Organic farming systems www.new-aq.msu.edu





Flaming at the base of corn plants controls weeds within the row in an organic research plot at the W.K. Kellogg Biological Station. Hickory Corners, MI.

Definition of organic farming:

Organic farming is a nonsynthetic input farming system that strives for the most environmentally sustainable farming practices available today. This system is defined more by the processes and practices organic farmers follow than by inputs they do or do not use.



Many consumers are often willing to pay a premium for organically grown food that they consider healthier and grown more environmentally friendly.

What is organic farming?

Dale Rhoads*

Organic farming is an integrated farming system that strives for a high level of longevity or sustainability to ensure an adequate food supply for future generations. In organic farming systems certain well-defined inputs are prohibited while others are restricted. The definitions and guidelines for organic farming are listed under the National Organic Program (NOP) and are regulated by approved local certifying agencies. The regulatory text of the NOP standards is available at www.ams.usda.gov/nop/NOP/standards/FullRegTextOnly.html.

It is not the purpose or intent of these fact sheets to imply that any one production system is any more or less safe or yields a superior farm product. Rather, their purpose is to provide factual information for those seeking to farm organically. In these fact sheets, "conventional farming" is defined as the type of farming which has been dominant since the latter half of the 20th century and accounts for the majority of food, fiber and biofuel production in the industrialized world. An ongoing pattern for most conventional farming has been the increasing use and reliance on synthetic/chemical off-farm inputs and intensive/confined animal production.

Before conventional farming was developed, successful farming consisted of centuries-old sustainable farm practices. Soil health was considered the backbone of a farm's long-term success. With the availability of synthetic chemical inputs, increased population demands and cultural demands for increasingly perfect-appearing products, farmers were encouraged to adopt a style of farming that depended on off-farm inputs, many of which are reliant on fossil fuels. Like all cultural institutions, farming continues to change as new techniques and scientific data from research become available demonstrating the practicality of sustainable farming systems. New farming practices that blend old proven sustainable farming techniques, the best of conventional farming practices today and new organic technologies are emerging. Recent innovations like no-till, minimum-till and cover crop systems are part of the changing landscape of farming now and in the future.

The expansion of organic farming has been driven by a consumer base that promotes and supports it through price premiums. Consumers participate in this market because they recognize the increased costs inherent in producing THEIR FOOD in a way they want it produced. To these people there is indeed a difference in safety and superiority, along with an environmental footprint they can agree with.

Beginning in the early 20th century, people began exploring farming without the use of chemical fertilizers, herbicides and pesticides in response to concerns about food safety and the sustainability of emerging conventional farming practices. This was largely a social movement with many different factions, including what developed



Buckwheat grown as a cover crop to control weeds and enrich the soil. Lapeer County, MI.



The Midwest Organic Team is a division of the New Ag Network. The team consists of researchers, extension educators and certified organic farmers.

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into what we now call organic farming. The modern organic movement has been central to defining the ethical use of the word "natural" and later "organic" in food labeling. The term "certified organic" arose in the 1970s in response to the use of the word organic by less than scrupulous food marketers. Early organic certifiers such as the Rodale Institute, California Certified Organic Farmers and Oregon Tilth were private organizations that each created clear guidelines for certifying farms and food suppliers, standardizing organic practices and food labeling for the benefit of the consumer. In 2002, due to increased sales in the organic food industry and continued inconsistent usage of the word organic, a National Organic Program (NOP) was passed into law. The NOP provides a clear set of minimum definitions, organic farming and processing standards and labeling guidelines. Under USDA-NOP guidelines, private local organizations serve as organic certifying agencies that inspect and regulate the application of the national organic standards. It is the responsibility of the organic farmer to pay for organic certification.

The money spent for certification, inspections and keeping good farm records has been found by many organic farmers to be easily recouped with good marketing practices and a well-thought-out farm plan. The tracking records a farmer has to keep to be certified are part of the food safety procedures most responsible farmers and producers should or are required to keep anyway. The organic certification system is based largely on trust, the yearly inspector's knowledge of what does work and what does not in organic practices, and the commitment of the farmer to supply customers with organic products.

Between 1970-2007 the percentage of sales of organic and natural products grew by at least 20 percent each year. Some major organic producers and market research firms reported a falling off of the growth for the demand for organic and/or natural products in 2008 due to economic pressures. While the markets remain steady at this time, further economic downturns could impact the future plans of farmers in or considering organic production. While a group of core customers considers organic or locally produced products a top priority, the growth of recent years has been driven by a far larger group of less-committed customers.

Organic farmers, researchers, conventional farmers and government agencies are working together to decrease the negative side effects of farming while continuing to strive for the highest quality food for the American consumer. The consumer demand for more sustainable, environmentally sound farm practices and organic farm products is one of the fastest growing areas in agriculture and is on the forefront of the exploration into healthier and more sustainable farming practices for the consumer, the environment, the farmer and the farm communities of this country.

While many farmers transitioning to organic do so for personal, health and/or environmental reasons, consideration of current market trends is essential for making sustainable farm management plans when considering organic production.

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