

USDA Foreign Agricultural Service

# GAIN Report

Global Agricultural Information Network

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## Japan

### Citrus Annual

### 2017 Japan Citrus Annual

**Approved By:**

Jess K. Paulson

**Prepared By:**

Tomohiro Kurai

**Report Highlights:**

Although Japanese production and consumption of citrus has been in decline for decades, market year (MY) 2016/17 marked a small increase from the previous MY. Japanese mandarin area planted continued a modest decline to 52,200 hectares (ha) in MY 2017/18. Cloudy weather and low temperatures in summer, coupled with typhoons and rain in October, further contributed to a lower production forecast in MY 2017/18 to 990,000 metric tons (MT). Grapefruit consumption is also forecast lower 13 percent to 95,000 MT on reduced production in Florida, though offset partially by other suppliers.

Keywords: Japan, JA7150, citrus, grapefruit, mandarin, unshu, lemon, lime

**Commodities:**

Grapefruit, Fresh  
 Lemons, Fresh  
 Oranges, Fresh  
 Orange Juice  
 Citrus, Other, Fresh

**Author Defined:****Tangerines/Mandarins****PS&D Table**

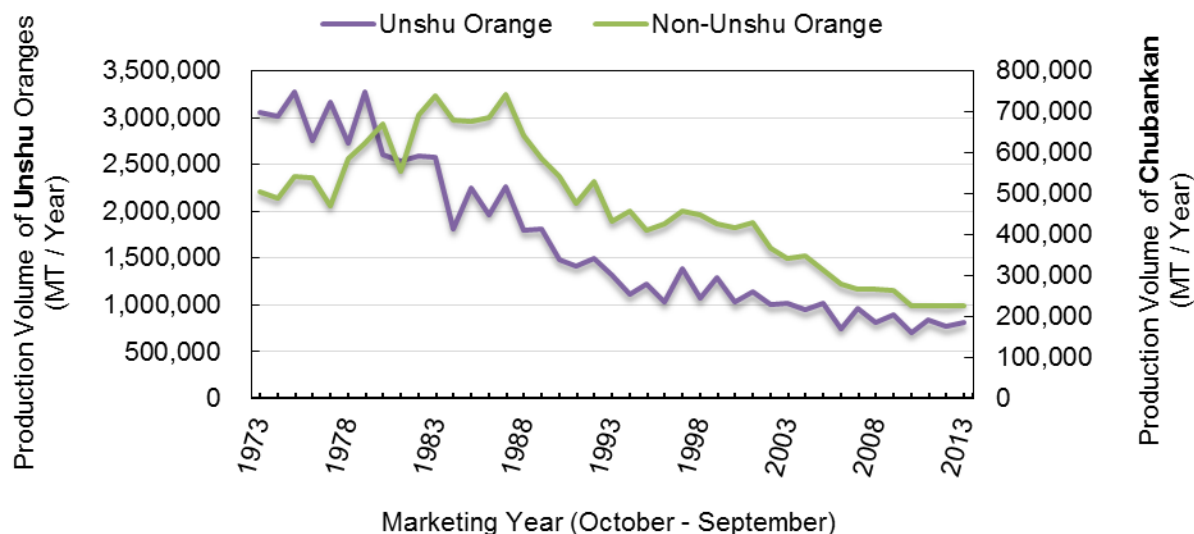
Tangerines/Mandarins, Fresh Market Begin Year Japan	2015/2016		2016/2017		2017/2018	
	Oct 2015		Oct 2016		Oct 2017	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	60100	60100	0	0	0	0
Area Harvested	54000	54000	53000	53000	0	52200
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total No. Of Trees	0	0	0	0	0	0
Production	933	933	995	1070	0	990
Imports	17	17	17	19	0	21
Total Supply	950	950	1012	1089	0	1011
Exports	3	3	2	2	0	2
Fresh Dom. Consumption	852	860	910	989	0	918
For Processing	95	87	100	98	0	91
Total Distribution	950	950	1012	0	0	0

(HECTARES) ,(1000 TREES) ,(1000 MT)

**Production**

Japan produces fresh Satsuma mandarins, also known as “Unshu mikan” or “Unshu orange”, and late-maturing, mandarin-based citrus varieties called “Chubankan” (see [JA 6058](#) for further details on the types of citrus varieties grown in Japan). Japan’s production of unshu mikan has been in a state of general decline since 1975, when its peak production reached 3.7 million metric tons (MT). Similarly, Japan’s harvested area for mandarins has declined over the last 40 years. This is mainly a consequence of an expansion policy to encourage unshu mikan production in 1950’s and 60’s. In the early 1970’s, the price fell and production began to decline. Some farmers replanted with Chubankan varieties that picked up production in 1975, which is reflected in the historical chart below (Chart 1). Although Chubankan production compensated for a portion of the reduction in Unshu, Chubankan production has also been in decline since it peaked in 1987.

Chart 1 - Comparison of Historical Production Volumes between Unshu and Chubankan



Source: FAS/Tokyo based on Ministry of Agriculture, Forestry and Fisheries of Japan  
 Note: “Non-Unshu Orange” includes Chubankan.

Another factor that discourages the expansion of Unshu orange production is a control put in place by the Ministry of Agriculture, Forestry and Fisheries of Japan (MAFF). MAFF announces the “appropriate production/distribution quantity” every year in June to manage the annual Unshu orange production in line with their annual domestic Unshu demand forecast. Although MAFF explains this estimate is a “guideline”, each prefecture and region follows this indirect order and adjusts production to meet the target. MAFF justifies this measure to secure farmers’ income by avoiding overproduction and subsequent drops in market prices. However, because production is restricted to a level below their maximum capacity, farmers strive to maximize unit prices in a race to outdo one another in appearance and flavor.

MAFF’s production estimate assumes ideal growing conditions, and does not account for potential factors that may affect production (such as weather and disease). Although MAFF’s production target for Unshu in MY 2016/17 was 890,000 MT, high temperatures and drought during fruit maturation in two of the three major producing regions (Wakayama and Shizuoka) resulted in domestic Unshu production of 805,100 MT on 41,500 hectares (ha). Though Unshu production increased in MY 2016/17, MY 2015/16 was a particularly poor harvest. Therefore the rise in production is a recovery, rather than an increase.

