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## Turkey

## Citrus Annual

# Turkey Citrus Annual Report 

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## Report Highlights:

In MY 2014/2015, yields were normal, which led to low prices in citrus. The production of total citrus was 3,784,000 MT in MY 2014/2015 and the sector expects that the yield will be the same for MY 2015/2016. Turkey exported 1,585,460 MT citrus worth $\$ 942$ million in 2014. Exports in 2014 increased 16 percent compared with the previous year. The biggest problem with citrus export in 2014 was the news in the press about the refused citrus by importing countries because of residue problems. After the November downed jet crisis with Russia, Russia has decided to put restrictions on Turkish agricultural products. Orange and mandarin will be the most affected products for Turkish citrus exportation when the Russian ban goes into place since Turkey has been exporting one fifth of total orange exportation ( 20 percent) and almost half of total mandarin exportation to Russia.

## Commodities:

Grapefruit, Fresh
Oranges, Fresh
Lemons, Fresh
Tangerines/Mandarins, Fresh
Orange Juice

## Executive Summary:

In MY 2014/2015, yields were good, but according to producers, prices were low. The total production of citrus was $3,784,000$ MT in MY 2014/2015 and the sector expects that the yield will be same for MY 2015/2016.

The primary citrus production is intensively in Mediterranean and Aegean regions. The share of production in Adana province is 25.9 percent, 22.7 percent for Mersin, 18.9 percent for Hatay, 16.2 percent for Antalya, 8.1 percent for Mugla, 4 percent for Izmir, 2.4 percent for Aydin, and 1.1 percent for Osmaniye province. Recently, citrus planting areas have been increasing however there is uncertainty as to what kind of and how many citrus fruits have been produced within those areas. The National Citrus Council has been working to establish remote perception methods in order to trace production in those areas.

Winter conditions in the Aegean region in 2014 have led to decrease of yield, however the yield of Mediterranean region from where the most of production is provided was quite enough to meet market demand.
Turkey exported 1,585,460 MT citrus worth $\$ 942$ million in 2014. Exports in 2014 increased 16 percent compared with the previous year. Turkey's citrus exports totaled 157 MMT in October 2014, a 35 percent increase compared with the same month of the previous year.

The biggest challenge for citrus exports in 2014 was the press coverage of citrus refused by importing countries because of high levels of pesticide residues. This also impacted the domestic market, since the rejected products were being sold in Turkish market. However that news were objected by Turkish officials with proves of Russian applications on Turkish citrus that Russia had decreased the import controls from one hundred percent to five percent for Turkish citrus.

Turkey mainly exports citrus to Russia, Iraq, Ukraine, and Middle Eastern countries. Citrus export season begins in the second half of September each year.

Following the November 2015 downed jet crisis with Russia, Russia has decided to put restrictions on Turkish agricultural products. These will begin after January 1, 2016. The restrictions will, among other measures, introduce limits or bans on the commercial activities of Turkish economic structures working in Russia, limit the supply of Turkish products, including food products, and restrict the work and provision of services by Turkish companies.

Oranges and mandarins will be the most affected products for Turkish citrus exportation when the Russian ban goes into place since one fifth ( 20 percent) of Turkey's orange exports and almost half of total mandarin exports go to Russia. Citrus exporters believe that Russian bans on Turkish citrus will negatively impact Turkey, especially since they are coming at the middle of the export season.

In early December, also after the downed jet crisis, Russia rejected 3,000 MT of fresh fruits and vegetables coming from Turkey. However, the reason that Russian officials claimed for the rejected shipments was that the consignments were not in compliance with Russian standards.

Presumably because Turkish lemons are highly demanded in Russia, Russia has not put any restrictions on lemons and grapefruit. According to lemon producers, the production in MY 2015/2016 is 30 percent lower than the previous season, but quality is high. Heavy snowing seen last year is the main reason for the low production this year. Post estimates that the domestic consumption of lemons will decrease due to higher domestic prices since so many lemons are being exported to Russia.

## Harmonized System (HS) Codes:

Oranges 080510
Tangerines/Mandarins 080520
Lemons 080550
Grapefruits 080540
Orange Juice 200911, 200912, 200919
Abbreviations used in this report:

| EU | European Union |
| :--- | :--- |
| FAS | Foreign Agricultural Service |
| GTA | Global Trade Atlas |
| MT | Metric ton $(1,000 \mathrm{~kg})$ |
| MMT | Million Metric Tons |
| MinFAL | Turkish Ministry of Food, Agriculture and Livestock |
| MY | Marketing year |
| PS\&D | Production, Supply and Demand |
| TRY or TL | Turkish Lira |
| TurkSTAT | Turkish Statistical Institute |
| USD | U.S. Dollar |

## COMMODITIES

## 1. Oranges, Fresh

## Production

Turkish orange production begins mid-October and continues until end of June, based on the specific orange varieties. Fifty-three percent of total orange production is in Mersin, Adana, and Hatay provinces located in Cukurova region, which is in the South of Turkey on the Mediterranean near the border with Syria. After this region, the Aegean Region (South West Turkey) is the next most important for orange
production. Additionally, Rize province in the East Black Sea region is starting to be available for orange production because of moderate climate conditions in winters.

