

The Production Base for Organic Temperate Fruit, Berries and Grapes

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Fresh fruit consumption is being promoted for health reasons in North America, Europe and other regions. Consumers are responding, as evidenced by the 20 percent increase in per capita fruit consumption in the past 30 years. US consumers have increased fruit consumption by 23 percent, but they still consume half the amount recommended by the dietary guidelines of the United States Department of Agriculture (USDA). Fruit production often requires significant intervention with pesticides to control pests and diseases. Thus, health conscious consumers increasingly see organic fruit as a logical package. Fruit and vegetable sales account for about 40 percent of the retail sales of organic foods in the US (93 percent of this is fresh produce), with fruit estimated to represent about half of this. In Europe, organic fruit sales represent about five percent of all fruit sales, but the market penetration differs considerably by the specific fruit. Apples, pears, grapes (including grapes for wine, raisins and table grapes), strawberries and peaches are among the top temperate fruits consumed in the US and Europe. These fruits can also be grown in those regions and thus supply a significant share of the organic market.

To understand the trends in production of organic temperate stone and pome fruits, as well as berries and grapes, the authors segregated 2007 data collected by FiBL/IFOAM, along with other data sources, to the level of individual fruit species where possible. As a result, estimates of the world production area for each fruit were developed; the total area for this group was approximately 290'000 hectares in 2007.

The data combine both certified (fully converted) and transition (in conversion) land. Organic grapes (wine grapes, table grapes, raisins) account for at least 40 percent of the global area. A large portion of this area was in conversion, and was concentrated in Spain, Italy, and France. About one quarter of the area reported as temperate fruit, berries and grapes did not contain any further detail. Pome and stone fruit are being grown on similar areas (more than 20 percent of the defined fruit, berry and grape area). Berry production is the smallest, but growing, category.

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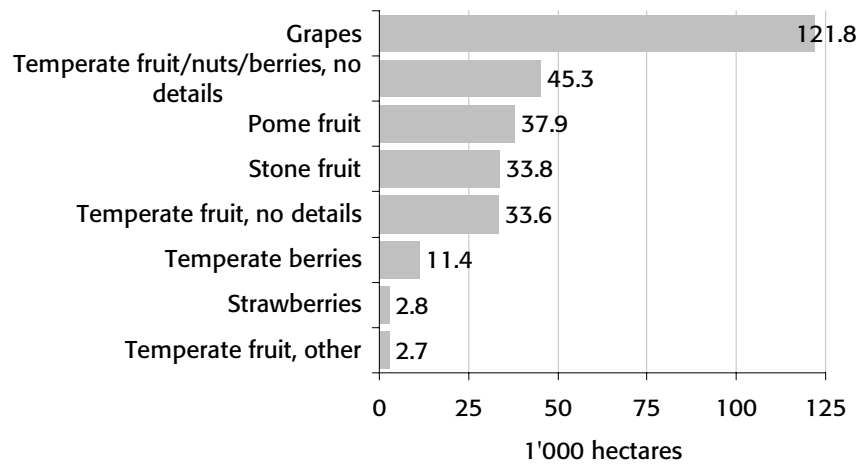


Figure 23: Organic temperate fruit, grape and berry area 2007 (including in conversion area).

Source: FiBL Survey

In the framework of the current FiBL survey, data were separated by converted and in conversion areas for the first time in order to identify where significant new volumes of product may be entering the market. It should be noted that not all countries supply separate data. The data show that more than half of the organically managed area covered by the survey is converted, whereas 16 percent is in conversion (Figure 24). For almost one third of the area no such details were available. Furthermore, some countries only provide data on the converted area.

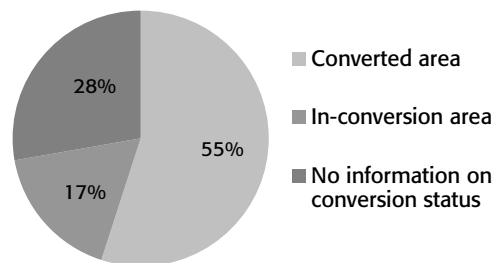


Figure 24: Organic temperate fruit, berry and grape area 2007 by conversion status

Source: FiBL Survey

Organic temperate fruit, berries and grapes are being grown in many countries with contrasting climates.