For MY 2017/18, MAFF aims for 870,000 MT of Unshu production, but FAS/Tokyo anticipates that low temperatures and reduced sunlight in July and August, as well as typhoon damage in October, will reduce national Unshu production below the target again. Therefore, FAS/Tokyo forecasts domestic Unshu orange production with a harvest area of 41,000 ha to be 720,000 MT, a 7 percent decrease from the previous MY.

Although there is no “production control” for Chubankan, these varieties are facing a steady decline in production similar to that of the Unshu orange (Chart 1 above). FAS/Tokyo estimates total Chubankan acreage and production were 11,500 ha and 265,000 MT in MY 2016/17, respectively. Because Chubankan are later-maturing varieties, they are better suited to withstand typhoon damage. FAS/Tokyo forecasts Chubankan production to remain almost flat at 270,000 MT in MY 2017/18, despite reduced acreage to 11,200 ha.

Overall, FAS/Tokyo forecasts Japanese total planted area of mandarin oranges in MY 2017/18 to be 52,200 ha (a 2 percent reduction), and total production will be 990,000 MT (an 8 percent reduction) compared to the previous MY.

## **Consumption**

Almost all of Japan’s Unshu orange production is consumed fresh (90 percent), with only a small part of production being processed as juice (7 percent) or as canned fruit (3 percent). This consumption trend remains unchanged and is unlikely to change in the foreseeable future, as fresh oranges receive the highest commercial return.

Consumer preferences for fruit have been shifting toward sweeter products. Thus, many retailers display the brix values of fruit at the point of sale. Accordingly, breeding programs aim for sweeter varieties, and sorting facilities for Unshu oranges are all equipped with brix sensors. Another characteristic which consumers seek in fruit is easy handling, particularly easy peeling or even no peeling. Consumer surveys conducted by MAFF clearly show that the inconvenience of peeling is one of the reasons why Japanese consumers avoid Unshu oranges. In fact, kiwi fruit and bananas are the only two types of fruit recently that are increasing in consumption in Japan, both of which require little peeling.

To increase the competitiveness of their Unshu and Chubankan oranges, many growers and their associations are trying to establish brands or trademarks for marketing campaigns. For example, “Dekopon” is a registered trademark given to the Shiranui variety of Unshu grown in certified areas and meet established brix and acidity standards. This type of strict quality control has successfully established brands and distinguished them from other Chubankan and citrus. Another approach is to register local products as a geographic indication (GI). “Sakurajima-Komikan” is the first registered GI-protected Unshu orange in Japan and FAS/Tokyo anticipates this trend will expand to other localized citrus varieties.

Strong production in 2016/17 reflects a recovery from the previous MY, and consumption increased 14 percent due to more availability and lower prices. However, the efforts mentioned above have not prevented the continuous decline in Japanese mandarin consumption. Therefore, FAS/Tokyo forecasts that consumption of Unshu and other mandarin oranges will continue to decline slowly but steadily in the future.

## Trade – Imports

Table 1 - Japanese Mandarin/Tangerine Imports (MT)

	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
World	16,820	10,390	11,629	17,342	18,833
United States	12,351	7,550	8,743	13,976	13,004
<i>Market Share:</i>	<i>73%</i>	<i>73%</i>	<i>75%</i>	<i>81%</i>	<i>69%</i>
Australia	2,389	1,711	1,586	2,636	4,135
Others	1,318	432	551	420	1,694

Source: Global Trade Atlas

Japanese fresh mandarin orange imports increased 9 percent to 18,833 MT in MY 2016/17 compared to the previous MY. This increase was mostly attributable to increased imports from Australia. Australia exported the second largest volume of fresh mandarin oranges to Japan after the United States. In MY 2016/17, Japan's imports of Australian mandarin oranges increased 57 percent when compared to MY 2015/16. As shown in Table 2 below, the United States no longer has a significant price advantage over Australian mandarins. Furthermore, the Japan-Australia Economic Partnership Agreement (EPA) provides a tariff benefit to Australian mandarins (12.8 percent) compared to the United States (17 percent). Tariffs on Australian mandarin will be reduced annually until they become tariff-free in 2029. Moreover, Australian mandarins do not compete in the market with domestic Unshu, as well as most U.S. mandarins, due to their production in the southern hemisphere.

The United States is the leading supplier of fresh mandarins to Japan, with about 69 percent market share. In MY 2016/17, Japan's imports of the U.S. fresh mandarins decreased by 7 percent to 13,004 MT. As described above, domestic Unshu production increased in MY 2016/17. Since the United States and Japan share the same harvest seasons for mandarins, Japan's demand for imported mandarins decreased, reducing import volumes from the United States. As Japan expects lower production of Unshu oranges for MY 2017/18, FAS/Tokyo forecasts a 15 percent increase in imports of U.S. mandarins (to 15,000 MT) in MY 2017/18. Overall, FAS/Tokyo anticipates Japanese imports of fresh mandarins to increase 10 percent to 21,000 MT for MY2017/18.

Table 2 - CIF Price of Imported Mandarin/Tangerines (US\$ / MT)

	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
United States	1,324	1,563	1,561	1,576	1,528
Australia	1,990	1,574	1,993	1,564	1,673
Others	3,124	2,052	2,828	2,362	2,486

Source: Global Trade Atlas

## Trade - Exports

Table 3 - Japanese Mandarin/Tangerine Exports (MT)

	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
World	2,481	2,935	3,302	2,537	1,801
Canada	1,984	2,258	2,538	1,756	1,166
Hong Kong	216	213	300	340	260
Taiwan	118	230	190	237	207
Others	164	233	275	204	168

Source: Global Trade Atlas

Japan exports only small volumes of mandarins. Despite increased production, Japan exported 1,801 MT of mandarin oranges in MY 2016/17, 29 percent lower compared to MY 2015/16. The largest destination had been Canada (accounting for 65 percent of exports), but this trend is declining due to competition with other countries. The Government of Japan's policy to promote exports of Japanese mandarins and other agricultural products continues. However, Japanese farmers prefer the ease of selling in the domestic market. FAS/Tokyo does not expect Japan's export volumes of mandarins to significantly increase in the coming years. Therefore, FAS/Tokyo forecasts Japanese exports of mandarins to remain at 1,800 MT in MY 2017/18.

