

Q: My rose plants bloomed their hearts out this spring, and now look very sad. The leaves are shriveling and falling off, and the remaining leaves are pale green and tiny. No buds seem to be forming. Are the plants worth saving?

A: The wet spring we had encouraged both blooms and fungus. Your roses need to be renovated— fed, pruned, and the fungus needs to be dealt with. This time of the year the fungus you see is probably a variety of Powdery Mildew, *Sphaerotheca pannosa* var. *rosa*, recognized by white to gray powdery growth on leaves, shoots, sepals, buds, and occasionally on petals. Infection may cause leaves to distort and drop. Powdery mildew does not require free water on the plant surfaces to develop and is active during our warm, dry summers. Although it may seem counter-intuitive, overhead sprinkling during midday can disrupt the daily spore-release cycle. It is very important to practice good garden sanitation, pruning out all infected foliage and removing it from your garden. Pick up all fallen foliage as well, although this fungus needs living tissue in order to survive. The spores can travel on the wind, so it is not realistic to think that you will be able to prevent infection from reoccurring. Improving air-flow by pruning surrounding plants will help.

Fungicides can be used to prevent infection, but timing is critical and they often require repeat applications. An inexpensive alternative to the synthetic fungicides is a combination of sodium bicarbonate and horticultural oil. Mix 4 teaspoons of baking soda per gallon of water with a 1% solution of narrow range oil. Do not apply this on hot days or in full sun to avoid problems with phytotoxicity. Sodium bicarbonate will increase the soil pH, and will leave white deposits on the foliage, so use this mixture judiciously. Neem oil has been used commercially to reduce powdery mildew infections as well.

Your roses need to be fertilized. There are as many different methods of fertilizing as there are rose experts, but the bottom line is that roses need well-drained soil with a neutral pH (7.00), with available nitrogen. Many of the soils in this area have a higher pH, which can increase the chance of micronutrient deficiencies, so you may need a fertilizer that contains nitrogen and micronutrients. Many commercial rose fertilizers are available at your local nursery. Follow the directions on the label, and be careful that you do not over-water in areas where the fertilizer laden water might run off into a creek or water-way.

Roses need to be irrigated throughout the summer dry months. Lack of water can lead to defoliation and small leaves. Renew the mulch beneath the plants to help keep the moisture in the soil.

University of California [publication 21589](#) describes environmentally friendly ways to grow roses. It can be ordered through UC Agriculture and Natural resources Communication services, ph # (510) 642-2431.