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Agricultural Experiment Station News July 1981

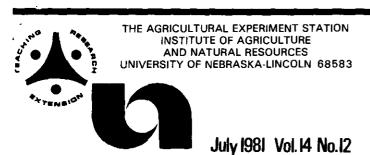
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Agricultural Experiment Station News

From the Director's Desk

Gudmundsen Sandhills Research Center

The Gudmundsen Sandhills Research Center near Whitman was formally dedicated on June 26. This outstanding resource, made available by Mr. and Mrs. Elmer Gudmundsen through the generous gift of their ranch to the University of Nebraska Foundation, will provide a permanent site for range and livestock research programs in the Sandhills.

It is anticipated that the Gudmundsen Sandhills Research Center also will serve IANR extension and teaching programs.

A multidisciplinary planning committee has been appointed to develop plans for this research location. Persons who have served in this planning effort to date include: Neal Baxter, John Campbell, Donald Clanton, Gene Deutscher, Robert Gast, Gary Hergert, Don Hudson, Donald Huls, James Nichols, Robert Oltjen, Irvin Omtvedt, George Pfeiffer, Patrick Reece, Ivan Rush, Warren Sahs, Charles Strasia, James Stubbendieck, Lavon Sumption, John Ward, and John Weihing. As programs are developed at the center, additional persons may be added to this group. A lay advisory committee of Sandhills ranchers and businessmen will be appointed soon.

An executive committee, consisting of Lavon Sumption, John Weihing and Warren Sahs, has had responsibility for broad policy and management decisions regarding this facility. Dr. Donald Clanton has been designated Program Coordinator, and Michael Knott is the resident Ranch Manager.

Initiating research activity at a new location is both a challenge and an opportunity. The Gudmundsen facility provides IANR with an opportunity to develop new and innovative research programs of importance to the Nebraska Sandhills. The Planning Committee is developing research projects and facilities plans which will allow IANR to make effective use of this outstanding resource.

Except for a small area involved in intensive research on crop production, soil fertility and irrigation research, the Sandhills Agricultural Laboratory leases will not be renewed beyond their expiration at the end of 1981. A negotiated extension of the lease on this small area for an additional three years is pending approval.

Widaman Trust Distinguished Graduate Assistant Stipends

The Agricultural Experiment Station has awarded seven Widaman Trust Distinguished Graduate Assistant

Stipends to outstanding graduate students for the 1981-82 year. Recipients, and their graduate study areas and thesis topics are:

David J. Foster, Agronomy; Disease resistance to viruses in maize

Romanus G. Monji, Agricultural Economics; Impact of inheritance tax laws and various forms of business organization upon the resultant structure of agriculture

Jimmie Lee Nelssen, Animal Science; Effect of nutrition on the reproductive performance of sows

Thomas McAdam Perring, Entomology; Effects of microenvironment and corn physiology on the population dynamics of the banks grass mite

Nancy E. Pfeiffer, Biochemistry; Investigation of the proteolytic enzymes of soybean root nodules and their role in regulation of the nitrogen fixation process occurring in root nodules

Geraldine Marie Russo, Plant Pathology; Characterization of a major protein found in Sclerotia of Sclerotinia sclerotiorum study of the regulation of its synthesis and regradation

John B. Solie, Agricultural Engineering; Application of herbicide subsurface to control weeds and leave residue on the surface to control soil erosion

Experiment Station Advisory Council

Four new members were elected recently to the Experiment Station Advisory Council. They are:

Dale G. Anderson, Professor, Agricultural Economics

Marvin B. Rhodes, Associate Professor, Veterinary Science

Khem M. Shahani, Professor, Food Science and Technology

D. Murray Danielson, Professor, Animal Science, North Platte Station

They will join the following staff to make up the Experiment Station Advisory Council for 1981-82;

Gerald R. Bodman, Associate Professor, Agricultural Engineering - Chairman

Robert A. Olson, Professor, Agronomy

Ralph E. Neild, Professor, Horticulture

John K. Ward, Professor, Animal Science

Eric D. Kerr, Professor, Plant Pathology, Panhandle Station

Sincere thanks goes to the following staff just completing their terms on the Council:

Ray Supalla, Agricultural Economics Lowell Satterlee, Food Science and Technology Don Ferguson, Veterinary Science

Leroy Peters, Entomology, South Central Station

Reorganization of Science and Education Administration

Experiment Station Letter 1603, dated June 19, 1981, reports the following:

A USDA reorganization was announced by Secretary John R. Block on June 17. SEA has been split into four program agencies: Agricultural Research Service, Cooperative State Research Service, Extension Service, and National Agricultural Library. Block said he decided to delegate greater authority to the administrators of the major science and education programs in an effort to strengthen the effectiveness of these programs and make them more efficient.

