

Station Facts

The Horticultural Crops Research Station was established in 1947 and is located on a 60-acre tract on Highway 133, six miles north of Wilmington. An additional 50-acre tract on Holly Shelter Road is seven miles northeast of the main station.

Infrastructure

Facilities include laboratories, offices, workshops, computerized greenhouses and environmental control chambers, two cold storage facilities, a computer room, equipment storage facilities and a new state of the art chemical storage and mixing room. Onsite weather gathering equipment has been collecting data for the National Weather Service (NWS) and the N.C. State Climate Office of North Carolina for more than 50 years. On August 27, 2002, the NWS honored the station for half-a-century of service. This station is one of sixteen NCDA&CS / NCSU Research Stations reporting weather data around the clock.

Events

The station hosts periodic Commodity Field Days during the peak growing periods between April and September. Blueberry, muscadine grape, and strawberry field days for agriculture and farming professionals are conducted to highlight new plant varieties and the latest research developments. Tours of the station and blueberry farm are available and include local high school students, Master Gardeners, extension personnel, etc.

Research Programs

Many N.C. State University scientists, including experts in horticulture, plant diseases and genetics conduct research at the Horticultural Crops Research Station at Castle Hayne. Maintaining the agricultural economy requires a great deal of information on efficient ways to produce fruits, vegetables and ornamentals.



Horticultural Crops Research at the station aims to help growers improve the quality and increase the yield of horticultural crops suitable for production in the Coastal Plain region of North Carolina. Research programs cover cultural practices, cultivar adaptability, new crops and the control of weeds, diseases and insects. Research is carried on through greenhouse studies and field experiments. Additional fruit and vegetable projects focus on cucumber breeding, evaluation of lettuce cultivars for Eastern North Carolina, weed control in vegetable crops and labeling of reduced-risk pesticides through the nationwide IR-4 program.

Small Fruits Small fruit research at the station focuses on developing pest resistant cultivars that are productive, have good quality fruit, and are well adapted to local conditions. The station is home to one of the world's top public blueberry breeding programs, and new strawberry selections are also evaluated annually. Work with muscadine grapes includes evaluation of cultivars for potential use in freshmarket, wine, and organic production systems. Small fruit crops are an important dietary source of healthful antioxidants, and the station provides blueberries, grapes and strawberries for researchers who are investigating these health benefits at NCSU and other institutions nationwide.

Ornamentals Ornamental research includes herbicide evaluations on both container grown stock and field grown landscape trees to develop newer, safer weed control products for use by commercial nurserymen. Populations of American beach grass and sea oats collected from across the United States are evaluated for use in beach stabilizing efforts along the North Carolina coast. The station also has a 2.5 acre N.C. Certified Plantsman Course for training.



The public is always welcome to stop by the station and tours are offered to any person or groups who make advanced arrangements. Station research staff is always available to answer questions from the public and commercial growers concerning plant pathology, propagation, and cultural practices. We aid several commodity groups and organizations such as the North Carolina Blueberry Council and the North Carolina Grape Council. The North American Blueberry Research and Extension Workers Conference is hosted at our station. We have cooperative research projects affiliated with the North Carolina Nurserymen's Society. There is a state of the art chemical mixing facility on the premises that is used in training extension agents, students, and the general public. A plant identification course is available for Master Gardeners, plant professionals, the landscape industry, and the general public to educate for the North Carolina Certified Plantsman certification.



Working together for one cause

Mission

To manage crop and livestock facilities that serve as a platform for agriculture research to make farming more efficient, productive, and profitable, while maintaining a sound environment and providing consumers with safe and affordable products.

Partnership

Agriculture research in North Carolina dates back to 1877, when state legislation established the N.C. Department of Agriculture along with "Experiment Stations" as a division of the department. Since that time, the N.C. Department of Agriculture and Consumer Services' Research Stations Division, in partnership with N.C. State University, has established 18 statewide locations. Each facility has unique climate and soil conditions, giving researchers a living laboratory in which to investigate a variety of regional crops, forestry concerns, livestock, poultry, and aquaculture. The Division supports these studies by providing land, water, equipment, buildings, and staff who work around the clock to help build a stronger foundation for the future of agriculture.

Contact

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RESEARCH STATIONS DIVISION

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NC DEPARTMENT OF AGRICULTURE

NC STATE UNIVERSITY

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