



Management of Rose Rosette Disease

ERIC REBEK

ASSOCIATE PROFESSOR AND STATE EXTENSION
SPECIALIST

JEN OLSON

ASSISTANT EXTENSION SPECIALIST

Management of Rose Rosette Disease (RRD)

- ▶ Research is in progress, so management recommendations will change with time
- ▶ Updates in e-Pest Alert newsletter (new subscribers welcome)
- ▶ Fact sheet E-7329 will be reviewed and updated yearly

Management of RRD

- ▶ Early detection and eradication is CRITICAL
- ▶ Whether you are commercial, landscape, or home garden, YOU MUST REMOVE AND DISCARD SYMPTOMATIC PLANT MATERIAL



Management of RRD

- ▶ Nursery growers (wholesale and retail):
 - ▶ Discard symptomatic plants immediately
(WHOLE PLANTS; It is also suggested to remove and discard adjacent plants)

Management of RRD

- ▶ Nursery growers (wholesale and retail):
 - ▶ During the growing season, use registered products to treat for eriophyid mites
 - ▶ Rose Rosette Disease Guidelines for Growers (from Star Roses/Conard-Pyle)
 - ▶ http://www.starrosesandplants.com/sites/default/files/RRD_Prevention_Guide_0.pdf

Management of RRD

- ▶ Nursery growers (wholesale and retail):
 - ▶ Registered products for eriophyid mites include:
 - ▶ Avid (abamectin) (Group 6)
 - ▶ Sunspray/SuffOil X (paraffinic and mineral oils)
 - ▶ Akari (fenpyroximate) (Group 21A)
 - ▶ Judo (spiromesifin) (Group 23)
 - ▶ ROTATE INSECTICIDES/MITICIDES TO PREVENT RESISTANCE

Management of RRD

- ▶ Landscapers and Home Gardeners:
 - ▶ Removal of symptomatic plants is recommended (and possibly the plants on either side)
 - ▶ Warn your clients that this disease will spread and they may lose an entire planting
 - ▶ If you want to 'prune it out', this will require heavy monitoring (frequent visits) and it may not be successful

Management of RRD

- ▶ In some landscape settings, pruning out symptomatic shoots has been effective



Management of RRD



- ▶ Clippings should be bagged for diagnostic testing (if needed) or discarded in the trash
- ▶ Do not compost or allow debris to fall on the ground

Management of RRD



- ▶ Cleaning tools, hands, clothing is necessary because the mites can be carried plant to plant
 - ▶ Research suggests mites die after about 8 hours without a host
- ▶ Go to uninfested sites early in the day and infested sites later in the day

Management of RRD

- ▶ Landscapers (commercial applicators):
 - ▶ If you are attempting to clean up a planting, it may help to treat for eriophyid mites
 - ▶ Registered products for eriophyid mite control (commercial applicators only):
 - ▶ Forbid (spiromesifen) (Group 23)
 - ▶ Sunspray/ SuffOil X (paraffinic and mineral oils)
 - ▶ NuFarm Abamectin SPC 0.15 EC Insecticide (abamectin) (Group 6)

Management of RRD

- ▶ Landscapers and home gardeners (without commercial applicator license):
- ▶ Horticultural oils are the only *effective* products for eriophyid mite control, but excellent coverage is a must.
 - ▶ Bonide All Seasons Horticultural & Dormant Spray Oil (Mineral oil)
 - ▶ PureSpray Green Horticultural Spray Oil (Mineral oil)
 - ▶ Ultra-Pure Oil Horticultural Insecticide, Miticide, Fungicide (Mineral oil)



Management of RRD

- ▶ What to do when pruning and spraying isn't working



Management of RRD



Unfortunately, many roses with RRD cannot be rescued.

Management of RRD



Management of RRD

- ▶ Highly symptomatic plants should be removed and discarded in the trash



Management of RRD

- ▶ If the client wants to replant new roses, all foliar debris must be removed from the site or allowed to decompose prior to replanting
- ▶ At this point, research indicates that the virus does not get into the crown or roots of the rose plant
 - ▶ Other pathogens may contaminate soil
- ▶ So, if RRD is the only problem, it is possible to replant in the same area

Management of RRD

- ▶ **If the same site is replanted, do not be surprised if RRD symptoms develop over time**
 - ▶ An active infection may be present in the area and mites may “blow in” to your site
 - ▶ It could be unintentionally carried into your area by others (i.e., landscapers, lawn care)
 - ▶ If rose foliage was not completely removed, the mites may be present
 - ▶ Wild roses in the area may harbor the disease

Management of RRD

- ▶ REMOVE WILD ROSES
- ▶ Nurseries especially should eliminate all wild roses from their site such as multiflora rose
 - ▶ This is a reservoir for the mites



Management of RRD

- ▶ If you live in a residential area, scout the neighborhood
- ▶ If neighbors have RRD, TELL THEM
 - ▶ Lack of education is limiting our control efforts
- ▶ If it is in a common area (e.g., entry to neighborhood), you may need to contact the landscaper that cares for the area or the homeowners association

New Rose Installations

A few tips for reducing RRD:

- ▶ Scout garden plants and the surrounds to ensure that no active RRD infections are present
- ▶ Provide proper plant care (for RRD and other diseases, stressed plants are more likely to develop disease)

New Rose Installations

A few tips for reducing RRD:

- ▶ Consider a mixture of different types of roses (disease reactions may vary)
 - ▶ We are not aware of any tolerant or resistant varieties at this time
 - ▶ Rose variety trials were planted this fall, but it will be a few years before we have recommendations

New Rose Installations

A few tips for reducing RRD:

- ▶ Use a wider spacing among plants
 - ▶ The mites often crawl from plant to plant
 - ▶ This may allow you to effectively prune or remove a plant from the site if RRD develops
- ▶ Consider mixed plantings and alternate roses with other plants
 - ▶ Reminder: *Rosa* spp. are the only known host for RRD

Existing Plantings

- ▶ Avoid introducing the virus or the mites
- ▶ If you are around symptomatic plants, clean your tools, gloves, clothing, and your body before visiting sites with healthy roses
 - ▶ Landscapers should visit 'clean' sites early in the day and 'infested' sites late in the day
 - ▶ This is why this workshop is in the afternoon

Existing Plantings

- ▶ Unless plants are completely dormant, do not use leaf blowers to clean up around roses



Existing Plantings

- ▶ Heavily prune roses during dormancy
- ▶ Discard as much foliage as possible
 - ▶ This removes many of the mites
- ▶ Following pruning, application of a dormant oil may help reduce the remaining mite population
- ▶ This method in conjunction with applications of horticultural oil IS WORKING at the municipal rose garden in Tulsa

Management of RRD in the Future

- ▶ Although RRD has been around for 70+ years, little is known about the disease
- ▶ The revelation that the cause is a virus and development of a diagnostic test has revitalized research in this area
- ▶ New research on the pathogen and mite is in progress (funding received in 2014)

The Future

