

AMERICAN ROSE SOCIETY

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ROSE ROSETTE DISEASE, SADLY

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Rose Rosette Disease (RRD) continues to spread throughout rose gardens and among wild roses. Hot and dry summers seem to have increased the speed of spread. In areas where the wild *Rosa multiflora* population is not a RRD reservoir, other roses develop RRD when the vector mites come in on puffs of wind.

RRD was supposed to kill wild multiflora quickly, but it remains an invasive unwanted weed throughout much of the continent. The fast demise of the wild roses doesn't happen in warmer climates where some massive clumps of infected roses can persist for six and seven years.

Similarly, garden roses can remain sick with RRD for years. Even though attempts are made to remove RRD infected canes when the disease is first sighted, often those efforts are too late as the disease moves through phloem into the roots and back out via the xylem to other canes.



RRD affecting early spring growth on American Pillar

SPREAD

In the Midwest RRD has spread farther north in Iowa than predicted. It has also appeared in Nebraska where it had not been common. It has spread as far north as Madison, Wisconsin and was seen last year in one of the southern tier counties of Michigan. Chicago, Illinois sees more of it each year.

In the east, RRD has appeared in Somerset County, New Jersey private gardens. One of 2007's least expected outbreaks was in New York City at the Brooklyn Botanical Garden. Other Mid-Atlantic states continue to suffer with it as well.

RRD has moved into South Carolina and northern Georgia. I've seen it in gardens below Montgomery Alabama, and northern Mississippi. People in northern Texas as far west as Fort Worth have seen the disease in their gardens. However, RRD doesn't appear to be a problem yet in the Mississippi River Delta; I wonder if that's due to the aerial spray program that is a multistate effort to control Boll Weevils. That eradication program is about over, so time will tell.

In the western US, for the past half century there have been scattered reports of RRD in Wyoming, Utah, the mountains of California and New Mexico. In Canada it has appeared recently in southern Ontario and there are historical reports in Alberta, Saskatchewan, and Manitoba.

The reports above are from published literature as well as my evaluation of images sent to me. Where the roses were sick and in gardens, they have been removed. But seldom were the owners able to find the infected roses that were the source of the infection. General eradication of nearby multiflora, both healthy and the infected has been one result of efforts to eradicate the disease.

DISEASE VECTORS

Until recently, there were two acknowledged disease vectors. The eriophyid mite *Phyllocoptes fructiphilus* was one; the other was grafting of infected buds onto target plants. More recently Laura Jessee completed a PhD at Iowa State looking at other potential insect and arthropod vectors on multiflora populations in Iowa. Two papers in *Weed Science* document her findings. And a paper by Golino *et al.* discusses the transmission of rose viruses by root-to-root grafts within beds

of cultivated roses. I think the Golino paper strongly suggests a third vector for the spread of RRD as we have seen some patterns of the spread of RRD in private gardens that are consistent with root to root spread. For this reason, I now strongly suggest that people take care to remove all roots left behind when they remove roses with RRD. In my garden I have seen new, RRD infected bushes come back from where we removed sick roses.

ANSWERS

There is no cure for RRD.

Education about the symptoms is the place to start. Too often, I receive emails from people who have found my website, and are just floored that such a disease exists that they have never heard of.

IF rose growers are vigilant and react quickly to the appearance of RRD, the spread of the disease within a garden can be avoided.



As a sick cane of James Galway (with Larry Peck for scale, the sick part is in his hand)

ETC.

References above (by author) can be found in the bibliography of my E-Book at <http://www.rosegeeks.com/>. The twelve chapter E-book also has an FAQ (Frequently Asked Questions).



Close up of James Galway



Late summer growth on Gloire de Dijon