

## **SP and MG citrus belt will produce 287.76 million orange boxes in the 2020-2021 crop**

**Crop loss of 25.6% in relation to previous crop is due to lower nutrient reserves in plants and adverse climatic conditions.**

The 2020-2021 orange crop for the São Paulo and West-Southwest Minas Gerais citrus belt is estimated at 287.76 million boxes of 40,8 kg, according to the online announcement made today (May 11) by Fundecitrus. This number is 25.6% smaller than the previous crop of 386.79 million boxes, and 12.5% below the average crop size for the last 10 years. Approximately 20.56 million boxes are expected to be produced in the Triângulo Mineiro.

Expected yield is estimated at 790 boxes per hectare, as compared to the 1,045 boxes per hectare in the previous crop.

“It is a small crop, considering the productive potential of groves, but that is due to the biennial production cycle of orange trees”, explains Fundecitrus general manager Juliano Ayres. “Since the previous crop was large, nutrient reserves this year are smaller. In addition, climatic conditions were adverse during fruit setting and the first phase of fruit growth”, he states.

### **Influence of the climate and late blooms**

Crop loss was caused by a reduced number of fruits per tree in comparison to the previous crop. The large production in the previous season increased the consumption of nutrient reserves in plants, which became scarce and triggered the phenomenon known as alternate bearing. Furthermore, the climate was also a negative influence: high temperatures in September and October 2019 affected the setting of newly formed fruit.

Adverse climatic conditions were also seen in March and April 2020, affecting fruit at a more advanced stage of development. According to data from Somar Meteorologia, the accumulated rainfall volume in



that period was not even half the historical average (1981-2010), which restricted fruit growth.

245.15 million boxes of the estimated production are of fruit from the first and second blooms (85.2% of the total), 34.64 million boxes are of fruit from the third bloom (12%) and 7.97 million boxes are of fruit from the fourth bloom (2.8%).

Dry weather in March and April 2020 restricted the growth of fruits that should still be small at harvest. Oranges are expected to weigh 159 grams at harvest.