The Washington Navel variety is the most prominent, with Valencia orange and domestic orange varieties following it. Valencia varieties are usually used for fruit juice. The Finike orange variety is specific to the Mediterranean region and it has gained geographical mark status given by the Turkish Patent Institute. Turkish citrus associations are also trying to get the geographical mark status for the Koycegiz orange variety.

During MY 2014/2015, the weather conditions were good for both blooming and harvest. The high yield of Washington variety for MY 2014/2015 led to an oversupply and from the point of view of producers, the crops have remained unsold. This affected producers adversely since there has not been profit.

According to the Aegean Citrus Committee, orange production will be 256,178 MT for MY 2015/2016 while it was 286,776 MT for MY 2014/2015. The orange production in Aegean region has decreased 10 percent this season. For the whole of Turkey, Post estimates that orange production will be 1.7 MMT for MY 2015/2016.

Table 1: Orange production by varieties and planted areas, 2014

| Year | Region | Orange by varieties | Orange Orchar d (ha) | Productio <br> n (MT) | Averag e Yield per tree (kg) | Number <br> of <br> Bearing <br> Trees | Total Number of Trees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | West Marmara | Washingto n Navel | 0 | 420 | 70 | 6 | 6 |
|  | Aegean | Washingto n Navel | 9,0,51 | 255,291 | 101 | 2,517,691 | 2,601,247 |
|  |  | Valencia | 64,1 | 1,196 | 45 | 2,666 | 2,974 |
|  |  | $\begin{array}{\|l} \hline \text { Orange } \\ \text { (Other) } \\ \hline \end{array}$ | 1,288 | 29,145 | 83 | 351,114 | 383,879 |
|  | Mediterranea n | Washingto n Navel | 30,121 | 1,072,893 | 144 | 7,448,300 | 8,032,999 |
|  |  | Valencia | 2,093 | 66,188 | 107 | 619,812 | 669,969 |
|  |  | $\begin{array}{\|l} \hline \text { Orange } \\ \text { (Other) } \\ \hline \end{array}$ | 11,956 | 352,645 | 125 | 2,820,417 | 3,191,728 |
|  | West Black sea | Washingto <br> n Navel | 0 | 1 | 20 | 50 | 60 |
|  | East Black sea | Washingto n Navel | 65.5 | 1,334 | 27 | 48,556 | 53,167 |
|  |  | Valencia | 3 | 121 | 37 | 3,305 | 4,025 |
|  |  | $\begin{aligned} & \hline \text { Orange } \\ & \text { (Other) } \\ & \hline \end{aligned}$ | 9.6 | 441 | 22 | 19,875 | 22,641 |
| $\begin{array}{\|l} \hline \text { Tota } \\ \hline \end{array}$ |  |  | 54,653 | 1,779,675 | 781 | $\begin{aligned} & 13,831,79 \\ & 2 \\ & \hline \end{aligned}$ | $\begin{aligned} & 14,962,69 \\ & 5 \end{aligned}$ |

Source: MinFAL, 2015
Figure 1: Orange Production in Thousands MT, with Province Breakdown



Source: TurkSTAT, 2015

## Consumption

Orange consumption in Turkey was 1.31 MMT in MY 2014/2015. Post estimates that consumption in MY 2015/2016 will be 1.4 MMT. Following the Russia ban, the price has been going down and there will be surplus production.

Fresh oranges are the most popular citrus consumed in Turkey. Per capita annual consumption is estimated at 18-20 kg for oranges.

## Price

In MY 2014/2015 the retail price of oranges was 2.03 TRY (\$0.69) per kg while the price paid to growers is 0.77 TRY ( $\$ 0.26$ ) in the field. Because the price in the Mediterranean region is even lower, the producers are having difficulties selling their products at even 0.5 TRY ( $\$ 0.17$ ). For this reason, the producers do not harvest the oranges and they leave them to rot on the trees.

The Turkish Citrus Associations believe that there is no production problem, but instead a problem with finding markets for the supply. The oversupply problems had mostly been fixed by increasing exports, however the current turmoil in the target export countries has been reducing exports and the price has decreased. The MinFAL is working closely with the associations to find new export markets for solving the oversupply problem related to Russian bans on Turkish agricultural products.

## Trade

Oranges are Turkey's third largest exported citrus product with 344,000 MT in 2014 after mandarins and lemons. Most of the oranges are being exported to Iraq. From January to October 2015, total export to Iraq was 178,000 MT with the value of $\$ 91$ million. When compared with the same period last year, it is about 17 percent lower due to the current turmoil in Middle East countries.

