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## Report Name: Citrus Annual

Country: Korea - Republic of
Post: Seoul
Report Category: Citrus

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## Report Highlights:

In MY 2021/22, Korea's total citrus production is expected to drop by about 7 percent, with consumption falling by 5 percent. Korean citrus production continues to trend towards increased greenhouse growing with an emphasis on high quality fruit, and citrus faces increased competition from other domestically produced high sugar content fruits. Korean imports of U.S. oranges are projected to decline by 5 percent, with U.S. lemon and grapefruit imports mostly unchanged.

## Tangerines / Mandarins

## PS\&D Table

| Tangerines/Mandarins, Fresh <br> Market Year Begins <br> Korea, Republic of | 2019/2020 |  | 2020/2021 |  | 2021/2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2019 |  | Oct 2020 |  | Oct 2021 |  |
|  | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Area Planted (HECTARES) | 20059 | 20059 | 20000 | 20038 | 0 | 20000 |
| Area Harvested (HECTARES) | 18855 | 18555 | 18800 | 18836 | 0 | 18800 |
| Bearing Trees (1000 TREES) | 23569 | 23569 | 23500 | 23545 | 0 | 23500 |
| Non-Bearing Trees (1000 TREES) | 6520 | 6520 | 6500 | 6512 | 0 | 6500 |
| Total No. Of Trees (1000 trees) | 30089 | 30089 | 30000 | 30057 | 0 | 30000 |
| Production (1000 MT) | 631 | 631 | 660 | 655 | 0 | 610 |
| Imports (1000 MT) | 1 | 1 | 0 | 1 | 0 | 0 |
| Total Supply (1000 MT) | 632 | 632 | 660 | 656 | 0 | 610 |
| Exports (1000 MT) | 3 | 3 | 7 | 7 | 0 | 5 |
| Fresh Dom. Consumption (1000 MT) | 552 | 552 | 563 | 571 | 0 | 545 |
| For Processing (1000 MT) | 77 | 77 | 90 | 78 | 0 | 60 |
| Total Distribution (1000 MT) | 632 | 632 | 660 | 656 | 0 | 610 |
|  |  |  |  |  |  |  |
| (HECTARES), (1000 TREES), (1000 MT) |  |  |  |  |  |  |

## Tangerine/Mandarin Production

Reduced open field "Unshu" harvests in northern Jeju island will drive Korea's total citrus production down 6.9 percent to 610,000 MT in MY 2021/22 (October - September). This reduction from last year's volume is primarily a result of the crop's alternating fruit-bearing cycle entering a lower yield period in 2022. Additionally, frequent rainfall during the summer fruit growing period and a sudden torrential rainfall right before the harvest season for extra early-maturing citrus in late August and early September had a negative impact on yields and fruit quality. Fruit quality issues included fruit cracking and larger-sized fruits with excess moisture, which are not favored in the Korean market. Nonmarketable fruits are expected to increase by 10 percent from a year ago due to the quality issues.

In MY 2021/22, regular season citrus production in open fields (accounting for about 79 percent of total citrus production in MY 2020/21) is estimated at 465,000 MT based on the November Ag Research crop survey, down about ten percent ( $51,000 \mathrm{MT}$ ) from the previous year.

Figure 1. Korea's Citrus Production and Planted Area by Year


Source: Jeju Special Self-Governing Province (JSSGP)

Climate Change and Citrus Planted Area in Jeju Island
As a result of climate change, Jeju island increasingly faces challenging weather conditions for citrus production, with increased rainfalls in Summer and cold damage in the Winter season in recent years. In 2021, Jeju had record high rainfall in early September with around $1,000 \mathrm{ml}$ during three to four days, which is equivalent to annual rainfall volume on the mainland. Additionally, the temperature in winter often went down below 4 to 5 degrees Celsius (not a common weather pattern in Jeju island), and it caused cold damage to some tangerine trees in open fields in recent years.

Korea's citrus production area is gradually moving north through the southern part of the mainland. Therefore, the Jeju Agricultural Research Institute forecasts Jeju citrus growers will increasingly compete with citrus growers on the mainland within 10 to 20 years. In response to these ongoing weather issues, the Jeju Provincial Government has advised some citrus growers to plant other tropical fruits such as mangoes, bananas, and kiwi fruits to diversify and maintain optimal production levels in the foreseeable future.

## Tangerine/Mandarin Planted Area

In MY 2021/22, Korea's total citrus planted area is projected to decrease slightly (down 0.2 percent) to 20,000 ha as the country's open field planting areas ( 74 percent of the total planted area) continues to shrink. On the other hand, planted area for late-maturing varieties and in heated greenhouses for summer tangerines is expected to increase steadily in the coming years as these provide higher income to citrus growers than regular open field production.

Among the late-maturing varieties, planted area for Hallabong (the major variety accounting for 40 percent of total late-maturing citrus in 2020) will decline by one percent due to aging trees with gradually falling productivity, poorer quality, and reduced consumer demand. Planting of Cheonhyehang and Redhayang, the second and the third most popular late-maturing citrus varieties, are expected to increase by around four percent to 1,740 ha combined ( 920 ha for Cheonhyehang and 820 ha for Redhyang) with increased consumer demand.

