

GROWING ROSES ON FORTUNIANA ROOTSTOCK

By James Mills

I have been planning on writing this article for quite a while and could never find the time. But now I would like to share the knowledge I have acquired from working with Fortuniana rootstock for twenty years. Of course, I have learned much of what I know through trial and error. I have also learned many helpful things about growing roses from other rosarians.

I became interested in growing on Fortuniana rootstock when I was introduced to it by a great rosarian, Sam Renfroe of Mobile, Alabama. My wife Daisy and I already loved roses and so we joined the Mobile Rose Society. That is where we began our experience with Fortuniana rootstock. We now have over a thousand rose bushes in our garden and most of them are on this rootstock. We grow our roses successfully by following a regimen that I would like to share with you.

Roses require at least six hours of sunlight. Since the soil must be well drained, we recommend raised beds or making holes at least two or three feet wide where the roots can spread in all directions. Holes that are not in raised beds should be at least two feet deep. Use the same soil mix as you would in raised beds. The basic mix should be $\frac{1}{4}$ sand, $\frac{1}{4}$ loamy soil, $\frac{1}{4}$ organics such as horse manure or cow manure, and $\frac{1}{4}$ crushed pine bark. Do not use pine shavings, as it will burn the roots. You can also add other recommended materials.

You should have the soil analyzed by sending a sample to the Soil Testing Lab at Mississippi State University. Your Extension County Agent can advise you how to do this. It is important that you keep the pH around 6.0. If the pH is low, add dolomitic lime; if the pH is high, add sulphur. The more organics you add to your rose bed, the better the roses will grow.

I have found that if you can cultivate earthworms in your rose bed, you will have much better roses. The earthworms aerate the soil, and this lets the roots breathe.

After preparing the bed, dig the holes the depth you are going to plant your roses and fill them with water. If it takes over an hour for the water to drain from the holes, the soil should be amended, or you should build raised beds.

When growing roses, the first thing to consider is the type of roses you want to grow. There are many kinds of rose bushes as well as many thousands of varieties. A common type grown in the South is old garden roses; these were hybridized before 1867. Roses hybridized after this date are considered modern roses.

Modern roses include hybrid teas, floribundas, polyanthas, grandifloras, miniatures, mini-floras, shrubs, and many different climbing roses. The roses that I discuss in this article pertain primarily to modern roses.

Selecting Rootstock For Your Roses

There are many different types of rootstock used to graft or bud with the modern roses. This is because most modern roses do not develop a good root system when grown on their own roots. These root species include Multiflora, Dr. Huey, Manetti, Fortuniana, and others that are used by the florist industry.

Fortuniana Rootstock

We have learned through trial and error that there is no other rootstock that compares with Fortuniana. It is resistant to nematodes. Nematodes attack the root system of roses and destroy them. It is also resistant to other root diseases.

Roses grow much larger on Fortuniana roots. The roots are fibrous and extend out from the plant much farther than other rootstocks. The rootstock will form a taproot, which could be compared to a taproot on pine trees. I have pulled up taproots from my older bushes that were up to four feet long. This massive root system is what makes Fortuniana the choice for serious rose growers.

The blooms will be larger and the plants will produce more leaves that will make the plant grow taller. We have roses on Fortuniana rootstock that are over twelve years old and they continue to get larger each year. We have found that after the first year the rootstock is as winter hardy as most other root systems.

Planting Your Fortuniana Rootstock Roses

Fortuniana rootstock roses are container grown, so they are planted different from bare root roses. The roses should be planted the same depth as they are in the container with the graft union well above the ground. The secret in growing Fortuniana roses is never let the union get covered.

Remember that over the years you will add mulch, fertilizers, lime, manures, etc., and you will have a soil build-up. You never want the soil to touch the bud union. If it does, the rose will revert back to its own roots.

A rose that reverts back to its own roots loses the advantages of the Fortuniana rootstock. It can attract nematodes and will never be as vigorous and healthy as it should be.

