

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Agricultural Research Division News & Annual  
Reports

Agricultural Research Division of IANR

---

12-1981

## Agricultural Experiment Station News December 1981

Follow this and additional works at: <http://digitalcommons.unl.edu/ardnews>



Part of the [Agriculture Commons](#)

---

"Agricultural Experiment Station News December 1981" (1981). *Agricultural Research Division News & Annual Reports*. 146.  
<http://digitalcommons.unl.edu/ardnews/146>

This Article is brought to you for free and open access by the Agricultural Research Division of IANR at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Agricultural Research Division News & Annual Reports by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



THE AGRICULTURAL EXPERIMENT STATION  
INSTITUTE OF AGRICULTURE  
AND NATURAL RESOURCES  
UNIVERSITY OF NEBRASKA-LINCOLN 68583



December 1981 Vol.15 No.5

# Agricultural Experiment Station News

## From The Director's Desk

### Progress Report — Instrument Repair Service

The August newsletter reported the start of a scientific instrument repair service on East Campus. There has been a high demand for the service.

The office and shop areas for this service have been developed in Rooms 122 and 123 Agricultural Biochemistry Hall. This facility will be staffed from 8:00 a.m. to 12:00 noon, Monday through Friday. Call 475-9020 between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

### Progress Report — Format for Experiment Station Projects

Following several months of discussion with the Experiment Station Advisory Council and IANR unit administrators, a set of materials dealing with policies, procedures and format for Nebraska Agricultural Experiment Station projects has been developed. These materials were mailed to unit administrators earlier this fall. Several unit administrators submitted additional comments and suggestions reflecting views of faculty in their units. This additional input will be considered in developing a revised draft for mailing to all Agricultural Experiment Station faculty in January, 1982. A 30-day comment period will be provided, after which a final version will be developed.

### Summer Faculty Fellowship Program Suspended

Because of current year budget problems, the Nebraska Agricultural Experiment Station is suspending the Summer Faculty Fellowship Program for 1982. Although this program has provided the opportunity for several academic year faculty members from throughout the University to apply their talents to ongoing Agricultural Experiment Station research programs, this program cannot be justified at a time when several critical support positions are frozen due to budget reductions.

### Federal Budget Update

At the time this is being written, we are operating under a continuing resolution at about last year's level of Federal funding. Attitudes concerning Federal budget prospects for FY '82 range from quite optimistic to pessimistic. Both houses of Congress have continued to express support for agricultural research and extension through their actions on FY '82 appropriations.

## Comprehensive Reviews

The Agricultural Engineering comprehensive review was held the week of November 30 to December 4. Review team members were: Dr. Norman Scott, Chairman, Department of Agricultural Engineering, Cornell University; Professor Wendell Bowers, Agricultural Programs Leader/Extension Coordinator, Oklahoma State University; Dr. Paul Turnquist, Head, Department of Agricultural Engineering, Auburn University; Dr. Earl C. Stegman, Professor, Agricultural Engineering Department, North Dakota State University; Dr. Larry F. Stikeleather, Manager, Product Planning, Allis Chalmers Corporation; Dr. Clarence F. Becker, Cooperative State Research Service, U.S.D.A.; and Dr. Robert "Bud" Britton, Professor of Animal Science, UN-L.

An excellent self-study document was prepared by the Agricultural Engineering Department. Interaction with the review team provided an excellent opportunity for discussion of current programs and future goals in Agricultural Engineering research, extension, teaching and international programs.

Remaining comprehensive reviews scheduled include Agricultural Communications (April, 1982) and Agricultural Biochemistry (May, 1982).

## Season's Best Wishes

The Agricultural Experiment Station office staff — Roy Arnold, Bob Kleis, Warren Sahs, John Woodward, Linda Arnold, Diane Mohrhoff, and Katie Bradshaw — express to each of you our best wishes for the holiday season and new year. It is our hope that this time may be restful, relaxing and fulfilling.