### Policy:

#### **The Japan-Mexico Economic Partnership Agreement (EPA):**

The Japan-Mexico EPA has been in effect since April 1, 2005. Under this agreement, various Mexican agricultural products enter Japan at a reduced import duty. The Japan-Mexico EPA agreement can be found at the following website: <http://www.mofa.go.jp/region/latin/mexico/agreement/index.html>

Mexican mandarins tariffs were not reduced. Hence, imports of Mexican mandarins face Japan's WTO tariff rate of 17 percent.

#### **The Japan-Australia Economic Partnership Agreement (EPA):**

The Japan-Australia Economic Partnership Agreement has been in effect since January 15, 2015. Under this EPA, the tariff on fresh Australian mandarins is 12.8 percent in Japanese fiscal year (JFY: April – March) 2017 and will become tariff-free in 2029.

#### Australian Mandarin Tariff Rate (Japan Fiscal Years)

2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
11.7	10.6	9.6	8.5	7.4	5.3	4.3	3.2	2.1	1.1

### **The U.S. approves Unshu orange imports from Fukuoka, Saga, Nagasaki, and Kumamoto**

To prevent the introduction of the citrus fruit fly (*Bactrocera tsuneonis*), the U.S. prohibited Unshu orange imports from Kyushu, the southernmost of Japan's four main islands. The U.S. and Japan reached an agreement to import Unshu oranges from these islands in 2016.

## Grapefruit

### PS&D Table

Grapefruit, Fresh Market Begin Year	2015/2016		2016/2017		2017/2018	
	Oct 2015		Oct 2016		Oct 2017	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Japan						
<b>Area Planted</b>	0	0	0	0	0	0
<b>Area Harvested</b>	1130	1130	1110	1120	0	1110
<b>Bearing Trees</b>	0	0	0	0	0	0
<b>Non-Bearing Trees</b>	0	0	0	0	0	0
<b>Total No. Of Trees</b>	0	0	0	0	0	0
<b>Production</b>	25	25	24	25	0	24
<b>Imports</b>	82	82	75	84	0	71
<b>Total Supply</b>	107	107	99	109	0	95
<b>Exports</b>	0	1	0	2	0	2
<b>Fresh Dom. Consumption</b>	106	105	98	106	0	92
<b>For Processing</b>	1	1	1	1	0	1
<b>Total Distribution</b>	107	107	997	109	0	95

(HECTARES) ,(1000 TREES) ,(1000 MT)

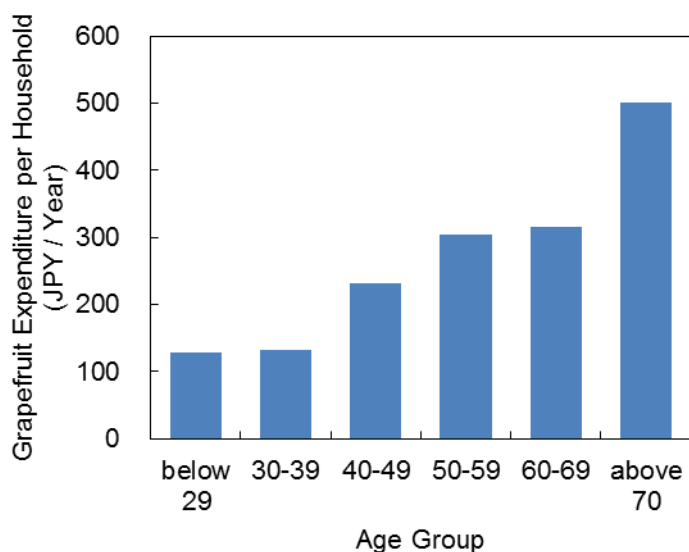
## Production

Japan produces negligible amounts of grapefruit domestically. However, Japan produces several domestic and unique Pomelo or grapefruit-like citrus varieties such as Buntan and Kawachi-bantan. Although planted area and production are on a continuous decline, much like other citrus varieties in Japan, these grapefruit-like fruit are popular among Japan's older consumers. During MY 2016/17, harvested area decreased to 1,120 ha, yet good weather preserved Japanese pomelo production at 25,000 MT. For MY 2017/18, FAS/Tokyo anticipates a further reduction of planted area (much of which is being abandoned) to 1,110 ha. As a result of low temperatures and unseasonably overcast weather through July and August, and high precipitation and typhoon damage in October (in addition to reduced acreage) FAS/Tokyo forecasts a 4 percent reduction in production (to 24,000 MT) in MY 2017/18.

## Consumption

Japan's fresh grapefruit consumption is on a downward trend after peaking at 304,445 MT<sup>1</sup> in 2004, when an incompatibility of grapefruit with hypertension medicine was first reported. Japan's forecast grapefruit consumption of 84,482 MT in 2016/17 reflects a 72 percent decline since the peak. (Note: the consumption data in the PS&D table above includes grapefruit and Japanese pomelo varieties.) As shown in Chart 2 below, grapefruit expenditures in Japanese households increase with the age of the consumer, especially those above 70 years. However, according to the Ministry of Health, Labor and Welfare (MHLW), nearly 60 percent of those 70 years old or above in Japan are taking hypertension medicines. While Japan's population is aging rapidly, younger generations have yet to develop a taste for fresh grapefruit. Japan's young consumers seek fruit that are sweet and easy to handle -- sourness, bitterness, and peeling are characteristics that they tend to avoid. One of the few potential product sectors to expand grapefruit consumption in Japan is alcohol cocktails with citrus flavoring. In addition to being the second most popular citrus after lemon, grapefruit demand is also bolstered by consumer preference for fresh grapefruit juice, rather than from concentrate.

