Required Report: Required - Public Distribution

## Report Name: Citrus Annual

Country: Korea - Republic of
Post: Seoul

## Report Category: Citrus

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## Report Highlights:

Korea's total citrus production is forecast at 570,000 metric tons (MT), a 2.1 percent decline from the previous marketing year ( $582,000 \mathrm{MT}$ ), driven by lower yield for open-field tangerines, and a slight reduction in planted area. As the prices of other domestic and imported fruits rise, consumption of relatively cheap citrus - both imported and domestic - is expected to remain strong. Korea's imported orange consumption in MY 2023/24 is forecast to increase by 5.7 percent ( $5,000 \mathrm{MT}$ ) to $92,000 \mathrm{MT}$ from the previous year ( $87,000 \mathrm{MT}$ ), helped by the decrease in domestic fruit supply and a recovery in the supply of U.S. navel oranges.

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## Tangerines / Mandarins

Table 1.
Korea: Production Supply \& Distribution (PSD) of Tangerines/Mandarins

| Tangerines/Mandarins, Fresh Market Year Begins Korea, Republic of | 2021/2022 |  | 2022/2023 |  | 2023/2024 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2021 |  | Oct 2022 |  | Oct 2023 |  |
|  | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Area Planted (hectares) | 19978 | 19978 | 19930 | 19871 | 0 | 19720 |
| Area Harvested (hectares) | 18800 | 18800 | 18734 | 18679 | 0 | 18537 |
| Bearing Trees (1000 TREES) | 23500 | 23500 | 23418 | 23348 | 0 | 23171 |
| Non-Bearing Trees (1000 trees) | 6500 | 6500 | 6477 | 6458 | 0 | 6409 |
| Total No. Of Trees (1000 TREES) | 30000 | 30000 | 29895 | 29806 | 0 | 29580 |
| Production (1000 MT) | 613 | 613 | 595 | 582 | 0 | 570 |
| Imports (1000 MT) | 1 | 1 | 1 | 1 | 0 | 1 |
| Total Supply (1000 MT) | 614 | 614 | 596 | 583 | 0 | 571 |
| Exports (1000 MT) | 6 | 6 | 3 | 3 | 0 | 3 |
| Fresh Dom. Consumption ${ }_{(1000}$ MT) | 542 | 542 | 523 | 514 | 0 | 513 |
| For Processing (1000 MT) | 66 | 66 | 70 | 66 | 0 | 55 |
| Total Distribution (1000 MT) | 614 | 614 | 596 | 583 | 0 | 571 |
|  |  |  |  |  |  |  |
| (HECTARES) ,(1000 TREES) ,(1000 MT) |  |  |  |  |  |  |

## Tangerine/Mandarin Production

In Marketing Year (MY) 2023/24 (October - September), Korea's total citrus production is forecast at 570,000 metric tons (MT), indicating a 2.1 percent decline from the previous marketing year ( $582,000 \mathrm{MT}$ ), driven by lower yield for open-field tangerines, especially decreased fruit set per tree, and a slight reduction in planted area. Open-field citrus production in Korea's primary citrus growing area of Jeju Island is projected at 413,000 MT for MY 2023/24, down about 3.7 percent from the previous year ( $429,000 \mathrm{MT}$ ). Open-field 'Unshu' tangerines grown in Jeju's southern Seogwipo region, which accounts for 70 percent of total production, saw increased premature fruit drop during the summer fruit growing period because of fruit cracking caused by high temperatures and heavy rains in August. The overall quality in the 2023/24 season is generally expected to be better than the previous year due to the absence of typhoon damage in the summer season and low rainfall after September until the harvest season, resulting in higher sweetness levels.

Open-field citrus yields in Jeju are influenced by an alternate fruit bearing cycle, but recently growers have been closing the gap between "on-year" and "off-year" yields through management practices such as targeted pruning during "on-years." Additionally, northern Jeju and southern Jeju regions are on opposite biennial cycles, such that an "on-year" in one region tends to offset reduced production during the other region's "off-year." In MY 2023/24, the northern part of Jeju Island is experiencing an "off-year" in the alternate fruit bearing cycle, while southern Jeju has an "on-year." However, because of the fruit cracking issue in Seogwipo, southern Jeju's citrus yield is projected to be lower than expected for a typical "on-year."

Conversely, MY 2023/24 production of late-maturing varieties and citrus grown in protected facilities is expected to increase by 2.7 percent year-on-year to $157,000 \mathrm{MT}$ on increased planted area, as consumer demand for greenhouse-grown varieties such as winter 'Unshu' and summer greenhouse tangerines continues to drive new investment in protected facility construction.