Table 2: Orange exportation by top five countries

| Countries | Jan.-Oct. <br> 2014(MT) | Jan.-Oct. <br> $\mathbf{2 0 1 5 ( M T )}$ | Change <br> $(\boldsymbol{\%})$ | 2015-Share <br> $(\boldsymbol{\%})$ |
| :--- | :--- | :--- | :--- | :--- |
| Iraq | 134,622 | 124,936 | -7 | 50 |
| Russia | 48,444 | 63,981 | 32 | 26 |
| Ukraine | 25,022 | 16,727 | -33 | 7 |
| Georgia | 13,816 | 10,961 | -21 | 4 |
| Azerbaijan- | 7,392 | 4,326 | -41 | 2 |
| Nakhichevan |  |  |  |  |

Source: Mediterranean Exporters Association, 2015
Turkey has been doing one fifth of total orange exportation (20 percent) to Russia and Post estimated that Turkey`s orange export will be decreased 10 percent in MY 2015/2016.

## Figure 2: Orange Export/ Import Chart



Source: TurkSTAT, 2015
Table 3: PSD Oranges, Fresh

| Oranges, Fresh Turkey | 2013/201 |  | 2014/20 |  | 2015/2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market 2013 | Begin: Oct | Market Oct 201 | Begin: | Market Oct 201 | Begin: |
|  | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{aligned} & \text { USDA } \\ & \text { Official } \end{aligned}$ | $\begin{array}{\|l} \hline \text { New } \\ \text { Post } \end{array}$ | $\begin{aligned} & \hline \text { USDA } \\ & \text { Official } \end{aligned}$ | $\begin{array}{\|l\|l\|} \hline \text { New } \\ \text { Post } \end{array}$ |
| Area Planted | 51,700 | 51,700 | 51,700 | 51,700 |  | 54,600 |
| Area Harvested | 50,000 | 50,000 | 50,000 | 50,000 |  | 53,000 |
| Bearing Trees | 13,000 | 13,000 | 13,000 | 13,000 |  | 13,500 |
| Non-Bearing Trees | 1,000 | 1,000 | 1,000 | 1,000 |  | 1,000 |
| Total No. Of Trees | 14,000 | 14,000 | 14,000 | 14,000 |  | 14,500 |
| Production | 1,700 | 1,700 | 1,650 | 1,650 |  | 1,700 |
| Imports | 30 | 30 | 45 | 45 |  | 42 |
| Total Supply | 1,730 | 1,730 | 1,695 | 1,695 |  | 1,742 |
| Exports | 310 | 310 | 305 | 305 |  | 262 |
| Fresh Dom. <br> Consumption | 1,320 | 1,320 | 1,310 | 1,310 |  | 1,380 |
| For Processing | 100 | 100 | 80 | 80 |  | 100 |
| Total Distribution | 1,730 | 1,730 | 1,695 | 1,695 |  | 1,742 |
| HECTARES, 1000 TREES, 1000 MT |  |  |  |  |  |  |

## 2. Tangerines/Mandarins, Fresh

Production

According to MinFAL, total tangerine/mandarin production in MY 2014/2015 increased by 10 percent compared to previous year, reaching approximately one million MT. The yield of Satsuma variety has declined in the Aegean region due to unexpected rainfall, however Adana, Antakya and Mersin Provinces had quite good yields.

According to the Aegean Fresh Fruit and Vegetables Exporters Association, the production of mandarins in Aegean region is expected to be 152,455 MT in MY 2015/2016. This is a decrease of 22 percent and the quality is not good as it is expected. For comparison, in MY 2014/2015, the production of mandarins in the Aegean Region was 192,047 MT.

To note, an application to have a geographical mark of Bodrum Mandarin, a local special variety for Bodrum District in the Aegean region, has been completed.

Table 4: Mandarin production by varieties and planted areas, 2014

| Region | Variety | Mandarin Orchard (ha) | Production (MT) | Average Yield per tree (kg) | Number of Bearing Trees | Total <br> Number of <br> Trees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Western <br> Marmara | Satsuma | 1,642 | 24,73 | 46 | 539 | 557,635 |
|  | Other | 0 | 10 | 20 | 500 | 500 |
| Aegean | Satsuma | 6,402 | 176,852 | 74 | 2,380,506 | 2,475,571 |
|  | Clementin | 571 | 10,813 | 51 | 212,575 | 235,665 |
|  | King | 14,5 | 691 | 99 | 6,985 | 7,058 |
|  | Other | 457 | 6,691 | 33 | 203,209 | 214,594 |
| Mediterranean | Satsuma | 14,597 | 437,963 | 126 | 3,483,889 | 4,681,268 |
|  | Clementin | 2,235 | 71,476 | 116 | 618 | 652,753 |
|  | King | 148 | 5,859 | 123 | 47,457 | 53,072 |
|  | Other | 15,502 | 307,149 | 101 | 3,036,127 | 4,188,375 |
| Western Black sea | Satsuma | 1.5 | 15 | 20 | 760 | 825 |
|  | Other | 0 | 2 | 22 | 90 | 110 |
| Eastern Black sea | Satsuma | 169 | 4,165 | 21 | 196,937 | 222,388 |
|  | Other | 1.1 | 483 | 16 | 30 | 32,315 |
|  | Total | 41,745 | 1,022,194 | 868 | 9,570,222 | 13,322,129 |

