Kansas State University Libraries

New Prairie Press

Conference on Applied Statistics in Agriculture

2005 - 17th Annual Conference Proceedings

Editor's Preface and Table of Contents

John E. Boyer Jr.

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

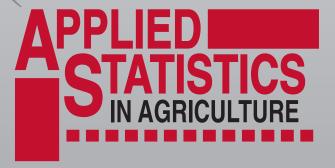
Boyer, John E. Jr. (2005). "Editor's Preface and Table of Contents," Conference on Applied Statistics in Agriculture. https://doi.org/10.4148/2475-7772.1131

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.

Seventeenth

Kansas State University Conference

on



Holiday Inn-Holidome Manhattan, Kansas

April 24-26, 2005



Proceedings

Preface

These proceedings contain papers presented in the seventeenth annual Kansas State University Conference on Applied Statistics in Agriculture, held in Manhattan, Kansas, April 24-26, 2005. The purpose of the conference is to provide a forum for discussion on the application of statistics to problems in agricultural sciences. Papers and posters presented at the conference and included in the proceedings are intended to provide information to both the statistician and agricultural researcher on current issues of agricultural and general statistical interest.

The keynote speaker was Alicia Carriquiry, Professor of Statistics at Iowa State University. On April 24, 2005, Professor Carriquiry presented a workshop titled Estimating Gene Expression Profiles Using all Available Information.

Each contributed paper was referred before being accepted for publication in these proceedings. The papers were accepted for publication based on their interest, relevance, innovation and application to the agricultural sciences and statistics.

Thanks goes out to the following referees: Bruce Mackey, Reid Landes, Mark West, Paul Cornelius, Bruce Craig, Jamie Perrett, John E. Boyer, Jr., Mary Christman, Imad Khamis, Bahman Shafii, Kathryn Hanford, Wenzhi Li, Erin Blankenship, Ramon Littell, Walt Stroup, Tisha Hooks, Dave Van Vleck, Dallas E. Johnson, Shoufan Fang, Solomon Harrar, Edward Gbur; to Shannon Reves for her help in assembling the proceedings; and finally to our conference sponsors: American Statistical Association, Eli Lilly & Company, Pfizer Inc, Pioneer Hi-Bred International Inc, and the USDA-ARS for their continued support.

John E. Boyer, Jr., Ph. D. Proceedings Editor

Table of Contents

Page #	
Statistical Analysis of Gene Expression Microarrays	
Tanzy Love, Iowa State University	
Alicia Carriquiry, Iowa State University	
Design and Analysis of Biological Assays of Mixtures	
Nancy Ferry, Dupont Crop Protection	
Dr. Bruce H. Stanley, Dupont Crop Protection	
Dr. Gregory Amel, Dupont Crop Protection	
Predicting Soil Temperatures in High Tunnels Using a Dynamic Model Based on Newtonian La	w
of Cooling	
Anil K. Jayaprakash, University of Nebraska-Lincoln	
Kent M. Eskridge, University of Nebraska-Lincoln	
Laurie Hodges, University of Nebraska-Lincoln	
Daryl Travnicek, University of Nebraska-Lincoln	
Buryl Huvinock, Omvolsky of Noordska Emoon	
Bayesian Analysis of Dose-Response Calibration Curves	
William J. Price, University of Idaho	
Bahman Shafi, University of Idaho65	
Modeling the Body Temperature of Heat Stressed Holstein Lying Cows Under Two Different	
Cooling Processes	
Meijian Zhou, University of Nebraska at Lincoln	
Anne M. Parkhurst, University of Nebraska at Lincoln	
Peter E. Hillman, Cornell University	
Chin N. Lee, Human Nutrition University of Hawaii	
Evaluating Clinical Mastitis in Dairy Fed Cattle Monensin	
Meihua Qiao, , Eli Lilly and Company	
Daniel Mowrey, Eli Lilly and Company	
Alan G. Zimmermann, Eli Lilly and Company	
James T. Symanowski, Eli Lilly and Company	
Howard B. Green, Eli Lilly and Company	
John I. D. Wilkinson, Eli Lilly and Company95	
The Effect of Managin on Lastation Dainy Cower A Dago Dagnange Evaluation	
The Effect of Monensin on Lactation Dairy Cows: A Dose Response Evaluation	
Zhanglin (Lin) Cui, Eli Lilly and Company	
Daniel Mowrey, Eli Lilly and Company	
Alan G. Zimmermann, Eli Lilly and Company	
James T. Symanowski, Eli Lilly and Company	
Howard B. Green, Eli Lilly and Company	
John I. D. Wilkinson, Eli Lilly and Company	
Evaluating the Effects of Monensin Overdose in Dairy Cattle	
Rebecca R. Hozak, Eli Lilly and Company	
James T. Symanowski, Eli Lilly and Company	

