From the Director's Desk

The Curiosity Factor

Obvious pride and enthusiasm characterize the research worker who is describing a recent discovery or major breakthrough. The researcher’s own curiosity in pursuing a particular concept or idea is often the key element in these successes. The sense of accomplishment which researchers feel when their observations lead to a new idea or concept is surely one of the greatest rewards a research worker can receive.

The ability to pose questions from one’s observations...the “curiosity factor”...is essential in research. When coupled with a willingness to work on answers to those questions, curiosity leads to realization of the products of research, namely creativity, discovery and invention.

How can curiosity be stimulated in a research organization? Or more specifically, how can it be stimulated in the Agricultural Experiment Station? Time management, which preserves time to think about research results and their implications, is one important factor. Interaction with other researchers in discussing, debating and exploring ideas and concepts is another.

What more can be done to develop greater curiosity within our research organization? Please help to answer this question by offering your thoughts and suggestions.

Roy G. Arnold
Dean and Director

Sahs Sez

Energy Farm Progress

Compliments to the Nebraska contract team! DOE representatives indicate that the development of the Nebraska project is far ahead of developments of other U.S. projects.

Field Laboratory resident crews brought in a new 6-inch water line and 2-inch natural gas line.

The alcohol building is up, the still is installed, and the feed mill and grain storage unit is essentially completed.

North Platte Station

Representatives of the North Platte Station hosted the Technical Committee of W-151, “Optimization of the Use of Range and Complimentary Forages for Red Meat Production”. The second day the group reviewed projects and facilities at the Sandhills Agricultural Laboratory, Tryon and the Gudmundsen Sandhills Research Center, Whitman, Nebraska.

Warren W. Sahs
Assistant Director

IANR - 1982 Conference

Don’t forget to mark January 5-7, 1982, on your calendar as dates for the Institute of Agriculture and Natural Resources 1982 Conference. Excellent speakers and lively discussion are anticipated for this event scheduled in the East Union. The theme is “Our Challenge: Making Things Happen”. The Experiment Station program is scheduled for Wednesday afternoon, January 6. Further information will come from the Planning Committee at a later date. Hope to see you there.

Grants and Contracts

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<th>Name</th>
<th>Organization</th>
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Historically American

DEVELOPMENT OF DRYLAND CROPPING SYSTEMS

Sander, D. Lane, Mandigo, R.

ASPECTS OF DETERMINATION

Witkowski, Watkins, Wilson, R. Kies (Human Nutrition and Food Management); J. F. (Northeast Station) - P. J. (Plant Pathology); B. Bullerman (Food Science and Technology); E. Dickey (Biometrics and Information Systems Center). The objectives of this project are (a) improve weed control systems for corn, sorghum and winter wheat grown under ecoregions in west central Nebraska; (b) develop methods of controlling weeds in crops grown using various reduced tillage systems; and (c) determine the efficacy and persistence of selected herbicides as they relate to reduced tillage in west central Nebraska.

NEB 43-334 - WEED CONTROL IN REDUCED TILLAGE SYSTEMS IN WEST CENTRAL NEBRASKA

This is a new Hatch project with an effective date of July 21, 1981. The principal investigator is G. A. Wicks of the North Platte Station. The project reviewers were E. Dickey (Agricultural Engineering); A. R. Martin (Agronomy); R. Mumm (Biometrics and Information Systems Center; J. Schmidt (Agronomy); and R. Moosmaw (Northeast Station). The objectives of this project are (a) improve weed control systems for corn, sorghum and winter wheat grown under ecoregions in west central Nebraska; (b) develop methods of controlling weeds in crops grown using various reduced tillage systems; and (c) determine the efficacy and persistence of selected herbicides as they relate to reduced tillage in west central Nebraska.