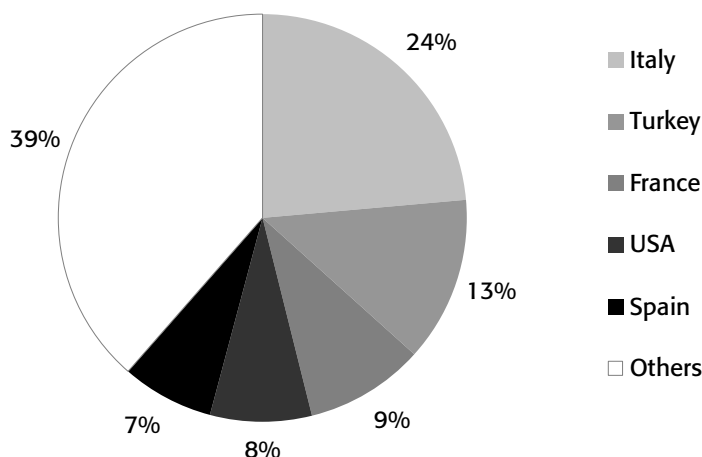


Figure 25: Organic temperate fruit, grape and berry area: Shares of the leading countries 2007 (including in-conversion area)

Source: FiBL Survey

Semi-arid regions with dry summers generally have fewer production challenges for organic fruit, particularly for diseases, than temperate humid regions. In 2007, Italy appeared to be the leading global producer, with 22 percent of the organic temperate fruit, berry and grape hectares (see Figure 25) and a diversity of fruit types. Turkey and the western US have the second and third most hectares, respectively. However, there are significant hectares of commercial organic fruit production across Northern Europe as well, including apples and berries. Leading organic tree fruit producers in 2007 include US for apples (5'793 hectares), Turkey for pear (1'974 ha) and plum (1'588 hectares), and Italy for sweet cherry (1'671 ha). The data refer to the converted areas only.

Considerable uncertainties exist in these estimates. The mechanisms for collecting data differ among countries, and not all certifiers may share their data. Year-to-year data are not always from comparable sources, hindering the ability to accurately track changes in production area. An attempt was made to determine the growth of certified organic apple area from 2000 to 2007 (Table 23). Global area expanded by more than 60 percent over this period, with particularly large increases in European hectares. Further growth is certain, with 2'000 hectares of new certified land in Washington State, US, in 2008 (a 60 percent increase), and an additional 1'700 hectares in conversion.

While prices for organic temperate fruits, berries and grapes have fluctuated over the years, they generally command price premiums of 20 to 100 percent over conventional fruit prices. From the limited number of economic studies available, most require substantially higher costs for fertilizers and weed control. Increases in pest control costs depend on the particular crop and the production region. Organic yields can equal conventional yields in

some situations, or be up to 40 percent less in others. The higher prices generally lead to profitable production, but not in every case.

Table 23: Estimated world certified organic apple area (2007)

Region	2007 Hectares		Change from 2000
N. America	6'409		
<i>US</i>		5'793	-7 %
S. America	1'870		+300 %
<i>Argentina</i>		1'511	
Europe	13'919		+38-88 %
<i>Italy</i>		2'071	
<i>Turkey</i>		3'312	
Asia / Pacific	2'697		
<i>China</i>		1'600	
<i>New Zealand</i>		947	-18 %
World total	25'535		+63 %

Data compiled by *Granatstein and Kirby, Washington State University*; data mostly 2007, some 2005, 2006. May include some transition land. Does not include non-specified organic fruit area. 'Change' uses available 2000/01 data. Sources: US: WSDA; OTCO; USDA-ERS, CDFR; L. Eggars. Canada: Canadian Organic Growers. Europe: AgenceBio; AMA; MiPAAF-SINAB; ZMP; S. Sansavini, Turkey: MARA; USDA-FAS (00). Argentina: SENASA; E. Sanchez. Chile: ODEPA; E. Sanchez. China: Zhou Zejiang, OFDC. NZ: Pipfruit NZ; Bio-Gro NZ; USDA-FAS. Australia: P. Dargusch, ACO, BFA.

Despite the expansion of organic temperate fruit, berry and grape production, it remains a small fraction of the global sector. Using the numbers generated in this study, along with current FAO data, organic grapes and apricots represent 1.6 percent of global area of those crops, and 0.6 percent for apple. With retail market penetration by organic foods between 5 to 10 percent for some countries, and organic fruit, berry and grape penetration above five percent for some cases, there is ample opportunity for growth. More complete, detailed and reliable statistics on the extent of organic fruit, berry and grape production will be needed to track and understand this growing sector. Once current demand is satisfied, then it will be important to expand the organic fruit, berry and grape area at a pace consistent with the expansion of the consumer base. As the organic market expands beyond Europe and North America, it is likely that these new organic consumers will also be interested in organic temperate fruits, but their buying habits and price sensitivity may be different than those of the dominant consumers today.

Further reading

Granatstein, David; Kirby, Elizabeth and Willer, Helga (2008) Current World Status of Organic Temperate Fruits. Paper presented at: Organic Fruit Conference, Vignola, Italy, June 16-17, 2008.
www.orgprints.org/14664/