Consumer demand for organic products in the United States has grown more than 20% annually over the last decade. The U.S. Department of Agriculture estimates that organic cropland has doubled between 1992 and 1997 as producers attempt to meet consumer demands. The trend toward production and consumption of organic produce and products shows no sign of reversing in Ohio, the United States, or globally.

There is a perception that organically produced foods are easier on the environment, more nutritionally valuable, and better tasting than non-organically produced foods. There is very little evidence of this based on studies using accepted scientific research methodologies.

In addition, there is very little scientifically based information addressing the challenges faced by organic producers such as weed control, disease and insect management, fertility, and variety selection. These challenges differ for organic farmers because of their need to meet certified organic criteria. These criteria are the result of strict new national organic standards that were implemented in 2002, standards that prohibit organic farmers from using the same types of management practices that would be used on a typical farm.

Responding to the growing public interest and requests by organic producers and supporters, the Ohio Agricultural Research and Development Center (OARDC) established the Organic Food and Farming Education and Research (OFFER) Program in 1998. Approximately 80 acres of land near the Wooster Campus of OARDC have been certified or are now being certified organic. Certified organic land allows Ohio State scientists to carry out research investigations under the same rules and conditions as organic farmers, increasing the relevancy of the resulting data to farmers and consumers.

OARDC scientists in the OFFER program have projects underway evaluating the many different aspects of organic and transitional organic farming systems.
OBJECTIVES
The long-term goal of OFFER is to provide the highest-quality science-based information, support, and education for the sustainable production, processing, and marketing of organic foods from the field to the table.

Objectives include research and evaluation of the nutritional value and quality of organic foods; the impacts of organic foods and practices on human, livestock, and environmental health; production efficiency; and economics. Outreach efforts that provide factual information to producers, processors, and consumers, so they can make informed choices and decisions, is also an objective of the OFFER Program.

CHALLENGES
Organic agriculture has claimed a place in the overall agricultural economy in Ohio and the United States. However, many of the organic practices currently used have not been scientifically validated using accepted research methodology. OFFER’s challenge is to add a science-based approach to the art of organic farming and to provide information to both producers and consumers so they can make informed decisions about agricultural products.

A survey of organic producers in Ohio identified mechanical or non-chemical systems for weed control; soil nutrient balancing or fertility without synthetic fertilizers; and evaluation of the nutritional value of organic products, both field crop and horticultural, relative to conventionally grown products as the most important areas of needed research. The OFFER program is uniquely poised to provide these producers with the technical information they need.

ACHIEVEMENTS
OFFER’s multi-disciplinary program has been instrumental in leveraging well over $3.5 million in extramural grant funds. These funds have allowed OFFER to build infrastructure and establish Ohio State as a national leader in organic research among land-grant universities.

Ohio State is among a small group of land-grant universities that have certified organic research land. According to the Organic Farming Research Foundation’s recent State of the States Report, the OFFER program exemplifies the ideal of organic farming systems research. In addition, the Ohio Citizens’ Action and the Innovative Farmers of Ohio awarded OFFER a Blue Ribbon Award in 2002 for efforts in pesticide reduction and innovative farming methods.

THE FUTURE
With the $3.5 million leveraged, OFFER plans to continue to fill the gap in technical knowledge on the organic process. Close work with producers and other industry partners will be the factor in determining future scientific direction. OFFER’s education and extension activities will continue to play a major role in the program in an effort to provide the information required for informed decision making for everyone involved, from field to table.

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Photos courtesy Jodi Miller and Ken Chamberlain