



USDA Foreign Agricultural Service

# GAIN Report

Global Agriculture Information Network

Required Report - public distribution

**Date:** 5/12/2003

**GAIN Report Number:** KS3020

## Korea, Republic of

## Citrus

## Semi-Annual

## 2003

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**Report Highlights:**

Korea's 2002 citrus crop reached a record level of 780,000 MT. Local juice production tripled to roughly 1/6th of total juice supply in response to the bumper crop. Despite various programs intended to reduce production and increase prices, the 2003 crop is still forecast to reach 714,000 MT.

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Includes PSD Changes: Yes  
Includes Trade Matrix: Yes  
Semi-Annual Report  
Seoul [KS1]  
[KS]

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## Citrus Production

### Local Citrus Situation

Market Year (MY) 2002/2003 Jeju citrus production including late varieties and green house production is projected at 780,000 metric tons (MT), a 23-percent increase over the initial forecast of 630,000 MT. Such a surprisingly high level of production was not expected since MY 2002 was an off harvest year within the cyclical production pattern. Actual production higher than expected production caused market prices to plummet. Jeju regional authorities tried to remove excess fruits and improve quality through programs to sort and pick-up fruits at orchards and remove some trees from production. However, the impact of the programs was insufficient to reduce the volume of fruit entering the fresh market.

To prop up market prices, the provincial government decided to purchase and remove 97,000 MT of citrus fruit from the fresh market of which 40,000 MT were earmarked for processing. Government authorities also purchased 4,000 MT of fruit for North Korean aid and 2,110 MT for the Korean army to boost market prices by augmenting processors' purchases of 112,148 MT of citrus. However, the efforts were insufficient to sustain market prices, which reacted sharply to the unexpected huge volume of citrus production and prevalence of low quality fruits resulting from unfavorable weather conditions in November and December.

MY 2003 Jeju citrus production is forecast at 714,000 including 662,000 MT of out door Onshu (Korean tangerine) production. Based upon historical production patterns, MY 2003 is expected to be a bumper crop year. The provincial government and producer groups already announced their plan to reduce the total volume entering the fresh market to 600,000 MT, inclusive of 50,000 MT of indoor Onshu and late varieties. The plan consists of three steps. First, between January and May, 1,416 hectares (ha) of citrus farms will be closed to production, tree thinning will be conducted on 2,000 ha of farms, and a variety improvement program will be implemented. Secondly, an orchard set-aside program will be in place until July. The last step is to organize orchard-site fruit pick-up and sorting out of low quality fruits. The provincial government will provide organic fertilizer they value a 1 million Korean won per hectare to farms that participate in a tree thinning program. The provincial government intends to reduce the production area to 20,000 ha by 2005 and the production level to about 500,000 MT.

There has been discussion among academics and government officials on seeking a way to revive the Jeju citrus industry. The consensus view is that Jeju has to prepare for a consumer-oriented market situation by focusing on variety improvement, environmental friendly farming, year-round production of various varieties in small quantities, changing packages into smaller sizes of 5 kilograms or 10 kilograms and collaboration of small packing houses.

The National Agricultural Cooperative Federation (NACF) is initiating a plan to introduce a citrus check-off program. For this program, NACF will setup a "Citrus Check Off Program Committee" consisting of representatives from NACF member cooperatives. The Committee would establish and oversee the system for the check off program. NACF plans to create a fund of 2 billion Korean won (approximately 0.17 million US dollars) in 2003. One percent of the farm gate price from each farmer and cooperative will be gathered to generate 1 billion Korean won of producer funds which will be matched by another 1 billion Korea won from the government. This money will be used for market promotion, export support, price stabilization, development of citrus industry, etc.

CY 2003 Onshu greenhouse production area is projected at 504-hectares, a 12-hectare decrease from the previous year. High costs of maintaining greenhouse production and low

market prices of fruits discourage farmers from keeping production area. Farmers are quickly shifting to production of late varieties such as Hallabong, which do not need additional heating but offer higher profits. The total production of late varieties in MY 2003 is expected to jump to 13,034 MT from the previous year's level of 11,131 MT. The shift to production of late varieties is creating concern that over production of late varieties could drive down market prices.

### Export

Jeju exceeded its MY 2002 export target of 7,000 MT as exports of Onshu exceeded 9,000 MT. However, 1,210 MT out of 1,600 MT of citrus exports to the U.S. were refused entry due to presence of citrus canker. The shipments were diverted to Canada. Suspension of exports to the United States is cited as causing a loss of approximately 1.2 million US dollars to Jeju producers. As of March 30, 2003, the total export of regular Onshu reached 9,191 MT, including 4,825 MT to Canada and 2,215 MT to Russia. Jeju's MY 2003 exports are forecast at 11,000 MT, inclusive of 1,000 MT of greenhouse production, mainly focusing on Canada and Russia.

