

# Southern Organic Resource Guide

A Reference Handbook of  
Organic Resources  
in the South



Arkansas, Kentucky,  
Louisiana, Mississippi,  
and Tennessee

*Includes:*

Certification Agencies • Educational and Outreach Resources •  
Certified Organic Operations • Suppliers of Inputs for Organic  
Farms • An Introduction to Organic Research

Also available online at [www.attra.ncat.org](http://www.attra.ncat.org)

# Southern Organic Resource Guide

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*A publication of the*  
**Independent Organic Inspectors Association (IOIA)**  
[www.ioia.net](http://www.ioia.net)



*In collaboration with the*  
**National Center for Appropriate Technology (NCAT)**  
[www.ncat.org](http://www.ncat.org)

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[www.rma.usda.org](http://www.rma.usda.org)

August, 2005

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# Introduction to the Southern Organic Resource Guide

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## Why was this guide created?

Organic products are among the fastest growing agricultural goods in the U.S. and worldwide. Part of this growth is attributable to the advent of the National Organic Program (NOP) and the National Organic Standards (USDA, 2000. National Organic Program Final Rule. *www.ams.usda.gov/nop*). These national standards have encouraged large production, processing, and distribution firms to develop organic divisions in their companies. Meanwhile, smaller scale producers increasingly see organics as a viable niche market.

The South enjoys long growing seasons and a varied choice of crops that can be produced. The climate, however, creates unique challenges to organic production, especially in pest and disease management. The infrastructure to support organic production is also a challenge. The development of regional organic certification agencies and markets in the South has been slow compared to other regions of the U.S. Currently, there are few certified organic operations, USDA-accredited certifying agents, and organic inspectors serving the states included in this guide. Involvement of land grant universities and their associated Extension Services in research and outreach related to organics has also been limited in this area. As a result, many southern farmers and farm advisors are unfamiliar with organic methods and regulations.

With interest and organic markets steadily growing, many growers are looking toward organic production, to become more ecologically and economically sustainable. For organics to thrive in the South, market development and technical support are needed. This support is especially important to growers making the transition to organic production, since they are most at risk of misinterpreting the Organic Standards, and most in need of technical assistance with their production practices and market development.

This guide is designed to help producers, and the people who serve them, identify organic information, inputs, markets, and certification assistance available in the South. As the first of its kind for Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee, we hope that this guide may also help build an organic infrastructure in the South by encouraging networking among farmers, researchers, educators, and business people.

## Who will find this guide useful?

### ***Farmers and advisors to farmers***

This guide will help these people connect with one another. These connections are important for sharing technical information as well as for market development. According to the 4th National Organic Farmers™ Survey, conducted by the Organic Farming Research Foundation (2004, [www.ofrf.org/publications/index.html](http://www.ofrf.org/publications/index.html)), organic farmers felt that other farmers were their most useful source of marketing information. This guide also helps producers and others identify sources for organic inputs and seeds, local and regional organic markets, and people involved in organic-specific research.

### ***Consumers***

This guide includes information on farmers' markets and regional cooperatives. It also lists all certified organic operations in Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee. By buying organic food direct from the producer, consumers can be assured of getting fresher food, while supporting growers who are part of their community.

### ***Businesses that sell products used by organic producers***

This guide describes existing organic operations in the South, provides descriptions of some of these operations, and lists state and local organizations and agencies that provide assistance to organic producers. This information can help businesses better identify the needs of organic producers in their area, and thereby reach out to potential clients.

## How is this guide organized?

Following the introduction are several regional resource lists.

- Where to Buy Organic Food
- Certifying Agents Currently Operating in The Southern States
- International, National, and Regional Educational and Outreach Resources
- Sources of Soil Amendments, Crop Inputs, And Livestock Supplies
- Sources of Organic and Untreated Non-GMO Seeds
- Sources of Production Equipment and Supplies

Then, state-by-state sections are provided, each with the following information.

- Statistics on the number and growth of organic operations in the state
- State resources including programs from state departments of agriculture, farmers' markets, and university research and Extension activities
- Contact information and descriptions for all certified organic operations
- A state map locating the certified organic operations
- Profiles of featured operations, selected for innovative production or marketing techniques
- State farm characteristics from [www.ers.usda.gov/StateFacts/](http://www.ers.usda.gov/StateFacts/)

While every effort was made to include all operations, certifying agents, educational and outreach organization, and business, we may have inadvertently omitted some. Any omissions are unintentional. Product and seed listings are not comprehensive. These lists were created largely from those suggested by regional producers who were interviewed in compiling this guide. Inclusion or omission implies no endorsement or otherwise by the guide or its authors.

Following the state-by-state listings are three short resources that we thought might be of interest to readers of this guide.

- Most common mistakes made by certified crop operators and/or certification applicants
- Tips on setting up a farm tour
- An introduction to organic research

## **What is meant by “organic”?**

Agricultural products sold as “organic” in the U.S. and bearing the USDA organic seal must be produced and handled in accordance with the National Organic Program (NOP) Rule, as established by the Organic Foods Production Act of 1990, effective October 21, 2002. The USDA Agricultural Marketing Service (AMS) regulates the use of the term “organic” and approves its use only for those producers who have been inspected and certified organic by an accredited third-party. (Note that producers selling less than \$5000 a year in organic products may advertise them as organic without undergoing inspection and certification, but may not use the USDA organic seal.) Complete text of the regulations is available at [www.ams.usda.gov/nop](http://www.ams.usda.gov/nop). Anyone seeking organic certification, or wanting to advise those who are, needs to be familiar with all the NOP provisions.

## Why Do Organic Farmers Choose to Farm Organically?

Out of the 17 categories provided, respondents identified their most important reasons for farming organically as:

- Land stewardship, ecological sustainability
- Chemical avoidance for family and farmworker health
- Chemical avoidance for environmental health
- Organic represents good farming practices
- Ecological principles—view farm as ecological system

Source: OFRF, 2004, [www.ofrf.org/publications/index.html](http://www.ofrf.org/publications/index.html)

Private certification agencies and state organic certification programs, accredited by the USDA, verify organic production and handling practices and grant (or deny) certification based on all available information, including the annual inspections. Producers must document inputs, field activities, production and harvest practices, and sales to show compliance with organic standards. For organic certification, fields must be free of prohibited materials (including synthetic fertilizers, prohibited pesticides, and genetically modified crops) for a minimum of 36 months prior to harvest of an organic crop.

It is the nature of organic farming—and the intent of the NOP Rule—to use cultural and biological practices that control insects, weeds, and disease, while simultaneously building soil fertility and enhancing the overall health of the agricultural ecosystem. Organic farming systems are guided by nature but require intensive management. The following are part of what is required for USDA organic certification.

The producer must:

- Select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion. [205.203(a)]
- Manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials. [205.203(b)]
- Manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. [205.203(c)]

- Use proactive management practices to prevent pests, weeds, and diseases. These include crop rotation, sanitation, and cultural practices. Pest problems may also be controlled by introducing natural predators or traps. Weeds may be controlled with cultivation, mowing, mulching (some restrictions on materials), grazing, or flaming. Only when those proactive practices are insufficient may a producer apply a biological or botanical substance, or an allowed synthetic substance listed on the National List. [205.206, 205.601]
- Use production practices...that maintain or improve the natural resources of the operation, including soil and water quality. [205.200]
- Feed organic livestock only organic feed. Farmers must promote animal health through nutrition, pasture management, appropriate housing, minimal stress, and preventative health-care practices. [205.236 – 205.239]

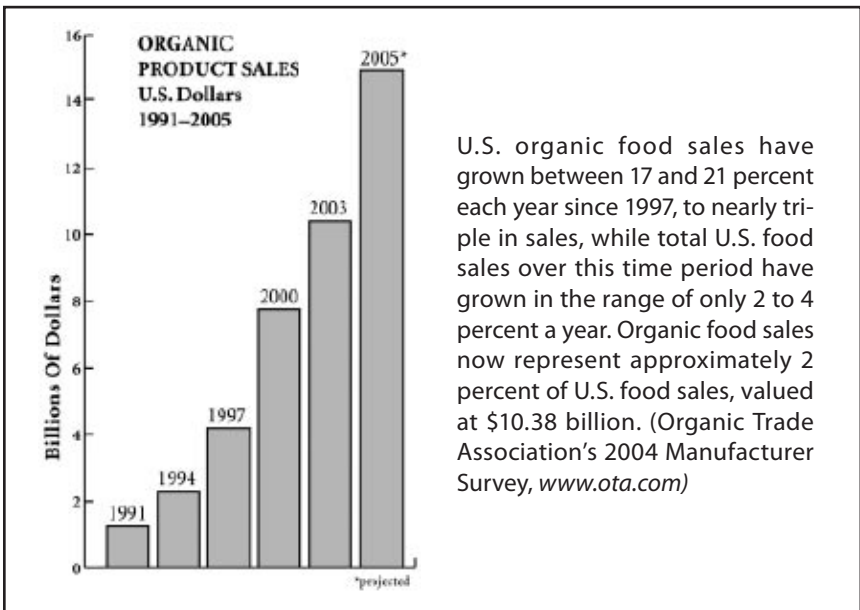


# Where to Buy Organic Food

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- 1) **Direct from the farmer.** Use this guide to find organic farmers. Many market directly. Some of them feature produce stands, U-pick operations, or mail order.
- 2) **Farmers' Markets.** To find a market near you, visit [www.ams.usda.gov/farmersmarkets](http://www.ams.usda.gov/farmersmarkets) or [www.localharvest.org](http://www.localharvest.org).
- 3) **Join a CSA (Community Supported Agriculture).** CSA farms are partnerships between consumers and farmers. For a fee (usually paid for an entire season), subscribing consumers receive shares (usually weekly) of fresh, locally grown food in season. Some CSAs deliver to collection points. Others arrange for their members to come to the farm to pick up their allotments. Some include eggs and meat products. Consumers are guaranteed fresh produce, but they share production risks with their farmer. Farmers receive operating capital at the beginning of the season, have less risk, and are able to focus more on production and less on marketing.
- 4) **Local food buying clubs** are the best source of organic food in many areas. United Natural Foods Inc. is one option available in Kentucky and Tennessee. Each state has more than 30 UNFI buying clubs. See [www.unitedbuyingclubs.com](http://www.unitedbuyingclubs.com).
- 5) **Community Food Co-ops.** To find one near you, do an on-line search for food buying cooperatives. A database of health food stores and co-ops in the U.S. can be found at [www.greenpeople.org/search2nd.cfm?type=Food\\_Coops](http://www.greenpeople.org/search2nd.cfm?type=Food_Coops). Examples of co-ops in the southern region are:
  - Ozark Natural Foods, Fayetteville, AR [www.ozarknaturalfoods.com/](http://www.ozarknaturalfoods.com/)
  - Good Food Co-op, Lexington, KY [www.goodfoods.coop](http://www.goodfoods.coop)
  - Sunshine Health Foods, Shreveport and Bossier City, LA [www.sunshinehf.com](http://www.sunshinehf.com)
  - Eve's Market, New Orleans, LA [www.evesmarket.com](http://www.evesmarket.com)
  - Rainbow Whole Foods Cooperative Grocery, Jackson, MS [www.rainbowcoop.org](http://www.rainbowcoop.org)
  - Marketplace Co-op, Nashville, TN [www.marketplaceco-op.org](http://www.marketplaceco-op.org)
  - Midtown Food Co-op, Memphis, TN [www.midtownfoodcoop.org](http://www.midtownfoodcoop.org)
  - Morningside Buying Club, Liberty, TN [morningsidefarm.com](http://morningsidefarm.com)

- Knoxville Community Food Cooperative, Knoxville, TN  
[www.knoxville.coop](http://www.knoxville.coop)
  - Whole Earth Co-op, Gatlinburg, TN [www.wholeearthgrocery.com](http://www.wholeearthgrocery.com)
- 6) **State or regional guides.** Check with your state to see whether it publishes guides for local food. For example, the Arkansas Agriculture Product Market sponsors Naturally Arkansas. Naturally Arkansas has a listing of the farmers' markets, U-pick farms, retail vendors, and other information about agricultural production within the state.
  - 7) **Ozark Cooperative Warehouse** started in 1989 as a local buying club and currently has more than 1,000 members and stocks more than 6,000 natural and organic products. Members are from Alabama, Arkansas, Georgia, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and Texas. Contact Ozark Cooperative Warehouse at 479-521-4920/ 479-521-9100, or e-mail [www.ozarkcoop.com](http://www.ozarkcoop.com).
  - 8) **Major health food chains**, such as Whole Foods or Wild Oats Natural Marketplace, offer a wide variety of organic products in many larger cities.
  - 9) **Most major supermarkets** have organic produce and dairy sections; many have an organic section.



# Certifying Agents Currently Operating in the South

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*(Listed in alphabetical order)*

<b>Certifying Agency</b>	<b>States Served</b>
<b>Indiana Certified Organic (ICO)</b> Cissy Bowman 8364 SSR 39 Clayton, IN 46118 317-539-4317 <i>cvof@iquest.net</i>	<b>AR, KY, LA, TN</b>
<b>International Certification Services, Inc.</b> (dba Farm Verified Organic and ICS-US) 301 5th Ave., SE Medina, ND 58467 Robert Simmons or Christina Dockter 701-486-3578 <i>www.ics-intl.com</i>	<b>MS</b>
<b>Louisiana Department of Agriculture and Forestry</b> Harry Schexnayder, Organic Program Coordinator 5825 Florida Boulevard, Suite 1023 Baton Rouge, LA 80806 225-925-8047 <i>HSchexnayder@ldaf.state.la.us</i>	<b>LA</b>
<b>Mississippi Department of Agriculture and Commerce</b> P.O. Box 1609 Jackson, MS 39205 Kevin Riggin 601-359-1138 <i>www.mdac.state.ms.us</i>	<b>MS</b>
<b>Ohio Ecological Food and Farm Association (OEFFA)</b> Stephen F. Sears 9665 Kline Rd. West Salem, OH 44287-9562 419-853-4060 <i>organic@oeffa.com</i>	<b>KY</b>

**OneCert, Inc.**

**MS**

2811 Tennyson St.  
Lincoln, NE 68516  
Sam Welsch  
402-420-6080  
*www.onecert.net*

**Oklahoma Department of Agriculture (ODA)**

**AR**

Chad Goss  
2800 N. Lincoln Blvd.  
Oklahoma City, OK 73105  
405-522-5898  
*cbgoss@oda.state.ok.us*

**Oregon Tilth (OTCO)**

**AR, LA**

Chris Schreiner  
470 Lancaster Dr.  
Salem, OR 97301  
503-378-0690  
*www.tilth.org*

**Organic Inspectors' Perceptions of Risks Faced  
by Organic Producers**

Organic inspectors are the eyes, ears, and nose of the certification agency and are often the only representatives to physically visit the farm. They verify the accuracy of the grower's Organic System Plan and assess the operation's compliance with the regulations by conducting an on-site inspection before the operation can be certified. They also conduct the required annual inspections.[7 CFR 205.403(a)] In the inspection process they become closely acquainted with both grower and operation. Recognizing that unique experience and insight, the IOIA gathered information from organic inspectors regarding the risks they perceived for transitioning and renewing organic producers.

Their answers:

- Risks are generally greater for producers who are in the process of transition to organics.
- The greatest risks for producers making the transition to organics are recordkeeping, human resource management, budgeting, and coping with the economic transition
- The greatest risks for experienced producers are budgeting, agency and neighbor interactions, access to labor, and management. Market identification and access and record keeping also pose concerns for these producers.

*(Born, 2005)*

**Organic Crop Improvement Association (OCIA)**

**AR**

Jeff See

6400 Cornhusker, Suite 125

Lincoln, NE 68507

402-477-2323

*www.ocia.org*

**Quality Certification Services (QCS)**

**AR, LA, TN**

(Formerly FOG)

Jonathan Austin

P.O. Box 12311

Gainesville, FL 32604

352-377-0133

*www.QCSinfo.org*

**Stellar Certification Services, Inc.**

**AR**

Jim Fullmer

25844 Butler Road

Junction City, OR 97448

541-998-5691

*stellar@demeter-usda.org*

**Self-profile survey of USDA-accredited organic certifiers.**

In 2003, The Rodale Institute collaborated with the Organic Farming Research Foundation (OFRF) to conduct a self-profile survey of USDA-accredited organic certifiers. This survey was built on the prior work of OFRF, which provided farmers with an annual directory of organic certifiers from 1992 through the start of the start of the National Organic Program in 2002. The 2003 survey data is in searchable database that is available on the New Farm Web page at *www.newfarm.org/ocdbt/*.

# International, National, and Regional Educational and Outreach Resources

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(Listed in alphabetical order)

The Southern Organic Resource Guide does not specifically endorse organizations or publications. We compiled this list of resources to assist with organic production and handling. Most of those listed were identified as useful by organic farmers in the South. Please refer to the state-by-state sections of this Guide for more resources within each state.

1) **ACRES USA**

800-355-5313; 512-892-4400; 512-892-4448 FAX

*www.acresusa.com*

*Acres USA* is North America's oldest, largest magazine covering eco-agriculture. Published monthly, this magazine offers a comprehensive guide to sustainable agriculture. They publish the latest techniques for growing crops and livestock and sponsor an annual conference.

2) **Alternative Farming Systems Information Center (AFSIC)**

National Agricultural Library, U.S. Department of Agriculture

10301 Baltimore Ave., Room 132

Beltsville, MD 20705-2351

301-504-6559

301-504-6927 FAX

*afsic@nal.usda.gov*

*www.nal.usda.gov/afsic*

The Alternative Farming Systems Information Center (AFSIC) is one of several centers at the National Agricultural Library (NAL) that provide in-depth coverage of specific agricultural subjects. AFSIC focuses on sustainable and alternative agricultural systems, including organic farming and marketing and alternative crops. Recent organic-related guides include *Organic Livestock Production: A Bibliography*; *Organic Agricultural Products: Marketing and Trade Resources*; and *Organic Gardening: A Guide to Resources 1989-September 2003*. AFSIC provides library services (literature searches and resource referrals) and free publications. NAL, the foremost agricultural library in the world, is one of four U.S. national libraries, along with the Library of Congress, the National Library of Medicine, and the National Library of Education.

3) **Appalachian Sustainable Development (ASD)**

289A W. Main Street

P.O. Box 791

Abingdon, Virginia 24212  
276-623-1121  
[asd@eva.org](mailto:asd@eva.org)

ASD is a not-for-profit organization working in 10 counties of the Appalachian section of Virginia and Tennessee, a region that suffers from double-digit unemployment, emigration of young people, and chronic environmental problems. Formed in 1995 following a year-long community strategic planning process, ASD focuses on developing healthy, diverse, and ecologically sound economic opportunities through education and training, and the development of cooperative networks and marketing systems. ASD organizes workshops for farmers and gardeners, offers free technical advice for local growers, seeks to educate the general public about the benefits of organic farming, and helps to make locally grown organic foods available to area consumers. ASD maintains a small library of ATTRA materials and other publications relating to sustainable farming. A hands-on resource for farmers—the *Appalachian Harvest Growers Manual*—is available for \$10.00. There is a wide variety of agricultural experience among the staff and participating farmers, and they are willing to help other farmers improve their farmland and their livelihoods. ASD also coordinates the Appalachian Harvest network of organic growers—a network of area farmers who cooperatively raise organic produce for the wholesale market.

- 4) **ATTRA-National Sustainable Agriculture Information Service**  
P.O. Box 3657  
Fayetteville, AR 72702  
800-346-9140  
[www.attra.ncat.org](http://www.attra.ncat.org)

ATTRA is operated by the National Center for Appropriate Technology under a grant from the Rural Business-Cooperative Services, USDA. ATTRA publications cover organic production methods for every commonly produced crop and species of livestock. They also have information on the National Organic Program and the organic certification process, as well as workbooks to help producers establish and maintain certification. All publications are free to the public. ATTRA's toll-free number connects callers to specialists knowledgeable about farm production, land management, and product marketing. More than 230 technically detailed but user-friendly publications are available free-of-charge either in print by calling 800-346-9140 or electronically at

*www.attra.ncat.org*. ATTRA specialists are also available to speak at conferences and to collaborate in project activities that promote sustainable and organic agriculture.

5) **Berea Garden Party**

Berea, KY

*bereagardenparty@yahoo.com*

*www.geocities.com/bereagardenparty*

Aiming to share social responsibility through the local sharing of food, labor, and goods and the networking of sustainability-related knowledge, news, and events, they serve as a model for the formation of other Garden Party groups.

6) **Biodynamic Association of America**

25844 Butler Road

Junction City, OR 97448

888-516-7797 or 541-998-0105

541-998-0106 FAX

*biodynamic@aol.com*

*www.biodynamics.com*

The Biodynamic Farming and Gardening Association (BDA), a non-profit organization open to the public, was formed in the U.S. in 1938 to foster, guide, and safeguard the Biodynamic method of agriculture. Biodynamic agriculture was inaugurated in 1924 by Austrian scientist Rudolf Steiner. Biodynamics is a worldwide agricultural movement. It is one of the oldest non-chemical agricultural movements and pre-dates organic agriculture by some twenty years. In addition to avoiding chemicals, Biodynamics seeks to actively work with the health-giving forces of nature. Farms can be certified Biodynamic by the Demeter Association, an international certifier.

7) **Carolina Farm Stewardship Association**

Tony Kleese, Executive Director

P.O. Box 448

Pittsboro, NC 27312

919-542-2402

*www.carolinafarmstewards.org*

Emile DeFelice, SC Director/

CFSA Livestock Coordinator

935 Main St. #1

Columbia, SC 29201

803-779-1124

CFSA is a membership-based, nonprofit organization of more than 750 farmers, processors, gardeners, businesses, and individuals in North and South Carolina who are committed to sustainable agriculture and the development of locally based, organic food systems. Their mission is to



support and expand local and organic agriculture in the Carolinas by inspiring, educating, and organizing farmers and consumers. Farmers, gardeners, and consumers founded the organization in 1979. CFSA has local chapters that develop educational programs, work on local solutions to pressing environmental and social problems, and provide a way for members to interact with others in their region. CFSA sponsors an excellent Sustainable Agriculture Conference each November, an Intern Referral Service, Elementary School Sustainable Gardening Curriculum, and local farm tours; publishes a bi-monthly membership newsletter, *Stewardship News*; and maintains a comprehensive Web site with good, basic educational materials for those interested in becoming certified.

8) **Clemson University**

Dr. Geoffrey Zehnder, Professor of Entomology and Coordinator,  
IPM and Sustainable Agriculture Programs  
Clemson University  
114 Long Hall, Box 340315,  
Clemson, SC 29634-0315,  
864-656-6644  
*zehnder@clemson.edu*

Clemson University maintains a certified organic demonstration farm and a USDA-NOP accredited certification program (Clemson University Feed and Fertilizer Services) within the state of South Carolina.

9) **Clinch Powell Community Kitchens / Appalachian Spring Cooperative**

Greg Golden, Kitchens Manager  
271 Highway 131  
Treadway, TN 37881  
423-733-4007 (phone and FAX)  
*ggoldenkit@hotmail.com*

The Clinch Powell Community Kitchens, located in Hancock County, Tennessee, offers a low-cost, state-of-the-art facility for processing foods for commercial resale. It is designed especially for the small- to medium-size food businesses, with technical expertise available on-site. The Appalachian Spring Cooperative includes more than two dozen such food entrepreneurs, and offers assistance in labeling, bulk buying of jars and other supplies, and marketing.

10) **Community Farm Alliance**

Deborah Webb  
614-A Shelby Street

Frankfort, KY 40601  
502-223-3655  
502-223-0804 FAX  
*www.communityfarmalliance.com*

The Community Farm Alliance is a grassroots organization committed to maintaining small family farms using sustainable methods of producing agricultural products.

**11) Community Food Security Coalition**

P.O. Box 209  
Venice, CA 90294  
310-822-5410  
*cfsc@foodsecurity.org*  
*www.foodsecurity.org*

The Community Food Security Coalition (CFSC) is dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times. They seek to develop self-reliance among all communities in obtaining their food and to create a system of growing, manufacturing, processing, making available, and selling food that is regionally based and grounded in the principles of justice, democracy, and sustainability. CFSC has more than 325 member organizations.

**12) Consortium for Sustainable Agriculture Research and Education**

Kim Leval  
541-687-1490  
*kimleval@qwest.net*  
*http://www.cfra.org/csare/default.htm*

The consortium is dedicated to facilitating cooperation and collaboration among those involved in sustainable agriculture. They publish a newsletter (*Inquiry in Action*, formerly *Consortium News*) that reports on happenings in sustainable agriculture, lists new publications, posts job announcements, and includes an events calendar.

**13) Florida Certified Organic Growers and Consumers, Inc. (FOG)**

Marty Mesh  
P.O. Box 12311  
Gainesville, FL 32604  
352-377-6345  
*www.foginfo.org*

FOG links organic producers and consumers to educate the public about local and organically produced agricultural products, sponsors workshops, and publishes a quarterly newsletter, *Foghorn*.

14) **Farming Magazine**

Sarah Baird, Editor

P.O. Box 85

Mt. Hope, OH 4466

800-915-0042

*farmingplc@farmingmagazine.net*

*www.farmingmagazine.net*

Quarterly magazine for the small-scale organic farmer. It explores “the intricate bonds connecting people, land, and community.”

15) **Georgia Organics, Inc.**

Alice Rolls, Executive Director

P.O. Box 8924

Atlanta, GA 31106

770-993-5534

*www.georgiaorganics.org*

Georgia Organics provides a variety of training venues for growers, gardeners, consumers, agricultural agents, and educators on topics concerning sustainable food and fiber systems and growing techniques. They host on-farm field days, an annual conference each winter that includes a trade show and children’s program, GO Feasts of local and sustainable produced foods, and a monthly Organic Living Series. Special programs include the Direct to Consumer Marketing Program to help family farmers earn more of the consumer’s food dollar, and Outreach and Mentoring to Underserved and Minority Farmers, which pairs experienced growers with new growers as part of a mentoring program that includes seminars and valuable hands-on learning through site visits to mentor and mentee farms.

*Building Capacity in Organic Agriculture Resource Manual*, 2nd edition, produced in collaboration with USDA-RMA, is available for purchase and includes fact sheets titled Soil Health, Managing Pests Organically, and What is Organic Agriculture? In addition, an on-line workbook at *www.georgiaorganics.org/markettool/* helps farmers identify the direct marketing strategies that will best fit their farms. It provides up-to-date, key information on these markets in the South and additional references to successfully meet the challenges and opportunities in direct marketing.

**16) Gulf States Organic Association (AR, MS, and LA)**

Gerd Oppenheim, Board Member  
P.O. Box 267  
Norwood, LA 70761  
504-866-6551

GSOA is a membership association that promotes organic agriculture.

**17) Herbert Green Agroecology**

825C Merrimon Avenue, Box 334  
Asheville, NC 28804  
858-258-1757  
828-252-6943 FAX  
*info@greenagroecology.com*  
*www.greenagroecology.com*

Herbert Green Agroecology is a new, private company solely owned and operated by Dr. Mark A. Boudreau. Begun in 2004, this company provides short- or long-term temporary research and education support in organic and sustainable agriculture for farmers and researchers in the Southeast. A central component of this work is the Extension Underground, a network of professionals from the Southeast and Midwest who have knowledge and experience specific to organic farming. Organic producers can hire these professionals to help them with production, certification, or business management questions.

