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## Report Name: Citrus Annual

Country: Brazil
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## Report Highlights:

The Brazilian orange crop for Marketing Year (MY) 2021/22 is forecast at 405 million $40.8-\mathrm{kg}$ boxes (MBx), equal to 16.52 million metric tons (MMT), an increase of 12 percent relative to the current season. The forecast assumes normal weather conditions will prevail as of mid-December 2021 to support fruit setting and development of the second blossoming in the Sao Paulo and Minas Gerais commercial citrus belt. The current orange crop estimate in the Sao Paulo and Minas Gerais citrus belt was revised downward from 294.2 to 264 MBx ( 12 MMT to 10.77 MMT ) as a consequence of adverse weather conditions including a severe drought and successive frosts. Total Brazilian FCOJ 65 Brix equivalent exports for MY 2021/22 are forecast at 1 MMT, similar to revised figure for MY 2020/21.

## FRESH ORANGES

## Production

## PS\&D Tables

The following table provides revised data for Sao Paulo and total Brazilian fresh orange production, supply, and distribution (PS\&D) for Brazilian (BR) marketing years (MY, July-June) 2020/21 and 2021/22, and the initial forecast for MY 2022/23. The MY mentioned above are equivalent to U.S. MY 2019/2020, 2020/21, and 2021/22 respectively.

Figure 1:

| Brazil: Fresh Oranges PS\&D (Jul-Jun, 1,000 ha, million trees \& million 40.8 kg <br> boxes) <br> Item/U.S. Marketing Year$\|$ US 19/20 |  |  |  |
| :--- | ---: | ---: | ---: |
| Item/ Brazilian Marketing Year | $\mathbf{2 0 2 0 / 2 1}$ | $\mathbf{\text { US 20/21 }}$ | US 21/22 |
| Area Planted | 595.7 | 579.4 | $\mathbf{2 0 2 2 / 2 3}$ |
| Sao Paulo | 395.7 | 379.4 | 374.0 |
| Others | 200.0 | 200.0 | 200.0 |
| Area Harvested | 557.0 | 538.7 | 532.6 |
| Sao Paulo | 364.4 | 346.1 | 340.0 |
| Others | 192.6 | 192.6 | 192.6 |
| Bearing Trees | 224.9 | 218.6 | 215.0 |
| Sao Paulo | 172.9 | 166.6 | 163.0 |
| Others | 52.0 | 52.0 | 52.0 |
| Non-Bearing Trees | 27.5 | 27.0 | 27.0 |
| Sao Paulo | 23.5 | 23.0 | 23.0 |
| Others | 4.0 | 4.0 | 4.0 |
| Total Trees | 252.4 | 245.6 | 242.0 |
| Total Production | 364.5 | 360.6 | 405.0 |
| Sao Paulo | 268.6 | 264.0 | 305.0 |
| Others | 95.9 | 96.6 | 100.0 |
| Exports | 0.2 | 0.1 | 0.2 |
| Imports (total Brazil) | 0.5 | 0.6 | 0.6 |
| Domestic Consumption | 121.8 | 112.1 | 116.4 |
| Delivered to processors | 243.0 | 249.0 | 289.0 |
| Sao Paulo (FCOJ + NFC exports) | 223.0 | 225.0 | 265.0 |
| Others | 20.0 | 24.0 | 24.0 |
|  |  |  |  |

* Note: There is a one-year lag between the BR MY and the U.S. MY. For example, BR MY 2022/23 is equivalent to U.S. MY 2021/22. To ensure data continuity, the current Brazilian MY 2022/23 will be referred to as U.S. MY 2021/22 throughout this report.


## General

ATO/Sao Paulo projects total Brazilian orange crop for MY 2021/22 (July/June) at 405 million 40.8-kg boxes (MBx), equivalent to 16.52 million metric tons (MMT), an increase of 12 percent vis-à-vis the current crop (MY 2020/21). The forecast is based on the assumption that normal weather conditions will prevail as of mid-December 2021, in order to support fruit setting and development of the second blossoming from the majority of the citrus groves in the Sao Paulo and Minas Gerais commercial citrus.

The commercial area in the state of Sao Paulo and the western part of Minas Gerais should account for 305 MBx ( 12.44 MMT ), an increase of 16 percent relative to the revised figure for the previous season ( 264 MBx or 10.77 MMT). Continued rainfall as of October 2021 triggered a steady second blossoming in the majority of the citrus areas during October/November. Fruit setting and development are now depending on favorable weather condition in the fields. Note that the first blossoming was restricted to some growing areas and irrigated fields. In addition, citrus trees are stressed from two consecutive years of dry weather and frost in June/July in some growing regions. Citrus trees have also been negatively affected by the increased infection from greening (see Disease sub-section for further information).

Production from other states is projected at 100 MBX (4.08 MMT), similar to MY 2020/21 ( 96.6 MBx or 3.97 MMT). Overall, it is still too early to project total orange production for MY 2021/22. More accurate numbers will be available during the first quarter of 2022.

