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Situation and
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Fruit and Tree Nuts Outlook: Commodity Highlight

Organic Fruit and Berries¹

Agnes Perez
acperez@ers.usda.gov

Kristy Plattner
kplattner@ers.usda.gov

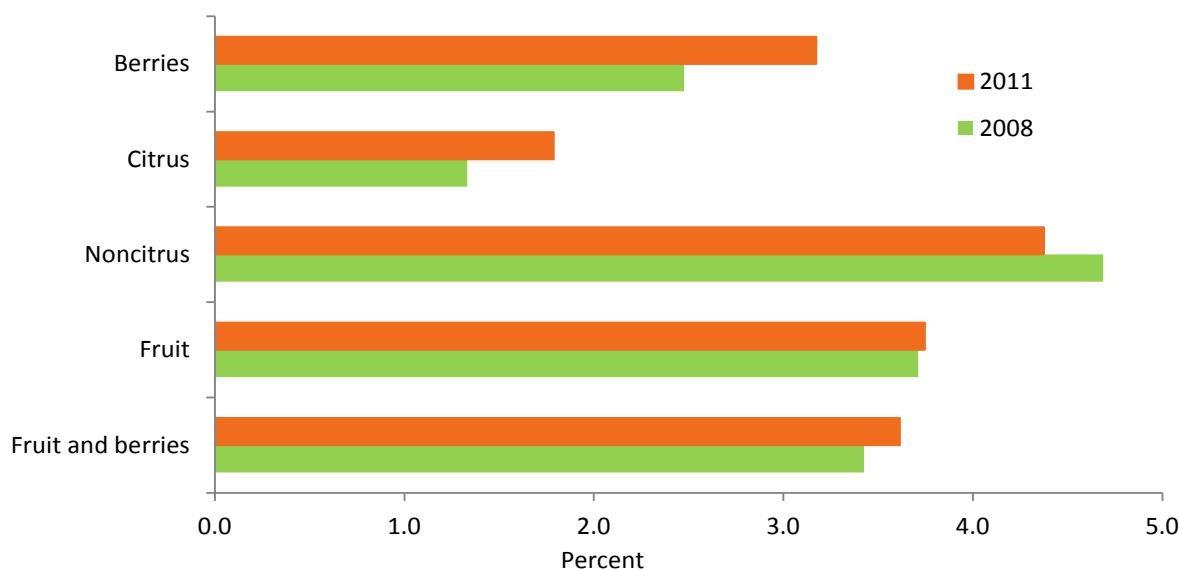
The U.S. organic food sector grew by \$2.5 billion in 2011, and nearly half of this growth was in the fruit and vegetable category (Organic Trade Association, 2012). In October 2012, USDA NASS released the 2011 Certified Organic Production Survey, an update to the initial 2008 Organic Production Survey, which was an addendum survey to the 2007 Census of Agriculture. Based on this most recent organic survey, U.S. organic fruit and berry gross value of sales from certified organic farms totaled \$620.1 million, up 25 percent from 2008 and represented approximately 18 percent of the total value of sales of organically produced crop and livestock commodities in the country. Organic fruit and berry sales grew at a faster pace than for all organic crop and livestock commodities which experienced a 12-percent increase in total farm value sales.

Despite continued positive growth, farmgate sales for organic fruit and berries continue to range between 3-4 percent of the total for all U.S. fruit and berries, suggesting room for future growth (fig. 1). As with conventional production, California leads the nation in organic fruit and berry production, with \$391.8 million in farm sales in 2011—slightly over 60 percent of total U.S. organic fruit and berry gross value of sales (fig. 2).

¹ Because of the small size and concentration of the organic sector, findings from the USDA Certified Organic Production Survey may underestimate the quantity and value of organic production in the United States. NASS surveyed 9,140 organic producers in 2011 versus the over 12,400 certified organic producers reported by USDA's National Organic Program that year. Also, the response rate for the 2011 survey declined. But, because fruit and berries is one of the largest organic sectors, any discrepancy for this sector may be smaller.

Figure 1

U.S. farm value share: Organic fruit and berry sales remain small relative to the conventional crop

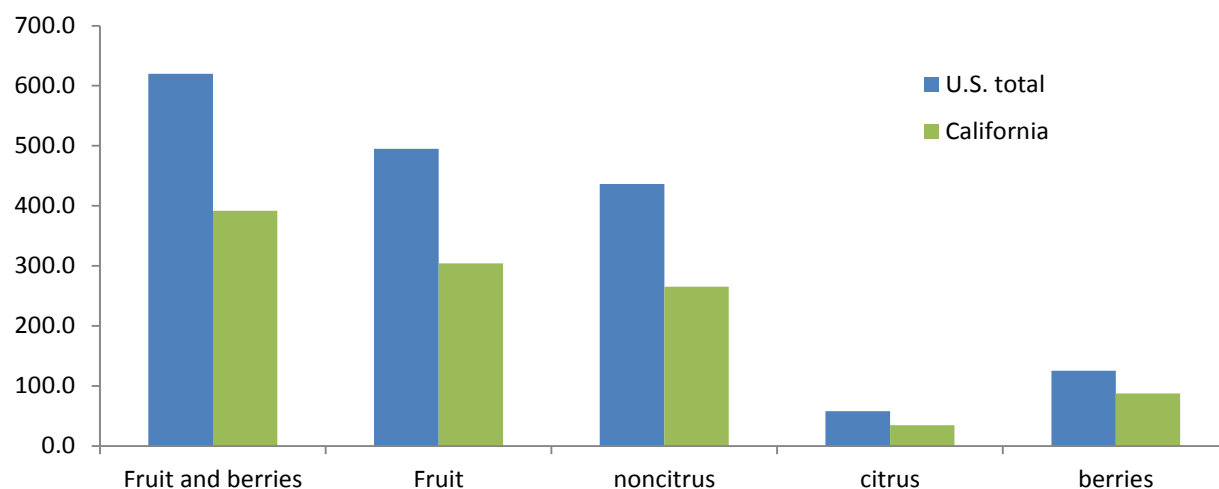


Source: USDA, Economic Research Service calculations using USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys, Noncitrus Fruit and Nuts Summary*, and *Citrus Fruit Summary*, various issues.

