

# Organic Farming in Kentucky - A Survey

## Poll ranks crops from easiest to hardest to grow organically

### Introduction

A common question posed by potential organic growers in Kentucky is: “What crops are easier to grow organically here?” In an attempt to answer this question, the New Crop Opportunities Center sent out a number of surveys to organic growers (certified and non-certified); to county Extension agents; and to state, university and Extension specialists. Of the 83 surveys sent out during the fall and winter of 2006-2007, a total of 31 were completed and returned.

This was not a scientific study, but rather a way to determine which crops have been grown organically in Kentucky and to discover what grower experience has been. This profile summarizes our findings. We hope the information we gathered will provide new and/or prospective organic growers with at least a general idea of which crops are easier to produce organically. This list is only a beginning step; potential growers need to thoroughly investigate any potential crop.

### Crop Production Ratings

Survey respondents were asked to rate a list of 71 food and forage crops as to their relative ease of production using organic methods. These



findings are summarized in the following table; crops with fewer than four respondents were not included. The type of experience with the crop (commercial, Extension, research, information from others) was also requested, but not factored into the summary.

A simple rating system of “easy”, “moderate” or “difficult” was used. Many factors can influence a grower’s or researcher’s rating: amount of overall experience in organic production, total experience with the particular crop (conventional, as well as organic), site location, environmental conditions, and so on. Because of these variables, a crop that one organic grower considers “easy” may be rated “difficult” by another grower.

In some cases, summarizing a crop’s ratings was clear-cut. For example, 17 out of 18 respondents rated okra as “easy.” In other cases, the number of responses was evenly distributed over

more than one rating. In the case of peppers, 11 growers rated them as “easy,” while 10 rated them “moderate.” In these cases, the results were summarized by using a range, such as “easy to moderate.”

A number of crops were rated equally (or nearly so) as “easy,” “moderate” and “difficult” and are, therefore, listed as “easy to difficult” in the summary. For example, field-grown tomatoes were rated as “easy” by 5, “moderate” by 4 and “difficult” by 5 respondents. These results suggest that organic production success is quite variable for that particular crop.

### **Special Challenges of Crop**

Respondents were asked to select from a list of potential challenges for each crop. These included: disease problems, economically prohibitive, high level of management, insect pests, limited or lacking effective organic pest management options, marketing difficulties, and weed control.

Often multiple challenges were listed; sometimes none were listed. Once the answers were tallied for each crop, the top three challenges were included in the table. Not surprisingly, weeds, insects and/or diseases were listed most frequently. The next most commonly cited concern is possibly closely linked with pest management issues: the crop requires a high level of management. Another concern was marketing difficulties, especially for “minor” crops such as radishes (easy to grow organically, but not in great demand as an organic crop). Mentioned occasionally were: the crop is economically prohibitive and limited or lacking effective organic pest management options.

Some respondents cited other challenges. An alfalfa producer mentioned the difficulty of obtaining organic seed. Other growers listed animal pests (e.g. rodents and deer), fertility, and shelf-life/storage difficulties for some crops.

### **Difficult Aspects of Organic Production**

When asked “What have you found to be the

most difficult aspect of organic production in general?” the common responses of weed, insect and disease management problems resurfaced. Also frequently mentioned was the lack of local sources for organic inputs, potting soils and seed. It was noted that organically approved items generally cannot simply be picked up at a local farm supply store – they must be ordered from distant sources, resulting in time delays and increased costs associated with shipping. Other top difficulties included: restoring soil fertility/soil health, management of a diverse selection of crops, and record keeping.

### **Economic Considerations**

Respondents were also asked if each crop had been profitable for them (yes or no). Many avoided the question completely, while others answered it for some of their crops, but not others. The response from a grower operating a CSA seemed to summarize the difficulty of the question. He indicated that he produces several crops that he knows are not particularly profitable, but he does so because his customers have requested them. The important issue to him is not so much whether each individual crop is profitable, but whether his operation as a whole shows a profit. Nevertheless, University of Kentucky agricultural economists urge organic growers to pay close attention to the bottom line.

### **Grower Sources of Information**

The survey included the following question: If you use the Web as a source of information, which sites do you find the most valuable? Respondents cited a wide variety of Web resources and these are listed below along with an Internet address. Some growers stated that they preferred obtaining information from seed catalogs and books. A few admitted to being “computer illiterate.”

- ATTRA - National Sustainable Agricultural Information Service  
<http://attra.ncat.org>
- GardenWeb - *commercial Web site* \*  
<http://www.gardenweb.com>

- Organic E-prints - *archive of research papers*  
<http://orgprints.org>
- Organic Gardening - *commercial Web site* \*  
<http://www.organicgardening.com>
- Organic Farming Research Foundation  
<http://ofrf.org>
- Peaceful Valley Farm and Garden Supply -  
*commercial Web site* \*  
<http://www.groworganic.com/default.html>
- Rodale Institute  
<http://www.rodaleinstitute.org>
- Seeds of Change - *commercial Web site* \*  
<http://www.seedsofchange.com>
- University of Kentucky Agricultural Weather  
Center  
<http://www.wagwx.ca.uky.edu>

### Additional Resources

- Agricultural Alternatives: Organic Crop  
Production (Pennsylvania State University, 2003)  
<http://agalternatives.aers.psu.edu/crops/OrganicVegetables/OrganicVegetableProduction.pdf>
- Alternative Farming Systems Information  
Center (USDA National Agriculture Library)  
<http://www.nal.usda.gov/afsic>

