

## USDA Announces Research Agreements

Ten research agreements have been signed with State agricultural experiment stations for studies on specific agricultural subjects, the U.S. Department of Agriculture (USDA) reports.

The agreements, funded by USDA's Agricultural Research Service (ARS), will provide data for a broad, continuing program to improve the efficiency of agricultural production and marketing and to protect the environment. The agreements signed are:

A three-year, \$55,000 cooperative agreement with the Pennsylvania Agricultural Experiment Station, University

Park, to purify and chemically characterize the components of crownvetch that might harm grazing animals. Crownvetch has potential as a forage crop for ruminant animals or as supplement feed for hogs and chickens if the harmful ingredients can be removed.

A three-year, \$40,000 cooperative agreement with the Montana Agricultural Research Station, Bozeman, to do research on ergot, a fungus disease of wheat and barley. Since there are no known ergot-resistant varieties and no fungicides or cultural practices that adequately control the disease, control is the ultimate research goal of this project.

A three-year, \$24,200 cooperative agreement with the Michigan Agricultural Experiment Station, East Lansing, to investigate the physiological nature of resistance to cereal leaf beetle, one of the major insect problems limiting production of cereal crops.

A three-year, \$35,000 cooperative agreement with the Ohio Agricultural Research and Development Center, Wooster, to establish a basis for an integrated Southern corn leaf blight control program using chemical and biological methods.

A three-year, \$36,000 cooperative agreement with the Nebraska Agricultural Experiment Station, Lincoln, to conduct basic research on bacterial leaf blights of corn, to include mechanism of spread, variation of bacterial strains, evaluation of genetic sources of resistance, and interrelations among bacterial and fungal blights.

A two-year, \$28,500 cooperative agreement with the Arkansas Agricultural Experiment Station, Fayetteville, to study biological control of northern jointvetch, a serious weed of rice fields. The research will emphasize evaluation of an indigenous

fungus (of the imperfect genus *Gloeosporium*) as the weed control agent.

A two-year, \$20,096 grant to North Carolina Agricultural Experiment Station, Raleigh, to investigate the use of growth regulators, other than 2, 4-D, to control witchweed in corn. Objectives include determining if the growth regulators will prevent flowering by witchweed, and evaluating several chemicals as seed treatments to protect corn against injury from herbicides that are effective against witchweed.

A three-year, \$20,000 cooperative agreement with the Minnesota Agricultural Experiment Station, St. Paul, to research the effect of soil structure on the water transmission and particle detachment characteristics of the soil during rainfall. In addition, scientists will study the effects of sewage waste on changes in soil organic matter and soil structure, and in turn, on changes in water transmission through soils.

A two-year, \$10,000 cooperative agreement with the Arkansas Agricultural, Mechanical and Normal College, Pine Bluff, to determine weed seed population, dormancy and viability in soils of the Mississippi Delta. This will provide fundamental information necessary for effective weed control.

A two-year, \$48,500 research grant to Virginia Polytechnic Institute and State University, Blacksburg, for basic studies on the effects of magnetic and electrostatic fields on insects.

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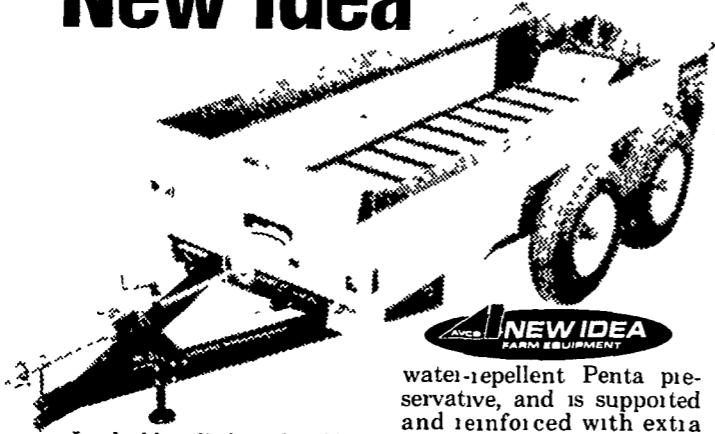
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