Figure 2

Organic fruit and berries gross value of sales from certified organic farms, 2011

Dollars (million)



Source: USDA, National Agricultural Statistics Service, *2011 USDA Certified Organic Production Survey*.

Organic Fruit Overview

Farmgate sales for U.S. organic fruit (excluding berries) increased 20 percent between 2008 and 2011 totaling \$494.8 million (table 1). This is almost 4 percent of the total crop value generated from all conventionally-produced domestic fruit in 2011. The bulk (88 percent) of sales of organic fruit was noncitrus, but sales of organic citrus are

growing at a faster pace. Sales of organic noncitrus fruit increased 18 percent to \$436.2 million, while those for organic citrus climbed 34 percent to \$58 million during the same 4-year period. While both amount to only a small proportion of corresponding total crop value of conventional noncitrus and citrus fruits, the relative share for organic citrus fruit inched slightly higher while falling slightly for organic noncitrus fruit (back to fig. 1).

Of the 15 individual commodities included in the most recent NASS organic survey, grapes remain the leading organically produced fruit in the United States, accounting for roughly one-third of the total gross value of sales for all organic fruit in 2011, followed by apples with 25 percent (fig. 3). Oranges, pears, and sweet cherries round out the top five organically produced fruit in the country for a combined share of 75 percent (including grapes and apples).

Total harvested area for organic fruit and berries in the United States declined 3 percent to 81,537 acres from 2008 to 2011. Most of this decline reflects reduced tree fruit acreage. Among organic fruit (excluding berries), grapes accounted for 42 percent of the total harvested acres in 2011, apples 18 percent, and oranges 9 percent. All other individual organic fruit commodities represented a less than 5-percent share each in the same year. Although area harvested for organic grapes grew 17 percent from 2008 to 2011 and additional acres were reported for peaches, lemons, figs, and tangerines, remaining organic fruit commodities experienced acreage declines during this 4-year period, reducing total U.S. harvested organic fruit acres (excluding berries) by roughly 4 percent to 75,486 acres in 2011.

Table 1--Organic fruit and berries: Harvested acreage and production and gross value of sales from certified organic U.S. farms

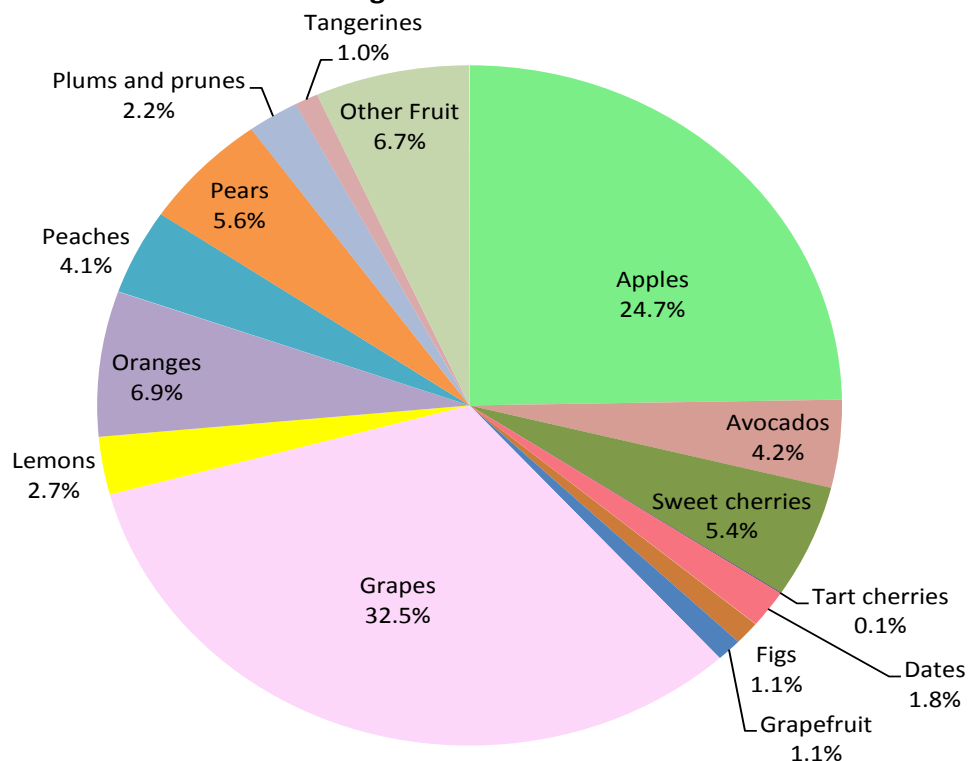
	Harvested acreage			Harvested quantity			Total gross value of sales		
	2008	2011	Change 2008-11	2008	2011	Change 2008-11	2008	2011	Change 2008-11
	----Acres----		Percent	----- Pounds -----		Percent	----- Dollars -----		Percent
Fruit:									
Apples	20,009	13,363	-33	488,194,548	297,926,981	-39	136,798,533	122,212,499	-11
Avocados	3,709	3,682	-1	11,744,000	16,372,000	39	15,221,397	20,564,558	35
Sweet cherries	2,061	1,965	-5	10,922,000	14,220,000	30	15,659,183	26,534,966	69
Tart cherries	264	226	-14	377,430	311,657	-17	291,325	255,071	-12
Dates	485	342	-29	2,764,000	2,664,000	-4	8,603,159	8,803,461	2
Figs	1,268	1,451	14	6,230,000	5,480,000	-12	4,248,766	5,458,976	28
Grapefruit	1,641	1,146	-30	30,472,000	24,254,000	-20	9,782,191	5,367,836	-45
Grapes	27,111	31,771	17	183,194,000	338,574,000	85	122,233,449	160,624,499	31
Lemons	1,407	1,740	24	19,236,000	30,234,000	57	7,398,431	13,471,127	82
Oranges	6,947	6,610	-5	84,008,000	123,034,000	46	22,649,404	34,154,479	51
Peaches	1,838	2,735	49	19,750,000	42,744,000	116	14,246,837	20,024,687	41
Pears	2,145	1,990	-7	43,794,000	53,082,000	21	16,239,511	27,507,140	69
Plums and prunes	3,284	2,198	-33	21,336,000	16,042,000	-25	11,891,004	11,025,614	-7
Tangerines	830	855	3	5,512,000	9,440,000	71	3,335,593	4,982,390	49
Other fruit	5,361	5,241	-2	34,152,833	44,309,614	30	25,225,495	33,174,738	32
U.S. all fruit 1/	78,358	75,486	-4	N.A.	N.A.		413,824,278	494,831,251	20
Berries:									
Blackberries and dewberries	492	308	-37	1688497	2015513	19	4,570,853	5,249,078	15
Tame blueberries	1953	2780	42	5949541	13745771	131	16,426,717	39,743,808	142
Cranberries	340	363	7	2811900	1764000	-37	3,635,144	2,728,691	-25
Raspberries	663	645	-3	4666612	4264253	-9	12,882,980	(D)	
Strawberries	1577	1638	4	42436800	37788700	-11	43,700,241	66,471,615	52
Other berries	470	22	-95	1630817	40546	-98	2,017,558	89,238	-96
U.S. all berries	5495	6051	10	N.A.	N.A.		83,233,493	125,250,030	50

