

Management Guidelines for RRD



- Remove symptomatic shoots by pruning.
- Discard all diseased foliage immediately in the trash.
- If symptomatic shoots continue to appear, remove the plant.
- If RRD was present in the area the previous year, heavily prune in late winter.
- Discard all pruned foliage in the trash since it may harbor mites.
- Follow dormant pruning with an application of dormant oil.
- Treat monthly with horticultural oil. Discontinue use during high temperature periods as indicated on the product label.
- Scout and remove wild roses in the area.
- Scout landscape roses in the area and follow these guidelines if symptoms are present on plants in the area.
- Do not use leaf blowers near roses.
- For new installations, do not overcrowd plantings. Use proper spacing.
- Consider mixed plantings (roses with non-rose plants) to break the disease cycle.
- Promote health and vigor by irrigating during periods of drought, maintaining fertility and controlling fungal diseases.

Miticides to control mite vectors in home gardens are not entirely effective. Monthly applications of horticultural oil may slow the spread of the disease. Commercial landscapers and nursery professionals have a wider selection of miticides that are effective in reducing eriophyid mite populations. In areas where RRD has been a problem, roses should be heavily pruned in late winter or early spring before new buds break. Do not prune too early or winter injury may occur. Debris should be removed by hand and a leaf blower should not be employed since this may blow mites onto other roses in the area. Foliage should be discarded in a sealed bag and disposed of off-site. Since the mites overwinter primarily in old blooms, many mites will be removed by heavy pruning. Following winter pruning, plants should be treated with dormant oil to reduce the population of remaining mites.

The mites will die in a few days in the absence of a host. However, they can survive on fallen debris. It is critical that all foliar material is removed and destroyed before replanting, especially fallen leaves, flower parts, and buds. The mites may also blow to other roses in the area, both cultivated and wild roses. If these roses harbor the mites or the virus, it is likely a replacement planting will become infected in the future. Therefore, wild roses such as multiflora rose should be removed, since these plants can harbor the virus and/or the mites. Other cultivated roses in the area should be scouted and removed if symptoms are present.

New research confirms that the virus is present in roots, so it is critical to remove the root ball of infected plants. Consider a one- to two-month fallow period before replanting roses since some roses can sprout from root pieces. Destroy sprouts if they develop.

When installing new roses, carefully inspect all plants, ensuring they are healthy and free of pest and disease symptoms, including those of RRD. Use proper spacing between plants and do not crowd roses. Mites are more likely to crawl from plant to plant if packed closely together. Studies show that tall barrier plants are useful in reducing new infections when the barrier plants are installed on the windward side of the garden.

It is helpful to install a mixed planting using some non-rose material to reduce disease spread. Since *Rosa* species and hybrids are the only known hosts, mixed plantings interfere with the disease cycle and slow the spread of disease (Figure 12).



Roses should be monitored throughout the season for symptoms of RRD. If diseased plants are replaced, a new infection may develop if other roses in the area are infected with RRV. Therefore, management is most successful when entire neighborhoods or communities are educated to recognize the disease and act quickly to remove symptomatic plants.

Stressed plants are more likely to become diseased. Promote health and vigor of roses by irrigating during periods of drought, maintain proper fertility with soil tests, and control fungal diseases or insect pests in a timely manner.