ARS, CSRS, and Extension administrators will head their agencies and report to the Director of Science and Education. The NAL will be headed by a Director.

Roy G. Arnold Dean and Director

Sahs Sez

Update on Integrated Energy Farm, Field Laboratory

- 1. Landscaping has been completed on the planned farm site.
- 2. Irrigation is underway using alcohol for two internal combustion engines which power the pumps.
- 3. Bids on the alcohol building are to be reviewed July 8.

Grants and Contracts		Deutscher, G. H. (North Platte Station) -	
		International Minerals & Chemical	50.000
Anderson, B. (Agronomy) - Osler Farms and		Corporation	50,000
Philip Geertson	505	Dickason, E. A. (Entomology) - FBC Chemical, Inc.	500
Arnold, R. G. (Director's Office) - USDA/SEA/CR	203,947	Dickason, E. A. (Entomology) - Mobay	500
Bashford, L. L. (Ag Engineering) - Nebraska		Chemical Corporation	500
Energy Office	249,992	Dickinson, E. O. (Vet Science) - Nebraska	
Boosalis, M. G. (Plant Pathology) - USDA/SEA	2,000	SPF Swine Accrediting Agency	583
Brandle, J. R. (Forestry, Fisheries & Wildlife) -	2,000	Dillon, R. (Ag Education) - Nebraska	40.44
Nebraska Railroad Association	2,460	Department of Education	18,557
Brink, D. (Animal Science) - A. H. Robins Company	10,000	Dreier, A. F. (Agronomy) - Nebraska Soybean	
Bullerman, L. B. (Food Science & Technology) -	10,000	Development Utilization & Marketing	
General Mills, Inc.	1,000	Board	49,250
Burnside, O. C. (Agronomy) - Mobil Chemical	1,000	Eisenhauer, D. E. (South Central Station) -	
Company .	1 600	Little Blue Natural Resources District	24,106
• •	1,500	Eldridge, F. (Animal Science) - American	
Burnside, O. C. (Agronomy) - Velsicol Chemical	750	Breeder's Service	1,185
Company	750	Eldridge, F. (Animal Science) - Lincoln Vet Clinic	40
Burnside, O. C. (Agronomy) - Shell Development	4 000	Fenster, C. R. (Panhandle Station) - Mobay	
Company	3,900	Chemical Corporation	800
Burnside, O. C. (Agronomy) - Stauffer Chemical		Fenster, C. R. (Panhandle Station) - Velsicol	
Company	1,000	Chemical Corporation	750
Burnside, O. C. (Agronomy) - Rohm and Haas	1,000	Fenster, C. R. (Panhandle Station) - American	
Campbell, J. B. (North Platte Station) - ICI		Hoechst Corporation	1,000
Americas, Inc.	500	Ferguson, D. L. (Vet Science) - Merck and	.,,
Campbell, J. B. (North Platte Station) - Dow		Company, Inc.	12,293
Chemical Company	1,000	Fischbach, P. E., Splinter, W. E., Thompson,	12,275
Campbell, J. B. (North Platte Station) - Philips		T. L. (Ag Engineering) - MIT	30,500
Roxane, Inc.	2,000	Flowerday, A. D. (Agronomy) - Olin Corporation	3,840
Chollet, R. (Ag Biochemistry) - U. S. Department	•	Flowerday, A. D. (Agronomy) - BASF Wyandotte	3,040
of Energy	50,000	Corporation	700
Clanton, D. C. (North Platte Station) -	•	Frank, K. (South Central Station) - Dow	700
Hoffmann-La Roche Inc.	6,000		2 (000
Compton, W. A. (Agronomy) - North American	•	Chemical Company Gold, R. E. (Environmental Programs) - The	2,000
Plant Breeders	40	, ,	1.000
Compton, W. A. (Agronomy) - Pioneer Hi-Bred		Dow Chemical Company	1,000
International, Inc.	40	Gustafson, W. A. (Southeast Extension &	60
Compton, W. A. (Agronomy) - Columbiana		Research Center) - Cyril Bish	50
Seed Company	20	Hergert, G. W. (North Platte Station) -	***
Compton, W. A. (Agronomy) - Northrup King	•	Georgia-Pacific Corporation	500
Company	40	Hergert, G. W. (North Platte Station) - Dow	* * * * * * * * * * * * * * * * * * * *
Compton, W. A. (Agronomy) Asgrow Seed Company	40	Chemical Company	2,000
Compton, W. A. (Agronomy) - DeKalb Ag	70	Hudson, D. (North Platte Station) - Norden	
Research, Inc.	40	Laboratories	480
Compton, W. A. (Agronomy) - O's Gold	40	Johnson, R. K., Zimmerman, D. R. (Animal	
Seed Company	20	Science) - Nebraska Pork Producers Ass'n.	4,500
Compton, W. A. (Agronomy) - O's Seed Company,	20	Johnson, V. A. (Agronomy) - USDA/SEA	40,000
Ramy Seed Company, Caisse Nationale		Kelling, C. L. (Vet Science) - Nebraska Pork	
	100	Producers Association	3,935
De Credit Agricole Course D. P. (Hostigultura) Rocky Mountain	100	Kerr, E. D., Yonts, C. D., Wilson, R. G.	
Coyne, D. P. (Horticulture) - Rocky Mountain	4 600	(Panhandle Station) - Grower-G, W. Joint	
Bean Dealers Association	4,000	Research Committee, Inc.	10,000
Danielson, D. M. (North Platte Station) -	9 000	Klopfenstein, T. (Animal Science) - Eli Lilly	
Hoechst-Roussell Pharmaceutical, Inc.	2,000	and Company	3,600
Deutscher, G. H. (North Platte Station) -	. =	Klopfenstein, T. (Animal Science) -	
American-International Charolais Ass'n.	1,750	Hoffmann-LaRoche Inc.	10,000
			•

