



1890 Impacts

PHOTO: Remsburg

Advancing food security through sustainable livestock and crop innovations

Research at 1890 land-grant universities addresses critical challenges in animal and plant production. Collectively, these projects support sustainable food systems and food security by improving livestock and crop health, reducing reliance on agrochemicals and increasing production efficiency.

Here are a few examples of that work:

- An **Arkansas** study on sheep health explored natural dietary supplements to reduce antibiotic and dewormer dependency, enhancing animal immunity and improving food safety. *University of Arkansas at Pine Bluff; Other USDA Capacity-Research. See [full statement](#).*
- **North Carolina** researchers developed a natural, cost-effective oleogel that can be incorporated into food products to enhance the stability and bioavailability of beneficial bioactive compounds without negatively affecting food taste or texture. The new oleogel could be used as a healthier fat alternative in baked foods and to develop healthy, functional food products. *North Carolina Agriculture & Technology University Agricultural Research Station; Evans-Alan. See [full statement](#).*
- In **Ohio**, investigation into cold-hardy sweet potato varieties provides crop diversification options for growers in colder growing regions. *Central State University; Evans-Alan. See [full statement](#).*
- Extreme weather events in **Texas** threaten both urban and rural food production by causing soil limitations and delaying growing seasons. Educating producers on sustainable, technology-driven soilless farming systems can enhance food system resilience while also addressing economic and environmental challenges. *Prairie View A&M University Cooperative Extension Program; Other USDA Capacity-Extension. See [full statement](#).*

landgrantimpacts.org

The National Land-grant Impacts Database (NIDB) documents the individual and collective impacts of the national Land-grant University System of joint research, education and Extension. Much of this work is supported by capacity and competitive funds through the USDA's National Institute of Food and Agriculture.

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