

## How I Grow Exhibition Roses

### **SOIL:**

I consider knowing the soil you're going to grow your roses in as one of the most important factors for growing exhibition roses. What is the soil structure? What are the inorganic and organic components in the soil? It's hard to grow quality roses in soil that is mostly clay. Also, knowing which nutrients are in the soil will help determine your fertilizer program. Another important factor is knowing the pH of the soil. Roses like a pH between 6.0 and 6.5. Obtaining an analysis of your soil helps you determine the make-up of your soil. A sandy-loam with some clay is a good soil texture combination for growing roses. I like to add some type of organic material to the soil yearly. Proper water drainage in the soil is also a critical factor for growing roses. A soil structure which is heavy in clay will not allow water to drain well. Roses do not like their roots swimming in water. A sandy-clay-loam soil will allow good drainage, water retention, air spaces, and extensive root growth. I feel it's important to have the soil for my roses tested every couple of years.

### **IRRIGATION:**

Water is another important component for growing roses. Water keeps the plants hydrated, helps move nutrients to the roots and through-out the plant. I have a drip irrigation system in my rose beds for supplemental watering and fertilizing. I use an injector pump to inject soluble fertilizer into the drip water lines. It's just as important to know the chemistry of your water as it is for your soil so you can apply the proper fertilizer program to your roses.

### **FERTILIZER:**

Nutrients will be applied to the rose beds based upon the most recent soil analysis. Early in the spring just before roses start to grow I'll apply an inorganic granular fertilizer. This early application is tilled into the soil so the root systems have some nutrients to absorb as the roses start to green up. I also will apply an organic fertilizer in late April. Once the soil warms up around 60 plus degrees Fahrenheit, the soil bacteria will start to convert the organic fertilizer to nutrients which the roots are able to take up. During the growing season I incorporate more inorganic granular fertilizer into the soil after the first and second bloom cycles. After the September bloom cycle the roses will start to shut down so I do not incorporate any fertilizer at all. I supplement my fertilize program with soluble fertilizer during the season. The soluble fertilizer is injected into a drip system. The analysis of my fertilizers and how much I apply are based upon the soil analysis and on the pH of the water I use in the drip system.

I also supplement the roses with alfalfa tea. I steep 12 to 15 cups of alfalfa tea in a close knit bag in a large plastic garbage can for 5 days. I apply the alfalfa tea in May, and then in June after the first bloom flush and then again in late July after the second bloom flush. I normally apply about one gallon of tea to each rose bush.

### **PESTICIDES:**

Pesticides include insecticides, miticides, fungicides, herbicides and other products. I normally don't apply herbicides to my rose beds. So I won't be discussing the application of herbicides within this article. To grow exhibition roses it is important to keep the foliage and blooms free from insect and mite damage, and diseases. I use a four gallon piston pump backpack sprayer to apply my pesticides. It's important to spray the whole rose bush keeping in mind to spray

both the top of the leaf and the underside of the leaf. I try to spray in the cool of the early morning before the wind starts to blow and before the bees and beneficial insects are foraging.

- 1) Insecticides: I try to refrain from applying insecticides to my roses. However, there are times during the growing season when a particular insecticide needs to be applied.
  - a. Rose Midge is a constant battle for me. Every spring (April), I will incorporate into the soil around each bush an insecticide containing the active ingredient, imidacloprid. In July, I drench the rose beds with the active ingredient Lambda-cyhalothrin to kill rose midge larvae in the ground. It's important to interrupt the rose midge life cycle by destroying the larvae stage before the insect pupates into an adult.
  - b. Aphids are another problem for me. If there is a light infestation I'll try to smash them with my fingers or dislodge the aphids with a strong spray of water from a garden hose. When there is a heavy infestation I'll spray with a product containing bifenthrin.
  - c. Every year I have issues with thrips attacking the rose blooms. Normally they make their way down between the petals during the bud stage. I spray the flower buds when they start breaking color with a product containing the active ingredient acephate. I will alternate with a product containing spinosad.
  - d. I don't spray for Japanese beetles unless the roses are inundated with them. I normally slide them into a jar of soapy water to drown them.
  
- 2) Miticides: If I have an outbreak of spider mites I try to wash them off with a good stream of water from a garden hose. This process is done three days in a row. However, during the hot dry periods of summer the spider mites are very prolific and sometimes it's hard to get the spider mites under control with the water method. I alternate my miticide program with Avid and Floramite to prevent resistance to any particular miticide. It's very important to spray underneath the foliage and in the leaf axils where the webbing is located at.
  
- 3) Fungicides: Clean foliage and blooms are essential when exhibiting roses. Powdery mildew, black spot, downy mildew and botrytis are some of the diseases that attack roses. I take a proactive approach by spraying my roses to prevent the different diseases from forming. If you wait to spray after the disease has a foothold on your roses then it's much harder to control or eradicate the disease. Most product labels note that the product should be used in a preventive spray program. My fungicide program consists of several different products and I spray every seven days starting in April and ending in October around the first frost. I always rotate the fungicides so I don't spray the same *Mode of Action Group* (MOA) number listed on the product, twice in a row.
  - a. To prevent powdery mildew I rotate the active ingredients myclobutanil, azoxystrobin, propiconazole or chlorothalonil.

- b. To prevent black spot I rotate the active ingredients myclobutanil, azoxystrobin, propiconazole, chlorothalonil, mancozeb, or copper hydroxide.
- c. To prevent downy mildew I'll combine mancozeb and copper hydroxide together and rotate with mono-and di-potassium salts of phosphorus acid.

Many times insects, mites and disease pathogens are able to build up resistance to a specific pesticide. It's important to rotate the products, based on the *Mode of Action Group* number, to prevent any type of resistance to the chemical.

### **Grafted Roses and Own Root Roses**

Many of my exhibition hybrid tea, floribunda and miniflora roses are grafted onto Rosa multiflora understock. The roses grafted on Rosa multiflora are vigorous and normally produce lots of good size blooms. The graft is probably the weakest part of the bush during the winter. For winter protection I will apply 8 to 12 inches of hardwood mulch down into the canes and about 18 inches out over the soil surrounding the rose bush. The mulch helps protect the canes, graft and the root system. The mulch also helps prevent thawing and freezing of the soil in late winter which can be detrimental to the root system.

Many of my miniature roses are on their own root system. Miniature roses are normally pretty vigorous and prolific bloom producers. I mulch the miniature roses in the same manner as the large roses.

### **Growing Roses in the Ground and in Containers**

Ninety-five percent of my roses are grown in the ground. I try to orient my rose beds in a manner for optimum growth and to help prevent diseases:

- So they receive early morning sun to help dry the dew off as soon as possible
- Six plus hours of sunlight
- Good air circulation
- Best plant spacing

I feel it's best to plant most of the large flowered roses on three foot or more centers. I will tighten up the spacing for miniflora and miniature roses.

My fertilizer program for the rose beds was discussed above.

Due to the lack of bed space the other five percent of my roses are grown in containers. I use the black seven gallon plus size containers. The soil in the pots warm up faster than the soil in the rose beds due to the black plastic sides. I use a soilless mix in the containers. When I fertilize the soil in the containers I only use a slow release fertilizer. If you use standard granular fertilizer you take the risk of burning the roots due to the quick release of the fertilizer in a limited amount of soil. I also supplement with soluble fertilizer during the growing season. For winter protection, after the first heavy frost, I'll prune the canes down to around 12 inches above the top of the soil, remove all the foliage and store the containers in a dark shed.