NEB 43-035 - EVALUATION OF MANAGEMENT PRACTICES TO IMPROVE REPRODUCTIVE EFFICIENCY OF BEEF CATTLE

This is a new Hatch project with an effective date of September 1, 1981. The principal investigators are G. H. Deutscher and D. C. Clan
to

NEB 44-011 - DEVELOPMENT OF DRYLAND CROP SYSTEMS FOR WESTERN NEBRASKA

This is a revised Hatch project with an effective date of April 8, 1981. R. C. Randle of the Panhandle Station is the principal investiga
to

NEB 44-012 - IMPROVEMENT OF MILLET, CORN, AND SORGHUM PRODUCTION BY BREEDING AND CULTURAL STUDIES

This is a revised Hatch project with an effective date of May 20, 1981. L. A. Nelson of the Panhandle Station is the principal investiga
to

NEB 43-007 - SORGHUM BREEDING AND CULTURAL RESEARCH UNDER REDUCED TILLAGE

This is a revised Hatch project with an effective date of April 7, 1981. The principal investigator is P. T. Nordquist of the North Platte Station. The project was reviewed by C. O. Gardner (Agronomy); O. Burnside (Agronomy); J. Parricide (Plant Pathology); R. Staples (Entomology) and W. Schultz (Biometrics and Information Systems Center). The objectives of this project are (a) to develop superior varieties and hybrids of sorghum by plant breeding; (b) to evaluate cultural practices and crop varieties under nonirrigated ecoregions and ecoregions with limited irrigation; and (c) interact with scientists from other Experimental Station locations in evaluating crop varieties under central Nebraska environmental conditions.
Journal Articles - Submitted for Publication (contact authors for more information)


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


81-1618. Topical Toxicity of Soil Insecticides to Western Corn Rootworm Adults in Nebraska, 1981. Harold J. Ball. Insecticide and Acaricide Tests.


BULLETINS PRINTED

New Experiment Station Personnel

Nancy M. Betts, Assistant Professor, Human Nutrition and Food Service Management. Dr. Betts received her B.A. in 1974 from Penn State and her M.S. in 1980 at Ohio State. From August, 1977 until June, 1980, she was a Research and Teaching Assistant. Before coming to Nebraska, she was a Research Consultant for Ohio Women, Infants and Children Program and an Academic Advisor for Ohio State. A recent recipient of her Ph.D., she joined the Human Nutrition and Food Service Management staff in August.

A. Larry Branen, Department Head, Food Science and Technology. Dr. Branen earned his B.S., 1967, University of Idaho; his Ph.D., 1970, Purdue University. From 1970-73, he was an Assistant Professor at the University of Wisconsin. He was a Professor and Chairman of the Food Science department at Washington State. He is a member of the Institute of Food Technology; International and Washington State Association of Milk and Food Sanitarians; American Oil Chemists Society; Nutrition Today Society. He joined IANR on September 1.

Chris R. Calkins, Assistant Professor, Animal Science with Courtesy Appointment in Food Science and Technology. Dr. Calkins earned his B.S., 1976, from Texas A&M; his M.S., 1978, from the University of Tennessee; his Ph.D., 1981, Texas A&M. He has two years experience as a Graduate Teaching Assistant and four years experience in research. He is a member of the American Meat Science Association; American Society of Animal Science; and the Institute of Food Technologist. He has written several publications. He joined IANR in August.

Stephen J. Danko, Research Associate, Agricultural Biochemistry. Dr. Danko earned his B.S., 1977, SUNY College of Environmental Science and Forestry; Ph.D., 1981, Oregon State. From September, 1977 to June, 1981, he was a Graduate Teaching Assistant at Oregon State. His Ph.D. Thesis was on "Production and Characterization of Antifungal Compounds Produced by Tomato Plants Inoculated with Fusarium oxysporum f. sp. lycopersici". He is a member of American Chemical Society; Phytochemical Society of North America; and American Phytopathological Society. He began July 1.

Roger W. Elmore, Assistant Professor, Agronomy, South Central Station. Dr. Elmore earned his B.S., 1972, from Illinois State; M.S., 1978, and Ph.D., 1981, from the University of Illinois. From January, 1976 to May, 1981, he was a Graduate Research Assistant and has performed some teaching duties at the University of Illinois. Dr. Elmore has written several publications and his thesis was titled "Importance of Morphological and Physiological Traits in Competition Between Inter-cropped Plants". He is a member of the American Society of Agronomy and Crop Science Society of America. He began his position on July 1.

