



# Transitioning to Organic Farm Systems

*Annette Wszelaki, Associate Professor and Commercial Vegetable Extension Specialist*

*Dana Saywell, former Extension Specialist*

*Sarah Broughton, former Graduate Research Assistant*

*Department of Plant Sciences*

## Introduction

Organic agriculture is a production system that integrates cultural, biological and mechanical practices that foster the cycling of resources, promote ecological balance, and conserve biodiversity. Organic production methods minimize the use of purchased off-farm inputs, such as synthetic fertilizers and pesticides, while maximizing the use of on-farm practices that promote naturally occurring ecological relationships. Transitioning to organic production involves introducing organic management practices into the system while gradually reducing and eventually eliminating the use of prohibited inputs.

## What is the transition period?

For land to be eligible for organic certification, prohibited substances must not be applied to the land for a period of three years immediately preceding harvest of the crop.

## Prohibited and Approved Substances

Prohibited substances include chemical fertilizers and synthetic pesticides, as well as genetically modified

organisms (GMOs), ionizing radiation, sewage sludge and treated seeds. All synthetic materials, unless specifically *approved* by the U.S. Department of Agriculture's (USDA) National Organic Program (NOP), are prohibited for use. All natural substances, unless specifically *prohibited* by the NOP, are approved for use. The National List outlines prohibited and approved substances; this is part of the NOP regulations found in sections 205.600 to 205.606. The OMRI Products List ([http://www.omri.org/OMRI\\_products\\_list.php](http://www.omri.org/OMRI_products_list.php)) provides information on products that the Organic Materials Review Institute (OMRI) has determined are allowed for use in organic production. This list is updated throughout the year, so it is important to check it regularly, as substances on the list can change in status (i.e., approved to restricted) from time to time.

## Organic Management Practices

Organic crop production relies on using preventative measures to reduce problems with weeds, diseases, pests and plant nutrition. These practices include promoting plant and animal biodiversity, implementing crop rotations, building healthy soils, and introducing the use of cover crops. For an overview of organic and sustainable agriculture practices, see UT Extension publication W234-A Introduction to Organic and Sustainable Agriculture Practices.

## Considerations for Transitioning to Organic Systems

- Organic crop systems can be more labor- and management-intensive than conventional cropping systems. Keeping ahead of weed, insect and disease problems through observation, monitoring, identification and a timely response is the most efficient management strategy an organic producer can use.



*A diversified crop planting.*



*Millet*

- Transitioning to organic farming takes time and patience. Depending on the farming system, the crops produced and the transition approach, it can take three to five years to convert to an organic system.
- Crop yields may decline during the initial transition period until a balance in the system is reached, but with time, yields will rebound.
- Some vegetable and fruit crops are easier than others to grow organically. For a successful transition, begin with crops that are easier to produce organically. After gaining experience, begin adding more difficult crops in subsequent seasons.

### Seeking Certification

- Before selecting a certification agency, talk with other organic farmers about their experiences with their certifier. Speak with different certifying agencies in your region. Ask what their certification fee is, whether they complete inspections and certification in a timely manner, and if they provide any additional services.
- Develop a farm plan including all practices to be performed and all expected off-farm inputs. For an example, see ATTRA's Organic Farm Plan online at <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=359>.
- Use the transitioning period to develop good record-keeping practices. Organic certification requires extensive documentation of practices to ensure that all off-farm inputs and cultivation practices meet NOP requirements. Farm maps, field histories, field notes, monitoring records, soil tests, input records and receipts, product labels, seed tags, storage records, and sales records will all be reviewed during

inspection.

- Begin the application process during the transition. The application, inspection and certification process can take between three and six months. By working with your certification agency at the start of transition, your farm can become certified in transition.

### Transition Approaches

The strategy for transitioning to organic crop production depends on the preferences of the grower and the farming system. Approaches for transitioning a farm include:

- **Gradual Transition**, where one class of inputs is withdrawn at a time, slowly discontinuing the use of synthetic inputs while introducing organic management practices into the system. This approach requires a longer transition time but can minimize yield losses during the conversion.
- **One Field at a Time** involves using organic management practices on a portion of your farm, converting to organic production parcel by parcel over time. This approach provides the opportunity to gain experience with organic production methods on a more manageable scale before converting the entire farm and minimizing risk.
- **Whole Farm**, where the use of all synthetic inputs is discontinued on the entire farm all at once.

### Additional Information Resources on Transitioning to Organic Systems:

For more information on organic and sustainable agriculture practices, visit the the UT Organic and Sustainable Crop Production website at <http://organics.tennessee.edu>.

Sustainable Agriculture Research and Education (SARE) Publication, *Transitioning to Organic Production*, available online at <http://www.sare.org/publications/organic/index.htm>.

For resources on organic crop production, visit the National Sustainable Agriculture Information Service (ATTRA) website at <http://attra.ncat.org>.

To learn more about certification, see the UT Extension publication W215, *Organic Certification in Tennessee*, available online at <http://www.utextension.tennessee.edu/publications/documents/W215.pdf>.

For certification agencies operating in Tennessee, visit the Accredited Certifiers Association Inc. website at <http://www.accreditedcertifiers.org/index.htm>.