In MY 2020/21, Korea's total citrus planted area decreased slightly (by 0.1 percent) to 20,059 ha as the aging farm population and increased property development gradually displace farmland.

The Jeju Provincial Government and Jeju citrus industry forecast the current level of 20,000 hectares of planted area will remain steady for the foreseeable future, but Unshu orange production in open fields will continue shifting to more late-maturing varieties.

## Late Maturing Varieties and Protected Facility Production

In MY 2021/22, Korea's late-maturing citrus planted area and production output is forecast to increase slightly by 1.5 percent and 2 percent to 4,040 ha and 84,000 MT, respectively. As demand for high quality, late-maturing citrus steadily increases, more growers will switch from regular Unshu orange production in open fields to late-maturing citrus production in the coming years to chase higher farm incomes.

In MY 2020/21, gross income for late-maturing citrus increased by 11 percent due to increased consumer demand and reduced production of other local competing fruits such as apples and pears.

## Greenhouse Tangerines

Korea's greenhouse tangerine production for the 2022 summer season (May - September) is projected to increase slightly by 3.7 percent to $28,000 \mathrm{MT}$ due to steady demand for this product during the offpeak season of regular open field Unshu oranges. Planted area is also projected to increase by 2.4 percent to 390 ha in MY 2021/22 due to the previously discussed cropping pattern changes.

Table 1. Korea: Summer Greenhouse Citrus Production Situation

| Year | Area (HA) | Production <br> $(\mathrm{MT})$ | Gross Income <br> (Mil. Won) | Household | Price <br> $(\mathrm{Won} / \mathrm{Kg})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | 285 | 19,963 | 65,719 | 843 | 3,292 |
| 2013 | 262 | 19,555 | 77,859 | 732 | 3,982 |
| 2014 | 255 | 21,571 | 60,695 | 713 | 2,814 |
| 2015 | 250 | 20,401 | 63,021 | 659 | 3,089 |
| 2016 | 284 | 21,660 | 76,087 | 697 | 3,513 |
| 2017 | 301 | 22,637 | 80,771 | 737 | 3,568 |
| 2018 | 321 | 22,898 | 81,046 | 783 | 3,539 |
| 2019 | 339 | 27,543 | 90,703 | 842 | 3,293 |
| 2020 | 363 | 25,358 | 100,603 | 887 | 3,999 |
| $20211 /$ | 381 | 26,796 | N/A | N/A | N/A |

1/ Preliminary forecast by FAS Seoul
Source: Jeju Provincial Government \& Korea Rural Economic Institute

## Tangerines for Processing

In MY 2021/22, the Jeju citrus industry projects around 60,000 MT of fresh tangerines will be used for processing, mostly for tangerine concentrate production. This is down about 23 percent ( 18,000 MT) from the previous year due to reduced processing capacity driven by reduced demand for fruit juice in the soft drink market and reduced export volume for tangerine concentrate to Japan. Korea exports around $1,500-2,000 \mathrm{MT}$ of tangerine concentrate annually to Japan, but exports decreased to 817 MT in MY 2020/21 due to reduced demand for tangerine juice in Japan.

As a result of reduced demand for fruit juice in recent years caused by health-conscious consumption trends, processing volume for non-marketable tangerines will continue to gradually decrease in the coming years. The Jeju government and citrus industry have used the citrus purchasing system for concentrate processing for many years to control supply and maintain higher prices for marketable tangerines, but losses caused by the downsizing local juice market is increasingly concerning to the citrus industry.

Generally, three local citrus processors (Jeju Development Corporation, Ilhae, and Lotte Chilsung Beverage) process 70,000 to $80,000 \mathrm{MT}$ of tangerines annually to maintain the market price of fresh tangerines. However, these three tangerine processors estimate the current handling capacity for fresh tangerine processing has already peaked as the local fruit juice market declined steadily for the past decade due to reduced consumer demand for high sugar content drinks in the market. As result, the two
private processors (Ilhae and Lotte Chilsung) have continuously decreased purchasing volume in recent years.

## Tangerine/Mandarin Prices

Table 2. Wholesale Prices for Greenhouse Tangerines, Nationwide (Unit: Korean Won per 3 Kilogram)

| Month | 2020 | 2021 |
| :---: | :---: | :---: |
| May | 22,164 | 21,707 |
| Jun. | 17,480 | 18,536 |
| Jul. | 18,043 | 15,945 |
| Aug. | 17,384 | 15,674 |
| Sep. | 15,537 | 12,304 |
| Oct. | 8,531 | 8,321 |
| Nov. | 9,160 | 9,848 |

Source: Jeju Special Self-Governing Province Citrus Marketing \& Shipping Association

Table 3. Korea: Average Retail Prices for Regular Unshu (tangerines), Nationwide (Unit: Korean Won per 10 Fruits)

| Month | S size |  | M size |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2021 | 2020 | 2021 |
| Jan. | 2,020 | 2,286 | 2,622 | 2,639 |
| Feb. | 2,127 | 2,473 | 2,701 | 2,790 |
| Mar. | - | 2,269 | - | 2,834 |
| April - September: N/A |  |  |  |  |
| Oct. | 2,759 | 2,594 | 3,428 | 3,458 |
| Nov. | 2,366 | 2,423 | 2,993 | 3,055 |
| Dec. | 2,201 | - | 2,669 | - |