In MY 2022/23, Korea's citrus production was 582,000 MT, down 5 percent from the previous year's $613,000 \mathrm{MT}$, due mainly to a reduction in the number of fruits per tree as the Seogwipo region experienced an "off-year" in the alternate fruit-bearing cycle. Meanwhile, citrus production in greenhouses (summer greenhouse mandarins and winter 'Unshu') increased by 7,056 MT ( 4.6 percent) year-on-year to 152,881 MT due to a steady rise in cultivated area.

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


Source: Jeju Special Self-Governing Province (JSSGP)

## Tangerine/Mandarin Planted Area

Korea's total citrus planted area is projected at 19,720 hectares (ha) in MY 2023/24, down 0.75 percent from the previous year ( $19,871 \mathrm{ha}$ ). The decline is attributed to various factors, including the aging of citrus farmers, the continuous development of property by the tourism industry in Jeju Island, and the gradual shift from open-field citrus cultivation to more profitable protected facility cultivation of late-maturing citrus varieties and other fruit (e.g. kiwis). Meanwhile, greenhouse citrus cultivation, including late-maturing varieties, is expected to grow by 2.7 percent year-on-year to $5,613 \mathrm{Ha}$ in MY 2023/24. This growth is mainly driven by high demand for late-maturing varieties among consumers, justifying farmers' investments in greenhouse facility development. The total citrus planting area in Jeju is expected to remain between 19,000 and 20,000 ha for the next several years, with a gradual reduction in open-field citrus farming
and an increase in protected-facility production of high-quality citrus, including late-maturing varieties.

## Late Maturing Varieties

In MY 2023/24, late-maturing citrus production is expected to be around $105,000 \mathrm{MT}$, up five percent from the previous year ( $99,991 \mathrm{MT}$ ), as a result of increased planting of 'Cheonhyehyang', 'Red Hyang', and 'Hamgeum Hyang' varieties. The increased price of imported oranges, caused by higher exchange rates and production costs over the past few years, nearly erased the price gap between domestically grown late-maturing citrus and imported navel oranges. As a result, production of late-maturing citrus varieties increased steadily as these varieties have become more cost-competitive with imports and appealing to Korean consumers. Late-maturing citrus varieties are about three times more profitable for citrus farmers than 'Unshu' mandarin production in open fields. They are highly regarded for their quality by Korean consumers, and production is expected to continue increasing in the next few years.

In MY 2022/23, Korea produced 99,991 MT of late-maturing varieties, an increase of 8 percent compared to 92,983 MT in MY 2021/22. Korea's main late-maturing cultivar 'Hallabong', whose elongated neck resembles the shape of Korea's highest peak, Mt. Halla, was produced at $40,090 \mathrm{MT}$, accounting for 40 percent of total late-maturing citrus, though its share has declined slightly in recent years. In contrast, the second and third most popular varieties, 'Cheonhyehyang' and 'Red Hyang', were produced at 26,921 MT and 17,996 MT, respectively, up 15 percent and 6 percent from the previous year.

## Summer Greenhouse Tangerines

Korea's summer greenhouse citrus production for the MY 2023/24 is expected to be approximately 28,000 MT due to increased acreage in response to consumer demand. Summer greenhouse citrus is typically distributed to the market from May through September, before the first open-field harvest of extra early-maturing mandarins. Summer tangerine production requires additional costs for heating the greenhouse during the citrus growth process, especially during the winter (November-January) flowering period, but farmers' income is typically two or three times higher than that of open-field mandarins.

In MY 2022/23, major domestic summer fruits (watermelon, plum, peach, etc.) experienced quality and production problems due to heavy July rains, so the demand for summer greenhouse citrus increased as a substitute. The average price of greenhouse mandarins (per 3 kilograms) in July and August 2023 increased by 15 percent and 39 percent from the previous year to 17,987 Korean won (KRW) and KRW 22,132, respectively, as the citrus market benefited from the decreased supply of major summer fruits.

Table 2.
Korea: Summer Greenhouse Citrus Production Situation

| Year | Area (HA) | Production <br> $(\mathrm{MT})$ | Gross Income <br> $($ Mil. Won $)$ | Household | Price <br> $(\mathrm{Won} / \mathrm{Kg})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2021 | 373 | 27,009 | 91,814 | 917 | 3,399 |
| 2022 | 415 | 25,775 | 99,506 | 961 | 3,861 |
| $20231 /$ | 420 | 28,000 | N/A | N/A | N/A |

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

## Tangerines for Processing

In general, the Jeju citrus industry seeks to maintain adequate market prices through market isolation policies, such as purchasing 10 to 15 percent of annual production for processing and destruction at farms. The current purchase price for citrus for processing into tangerine concentrate is KRW 180 per kilogram (KRW 120 from companies and KRW 60 from the Jeju Provincial Government), which has been maintained since the last increase in 2017. Meanwhile, the market isolation program compensates farmers for fruit destroyed at the farm at KRW 150 per kg (KRW 120 from Jeju Provincial Government and KRW 30 from grower cooperatives).