The ATO/Sao Paulo revised estimate for the Brazilian orange crop for MY 2020/21 is 360.6 MBx (14.71 MMT), a drop of eight percent compared to the previous estimate, based on updated information from the Defense Fund for Citriculture (Fundecitrus) and the Brazilian Institute for Geography and Statistics (IBGE). Harvest in the commercial citrus area of Sao Paulo and western Minas Gerais started in May 2021, and should be extended through February/March 2022, given the orange juice processors will likely attempt to maximize crushing at the fullest.

On December 10, Fundecitrus released an updated estimate for the 2021/22 citrus production for the commercial area in the state of Sao Paulo and the western part of Minas Gerais, placing production at 264.1 MBx, the second lowest production in almost 30 years. Adverse weather conditions including a severe drought and successive frosts in June/June negatively impacted the growth of the fruit and increased premature fruit drop. According to weather data from Somar/Climatempo Meteorologia, average cumulative rainfall from May to November 2021 was 344 millimeters in the commercial citrus area, a drop of 31 percent compared to the historical average for the past 40 years. The severe drought reduced water level of rivers and reservoirs, affecting water availability for irrigated groves as well, which currently comprise over 30 percent of the citrus commercial area. Production from other states is estimated at 96.6 MBx (3.94 MMT), unchanged from the previous estimate.

The Sao Paulo State Institute of Agricultural Economics (IEA) released its June 2021 crop survey for the 2021 crop (BR MY 2021/22). The Sao Paulo state crop, including commercial and non-commercial areas, is estimated at 303.5 MBx ( 12.38 MMT ), a drop of five percent compared to the previous crop
year (317.8 MBx or 12.96 MMT). Note that IEA considers the entire state of Sao Paulo and all varieties of oranges. Simultaneously, the Agricultural Trade Office's (ATO) estimates follow the Fundecitrus methodology, which includes the commercial area of the state plus the western part of Minas Gerais and the four major citrus varieties for juice processing.

## Area, Tree Inventory, and Yields

The Brazilian agricultural yield for the MY 2021/22 crop is forecast at 1.88 boxes/tree, an increase of 14 percent compared to the current crop ( 1.65 boxes/tree), assuming normal weather conditions as of midDecember 2021.

Total Brazilian tree inventory for MY 2021/22 is forecast at 215 million trees, a 3.6 million tree drop from the previous season, due to increased greening infection in the groves, and the area planted of oranges is projected at 574,000 hectares (ha). Sao Paulo is the only state that compiles data on trees planted and tree inventory. According to the June 2021 crop survey released by IEA, the state of Sao Paulo has 174.55 million orange trees ( 19.64 million non-bearing trees and 154.91 million bearing trees). ATO/Sao Paulo estimates stable area and tree population for other producing states based on the Brazilian Institute of Geography and Statistics (IBGE).

## Disease

According to the 2021 greening survey conducted by Fundecitrus, 43.4 million trees, or 22.37 percent percent, of the trees in the commercial area of the state of Sao Paulo and the western part of Minas Gerais are affected by greening. This figure shows an increase of roughly seven percent in the greening infection relative to the 2020 greening survey ( 20.87 percent). However, if the number of citrus trees eradicated in 2020 due to greening (approximately 8.5 million trees) were included in the survey, greening infection would rise to 26.52 percent. The institution is concerned about the upward trend, especially in adult groves. The high number of infected trees over five years old has created difficulties to control the disease in young fields, since the vector of the disease, the psyllid Diaphorina Citri, multiplies in the infected trees and spreads the bacteria, which causes the disease in the neighboring young fields. Citrus greening was identified in Brazil in 2004 and no definitive cure has been found so far. The graph below shows the incidence of greening in the Sao Paulo and western Minas Gerais commercial area since 2012. Note: no surveys were conducted in 2013 and 2014 due to a lack of funding.

Figure 2:

# Incidence of Greening in Commercial Citrus 



Source: Fundecitrus

The 2021 Fundecitrus citrus variegated chlorosis (CVC) disease survey reports that the level of infection continues to decrease, reaching 0.46 percent or roughly 890,000 trees, as opposed to 1.04 percent in the previous year. Losses associated with CVC should remain very low given that the infected trees are mostly in the initial phases of the disease. Decades ago, the industry adopted measures including protected nurseries for seedlings, renewal of old infected citrus groves, and pesticides to control the insect that transmits greening which also controls the spittlebug that transmits CVC. These measures have contributed to the noteworthy drop of the disease. The graph below shows the incidence of CVC in the Sao Paulo and western Minas Gerais commercial area since 2012. Note: no surveys were conducted in 2013 and 2014 due to a lack of funding.

Figure 3:

## Incidence of CVC in Commercial Citrus



Source: Fundecitrus

Citrus canker infection in 2021 is estimated at 10.76 percent of the trees in the commercial area of Sao Paulo and Minas Gerais, or 21 million trees, a drop of 38 percent compared to 2020 ( 17.26 percent infection), according to the latest Fundecitrus survey. The prevailing drought weather during several months of 2020 and 2021 contributed to the sharp reduction of the infection level. Note that the formerly rigid control of eradicating the affected and neighboring trees was loosened up, and risk mitigation was adopted instead. Indeed, Brazilian legislation allows different states and municipalities to adopt different control/eradication strategies. The graph below shows the incidence of CVC in the Sao Paulo and western Minas Gerais commercial areas since 2016.