**18) Independent Organic Inspectors Association (IOIA)**

Margaret Scoles, Executive Director  
P.O. Box 6  
Broadus, MT 59317  
406-436-2031 (phone and FAX)  
*ioia@ioia.net*  
*www.ioia.net*

IOIA is an international membership association of more than 225 organic inspectors from 15 countries. IOIA trains organic inspectors around the world, sponsoring at least a dozen trainings each year on inspecting organic crop, livestock, and processing operations, as well as on advanced organic inspection topics. IOIA schedules organic inspector trainings, responds to requests from interested co-sponsors, and provides scholarships. IOIA publishes inspection manuals and a quarterly newsletter, *The Inspectors Report*; maintains an inspector accreditation program; and engages in related training for the organic industry.

IOIA collaborated with OTA to produce the *Good Organic Retailing Practices Manual*. IOIA membership includes several supporting categories. Inspector members work as independent contractors or employees of certification agents. Many also serve as trainers or consultants to those who need training to prepare for certification, while strictly maintaining separation of their roles as consultants and inspectors. IOIA maintains a comprehensive Web site.

**19) Information Collection and Exchange Peace Corps**

1990 K Street, N.W.  
Washington, DC 20526  
[www.peacecorps.gov/center](http://www.peacecorps.gov/center)

Peace Corps publishes manuals to aid Peace Corps Volunteers (PCVs) and others working in developing countries. The manuals are excellent, practical, and applied. They provide background and how-to information to PCVs who might not be trained in the particular task at hand. The manuals are reprints of other publications, publications commissioned by the Peace Corps, or manuals written by PCVs. Their *Bibliography of ICE Publications* lists all the publications, and they will send the bibliography to individuals in the U.S. While materials housed in Washington are for the use of volunteers overseas and cannot be sent to U.S. addresses, many of these publications are available in the government documents section of most major university libraries.

**20) International Federation of Organic Agricultural Movement (IFOAM)**

Charles-de-Gaulle-Strasse Str 5  
53113 Bonn, Germany  
+49-228-926-50-10  
[www.ifoam.org](http://www.ifoam.org)

**Sources of marketing information found most useful by organic farmers**

Other farmers were cited by farmers as the most useful and most frequently used resource for marketing information.

Farmers also cited as useful:

- Local and regional organic market development
- Organic-specific research and Extension services
- Organic price reporting services
- Directories of organic product buyers

(OFRF 4th Annual Organic Farmers' Survey, 2004, [www.ofrf.org/publications/index.html](http://www.ofrf.org/publications/index.html))

IFOAM's mission is leading, uniting, and assisting the organic movement in its full diversity. Their goal is the worldwide adoption of ecologically, socially, and economically sound systems that are based on the principles of organic agriculture.

**21) Leopold Center for Sustainable Agriculture**

209 Curtiss Hall

Iowa State University

Ames, IA 50011-1050

515-294-3711

*www.leopold.iastate.edu*

The Leopold Center is a research and education center with statewide programs to develop sustainable agricultural practices that are both profitable and conserve natural resources. It was established under the Groundwater Protection Act of 1987 with a three-fold mission: to conduct research into the negative impacts of agricultural practices, to assist in developing alternative practices, and to work with ISU Extension to inform the public of Leopold Center findings.

In late 2002, a vision statement was adopted: The Leopold Center for Sustainable Agriculture explores and cultivates alternatives that secure healthier people and landscapes in Iowa and the nation. As part of this new orientation, three research initiatives replaced the more general competitive grants research program. Each of the three research programs—marketing and food systems, ecology, and policy—is responsible for its own projects and educational events.

**22) Michael Fields Agricultural Institute**

W2493 County Road ES

East Troy, WI 53120

*www.michaelfieldsagainst.org*

Michael Fields Agricultural Institute is a nonprofit education and research institute that is dedicated to preserving sustainable and organic agriculture. They provide student training, public policy support for sustainable agriculture, and sustainable food system development.

**23) National Campaign for Sustainable Agriculture**

P. O. Box 396

Pine Bush, NY 12566

914-744-8448

914-744-8477 FAX

*campaign@magiccarpet.com*

This organization alerts its members to sustainable agriculture concerns that need an immediate response. They mail a one-page summary to members that gives background on the issue, a suggested response, and where to submit the response. Members are free to respond as they feel appropriate. Membership is free and available by contacting their office.

24) **Midwest Organic and Sustainable Education System (MOSES)**

P.O. Box 339  
Spring Valley, WI 54767  
715-772-3153  
*info@mosesorganic.org*

MOSES is a nonprofit organization working to promote organic and sustainable agriculture in the upper Midwest. Their focus is providing education for farmers. They host the Upper Midwest Organic Farming Conference and Organic University in late February in LaCrosse, Wisconsin; publish a bi-monthly newspaper, *The Organic Broadcaster*; and maintain a comprehensive list of publications for sale.

25) **Missouri Alternatives Center (MAC)**

531 Clark Hall  
Columbia, MO 65211  
573-882-1905  
*agebb.missouri.edu/mac*

MAC is a University of Missouri Outreach and Extension program that provides information and resources on alternative agricultural methods, including organic production.

26) **National Association for State Organic Programs (NASOP)**

Doug Crabtree, President  
Montana Department of Agriculture Organic Program  
*dcrabtree@mt.gov*

NASOP is a National Association of State Departments of Agriculture (NASDA) affiliated organization. It is comprised of state organic marketing programs and state certification agencies. They provide a networking system for the state organic programs, state citizens, and the National Organic Program.

27) **The NEW FARM electronic newsletter**

*www.newfarm.org*

The Rodale Institute, a global leader in regenerative agriculture, is devoted to innovative agriculture research, outreach, and training through

The New Farm® programs. The Institute works with people worldwide to achieve a regenerative food system that renews and improves environmental and human health, working with the philosophy that “Healthy Soil = Healthy Food = Healthy People.” The Web site reaches a global community of food producers to exchange valuable “farmer-to-farmer know-how.” NewFarm.org presents compelling success stories and expert resources for crop and livestock production, direct marketing, local food systems, policy campaigns, and community-building collaborations.

**28) The Non-GMO Report**

Ken Roseboro, editor

641-472-1491 or 800-854-0586

[ken@non-GMOreport.com](mailto:ken@non-GMOreport.com)

[www.non-gmoreport.com](http://www.non-gmoreport.com)

*The Non-GMO Report* is the only monthly newsletter that provides information needed to respond to the challenges of genetically modified (GM) foods. Subscribers to this report receive a copy of the annual *Non-GMO Sourcebook, a Guide to Experts in GMO Testing, Identity Preservation, and Non-GMO Certification*. The report includes a buyers’ guide to suppliers of non-GMO seeds, grains, ingredients, and foods, and for sources of organic seeds.

**29) Organic Consumers Association**

6101 Cliff Estate Rd.

Little Marais, MN 55614

218-226-4164

218-353-7652 FAX

<http://www.organicconsumers.org/index.htm>

The OCA is a grassroots nonprofit public interest organization that deals with crucial issues of food safety, industrial agriculture, genetic engineering, corporate accountability, and environmental sustainability. It is the only organization in the U.S. focused exclusively on representing the views and interests of the nation’s estimated 10 million organic consumers. The OCA serves as a global clearinghouse for information and grassroots technical assistance for organic consumers.

**30) Organic Farm Research Foundation (OFRF)**

P.O. Box 440

Santa Cruz, CA 95060

831-426-6606

831-426-6670 FAX

[www.ofrf.org](http://www.ofrf.org)



The Organic Farming Research Foundation is a nonprofit organization whose mission is to sponsor research related to organic farming practices, to disseminate research results to organic farmers and growers interested in adopting organic production systems, and to educate the public and decision-makers about organic farming issues. They publish a newsletter, focusing on organic research. For results of the Fourth National Organic Farmer's Survey, see *Sustaining Organic Farms in a Changing Organic Marketplace* (OFRF, Erica Walz, 2004). [www.ofrf.org/publications/survey/Final.Results.Fourth.NOF.Survey.FastView.pdf](http://www.ofrf.org/publications/survey/Final.Results.Fourth.NOF.Survey.FastView.pdf).

31) **Organic Materials Review Institute (OMRI)**

Box 11558  
Eugene, OR 97440-3758  
541-343-7600  
[www.omri.org](http://www.omri.org)

OMRI is a nonprofit organization that reviews materials used for crop and livestock production and processing, to assess their compliance with National Organic Program standards. They publish a *Brand Names Material List* that is available on-line free of charge to the public. The *Brand Names Material List* is not comprehensive for all materials; it is limited to those companies that have paid to have their materials reviewed by OMRI. OMRI also publishes a Generic Materials List that is available to subscribing certifying agents and individuals.

32) **Organic Producer**

32647 US Hwy 14  
Lone Rock, WI 53556  
877-786-4646  
[www.organicproducermagazine.com](http://www.organicproducermagazine.com)

With their first issue in July/August 2005, the *Organic Producer* is the first national print magazine specifically for organic farmers. It is available bimonthly in both print and electronic formats. Its publishers actively solicit farmer involvement in the magazine.

33) **Organic Trade Association (OTA)**

50 Miles Street  
P.O. Box 1078  
Greenfield, MA 01302  
413-774-7511  
413-774 6432 FAX  
[ota@igc.apc.org](mailto:ota@igc.apc.org)  
[www.ota.com/](http://www.ota.com/)

OTA represents the organic industry in Canada and the United States. It is made up of growers, farmer associations, processors, retailers, distributors, shippers, brokers, consultants, and certifiers. The association is concerned with all aspects of the organic agriculture industry, including production, markets, and legislation. It sponsors the annual "All Things Organic" food show and maintains an extensive Web site, with fact sheets and search tools to locate a variety of inputs and markets.

**34) Ozark Cooperative Warehouse**

P.O. Box 1528  
Fayetteville, Arkansas 72702  
479-521-4920 or 479-521-9100  
*www.ozarkcoop.com*

The Ozark Cooperative Warehouse was started in 1989 as a local buying club with two products. It now has more than 1,000 members and stocks more than 6,000 natural and organic products. Members are buying clubs located in Alabama, Arkansas, Georgia, Kansas, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and Texas. The cooperative is committed to buying and reselling local fresh organic and natural foods.

**35) Rural Advancement Foundation International, RAFI-USA**

P.O. Box 640  
Pittsboro, NC 27312  
919-542-1396  
919-542-0069 FAX  
*http://www.rafiusa.org/index.html*

RAFI-USA is dedicated to community, equity, and diversity in agriculture. While focusing on North Carolina and the southeastern United States, they also work nationally and internationally. RAFI-USA addresses major agricultural trends and works to create a movement among farm, environmental, and consumer groups to promote sustainable agriculture, strengthen family farms, and ensure responsible use of new technologies. Current focal issues include contract farming and the spread of GMO seeds.

**36) Rural Resources**

Sally Causey  
2870 Holley Creek Road  
Greeneville, TN 37745  
423-636-8171  
*www.ruralresources.net*

Rural Resources is a nonprofit organization dedicated to educating the community in preserving and improving the agricultural land and rural heritage, and to developing a system for producing and marketing locally produced agricultural products.

37) **Small Farm Center**

University of California  
Davis, CA 95616-8699  
916-752-8136  
916-752-7716 FAX  
*www.sfc.ucdavis.edu/*

The Small Farm Center is an office that disseminates information relevant to small farmers, publishes a newsletter, *Small Farm News*, maintains a library on small farm topics, and has a catalog of for-sale publications on small farm topics.

38) **Small Farmer's Journal quarterly magazine**

P.O. Box 1627  
Sisters, OR 97759  
800-876-2893  
*agrarian@smallfarmersjournal.com*  
*www.smallfarmersjournal.com*

Dedicated to “self-sufficiency, sustainability, and community,” the *Small Farmer's Journal* has featured information on practical horse farming and the “how to’s” of the small farm since 1976. They also publish books on horse farming techniques and equipment used in horse farming.

39) **Small Farm Today**

3903 W. Ridge Trail Rd.  
Clark, MO 65243-9525  
800-633-2535  
*www.smallfarmtoday.com*

*Small Farm Today* is a monthly how-to magazine of alternative and traditional crops, livestock, and direct marketing, established 1984 by a small farmer in central Missouri. It is dedicated to the preservation and promotion of small farming, rural living, community, sustainability, and agripreneurship. *Small Farm Today* sponsors an annual Small Farm Trade Show and Conference in Columbia, Missouri, in early November, the largest in the U.S. (more than 4,400 people and 150 exhibitors in 2004). *Small Farm Today* is a good source of information about small-scale farm equipment.

**40) Southern Sustainable Agriculture Working Group**

P. O. Box 324  
Elkins, AR 72727  
479-587-0888  
*info@ssawg.org*  
*http://www.ssawg.org/*

The Southern Sustainable Agriculture Working Group is a coalition of more than 120 diverse organizations in 13 southeastern states (Alabama, Arkansas, Georgia, Florida, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia). It publishes a newsletter, *Southern Sustainable Farming*, and holds an annual meeting that features presentations on topics of interest to growers and displays by appropriate vendors. The SSAWG is taking a regional approach to the creation of a sustainable food and farming system.

**41) Sustainable Agriculture Network (SAN) Publications**

University of Vermont  
210 Hills Building  
Burlington, VT 05405-0082  
802-656-0484  
*www.sare.org/publications/index.htm#books*

Funded by USDA's Cooperative State Research, Education, and Extension Service, SAN offers many free publications on sustainable and organic production methods. The books are softcover and inexpensively priced to cover printing and handling. Titles include *The Real Dirt: Farmers Tell About Organic and Low-Input Practices in the Northeast*, *Build Soils for Better Crops*, and *Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses*.

**42) Sustainable Agriculture Research Education (USDA CSREES-SARE)**

Southern Region SARE Office  
Jeff Jordan, Program Director  
1109 Experiment St.  
Room 206, Stuckey Building  
University of Georgia Agricultural Experiment Station  
Griffin, GA 30223-1797  
770-412-4787 or 770-412-4789  
*www.griffin.peachnet.edu/sare/*

The SARE program works to increase knowledge about food and agricultural systems—including organic agriculture—that boost profits,

stewardship, and quality of life. SARE offers competitive grants through a regional process and shares information through its Web page and the Sustainable Agriculture Network (SAN).

**43) Southeast Workers on Organic Farms (SEWOOF); Northeast Workers on Organic Farms (NEWOOF); and Willing Workers on Organic Farms (WWOOF)**

**Southeast Workers on Organic Farms (SEWOOF)**

Janus Farms Institute  
1287 Stage Coach Rd.  
Silver City, NC 27344  
919-742-4672

SEWOOF publishes a listing of organic farms in 13 southeastern states that take seasonal apprentices.

**Northeast Workers on Organic Farms (NEWOOF)**

P. O. Box 608  
Belchertown, MA 01007  
413-323-4531  
413-323-9594 FAX  
*nesfi@igc.org*

Northeast WOOF is an organic farm apprenticeship placement service, sponsored by the New England Small Farm Institute. They publish a list of available farm openings in February each year, with updates in the spring. Farms pay \$8 for their listing. Northeast WOOF workers spend an entire season on a farm. They also publish a four-page directory of contacts for organic farming apprenticeship programs throughout the world.

**Willing Workers on Organic Farms (WWOOF)**

RR # 2 5-18 C-9  
Nelson, BC, V1L 5P5, Canada  
250-354-4417  
OR  
Don Pynches, Coordinator  
19 Bradford Road  
Lewes, East Sussex BN7 1RB, England  
011-44-1273-476-286  
*www.earthlink.com.au/woof*

Willing Workers on Organic Farms places individuals on organic farms on a work-for-lodging-and-learning basis. Workers can spend from a few days to a whole season on a farm. WWOOF operates in Austria, Finland,

France, Germany, Ghana, Hungary, Ireland, Israel, Italy, the Ivory Coast, Japan, Korea, New Zealand, Switzerland, and Togo.

**44) University of Georgia Coastal Plain Experiment Station,**

Sharad C. Phatak, Ph.D  
100 Horticulture Building  
CAES, Tifton Campus  
Tifton, GA 31793-0748  
229-386-3901  
*phatak@tifton.uga.edu*

Dr. Phatak's research objective is to develop "sustainable crop production systems" that are environmentally sound, economically feasible, and socially acceptable. These systems use conservation tillage, cover crops, crop rotations, biological controls, reduced fertilizer and pesticide use, and alternative crops that require fewer inputs.

**45) USDA Economic Research Service (ERS)**

ERS conducts economic research and develops and distributes a broad range of economic and other social science information and analysis on organic agriculture. The Briefing Room provides current US organic information and economic data and analyses.

*[www.ers.usda.gov/briefing/organic](http://www.ers.usda.gov/briefing/organic)*

Two useful organic ERS publications are:

**US Organic Farming in 2000-2001: Adoption of Certified Systems** (USDA Bulletin 780, 2003)

**Recent Growth Patterns in the US Organic Foods Market** (ERS Bulletin 777, 2002)

**46) USDA National Organic Program (USDA-NOP)**

USDA-AMS-TMP-NOP  
Room 4008-South Building  
1400 Independence Ave. SW  
Washington, DC 20250-0020  
202-720-3252  
202-205-7808 FAX  
*[www.ams.usda.gov/nop/indexIE.htm](http://www.ams.usda.gov/nop/indexIE.htm)*

The NOP Web site includes organic regulations, a current list of USDA-NOP accredited certifying agents, consumer information, and all recommendations and activities of the 15-member National Organic Standards Board that advises the USDA. Certifying agents are listed with complete

contact information by state, but certifiers often operate in other states or countries.

**47) Wild Farm Alliance (WFA)**

P.O. Box 2570

Watsonville, CA 95077

*www.wildfarmalliance.org*

WFA has published guides to help farmers understand how to implement conservation practices and promote biodiversity in their operations.

**47) USDA Agricultural Research Service (USDA-ARS)**

*http://www.ars.usda.gov/main/main.htm*

Research scientists with USDA ARS are increasingly focusing on organic production systems. On-going studies include of cover cropping practices, organic pest control, soil quality, and methods for converting conventional systems to organic systems.

**48) USDA Natural Resources Conservation Service (USDA-NRCS)**

*www.nrcs.usda.gov*

NRCS technical experts can provide technical assistance to develop and implement conservation plans consistent with sound land use and the production of quality organic crops.

**49) USDA Risk Management Agency (USDA RMA)**

Jackson, MS Regional Office

8 River Bend Place

Jackson, MS 39232

601-965-4771

601-965-4517 FAX

*rsoms@rma.usda.gov*

*www.rma.usda.gov*

The Risk Management Agency administers the Federal Crop Insurance Corporation, which offers crop insurance products through private insurance company partners. Since 2001, RMA has provided coverage for both transitional and certified organic acreages. Through its competitive grants programs, RMA has also funded several outreach and extension projects that have benefited organic producers.

# SOURCES OF SOIL AMENDMENTS, CROP INPUTS, AND LIVESTOCK SUPPLIES

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## Introduction

All materials used on organic crops or livestock must be natural (and not otherwise prohibited), or they must be synthetics but listed as approved on the USDA-NOP National List for crops and livestock (7CFR 205.600-604), which lists the approved synthetics and prohibited natural products.

Some natural materials, such as tobacco dust, are prohibited, whereas some synthetic materials, such as certain horticultural oils, are allowed for specific uses. (See USDA-NOP regulatory text for exact regulations.) The final responsibility for determining the suitability of products lies with the producer. Producers should always amend their Organic System Plans and seek approval from their certifying agents before using any materials. USDA-NOP organic labeling laws do not address fertilizer products, so the use of the term “organic” on these materials can be confusing. “If in doubt, go without” is a good rule of thumb. Producers in transition to organics often seek to substitute purchased, organically acceptable inputs to replace non-approved inputs and are especially at risk. Using a prohibited input, whether intentionally or innocently, will cause organic producers to go through another three-year transition process prior to becoming recertified.

Livestock manures may be used without restriction on crops not for human consumption. Sewage sludge is prohibited in any form. Unless composted manure meets the definition of the USDA-NOP, (7CFR 205.203 (c)(2), it is considered to be “raw or aged manure” and must be applied and incorporated according to restrictions in 7CFR 205.203(c)(1) for crops for human consumption. These restrictions require 120 days between application and harvest, for crops where the edible portion has contact with the ground, and a 90 day interval when the edible portion of the crop is not in contact with the ground. Currently, dehydrated or pelleted manures must be applied according to the raw or aged manure regulations. Uncomposted plant materials are allowed (205.203(c)(3), and can be applied to the field at any time in the growing season. (See USDA-NOP regulatory text for exact regulations.)

Generic and brand-name lists from the Organic Materials Review Institute (OMRI) can be helpful in assessing a product’s compliance. OMRI



reviews materials for crop and livestock production and processing to assess compliance with National Organic Program standards. However, OMRI has no regulatory authority. The OMRI *Brand Names Material List* is available on-line and free of charge to the public. Many of the products listed below are OMRI approved. The OMRI Brand Names Material List is not comprehensive for all materials, however. Instead, it is limited to those companies that have paid to have their materials reviewed by OMRI. Lack of a brand-name listing does not mean that a product is not approved. It is simply an indicator for greater diligence. OMRI also publishes a *Generic Materials List* that is available to subscribing certifying agents and individuals. Growers can generally get inexpensive or free copies of the lists from their certifying agents, if the certifier is an OMRI subscriber.

Seven in 10 Americans express some concerns about the health risks of pesticides, hormones, antibiotics, and other chemicals used in food production, according to a national consumer opinion poll conducted by Roper Public Affairs on behalf of Organic Valley Family of Farms. The survey found consumers felt smaller-scale family farms were more likely to care about food safety than large-scale industrial farms, and that it was important to know whether food is grown or produced locally or regionally. (Organic Valley Family of Farms, Food and Farming 2004, [www.organicvalley.coop](http://www.organicvalley.coop))

Growers interviewed in the southern states during the development of this guide reported using relatively few purchased inputs. They often cited lime, off-farm manure sources, mulches, garlic, biological pest control agents, and beneficial insects as products they sometimes purchase. Some mentioned that they consider the input catalogs to be a primary source of information about pests and diseases, even though they rarely purchase products. (IOIA verbal interviews, 2005)

## **Soil Amendments, Crop Inputs, and Livestock Supplies: Source List**

The Southern Organic Resource Guide does not endorse any supply companies. We have included this list as a sample of potential suppliers, with the intent to assist organic producers. Organic farmers in the South suggested the companies listed. Inclusion or omission on this list is neither an endorsement nor an implied criticism. Listings are in alphabetical order.

- 1) **Agreaux Organics, Inc.**  
Gary Canton  
P.O. Box 30  
Monticello, MS 39654  
601-587-0027  
877-387-5407  
*www.agreauxorganics.com*  
**Products:** OMRI listed fertilizer products—Agreaux Organic All Natural 3-3-3 Organic Fertilizer; Agreaux Organic All Natural Organic 3-3-3 Slow Release Plugs; Agreaux Organics All Natural Organic 5-5-5; Agreaux Organics All Natural Organic 6-2-4 Slow Release Plugs; Agreaux Organics All Natural Organic 6-2-4 Fertilizer
- 2) **AgriGulf**  
52 Cable Bridge Rd.  
Perkinston, MS 39573  
601-928-5837  
*AgriGulf@bellsouth.net*  
*www.agrigulf.com/*  
**Products:** All natural fertilizer made from shrimp and crab shells
- 3) **Agro-K Corp**  
Gerd Oppenheim, Dealer  
P.O. Box 267  
Norwood, LA 70761  
504-866-6551  
*trudyo@gs.net*  
**Products:** OMRI listed fertilizer products—Zinc Dextro-Lac, Magnesium Dextro-Lac; Manganese Dextro-Lac Symbex (Organic) and Symbex 4X; Vigor-Cal and Cal-Mag D.L. Ag Unlimited 4-1-1
- Liquid Fertilizer; Symspray (Organic), Symspray 10X; Potassium D.L. 0-0-6; Hytec Foliar 5-2-2 Liquefied Fish Fertilizer; Symcoat 221 Liquid; Symbooster 10X
- 4) **Bradfield Natural Fertilizers**  
Bob Scott  
610A E. Battlefield #203  
Springfield, MO 65807  
417-882-1442  
775-310-6654 FAX  
*bscott6500@sbcglobal.net*  
*www.bradfieldind.com/*  
**Products:** OMRI listed fertilizers—alfalfa meal, poultry protein, humate, moloassas, soluble seaweed extract, sulfate of potash, corn gluten fertilizer, horticultural vinegar
- 5) **Bourbon Limestone Co.**  
2470 Fords Mill Rd.  
Paris, KY 40361  
869-987-4425  
**Products:** Mined limestone
- 6) **Calcium Silicate Corp.**  
Donald Beatty  
P.O. Box 2058  
Columbia, TN 38402-2058  
931-381-1859  
931-380-1364 FAX  
*debco@bellsouth.net*  
**Products:** Tennessee Brown Rock; OMRI listed
- 7) **Circle One International, Inc.**  
16209 Flight Path Drive  
Brooksville, FL 34609  
800-430-2467  
352-544-0202

- 352-544-0230 FAX  
*circle-one@circle-one.com*  
*www.circle-one.com/*  
**Products:** Liquid organic fertilizers and fertility products
- 8) **Continental Sulfur Company, LLC**  
Warren W. Boone  
5100 Poplar Ave, Suite 2704  
Memphis, TN 38137  
901-763-4017  
901-763-4028 FAX  
**Products:** OMRI listed pest control products—CSC 80% Thiosperse, CSC DS-90, CSC Dusting Sulfur
- 9) **EcoSMART Technologies, Inc.**  
Judy Hight  
318 Seaboard Lane, Ste. 201  
Franklin, TN 37067  
615-261-7300 or  
888-326-7233  
615-261-7301 FAX  
*www.bioganic.com*  
**Products:** OMRI listed pest control products—Matran™2; EcoTrol™; Hexacide; Sporan; EcoExempt® IC
- 10) **Farmers Lime Company**  
Hwy 45 E  
South Fulton, TN 38257  
731-479-3827  
**Products:** Mined limestone
- 11) **Fertrell Co.**  
P.O. Box 265  
Bainbridge, PA 17502  
717-367-1566  
800-367-1566  
*www.fertrell.com*  
**Products:** Feed supplements, fertilizers; OMRI listed
- Fertrell Dealers**  
**ARKANSAS:**  
***Bison Meadows***  
Donna Mayhew  
18940 Skyline Dr.  
Sulphur Springs, AR 72768  
479-298-3004
- KENTUCKY:**  
***Henry Hoover***  
7270 US 68E  
Hopkinsville, KY 42240
- Edwin Kurtz***  
1185 New Street Road  
Webster, KY 40176  
270-496-4574
- Philoman Martin***  
840 Dandur Road  
Eubank, KY 42567  
606-379-0274
- New Earth***  
9810 Taylorsville Road  
Louisville, KY 40299  
502-261-0005
- MISSISSIPPI:**  
***Newton County Farm Supply***  
406 Scanlan Street  
Newton, MS 39345  
601-683-3911