Source: TurkSTAT, 2015

Figure 3: Turkish Mandarin Production and Area Planted


Source: MinFAL, 2015

## Consumption

In MY 2015/ 2016, Turkey's domestic use of mandarins is estimated at 600,000 MT since the domestic market price will decline as a result of the closure of the Russian market. Per capita annual consumption is estimated at 7 kg in MY 2015/2016 for tangerines/mandarins.
In 2015, consumption of new variety of mandarin called Dobashi Beni has increased based on consumer demands since it is seedless and peels easily.

## Trade

Mandarins are the number one exported citrus product with the value of $\$ 369$ million among other exported citrus in 2014. $\$ 179$ million value of Satsuma mandarins have been exported to 44 different countries in MY 2014/2015. When compared to MY 2013/14, exports increased 5 percent. The exporters had Mediterranean fruit fly problems with mandarin exports to Russia last year.

Table 6: Tangerines/Mandarins exportation by top five countries

|  | Jan.-Nov. 2014(MT) |  | Jan.-Nov. 2015(MT) |  | Change (\%) |  | 2015-Share (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Countr y | Quantit y (MT) | $\begin{aligned} & \text { Value } \\ & \text { (\$) } \end{aligned}$ | Quantity <br> (MT) | Value (\$) | Quantit y | Valu | Quantit y | Valu |
| Russia | 174,091 | $\begin{aligned} & 97,459,404 . \\ & 91 \end{aligned}$ | 168,875 | $\begin{aligned} & 88,018,003 . \\ & 32 \\ & \hline \end{aligned}$ | -3 | -10 | 45 | 46 |
| Iraq | 118,947 | $\begin{aligned} & \hline 65,774,031 . \\ & 76 \\ & \hline \end{aligned}$ | 112,047 | $\begin{aligned} & 53,590,245 . \\ & 65 \\ & \hline \end{aligned}$ | -6 | -19 | 30 | 28 |
| Ukraine | 52,865 | $\begin{aligned} & \hline 32,184,519 . \\ & 11 \\ & \hline \end{aligned}$ | 35,535 | $\begin{aligned} & 19,708,703 . \\ & 89 \\ & \hline \end{aligned}$ | -33 | -39 | 10 | 10 |
| UK | 10,791 | $\begin{aligned} & 7,573,649.7 \\ & 9 \\ & \hline \end{aligned}$ | 8,313 | $\begin{aligned} & 5,838,942.6 \\ & 2 \\ & \hline \end{aligned}$ | -23 | -23 | 2 | 3 |
| Saudi <br> Arabia | 12,283 | $\begin{aligned} & 7,481,728.8 \\ & 9 \end{aligned}$ | 7,721 | $\begin{aligned} & 4,140,754.4 \\ & 8 \\ & \hline \end{aligned}$ | -37 | -45 | 2 | 2 |

Source: Mediterranean Exporters Association, 2015

October 26, 2015 began the export season of Satsuma variety, which is one of the traditionally exported products of the Aegean region, for MY 2015/16. However exporters consider that this export period would not be efficient because of the political and economic turmoil in the neighboring countries.
Almost half of Turkey's mandarin exports have previously been to Russia. Post estimates that mandarin export in MY 2015/2016 will decline to 457,000 MT, compared to 630,000 MT last year.
Figure 4: Turkish Mandarin Production via Export Value


Source: TurkSTAT, 2015
Table 7: PSD Tangerines/Mandarins

| Tangerines/Mandarins, | 2013/20 |  | 2014/20 |  | 2015/20 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Oct 2013 | Begin: | Market Oct 201 | Begin: | Market Oct 201 | Begin: |
|  | $\begin{array}{\|l} \hline \text { USDA } \\ \text { Official } \\ \hline \end{array}$ | $\begin{array}{\|l\|l\|} \hline \text { New } \\ \text { Post } \end{array}$ | $\begin{array}{\|l} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{array}{\|l} \hline \text { New } \\ \text { Post } \end{array}$ | $\begin{array}{\|l} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{array}{\|l\|l} \text { New } \\ \text { Post } \end{array}$ |
| Area Planted | 38,300 | 38,300 | 38,900 | 38,900 |  | 41,795 |
| Area Harvested | 34,450 | 34,450 | 34,450 | 34,450 |  | 37,795 |
| Bearing Trees | 9,150 | 9,150 | 9,150 | 9,150 |  | 9,600 |
| Non-Bearing Trees | 1,250 | 1,250 | 1,250 | 1,250 |  | 2,250 |
| Total No. Of Trees | 10,400 | 10,400 | 10,400 | 10,400 |  | 14,000 |
| Production | 880 | 880 | 960 | 960 |  | 1,040 |
| Imports | 17 | 16 | 19 | 19 |  | 18 |
| Total Supply | 897 | 896 | 979 | 979 |  | 1,058 |
| Exports | 525 | 549 | 615 | 615 |  | 457 |
| Fresh Dom. Consumption | 371 | 346 | 363 | 363 |  | 600 |
| For Processing | 1 | 1 | 1 | 1 |  | 1 |
| Total Distribution | 897 | 896 | 979 | 979 |  | 1,058 |
|  |  |  |  |  |  |  |
| HECTARES, 1000 TREES, 1000 MT |  |  |  |  |  |  |