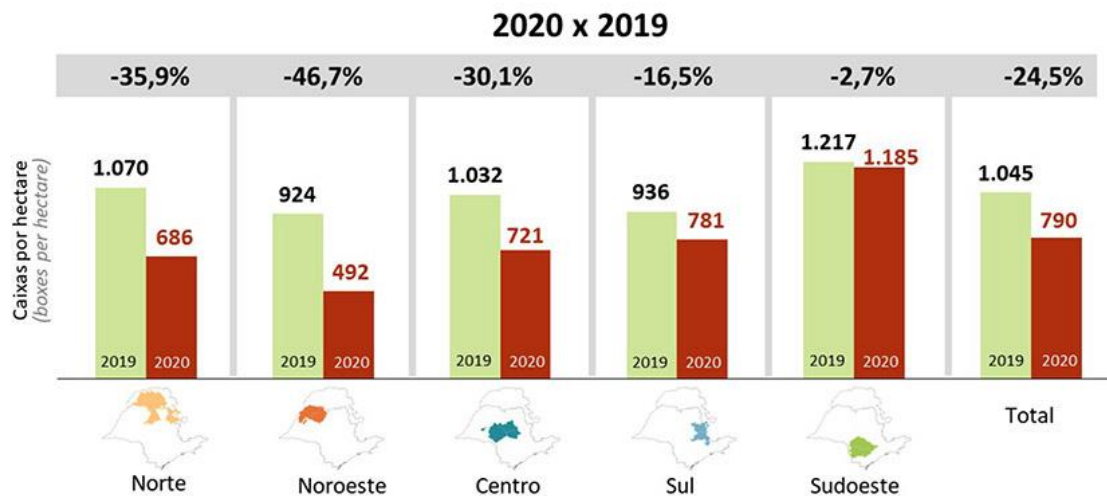
### **Alternate bearing in regions**

Yield per sector this crop season, as compared to last year's, shows significant variations among locations. The Northwest sector, encompassing the regions of Votuporanga and São José do Rio Preto, ranks first in yield drop. 492 boxes per hectare expected to be produced in that sector represent a drop of 46.7% in relation to the 2019-2020 crop. Next comes the North sector (regions of Triângulo Mineiro, Bebedouro and Altinópolis), with an expected yield of 686 boxes per hectare (-35.9%); then the Central sector (regions of Matão, Duartina and Brotas), with 721 boxes expected per hectare (-30.1%); the South sector (regions of Porto Ferreira and Limeira), with 781 boxes expected per hectare (-16.5%); and the Southwest (regions of Avaré and Itapetininga), where 1.185 boxes should be harvested per hectare (-2.7%) (see the graph below).

“The greater drop in yield expected for this current crop, the larger the increment observed in the previous crop. This is one evidence of the biennial production cycle of orange trees, showing that usually the fruit load one year is inversely proportional to the fruit load in the previous year, causing variations in yield per hectare that alternate with the crop seasons”, analyzes PES coordinator Vinícius Trombin. “But the main reason for crop fluctuations is the climatic change that often occurs from one year to the next. In regions with more stable climate, such as Avaré and Itapetininga, yield variations are smaller”, adds the survey coordinator.



**PRODUTIVIDADE POR SETOR (CAIXAS POR HECTARE)**  
YIELD BY SECTOR (BOXES PER HECTARE)



### Recovery of orange juice consumption

The São Paulo and West-Southwest Minas Gerais citrus belt is the largest worldwide producer of orange for processing. According to PES methodological coordinator and Professor at USP and FGV Marcos Fava Neves, the 2020-2021 crop and the inventory volume are now balanced due to the recovery of the demand for juice, heated up in major markets as a result of the COVID-10 pandemic.

"In view of an attempt to boost immunity, the citrus sector sees an increasing consumption of orange juice. It is an extremely nutritious liquid food", he states.

### Citriculture and sustainability

This year, based on methodology developed by Embrapa Territorial, PES has estimated the area of conserved woods on citrus farms: 182 thousand hectares throughout the citrus belt. On average, there is one hectare dedicated to conservation on farms for every 2.52 hectares of citrus groves. Data was obtained from cross-checking the information collected in the field by Fundecitrus with data from the Rural Environmental Registry (CAR).

"This work shows the important role of citriculture in environmental conservation and biodiversity, with large conserved areas integrated within farms", says Trombin.



## Methodology

For the estimate, orange trees were counted one by one in 2,557 plots and fruits from 1,590 trees were harvested throughout the citrus belt. “The reduced number of samples due to COVID-19 caused minor impact in the general survey result, which can be verified by the error of  $\pm 2.65\%$  in the average number of fruits per tree”, PES methodology analyst and Professor at the department of engineering, math and science at FCAV/Unesp José Carlos Barbosa states.

The Crop Forecast Survey is carried out by Fundecitrus in cooperation with Markestrat, school of economics, business administration and accounting (FEA) of the university of São Paulo (USP) and the “Júlio de Mesquita” school of agricultural science and veterinary medicine (FCAV) of the São Paulo state university (Unesp).

## Rapport complet :

[https://www.fundecitrus.com.br/pdf/pes\\_relatorios/2020\\_05\\_11\\_Executive-Summary-of-Orange-Crop-Forecast-for-the-2020-2021-Season.pdf](https://www.fundecitrus.com.br/pdf/pes_relatorios/2020_05_11_Executive-Summary-of-Orange-Crop-Forecast-for-the-2020-2021-Season.pdf)

## Lien article :

<https://www.fundecitrus.com.br/comunicacao/noticias/integra/cinturao-citricola-de-sp-e-mg-produzira-28776-milhoes-de-caixas-de-laranja-na-safra-202021/916>

