

U.S. BOTANIC GARDEN

Roses Can Be “Green”

The National Garden is growing into a place of beauty, inspiration, and good planting design, and is delivering significant environmental gardening messages. The Margaret Hagedorn Rose Garden is a great example.



Growing roses can be a challenge, especially in a hot, humid climate. Gardening guides frequently recommend an array of chemicals to cope with diseases and pests, many of them toxic to beneficial insects, notably the pollinators and predators who prey on pests like aphids. At the U.S. Botanic Garden we have a different philosophy.

To earn a place in this garden, each rose must perform without applications of fungicides and pesticides. Each year, our gardeners evaluate the roses for their performance and vigor. If a rose shows problems with black spot or powdery mildew, or are simply not growing or blooming well in this location, they are removed.

Our selection of roses will evolve as we learn more about how they perform under different conditions. Our “sustainable” approach to growing roses makes this particular rose garden different from any other in the area. Look around you—beautiful results can be accomplished with healthy gardening practices. Try this at home!

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Growing “Green” Roses

Our roses receive a regimen of care that promotes the health of the plant, the soil, and the garden as a whole. We try to work with the plant’s metabolism to promote vigorous growth and a strong immune system.



At initial planting we

- drench the foliage and soil with water containing beneficial microorganisms, including beneficial fungi and bacteria
- “fertilize with four,” i.e., a mixture of the following, worked into the soil around the roots:
 - sea kelp (1 cup per plant)
 - composted chicken manure (¼ cup or less per plant)
 - cottonseed meal (1 tsp. per plant)
 - alfalfa meal (1+ tsp. per plant)

In mid-summer (July) we apply

- cocoa hulls (a handful per plant)
- Epsom salt (1 tsp. per plant) to help combat heat

During the growing season, to nourish beneficial soil organisms, strengthen the immune system, and combat the stresses of heat, urban pollution, pests, and diseases, we fertilize every 4 to 6 weeks with a mixture containing:

- beneficial soil bacteria
- a root-growth stimulator that contains kelp, vitamins, chelated micronutrients, fungi, and humic acid
- a plant booster that contains fish hydrolysate, kelp, humic acid, and amino acids
- potassium salts, plus fatty acids from cold, pressed neem oil (produced from the seeds of the neem tree, neem oil is a natural insecticide that controls a wide variety of insects and mites)

Aphids, tiny sap-sucking insects, are a problem for roses everywhere. We remove aphids with a hard spray of water, and the aphids are unable to climb back up the rose plant.

In fall, we apply an organic nitrogen fertilizer, 1 tbsp. per plant.

In winter, we apply a mulch, 1-2” thick, of cocoa hulls or shredded pine fines, that has been fortified with our “fertilize with four” recipe.

These products are available at garden centers and websites that carry organic products.