Commodity Profile: Plums, fresh market

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History
In the United States nearly all of the commercially grown plums are hybrids of the Japanese plum introduced by Berkley nurseryman John Kelsey in the 1870s and subsequently hybridized by Luther Burbank in the late 1800s (California Tree Fruit Agreement). Today, California is the dominant producer of plums due to its mild winters, minimal rainfall during the growing season and low humidity, which is ideal for the Japanese varieties. California fresh plum harvest lasts from mid May through early October because of the many varieties. Plums are graded on maturity and sized based on the number of plums per standard 28-pound volume-fill box (California Tree Fruit Agreement).

California is the dominant producer of plums, accounting for over 96 percent of the 122,000 acres dedicated to both fresh plum and prune (dried plum) production in the United States in 2004. Fresh-market plum production accounts for roughly one-third of the total plum bearing acreage (NASS).

Demand
Consumption of fresh plums in the United States has remained relatively constant since 1970 ranging from 0.9 pounds per capita to 1.9 pounds per capita, although appearing to trend downward since 1997 (Figure 1). Fresh plums compete in the market with other popular summer fruits including cherries, peaches, and oranges. In recent years, the Pluot, a combination of apricot and plum with dominant plum parentage, has been gaining in popularity in the fresh market.

Exports
The United States is a net exporter of plums. Under the California Tree Fruit Agreement (CTFA), the state California Plum Marketing Board program oversees the domestic and international marketing programs for plums.
Total export value has fluctuated between $47.3 million (1995) and $62 million (1997) before dropping more significantly to $39.6 million in 2004. Canada and Taiwan were the largest export markets for U.S. plums in the 1990s. However, exports to Taiwan have since decreased, while exports to Canada remained relatively stable. (Figure 2). The top market for U.S. plum exports in 2004 was Canada (56%), followed by Taiwan (11%), Mexico (8%), and Hong Kong with 7 percent (Figure 2).

With regard to the North American plum trade, under the Canadian-U.S. Free Trade Agreement (CUSTA) of 1989, all tariffs on plums were gradually reduced and reached zero in 1998. Under NAFTA, the 1994 North American Free Trade Agreement, the U.S. tariff for plum imports from Mexico was eliminated immediately, and the Mexican import tariff of 20 percent ad valorem on plums from the United States was reduced over 5 years until it fell to zero in 1998.

Supply
In 2004 production of fresh plums decreased by nearly 65,000 tons, from 209,000 tons in 2003 to 144,000 tons in 2004. Correspondingly, yields fell from 5.81 to 4.0 tons per acre. Total fresh plum acreage, reported for California—which has 96 percent of the nation’s fresh and dried plum acreage—decreased slightly over the last decade from a peak of 42,400 acres in 1992 to 36,000 acres in 2002. It remained unchanged at 36,000 acres in 2004 (Figure 3). The value of plum production has been variable over the last decade and a half, due in part to the alternate bearing nature of plum trees. Total value of production peaked in 1990 at $134.4 million but has since followed a decreasing trend (Figure 4). In 2004, total value of U.S. fresh plum production was $74.4 million.

Price
When adjusted for inflation (expressed in year-2000 dollars), the price for U.S. fresh-market plums, although highly variable, shows a slightly decreasing trend since 1980 (Figure 5). Prices peaked in 1995 at over $1,037 per ton due to a poor harvest year. In 2004, the season-average grower price for plums was $473 per ton. Price variability is mainly attributed to fluctuations in production.

Imports
Although the United States is a net exporter of fresh-market plums, exports exceeded imports by just $8.4 million in 2004. The total value of U.S. plum imports has nearly doubled between 1998 and 2004 from $18.0 million to $31.1 million (Figure 6). The highest value of imports was in 2002 at $33.2 million. Chile accounts for nearly the entirety of U.S. imports, accounting for between 97 and 99.7 percent of the total since 1989. The majority of plum imports enter the United States during the off season of U.S. plum production, between the 1st of January and the 31st of May.

Sources


United States Department of Agriculture, Foreign Agricultural Service (FAS). Trade Database. Available at: http://www.fas.usda.gov/ustrade/

FIGURES

Figure 1: U.S. Fresh Plum Per Capita Consumption, 1970-2003

Source: USDA Economic Research Service, Per Capita Consumption Data System

Figure 2. U.S. Exports of Plums, Total and Major Destinations, 1990-2004

Source: USDA Foreign Agricultural Service
Figure 3. U.S. (California) Acreage of Fresh Plums, 1980-2004

Source: USDA Economic Research Service, Fruits and Nuts Yearbook

Figure 4. U.S. (California) Value of Fresh Plum Production, 1979-2004

Source: USDA Economic Research Service, Fruits and Nuts Yearbook
Figure 5. U.S. Growers’ Fresh Plum Price (year-2000 inflation-adjusted dollars), 1980-2004

Source: USDA Economic Research Service, Fruits and Nuts Yearbook

Figure 6. U.S. Fresh Plum Trade, 1990-2004

Source: USDA Foreign Agricultural Service