Source: Agricultural \& Fishery Marketing Corporation
Note: S size fruit diameter: $55-58 \mathrm{~mm} / \mathrm{M}$ size fruit diameter: $59-62 \mathrm{~mm}$

## Tangerine/Mandarin Consumption

In MY 2021/22, Korea's citrus consumption is projected to decrease by 4.6 percent to $545,000 \mathrm{MT}$ due to: 1 ) a 6.9 percent decline in citrus production, 2) a reduced number of marketable fruits caused by unfavorable weather conditions, and 3) increased competition from other domestically produced highquality fruits (strawberries and high Brix green grapes). In addition, the recovered production of major local fruits (apples, pears, and persimmons) also will affect the citrus consumption to some extent. Meanwhile, the consumption of late-maturing varieties is expected to increase steadily with its high
quality compared to regular tangerines grown in open field. As result, Korea's per capita tangerine consumption is projected to decrease slightly to around 11.8 kg (from 12.1 kg ).

As a result of reduced overall tangerine supply, average retail prices for regular Unshu oranges in November 2021 were 2.5 percent higher from the same month in 2020 and this should continue during the winter (December and January) with supply of imported navel oranges limited due to seasonal tariffs.

In MY 2020/21, Korea's tangerine consumption rose by 3.4 percent to 571,000 MT due to reduced production of other major domestic fruits (apples, pears, and persimmons) caused by unfavorable weather conditions during the flowering and fruit growing periods. In addition, an unstable supply of California navel oranges caused by COVID-19 related supply chain disruptions helped local citrus to increase market share.

As Korean consumers increasingly prefer the convenience of smaller citrus, the Jeju Provincial Government and Jeju citrus industry eased the quality (size) standard this season to allow smaller than 2 S (fruit diameter $49-53 \mathrm{~mm}$ ) citrus, which used to be classified as non-marketable in the past. The Jeju Provincial Government also decided to exclude 2L size (fruit diameter $67-70 \mathrm{~mm}$ ) for the same reasons.

The Jeju citrus industry estimates around 22,000 MT of locally produced citrus was destroyed in MY 2020/21 during the distribution process mainly due to damage by careless handling. Prior to this year, the Jeju citrus number did not track fruit lost due to damage from distribution.

## Tangerine/Mandarin Trade

In MY 2021/22, Korea's Unshu orange exports are forecast to decrease by 26 percent to around 5,000 MT due to reduced open field production (including a decline in marketable fruits), increased ocean transportation costs, and relatively favorable domestic market prices. In addition, fresh tangerine exports to the Canadian and U.S. markets are forecast to decrease significantly due to ongoing supply chain disruptions caused by the COVID-19 pandemic. Normally, Korea exports around 1,000 MT of fresh tangerines annually to Canada and the United States.

Russia will be the main buyer for Korean tangerine exports this year, replacing around 4,000 MT of imports of Chinese tangerines that were banned due to MRL issues from early last year. As Russia increased imports of Korean tangerines, the Korean tangerine industry could look to export larger size tangerines in the coming years, despite their lack of popularity in the Korean market.

In MY 2020/21, Korea's fresh Unshu orange exports increased by 165 percent to 6,801 MT due to the increased demand in Russia.

Table 4. Korea's Tangerine Exports by Country

| Export Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Country: Korea | MY 2019/20 <br> (Oct. 19 - Sep. 20) | MY 2020/21 <br> (Oct. 20 - Sep. 21) |  |  |
| Commodity: Tangerine (HS 0805.21/22/29) Unit: MT \& US\$1,000 |  |  |  |  |
| Exports to | Volume | Value | Volume | Value |
| Country | 512 | 1,069 | 475 | 1,089 |
| U.S. |  |  |  |  |
| Others | 686 | 546 | 4,816 | 3,670 |
| Russia | 441 | 447 | 588 | 580 |
| Canada | 212 | 537 | 327 | 730 |
| Hong Kong | 58 | 137 | 60 | 102 |
| Guam | 80 | 130 | 49 | 105 |
| Malaysia | 193 | 254 | 163 | 253 |
| Mongolia | 334 | 712 | 291 | 763 |
| Singapore | 47 | 119 | 32 | 130 |
| Others |  |  |  |  |
|  | 2,051 | 2,882 | 6,326 | 6,333 |
| Total for Others | 2,563 | 3,951 | 6,801 | 7,422 |
| Grand Total |  |  |  |  |

Source: Trade Data Monitor LLC.