Post expects the amount of citrus purchased for processing into concentrate in MY 2023/24 to be around $55,000 \mathrm{MT}$, a 16.7 percent ( $11,000 \mathrm{MT}$ ) decrease from the previous year ( $66,000 \mathrm{MT}$ ). Accordingly, the production of citrus concentrate is expected to decrease in MY 2023/24, and the export volume of citrus concentrate (mainly to Japan) is also expected to fall. In MY 2023/24, the Jeju citrus industry indicated that it had planned to purchase $70,000 \mathrm{MT}$ of citrus for processing in cooperation with the Jeju Development Corporation and private citrus processors. Additionally, industry expected around 10,000 MT to be destroyed at farms, for a total of 80,000 MT diverted from the fresh market to maintain the optimal level of citrus production and price stabilization. However, due to the 20 to 30 percent decrease in production of major domestic competing fruits (apples, pears, and sweet persimmons) and strong domestic citrus prices, many farmers appear to be selling tangerines independently to the fresh market instead of selling to the market isolation program.

Recently, as citrus concentrate exports increased due to stronger international orange prices, the Jeju citrus industry had planned to expand its purchase volume for processing. However, that expansion is unlikely in the coming year due to Korea's robust domestic fruit market.

## Tangerine/Mandarin Consumption

Korea's tangerine consumption in MY 2023/24 is forecast at 513,000 MT, similar to the previous year ( $514,000 \mathrm{MT}$ ). Along with the decrease in Korea's total citrus production, the volume of citrus withdrawn from the fresh market (for concentrate processing and destruction) will also likely decline due to the tight supply of other domestically grown fruits. This season, consumer demand is expected to be good, as citrus quality is generally high, with no typhoon damage and higher sugar content than last year. As the prices of other domestic and imported fruits rise, consumption of relatively cheap citrus is expected to remain steady. As the prices of strawberries, apples, etc. have increased by more than 20 percent, the demand for local citrus as a substitute fruit has been growing so far in MY 2023/24.

Table 5.
Korea's Total Fruits and Citrus Per Capita Consumption

| Year | Total Fruits $(\mathrm{Kg})$ | Tangerine $(\mathrm{Kg})$ |
| :---: | :---: | :---: |
| 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 | 51.5 | 12.6 |
| 2021 | 54.4 | 12.2 |
| 2022 | 55.0 | 11.8 |

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

## Tangerine/Mandarin Trade

In MY 2023/24, Korea's citrus exports are expected to reach around $3,400 \mathrm{MT}$, similar to the previous year's ( $3,263 \mathrm{MT}$ ), as the decrease in open-field citrus production and the robust domestic fruit market have tempered plans to expand exports. At the beginning of the season, the Jeju citrus industry set a target of exporting $4,000 \mathrm{MT}$, but it is expected to supply more for the domestic market than for export. In general, when the domestic fruit market is strong, citrus export volumes show a decline.

Korea's citrus exports are mainly comprised of open-field citrus, with the main export destinations being Russia and Canada. These two countries are expected to continue to import Korean fresh mandarins due to the consistent demand for large-size mandarins, which are less favored by Korean consumers. In recent years, Korea's citrus exports to Southeast Asian countries (Hong Kong, Malaysia, Singapore) have also increased slightly as a result of the popularity of Korean culture.

In MY 2022/23, Korea's citrus exports decreased by 50 percent to 3,263 MT compared to the previous year ( $6,462 \mathrm{MT}$ ). This was mainly due to a 69 -percent reduction in exports to Russia, down $3,566 \mathrm{MT}$ to $1,607 \mathrm{MT}$ because of the war between Ukraine and Russia since February 2022 and the resumption of Chinese citrus exports to Russia following the resolution of MRL issues.

Table 6.
Export Matrix for Korean Tangerines

| Export Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Country: Korea | MY 2021/22 <br> (Oct. 21 - Sep. 22) | Unit: MT \& 2022/23 <br> (Oct. 22 - Sep. 23) |  |  |
| Commodity: Tangerine (HS 0805.21/22/29 |  |  |  |  |
| Exports to | Volume | Value | Volume | Value |
| Country | 0 | 7 | 399 | 808 |
| U.S. |  |  |  |  |
| Others | 5,173 | 4,280 | 1,607 | 1,151 |
| Russia | 494 | 530 | 522 | 516 |
| Canada | 261 | 549 | 251 | 504 |
| Hong Kong | 69 | 143 | 73 | 175 |
| Guam | 189 | 314 | 117 | 175 |
| Malaysia | 234 | 77 | 33 | 69 |
| Mongolia | 29 | 741 | 216 | 684 |
| Singapore |  | 96 | 45 | 96 |
| Others | 6,462 |  | 6,730 | 2,864 |

Source: Trade Data Monitor LLC.