## 3. Lemons/Lime, Fresh

## Production

According to lemon producers, the production in MY 2015/2016 is 30 percent lower than the previous season, however producers have been harvesting a good quality product. Heavy snowing last year is the main reason for low production.

According to the Aegean Fresh Fruits and Vegetables Association, the lemon production in MY 2015/16 is expected to be 32,419 MT in Aegean region while it was 62,449 MT in MY 2014/15. Post estimates that lemon production in MY 2015/2016 will decline to 668,000 MT,

Table 8: Lemon production by regions and planted areas, 2014

| Year | Regions | Lemon Orchard (ha) | Production(MT) | Average Yield per tree (kg) | Number of Bearing Trees | Total <br> Number of Trees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2014 | Western Marmara | 0 | 203 | 35 | 5.8 | 5.8 |
|  | Aegean | 2,730 | 62,246 | 82 | 762,996 | 826,148 |
|  | Mediterranean | 24,930 | 662,396 | 113 | 5,850,700 | 7,333,335 |
|  | Western Blacksea | 0 |  | 0 | 22 | 32 |
|  | Eastern Blacksea | 5 | 385 | 16 | 23.99 | 30.22 |
|  | TOTAL | 27,665 | 725,230 | 246 | 6,613,748 | 8,159,524 |

Source: TurkSTAT, 2015
Applications to have a geographical mark of Erdemli Lamas and Ortaca lemon varieties have been completed.

Figure 5: Turkish Lemon Production/ Area Planted
Source: TurkSTAT, 2015

## Consumption

In MY 2014/15, lemon domestic use decreased to 230 MMT compared with last year because of high prices due to low supply from the unfavorable weather conditions. In MY 2015/16, Turkey's domestic use of lemons is estimated lower than last year since the production will be again low because of the freezing winter. Additionally, lemons are going to be exported to Russia since there have not been any sanctions announced by Russia on Turkish lemons. Per capita annual consumption in Turkey is estimated at 3.1 kg in MY 2014/2015.
The price of lemons within MY 2015/16 is expected to increase since the yield is low.

## Trade

Turkey has been exporting 350,000 MT worth $\$ 215$ million of lemons up until October 2015. Lemon is the second biggest exported product within fresh fruits and vegetables exportation.
Russia is the biggest export market for Turkish lemons and it is not on the Russian banned agricultural list after Turkey's dispute with Russia over the downed jet. Turkey has been exporting lemons to Russia, and up until October this year it had sent 90 MMT worth $\$ 54$ million in value. Turkey's market share in Russia for lemon imports is over 25 percent.
After Russia, Turkey has been exporting lemons mostly to Iraq, Saudi Arabia and Romania.

Table 9: Turkey's Citrus Exports (MT)

| Marketing Year | Exports |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 1000 Metric Tons | $2013 / 2015$ | $2015 / 2016^{*}$ |  |
|  | $\mathbf{2 0 1 2 / 2 0 1 3}$ | $2013 / 2014$ | 2014 | $\mathbf{3 5 0}$ |
| Lemon/Lime* | $\mathbf{3 6 9}$ | $\mathbf{4 2 6}$ | $\mathbf{5 0 0}$ |  |

Source: USDA, 2015 *Data for MY 2015/2016 includes commitment forecast
Table 10: PSD Lemons/Limes

| Lemons/Limes Fresh Turkey | 2013/2014 |  | 2014/2015 |  | 2015/2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Year Begin: Oct 2013 |  | Market Year Begin: Oct 2014 |  | Market Year Begin: Oct 2015 |  |
|  | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ | USDA Official | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ |
| Area Planted | 25,200 | 25,200 | 25,200 | 25,200 |  | 27,000 |
| Area Harvested | 22,900 | 22,900 | 22,900 | 22,900 |  | 24,000 |
| Bearing Trees | 6,265 | 6,265 | 6,265 | 6,265 |  | 6,613 |
| Non-Bearing Trees | 590 | 590 | 590 | 590 |  | 1,000 |
| Total No. Of Trees | 6,855 | 6,855 | 6,855 | 6,855 |  | 7,613 |
| Production | 760 | 760 | 725 | 725 |  | 668 |
| Imports | 2 | 2 | 2 | 2 |  | 2 |
| Total Supply | 762 | 762 | 727 | 727 |  | 670 |
| Exports | 440 | 416 | 440 | 440 |  | 450 |
| Fresh Dom. Consumption | 262 | 286 | 230 | 230 |  | 180 |
| For Processing | 60 | 60 | 57 | 57 |  | 40 |
| Total Distribution | 762 | 762 | 727 | 727 |  | 670 |