N.A. = Not applicable. (D) = Withheld to avoid disclosing data for individual operations.

1/ Includes coffee.

Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

Figure 3
Share of U.S. farm value sales of organic fruit in 2011



Source: USDA, National Agricultural Statistics Service, *2011 USDA Certified Organic Production Survey*.

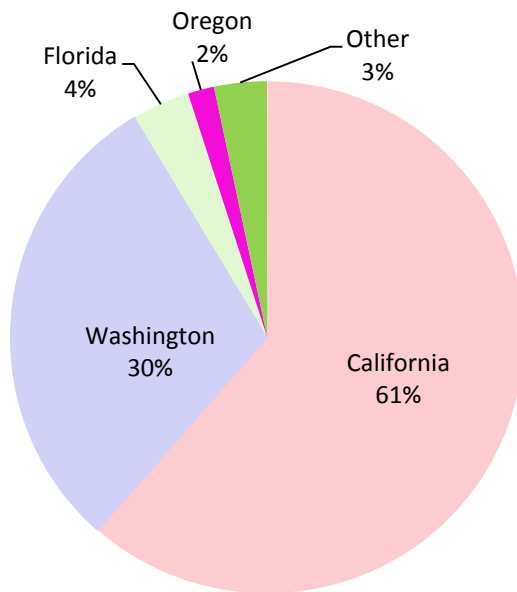
California and Washington Lead in Organic Fruit Production

Climatic conditions and reduced pest pressure are behind the large presence of organic tree fruit production in the semi-arid irrigated regions of the western United States (Kirby and Granatstein, June 2011). California and Washington State top the list of organic fruit production regions (fig.4). In 2011, 61 percent of U.S. organic fruit sales were produced in California while Washington State accounted for 30 percent. In general, California ranks No. 1 in U.S. grape production, has similar top ranking for avocados, peaches, dates, and figs, and is a major producer of apples, pears, sweet cherries, and citrus. Washington State leads in U.S. apple, pear, and sweet cherry production and No. 2 in grape production. Florida and Oregon are the next two leading producing States for organic fruit with the former relying mostly on citrus and avocados and the latter counting heavily on grapes, sweet cherries, and pears. The number of States reporting reduced organic fruit harvested acres in 2011 outnumbered those that experienced an expansion but gains reported in top producer, California (up 15 percent), and in Oregon (up 3 percent), moderated the overall decline in harvested acreage (fig. 5).

Except for Grapes, Lesser Produced Fruit Experience Larger Growth in Organics

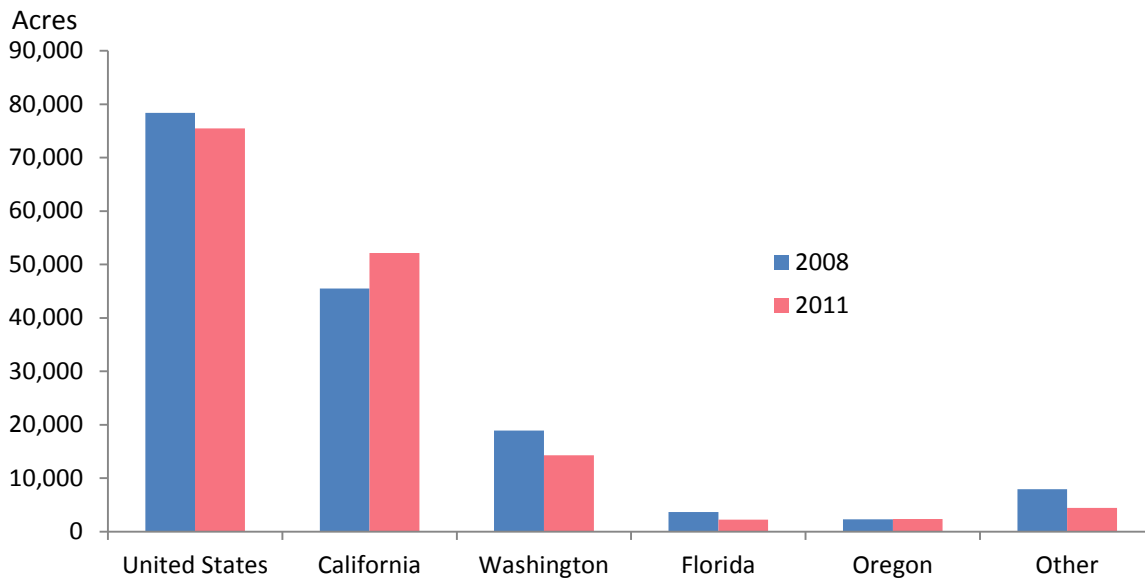
While grapes and apples together account for more than half of total organic fruit farm sales and harvested acres, growth in organic production has been reported for several fruit commodities outside the top five. Some of these lesser-produced fruit have experienced larger expansion between 2008 and 2011 (back to table 1). In terms of growth in harvested quantity, these include peaches, tangerines, lemons, and avocados. Along with grapes, apples, oranges, and sweet cherries, below are some of the trends in organic production for these selected fruit.