Findings of citrus canker in citrus exports to the U.S. in December 2002 resulted in not only a suspension of citrus exports, but also a delay in the prospects for opening exports of Jeju citrus to the five citrus producing states in the United States. Before the December 2002 incident, Jeju authorities had high expectations to begin exporting to the five U.S. citrus producing states in MY 2003. However, it appears that resumption of exports will not take place until Korea is able to ensure that sufficient measures have been taken to prevent citrus canker from re-occurring.

### Import

In CY 2002, fresh orange imports totaled 102,654 MT, of which 43,669 MT entered under Korea's Minimum Market Access (MMA) quota. CY 2002 was the first year that the fresh orange import exceeded 100,000 MT and the third consecutive year that fresh orange non-quota imports exceeded quota imports. U.S. oranges continued to dominate the market accounting for 96-percent of the total import.

As of April 25, CY 2003 orange imports totaled 65,679 MT including 40,000 MT of in-quota imports all of which were U.S. origin. A total of 50,260 MT of the MMA quota was auctioned and awarded to importers for CY 2003. Through April 25, the pace of imports is three-percent up from the same period in 2002. Early this year, importers optimistic about prospects for the Korean market thanks to the availability of US navel oranges at attractive prices. They expected that CY 2003 orange imports would increase 10 to 30-percent. However, the slowing economy and perceptions that US navel quality this year is not meeting consumers' high taste have limited imports prospects. Because of the Iraq war, importers say they have been facing difficulties in getting shipping containers from the west coast of the United States. Importer forecast that the CY 2003 orange import would remain at the level of 2002 or possibly 5 to 10-percent more at most.

Jeju Citrus Grower's Agricultural Cooperative (JCGAC) held an auction for the total MMA quota designated to Jeju as they did last year. Because of the tariff difference between in-quota and out-of-quota imports has narrowed to 4.9-percent, the advantage to importing in-quota product is eroding. On February 13, 17 importing companies participated in the quota auctions and 15 companies were awarded 50,260 MT in total. Like last year, Jeju set the delivery due date as September 30, 2003 to avoid direct competition with the local citrus harvest. As the major variety of US orange imports are navel, whose season ends in April, the shipment due date does not seem to pose a serious constraint to US orange exports.

The MMA quota will phase out in 2004 when the MMA and out of quota tariff will be equally 50-percent.

For valencia oranges, interest in the fresh squeezed juice market is increasing as some big supermarkets are planning to open fresh juice bars in their outlets. Although the fresh squeezed juice market is still too undeveloped to attract large interest, it does present a potential market development possibility for valencia oranges. With appropriate marketing approaches, it may be possible to build a market for valencias used for fresh juice.

### **Competitors**

Australia, New Zealand, Japan, and South Africa are competing with the United States in the fresh orange import market, capturing four percent of the total imports in CY 2002. Compared to CY 2001, Australian navel imports have slightly more market share. Exports from other countries were insignificant. In 2003, US navel oranges continue to dominate the Korean orange market based upon consumer perceptions of good quality, familiarity, and good physical appearance.

Spain has been negotiating phytosanitary protocols for oranges while Argentina and Egypt have initiated discussion with Korea for protocols on various citrus imports. Chile has approached Korean authorities about protocols for lemons. Substantial progress has been made with Spain though the Korean quarantine authority does not expect the protocol agreement to allow imports of Spanish oranges in the near future. Spanish clementines are very similar to the Onshu oranges produced in Jeju.

Korea and Chile signed a free trade agreement in 2002. However, Korea's National Assembly has not ratified the agreement yet. Concerning citrus fruits, Korea agreed to a 100 MT tariff rate quota for Chilean mandarins with the possibility for additional liberalization to be discussed after the DDA negotiations are completed. Korea also agreed to eliminate tariffs on lemons from Chile in 10 years. Liberalization of FOJC trade under the free trade agreement will be discussed after completion of the DDA negotiations. Korean industry has expressed interest in importing Chilean lemons once a phytosanitary protocol for lemons is completed, as they are perceived to be price competitive with US lemons.

### **Phytosanitary Issues**

The National Plant Quarantine Service (NPQS) still maintains a 100-percent fumigation policy for imported California oranges owing to the on-going problems with red scale.

In December 2002, Jeju shipped 1,600 MT of citrus to the U.S. but of 1,210 MT was refused entry due to wide spread presence of citrus canker. USDA's Animal Plant Health Inspection Service (APHIS) suspended exports of Jeju citrus to the United States. APHIS is working with NPQS to create conditions for resumption of Jeju citrus exports. NPQS will complete a citrus canker survey by the end of April and provide it to APHIS. Also, NPQS hopes to remove all citrus canker tainted trees by the end of May. If all details are worked out, Korean imports to the U.S. could resume later this year.