**Roy G. Arnold**  
Dean and Director

**Sahs Sez**

Various IANR personnel met with John H. Sautter, District Conservationist and colleagues at Mullen, Nebraska on November 18. Resource data information on the Gudmundsen Sandhills Research Center was presented and discussed, such as soils and range survey, a suggested conservation plan and suggested tree and shrub planting plans. This was an excellent report and represented much effort in cooperation with the Upper Loup Natural Resources District.

The Sandhill Agricultural Laboratory cow herd was moved to the Gudmundsen site the same week.

**Warren W. Sahs**  
**Assistant Director**

**Grants and Contracts**

Anderson, B. E. (Agronomy) - Arrow Seed Company	1,200	Francis, C. A. (Agronomy) - Union Pacific Foundation	5,500
Ball, H. J. (Entomology) - Ciba-Geigy	500	Gardner, C. O. (Agronomy) - The DeKalb Ag Research Foundation	3,000
Bullerman, L. B. (Food Science & Technology) - Monsanto Company	31,900	Gustafson, W. A. (Southeast Extension & Research Center) - Illinois Nut Tree Growers Association	100
Case, R. M. (Forestry, Fisheries & Wildlife) and Stubbendieck, J. (Agronomy) - Union Pacific Foundation	7,500	Holtzer, T. O. (Entomology) - American Cyanamid	750
Compton, W. A. (Agronomy) - Holden's Foundation Seeds	40	Mandigo, R. W. (Animal Science) - Farmland Foods, Inc.	150
Coyne, D. P. (Horticulture) - Union Pacific Foundation	6,835	Moomaw, R. S. (Northeast Station) - Rohm and Haas Company	800
Coyne, D. P. (Horticulture) - Anna H. Elliott Fund	7,500	O'Keefe, R. B. (Panhandle Station) - Nebraska Dept. of Ag - Div. of Potato Dev.	5,000
Danielson, D. M. (North Platte Station) - Norden	8,000	Peo, E. R. (Animal Science) - Donation/Gift - Pfizer, Inc.	2,500
Ferguson, D. L. (Veterinary Science) - Merck & Company, Inc.	2,500	Peo, E. R. (Animal Science) - Zinpro Corporation	2,500
		Roeth, F. W. (South Central Station) - Monsanto Company	500
		Satterlee, L. D. (Food Science & Technology) - United States-Saudi Arabian Joint Commission on Economic Operation	3,850
		Schulte, D. D. (Ag Engineering) - UN Foundation	369
		Shearman, R. C. (Horticulture) - Mobay Chemical Company	750
		Splinter, W. E. (Ag Engineering) - UN Foundation	3,000
		Steadman, J. R. (Plant Pathology) - Diamond Shamrock	300
		Vidaver, A. K. (Plant Pathology) - Illinois Foundation Seeds	500
			<u>95,544</u>

NEBRASKA AGRICULTURAL EXPERIMENT STATION PUBLICATIONS - November 1981

Journal Articles - Submitted for Publication (contact authors for more information)