Figure 4
Organic fruit: Top States in terms of value of farm sales, 2011



Source: USDA, National Agricultural Statistics Service, *2011 USDA Certified Organic Production Survey*.

Figure 5
Trends in organic fruit harvested acreage, United States and selected States



Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

Organic grapes: By far, grapes continue to be the top organic fruit produced in the United States, having the most acreage and quantity harvested and the highest farm sales value (table 1). In 2011, U.S. farmgate sales of organic grapes totaled \$160.6 million, up 31 percent from 2008 and representing 32 percent of the total gross value of U.S. organic fruit (excluding melons and berries) sales from certified organic farms. This share is up slightly from the 30-percent share in 2008. Both harvested acreage and quantity of organic grapes also grew from 2008 to 2011,

increasing 17 percent and 85 percent, respectively. These gains far outpaced those for conventional grapes which were up 3 percent for bearing acres and up 6 percent for production during the same 4-year period. Still, both harvested organic area and quantity remain fairly small relative to U.S. conventional grape bearing acreage and production, amounting to about 3 percent and 1 percent, respectively. In terms of farm value sales, the share for organic grapes amount to 4 percent of the total for all U.S. grapes in 2011.

As the predominant grape-producing State, California accounted for roughly 87 percent of the Nation's harvested organic grape acreage in 2011, supplying over 90 percent each of harvested quantity and value of sales for organic grapes. In the same year, Oregon had about 6 percent of the harvested acres and 2 percent of harvested quantity which generated over \$5.4 million in farm sales. As with California, there has been an expansion in organic grape harvested acreage, quantity, and farm sales value in Oregon from 2008 to 2011. In comparison to other grape-producing States, organic grape production in Oregon is 8 percent the size of its conventional grape production, outpacing corresponding relative sizes of other producing States, including California (at 2 percent) and Washington (at 3 percent). Although Washington State continues to surpass Oregon in organic grape acreage and production volume, farm sales of organic grapes in the State fell significantly (down 31 percent) behind Oregon's in 2011, totaling approximately \$3.8 million.

Organic apples: Next to grapes, apples are the second most widely produced organic fruit in the country, with 297.9 million pounds harvested from 13,363 acres in 2011. The 2011 production generated \$122.2 million in farm sales, or about a quarter of the nation's total value of organic fruit sales from certified organic farms. Unlike grapes, however, organic apple production has declined relative to the size of the conventional U.S. apple crop between 2008 and 2011, falling to 3 percent of production volume (from 5 percent in 2008) and to 4 percent of the value of farm sales (from 6 percent in 2008). A very wet spring affected production in many apple-producing States, including top-ranking Washington State. Harvested organic apple acreage, quantity, and value of farm sales all have declined between 2008 and 2011 (table 1). Consistent with U.S. conventional apples, increased adoption of high density plantings and some acreage removal of widely-planted varieties that have become less popular over the years are partly behind the downward trend in acreage. Organic apple harvested acreage declined 33 percent over the 4-year period, falling in share of total organic fruit harvested area from 26 percent to 18 percent. Organic apple volume declined 39 percent over the same period, with a corresponding 11-percent drop in farm value sales. Almost all reporting States experienced a decline in harvested area, volume, and/or value of farm sales, including Washington State.

Washington accounts for more than 60 percent of U.S. harvested acreage for organic apples. Other key States with organic apple acreage include California (18 percent of total harvested acres in 2011), Arizona (6 percent), Michigan (4 percent), and Colorado (3 percent). Eastern U.S. organic apple growers face bigger challenges, particularly with regards to pest and disease pressures, mostly because of frequent rainfall and overall high humidity during the region's growing season (Herrick, June 2013). Although New York and Pennsylvania also report organic apple harvested acres, they each account for less than 1 percent of the total. In 2011, there were 8,770 acres of organic apples harvested in Washington, yielding 245.0 million pounds of organic apples and valued at \$102.6 million, or over 80 percent the total volume and value of U.S. organic apples. While Washington remains a main player in U.S. organic apple production, harvested quantity has declined 42 percent between 2008 and 2011 partly as a result of a 32-percent reduction in harvested acreage. Transition acres (refers to acres currently managed as organic but have not yet met the National Organic Program 3-year organic management requirement) for apples fell to just over 600 in 2010, likely in response to depressed prices for both conventional and organic apples during the 2008/09 marketing year and/or growers' downward acreage adjustments on some varieties experiencing diminished market demand such as Red Delicious and Golden Delicious (Kirby and Granatstein, 2011). Washington State reported 725 apple transition acres in 2011 and 1,064 in 2012, still way below the 4,256 acres reported in 2008 (Kirby and Granatstein, 2012), signaling slower but upward growth in the next few years.

