

ECONOMIC SIGNIFICANCE OF ORGANIC FRUIT PRODUCTION IN NEW ENGLAND, THE US, AND THE WORLD

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Organic Production Worldwide

Organic farming in the United States, as well as throughout the world, is one area of agriculture that continues to expand and grow. In the past, organic foods used to fit into a niche found only in specialty shops. Today, organic foods are found in a variety of markets such as roadside stands, farmers markets, and conventional supermarkets. According to the Organic Trade Association, sales of organic foods and beverages have been increasing by at least 20% per year since 1990 with some years reporting up to 24% increases in the United States. These sales are often associated with more direct marketing and smaller farms.

According to a 2001 worldwide survey by a private research firm in Germany, Australia was the leading country in land managed as organic farming systems (19 million acres). Argentina and Italy followed with 6.9 and 2.6 million acres, respectively. The United States was fourth with 2.35 million acres under organic production. This acreage includes both crop and pasture land. Europe is the leading geographic area in organic crop production, where increases in production have been estimated to be five-fold between 1993 and 2000. One of the main reasons for this success, besides consumer demand, is the commitment by many European countries to support organic agriculture by encouraging research and education and consumer information in order to enlarge organic markets. In addition, many European countries provide some type of financial support to growers for changing their practices to an organic management system. For example, in Finland, conversion aid is paid for five years and the farmer receives EUR 60 per acre and year. For already converted areas, the aid is EUR 42 per acre and year and the contracts are made on a five-year basis. In 2001, Italy was the leading European country in both total share of organic fruit production (3 million acres) and total percentage (8%) in farmland under organic management.

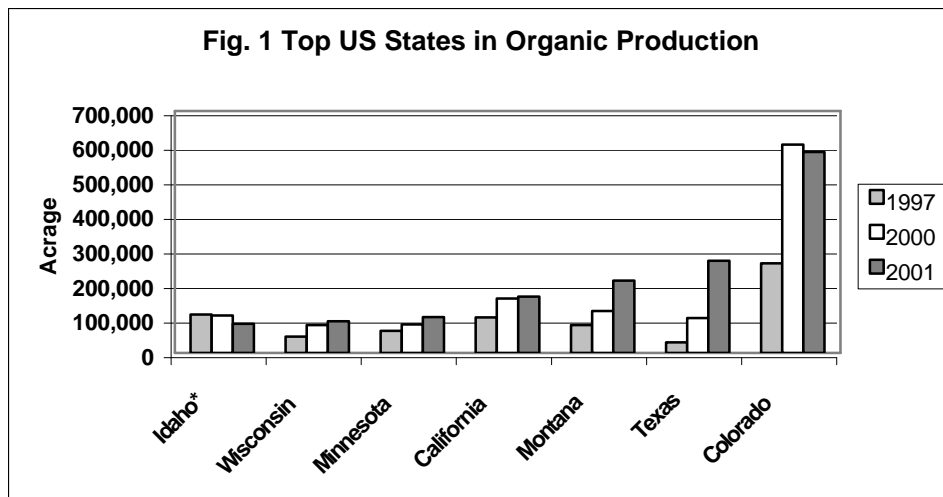
In October 2001, the U.S. Department of Agriculture put in place a set of national standards that label foods as "organic". According to these standards, organic agriculture is: "A production system that is managed in accordance to the Foods Production Act and regulations to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance and preserve biodiversity". In the past, organic food producers established and followed their own regional, voluntary certification standards. The new regulations should help consumers buying organic foods because these regulations provide precise definitions and penalties for violations.

Organic Production in the U.S.

According to USDA statistics, U.S. certified organic cropland doubled between 1992 and 1997 (to 1.3 million acres) and preliminary estimates indicate that organic production increased significantly between 1997 and 2001. The leading state in organic production is Colorado, with

over half a million acres in production (both cropland and pasture included). Other leading states include Texas, Montana and California (Fig. 1).

In general, the South has less acreage under organic production than any other region in the U.S. The area in organic production in New England is approximately 44,000 acres, with Vermont leading with 39,000 acres.



According to various surveys, organic farmers market their food directly to consumers much more frequently than conventional farmers do. Vegetables and fruits are the commodities sold the most through direct markets. It is estimated that 20 percent of the organic fruit and vegetable acreage is marketed directly to grocery retailers and restaurants. The organic products most often purchased are tomatoes, leafy vegetables, carrots, and apples. The estimated dollar value in 2000 for fresh produce sales was \$833 million, accounting for 42 percent of the U.S. organic food sales.