## Figure 4:

## Incidence of Canker in Commercial Citrus



Source: Fundecitrus

## Producer Prices

The Orange Index price series is published by the University of Sao Paulo’s Luiz de Queiroz College of Agriculture (ESALQ), for both the domestic fresh market and product delivered to orange juice processing plants in the state of Sao Paulo. Prices for the fresh market are for fruit on the tree.

Spot prices during 2021, especially for fruit for processing, remained relatively stable and close to contracted prices for fruit delivery, which ranged from $\mathrm{R} \$ 28.00$ to $\mathrm{R} \$ 30.00 / b 0 x$. Prices for fruit for the fresh market have escalated since August due to the low availability of fruit and increased competition with fruit for orange juice processing. No noticeable contract for fruit delivery in next year's crop has been negotiated yet.

Figures 5 and 6:

| Orange Prices paid by Sao Paulo industry - spot market (Pera, Natal, Valencia varieties, average prices in Reais - $\mathbf{R} \$, 40.8 \mathrm{~kg}$ box, fruits delivered to the processing plant). |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Jan | 13.84 | 25.84 | 17.66 | 21.77 | 20.96 | 25.29 |
| Feb | 13.82 | 21.98 | 16.70 | 21.19 | 21.20 | 24.87 |
| Mar | 14.01 | 21.39 | 16.24 | 21.58 | 20.48 | 24.89 |
| Apr | 14.72 | 17.60 | 16.33 | 20.61 | 20.80 | 25.88 |
| May | 17.23 | 16.52 | 17.27 | 18.21 | 20.92 | 26.17 |
| Jun | 18.79 | 16.11 | 19.28 | 19.13 | 22.35 | 28.93 |
| Jul | 19.64 | 18.55 | 20.55 | 19.78 | 22.63 | 29.16 |
| Aug | 19.99 | 19.30 | 22.00 | 20.01 | 22.94 | 29.17 |
| Sep | 20.28 | 19.13 | 22.48 | 19.67 | 23.61 | 28.83 |
| Oct | 22.10 | 19.15 | 22.29 | 20.05 | 23.91 | 28.84 |
| Nov | 25.35 | 18.96 | 22.51 | 20.27 | 24.47 | 28.98 |
| Dec | 25.90 | 18.64 | 22.15 | 20.64 | 25.10 | -- |
| Source: CEPEA/ESALQ. |  |  |  |  |  |  |


| Orange Prices received by Producers in the Domestic Fresh Market (Pera Variety, average prices in Reais - R\$, 40.8 kg box, fruits on the tree). |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Month | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Jan | 18.39 | 37.53 | 20.00 | 30.42 | 30.53 | 39.03 |
| Feb | 20.14 | 43.91 | 22.51 | 40.66 | 33.06 | 37.69 |
| Mar | 22.17 | 41.86 | 29.02 | 42.23 | 35.35 | 38.71 |
| Apr | 20.63 | 30.41 | 29.83 | 31.80 | 32.47 | 38.11 |
| May | 21.22 | 21.15 | 26.33 | 21.17 | 26.09 | 34.42 |
| Jun | 20.36 | 17.14 | 25.66 | 18.24 | 25.26 | 32.64 |
| Jul | 19.53 | 16.15 | 26.80 | 18.06 | 26.83 | 34.74 |
| Aug | 21.60 | 16.40 | 29.08 | 18.26 | 30.01 | 39.67 |
| Sep | 26.88 | 17.34 | 31.39 | 19.51 | 32.78 | 45.30 |
| Oct | 32.14 | 19.27 | 32.83 | 22.99 | 38.89 | 49.88 |
| Nov | 34.66 | 19.97 | 30.24 | 28.04 | 43.35 | 45.01 |
| Dec | 32.77 | 19.94 | 27.16 | 28.22 | 40.52 | -- |
| Source: CEPEA/ESALQ |  |  |  |  |  |  |

## Exchange Rate

The table below shows the official exchange rate as released by the Brazilian Central Bank from 2015 through 2021.

Figure 7:

| Exchange Rate (R\$/US\$1.00 - official rate, last day of period) |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Month | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ |
| January | 2.66 | 4.04 | 3.13 | 3.16 | 3.65 | 4.25 | 5.48 |
| February | 2.88 | 3.98 | 3.10 | 3.24 | 3.74 | 4.50 | 5.53 |
| March | 3.21 | 3.56 | 3.17 | 3.32 | 3.90 | 5.20 | 5.70 |
| April | 2.98 | 3.45 | 3.20 | 3.48 | 3.94 | 5.43 | 5.40 |
| May | 3.18 | 3.60 | 3.26 | 3.74 | 3.94 | 5.43 | 5.23 |
| June | 3.10 | 3.21 | 3.30 | 3.86 | 3.83 | 5.48 | 5.00 |
| July | 3.39 | 3.24 | 3.13 | 3.75 | 3.76 | 5.20 | 5.12 |
| August | 3.65 | 3.24 | 3.15 | 4.14 | 4.14 | 5.47 | 5.14 |
| September | 3.98 | 3.25 | 3.17 | 4.00 | 4.16 | 5.64 | 5.44 |
| October | 3.86 | 3.18 | 3.27 | 3.72 | 4.00 | 5.77 | 5.64 |
| November | 3.85 | 3.40 | 3.26 | 3.86 | 4.22 | 5.33 | 5.62 |
| December 1/ | 3.90 | 3.47 | 3.31 | 3.87 | 4.03 | 5.20 | 5.56 |
| Source $:$ Bra |  |  |  |  |  |  |  |

Source : Brazilian Central Bank (BACEN) 1/ December 2021 refers to December 09.