## FOJC Market Situation

In MY 2002, overall orange juice consumption is forecast to increase 10-percent despite the slowing economic situation. Consumption of premium cold chain orange juice made of non-frozen concentrate has continued to show rapid expansion since CY 2000. Similarly, orange juice made from Jeju citrus concentrate has continued to show rapid growth since last year.

In CY 2002, premium cold chain orange juice recorded a 25-percent sales increase and it is expected to keep increasing at least 10-percent this year. Orange juice made of Jeju mandarins was introduced in CY 2002 with extremely positive response from consumers. Emphasizing the image of locally produced fresh citrus the Jeju juice attracts consumers with a much sweeter taste than regular orange juice at competitive prices. Most local juice manufacturers introduced Jeju citrus juice last year but could not fully satisfy market demand owing to a short supply of Jeju citrus concentrates. The juice industry forecasts that the Jeju citrus juice market in CY 2003 will expand up to 100 billion Korean won (approximately 83 million US dollars), which is double the market size in CY 2002.

In March 2003, the Jeju provincial government initiated construction of a second processing facility on the west coast of Jeju Island. This plant is expected to process about 30,000 MT of citrus annually and help citrus farmers in western Jeju who have logistical constraints in using the existing government-built processing facility on the east coast of Jeju Island. The existing government-build facility and other private processing facilities have a maximum capacity of processing roughly 100,000 MT of fruit annually. Along with other private processing facilities, the Jeju government hopes to utilize 15 to 20-percent of annual production for juicing. The government plans to complete construction in 2003 and start operation for fruits produced in MY 2003.

In 2003, Jeju's existing processing facility plans to export 300 MT of Jeju citrus juice concentrates to Japan. Annually supply of 300 MT of concentrates to Japan for five years is expected. Exports to other countries such as Russia remain insignificant.

**PS&D**

**PS&D for Fresh Tangerines**



Tanger.wk4

PS&D for FOJC



Orange.wk4

## Production

## Korea: Citrus Production Situation 1/

| Year    | Area (HA) | Production (MT) | Farm Household | Gross Income (Mil.won) |
|---------|-----------|-----------------|----------------|------------------------|
| 1996    | 25,802    | 480,000         | 36,055         | 607,900                |
| 1997    | 25,781    | 693,200         | 36,050         | 400,862                |
| 1998    | 25,860    | 543,980         | 36,212         | 515,800                |
| 1999    | 25,823    | 638,740         | 36,073         | 325,709                |
| 2000    | 25,796    | 563,341         | 36,590         | 370,811                |
| 2001    | 25,408    | 646,023         | 36,580         | 361,700                |
| 2002 2/ | 25,207    | 780,000         | 35,078         | N/A                    |
| 2003 2/ | 24,000    | 714,000         | 35,000         | N/A                    |

1/ Calendar year basis including greenhouse

2/ Preliminary

Source: Jeju Provincial Government & Jeju Citrus Grower's Cooperative

## Korea: Citrus Utilization (Unit: MT)

| Year    | Total   | Fresh   | Processing | Other 1/   |
|---------|---------|---------|------------|------------|
| 1997    | 693,200 | 617,747 | 13,785     | 61,668     |
| 1998    | 543,980 | 512,586 | 5,012      | 26,382     |
| 1999    | 638,740 | 567,041 | 33,142     | 38,557 2/  |
| 2000    | 563,430 | 502,838 | 26,526     | 33,124     |
| 2001    | 646,023 | 527,326 | 47,445     | 71,252 3/  |
| 2002 5/ | 767,951 | 521,493 | 127,239    | 119,219 4/ |

1/ Other - composed of self consumption, loss and discarded citrus

2/ Other - including purchase by Jeju Provincial Government

3/ Other - including purchase by Central Government for Aid to North Korea

4/ Other - including 2/ and 3/

5/ As of March 30, 2003

Source: Jeju Provincial Government

**Korea: Citrus Greenhouse Production Situation**

| Year | Area (HA) | Production (MT) | Gross Income (Million Won) | Household | Price (Won/kg) |
|------|-----------|-----------------|----------------------------|-----------|----------------|
| 1995 | 425       | 15,851          | 46,500                     | 1,537     | 2,800          |
| 1996 | 497.7     | 23,093          | 74,659                     | 1,601     | 3,233          |
| 1997 | 554.2     | 27,461          | 85,077                     | 1,762     | 3,098          |
| 1998 | 554       | 26,812          | 61,900                     | 1,763     | 2,309          |
| 1999 | 545       | 28,129          | 64,700                     | 1,646     | 2,300          |
| 2000 | 567       | 27,655          | 68,200                     | 1,777     | 2,466          |
| 2001 | 512       | 27,158          | 69,300                     | 1,546     | 2,550          |
| 2002 | 516       | 27,046          | N/A                        | 1,573     | N/A            |
| 2003 | 504       | 26,800          | N/A                        | N/A       | N/A            |