6709. Musk Thistle Seed Production. Melvin K. McCarty. Weed Science.
6710. Mowing Height, Frequency, and Mower Blade Sharpness Effects on Turf. D. H. Steinegger, R. C. Shearman, T. P. Riordan and E. J. Kinbacher. HortScience.
6711. The Air-Atomizing Nozzel in Woody Plant Propagation. S. J. Kollars and W. A. Gustafson. (Invitational paper) Northern Nut Growers Assn. Inc.
6712. Influence of Energy Intake During Lactation on the Interval from Weaning to First Estrus in Sows. D. E. Reese, B. D. Moser, E. R. Peo, Jr., A. J. Lewis, Dwane R. Zimmerman, J. E. Kinder and W. W. Stroup. Journal of Animal Science.
6713. The Effect of *S. faecium* C68 in Control of *E. coli*-induced Diarrhea in Gnotobiotic Pigs. N. R. Underdahl, A. Torres-Medina and A. R. Doster. American Journal of Veterinary Research.
6714. Nebraska Mastitis Awareness Program - A Team Effort. Duane N. Rice, Gerald R. Bodman, Philip H. Cole and Don J. Kubik. Journal of the American Veterinary Medical Association.
6715. Bacteriocins: The Lure and the Reality. Anne K. Vidaver. Plant Disease.
6716. Natural Antibiotic Activity of *Lactobacillus Acidophilus* and *Bulgaricus*. G. V. Reddy, K. M. Shahani, B. A. Friend and R. C. Chandan. Cultured Products Journal.
6717. Comparison of Polyethylene Glycol and Dye Markers in Nutrition Research. Edgar T. Clemens. Nutrition Research.
6718. Genetics of *Gibberella fujikuroi*. I. Inheritance Studies. Gurmel S. Sidhu. Canadian Journal of Botany.
6719. Influence of Energy Intake During Lactation on Subsequent Gestation, Lactation and Postweaning Performance of Sows. D. E. Reese, B. D. Moser, E. R. Peo, Jr., A. J. Lewis, Dwane R. Zimmerman, J. E. Kinder and W. W. Stroup. Journal of Animal Science.
6720. Progress Report on the Northern Pecan Cultivar and Provenance Research. W. A. Gustafson, K. L. Nelson and G. B. Morgenson. Northern Nut Growers Assoc., Inc.
6721. Identification of Major Proteins in Sclerotia of *Sclerotinia minor* and *Sclerotinia trifoliorum*. Gary R. Petersen, Geraldine M. Russo and James L. Van Etten. Experimental Mycology.
6722. Identification of a Development-Specific Protein in Sclerotia of *Sclerotinia sclerotiorum*. Geraldine M. Russo, Kurt R. Dahlberg and James L. Van Etten. Experimental Mycology.

6723. Salt Affected Soils in the Platte River Valley of Central Nebraska: I. Properties and Classification. K. Z. Al-Janabi and D. T. Lewis. Soil Science Society of America.
6724. Determination of the Competitive Ability of Winter Wheat (*Triticum aestivum*) Cultivars to Weeds. Challaiah, Orvin C. Burnside, Robert Ramsel, Gail A. Wicks and Virgil A. Johnson. Agronomy Journal.
6725. Relationship of Physiological Factors to Placental Retention in Dairy Cattle. L. L. Larson, M. A. Ishak, F. G. Owen, E. D. Erickson and S. R. Lowry. Journal of Dairy Science.
6726. Effect of Selenium, Vitamin and Ration Fiber Treatments on Placental Retention and Subsequent Performance in Dairy Cattle. M. A. Ishak, L. L. Larson, F. G. Owen, S. R. Lowry and E. D. Erickson. Journal of Dairy Science.
6727. Developing a Propagation Technique for Juvenile Clonal Pecal Rootstocks. K. L. Nelson and W. A. Gustafson. Northern Nut Growers Association.
6728. Interannual Crop Yield Variability - The Potential Role of Land Use Changes and Technology. Donald A. Wilhite. Journal of Soil and Water Conservation.
6729. Simulation of Genetic Changes in Life-Cycle Efficiency of Pork Production. I. A Bioeconomic Model. M. W. Tess, G. L. Bennett and G. E. Dickerson. Journal of Animal Science.
6730. Simulation of Genetic Changes in Life-Cycle Efficiency of Pork Production. II. Effects of Components on Efficiency. M. W. Tess, G. L. Bennett and G. E. Dickerson. Journal of Animal Science.
6731. Simulation of Genetic Changes in Life-Cycle Efficiency of Pork Production. III. Effects of Management Systems and Feed Prices on Importance of Genetic Components. M. W. Tess, G. L. Bennett and G. E. Dickerson. Journal of Animal Science.
6732. Effects of Seeding Dates on Field Establishment of Twelve Species of Wildflowers. Sotero S. Salac, Jayne M. Traeger and Peter N. Jensen. Journal of American Society for Horticultural Science.
6733. Population Trends of Epiphytic *Corynebacterium Flaccumfaciens* var. *Aurantiacum* on Leaves of *Phaseolus* Genotypes. M. L. Schuster, C. C. Smith and D. J. Smith. Plant Disease.
6734. Heritability, Phenotypic, Environmental, and Genetic Correlation of Periodic Postweaning Gains of Cattle. R. M. Koch, L. V. Cundiff and K. E. Gregory. Journal of Animal Science.
6735. Wheat Straw for Beef Cows. D. B. Faulkner, G. L. Llamas, J. K. Ward and T. J. Klopfenstein. Journal of Animal Science.
6736. Germination Response of Sweetclover Seed to 39-MHz Electrical Treatments. S. O. Nelson and L. E. Stetson. Transactions of the ASAE.