12) - Court 1 70 (A 1) - 10 1	4 000	Grand Andrews and Laboratory	
Klopfenstein, T. (Animal Science) - Amax Inc.	4,800	Steadman, J. R. (Plant Pathology) - E. I. DuPont	1,500
Knoche, H. W., Daly, J. M., Gross, M. L. (Ag Biochemistry) - National Science Foundation	31,000	deNemours & Company Steadman, J. R. (Plant Pathology) - Rohm	1,500
Lindgren, D. T. (North Platte Station) - The O. M.	31,000	and Haas Company	500
Scott & Sons Company	1,000	Stetson, L. E. (Ag Engineering) - Nebraska	200
Loveday, H. D. (Animal Science) - Houston	-,	Energy Office	10,000
Livestock Show & Rodeo	500	Sullivan, T. W. (Animal Science) -	
Martin, A. R. (Agronomy) - BASF		International Minerals & Chemical	
Wyandotte Corporation	600	Corporation	7,500
Martin, A. R. (Agronomy) - Stauffer Chemical		Torres-Medina, A. (Vet Science) - World Health	
Company	1,500	Organization	15,000
Martin, A. R. (Agronomy) - 3M Company	500	Vogel, K. P. (Agronomy) - Anna H. Elliott Fund	6,500
Martín, A. R. (Agronomy) - North Dakota		Waller, S. S. (Agronomy) - Webster County	
State/Old West Regional Commission	15,928	Natural Resources	675
Mayo, Z. B. (Entomology), Witkowski, J.		Watkins, J. E. (Plant Pathology) - Rohm and Haas	500
(Northeast Station) - Dow Chemical Company	11,000	Watkins, J. E. (Plant Pathology) - Ciba-Geigy	500
Mayo, Z. B. (Entomology) - Dow		Wicks, G. A. (North Platte Station) - Chevron	
Chemical Company	2,000	Chemical Company	1,250
Mayo, Z. B. (Entomology) - Mobil Chemical		Wicks, G. A. (North Platte Station) - E. I. DuPont	
Company	1,500	de Nemours & Company	1,000
Moomaw, R. (Northeast Station) - Mobil Chemical	600	Wicks, G. A. (North Platte Station) - Monsanto	
Moomaw, R. (Northeast Station) - Shell		Agricultural Products Company	750
Development Company	1,250	Wicks, G.A. (North Platte Station) - Shell	
Moomaw, R. (Northeast Station) - Monsanto	1,000	Development Company	5,000
Moomaw, R. (Northeast Station) - American		Wilson, R. G. (Panhandle Station) - Rocky	
Hoechst Corporation	1,000	Mountain Bean Dealers Association	1,500
Moomaw, R. (Northeast Station) - Uniroyal	1,000	Wilson, R. G. (Panhandle Station) - Velsicol	
Moomaw, R. (Northeast Station) - 3M	500	Chemical Corporation	1,000
Moomaw, R. (Northeast Station) - Dow Chemical	360	Wilson, R. G. (Panhandle Station) - BASF	
Company Pertridge I F (Plant Bathalaur) Standfor	250	Wyandotte Corporation	1,000
Partridge, J. E. (Plant Pathology) - Stauffer	14 000	Wilson, R. G. (Panhandle Station) - Rohm	500
Chemical Company	15,000	and Haas Company	500
Penas, E. J. (Southeast Extension & Research	1.000	Wilson, R. G. (Panhandle Station) - The Dow	500
Center) - Dow Chemical Company	1,000	Chemical Company Wilson B. C. (Pophendle Station) E. I. DuBont	500
Peo, E. R. (Animal Science) - Crows	10.000	Wilson, R. G. (Panhandle Station) - E. I. DuPont	770
Hybrid Corn Company Peters I. I. (South Central Station)	19,900	de Nemours & Company Wilson P. G. (Penhandle Station) Monsanto	770
Peters, L. L. (South Central Station) - Dow Chemical Company	1,250	Wilson, R. G. (Panhandle Station) - Monsanto	1,750
Rhodes, M. B. (Vet Science) - A. V. L. Inc.	65	Company Wilson, R. G. (Panhandle Station) - FBC	1,750
Rhodes, M. B. (Vet Science) - Nebraska Pork	03	Chemicals, Inc.	1,000
Producers Association	5,000	Wilson, R. G. (Panhandle Station) - Nor-Am	1,000
Roeth, F. W. (South Central Station) - Shell	5,000	Ag. Products Inc.	500
Chemical Company	650	Wilson, R. G. (Panhandle Station) - American	300
Roeth, F. W. (South Central Station) - Rohm	0.50	Hoechst Corporation	1,500
and Haas Company	250	Wilson, R. G. (Panhandle Station) - Agricultural	1,500
Roeth, F. W. (South Central Station) -	-50	Products Company	500
Stauffer Chemical Company	1,200	Wilson, R. G. (Panhandle Station) - Uniroyal	1,000
Sander, D. H. (Agronomy), Rehm, G. W.	-,=00	Witkowski, J. (Northeast Station) - Shell	1,000
(Northeast Station) - Potash and		Development Company	300
Phosphate Institute	6,840	Witkowski, J. (Northeast Station) - Chevron	
Schneider, N. R. (Vet Science) - Nebraska Pork	• • • • • • • • • • • • • • • • • • • •	Chemical Company	750
Producers Association	2,000	Witkowski, J. (Northeast Station) - Dow	
Schulte, D. (Ag Engineering) - Blount	•	Chemical Company	1,500
Agribusiness, Donation/Gift	110,000	Witmuss, H. D. (Ag Engineering) - Eli Lilly	•
Schuster, M. L. (Horticulture) - The	·	and Company	1,500
Popcorn Institute	4,000	Woodward, J. (Director's Office) - USDA/SEA/CR	29,059
Shearman, R. C. (Horticulture) - E. I. DuPont		Yonts, C. D. (Panhandle Station) - Anna H. Elliott	
deNemours & Company	500	Fund	9,170