## Tangerine/Mandarin Prices

In 2023, Korea's citrus producers have benefited from exceptionally high fresh fruit prices. Korean domestic apple and pear production is forecast to be 25 percent and 19 percent lower than the previous year, respectively (see Post's recent Deciduous Fruit Reports), while sweet persimmons are expected to be 30 percent lower due to disease and pest damage. On the other hand, citrus production in Jeju Island is forecast only slightly below last year, but market prices are expected to increase due to higher demand as a substitute for other fruits.

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

| Month | 2022 | 2023 | \% change |
| :---: | :---: | :---: | :---: |
| May | 25,485 | 27,067 | +6.2 |
| Jun. | 19,653 | 19,439 | -1.1 |
| Jul. | 15,676 | 17,987 | +14.7 |
| Aug. | 15,883 | 22,132 | +39.3 |
| Sep. | 14,462 | 16,344 | +13.0 |
| Oct. | 9,628 | 9,527 | -1.0 |
| Nov. | 10,900 | 13,596 | +24.7 |

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

Table 4.
Korea: Average Retail Prices for Regular Unshu Tangerines
(Unit: Korean won per 10 Fruits)

| Month | Small size |  | $\%$ <br> change | Medium size |  | $\%$ <br> change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 2023 |  | 2022 | 2023 |  |
| Jan. | 2,345 | 2,754 | +17.4 | 3,041 | 3,349 | +10.1 |
| Feb. | 2,606 | 2,903 | +11.4 | 3,043 | 3,504 | +15.1 |
| Mar. | 3,079 | 3,949 | +28.3 | 3,408 | 6,997 | +105.3 |
|  |  |  |  |  |  |  |
| Oct. | 3,908 | 5,134 | +31.4 | 5,260 | 6,518 | +23.9 |
| Nov. | 2,658 | 2,904 | +9.3 | 3,401 | 3,599 | +5.8 |
| Dec. | 2,578 | - |  | 3,209 | - |  |

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

## Oranges

Table 7.
Korea: Production, Supply and Distribution (PSD) of Fresh Oranges

| Oranges, Fresh <br> Market Year Begins Korea, Republic of | 2021/2022 |  | 2022/2023 |  | 2023/2024 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2021 |  | Oct 2022 |  | Oct 2023 |  |
|  | 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) | 78 | 78 | 85 | 87 | 0 | 92 |
| Total Supply (1000 MT) | 78 | 78 | 85 | 87 | 0 | 92 |
| Exports (1000 MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Fresh Dom. Consumption (1000 MT) | 78 | 78 | 85 | 87 | 0 | 92 |
| For Processing (1000 MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Distribution (1000 MT) | 78 | 78 | 85 | 87 | 0 | 92 |
|  |  |  |  |  |  |  |
| (HECTARES) ,(1000 TREES) ,(1000 MT) |  |  |  |  |  |  |

## Orange Production

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

## Orange Consumption

Korea's orange consumption in MY 2023/24 is forecast to increase by 5.7 percent ( $5,000 \mathrm{MT}$ ) to 92,000 MT compared to the previous year ( $87,000 \mathrm{MT}$ ). The main reasons for the increase are a decrease in domestic fruit supply due to the decline in major domestic fruit production, which is expected to increase demand for substitute fruits, and a recovery in the supply of U.S. navel oranges. However, higher import and production costs (labor, transportation) and the supply of domestic competing fruits (late-maturing citrus, strawberries) are expected to affect orange consumption throughout the current marketing year.

In MY 2022/23, Korea consumed around 87,000 MT of oranges, up 11.5 percent from the previous year ( $78,000 \mathrm{MT}$ ) due to a shortage of local fruit supply caused by heavy rains in the summer season and a shortage of stored domestic apples.

## Orange Trade

With Korea's orange supply coming entirely from imports, MY 2023/24 orange imports are forecast at $92,000 \mathrm{MT}$ to meet consumption needs. Korea imports mostly U.S. navel oranges, which accounted for 82 percent of total imports in MY 2022/23. Despite the limited 5.7-percent increase for MY 2023/24, orange imports are still expected to be well below average levels seen during the past ten years.

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


Source: Korea Customs Service \& Trade Data Monitor LLC

In MY 2022/23, Korea's orange imports increased by 11.5 percent year-on-year to 87,000 MT due to a shortage of domestic fruit supply during the spring and summer seasons and increased demand for alternative fruits. In particular, orange imports during the months of July, August, and September 2023 increased by 84 percent to 11,494 MT compared to the same period last year ( $6,260 \mathrm{MT}$ ). This was mainly due to the availability of navel oranges from Australia, which also enjoys zero percent duty under the Korea-Australia Free Trade Agreement (KAFTA).
Imports of Australian oranges increased by 82 percent from the previous year to $12,275 \mathrm{MT}$, and imports of South African oranges increased by 794 tons year-on-year to 1,957 MT. The United States remained Korea's top orange supplier in MY 2022/23, with 70,994 MT, up 4.6 percent from the previous year.

