UNIVERSITY OF KENTUCKY - COLLEGE OF AGRICULTURE

Glossary of Alternative Farming Production and Marketing Terms

Introduction

The continued development of alternative methods of agriculture has resulted in an often confusing array of production and marketing terminology. In an effort to help sort through the maze, a number of these terms are defined here. The words on this list range from ideas that are difficult to pin down (e.g. sustainable) to concepts that have a precise legal definition (e.g. organic). Nevertheless, an attempt has been made to provide a brief explanation of the most generally accepted meaning.

Terms and Definitions

Alternative farming and alternative agriculture are general terms that apply to agricultural production methods, agricultural enterprises and/or crops that are different from traditional or conventional ones.

Best Management Practices (BMPs) are methods or techniques designed to minimize the environmental impact of plant and crop production on water and soil quality. For example, BMPs address the problem of pesticide run-off into natural water sources.



attempts to bring it into balance. The Demeter Association establishes the specific guidelines for Biodynamic production and certification. While generally considered a type of organic farming system, Biodynamic agriculture is considerably more rigorous. http://www.demeter-usa.org/ and http://www.biodynamics.com/

Biological control (often shortened to biocontrol) is the practice of using living organisms (e.g. predators, parasites or diseases) to control or manage a separate, harmful organism (e.g. weeds, plant pathogens or insect pests).

Biological farming is the term often used in Europe to refer to organic farming.

Biotechnology refers to the integration of the biological sciences and technology. Biotechnology can include anything from selective plant and animal breeding to gene manipulation and cloning. This term can also be applied to the use of biological organisms

Biodynamic agriculture is a concept of agriculture which sees the farm as a living, dynamic, spiritual entity and



in industry (e.g. fermentation processes used to make foods; manufacturing pharmaceuticals from microorganisms, etc.).

Agriculture & Natural Resources • Family & Consumer Sciences • 4-H/Youth Development • Community & Economic Development

Biointensive agriculture is an organic agricultural system that is practiced on a relatively small scale. It is also referred to as biointensive mini-farming or biointensive gardening. This system focuses both on obtaining maximum yields from a minimal area of land and on long term sustainability in a closed system.

Biointensive IPM is an attempt to take integrated pest management back to its ecological roots. It emphasizes many of the concepts inherent in IPM, such as understanding pest biology, crop rotations to disrupt pest life cycles, and using resistant varieties. However, only reduced risk pesticides are used, and then only as a last resort after other preventative tactics have proved ineffective.

Certified Naturally Grown (CNG) is a grassroots alternative to the USDA NOP organic certification program and is primarily aimed at small farmers. This organization uses NOP regulations as the basis for its own high standards of organic production. However, the CNG puts less emphasis on record-keeping and encourages the sharing of advice between inspectors and farmers. Farms that have been inspected and certified by CNG members can use the Certified Naturally Grown logo on their products. http://www.naturallygrown.org/

Certified organic see "Organic labels"

Conventional agriculture or **conventional farming** refers to traditional agricultural practices, such as a reliance on pesticides and synthetic fertilizers. These terms are often used in contrast to organic or sustainable agricultural systems. Growers who are not "organic" are referred to as "conventional" farmers.

Ecological farming is a term used in Europe to refer to organic agriculture, but with a greater emphasis on environmental concerns.

Environmentally friendly is a general term used to describe products or services that have resulted in minimal to no harm to the environment.

Food Alliance (FA) is a non-profit organization that provides certification for farmers, ranchers and handlers who follow FA sustainable agriculture standards. http://www.foodalliance.org/

Genetic engineering is the science of deliberately and artificially manipulating an organism's genetic make-up. Other applicable terms include gene-splicing, genetic modification and genetic enhancement. GMOs (genetically modified organisms) are the result of genetic engineering.

Genetically modified organism (GMO) refers to an organism that has been altered by genetic engineering. A gene from one organism is introduced into the genetic material of another organism to improve its quality or performance (such as disease resistance or pesticide immunity).

GMO-Free or **No GMO** products were produced without the use of GMOs.

Good Agricultural Practices is a nation-wide, voluntary program that addresses the issue of microbial contamination in fresh produce. The Kentucky Department of Agriculture, the Kentucky Department for Public Health and the University of Kentucky Extension have joined together to provide producers with the information and tools they need to minimize contamination risks during all phases of production and marketing. http://www.kyagr.com/marketing/ GAP.htm

Green refers to environmentally friendly products that are derived from recycled materials or renewable resources.

Holistic Management® is a sustainable farm planning tool that views the farm, the family and the community as a whole, rather than as separate entities. Holistic management emphasizes the establishment of long-range goals, while also meeting immediate needs. Other related concepts include whole farm planning, comprehensive farm planning, and integrated farm management. http://www.holisticmanagement.org/ Integrated Pest Management (IPM) is a pest management strategy that uses a combination of biological, cultural, and chemical tools to reduce crop damage from insects, diseases and weeds. These strategies are employed in such a way as to minimize environmental risks, economic costs and health hazards. IPM uses such techniques as monitoring pest populations, observing weather conditions, understanding pest cycles, biological control and crop rotation in order to reduce and/ or manage pest populations. Pesticides are used minimally and judiciously as only one part of the pest management strategy. (University of Kentucky IPM Web site: http://www.uky.edu/ Ag/IPM/ipm.htm)

Irradiation is a method of disinfesting, sterilizing and/or preserving food using ionizing radiation.

