Kansas State University Libraries

New Prairie Press

Conference on Applied Statistics in Agriculture 1989 - 1st Annual Conference Proceedings

Editor's Preface, Table of Contents, and List of Attendees

George A. Milliken

James R. Schwenke

Follow this and additional works at: https://newprairiepress.org/agstatconference

Part of the Agriculture Commons, and the Applied Statistics Commons

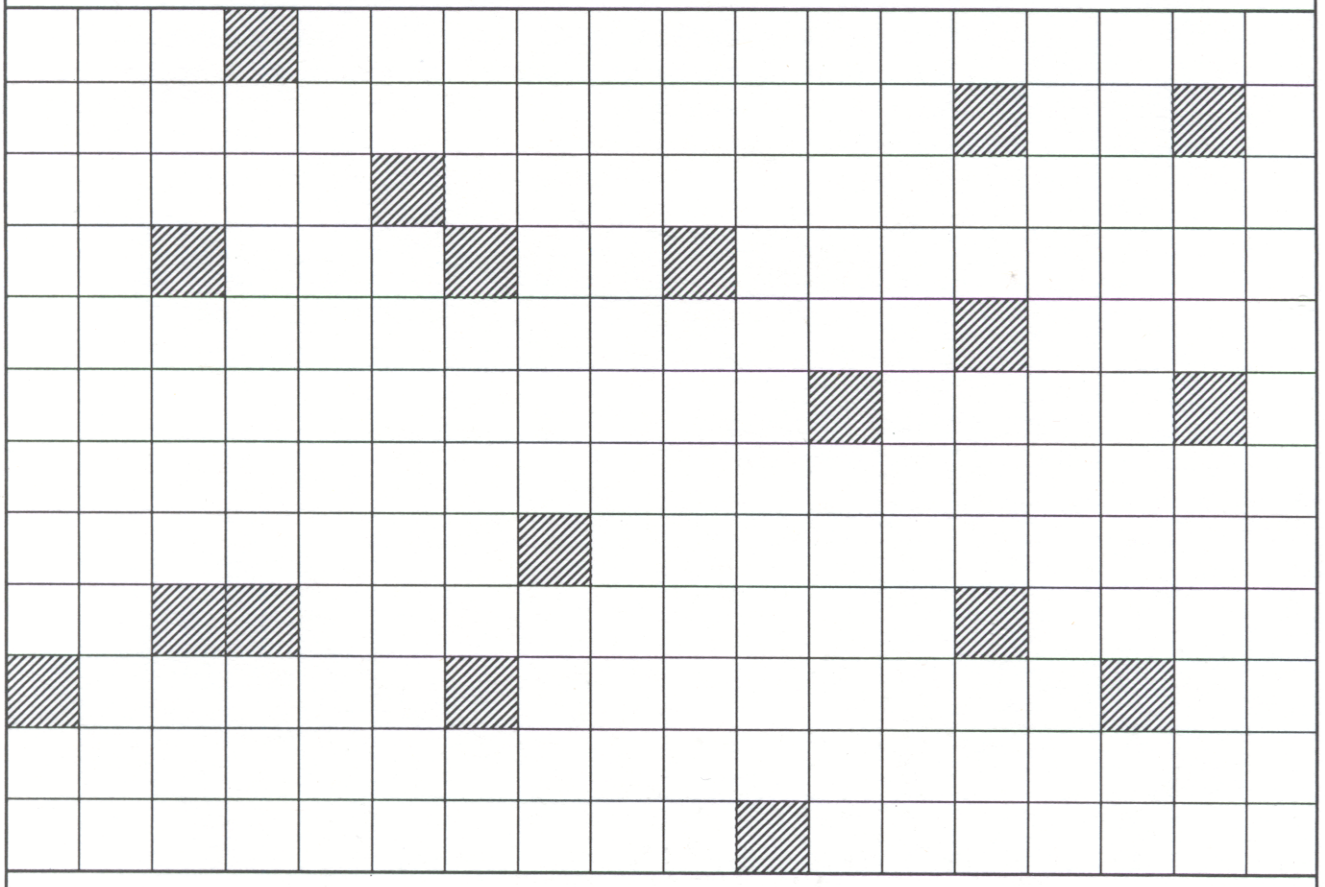
This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License.