Place a handful of Osmocote time release in the bottom of the hole and mix it with the soil. This will give the root system nourishment sooner than food leaching from the surface. Next, remove the bush from the container and place it in the prepared hole. Try to keep the soil intact. Then fill the hole half full of soil, and fill the hole with water. You will see bubbles appearing as the water drains. This means that the air pockets are being removed from the soil. Air pockets can cause disease to form. When the water drains, you should finish filling the hole with soil and water again.

You should immediately stake the rose bush. I recommend using one-half inch rebar cut in four-foot lengths. Tie the bush above the graft, as a strong wind can break the graft union. As the bush gets larger, the stake will support the shallow root system and will keep the roots from working loose in the soil.

If you are going to tie your rose up with a wire string, you should take an old garden hose and place over the wire string where it will not damage the plant. Put a handful of Osmocote or other time-release fertilizer around the plant. Milorganite is one of the best because it is slow release and is a good source of iron.

Finally, mulch around the bush with pine straw or some other compost that will deteriorate and build up the soil and make the earthworms more plentiful.

Watering Your Rose Bushes

Water is the same thing to a rose bush as milk is to a baby. A rose bush cannot survive without water. Water is even more important than food for the rose bush. In a well-drained bed, it can take up to three inches of water a week for the plant to really flourish. The best way to tell if your bushes need water is to stick your finger in the soil around the bush. If the soil is moist, you do not need to water. If the soil is water logged, cut back on the water. If the soil is dry, you know that you are not using enough water.

There are various ways of watering bushes. I would suggest that you install some type of system before you plant. If you rely on pulling out the garden hose in the hot days of summer, your roses will not get enough water. It is too easy to wait until tomorrow. Always water your roses in the morning, as this will give them all day to dry out. It will not hurt the leaves to wet them if you water in the morning. We water overhead and always in the morning. In the heat of the summer the roses seem to respond to overhead watering.

Feeding Your Rose Bushes

There are many ways to feed your roses and most rosarians have their own secret formula for great roses. Roses can absorb a lot of feeding if you water sufficiently. The more water you use, the more you can feed your bushes. If you do not water

sufficiently, you can have a build-up of soluble salts from the fertilizers and then the root system cannot pick up the nutrients from the food. Give each rose bush a cup of Milorganite in the early spring after the danger of a hard freeze is over. This will not burn the roots and is a good source of iron. Also give each bush a cup of time-release fertilizer such as Nurseryman Special or Osmocote. There are many other types of fertilizers that do an excellent job. Once a month add a tablespoon of soluble fertilizer to each rose bush in a gallon of water. Peters 20-20-20 and Miracle Grow are two good soluble fertilizers. A tablespoon of Epsom salts in a gallon of water each month will help produce basal breaks from around the graft. These are next year's canes that will make your bushes larger. Repeat the time release and Miloginite each month until September. After September do not feed any more so the bushes can begin to harden for winter.

Mulch your beds with organics such as horse manure, cow manure, or mushroom compost. As this breaks down, it gives the roses many nutrients. This will not burn the roots.

Spraying Your Roses

This is the one thing that keeps most folks from growing roses. Spraying is essential if you want to have great roses. There are some things you must invest in to have good roses and one of them is a good sprayer. There are many types of economical sprayers on the market. If you have just a few roses you can purchase a backpack sprayer that will give you sufficient coverage. For just a few more dollars you can purchase a battery-operated sprayer. Most discount stores have five to twelve gallon sprayers that can be connected to your battery on your lawn mower. Sufficient pressure is necessary for a fine mist, and a mist or fog gives better coverage.

We have a constant battle with blackspot in the South. It can defoliate your rose bushes and eventually weaken them so much they will die. There are a lot of disease resistant shrubs that are being sold that do not need much spraying, but these roses will never give you the long stem cut flowers that so many of us desire.

