

Bitter Rot Management

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Fungicide options for the management of *Glomerella* leaf spot (GLS) and bitter rot of apple are becoming increasingly limited due to their lack of inherent efficacy against the causal pathogen and the development of resistance to efficacious fungicides. In the eastern U.S., resistance to the strobilurin fungicides in populations of *Colletotrichum spp.* causing GLS and bitter rot on apple is becoming more prevalent, leaving growers with limited options to manage these devastating diseases. In this presentation, concepts of fungicide resistance evolution and strategies we are researching in North Carolina to mitigate resistance to single-site fungicides will be discussed.



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.