Recommended Citation

Milliken, George A. and Schwenke, James R. (1989). "Editor's Preface, Table of Contents, and List of Attendees," *Conference on Applied Statistics in Agriculture*. https://doi.org/10.4148/2475-7772.1446

This is brought to you for free and open access by the Conferences at New Prairie Press. It has been accepted for inclusion in Conference on Applied Statistics in Agriculture by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

APPLIED STATISTICS IN AGRICULTURE



Proceedings of the 1989 Kansas State University Conference on Applied Statistics in Agriculture

Sponsored by: Department of Statistics and Agricultural Experiment Station
Kansas State University, Manhattan, Kansas 66506

April 30 - May 2, 1989

New Prairie Press
https://newprairiepress.org/agstatconference/1989/proceedings/1

Preface

This publication contains papers presented at the first annual meeting of the Kansas State University Conference on Applied Statistics in Agriculture, held in Manhattan, Kansas, April 30 through May 2, 1989. The purpose of the conference was to provide a forum for discussion of the application of Statistics to problems generated in the Agricultural sciences. The papers in this proceedings provide information to both the statistician and the agricultural researcher on current issues. The topics covered include statistical applications to animal, plant, entomology, and soil sciences, and papers of general statistical interest. The keynote speaker was Ronald R. Hocking, Ph.D. from the Department of Statistics, Texas A&M. Dr. Hocking's paper is a discussion of innovative approaches to understanding variance component analysis. Each paper in the proceedings was refereed and received at least two positive reviews before being accepted for publication.

George A. Milliken, Ph.D.
James R. Schwenke, Ph.D.
Editors

Table of Contents

Recent Developments in Variance Component Estimation
Ronald R. Hocking 1

Nonlinear Modeling of pH Decline in Beef Carcasses
James R. Schwenke and Curtis L. Kastner 10

Statistical Issues in Studies of Thermoregulation in Farm Animals
A. M. Parkhurst and G. L. Hahn 21

Analysis of a Two Lactation Target Animal Safety Study of Somidobove Sustained Release Injection in Multiparous Dairy Cows
L. V. Tonkinson, R. P. Basson, R. K. McGuffey, A. Deldar, and L. Fisher 34

Statistical Models for Analysis of Dose-Response Data
Karan P. Singh 47

Statistical Design and Analysis of Dairy Nutrition Experiments to Improve Detection of Milk Response Differences
Stephen R. Lowry 59

The Use of Near Infrared Reflectance for Evaluating Cotton Fineness and Maturity
Vicki A. Lancaster, Steven M. Buco, and Joseph G. Montalvo, Jr. 72

Comparison of Hop Downy Mildew Epidemics Using Spatial Analysis
J. Richard Alldredge, Dennis A. Johnson, and Rochelle Allwine 83

Evaluation of the Three Plantain (MUSA AAB) Cultivars for Agronomic Characteristics
Ahmad R. Rafie and Carlos Medina 94

Multiple Regression Analysis of Soil Properties on Eroded and Native Deep Loess Missouri Soils
S. J. Indorante, J. M. Maata, R. D. Hammer, and J. R. Brown 103

The 2-SPRT as an Alternative to Wald's SPRT When Testing Hypotheses Concerning Insect Populations
Linda J. Young and Jerry H. Young 117

Evaluation of Presentation Graphics for the Agricultural Sciences
Kathy Shelley 125

Teaching Statistical Methods to Graduate Students in Colleges of Agriculture
D. F. Cox 132

Model Building to Measure Impact of Weather on Crop Yields
Arlin. M. Feyerherm and Gary M. Paulsen 137

Kansas Wheat Objective Yield Survey
Eldon J. Thiessen 146

Forecasting Corn Ear Weights from Daily Weather Data
Fred B. Warren 156

Forecasting Corn Ear Weight Using Surface Area and Volume Measurements: A Preliminary Report
Fatu Bigsby 165

Evaluating the Effect of Commodity Donation Programs Using the Truncated Normal Distribution
J. William Levedahl 176

A Combined Analysis of Experiments When Treatments Differ Among Experiments
Paul N. Hinz and Mario R. Pareja 186

The Analysis of the Additive Mixed Model for Classes of Nonorthogonal Designs
Christine A. Stidley 194

Using Interaction in Two-Way Data Tables
Hugh G. Gauch, Jr. and Richard W. Zobel 205