Source: Jeju Provincial Government & Korea Rural Economic Institute

**Korea: 2001/2002 Citrus Variety Production Situation**

(Unit: HA, MT)

| Year         | Acreage |        | Production |      |
|--------------|---------|--------|------------|------|
|              | 2001    | 2002   | 2001       | 2002 |
| Very early   | 1,844   | 1,872  | 41,196     | N/A  |
| Early        | 20,719  | 20,580 | 537,979    | N/A  |
| Normal       | 1,986   | 1,781  | 55,717     | N/A  |
| Late         | 859     | 974    | 11,131     | N/A  |
| <b>Total</b> | 25,408  | 25,207 | 646,023    | N/A  |

Source: Jeju Provincial Government & Jeju Citrus Grower's Cooperative

**Korea: Purchasing Price of Processing Tangerine Orange**

(Korean Won/kg)

| Year | Price        |
|------|--------------|
| 1995 | 220          |
| 1996 | 220          |
| 1997 | 100          |
| 1998 | 100          |
| 1999 | 100          |
| 2000 | 80           |
| 2001 | 100 / 180 1/ |
| 2002 | 100 / 200 2/ |

1/ 100 Korean Won for compensation for discarding fruits at farms and for purchase for processing

180 Korean Won for government purchase for North Korea Aid and processing

2/ 100 Korean Won for purchase for processing

200 Korean Won for government purchase of 97,000 MT to remove fruits from fresh market

Source: Jeju Citrus Grower's Cooperative

**Korea: Citrus Production as Ratio to Total Fruit Production**

(Unit: 1,000 MT, Ratio: Percent)

| Year | Total Fruits | Citrus | Ratio |
|------|--------------|--------|-------|
| 1990 | 1,765        | 493    | 30.4  |
| 1995 | 2,150        | 615    | 28.6  |
| 1996 | 2,003        | 480    | 24.0  |
| 1997 | 2,330        | 693    | 29.7  |
| 1998 | 2,022        | 544    | 26.9  |
| 1999 | 2,229        | 639    | 28.0  |
| 2000 | 2,429        | 564    | 23.0  |
| 2001 | 2,488        | 645    | 25.0  |
| 2002 | 2,500        | 643    | 25.0  |

Source: National Agricultural Quality Service, Ministry of Agriculture & Forestry

**Korea: Total Fruits and Citrus Per Capita Consumption**

| <b>Year</b> | <b>Total Fruits</b> | <b>Citrus</b> |
|-------------|---------------------|---------------|
| 1996        | 52.3 Kg             | 11.9 Kg       |
| 1997        | 57.9 Kg             | 14.9 Kg       |
| 1998        | 49.2 Kg             | 11.9 Kg       |
| 1999        | 55.7 Kg             | 13.8 Kg       |
| 2000        | 58.4 Kg             | 14.0 Kg       |
| 2001        | 59.2 Kg             | 15.5 Kg       |

Source: Ministry of Agriculture & Forestry

**Tariff**

On July 1, 1997, Korea liberalized the fresh orange market. Applied tariffs for in-quota and out-of quota imported oranges and other citrus in Korea's Uruguay Round Country Schedule follow;

**Korea: Import Quota and Tariff for Fresh Orange**

(Unit: MT, %)

| Year | Quota  | In-quota Tariff | Out-quota Tariff |
|------|--------|-----------------|------------------|
| 2002 | 45,052 | 50              | 59.8             |
| 2003 | 50,684 | 50              | 54.9             |
| 2004 | 57,020 | 50              | 50               |

**Korea: Import Quota and Tariff for Other Citrus 1/**

(Unit: MT, %)

| Year | Quota | In-quota Tariff | Out-quota Tariff |
|------|-------|-----------------|------------------|
| 2002 | 1,909 | 50              | 147.2            |
| 2003 | 2,002 | 50              | 145.6            |
| 2004 | 2,097 | 50              | 144              |

1/ HS 0805.20.1000, HS 0805.20.9000, HS 0805.90.0000

Note: On February 13, 2003, the total MMA quota for oranges was auctioned off. 50,260 MT out of 50,684 MT were awarded to 15 companies. As of April 24, 2003, a total of 65,679 MT including approximately 40,000 MT of the 2003 MMA quota have been imported.