**TENNESSEE:**

***Beaty Fertilizer***

3697 Michigan Ave. Road  
Cleveland, TN 37323  
423-472-7122

***John Cairns***

455 Scott Rd.  
Ardmore, TN 38449  
931-468-2819

***Ralph Cole***

155 Shekinah Way  
Deer Lodge, TN 37726,  
423-965-3334

***Greg Cover***

4195 Oak Hills Road  
Parrottsville, TN 37843  
423-613-0115

***Dicken's Supply***

814 Cherokee Ave.  
Nashville, TN 37207  
615-227-1111

***John England***

111 England Dr.  
Huntland, TN 37345  
931-469-7303

***Julie Forkner***

277 Camp Road  
Sweetwater, TN 37874  
423-337-3195

***Blue Marrow***

189 Rye Branch Rd.  
Butler, TN 37640  
423-768-3433

***Whispering Spirit Farm***

383 Massy Cove  
Atoka, TN 38004  
901-837-1796

12) **First Fruits, LLC**

RD 1, Box 156  
Triadelphia, WV 26059  
304-547-5553;  
888-489-0162

*www.vamfungi.com*

**Products:** VAM Fungi;  
OMRI Listed

13) **Franklin Limestone  
Quarry**

211 Old Nashville Rd.  
Woodburn, KY 42170  
800-342-2191

**Products:** Bagged lime

14) **Griffin Industries/Nature  
Safe Fertilizers**

4221 Alexandria Pike  
Cold Spring, KY 41076  
859-572-2548  
800-252-4727

859-572-2583 FAX

*bdeckert@griffinind.com*

**Products:** Fertilizers,  
feather meal; OMRI listed

15) **Helfter Feeds, Inc.**

135 N. Railroad St.  
P.O. Box 266  
Osco, Illinois 61274-0266  
*www.HelfterFeeds.com*

**Products:** Feeds and feed  
supplements; OMRI listed

16) **Honey Crest Farms**

Lee Harris  
8868 Lee Lane  
Bentonville, AR  
479-795-2113

**Products:** 4-2-2 poultry lit-  
ter-based fertilizer

- 17) **Lakeside Feed**  
Harold Bryant  
7703 Highway 412  
Huntsville, AR 72740  
479-738-5145  
**Products:** Complete organic rations for livestock, including poultry
- 18) **Mathis Farm Supply**  
5799 Shane Rd  
Melber, KY 42069  
270-674-5600  
**Products:** Mined limestone
- 19) **Micro Flo Company**  
Julie Mills  
P.O. Box 772099  
Memphis, TN 38117-2099  
901-432-5000  
901-432-5031 FAX  
**Products:** Kumulus DF sulfur; OMRI listed
- 20) **Mid-States Supply, Inc.**  
1716 Guinette Avenue  
Kansas City, MO 64120  
816-842-4290  
816-842-3630 FAX  
*www.midcoonline.com*  
**Products:** Composts, manures, guano, blended fertilizers, cover crop seeds, humates, humic acids, marine products, micronutrients, rock minerals, phosphates
- 21) **Midwest Bio-Systems**  
Route 1, Box 121  
Tampico, IL 61283  
815-438-7200  
815-542-6470 FAX  
*www.aeromasterequipment.com/index.html*
- Products:** Compost production microbial inoculants, Aeromaster composting equipment, soil and compost analyses, compost production workshops, and consulting services
- 22) **Nature Safe Natural and Organic Fertilizers**  
4221 Alexandria O'Pike  
Cold Spring KY 41076  
859-781-2010  
800-353-4727  
859-572-2574 FAX  
**Products:** Fertilizers
- 23) **Nitron**  
P.O. Box 1447  
Fayetteville, AR 72702-1447  
Orders: 800-835-0123  
Customer service: 479-587-1777  
*www.nitron.com/*  
**Products:** Compost, limestone, fertilizers, humic acid, diatomaceous earth, milky spore, hydroponic fertilizers
- 24) **N-Viro Products, Inc.**  
Ferguson Mill Rd.,  
P.O. Box 30  
Monticello, MS 39654  
601-587-0027  
601-587-0420 FAX  
**Products:** Pelletized 3.5-3.5-3.5 organic fertilizer; pelletized 6-2-4, 5-2-4 organic fertilizer; pelletized 2-10-10 organic fertilizers

- 25) **Regenerated Resources, LLC**  
Buddy Black  
Cave Springs, AR  
479-248-4607  
*www.organic-gro.com*  
**Products:** 8-2-4 feather-meal-based fertilizer
- 26) **Rose Acre Farms**  
6874 N. Base Rd  
Seymour IN 47274  
**Products:** Manure and composted manure; OMRI listed
- 27) **Royster Clark Farmmarket**  
*www.roysterclark.com/*  
(for directory of locations)
- 28) **Thoroughbred Compost**  
Heraldry Court  
Lexington, KY 40513  
859-255-6315  
800-227-5125  
**Local Plant Location:**  
3380 Paris Pike  
Lexington, KY 40511  
859-293-6658  
859-293-6397 FAX  
*qualityhay@creechhay.com*  
**Products:** Fertilizers, compost
- 29) **Thorvin Inc.**  
P.O. BX 458  
New Castle, VA 24127  
540-864-5108  
800-464-0417  
540-864-5161  
*www.Thorvin.com*  
**Products:** Kelp fertilizer and feed supplement; OMRI listed
- 30) **Universal Agriculture Products, Inc.**  
1775 Cedar Ridge Way  
Reeds Spring, MO 65737  
417-336-6666 or  
800-336-6681  
417-336-6630 FAX  
*michelle@universalagri.com*  
*www.universalagri.com*  
**Products:** Compost, manure, guano, blended fertilizers
- 31) **Valley Fertilize and Seed**  
4907 Smithville Highway  
McMinnville, TN 37110  
931-668-4101  
**Products:** Lime; farm equipment & supplies dealer
- 32) **Wesley's Fertilizer Plant, Inc.**  
111 West Doyle Street  
Poplarville, MS 39470  
**Products:** Lime and fertilizer
- 33) **Westway Feed Products**  
Paul Mosty  
365 Canal St. Suite 2900  
New Orleans, LA 70130  
281-351-4420  
800-654-9668  
281-351-4975 FAX  
*www.westway.com*  
**Products:** Wes Las 79.5 Brix Soil Amendment

# SOURCES OF ORGANIC AND UNTREATED NON-GMO SEEDS

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## Introduction

Organic farmers are required by USDA-NOP regulations to use organic seeds and planting stock when commercially available. They can use non-organic, untreated seeds when organic seeds are not available in the form, quality, or quantity they need. Annual seedlings must be organic; only the USDA Secretary can grant a variance for seedlings. Perennials can be started from non-organic stock, but must be raised organically for one year before any crop is harvested as organic. Seeds, seedlings, and planting stock that have been treated with prohibited substances are allowed only if required by federal or state phytosanitary regulations. Organic sprouts can only be produced using organic seed. In no case are genetically engineered seed varieties allowed. (See 7CFR 205.105(e) and 205.204 for exact regulatory text.)

Growers in the southern states have limited regional organic seed sources. Most of them buy seed from other states.

## Regional Seed Resources

The Save Our Seed Project is a unique regional resource created in response to the limited availability of organic and open-pollinated heirloom seed. Save our Seed is working to increase the availability of regionally adapted, open-pollinated, certified organic seed and to develop a southern seed network.

This project has published a series of seed production manuals: *The Bean Seed Production Manual*; *The Tomato Seed Production Manual*; *The Isolation Distance Guide*; *The Seed Processing and Storage Manual*, and the *Organic Brassica Seed Production Guide*. Each guide provides details for production of organic seeds in the Southeast. Save our Seed also maintains a current database of more than 100 organic seed sources and assists growers in determining whether the seeds they seek are commercially available.

**Contact:**

Cricket Rakita  
Save our Seed Project  
286 Dixie Hollow  
Louisa, VA 23093

540-894-8865  
[cricket@savingourseed.org](mailto:cricket@savingourseed.org)  
[www.savingourseed.org](http://www.savingourseed.org)  
(seed production guides  
and seed source database)

The Southern Seed Legacy, a membership association, was developed to recover, save, and increase the diversity of heirloom plants and traditional knowledge of the American South. More than 400 varieties of heirloom seeds, with photos, are posted on their Web site, [www.uga.edu/%7Eebl/southernheirloom](http://www.uga.edu/%7Eebl/southernheirloom); email: [ebl@uga.edu](mailto:ebl@uga.edu).

The Seedsaving and Seedsavers' Resources Web page provides many links to sources for heirloom and non-GE seeds, information and resources for saving seeds, and seed exchange networks. Links are from the U.S., several European countries, the U.K., and Australia. [homepage.tinet.ie/~merlyn/seedsaving.html](http://homepage.tinet.ie/~merlyn/seedsaving.html)

## Organic Seed Resource Information

The ATTRA publication *Suppliers of Seed for Certified Organic Production* has been updated and is now in the form of a searchable on-line database. The database provides sources for organic seed for agronomic and horticultural crops. Some national mail-order suppliers of untreated seed are included, with emphasis on small, alternative seed companies offering open-pollinated vegetable, flower, and herb seed. Farmers can contact their certifying agents or state departments of agriculture to find out whether these agencies can supply lists of organic seed sources.

[www.attra.ncat.org](http://www.attra.ncat.org)

The Organic Materials Review Institute (OMRI) lists some sources of organic seed. For grain growers interested in using local, bin-run organic seed, see the ATTRA publication *Marketing Organic Grains* for a regionally balanced list. The ATTRA publication *Seed Production and Variety Development for Organic Systems* discusses additional seed sources. The buyer needs to ask to see the seed supplier's documentation, including organic certification.

[www.omri.org/OMRI\\_SEED\\_list.html](http://www.omri.org/OMRI_SEED_list.html)

## Companies Selling Organic Seeds: Source List

The Southern Organic Resource Guide does not endorse any seed companies, but we have made an effort to compile a comprehensive listing of organic seed sources to assist organic producers. Organic farmers in the South provided most of the listings. Inclusion or omission on this list is neither a statement of endorsement nor an implied criticism. Growers are encouraged to visit listed Web sites; many include extensive seed supplier lists. Companies are listed in alphabetical order.



- 1) **Baker Creek Heirloom Seeds**  
2278 Baker Creek Road  
Mansfield, MO 65704  
417-924-8917  
417-924-8887 FAX  
*www.rareseeds.com*  
**Products:** Untreated non-GMO heirloom vegetable seeds from around the world
- 2) **Cook's Garden**  
P.O. Box C5030  
Warminster, PA 18974  
800-457-9703  
800-457-9705 FAX  
*www.cooksgarden.com*  
**Products:** Certified organic and untreated non-GMO vegetable seeds
- 3) **Fedco Seeds**  
P.O. Box 520  
Waterville, ME 04903  
207-873-7333  
207-872-8317 FAX  
*www.fedcoseeds.com*  
**Products:** Certified organic and biodynamic seeds, untreated and non-GMO vegetable seeds, certified organic onion sets, specialty potatoes and fingerlings, and Jerusalem artichokes
- 4) **Filaree Farm**  
182 Conconully Hwy.  
Okanogan, WA 98840  
509-422-6940  
*filaree@northcascades.net*  
*www.filareefarm.com*  
**Products:** Certified organic garlic cloves
- 5) **Harris Seeds—Organic and Untreated Seeds for the Professional Grower**  
355 Paul Rd.  
P.O. Box 24966  
Rochester, NY 14624-0966  
800-544-7938  
*www.harriseseeds.com*  
**Products:** Certified organic and untreated non-GMO vegetable seeds, OMRI listed and NOP National List pesticides, small vegetable production supplies
- 6) **High Mowing Seeds**  
813 Brook Rd.  
Wolcott, Vermont 05680  
802-888-1800  
802-888-8446 FAX  
*www.highmowingseeds.com*  
**Products:** 100% certified organic vegetables seeds
- 7) **Horizon Herbs**  
P.O. Box 69  
Williams, OR 97544  
541-846-6704  
541-846-6233 FAX  
*herbseed@chatlink.com*  
*www.chatlink.com/~herbseed*  
**Products:** Certified organic and untreated native medicinal herbs of the world

- 8) **Johnny's Selected Seeds**  
1 Foss Hill Road  
RR 1, Box 2580  
Albion, ME 04910-9731  
207-437-4395  
(commercial orders)  
207-437-4301  
(home gardeners)  
800-437-4290 FAX  
*homegarden@johnnyseeds.com*  
(home gardeners)  
*www.johnnyseeds.com*  
**Products:** Certified organic and untreated non-GMO vegetable seeds, small vegetable equipment and machinery, OMRI listed and NOP National List pesticides
- 9) **Lakeview Farm**  
44200 Hwy. BB  
Middletown, MO 63359  
573-549-2231  
**Products:** Certified organic cover crop seeds (hairy vetch, clovers, rye, and buckwheat), certified soybeans, corn, oats, and sunflowers seeds
- 10) **Milk Ranch Specialty Potatoes, L.L.C.**  
20094 Highway 149  
Powderhorn, CO 81243  
970-641-5634  
970-642-0471 FAX  
*craig@milkranch.com*  
*www.milkranch.com*  
**Products:** Certified organic potatoes and specialty fingerlings
- 11) **Morgan County Wholesale Seeds**  
18761 Kelsey Rd.  
Barnett, MO 65011-3009  
513-378-2655  
**Products:** Untreated non-GMO vegetable seeds, vegetable production supplies and equipment, soil amendments, and pesticides
- 12) **The Natural Gardening Company**  
P.O. Box 750776  
Petaluma, CA 94975-0776  
707-766-9303  
707-766-9747 FAX  
*info@naturalgardening.com*  
*www.naturalgardening.com*  
**Products:** Certified organic and untreated non-treated vegetables seeds
- 13) **Organica Seed Co.**  
P.O. Box 611  
Wilbraham MA 01095  
413-599-0396  
*office@organicaseed.com*  
*www.organicaseed.com*  
**Products:** Certified organic vegetables, herb, cotton, and cover crops seeds
- 14) **Sand Hill Preservation Center**  
1878 230th Street  
Calamus, Iowa 52729-9659  
563-246-2299  
*sandhill@fbcom.net*  
*www.sandhillpreservation.com*  
**Products:** Heirloom untreated vegetables seeds, sweet potatoes, plants, and poultry

- 15) **Seeds of Change**  
P.O. Box 15700  
Santa Fe, NM 87596-5700  
888-762-7333 (orders)  
866-339-3876 (technical questions)  
*www.seedsofchange.com/*  
**Products:** Certified organic and untreated non-GMO heirloom vegetable seeds
- 16) **Seed Savers**  
3094 North Winn Road  
Decorah, IA 52101-7776  
563-382-5990  
563-382-5872 FAX  
*www.seedsavers.org*  
**Products:** Certified organic and untreated non-GMO vegetable seeds
- 17) **Southern Exposure Seed Exchange**  
P.O. Box 460  
Mineral, VA 23117  
540-894-9480  
540-894-9481 FAX  
*www.southernexposure.com*  
**Products:** Certified organic and untreated non-GMO heirloom and open-pollinated vegetable, herb, and flower seeds, certified organic peanut seeds, and garlic
- 18) **Territorial Seed Company**  
P.O. Box 158  
Cottage Grove, OR 97424  
800-626-0866  
888-657-3131 FAX  
*www.territorialseed.com*  
**Products:** Certified organic and untreated non-GMO vegetable seeds

# Production Equipment and Supplies: Source List

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*(Listed in Alphabetical Order)*

The Southern Organic Resource Guide does not endorse any supply companies, but we have included this list as a sample of potential suppliers, with the intent to assist organic producers. Organic farmers in the South suggested most of the companies listed. Inclusion or omission on this list is neither an endorsement nor an implied criticism. Most growers interviewed stated that they need sources of small-scale equipment and more information about specialized equipment. Regional conferences and trade shows are a good way to find equipment information.

- 1) **BWI Companies, Inc.**  
6013 N. McRaven Rd.  
P.O. Box 20407  
Jackson, MS 39289-1407  
800-395-2580  
601-922-5214  
601-922-8634 FAX  
OR  
3136 S. Clifton  
Springfield, MO 65807  
800-247-4954  
417-881-3003  
417-881-7055 FAX  
**Products:** Greenhouse and nursery equipment, including trays, pots, flats, cells, potting media, fertilizers, seeds, irrigation supplies, and misters
- 2) **Charley's Greenhouse & Garden**  
17979 State Route 536  
Mount Vernon, WA 98273  
800-322-4707  
800-233-3078 FAX  
*www.charleysgreenhouse.com*  
**Products:** Greenhouse frames and plastic, greenhouse supplies, gardening supplies
- 3) **EggCartons.com**  
P.O. Box 302 24 Holt Road  
Manchaug, MA 01526  
888-852-5340  
*www.EggCartons.com*  
**Products:** Poultry and hen supplies, egg cartons
- 4) **FarmTek**  
1440 Field of Dreams Way  
Dyersville, IA 51040  
800-327-6835  
800-457-8887  
*www.FarmTek.com*  
**Products:** Greenhouse frames and plastic, farm fencing and supplies, gardening equipment
- 5) **Gallagher Power Fence, Inc.**  
18940 Redland Rd.  
P.O. Box 708900  
San Antonio, TX 78270-8900  
800-531-5908  
210-494-9364 FAX  
*gallagherusa@msn.com*  
*www.gallagher.co.nz/*  
**Products:** Electric fencing wire and supplies

- 6) **Hummert International**  
4500 Earth City Expwy.  
Earth City, MO 53045  
314-505-4500  
*www.hummert.com*  
**Products:** Greenhouse frames and plastic, field and greenhouse equipment and supplies, drip irrigation, bedding plant plastics and containers
- 7) **Irrigation Mart**  
3303 McDonald Ave.  
East, Ruston, LA 71270-7412  
800-729-7246  
*www.irrigation-mart.com*  
**Products:** Field and greenhouse irrigation equipment, including drip tape, filters, sprinklers, and pumps
- 8) **McNeely Plastic Products, Inc.**  
Terri Smith  
5166 Keele St.  
Jackson, MS 39206  
800-433-8407  
601-364-5050  
601-364-5060 FAX  
*info@mcnplastics.com*  
*www.mcnplastics.com/*  
**Products:** Plastic mulch, plastic packaging material, and corrugated boxes
- 9) **Midwest Bio-Systems**  
Route 1, Box 121  
Tampico, IL 61283  
815-438-7200  
815-542-6470 FAX  
*www.businessiowa.com/MidwestBio-systems.htm*  
**Products:** Self-propelled and tractor pulled PTO-driven compost turners; aerobic compost production seminars at various locations nationally
- 10) **Morgan County Seeds**  
18761 Kelsey Rd.  
Barnett, MO 65011-3009  
573-378-2655  
**Products:** Greenhouse plastic, irrigation equipment, plastic mulch, and equipment
- 11) **Nolt's Produce Supplies**  
152 North Hershey Ave.  
Leola, PA 17540  
717-656-9764  
717-656-6540 FAX  
**Products:** Farm and greenhouse supplies, irrigation equipment and supplies, pumps, plastic mulch, mulch layers and lifters, packaging machinery

12) **Peaceful Valley Farm Supply**

P. O. Box 2209  
Grass Valley, CA 95945  
888-784-1722 (orders)  
*www.groworganic.com/*

**Products:** Seeds, supplies, organic pesticides, organic fertilizers, animal traps, tools, equipment (including spreaders, seeders, tillers, and backpack sprayers), and books for organic growers.

13) **PolyDrip**

13799 Airline Hwy  
Baton Rouge, LA 70817  
800-676-0979  
225-755-1240 FAX  
*info@polydrip.com*  
*www.polydrip.com/*

**Products:** Field or greenhouse irrigation equipment, including drip tape, filters, sprinklers, pumps, and fertilizer dispensers. Personal service and free consulting on irrigation needs and system design.

14) **Spectrum Technologies, Inc.**

23839 W. Andrew Rd.,  
Plainfield, IL 60544  
800-248-8873  
815-4364460 FAX  
*specmeters@aol.com*  
*www.specmeters.com/*

**Products:** Small instruments, such as pH, chlorophyll, and nutrient (ion selective) meters. American distributor for Horiba's Cardy meters (for nitrate, potassium, and sodium).

# Arkansas Organics: Statistics and State Resources

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## Arkansas Organic Statistics

According to the USDA 2004 agricultural census ([www.nass.usda.gov](http://www.nass.usda.gov)), Arkansas had 47,500 farms (14,400,000 acres), with an average size of 303 acres. Of that, only about 1% is in organic crop production; nevertheless, Arkansas has seen significant growth in certified organic production in recent years.

According to United States Department of Agriculture Economic Research Services, Arkansas had only 997 acres of organically certified crops in 1997. (USDA/ERS, 2002. Organic production. [www.ers.usda.gov/Data/organic/](http://www.ers.usda.gov/Data/organic/)) The acreage of certified organic cropland has increased steadily since then to around 8,700 acres in 2003. This represents a 1294% increase in certified organic croplands from 1997 to 2002.

Sixty-three percent of all certified organic acreage in Arkansas is in grain production. Brown and white rice comprise the largest percentage, with 11,509 acres (46.44% of total organic production). The second largest segment of organic crop production is soybeans, with 8,138 acres reported (33%). Production of mixed vegetables follows, with 513 acres (2.3%), fruits (1%), and herbs (0.4%). The remaining organic production was reported to be from hay, pastures, and other crops.

Organic production in Arkansas is scattered throughout the state, paralleling conventional agricultural production patterns. The northern part of the state's organic production focuses on mixed vegetables, herbs, and fruit. The central and eastern parts of the state produce organic soybeans, rice, and wheat in rotational grain systems.

## State Resources

1) The Arkansas State Legislature passed a bill in 2005 to establish a Department of Agriculture. Currently (up to 2005), the **Arkansas State Plant Board** is responsible for activities associated with the certification and marketing of organic products in this state.

**Accredited certifying agent.** The State of Arkansas does not operate as a National Organic Program (USDA-NOP) accredited certification agency.

**USDA-NOP Certification Cost Share Program.** The Arkansas State Plant Board disburses the monies from this program to certified

operations in their state. The monies cover 75% of certification costs, with a maximum of \$500 per certificate. Originally, Arkansas was allocated \$30,000 to disburse to its organic producers and handlers. According to Tim Ellison, Program Coordinator for the Certification Cost Share Program, there is (as of 2005) approximately \$4,000 left in the fund available for disbursement.

**Contact:**

Tim Ellison, Arkansas State Plant Board  
501-225-1598.

*tim.ellison@aspb.ar.gov*

**Farmers' Markets.** The **Arkansas Agriculture Product Market** was developed by the Arkansas State Plant Board to help potential buyers locate Arkansas producers, including organic producers. Residents of Arkansas who produce an agricultural product in the state may, at no charge, list their marketing information on the State Plant Board Web site, *Naturally Arkansas*. *Naturally Arkansas* has a list of farmer's markets, U-pick farms, retail vendors, and other information about agricultural production within the state. For contact information about Arkansas products, or for other information, see *www.naturallyarkansas.org*.

- 2) **University of Arkansas** faculty with organic research and education experience: **Dr. Curt Rom**, professor, Horticulture, is heading efforts to develop an *Ecological Agricultural Center* at the University of Arkansas. This program seeks to develop research and outreach programs, and a University of Arkansas academic major or minor, that focus on sustainable and organic agriculture. Dr. Rom is currently coordinating a SSARE-funded Research and Extension Program grant titled "Best Management Practices for Organic Orchard Nutrition."

479-575-7434

*crom@uark.edu*

**Heather Friedrich** is the Ecological Agriculture Center coordinator.  
479-575-2798

*heatherf@uark.edu*

**Dr. Donn Johnson**, professor, Entomology. Dr. Johnson is heading efforts with Gerber Products Company to evaluate organic and other alternative pest management practices in tree fruits, and collaborating with Curt Rom, Jennie Popp, Barbara Bellows, and Heather Friedrich on a Southern Region IPM Center Grant titled "Development of



Southern Region IPM Organic Tree Fruit Working Group” that organized in-state focus groups and regional discussion meetings involving producers, support industry, research, and Extension personnel. Participants identified obstacles and information gaps in organic tree fruit production in the South, in order to prioritize future research and Extension activities.

479-575-2501

*dtjohnso@uark.edu*

**Dr. Jennie Popp**, associate professor, Agricultural Economics and Business, and collaborator with the Ecological Agricultural Center  
479-575-2279

*jhpopp@uark.edu*

**Dr. Mary Savin**, assistant professor, Crop Soils and Environmental Sciences and collaborator with the Ecological Agricultural Center  
479-575-5740

*msavin@uark.edu*

**Dr. Larry Purcell**, Professor, Crops, Soils, and Environmental Sciences, teaches an undergraduate level course in organic agriculture.  
479-575-7434

*lpurcell@uark.edu*

### **University of Arkansas Cooperative Extension Service**

Little Rock, Arkansas

501-671-2000

*www.uark.edu*

***Arkansas Cooperative Extension specialists familiar with organic practices:***

**Dr. Craig Anderson**, Extension Vegetable Specialist

479-575-2639

*crander@uark.edu*

**Dr. Elena Garcia**, Extension Tree Fruit Specialist

479-575-2790

479-575-8619 FAX

*megarcia@uark.edu*

**Dr. Ron Rainey**, Agricultural Economics and Community Development

501-671-2175

*rrainey@uaex.edu*

**Janet Carson**, Extension Horticulture Specialist

501-671-2174

*jcarson@uaex.edu*

**Arkansas Cooperative Extension Agents familiar with organic practices:**

**Kevin Lawson**—Perry County

501-889-2661

*klawson@uaex.edu*

**Sherri Wesson**—White County

501-268-5394

*swesson@uaex.edu*

**Dustin Blakey**—Sebastian County

479-484-7737

*dblakey@uaex.edu*

**Jack Boles**—Newton County

801-446-2240

*jboles@uaex.edu*

**Arkansas – Oklahoma Horticulture Industries Show** is an annual bi-state conference and trade show for horticultural growers. Drawing up to 400 people, this conference is held alternately in Tulsa, Oklahoma, and Ft. Smith, Arkansas. Regular session topics include fruits, vegetables, grapes, Christmas trees, herbs, sustainable agriculture, and farmers' markets. The sustainable agriculture session includes talks on organics and has been a regular feature of HIS since the late 1980s.

**Contact:**

Ray Campbell, Secretary

OSU Horticulture and Landscape Architecture

360 Agricultural Hall

Stillwater, OK 74078-6027

405-744-5404

405-377-8948 (home)

*raycam@dasnr.okstate.edu*

*home.okstate.edu/Okstate/dasnr/hort/hortlahome.nsf/toc/HIS*

# Certified Organic Operations in Arkansas

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The following information was graciously supplied by the agents who certify in Arkansas. All certified operations were contacted for verification of the information. Only operations that were certified prior to June 1, 2005 and provided their approval for inclusion are listed in this resource manual.

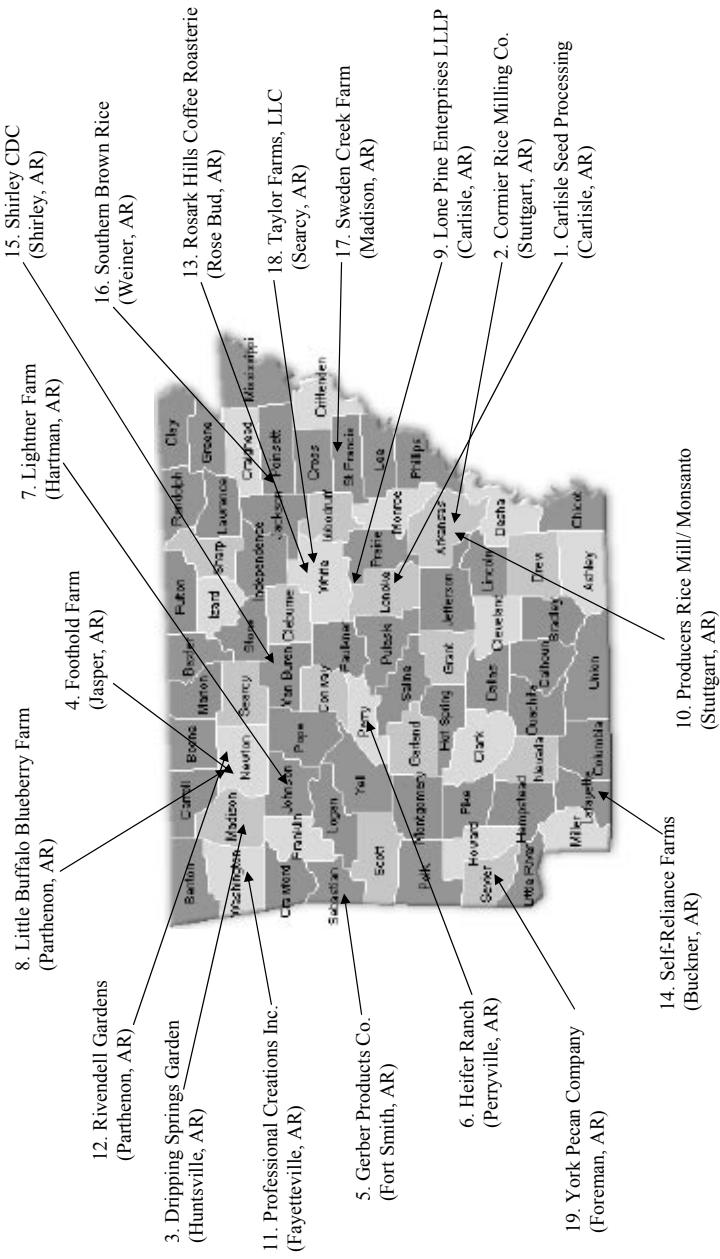
Operations are listed in alphabetical order by name of the operation. No attempt was made to sort by certifying agent, location, or by size of the operation. Numbers assigned to operations correspond to numbering on the Arkansas map (page 53).

