

Smart Farming:

AI, Robotics and Digital Technology

The N.C. Agricultural & Technical State University Farm is making key investments in precision technologies to increase food production resiliency and protect the environment. Drones, robotics, “smart” tractors and implements with sensors that can securely gather quality data all help us educate farmers, and students, about data-driven decision-making and efficient production. In the College of Agriculture and Environmental Sciences, we’re bringing science and society one step closer together.

PRECISION AG TOOLS

* auto-steering tractor
with GIS guidance

* variable-rate technology



AUTOMATED MILKING SYSTEM

* allows
cows to
milk as
needed

* improves
herd health

* boosts milk
production



**NORTH CAROLINA AGRICULTURAL
AND TECHNICAL STATE UNIVERSITY**

AGRICULTURE AND ENVIRONMENTAL
SCIENCES

* capture leaf surface reflected radiations — part of the light spectrum invisible to the human eye — that indicate a plant's health

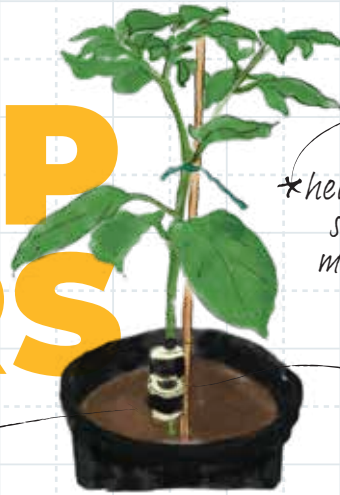
NEW DRONES



* provide real-time information regarding crop status non-destructively

* provide data on soil composition and plant nutrition

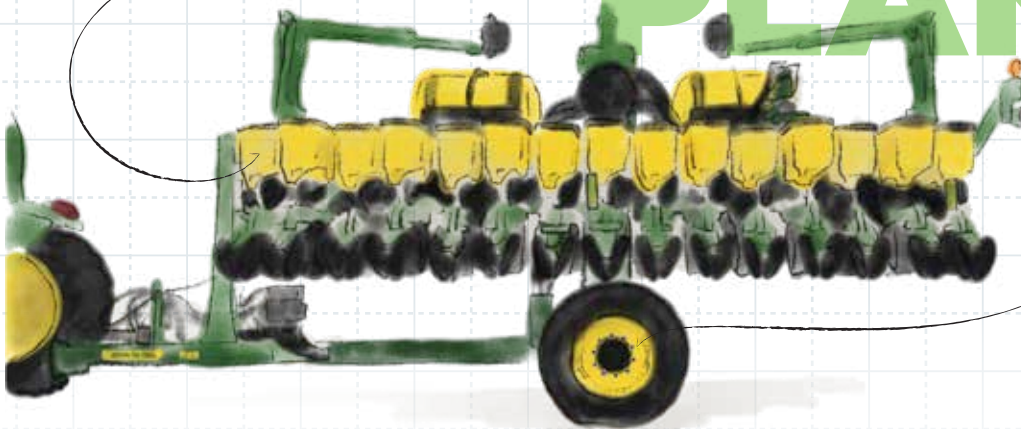
CROP SENSORS



* help gauge crop stress and soil moisture levels to reduce water waste

* average seed savings 4.3% per acre

NEXT-GEN PLANTER



* allows for selective spacing

North Carolina Agricultural and Technical State University (N.C. A&T) is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, master's and doctoral degrees.

N.C. A&T does not discriminate against any person on the basis of age, color, disability, gender identity, genetic information, national origin, race, religion, sex, sexual orientation, veteran status, or any other basis protected by law. | N.C. A&T is an AA/EEO and ADA compliant institution.

150 copies of this public document were printed at a cost of \$101.00 or .67 cents per copy. | 01.25