Management of Rose Rosette Disease

ERIC REBEK

ASSOCIATE PROFESSOR AND STATE EXTENSION SPECIALIST

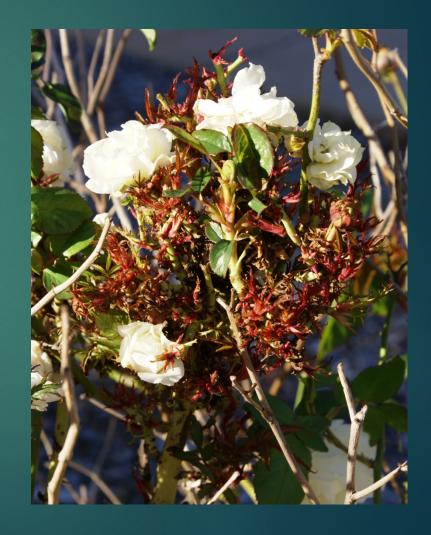
JEN OLSON

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

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



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

- 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

- 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

- 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

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





- 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



- 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

- 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)

- 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)

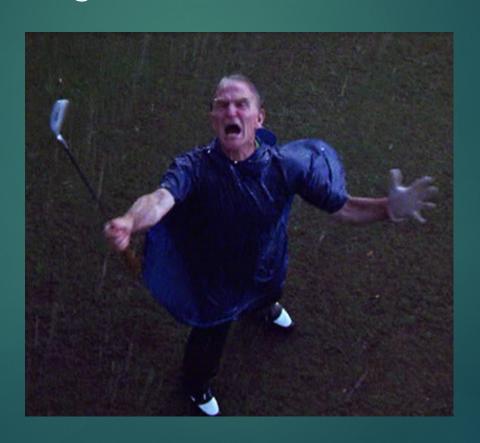
▶ Ultra-Pure Oil Horticultural Insecticide, Miticide, Fungicide







What to do when pruning and spraying isn't working





Unfortunately, many roses with RRD cannot be rescued.



Highly symptomatic plants should be removed and discarded in the trash



- ▶ If the client wants to replant new roses, <u>all</u> 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

- ▶ 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

► REMOVE WILD ROSES

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



- 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