**Korea: Monthly Orange Imports**

(Unit: Metric Tons)

| Year | Jan   | Feb   | Mar   | Apr   | May   | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec   |
|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| '03  | 13231 | 16006 | 36442 |       |       |      |      |      |      |      |      |       |
| '02  | 4673  | 8469  | 27190 | 24865 | 17323 | 5643 | 2586 | 1996 | 2111 | 1066 | 865  | 4866  |
| '01  | 5140  | 11895 | 17378 | 32655 | 14450 | 2671 | 1474 | 1087 | 1510 | 1685 | 588  | 446   |
| '00  | 2389  | 13041 | 14524 | 23407 | 20861 | 5230 | 6846 | 2284 | 2297 | 3167 | 1351 | 3742  |
| '99  | 792   | 633   | 2076  | 2943  | 7269  | 3261 | 94   | 337  | 1044 | 426  | 115  | 11863 |

Source: Korea Customs Service &amp; National Plant Quarantine Service

## Trade Matrix

## Import Matrix for Oranges

| Import Trade Matrix                   |   |            |   |            |
|---------------------------------------|---|------------|---|------------|
| <b>Country: Korea</b>                 |   |            |   |            |
| <b>Commodity: Orange (HS 0805.10)</b> |   |            | <b>Unit: MT &amp; U\$1,000</b>            |            |
| <b>Imports for</b>                    | <b>MY 2001/02<br/>(Oct. 01 - Sep. 02)</b> |            | <b>MY 2002/03<br/>(Oct. 02 - Feb. 03)</b> |            |
| <b>Country</b>                        | <b>Vol</b>                                | <b>Val</b> | <b>Vol</b>                                | <b>Val</b> |
| <b>U.S.</b>                           | 95,351                                    | 81,776     | 36,268                                    | 27,068     |
| <b>Others</b>                         |   |            |   |            |
| South Africa                          | 1,799                                     | 1,218      | 135                                       | 92         |
| New Zealand                           | 329                                       | 311        | 61  | 59         |
| Australia                             | 1,875                                     | 1,875      | 546                                       | 552        |
| PRC                                   | 57  | 36         | 35  | 26         |
| Cameron                               | 10  | 11         | 0   | 0          |
|                                       |   |            |   |            |
| <b>Total for<br/>Others</b>           | 4,070                                     | 3,451      | 777                                       | 729        |
| <b>Grand Total</b>                    | 99,421                                    | 85,227     | 37,045                                    | 27,797     |

Source: Korea Customs Service

## Import Matrix for Lemon

| Import Trade Matrix           |                                   |       |                                   |       |
|-------------------------------|-----------------------------------|-------|-----------------------------------|-------|
| Country: Korea                |                                   |       |                                   |       |
| Commodity: Lemon (0805.50.10) |                                   |       | Unit: MT & U\$1,000               |       |
| Imports for                   | MY 2001/02<br>(Oct. 01 - Sep. 02) |       | MY 2002/03<br>(Oct. 02 - Feb. 03) |       |
| Country                       | Vol                               | Val   | Vol                               | Val   |
| U.S.                          | 3,610                             | 4,828 | 1,555                             | 1,967 |
| <b>Others</b>                 |                                   |       |                                   |       |
| New Zealand                   | 180                               | 225   | 22                                | 24    |
| Australia                     | 52                                | 51    | 0                                 | 0     |
|                               |                                   |       |                                   |       |
| <b>Total for Others</b>       | 232                               | 276   | 22                                | 24    |
| <b>Grand Total</b>            | 3,842                             | 5,104 | 1,577                             | 1,991 |

Source: Korea Customs Service

## Import Matrix for Grapefruit

| Import Trade Matrix             |                                   |       |                                   |     |
|---------------------------------|-----------------------------------|-------|-----------------------------------|-----|
| Country: Korea                  |                                   |       |                                   |     |
| Commodity: Grapefruit (0805.40) |                                   |       | Unit: MT & U\$1,000               |     |
| Imports for                     | MY 2001/02<br>(Oct. 01 - Sep. 02) |       | MY 2002/03<br>(Oct. 02 - Feb. 03) |     |
| Country                         | Vol                               | Val   | Vol                               | Val |
| U.S.                            | 1,724                             | 1,464 | 764                               | 742 |
| <b>Others</b>                   |                                   |       |                                   |     |
| Israel                          | 88                                | 67    | 233                               | 217 |
|                                 |                                   |       |                                   |     |
| <b>Total for Others</b>         | 88                                | 67    | 233                               | 217 |
| <b>Grand Total</b>              | 1,812                             | 1,531 | 997                               | 959 |

