

Organic Production Principles

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Definition of Organic Agriculture

“an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony.” (National Organic Standards Board)



Nature's farming

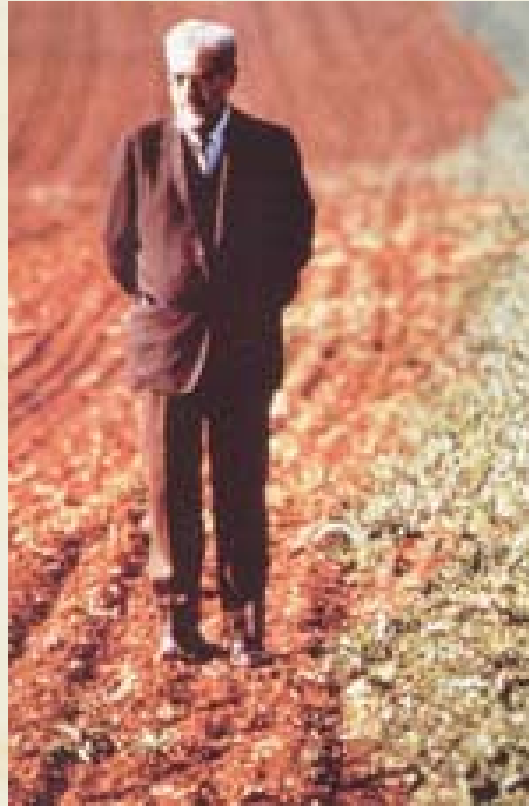
“Mother earth never attempts to farm without live stock; she always raises mixed crops; great pains are taken to preserve the soil and to prevent erosion; the mixed vegetable and animal wastes are converted into humus; there is no waste; the processes of growth and the processes of decay balance one another; ample provision is made to maintain large reserves of fertility; the greatest care is taken to store the rainfall; both plants and animals are left to protect themselves against disease.” --Sir Albert Howard, *An Agricultural Testament*

The Pioneers

Sir Albert Howard



J.I. Rodale



Biodiversity

- Natural systems are stable.
- Farms that are diverse can support beneficial organisms.
- Diversity above ground = diversity underground.
- Various tools that mimic biodiversity.



Diversification of Enterprises

- Good organic farms integrate enterprises.
- Economic sustainability.



Sustainability

- Economic sustainability
- Energy sustainability
- Environmental sustainability
- Social and/or Community sustainability





Natural Plant Nutrition

- Proper care & nourishment of soil organisms
- Failure to support soil biotic life leads to soil declines
- Soluble fertilizers cause nutritional imbalances
- Focus on macronutrients also leads to imbalance
- Soluble nutrients (nitrate) lead to environmental problems



Natural Pest Management

- Insect pests attracted to inferior or weak plants as caused by poor plant nutrition.
- Pest outbreaks are imbalances in the agroecosystem.
- Pesticides are a cause of agroecosystem imbalances.
- Organic farmers employ natural pesticides as little as possible.

Integrity

- Practices & actions that assure consumers that they get what they pay for
- Recordkeeping
- Buffer strips





Practices & Tools

- Crop Rotation
- Green manures & cover crops
- Manures & compost
- Intercropping & companion planting
- Biological pest control
- Mulching
- Biorational pesticides
- Buffers & barriers

Organic Crop Production

Foundational Principles & Practices

Biodiversity	Diversification	Sustainability	Natural Plant Nutrition	Natural Pest Management	Integrity
Rotation Green Manure Cover Crops Animal Manure Composting Intercropping Biocontrol Farmscaping Buffers	Rotation Animal Manure Composting Intercropping Farmscaping Mulching	Rotation Green Manure Cover Crops Intercropping Biocontrol Farmscaping Animal Manure Composting Mulching Buffers	Rotation Green Manure Animal Manure Composting Natural Fertilizers Foliar Fertilizers	Rotation Green Manure Cover Crops Composting Intercropping Biocontrol Farmscaping Sanitation Tillage Fire Natural Pesticides	Buffers Records

Resources for Organic Farming Information

- <http://smallfarms.oregonstate.edu>
- www.ofrf.org
- The Soil & Health Library
<http://soilandhealth.org/index>
- *The New Organic Grower*, Eliot Coleman
- *The Soul of Soil*, Grace Gershuny & Joe Smilie
- *Building Soils for Better Crops*, Fred Magdof & Harold van Es
- ATTRA www.attra.org

