# Soil Health Field Day: Understanding the Benefits of Mycorrhizal Fungi



Featuring Dr. Wendy Taheri, TerraNimbus, LLC

Dr. Taheri is a specialist in arbuscular mycorrhizal fungi (AMF)—plant symbionts that affect every aspect of plant physiology. During her graduate work at Indiana University, she demonstrated that selection for the right AMF communities can increase plant biomass as much as 69%. As a USDA researcher, she began developing molecular tools that allow routine assessments of AMF in agricultural soils. She also examined the manipulation of cover crops to select the best microbial community for the subsequent cash crop. After completing two consecutive terms with the USDA, Dr. Taheri founded the research company TerraNimbus, which is working to develop more effective solutions to the challenges faced by modern farmers.

Dr. Taheri's work has been featured in John Deere's Furrow, The Farm Journal, Acres USA, Prairie Hearth, Corn & Soybean Digest, and other publications. In this special appearance, Dr. Taheri will explain the basics of mycorrhizal fungi, their importance in cropping systems, and how they are affected by farm management decisions.

Other speakers will include Jason Carter, Carter Farms Owner/Operator and SC Soil Health Champion; Dr. Buz Kloot, USC Research Professor; and Gordon Mikell, USDA- NRCS State Agronomist.

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Carter Farms 120 Merrylane Rd. Eastover, SC 29044

Free event! Lunch by Mr. Bunky's 1 Pesticide Applicator CCH; 3 CCA Credits

Register by September 26! Phone: (803) 576-2080 Email: fisherc@rcgov.us Online: https://carterfarms.eventbrite.com

# Soil Health Field Day: Understanding the Benefits of Mycorrhizal Fungi

Tuesday, October 3, 2017 Carter Farms Agenda

9:00am—Registration and Welcome (Chanda Cooper, Richland SWCD)

9:10am—Clemson University Soil Judging Team (TBA)

9:15am—Introduction (Gordon Mikell, USDA-NRCS)

9:30am—Farm Overview (Jason Carter, Carter Farms)

## 9:45am—**Understanding the Benefits of Mycorrhizal Fungi, Dr. Wendy Taheri, TerraNimbus, LLC** Dr. Taheri will explain the biology of arbuscular mycorrhizal fungi (AMF), their importance in cropping systems, and how they are affected by farm management decisions. She will also discuss AMF as an important component of on-farm integrated pest management, including the connections between AMF, beneficial insects, plant diseases, and pesticide applications.

10:45am—Break

## 11:00am—Field Visit (Dr. Wendy Taheri, Gordon Mikell, Jason Carter, and Dr. Buz Kloot)

During the field visit, experts will identify and discuss soil properties such as soil structure, compaction, and biology; cover crop selection, growth, and management; and cover crop benefits including weed suppression, pest management, soil moisture retention, temperature modulation, and more.

# 11:45am—Lunch (Mr. Bunky's)

## 12:15pm—**Sponsor Remarks** Little Mill Seed, Pennington Seed, Mixon Seed, SC Farm Bureau, Truax Company, SWCDs

# 12:30pm—A Summary of SC Soil Health Research (Dr. Buz Kloot, USC)

Dr. Kloot will review the findings of several soil health research and demonstration projects in the SC coastal plain, including the impact soil health has on nutrient cycling, weed and pest management, crop productivity, and the farmers' bottom line.

#### 1:00pm—Clemson University Soil Health Research Update (Dr. Dara Park, Clemson University)

1:10pm—Farmer Panel/Q&A (Rupert Burrows, Jason Carter, Carl Coleman, Leon Dueck, and Doug Newton)

Farmers will provide 5-minute introductions to their soil health journeys, then will field questions from the audience regarding cover crop selection, management, and effects.

2:00pm—Dismiss











