Wet weather promotes black spot on roses

Black spot, the most serious disease of roses in Florida, is promoted by wet weather. Rose enthusiasts in Florida need to be aware of this frequent fungal disease. This leaf spot disease is more common during wet, warm weather or when the foliage is being wet by overhead irrigation too frequently or too late in the day. High humidity, heavy dews and particularly frequent late afternoon and evening showers can promote black spot on many rose species.

Dr. Mathews Paret, UF/IFAS Extension Plant Pathologist at the North Florida Research and Education Center, shares information on black spot of roses in today’s article.

The black spot symptoms start as small black spots on the upper surface of the leaves. Lesions can vary in size on the leaf surfaces. These spots may have unique feathery borders. The leaves subsequently turn yellow around the black spot lesions finally leading to severe defoliation. Defoliation usually starts on the lower parts of stems and gradually moves higher. Spots can also be found on peduncles, fruits and sepals if the infection is severe. The disease significantly reduces plant vigor and flowering of roses.

The fungal spores of the pathogen are easily spread by splashing rain or overhead irrigation water. The fungal conidia must be wet for several hours to infect plant tissues. Black spot is promoted by warm, wet weather and is common in summer. However, the disease can continue to develop in a wide range of temperature from 59 to 81°C as long as the moisture is adequate during the season.

The disease can be managed by cultural practices. Planting resistant cultivars and following strict sanitation practices including removal of infected and fallen leaves and pruning of canes late in the winter are very important. These practices reduce the inoculum load tremendously. Inoculum is the pathogen or its parts which can cause plant infection. It may include fungal spores or survival structures but can also be plant debris, infested soil, infected plant parts, etc. Plants should be irrigated early morning to allow sufficient time for the leaves to dry. Fungicide applications should start with the use of protective fungicides at bud break, followed by bi-monthly applications until the leaves are fully expanded. The application duration can be shortened during summer conditions. It is important to rotate fungicide chemistries to reduce the chances of fungicide resistance.

Additional information on black spot and its management can be found at http://edis.ifas.ufl.edu/pp268.

Larry Williams, UF/IFAS Extension Agent, Okaloosa County, July 28, 2011