- 1) **Carlisle Seed Processor**  
Carl Garrich  
P.O. Box 416  
Carlisle, AR 72024-0416  
870-552-3217  
Soybean seed cleaning and processing exclusively for Lone Pine Enterprises.  
Organic Crop Improvement Association, certifying agent
- 2) **Cormier Rice Milling Co.**  
Jim Byers  
P.O. Box 416  
Carlisle, AR 72024-0416  
870-946-3561  
Rice milling exclusively for Lone Pine Enterprises.  
Organic Crop Improvement Association, certifying agent
- 3) **Dripping Springs Garden**  
Mark Cain and Michael Crane  
1558 County Road 548  
Huntsville, AR 72740  
870-787-6702  
Specialty vegetables, cut flowers, blueberries  
Oklahoma Department of Agriculture Organic Program, certifying agent
- 4) **Foothold Farm**  
David Malm  
HCR 70, Box 592  
Jasper, AR 72641  
870-861-5552  
*footholdfarm@eritter.net*  
1.5 acres of mixed vegetables and fruits  
Indiana Certified Organic, certifying agent
- 5) **Gerber Products Company**  
P.O. Box 10010  
Fort Smith, AR 72904  
479-784-5255  
Baby Food  
Oregon Tilth, certifying agent
- 6) **Heifer Ranch**  
Chuck Crimmins  
55 Heifer Rd.  
Perryville, AR 72126  
501-889-5124  
*ranch@heifer.org*  
7.5 acres of mixed vegetables, herbs, and flowers  
Indiana Certified Organic, certifying agent

- 7) **Lightner Farm**  
Robert Lightner  
577 Co. Rd. 3020  
Hartman, AR 72840  
479-497-2011  
2 acres mixed vegetables  
Indiana Certified Organic,  
certifying agent
- 8) **Little Buffalo Blueberry Farm**  
Jack and Barbara Vasluski  
HCR 72, Box 93  
Parthenon, AR 72666  
870-446-5621  
1.75 acres High Bush  
blueberries  
Indiana Certified Organic,  
certifying agent
- 9) **Lone Pine Enterprises, LLLP**  
Carl Garrich, Jason Smith  
P.O. Box 416  
Carlisle, AR 72024-0416  
870-552-3217  
6,300 acres white and brown  
rice, soybeans, wheat  
Organic Crop Improvement  
Association, certifying agent
- 10) **Producers Rice Mill, Inc./ Monsanto**  
Keith Glover  
901 N. Park Ave,  
P.O. Box 1248  
Stuttgart, AR 72160  
870-673-4444  
Soybean cleaning  
Organic Crop Improvement  
Association, certifying agent
- 11) **Professional Creations, LLC**  
Paul Roth  
P.O. Box 1971  
Fayetteville, AR 72702  
*profer@sbcglobal.net*  
479-521-6371  
Coffee importers  
Quality Certification Ser-  
vices, certifying agent
- 12) **Rivendell Gardens**  
Gordon Watkins  
HCR 72, Box 34  
Parthenon, AR 72666  
870-446-5783  
*g Watkins@ritternet.com*  
4 acres High Bush  
Blueberries  
Indiana Certified Organic,  
certifying agent
- 13) **Rosark Hills Coffee Roasterie**  
Chick Curtis  
P.O. Box 180  
Rose Bud, AR 72137  
501-556-5808  
*rozarkhills@alltel.net*  
Roasted coffee  
Indiana Certified Organic,  
certifying agent
- 14) **Self-Reliance Farms**  
P.O. Box 7  
Buckner, AR 71827  
870-533-4352  
870-565-2146(f)  
*slo@ipa.net*  
65.5 acres Mixed fruits and  
vegetables  
Oregon Tilth, certifying agent

- 15) **Shirley CDC**  
Tom Kimmons  
366 Brown Rd.  
Shirley, AR 72153  
501-723-4443  
*shirlcdc@artelco.com*  
25,000 logs of fresh, dehydrated, and packaged shiitake mushrooms  
Indiana Certified Organic, certifying agent
- 16) **Southern Brown Rice**  
Tom Hogue  
P.O. Box 185  
8553 Raybourn Rd.  
Weiner, AR 72479  
870-684-2354  
Brown rice, soybeans  
Organic Crop Improvement Association, certifying agent
- 17) **Sweden Creek Farm**  
11540 Madison 3605  
Madison, AR 72742  
479-665-2146 (phone and FAX)  
10 acres shiitake mushrooms  
Oregon Tilth, certifying agent
- 18) **Taylor Farms, LLC.**  
Joe and Jackie Taylor  
2016 S. Benton St.  
Searcy, AR 72143  
501-268-3952  
501-268-2685  
800 acres soybeans  
Indiana Certified Organic, certifying agent
- 19) **York Pecan Company**  
Natalie Fields  
2919 Highway 32 West  
Foreman, AR 71836  
870-542-6196  
870-542-6197 FAX  
*yorkpecan@walnutar.com*  
(Natalie Fields)  
*yorkfarms@walnutar.com*  
(Dan York, President)  
*www.yorkpecan.com*  
Handler/processor of pecans  
Indiana Certified Organic, certifying agent

# Arkansas Certified Organic Operations\*



\* Data supplied by Certifying Agents operating in state, 2005.  
 Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndCGI.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndCGI.exe/oip_public/USA_map)

# Organic Producer Profile

## Southern Brown Rice: Weiner, Arkansas

Southern Brown Rice, located in Weiner, Arkansas, was among the first farms in the South to become organic. The families of Ron and Willadean Hogue began growing rice in the Weiner area in 1907, following the standard practices of the time. But, in 1978, Willadean took a long, hard look around the area in which they lived, where her children grew and played, and where someday her grandchildren would do the same. She was concerned about the high number of cancer cases in the area and became convinced that they were due to all the pesticides and chemicals used on the crops. With this realization, she decided to convert the farm to organic production.

The Hogues began the transition to organics in 1980, doing just one field at a time. Transitioning was not easy. “No one in the area knew about organic rice production,” Willadean recalls. “We had to get both production and certification information from manuals produced by CCOF (California Certified Organic Farmers).” In 1983 they were certified organic by OCIA as member number 22.

The lack of knowledge about organics in the early 1980s meant that the Hogues needed to develop markets for their products. They did this by traveling from city to city, from New Orleans to Dallas and Austin, from Chicago to St. Louis, and from New York to Boston. In each town, they would sit in their hotel room and call every health food store and co-op in the phone book. Then, they would go from shop to shop promoting their organic rice. In the early years, the Hogue’s home served as their storeroom, office, and mailroom. By 1984, they signed agreements with a few distributors. Currently, Southern Brown Rice is shipped all over the U.S., to Canada, and even to Europe.

On the Southern Brown Rice farms, rice and soybeans are grown in rotation, with the soybeans sold for tofu production. Until recently, poultry litter was used to provide nutrients and build soil organic matter. However, when the Hogues extended their organic certification from NOP compliance to compliance with E.E.C. (European Economic Community) standards, they needed to discontinue use of the litter. (Even though the poultry producers who provided the Hogues with litter do not feed their birds hormones or other additives, their operations did not comply with

some animal management practices required by E.E.C. organic standards.) As an alternative, they have begun using wheat as a winter cover crop, and soybeans tilled in at the blossom stage as a green manure.

Good land management has caused changes in the farm over the years. “The soil is different than it used to be.” Willadean says, “It is less compacted, there are more earthworms, and the white cranes are more abundant.”

Weeds and nitrogen management are the major production problems encountered on this farm. While cultivation is used to control weeds in the soybeans, weed management in flooded rice fields requires hand labor. Willadean remarks that the lack of chemical weed control means that their fields are “not pretty” and that their yields are usually lower than those of conventional rice growers. She admitted that when they first changed to organic production, their yields dropped to almost half of those obtained by conventional rice producers. After many years of building their soil and learning how to effectively manage their fields organically, Southern Brown Rice now produces yields closer to 70% of conventional producers. But they have minimal problems with pests, and their soils hold water better than conventional soils. “Many people have also told me that our rice just tastes better than conventionally grown rice,” Willadean notes. Finally, to naysayers of organics, Willadean says, “Organic production is not easy, but it can be done.”

**Contact:**

Southern Brown Rice

P.O. Box 185

Weiner, AR 72479

800-421-7423

870-684-2239 FAX

*office@southernbrownrice.com*

*www.hoguefarms.com/home.html*



# Organic Producer Profile

## Shirley Community Development Corporation (CDC)— The Shiitake Mushroom Center: Shirley, Arkansas

In 1988, a group of Arkansas farmers, including Tom and Brandy Kimmons, formed Shirley Community Development Corporation (CDC) as a non-profit 501(c)(3) community development program to provide livings for themselves, teach people about long-term sustainable agriculture, including organic farming, and educate the public about healthy food choices.



The Shiitake Mushroom Center, the marketing arm of the CDC, produces approximately 4,000 pounds of fresh, organically certified shiitake mushrooms on native white oak logs inoculated with certified organic spawn. After inoculation, the logs are tagged and stored until time for harvest. At harvest, the logs are submerged in water to shock the mushrooms into growing. One day later the mushrooms begin sprouting and will continue to fruit every 12 weeks for 2 years.

Shiitake mushrooms and mushroom specialty products are but a small part of production for Shirley CDC. Tom designed raised vegetable beds and herbal gardens that get their nutrients from compost made from mushroom and log wastes. Raised vegetable and herbal gardens needed decorative bricks, stepping stones, and birdbaths for garden design, so Tom developed a process to make the decorative items and now markets them from the gift shop located at the Center.

When China flooded the market with cheaper shiitake mushrooms, the Center partnered with the National Cancer Institute to research the health benefits of eating shiitake mushrooms, and now most of their product is being sold to the Institute.

The CDC has expanded its educational and economic development activities to include computer and business classes, youth job training, and production training seminars. During the past 10 years, the Center has

trained 200 small and independent farmers in sustainable agriculture and shiitake mushroom production and welcomes more than 3,000 visitors each year.

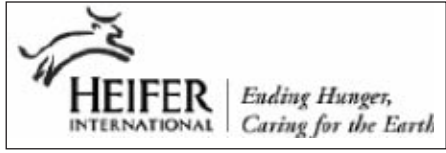
**For more information or to arrange a tour of the Center, contact:**

Tom Kimmons, Program Director  
Shirley Community Development Corporation  
The Shiitake Mushroom Center  
366 Brown Road  
Shirley Arkansas 72153  
501-723-4443  
*www.shiitakecenter.com*

# Organic Producer Profile

## Heifer Ranch: Perryville, Arkansas

**H**eifer International's strategy for defeating world hunger is "to pass on the gift." To accomplish that, they maintain three U.S. education centers and sev-



eral international centers that focus on world hunger solutions, organic gardening, and sustainable agricultural practices.

Heifer Ranch, located in Perryville, Arkansas, just 45 minutes from Heifer International's Little Rock headquarters, is one of the three U.S. centers. Known informally as "The Ranch," the 1200-acre educational center sponsors on-going, hands-on, educational programs on sustainable agriculture, sloping land agriculture, and organic production techniques.

One project at The Ranch is a 10-acre certified organic vegetable farm. Chuck Crimmins, The Ranch's master gardener, supervises a volunteer student manager and a myriad of volunteers and interns who can spend up to one year at The Ranch learning farming and sustainable agriculture techniques. Interns receive a small stipend and a house to live in. Heifer Ranch provides the intern with all the necessary tools to run a certified organic vegetable operation, including a refrigerated truck, a tractor, hoop-house, and other equipment. At the end of the season, if there is income from vegetable production shares and expenses are managed correctly, the intern may share in the profits from the vegetable project.

The 10-acre vegetable farm grows produce for The Ranch kitchen and the approximately 75 Community Supported Agriculture (CSA) members, who can choose either to pick up their vegetables at The Ranch, or have them delivered to a central location in Little Rock. For more information on the CSA program, contact Chuck Crimmins.

The Ranch hosts more than 25,000 visitors and 250 volunteers annually, and is the home of Heifer's original Global Village, where teenagers and adults can spend a few nights living with the realities of poverty and hunger. After spending time at the Global Village, they leave with an understanding of the root causes of poverty, an understanding that will affect their choices for a lifetime.

The Ranch also includes a Conference Center with modern lodging facilities, low and high Challenge Courses, organic gardens, livestock representing Heifer's gifts to projects, and a Heifer International Gift Shop.

For more information about Heifer International or about The Ranch, contact:

Chuck Crimmins

Ranch address:

55 Heifer Road

Perryville, AR 72126

501-889-5124

800-422-0474

*chuck.crimmins@heifer.org*

*www.heifer.org*

Mailing address:

P.O. Box 8058,

Little Rock, AR 72203

# Arkansas Farm Characteristics

from [www.ers.usda.gov/StateFacts/AR.HTM](http://www.ers.usda.gov/StateFacts/AR.HTM)

<b>1992, 1997 and 2002 Census of Agriculture</b>			
	1992	1997	2002
Total land area (million acres)	33.33	33.33	33.32
Total farmland (million acres)	14.13	14.82	14.50
Percent of total land area	42.4	44.5	43.5
Cropland (million acres)	10.06	10.27	9.58
Percent of total farmland	71.2	69.3	66.0
Percent in pasture	20.5	19.9	17.8
Harvested cropland (million acres)	7.30	7.81	7.46
Percent irrigated	26.7	36.7	43.3
Woodland (million acres)	2.23	2.47	2.37
Percent of total farmland	15.8	16.6	16.3
Percent in pasture	44.4	41.6	38.4
Pastureland (million acres)	1.44	1.55	1.98
Percent of total farmland	10.2	10.4	13.6
Land in house lots, ponds, roads, wasteland, etc. (million acres)	0.39	0.54	0.58
Percent of total farmland	2.8	3.6	4.0
Conservation and organic practices			
Farmland in conservation or wetlands reserve programs (million acres)	0.13	0.19	0.15
Percent of total farmland	1.0	1.3	1.0
Certified organic farms, all commodities (number)	N/A	N/A	19
Value of all organic commodities sold (\$1,000's)	N/A	N/A	136
Certified organic farms, crops (number)	N/A	N/A	9
Land used to raise certified organic crops (acres)	N/A	N/A	359
Average farm size (acres)	322	300	305

# Kentucky Organics: Statistics and State Resources

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## Kentucky Organic Statistics

Kentucky reported a steady 13.1% growth in certified organic acreage from 1997 to 2002. USDA statistics from 1997 show 5,666 certified organic acres. There were 6,291 certified acres in 2000, decreasing to 5,200 acres in 2002, then up to 8,700 acres in 2003.

The majority of organic acreage certified in Kentucky is in “other croplands” (62%), followed by hay, silage, and pasture production (995 acres, 35%). The remaining organic acreage is divided among vegetable production (2%), grain production (1%), and organic soybeans (0.4%). (USDA/ERS, 2002. Organic production. [www.ers.usda.gov/Data/organic/](http://www.ers.usda.gov/Data/organic/)) “Other croplands” include the production of wild medicinal and culinary herbs, organic tobacco, and mushrooms. (Verbal communication with organic producers)

The majority of certified organic mixed vegetables and fruits are grown near larger urban areas, where there are established direct markets at local farmers’ markets, restaurants, and local grocery stores.

Organic processing in Kentucky is currently limited to a bakery, coffee roasteries, organic distilled vodka, seed production, and organic tobacco processing.

## State Resources

1) The **Kentucky State Department of Agriculture** (KDA) is involved in various activities to assist organic growers.

**Accredited certifying agent.** KDA has applied for accreditation from USDA-NOP to become a certifying agent, but the accreditation was still pending as of July 2005. For the current status of the KDA Organic Program accreditation,

**Contact:** Kentucky State Department of Agriculture  
100 Fair Oaks Lane-5th Floor  
Frankfort, KY 40601

Mac Stone  
502-564-4983  
[mac.stone@ky.gov](mailto:mac.stone@ky.gov)

Jake Schmitz  
502-564-4983  
[jake.Schmitz@ky.gov](mailto:jake.Schmitz@ky.gov)

**USDA-NOP Certification Cost Share Program.** KDA participates in this program, which disburses monies to certified operations in the state. Originally Kentucky was allocated \$25,000 to disburse to their organic producers and handlers. According to Jake Schmitz, Program Coordinator for the Certification Cost Share Program, after redistribution by the USDA-NOP, there is approximately \$10,000 left in the fund available for disbursement.

**Contact:** Jake Schmitz

1001 Fair Oaks Lane-5th Floor

Frankfort, KY 40601

502-564-4983

*jake.Schmitz@ky.gov*

**Farmers' Markets.** KDA Product Directory lists where to buy "Kentucky Proud" livestock, hay, wood products, equipment, and services. They also offer a free Web Page Builder. For information about this service, visit *www.kyagr.com/buyky/index.htm*.

- 2) **The Kentucky Agricultural Development Board** invests monies from the Kentucky Agricultural Development Fund in innovative proposals that increase net farm income. The funding affects tobacco farmers, tobacco-impacted communities, and agriculture across the state, by stimulating markets for Kentucky agricultural products, finding new ways to add value to Kentucky agricultural products, and exploring new opportunities for Kentucky farms and farm products. There are also Project Analysts on the staff to assist applicants and county councils with any questions that arise.

**Contact:** Governor's Office of Agricultural Policy

404 Ann Street

Frankfort, Kentucky 40601

502-564-4627

502-564-8990 FAX

*govkyagpolicy@ky.gov*

*www.agpolicy.ky.gov*

- 3) **Dr. Michael Bomford, Kentucky State University**, does organic and sustainable vegetable research.

502-597-5752

502-597-6381 FAX

*mbomford@gwmail.kysu.edu*

- 4) **Berea College Department of Agriculture** is operating a Community Supported Agriculture (CSA) project at the college, which is in transition to organic production. OEFFA is monitoring their transition to being certified under the NOP Standards. For more information about this project or other organic production questions,  
**Contact:** Sean Clark, Professor of Agriculture  
CPO 2161  
Berea, KY 40404  
859-985-3402  
*sean\_clark@berea.edu*
- 5) **Dr. Mark Williams, University of Kentucky Department of Horticulture**, received a USDA grant for developing an organic CSA. The UK Horticulture Department has been conducting organic research at their Research Farm in Lexington, Kentucky, for past three years. They are in the process of developing an undergraduate curriculum in sustainable agriculture that will include organic production on the 6-acre CSA Program farm. The students will receive credits in the Organic/Sustainable Track for working in the CSA Program. For more information about this project, or other organic production matters,  
**Contact:** Dr. Mark Williams  
Department of Horticulture  
N-318 Agricultural Sciences North  
University of Kentucky  
Lexington, KY 40546-0091  
859-257-2638  
*mavillia@email.uky.edu*
- 6) **Don Sorrell, Campbell County Office Extension Agent**, offers assistance with organic production and handling technical questions.  
**Contact:** Campbell County Extension Office  
3500 Alexandria Pike  
Highland Heights, KY 41076-1705  
859-572-2600, 859-572-2619 FAX  
*dsorrell@uky.edu*

**Partners for Family Farms** is a private, nonprofit organization whose mission is to sustain farm life and farmland through the following goals: provide educational materials that improve the understanding of the role



of agriculture in local economies; support and promote successful diversification by farmers; create linkages among urban consumers and family farms by supporting markets and other opportunities for local products to be consumed locally; educate government agencies, restaurants, and institutions about their opportunity to purchase local, family-farm products; develop urban-rural, agricultural, and environmental classroom projects; and encourage policy makers to consider the role of family farms.

**Contact:** Partnership for Family Farms

P.O. Box 22259

Lexington, KY 40522

859-233-3056

859-281-6121 FAX

7) **Sustainable Mountain Agriculture Center** uses their skills and information base, developed over many decades, to make mountain agriculture sustainable. This organization is particularly interested in bringing to the forefront the importance of quality heirloom fruits and vegetables. They provide trainings in identifying, collecting, and sustaining family and community heirloom seeds and plants and coordinate the activities of growers of heirloom fruits and vegetables. They also experiment with herb and mushroom production.

**Contact:** Sustainable Mountain Agriculture Center

1033 Pilot Knob Cemetery Road

Berea, Kentucky 40403

859-986-3204

*bill\_best@heirlooms.org*

*www.heirlooms.org/index.html*

# Certified Organic Operations in Kentucky

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The following information was graciously supplied by the agents who certify in Kentucky. All certified operations were contacted for verification of the information. Only operations that were certified prior to June 1, 2005 and provided their approval for inclusion are listed in this resource manual.

Operations are listed in alphabetical order by name of the operation. No attempt was made to sort by certifying agent, location, or size of the operation. Numbers assigned to operations correspond to numbering on the Kentucky map (pages 68 and 69).

- 1) **Buffalo Trace Distillery**  
Drew Mayville  
1001 Wilkinson Blvd.  
Frankfort, KY 40601  
502-696-5912  
Organic Rain Vodka  
Indiana Certified Organic,  
certifying agent
- 2) **Jack Byrd**  
59 Swafford Branch Rd  
Manchester, KY 40962  
606-596-0280  
Wild crops: black walnuts,  
mushrooms, wild herbs  
Indiana Certified Organic,  
certifying agent
- 3) **Colcord Farms**  
Leo Keene  
Marketing manager  
Box 1000  
Paris, KY 4037-1000  
859-328-2401  
859-328-2540 FAX  
*bluemoon@iclub.org*  
Asparagus, grass-finished  
beef, non-certified but hor-  
mone and chemical free  
Indiana Certified Organic,  
certifying agent
- 4) **Conner/Fairchild**  
John Conner  
21 Conner Rd.  
Hebrom, KY 41048  
859-689-0924  
Produce, tomatoes  
Indiana Certified Organic,  
certifying agent
- 5) **Elmwood Stock Farm**  
Mac Stone  
3520 Paris Rd.  
Georgetown, KY 40324  
859-621-0756  
502-863-0086  
236 acres organic grass-  
fed beef, organic pastured  
poultry products and eggs,  
market vegetables, berries,  
herbs, and flowers  
Ohio Ecological Food and  
Farm Association, certifying  
agent

- 6) **Heine Brothers' Coffee**  
Mike Mays and Gary Heine  
2714 Frankfort Ave.  
Louisville, KY 40206  
502-899-5551  
888-273-9528  
Five stores, coffee roasting  
and retail, organic fair trade  
coffees  
Indiana Certified Organic,  
certifying agent
- 7) **Infinity Farms**  
Edward Schumann  
5600 Cutler Trace  
Melbourne, KY 41059  
859-635-8682  
859-635-8683  
Field crops, tobacco  
Indiana Certified Organic,  
certifying agent
- 8) **Lake Botanicals**  
Charles Lake  
2920 Poindexter Rd.  
Cynthiana, KY 41031  
859-234-6884  
*lakefarm@kyk.net*  
1.25 acres herbs, passion  
flower, yellow dock, and  
calamus  
Indiana Certified Organic,  
certifying agent
- 9) **Organic Ridge Farm**  
Roger Smith  
835 AA Highway South  
Brookville, KY 41004  
606-756-2406  
16 acres mixed vegetables,  
flowers, seed saver of Burley  
tobacco  
Indiana Certified Organic,  
certifying agent
- 10) **Organic Oven Breads**  
Florentino Morlote  
2780 Louisville Rd.  
Harrodsburg, KY 40330  
859-733-9070  
Five types of organic bread  
Ohio Ecological Food and  
Farm Association (OEFFA),  
certifying agent
- 11) **Otter Valley Farms**  
Suzanne Doerrfeld  
1342 Enterprize Rd.  
Lawrenceburg, KY 40342  
502-859-1028  
Mixed vegetables, garlic,  
non-certified honey  
Indiana Certified Organic,  
certifying agent
- 12) **Perry Botanicals**  
Charles Perry  
324 Saterfield Ln.  
Owingsville, KY 40360  
606-674-2819  
Woodland medicinal herbs:  
black and blue cohosh, wild  
yam, black haw, wild cherry,  
goldenseal, Solomon's seal,  
and cranes bill  
Indiana Certified Organic,  
certifying agent
- 13) **Sheltowee Farm, Inc.**  
Bill and Rebecca Webb  
4793 Firebrook Blvd.  
Lexington, KY 40513  
859-219-3400  
859-230-0780 (cell)  
*billy@sheltoweefarm.com*  
Year-round specialty fresh  
mushrooms  
Indiana Certified Organic,  
certifying agent

14) **Swackhamer Farms**

Jeff Swackhamer  
1690 Goodluck Beaumont Rd.  
Edmonton, KY 42129  
270-428-2329  
200 acres wild crops, herbs,  
ginseng, yellow root, black  
cohosh  
Indiana Certified Organic,  
certifying agent

17) **Tom's Farm**

Thomas Byrd and Thomas  
Lawhon, Jr.  
755 Towles Rd.  
Owenton, KY 40359  
502-484-5016  
324 acres of hay, 45 A. of  
field crops  
Indiana Certified Organic,  
certifying agent

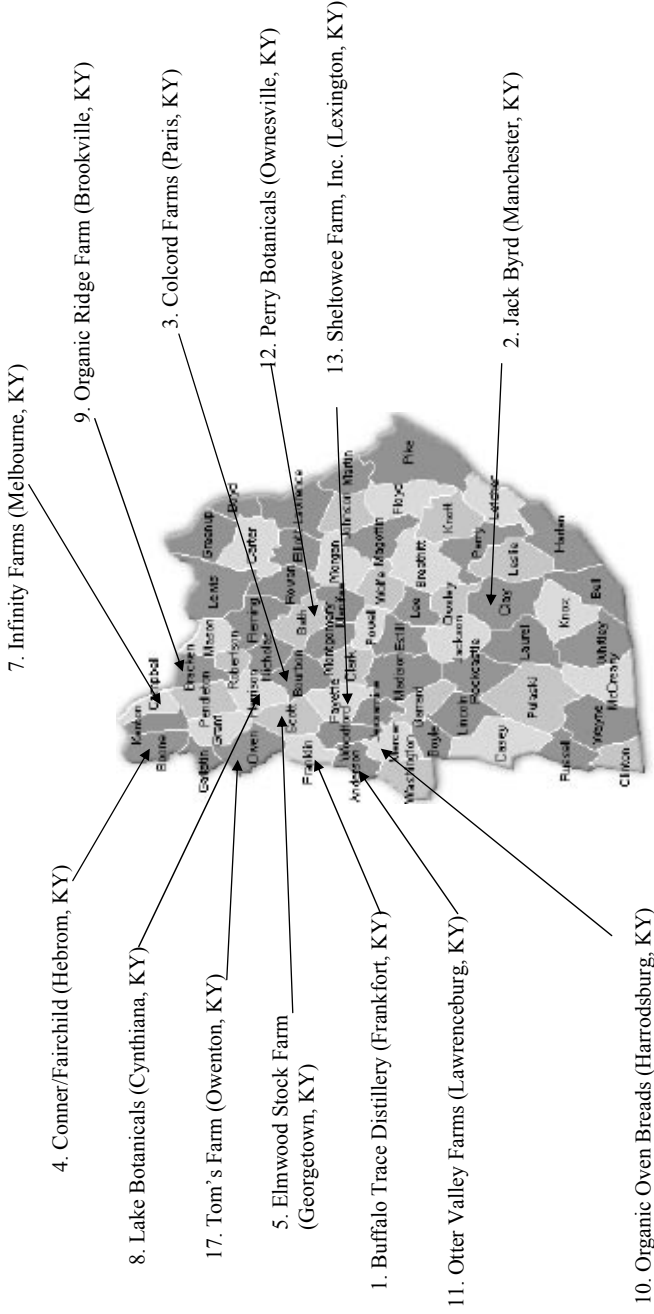
15) **Sylvanus Farm**

Edward E. Elliott and Sarah  
A. Paulson  
5980 Salt Lick Rd.  
Burkesville, KY 42717  
270-433-6068  
*sylvanusfarm@hotmail.com*  
*www.geocities.com/sylvanus-*  
*farm*  
23 acres; 5 acres in seasonal  
produce, seed garlic  
Ohio Ecological Food and  
Farm Association, certifying  
agent

16) **T&J Farm**

Tom Crogan  
645 Dog Creek Rd.  
Cub Run, KY 42729  
270-534-9665  
Field crops, tobacco  
Indiana Certified Organic,  
certifying agent

# Eastern Kentucky Certified Organic Operations\*



\* Data supplied by Certifying Agents, 2005.

Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndCt.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndCt.exe/oip_public/USA_map)



# Organic Producer Profile

## Elmwood Stock Farm: Georgetown, Kentucky

**E**lmwood Stock Farm is located in the Bluegrass farmland of Scott County. It is a diversified operation that is owned and operated by a multi-generational family who have been farming in the region for more than six generations. The largest organic farm in Kentucky, 236 of the farm's 375 acres will be certified organic by Ohio Ecological Food and Farm Association (OEFFA) in 2005.



*Mac and Ann Stone*

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Farm owners Cecil and Kay Bell reside and farm full-time at Elmwood. Cecil oversees the cattle herd, makes hay, and maintains pastures, barns, and on-farm construction projects. John and Melissa Bell, Cecil's son and daughter-in-law, are another leg of the farm stool. John oversees all of the vegetable and burley tobacco production, partners in the cattle herd, makes compost, and manages the on-farm labor. John's sister and her husband, Ann and Mac Stone, are more visible at farmers' markets. They see to the organic poultry, sheep flock, farmers' markets, and CSA pickups of Elmwood products. Mac is employed by the Kentucky Department of Agriculture as the Division Director of Value Added Plant Production, which includes the organic program.

This farm has always rotated crops, used cover crops in the off season, "rested" the fields, and maintained livestock as part of the mix, in an effort to help build on the high quality land of central Kentucky. Production on Elmwood Stock Farm now embraces the experiences of earlier generations within new technologies offered today. Electric fencing helps keep pastured poultry safe from predators; trickle irrigation conserves water and reduces conditions favorable for disease; and lab testing identifies microbial life in the compost. They do not produce all of their crops organically. "Each year we learn more production skills that enable us to produce more organic vegetables in Kentucky's humidity. But we cannot successfully grow everything . . . yet."

Long a producer of Black Angus cattle breeding stock, Elmwood still sells breeding bulls. Complementing Elmwood's cattle herd, a flock of

Dorset-Suffolk cross sheep are grazed in a carefully planned rotation to produce spring lambs.

The owners of Elmwood Stock Farm are proud of their traditional approach to sustainable agriculture:

Some say that many of the organic practices we employ today are old fashioned. Our view is that our “old fashioned” practices of diversifying crops and livestock in seasonal rotation, building good soil with compost and cover crops, letting poultry out of the houses onto the pastures, and producing vegetables and fruits in season with the sun and rains are successful.

Elmwood Stock Farm sells through Kentucky farmers’ markets in Lexington and Georgetown, and through a Community Supported Agriculture venture (CSA), started in 2005. The CSA served 38 members in 2005, but plans are to increase this number to 150 members in 2006. Organic tobacco in Kentucky, including theirs, is marketed to American Spirit. Although the farm is not open to the public on a regular basis, CSA subscribers are annually hosted at a special farm tour and open house.

Elmwood Stock Farm received a Master Conservationist award from the National Resource and Conservation District of Scott County in October 2004.

**Contact:**

Mac Stone  
3520 Paris Road  
Georgetown, KY 40324  
Organic Meat and Produce  
859.621.0755  
502-867-2046 FAX  
*www.elmwoodstockfarm.com*



# Organic Producer Profile

## Peacemeal Organic Gardens: St. Catharine, Kentucky A Project of Saint Catharine Farm and Dominican Earth Education Center

The Congregation of Dominican Sisters of St. Catharine was founded in 1822. The Sisters were given 100 acres of land that they worked from the beginning. In the early 1980s, a Kentucky State Forester helped to initiate the Timberland Stand Improvement program at St. Catharine Farm, with a grant



from the U.S. Forestry Department. In 1998-99 earth retreat cabins were built using ecological design, including composting toilets, solar energy, and wood stoves. In 1999 a new recycling center, a resource library, and an Earth Center office were added to the farm. The staff has been running a children's garden project since the summer of 2001, and an expanded organic garden project was launched in October 2002. Most recently, the project's gardener, Chad Jubela, took a course in permaculture. A grant received in July 2003 from The Kentucky Division of Forestry will enable the Earth Center to implement permaculture principles in the garden. The Earth Center is also weighing possibilities for a Community Supported Agriculture (CSA) project and new earth cabins in the near future. The process of application to Kentucky Department of Agriculture for organic certification of the gardens is underway.

The Sisters practice sustainable living, environmental education, and earth spirituality on their 700 acres of land, where there is also a college, health care facility, working farm, Dominican Earth Center, and the Congregation's Motherhouse. Their ecological education center includes 150 acres of woodland, 170 acres of pasture, 10 acres of organic gardens, and a 7-acre model of sustainable living called Jonquil Ridge. In addition to making a walking trail with Earth stations through one of their three timberland preserves, the Sisters placed 15 acres of former cropland in the Conservation Reserve Program. At the present time, the 10-acre garden, called Peacemeal Organic Gardens, provides fresh organic produce to Sansbury Care Center, a state-licensed health care center,

and to local residents through a farmers' market. The gardens are used to educate local Hispanic children about Earth stewardship, gardening, and basic ecological principles. In cooperation with the University of Kentucky, more than 170 acres was devoted to demonstrate ecologically-sound intensive grazing techniques. Guided by the Congregation's Vision Statement, which calls the Sisters to contemplate the interconnectedness of God's creation, to live simply and sustainably, to oppose violence, and to transform oppressive structures, the Land Trust Committee is working to develop a land ethic that will help protect the ecological integrity of their land into the future. The Coordinator of the Earth Center also writes a monthly "Earth Alert" column for four local newspapers (Springfield, Lebanon, Bardstown, and Louisville).

**Contact:**

Sr. Rose Marie Cummins,  
859-336-7778  
2645 Bardstown Rd.  
St. Catharine, KY 40061  
*rosieop@kyol.net*

**Partner Organizations:**

The Dominican Alliance  
Kentucky Care for the Earth  
Committee  
University of Kentucky Extension Service  
Kentucky Division of Forestry



# Organic Producer Profile

## Sheltowee Farm, Inc.: Lexington, Kentucky

**B**ill and Rebecca Webb (Billy and Becky) grow specialty shiitake and oyster mushrooms at Sheltowee Farm in Bath County, Kentucky. They also take advantage of what Mother Nature has to offer seasonally, wildcrafting and marketing morels, chanterelles, hen of the woods, and chicken of the woods wild mushrooms. Sheltowee Farm, a 200-acre family-owned and -operated farm, is located in the heart of Daniel Boone National Forest and encompasses hardwood forests, bottomlands, and a 10-acre lake. Sheltowee Farm is certified organic by Indiana Certified Organic.



*The Webbs: Hyatt, age 6; Harrison, age 8; and Hunter, age 3; Billy and Becky*

Billy's father, Elmer Webb, purchased Sheltowee Farm to be near the family and is an untiring farm worker. Rebecca's mother and father, Sharon and Jerry Phillips, spend so much time working at the farm that the Webb's three young sons believe they live there. Billy says the farm could not function without the three elders who take part in everything from drilling mushroom logs to ongoing construction. Additionally, the Webbs say they found the perfect employee, Angelica Hernandez, after years of searching.

One problem Billy identified is a reliable supply of organic materials for production. Currently, there are more than 18,000 shiitake logs on the farm. Billy says that in addition to following loggers in the area himself, he pays \$1.00 per log to locals and is proud of the farm's contribution to the local economy. They use 600 bales of certified organic wheat straw and certified organic rye grain to produce the oyster mushrooms but can find no straw supply in Kentucky. To get the wheat straw, Bill and Becky travel 15 hours round trip to another state, five times a year. They would like to find an in-state supply and further contribute to Kentucky's

farming economy. Also on the wish list is a custom harvester to combine the wheat that could be grown on their own 50 acres of certified land. The Webbs would use the straw, and the harvester could have the wheat. This family is all about cooperation.

The family built an environmentally controlled mushroom house before they had any customers, recognizing that the ability to supply a quality product year-round would give them an advantage in the marketplace. Another marketing tool that the Webbs use to secure their market is to produce highest quality mushrooms. Their organic certification helps them to compete with lower priced imports from China.

“All marketing was self-taught; we feel it is common sense. Becky and I work as a team. We study each chef prior to meeting them, and we always go in together for meetings. We started two years ago with one restaurant, and now we sell to 44.” The farm also does custom growing for restaurants.

Becky received a USDA Fellowship grant and is now an Entrepreneurial Coach. She accomplished this while farming, raising three little boys, and carrying the fourth. She will be updating their Web site in the near future. Becky’s Web site features farm photos, a chef’s survey, and recipes for their fabulous mushrooms.

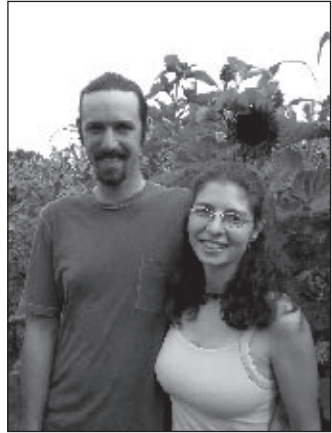
**Contact:**

Bill and Rebecca Webb  
4793 Firebrook Blvd.  
Lexington, KY 40513  
859-219-3400; 859-230-0780(c)  
*info@sheltoweefarm.com*  
*www.sheltoweefarm.com*

# Organic Producer Profile

## Sylvanus Farm CSA: Burkesville, Kentucky

Sylvanus Farm CSA, in South-central Kentucky's Cumberland County, is located on a curve of the Cumberland River called Salt Lick Bend. Certified by the Ohio Food and Farm Association (OEFFA), Todd Elliott and Sarah Paulson cultivate about 5 acres of vegetables, herbs, flowers, and fruit on their 23-acre farm. They sell crops through a Community Supported Agriculture (CSA) operation, with delivery to Bowling Green, Kentucky, and Nashville, Tennessee. Boxed, mixed produce is delivered weekly for 28 weeks from late April through



early November. Their members can eat fresh, organic, locally-grown produce usually less than 24 hours after harvest. Interns assist through the growing season, trading their labor for on-the-job education.

Sylvanus Farm specializes in growing European, Asian, traditional, and heirloom varieties. Todd and Sarah say, "Because we operate on a small scale, we can bring you gourmet and heirloom varieties that require too much handling for large grocery producers." They have a small, mostly Black Angus beef herd and sell natural meat and eggs. They have too few acres to produce their own hay and cite a lack of local organic hay and grain as their main obstacle to certifying livestock. CSA members are welcome to the farm and receive a weekly e-mail newsletter that includes farm news and recipes. Members are encouraged to make requests for favorite varieties and give taste-test feedback. Sarah says the newsletter helps her maintain farm records, as it includes reports of the produce available and describes important farm activities.



Row covers extend the season in the spring, by warming up soil for early planting, and in the fall to conserve warmth. Covers also make it possible to grow crops such as eggplant that would otherwise be consumed

by pests such as Colorado potato beetles. High humidity in their river bottom location can create blight problems for tomatoes and melons. They use succession planting of many crops but will skip successions during peak pest periods.

Sylvanus Farm is 2.5 hours from Nashville and 1.5 hours from Bowling Green. They say proximity to urban centers is essential for a CSA to work, but they could not buy higher-priced land nearer the cities. Many CSA's opt out of organic certification because they say they know their members personally and don't need it, but Todd notes several reasons to certify. Even though they know their members well, Todd says that certification is important to many of their customers, as it distinguishes them as the only certified CSA in the area. Some potential members contact them specifically because they are organic. Also, if they want to expand to other types of markets, certification will be required.

Challenges to certification? Todd says, "I don't think it is that hard to certify." Here are some tips from Sarah and Todd for growers considering the step to organic production:

- Keep a daily journal. Write down what you do. Records are not only a requirement for certification, they also help you make informed management decisions.
- Get very familiar with the organic regulations.
- Before applying any inputs to your crops, contact your certifying agent.
- Be aware of what your neighbors are doing (are there chemical drift concerns, and how might their crop impact yours?). As an example, when close neighbors stopped growing corn, crows descended on Sylvanus Farm in droves the next year.

**For more information about the farm or a CSA membership, contact:**

Todd Elliott and Sarah Paulson  
6980 Salt Lick Rd  
Burkesville, KY 42717  
270-433-6068  
*sylvanusfarm@hotmail.com*  
*www.geocities.com/sylvanusfarm*

# Organic Producer Profile

## Buffalo Trace Distillery: Frankfort, Kentucky

A Kentucky Distillery with an Innovative Product

**B**uffalo Trace Distillery, award-winning makers of Kentucky Straight Bourbon Whiskey, is a family-owned operation based in Franklin County, Kentucky. The distillery's rich tradition dates back to 1787, with the first modern distillery built on the site in 1857. Buffalo Trace is a fully operational distillery, producing bourbon and vodka on site, and was recently named to the National Historic Register. The distillery has been making Certified Organic Rain Vodka in Franklin County, Kentucky, since 2002.



*Master Distiller Harlan Wheatley educates a guest at "Whiskies of the World" in San Francisco.*

Buffalo Trace Distillery has won more international awards since 1990 than any other North American distillery, earning more than 85 distinctions in national and international competitions. When the 2005 winners of the San Francisco World Spirits Competition were announced, several spirits from the Buffalo Trace family topped the list receiving Gold Medals, and Organic Rain Vodka took a Double Gold Medal.

Organic Rain Vodka is made from scratch at Buffalo Trace Distillery, using 100 percent white organic corn. "It is truly a unique vodka," according to Elizabeth Cawood, Vodka Brand Manager. "The distillery is often commended for the high-quality bourbon we produce, but we're also quite proud of our vodka, and to win the Double Gold medal is really a validation of all the effort that goes into every batch of Rain." Organic Rain Vodka is distilled seven times under the direction of Master Distiller Harlan Wheatley.

Director Drew Mayville identified the short supply of organic grains for distillers as an opportunity for organic grain producers. There are no in-state sources of organic white corn.

**For more information about Organic Rain Vodka contact:**

Angela H. Traver

1001 Wilkenson Blvd.

Frankfort, KY 40601

502-696-5957

502-875-5553 FAX

*thunder@buffalotrace.com*

*atraver@buffalotrace.com*

*www.buffalotrace.com*



# Kentucky Farm Characteristics

[www.ers.usda.gov/StateFacts/KY.HTM](http://www.ers.usda.gov/StateFacts/KY.HTM)

<b>1992, 1997 and 2002 Census of Agriculture</b>			
	<b>1992</b>	<b>1997</b>	<b>2002</b>
Total land area (million acres)	25.43	25.43	25.43
Total farmland (million acres)	13.67	13.94	13.84
Percent of total land area	53.7	54.8	54.4
Cropland (million acres)	8.88	8.89	8.41
Percent of total farmland	65.0	63.8	60.8
Percent in pasture	38.9	36.0	30.7
Harvested cropland (million acres)	4.42	4.85	4.98
Percent irrigated	0.3	0.6	0.4
Woodland (million acres)	3.13	3.18	3.11
Percent of total farmland	22.9	22.8	22.5
Percent in pasture	31.7	30.1	29.0
Pastureland (million acres)	1.06	1.18	1.61
Percent of total farmland	7.8	8.5	11.7
Land in house lots, ponds, roads, wasteland, etc. (million acres)	0.60	0.69	0.71
Percent of total farmland	4.4	5.0	5.1
<b>Conservation and organic practices</b>			
Farmland in conservation or wetlands reserve programs (million acres)	0.27	0.37	0.40
Percent of total farmland	2.0	2.7	2.9
Certified organic farms, all commodities (number)	N/A	N/A	525
Value of all organic commodities sold (\$1,000's)	N/A	N/A	2,987
Certified organic farms, crops (number)	N/A	N/A	114
Land used to raise certified organic crops (acres)	N/A	N/A	640
<b>Average farm size (acres)</b>	<b>151</b>	<b>153</b>	<b>160</b>

# Louisiana Organics: Statistics and State Resources

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## Louisiana Organic Statistics

Louisiana has one of the longest operating state organic certification programs but was one of nine states that reported a decline in certified organic acreage from 1997 to 2001. USDA statistics from 1997 show 371 certified organic acres. There were 161 certified acres in 2000, which declined further to 96 acres certified in 2001 and 66 acres certified in 2002.(USDA/ERS, 2002. Organic production. [www.ers.usda.gov/Data/organic/](http://www.ers.usda.gov/Data/organic/)) The primary cause of the decline was a delay in obtaining USDA-NOP accreditation. Many smaller producers opted to drop from certification when local certification was not available. One of the largest producers obtained services from a certification agency from outside the state.

The majority of organic acreage certified in Louisiana in 2001 was “fruits, vegetables, and herbs” (73 acres, 76%), with “other crops” following (13 acres, 14%). The remaining organic acreage was divided between hay (3%) and pasture (10%). “Other croplands” include 11 acres in cultivated and wild mushrooms. One-third of total certified organic acreage was in vegetables. Fruits include citrus (15%), tree nuts (12.5%), and other fruits (11%). Blueberries are the leading “other fruit crop.” There are currently no certified organic livestock in the state.

Most certified organic production is located in southern Louisiana, near larger urban areas, where there are established direct markets, including farmers’ markets, restaurants, and local grocery stores.

Organic products in Louisiana include roasted coffee, brown rice crackers, flavors and syrups, stir-fry sauce, and juice. Handlers are certified by several different certifying agents, mostly from outside the state.

## State Resources

- 1) The **Louisiana State Department of Agriculture and Forestry (LDAF)** is involved in several activities that assist organic producers. **Accredited certifying agent.** The USDA-National Organic Program (USDA-NOP) granted accreditation to LDAF in September, 2004. LDAF is a certifying agent in crops, livestock, wild crops, and handling. LDAF had certified organic operations in Louisiana for more than a decade prior to becoming a USDA-NOP accredited certifying agent.

**Contact:** Harry Schexnayder, Organic Program Coordinator  
225-952-8047  
*HSchexnayder@ldaf.state.la.us.*

**USDA-NOP Certification Cost Share Program.** The Louisiana Department of Agriculture and Forestry participates in this program, which disburses monies to certified operations in the state.

**Contact:** Harry Schexnayder, Organic Program Coordinator  
225-925-8047  
*HSchexnayder@ldaf.state.la.us.*

- 2) **Farmers' Markets** are coordinated through the Louisiana State University Agriculture Center and Louisiana Vegetable and Fruit Growers Association. There are 21 markets currently listed in Louisiana.

**Contact:** Jimmy Boudreaux, State Farmers' Market Representative  
LSU Ag Center  
155 J.C. Miller Hall  
Baton Rouge, LA 70803  
225-578-2222  
225-578-0773 FAX  
*JBoudreaux@agctr.lsu.edu.*  
*www.ams.usda.gov/farmersmarkets/States/Louisiana.htm*

### **New Orleans Farmers' Markets**

**Contact:** Darlene Wolnik, Associate Director  
Economics Institute/Crescent City Farmers' Market  
504-861-5898  
*ecoinst@loyno.edu*  
*www.crescentcityfarmersmarket.org.*

### **Baton Rouge Farmers' Market**

**Contact:** Copper Alvarez  
Red Stick Farmers' Market  
Baton Rouge Economic and Agricultural  
Development Alliance  
225-267-5060  
*breada@earthlink.net*  
*www.mainstreetmarketbr.com.*

- 3) **University of Louisiana at Lafayette. Lafayette, LA.**  
**Durga Poudel**, Assistant Professor and Farm Director, organizes organic field tours and workshops and maintains a certified organic demonstration farm. His publications include "Participatory

Evaluation of Organic Production Systems in Southwestern Louisiana” (Organic Farming Research Foundation, 2003), available at [www.ofrf.org/publications/Grant\\_reports/01.f.28.Poudel.pdf](http://www.ofrf.org/publications/Grant_reports/01.f.28.Poudel.pdf). His current research, funded by OFRF and due for publication in 2005, is evaluating weed suppression in tomatoes and sweet corn using hay mulch, plastic mulch, flaming, and mechanical cultivation.

**Contact:** Dr. Durga Poudel

Department of Renewable Resources  
University of Louisiana at Lafayette  
P.O. Box 44650  
Lafayette, LA 70504  
337-482-6163  
[ddpoudel@louisiana.edu](mailto:ddpoudel@louisiana.edu)

**Colette Anzalone**, Outreach Specialist, provides answers concerning production and handling of organic products.

**Contact:** Colette Anzalone

University of Louisiana at Lafayette  
611 McKinley Dr.  
Hamilton Hall, Room 127  
Lafayette, LA 70504  
337-482-5349  
[colette@louisiana.edu](mailto:colette@louisiana.edu)

- 4) **Owusu Bandele, Southern University, Professor, Department of Plant and Soil Sciences**, created the demonstration organic farm “Food for Thought,” with special interest in assisting limited resource and small-scale farmers. He is a past member of the National Organic Standards Board, the board that advises the USDA National Organic Program.

**Contact:** Dr. Owusu Bandele

Southern University Agriculture Research  
and Extension Center  
150 A.O. Williams Hall  
P.O. Box 10010  
Baton Rouge, LA 70813  
225-771-2262, ext. 206  
[owusu\\_bandele@suagcenter.com](mailto:owusu_bandele@suagcenter.com)

- 5) **Carl E. Motsenbocker, Ph.D., Professor, Department of Horticulture, Louisiana State University Agricultural Center**, teaches organic gardening at LSU, including organic methods, advises an

organic community garden, conducts sustainable agriculture research at the Ag Center research station, works with farmers' markets, and is developing an organic research program and organic extension materials for Louisiana for publication by the LSU Ag Center.

**Contact:** Dr. Carl Motsenbocker

137 Julian Miller Hall

Department of Horticulture

Louisiana State University

Baton Rouge, LA 70803

225-578-1036

*cmots@lsu.edu* or *cmotsenbocker@agctr.lsu.edu*.

# Certified Organic Operations in Louisiana

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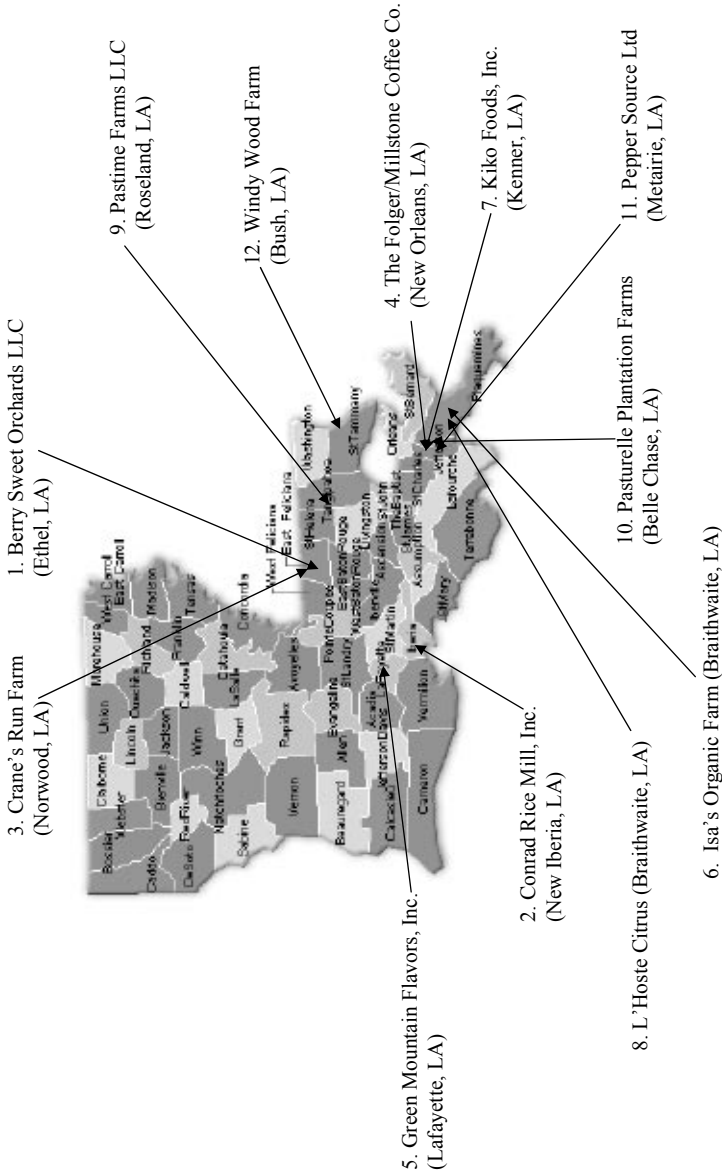
The following information was graciously supplied by the agents who certify in Louisiana. All certified operations were contacted for verification of the information. Only operations that were certified prior to June 1, 2005 and provided their approval for inclusion are listed in this resource manual.

Operations are listed in alphabetical order, by name of the operation. No attempt was made to sort by certifying agent, location, or size of the operation. Numbers assigned to operations correspond to numbering on the Louisiana map (page 87).