Source: Korea Customs Service

## Export Matrix for Korean Tangerine

| Export Trade Matrix                  |                                   |       |                                   |       |
|--------------------------------------|-----------------------------------|-------|-----------------------------------|-------|
| Country: Korea                       |                                   |       |                                   |       |
| Commodity: Tangerine (HS 0805.10/20) |                                   |       | Unit: MT & U\$1,000               |       |
| Exports for                          | MY 2001/02<br>(Oct. 01 - Sep. 02) |       | MY 2002/03<br>(Oct. 02 - Feb. 03) |       |
| Country                              | Vol                               | Val   | Vol                               | Val   |
| U.S.                                 | 1,452                             | 986   | 1,612                             | 1,527 |
| Others                               |                                   |       |                                   |       |
| Russia                               | 662                               | 187   | 2,133                             | 758   |
| Canada                               | 108                               | 53    | 4,811                             | 2,707 |
| Japan                                | 336                               | 741   | 130                               | 137   |
| Singapore                            | 136                               | 79    | 0                                 | 0     |
| Hong Kong                            | 7                                 | 3     | 7                                 | 6     |
| Guam                                 | 41                                | 155   | 18                                | 25    |
| Indonesia                            | 66                                | 47    | 63                                | 44    |
| Malaysia                             | 113                               | 73    | 151                               | 63    |
| PRC                                  | 11                                | 6     | 0                                 | 0     |
| Philippines                          | 12                                | 8     | 0                                 | 0     |
| Taiwan                               | 39                                | 30    | 50                                | 10    |
| Others                               | 17                                | 23    | 24                                | 11    |
|                                      |                                   |       |                                   |       |
| <b>Total for Others</b>              | 1,548                             | 1,405 | 7,387                             | 3,761 |
| <b>Grand Total</b>                   | 3,000                             | 2,391 | 8,999                             | 5,288 |

Source: Korea Customs Service

## Import Matrix for FOJC

| Import Trade Matrix             |                                   |        |                                   |        |
|---------------------------------|-----------------------------------|--------|-----------------------------------|--------|
| Country: Korea                  |                                   |        |                                   |        |
| Commodity: FOJC (2009.11/12/19) |                                   |        | Unit: MT & U\$1,000               |        |
| Imports for                     | MY 2001/02<br>(Oct. 01 - Sep. 02) |        | MY 2002/03<br>(Oct. 02 - Feb. 03) |        |
| Country                         | Vol                               | Val    | Vol                               | Val    |
| U.S.                            | 9,645                             | 14,729 | 3,441                             | 5,353  |
| <b>Others</b>                   |                                   |        |                                   |        |
| Brazil                          | 36,349                            | 40,351 | 12,041                            | 15,519 |
| Australia                       | 129                               | 127    | 97                                | 87     |
| Israel                          | 162                               | 189    | 111                               | 130    |
| Hong Kong                       | 38                                | 117    | 55                                | 71     |
| Swiss                           | 22                                | 282    | 5                                 | 71     |
| Belgium                         | 4                                 | 16     | 69                                | 98     |
| Netherlands                     | 0                                 | 0      | 24                                | 40     |
| Canada                          | 26                                | 55     | 0                                 | 0      |
| Germany                         | -                                 | 3      | 0                                 | 0      |
| Other                           | 1                                 | 1      | 0                                 | 0      |
|                                 |                                   |        |                                   |        |
| <b>Total for Others</b>         | 36,731                            | 41,141 | 12,402                            | 16,016 |
| <b>Grand Total</b>              | 46,376                            | 55,870 | 15,843                            | 21,369 |

Source: Korea Customs Service

## Export Matrix for FOJC

| Export Trade Matrix             |                                   |     |                                   |     |
|---------------------------------|-----------------------------------|-----|-----------------------------------|-----|
| Country: Korea                  |                                   |     |                                   |     |
| Commodity: FOJC (2009.11/12/19) |                                   |     | Unit: MT & U\$1,000               |     |
| Exports for                     | MY 2001/02<br>(Oct. 01 - Sep. 02) |     | MY 2002/03<br>(Oct. 02 - Feb. 03) |     |
| Country                         | Vol                               | Val | Vol                               | Val |
| U.S.                            | 4                                 | 3   | 0                                 | 0   |
| <b>Others</b>                   |                                   |     |                                   |     |
| Hong Kong                       | 5                                 | 3   | 0                                 | 0   |
| Japan                           | 1                                 | 2   | 0                                 | 0   |
| Malay                           | 5                                 | 11  | 0                                 | 0   |
| Kenya                           | 2                                 | 3   | 0                                 | 0   |
| Other                           | -                                 | 1   | 2                                 | 3   |
|                                 |                                   |     |                                   |     |
| <b>Total for Others</b>         | 13                                | 20  | 2                                 | 3   |
| <b>Grand Total</b>              | 17                                | 23  | 2                                 | 3   |