- Fourth National Organic Farming Survey  
(Organic Farming Research Foundation, 2004)  
[http://www.ofrf.org/sites/ofrf.org/files/docs/pdf/4thsurvey\\_results.pdf](http://www.ofrf.org/sites/ofrf.org/files/docs/pdf/4thsurvey_results.pdf)
- Organic Marketing (Kentucky Department of  
Agriculture)  
<http://www.kyagr.com/marketing/organic-marketing.html>
- National Organic Program (USDA)  
<http://www.ams.usda.gov/nop>
- Organic Production of Horticultural Crops  
(Saskatchewan Agriculture and Food, 2004)  
<http://www.agriculture.gov.sk.ca/Default.aspx?DN=2a1c6b89-7895-4c92-988d-9d2ab9f808fb>
- Organic Trade Association (OTA) -  
*membership-based business association*  
<http://www.ota.com>
- Southern Sustainable Agriculture Working  
Group (Southern SAWG)  
<http://www.ssawg.org>
- Sustainable Agriculture Research and  
Education (SARE)  
<http://www.sare.org>

\* Survey respondents reportedly found these commercial Web sites helpful. Including them here does not represent an endorsement of these sites or their products by the University of Kentucky.

**TABLE 1. ORGANIC CROP PRODUCTION SURVEY SUMMARY OF RESULTS**

Crops	Rating	Special Challenges Presented By Crop
<b>Agronomic</b>		
Alfalfa	Moderate	Insects, Weeds, Economically Prohibitive
Clover	Easy	
Corn	Moderate	Insects, Weeds
Dry beans	Easy to Moderate	Diseases, Insects, Weeds
Forage grasses	Easy	Weeds
Millet	Easy	
Oats	Easy	
Pasture	Easy to Moderate	Weeds, Fertility
Sorghum	Easy	Weeds
Soybeans	Easy to Moderate	Insects, Diseases, Weeds
Tobacco	Easy to Difficult	High Level of Management, Diseases, Insects
Wheat	Easy to Moderate	

**TABLE 1. ORGANIC CROP PRODUCTION SURVEY SUMMARY OF RESULTS (CONT'D)**

<b>Crops</b>	<b>Rating</b>	<b>Special Challenges Presented By Crop</b>
<b>Greenhouse crops</b>		
Edible flowers Herbs Lettuce Tomatoes	Easy to Moderate Easy Easy Moderate	High Level of Management Insects Insects, Marketing, Weeds High Level of Management, Insects, Diseases
<b>Herbs</b>		
Catnip Culinary herbs Echinacea	Easy Easy to Moderate Easy	Weeds, Marketing Difficulty, High Management
<b>Small fruits</b>		
Blackberries Blueberries Grapes Raspberries Strawberries	Easy to Moderate Easy to Moderate Difficult Easy to Moderate Moderate to Difficult	Insects, Weeds Weeds, High Level of Management Diseases, High Level of Management, Weeds Insects, Diseases, Weeds Weeds, High Level of Management, Diseases
<b>Tree fruits &amp; nuts</b>		
Apples Peaches Pears Persimmon	Difficult Difficult Moderate Easy	Diseases, Insect, Limited Pest Control Options Diseases, Insects, High Level of Management Diseases, Insects, High Level of Management
<b>Vegetables</b>		
Asparagus Beans Beets Broccoli Cabbage Cauliflower Carrots Cucumber Edamame Eggplant Garlic Greens (kale, spinach...) Lettuce Muskmelon (cantaloupe) Okra Onion	Easy to Moderate Moderate Easy Moderate Easy to Moderate Easy to Difficult Easy Moderate to Difficult Easy to Moderate Difficult Easy Easy Moderate To Difficult Easy Easy to Moderate	Weeds, Insects Insects, High Level of Management, Diseases Weeds, Marketing Difficulty Insects, High Level of Management Insects, High Level of Management Insects, High Level of Management Weeds Insects, Diseases, High Level of Management Diseases, Weeds Insects, Diseases Diseases, High Level of Management, Insects Insects High Level of Management Insects, Diseases Weeds

**TABLE 1. ORGANIC CROP PRODUCTION SURVEY SUMMARY OF RESULTS (CONT'D)**

Crops	Rating	Special Challenges Presented By Crop
<b>Vegetables (cont'd)</b>		
Parsnips	Easy to Moderate	
Peas	Easy	High Level of Management
Peppers	Easy to Moderate	Insects, Diseases, High Level of Management
Potatoes	Easy to Moderate	Insects, Diseases
Pumpkins	Easy to Difficult	Insects, Diseases, Weeds
Radish	Easy	Marketing Difficulty
Rhubarb	Easy	
Squash, summer	Easy to Moderate	Insects, Diseases, Level of Management
Squash, winter	Easy to Difficult	Insects, Diseases
Sweetpotatoes	Easy	High Level of Management
Tomatoes	Easy to Difficult	Diseases, Insects, High Level of Management
Turnip	Easy	Insects, Marketing Difficulty
Watermelon	Moderate	Diseases, Insects, Level of Management
<b>Miscellaneous</b>		
Seed production	Easy	

*Okra, persimmon and turnip photos courtesy of Rosie Lerner, Purdue University;  
Sorghum photo courtesy of Christy Cassady, University of Kentucky;  
Organic logo courtesy of the USDA*

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For additional information, contact your local [County Extension](#) agent