- 1) **Berry Sweet Orchards, LLC**  
Clifford and Susan Muller  
P.O. Box 191  
5110 Brown Rd.  
Ethel, LA 70730  
225-683-8584  
3 acres blueberries and vegetables; LA Department of Agriculture and Forestry, certifying agent
- 2) **Conrad Rice Mill, Inc.**  
Mike Davis  
P.O. Box 10640  
New Iberia, LA 70562  
337-364-7242  
Brown rice crackers  
Oregon Tilth, certifying agent
- 3) **Crane's Run Farm**  
Gerd and Trudy Oppenheim  
P.O. Box 267  
Norwood, LA 70761  
504-866-6551  
*trudyo@gs.net*  
5 acres vegetables, fruits, and nuts  
LA Department of Agriculture and Forestry, certifying agent
- 4) **The Folger/Millstone Coffee Company**  
Robert Osborne  
5242 Coffee Dr.  
New Orleans, LA 70115-7769  
504-894-0112  
Coffee  
Quality Certification Services, certifying agent
- 5) **Green Mountain Flavors, Inc.**  
Lee Simek  
236 Thoroughbred Dr.  
Lafayette, LA 70507  
337-886-1509  
Flavors, syrups  
Oregon Tilth, certifying agent
- 6) **Isa's Organic Farm**  
Javier and Isabele Guerrero  
6251 Hwy 29  
Braithwaite, LA 70040-2149  
504-682-7018  
*jxguerre@netscape.net*  
4 acres citrus (grapefruit, navel orange, satsuma, and lime)  
LA Department of Agriculture and Forestry, certifying agent

- 7) **Kiko Foods, Inc.**  
Tom Douglass  
2628 Lexington Ave.  
Kenner, LA 70062  
504-466-2090  
Aseptic packer of juice-based  
beverages  
Oregon Tilth, certifying agent
- 8) **L'Hoste Citrus**  
Lester L'Hoste, Jr.  
6397 Hwy 39  
Braithwaite, LA 70040  
504-682-0312  
*lhostecitrus@yahoo.com*  
10 acres citrus (grape-  
fruit, satsuma, lemon, navel  
orange), persimmons, and  
figs  
LA Department of Agricul-  
ture and Forestry, certifying  
agent
- 9) **Pastime Farms, LLC**  
Russell Roy  
65409 Highway 1058  
Roseland, LA 70456  
985-748-6504  
*www.nolaorganics.com*  
100 acres vegetables and  
fruits  
Quality Certification Ser-  
vices, certifying agent
- 10) **Paturelle Plantation  
Farms**  
Cynthia Ann Becnel  
13270 Hwy 23  
Belle Chase, LA 70037  
504-656-3375  
15 acres citrus, pecans, per-  
simmons; 1 acre produce  
Indiana Certified Organic,  
certifying agent
- 11) **Pepper Source Ltd.**  
Paul Liggio  
2709 Division Street  
Metairie, LA 70002  
504-885-3223  
Stir-fry sauce  
Oregon Tilth, certifying agent
- 12) **Windy Wood Farm**  
William Beatrous  
81540 Hwy. 1082  
Bush, LA 70431  
985-892-7685  
1 acre Vegetables, fruits, and  
herbs  
LA Department of Agricul-  
ture and Forestry, certifying  
agent

# Louisiana Certified Organic Operations\*



\* Data supplied by Certifying Agents, 2005.  
 Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndCGI.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndCGI.exe/oip_public/USA_map)



# Organic Producer Profile

## Pastime Farms, LLC: Roseland, Louisiana

**A** Louisiana local, Russell Roy began with a degree in agriculture and chemistry and a dream of distributing only the freshest, highest quality produce. Pastime Farms, on 105 acres, is now the largest certified organic farm in Louisiana and produces from May through November. It has 95 linear miles of 35 different vegetables, 2000 berry bushes, and 1200 fig trees, all certified organic by Quality Certification Systems. Russell Roy claims not only the most organic produce in Louisiana but also the freshest. Pastime Farms' pledge is, "The only way that they're gonna get it any fresher is by



going out there themselves, picking it off the trees, and eating it." Pastime Farms was started in 1998 with a handful of employees, has grown significantly since then, and is currently growing exponentially.

Russell does his own marketing through his Web site ([www.nolaorganics.com](http://www.nolaorganics.com)), TV, 17 magazines, 6 newspapers, newsletters, educational programs at local schools, developing a school age coloring book for students, and an agri-tourism program at the farm. Produce is marketed to restaurants and wholesalers, at farmers' markets and a produce stand, and through a Community Supported Agriculture (CSA) project. Customers can find the farm on-line at [www.nolaorganics.com](http://www.nolaorganics.com) and purchase shares to receive an allotment of production, with fresh produce delivered weekly within 36 hours of harvest. The CSA currently has 400 members and a 70% renewal rate. Russell's goal is 500 members.

Russell makes compost based on local chicken litter. He reports minimal use of off-farm pest control inputs, relying primarily on garlic extract. No plastic mulch is used. One-row cultivation is used to control weeds. Russell also rebuilds antique Allis Chalmers tractors, which he uses on Pastime Farm. Over the years he has amassed one of the largest working antique Allis-Chalmers tractor collections in the country.

**Produce sales contacts:**

New Orleans and North Shore area

Matt, Field Sales Manager

985-246-9685

*sales@nolaorganics.com*

Sean, Restaurant Sales Manager

985-705-3379

*sean@nolaorganics.com*

Baton Rouge area

Connie 225-763-9739

**Farm contact:**

Russell Roy

Pastime Farms, LLC

65409 Hwy. 1058

Roseland, LA 70456

*pastimefarms@aol.com*

Farm Location:

20174 Lowery Lane

Amite, LA 70422

*www.nolaorganics.com*

# Organic Producer Profile

## EquiTerra Farm: Clinton, Louisiana

Paul Davidson had a dream 29 years ago when he and his wife, Maria, bought a worn-out farmstead in the rolling hills of East Feliciana Parish, in southeast Louisiana. EquiTerra Farm continues to be “a work in progress.” With both



Davidsons employed full-time as wildlife biologists—Maria as a Biologist Manager for the Louisiana Department of Wildlife and Fisheries, and Paul as the Executive Director of the Black Bear Conservation Committee—the farm sometimes takes a back seat.

From the onset, Paul sought to manage his crops and land “in concert with nature.” In the early 1980s, he planted more than an acre of Rab-biteye blueberries and managed them, and his market garden, using organic methods, but was not officially certified. By the time Baton Rouge’s Red Stick Farmers’ Market opened in 1996, Paul was ready to apply for organic certification from the Louisiana Department of Agriculture and Forestry. They classified Paul’s blueberry fields as “transitional organic” and his market garden as “organic.” With the advent of the NOP, the Davidsons had to recertify their farm. In the summer of 2005, they were completing their paperwork to become certified organic with the Louisiana state program.

Over time, the Davidsons have expanded and added new components to the farm, evaluating each for future planning. The high demand for their produce at the farmers’ market allowed them to expand their market garden from 0.5 to 1.75 acres. Produce includes beans, peppers, tomatoes, potatoes, corn, okra, cucumbers, squash, strawberries, eggplant, and herbs in the summer, with lettuce mixes, high quality greens, broccoli, cabbage, cauliflower, carrots, and other crops grown in the fall and winter. A mixed-power farm, much of the land management is done using their three Belgian draft horses. Besides produce, they also raise and

process about 400 pastured broilers each year, with plans to expand. They also maintain about 50 laying hens, selling the eggs directly from the farm and at the market.

In 2004, they fenced an additional nine acres of pasture and cross-fenced to accommodate meat goats and Katahdin sheep. They plan to expand their herd by keeping female kids and lambs and selling the males until they have 20 ewes and 20 does. Their goats will be bred to include Spanish, Tennessee Meat Goat, Kiko, and Boer bloodlines, with breeding does being no more than 50% Boer. Sheep will be upgraded by purchasing better stock and using first-class rams. Besides having access to pasture, the sheep and goats are allowed to browse on privet and Chinese elm in the understory of the 75 acres of forested land on the farm.

In 2005, eight CSA shares were sold to investigate CSA marketing. Intentionally starting on a small scale to evaluate potential problems, the Davidsons are happy with the way it worked and will probably expand to about 20 shares in 2006. The overall objective of EquiTerra Farm, LLC, is “to be a model sustainable farmstead to show others, especially young farmers, that a decent and honest living can be made on a small farm, working with the land and not against it.” To encourage young farmers, the Davidsons regularly have interns working on the farm. They are also making their farm available as an outdoor environmental and agricultural classroom for students in a nearby Montessori school that their two-year-old son, Mark, will be attending when he gets older.

**Contact:**

Paul and Maria Davidson  
12798 Muse Lane  
Clinton, LA 70722  
225-683-8406  
*pldavidson@aol.com*

# Louisiana Farm Characteristics

[www.ers.usda.gov/StateFacts/LA.HTM](http://www.ers.usda.gov/StateFacts/LA.HTM)

<b>1992, 1997 and 2002 Census of Agriculture</b>			
	<b>1992</b>	<b>1997</b>	<b>2002</b>
Total land area (million acres)	27.88	27.88	27.88
Total farmland (million acres)	7.84	8.37	7.83
Percent of total land area	28.1	30.0	28.1
Cropland (million acres)	5.55	5.57	5.07
Percent of total farmland	70.9	66.5	64.8
Percent in pasture	15.8	16.3	16.6
Harvested cropland (million acres)	3.81	4.02	3.33
Percent irrigated	16.0	17.1	18.3
Woodland (million acres)	0.99	1.07	1.02
Percent of total farmland	12.6	12.8	13.0
Percent in pasture	39.5	32.0	29.5
Pastureland (million acres)	0.99	1.10	1.19
Percent of total farmland	12.7	13.1	15.3
Land in house lots, ponds, roads, wasteland, etc. (million acres)	0.30	0.64	0.55
Percent of total farmland	3.9	7.6	7.0
Conservation and organic practices			
Farmland in conservation or wetlands reserve programs (million acres)	0.08	0.18	0.27
Percent of total farmland	1.0	2.2	3.5
Certified organic farms, all commodities (number)	N/A	N/A	18
Value of all organic commodities sold (\$1,000's)	N/A	N/A	51
Certified organic farms, crops (number)	N/A	N/A	13
Land used to raise certified organic crops (acres)	N/A	N/A	66
Average farm size (acres)	306	275	

# Mississippi Organics: Statistics and State Resources

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## Mississippi Organic Statistics

According to USDA/ERS statistics for 2001, Mississippi was one of two states in the U.S. with no acreage in certified organic production.(USDA/ERS, 2002. Organic production. [www.ers.usda.gov/Data/organic/](http://www.ers.usda.gov/Data/organic/)) In May 2005, the Mississippi Department of Agriculture Organic Program certified the first five organic producers in Mississippi. Private certifying agents report two certified organic handlers in the state.

## State Resources

- 1) **The Mississippi Department of Agriculture and Commerce (MDAC)** is involved in several activities of importance to organic producers.

**Accredited certifying agent.** MDAC received accreditation by the USDA-National Organic Program (USDA-NOP) in crops, wild crops, and handling on June 1, 2004. The Organic Certification Review Board meets quarterly to review and approve certification applications.

**USDA-NOP Certification Cost Share Program.** Up to 75% of the certification costs can be covered by this program, up to a maximum of \$500 per farm per year.

**Contact:** Kevin Riggin

MDAC Program Coordinator for the Certification

Cost Share Program

601-693-3382 or 601-354-6818

[Kevin@mdac.state.ms.us](mailto:Kevin@mdac.state.ms.us)

Guy Feltenstein

Director, Regulatory Services for Fruits and Vegetables

601-483-3451

[GuyF@mdac.state.ms.us](mailto:GuyF@mdac.state.ms.us)

Organic System Plan forms:

[www.mdac.state.ms.us/n\\_library/pub\\_form/forms/pdf/](http://www.mdac.state.ms.us/n_library/pub_form/forms/pdf/reg_fruitveg_organic.pdf)

[reg\\_fruitveg\\_organic.pdf](http://www.mdac.state.ms.us/n_library/pub_form/forms/pdf/reg_fruitveg_organic.pdf)

**Farmers' Market Program.** Farmers' markets are located throughout the state, serving as a marketplace for locally grown organic and non-organic vegetables and fruits, as well as meats, eggs, bee products, and processed farm products.

**Contact:** Jake Hutchins, Director  
P.O. Box 1609  
Jackson, MS 39215  
601-953-2445 601-354-7330 FAX  
*Jake@mdac.state.ms.us*  
*www.mdac.state.ms.us/n\_library/departments/farm\_mkt/  
index\_farmmkt.html*

**Mississippi Department of Agriculture and Commerce Plant Pathology Laboratory.** Identification of fruit (strawberry, cherry, and blackberry) fungal diseases, as well as other plant diseases.

**Contact:** Dr. David Ingram  
601-857-2284

- 2) **The Mississippi Agriculture and Forestry Extension Station (MSU-MAFES)** provides expertise in all aspects of commercial fruit (specializing in blueberries and grapes) and vegetable production.

**Contact:** MSU Truck Crops Branch Experiment Station  
P.O. Box 231  
2024 Experiment Station Road  
Crystal Springs, MS 39059  
*www.msucare.com*

**Dr. Bill Evans, Research Coordinator—Mississippi Truck Crops Branch Experiment Station,** is conducting a USDA Specialty Grants organic and integrated pest management research project. The research is using a six-point rotation system of vegetables to evaluate crop yields and economic returns of organically and conventionally produced vegetables. The research is in its second year, with one year remaining on the grant. Preliminary results show that it is economically feasible to grow some varieties of vegetables organically in Mississippi.

**Contact:** Dr. Bill Evans  
601-892-3731  
601-892-2056 FAX  
*wbe@ra.msstate.edu.*  
*www.msstate.edu/dept/cmrec/truckcrops.htm* (Truck Crops Branch)

**Dr. Richard G. Snyder, Professor and Vegetable Specialist,** answers questions on commercial vegetable production, including organic production, and maintains an excellent Web site with information on local organic production of vegetables and fruits as well as links to organic agricultural information.

**Contact:** Dr. Richard Snyder  
601-892-3731  
601-892-2056 FAX  
*RickS@ra.msstate.edu*  
*www.msstate.edu/dept/cmrec/organic*  
(Organic fruit and vegetables)  
*www.greenhousetomatosc.com*  
(Greenhouse Tomato Short Course)  
*www.msstate.edu/dept/cmrec*  
(Central Research and Extension Center)  
*www2.msstate.edu/~ricks/* (Vegetable Resource Page)

- 3) **Mississippi State University (MSU) Coastal Research and Extension Center.** This center focuses on horticultural and field crop production.

1815 Poppo Ferry Rd.  
Biloxi, MS 39532  
228-388-4710  
228-388-1375 FAX  
*www.msstate.edu/dept/crec/crec.html*

**Dr. David Veal**, Head, Coastal Research and Extension Center.  
Focus on ornamental horticulture and environmental protection.  
228-546-1000  
228-388-1375 FAX  
*cdv@ra.msstate.edu*

**Dr. John Braswell**, Associate Horticulture Specialist. Specializing in blueberry and muscadine production, as well as general horticultural practices.  
601-795-4525  
601-795-0653 FAX  
*braswell@ext.msstate.edu*

- 4) **The Deep South Fruit and Vegetable Conference and Trade Show** is a cooperative event held annually in one of the four participating southern states (Alabama, Arkansas, Louisiana, and Mississippi). The conference features workshops on fruit and vegetable production, including organic production, presented by academic personnel from the four states, and programs from the Farm Service Agency and other state and federal agencies. Typical attendance at the conference is more than 500 people.



**Contact:** Guy Feltenstein  
MDAC Director, Regulatory Services for Fruits and  
Vegetables  
601-483-3451  
*GuyF@mdac.state.us*

- 5) **Small-Scale/Limited Resource Farmers Initiative.** Mississippi was one of 11 states that received funding of up to \$6 million for a Small-Scale/Limited Resource Farmers Initiative. The USDA-NRCS offices in Mississippi will dedicate up to \$500,000 for this program to help farmers with 100 acres or less of cropland to implement conservation practices.

To be eligible, at least 10% of the cropland acres must be planted to alternative crops. Cost-share rates will be up to 90% for all practices, and contracts will be limited to \$10,000. Farmers interested in the Small-Scale/Limited Resource Farmers Initiative should contact their local USDA Service Center or NRCS office. Information is also available at <http://offices.usda.gov/> or in the telephone book under “Federal Government, U.S. Department of Agriculture.” Additional information for small farmers and ranchers is on the Web at [www.usda.gov/oce/smallfarm](http://www.usda.gov/oce/smallfarm) and [www.nal.usda.gov/afsic/AFSIC\\_pubs/altlist.htm](http://www.nal.usda.gov/afsic/AFSIC_pubs/altlist.htm).

- 6) **The Mississippi Department of Environmental Quality (DEQ)** is a state agency that publishes an occasional newsletter, *Watershed Harmony*, on non-point source pollution in Mississippi.

**Contact:** P. O. Box 20305  
Jackson, MS 39289-1305  
601-961-5316  
*www.deq.state.ms.us*

# Certified Organic Operations in Mississippi

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The following information was graciously supplied by the agents who certify in Mississippi. All certified operations were contacted for verification of the information. Only operations that were certified prior to June 1, 2005 and provided their approval for inclusion are listed in this resource manual.

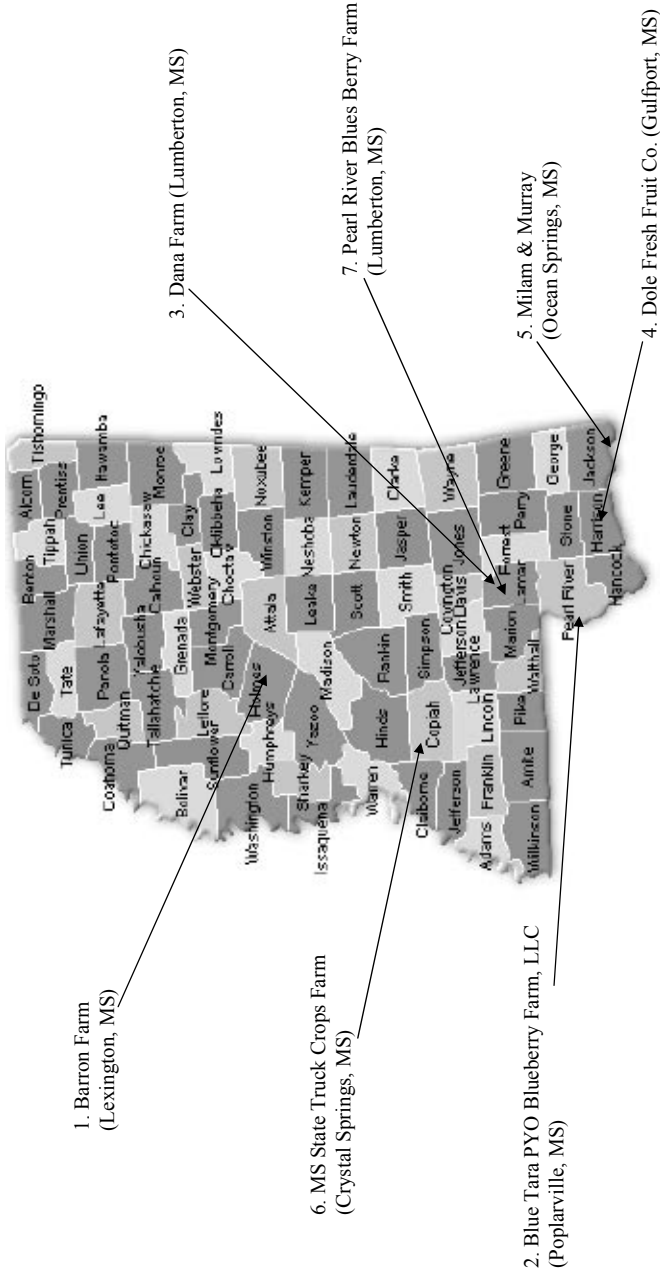
Operations are listed in alphabetical order by name of the operation. No attempt was made to sort by certifying agent, location, or by size of the operation. Numbers assigned to operations correspond to numbering on the Mississippi map (page 99).

- 1) **Barron Farm**  
Billy Barron  
1904 Hwy 14  
Lexington, MS 39095  
662-834-2486  
1½ acres mixed vegetables  
Mississippi Department of  
Agriculture and Commerce,  
certifying agent
- 2) **Blue Tara PYO Blueberry Farm, LLC**  
Mandy McCormick and  
Colleen Cody  
258 Langnecker Rd.  
Poplarville, MS 39470  
601-403-8272  
18 acres blueberries  
Mississippi Department of  
Agriculture and Commerce,  
certifying agent
- 3) **Dana Farm**  
Tom and Sue Ann Dana  
277 Hurricane Creek Rd.  
Lumberton, MS 39455  
601-796-4406  
6 acres of rotationally man-  
aged vegetables and fruits  
(strawberries, blueberries,  
Asian pears, muscadines)
- 4) **Dole Fresh Fruit Co.**  
Rick Huber, Vice-President/  
Central Division Director  
East Pier, Banana Wharf  
Gulfport, MS 39502  
504-465-0761  
Handler of organic bananas  
International Certification  
Services, Inc., certifying  
agent
- 5) **Milam and Murray**  
Dean Murray  
106 Industrial Park Circle  
Ocean Springs, MS 39564  
228-875-3661  
Frozen food dinners  
OneCert, Inc., certifying  
agent

6) **Mississippi State University Truck Crops Farm**  
Dr. Bill Evans  
2024 Experiment Station Rd.  
Crystal Springs, MS 39059  
601-892-3731  
Organic research plot on  
farm  
Mississippi Department of  
Agriculture and Commerce,  
certifying agent

7) **Pearl River Blues Berry Farm**  
Alan and Amy Phelps  
24 Curt Rester Rd.  
Lumberton, MS 39455  
601-796-9800  
*info@pearlriverblues.com and  
order@pearlriverblues.com  
www.pearlriverblues.com*  
3000 Rabbiteye blueberry  
bushes  
Mississippi Department of  
Agriculture and Commerce,  
certifying agent

# Mississippi Certified Organic Operations\*



\* Data supplied by Certifying Agents operating in state, 2005.

Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndCGI.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndCGI.exe/oip_public/USA_map)

# Organic Producer Profile

## Dana Farm: Lumberton, Mississippi

**I**do not proselytize organics. I just do what I am doing. And I have been doing it for 30 years. If you don't want to believe that organics can be done in the South, that's OK. Or you can see what I am doing."

As a graduate student at the University of California in San Diego, Tom Dana became ill spending too much time in the library and not eating right. The campus doctors told him that he needed to eat food that was "more readily digestible." One of those "readily digestible foods" was soybeans, and the only place that Tom could buy soybeans was at a health food store. After talking with people at the store, Tom decided to grow some of his own food in a back yard garden. Thus started Tom's love of growing plants.

After working several years as an oceanographer, Tom found the "politics of the workplace detestable" and he and his wife, Sue Ann, moved back to his home state of Mississippi. They chose a poorly-located piece of land, and Tom started growing a garden, planting fruit trees, and "learning how to farm by doing it." The Dana farm has always been a partnership between Tom and Sue Ann. Tom handles the production work, while Sue Ann serves as "budget director, tax expert, marketing coordinator, harvesting assistance, landscaper, domestic support, spiritual inspiration, and reality check."

Tom warns beginning organic growers not to make the same mistakes Sue Ann and he made when choosing their farm. "Location," he stresses, "is very important." Your farm should be located close to markets, it should not be located in a frost pocket, it should not be next to a wildlife refuge, nor should it be near farmers that use aerial-applied pesticides. Tom speaks from experience on these recommendations, since his farm fails the first three tests.

Tom's farming practices center around building organic matter by frequently adding green manures and mulch to his land. Since he began farming in 1976, he has tried "almost every green manure available." Currently, he uses crimson clover as a winter cover crop and volunteer barnyard, crow foot, goose, and crab grass as summer cover crops. Dividing his 6-acre market garden area into 14 plots, he rotates at least

two plots into fallow each year to rejuvenate them and build up organic matter. He mulches his cropped plots extensively, putting a heavy layer of mulch on the walkways between his 3-foot beds, then adjusting the amount of mulch on the bed to the type of crop being grown, the weather conditions, and crop maturity. To guarantee a ready supply of mulch, he maintains a 10-acre hay field planted to bahagrass overseeded with crimson clover.

Having decided in 1979 not to use manure as an input, Tom relies on slow-release, mined (non-synthetic) minerals as sources for nutrients other than nitrogen. He limes his sandy soil every three years using a marl limestone. For readily available nitrogen during cool weather when decomposition is slow, Tom relies on soybean meal. He applies seaweed meal on his high-value cropland to supply micronutrients.

Tom claims to have tried “every possible marketing venture you can imagine.” When he first started, consumer knowledge of organic food was limited. He sold his crop to the only available “organic market” at the time, a food co-op in New Orleans that later turned into a private business. However, for the past 18 years, Tom’s major market outlet has been a pay-as-you-go (rather than annual shares) CSA. People participating in this CSA are able to have fresh produce from Tom’s garden year-round (in most years).

Tom almost did not become certified under the NOP. Not one to be bothered with keeping exacting records, he disliked the amount of paperwork required under the NOP. However, he did become certified, since he felt that he needed the certification to remain competitive in a volatile market.

**Contact:**

Tom and Sue Ann Dana  
277 Hurricane Creek Rd.  
Lumberton, MS 39455  
601-796-4406

# Mississippi Farm Characteristics

from [www.ers.usda.gov/StateFacts/MS.HTM](http://www.ers.usda.gov/StateFacts/MS.HTM)

<b>1992, 1997 and 2002 Census of Agriculture</b>			
	<b>1992</b>	<b>1997</b>	<b>2002</b>
Total land area (million acres)	30.02	30.02	30.02
Total farmland (million acres)	10.19	11.44	11.10
Percent of total land area	33.9	38.1	37.0
Cropland (million acres)	6.52	6.32	5.82
Percent of total farmland	64.0	55.3	52.5
Percent in pasture	20.4	19.7	15.4
Percent irrigated	13.5	17.5	20.2
Harvested cropland (million acres)	4.40	4.52	4.14
Woodland (million acres)	2.32	3.35	3.26
Percent of total farmland	22.7	29.3	29.4
Percent in pasture	36.0	23.9	24.7
Pastureland (million acres)	0.96	1.09	1.40
Percent of total farmland	9.4	9.5	12.6
Land in house lots, ponds, roads, wasteland, etc. (million acres)	0.40	0.67	0.61
Percent of total farmland	3.9	5.9	5.5
Conservation and organic practices			
Farmland in conservation or wetlands reserve programs (million acres)	0.33	0.73	0.81
Percent of total farmland	3.2	6.4	7.3
Certified organic farms, all commodities (number)	N/A	N/A	160
Value of all organic commodities sold (\$1,000's)	N/A	N/A	649
Certified organic farms, crops (number)	N/A	N/A	
Land used to raise certified organic crops (acres)	N/A	N/A	
Average farm size (acres)	318	271	263

# Tennessee Organics: Statistics and State Resources

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## Tennessee Statistics

According to the USDA 2002 Farm Census ([www.ers.usda.gov](http://www.ers.usda.gov)), Tennessee has 26.38 million acres in total land area, with 44.3% of that land in farm production, and only 4.37 million acres of that in harvestable crop production. According to USDA, there were 85,000 farms in Tennessee in 2004, with only 25% having incomes of more than \$10,000. Average farm size was 136 acres.

The state's largest farms are in western Tennessee, where cotton has historically been the leading crop. Cotton is supplemented, or in some sections supplanted, by corn, soybeans, vegetables, strawberries, grain sorghum (milo), and tobacco. Eastward in the Nashville Basin, livestock dominates, with cattle, hogs, sheep, horses, and poultry being raised there. On some farms, dairying is the chief source of income. Corn, hay, and other crops are grown mainly to feed the livestock, not for cash. However, in the Nashville Basin and on the Highland Rim, tobacco is an important crop. In northwest Tennessee, a Tyson processing plant in Union City has stimulated the growth of poultry production.

The sale of cattle and calves was the leading source of farm income in 1997, generating one-fifth of all sales. Other major sources of income include broilers (young chickens), eggs, dairy products, and hogs. The central part of the Nashville Basin is noted for its horse farms, where the famous Tennessee Walking Horse, which has a distinctively smooth gait, is raised.