List of Conference Attendees 214

List of Conference Attendees

Alldredge, Richard, Washington St. Univ.
Bigsby, Fatu, U.S. Dept. of Agriculture
Black,IV, William, Kansas State University
Blodgett, Sue, Kansas State University
Bondari, Kaine, Dept. of Stat. & Comp.
Boykin, Debbie, USDA/ARS
Byrd, Wilbert, Clemson University
Camp, Mary, USDA/ARS/SCAS
Campbell, Larry, USDA/ARS
Chang, Kuo-Hsing, Kansas State University
Chester, Ted, The Upjohn Company
Chew, Victor, U.S. Dept. of Agriculture
Cox, D.F., Iowa State University
Crabb, Jeffrey, Kansas State University
Darrow, Patrick, U. of Nebraska-Lincoln
De Ramos, Mariano, Univ. Lincoln-Neb.
Donnelly, Mike, DOW Chemical Co.
Douglass, Larry, U. of Maryland
Eskridge, Kent, U. of Nebraska-Lincoln
Evenson, Paul, S. Dakota State Univ.
Fernando, Indrasiri, Kansas State University
Feyerherm, Arlin, Kansas State University
Fryer, Holly, Kansas State University
Gao-Xiong, Gan, Kansas State University
Gauch, Jr., Hugh, Cornell University
Gbur, Edward, University of Arkansas
Hahn, LeRoy, Ag Research Serv., USDA
Hamlin, Randall, Beatrice/Hunt-Wesson
Hammer, R.D., University of Missouri
Higgins, James, Kansas State University
Higgins, Randall, Kansas State University
Hinz, Paul, Iowa State University
Hocking, Ronald, Texas A&M
Hurst, Rex, Utah State University
Indorante, S.J., University of Missouri
Jayawardene, Sumedha, Kansas State Univ.
Johnson, Dallas, Kansas State University
Johnson, Dennis, Washington St. University
Keller-McNulty, Sallie, Kansas State Univ.
Kemp, Ken, Kansas State University
Kiernan, Kathleen, Kansas State University
Knapp, Brad, Livestock & Range Resear.
Kratzer, D. Dal, The Upjohn Company
Lancaster, Vicki, Stats. Resource Inc.
Langholff, Wayne, USDA-ARS
Leland, Stan, Kansas State University
Levedahl, J. Wiliam, Econ. Research Serv.
Liu, Ben-Hui, Oregon State University
Lowry, Stephen, Agriculture Experiment
Lund, Richard, Montana State University
Maatta, J.M., University of Missouri
Mackey, Bruce, USDA/ARS
Marx, David, U. of Nebraska-Lincoln
McLean, Robert, U. of Tennessee
McNew, Ronald, Oklahoma State University
McNulty, Mark, Kansas State University
Milliken, George, Kansas State University
Mumm, Robert, U. Nebraska-Lincoln
Nassar, Raj, Kansas State University
Neill, Jim, Kansas State University
Nelsen, Terry, USDA/ARS
Nelson, Paul, Kansas State University
Ngeny, John Mark, Kansas State University
Nordheim, Erik, U. of Wisconsin
Palmquist, Debra, USDA/ARS
Parkhurst, Anne, U. of Nebraska-Lincoln
Perng, S.K., Kansas State University
Petty, Lisa, Kansas State University
Phillips, John, USDA/ARS, North Atlantic
Rafie, Ahmad, FHIA, Honduran Found.
Remmenga, Elmer, Colorado State Univ.
Remmenga, Marta, Kansas State University
Richardson, Gary, USDA/ARS
Rolka, Henry, Kansas State University
Rowe, Kenneth, Oregon St. University
Sacks, Jerome, USDA-ARS Midwest Area
Schwenke, James, Kansas State University
Shafii, Bahma, University of Idaho
Shelley, Kathy, Iowa State University
Singh, Karan, Memphis State University
Sisson, Donald, Utah State University
Stein, Ira, Pioneer Seed
Stidley, Christine, U. of New Mexico
Taylor, Veronica, The Upjohn Company
Thiessen, Eldon, Ks. Agricultural Stats.
Tonkinson, Lealon, Eli Lilly & Co.
Tucker, Lee, S. Dakota State Univ.
Vinyard, Bryan, USDA/ARS/SRRC
Warren, Fred, USDA/NASS
Weeks, David, Oklahoma State
Whitehand, Linda, USDA/ARS
Willers, Jeffrey, USDA/ARS
Williams, Ron, Triology Consulting Corp.
Wilson, Ruel, USDA/ARS
Woods, Walter, Kansas State University
Wray, James, U.S. Meat Animal Research
Young, Jerry, Oklahoma State University
Young, Linda, Oklahoma State University