Kenneth Hubbard, Assistant Professor, Climate Resources Specialist Center for Agriculture Meteorology and Climatology. A native of Nebraska, Dr. Hubbard earned his M.S. in 1973, South Dakota School of Mines and Technology; his Ph.D. 1981, Utah State. From 1977-81, he was an Assistant State Climatologist at Utah Department of Agriculture and a Research Scientist/Meteorologist at Utah Water Research Lab. From 1976-81, he taught courses in Soil Science and Bio-meteorology at Utah State. He has authored many publications; developed and has overseen several projects in Climatology. He joined IANR in August.

Bharathi, J. Joshi, Research Associate, Plant Pathology. A native of India, Dr. Joshi earned her B.S., University of Delhi, 1967; worked in Diagnostic Regents Department at Haskine Institute, Bombay, 1967-69; joined the Cancer Research Institute, Bombay, working towards her Master's, which she received in 1972. She obtained her Ph.D., University of Bombay, 1980; thesis on "Immunobiological Studies on Murine Leukemia and Mammary Tumor Viruses". She started in July to study the mechanism of infection of cowpea mosaic virus in plants and beetles.
Connie Ley, Assistant Professor, Education and Family Resources. Dr. Ley earned her B.S., 1966, Indiana University of Pennsylvania; M.S., 1975 and Ph.D., 1977 from Penn State. She has eight years of experience as a Home Economics Teacher for Pittsburgh Public Schools; four years as Instructor of Home Economics Education from Penn State. Her thesis was on "An Exploratory Study of the Political Socialization of Politically Active Home Economists". Memberships include: American Home Economics Association; American Vocational Association; Association for Curriculum and Supervision. She started in August, 1979.

Richard O. Pierce, Assistant Professor, Agricultural Engineering. Dr. Pierce earned his B.S., 1974, his M.S. in 1976, and his Ph.D. in 1981 from the University of Nebraska, majoring in Agricultural Engineering. He has authored many publications dealing with methods of energy, performance, utilization and efficiency of grain drying. His thesis was entitled, "Drying Scheduling - A Management for Low Temperature Drying Systems". Dr. Pierce started his present extension and research position on July 1.

Patrick J. Shea, Assistant Professor, Agronomy. In 1975, Dr. Shea earned his B.S. in Biology from Fordham University in his home state of New York. He obtained his M.S. in Agronomy and Weed Science at the University of Connecticut. He completed graduate work at North Carolina State, where he concentrated his studies and research in the soil-plant behavior of herbicides and organic contaminants in waste water, and received his Ph.D. in 1981. He joined the staff on July 1 and will conduct research in pesticide-soil interactions.

Neil W. Sullivan, Teaching-Research Position in Farm Power Systems, Agricultural Engineering. Mr. Sullivan received his B.S., 1976, from Cornell University; his M.S., 1979, and is expecting his Ph.D. in 1983 from the University of Nebraska. He has more than two years experience as a Research Assistant at Cornell University and the University of Nebraska; and more than three years experience as a Research Associate. He authored many publications and the title of his Ph.D. thesis will be "Energy Management for Agricultural Applications". He started on July 1.

Kathryn J. Tegtmeier, Research Associate, Agricultural Biochemistry. Dr. Tegtmeier received her B.S., 1968, Muhlenberg College; her M.S., 1971, Pennsylvania State University; and her Ph.D., 1981, from Cornell University. From 1976-80 she was at Cornell University involved with Plant Pathology research. She is a member of American Association for the Advancement of Science; and American Phytopath Society. Her experience is in the area of fungi which is a valuable asset in understanding the role of toxins in plant diseases. She started in January of this year.

Kenneth R. Tremblay, Jr., Assistant Professor, Education and Family Resources. Dr. Tremblay earned his B.A., 1974, University of Alaska; M.A., 1977 and Ph.D., 1980, Washington State. Previous experience: Graduate Research Assistant and Graduate Teaching Assistant at Washington State; Assistant Professor, University of South Dakota. He has written several publications. He is a member of the American Sociological Association; Rural and Midwest Sociological Societies; Policy Studies Organization; American Association of Housing Educators. He began his position in August, 1980.