Organic Oranges: U.S.-produced organic oranges showed strong gains in harvested quantity between 2008 and 2011, rising 46 percent from 42,004 tons (or 84 million pounds) to 61,517 tons (or 123 million pounds). Though there was a jump in quantity, acreage declined 5 percent, following the current pattern in conventional orange production of higher density orchards and removal of acreage from orange production reducing overall harvested

acres. California and Florida are the predominant domestic citrus growing States for both conventional and organic citrus. Organic oranges are the 3rd most produced organic fruit in the United States, with California accounting for 62 percent of all harvested organic oranges in 2011 and Florida claiming the remainder. California organic acreage increased 20 percent from 2008 to 2011, pushing production up 18 percent to reach 37,991 tons in 2011. While Florida experienced a 3.5-fold increase in harvested quantity, acreage dropped 56 percent over the same 4-year period. Even with harvest increases, organic oranges account for less than 1 percent of total orange quantity grown on 1 percent of total orange acreage in 2011.

Organic orange farmgate sales also increased over the 2008 to 2011 period, starting at \$22.6 million and rising 51 percent to \$34.2 million. California's organic orange sales made up 61 percent of the total. While California is the largest organic orange producer, Florida witnessed the largest gains in value, with an almost threefold increase from 2008 to top \$12.4 million in 2011. The growth in value for the United States still represents a very small share of overall orange sales value which fell below \$2 billion in 2011—organic orange value representing just below 2 percent. Organic orange production is limited due to disease pressure in growing regions, with citrus greening having a strong hold in Florida and now has been detected in California. As the industry combats this disease, there are numerous other pest and disease issues of concern creating challenges to conventional and organic producers alike. Regardless, organic orange production has room to expand in the future but may have a more difficult time expanding within the confines of organic production restrictions under heavy disease pressure.

Organic peaches: While representing only 4 percent of total U.S. harvested area and value of farm sales of organic fruit, peaches experienced the largest production growth between 2008 and 2011. Organic peach harvested acreage grew 49 percent during these 4 years, producing 42.7 million pounds (or 21,372 tons) in 2011, more than twice the 2008 crop size. Value of sales reached \$20 million, up 41 percent from 2008. As the Nation's chief peach-producing State, organic peaches in California accounted for most of this growth. There were 1,809 acres of organic peaches harvested in California in 2011, up 50 percent from 2008 and representing almost 70 percent of the U.S. total. Organic peaches in California more than doubled over the 4-year period, totaling 18,024 tons, with farm sales worth \$13.9 million. Acreage and production gains indicate average yields per acre have improved by about 45 percent between 2008 and 2011. Growth trends in acreage and crop size are the reverse for California's conventionally-produced peaches and while the State's share of U.S. conventional peaches has remained fairly steady at nearly 75 percent over this 4-year period, its organic counterpart has expanded its share of all U.S. organic peaches from 73 percent in 2008 to 84 percent in 2011. California's organic peaches, however, remains small at 2 percent of all peaches produced in the State in 2011.

South Carolina and Georgia are distant second and third in U.S. peach production. Together, these two States account for over one-tenth of all U.S. conventionally produced peaches. NASS, however, does not report organic peach production in Georgia and has not disclosed most organic information for South Carolina peaches in the two organic surveys. Based on the two surveys, other States contributing to the expansion in organic peach production include Washington State, Oregon, and New Mexico. Between 2008 and 2011, Washington State also experienced significant growth in harvested acreage (up 98 percent to 448 acres), crop size (up 28 percent to 2,181 tons), and farm sales value (up 48 percent to approximately \$2.9 million). This expansion boosted the relative size of Washington's organic peach crop from about 10 percent of total peach production in the State in 2008 to 17 percent in 2011.

Washington State's production share in the organic peach sector outpaces its contribution to U.S. conventional peach production where its share is at roughly 1 percent. In 2011, Washington State accounted for 16 percent of total organic peach harvested acres in the country, up slightly from 12 percent in 2008. Similar to the developments in California, positive growth trends in organic peach production in Washington State are paralleled by declines in their conventional counterparts (for acreage, production volume, and farm sales value) over the 4-year period.

Although production was not reported by NASS for Oregon's organic peaches, organic peach harvested acreage in the State increased 75 percent between 2008 and 2011 to total 56 acres and farm sales for the same period increased 35 percent to \$144,660. Organic peach production in New Mexico is very small, accounting for only less than 1 percent of all U.S. organic peaches. Harvested acreage in the State declined from 7 acres in 2008 to only 2 acres in

2011, but harvested quantity tripled to 12 tons over this 4-year period, generating 37-percent more in gross farm sales totaling \$16,019.

Organic lemons: Commercial conventional lemon production is concentrated in California with limited acreage in Arizona. Over 98 percent of 2008's harvested organic lemons come from California with remaining harvested quantities of production in Florida, Hawaii and Arizona. Harvested organic lemon quantity has increased 57 percent between 2008 and 2011. Organic lemons harvested account for less than 2 percent of total conventional lemon production, with harvested quantity for organics at 15,117 tons while conventional harvested lemons totaled at 850,000 tons. Conventional production changed 66 percent in 2011 from 2008, but the 5-year average (2007-2011) production level is 533,300 tons, since harvest levels fluctuate annually. Acreage increased by 24 percent over the same period to 1,740 acres in 2011. Organic acreage was 3 percent of total lemon acreage in 2011, an increase from the 2-percent share in 2008.

Value of sales for U.S. organic lemons was \$13.5 million in 2011, up 82 percent from the \$7.4 million in sales during 2008. While sales value has risen over time, so has the relative share of organic sales—from 2 percent of total conventional value in 2008 to 3 percent in 2011. Still, organic lemons remain a small fraction of overall lemon sales and quantity sold in 2011.

Organic tangerines: Similar to lemons, tangerines are limited in production in the United States with the bulk of the groves found in California and Florida. Organic tangerine/mandarin quantity harvested has increased 71 percent to 4,720 tons in 2011 from 2,756 tons in 2008. Conventional production has increased 35 percent over the same period, complimenting the overall trend of increased production and per capita use for specialty citrus. Even with increased organic production, organic tangerines account for less than 1 percent of total U.S. produced tangerines. Organic acreage has increased at a rate much slower than production, rising only 3 percent between the two time periods.