Kentucky Proud is a registered service mark regulated by the Kentucky Department of Agriculture (KDA). The logo signifies that the product was grown, processed or crafted within the state of Kentucky. Those wishing to participate in this program must apply annually to the KDA for their free membership. http:// www.kyagr.com/kyproud/producer.htm

Local or **locally grown** are subjective terms lacking a precise definition. Some consider "local" to be an area within a 150- to 250-mile radius of the market. Others apply these terms to the agricultural products grown or raised by independent farmers within the community.

Low input agriculture refers to the purchase of few external inputs (e.g. purchased fertilizers) with a greater reliance on on-farm resources.

Natural refers to foods or food additives that are not produced or manufactured. In addition, natural foods contain no artificial ingredients, including preservatives, and have undergone minimal processing. The FDA does not regulate the use of this term except when used on meat and poultry. Natural is NOT synonymous with "organic" or "sustainable." **Natural farming** is a highly refined method of working closely with nature to obtain high yields with little labor involvement. The founder, Japanese farmer Masanobu Fukuoka, refers to his method as "do-nothing farming."

Naturally grown is a general term that suggests the crop was produced without pesticides or other synthetic chemicals.

Nutrient management relates to managing the amount, timing, form and placement of soil amendments used in plant production. The current focus is on optimizing crop production and economic returns while also taking into consideration environmental concerns.

Organic crop production refers to an agricultural system that follows the specific, legal requirements outlined in the USDA National Organic Program (NOP) regulations. For example, no GMOs are permitted and crops are produced without the use of synthetic pesticides or fertilizers. Growers are certified by a USDA-approved certifying agency only after they have demonstrated compliance with stringent NOP standards. http://www.ams. usda.gov/NOP/indexIE.htm

Organic labels can include the following:

Certified organic is used to label a farm, farmer or product that has been certified in accordance with USDA National Organic Program (NOP) regulations. Only farmers that have been inspected and approved by a USDA-accredited organization (such as the KDA) may sell, label and represent their products as certified organic. The USDA organic logo may be used on these products.

100% organic products contain only certified organically produced ingredients (with the exception of salt and water). Producers and handlers must be certified organic in order to sell, label or represent their products as 100% organic. The USDA logo may be used on these products.

Organic refers to products in which 95% or more of their ingredients are certified organic.

Producers and handlers must be certified organic in order to sell, label or represent their products as organic. The USDA logo may be used on these products.

Made with organic ingredients refers to products that contain certified organic ingredients. At least 70% of the ingredients must be organic; the label may list up to three of these ingredients. Producers and handlers must be certified organic in order to sell, label or represent their products as "made with organic products." The USDA organic logo may not be used on these products.

Organically inclined means the producer prefers organic crop production techniques, but it does not guarantee that organic methods were used exclusively.

Permaculture is a contraction of the words "permanent agriculture" and "permanent culture." Based on the work of Australian Bill Bollison, permaculture incorporates techniques from tribal, traditional and scientific cultures around the world. It is a sustainable form of agriculture that attempts to integrate the production of crops and animals into a low maintenance, balanced system. The three core values are: earth-care, people-care and fair-share. http://www.permaculture.org/nm/ index.php/site/index/

Pesticide-free crops are those that have been produced without the use of insecticides, herbicides, fungicides or rodenticides. Products that bear the Pesticide Free Production logo (trademark of University of Manitoba) have not been treated with pesticides from seedling emergence to market, are non-GMO, and have not been grown where residual pesticides are commercially active. http://www.buypfp.com/

Precision agriculture (aka site-specific farming) employs the use of modern technology (e.g. computers, GIS, GPS and remote sensing) to achieve its goal of optimizing the application of production inputs (seeds, fertilizers, etc). Inputs are applied precisely only when and where needed, based on detailed, site-specific information. http://www.precisionag.com/

Protected Harvest is an independent non-profit organization which certifies crops that have been produced according to their strict environmental standards. Based in Wisconsin, this program stresses biointensive IPM and sustainable agriculture. It is currently being expanded from potatoes to include other crops. http://www. protectedharvest.org/index.htm

Regenerative agriculture is used to describe a sustainable agricultural system that focuses on restoring soil health and the balance of nature.

Residue-free signifies that a product does not have pesticide residues above an established limit set by the producer or company. This label does not mean that pesticides were not used at any time nor does it indicate that the product is 100% free of any chemical residue.

Sustainable agriculture is a philosophy that is committed to meeting current plant and animal production needs without compromising the earth's natural resources for future generations. Sustainable practices are meant to allow a farm or farm system to continue to produce indefinitely. In addition to environmental quality concerns, sustainable agriculture also addresses the economic and social issues of the farm community.

Transitional refers to fields or farms that are in the process of being converted from conventional production to certified organic production. The USDA requires a minimum transitional period of three full years, during which time the grower must comply with all National Organic Program standards.

Value-added refers to raw agricultural products that have been altered or processed in such a way that their value, and therefore their selling price, is increased. This can include processing (berries made into jam), combining with other products (bagged mixed greens), and packaging (individually wrapped melon portions). Distribution (getting the product to a more convenient buying location, such as the Internet) and added service (creating floral arrangements from cut flowers) can also add value. Organic crops are often considered value-added since they are produced in a way that makes it possible to label the product "certified organic," thus adding value to the final product.