Chart 2 - Grapefruit Expenditure per Household by Age Groups in Japan



Source: Statistics Bureau, Ministry of Internal Affairs and Communications

Japanese national consumption of fresh grapefruit (including Japanese Pomelo) was 109,000 MT in MY 2016/17, a 2 percent increase compared to 107,000 MT in MY 2015/16. This was the first increase since a year-on-year decline in consumption began in 2007. Increased volumes of grapefruit imports supported this increase (described below in the “Trade” section). However, FAS/Tokyo anticipates a significant decline in grapefruit consumption (to 95,000 MT) in MY 2017/18, 13 percent lower than the previous MY. Despite increased exports from other grapefruit suppliers, reduced grapefruit imports from the United States will outpace those increases, resulting in a reduction in the availability of fresh grapefruit in Japan in MY 2017/18 (described below in “Trade” section).

<sup>1</sup> This is the value of Japanese grapefruit imports in 2004. As virtually all grapefruit in Japan are imported, this is the best figure for grapefruit consumption.



## Trade – Imports

Japanese imports of grapefruit increased 3 percent to 84,482 MT in MY 2016/17. The United States was the largest supplier of fresh grapefruit to Japan until MY 2016/17, when South Africa overtook the United States. In MY 2016/17, the U.S. exported 36,034 MT of grapefruit, an 18 percent decrease from the previous MY. Florida accounts for about 85 percent of the U.S. grapefruit shipments to Japan, followed by California and Texas with 10 and 5 percent, respectively. The decline in MY 2016/17 exports is attributed to lower production in Florida. Citrus greening disease and damage from hurricane Irma have had a major impact on production in Florida. Based on anticipated production losses in Florida, FAS/Tokyo anticipates that Japanese imports of the U.S. fresh grapefruit will decrease significantly, falling to 15,000 MT in MY 2017/18 (a 58.4 percent reduction from the current MY).

Table 4 –Japanese Grapefruit Suppliers

	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
World	133,682	109,491	99,776	81,838	84,482
United States	78,580	60,022	51,899	44,032	36,034
<i>Market Share:</i>	<i>59%</i>	<i>55%</i>	<i>52%</i>	<i>54%</i>	<i>43%</i>
South Africa	50,457	46,488	43,973	30,634	38,672
Israel	3,120	2,646	1,501	2,937	5,964
Mexico	0	0	200	1,783	3,183
Australia	0	0	0	643	469
Turkey	1,520	333	2,185	1,684	96
Others	5	2	9	125	64

Source: Global Trade Atlas

South Africa increased exports of fresh grapefruits to Japan by 26 percent to 38,672 MT in MY 2016/17. This increase made South Africa the leading supplier of fresh grapefruit to Japan, accounting for approximately 46 percent of imports. Although United States and South Africa grapefruit do not compete directly due to different production seasons, South African grapefruit will partially replace the anticipated reduction in U.S. grapefruit. Therefore, FAS/Tokyo forecasts that Japan's import volumes of South African fresh grapefruit will increase 8.6 percent to 42,000 MT (assuming normal growing conditions).

In addition to South Africa, Israel and Mexico are also competing with U.S. grapefruit. Japanese importers have gradually shifted grapefruit sources to these countries. For example, in MY 2016/17, both Israel and Mexico increased trade volumes by 103 and 78 percent to 5,964 MT and 3,183 MT, respectively. The Japan-Mexico Economic Partnership Agreement (EPA) eliminated tariffs on fresh

Mexican grapefruit since 2011. FAS/Tokyo forecasts that both Israel and Mexico will further expand grapefruit exports to 9,000 MT and 4,500 MT in MY 2017/18, respectively.

Given the reductions in U.S. grapefruit production, and despite Japan's increased imports of grapefruit from South Africa, Israel and Mexico, FAS/Tokyo forecasts Japanese grapefruit imports to decrease 16 percent in MY 2017/18 to 71,000 MT.

### **Trade – Exports**

Japan exports a negligible amount of Japanese Pomelo to Hong Kong, Singapore, and Taiwan in MY 2016/17, and FAS/Tokyo expects these levels to remain unchanged in MY 2017/18.

### **Policy:**

#### **The Japan-Mexico Economic Partnership Agreement (EPA):**

For mandarins, Mexican grapefruits tariffs were not reduced. Hence, imports of Mexican mandarins receive Japan's WTO tariff rate of 10 percent.

#### **The Japan-Australia Economic Partnership Agreement (EPA):**

Under this EPA, the tariff on fresh Australian grapefruit is 3.3 percent in JFY 2017. It will be 1.7 percent in JFY2018, and will become tariff-free in 2019.

## **Oranges**

### **PS&D Table**

Oranges, Fresh	2015/2016	2016/2017	2017/2018
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Market Begin Year	Oct 2015		Oct 2016		Oct 2017	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Japan						
Area Planted	0	0	0	0	0	0
Area Harvested	450	450	440	440	0	430
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0
Total No. Of Trees	0	0	0	0	0	0
Production	7	7	6	6	0	6
Imports	100	100	95	92	0	89
Total Supply	0	0	101	98	0	95
Exports	0	0	0	0	0	0
Fresh Dom. Consumption	106	106	101	97	0	94
For Processing	1	1	0	1	0	1
Total Distribution	107	107	101	98	0	95
(HECTARES) ,(1000 TREES) ,(1000 MT)						

## Production

Navel oranges account for 93 percent of Japanese orange cultivation, with the remaining production coming from Valencia oranges. The main regions producing oranges are Hiroshima and Shizuoka. However, the area for cultivating oranges is in continuous decline -- falling another 2 percent in MY 2016/17 to 440 ha -- as farmers age out of the workforce without successors to take over their business. As a result, FAS/Tokyo forecasts a reduction in Japanese orange acreage to 430 ha in MY 2017/18, down 2 percent compared to the previous MY. In addition to the declining cultivation area, a typhoon in October damaged fruit that was nearly matured on the trees. Therefore, FAS/Tokyo estimates Japan's MY 2016/17 orange production to decrease 15 percent to 5,500 MT. In MY 2017/18, FAS/Tokyo forecasts harvested area to be lower, yet (weather permitting) production should recover from MY 2016/17 damage, resulting in a 9 percent increase to Japanese orange production to 6,000 MT.

## Consumption

Japan's annual consumption of fresh oranges decreased by 9 percent in MY 2016/17 to 98,000 MT. According to industry sources, one of the primary reasons for this was higher prices that reduced imports compared to the previous MY. The CIF price for U.S. fresh oranges increased nearly 12 percent in MY 2016/17 compared to the previous MY (see Table below).