## Consumption

ATO/Sao Paulo estimates total Brazilian orange consumption for MY 2021/22 at 116.4 MBx (4.75 MMT), relatively unchanged from the current crop ( 112.1 MBx or 4.57 MMT ). These figures include actual domestic consumption plus losses from the natural drop, harvesting, transportation, and packing.

Note that fruit delivered to processors for "not from concentrate" (NFC) orange juice production for the domestic market will not be included as fresh oranges consumption, but as "Delivered to Processors for NFC Production".

Fresh domestic consumption estimates are calculated as the difference between production estimates and the volume of oranges delivered to processors for FCOJ and NFC produced for domestic consumption and export.

## Trade

## Exports

Total fresh orange exports for MY 2021/22 are projected at $0.2 \mathrm{MBx}(8,160 \mathrm{MT})$, an increase of 0.1 MB compared to fresh orange export estimate for MY 2020/21 ( 0.1 MBx or $4,100 \mathrm{MT}$ ), according to updated information from the Brazilian Secretariat of Foreign Trade (Secex). Paraguay, Italy, U.K., France and Uruguay were the major export destinations for fresh orange exports during the July-2020 June 2021 period.

The table below shows fresh orange exports (NCM 0805.10.00) by destination, according to the Trade Data Monitor (TDM), based on data from the Secretariat of Foreign Trade (Secex) for BR MY 2018/19, 2019/20 and 2020/21 (July-June), as well as for BR 2019/20, 2020/21 and 2021/22 (July-November).

## Figures 8 and 9:

| Brazilian Fresh Orange Exports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2018 - Jun 2019 |  | Jul 2019 - Jun 2020 |  | Jul 2020 - Jun 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Paraguay | 4 | 28 | 34 | 228 | 256 | 2,068 |
| Italy | 47 | 60 | 2 | 4 | 1,023 | 1,565 |
| United Kingdom | 1,156 | 2,323 | 68 | 104 | 846 | 1,335 |
| France | 1,898 | 3,317 | 443 | 715 | 790 | 1,251 |
| Uruguay | 0 | 0 | - | - | 340 | 1,012 |
| Ukraine | 567 | 1,107 | 862 | 1,762 | 397 | 593 |
| Canada | 42 | 50 | 18 | 39 | 138 | 259 |
| Russia | 183 | 313 | - | - | 89 | 186 |
| Netherlands | 283 | 652 | 193 | 383 | 42 | 88 |
| Portugal | 3,601 | 7,535 | 2 | 3 | 77 | 85 |
| Others | 2,451 | 4,695 | 309 | 400 | 339 | 494 |
| Total | 10,232 | 20,080 | 1,930 | 3,636 | 4,336 | 8,936 |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX)
NCM 0805.10.00. Numbers may not add due to rounding.

| Brazilian Fresh Orange Exports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2019 | Nov 2019 | Jul 2020 | Nov 2020 | Jul 2021 | Nov 2021 |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Russia | 0 | 0 | 89 | 186 | 70 | 145 |
| Marshall Islands | 17 | 20 | 16 | 23 | 19 | 23 |
| Panama | 14 | 17 | 17 | 21 | 18 | 23 |
| Liberia | 13 | 18 | 13 | 19 | 18 | 22 |
| Hong Kong | 13 | 17 | 11 | 16 | 10 | 13 |
| Malta | 8 | 11 | 6 | 10 | 8 | 11 |
| Greece | 5 | 7 | 5 | 8 | 6 | 8 |
| Singapore | 8 | 9 | 6 | 8 | 4 | 6 |
| Cyprus | 5 | 6 | 5 | 8 | 4 | 6 |
| Bahamas | 3 | 4 | 3 | 4 | 4 | 5 |
| Others | 1,113 | 2,223 | 3,364 | 5,279 | 21 | 26 |
| Total | 1,198 | 2,332 | 3,536 | 5,581 | 182 | 288 |
| Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 0805.10.00. Numbers may not add due to rounding. |  |  |  |  |  |  |

## Imports

Total fresh orange imports for MY 2021/22 are projected stable at $0.6 \mathrm{MBx}(24,480 \mathrm{MT}$, according to updated information from the Brazilian Secretariat of Foreign Trade (Secex). Spain, Uruguay, Egypt and Argentina were the major countries of origin for imported oranges during the July-2020 - June 2021 period.

The table below shows fresh orange imports (NCM 0805.10.00) by country of origin, according to the Trade Data Monitor (TDM), based on data from the Secretariat of Foreign Trade (Secex) for BR MY 2018/19, 2019/20 and 2020/21 (July-June), as well as for BR 2019/20, 2020/21 and 2021/22 (JulyNovember).

