



Organic Farming

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Learning objectives

At the end of the class, students will be able to answer the following questions:

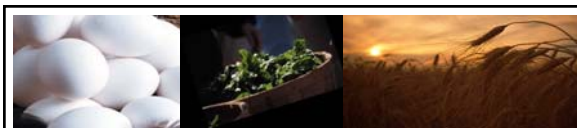
- What is organic agriculture?
- Where do I go to get certification in organic agriculture?
- How can I get more information about organic agriculture?



Definition of organic agriculture

“An ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity”

- USDA National Organic Standards Board, 1997



What is organic?

- The term “organic” is not synonymous to the terms “natural” or “eco-friendly.”
- The label “natural” on foodstuff does not guarantee complete adherence to organic practices as defined by a law.



Aims of organic agriculture

- Produce food of high quality in sufficient quantity
- Maintain biological diversity within the farming system
- Maintain long-term soil fertility
- Rely on renewable resources in locally organized agricultural systems
- Minimize pollution and protect the environment



What is allowed in organic crop production?

- New varieties of crops and agricultural technologies
- Crop rotations, cover crops and natural-based products that maintain soil fertility
- Biological, cultural and physical methods to limit pest expansion and increase population of beneficial insects

What is **not allowed** in organic crop production?

- Synthetic fertilizers, insecticides, fungicides and herbicides
- Genetically modified herbicide-resistant seeds, plants
- Genetically modified product ingredients, e.g. GM-lecithin
- "Biosolids" or sewage sludge, due to concerns with bacterial and heavy metal contamination
- Irradiated products also prohibited because irradiated elements do not occur in nature

What is **allowed** in organic livestock production?

- Organic livestock must be fed 100% organic food/feed.
- Natural bacteria present in vaccinations are permissible.
- Livestock must be free of parasites and have access to ample pasture, water and nutritional feed.
- Alternative health therapies, such as botanical remedies and manipulation are allowed.



What is **not allowed** in organic livestock production?

- Synthetic hormones and antibiotics
- Synthetic parasiticides



Certification process

- The certification process takes three years.
- Contact local certification agency to make transition to certified organic production.
- Land that has had no synthetic chemicals applied during the last three years can enter certified organic status.
- For the first three-year transition period, records should be kept on all substances applied.



Certification process (continued)

- Inspector will visit the farm in the third year to review records and crops, storage bins and equipment.
- Inspector will issue a certificate upon completion of inspection and approval by the certification board.
- Fees will be assessed based on an inspection fee and anticipated acreage/livestock costs.

Certification agencies in Iowa

Organic Crop Improvement Association

OCIA of Iowa Chapter 1, Inc.
Wilma Miles
6534 220th St
Arthur, IA 51431-8007
Phone: (712) 367-2442
Fax: (712) 367-2342
E-mail: ociaia1@netins.net



Web: <http://www.ocia.org>

Certification agencies in Iowa (continued)

Organic Crop Improvement Association

OCIA Iowa Chapter 2
 Leon Kruse
 1011 County Road W 14
 Fort Atkinson, IA 52144-7122
 Phone: (563) 534-7396



Web: <http://www.ocia.org>

Certification agencies in Iowa (continued)

Organic Crop Improvement Association

North Iowa Organics Association
 Janet Pratt
 2410 Asherton Ave
 Nashua, IA 50658-9427
 Phone: (641) 435-2156
 E-mail: janetp@fjai.net



Web: <http://www.ocia.org>

Certification agencies in Iowa (continued)

Midwest Organic Services Association, Inc. (MOSA)

PO Box 821
 122 West Jefferson Street
 Viroqua, WI 54665
 Phone: (608) 637-2526
 Fax: (608) 637-7032
 E-mail: mosa@mosaorganic.org



Web: <http://www.mosaorganic.org/>

Certification agencies in Iowa (continued)

Iowa Department of Agriculture & Land Stewardship (IDALS)

Statewide program
 Maury Wills
 IDALS Organic Program
 Phone: (515) 281- 5783
 E-mail: maury.wills@idals.state.ia.us



Web:
www.iowaagriculture.gov/AgDiversification/organicCertification.asp

Domestic sales of organic products, USA

Year	Total U.S. organic food sales in \$	Organic food sales compared to total food sales (%)
2000	7.8 Billion	1-2
2003	12 Billion	1.9
2005	13.83 Billion	2.5
2006	17 Billion	3.0



U.S. market for organic products

- Annual growth rate for organic food market is 22%.
- Organic products are sold in 20,000 natural food stores.
- 73% of all supermarkets and grocery stores sell organic food.
- Organic products are also directly marketed through increasing number of farmers markets.

More information

Kathleen Delate, Organic Specialist

Iowa State University

<http://extension.agron.iastate.edu/organicag/>



Fundamentals of organic agriculture

Iowa State University Extension publication PM 1880:

<http://www.extension.iastate.edu/Publications/PM1880.pdf>

Iowa Department of Agriculture & Land Stewardship (IDALS)

www.iowaagriculture.gov/AgDiversification/organicCertification.asp

More information (continued)

USDA Agricultural Research Service

<http://www.ars.usda.gov/is/AR/archive/feb02/amer0202.htm>

Midwest Organic and Sustainable Education Service

<http://www.mosesorganic.org/>

Rodale Institute

<http://www.rodaleinstitute.org/>

Organic Farming Research Foundation

<http://ofrf.org/index.html>



For a summary of research findings

<http://www.organicag.org>



Scientific Findings About Organic Agriculture

Animal Health & Welfare
Fruits & Vegetables
Grains
Meat
Milk
Organic Farming & Niche Markets
Organic/Conventional Comparisons
Poultry
About the Project

Summaries of about 100 scientific studies

Full references/links to original research articles

Categorized by topic

Project of the Leopold Center for Sustainable Agriculture