## 4. Grapefruit, fresh

## Production/ Consumption

As for all citrus production, it is also expected that grapefruit yield in the MY 2015/16 will be lower than the previous year.

Table 11: Grapefruit production by regions and planted areas, 2014

| Year | Regions | Orchards <br> (ha) | Production <br> (MT) | Average <br> Yield per <br> tree(kg) | Number of <br> Bearing <br> Trees | Total <br> Number of <br> Trees |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Aegean | 202 | 4,213 | 80 | 52,781 | 59,347 |
|  | Mediterranean | 6,185 | 225,332 | 179 | $1.260,451$ | $1,481,445$ |
|  | Eastern |  |  |  |  |  |
|  | Blacksea | 0 | 10 | 22 | 450 | 555 |
|  | TOTAL | $\mathbf{6 , 3 8 7}$ | $\mathbf{2 2 9 , 5 4 5}$ | $\mathbf{5 8 1}$ | $\mathbf{1 , 3 1 3 , 6 8 2}$ | $\mathbf{1 , 5 4 1 , 3 4 7}$ |

## Source: TurkSTAT, 2015; Note Turkstat data is calendar year which differs from marketing year

Due to a lack of demand, grapefruit production has been declining in recent years as producers convert the grapefruit planted areas to orange orchards. Domestic use of grapefruit was 46,000 MT during MY 2014/15 and consumption per capita was 0.6 kg during the same period. Post estimates that the consumption will be lower in MY 2015/16 as a result of continued negative press coverage that grapefruits cause problems with drug accumulation in the human body. Misinformation on food and its health impacts is common in Turkey and does impact consumer choices.

## Trade

Turkey has been increasingly exporting grapefruit for many years. Approximately 80 percent of total production has been exported. The most common exported grapefruit varieties are Star Ruby, Ruby Red, Marsh Seedless and Rio Red.

Table 12: Grapefruit exportation by top five countries, 2014/2015

|  | Jan.-Nov. 2014(MT) |  | Jan.-Nov. 2015(MT) |  | Change (\%) |  | 2015-Share (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country |  | Value (\$) | Quantit y (MT) | Value (\$) | Quantit y (kg) | Valu <br> $e$ <br> (\$) | $\begin{aligned} & \text { Quantit } \\ & \mathrm{y} \\ & (\mathrm{~kg}) \end{aligned}$ | Value(\$ |
| Russia | 34,878 | $\begin{array}{\|l\|} \hline 19,411,49 \\ 1 \\ \hline \end{array}$ | 36,447 | $\begin{aligned} & 19,087,91 \\ & 2 \\ & \hline \end{aligned}$ | -2 | 4 | 27 | 29 |
| Romania | 18,362 | 8,269,430 | 12,149 | 5,125,444 | -34 | -38 | 9 | 8 |
| Netherlan <br> d | 13,674 | 8,121,744 | 9,557 | 4,917,096 | -30 | -39 | 7 | 7 |
| Poland | 13,409 | 6,906,321 | 10,536 | 4,715,321 | -21 | -32 | 8 | 7 |
| Germany | 7,725 | 4,829,437 | 8,499 | 4,425,025 | 10 | -8 | 6 | 7 |

Source: Mediterranean Exporters Association, 2015
Turkey's grapefruit exportation until at the end of October, 2015 is 110,634 MT worth $\$ 55$ million. Last year at the same point, it was 160,000 MT worth $\$ 96$ million. In 2014 the total grapefruit export was 178,311 MT worth $\$ 96$ million.

Figure 6: Turkish Grapefruit Export


Source: TurkSTAT, 2015; Note 2015 data is until end of October, 2015
Table 13: PSD Grapefruit