## Oranges

## PS\&D Table

| Oranges, Fresh <br> Market Year Begins <br> Korea, Republic of | 2019/2020 |  | 2020/2021 |  | 2021/2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2019 |  | Oct 2020 |  | Oct 2021 |  |
|  | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Area Planted (HECTARES) | 0 | 0 | 0 | 0 | 0 | 0 |
| Area Harvested (HECTARES) | 0 | 0 | 0 | 0 | 0 | 0 |
| Bearing Trees (1000 TREES) | 0 | 0 | 0 | 0 | 0 | 0 |
| Non-Bearing Trees (1000 Trees) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total No. Of Trees (1000 Trees) | 0 | 0 | 0 | 0 | 0 | 0 |
| Production (1000 MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Imports (1000 MT) | 116 | 116 | 110 | 110 | 0 | 105 |
| Total Supply (1000 MT) | 116 | 116 | 110 | 110 | 0 | 105 |
| Exports (1000 MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Fresh Dom. Consumption (1000 MT) | 116 | 116 | 110 | 110 | 0 | 105 |
| For Processing (1000 MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution (1000 MT) | 116 | 116 | 110 | 110 | 0 | 105 |
|  |  |  |  |  |  |  |
| (HECTARES) ,(1000 TREES) ,(1000 MT) |  |  |  |  |  |  |

## Orange Production

There is no domestic production of Navel or Valencia oranges in Korea.

## Orange Consumption

In MY 2021/22, Korea's orange consumption is forecast to decrease by five percent to 104,500 MT from the previous year due to the following reasons: 1) reduced orange supply from pandemic related supply chain disruption worldwide, 2) increased import prices caused by unfavorable exchange rates and increased production costs, and 3) increased market competition with domestically produced high quality fruits (late maturing citrus, strawberries, and high Brix green grapes).

In MY 2020/21, Korea's orange consumption declined by five percent to around 110,000 MT mainly due to reduced demand in the group catering sector (including restaurants) caused by strict social distancing restrictions and unstable supply of oranges in the market due to pandemic related supply chain disruptions (shipping problems and shortage of refrigerated containers). On top of the short-term supply disruption issues, longer term fruit consumption trends towards higher quality (high Brix) and easier-to-peel fruits have made orange consumption less attractive in recent years.

## Orange Trade

In MY 2021/22, Korea's fresh orange imports are projected to decrease by five percent to around 104,500 MT for the following reasons:

1) The September Navel orange production forecast in California projected a 14 percent decline from the previous year following a lower number of fruit sets due to climate issues.
2) On top of the reduced production forecast, higher production costs including inland transportation and increased labor costs will be a key factor to increase prices.
3) An unfavorable exchange rate (US Dollar / Korean Won) will also increase unit prices.
4) During the 2020/21 season, many Korean orange importers suffered from business losses due to logistics issues including a shortage of refrigerated containers and shipping problems in California and the Pacific Northwest (PNW) area. If these issues continue, some Korean importers may scale back purchases this year.
5) Increased competition from some high-quality domestic fruits (late-maturing citrus, greenhouse strawberries, and high Brix green table grapes) during the seasonal FTA duty period (March early May) will also hinder U.S. navel orange imports.

In MY 2020/21, Korea's total orange imports decreased by 5.4 percent to 109,555 MT mainly due to COVID-19 related supply chain disruptions and increased transportation costs. Korea's imports from the United States decreased 7.3 percent ( 7,793 MT), while imports from South Africa plummeted by 38 percent. Australia was less impacted and was able to increase sales 42 percent increase with the seasonal FTA duty.

The majority (about 70 to 80 percent) of U.S. navel oranges are imported during the March - April period due to the seasonal FTA duty rate. Most U.S. oranges imported into the Korean market are high Brix (quality) oranges due to Korean consumers strong demand for high sugar content fruits in recent years.

Figure 2. Korea's Fresh Orange Imports by Marketing Year


Source: Korea Customs Service \& Trade Data Monitor LLC

Table 5. Korea: Monthly Orange Imports (Unit: MT)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| '21 | 2,338 | 4,325 | 46,399 | 33,256 | 10,201 | 1,905 | 2,996 | 2,349 | 1,988 | 1,136 | - | - |
| '20 | 4,794 | 4,779 | 49,759 | 31,547 | 12,008 | 1,583 | 1,972 | 1,990 | 3,127 | 2,203 | 733 | 861 |
| '19 | 5,424 | 5,700 | 41,025 | 48,408 | 12,121 | 1,709 | 2,098 | 2,047 | 1,631 | 1,647 | 583 | 1,994 |
| '18 | 9,251 | 7,294 | 61,291 | 39,691 | 10,335 | 2,885 | 1,339 | 1,605 | 2,916 | 3,804 | 1,157 | 877 |
| '17 | 5,918 | 11,421 | 60,543 | 40,549 | 8,925 | 3,471 | 1,946 | 2,067 | 2,669 | 1,357 | 1,012 | 1,694 |
| '16 | 5,210 | 10,830 | 68,324 | 46,908 | 9,719 | 1,780 | 2,340 | 2,275 | 2,166 | 1,473 | 838 | 3079 |
| '15 | 2,926 | 5,759 | 40,090 | 38,067 | 13,132 | 1,815 | 1,346 | 1,500 | 2,608 | 2,207 | 590 | 1,704 |

Source: Korea Customs Service \& Trade Data Monitor LLC.