Value of organic tangerine sales has increased 50 percent since 2008 to total \$4.9 million in 2011. The growth in sales has not increased the share of organic tangerine sales compared to conventional value. Organic tangerines in both periods represent just over 1 percent of total tangerine value. Organic citrus is a niche market and will most likely remain that way in the domestic market due to increased pest pressure from the Asian citrus psyllid which carries the citrus greening disease. The disease has been particularly hard on Florida citrus and has yet to gain a stronghold in California where the insect was discovered in early 2012. With no known cure for the citrus greening disease, pesticides are one of the main treatments reducing the feasibility of producing citrus fruits organically in the United States.

Organic sweet cherries: Sweet cherries rank fifth among U.S. organic fruits in terms of value of farm sales, with a 5 percent share of the total in 2011. As demand for organic food continues to grow, organic sweet cherry production in the United States has expanded significantly from 2008 and 2011, both in terms of harvested quantity and farm sales value. Although harvested acreage for organic sweet cherries declined 5 percent over this 4-year period, production volume rose 30 percent, totaling 14.2 million pounds (or 7,110 tons) with a value of \$26.5 million, up 69 percent. Organic production grew in tandem with increased domestic and export demand for U.S. conventional sweet cherries. However, as with other fruit, value of organic sweet cherry sales has remained relatively small at about 3 percent of the total production value of U.S. conventional sweet cherries.

Made feasible by the introduction of effective fruit fly controls that conform to organic standards, Washington State is the Nation's largest producer of organic cherries, accounting for more than half of both harvested acreage and quantity. However, disease pressure (for example, from brown rot and powdery mildew) created challenges in recent years, prompting growers to move some organic acres to conventional production by 2010 (Kirby and Granatstein, 2011). Moreover, recent pest concerns (such as the spotted wing drosophila and brown marmorated stink bug) may also have impelled growers to scale back or hold off putting additional acres into organic production. From 2008 to 2011, the State's harvested area declined 30 percent to 1,045 acres. Quantity harvested, however, rose 2 percent to 4,558 tons during the 4 years, generating farm sales in the amount of \$13.1 million in 2011, relatively unchanged from 2008.

Meanwhile, California—the second-largest producer—experienced tremendous production growth during the same 4-year period, with harvested quantity for organic sweet cherries up almost fivefold to 2,094 tons and value of farm sales up more than eightfold to \$11.3 million. Hence, California’s organic sweet cherry production share grew from 7 percent to 29 percent of the U.S. total for harvested quantity and 8 percent to 42 percent of the total for farm sales value over this 4-year period.

Organic avocados: Demand for avocados in the United States continues to grow at a rapid pace, hitting record-breaking levels almost every year since 2000. Production is limited to California, Florida, and Hawaii, with over 85 percent of all conventional avocados produced in California (primarily the hass variety) and Florida supplying slightly over 10 percent (but of the green skin varieties). Hawaii’s production is very small at less than 1 percent of the total crop. Over the past few years, imports have become a key player in fulfilling domestic demand, largely fueled by Mexico gaining year-round access to this market. Even so, while there are annual fluctuations in conventional production due to weather impacts and the alternate-bearing nature of the crop, domestic production continues to trend upwards in response to increasing demand. Similarly, organic avocado production is also expanding, with harvested quantity up from 5,872 tons in 2008 to 8,186 tons in 2011. Farm sales of organic avocados also grew during this 4-year period, from \$15.2 million to \$20.6 million—the sixth highest returns for all U.S. organic fruit. In 2011, organic avocado production equaled about 3 percent and 5 percent of U.S. conventional avocado production volume and value, respectively.

As with most other fruit, top producing States for conventional production are also the key players in organic production. California dominates U.S. organic avocado production, accounting for well over 90 percent of total harvested acreage, harvested quantity, and value of farm sales. From 2008 to 2011, harvested acreage in the State declined 1 percent to 3,533 acres, reducing overall organic avocado harvested acreage by the same magnitude to total 3,682 acres. Despite reduced acreage, both harvested quantity and farms sales in California increased by over 30 percent each during this 4-year period. California’s conventional avocados, however, still experienced far larger production growth rates during the same period.

Although small relative to California’s production and producing entirely different varieties, organic avocado production has seen tremendous growth in Florida. Area harvested for Florida’s organic avocados increased 72 percent to 110 acres from 2008 to 2011, with a corresponding nearly-triple growth in quantity harvested and more than double-growth in value of farm sales, outpacing growth rates for their conventional crop. In 2011, organic avocado production in Florida totaled 7,875 tons and valued at \$20.1 million in farm sales. Production in Hawaii, on the other hand, has declined significantly during this 4-year period.

Organic Berry Overview

The total value of U.S. organic berry farm sales increased 50 percent from 2008 to 2011, totaling \$125.2 million—roughly 3 percent of the total production value for all U.S. conventional berries (back to fig. 1). Strawberries accounted for more than half of the farm value sales for organic berries, or \$66.5 million (fig.6). In 2011, 37.8 million pounds of strawberries were harvested from 1,638 acres, or nearly one-third of organic berry harvested acreage in the United States (back to table 1). While strawberries’ share of organic berry sales has remained fairly steady, increasing from 52 percent in 2008 to 53 percent in 2011, blueberries’ share of total sales rose from 20 percent to 32 percent over the same period. Organic production is also reported separately for raspberries, blackberries (including dewberries), and cranberries, and although dwarfed by strawberry and tame blueberry sales, they accounted for 8 percent, 4 percent, and 2 percent of total farm value sales of organic berries in the country, respectively.

