well be necessary to apply chelated iron (Sequestrene 138) as a soil drench.

Pruning For those previously accustomed to growing roses in more northern latitudes, it will no longer be necessary to perform a major pruning for winter. Late Fall through Spring is when most roses, including hybrid teas, produce their best show of flowers in South Florida. Roses should be deadheaded (removal of spent blossoms), and regularly inspected for die-back of canes. Hybrid teas, if necessary, can be pruned back by up to one third, whilst tea and china roses will languish if pruned this severely. Pruning should be kept to a minimum and undertaken as needed, and it is best to avoid all but essential pruning during the summer .

As a first step cut out all dead and infected wood, then cut back canes that cross one another and those producing blind (none flowering) growth. Try to develop a bush with an open center, pruning back to an outward pointing full leaf set or bud eye, taking care to leave no stubs. This latter point is most important in our hot and humid climate, since disease can become established if stubs remain, leading to die back of the pruned cane. If the rose is correctly cut there should be no need to use a pruning sealer - tar based products can induce dieback and should be avoided. Die back due to canker can be a serious problem for some roses, particularly if they are stressed from lack of water and nutrients. Canker often progresses more rapidly down one side of a stem so inspect carefully before cutting to ensure that all of the infected tissue is removed. Disinfect the pruners between each cut with denatured alcohol.

Pests and Disease Aphids, flower thrips, spider mites, weevils, big footed and leaf footed bugs and cane borers can sometimes be a nuisance. Unless damage is severe, it is best to allow natural predators and parasites a chance to control any problem. Horticultural soap can be used to control aphids and spider mites, whilst Orthene or Cygon will help to control thrips, more so if they are on the foliage rather than the flowers. Note that roses with light colored blossoms are more attractive to flower thrips and that damaging populations are more likely to develop where such varieties are planted together. Varieties having sepals that cover the flower bud until it opens are less prone to attack from flower thrips. Cane borers are occasional pests, often attacking newly cut canes and found in the pith of the cane where they cause wilting and die back. A clear water soluble glue can be used on pruning cuts if borers are a problem. Any infested growth should be cut out as soon as it is noticed.

Blossom weevils and big footed bugs (attack new shoots) are also occasional pests for which pesticides are not very effective: hand pick weevils and destroy whilst Orthene or Sevin may give some control of bugs. Products containing chlorpyrifos (e.g. Dursban) or diazinon can damage roses. Cygon should be used sparingly and repeated use of insecticidal soap can cause phytotoxicity.

In south Florida the two most prevalent diseases on roses are powdery mildew and blackspot. The former is favored by extended periods of warm dry weather (day time temperatures of 25 - 27EC and 40 - 70% relative humidity), such as occur in spring and occasionally late fall in south Florida. The disease is inhibited once the rainy season commences. This is the time of year when blackspot can become a serious problem. Spread of the disease is favored by rainfall regularly

splashing infective spores from diseased leaves onto the foliage of neighboring plants. Where foliage remains wet, with high humidity and a temperature of 75°F, fungal spores will germinate and infect the foliage within a day. Providing rose bushes with sufficient room can help to lessen the spread of disease. Adequate spacing also permits better air circulation, promoting more rapid drying of plant surfaces, which is less conducive to germination of infective spores. The severity of blackspot increases through out the summer months, especially in stressed plants, and is at it's worst by late August into September. A third less serious problem, Cercospora leaf spot, can be distinguished from blackspot by the spots that form, which have reddish purple borders and a grey center.

The most effective way to limit problems with these diseases, particularly blackspot, is to choose roses that are naturally resistant. The "old fashioned" roses (Chinas, Teas and Noisettes) are particularly resistant, whereas many modern roses (including hybrid teas) are far more susceptible. Control is also improved if roses are provided with adequate nutrients and water. With hybrid teas, control of blackspot will necessitate a weekly spray program for the period late/spring early summer through October. Use either myclobutanil (Immunox, Systhane 40 WSP or Eagle 40 WSP), propiconazole (Banner Maxx) or chlorothalonil (Daconil). The first two chemicals will also control powdery mildew. There are claims that ultra fine horticultural oils aid in controlling both of these diseases, particularly in the latter case if used in conjunction with baking soda (sodium bicarbonate). If you wish to use these spray mixes, apply during the evening. Avoid repeated applications of baking soda, as this could cause problems with salt (sodium) build up , especially in containers and raised beds. Potassium bicarbonate is preferable.

Two related problems, balling and petal blight, can also be a concern, particularly on roses with cabbage-like blossoms including certain old fashioned roses such as bourbons. The disease is at its worst during periods of cool wet weather, and infected blossoms should be removed promptly. Use of daconil or Duosan/Zyban may give some control if petal blight is a particularly serious problem.

Weed Control Maintaining an adequate depth of mulch should prevent weeds from becoming a problem. Any that do appear should be hand pulled as soon as possible, since weeds can spread rapidly in our hot, wet climate. The abundant prickles present on most roses renders removal of weeds growing under large shrub roses an arduous task, and it may be necessary to use herbicides to aid in their elimination. A pre-emergent herbicide such as Preen or Scotts Miracle Grow Weed Prevent can be applied around the base of each plant, though it will need to be replaced every 6-8 weeks. For control of grass use a product containing fluazifop (e.g. Ortho Grass B Gone II) and post emergent control of many broadleaf weeds can be effected using bentazon (e.g. Basagran)