Table 6. Import Quota under the KORUS FTA (Unit: MT, \%)

| HSK 10 | Description | Base Rate | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0805100000 | Oranges |  |  |  |  |
| March 1 - end Aug |  | 50 | Zero | Zero | Zero |
| Sept 1-end Feb |  |  |  |  |  |
| TRQ (MT) |  |  | 3,167 | 3,262 | 3,360 |
| In-quota Rate |  |  | 0 | 0 | 0 |
| Out of Quota Rate |  | 50 | 50 | 50 | 50 |

Note: After year 5, the in-quota quantity increases by $3 \%$ per year, compounded annually.

Table 7. Import Quota under the Korea-EU FTA (Unit: MT, \%)

| KOR-EU FTA | Description | Base Rate | Zero | Zero | $\begin{aligned} & \hline 2022 \\ & \hline \\ & \hline \text { Zero } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HS 0805100000 | Oranges | $50$ |  |  |  |
| March 1 - end Aug |  |  |  |  |  |
| Sept 1-end Feb |  |  |  |  |  |
| TRQ (MT) |  |  | 40 | 40 | 60 |
| In-quota Rate |  |  | 0 | 0 | 0 |
| Out of Quota Rate |  | 50 | 50 | 50 | 50 |

Note: After year 12, the in-quota quantity shall remain the same as the quantity of year 12 .

Table 8. Import Quota under the Korea-Australia FTA (Unit: MT, \%)

| KOR-AUS FTA | Description | Base Rate | 2020 | 2021 | 2022 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HS 0805100000 | Oranges |     <br> 50 Zero Zero Zero |  |  |  |
| April 1 - end Sep |  |  |  |  |  |
| Oct 1 - end March |  |  |  |  |  |
| TRQ (MT) |  |  | 30 | 30 | 30 |
| In-quota Rate |  |  | 0 | 0 | 0 |
| Out of Quota Rate |  | 50 | 50 | 50 | 50 |

Note: After year 10, the in-quota quantity shall remain the same as the quantity of year 10 .

Table 9. Import Matrix for Oranges

| Import Trade Matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |
| Commodity: Orange (HS 0805.10) |  |  | Unit: MT \& US\$1,000 |  |
| Imports from | $\begin{gathered} \text { MY 2019/20 } \\ \text { (Oct. 19-Sep. 20) } \end{gathered}$ |  | MY 2020/21(Oct. 20-Sep. 21) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 107,410 | 176,475 | 99,617 | 183,495 |
| Others |  |  |  |  |
| South Africa | 2,430 | 2,699 | 1,506 | 1,752 |
| Australia | 5,051 | 8,261 | 7,190 | 12,118 |
| Spain | 240 | 307 | 404 | 595 |
| Chile | 476 | 657 | 551 | 863 |
| Other | 176 | 130 | 287 | 297 |
|  |  |  |  |  |
| Total for Others | 8,373 | 12,054 | 9,938 | 15,625 |
| Grand Total | 115,783 | 188,529 | 109,555 | 199,120 |

Source: Trade Data Monitor LLC.

Orange Prices
Table 10. Korea: Average Retail Prices for Imported Oranges (Navel), Nationwide (Unit: Korean Won per 10 Fruits)

| Month Year | 2019 | 2020 | 2021 | \% Change from the <br> previous year |
| :---: | :---: | :---: | :---: | :---: |
| Jan | 12,246 | 12,113 | 15,516 | 28.1 |
| Feb | 12,311 | 9,993 | 14,880 | 48.9 |
| Mar | 11,037 | 9,474 | 11,347 | 19.8 |
| Apr | 9,955 | 9,473 | 10,442 | 10.2 |
| May | 8,951 | 9,493 | 10,267 | 8.2 |
| Jun | 8,930 | - | 10,079 | - |
| Jul | 8,584 | - | 9,759 | - |
| Aug | - | - | - | - |
| Sep | - | - | - | - |
| Oct | - | - | - | - |
| Nov | - | - | - | - |
| Dec | - | 15,202 | - | - |

Prices for high quality
Source: Agricultural \& Fishery Marketing Corporation

Table 11. Korea: Average Wholesale Prices for Imported Navel Oranges
(Unit: Korean Won per 18 Kilogram box)

| Month | High Quality |  | Medium Quality |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2021 | 2020 | 2021 |
| Jan. | - | 64,810 | - | 58,910 |
| Feb. | 49,930 | 67,969 | 44,930 | 62,458 |
| Mar. | 53,707 | 60,325 | 48,541 | 54,314 |
| Apr. | 53,360 | 50,734 | 47,990 | 44,370 |
| May | 49,821 | 51,440 | 44,516 | 45,415 |
| Jun. | 49,270 | 52,865 | 44,025 | 46,681 |
| Jul. | - | 57,288 | - | 50,644 |
| Aug. | - | - | - | - |
| Sep. | - | - | - | - |
| Oct. | - | - | - | - |
| Nov. | - | - | - | - |
| Dec. | - | - | - | - |