## Figures 10 and 11:

| Brazilian Fresh Orange Imports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2018 - Jun 2019 |  | Jul 2019 - Jun 2020 |  | Jul 2020 - Jun 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Spain | 13,666 | 17,304 | 13,246 | 15,535 | 11,951 | 11,914 |
| Uruguay | 4,252 | 6,572 | 5,940 | 8,888 | 2,878 | 3,870 |
| Egypt | 0 | 0 | 60 | 75 | 2,574 | 3,552 |
| Argentina | 401 | 603 | 1,495 | 2,397 | 1,190 | 1,652 |
| Chile | 832 | 889 | 887 | 986 | 351 | 324 |
| Total | 19,150 | 25,369 | 21,628 | 27,881 | 18,944 | 21,311 |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 0805.10.00. Numbers may not add due to rounding.

| Brazilian Fresh Orange Imports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Country | Jul 2019 - Nov 2019 | Jul 2020 - Nov 2020 |  | Jul 2021 - Nov 2021 |  |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Uruguay | 3,988 | 6,287 | 1,681 | 2,358 | 3,332 | 5,419 |
| Argentina | 976 | 1,661 | 1,072 | 1,441 | 935 | 1,419 |
| Spain | 882 | 984 | 695 | 659 | 383 | 388 |
| Chile | 887 | 986 | 351 | 324 | 78 | 91 |
| Total | 6,734 | 9,918 | 3,800 | 4,782 | 4,727 | 7,317 |
| Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) <br> NCM 0805.10.00. Numbers may not add due to rounding. |  |  |  |  |  |  |

## Production, Supply, and Distribution Statistics

## Figure 11:

| Oranges, Fresh | 2019/ |  | 2020/ |  | 2021/ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Market Year Begins | Jul 2 |  | Jul 2 |  | Jul 2 |  |
| Brazil | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Area Planted (hectares) | 595700 | 595700 | 579400 | 579400 | 0 | 574000 |
| Area Harvested (hectares) | 557000 | 557000 | 538700 | 538700 | 0 | 532600 |
| Bearing Trees (1000 TREES) | 224900 | 224900 | 218600 | 218600 | 0 | 215000 |
| Non-Bearing Trees (1000 TREES) | 27500 | 27500 | 27000 | 27000 | 0 | 27000 |
| Total No. Of Trees (1000 TREES) | 252400 | 252400 | 245600 | 245600 | 0 | 242000 |
| Production (1000 MT) | 14870 | 14870 | 15942 | 14712 | 0 | 16524 |
| Imports (1000 MT) | 20 | 20 | 24 | 24 | 0 | 24 |
| Total Supply (1000 MT) | 14890 | 14890 | 15966 | 14736 | 0 | 16548 |
| Exports (1000 MT) | 8 | 8 | 8 | 4 | 0 | 8 |
| Fresh Dom. Consumption (1000 mT) | 4967 | 4967 | 4779 | 4573 | 0 | 4749 |
| For Processing (1000 MT) | 9915 | 9915 | 11179 | 10159 | 0 | 11791 |
| Total Distribution (1000 MT) | 14890 | 14890 | 15966 | 14736 | 0 | 16548 |
|  |  |  |  |  |  |  |
| (HECTARES),(1000 TREES), (1000 |  |  |  |  |  |  |

## ORANGE JUICE

## Production

## PS\&D Tables

The following tables provide revised data for Sao Paulo and total Brazilian orange juice production, supply, and distribution (PS\&D) for Brazilian (BR) marketing years (MY, July-June) 2020/21 and 2021/22, and the initial forecast for MY 2022/23. The MY mentioned above are equivalent to U.S. MY 2019/2020, 2020/21, and 2021/22 respectively.

The tables include NFC production for exports converted to Frozen Concentrated Orange Juice (FCOJ), 65 Brix equivalent. The following conversion factor: 1 metric ton of FCOJ 65 Brix equals 5.4 to 5.6 metric tons of NFC 11.6 Brix.

Figure 12:

| Brazil: FCOJ PS\&D (Jul-Jun, Million 40.8 kg boxes, TMT, $\mathbf{6 5}$ degrees brix) |  |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
| Item/U.S. Marketing Year | US 19/20 | US 20/21 | US 21/22 |  |
| Item/ Brazilian Marketing Year | $\mathbf{2 0 2 0 / 2 1}$ | $\mathbf{2 0 2 1 / 2 2}$ | $\mathbf{2 0 2 2 / 2 3}$ |  |
| Delivered to Processors | 243 | 249 | 289 |  |
| Sao Paulo (FCOJ + NFC exports) | 223 | 225 | 265 |  |
| Others | 20 | 24 | 24 |  |
| Beginning Stocks - Total | 312 | 151 | 48 |  |
| Total Production | 938 | 967 | 1,123 |  |
| Sao Paulo FCOJ | 550 | 559 | 715 |  |
| Sao Paulo NFC (FCOJ equiv) | 308 | 312 | 312 |  |
| Others | 80 | 96 | 96 |  |
| Total Supply | 1,250 | 1,118 | 1,171 |  |
| Exports | 1,036 | 1,000 | 1,000 |  |
| Sao Paulo FCOJ | 741 | 700 | 700 |  |
| Sao Paulo NFC (FCOJ equiv) | 260 | 270 | 270 |  |
| Others FCOJ | 35 | 30 | 30 |  |
| Domestic Consumption | 63 | 70 | 75 |  |
| Ending Stocks - Total | 151 | 48 | 96 |  |
| Total Distribution | 1,250 | 1,118 | 1,171 |  |