Table 8.
Korea: Monthly Orange Imports (Unit: MT)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| '16 | 5,210 | 10,830 | 68,324 | 46,908 | 9,719 | 1,780 | 2,340 | 2,275 | 2,166 | 1,473 | 838 | 3079 |
| $' 17$ | 5,918 | 11,421 | 60,543 | 40,549 | 8,925 | 3,471 | 1,946 | 2,067 | 2,669 | 1,357 | 1,012 | 1,694 |
| '18 | 9,251 | 7,294 | 61,291 | 39,691 | 10,335 | 2,885 | 1,339 | 1,605 | 2,916 | 3,804 | 1,157 | 877 |
| '19 | 5,424 | 5,700 | 41,025 | 48,408 | 12,121 | 1,709 | 2,098 | 2,047 | 1,631 | 1,647 | 583 | 1,994 |
| '20 | 4,794 | 4,779 | 49,759 | 31,547 | 12,008 | 1,583 | 1,972 | 1,990 | 3,127 | 2,203 | 733 | 861 |
| '21 | 2,338 | 4,325 | 46,399 | 33,256 | 10,201 | 1,905 | 2,996 | 2,349 | 1,988 | 1,136 | 1,211 | 1,233 |
| '22 | 2,026 | 3,128 | 30,366 | 19,203 | 11,431 | 1,817 | 1,352 | 1,780 | 3,128 | 2,279 | 797 | 481 |
| '23 | 1,201 | 3,138 | 37,377 | 20,048 | 8,436 | 1,305 | 2,251 | 3,675 | 5,568 | 4,031 | - | - |

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

Of the total fresh orange imports during the marketing year, the majority ( 76 percent of total imports in MY 2022/23) is imported during a three-month period from March to May, once the FTA seasonal duty starts on March 1. Since 2018, a zero-percent duty has been applied for U.S. oranges between March 1 and August 31 under the Korea-U.S. Free Trade Agreement (KORUS), with no quota. From September 1 to February 28, U.S. oranges are imported under the KORUS tariff rate quota (TRQ), which will be 3,461 MT in MY 2023/24 and increases by 3 percent annually. Oranges that come in within the quota are duty-free, while the out-of-quota rate is 50 percent. Korea manages additional orange TRQs and allows seasonal duty-free imports of oranges from other FTA partners, notably Australia and the European Union, as summarized in Annex II.

Table 9.
Korea: Import Matrix for Oranges

| Import Trade Matrix |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Country: Korea |  |  |  |  |
| Commodity: Orange (HS 0805.10) |  |  | Unit: MT \& US\$1,000 |  |
| Imports from | $\begin{gathered} \text { MY 2021/22 } \\ \text { (Oct. } 21-\text { Sep. } 22 \text { ) } \\ \hline \end{gathered}$ |  | MY 2022/23(Oct. 22-Sep. 23) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 67,888 | 149,288 | 70,994 | 147,362 |
| Others |  |  |  |  |
| South Africa | 1,163 | 1,317 | 1,957 | 2,017 |
| Australia | 6,740 | 11,186 | 12,275 | 19,881 |
| Spain | 1,334 | 1,893 | 883 | 1,623 |
| Chile | 420 | 619 | 209 | 346 |
| Other | 265 | 197 |  |  |
|  |  |  |  |  |
| Total for Others | 9,922 | 15,212 | 15,562 | 24,036 |
| Grand Total | 77,810 | 164,500 | 86,556 | 171,398 |

Source: Trade Data Monitor LLC.

## Orange Prices

Korea's main late-maturing citrus variety 'Hallabong' overlaps with the FTA duty-free season from March to June and thus competes directly with imported oranges. The average wholesale price for 'Hallabong' used to be around 20 to 25 percent higher than the price of imported navel oranges (mainly from California) until 2021. However, these two prices became inverted in 2022, as unfavorable exchange rates increased import prices and navel oranges suffered from higher production costs and supply chain issues after the COVID-19 pandemic. Meanwhile, 'Hallabong' prices decreased with improved supply. As more Korean citrus growers are willing to shift from open field cultivation to greenhouse production, late-maturing citrus varieties will
continue to diversify, and their prices will be more competitive with navel oranges during the early FTA duty-free season.