NEBRASKA AGRICULTURAL EXPERIMENT STATION PUBLICATIONS - June 1981

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

- 6137. Soil Loss and Sediment Produced from an Area of Severely Eroded Loessal Soil in Southeastern Nebraska. D. T. Lewis and M. J. Lepele. Journal of Soil and Water Conservation.
- 6138. Anthelmintic Activity of Albendazole Premix Against Adult Metastrongylus apriin Swine. D. L. Ferguson. Journal of Parasitology.
- 6139. The Rediscovery of Faith and Hope in Dealing with Crises. Barbara Chesser. Journal of Orthopsychiatry.
- 6140. Systems of Fallowing for Winter Wheat in Western Nebraska. C. R. Fenster and G. A. Wicks. Agronomy Journal.
- 6141. Indirect Solid-Phase Microradioimmunassay for Detection of Ascaris suum Antibodies in Swine Sera. M. B. Rhodes, L. A. Staudinger and R. A. Hart. American Journal of Veterinary Research. v42 (5):868-870, 1981.
- 6142. Antitumor Component(s) of Yogurt. 1. Fractionation. A. D. Ayebo, K. M. Shahani and R. Dam. Journal of Dairy Science.
- 6143. Performance of Blends of Short, Medium, and Tall Sorghum. H. J. Gorz and F. A. Haskins. Crop Science.
- 6144. Windbreaks and Crops. S. N. Ogbuehi. Crops and Soils Magazine.
- 6145. Niacin/Pantothenic Acid/Protein Interrelationships Affecting the Nutritive Values of Winter Wheat for Humans. B. Unver, C. Kies and H. M. Fox. Nutrition Reports International.
- 6146. Moisture Storage, Water Use and Corn Yields for Seven Tillage Systems Under Water Stress. Howard Wittmuss and Attila Yazar. Proceedings of ASAE Conference.
- 6147. Effects of Relative Planting Dates in Bean (*Phaseolus vulgaris* L.) and Maize (*Zea mays* L.) Associated Cropping Systems. C. A. Francis, Martin Prager and Gerardo Tejada. Field Crops Research Netherlands.
- 6148. Transformation of *Pseudomonas syringae* with Non-conjugative R-factor Plasmids. Dennis C. Gross and Anne K. Vidaver. Canadian Journal of Microbiology.
- 6149. Irrigation Management Energy. James R. Gilley, Dale F. Heerman and LaVerne E. Stetson. Proceedings, Second National Irrigation Symposium.
- 6150. The Role of Microclimate in Energy Use Efficiency. James R. Brandle. Proceedings: Tree Crops for Energy Production on Farms.
- 6151. A Search for Genetic Markers Linked to the ms, Locus in Soybeans. J. W. Keaschall, J. E. Specht and J. H. Williams. Crop Science.
- 6152. Population Dynamics of the Stable Fly, Stomoxys calcitrans (L.) Under Field Conditions. R. L. Rasmussen and J. B. Campbell. Environmental Entomology.
- 6153. Heat-Induced Gelation and Protein-Protein Interaction of Actomyosin. J. C. Acton, M. A. Hanna and L. D. Satterlee. Food Biochemistry.

