Kentucky State University Cooperative Extension Program

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Organic Agriculture 101

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Organic Agriculture Crop Production

What is Organic Agriculture?

Organic agriculture is a way of farming that uses natural methods to protect the environment, keep soil and plants healthy, and avoid synthetic chemicals or GMO's (USDA)

Is a farming system production that:

- •Generally relies on naturally derived inputs.
- •Generally enhances soil and ecosystem health when managed well.
- •Generally prohibits use of synthetic pesticides, fertilizers, and GMO's.
- •Follows a set of regulations that define approved and prohibited practices.
- •Relies on inspections and record keeping to ensure regulatory compliance.

Commonly Used Practices

- Crop Rotation
- Cover Cropping
- Composting
- Natural Pest Control

Top Selling Certified Organic Products in Kentucky Farms

Milk, eggs, vegetables and fruits, tobacco, and corn.

Key Principles

Soil Health: minimize soil disturbance, cover crops, and build organic matter.

Biodiversity: crop rotations, cover crops, integrative livestock, and preserve natural habits. **Approved inputs:** use only NOP-approved substances (generally naturally derived with prohibition on synthetics).

Animal Welfare: access outdoors, 100% organic fed, no hormones or antibiotics, and must treat animals when sick regardless of organic status.

Steps for Certification

- •Understand why you might choose organic certification and how your farm might operate.
- •Understand the yearly commitment for inspections and fees (varies from certifiers)
- •Become familiar with the National Organic Program and general practices.
- •Develop an Organic System Plan.
- •Develop a record keeping system and begin keeping detailed records.
- •Transition your land for 3 years with no use of non-approved inputs (exceptions are possible when land has not been treated with non-approved inputs).

Key Terms in Organic Agriculture

Organic System Plan (OSP) – a written plan that explains how a farmer or business follow organic rules. It should include: farm map, crops or animals that will be used, how records are kept, steps to prevent fraud, and harvest and handling methods.

National Organic Programs (NOP) – is a regulatory program run by the United States Department of Agriculture (USDA) that sets and enforces the rules for organic farming and production in the U.S.

Independent Organic Inspectors Association (**IOIA**)- is a non-profit professional association of organic farm, livestock, and process inspectors. Provide inspectors training and networking services to bring knowledge in organic inspection process.

Organic Materials Review Institute (OMRI) – is a non-profit organization that evaluates products like fertilizer, pest control, and other inputs to ensure they meet organic standards and certifies products for use in organic agriculture. The organization adds a seal in products that have been reviewed and approved for organic production.

Compliance: in organic agriculture it means following all the rules and standards that are required to be certified organic.

Certifier: is also called a certifying agent, is an organization or agency approved by a government (such as USDA), that checks whether farms and food businesses are following organic rules. The certifier grants or denies the organic certification. Kentucky Department of Agriculture (KDA) is a certifier in Kentucky.

Inspector: is a certified agent sent by the certifier to report and see the operation meets organic standards. NOP Standards: the official rules set by the USDA that define how organic food must be grown, handled, and processed.

Part 205: refers to Tittle 7, Part 205 of the Code of Federal Regulations (CFR) in the United States. It contains official rules and standards for the National Organic Program (NOP).





OMRI has resources list of all the products approved

Challenges

- Composting
- Natural Pest Control
- Weed Control without chemicals
- Building organic market chemicals
- Cost of inputs approved for use in organic
- Initial learning curve during transition (lower yields, weed management, etc.)

Acknowledgment

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References & Resources

- ATTRA. NCAT. Sustainable Agriculture. https://attra.ncat.org/organic-farming/
- Kentucky Department of Agriculture, Organic Marketing.
 - https://www.kyagr.com/marketing/organic-marketing .html
- National Organic Program. https://www.ams.usda.gov/about-ams/programs-offic es/national-organic-program
- Organic Association of Kentucky. https://www.oak-ky.org/
- OMRI Lists. https://www.omri.org/omri-lists
- UK Cooperative Extension Office. extension.ca.uky.eduUSDA

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