



# AMERICAN JOURNAL OF ALTERNATIVE AGRICULTURE®

2001  
Volume 16, Number 2

## TABLE OF CONTENTS

### Articles

- 50** Performance of a Swedish deep-bedded feeder pig production system in Iowa • M.S. Honeyman and D. Kent
- 57** Assessment of the potential to improve N fixation by cowpea (*Vigna unguiculata* (L.) Walp.) in Ghanaian soils • J.O. Fening, W. Dogbe, and S.K.A. Danso
- 66** Small grain winter cover crops for conservation of residual soil nitrogen in the mid-Atlantic Coastal Plain • F.J. Coale, J.M. Costa, G.A. Bollero, and S.P. Schlosnagle
- 73** An assessment of SARE-funded farmer research on sustainable agriculture in the north central U.S. • Margaret M. Kroma and Cornelia Butler Flora
- 81** Farmer support for publicly funded sustainable agriculture research: The case of hoop structures for swine • Julie T. Sharp and C. Clare Hinrichs
- 89** *Commentary: Challenges in designing ecological agriculture education: A Nordic perspective on change* • Charles A. Francis, Geir Lieblein, Juha Helenius, Lennart Salomonsson, Hanne Olsen, and John Porter

### Departments

Wallace Center News—56 • Upcoming Events—65 • Book Review—80

### Journal Editorial Board

Miguel A. Altieri, University of California at Berkeley • Molly D. Anderson, Tufts University • Lloyd A. Andres, USDA-ARS • M. (Charlie) Arshad, Agriculture and Agri-Food Canada • David F. Bezdicsek, Washington State University • Michael C. Brumm, University of Nebraska • Frederick H. Buttel, University of Wisconsin • Eliot Coleman, Harborside, Maine • Kenneth A. Cook, Center for Resource Economics, Washington, DC • R. James Cook, USDA-ARS • John W. Doran, USDA-ARS • Sara Ebenreck, St. Mary's College • Thomas C. Edens, Michigan State University • Frank P. Eggert, University of Maine • Lloyd F. Elliot, USDA-ARS • A. Dale Flowerday, Lincoln, Nebraska • Charles A. Francis, University of Nebraska • Stephen R. Gliessman, University of California at Santa Cruz • Joan Gussow, Columbia University • Richard R. Harwood, Michigan State University • Glenn A. Helmers, University of Nebraska • Sharon B. Hornick, International Nature Farming Research Center, Bellingham, Washington • Larry D. King, North Carolina State University • Dietrich Knorr, University of Delaware • J. Patrick Madden, World Sustainable Agriculture Association • Robert H. Miller, University of Rhode Island • James F. Parr, International Nature Farming Research Center, Bellingham, Washington • Richard L. Ridgway, USDA-ARS • Douglas L. Young, Washington State University • Raymond R. Weil, University of Maryland

### Information Services Listing AJAA

Academic Search FullTEXT • AGRICOLA (Bibliography of Agriculture) • AGRIS • Biological & Agricultural Index • CAB Abstracts (Dairy Science Abstracts; Field Crops Abstracts; Grasslands and Forage Abstracts; Irrigation and Drainage Abstracts; Maize Abstracts; Review of Agricultural Entomology; Soils and Fertilizers; Weed Abstracts; Wheat, Barley and Triticale Abstracts; World Agricultural Economics and Rural Sociology Abstracts) • Dietary Supplements (IDIS) Database • Environment Abstracts • Environmental Periodicals Bibliography • First Search (OCLC) • Sociological Abstracts • Social Planning/Policy & Development Abstracts • UnCover

### Journal Staff

Editor in Chief—Garth Youngberg  
Editor—Robert I. Papendick  
Senior Consulting Editor—James F. Parr  
Associate Technical Editors—Marion E. Simpson  
—David E. Ervin  
Assistant Editor—Suzanne P. DeMuth  
Book Review Editor—Rick Welsh  
Circulation—Joanna L. Hildebrand  
Art Director—Randy White

The American Journal of Alternative Agriculture (ISSN 0889-1893) is published quarterly by the Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International, 1621 North Kent Street, Suite 1200, Arlington, Virginia 22209-2134, in collaboration with the Department of Crop and Soil Sciences, Washington State University, Pullman, Washington 99164-6420. Neither the Wallace Center nor Washington State University is responsible for statements and opinions expressed by the authors.

### Subscription Information

Journal subscription rates (4 issues): U.S. mailing address—Library US\$70, Individual US\$36, Student US\$18 (with a copy of student I.D.). Non-U.S. mailing address (Check or money order must be drawn on U.S. bank)—Library US\$80, Individual US\$44, Student US\$22 (with a copy of student I.D.). Send address changes to American Journal of Alternative Agriculture, 1621 North Kent St., Ste. 1200, Arlington, VA 22209-2134 USA.

### About the Wallace Center

The Henry A. Wallace Center for Agricultural & Environmental Policy at Winrock International uses its expertise in research, policy analysis, and development to foster sustainable and equitable agriculture and food systems. To achieve this mission, the Wallace Center works to: measure the impacts of agricultural policy and offer appropriate policy recommendations; offer policy alternatives for sound natural resources management; understand the driving forces and the environmental and social impacts of an industrialized food system; and educate, empower, and increase participation in the food system, especially by local rural communities. Formerly the Henry A. Wallace Institute for Alternative Agriculture, established as a private, nonprofit organization in 1983, the Institute joined Winrock International Institute for Agricultural Development in January 2000. The Wallace Center is supported by donations and grants from foundations, corporations, and individuals; competitive research awards; and publication sales.

### Cover Photo

Tent-like hoop structures for swine at an Iowa State University research farm. The structures are bedded with corn stalks and used for housing market pigs and gestating sows. Photo provided by M.S. Honeyman, Iowa State University, Ames.