Given USDA's forecast (found [here](#)) for reduced orange production in California for MY 2017/18, which supplies all of the U.S. exports of oranges to Japan, FAS/Tokyo anticipates further price increases for fresh oranges, resulting in reduced fresh orange consumption in Japan to 95,000 MT.

## Trade - Import

Table 5 - Japanese Orange Imports (MT)

	MY 2012/13	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
World	112,913	86,877	83,023	100,212	92,223

United States	74,795	54,361	52,257	61,412	52,596
<i>Market Share:</i>	66%	63%	63%	61%	57%
Australia	34,510	26,376	25,079	34,608	35,464
Others	3,608	6,140	5,687	4,192	4,163

Source: Global Trade Atlas

Japan imported 92,223 MT of fresh oranges in MY 2016/17, 8 percent lower than in MY 2015/16. The United States is the largest supplier of fresh oranges to Japan with approximately 57 percent of imports. However, the average CIF price of U.S. oranges during MY 2016/17 increased by 12 percent, resulting in a reduction of fresh orange imports from the United States by 14 percent. Based on the USDA citrus production estimate, fresh orange production in California (which supplies 100 percent of U.S. oranges) will be lower in MY 2017/18. Thus, FAS/Tokyo forecasts Japanese imports of fresh oranges from the United States to decrease another 8 percent in MY 2017/18 to 50,800 MT.

Australia is the second largest supplier of fresh oranges to Japan, accounting for approximately 35 percent of Japan's imports. However, Australian oranges do not compete directly with U.S. oranges since Australia's market season is from July to November. And while the absolute volume of trade in Mexican oranges is still small, Mexico's exports increased in volume nearly four-fold from the previous MY. This may be partially attributable to the Japan-Mexico EPA, which provides a lower tariff to Mexican oranges (see Policy below for rates).

## Trade - Export

Japanese exports a negligible amount (less than 5 MT) of fresh oranges, mainly to Asian and South Asian countries.

## Policy:

### **The Japan-Mexico Economic Partnership Agreement (EPA):**

For Mexican oranges, in-quota imports of Mexican oranges (up to 4,100 MT) receive a tariff of 5 percent when imported between June 1 and November 30, and a tariff of 10 percent when imported from December 1 to May 31. Out-of-quota imports of Mexican oranges face the WTO tariff rates of 32 percent (from December 1 to May 31) or 16 percent (between June 1 and November 30).

### **The Japan-Australia Economic Partnership Agreement (EPA):**

Under this EPA, the tariff on fresh Australian oranges imported between June 1 and September 30 is 10.2 percent in JFY 2017, and will reduce annually to become tariff-free in 2024.

### Japan Tariffs on Australian Oranges (Japan Fiscal Years)

2018	2019	2020	2021	2022	2023
8.5	7.3	5.8	4.4	2.9	1.5

## Orange Juice

### PS&D Table

Orange Juice Market Begin Year	2015/2016		2016/2017		2017/2018	
	Oct 2015		Oct 2016		Oct 2017	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Deliv. To Processors	0	52000	0	60000	0	50000
Beginning Stocks	17524	17524	12667	17867	0	18347
Production	0	5200	0	6000	0	5000
Imports	73413	73413	80000	71480	0	68000
Total Supply	90937	96137	92667	95347	0	91347
Exports	0	0	0	0	0	0
Domestic Consumption	78270	78270	77500	77000	0	76000
Ending Stocks	12667	17867	15167	18347	0	15347
Total Distribution	90937	96137	92667	95347	0	91347
(MT)						

\* Imports of orange juice are the sum of imports for HS codes; 2009.11, 2009.12, and 2009.19.

\*\* Global Trade Atlas provides Japanese import statistics for orange juice in kiloliters only. Hence, the following factors are used to convert from kiloliters to metric tons at a 65 Brix equivalent: for concentrated orange juice 2009.11 (frozen) and 2009.19 (non-frozen), kiloliter is multiplied by 1.3154 to get metric ton, and for single strength orange juice 2009.12, kiloliter is multiplied by 0.1897 to get metric ton at a 65 Brix equivalent.

### Production

Japan produces Unshu-based orange juice, often referred to as mikan juice. Japan has few Unshu orange farms designated specifically for juice production. Rather, damaged Unshu oranges that are unmarketable for fresh consumption (i.e. scratches or blemishes) are diverted for juice processing. In addition, when production is high, large volumes of fresh Unshu enter the juice market as farmers and local agricultural associations (called JA) restrict distribution volumes to maintain target prices. For MY 2016/17, a 3.5 percent increase in local Unshu production also increased juice volumes, resulting in production of approximately 6,000 MT at a 65 Brix equivalent.

Although typhoons in October 2017 caused oranges in major producing areas (such as Wakayama and Shizuoka) to fall from the trees before maturation, these oranges cannot be used for processing juice. Therefore, FAS/Tokyo forecasts that the Unshu orange supply for processing juice will be reduced for MY 2017/18 to 5,000 MT at a 65 Brix equivalent.

### Consumption

According to leading juice manufacturing companies in Japan, total Japanese consumption of fruit juice-based beverages has been declining steadily since its peak in 2013. Japanese consumers have shown

more concern for 100-percent juice due to their concerns for its high sugar content, calories and high prices. During MY 2015/16, many manufacturers and retailers increased the retail price of 100-percent orange juice due to high Frozen Concentrated Orange Juice (FCOJ) prices. Consequently, manufacturers and retailers focus more on drinks with a lower percentage of orange juice (i.e. carbonated drinks with less than 5 percent orange juice). This trend continued in MY 2016/17, which further reduced orange juice consumption in Japan by about 2 percent. FAS/Tokyo anticipates a continuation of this trend in MY 2017/18, and forecasts orange juice consumption in Japan to decrease another 1,000 MT in MY 2017/18.