| Grapefruit, Fresh Turkey | 2013/201 |  | 2014/201 |  | 2015/20 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market <br> Oct 2013 | Begin: | Market Oct 201 | Begin: | Market Oct 201 | Begin: |
|  | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \\ \hline \end{array}$ | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ | USDA <br> Official | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ | $\begin{array}{\|l} \text { USDA } \\ \text { Official } \end{array}$ | $\begin{array}{\|l\|} \hline \text { New } \\ \text { Post } \end{array}$ |
| Area Planted | 6,500 | 6,500 | 6,400 | 6,400 |  | 6,300 |
| Area Harvested | 5,000 | 5,000 | 5,000 | 5,000 |  | 5,300 |
| Bearing Trees | 1,040 | 1,040 | 1,040 | 1,040 |  | 1,300 |
| Non-Bearing Trees | 65 | 65 | 65 | 65 |  | 200 |
| Total No. Of Trees | 1,105 | 1,105 | 1,105 | 1,105 |  | 1,500 |
| Production | 235 | 235 | 210 | 238 |  | 200 |
| Imports | 5 | 4 | 3 | 3 |  | 3 |
| Total Supply | 240 | 239 | 213 | 241 |  | 203 |
| Exports | 170 | 182 | 150 | 178 |  | 150 |
| Fresh Dom. Consumption | 70 | 57 | 63 | 63 |  | 53 |
| For Processing | 0 | 0 | 0 | 0 |  | 0 |
| Total Distribution | 240 | 239 | 213 | 241 |  | 203 |
| HECTARES, 1000 TREES, 1000 MT |  |  |  |  |  |  |

## 5. Orange Juice

## Production

The citrus processing sector in Turkey is facing rigid competition in sourcing raw materials in the fresh citrus market. This is mainly due to the difficulties in finding available varieties of oranges for processing. The sector says that they are processing 1 million MT of fruits, however their goal is to increase production by using more of their current capacity.

## Consumption

Citrus consumed as juice is still quite low compared to some other citrus growing countries, as there are many competing non-citrus juices. Orange is the still the least preferred juice by Turkish consumers. Juice consumption per capita is 9 liters annually in 2014. Eight liters of which is consumption of nectars, which are diluted fruit juice based drinks with sugar added, and one liter of which is fruit juice. In Turkey, the most preferred fruit juices are peach, cherry and apricot juice.

## Trade

Turkey's total orange juice exports are mainly to European countries and imports are mainly from Germany, Holland and Brazil. Post forecasts that Turkey will increase its orange juice export since Turkey will not able to export oranges to Russia after the $1^{\text {st }}$ of January. The sector has processing capacity. Post estimates that Turkey orange juice exports will increase in MY 2015/2016 and imports will remain the same.

Table 14: PSD Orange Juice

| Orange Juice | 2013/20 |  | 2014/20 |  | 2015/20 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Market } \\ & 2013 \\ & \hline \end{aligned}$ | Begin: Oct | Market Oct 201 | Begin: | Market <br> Oct 2015 | Begin: |
|  | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{array}{\|l} \hline \text { USDA } \\ \text { Official } \end{array}$ | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ | $\begin{aligned} & \hline \text { USDA } \\ & \text { Official } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { New } \\ & \text { Post } \end{aligned}$ |
| Deliv. To Processors | 100,000 | 100,000 | 80,000 | 80,000 |  | 100,000 |
| Beginning Stocks | 100 | 100 | 150 | 150 |  | 100 |
| Production | 8,800 | 8,800 | 8,000 | 8,000 |  | 8,500 |
| Imports | 7,000 | 7,000 | 7,600 | 7,600 |  | 7,600 |
| Total Supply | 15,900 | 15,900 | 15,750 | 15,750 |  | 16,200 |
| Exports | 2,650 | 2,650 | 2,600 | 2,600 |  | 3,000 |
| Domestic Consumption | 13,100 | 13,100 | 13,050 | 13,050 |  | 13,050 |
| Ending Stocks | 150 | 150 | 100 | 100 |  | 150 |
| Total Distribution | 15,900 | 15,900 | 15,750 | 15,750 |  | 16,200 |
| MT |  |  |  |  |  |  |

## POLICY

The Turkish government supports the citrus farmers who are registered in the "Farmers Registration System" and offers these farmers the following supports for the year 2015, these are in Turkish Lira (TL) per hectare (ha):

- $500 \mathrm{TL} / \mathrm{ha}$ for Good Agricultural Practices,
- $700 \mathrm{TL} /$ ha for organic agriculture;
- $1500 \mathrm{TL} /$ ha for standard orchards with small fruit scion and $400 \mathrm{TL} / \mathrm{da}$ if it is certified,
- $1500 \mathrm{TL} /$ ha for standard orchards with half-small fruit scion and $350 \mathrm{TL} / \mathrm{da}$ if it is certified,
- $25 \mathrm{TL} /$ ha for soil analysis;
- 48 TL/ha for fuel;
- $47 \mathrm{TL} / \mathrm{ha}$ for fertilizer;

The MinFAL Agricultural Research Institutes, along with Çukurova University, conduct research on improved varieties and better horticultural practices. Additionally, MinFAL has published control points guidance for the farmers who are dealing with fresh fruits and vegetables production about good agricultural practices. At the same time, within the MinFAL organization, training on good agricultural practices has been given to inspectors.

Recently, citrus planting areas have been increasing, however there is uncertainty on what kind of and how many citrus fruits have been produced within those areas. The National Citrus Council and

MinFAL have been working to establish remote perception methods in order to track production in those areas.