David G. McClary, Eli Lilly and Company

]	Meliton N. Novilla, Eli Lilly and Company John C. Cube, Eli Lilly and Company R. Ken McGuffey, Eli Lilly and Company John I. D. Wilkinson, Eli Lilly and Company Howard Green, Eli Lilly and Company Elvin E. Thomas, Eli Lilly and Company	Kansas State
A Bave	sian Random Coefficient Nonlinear Regression Model for a Split-plot Experim	ent
•	Reid D. Landes, University of Arkansas for Medical Sciences	
	Trey Spencer, University of Arkansas for Medical Sciences	
]	Ian A. Zelaya, Iowa State University	123
-	sian and Covariate Approach to Combine Results from Multiple Microarray S	Studies
	John R. Stevens, Purdue University R.W. Doerge, Purdue University	122
<u>i</u>	K. W. Doerge, Purdue University	133
R ² Stati	istics for Mixed Models	
]	Matthew Kramer, BCS/ARS/USDA	148
a		
_	Variability in Aggregation Based on Geostatistical Analysis	
	Shoufan Fang, UIUC George Z. Gertner, UIUC	
	George Z. Germer, OTOC Guangxing Wang, UIUC	161
'	Guangxing wang, Ofoc	101
The 3 ⁿ	Circular Factorial Designs: More Robust Estimate of All Factorial Effects	
	Md Shamsuddin, Chittagong University	184
The Use	e of Pseudo Factors in 4 ⁿ , 8 ⁿ , 2 ^m x 4 ⁿ , 2 ⁿ x 8 ⁿ Factorial Designs	
	Md Shamsuddin, Chittagong University	
]	Mian A S Adnan, Jahangirnagar University	190
The De	The Column Conformed of 2 th at 4 th Ecotomical Degion and its Different East 4 th and	
	w-Column Confounded 2 ^m x 4 ⁿ Factorial Design and its Different Fractions Md Shamsuddin, Chittagong University	
	Mian A S Adnan, Jahangirnagar University	100
1	ivitan ri d riunan, jananginnagar Umivelsity	