## Trade

**Table 6 - Japanese Orange Juice Imports (MT at a 65 Brix equivalent)**

	MY 2015/16	MY 2016/17	MY 2017/18
<b>World</b>	<b>86,352</b>	<b>73,143</b>	<b>71,480</b>
United States	897	1,120	709
<i>Market Share:</i>	<i>1.0%</i>	<i>1.5%</i>	<i>1.0%</i>
Brazil	62,248	49,481	47,397
Israel	9,319	6,954	9,425
Mexico	7,831	8,675	6,505
Spain	2,409	3,279	4,199
Italy	2,826	2,627	2,483
Others	897	1,120	709

Source: Global Trade Atlas

\* Imports of orange juice are the sum of imports for HS codes; 2009.11, 2009.12, and 2009.19.

\*\* Global Trade Atlas provides Japanese import statistics for orange juice in kiloliters only. Hence, the following factors are used to convert from kiloliters to metric tons at a 65 Brix equivalent: for concentrated orange juice 2009.11 (frozen) and 2009.19 (non-frozen), kiloliter is multiplied by 1.3154 to get metric ton, and for single strength orange juice 2009.12, kiloliter is multiplied by 0.1897 to get metric ton at a 65 Brix equivalent.

Japan's total imports of orange juice decreased another 2 percent to 71,480 MT (on a 65 Brix equivalent) in MY2016/17 compared to MY 2015/16. This decline is attributed to high FCOJ prices in early MY 2016/17. Brazil is the leading supplier of orange juice in Japan, accounting for about 66 percent of Japan's total orange juice imports. Israel follows with 9,425 MT in MY 2016/17. Although volumes are still small compared to Brazil, FAS/Tokyo is aware that Japanese importers are optimistic about importing more from Israel to diversify procurement sources from Brazil. FAS/Tokyo expects import volumes from Israel to grow further in MY 2017/18. The United States is not a significant supplier of FCOJ, but does supply non-concentrated orange juice, which has a higher CIF price. As a result, Japan imports only 761 MT of orange juice from the United States.

For MY 2017/18, Japanese manufacturers have expressed uncertainty about Brazil's orange production next year. In addition, devastating damage to oranges in Florida by Hurricane Irma may encourage the United States to import more orange juice. These factors may increase competition and raise FCOJ prices further. Given these circumstances, together with Japan's declining consumption of orange juice, FAS/Tokyo forecasts total Japanese imports of orange juice to decrease 5 percent to 68,000 MT (on a 65 Brix equivalent) in MY 2017/18.

## Prices:

### Japanese Average Import Prices of Orange Juice (U.S. Dollars/liter)

#### 1) Frozen Concentrated Orange Juice (HS code: 2009.11)

	<b>MY 2014/15</b>	<b>MY 2015/16</b>	<b>MY 2016/17</b>
United States	2.94	3.22	3.20
Brazil	2.70	2.42	2.83
Israel	2.68	2.61	2.81
Mexico	3.17	3.13	3.43
Spain	2.56	2.38	2.52
Italy	2.47	2.35	2.49

Source: Global Trade Atlas

#### 2) Non-Frozen Concentrated Orange Juice (HS code: 2009.19)

	<b>MY 2014/15</b>	<b>MY 2015/16</b>	<b>MY 2016/17</b>
United States	4.47	4.27	4.90
Brazil	2.79	2.58	2.81
Israel	1.94	1.95	2.06
Spain	2.58	2.61	-

Source: Global Trade Atlas

#### 3) Non-Frozen, Non-Concentrated Orange Juice (HS code: 2009.12)

	<b>MY 2014/15</b>	<b>MY 2015/16</b>	<b>MY 2016/17</b>
United States	1.42	1.28	1.27
Spain	0.76	0.80	0.80
Australia	1.52	1.48	1.69

Source: Global Trade Atlas

**The Japan-Mexico Economic Partnership Agreement (EPA):**

For Mexican orange juice, depending on the tariff code, the in-quota tariff rate will be lowered to either: 1) 5.3 percent; 2) 6.3 percent; or 3) whichever is the greater of 7.4 percent or 5.7 yen per kilogram. The quota for Mexican FCOJ (HS 2009.11 and 2009.19) is set in Japanese Fiscal Year (JFY, April - March) 2017 at 7,000 MT. The quota for orange juice other than FCOJ (HS 2009.12) set at 5,000 MT in JFY 2017.

As shown in Annex-I, depending on the tariff code, out-of-quota imports of Mexican orange juice face the WTO tariff rate of either: 1) 21.3 percent; 2) 25.5 percent; or 3) whichever is greater of 29.8 percent or 23 yen per kilogram.

**The Japan-Australia Economic Partnership Agreement (EPA):**

Under this EPA, Japan granted Australia preferential tariff quotas on all orange juice line items with reduced tariffs. For JPY 2017, the annual quota is set at 1,300 MT and in-quota tariff rates are set below.

**Lemons/Limes**

**PS&D Table**

Lemons/Limes, Fresh Market Begin Year Japan	2015/2016		2016/2017		2017/2018	
	Oct 2015		Oct 2016		Oct 2017	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted	0	0	0	0	0	0
Area Harvested	4500	4500	4600	4560	0	4600
Bearing Trees	0	0	0	0	0	0
Non-Bearing Trees	0	0	0	0	0	0



<b>Total No. Of Trees</b>	0	0	0	0	0	0
<b>Production</b>	52	52	53	53	0	39
<b>Imports</b>	51	51	52	53	0	55
<b>Total Supply</b>	103	103	105	106	0	94
<b>Exports</b>	0	0	0	0	0	0
<b>Fresh Dom. Consumption</b>	74	74	74	75	0	69
<b>For Processing</b>	29	29	31	31	0	25
<b>Total Distribution</b>	103	103	105	106	0	90
(HECTARES) ,(1000 TREES) ,(1000 MT)						

## Production

Japanese fresh lemon production is estimated to increase 10 percent to 11,500 MT in MY 2016/17. Hiroshima prefecture, located 450 miles west of Tokyo, is the prefecture with the largest production of lemons, accounting for more than 60 percent of domestic lemon production. Hiroshima prefecture's strategic plan was released in 2014 and aims to increase both the acreage and production of lemons by 60 percent to 300 ha and 10,000 MT by 2020. Hiroshima's ambition is supported by steady demand and strong consumer preference for domestic lemons, which consumers believe are not treated or are treated minimally with agricultural chemicals (including post-harvest fungicides). Hiroshima has been making steady progress toward this goal by encouraging farmers to convert Unshu-mandarin orchards to lemon. Though Unshu prefer hill-side slopes with good drainage that increases sweetness, lemon trees perform better in flat, wetter conditions. Therefore, farmers with relatively unsuitable Unshu land are actively converting their fields to lemons. FAS/Tokyo estimates the current acreage reached 230 ha, producing 7,000 MT of lemons in Hiroshima in MY 2016/17, and will continue to expand in MY 2017/18.