- 6154. Fuel Alcohol Production from Waste Materials. B. A. Friend and K. M. Shahani. Chapter in impending book entitled "Fuels from Agricultural Products."
- 6155. Maize (Zea mays L.) and Bush Bean (Phaseolus vulgaris L.) Density Interactions in Tropical Intercropping Systems. C. A. Francis, M. Prager and G. Tejada. Field Crops Research.
- 6156. Effect of Herbicide and Manure Applications on Root Rot and Growth of Fieldbeans (*Phaseolus vulgaris*). L. S. Quakenbush and R. G. Wilson. Weed Science.
- 6157. The Nebraska Farm Accident Example 1970-1979. Rollin D. Schnieder. ASAE Winter Meeting Proceedings, 1980.
- 6158. A Review of a 1972 Safety Research Needs Study. Rollin D. Schnieder. ASAE Winter Meeting Proceedings, 1980.
- 6159. Effect of Item Arrangement, Knowledge of Arrangement, and Test Anxiety on Two Scoring Methods. Barbara S. Plake, Patricia Thompson and Stephen R. Lowry. Journal of Experimental Education.
- 6160. Biological Aspects of Iron in Plants. R. B. Clark, J. C. Brown, R. A. Olsen and J. H. Bennett. Iron Document for EPA.
- 6161. Hydrocyanic Acid Potential of Sorghum Seedlings Grown Under Two Radiation Levels. F. A. Haskins, H. J. Gorz and R. B. Clark. Crop Science.
- 6162. Reducing the Incidence of Short Estrous Cycles in Beef Cows with Norgestomet. J. A. Ramirez-Godinez, G. H. Kiracofe, R. M. McKee, R. R. Schalles and R. J. Kittok. Theriogenology.
- 6163. Changing Weed Problems with Conservation Tillage. O. C. Burnside. Transactions of the American Society of Agricultural Engineers.
- 6164. Pesticide Application Methodology. Leonard L. Bashford. Proceedings for the Colorado Crop Protection Institute. 10th Annual Proceedings, November 12-13, 1980.
- 6165. Distribution of a Barley Stripe Mosaic Virus-Precipitating Lectin on Purified Virus Particles. L. Giunchedi and W. G. Langenberg. Journal of General Virology.
- 6166. Evaluation of Fungicides for Control of Blackspot, 1980. J. A. Houfek, J. E. Watkins and D. H. Steinegger. Fungicide & Nematicide Tests.
- 6167. Fungicide Control of Leaf Rust & Tan Spot of Winter Wheat, 1980. J. E. Watkins and B. L. Doupnik, Jr. Fungicide & Nematicide Tests.
- 6168. Control of Stem Rust on a Kentucky Bluegrass Turf, 1980. J. E. Watkins, J. A. Houfek and R. C. Shearman. Fungicide & Nematicide Tests.
- 6169. Spotted Alfaifa Aphid (Therioaphis maculata (Buckton)): Water Stress Amino Acid Content, and Plant Resistance. Nancy E. Lorenz DeVries and George R. Manglitz. Journal of Kansas Entomological Society.

