

---

# SOUTHERN JOURNAL OF AGRICULTURAL ECONOMICS



Volume 16, Number 1

July, 1984

Published by  
Southern Agricultural Economics Association

# SOUTHERN JOURNAL OF AGRICULTURAL ECONOMICS

Volume 16, Number 1

July, 1984

Copyright © 1984 by the Southern Agricultural Economics Association

## 1984 Editorial Council

Neil R. Martin, Jr., *Auburn University*, Editor  
John L. Adrian, Jr., *Auburn University*, Associate Editor  
Oral Capps, Jr., *Virginia Polytechnic Institute and State University*  
Kenneth C. Clayton, *NED, ERS, USDA*  
Charles L. Cramer, *University of Missouri-Columbia*  
Leon E. Danielson, *North Carolina State University*  
Stanley M. Fletcher, *Georgia Experiment Station*  
Edward O. Fryar, Jr., *University of Arkansas*  
Ian W. Hardie, *University of Maryland*  
John Holt, *University of Florida*  
Stephen E. Miller, *Clemson University*  
Mack C. Nelson, *Fort Valley State College*  
Michael R. Reed, *University of Kentucky*  
Lynn L. Reinschmidt, *Mississippi State University*  
Sujit K. Roy, *Texas Tech University*  
John R. Stoll, *Texas A&M University*  
Daniel S. Tilley, *Oklahoma State University*

## Editorial Staff

E.L. McGraw, Copy Editor  
Wanda Toney, Secretary

## Editorial Policy

The purpose of the *Journal* is to provide a forum for creative and scholarly work in agricultural economics and related areas. Contributions on methodology and applications in business, extension, research and teaching phases of agricultural economics are encouraged. Preference will be given to articles addressing problems and issues of concern in the southern region of the United States. Only submitted articles recommended by the Editorial Council are accepted for publication.

The Editorial Council encourages constructive criticism of *Journal* articles and will publish accepted comments and replies.

## 1984 Microcomputer Software Committee

Preston LaFerney, *University of Arkansas*, Co-Chairman for Policy  
Neil R. Martin, Jr. *Auburn University*, Co-Chairman for Review  
Ernest Bentley, *Farm Computer Center, Inc., Christianburg, Virginia*  
Wallace Killcrease, *Mississippi State University*  
Al Tinsley, *Clemson University*  
Richard A. Levins, *University of Maryland*  
James McGrann, *Texas A&M University*  
Ted. R. Nelson, *Oklahoma State University*  
Kenneth C. Schneeberger, *University of Missouri-Columbia*

## 1984 Executive Committee

PRESIDENT .....	Joseph Havlicek, Jr., <i>Ohio State University</i>
PRESIDENT-ELECT .....	J. Richard Conner, <i>Texas A&amp;M University</i>
PAST-PRESIDENT .....	Calvin R. Berry, <i>University of Arkansas</i>
FIRST VICE-PRESIDENT .....	John E. Ikerd, <i>Oklahoma State University</i>
SECOND VICE-PRESIDENT .....	Lanny Bateman, <i>Mississippi State University</i>
SECRETARY-TREASURER .....	H. Evan Drummond, <i>University of Florida</i>

*Southern Journal of Agricultural Economics* is published in July and December by the Southern Agricultural Economics Association.

Membership in the SAEA, consisting of persons and organizations having a professional interest in agricultural economics, includes subscription to the *Journal*. Regular membership dues are \$10. Junior membership dues are \$5.

The annual subscription rate for libraries and other institutions is \$15. Single copies of current issues are available to individuals at a price of \$5.

Please address all subscription, membership and change of address requests to C. L. Huang, Department of Agricultural Economics, Georgia Experiment Station, Experiment, Georgia 30212.

