

Staying a Step Ahead of Pests

Researchers at the nation's land-grant universities are helping protect food crops from direct insect damage and diseases spread by insect pests. Their work helps improve crop quality, crop yield and farm profitability.

Here are a few examples of that work:

- At Fort Valley State University in **Georgia**, researchers have found a combination of beneficial nematodes and a widely available insecticide provides an important tool in managing the peanut burrower bug. The insect pest poses a significant threat to the state's peanut crop. Georgia produces about 50% of the nation's peanuts.
- **Oregon** State University scientists are working to find effective alternatives for a recently banned pesticide that was crucial to the state's grass seed crop producers to battle insects. Oregon leads the country in grass seed production, with more than 400,000 acres grown annually.
- In **Illinois**, Extension professionals are providing farmers with research-based information on the effectiveness of insecticides to control corn rootworm and other major insect pests.
- In **Arkansas**, scientists are developing seed treatments to reduce nematode infection in soybeans. Researchers also found bacteria that colonize root systems can offer another promising alternative approach for nematode management. Nematodes can significantly reduce soybean yields.
- Scientists in **New York** are developing ways to deter aphids, a common and destructive pest, from feeding and causing plant damage. Cornell University researchers are investigating how probiotic bacteria could decrease aphid-spread diseases and reduce pesticide reliance.

www.landgrantimpacts.org

ABOUT LANDGRANTIMPACTS.ORG | The Land-grant University System is a uniquely American institution and has operated successfully for more than a century. The website documents the collective and individual impacts of the national system of joint teaching, research, and extension institutions.

Prepared by the National Impacts Database writing team, and supported by the Association of Public and Land-grant Universities' Board on Agriculture Assembly. Some projects funded by USDA/NIFA.