After pruning your roses in late winter or early spring, you should spray with a fungicide such as Banner Maxx mixed with Dithane or Pentathlon (formerly known as Manzate). Then, if you spray your bushes every ten to fourteen days, you should not have blackspot. You can spray both of these fungicides at the same time. After a couple of sprayings you can omit the Banner Maxx and only use Dithane or Pentathlon. I also recommend that you purchase an alternate fungicide and use it once every month when you are not using Banner Maxx. You should also use a spreader sticker with your spray. (If nothing else, use a couple of drops of dishwasher detergent in your spray tank.)

There are also neutralizers such as Indicate Five, which you can use to make the water neutral. Vinegar can do the same thing, but it is hard to know how much to add. You might want to call your water department to find out the pH of your water.

Never spray your roses in the heat of the day, as this may burn the leaves.

You will also need to spray for Thrips and Spider Mites. I recommend Conserve for the Thrips. Thrips are tiny insects that get into the buds as they are beginning to open. They damage the flower and cause it to turn brown. Only spray the buds, because the insecticide will kill other insects on the bush that are beneficial. These beneficial insects will eat the Spider Mites.

Spider Mites are tiny mites that will infect your bushes in the heat of the summer. They are on the underside of the bottom leaves and they will turn the leaves a copper color. They will also defoliate the bush. There are a couple of ways of getting rid of mites. One way is to use a water wand and wash the underside of the leaves with a strong force of water, or you can use a miticide such as Floramite, Sanmite, or TetraSan. You can mix the miticide with your regular fungicide spray. I spray my roses once a month with a miticide and I don't seem to have a problem with mites.

Another major disease is downy mildew, but this does not occur very often. This can develop in the springtime when the days are cool and damp. Downy mildew looks very similar to blackspot in the early stages, but it will begin on new growth, whereas blackspot begins on older leaves. The canes will also begin to have purple splotches on them, and if this is not corrected it will devastate your garden. I recommend a copper based spray once every fall and again in the spring. Again, some of the recommended fungicides are Aliette, Stature, and Kocide. These are very good preventives.

I know this seems like a lot of work to have roses, but the benefits of beautiful cut flowers is well worth the effort.

Pruning Your Fortuniana Rose Bushes

You don't prune roses grown on Fortuniana rootstock as severely as you do other bushes. If you prune too severely they will have a hard time recovering. The reason is that the massive root system must have lots of energy when the new growth begins. We prune about hip height. Some people suggest removing the old leaves as they prune the bush. We don't and it doesn't seem to bother the bush.

In zone eight, we prune our bushes around the middle to late February. If you prune your bushes too early, a freeze can kill or severely damage the bush, so it is better to prune a little later. When cutting your roses, always cut back to a five leaflet (not a three leaflet). Always cut a quarter inch above the bud eye. If you cut the leaves that

are growing to the outside of the bush, it will make the stems grow up and outward. The idea is to make your rose bush look like an upside down umbrella.

Cut back canes that are 5 years or older. Remove dead or diseased canes. Cut branches that cross in the middle and the twiggy (very small) limbs.

It takes fifty to sixty days for a bush to repeat blooming, so if you are planning for a special occasion you can schedule when to prune the plants. When the blooms are spent, you should cut the old flowers and this will start new growth.

Enjoying Your Rose Bushes

A person should never let growing roses become a job! It should always be a hobby, even though there is work involved. This is why you prepare beds with a water system installed. Also keep your rose beds mulched so weeds will not be a major problem. Just remember that water, good soil, and fertilizer means that weeds and grass will try to emerge. You can use a pre-emergence herbicide in the early spring, as this will keep the weeds and grass from ever getting a good start. I would never use a post-emergence herbicide around my roses because anything that will kill the weeds will kill roses.

Most people want to begin with the older varieties, but there are a lot of newer roses that are more disease resistant and easier to grow. It is better to purchase varieties that have been grown successfully in your area. This is one of the reasons we have such a large garden. We try to grow new varieties before we recommend them to others.

I believe with all my heart there is no other hobby that can give you as much joy and pleasure as growing beautiful roses.