# **SOUTHERN JOURNAL OF AGRICULTURAL ECONOMICS**

Volume 16, Number 1

July, 1984

Published by

Southern Agricultural Economics Association

## SAEA OFFICERS, 1968-85

<u>Year</u>	<u>President</u>	<u>President-Elect</u>	<u>Vice-President</u>	<u>Secretary-Treasurer</u>	
1968-69	Robert W. Rudd	Marshall R. Godwin	A. D. Seale, Jr.	John C. Redman	
1969-70	Marshall R. Godwin	Thomas J. Whatley	W. J. Lanham	Luther H. Keller	
1970-71	Thomas J. Whatley	Kenneth R. Tefertiller	Willard F. Williams	Luther H. Keller	
1971-72	Kenneth R. Tefertiller	James S. Plaxico	William E. Black	Luther H. Keller	
1972-73	James S. Plaxico	Verner G. Hurt	Charles D. Covey	Luther H. Keller	
1973-74	Verner G. Hurt	Joseph C. Purcell	James B. Bell	James H. Simpson	
1974-75	Joseph C. Purcell	Henry J. Meenen	Ted R. Nelson	James H. Simpson	
			<u>1st Vice-President</u>	<u>2nd Vice-President</u>	
1975-76	Henry J. Meenen	Richard A. King	Vernon R. Eidman	James L. Pearson	James H. Simpson
1976-77	Richard A. King	Donald E. Farris	Garnett L. Bradford	Thomas G. Brown	James H. Simpson
1977-78	Donald E. Farris	Joseph D. Coffey	Calvin R. Berry	Robert Raunikar	Gene A. Mathia
1978-79	Joseph D. Coffey	Leo V. Blakley	Bobby Eddleman	Harold M. Harris	Gene A. Mathia
1979-80	Leo V. Blakley	Garnett L. Bradford	John E. Lee, Jr.	John Holt	Gene A. Mathia
1980-81	Garnett L. Bradford	Bobby R. Eddleman	Joseph Havlicek, Jr.	Neil R. Martin, Jr.	H. Evan Drummond
1981-82	Bobby R. Eddleman	Robert Raunikar	Gerald A. Doeksen	Jerry G. West	H. Evan Drummond
1982-83	Robert Raunikar	Calvin R. Berry	Max R. Langham	J. Richard Conner	H. Evan Drummond
1983-84	Calvin R. Berry	Joseph Havlicek, Jr.	J. Richard Conner	John E. Ikerd	H. Evan Drummond
1984-85	Joseph Havlicek, Jr.	J. Richard Conner	John E. Ikerd	Lanny Bateman	H. Evan Drummond

## CORRIGENDA FOR VOLUME 15 (December 1983)

CONTENTS and Heading (p. 93) should read:

Estimating the Effects of Pesticide Use on Burley and Flue-Cured Tobacco  
G. Andrew Bernat and George W. Norton

CONTENTS and Heading (p. 111) should read:

Impacts of Household Composition on Convenience and Non-Convenience Food Expenditures in the South  
John R. Tedford, Oral Capps, Jr. and Joseph Havlicek, Jr.

# CONTENTS

## Invited Papers and Discussions

The Southern Agricultural Economics Association: Past, Present, and Future Joseph Havlicek, Jr.	1
Implications of Emerging Biotechnologies Mary E. Carter	7
Discussion: Jack McEowen	11
Policy Considerations of Emerging Information Technologies Thomas L. Sporleder	15
Discussion: Joe T. Davis	23
An Evaluation of the 1981 Farm Program for Crops: Implications for the 1985 Farm Bill Abner W. Womack, Stanley R. Johnson, William H. Meyers, and Robert Young, II	27
Discussion: Bruce Gardner	39
Agricultural Economists in Rural Development: Responsibilities, Opportunities, Risks, and Payoffs James R. Nelson and Gerald A. Doeksen	41
Discussion: Curtis Braschler	49
Water Resources Management: Policy Economics for an Era of Transitions Leonard A. Shabman	53
Discussion: Robert N. Shulstad	67
Opportunities in Farm Management: Discussion/Challenge Gregory D. Hanson	71
Use of Biophysical Simulation in Production Economics Wesley N. Musser and Bernard V. Tew	77
Discussion: William G. Boggess	87
World Agricultural Markets: Implications for U.S. Food and Agricultural Policy T. Kelley White	91
Discussion: Eric J. Wailes	99
Methods for Evaluating Economic Efficiency in Agricultural Marketing Richard L. Kilmer and Walter J. Armbruster	101
Discussion: Stephen E. Miller	111

## Submitted Articles

Granger Causality and U.S. Crop and Livestock Prices Rod F. Ziemer and Glenn S. Collins	115
--	-----

<b>Estimating Returns to Agricultural Research, Extension, and Teaching at the State Level</b>	George W. Norton, Joseph D. Coffey, and E. Berrier Frye .....	121
<b>Cooperative Antitrust Monopolization and the Theory of Contestable Markets</b>	Terence J. Centner and Michael E. Wetzstein .....	129
<b>The Effects of the 1980, 1981, and 1982 Tax Laws on Texas Rice Farmers</b>	James W. Richardson and Clair J. Nixon .....	137
<b>Use of Forecasts in Decisionmaking: The Case of Stocker Cattle in Florida</b>	Thomas H. Spreen and Carlos A. Arnade .....	145
<b>Evaluating Use of Outlook Information in Grain Sorghum Storage Decisions</b>	M. Edward Rister, Jerry R. Skees, and J. Roy Black .....	151
<b>An Empirical Analysis of the Intertemporal Stability of Risk Preference</b>	Ross O. Love and Lindon J. Robison .....	159
<b>Assessment of Journals Used by Agricultural Economists at Land-Grant Universities</b>	Josef M. Broder and Rod F. Ziemer .....	167
<b>Production, Price and Risk Factors in Channel Catfish Farming</b>	Gregory D. Hanson, Neil R. Martin, Jr., and John B. Flynn .....	173
<b>A Microcomputer Linear Programming Package: An Alternative to Mainframes</b>	David H. Laughlin .....	183
<b>Abstracts</b>		
<b>Selected Papers</b>	.....	187
<b>Symposia</b>	.....	200
<b>SAEA Reports</b>		
<b>Editors', February 1984</b>	.....	201
<b>Secretary-Treasurer's, February 1984</b>	.....	204