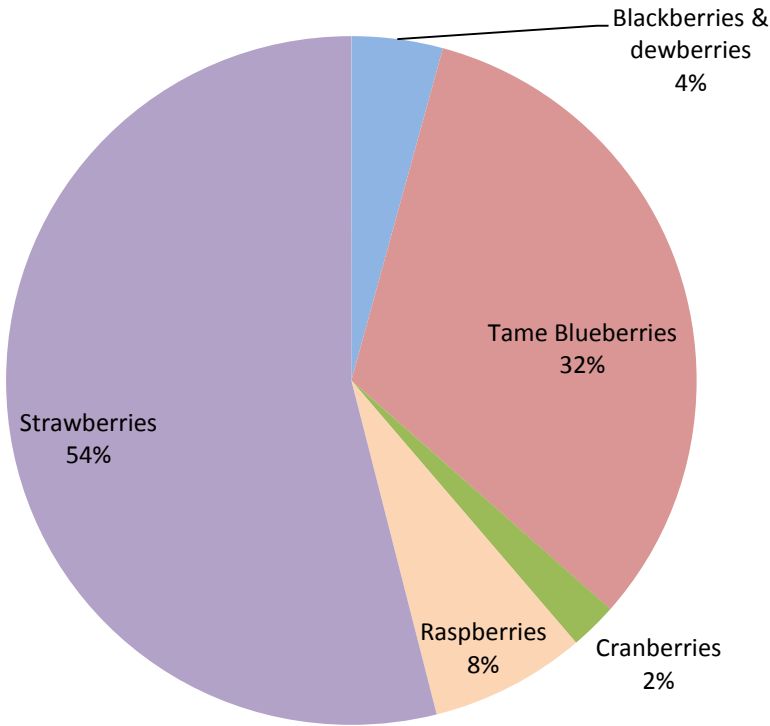
California Also Dominate in Organic Berry Production

California also leads the Nation’s organic berry production with 70 percent of the total gross value of organic berry farm sales from certified organic farms in 2011 or \$87.6 million (fig. 7). This share is up slightly from 68 percent in

2008. California’s continued dominance in organic berry production is supported by the heavy concentration of strawberry production in the State. Moreover, California is also regarded as the No.1 producing State for raspberries and among the major producers of blueberries. Of the total harvested organic berry acreage in the United States in 2011, California reported 2,558 acres, or 42 percent. All other States with reported harvested organic berry acreage, including Oregon, Georgia, Maine, Florida, New Jersey, and Wisconsin accounted for less than 10 percent each of the total. Between 2008 and 2011, harvested area in these smaller-producing States grew in New Jersey (up 80 percent), Florida (up 63 percent), and Georgia (up 44 percent), mostly on account of blueberry production (fig. 8).

Harvested acreage for organic strawberries, raspberries, and blueberries increased significantly in California from 2008 to 2011, with corresponding significant growth in harvested quantity particularly for blueberries and blackberries. Although harvested quantity for California strawberries and raspberries declined over the same period, corresponding organic farm sales value grew, indicating grower prices for California organic strawberries and raspberries were higher in 2011 than in 2008. In 2011, California accounted for 96 percent (or \$63.5 million) of all organic strawberry farm value sales in the United States and 85 percent (or \$10.7 million) of those for blackberries and dewberries. Although NASS did not report total value of farm sales for organic raspberries in 2011, in terms of harvested quantity, California supplied 89 percent (or 3.8 million pounds) of all the harvested organic raspberries that year.

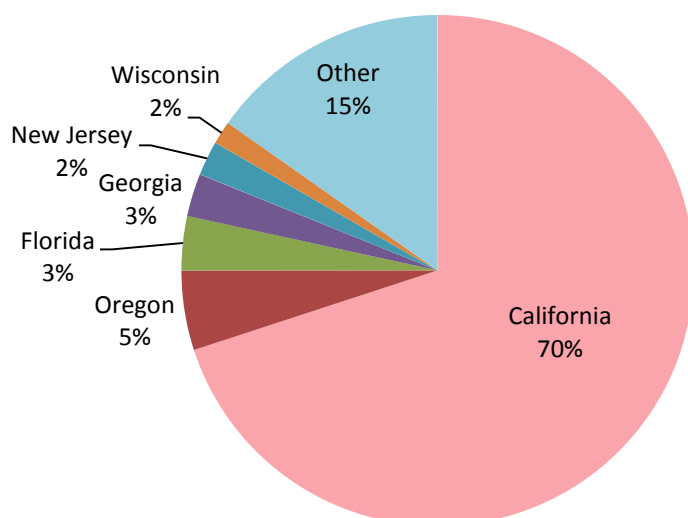
Figure 6
Share of U.S. farm value sales for organic berries in 2011



Source: USDA, National Agricultural Statistics Service, *USDA 2011 Certified Organic Production*

Figure 7

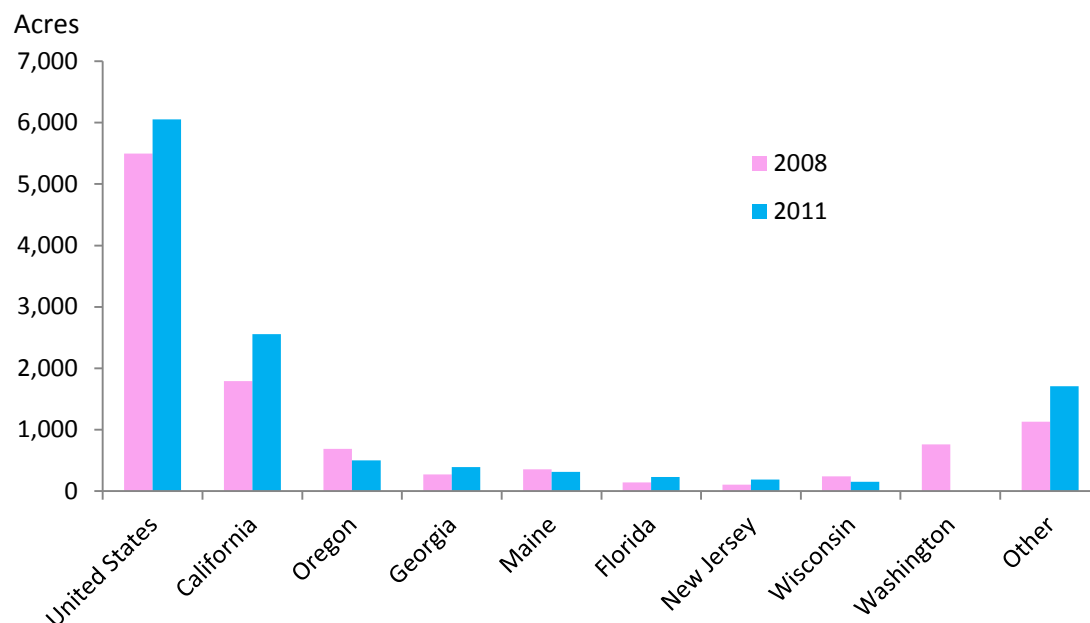
Organic berries: Top States in terms of value of farm sales, 2011