6737. Importance of Soil and Land Resources to Agricultural Productivity. Robert G. Gast and Elbert C. Dickey. Proceedings of Annual Meetings of the Agricultural Research Institute.
6738. Changes in Patterns of Inheritance of Flowering Time of Dry Beans (*Phaseolus vulgaris* L.) in Different Environments. H. K. Leyna, S. S. Korban and D. P. Coyne. Journal of Heredity.
6739. Effects of Item Arrangement, Knowledge of Arrangement, Test Anxiety, and Sex on Test Performance. Barbara S. Plake, Charles J. Ansorge, Claire Parker and Stephen R. Lowry. Journal of Educational Measurement.
6740. The Influence of Dietary Energy Intake on Serum Luteinizing Hormone and Progesterone Concentrations in Beef Heifers. K. Imakawa, R. J. Kittock and J. E. Kinder. Journal of Animal Science.
6741. Preservation of Wet Distillers Grains and Its Value as a Protein Source for Growing Ruminants. S. M. Abrams, T. J. Klopfenstein, R. A. Stock and R. A. Britton. Journal of Animal Science.
6742. Canada Thistle - The Problem Distribution & Economics. Robert G. Wilson. North Central Weed Conference.

Journal Abstracts - Submitted for Publication (contact authors for more information)

- 81-1641. Government Response to Drought: The U. S. Great Plains. Donald A. Wilhite. ASCE Conference, April 19-23, 1982, Las Vegas, Nevada.
- 81-1642. Discing to Improve Mixed Prairie Dominated by a Cool- and Warm-Season Shortgrass Sod. S. S. Waller, M. Hart and S. R. Lowry. Journal of Range Management.
- 81-1643. Foliar Applications of Insecticides for Control of Chinch Bugs on Grain Sorghum, 1981. S. Dean Kindler and Robert Staples. Insecticide and Acaricide Tests.
- 81-1644. Analysis and Interpretation of Ratios, Such as Feed Efficiency, in Animal Nutrition Trials. Stephen R. Lowry. Journal of Animal Science.
- 81-1645. Effect of Cornstalk Quality and Monensin on Calf Performance. D. B. Faulkner, M. McDonnell, T. J. Klopfenstein and W. Sahs. Journal of Animal Science.
- 81-1646. Effects of Calcium Level and Rate of Reactivity on Performance, Carcass Measurements and Rumen Epithelium Characteristics of Steers Fed High Moisture Corn. O. A. Turgeon, Jr., D. R. Brink, R. A. Britton, D. L. Harmon and R. T. Steele. Journal of Animal Science.
- 81-1647. Corn Gluten Feed as a Protein and Energy Source for Ruminants. K. A. DeHaan, T. J. Klopfenstein and R. Stock. Journal of Animal Science.
- 81-1648. Computer Simulation of Animal and Plant Growth. W. F. Brown, T. J. Klopfenstein, L. E. Moser and T. L. Thompson. Journal of Animal Science.

- 81-1649. Alfalfa with Chemically Treated Corn Residues. F. Cook, J. Merrill, D. Brink and T. Klopfenstein. Journal of Animal Science.
- 81-1650. The Effects of Changes in Economic Weights on the Efficiency of Index Selection. Charles Smith. Journal of Animal Science.
- 81-1651. Testicular Growth of Boars from Different Genetic Lines. Allan Schinckel, R. K. Johnson and R. A. Pumfrey. Journal of Animal Science.