

TABLE OF CONTENTS

Articles

- 146** Role of ecology in lower-input, sustainable agriculture: An introduction
Benjamin R. Stinner and Garfield J. House
- 148** The concept of integrated systems in lower input/sustainable agriculture
Clive A. Edwards
- 153** Ecological genetics and evolution in insect pests: Implications for lower input agriculture
Ellen L. Simms
- 160** Species interactions and community ecology in low external-input agriculture
Stephen R. Gliessman
- 166** Strategies for research and management in reduced-input agroecosystems
Paul F. Hendrix
- 175** Impacts of low and high input agriculture on landscape structure and function
Richard Lowrance and Peter M. Groffman
- 184** Sustainable agriculture and the challenge of place
David Ehrenfeld

Departments

Book Reviews • Resources • Upcoming Events • Special Report • Institute News • Opinion • Commentary • From The Literature • Letters

Journal Editorial Board

Miguel A. Altieri, University of California at Berkeley • Lloyd A. Andres, USDA-ARS • David F. Bezdicek, Washington State University • Harold F. Breimyer, University of Missouri • Michael C. Brumm, University of Nebraska • Frederick H. Buttell, Cornell University • Katherine L. Clancy, Syracuse University • Eliot Coleman, The Mountain School-Milton Academy, Vermont • R. James Cook, USDA-ARS • Robert B. Dahlgren, Iowa State University • John W. Doran, USDA-ARS • Sara Ebenreck, American Land Resource Association • Thomas C. Edens, Michigan State University • Frank P. Eggert, University of Maine • Lloyd F. Elliott, USDA-ARS • A. Dale Flowerday, Pioneer Hi-Bred International • Charles A. Francis, University of Nebraska • Stephen R. Gliessman, University of California at Santa Cruz • Joan Gussow, Columbia University • Don F. Hadwiger, Iowa State University • Richard R. Harwood, Winrock International • Glenn A. Helmers, University of Nebraska • Larry D. King, North Carolina State University • Dietrich Knorr, University of Delaware • J. Patrick Madden, Pennsylvania State University • Robert I. Papendick, USDA-ARS • James F. Parr, USDA-ARS/USAID • Richard L. Ridgway, USDA-ARS • Neill Schaller, USDA-ERS •

Institute Board of Directors

James R. Lukens, Fox, AR; President • John A. Harris, IV, Berwyn, PA; Vice President • Earl Lawrence, Martinsville, VA; Secretary • Maureen Hinkle, Washington, DC; Treasurer • Delmar Akerlund, Valley, NE • Robert O. Blake, Washington, DC • Katherine L. Clancy, Syracuse, NY • Jerald R. DeWitt, Ames, IA • Mrs. Jean Wallace Douglas, Washington, DC • Joseph Dunsmoor, Beltsville, MD • Thomas B. Harding, Jr., Wind Gap, PA • Warren W. Sals, Lincoln, NE

Journal Staff

Editor – *Garth Youngberg*
Technical Editor – *William Lockeretz*
Associate Technical Editor – *Paul B. Marsh*
Book Review Editors – *Thomas C. Edens*
– *James F. Parr*
Contributing Editor – *Sara Ebenreck*
Assistant to the Editor – *Sarah C. Byler*
Circulation Manager/Word Processing –
Susan E. Ward
Art Director – *Randy White*

Subscription Information

The American Journal of Alternative Agriculture (ISSN 0889-1893) is published quarterly by the Institute for Alternative Agriculture, Inc., 9200 Edmonston Road, Suite 117, Greenbelt, MD 20770. The IAA is not responsible for statements and opinions expressed by authors. Subscriptions: Institutions \$40 a year (\$45 foreign); Individuals \$20 a year (\$25 foreign); IAA Members \$15 a year (\$20 foreign); Students \$10 a year (\$15 foreign). Single copies \$6. Second Class postage paid at Greenbelt, MD. Postmaster: Send address changes to American Journal of Alternative Agriculture, 9200 Edmonston Road, Suite 117, Greenbelt, MD 20770.

Institute Information

The Institute for Alternative Agriculture is a nonprofit, tax-exempt research and education organization established in 1983 to encourage and facilitate the adoption of low-cost, resource-conserving and environmentally-sound farming methods. It works closely with producer groups, public research and education institutions, and government agencies in promoting a sustainable agriculture system.

Its programs include providing a national information clearinghouse, serving as a voice for sustainable agriculture in Washington, and developing and implementing research and educational outreach programs. It holds an annual scientific symposium and publishes a monthly newsletter.

The Institute is governed by a 13-member Board of Directors, which includes several commercial-scale organic farmers, and maintains a small professional staff. It is supported by memberships and donations and grants from foundations, corporations, and individuals.

Cover

The cover painting by Bobbi Tull Pratte, a Virginia artist, is intended to portray the hierarchical nature of ecological organization. Ecological interactions occur all the way from the level of the individual organism (e.g., the frog) up to the complex interrelation between agroecosystems and other ecosystems in the landscape (e.g., farm and city). The emphasis on interactions at all ecological levels forms the underlying theme for papers in this volume.