## MARKETING

As with other agricultural products, marketing of citrus products in Turkey is a big challenge for producers and consumers. Producers sell their products at low prices, however consumers buy the products from the markets at high prices since there are many stakeholders within distribution channels.

The biggest challenge for citrus exports in 2014 was the press coverage of citrus refused by importing countries because of high levels of pesticide residues. This also impacted the domestic market, since the rejected products were now being sold in the Turkish market.

The other problem is the lack of a tracking system from the farm to the market. The producers believe that the citrus are sold in the domestic market under incorrect labelling of their particular variety. In order to prevent any inconvenience for consumers, the associations and MinFAL have created a marking tag system that allows the products to be labeled at the farm and are sent to market with this tracking system.

## Russian Sanctions on Turkish Citrus Exports

Turkey has been exporting citrus mainly to Russia, Iraq, Ukraine, and Middle Eastern countries. Citrus export season is initiated at the second half of September each year.

Turkey's citrus exports totaled 157 MMT in October 2014, a 35 percent increase when it is compared with previous year.

Turkey accounts for about four percent of Russia's total food imports, supplying mainly fruits, nuts and vegetables. Agricultural and food product imports from Turkey were worth $\$ 1$ billion in the first 10 months of 2015, according to customs data. The restrictions will, among other measures, introduce limits or bans on the commercial activities of Turkish economic structures working in Russia, limit the supply of Turkish products, including food products, and restrict the work and provision of services by Turkish companies. Russia's Agriculture Minister Alexander Tkachev said any shortfall could be made up with supplies from Iran, Morocco, Israel and Azerbaijan.

Before Turkey's dispute with Russia over the downed jet, the exporters in Turkey were already worried about turmoil in Russia's economy and adverse events in the Middle East for the export season of MY 2014/15. On the other hand, Turkish exporters were satisfied with the new Russian import controls on Turkish goods since Russia's Ministry of Agriculture had decreased controls from hundred percent to 5 percent on food and agriculture imports from Turkey.

Turkish citrus production in 2014 slightly increased to 3.78 MMT from 3,5 MMT and it is expected at the same value in 2015. Turkish citrus exports in 2014 reached 1.5 million MT with a value of $\$ 942$ million. Thirty-five percent of Turkey's total citrus exports have gone to Russia, totaling 600-650 thousand MT of citrus each year.

Exporters expect that this year because of these bans they will now export about 60 percent of the citrus to Russia that they had planned on. The remaining 40 percent they expect to export to Eastern Europe, China, South East Asian countries, and also to sell some on the domestic market.

Russia has not restricted lemon imports from Turkey since lemon has been heavily consumed. Turkey has over 25 percent market share in Russia on lemon imports.

The total citrus exports from Turkey to all countries for the first ten months of 2015 was 830 MMT with a value of $\$ 457$ million. Citrus exports, including lemons, to Russia totaled 245 MMT with a value of $\$ 138$ million as of October 2015. Oranges and mandarins will be the most affected products for Turkish citrus exportation when the Russian ban goes into place, since one fifth ( 20 percent) of Turkey's total orange exports and almost the half of total mandarin exports go to Russia. Citrus exporters believe that Russian bans on Turkish citrus will negatively impact Turkey, especially since they are coming at the middle of the export season.
According to Turkish press, citrus prices have decreased 30 percent after Russian ban.

Table 15: Turkey`s citrus exportation excluding lemon to Russia in 2014 and 2015

| Exports to Russia | 2014 | 2015 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Month | Export (kg) | Export(\$) | Export (kg) | Export(\$) |
| January | $26,829,797$ | $16,398,145$ | $58,576,660$ | $33,240,033$ |
| February | $26,322,323$ | $15,302,008$ | $29,327,707$ | $16,179,158$ |
| March | $15,479,745$ | $8,701,316$ | $12,060,341$ | $5,878,453$ |
| April | $7,849,326$ | $4,209,527$ | $3,269,999$ | $1,803,988$ |
| May | $2,944,546$ | $1,547,683$ | 839,152 | 457,779 |
| June | 86,595 | 44,917 | - | - |
| July | 20.2 | 7.07 | - | - |
| Aug. | 19.9 | 6,965 | - | - |
| Sept. | $5,587,868$ | $3,623,395$ | $1,847,259$ | 911,598 |
| Oct. | $41,742,069$ | $25,133,194$ | $51,558,935$ | $51,558,935$ |
| TOTAL | $\mathbf{1 2 6 , 8 8 2 , 3 6 9}$ | $\mathbf{7 4 , 9 7 4 , 2 2 0}$ | $\mathbf{1 5 7 , 4 8 0 , 0 5 3}$ | $\mathbf{8 5 , 1 0 9 , 9 8 1}$ |

Source: TurkSTAT, 2015. Data up until October for comparison.