* Note: There is a one-year lag between the BR MY and the U.S. MY. For example, BR MY 2022/23 is equivalent to U.S. MY 2021/22. To ensure data continuity, the current Brazilian MY 2022/23 will be referred to as U.S. MY 2021/22 throughout this report.


## General

ATO/Sao Paulo projects the total Brazilian FCOJ 65 Brix equivalent production for MY 2021/22 at 1.123 million metric tons (MMT), an increase of 16 percent compared to orange juice production for MY 2020/21, due to expected higher availability of fruit for processing. The Sao Paulo industry is expected to process 265 MBx of oranges for orange juice production ( 185 MBx for FCOJ and 80 MBx for NFC production), accounting for 1.027 MT of juice ( $715,000 \mathrm{MT}$ and 312,000 metric tons of FCOJ and NFC converted to FCOJ equivalent, respectively). Other producing states should deliver 24 MBx , accounting for $96,000 \mathrm{MT}$ of juice.

The total Brazilian FCOJ 65 Brix equivalent production estimate for MY 2020/21 has been revised downward to $967,000 \mathrm{MMT}$, a decrease of $81,000 \mathrm{MT}$ compared to the previous estimate, mainly because a lower volume of fruits should be delivered for FCOJ processing. The drop is related to a lower expected volume of fruit for processing ( 249 MBx as opposed to 274 MBx ). Orange juice figures include NFC production for exports converted to FCOJ 65 Brix equivalent. There is no official estimate for NFC supply and demand in Brazil

## Consumption

ATO/SaoPaulo projects domestic FCOJ equivalent consumption for MY 2021/22 at 75,000 MT, 65 Brix, up 5,000 MT vis-à-vis the previous MY (70,000 MT), given that orange juice consumption, especially NFC has continuously been increasing in Brazil. Note that NFC consumption converted to FCOJ equivalent is included in the orange juice statistic.

## Trade

ATO/Sao Paulo forecasts total Brazilian FCOJ 65 Brix equivalent exports for MY 2021/22 at 1 MMT, unchanged from the revised number for MY 2020/21 due to expected higher availability of oranges for crushing in the upcoming season. The Sao Paulo industry should contribute 970,00 MT, 65 Brix equivalent.

Total exports for MY 2020/21 were revised to 1 MMT, a reduction of 50,000 MT compared to the previous estimate, as a result of lower fruit availability for processing and reduced stocks. Cumulative orange juice exports during July-November 2021 are 410,986 MT, 66 Brix, FCOJ equivalent, according to the Brazilian Secretariat of Foreign Trade, relatively similar to the same period in 2020 ( 421,882 MT, 66 Brix, FCOJ equivalent). However, cumulative exports to the United States during July-November 2021 are 211,560 MT, 66 Brix, an increase of 25 percent relative to the same period during the previous year ( 62,745 MT, 65 Brix, FCOJ equivalent), likely pushed by the decrease in the Floridian production for MY2021/22. Note that the European Union remains the largest export destination of the Brazilian orange juice with approximately 70 percent of total exports.

The tables below show fresh orange juice exports (NCM 2009.11.00, 2009.12.00, and 2009.19.00) by country of destination, according to the Trade Data Monitor (TDM), based on data from the Brazilian Secretariat of Foreign Trade (SECEX) for BR MY 2018/19, 2019/20 and 2020/21 (July-June), as well as for BR 2019/20, 2020/21 and 2021/22 (July-November).

The "others" category includes both FCOJ and NFC exports. Post considers the average monthly price by country of destination for the "others" category as a criterion to distinguish between FCOJ and NFC exports.

Figures 13 and 14:

| Frozen/Unfermented Orange Juice Exports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2018 - Jun 2019 |  | Jul 2019 - Jun 2020 |  | Jul 2020 - Jun 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Belgium | 198,441 | 104,843 | 271,180 | 165,417 | 163,043 | 120,876 |
| China | 64,161 | 32,788 | 62,443 | 45,218 | 68,783 | 57,237 |
| Netherlands | 104,463 | 54,383 | 87,820 | 62,938 | 66,174 | 48,333 |
| United States | 40,768 | 20,973 | 27,946 | 19,069 | 61,411 | 45,792 |
| Japan | 74,810 | 38,070 | 100,694 | 58,009 | 41,598 | 28,775 |
| Australia | 22,885 | 11,299 | 21,948 | 12,712 | 22,999 | 16,151 |
| Israel | 19,874 | 10,557 | 8,863 | 7,332 | 11,170 | 9,419 |
| Spain | 6,157 | 3,252 | 6,099 | 4,561 | 8,082 | 5,687 |
| Saudi Arabia | 4,984 | 2,419 | 4,984 | 2,941 | 7,700 | 4,964 |
| Argentina | 4,845 | 2,353 | 780 | 449 | 7,691 | 4,815 |
| Others | 74,012 | 36,176 | 90,392 | 54,890 | 61,470 | 39,983 |
| Total | 615,401 | 317,112 | 683,149 | 433,537 | 520,121 | 382,033 |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.11.00 Numbers may not add due to rounding.

