

All Natural Rose Care

Roses have been cultivated in Chinese gardens for nearly 5,000 years. Roses are indigenous to the northern temperate zones between latitudes 20°-70°. Here in the Northwest we have five indigenous species; *R. nutkana*, *R. woodsii*, *R. gymnocarpa* and *R. pisocarpa*. Botanically the genus *Rosa* is within the Tribe Rosea in the subfamily Rosioideae of the family Rosaceae. This family is part of the Division Angiospermae (flowering plants) contained within the class Dicotyleoneae. Thus roses are close cousins to many fruit trees such as pears and apples. Most rose care techniques are directly applicable to fruit tree care.

This guide is not intended to be complete and comprehensive. It provides some simple and easy to follow directions that result in healthy roses, disease and pest free, using no toxic chemicals.

Background

Roses appear extensively in Greek and Roman history. The rose was offered to Venus as a symbol of beauty and to Cupid as a symbol of love. Harpocrates, “God of Silence,” suspended a rose above a room to indicate that what took place below was confidential. The term sub rosa still indicates private activity.

Since the mid 1800s, roses have been extensively cultivated and hybridized in Europe and later in the new world. Old roses are species and cultivars in existence prior to 1867, when the first Hybrid Tea rose was introduced in Europe. Modern roses are cultivars and hybrids created after this date.

Roses are hybridized to create new roses with specific bloom color, fragrance, re blooming, disease resistance and other desirable properties. Some hybrids are patented. Patented roses cost more because a patent fee is paid to the hybridizer for the many years work invested in creating the hybrid.

“Old Garden Roses” are primarily European in origin and many are highly fragrant with a single bloom period per year (single blooming). Asian roses have a light fragrance and bloom multiple times per year (re blooming or recurrent). The Hybrid Tea Rose crosses these two groups to make a re blooming, fragrant rose.

Miniature rose (*Rosa chinensis minima*) ancestry is also Asian. Miniatures have become popular because of their re blooming characteristic and small space requirement.

Miniature roses are frequently container grown on decks and patios outside in the NW. Miniatures are not indoor plants. In the ground, they make great border plants in front of taller rose varieties or other plants.

Miniatures are available as climbers, ground cover, and small bushes. Their size and shape are easily controlled by pruning. Finished blooms should be removed. The cane can be pruned anywhere from 1/3 to 2/3 of its length. The more you “whack ‘em” the more they bloom. Because miniatures are grown on their own roots, they are generally hardier than Hybrid Tea Roses.

Roses grow well in our NW climate and are among the few plants that will thrive in locations exposed to our very strong southern and western sun for extended periods. Roses grown with proper siting and nutrition are relatively easy and care free.

When to Plant

Roses can be planted anytime from early spring to late fall with protection from wind and drought until they are established. Roses planted during our NW dry period, July-September, require close attention to water. Bare root roses will benefit from a soaking in a root stimulant hormone solution such as Dyna-Gro K-L-N diluted 1 Tbs/gal of water before planting. Use the solution to water in the new planting. Bare root and enclosure roses should still be dormant when purchased. If already awakened, the plant will be stressed by trying to grow in poor growing conditions.

Site selection

Roses are an outdoor, full sun plant. Roses need good air circulation, good drainage and should not have to compete for nutrients with other large plants.

Nutrient competition can be alleviated by following a full nutrition program. Container grown plants require a full nutrition program as described in the section on nutrition.

Planting in the ground

Hole preparation is very important. In our NW clay, too big a hole cannot be dug. The hole should be at least two feet across and nearly as deep. If heavy clay soil, dig deep and fill the bottom layer with gravel to promote drainage. The clay removed should be mixed (amended) with a good compost or humus to break it up and again promote drainage.

Make a layer of amended soil over the gravel with a mound in the center. Spread the roots around this mound. The mound should be high enough to raise the bottom of the bud union of hybrid roses to surface level. Miniature roses should be planted to the same depth as they were in the pot.

Begin filling the hole with the amended soil. Dampen down to remove air pockets as you fill. For optimum results water with the rooting solution when the hole is about halfway full and then again when full.

The finished planting should be thoroughly watered. For optimum results, use the nutrient solution described in the section on nutrition for this watering.

Follow the nutrition and disease prevention program recommended and you will soon have beautiful roses needing no other special care until you winterize and perform an annual first of the season pruning.

Container Planting

Use a good potting mix, that will drain well. Make sure you use a container that drains. If the mix claims to have fertilizer in the mixture be aware that it is both incomplete and in a short period of time will be consumed and no nutrients will remain. It is recommended that you use a mix without nutrients and provide the proper nutrients with the water right from the beginning. The potting medium should be changed annually when the rose is naturally dormant or out of bloom. pH control is critical. A pH between 6.0 and 6.5 should be maintained.

The container for miniature roses should be a 2-3 gallon pot with good bottom drain holes. The container for standard bush roses should be larger, 3-5 gallon, so as not to restrict the roots too severely. Decorative pots without drain holes will prevent the roots from obtaining oxygen and kill the rose. If this type of pot is desired, leave the rose in an appropriate size plastic pot and place the plastic pot in the decorative pot. Remove the rose for watering and allow to drain completely before returning to the decorative pot. The medium should be kept moist but not wet – avoid “wet feet.” Water thoroughly from the top until draining from the holes.

All Natural Disease and Pest Control

Roses are notorious for getting fungal diseases such as black spot, powdery mildew and rust in the NW. They are also magnets for pests such as aphid, spider mites and scale. The common method of attacking these problems is with toxic fungicides and pesticides that can be harmful to humans, animals and the environment, as well as expensive.