- 6170. An Unusual Large Subunit Multiple Polypeptide Composition of Perennial Ryegrass Ribulosebisphosphate Carboxylase/Oxygenase. Sarjit Johal and Raymond Chollet. FEBS Letters. v124 (1):75-78, February, 1981.
- 6171. Silicone Additive Facilitates Epoxy Plastic Sectioning. Willem G. Langenberg. Stain Technology.
- 6172. Reactions of Identity of a Barley Stripe Mosaic Virus-Precipitating Lectin Isolated from Wheat, Rye and Barley. W. G. Langenberg and L. Giunchedi. Biochemica et Biophysica Acta.
- 6173. Divergent Selection for Hydrocyanic Acid Potential in Sudangrass. H. J. Gorz, F. A. Haskins and K. P. Vogel. Crop Science.
- 6174. A Wet-Harvested Spore is Not a Native Spore. Kenneth W. Nickerson, Shelby N. Freer and James L. Van Etten. Experimental Mycology.
- 6175. Characterization of Biological Types of Cattle (Cycle II): V. Carcass Wholesale Cut Composition. R. M. Koch, M. E. Dikeman and L. V. Cundiff. Journal of Animal Science.
- 6176. Labor Time Analysis: Type A Versus A La Carte Meal Service in a Public School System. Marie E. Knickrehm, Rebecca Jo McConnell and Claire Anne Tunkel Berg. School Food Service Research Review.
- 6177. Use of a Diastase Enzyme Pre-Treatment for Determining Cell Wall Constituents in Corn and Sorghum Silages. D. H. Smith, G. C. Marten and R. A. Britton.
- 6178. Evidence for a Functional ATP-Citrate Lyase: NADP-Malic Dehydrogenase Pathway in Bovine Adipose Tissue: Enzyme and Metabolite Levels. Stephen B. Smith and Ronald L. Prior.
- 6179. Metabolic Pathways Involved in Lipogenesis from Lactate and Acetate in Bovine Adipose Tissue: Effects of Metabolic Inhibitors. Ronald L. Prior, Stephen B. Smith and J. J. Jacobson.
- 6180. Comparison of Ribosomal Proteins of Filamentous Fungi by Gel Electrophoresis and Immunochemical Cross-Reactions. J. E. Partridge, P. C. Entrekin and M. R. Marshall. Phytopathology.
- 6181. Enzymic and Physicochemical Characterization of Ribulose 1,5-Bisphosphate Carboxylase/Oxygenase from Diploid and Tetraploid Cultivars of Perennial Ryegrass. Joan M. Rejda, Sarjit Johal and Raymond Chollet. Archives of Biochemistry and Biophysics.
- 6182. Antitumor Component(s) of Yogurt. II. Purification and Properties. A. D. Ayebo, K. M. Shahani and R. Dam. Journal of Dairy Science.
- 6183. Developing Hybrids of Corn and Sorghum for Future Cropping Systems.
 Charles A. Francis. American Seed Trade Assn.
- 6184. A Comparison of Wicking Rates of Soft Braid Nylon Rope for Glyphosate and 2,4-D. William E. Lueschen, John D. Furrer and Alex R. Martin. North Central Weed Control Conference.

