



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# Food Distribution Research Society, Inc.

*A nonprofit education society incorporated under the  
Laws of the State of Maryland, February 20, 1970*

## 2010 Officers and Directors

### President

Aaron Johnson  
University of Idaho  
Agricultural Economics & Rural  
Sociology  
P.O. Box 442334  
Moscow, ID 83844-2334

### President Elect

John Park  
Texas A&M University  
Department of Agricultural Economics  
2124 TAMU  
Colllege Station, TX 77843-2124

### Past President

R. Wes Harrison  
Louisiana State University  
Agricultural Economics &  
Agribusiness  
230 Ag. Administration Building  
Baton Rouge, LA 70803-5604

### Vice President-Education

Sayed Saghaian  
University of Kentucky  
Agricultural Economics  
314 Charles E. Barnhart Bldg.  
Lexington, KY 40546-0276

### Vice President-Programs

Terry Hanson  
Auburn University  
203 Swingle Hall  
Auburn, AL 36849

### Vice President-Communications

Ronald L. Rainey  
University of Arkansas  
Department of Agricultural  
Economics and Agribusiness  
P. O. Box 391  
Little Rock, AR 72203

### Vice President-Research

Forrest E. Stegelin  
University of Georgia  
Agricultural and Applied Economics  
313 Conner Hall  
Athens, GA 30602

### Vice President-Membership

Rodney Holcomb  
Oklahoma State University  
Department of Agricultural Economics  
Food & Agricultural Products Center  
114 Food & Agricultural Products Ctr  
Stillwater, OK 74078

### Vice President - Logistics and Outreach

Mike Schroder  
Towson University  
Division of Economic and  
Community Outreach  
Director, Extended Education and  
On-Line Learning  
800 York Road  
Towson, MD 21252

### Vice President - Student Programs

Mike Gunderson  
University of Florida  
Food and Resource Economics  
Department  
1181 McCarty Hall  
PO Box 110240  
Gainesville, FL 32611-0240

### Vice President-Applebaum Scholarship

Doug Richardson  
Sun City Hilton Head  
105 Fort Walker Lane  
Bluffton, SC 29910

### Secretary-Treasurer

Kellie Raper  
Oklahoma State University  
Department of Agricultural  
Economics  
514 Ag Hall  
Stillwater, OK 74078

### Journal Editors

*Refereed Issues*  
Dovi Alipoe  
Alcorn State University  
Department of Agriculture  
1000 ASU Drive #1134  
Alcorn State, MS 39096

### *Proceedings Issues*

Deacue Fields  
Auburn University  
Department of Agricultural  
Economics and Rural Sociology  
100 B Comer Hall  
Auburn University, AL 36849-5406

### Newsletter Editor

Greg E. Fonsah  
University of Georgia  
Rural Development Center  
P.O. Box 1209  
Tifton, GA 31793

### Directors

#### Stan Ernst (Three years)

Ohio State University  
Dept. of Agricultural, Environmental  
& Development Economics  
219 Agricultural Administration  
Building  
2120 Fyffe Road  
Columbus, Ohio 43210

#### Jennifer Dennis (Three years)

Purdue University  
Agricultural Economics  
625 Agriculture Mall Drive  
West Lafayette, IN 47906

#### Fred Gunter (Three years)

Corporate Services Group (CSG)  
9501 Palm River Road  
Tampa, FL 33619

#### Phil Kenkel (One year)

Oklahoma State University  
Bill Fitzwater Cooperative Center  
516 Ag Hall  
Stillwater, OK 74078

#### Patricia McLean-Meynsse (One year)

Southern University and A&M  
College  
113B Fisher Hall  
Baton Rouge, LA 70813

#### Suzanne Thornsburry (One year)

Michigan State University  
Department of Agricultural  
Economics  
211-B Agriculture Hall  
East Lansing, MI 48824

# *Journal of Food Distribution Research*

Volume XLI, Number 3

November 2010

ISSN 0047-245X

The *Journal of Food Distribution Research* has an applied, problem-oriented focus. The *Journal's* emphasis is on the flow of products and services through the food wholesale and retail distribution system. Related areas of interest include patterns of consumption, impacts of technology on processing and manufacturing, packaging and transport, data and information systems in the food and agricultural industry, market development, and international trade in food products and agricultural commodities. Business and agricultural and applied economic applications are encouraged. Acceptable methodologies include survey, review, and critique; analysis and syntheses of previous research; econometric or other statistical analysis; and case studies. Teaching cases will be considered. Issues on special topics may be published based on requests or on the editor's initiative. Potential usefulness to a broad range of agricultural and business economists is an important criterion for publication.

The *Journal of Food Distribution Research* is a publication of the Food Distribution Research Society, Inc. (FDRS). The *JFDR* is published three times a year (March, July, and November). The *JFDR* is a refereed journal in its July and November Issues. A third, non-refereed issue contains papers presented at FDRS' annual conference and Research Reports and Research Updates presented at the conference. Members and subscribers also receive the *Food Distribution Research Society Newsletter* normally published twice a year.

The *Journal* is refereed by a review board of qualified professionals (see Editorial Review Board list). Manuscripts should be submitted to the FDRS Editors (see back cover for Guidelines for Manuscript Submission).

The FDRS accepts advertising of materials considered pertinent to the purposes of the Society for both the *Journal* and the *Newsletter*. Contact the V.P. for Membership for more information.

Life-time membership is \$400. Annual library subscriptions are \$65; professional membership is \$45; and student membership is \$15 a year; company/business membership is \$140. For international mail, add: US\$20/year. Subscription agency discounts are provided.