Figure 3. Price Comparison of Imported Oranges and Korean Hallabong Tangerines
(Average wholesale price from January to June)


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

Table 15. Korea: Monthly Wholesale Prices for Domestic Hallabong \& Imported Oranges
(Unit: Korean Won per Kilogram)

| Month | Imported Navel 1/ |  | Hallabong 2/ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 2023 | 2022 | 2023 |
| Jan. | 4,333 | 4,713 | 4,989 | 4,536 |
| Feb. | 4,423 | 4,589 | 3,315 | 3,461 |
| Mar. | 3,721 | 3,982 | 3,214 | 3,452 |
| Apr. | 4,208 | 3,877 | 3,120 | 3,761 |
| May | 4,116 | 3,873 | 3,111 | 3,635 |
| Jun. | 4,069 | 3,837 | - | - |

[^0]Orange Juice
Table 16.
Production, Supply and Distribution of Orange Juice

| Orange Juice Market Year Begins Korea, Republic of | 2021/2022 |  | 2022/2023 |  | 2023/2024 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct 2021 |  | Oct 2022 |  | Oct 2023 |  |
|  | 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) | 5500 | 5500 | 5500 | 5500 | 0 | 7500 |
| Production (MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Imports (MT) | 18118 | 18118 | 17000 | 20300 | 0 | 17600 |
| Total Supply (MT) | 23618 | 23618 | 22500 | 25800 | 0 | 25100 |
| Exports (MT) | 400 | 400 | 400 | 400 | 0 | 400 |
| Domestic Consumption (MT) | 17718 | 17718 | 17800 | 17900 | 0 | 18200 |
| Ending Stocks (MT) | 5500 | 5500 | 4300 | 7500 | 0 | 6500 |
| Total Distribution (MT) | 23618 | 23618 | 22500 | 25800 | 0 | 25100 |
|  |  |  |  |  |  |  |
| (MT) |  |  |  |  |  |  |

## Orange Juice Production

There is no domestic production of frozen concentrated orange juice (FCOJ) in Korea. However, the Korean beverage industry frequently combines imported FCOJ with domestically produced tangerine juice concentrate to produce blended citrus beverages.

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

Korea's consumption of orange concentrate for fruit juice processing is expected to reach 18,200 MT in MY 2023/24, a slight increase from the previous year. For the past several years, the Korean beverage market has experienced low demand for fruit juice due to growing health consciousness among consumers favoring lower sugar content drinks. In addition, the recent increase in global orange juice prices has also led some domestic beverage companies to try to substitute orange juice concentrates with local citrus concentrates. Nonetheless, orange juice remains the most preferred fruit juice among Korean consumers.

## Orange Juice Trade

In MY 2023/24, Korea's FCOJ imports are forecast to decline by 13.3 percent to 17,600 MT due to high global orange juice prices caused by reduced U.S. FCOJ production and high carry-over stocks. Korea's FCOJ imports for MY 2022/23 have been revised up to 20,300 MT based on official trade data reported to Trade Data Monitor, up 12 percent from MY 2021/22. With FCOJ consumption unlikely to increase significantly in this mature market, the additional imports are expected to buffer stocks against potential FCOJ supply shortages or price increases in the future.

In MY 2022/23, Korea imported 15,235 MT of FCOJ from Spain, up 30 percent from the previous year, accounting for 75 percent of total imports. After Spain, the United States was the next largest supplier of orange juice concentrate to the Korean market in MY 2022/23 with 8 percent market share. The United States was the top supplier until MY 2016/17, but its market share has declined gradually due to the supply impacts of citrus greening disease in Florida. As U.S. orange juice exports continue to decline, Spain is expected to remain Korea's top supplier.

Table 17.
Korea: Import Matrix for FCOJ

| Import Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Commodity: FCOJ (2009.11/12/19) | Unit: MT \& US\$1,000 |  |  |  |
| Korea Imports <br> from | MY 2021/22 <br> (Oct. 21 - Sep. 22) |  | MY 2022/23 <br> (Oct. 22 - Sep. 23) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 3,359 | 9,165 | 1,659 | 5,226 |
| Others |  |  |  |  |
| Spain | 11,710 | 22,618 | 15,235 | 35,121 |
| Brazil | 171 | 346 | 638 | 2,070 |
| Australia | 582 | 1,531 | 822 | 1,957 |
| Thailand | 812 | 1,132 | 828 | 1,202 |
| Other | 1,484 | 3,102 | 1,118 | 2,354 |
|  |  |  |  |  |
| Total for Others | 14,759 | 28,729 | 18,641 | 2,354 |
| Grand Total | 18,118 | 37,894 | 20,300 | 47,930 |

[^1]
## Lemons

## Lemon Production

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

## Lemon Trade

Korea's lemon imports in MY 2023/24 are expected to be around 18,000 MT, down about 1,000 MT from the previous year, due to lower production in the United States, the main supplier, and higher import prices because of increased production costs and unfavorable exchange rates. In MY 2022/23, lemon imports were down 1,494 MT year-on-year to 19,257 MT due to lower production in the United States.

