Combating Rose Fosette Disease Symptoms

Combating Rose Rosette: Pictorial Guide to Rose Rosette

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Roses are highly valued in nurseries and landscape plantings for their fragrance and attractive flowers. Rose rosette is a serious disease of roses and early identification of the disease is critical for successful management. This poster was developed to show the range of symptoms associated with rose rosette disease. Depending on the cultivar, the symptoms vary, but may include witches' broom (rosette), proliferation of prickles (thorns), stunting, cane dieback, leaf distortion or discoloration, and blossom blight. This poster was prepared for display in county extension offices, garden centers, and nurseries to educate clients on rose rosette disease symptoms. Small images that are found in extension fact sheets are less useful since the images are small in size and image quality may be low. Therefore, this poster has high quality, fullcolor, large images that can be used to assist in rose rosette disease diagnosis.

Preparation of the Pictorial Guide

Roses in Oklahoma and Texas landscapes were examined, photographed and sampled (Fig 1). These roses were naturally infected in the landscape by eriophyid mites and/or plant propagation. More than 2500 images were collected of 200+ unique rose cultivars. Samples were submitted to the Plant Disease and Insect Diagnostic Laboratory at Oklahoma State University to confirm eriophyid mites were present and/or for molecular detection of the rose rosette virus.

Images selected for the poster were representative of the damage caused by rose rosette disease on most rose cultivars (Fig 2). It was important to include a few images of healthy roses for reference since normal growth, particularly the red color of new growth, can sometimes be confused with rose rosette disease. These images will guide consumers and producers to recognize the symptoms for timely management of the disease.

Outreach and Distribution

The purpose of the poster is educate producers and consumers to recognize rose rosette disease symptoms. This poster will be distributed to nurseries, garden centers, landscapers, extension offices, and other stakeholders. The poster is available in small (8 ½ by 11 inches), medium (11 x 17 inches) and large (24 x 36 inches) sizes. Printed posters will be distributed as supply allows, and the poster can be downloaded for free online at http://osufacts.okstate.edu.

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Figure 1. More than 2,500 images were collected to ent symptoms on 200+ cultivars of roses in Oklahoma and Texas landscapes



igure 2. Specialists selected images that represented consistent symptoms of rose rosette disease across rose



igure 3. Visual diagnoses were confirmed by laboratory testing to confirm presence of the eriophyid mites vectors nd/or molecular detection of the rose rosette virus

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UNUSUAL RED COLOR



NORMAL ROSE, **NEW GROWTH**



LEAF DISTORTION OR DISCOLORATION



ONE SECTION SYMPTOMATIC



WITCHES' BROOM **OR ROSETTE**



THORN **PROLIFERATION**



NORMAL ROSE **STEM**



SUCCULENT **STEM**



BLOSSOM BLIGHT



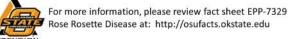
ELONGATION



STUNTING



DIEBACK AND DECLINE



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