Source: Korea Customs Service

**Korea: Monthly Average Foreign Exchange Rate**

(Unit: Korean Won / 1U\$)

| Month     | 2001    | 2002    | 2003       |
|-----------|---------|---------|------------|
| January   | 1272.82 | 1313.60 | 1179.46    |
| February  | 1252.44 | 1318.72 | 1191.27    |
| March     | 1288.43 | 1322.51 | 1233.68    |
| April     | 1325.55 | 1318.93 | 1236.80 1/ |
| May       | 1298.46 | 1266.06 |            |
| June      | 1293.83 | 1233.47 |            |
| July      | 1302.60 | 1185.12 |            |
| August    | 1285.39 | 1196.37 |            |
| September | 1293.70 | 1208.50 |            |
| October   | 1302.60 | 1241.13 |            |
| November  | 1284.00 | 1211.91 |            |
| December  | 1289.66 | 1208.91 |            |

Source: Korea Industrial Bank  
1/ April 25 spot rate

## Price Table

**Korea: Monthly Average Tangerine Wholesale Auction Price**

(Unit: Korean Won per 1Kg)

| Month                | High Quality |        | Medium Quality |        |
|----------------------|--------------|--------|----------------|--------|
|                      | 2002         | 2003   | 2002           | 2003   |
| Jan.                 | 984          | 609    | 727            | 368    |
| Feb.                 | 1,235        | 539    | 931            | 327    |
| Mar.                 | 1,240        | 569    | 1,018          | 350    |
| Apr.                 | 1,420        | 661 1/ | 1,100          | 393 1/ |
| May - September: N/A |              |        |                |        |
| Oct.                 | 735          | n/a    | 510            | n/a    |
| Nov.                 | 739          | n/a    | 501            | n/a    |
| Dec.                 | 680          | n/a    | 462            | n/a    |

Source: Garak Wholesale Market

1/ April 24 spot price

**Korea: Average Greenhouse Tangerine Auction Price**

(Unit: Korean Won per Kg)

| Month | High Quality |       | Medium Quality |       |
|-------|--------------|-------|----------------|-------|
|       | 2001         | 2002  | 2001           | 2002  |
| Mar.  | 2,483        | 2,084 | 2,029          | 1,660 |
| Apr.  | 3,705        | 2,723 | 2,657          | 1,965 |
| May   | 4,741        | 3,778 | 3,312          | 2,919 |
| Jun.  | 4,381        | 4,060 | 3,519          | 3,276 |
| Jul.  | 2,888        | 2,407 | 2,381          | 1,978 |
| Aug.  | 3,244        | 2,844 | 2,667          | 2,222 |
| Sep.  | 3,204        | 3,122 | 2,538          | 2,526 |
| Oct.  | 2,226        | 3,353 | 1,722          | 2,384 |
| Nov.  | 1,867        | n/a   | 1,400          | n/a   |

Source: Garak Wholesale Market

Note: Price on a 5-kg box basis

**Korea: Average Retail Price Nationwide for Tangerine**

(Unit: Korean Won per 10 Fruits, Approximately 100g per fruit)

| Year<br>Month         | 2001  | 2002  | 2003    | % Changes of<br>2002/03 |
|-----------------------|-------|-------|---------|-------------------------|
| Jan                   | 1,622 | 1,314 | 1359    | 3                       |
| Feb                   | 1,404 | 1,554 | 1091    | -29                     |
| Mar                   | 1,949 | 2,188 | 1007    | -53                     |
| Apr                   | 2,841 | 2,675 | 1056 1/ | -60                     |
| May                   | 2,960 | -     | -       | -                       |
| June - September: N/A |       |       |         |                         |
| Oct                   | 2,076 | 1,988 | -       | -                       |
| Nov                   | 1,635 | 1,687 | -       | -                       |
| Dec                   | 1,352 | 1,554 | -       | -                       |

Prices for medium quality

1/ April 20 spot price

Source: Agricultural &amp; Fishery Marketing Corporation

**Korea: Average Retail Price Nationwide for Imported Oranges**

(Unit: Korean Won per 10 Fruits)

| Year<br>Month | 2001  | 2002   | 2003     | % Changes of<br>2002/03 |
|---------------|-------|--------|----------|-------------------------|
| Jan           | 5,588 | 7,924  | 7,122    | -10                     |
| Feb           | 5,773 | 8,061  | 6,329    | -21                     |
| Mar           | 6,432 | 8,215  | 6,699    | -18                     |
| Apr           | 6,579 | 8,766  | 7,349 1/ | -16                     |
| May           | 7,165 | 10,270 | -        | -                       |
| Jun           | 6,995 | 8,418  | -        | -                       |
| Jul           | 6,523 | 6,484  | -        | -                       |
| Aug           | 6,223 | 5,628  | -        | -                       |
| Sep           | 6,340 | 6,636  | -        | -                       |
| Oct           | 6,805 | 7,293  | -        | -                       |
| Nov           | 6,872 | 8,249  | -        | -                       |
| Dec           | 6,932 | 8,078  | -        | -                       |

