Organic Tree Fruit Production, Promise and Pitfalls

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Organic food sales in the U.S. and other countries continue to grow at an estimated 20 to 25% per year. This has occurred for the past 10 years and shows no sign of abating (Fig. 1). The Organic Trade Association estimates that U.S. sales will grow to $20 billion by the year 2005. It is less clear where organic tree fruit sits relative to the overall sector growth, as no statistics are readily available. Thus, we can only guess whether consumption of organic apples, for example, is above or below the overall growth rate. However, a 2001 survey by *The Packer* (2002) found that organic apples were the most frequent produce choice of organic consumers.

The acreage of organic production in Washington State also continues to expand in response to market growth. The major crop groups are listed in Table 1. Tree fruit accounts for about 25% of the certified land and shows much more growth potential than other crops based on the transition acres. Production of all crops, including tree fruit, is largely based in the irrigated region of central Washington. Grant County leads in total organic acreage as well as tree fruit acreage. Other major organic tree fruit counties include Yakima, Okanogan, Chelan, Douglas, Franklin, Benton and Walla Walla, in order of declining acreage.

Organic farming is becoming recognized as one farming system that can deliver specific environmental benefits, and agricultural policy will likely favor this more in the future.

TABLE 1

Acreages of organic crops in Washington State, 2002.

	Certified	Transition
Tree fruit	10,773	2,186
Grapes	1,410	298
Berries	380	114
Hay	4,280	329
Pasture	3,043	81
Grains	4,110	70
Fallow	2,368	88
Herbs	1,982	5
Vegetables	9,335	43
Total	39,501	3,381

TABLE 2

Acreages of organic tree fruit in Washington State, 2002.

	Certified	Transitional	Total
Apples	8,075	1,786	9,861
Pears	1,771	192	1,963
Cherries	501	184	685
Apricots	90	12	102
Peaches	195	4	199
Nectarines	78	3	81
Plums	46	3	49
Other	17	2	19

PRODUCTION TRENDS

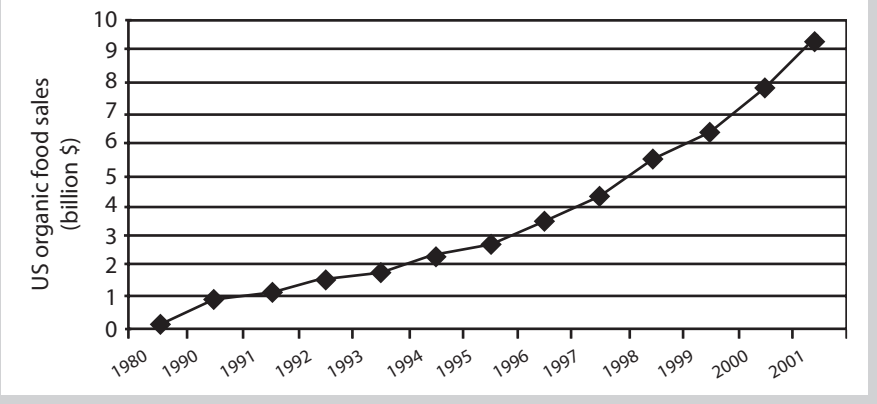
Organic tree fruit production continues to expand in the U.S. and other countries (Granatstein and Kirby, 2002). Exporting countries such as New Zealand and Chile are aggressively increasing plantings and exploring markets. The U.S. remains the dominant producer of organic apples, with some 17,600 acres out of a rough worldwide estimate of 31,000 acres in 2001. Of this, Washington State has over 8,000 acres, representing about 20% of the world's production of organic apples. A breakdown of the certified and transition acreage in the state for 2002 is provided in Table 2.

The growth of organic apple acreage in Washington appears to be slowing. Peak increases occurred in 1998 and 1999. The number of acres in transition has dropped off markedly since then. No data are available on turnover to see what percent of certified tree fruit growers leave the program each year. In 2002, organic apple acreage represented about 4.8% of the state's total apple acreage. Red Delicious is still the leading organic apple variety, both for certified and transitional acreage. Granny Smith, Gala and Fuji are catching up.