Besides lemons, Japan grows many other types of citrus (such as "Yuzu") that account for nearly 60 percent of Japanese acidic citrus and are consumed as garnishes or seasoning like lemon and lime (see [JA 6058](#) for further details). Similar to lemons, yuzu production has been steadily increasing due to consumer preference for its distinctive flavor. This distinctive flavor and scent of yuzu clearly distinguishes its use from lemon, even though the functionality of yuzu is similar to lemon. In addition, because Yuzu occasionally represents "Japanese flavor" in some Japanese dishes, many major prefectures that produce Yuzu consider it as a potentially competitive product to export. However, for MY 2017/18, a late typhoon in October brought considerable damage to Japanese citrus producing areas, including areas that produce Yuzu. Although area has expanded, the damage more than offset those increases. FAS/Tokyo anticipates growth of acidic-citrus in Japan to continue, but production in MY 2016/17 is estimated to decline 7 percent to 39,000 MT.

Overall Japanese production of lemon and other flavorful acidic citrus were estimated at 53,000 MT in MY 2016/17, a 4 percent increase from the previous MY. Although FAS/Tokyo expects Japanese lemon and Japanese lemon-like citrus production to increase (largely due to consumer preferences for these specific flavors), typhoons in October knocked fruit to the ground without hurting the trees, reducing MY 2017/18 production 15 percent compared to the previous MY. With the trees unharmed, FAS/Tokyo expects production to recover in MY 2018/19, assuming favorable conditions.

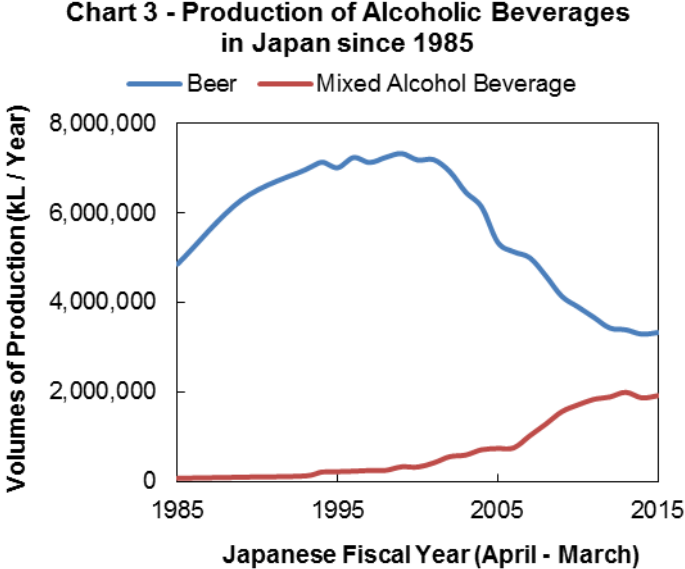
## Consumption

For MY 2016/17, Japan’s total consumption of lemons was 61,000 MT, of which 10,500 MT was supplied from domestic production. Japan’s consumption of flavor-adding, acidic citrus was 106,000 MT, of which 75,000 MT was consumed fresh.

Fresh lemons, as well as other unique lemon-like citrus in Japan, are largely consumed in the food sector as a garnish or as seasoning for food and beverages. For example, the main use of domestic varieties is for processed products such as salad dressing and jams. For MY 2016/17, nearly 70 percent of the yield of domestic varieties (excluding lemons) was used for processing.

In addition to the uses described above, lemons are used for citrus flavored alcoholic beverages. Chart 3 below illustrates changes in the consumption trend of alcoholic beverages, indicating that the growth of mixed alcohol beverages (i.e. citrus-flavored cocktail) is replacing beer. According to sources, lemon-based cocktails have nearly a third of this mixed alcohol beverage category, which represents 8 percent of the entire Japan’s alcoholic beverage market, and sales are growing again. Industry has observed a 2-3 percent increase in lemon consumption associated with increased sales of lemon-based cocktails. Japan’s alcoholic beverage industry, as well as lemon growers, anticipate further growth of lemon-based cocktails, and therefore of both domestic and imported lemon.

Considering these trends, Post estimates that Japan’s MY 2017/18 lemon consumption will increase to 62,000 MT, with domestic market share accounting for 18 percent at 11,000 MT. Total flavorful, acidic citrus consumption in MY 2017/18 is, however, forecast to decline 12 percent to 94,000 MT due to typhoon damage.



Source: FAS/Tokyo based on statistics of National Tax Agency

**Trade – Imports**

Table 7 - Japanese Lemon Imports (MT)

	MY 2013/14	MY 2014/15	MY 2015/16	MY 2016/17
World	49,123	49,323	48,734	50,731
United States	34,806	32,916	30,519	29,973
<i>Market Share:</i>	<i>67%</i>	<i>62%</i>	<i>60%</i>	<i>59%</i>
Chile	14,376	16,724	17,641	18,511
Others	1,832	2,081	1,631	2,247

Source: Global Trade Atlas

Japanese fresh lemon imports (excluding limes) increased 4 percent in MY 2016/17 compared to the previous MY. FAS/Tokyo anticipates (as described above) that Japanese consumption of lemon will increase, and therefore forecasts a 3 percent increase in the import of fresh lemons in MY 2017/18 to 52,500 MT.