Prices for high quality

1/ April 21 spot price

Source: Agricultural &amp; Fishery Marketing Corporation

**Korea: Average Imported Valencia Auction Price**

(Unit: Korean Won per Kg)

| Month | High Quality |       | Medium Quality |       |
|-------|--------------|-------|----------------|-------|
|       | 2001         | 2002  | 2001           | 2002  |
| April | n/a          | 2,167 | n/a            | 2,083 |
| May   | 1,947        | 1,883 | 1,757          | 1,721 |
| Jun.  | 1,856        | 1,668 | 1,580          | 1,459 |
| Jul.  | 1,788        | 1,412 | 1,551          | 1,094 |
| Aug.  | 1,871        | 1,523 | 1,677          | 1,111 |
| Sep.  | 2,245        | 2,182 | 1,921          | 1,694 |
| Oct.  | 2,030        | 2,363 | 1,250          | 1,967 |
| Nov.  | 1,546        | 2,500 | 1,328          | 2,083 |
| Dec.  | 1,750        | n/a   | 1,523          | n/a   |

Source: Garak Wholesale Market

**Korea: Wholesale Prices for Domestic & Imported Oranges**

(Unit: Korean Won per 1kg)

| Month      | Imported Navel |        | Korean Orange |        |
|------------|----------------|--------|---------------|--------|
|            | High           | Medium | High          | Medium |
| Jan. 02    | 2,751          | 2,473  | -             | -      |
| Feb. 02    | 2,446          | 2,161  | 6,976         | 5,333  |
| Mar. 02    | 2,325          | 2,137  | 7,372         | 5,356  |
| Apr. 02    | 2,631          | 2,366  | 3,289         | 2,600  |
| May 02     | -              | -      | -             | -      |
| Jun. 02    | -              | -      | -             | -      |
| Jul. 02    | -              | -      | -             | -      |
| Aug. 02    | 2,472          | 1,750  | -             | -      |
| Sep. 02    | 2,581          | 1,895  | -             | -      |
| Oct. 02    | 2,654          | 2,249  | -             | -      |
| Nov. 02    | 2,665          | 2,387  | -             | -      |
| Dec. 02    | 2,587          | 2,169  | -             | -      |
| Jan. 03    | 1,441          | 2,250  | 6,844         | 5,198  |
| Feb. 03    | 1,630          | -      | 6,856         | 4,883  |
| Mar. 03    | 1,904          | 1,889  | 7,019         | 4,910  |
| Apr. 03 1/ | 2,111          | 1,944  | 9,333         | 6,833  |

1/ April 23 spot price

Source: Garak Wholesale Market

**Korea: Average Imported Lemon Auction Price**

(Unit: Korean Won per 18 Kg Box)

| Month | High Quality |           | Medium Quality |        |
|-------|--------------|-----------|----------------|--------|
|       | 2002         | 2003      | 2002           | 2003   |
| Jan.  | 54,740       | 49,900    | 49,760         | 46,000 |
| Feb.  | 52,000       | 43,864    | 46,881         | -      |
| Mar.  | 49,962       | 42,500    | 45,462         | -      |
| Apr.  | 53,423       | 47,500 1/ | 49,231         | -      |
| May   | 59,611       | -         | 52,889         | -      |
| Jun.  | 70,700       | -         | 63,740         | -      |
| Jul.  | 60,278       | -         | 54,333         | -      |
| Aug.  | 61,056       | -         | 47,667         | -      |
| Sep.  | 63,522       | -         | 53,500         | -      |
| Oct.  | 71,389       | -         | 59,056         | -      |
| Nov.  | 57,269       | -         | 52,788         | -      |
| Dec.  | 47,500       | -         | 42,500         | -      |

1/ April 23 spot price

Source: Garak Wholesale Market

**Korea: Average Imported Grapefruit Auction Price**

(Unit: Korean Won per 18 Kg Box)

| Month | High Quality |        |           |
|-------|--------------|--------|-----------|
|       | 2001         | 2002   | 2003      |
| Jan.  | 34,478       | 32,100 | 24,000    |
| Feb.  | 33,625       | 30,452 | 25,318    |
| Mar.  | 34,500       | 31,019 | 28,615    |
| Apr.  | 38,100       | 31,596 | 43,500 1/ |
| May   | 36,630       | 35,667 | -         |
| Jun.  | 27,365       | 28,460 | -         |
| Jul.  | 26,231       | 25,315 | -         |
| Aug.  | 27,000       | 23,519 | -         |
| Sep.  | 32,077       | 29,261 | -         |
| Oct.  | 32,696       | 50,333 | -         |
| Nov.  | 27,000       | 48,231 | -         |
| Dec.  | 33,846       | 29,500 | -         |

1/ April 23 spot price

Source: Garak Wholesale Market