Change of address notification: Send to Rodney Holcomb, Oklahoma State University, Department of Agricultural Economics, 114 Food & Agricultural Products Center, Stillwater, OK 74078; Phone: (405)744-6272; Fax: (405)744-6313; e-mail: rodney.holcomb@okstate.edu.

Copyright © 2010 by the Food Distribution Research Society, Inc. Copies of articles in the *Journal* may be noncommercially reproduced for the purpose of educational or scientific advancement. Printed in the United States of America.

## **Indexing and Abstracting**

Articles are selectively indexed or abstracted by:

*AGRICOLA Database*, National Agricultural Library, 10301 Baltimore Blvd., Beltsville, MD 20705.

*CAB International*, Wallingford, Oxon, OX10 8DE, UK.

*The Institute of Scientific Information*, Russian Academy of Sciences, Baltijskaja ul. 14, Moscow A219, Russia.

## **Food Distribution Research Society**

<http://fdrs.tamu.edu/FDRS/>

## **Editors**

Dovi Alipoe, Alcorn State University  
Deacue Fields, Auburn University

## **Technical Editor**

James C. Bassett

## **Printer**

Omni Press

## **Editorial Review Board**

Alexander, Corinne, Purdue University  
Allen, Albert, Mississippi State University  
Boys, Kathryn, Clemson University  
Bukenya, James, Alabama A&M University  
Cheng, Hsiangtai, University of Maine  
Chowdhury, A. Farhad, Mississippi Valley State University  
Dennis, Jennifer, Purdue University  
Elbakidze, Levan, University of Florida  
Epperson, James, University of Georgia-Athens  
Evans, Edward, University of Florida  
Flora, Cornelia, Iowa State University  
Florkowski, Wojciech, University of Georgia-Griffin  
Fonsah, Esendugue Greg, University of Georgia-Tifton  
Fuentes-Aguiluz, Porfirio, Starkville, Mississippi  
Govindasamy, Ramu, Rutgers University  
Haghiri, Morteza, Memorial University-Corner Brook, Canada  
Harrison, R. Wes, Louisiana State University  
Herndon, Jr., Cary, Mississippi State University  
Hinson, Roger, Louisiana State University  
Holcomb, Rodney, Oklahoma State University  
House, Lisa, University of Florida  
Hudson, Darren, Texas Tech University  
Litzenberg, Kerry, Texas A&M University  
Mainville, Denise, Virginia Tech University  
Malaga, Jaime, Texas Tech University  
Mazzocco, Michael, University of Illinois  
Meynsse, Patricia, Southern Univ. and A&M College-Baton Rouge  
Muhammad, Andrew, Economic Research Service, USDA  
Mumma, Gerald, University of Nairobi, Kenya  
Nalley, Lanier, University of Arkansas-Fayetteville  
Ngange, William, Arizona State University  
Novotorova, Nadehda, Augustana College  
Parcell, Jr., Joseph, University of Missouri-Columbia  
Regmi, Anita, Economic Research Service, USDA  
Renck, Ashley, University of Central Missouri  
Shaik, Saleem, North Dakota State University  
Stegelin, Forrest, University of Georgia-Athens  
Teegne, Fisseha, Tennessee State University  
Thornsbury, Suzanne, Michigan State University  
Toensmeyer, Ulrich, University of Delaware  
Tubene, Stephan, University of Maryland-Eastern Shore  
Wachenheim, Cheryl, North Dakota State University  
Ward, Clement, Oklahoma State University  
Wolf, Marianne, California Polytechnic State University  
Wolverton, Andrea, Economic Research Service, USDA  
Yeboah, Osei, North Carolina A&M State University

***Journal of Food Distribution Research***  
**Volume XLI, Number 3**  
**November 2010**

**CONTENTS**

|   | <b>Pages</b> |
|---|--------------|
| Americans' Perceptions of Food Safety: A Comparative Study of Fresh Produce, Beef and Poultry Products<br><i>Benjamin Onyango, Neal H. Hooker, William K. Hallman, and Cara L. Cuite</i>      | 1–13         |
| Understanding Why College-Educated Millennials Shop at Farmers Markets: An Analysis of Students at Louisiana State University<br><i>Joshua D. Detre, Tyler B. Mark, and Benjamin M. Clark</i> | 14–24        |
| Concentration in Beef Packing and Slaughter Cattle Pricing<br><i>H. Alan Love, Oral Capps, Jr., and Gary W. Williams</i>  | 25–41        |
| The Efficiency of Customer Relationships: An Empirical Analysis of China's Agricultural Wholesale Market<br><i>Zhigang Wang, Jianlei Ma, and Eugene Jones</i>                                 | 42–51        |
| Sensory and Marketing Characteristics of a Hibiscus Beverage<br><i>Milena M. Ramirez, Allen F. Wysocki, Melissa A. Ramirez, Charles A. Sims, and Murat O. Balaban</i>                         | 52–62        |
| Investigating Chinese Vegetable Processing Firms' Economic Incentives to Enhance Quality and Safety Controls<br><i>Jiehong Zhou and Chengyan Yue</i>  | 63–74        |
| Mexican Meat Demand Parameters Before and After NAFTA: Evidence from Household Surveys, 1992–2004<br><i>Jaime Malaga, Suwen Pan, and Teresa Duch-Carvallo</i>                                 | 75–83        |

Published by



|   |        |
|---|--------|
| Differences in the Perception of Pallet Systems between U.S. and Canadian Grocery Retailers .....                     | 84–97  |
| <i>Cristina F. Guzman-Siller, Diana Twede, and Diane A. Mollenkopf</i>  |        |
| Factors Influencing the Willingness-to-Pay for Ethnic Specialty Produce in the Eastern Coastal<br>United States ..... | 98–109 |
| <i>Anoma Ariyawardana, Ramu Govindasamy, and Venkata Puduri</i>   |        |