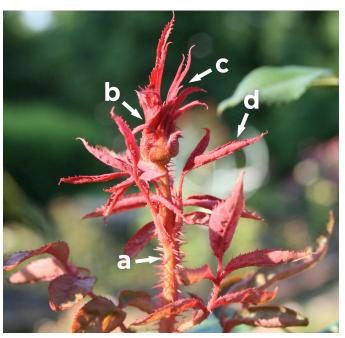
EARLY DETECTION OF ROSE ROSETTE DISEASE

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Rose rosette is a serious virus disease of roses. It is spread primarily by a microscopic mite. Successful management of rose rosette disease (RRD) involves early detection of symptoms.



EARLY SYMPTOMS OF RRD INCLUDE:

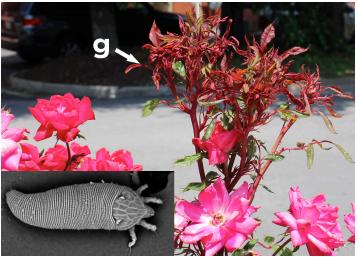
- a. Hyper (excessive) thorniness.
- **b.** Distorted flower buds.
- c. Affected tissues may be red, but they are sometimes green.
- d. Strapped (thin) leaves.
- e. Thickened stems.

YOU MUST ACT QUICKLY TO MINIMIZE IMPACT OF RRD:

- **f.** Plants should be inspected at one- to two-week intervals for symptoms during the growing season.
- **g.** Do not wait until the plant has multiple symptomatic shoots or a rosette before digging, removing and bagging the plant. Delayed action could jeopardize other roses in your garden as the microscopic mites* that vector RRD are more numerous on symptomatic tissue.

*Eriophyid mite courtesy: Gary Bauchan, USDA-ARS









WHAT CAN BE CONFUSED WITH RRD SYMPTOMS?

- **h.** Herbicide damage may appear as strapped, bunched or dwarfed leaves but not as swollen canes or hyper-thorniness.
- **i.** Shoots damaged by chili thrips may have dwarfed, distorted leaves. Leaves may become blackened as they mature.
- **j.** Fasciation of stems has not been associated with RRD. Fasciation may be found in many herbaceous and woody plant species. It is the result of several flattened stems growing together. The cause of fasciation is unknown.

ACTIONS IF RRD IS SUSPECTED:

- If multiple symptoms are present, even one shoot, remove the plant; losing one plant is preferable to losing the rose garden.
- Send a sample of live, symptomatic foliage to your Extension office for positive confirmation. This will aid you with future diagnoses.
- For more information on rose diseases, see *A Guide to Rose Diseases and their Management* at **rose.org**.





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