| Frozen/Unfermented Orange Juice Exports (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Country | Jul 2019 - Nov 2019 | Jul 2020 - Nov 2020 | Jul 2021 - Nov 2021 |  |  |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Belgium | 141,588 | 78,192 | 72,109 | 55,445 | 72,737 | 49,894 |
| China | 33,413 | 23,068 | 21,059 | 18,886 | 32,782 | 30,293 |
| Netherlands | 48,270 | 33,803 | 38,876 | 28,115 | 28,333 | 19,707 |
| United States | 10,845 | 6,254 | 11,627 | 9,566 | 27,224 | 17,058 |
| Japan | 63,733 | 35,046 | 27,973 | 19,789 | 15,544 | 9,703 |
| Israel | 3,649 | 2,679 | 5,156 | 4,296 | 6,167 | 4,670 |
| Australia | 10,926 | 5,657 | 10,681 | 7,639 | 7,052 | 4,466 |
| Chile | 3,565 | 2,102 | 2,174 | 1,407 | 5,631 | 3,340 |
| Spain | 2,435 | 1,798 | 3,882 | 2,715 | 2,271 | 1,529 |
| Argentina | 556 | 312 | 336 | 210 | 2,106 | 1,181 |
| Others | 29,873 | 6,713 | 24,725 | 16,370 | 21,297 | 12,898 |
| Total | 348,852 | 205,625 | 218,599 | 164,439 | 221,144 | 154,737 |
| Soure Tre |  |  |  |  |  |  |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.11.00 Numbers may not add due to rounding.

Figures 15, 16:

| Brazilian Orange Juice Exports, Not Frozen and Brix Under 20 (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2018 - Jun 2019 |  | Jul 2019 - Jun 2020 |  | Jul 2020 - Jun 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Belgium | 178,621 | 525,064 | 178,466 | 495,518 | 176,190 | 581,006 |
| United States | 190,656 | 591,747 | 140,358 | 437,326 | 159,118 | 494,789 |
| Netherlands | 116,831 | 365,919 | 124,646 | 381,418 | 124,946 | 375,435 |
| Spain | 0 | 0 | 2,545 | 9,288 | 7,181 | 24,838 |
| China | 0 | 0 | 317 | 377 | 4,571 | 5,423 |
| Chile | 1,027 | 1,034 | 994 | 955 | 1,284 | 1,324 |
| Israel | 0 | 0 | 0 | 0 | 343 | 818 |
| Ireland | 0 | 0 | 8 | 25 | 188 | 417 |
| Paraguay | 19 | 17 | 71 | 80 | 231 | 301 |
| Argentina | 0 | 0 | 36 | 69 | 66 | 162 |
| Others | 609 | 650 | 17,493 | 46,095 | 540 | 519 |
| Total | 487,763 | 1,484,431 | 464,936 | 1,371,151 | 474,657 | 1,485,030 |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.12.00 Numbers may not add due to rounding.
Brazilian Orange Juice Exports, Not Frozen and Brix Under 20 (MT and US\$ 1,000 FOB)

| Country | Jul 2019 - Nov 2019 |  | Jul 2020 - Nov 2020 |  | Jul 2021 - Nov 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| United States | 68,106 | 200,848 | 49,788 | 156,144 | 72,873 | 211,560 |
| Belgium | 93,194 | 242,464 | 77,063 | 265,695 | 59,319 | 177,154 |
| Netherlands | 57,191 | 175,366 | 53,194 | 158,622 | 53,794 | 161,326 |
| Spain | 0 | 0 | 3,114 | 11,283 | 1,898 | 5,582 |
| China | 3 | 1 | 1,276 | 1,522 | 3,956 | 4,696 |
| Chile | 335 | 327 | 431 | 425 | 701 | 807 |
| Paraguay | 15 | 13 | 72 | 106 | 117 | 136 |
| Angola | 16 | 17 | 29 | 27 | 89 | 83 |
| Israel | 0 | 0 | 89 | 213 | 38 | 80 |
| Ireland | 8 | 25 | 10 | 22 | 31 | 70 |
| Others | 98 | 77 | 155 | 147 | 316 | 197 |
| Total | 218,967 | 619,138 | 185,221 | 594,206 | 193,132 | 561,692 |