Figure 4. Korea's Lemon Imports by Year


Source: Korea Customs Service \& Trade Data Monitor LLC

Table 18.
Korea: Import Matrix for Lemons

| Import Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Commodity: Lemon (0805.50.10) | Unit: MT \& US\$1,000 |  |  |  |
| Korea Imports <br> from | MY 2021/22 <br> (Oct. 21 - Sep. 22) |  | MY 2022/23 <br> (Oct. 22 - Sep. 23) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 15,797 | 35,180 | 13,080 | 29,499 |
| Others |  |  |  |  |
| Chile | 4,764 | 8,868 | 5,510 | 10,230 |
| Other | 190 | 379 | 667 | 1,065 |
|  |  |  |  |  |
| Total for Others | 4,954 | 9,247 | 6,177 | 11,295 |
| Grand Total | 20,751 | 44,427 | 19,257 | 40,794 |

Source: Trade Data Monitor LLC.

## Grapefruit

## Grapefruit Production

There is no domestic grapefruit production in Korea.

## Grapefruit Trade

Korea's grapefruit imports for the MY 2023/24 are forecast at 11,700 MT, down 1,000 MT from the previous year, due to lower U.S. production and transportation instability caused by the Israeli-Hamas war since October 2023. The United States lost the top supplier position in MY 2021/22 due to reduced production in Florida. South Africa recently became the top supplier with better price competitiveness, followed by Israel.

Figure 5. Korea's Grapefruit Imports by Year


Source: Korea Customs Service \& Trade Data Monitor LLC

Table 19.
Korea: Import Matrix for Grapefruit

| Import Trade Matrix |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Commodity: Grapefruit (0805.40) | Unit: MT \& US\$1,000 |  |  |  |
| Korea Imports <br> from | MY 2021/22 <br> (Oct. 21 - Sep. 22) |  | MY 2022/23 <br> (Oct. 22 - Sep. 23) |  |
| Country | Volume | Value | Volume | Value |
| U.S. | 5,223 | 10,712 | 2,727 | 5,189 |
| Others |  |  |  |  |
| Israel | 3,483 | 5,290 | 4,724 | 6,840 |
| S. Africa | 6,145 | 8,063 | 5,268 | 5,738 |
| Mexico | 0 | 0 | 0 | 0 |
|  |  |  |  |  |
| Total for Others | 9,629 | 13,353 | 9,992 | 12,577 |
| Grand Total | 14,852 | 24,065 | 12,719 | 17,766 |

Source: Trade Data Monitor LLC.

Annex I. Additional Citrus Tables
Table 20.
Korea's Citrus Production by Year 1/

| Year | Area (ha) | Production (MT) | Farm Household | Gross Income <br> (Mil.won) |
| :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2021 | 19,978 | 613,118 | 30,799 | $1,027,131$ |
| 2022 | 19,871 | 581,858 | 30,912 | $1,041,846$ |
| $20232 /$ | 19,720 | 570,000 | N/A | N/A |

1/ Calendar year basis including greenhouse
2/ Preliminary forecast by FAS Seoul
Source: Jeju Provincial Government
Table 23.
Korea: Citrus Utilization (Unit: MT)

| Year | Total | Fresh | Processing | Other 1/ |
| :---: | :---: | :---: | :---: | :---: |
| 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 |
| 2021 | 613,118 | 307,025 | 66,280 | 239,813 |
| 2022 | 581,858 | 270,404 | 65,640 | 245,814 |

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

Table 22.
Korea: Purchase Price of Processing Tangerine Oranges (Korean Won/kg)

| Year | Price |
| :---: | :---: |
| 2015 | 160 |
| 2016 | 160 |
| 2017 | 180 |
| 2018 | 180 |
| 2019 | 180 |
| 2020 | 180 |
| 2021 | 180 |
| 2022 | 180 |
| 2023 | 180 |

Source: Jeju Citrus Growers' Cooperative

Table 23.
Korea: Citrus Production as Ratio to Total Fruit Production
(Unit: 1,000 MT, Ratio: Percent)

| Year | Total Fruits | Citrus | Ratio |
| :---: | :---: | :---: | :---: |
| 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 |
| 2021 | 2,109 | 636 | 30.2 |
| 2022 | 2,206 | 582 | 26.4 |

Source: Korea Statistical Information Service (KOSIS)
Table 24.
Korea: Total Fruits and Citrus Per Capita Consumption

| Year | Total Fruits (Kg) | Total Tangerine (Kg) |
| :---: | :---: | :---: |
| 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 | 51.5 | 12.6 |
| 2021 | 54.4 | 12.2 |
| 2022 | N/A | N/A |

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

## Annex II. Tariff Rates and Quotas

Table 25.
Korea: Import Quota and Tariff for Fresh Orange (Unit: MT, \%)

| Year | Quota | In-quota Tariff | Out-quota Tariff |
| :---: | :---: | :---: | :---: |
| 2004 | 57,017 | 50 | 50 |
| 2021 | 57,017 | 50 | 50 |
| 2022 | 57,017 | 50 | 50 |
| 2023 | 57,017 | 50 | 50 |
| 2024 | 57,017 | 50 | 50 |

Table 26.
Korea: Import Quota and Tariff for Other Citrus (Unit: MT, \%)

| Year | Quota | In-quota Tariff | Out-quota Tariff |
| :---: | :---: | :---: | :---: |
| 2004 | 2,097 | 50 | 144 |
| 2021 | 2,097 | 50 | 144 |
| 2022 | 2,097 | 50 | 144 |
| 2023 | 2,097 | 50 | 144 |
| 2024 | 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.