There were only 300 acres in certified organic crop production in 2001. This was a significant decrease in organic production in Tennessee from 1997, when USDA reported 1,351 certified organic acres in production. Loss of organic production was attributed to lack of a local certification program when the USDA-NOP was implemented. Two percent of organic production in Tennessee was in mixed vegetables (5 acres); 1 acre was reported to be in herbs and nursery items, and the remaining 98% was in undesignated "Other Cropland." The majority of the "Other Cropland" is in organic tobacco. (USDA/ERS, 2002. Organic production. [www.ers.usda.gov/Data/organic/](http://www.ers.usda.gov/Data/organic/))



## State Resources

1) **The Tennessee Department of Agriculture** is involved in several programs of importance to organic producers.

**Accredited certifying agent.** Tennessee does not operate as a National Organic Program (USDA-NOP) accredited certification agency.

**USDA-NOP Certification Cost Share Program.** Tennessee does disburse monies to certified operations in the state to help them become certified. The monies are disbursed at 75% of certification costs, with a maximum of \$500 per certificate.

**Contact:** Dan Strasser

Tennessee Department of Agriculture  
615-837-5160

*Dan.Strasser@state.tn.us*

**Tennessee Farmers' Markets.** A directory of farmers' markets in Tennessee is located on the Tennessee Department of Agriculture Web page at <http://picktnproducts.org/farmersmarkets.html>.

**The Tennessee Market News Service** provides Tennesseans with information critical to making sound marketing decisions. This service is provided by the Tennessee Department of Agriculture and the United States Department of Agriculture. Trained reporters gather and disseminate complete, accurate, and unbiased agricultural market news. The market news covers current supply, demand, prices, trends, movements, and other information that affects the trade of livestock, grain, and other commodities. For up-to-date information, see <http://picktnproducts.org/marketnews/index.html>.

**The Tobacco Growers Trust.** Tobacco growers can obtain financial and technical assistance to assist in converting from tobacco to the production of alternative crops. Several tobacco producers have used these funds to assist them in converting to organic fruit and vegetable production.

**Contact:** Tennessee Tobacco Farmers Certifying Board

P.O. Box 40627  
Ellington Agricultural Center  
Nashville, TN 37204

<http://picktnproducts.org/trust/index.html>

- 2) **The Tennessee Organic Growers Association** is a membership association of organic and non-organic producers that sponsors an annual conference.

**Contact:** Cindy Delvin, President  
P.O. Box 121723  
Nashville, TN 37212  
615-395-4566  
*chdelvin@aol.com*

- 3) **Tennessee State University, Cooperative Extension**

3500 John A. Merritt Blvd.  
Nashville, TN 37209  
*www.tnstate.edu/cep/*

**Pam Rye, Area Small Farm Specialist**

1030 A Cumberland Heights Rd.  
Clarksville, TN 37040  
931-648-5725  
*prye@utk.edu*

- 4) **Tennessee State University Extension and Research Farm.** The 124-acre TSU Extension and Research Farm is a teaching and learning laboratory with on-farm test plots in agro-forestry, aquaculture, small ruminant management, vegetable and small fruit production, sustainable agricultural, organic production, pesticide storage and handling, post harvest handling, and water quality. Five acres are dedicated to organic crops (fruits and vegetables), and another 30 acres are dedicated to organic small ruminants (goats). A total of 35 acres are dedicated to organic research and demonstration, though not yet certified. Organic certification is in process. Plans are in place to study green manures, plasticulture, and insect control in vegetable growing. Research and demonstrations will focus on vegetables/small fruits and small ruminants (goats).

The goals of the farm are to provide innovative educational programs and leadership for limited-resource clientele and provide Extension applied-research information on alternative agriculture for small farmers. Farm educational programs include a Small Farm Expo, Small Farmer Recognition, a Forestry Field Day, World Igbo Congress Farm Tour, University of Tennessee/ Tennessee State University State Advisory Farm Tour, and UT/TSU State Advisory Farm Tour. The TSU

Research and Extension Demonstration Farm sponsored the 2005 Conference of the Tennessee Organic Growers' Association (TOGA).

Farm location: 3101 River Rd., Ashland, TN 37015

**Finis Stribling**, Extension Assistant/Farm Superintendent

615-963-1844

*fstribling@tnstate.edu*

**Dr. Roy Bullock**, Small Farm Coordinator and IPM

615-963-5449

*FBullock@tnstate.edu*

*www.tnstate.edu/cep/SpecialistPages/4/1091/HTML/PestMgt.htm*

**Dr. An Peischal**, Extension Assistant Professor, Livestock/  
Small Ruminants

615-963-5539

615-963-5833 FAX

*apeischel@tnstate.edu*

*www.tnstate.edu/cep/goats\_and\_small\_ruminant.htm*

**Dr. Richard Winston**, Plant and Soil Sciences Specialist

615-963-5538

*rwinston@tnstate.edu*

- 5) The **Tennessee Wildlife Resources Agency** provides information on a Comprehensive Wildlife Conservation Strategy, or "Bobwhite Buffers," that could increase farm incomes. For more information, see *www.state.tn.us/twra*.
- 6) The **Tennessee Department of Environment and Conservation (TDEC)** provides information on water quality, solid waste disposal, and disposal of conventional inputs. For information on the priorities and programs at TDEC, which are designed to protect and preserve the natural resources for one of the most biologically diverse states in the nation, go to *www.state.tn.us/environment*.
- 7) **Slow Food Nashville** is a nonprofit organization that supports a bio-diverse, sustainable food supply, local producers, heritage food traditions, and rediscovery of the pleasures of the table.

**Contact:** Cindy Wall

615-974-9066

*cindywall@comcast.net*

*www.slowfoodusa.org* and *www.slowfood.com*

# Certified Organic Operations in Tennessee

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The following information was graciously supplied by the agents who certify in Tennessee. All certified operations were contacted for verification of the information. Only operations that were certified prior to June 1, 2005 and provided their approval for inclusion are listed in this resource manual.

Operations are listed in alphabetical order by name of the operation. No attempt was made to sort by certifying agent, location, or by size of the operation. Numbers assigned to operations correspond to numbering on the Tennessee map (pages 110 and 111).

- 1) **American Mercantile Corporation**  
Damon S. Arney  
1310 Farmville Rd.  
Memphis, TN 38122  
901-454-1900  
*dsa@memphis.net*  
Importer/exporter/processor;  
organic yerba maté  
Quality Certification Services, certifying agent
- 2) **Art Ausmus**  
521 Davis Creek Rd.  
Speedwell, TN 37870  
423-869-0245  
2½ acres tobacco  
Indiana Certified Organic,  
certifying agent
- 3) **A & D Meat Processing**  
David Jordan  
2830 Ezell Rd.  
Chapel Hill, TN 37034  
931-364-7924  
*admeats@yahoo.com*  
Contract processing of beef,  
lamb, and pork for West  
Wind Farms  
Quality Certification Services, certifying agent
- 4) **Delvin Farms**  
Clyde and Cynthia Delvin  
6290 McDaniel Rd.  
College Grove, TN 37046  
615-395-4566  
615-395-0026 FAX  
*chdelvin@aol.com*  
Mixed vegetables  
Quality Certification Services, certifying agent
- 5) **Dhamma Farm**  
Thomas O'Neal  
6932 Walker Rd.  
Signal Mountain, TN 37377  
423-886-3373  
*oneal6932@yahoo.com*  
3 acres Mixed fruits and vegetables, cut flowers, culinary herbs  
Quality Certification Services, certifying agent

- 6) **Doalnara Organic Farm USA**  
Andy Yoo  
834 Understanding Rock Rd.  
Dover, TN 37058  
931-232-5887, ext. 409  
931-232-8851  
40 acres mixed vegetables and herbs  
Quality Certification Services, certifying agent
- 7) **Donaldson Farms**  
Lorna Donaldson  
P.O. Box 224  
230 Donaldson Rd.  
Tiptonville, TN 38079  
*ld@donaldsonfarms.com*  
200 acres soybeans  
Indiana Certified Organic, certifying agent
- 8) **Eaton's Creek Organics**  
Tana Comer  
5570 Eaton's Creek Rd.  
Joelton, TN 37080  
615-299-0979  
*ecoorganics@bellsouth.net*  
*www.ecorganics.net*  
Mixed vegetables, herbs, and cut flowers  
Quality Certification Services, certifying agent
- 9) **FarmSoy Company**  
Barbara and Thomas Elliott  
96 The Farm  
Summertown, TN 38483  
931-964-2411  
*www.farmsoy.home.mindspring.com*  
Soy milk, tofu, soy yogurt, and tempeh  
Quality Certification Services, certifying agent
- 10) **Glen Ayre Tree Farm**  
Curtis Buchanan  
208 E. Main St.  
Jonesborough, TN 37650  
423-753-5160  
2½ A. (3000) Fraser Fir Christmas trees  
Quality Certification Services, certifying agent
- 11) **Heritage Academy Farm**  
Del Dimick  
745 Heritage Farm Rd.  
Monterey, TN 38574  
931-839-3644  
*wddimick@aol.com*  
73 acres wheat, soybeans, pasture, and hay  
Quality Certification Services, certifying agent

12) **J & J Berry Farm**

Joyce Graham  
7152 Rock Creek Rd.  
Tullahoma, TN 37388  
931-455-6855; or -2740  
2 acres blueberries, 1 A.  
blackberries  
Quality Certification Ser-  
vices, certifying agent

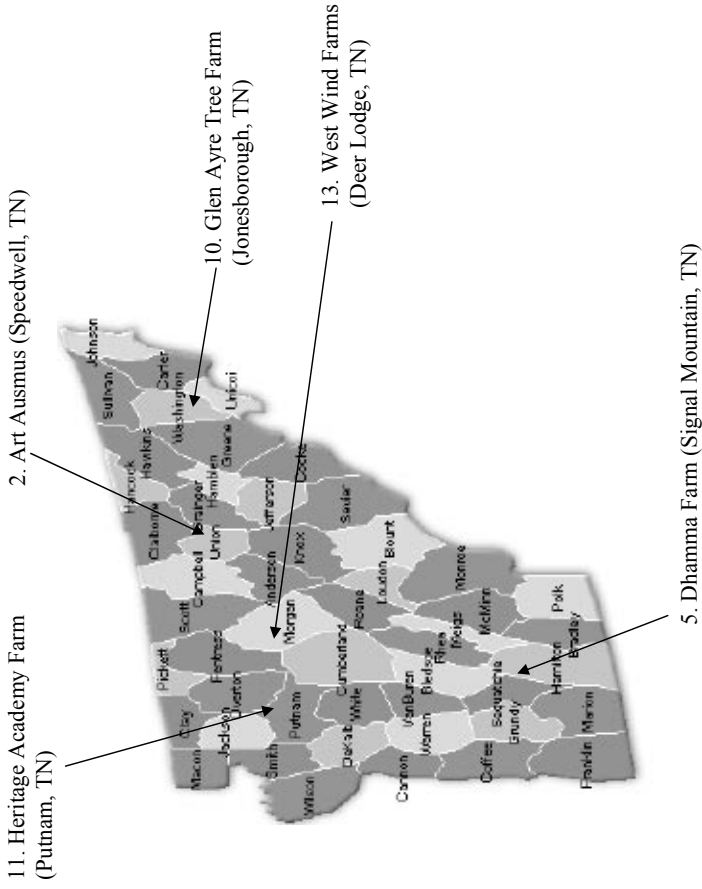
13) **West Wind Farms**

Ralph and Kimberlie Cole  
155 Shekinah Way  
Deer Lodge, TN 37726  
423-965-3334  
*wwfarms@highland.net*  
*www.westwindfarms.com*  
*www.grassorganic.com*  
Organic chicken, whole and  
parts, turkey, Katahdin lamb,  
Berkshire pork, Simmen-  
tal beef, and heritage breed  
eggs; non-certified honey and  
goat meat  
Quality Certification Ser-  
vices, certifying agent

14) **Windy Acres Farm**

Alfred and Carney Farris or  
Sam Justice  
5552 Dixon Rd.  
Orlinda, TN 37141  
615-654-3599 (Farris)  
615-654-3405 (Justice)  
*acfarris@bellsouth.net* or  
*samuelfjustice@bellsouth.net*  
470 acres yellow and blue  
corn; feed-grade and Clear  
Helium soybeans; soft red  
winter wheat; cow peas, and  
spelt. Non-certified British  
White beef cattle and Katah-  
din sheep, raised on certified  
pasture  
Quality Certification Ser-  
vices, certifying agent

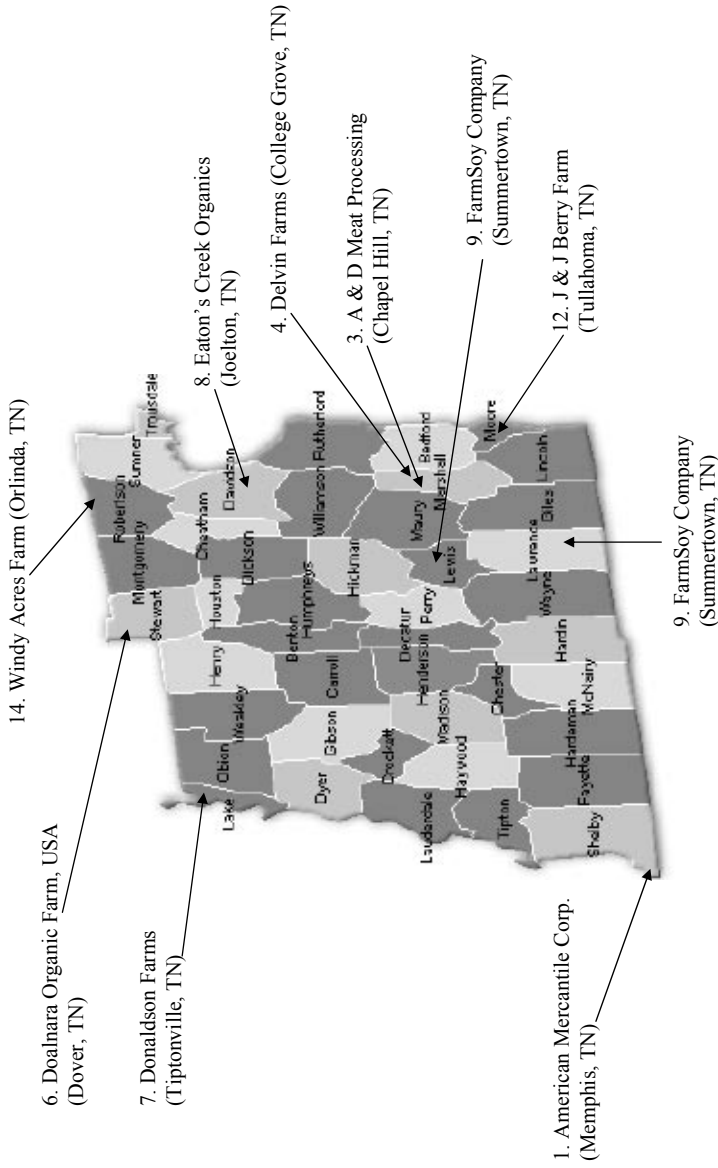
# Eastern Tennessee Certified Organic Operations\*



\* Data supplied by Certifying Agents, 2005.

Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndcgl.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndcgl.exe/oip_public/USA_map)

# Western Tennessee Certified Organic Operations\*



\* Data supplied by Certifying Agents, 2005.

Map by USDA Office Information Profile System at: [http://offices.usda.gov/scripts/ndCGI.exe/oip\\_public/USA\\_map](http://offices.usda.gov/scripts/ndCGI.exe/oip_public/USA_map)



# Organic Producer Profile

## West Wind Farms: Deer Lodge, Tennessee

Kimberlie and Ralph Cole own and operate West Wind Farms, a 100-acre diversified family farm located on the scenic Cumberland Plateau. They raise grass-fed lamb, beef, and pork, pastured chicken and turkey, and collect free-range eggs. They also produce organically produced, chemical-free, but non-certified, honey.



All the animals are rotationally grazed, and all are born and bred on the farm. Even the birds have constant contact with fresh pasture, and they get proper exercise and free movement in their “chicken tractors.” All of West Wind Farms is certified organic by Quality Certification Services (QCS), including the animals and animal products.

Small-scale production allows the opportunity to observe each animal in detail and provide attentive care from birth/hatch to processing, and stress-free animals mean better-tasting meat. All organic feed is custom mixed on the farm, and the animals receive the finest quality nutrition. Organic feed grain is either farm-raised or bought out-of-state, when it is unavailable locally.

Providing nutritious organic meat and produce for the local community is a priority for the Coles. Lamb and beef are processed young, so cuts are lower in fat and slightly smaller for portion-conscious consumers. Pork comes from heritage Berkshires, a breed known for its flavor. West Wind sees a real need for secondary processing of meats, especially in specialty sausages and convenience foods such as luncheon meats. “This is an area where the big concerns are taking market share from the small farmer, and it is an opportunity for a small organic processor,” says Kimberlie. She makes West Wind Farms Pilgrim Pork Sausage, free of preservatives, and gives away samples at the farmers’ markets. Nearly all the products are available year-round.

Kimberlie says,

“We are dedicated to promoting farming on a small scale . . . and showing young people that it can be done. West Wind provides the opportunity for interns to experience daily life on an organic farm. By assisting the organic farmer, the intern will learn what it takes to create a successful organic farming system. Interns on the farm are encouraged to work in a focused manner in areas of the farm that attract them. This is to try and tailor what needs to be done on the farm with the interns’ interests and which aspects of farming they want to learn. Our farm is so diversified, there is something that everyone can enjoy.”

Once a year, in the early fall, West Wind has a customer appreciation day. Customers, their friends, and other visitors come for farm tours, demonstrations, discussion groups, and a cook-out with all the farm’s products spotlighted. The Coles purchase some products from other local farmers to fill out the meal. They also deliver to various farmers’ markets in Middle and East Tennessee, and ship meats mail-order nationwide. All meats and poultry are certified organic and are USDA inspected.

Ralph was named 2005 Tennessee State Farmer of the Year by the Natural Resources Conservation Service (NRCS).

**Contact:**

Ralph and Kimberlie Cole  
155 Shekinah Way  
Deer Lodge, TN 37726  
423-965-3334  
*www.westwindfarms.com*

# Organic Producer Profile

## Glen Ayre Tree Farm: Jonesborough, Tennessee

Curtis Buchanan grew up on a farm near Bakersville, North Carolina, that has been in his father's family since the early 1800s. The family has traditionally raised trees, and Curtis followed in this tradition until a few years ago. He still produces Fraser Fir Christmas trees on the same land that his father's family grew on for centuries, and the farm still looks over the famous Roan Mountain. Curtis recently changed his production methods to make them sustainable.

Commercial Christmas tree farmers often use a powerful organophosphate pesticide called Di-Syston to control the Balsam Twig Aphid and Spruce Spider Mite. The Balsam Twig Aphid causes curling of the fir needles and makes the tree unmarketable. Di-Syston is so toxic that signs must be posted every 100 feet around the field before application. Applicators must be specially certified to apply the chemical and must wear the maximum personal protective equipment. The chemical is normally applied in late April in granular form and is systemic in action.

Experts in the Christmas tree industry said that heavy applications of chemicals were mandatory in order to produce quality trees. Curtis decided that he would quit growing Christmas trees if he couldn't find a way to produce them without chemicals. In fact Curtis did stop growing trees for three years, from 1992 to 1995. But in 1995 Curtis decided to try growing Christmas trees organically, and eight years later (in 2002) his operation was certified organic.

Curtis tried many products and methods before he discovered a highly refined vegetable oil, called "Natur'L Oil," that was being manufactured and marketed as a surfactant by Stoller Chemical Company. Curtis sprays the oil in a 2% solution with a high-pressure sprayer. The oil suffocates the aphids for a 90% kill. Curtis says, "There's a fine balance between suffocating the aphids and not suffocating the trees." Curtis has used the oil for four years now and is satisfied that he can produce market-quality Christmas trees. Stoller Chemical Company recently applied to Organic Materials Review Institute to have the oil brand-name listed for this purpose.

Many customers have told Curtis that his Fraser Fir Christmas trees are the only trees that they can tolerate in their house, even though they have

not tested positive for fir tree allergies. There is no scientific evidence to support it yet, but Curtis and others think that the trees are still expelling the Di-Syston from their needles in December, causing the allergic reactions. Researchers at the Appalachian Sustainable Development/Community for Jobs and Environment think the theory could be valid. They are sponsoring research into Di-Syston residual emissions.

Curtis is excited about his tree operation and foresees his work having an impact on all commercial tree production.

**Contact:**

Curtis Buchanan  
Glen Ayre Tree Farm  
208 E. Main St.  
Jonesborough, TN 37650  
423-753-5160

# Tennessee Farm Characteristics

From: [www.ers.usda.gov/StateFacts/TN.HTM](http://www.ers.usda.gov/StateFacts/TN.HTM)

<b>1992, 1997 and 2002 Census of Agriculture</b>			
	<b>1992</b>	<b>1997</b>	<b>2002</b>
Total land area (million acres)	26.38	26.38	26.38
Total farmland (million acres)	11.17	11.99	11.68
Percent of total land area	42.3	45.4	44.3
Cropland (million acres)	7.09	7.45	6.99
Percent of total farmland	63.5	62.2	59.9
Percent in pasture	36.7	34.6	29.5
Harvested cropland (million acres)	3.82	4.23	4.37
Percent irrigated	0.5	0.6	0.8
Woodland (million acres)	2.77	2.90	2.34
Percent of total farmland	24.8	24.2	20.0
Percent in pasture	37.9	36.0	36.4
Pastureland (million acres)	0.89	1.10	1.95
Percent of total farmland	8.0	9.2	16.7
Land in house lots, ponds, roads, wasteland, etc. (million acres)	0.42	0.53	0.40
Percent of total farmland	3.8	4.4	3.4
Conservation and organic practices			
Farmland in conservation or wetlands reserve programs (million acres)	0.21	0.39	0.23
Percent of total farmland	1.9	3.3	2.0
Certified organic farms, all commodities (number)	N/A	N/A	81
Value of all organic commodities sold (\$1,000's)	N/A	N/A	637
Certified organic farms, crops (number)	N/A	N/A	38
Land used to raise certified organic crops (acres)	N/A	N/A	417
Average farm size (acres)	149	131	133

# Most Common Mistakes Made by Certified Crop Operators and/or Certification Applicants

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*Compiled by Jim Riddle\**

## **Certifier relations:**

- Getting a product or practice approved by a certifier, but not getting the approval in writing, and then misunderstanding the “approval.”
- Failure to submit requested documentation to the certifier (such as prior land-use forms, non-GMO letters, adjoining land-use forms, water test results, etc.).
- Not understanding and/or not complying with certification requirements (minor non-compliances) from the previous year.
- Failure to complete required paperwork on time, or at all.
- Not registering with the state organic program, if applicable.
- Failure to pay certification and/or inspection fees.

## **Non-approved inputs:**

- Use of non-approved substances (including treated seeds), due to negligence and/or not understanding the requirements.
- Use of non-approved substances, due to trusting an input supplier who gave assurances that the material was approved for organic farming.
- Failure to inquire about the GMO status of inputs, especially inoculants and Bt products.
- Not having documentation of non-GMO status of inputs, including seeds, inoculants, and Bt products.
- Incorrectly calculating the length of time from the last date of prohibited inputs used—and the required 36 months have not passed. The farmer then wrongly thinks that the present year’s crop will be saleable as certified organic, when it is not certifiable.

## **Documentation of approved inputs:**

- Failure to obtain adequate documentation for purchase of approved inputs.
- Failure to document attempts to purchase organic seeds.

## **Record keeping:**

- Lack of adequate detail or clarity on field maps and/or use of inaccurate maps.

- Field maps that do not show acres, field numbers, and/or adjoining land uses.
- Not keeping field activity records up to date.
- Failure to keep seed and input labels and receipts in an organized and accessible manner.
- Failing to keep records for contracted services, such as planting, spraying, harvesting, and/or trucking.
- Failure to keep bin records up to date.
- Not recording field numbers on harvest and/or storage records.
- Not using lot numbers or not using a consistent lot numbering system.
- Not providing adequate documentation to buyers when organic products are sold.
- Not keeping records of steps taken to inspect and clean transport units.
- Not maintaining adequate records for operations with both organic and conventional production.

**Organic plan:**

- Failure to follow the operation's organic plan.
- Filing "renewal" farm plans with entries marked "No Change," when there have been significant changes, such as new leased or purchased fields, discontinued leases, sub-divided fields, new crops, new inputs, changes to field numbers, changes to the lot numbering system, etc.

**Commingling and contamination:**

- Failure to properly clean harvesting equipment and/or storage units, resulting in commingling or contamination of organic crops.
- Failure to segregate crops harvested from buffer zones.
- Lack of cleaning logs for spray equipment that is also used for prohibited inputs.
- Work area contamination for post harvest handling (e.g., washing vegetables, cutting vegetables, packing vegetables, etc.).
- Mislabeling or mishandling of crops by workers who are not fully informed of organic certification requirements.
- Misapplication of prohibited materials by workers who are not fully informed of organic certification requirements.

- No GMO drift management plan—not knowing where the nearest GMO fields are located.
- Failure to inform highway departments and/or other authorities that land adjacent to organic fields should not be sprayed (or sign no-spray agreements when these are available).
- Failure to post no-spray signs when and where these would add protection.

*\*Based on information provided by members of the Independent Organic Inspectors Association and the OTA's Organic Certifiers Council. Compiled January 18, 2002, by James A. Riddle, Organic Independents, Winona, MN, USA.*



## *Farm Tour*

# **Host Farmer/Rancher Presentation Outline**

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One of the best learning resources is a farm tour. Not only do participants learn from the host farmer, but they also learn from each other. Farm tours can enhance marketing, increase local food awareness, and keep alive the farm-to-consumer connection. A tour can help researchers and perspective farmers become more aware of practical grower problems.

*Modify this outline to suit your style and needs. Jot a few notes (about one note card) so you don't forget important details.*

## **I. PLANNING FOR THE TOUR**

- A. Choose a date
- B. Determine target audience
  - Identify resource people
  - Identify others who need a special invitation
- C. Plan Publicity
  - Public service announcements for radio stations
  - Articles and press releases in newspapers
  - Announcements to local offices of Cooperative Extension Service, NRCS, agricultural and community organizations
- D. Organize logistics
  - Food
  - Parking
  - Tour transportation
  - Participant seating
  - Restroom facilities
- E. Conduct a dress rehearsal two or three days before the tour
- F. Put up signs to direct participants to the farm
- G. Plan a post-tour evaluation

## **II. THE DAY OF THE TOUR**

- A. PROVIDE THE TOUR CONTEXT [before the group departs for the first field or site]
  - Introduce yourself
  - Overview of operation
    - ◇ the physical resource
    - ◇ the people historical and current
    - ◇ the management scheme
  - Objectives of operation
    - ◇ what they are

- ◇ why
- ◇ how being achieved
- ◇ problems
- Mentors, key sources of inspiration and information

**B. MANAGEMENT AND PRACTICES [on-site]**

- Describe your production system (crops and livestock)
  - ◇ your primary crop rotation(s)
  - ◇ your forage/grazing system
  - ◇ how your system has evolved
  - ◇ technical details; e.g., equipment used, seeding rates and dates, etc.
- Describe your weed, insect pest, and disease management.
- Describe your soil fertility management and erosion control.
- Describe your moisture management.
- Describe your marketing (include processing and transportation, as applicable).

