

Glomerella Leaf Spot

Sara Villani, North Carolina State Extension - Raleigh, NC

Glomerella leaf spot and bitter rot, caused by species of the fungus *Colletotrichum* are increasingly resulting in devastating losses in humid apple production regions of the United States. In recent years, average annual crop losses have exceeded 25% (100% loss on susceptible cultivars) due to the onset of Glomerella leaf spot and bitter rot during the pre- and post-harvest periods. These losses have amounted to individual grower losses of up to \$250,000 annually due to complete crop loss or downgraded fruit due to poor quality. Symptoms of the disease may appear as early as four days after an infection event and progress rapidly. Leaf spots initially appear as small red to purple colored specks, which develop into asymmetrical, light tan, concentric lesions. As the disease progresses, infected leaves become chlorotic, and under high disease pressure prematurely defoliate. The fruit rot stage of the disease is initially characterized by small, sunken black/brown spots that expand into concentric rots just prior to or following harvest. This presentation will provide a discussion of Glomerella leaf spot and bitter rot symptom recognition, recognizing conditions favorable for infection and disease development, and developing fungicide programs for disease management.



Dr. Sara Villani is an Assistant Professor and Extension Specialist in the Department of Entomology and Plant Pathology at North Carolina State University. She received a B.S. degree in chemistry from SUNY Geneseo in 2005 and a PhD in plant pathology from Cornell University in 2016. Dr. Villani's current research interests include understanding mechanisms driving practical fungicide and antibiotic resistance, understanding the effect of abiotic stressors on disease development, and the development of chemical, biological, and cultural strategies for the management of economically important diseases on fruit and woody ornamentals in the southeastern United States.