Source: USDA, National Agricultural Statistics Service, 2011 *USDA Certified Organic Production Survey*.

Figure 8

Organic berries: Trends in harvested acreage, United States and selected States



Source: USDA, National Agricultural Statistics Service, *USDA Certified Organic Production Surveys*, various issues.

Organic strawberries: From 2008 to 2011, organic strawberry harvested acreage in the United States increased by 4 percent, but quantity harvested declined by 11 percent. Nonetheless, farm sales of organic strawberries rose 52 percent over this 4-year period to \$66.5 million. While this growth is significant, the value of organic strawberry farm sales remain relatively small at 3 percent of the total crop value of all U.S. conventionally-produced

strawberries. The same relative share is reported for organic strawberries in terms of total strawberry harvested acres in the United States in 2011. Apart from the price premiums associated with organic berries, organic strawberry production is a viable marketing option for growers who are willing to adopt alternative production methods, especially as growers continue to raise concerns about the current lack of technical or economically feasible alternatives to methyl bromide—a preplant soil fumigant against weeds, nematodes and pathogens in strawberry production (Boriss, Brunke, and Keith, June 2012).

Of the eight states that reported harvested organic acreage in 2011 (there were five States that did not disclose 2011 data on harvested acreage), California and Maryland were the only ones reporting more acreage from 2008. New York, North Carolina, Oregon, Vermont, Washington, and Wisconsin reported huge declines in harvested acreage between 2008 and 2011.

Organic blueberries: Fresh blueberry consumption has increased 56 percent in 4 years (2008-2011), with production increasing 86 percent over the same period. Organic blueberry production is on a parallel course with its conventional counterpart, with total domestic organic quantity harvested more than doubling since 2008 to total 13.7 million pounds in 2011. Still a niche market, U.S. organic blueberries represent 3 percent of total blueberry production. California observed the largest jump in organic blueberry production. In 2008, total harvested organic blueberries were just below 200,000 pounds and in 4 years production jumped to 3.1 million pounds. With the increase, the share of organic production to conventional went from 1 percent to 7 percent of the total quantity of California blueberries harvested.

Florida has also witnessed a dramatic jump in organic harvest, starting at 75,645 pounds to 794,466 pounds, supported by a doubling of acreage in the same period. Washington represents the largest producer of organic blueberries in the Nation, with a harvest of 4.6 million pounds in 2011, a 73-percent increase from 2008. While Michigan is the top conventional producer of blueberries, it is not in the top five in organic blueberry production. While harvested organic quantities increased 5 percent since 2008, the harvested organic blueberries accounted for less than 1 percent of their total blueberry production in 2011. New Jersey was the 4th largest producer of conventional blueberries in 2011 but organic production in the state represented less than 2 percent of total harvested berries. Even though organic production was not large in the State between the 2 time periods, harvested organic blueberries expanded fourfold, reaching 1.1 million pounds from 269,015 pounds in 2008.

Value of organic blueberry sales more than doubled since 2008 to reach \$39.7 million in 2011, representing a 5-percent share of total blueberry crop value in the most recent period. Washington leads the way in the value of sales at \$11.5 million, up 32 percent from \$8.7 million. California produced the second most valuable organic blueberry crop in 2011, valued over \$10.6 million, just over 9 times larger than in 2008. Florida's organic blueberry crop pulled in \$264,630 in 2008 and by 2011, the crop was valued over \$3.9 million, more than a fifteenfold increase in 4 years. Michigan's organic blueberry sales value grew 25 percent to reach \$699,340 but only represents less than a percent of the State's total blueberry sales value of \$118.7 million in 2011. Organic blueberry sales value in New Jersey expanded from \$137,246 in 2008 to \$2.7 million in 2011. Though organic blueberry production volumes and values have grown substantially between the 2 organic survey periods, the organic blueberry sector still represents a niche market with continued room for growth.

Summary

Demand for organic food continues to climb, fueling continued opportunities for U.S. fruit and berry growers to expand their organic production. Currently, domestically produced organic fruit and berries value amount to a 3-4 percent share of total fruit and berry farmgate value in the United States. Having the most ideal climate for growing fruit, California and Washington State are leaders in organic tree fruit production. California also supplies more than half of U.S. organic berries. Noncitrus fruit account for the bulk of organic fruit farmgate sales but growth in organic citrus fruit sales between 2008 and 2011 outpaced its noncitrus fruit counterpart. The top five U.S. organic fruit, based on value of farm sales, include grapes, apples, oranges, pears, and sweet cherries. While grapes and apples together account for more than half of the total organic fruit farm sales and harvested acres, some lesser produced fruit have experienced significant growth such as peaches, tangerines, lemons, and avocados. For organic

berries, blueberries experienced tremendous growth between 2008 and 2011 although strawberries still represent more than half of the total value of organic berry farm sales.

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