Staking Fortuniana Grafted Roses

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Fortuniana is considered the best rootstock choice for Florida. It performs extremely well in our sandy soils, is nematode resistant, and more resistant to gall, stem dieback, and to root diseases. In addition, it is more drought-tolerant than any other common rootstocks, and is able to extract fertilizer nutrients from a wide variety of soils. Fortuniana is comprised of many fine feeder roots that are generally in the top 14 inches of the soil extending out many feet from the bush in all directions. This allows for greater adsorption of water and soluble minerals. Until established, these fine feeder roots do not provide adequate stability for the top-heavy upper portion of the plant. As the bush matures over a few years time, these feeder roots will become a large enough mass throughout the bed to provide needed support.

Young Fortuniana grafted roses should be securely staked. If left un-staked, bushes can blow over in a storm, become uprooted and also possibly break off at the graft. On young bushes the section of Fortuniana between the graft (aka bud union) and the ground is flexible. The graft may not be completely healed/fused. Therefore, when a new bush is planted in the garden it is important to provide support for the top portion of the bush and also prevent the graft from breaking. In addition to keeping the root ball firmly in the ground, staking will also keep the plant and the graft in an upward position, encouraging new canes to grow uniformly from all areas of the graft. As the plant matures, the stake provides additional support while the roots develop to provide a firm foundation in the soil. Given to these purposes, little instruction can be found on how to best stake a rose bush, and typical of rose growing, there are multiple opinions on the technique of staking. Over many years, while visiting numerous rose gardens, I have observed various methods of staking Fortuniana grafted roses. Whatever method is used, the desired result is to keep the bush standing upright while providing support for the top of the bush above the graft, and lessening any tension on the graft so the bud union can grow smoothly to allow new canes to emerge. One staking method which seems very popular is to tie the shank of the rose bush (main "trunk" below the graft) to a stake placed inches away from the shank. This method DOES NOT provide adequate support for the top of the bush or the bud union.

When staking a bush, I look for one of the sturdier canes, (even on a young bush), that is growing in an outward direction away from the bud union. It is important to note that this is a sacrificial cane, as over time it usually will deteriorate. We are not concerned that the cane used for staking will produce blooms, but rather it is used to only support the bush. Very young bushes can be <u>temporarily</u> staked with a piece of sturdy bamboo or a standard garden

stake. As the bush matures, we recommend a much more substantial stake utilizing a section of 1/2 to 3/8 inch diameter rebar that is 3 1/2 to 4 feet long. Once the "staking" cane has been identified, the rebar is placed where it is to be tied to the "staking" cane insuring the plant is standing straight and not leaning. The rebar is then hammered into the ground a minimum of one foot. section of PVC pipe or old garden hose is then slipped over the above ground portion of rebar. This covering keeps the cane from rubbing against the rebar and serves as insulation from the heat absorbed by the rebar from the sun. Using stretchy vinyl "plant tie tape", pull off a length sufficient to double the tape (fold in half) and wrap snuggly around the cane and the stake two times and tie in a knot. It is not recommended to use wire (or similar) to tie the cane to the stake, but rather something that will stretch and not cut into the cane as it grows. Only one stake per plant will be required. The staking to the sacrificial cane remains until the cane breaks or no longer can support the plant.