Source: Agricultural \& Fishery Marketing Corporation

Table 12. Korea: Wholesale Prices for Domestic Hallabong \& Imported Navel Oranges (Unit: Korean Won per Kilogram)

| Month | Imported Navel 1/ |  | Hallabong 2/ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2020 | 2021 | 2020 | 2021 |
| Jan. | - | 3,601 | 3,798 | 4,030 |
| Feb. | 2,774 | 3,776 | 2,820 | 5,183 |
| Mar. | 2,984 | 3,351 | 3,105 | 3,758 |
| Apr. | 2,964 | 2,819 | 3,915 | 4,188 |
| May | 2,768 | 2,858 | 4,138 | 4,405 |
| Jun. | 2,737 | 2,937 | - | - |

1/ High quality navel oranges
2/ Late variety Unshu oranges
Source: Agricultural \& Fishery Marketing Corporation / Jeju Special Self-Governing Province Citrus
Marketing \& Shipping Association

## Orange Juice

PS\&D Table

| Orange Juice <br> Market Year Begins <br> Korea, Republic of | 2019/2020 |  | 2020/2021 |  | 2021/2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2019 |  | Oct 2020 |  | Oct 2021 |  |
|  | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Deliv. To Processors (MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Beginning Stocks (MT) | 3868 | 3868 | 4968 | 4968 | 0 | 5500 |
| Production (MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Imports (MT) | 18837 | 18837 | 17000 | 18504 | 0 | 17000 |


| Total Supply (MT) | 22705 | 22705 | 21968 | 23472 | 0 | 22500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exports (MT) | 237 | 237 | 250 | 379 | 0 | 400 |
| Domestic Consumption (MT) | 17500 | 17500 | 17500 | 17593 | 0 | 16600 |
| Ending Stocks (MT) | 4968 | 4968 | 4218 | 5500 | 0 | 5500 |
| Total Distribution (MT) | 22705 | 22705 | 21968 | 23472 | 0 | 22500 |
|  |  |  |  |  |  |  |
| (MT) |  |  |  |  |  |  |

## Orange Juice Production

There is no domestic production of orange juice in Korea.
Figure 3. Korea's Frozen Concentrated Orange -Juice (FCOJ) Imports and Unshu-based Tangerine Concentrate Production by Year


Source: Korea Customs Service \& Jeju Tangerine Processing Industry

## Orange Juice Consumption

The Korean fruit juice market is still dominated by citrus juice products, including orange juice, but many new premium juice products (such as hybrid fruit and vegetable juices) that are targeting healthconscious consumers are emerging. On the other hand, overall demand for fruit juice will be decrease gradually in the coming years due to consumer trends towards carbonated water, tea drinks, and health functional drinks.

Recently, the local drink industry pointed out two notable context points for the current downsizing juice market: 1) the café industry rapidly filled fresh fruit juice demand with convenient options (including
orange juice) to consumers who are living alone (single-member households), and 2) limited access to hospitals under the Covid-19 pandemic caused less demand from hospital visitors.

## Orange Juice Trade

In MY 2021/22, Korea's frozen concentrated orange juice (FCOJ) imports are forecast to decline by eight percent to $17,000 \mathrm{MT}$ due to reduced consumer demand for fruit juice products (including orange juice). Spain is the most price competitive and top OJ concentrate supplier in the Korean market with a 62 percent market share in MY 2020/21, followed by the United States with a 20 percent market share. The United States was the top supplier until MY 2016/17 but has since declined gradually due to supply impacts of the citrus greening issue in Florida since 2017.

Table 13. Import Matrix for FCOJ

| Import Trade Matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |
| Commodity: FOJC (2009.11/12/19) |  |  | Unit: MT \& US\$1,000 |  |
| Imports from | MY 2019/20(Oct. 19 - Sep. 20) |  | MY 2020/21(Oct. 20-Sep. 21) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 3,725 | 2,880 | 3,651 | 9,890 |
| Others |  |  |  |  |
| Spain | 12,512 | 26,065 | 11,516 | 21,588 |
| Brazil | 683 | 1,160 | 821 | 1,284 |
| Australia | 287 | 805 | 358 | 1,005 |
| Thailand | 602 | 744 | 837 | 1,142 |
| Other | 1,028 | 9,809 | 1,321 | 2,676 |
|  |  |  |  |  |
| Total for Others | 15,112 | 38,583 | 14,853 | 27,695 |
| Grand Total | 18,837 | 41,463 | 18,504 | 37,585 |

Source: Trade Data Monitor LLC.

Table 14. Export Matrix for Frozen Orange Juice

| Export Trade Matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |
| Commodity: Frozen Orange Juice (2009.11/12/19) |  |  | Unit: MT \& US\$1,000 |  |
| Exports to | $\begin{array}{r} \text { MY 20 } \\ \text { (Oct. } 19 \end{array}$ | $\begin{aligned} & 20 \\ & \text { p. 20) } \end{aligned}$ | MY 2020 (Oct. $20-$ | $\begin{aligned} & \hline 21 \\ & \text { p. 21) } \end{aligned}$ |
| Country | Volume | Value | Volume | Value |
| U.S. | 3 | 22 | 16 | 137 |


| Others |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Mongolia | 40 | 140 | 64 | 93 |
| China | 35 | 107 | 2 | 32 |
| Canada | 52 | 57 | 0 | 0 |
| Hong Kong | 46 | 182 | 149 | 464 |
| Other | 61 | 291 | 148 | 486 |
|  |  |  |  |  |
| Total for Others | 234 | 777 | 363 | 1,075 |
| Grand Total | 237 | 799 | 379 | 1,212 |

Source: Trade Data Monitor LLC.