Price information for organic apples and pears was provided by the Washington Growers Clearinghouse. The percent of production that their data represents is not known; therefore it should be considered a rough estimate. Prices for most varieties of organic apples have been trending downward since 1995 when the tracking began (Granatstein and Kirby, 2002). Average prices seem to be settling in a band around $20 per 40-lb box (FOB). Red Delicious tends to be lower, and very new varieties such as Pink Lady tend to be higher (Fig. 2). When organic prices

FIGURE 1

Organic retail food sales in the U.S. (source: OTA).



are plotted with conventional prices, the price premium for organic apples also has shrunk since 1995.

Organic pear acreage in Washington nearly doubled in 2000, but growth is slowing. Anjou is the leading variety, with Bartlett and Bosc the other two sizeable varieties. Organic pear prices and premiums have trended downward substantially since 1995.

Organic cherry acreage has been small but is starting to grow. Acreage doubled between 2000 and 2002 to nearly 1000 acres. Cherry fruit fly control has been a barrier for organic production. In 2003, a new pest control product based on spinosad should be available to organic growers, and this will likely increase organic cherry production. No price information has been found for organic cherries. Production of other organic soft fruit remains small relative to cherry.

CHALLENGES AND OPPORTUNITIES

The implementation of the National Organic Standards (NOS) by the USDA in October 2002 continues to challenge growers and the certification bodies they use. Many aspects of the rule remain unclear or controversial, especially rules for composts and manures. The NOS should improve the flow of organic products domestically. But international harmonization with other countries and their certification programs remains a challenge. A case in point critical to Washington State organic apple growers is the much stricter standards used by the Soil Association, which oversees most of the organic food import into the United Kingdom. This is a very significant market for Washington organic apples. It is possible that their standards will become a barrier to trade and severely curtail our exports.

Another challenge is retail pricing for organic fruit. Based on 2001 cost and price estimates, a grower of organic Fuji apples might have received 45 cents out of the retail price of $1.99/lb. This was a large premium over the 22 cents a grower might have received for a conventional Fuji selling at retail for $0.95/lb. However, the retailer share of the organic Fuji was $1.09 versus $0.44 for conventional Fuji. And retail markup for the organic Fuji was 120% compared to 86% for the conventional Fuji. As more organic production comes on line, retail prices may need to recede in order to expand consumer purchases. In Switzerland, where organic apple production is difficult and far more expensive than conventional, a major supermarket chain agreed to price the organic fruit with the same absolute amount of markup, not the percent, to keep the retail price more affordable for organic consumers. Similar discussions are needed with retailers here.

Opportunities exist on several fronts for organic tree fruit producers. In the area of fruit quality, there is increasing research interest in whether organic systems consistently produce fruit quality differences of value to consumers. Analyses of taste and phytonutrients are being undertaken (Weibel et al., 1998). Studies on pesticide residues confirm that organic apples have a much lower likelihood and concentration of pesticide residues (Baker et al., 2002).

With the adoption of the NOS, it is unlikely there will be major changes to the rule in the near future. Yet efforts are underway in other parts of the world to expand the scope of the organic label to include issues such as labor, biodiversity and energy. Other ecolabel programs are emerging that cover these issues, and organic growers may seek additional labels to maintain their uniqueness in the face of the commoditization of organic or to access specific market segments where these issues are important.

Finally, the recent federal Farm Bill established the Conservation Security Program to provide "green payments" to farmers for varying levels of environmental stewardship. Unlike past programs that tended to reward those with poorer performance, this program progressively rewards conservation farmers for things they are already doing. Europe has had programs such as this for years, which in part accounts for the great expansion of organic acres there. Organic farming is becoming recognized as one farming system that can deliver specific environmental benefits, and agricultural policy will likely favor this more in the future.

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FIGURE 2

Price trends for Washington State organic apples (Data source: Washington Growers Clearinghouse).