Kansas State University

208

List of Attendees

An, Lingling, Purdue University

Bargen, Jason, Pfizer Inc

Bauer, Karin, Midwest Research Institute

Baumann, William, Iowa State University

Bi, Lieqi, Kansas State University

Blankenship, Erin, University of Nebraska-Lincoln

Bovaird, Jim, University of Kansas

Boyer, John, Kansas State University

Bradbury, Peter, USDA/ARS

Bryson, Lawrence, Pfizer Animal Health

Bsharat, Rebhi, Kansas State University

Burch, Brent, Northern Arizona University

Carriquiry, Alicia, Iowa State University

Cheng, Fu-Chih, Pioneer Hi-Bred

International Inc

Christman, Mary, University of Florida

Cochrane, Chun-Yen, Kansas State

University

Cornelius, Paul, University of Kentucky

Craig, Bruce, Purdue University

Crews, Trenton,

Cui, Lin, Eli Lilly and Company

Danner, Brad, University of Nebraska-

Lincoln

Dixon, Philip, Iowa State University

Douglass, Larry, University of Maryland

Duke, Sara, USDA-ARS

Durham, Susan, Utah State University

Eskridge, Kent, University of Nebraska-

Lincoln

Fang, Liang, Kansas State University

Fang, Shoufan, University of Illinois

Feng, Lizhi, Pioneer Hi-Bred International Inc

Ferry, Nancy, DuPont Crop Protection

Gbur, Edward, University of Arkansas

Hackstadt, Amber, Southeast Missouri State

Univ

Hanford, Kathryn, University of Nebraska-

Lincoln

Harrar, Solomon, South Dakota State

University

Higgins, James, Kansas State University

Hinds, Mark, Pioneer Hi-Bred International

Hines, Michael,

Hong, Bonnie, Pioneer Hi-Bred International

Inc

Hooks, Tisha, University of Nebraska-Lincoln

Hozak, Rebecca, Eli Lilly

Jayaprakash, Anil, University of Nebraska-

Lincoln

Jayawardhana, Ananda, Pittsburg State

University

Johnson, Brent, Kansas State University

Johnson, Dallas, Kansas State University

Jung, Yoonsung,

Kachman, Stephen, University of Nebraska-

Lincoln

Katochke, Adrian, University of Nebraska-

Lincoln

Keeler, Lisa, Dow Agro Services

Khamis, Imad, Southeast Missouri State Univ

Kramer, Matt, USDA ARS

Kupzyk, Kevin, University of Kansas

Landes, Reid, Univ of Arkansas for Medical

Sci

Lee, Seunghee, Kansas State University

Leone, Erin, University of Maryland

Leyva-Estrada, Norma, Iowa State

University

Li, Wenzhi, Stine-Haskell Research Center

Littell, Ramon, University of Florida

Liu, Grace, Pioneer Hi-Bred

Liu, Xiangdong, University of Nebraska-

Lincoln

Liu, Ying, Kansas State University

Mackey, Bruce, USDA/ARS

Mariappan, Sadayappan, University of

Nebraska-Lincoln

Marx, David, University of Nebraska-Lincoln

McCubrey, Raymond, Kansas State

University

Meek, David, USDA-ARS

Meyer, Mike, University of Arkansas

Milliken, George, Kansas State University

Mo, Hua, Pioneer Hi-Bred Int. Inc

Mowrey, Daniel, Eli Lilly and Company Natarajan, Bala, Kansas State University Neill, Jim, Kansas State University Osiriphun, Sukhuntha, Kansas State University

Palmquist, Deb, USDA-ARS **Parkhurst,** Anne, University of Nebraska-Lincoln

Peng, Jianan, Acadia University **Pereira,** Cliff, Oregon State University **Perrett,** Jamis, University of Northern Colorado

Plastina, Alejandro, University of Nebraska-Lincoln

Pontius, Jeff, Kansas State University Price, William, University of Idaho Qiao, Meihua, Eli Lilly and Company Ramler, Ivan, Iowa State University Rashidi, Sahar, University of Arkansas Reinbolt, Luke, University of Nebraska-Lincoln

Ren, Cuirong, South Dakota State University Ridpath, Harold, USDA APHIS Ridpath, Lance, Kansas State University Roozeboom, Kraig, Kansas State University Sangras, Sandeepa, Kansas State University Senne, Lane, Kansas State University Shafii, Bahman, University of Idaho Shamsuddin, M, University of Chittagong Shrestha, Smriti, Kansas State University Singh, Pradeep, Southeast Missouri State University

Smith, Christina, Kansas State University Stanley, Bruce, DuPont Stevens, John, Purdue University Stork, LeAnna, Virginia Commonwealth University

Stroup, Walt, University of Nebraska-Lincoln **Sweeney,** Diane, Schering-Plough Animal Health

Tang, Zhongwen, Kansas State University **Tolos,** Siti, Kansas State University **Travnicek,** Daryl, University of Nebraska-Lincoln

Tu, Chunhao, University of Nebraska-Lincoln Vahl, Chris, Kansas State University Van Vleck, Dale, USDA-ARS Wearukanjana, Pornvipa, West, Mark, USDA/ARS Whitehand, Linda, USDA,ARS,WRRC Wickham, Hadley, Iowa State University Wilson, Samuel, Kansas State University Wright, Kevin, Pioneer Hi-Bred Xie, Lin, Kansas State University Xu, Xia, Iowa State University Yang, Shie-Shien, Kansas State University Yang, Xiao, Southeast Missouri State University Yu, Lianbo, Purdue University

Zhang, Kurt, Kansas State University **Zhou,** Meijian, University of Nebraska-Lincoln

Zhu, Jun, University of Wisconsin-Madison