Research and Extension Works

NC State discovers it, improves it and delivers it so North Carolina succeeds.

We don't stop at the lab. We put research into action at field labs and Extension offices across the state.

We improve N.C.'s top cash crops

- including sweet potatoes, peanuts, blueberries, cucumbers, peaches and Christmas trees -

adding billions to N.C.'s economy.



AG RESEARCH

every \$1

spent on research

= \$19.90

in economic benefit

EXTENSION

967 strong

across N.C. create

\$2.1B

in economic impact

IMPACT ON NC

11,200

jobs generate

\$560M

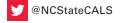
in wages



College of Agriculture and Life Sciences







Competitive Research: The Capacity to Think and Do









Food Innovation to Build N.C. Jobs

Eighty percent of all the crops grown in N.C. are shipped out of state for value-added processing. The new N.C. Food Innovation Lab (NCFIL) will open up new markets for growers and enhance crop values, grow local food entrepreneurs and bring value-add processing jobs to rural North Carolina. Our food science researchers and Extension agents will play a critical role in helping grow N.C.'s food manufacturing economy from seed to supermarket in our own backyard. go.ncsu.edu/NCFIL

Growing New Opportunities

While people don't ordinarily think of ornamental plants as crops, they are actually part of the largest agricultural commodity in North Carolina. The green industry – nursery, greenhouse and Christmas trees – has a wholesale value of more than \$700 million per year, and it provides jobs for 125,000 employees. Our plant breeding programs help keep this number growing.

go.ncsu.edu/NewPlants

NC State Extension specialists are conducting industrial hemp research across the state to answer questions about how, when and what varieties to plant, and helping determine the actual market size and grower opportunity.

go.ncsu.edu/HempResearch

New World Leader in Plant Sciences

Partnering with commodity groups, agribusinesses and startups – we are developing a new, cross-disciplinary approach to plant science research in a world-class facility that will bring the brightest minds in academia, government and industry together to increase crop yields, enhance sustainability and extend growing seasons.

Through Extension, farmers will have direct access to the latest developments in agricultural science and technology from the new world leader in plant sciences.

ao.ncsu.edu/PSI

Transforming Sludge into Energy

go.ncsu.edu/Sludge2Bioenergy

What if sludge from swine lagoons could be removed and used not only as fertilizer, but also for renewable energy? Sludge is made up of organic matter that was not broken down fully during treatment in the lagoon. For this reason, it has the potential to be utilized as a bioenergy feedstock. In two-year's time, we will develop and evaluate economic systems for sludge removal and drying, and characterize the dried sludge as a fertilizer and a combustion feedstock.

When Disasters Hit, NC State Extension Responds.

From the State Emergency Operations Center to flood-ravaged neighborhoods, towns and farms, when Hurricane Florence took aim on N.C., our agents took action. We led community efforts for disaster preparation, rescue, and recovery. We delivered much-needed feed and supplies to farmers and provided constant updates and recovery resources for our neighbors. **go.ncsu.edu/DisasterCenter**