## Lemons

## Lemon Production

Domestic lemon production in Korea is essentially non-existent with no official data to report.

## Lemon Trade

In MY 2021/22, Korea's lemon imports are forecast to increase slightly to 17,000 MT due to a gradual recovery of consumer demand from the COVID-19 pandemic with more normalized economic activity including in restaurants and group catering. Lemon demand is expected to increase steadily in the coming years owing to a diverse and growing range of food applications for the fruit. Lemon consumption in Korea is much larger outside the home versus at home due to this growing use of lemons as a food ingredient in menu applications.

In MY 2020/21, Korea's lemon imports decreased by 13.6 percent to 16,645 MT mainly due to reduced lemon production in the main supplying country (the United States). U.S. lemon exports covered 76 percent of the Korean market in MY 2019/20, while declining by 17.8 percent to 11,987 MT from the previous year.

Figure 4. Korea's Lemon Imports by Year


Source: Korea Customs Service \& Trade Data Monitor LLC

Table 15. Import Matrix for Lemons

| Import Trade Matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |
| Commodity: Lemon (0805.50.10) |  |  | Unit: MT \& US\$1,000 |  |
| Imports from | $\begin{gathered} \text { MY 2019/20 } \\ \text { (Oct. } 19-\text { Sep. 20) } \end{gathered}$ |  | MY 2020/21(Oct. 20-Sep. 21) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 14,590 | 29,019 | 11,987 | 27,652 |
| Others |  |  |  |  |
| Chile | 4,684 | 8,128 | 4,654 | 8,508 |
| Other | 0 | 5 | 4 | 15 |
|  |  |  |  |  |
| Total for Others | 4,684 | 8,133 | 4,658 | 8,523 |
| Grand Total | 19,274 | 37,152 | 16,645 | 36,175 |

Source: Trade Data Monitor LLC.

## Grapefruit

## Grapefruit Production

There is no domestic grapefruit production in Korea.

## Grapefruit Trade

In MY 2021/22, Korea's fresh grapefruit imports are forecast to stay at $16,000 \mathrm{MT}$ as steady demand for home use (including fresh squeezed juice) and 'Ade' drink use in the restaurant sector continues. U.S. grapefruits are forecast to maintain the current level of MY 2020/21 (around 10,000 MT) in Korea reflecting a shift to California supply following reduced production in Florida in recent years. The United States is the main supplier in Korea with a 63 percent market share in MY 2020/21, followed by South Africa ( 22.6 percent), and Israel (13 percent).

Despite this relatively steady performance, increased production costs and supply chain disruption issues along with unfavorable exchange rates will pose an obstacle to increasing import volume in Korea. Unlike lemons, grapefruit applications in the food industry are quite limited (basically for fruit juice or whole fruitconsumption, with some use in bakeries). Therefore, the import volume is projected to remain stagnant in the coming years.

Figure 5. Korea's Grapefruit Imports by Year


Source: Korea Customs Service \& Trade Data Monitor LLC

Table 16. Import Matrix for Grapefruit

| Import Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Country: Korea | Unit: MT \& US \$1,000 |  |  |  |
| Commodity: Grapefruit (0805.40) |  |  |  |  |
| Imports from | MY 2019/20 <br> (Oct. 19 - Sep. 20) | MY 2020/21 <br> (Oct. 20 - Sep. 21) |  |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 10,876 | 17,520 | 9,786 | 18,639 |
| Others |  |  |  |  |
| Israel | 1,624 | 2,193 | 2,032 | 2,925 |
| S. Africa | 3,658 | 4,119 | 3,513 | 5,068 |
| Mexico | 0 | 6 | 0 | 0 |
|  |  |  |  |  |
| Total for Others | 5,282 | 6,318 | 5,745 | 7,993 |
| Grand Total | 16,158 | 23,838 | 15,531 | 26,632 |

Source: Trade Data Monitor LLC.

Annex I. Korea's Citrus Production by Year
Korea: Citrus Production Situation 1/

| Year | Area (HA) | Production (MT) | Farm Household | Gross Income <br> (Mil.won) |
| :---: | :---: | :---: | :---: | :---: |
| 2012 | 20,595 | 668,610 | 31,070 | 801,175 |
| 2013 | 20,577 | 672,267 | 31,041 | 901,421 |
| 2014 | 20,555 | 696,763 | 31,404 | 670,739 |
| 2015 | 20,523 | 635,032 | 31,458 | 602,196 |
| 2016 | 20,491 | 599,642 | 31,525 | 911,392 |
| 2017 | 20,140 | 576,772 | 30,957 | 945,792 |
| 2018 | 20,090 | 607,638 | 30,846 | 940,239 |
| 2019 | 20,059 | 631,310 | 30,711 | 850,168 |
| 2020 | 20,038 | 654,864 | 30,843 | 950,828 |
| $20212 /$ | 20,000 | 605,000 | N/A | N/A |