The United States is the leading supplier of fresh lemons to Japan, with about 60 percent market share. In MY 2016/17, Japan's imports of the U.S. fresh lemons decreased about 2 percent to 29,973 MT, as U.S. domestic demand increased and prices of U.S. fresh lemons remained high. Some of the decrease in U.S. fresh lemon supplied in MY 2016/17 was compensated for by Chilean lemons. Chile is the second supplier of fresh lemons to Japan with 36 percent of the market (18,511 MT) in MY 2016/17. Chile supplies fresh lemons between June and October, when U.S. lemons are generally unavailable, and thus U.S. and Chilean lemons do not compete directly. However, because the average CIF prices of Chilean lemons are about 45 percent cheaper than U.S. lemons, Japanese traders tend to purchase Chilean lemons during transitional months such as June. Thus, FAS/Tokyo forecasts fresh lemon imports from the U.S. to Japan to continue to drop marginally to 29,000 MT in MY 2017/18, whereas Chilean lemons are to increase 5 percent to 19,500 MT in MY 2017/18.

Mexico dominates Japanese trade in limes with 2,304 MT in MY 2016/17. This quantity has been stable over several years, and FAS/Tokyo anticipates that fresh lime trade will remain unchanged in MY 2017/18.

### **Trade – Exports**

Japan does not export any fresh lemons or limes. There is demand for yuzu in Southeast Asia and Europe, but export volumes are below 100 MT. FAS/Tokyo anticipates export volumes to remain similar for MY 2017/18.

### **Policy:**

No major changes occurred during the reporting marketing year.

## Annex I: Prices of Citrus in Japan

### Japan: Fresh Unshu Orange Prices – Import, Wholesale, Retail

Import CIF Prices*		Wholesale Prices**		Retail Prices***	
MY 2016/17	US \$ / KG	MY 2016/17	JPY / KG	MY 2016/17	JPY / KG
October	2.98	October	242	October	565
November	0	November	289	November	577
December	2.88	December	290	December	601
January	3.04	January	266	January	653
February	1.63	February	302	February	690
March	1.66	March	366	March	817
April	1.57	April	613	April	-
May	1.90	May	1552	May	-
June	1.83	June	1106	June	-
July	1.54	July	1015	July	-
August	1.59	August	919	August	-
September	1.80	September	318	September	773
Source: GTA		Source: MAFF		Source: MIC	

### Japan: Fresh Orange Prices – Import, Wholesale, Retail

Import CIF Prices*		Wholesale Prices**		Retail Prices***	
MY 2015/16	US \$ / KG	MY 2015/16	JPY / KG	MY 2015/16	JPY / KG
October	1.23	October	205	October	434
November	1.17	November	217	November	450
December	1.44	December	285	December	455
January	1.45	January	238	January	469
February	1.44	February	249	February	480
March	1.46	March	285	March	472
April	1.47	April	273	April	486
May	1.47	May	262	May	482
June	1.41	June	262	June	477
July	1.25	July	253	July	482
August	1.22	August	245	August	456
September	1.27	September	230	September	456
Source: GTA		Source: MAFF		Source: MIC	

\* Import prices are average import CIF prices.

\*\* Wholesale prices are average wholesale prices of navel oranges at Tokyo wholesale markets.

\*\*\* Retail prices are average retail prices of navel oranges in the Metro Tokyo area published from Statistic Bureau, Japan.

## Annex II – Import Duties for Citrus to Japan

### Mandarin

Tariff Code (HS)	Description	Duty Rate (%)*
0805.21-000	Fresh Mandarins (including tangerines and Satsumas)	17%
0805.22-000	Fresh Clementines	17%
0805.29-000	Other	17%

### Grapefruit

Tariff Code (HS)	Description	Duty Rate (%)*
0805.40-000	Fresh Grapefruit	10%

### Oranges

Tariff Code (HS)	Description	Duty Rate (%)*
0805.10-000	Fresh oranges, imports between December 1 - May 31	32%
	Fresh oranges, imports between June 1 - November 30	16%

### Orange Juice

Tariff Code (HS)	Description	WTO Duty Rate (%)*	EPA Mexico Rate (%)*	EPA Australia Rate (%)*
2009.11-110	Orange juice, frozen, containing added sugar, not more than 10% by weight of sucrose, naturally and artificially contained	25.5%	6.3%	12.8%
2009.11-190	Orange juice, frozen, containing added sugar, other	29.8% or 23 yen/kg, whichever is the greater	7.4% or 5.7yen/kg, whichever is the greater	14.9% or 11.5yen/kg, whichever is the greater
2009.11-210	Orange juice, frozen, not containing added sugar, not more than 10% by weight of sucrose	21.3%	5.3%	10.7%
2009.11-290	Orange juice, frozen, not containing added sugar, other	25.5%	6.3%	12.8%
2009.12-110	Orange juice, not frozen, of a Brix value not exceeding 20, containing added sugar, not more than 10% by weight of sucrose, naturally and artificially contained	25.5%	6.3%	12.8%

2009.12-190	Orange juice, not frozen, of a Brix value not exceeding 20, containing added sugar, other	29.8% or 23 yen/kg, whichever is the greater	7.4% or 5.7 yen/kg, whichever is the greater	14.9% or 11.5yen/kg, whichever is the greater
2009.12-210	Orange juice, not frozen, of a Brix value not exceeding 20, not containing added sugar, not more than 10% by weight of sucrose	21.3%	5.3%	10.7%
2009.12-290	Orange juice, not frozen, of a Brix value not exceeding 20, not containing added sugar, other	25.5%	6.3%	12.8%
2009.19-110	Orange juice, other, containing added sugar, not more than 10% by weight of sucrose, naturally and artificially contained	25.5%	6.3%	12.8%
2009.19-190	Orange juice, other, containing added sugar, other	29.8% or 23 yen/kg, whichever is the greater	7.4% or 5.7 yen/kg, whichever is the greater	14.9% or 11.5yen/kg, whichever is the greater
2009.19-210	Orange juice, other, not containing added sugar, not more than 10% by weight of sucrose	21.3%	5.3%	10.7%
2009.19-290	Orange juice, other, not containing added sugar, other	25.5%	6.3%	12.8%

### Lemons and Limes

Tariff Code (HS)	Description	Duty Rate (%)*
0805.50-010	Fresh Lemon	Free
0805.50-090	Fresh Lime	Free

Source: Customs Tariff Schedules of Japan as of May 16, 2017 (latest as of Dec 15, 2017)

\* all duties are charged on a CIF basis