[^0]Figures 17 and 18:

| Brazilian Orange Juice Exports, Others (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2018 - Jun 2019 |  | Jul 2019 - Jun 2020 |  | Jul 2020 - Jun 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Netherlands | 277,587 | 162,111 | 310,418 | 214,394 | 230,937 | 166,847 |
| Belgium | 278,282 | 138,171 | 210,151 | 116,868 | 193,560 | 121,318 |
| United States | 109,539 | 67,826 | 108,629 | 76,183 | 77,006 | 62,595 |
| United Kingdom | 7,261 | 3,877 | 26,058 | 17,939 | 27,346 | 19,622 |
| Japan | 18,456 | 9,843 | 391 | 215 | 13,388 | 10,035 |
| Spain | 7 | 14 | 142 | 118 | 2,010 | 1,221 |
| Paraguay | 340 | 374 | 151 | 243 | 157 | 236 |
| Kuwait | 580 | 248 | 529 | 248 | 413 | 224 |
| Panama | 4 | 3 | 92 | 50 | 163 | 127 |
| Argentina | 103 | 73 | 187 | 187 | 101 | 117 |
| Others | 6,656 | 3,745 | 2,757 | 1,748 | 850 | 613 |
| Total | 698,815 | 386,285 | 659,503 | 428,193 | 545,931 | 382,953 |

Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.19.00 Numbers may not add due to rounding.

| Brazilian Orange Juice Exports, Others (MT and US\$ 1,000 FOB) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | Jul 2019 - Nov 2019 |  | Jul 2020 - Nov 2020 |  | Jul 2021 - Nov 2021 |  |
|  | Value | Quantity | Value | Quantity | Value | Quantity |
| Netherlands | 133,950 | 90,327 | 86,114 | 64,335 | 122,880 | 77,874 |
| Belgium | 159,053 | 84,310 | 75,126 | 47,171 | 85,099 | 47,420 |
| United States | 70,688 | 49,628 | 30,593 | 25,296 | 30,797 | 23,613 |
| UK | 11,934 | 7,956 | 5,134 | 3,875 | 9,609 | 6,006 |
| Spain | 5 | 9 | 293 | 179 | 791 | 455 |
| Turkey | 509 | 357 | 2 | 1 | 304 | 164 |
| Israel | 0 | 0 | 0 | 0 | 180 | 109 |
| Paraguay | 62 | 93 | 67 | 107 | 76 | 108 |
| Italy | 0 | 0 | 0 | 0 | 142 | 82 |
| Japan | 391 | 215 | 13,044 | 9,844 | 78 | 48 |
| Others | 1,697 | 960 | 737 | 527 | 63 | 67 |
| Total | 378,289 | 233,856 | 211,111 | 151,335 | 250,019 | 155,946 |
| Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.19.00 Numbers may not add due to rounding. |  |  |  |  |  |  |

## Stocks

Ending stocks for MY 2021/22 are forecast at 96,000 MT, 65 Brix, an increase of 46,000 MT compared to revised figure for MY 2020/21 carryover stocks ( 46,000 MT), and one of the lowest stock levels ever reached by the citrus industry. Stock figures include only stocks in the storage tanks of orange juice facilities (processing plants, port terminals, etc.) in Brazil. They do not include stocks owned by Brazilian companies abroad, e.g., in transit and port terminals in the United States, Europe, and Japan.

According to the Brazilian Association of Citrus Exporters (CitrusBR), global Brazilian orange juice inventories were 316,929 MT ( 66 Brix) on June 30, 2021, a drop of 154,209 MT vis-à-vis stocks on June 30, 2020 ( 471,138 MT, 66 Brix). CitrusBR forecasts carry-over stocks for June 30, 2022 between 170,000 and $190,000 \mathrm{MT}$. Note that global inventories include orange juice in storage tanks at processing plants and port terminals in Brazil, as well as stocks abroad (vessels and port facilities worldwide).

## Production, Supply, and Distribution Statistics

This table includes NFC production for exports converted to FCOJ 65 Brix equivalent using the following conversion factor: 1 metric ton of FCOJ 65 Brix equals 5.4-5.6 metric tons of NFC 11.6 Brix.

| Orange Juice Market Year Begins Brazil | 2019/2020 |  | 2020/2021 |  | 2021/2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jul 2020 |  | Jul 2021 |  | Jul 2022 |  |
|  | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post |
| Deliv. To Processors (MT) | 9914400 | 9914400 | 11179200 | 10159200 | 0 | 11791200 |
| Beginning Stocks (MT) | 312000 | 312000 | 155000 | 151000 | 0 | 48000 |
| Production (MT) | 938000 | 938000 | 1048000 | 967000 | 0 | 1123000 |
| Imports (MT) | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Supply (MT) | 1250000 | 1250000 | 1203000 | 1118000 | 0 | 1171000 |
| Exports (MT) | 1032000 | 1036000 | 1050000 | 1000000 | 0 | 1000000 |
| Domestic Consumption (MT) | 63000 | 63000 | 70000 | 70000 | 0 | 75000 |
| Ending Stocks (MT) | 155000 | 151000 | 83000 | 48000 | 0 | 96000 |
| Total Distribution (MT) | 1250000 | 1250000 | 1203000 | 1118000 | 0 | 1171000 |
|  |  |  |  |  |  |  |
| (MT) |  |  |  |  |  |  |

## Attachments:

No Attachments


[^0]:    Source: Trade Data Monitor based on the Brazilian Secretariat of Foreign Trade (SECEX) NCM 2009.12.00 Numbers may not add due to rounding.