The foundation for natural disease and pest control is a healthy plant. If the plant is properly sited, then good health is primarily a function of nutrition and pH control. Even healthy plants can still be attacked by disease and pests. A preventative/curative spray program using Dyna-Gro Pure Neem Oil and Pro-TeKt® will control this problem without the use of any toxic chemicals.

pH Control

Generally our NW tap water is slightly basic (pH 7.2-7.4). Well water pH can vary widely during the

year. Fertilizers tend to be acidic and pesticides and fungicides basic. Pro-TeKt is highly basic. A Dyna-Gro full nutrition formula mixed with an equal amount of Pro-TeKt will have a pH between 6.3 and 6.5. The Neem Oil spray mixed as directed will have a similar pH. A pH above 7.5 will block the uptake of essential nutrients, especially iron.

Nutrition

All plants, including roses, require six macro nutrients and 10 trace elements. Roses are heavy feeders. Plants obtain all of their carbon from the gas carbon dioxide during photosynthesis. The required mineral nutrients are metabolized by plants to create the carbon based organic matter. Minerals already combined with carbon or insoluble in water cannot be used by the plant.

Fertilizers claiming to be specially formulated for roses are a marketing ploy and are rarely complete. The urea form of nitrogen is of little value and should be avoided. Blooming formulas with a low nitrogen percentage and a high phosphorus percentage should not be used. Roses are very sensitive to phosphorus toxicity. This will appear as black spots with brown borders. Labels should be read carefully. By law, labels do not show complete contents. Research manufacturer spec sheets to determine the contents.

In addition to the proper ratio of the three common fertilizer elements, nitrogen (N), phosphorus (P) and potassium (K), make sure the other three essential macro nutrients, calcium (Ca), Magnesium (Mg), and sulfur (S) are present. Roses and fruit trees are especially susceptible to magnesium and sulfur deficiencies. This is why many rose books direct the use of Epsom salts, magnesium sulfate, for growing roses. Large N-P-K numbers are not better. Formulations with high phosphorus numbers are OK if nitrogen is also available in sufficient quantity. The nitrogen ions combine with the carbon skeletons created during photosynthesis on a preferential basis and prevent phosphorus toxicity.

Though only needed in trace amounts, the mineral elements boron (B), chlorine (Cl-tap water is OK), cobalt (Co), copper (Cu), iron (Fe-preferably chelated), manganese (Mn), molybdenum (Mo), nickel (Ni), sodium (Na) and zinc (Zn) are essential. If any of these are not present in sufficient quantity in your soil, your rose will suffer. The best insurance is to use a complete nutrient formula. Dyna-Gro Foliage-Pro (9-3-6) or Grow (7-9-5) are both urea free and complete. The Dyna-Gro supplement formula Mag-Pro (2-15-4) used in conjunction with Foliage-Pro will provide additional magnesium and sulfur eliminating the need for Epsom salts.

In addition to the essential mineral elements, roses will benefit greatly from supplemental silicon. Dyna-Gro Pro-TeKt provides soluble silicon. Roses will take up soluble silicon via both the roots and the leaves. Roses containing significant amounts of silicon in the lignin of their leaves prevent fungal disease such as black spot and powdery mildew from obtaining sufficient food and breaks the mandibles of aphids. Good silicon content extends bloom life and makes the rose more heat, drought and cold tolerant.

Application

Using either the Foliage-Pro or Grow formulas mix 1/2 tsp. (8 oz. cap-1:1500) per gallon of water along with 1/2 tsp. of Pro-TeKt and apply with every watering. If applying weekly or bi-weekly, double the amount of nutrient and Pro-TeKt. Use a pump sprayer or watering can to apply. Do not mix the nutrient formula and Pro-TeKt together in the feed bottle of a hose end sprayer.

If using a hose end sprayer, the nutrient formula and Pro-TeKt must be applied separately. Most hose end applicators dilute 100:1. Therefore, the feed bottle solution should use two ounces of nutrient or Pro-TeKt (1:750), filling the rest of the 16 ounce feed bottle with water. Apply weekly or bi-weekly.

If you really want killer roses, every third feeding use an equal amount of Foliage-Pro and Mag-Pro to total the above amount of nutrient formula. When using a hose end sprayer the separate application of Pro-TeKt and nutrient can be avoided by combining the Pro-TeKt with the Neem Oil in your spray program.

Spray Program

Neem Oil combined with Pro-TeKt provides a highly effective spray solution to control pests, fungal disease and slugs. Neem Oil is a natural product derived from the seeds of the Indian Neem Tree. Use it both as a spray and a root fed systemic.

Neem Oil controls pests such as aphids, scale, white fly, spider mites, mealy bugs, root weevil and slugs and protects against such fungal diseases like black spot, powdery mildew, boytritis and rust. It is not harmful to humans animals or beneficial insects such as lady bugs and bees. When using Neem Oil it is not necessary to wear gloves, masks, goggles or any other special equipment.

Neem oil should be applied in the evening using a pump sprayer. Apply monthly as a preventative throughout the growing season. When used as a curative, three applications one week apart is recommended. Use of a hose end sprayer is not recommended.

Mix 4 tsp. of Neem Oil, 1 tsp. of Pro-TeKt and 1 tsp. of dish washing soap per gallon of water. Add the soap after the water and shake to mix. Warm the Neem Oil bottle in a pan of warm water before mixing. Mix only as much as you will use. Drench spray this solution on all leaf surfaces including the underside and all buds until dripping. Diseased leaves will turn yellow and drop in one to four days.

Dyna-Gro products are available at better nurseries and garden stores.