



2018 Tomato Field Day

August 16, 2018

**Mountain Horticultural Crops Research and Extension Center
Mills River, N.C.**

Sponsored by:

NC State University's
College of Agriculture and Life Sciences
N.C. Agricultural Research Service
N.C. Agricultural Foundation, Inc.
NC Cooperative Extension

N.C. Department of Agriculture
and Consumer Services

N.C. Tomato Growers Association

About the Mountain Horticultural Crops Research and Extension Center

The Mountain Horticultural Crops Research and Extension Center opened on 14 acres in 1949. A new administrative and laboratory building was built in 1987, and the Center has grown to 397 acres. The Center is home to research and extension faculty and staff from six academic departments of NC State's College of Agriculture and Life Sciences and College of Natural Resources. The Science House's Mountain Satellite Office and N.C. Cooperative Extension's District Office are housed here.

The growth and development of the Center is based on the success of its faculty and staff as leaders in laboratory, greenhouse and field studies vitally important to Western North Carolina's agricultural economy. Located in the Southern Appalachians' French Broad River basin at a base elevation of 2,069 feet, the MHCREC has a varied topography and climate conducive to crop research and evaluation of cultural practices of the region. The Center's core research areas are apples, tomatoes and ornamentals. Additional research efforts include bioenergy crops, corn, hops, peaches, vegetables, soybeans, and other specialty and alternative crops.

Pesticides Credits will be available for today's field day. Please see Craig Mauney or Jessica Edney for more information.

About the College of Agriculture and Life Sciences

The College of Agriculture and Life Sciences educates students through its Office of Academic Programs, seeks new knowledge through its research division, the North Carolina Agricultural Research Service, and extends educational programs throughout the state through NC Cooperative Extension.

Our strong relationships with our many partners enhance the quality and productivity of our research, teaching and extension programs.

We extend our appreciation to all our field day partners and participants.

Learn more at cals.ncsu.edu

**NC STATE
UNIVERSITY**

**College of Agriculture
and Life Sciences**

Tour of Research Information Guide

- > Tours will operate with 6 wagons.
- > There will be 12 presentations.
- > Everyone will have the opportunity to hear each presentation.
- > If you need to return to the registration area during the tour, please let a staff member know and they will bring you back.
- > Extension Agent hosts will be present at each stop to take additional questions.

Registration

8:00 a.m.

Welcome and Tour Instructions

8:45 a.m.

Jeff Chandler, Director
NC State University's Mountain Horticultural
Crops Research and Extension Center

Field Tour of Research 9:00 a.m. – 12:30 p.m.

Growing Industrial Hemp for Cannabinoids in Western North Carolina

Jeanine M. Davis
NC State University's Dept of Horticultural Science

Pruning, Pinching and Plant Spacing to Optimize Grafted Tomato Production

Tom Ingram, Inga Meadows and Frank Louws
NC State University's Dept of Entomology and Plant Pathology

Rootstock variety trials for bacterial wilt and verticillium race 2 management

Jonathan Kressin and Tom Ingram
NC State University's Dept of Horticultural Science

Management of Foliar Diseases of Tomato

Amanda Scherer and Inga Meadows
NC State University's Dept of Entomology and Plant Pathology

Using Chemigation to Manage Phytophthora Blight

Inga Meadows and Suzette Sharpe
NC State University's Dept of Entomology and Plant Pathology

Breeding for Late Blight Resistance and Tolerance to Bacterial Spot and Verticillium Wilt Race 2

Randy Gardner
NC State University's Dept of Horticultural Science

Tomato Variety Replicated Yield Trials 2018

Dilip R. Panthee, Ann Piotrowski, Jianbo Zhang, Pragya
Adhikari, Navin Shrestha and Xingyue Gong
NC State University's Dept of Horticultural Science

Evaluation of tomato lines for Late Blight Resistance

Ann Piotrowski and Dilip R. Panthee
NC State University's Dept of Horticultural Science

Flavonoids in Tomato

Navin Shrestha and Dilip R. Panthee
NC State University's Dept of Horticultural Science

Use of banker plants to release Phytoseiulus persimilis into tomatoes for spider mite control

Julian Golec and Jim Walgenbach
NC State University's Dept of Entomology and Plant Pathology

Evaluation of insecticides for key pests of fruiting vegetable crops

Jim Walgenbach, Steve Schoof, Cole Ford and Kareem Phillips
NC State University's Dept of Entomology and Plant Pathology

Assessment of native natural enemies on biological control of brown marmorated stink bug

Emily Ogburn, Amelia Heintz-Botz and Jim Walgenbach
NC State University's Dept of Entomology and Plant Pathology

Educational Displays

Available for viewing before or after field tours

Plastic Mulch Retrieval Project

Robert Craig Mauney
NC Cooperative Extension, NC State University

David Lowles and Jan Foster
Waste Reduction Partners

Daniel Falkenstein
Land of Sky Regional Council

Tomato Taste Test: New Varieties and Breeding Lines for Organic Production in Western N.C.

Jeanine Davis, Dilip Panthee, Margaret Bloomquist
and Leo Stefanile
NC State University's Dept of Horticultural Science

Lunch and Comments

12:30 p.m.

Steve Lommel, Associate Dean and Director of NCARS
NC State University's College of Agriculture and Life Sciences

Richard Bonanno, Associate Dean and Director
NC Cooperative Extension, NC State University

Sandy Stewart, Asst. Commissioner for Agricultural Services
N.C. Department of Agriculture and Consumer Services

Randall Patterson, Vice President
N.C. Tomato Growers Association