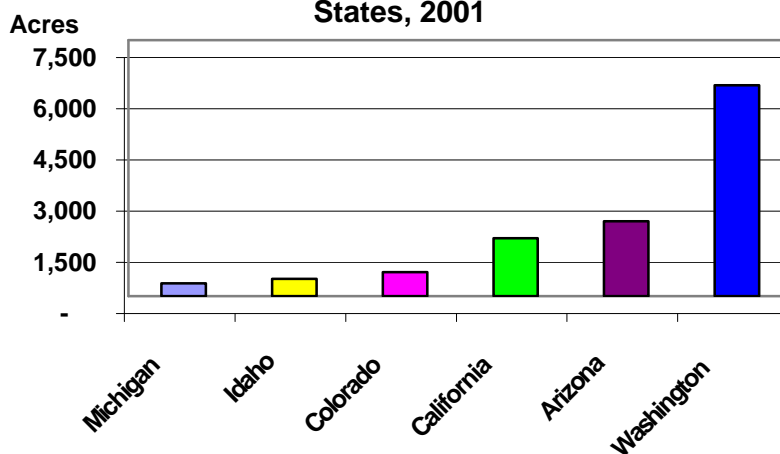
U.S. Organic Fruit Production

The United States leads the world production of organic apples, with an estimated production in organic apples at 17,276 acres. It is second in pear production with an estimated 2,798 acres in 2001. Most of this production is located in the semi-arid regions of the West, which have a major climatic advantage over more humid regions in the East. The Western region has fewer problems with pests (diseases and insects). In 2001, Washington State was the leading producer in organic apples, pears, and sweet cherries. In Washington, organic apple production in 2001 was approximately 6540 acres with another 3400 acres in transition. This figure represents only 3.9% of the total apple acreage in this state. Organic apple production in Washington State has generally increased every year in the past 10 years, with an increase of 55% from 2000 to 2001. Other states where apples are grown organically include Arizona, California and Colorado (Fig 2). The leading apple cultivar grown organically in Washington is ‘Red Delicious’. The planting of other cultivars such as ‘Granny Smith, ‘Gala’ and ‘Fuji’ nearly doubled in acreage from 2000 to 2001 (Table 1). Pear production in Washington State increased by 111% in 2001 from 2000, to 619 acres. The main pear cultivar under organic management is ‘Anjou,’ with ‘Bosc’ and ‘Bartlett’ also being planted but to a lesser degree. Increases in organic production of other fruits are expected in the future.

Table 1. Washington organic apple acreage by variety 2000-2001 (WSU *Current trends in organic tree fruit production*).

Variety	2000			2001		
	Certified	Transitional	Total	Certified	Transitional	Total
Red Del.	1512	984	2496	1872	864	2736
Granny Smith	452	625	1077	1053	651	1704
Gala	596	577	1173	1040	440	1481
Golden Del.	603	304	907	860	131	991
Fuji	425	606	1031	807	408	1215
Braeburn	186	165	351	258	177	435
Cameo	93	350	443	151	146	297
Pink Lady	83	196	279	128	532	660
Other	209	71	280	371	72	432
Total	4159	3878	8037	6540	3411	9951

Fig. 2. Leading U. S. Organic Apple Producing States, 2001



Generally, prices for organic fruits are higher than those of 'conventionally' managed fruits. However, organic prices are as susceptible to market fluctuation as are those for 'conventionally' grown fruits, and there has been a general decline in price premiums for organic fruits. For example, prices received for the older cultivar 'Red Delicious' grown organically are lower (\$18.70/box over six cropping seasons) than those received for the newer cultivars such as 'Cameo' and 'Pink Lady' (\$26.68 and \$24.29 per box, respectively). One must consider that pricing is not the only factor determining whether an organic fruit producer will be successful or not. The cost of production may be higher for organic producers than for conventional growers. It is estimated that organic fruits require premiums of 12-14% higher than conventional prices to reach a break-even point.

In conclusion, the U.S. Organic Market is forecast to be worth \$20 billion by the year 2005 with an annual growth rate of 21%. Although a slowdown is likely to occur as the market expands and matures, there are market opportunities for fruit growers in New England in this expanding area of agriculture.

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