**C. THE TRANSITION [wrap-up]**

- How do you monitor your progress and make decisions? (Recordkeeping, on-farm experiments, soil tests, observations, etc.)
- What changes occurred during the transition period?
  - ◇ compare costs, income, yields
  - ◇ benefits of transition
  - ◇ problems transition has brought
  - ◇ what's next?
- Parting words
  - ◇ message for other producers
  - ◇ message for Extension, research, federal agencies, policymakers
  - ◇ ask participants to complete evaluation

**IV. TIPS FOR MAKING THE TOUR GO SMOOTHLY**

- A. Designate someone to bring late arrivals up to speed.
- B. Develop a strategy in advance for dealing with disruptive or dominating people.
- C. Develop strategy for working with the media.
  - Ask what type of story the reporter is looking for.
  - Make sure reporters understand what they see.
  - Develop and rehearse 30 second sound bytes.

*Farm Tour: Host Farmer/Rancher Presentation Outline*

- Provide a press statement for reporters.
- Identify photo opportunities.
- Designate a person to guide the reporter.

*Adapted from: AERO Farm Tours: 101 Things to Remember and  
AERO Farm Tour: Farmer/Rancher Presentation Outline  
Alternative Energy Resources Organization, Helena, MT*

# **An Introduction to Organic Research**

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by *Barbara Bellows*

## **Why is research on organic agriculture important?**

For many years, following the introduction of soluble fertilizers and synthetic pesticides, researchers at land-grant universities conducted very little research applicable to organic agriculture. Consequently, organic farmers were forced to rely on their own indigenous knowledge, anecdotal information from other farmers, and research from the pre-synthetic fertilizer era prior to the 1940s. Some innovative farmers were able to develop viable businesses based on this limited information. However, other farmers struggled or abandoned their attempts to use organic practices, because they had limited understanding of organics, tried to implement practices that were not appropriate for their environment, or simply substituted “organically acceptable inputs” for synthetic inputs, while using “conventional” management practices.

While consumer interest in organically-produced products is growing rapidly and steadily (OTA, 2004, USDA/ERS, 2002), the number of land-grant institutions with organically certified research land is increasing very slowly. Research studies on organic agriculture lag behind those of synthetic-materials based “conventional” agriculture. Because of its emphasis on working with the soil and ecology, organic agriculture tends to be site-specific in its response to local environmental conditions. Thus, research conducted in one area of the country cannot be used to provide management recommendations for producers in another area of the country. Faced with this lack of reliable, locally appropriate research, many Extension agents are reluctant to provide advice about or encourage producers to use organic methods.

Reliable, systems-based research on organic practices can provide insights into how soil health, plant-pest interactions, and environmental conditions work together in productive organic agro-ecosystems. Researchers can then develop and test management practices that promote these interactions. This research needs to be conducted both in the field and in the laboratory. (Drinkwater, 2002) Field-based experiments will identify which management practices work under a given set of environmental and management conditions, while the laboratory experiments will help explain why they work—or fail to work. Based on this research, technical service providers, and ultimately producers, can then identify and implement effective organic practices.

This short document is provided to assist producers and technical service providers—Extension agents, NRCS agents, and specialists with non-profit sustainable agriculture organizations—find and critically evaluate research literature on organic agriculture. Unfortunately, not all research that claims to be applicable to “organic agriculture” is. Research on organic agriculture must be evaluated according to its adherence to the NOP regulations and its scientific merit. The section titled “A critical understanding of organic research” is designed to help people evaluate the validity of published research studies. It can also be used to provide researchers with guidelines for conducting valid organic research. Finally, this document contains some examples of research that has been—or is being—conducted on organic agriculture.

## **How to find research-based information on organic agriculture**

Although the time and effort spent on organic research is considerably less than that expended on conventional agriculture, the USDA Agricultural Research Service (ARS), land-grant universities, non-governmental organizations, and private companies have all been involved in organic research. Funding for organic research comes primarily from two USDA Cooperative State Research, Education and Extension Service (CSREES) programs: Sustainable Agriculture Research Education (SARE) and the Integrated Organic Program. The Organic Farming Research Foundation (OFRF) has been a major non-governmental funder of organic agriculture research in the US. The purpose of OFRF has also been to increase awareness of the need for research and promote greater public funding of research in organic agriculture. Based on the increasing role of CSREES in funding organic research, the role of OFRF as a funder in this realm is decreasing.

Summaries of organic research funded by CSREES Integrated Organic Program, SARE, and OFRF can be found on their respective Web pages:

CSREES Integrated Organic Program—Abstracts of funded projects

*[www.csrees.usda.gov/fo/fundview.cfm?fonum=1141](http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1141)*

SARE research reports

*[www.sare.org/projects](http://www.sare.org/projects)*

OFRF research reports

*[www.ofrf.org/research/reports.html](http://www.ofrf.org/research/reports.html)*

### OFRF funded projects

[www.ofrf.org/research/OFRF\\_Grants\\_Since\\_1990.pdf](http://www.ofrf.org/research/OFRF_Grants_Since_1990.pdf)

OFRF has also conducted two “State of the States” surveys, the first published in 2001 and the second in 2003. These surveys examine organic systems research at land-grant institutions.

[www.ofrf.org/publications/SoS/SoS2.overview.page.html](http://www.ofrf.org/publications/SoS/SoS2.overview.page.html)

Rodale Institute is a long-time participant in organic research. Founded in 1947 by J.I. Rodale as the Soil and Health Institute, the Rodale Institute is the former publisher of *Organic Farming and Gardening* and the current publisher of the on-line journal *New Farm*. The primary research at this Institute has been based on a long-term comparison of conventional, manure-based, and legume-based field crop systems. A summary of research conducted in conjunction with the Rodale long-term farming systems trial is available at [www.newfarm.org/research/2005/jun05/tri\\_guide.shtml](http://www.newfarm.org/research/2005/jun05/tri_guide.shtml).

In January, 2005, the USDA Agriculture Research Service held their first national conference on organic agricultural research. They used this conference to review their work to date on organics and to encourage ARS researchers to conduct more research on organic agriculture. Their prior and on-going research projects can be searched by topic or title at [www.ars.usda.gov/research/projects/projects.htm](http://www.ars.usda.gov/research/projects/projects.htm).

The professional societies of agricultural scientists have acknowledged the importance, and scientific credibility, of organic agriculture. The annual meetings of these societies include presentations that address organic agricultural production, processing, or marketing. Most of these societies also have official committees or working groups that focus on organic agricultural issues. In addition, journals of these organizations regularly publish peer-reviewed papers on organic agriculture. For more information, see the Web pages of these societies.

Agronomy Society of America

[www.agronomy.org](http://www.agronomy.org)

Crop Science Society of America

[www.crops.org](http://www.crops.org)

Soil Science Society of America

[www.soils.org](http://www.soils.org)

American Society of Horticultural Sciences

[www.ashs.org](http://www.ashs.org)

American Agricultural Economics Association

*www.aaea.org*

CAB International, publishers of *Renewable Agriculture and Food Systems* and several peer-reviewed scientific publications, compiled a comprehensive Organic Farming CD-ROM containing more than 100,000 literature citations. It is available by subscription through the CABI Web site.

*www.organic-research.com*

The Organic AgInfo Web page provides a searchable database of technical, educational, and research information related to organic agriculture. It was developed by the Organic Agriculture Consortium (OAC)/Scientific Congress on Organic Agricultural Research (SCOAR) and funded by the United States Department of Agriculture. The OAC includes Ohio State University, North Carolina State University, Iowa State University, Tufts University, and the Organic Farming Research Foundation.

*www.organicaginfo.org*

The Alternative Farming Systems Information Center of the USDA National Agricultural Library provides a searchable database for research and educational projects related to sustainable and organic agriculture. It also provides recommendations for how to search databases for information on organic agriculture.

*www.nal.usda.gov/afsic/ofp*

Several publications written and distributed by ATTRA, the National Sustainable Agriculture Information Service, provide information about organic research projects and research results in their reference sections and resource lists.

*www.attra.ncat.org*

Two comprehensive bibliographies of organic farming systems were compiled by Paul Kristiansen of the University of New England in Amidale, New South Wales, Australia. These lists include research conducted and published in the U.S. as well as in other countries. Titled “References relevant to organic farming” and “Reports comparing organic and other farming systems,” these bibliographies can be found at the UNE Web site.

*www.une.edu.au/agronomy/agssystem/organic/library/library.html*

## **A critical understanding of organic research**

As mentioned above, valid organic research must be consistent with the NOP standards as well as with good scientific protocol. In addition,

research on organic agro-ecosystems should be designed in a way that acknowledges that these systems function according to principles different from “conventional” or synthetic-input based agriculture. (Lipson, 1997) One fundamental difference is that organic agriculture relies primarily on ecological or biological processes, while conventional agriculture relies more on eliminating or minimizing biological factors through chemical interactions or impacts.

Because organic systems “behave differently in terms of nutrient cycles, disease suppression, and pest resistance” from conventional agriculture, research into these systems requires “a different set of management principles and assumptions,” and “a specific set of investigative contexts” to be effective. (Lipson, 1997) Unfortunately, much of the organic research conducted in the U.S. prior to the implementation of the NOP did not recognize fundamental differences between organic and conventional agriculture, nor did it analyze organic agriculture as an ecological system. Some research that claimed to be studying “organic” agriculture was inconsistent with the current NOP regulations, and thus cannot, at this time, be regarded as valid organic research. Because of these “misrepresentations,” the “methods” section of research studies on organic agriculture must be read critically to determine the validity of the study, and hence, the accuracy and/or applicability of its results.

The following are critical components of research methodology that must be in place for organic research studies to be credible.

I. Management of organic agriculture treatments must be consistent with current NOP regulations.

- A. Inputs used in organic treatments or practices must be permitted under the NOP
- B. Organic treatments or practices must be implemented on land that has gone through a certifiable three-year transition period.
- C. Comparative studies of organic and conventional agriculture must provide the organic treatment with required buffer areas.

II. Organic agriculture should be evaluated in the context of a system.

- A. Any organically approved input or management practice should be evaluated in the context of specific environmental conditions and in relationship to other inputs and management practices.
- B. Multiple organic management practices may be required to serve the same role that a single input or management practice does in a conventional system. Thus, substituting organic for



conventional inputs on a one-to-one basis is often invalid.

- C. Component research should be conducted within the context of a larger system. This research involves investigating the underlying factors that influence interactions among plants, animals, plant-associated microbes, insects, plant-insect interactions, and/or the soil environment.

III. Organic agriculture should be evaluated using long-term studies rather than two- or three-year studies

- A. Organic agriculture should be evaluated based on its resiliency under “poor conditions” as well as its responsiveness to ideal conditions. (Temple, 2000)
- B. Organic agriculture should be evaluated based on “management effort per unit of production” over time, rather than on yields per acre over the short term. (Lee, 2002)

Mark Lipson (1997) summarized these concerns about organic research studies in his introduction to *Searching for the “O-Word,”* a critique of the USDA Research Information System’s ability to identify valid organic research. He then goes on to challenge researchers to “ask the right questions” in order to “provide reliable answers to the important questions” of how organic agro-ecosystems operate.

Among these thousands of farms, there exists a fundamentally different set of biological and agronomic premises, in contrast to their “conventional,” chemical-management-intensive counterparts. The point here is not to argue which system is “better,” but to recognize that organic systems are qualitatively different, that they have different management principles, and to consider the costs and potential benefits of investing explicitly in research and development of them . . . .

Organic farming is NOT just a “different flavor” of farm inputs. The best organic farmers are not relying on purchased “biopesticides,” nor are they managing crop fertility by simply substituting natural sources for equivalent pounds of chemical fertilizer. They are building and maintaining the balances of the farming system such that adequate resources are available to meet their crops’ or animals’ needs without inducing problems generated by artificial imbalances. These farms conspicuously display “preventive-intensive” attributes, and they have different management and informational needs accordingly.

*We have barely begun* to tap the full potential of organic farming systems. In many ways, the state-of-the-art of organic farming is still in a rudimentary phase. We know very little about exactly how our systems are working.

The patterns of systemic relationships between biological fertility and soil qualities on one hand, and pest resistance and disease suppression on the other, are barely beginning to be understood. We have only glimpsed the outlines of the “soil food web”: the complex mediation of nutrients and disease prevention by communities of living organisms in biologically active agricultural soils. We are just getting to the point where we can ask questions at the correct (i.e., systems) level, let alone ask the best questions (e.g., “What characterizes the optimum patterns of relationship among specific soil biotic constituents?”), let alone provide reliable answers to the important questions.

## References

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## Examples of organic research

The following list of research studies is far from comprehensive. It is not designed to identify selected studies as “the best research available.” Instead, this list is meant to show the depth and diversity of research being conducted on organic agro-ecosystems.

### **Comparisons of organic and conventional agriculture**

Temple, Steve. 2000. The Transition from Conventional to Low-Input or Organic Farming Systems: Soil Biology, Soil Chemistry, Soil Physics, Energy Utilization, Economics, and Risk. Western SARE. Final Report - November 2000. [www.sarep.ucdavis.edu/Grants/Reports/Temple/temple88-225.htm](http://www.sarep.ucdavis.edu/Grants/Reports/Temple/temple88-225.htm)

*A two-year rotation of tomatoes and wheat was more profitable than either organic or low-conventional-input four-year rotations that included processing tomatoes, safflower, dry beans, wheat, and corn. However, the organic system had better water infiltration and exhibited a substantially greater build-up of organic matter in the soil. Based on output-input ratios, the low-input system is the most energy-efficient farming system, while the conventional two-year rotation is the least efficient.*

Delate, Kathleen, Michael Duffy, Craig Chase, Ann Holste, Heather Friedrich, and Noreen Wantate. 2003. An economic comparison of organic and conventional grain crops in a long-term agroecological research (LTAR) site in Iowa. American Journal of Alternative Agriculture. Vol. 18, No. 2. p. 59–69.

*A long-term study was established in 1998 to examine the agronomic and economic performance of conventional and organic systems. After three years of production (1999–2001), returns for corn within the organic corn-soybean-oat and corn-soybean-oat-alfalfa rotations were significantly greater than conventional corn-soybean rotation returns. Organic soybean returns were significantly greater than conventional soybean crop returns in the corn-soybean rotation.*

### **Production Economics**

Evans, William B., Kenneth W. Hood, Keri L. Paridon, and Peter M. Hudson. 2005. Organic Vegetable Yield and Economics Show Promise in a Mississippi Trial. American Society for Horticultural Science. Annual Conference. July 18-21, 2005. Las Vegas, NV.

*Yield, input, and economic data from research plots in central Mississippi are being used to test the economic potential of organic vegetable crop production. A six-part, multi-year rotation, including winter and summer cover crops, has*

*been set up to generate yield, cost, and economic return data from vegetables produced in Mississippi using methods allowed by the United States Department of Agriculture National Organic Standards and accepted by local growers employing pesticide-free and other similar management methods. Data being collected include labor and input costs, yields, and market prices for harvested crops. Marketable produce is being sold through a grower-retailer at a farmers' market. During 2004, the first full year of the rotation, 10 vegetable species were included in the plots. Pest pressure has generally been minimal. With one exception, all crops planted produced fair to excellent yields. Crops generating high retail prices in this study include potatoes, snap beans (*Phaseolus vulgaris*), and leaf lettuce (*Lactuca sativa*). In the future, the yield and price data being generated will be combined with new and existing cost data to create enterprise and production budgets for use by perspective and existing organic vegetable growers.*

Welsh, Rick. 1999. Economics of Organic Grain and Soybean Production in the Midwestern United States. Henry A. Wallace Institute for Alternative Agriculture. Greenbelt, MD.

[www.organicaginfo.org/record.cfm?pk\\_doc\\_id=2859&doc\\_num=45](http://www.organicaginfo.org/record.cfm?pk_doc_id=2859&doc_num=45)

*A study conducted by researchers at the land-grant universities in Iowa, Kansas, Minnesota, Nebraska, and two in South Dakota indicates that, even without price premiums, the organic cropping systems were more profitable than the most common conventional system (generally a corn-soybean system) in half the studies, while they were always more profitable than the continuous corn systems. The higher profitability of the organic systems was due to one or more of the following factors: lower production costs, the longer rotations and greater diversity of the organic systems, and the greater drought tolerance of the organic compared to the conventional systems.*

Zibilske, Larry, Donald Makus, Joe Bradford, and Nasir Malik. 2004. Sustainable and Organic Management of Selected Fruits and Vegetables. Initiated USDA Agricultural Research Service project at the Integrated Farming and Natural Resources Research Station.

[www.ars.usda.gov/research/projects/projects.htm?accn\\_no=408493](http://www.ars.usda.gov/research/projects/projects.htm?accn_no=408493)

*This research seeks to improve organic production systems and to provide guidelines and knowledge for conversion of conventional systems to organic systems. This will be accomplished through the use of a variety of cover cropping systems and by selecting, propagating, and characterizing clones/cultivars that are suited for organic cultivation of olives as a new crop for Texas. Analyses will compare soil and plant health and food quality between organic and conventional systems.*

## Soil Management

Drinkwater, L.E., P. Wagoner, and M. Sarrantonio. 1998. Legume-based cropping systems have reduced carbon and nitrogen losses. *Nature*. Vol. 396. p. 262-265.

*Nitrogen and carbon losses from organic and conventionally managed fields were analyzed over 15 years. Immobilization of nitrogen by soil organisms and soil organic matter caused nitrogen to accumulate in organically managed fields. Conventional fields had less nitrogen immobilization and 50% more nitrate leaching than the organic plots. The organically managed fields also had greater water infiltration, higher water holding capacity, and less soil erosion than the conventionally managed fields.*

Wander, M.M., S.J. Traina, B.R. Stinner, and S.E. Peters. 1994. Organic and conventional management effects on biologically active soil organic matter pools. *Soil Science Society of America Journal*. Vol. 58. p. 1130-1139.

*A 10 year comparison of organically and conventionally managed fields showed higher levels of carbon and nitrogen accumulation in the organically managed soils. Cover-cropped soils had organic matter with a high C/N ratio. This is indicative of high organic matter turnover rates, retention of soil organic matter in chemically stabilized forms, and retention of nitrogen by the soil. Conversely, the conventionally managed soil had the smallest pool of soil organic matter and lowest levels of biological activity.*

Lotter, D., Seidel, R., and W. Liebhardt. 2003. The performance of organic and conventional cropping systems in an extreme climate year. *American Journal of Alternative Agriculture*. Vol. 18, No. 3. p. 146-154.

*The Rodale Institute Farming Systems Trial has been operating since 1981 and consists of three replicated cropping systems, one organic manure based (MNR), one organic legume based (LEG), and a conventional system (CNV). Between 1984 and 1998, five drought years occurred, and in four of them the organic maize out-yielded the CNV by significant margins. In 1999 all crop systems suffered severe yield depressions; however, the organic soybeans yielded more than the conventional plots. The significantly higher water-holding capacity of the organically managed soils is believed to be the primary mechanism for their higher yields.*

Davis, Jessica. 2002. Long-term organic farming impacts on soil fertility. OFRF project. Final Report. [www.ofrf.org/publications/Grant%20reports/00.49.15.Davis.Fall00.IB12.pdf](http://www.ofrf.org/publications/Grant%20reports/00.49.15.Davis.Fall00.IB12.pdf)

*Soil tests from a large, organic mixed-crop farm in Colorado were evaluated over a period of 15 years. This farm used leguminous cover crops and dairy manure as fertility inputs and practiced crop rotations among more than 20 different vegetable crops. During the study period soil fertility and organic matter increased, while pH decreased.*

### **Plant Breeding**

Jones, Stephan S. 2004. Development of wheat varieties for organic farmers. OFRF project. Final Report.

[www.ofrf.org/publications/Grant%20reports/04.s.36.Jones.pdf](http://www.ofrf.org/publications/Grant%20reports/04.s.36.Jones.pdf)

*More than 163 historical varieties grown in the Pacific Northwest from 1842 to 1955 were evaluated in the greenhouse and field for emergence, protein quality, baking and milling characteristics, yield, nutrient-use efficiency, vigor, resistance to stripe rust, tolerance to mechanical cultivation, weed suppression ability, and weed competitiveness. Selected varieties were crossed with modern varieties with the objective of selecting varieties best suited for use in organic production systems. Results from field trials involving these crosses indicated that varieties that respond best under organic conditions have different characteristics from those that respond best under conventional practices. This suggests that yield in organic farming systems can be significantly increased by implementing separate plant breeding programs for organic farming systems.*

Robertson, Larry. 2004. Breeding Vegetables for Organic Systems: a Federated Approach. Initiated research at the USDA Agricultural Research Service Plant Genetic Resources Unit.

[www.ars.usda.gov/research/projects/projects.htm?ACCN\\_NO=409091](http://www.ars.usda.gov/research/projects/projects.htm?ACCN_NO=409091)

*The objective of this cooperative research project is to develop a strong national network capable of developing and delivering quality seed of improved vegetable varieties for organic agricultural production systems. Efforts will be made through additional grants to identify research objectives and research partners to conduct this research to address seed-health issues for organic seed producer.*

### **Weed Management**

Christine, Mary Akemo, Mark Bennett, and Emily Regnier. 1998. Weed control in tomato production using spring-sown cover crops killed by undercutting. HortScience. Vol. 33, No. 3. June. p. 495.

*Research on undercutting at Ohio State began in the early in the 1990s. In ongoing research, investigators spring-planted two winter annuals, grain rye and field peas, both as monocultures and as bi-cultures in varying proportions. The cover crops were undercut after two months and tomato seedlings*

*transplanted. Weed suppression was effective for roughly six weeks or until tomato growth was no longer affected by weed competition. Yields were highest in plots that had 50% or more of the cover in peas, apparently in response to greater nitrogen availability. Undercutting loosened the soil, resulting in a positive effect on the transplant growth.*

Abdul-Baki, Aref A., and John R. Teasdale. 1997. Snap bean production in conventional tillage and in no-till hairy vetch mulch. Hort-Science. Vol. 32, No. 7. December. p 1191-1193.

*The work done by USDA researchers Abdul-Baki and Teasdale is among the most informative on the matter of killed cover crops, highlighting both the potentials and the challenges of this approach. Compared to conventional tillage plots, the killed mulch plots produced higher yields with no additional nitrogen fertilizer. Weed control was managed with a minimal amount of hand weeding in two out of three years.*

Schonbeck, Mark, Peggy Elder, and Ralph DeGregorio. 1995. Winter annual cover crops for the home food garden. Journal of Sustainable Agriculture. Vol. 6, No. 2-3. p. 29-53.

*A mow-killed mulch of hairy vetch and rye provided better weed control than when these cover crops were tilled into the soil prior to planting. The tilled plots yielded more early in the season, but by the end of the season, yields for the two treatments were not significantly different. Time spent in weed management on the killed-mulch plots was about three-fourths that spent on the tilled plot. Mulched plots also showed better moisture conservation.*

Ullrich, S.D., J.R. Teasdale, and M.A. Cavigelli. 2003. Weed Seed-bank Dynamics In Organic And Conventional Long-Term Cropping Systems [abstract]. American Society of Agronomy Abstracts. A08-Ullrich412133-Oral.

[www.ars.usda.gov/research/publications/publications.htm?seq\\_no\\_115=151976](http://www.ars.usda.gov/research/publications/publications.htm?seq_no_115=151976)

*Weed management is one of the biggest challenges in organic farming. The Farming Systems Project (FSP) in Beltsville, Maryland, compares five cropping systems, two conventional and three organic. Overall, there has been no long-term increase in the weed seed bank during the first six years. However, there were oscillations in all major species, depending on weather, crop, and weed management success. Comparing the three organic systems in FSP, the seed bank and weed abundance of the dominant species tended to be highest in the two-year rotation, intermediate in the three-year rotation, and lowest in the four-year rotation. This confirms that the more varied and longer the rotation, the lower the population of annual weeds. Organic cropping systems*

*should be designed to offer a variety of mechanisms acting on various stages of the life cycle of annual weeds to regulate weed populations.*

Brennan, Eric. 2004. Cover Cropping Practices to Improve Weed and Fertility Management in Organic Production Systems. USDA Agricultural Research Service Annual Report.

[www.ars.usda.gov/research/projects/projects.htm?accn\\_no=407866](http://www.ars.usda.gov/research/projects/projects.htm?accn_no=407866)

*Organic production systems are complex and involve interacting factors that affect overall system performance. A multi-year systems study was established on the USDA-ARS certified organic research plot in 2004 to begin to address the effects of cover crop variety and seeding rate on weed management, soil quality, nitrate leaching, and yield in an organic vegetable production system. The first-year data indicated significant treatment effects on weed dynamics, soil moisture storage, and yield and profitability of subsequent vegetable crops. Cover crop mixtures of legumes, cereals, and mustards were effective in weed suppression.*

### **Pest and Disease Suppression**

Sams, Carl. 2004. Improving Organic Crop Production with Enhanced Biofumigation and Composting Systems. Southern SARE Research and Education project. Annual Report.

[www.sare.org/reporting/report\\_viewer.asp?pn=LS03-152](http://www.sare.org/reporting/report_viewer.asp?pn=LS03-152)

*Significant yield and disease resistance in tomatoes was achieved with a combination of mustard meal and mushroom compost. Biofumigation using mustard meal or brassica cover crops reduced disease incidence from the fungal disease Southern Blight to 24 to 29% of all plants. In control plots, more than 60% of all plants were affected by this disease. It was also demonstrated that the biofumigation and compost treatment resulted in an increase in soil bacterial activity.*

Ristaino, Jean. 2003. Influence of microbial species and functional diversity in soils on pathogen dispersal and ecosystem processes in organic and conventional agroecosystems. Southern SARE Research and Education project. Annual Report.

[www.sare.org/reporting/report\\_viewer.asp?pn=LS01-128](http://www.sare.org/reporting/report_viewer.asp?pn=LS01-128)

*The resistance of conventional, sustainable, and organic agro-ecosystem soils to species invasion and colonization by *S. rolfsii* were evaluated. Conventional soil fertility amendments included synthetic fertilizers, while organic soil fertility amendments included either composted plant materials, animal manures, or incorporated green manures. Soils amended with organic amendments such as cotton gin trash were more suppressive to southern blight than soils from plots amended with synthetic fertilizers. These soils were colonized*



*less rapidly over time by pathogens, disease incidence was reduced, and yield was higher at harvest. Soils with organic amendments had higher populations of thermophilic organisms.*

Delate, Kathleen, Cynthia Cambardella, Brian Lang, John Kennicker, and Heather Friedrich. 2002. Pest Management in Organic Soybeans—Paul Hunter and Wayne Wangness Farms.

[www.organicaginfo.org/record.cfm?pk\\_doc\\_id=3165&doc\\_num=162](http://www.organicaginfo.org/record.cfm?pk_doc_id=3165&doc_num=162)

*Soybeans at two organic farms were treated with Insecto, Surround, Neemix, or Garlic Gard plus fish oil to determine the effect on aphids and beneficial insects. An untreated control was also monitored. Beneficial insect populations followed the aphid population at both sites. When compared to the other treatments, Neemix generally had the lowest aphid population but also the lowest beneficial population.*

### **Outreach to Organic Producers**

Lohr, Luanne, and Timothy A. Parks. 2003. Improving extension effectiveness for organic clients: current status and future directions. *Journal of Agricultural and Resource Economics*. Vol. 28, No. 3. p. 634-650.

*Responses from a national survey of U.S. organic farmers indicated dissatisfaction with the Extension service. Part-time, higher-income organic farmers, who rated highly a variety of private-sector information sources, also rated Extension providers as effective. Farmers in the Northeast and West rated Extension usefulness more highly than did producers in other regions. Extension agents can improve their usefulness to organic farmers by complementing educational and technical services offered by the private sector, and by facilitating farmer information exchange, as well as presenting relevant research findings as they have done traditionally.*

# The Southern Organic Resource Guide

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