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## Rose Rosette Disease: No Cure

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A disease alert for growers and retailers dealing in roses

One of my favorite roses in the garden used to be Ballerina—a little hybrid musk with huge clusters of apple-blossom flowers. But when the rose suddenly started sporting fast-growing, hyper-thorny shoots covered with wrinkled, deformed leaves, I cut away as much of the growth as I could. The growth kept coming back, and it appeared on other roses.

Rose rosette disease (RRD)—a virus spread by airborne mites—had infected the rose. Finally, I had to throw in the trowel and dig up the plant. For this disease, there's no cure; an infected rose is a curse to other surrounding roses.

A rose infected by RRD suddenly develops fast-growing canes, usually purple- or bronze-red, sometimes a sickly lime-green color. This sudden, odd growth is thicker than the stem it sprouts from. As the disease progresses, new canes are covered with thorns, with many stems emerging from the same place on the cane—a witch's broom. These shoots and their thorns are soft, almost rubbery.

Leaves have bumpy or pebbly surfaces; sometimes, they seem to be more leaf-veins than leaf, as if they've suffered herbicide damage. (However, RRD affects only new growth, whereas an herbicide will affect both old and new growth.) Blossoms are cabbage-shaped and tiny. Often, they can't open. The color and shape of infected growth seldom resembles healthy parts of the same rose. Over time, the rose's canes turn black and develop a burnt look. The rose dies in about two years.

Just because roses come in from the suppliers as virus-free doesn't mean they're safe from rose rosette. This is because the disease is spread by an eriophyid mite that drifts on the wind from one rose to another. Eriophyid mites are smaller than spider mites, and they don't respond to the same chemical controls.

Multiflora roses—the wild roses that grow along highways all through the country—are highly susceptible to the disease. Therefore, any roses downwind from a stand of multifloras can pick up eriophyid mites that drift in, even from miles away.

If you've seen the infected shoots on roses in your nursery, you've got to take action. You can get the stands of multiflora roses torn down (this will release a huge cloud of mites, so be careful), or place your rose crop in a place out of the wind, or keep spraying the roses so you don't lose any more of your product.

There are no commercially available biological agents that prey on the mite. For chemical control, spray Thiodan (endosulfan) or Avid (abamectin) every two weeks to slow the mites' spread. Horticultural oil also works well, though it shouldn't be sprayed when temperatures are above 85F. Sevin works, but it isn't recommended, because spider mite numbers increase drastically with its use.

Prevention is the best cure for rose rosette. Any infected rose should be quarantined and sprayed. Remove infected growth by cutting the cane off at the base. If all the subsequent growth on the rose stays normal after a month, then you can put it back on the sales floor, but keep an eye on it, just in case. Sometimes you can stop the disease if you quickly remove infected growth. However, if the infected growth continues to grow, destroy the rose.

For more information on the disease, fellow rosarian Ann Peck has an e-book on the web with plenty of photos at http://web.ntown.net~apeck/id19.htm.

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