- 6185. Effectiveness of Glyphosate and 2,4-D for Controlling Sunflower, Kochia and Velvetleaf in Soybeans with New Generation Applicators. William E. Lueschen, Alex R. Martin and John D. Furrer. North Central Weed Control Conference.
- 6186. Screening Phytopathogenic Pseudomonads for a Double-stranded RNA Modification and Restriction System. Diane A. Cuppels, James L. Van Etten, Pat Lambrecht and Anne K. Vidaver. Current Microbiology.
- 6187. Immunochemical Identification of Fusarium monliforme Ribosomes from Diseased Corn (Zea mays L.) Stalk Tissue. Michael R. Marshall and J. E. Partridge. Physiological Plant Pathology.
- 6188. Protecting Corn from Herbicides Injury with R-25788. A. R. Martin and O. C. Burnside. Agronomy Journal.
- 6189. Genetics of Ovule Number, Seed Number Per Pod, Seed Weight and Association with Several Traits in Dry Edible Bean (*Phaseolus vulgaris* L.) Crosses and Implications in Breeding. Faisal A. Al-Mukhtar and Dermot P. Coyne. Journal of the American Society of Horticultural Science.
- 6190. Inheritance and Linkage of Flower Color, Pod Color, Pod Tip Shape, Days to First Flower, and Maturity in Dry Bean (*Phaseolus vulgaris* L.) Crosses. Faisal A. Al-Mukhtar and Dermot P. Coyne. Journal of the American Society of Horticultural Science.
- 6191. Effects of Water Stress Preconditioning on Net Carbon Exchange of Grain Sorghum. J. M. Bennett and C. Y. Sullivan. Photosynthetica.
- 6192. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. W. R. Kehr. Insects and Diseases are Involved.
- 6193. Characterization of Biological Types of Cattle (Cycle III): III. Carcass Composition, Quality and Palatability. R. M. Koch, M. E. Dikeman and J. D. Crouse. Journal of Animal Science.
- 6194. Cyanogenesis in Dhurrin-Containing Forage Grasses. H. J. Gorz, F. A. Haskins and K. P. Vogel. Proceedings of the XIV International Grassland Congress.
- 6195. Loneliness Among Mexican American Migrant Children. Barbara Chesser and Dania Inguanzo. Social Science Quarterly.
- 6196. A State Soil For Nebraska. D. T. Lewis. Soil and Water Conservation.
- 6197. Relationship Between Training Methods and Labor Turnover. Marie E. Knickrehm and Cheryl S. Davis. Journal of the American Dietetic Association.
- 6198. Factors Affecting Puffing and Sensory Characteristics of Extruded Egg Products.
 G. W. Froning, Jane Clegg and Carol Long. Poultry Science Journal.
- 6199. Tractor Modification for Paraplegics. Leonard L. Bashford. 1980 Winter Meeting, American Society of Agricultural Engineers.
- 6200. Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase: Enzymic, Physicochemical and Nutritional Properties. Sarjit Johal and Raymond Chollet. What's New in Plant Physiology. vll (12);45-48, 1980.

- 6201. Canonical Correlation Analysis for Evaluating the Impact of Atmospheric Conditions on Feedlot Cattle Performance. Robert C. Balling, Jr. Canadian Journal of Animal Science.
- 6202. Drying Scheduling A Procedure for Layer Filling Low-Temperature Corn Drying Systems. R. O. Pierce and T. L. Thompson. Transactions of the ASAE.
- 6203. Evaluation, Variation and Genetic Control of Seed-Coat Whiteness in Dry Beans (*Phaseolus vulgaris* L.). Safi S. Korban, Dermot P. Coyne and John L. Weihing. Journal of the American Society of Horticultural Science.
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 Carol Easley, Joan Laughlin, Roger Gold and Duane Tupy. Archives of
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 Lowell E. Moser and L. J. Perry. Range Management.
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 Ronald L. Prior, G. B. Huntington and Robert A. Britton.
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 Chemical Composition. O. O. Ologunde and R. C. Sorensen. Soil Science Journal
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