1/ Calendar year basis including greenhouse
2/ Preliminary forecast by FAS Seoul
Source: Jeju Provincial Government

Korea: Citrus Utilization (Unit: MT)

| Year | Total | Fresh | Processing | Other 1/ |
| :---: | :---: | :---: | :---: | :---: |
| 2012 | 668,610 | 432,058 | 55,814 | 180,738 |
| 2013 | 672,267 | 433,650 | 92,834 | 145,783 |
| 2014 | 696,763 | 400,712 | 158,371 | 137,680 |
| 2015 | 635,032 | 340,353 | 84,679 | 210,000 |
| 2016 | 599,642 | 351,826 | 56,372 | 191,444 |
| 2017 | 576,772 | 331,612 | 72,460 | 172,650 |
| 2018 | 607,638 | 354,172 | 63,402 | 190,064 |
| 2019 | 631,310 | 318,142 | 77,041 | 236,127 |
| 2020 | 632,921 | 320,059 | 77,602 | 235,260 |

1/ Other - including exports, military consumption and consumption within Jeju island Source: Jeju Provincial Government

Korea: Purchasing Price of Processing Tangerine Oranges (Korean Won/kg)

| Year | Price |
| :---: | :---: |
| 2013 | 160 |
| 2014 | 160 |
| 2015 | 160 |
| 2016 | 160 |
| 2017 | 180 |
| 2018 | 180 |
| 2019 | 180 |
| 2020 | 180 |
| 2021 | 180 |

Source: Jeju Citrus Growers' Cooperative
Korea: Citrus Production as Ratio to Total Fruit Production (Unit: 1,000 MT, Ratio: Percent)

| Year | Total Fruits | Citrus | Ratio |
| :---: | :---: | :---: | :---: |
| 2011 | 2,102 | 645 | 30.7 |
| 2012 | 2,027 | 654 | 32.3 |
| 2013 | 2,207 | 655 | 29.7 |
| 2014 | 2,347 | 688 | 29.3 |
| 2015 | 2,364 | 640 | 27.1 |
| 2016 | 2,387 | 610 | 25.6 |
| 2017 | 2,358 | 597 | 25.3 |
| 2018 | 2,160 | 621 | 28.8 |
| 2019 | 2,206 | 630 | 28.6 |
| 2020 | 1,976 | 659 | 33.4 |

Source: Korea Statistical Information Service (KOSIS)

Korea: Total Fruits and Citrus Per Capita Consumption

| Year | Total Fruits (Kg) | Total Tangerine (Kg) |
| :---: | :---: | :---: |
| 2012 | 57.9 | 13.7 |
| 2013 | 59.6 | 13.4 |
| 2014 | 61.8 | 14.2 |
| 2015 | 59.8 | 12.5 |
| 2016 | 60.6 | 11.9 |
| 2017 | 61.2 | 11.6 |
| 2018 | 57.5 | 12.0 |
| 2019 | 56.6 | 12.1 |
| 2020 | N/A | N/A |

Source: Ministry for Food, Agriculture, Forestry, and Fisheries

## Annex II. Tariff

Korea: Import Quota and Tariff for Fresh Orange (Unit: MT, \%)

| Year | Quota | In-quota Tariff | Out-quota Tariff |
| :---: | :---: | :---: | :---: |
| 2004 | 57,017 | 50 | 50 |
| 2019 | 57,017 | 50 | 50 |
| 2020 | 57,017 | 50 | 50 |
| 2021 | 57,017 | 50 | 50 |
| 2022 | 57,017 | 50 | 50 |

Korea: Import Quota and Tariff for Other Citrus (Unit: MT, \%)

| Year | Quota | In-quota Tariff | Out-quota Tariff |
| :---: | :---: | :---: | :---: |
| 2004 | 2,097 | 50 | 144 |
| 2019 | 2,097 | 50 | 144 |
| 2020 | 2,097 | 50 | 144 |
| 2021 | 2,097 | 50 | 144 |
| 2022 | 2,097 | 50 | 144 |

1/ HS 0805.21.1000, HS 0805.21.9000, HS0805.22.0000, HS0805.29.000, HS0805.50.2020 \& HS 0805.90.0000.

Annex III. Exchange Rate

Korea: Monthly Average Foreign Exchange Rate
(Unit: Korean Won / 1U\$)

| Month | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: |
| Jan. | 1175.31 | 1164.28 | 1097.49 |
| Feb. | 1122.45 | 1193.79 | 1111.72 |
| Mar. | 1130.72 | 1220.09 | 1131.02 |
| Apr. | 1140.95 | 1225.23 | 1119.40 |
| May | 1183.29 | 1228.67 | 1123.28 |
| Jun. | 1175.62 | 1210.01 | 1121.30 |
| Jul. | 1175.31 | 1198.90 | 1143.98 |
| Aug. | 1208.98 | 1186.85 | 1160.34 |
| Sep. | 1197.55 | 1178.80 | 1169.54 |
| Oct. | 1184.13 | 1144.68 | 1182.82 |
| Nov. | 1167.45 | 1116.76 | - |
| Dec. | 1175.84 | 1095.13 | - |

Source: Industrial Bank of Korea

## Attachments:

No Attachments