Table 27.
Korea: Import Quota under the KORUS FTA (Unit: MT, \%)


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

Table 28.
Korea: Import Quota under the Korea-EU FTA (Unit: MT, \%)

| KOR-EU FTA | Description | Base Rate | 2022 | 2023 | 2024 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HS 0805100000 | Oranges |  |  |  |  |
| March 1 - end Aug |  | 50 | Zero | Zero | Zero |
| Sept 1- end Feb |  |  |  |  |  |
| TRQ (MT) |  |  | 60 | 60 | 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 29.
Korea: Import Quota under the Korea-Australia FTA (Unit: MT, \%)

| KOR-AUS FTA | Description | Base Rate | 2022 | 2023 | 2024 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 .

## Annex III. Prices and Exchange Rates

Table 30.
Korea: Average Retail Prices for High-Quality Imported Oranges (Navel), Nationwide (Unit: Korean Won per 10 Fruits)

| Month Year | 2021 | 2022 | 2023 | \% Change from the <br> previous year |
| :---: | :---: | :---: | :---: | :---: |
| Jan | 15,516 | 15,855 | - | - |
| Feb | 14,880 | 14,914 | 15,766 | 5.7 |
| Mar | 11,347 | 13,061 | 16,242 | 24.4 |
| Apr | 10,442 | 15,681 | 15,908 | 1.4 |
| May | 10,267 | 15,528 | 15,755 | 1.5 |
| Jun | 10,079 | 14,874 | 15,158 | 1.9 |
| Jul | 9,759 | 13,779 | 15,295 | 11.0 |
| Aug | - | - | - | - |
| Sep | - | - | - | - |
| Oct | - | - | - | - |
| Nov | - | - | - | - |
| Dec | - | - | - | - |

Source: Agricultural \& Fishery Marketing Corporation

Table 31.
Korea: Average Wholesale Prices for Imported Navel Oranges
(Unit: Korean Won per 18 Kilogram box)

| Month | High Quality |  | Medium Quality |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2022 | 2023 | 2022 | 2023 |
| Jan. | 78,000 | 84,842 | 73,000 | 80,127 |
| Feb. | 79,606 | 82,605 | 74,606 | 78,161 |
| Mar. | 66,982 | 71,676 | 61,154 | 67,246 |
| Apr. | 75,736 | 69,784 | 71,367 | 65,023 |
| May | 74,079 | 69,708 | 69,879 | 65,214 |
| Jun. | 73,247 | 69,073 | 68,722 | 64,282 |
| Jul. | - | - | - | - |
| Aug. | - | - | - | - |
| Sep. | - | - | - | - |
| Oct. | - | - | - | - |
| Nov. | - | - | - | - |
| Dec. | 84,700 | - | 79,700 | - |

Source: Agricultural \& Fishery Marketing Corporation

Table 32.
Korea: Monthly Average Foreign Exchange Rate
(Unit: Korean Won / 1 U.S. \$)

| Month | 2021 | 2022 | 2023 |
| :---: | :---: | :---: | :---: |
| Jan. | 1097.49 | 1194.01 | 1247.25 |
| Feb. | 1111.72 | 1198.34 | 1270.74 |
| Mar. | 1131.02 | 1221.03 | 1305.73 |
| Apr. | 1119.40 | 1232.34 | 1320.01 |
| May | 1123.28 | 1269.88 | 1328.21 |
| Jun. | 1121.30 | 1277.35 | 1296.71 |
| Jul. | 1143.98 | 1307.40 | 1286.30 |
| Aug. | 1160.34 | 1318.44 | 1318.47 |
| Sep. | 1169.54 | 1391.59 | 1329.47 |
| Oct. | 1182.82 | 1426.66 | 1350.69 |
| Nov. | 1182.91 | 1364.66 | - |
| Dec. | 1183.70 | 1296.22 | - |

Source: Industrial Bank of Korea

## Attachments:

No Attachments


[^0]:    1/ High quality navel oranges
    2/ Late variety Unshu oranges
    Source: Agricultural \& Fishery Marketing Corporation / Jeju Special Self-Governing Province Citrus Marketing \& Shipping Association

[^1]:    Source: Trade Data Monitor LLC.

