COOPERATIVE EXTENSION SERVICE UNIVERSITY OF KENTUCKY—COLLEGE OF AGRICULTURE

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.

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://wwwagwx.ca.uky.edu

More Information

- 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://ofrf.org/publications/survey.html
- KDA Division of Value-added Plant Production: Organic Program http://www.kyagr.com/marketing/plantmktg/ organic/index.htm
- National Center for Appropriate Technology http://www.ncat.org/agri.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

Table 1. Organic Crop Production Survey Summary of Results

Crops	Rating	Special Challenges Presented By Crop
Agronomic		
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	

^{*} 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 (CONT'D)

Crops	Rating	Special Challenges Presented By Crop
Greenhouse crops	8	ı S v ı
Edible flowers	Easy to Moderate	High Level of Management
Herbs	Easy	Insects
Lettuce	Easy	Insects, Marketing, Weeds
Tomatoes	Moderate	High Level of Management, Insects, Diseases
Herbs		
Catnip	Easy	
Culinary herbs	Easy to Moderate	Weeds, Marketing Difficulty, High Management
Echinacea	Easy	
Small fruits		
Blackberries	Easy to Moderate	Insects, Weeds
Blueberries	Easy to Moderate	Weeds, High Level of Management
Grapes	Difficult	Diseases, High Level of Management, Weeds
Raspberries	Easy to Moderate	Insects, Diseases, Weeds
Strawberries	Moderate to Difficult	Weeds, High Level of Management, Diseases
Tree fruits & nuts		
Apples	Difficult	Diseases, Insect, Limited Pest Control Options
Peaches	Difficult	Diseases, Insects, High Level of Management
Pears	Moderate	Diseases, Insects, High Level of Management
Persimmon	Easy	
Vegetables		
Asparagus	Easy to Moderate	Weeds, Insects
Beans	Moderate	Insects, High Level of Management, Diseases
Beets	Easy	Weeds, Marketing Difficulty
Broccoli	Moderate	Insects, High Level of Management
Cabbage	Easy to Moderate	Insects, High Level of Management
Cauliflower	Easy to Difficult	Insects, High Level of Management
Carrots	Easy	Weeds
Cucumber	Moderate to Difficult	Insects, Diseases, High Level of Management
Edamame	Easy to Moderate	Diseases, Weeds
Eggplant	Difficult	Insects, Diseases
Garlic	Easy	Diseases, High Level of Management, Insects
Greens (kale, spinach)	Easy	Insects
Lettuce	Easy	High Level of Management
Muskmelon (cantaloupe)	Moderate To Difficult	Insects, Diseases
Okra	Easy	
Onion	Easy to Moderate	Weeds

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

Crops	Rating	Special Challenges Presented By Crop
Vegetables (cont'd)		
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
Miscellaneous		
Seed production	Easy	