

Current forecast update (variation regarding the December update):

February 15, 2018

Total orange crop production forecast¹: 397.27 million boxes (increase of 3.13%)

Hamlin, Westin and Rubi: 77.48 million boxes (unchanged)

Other early season²: 18.02 million boxes (unchanged)

Pera Rio: 118.47 million boxes (increase of 0.24%)

Valencia and Valencia Folha Murcha: 138.77 million boxes (increase of 7.39%)

Natal: 44.53 million boxes (increase of 5.30%)

Forecast Dates 2017-2018

Final estimate: April 10, 2018

Orange production forecast update by sector and variety group – citrus belt

Month	Forecast update components				Orange production forecast update 2017-2018					
	December 2017 and February 2018 (strike-through values were presented in December, to their left are their respective values updated in February)				December/2017			February/2018		
Sector and variety group	Bearing trees	Fruits per tree at stripping ³	Fruits forecasted by box	Fruit loss from droppage forecast	By tree	By hectare	Total	By tree	By hectare	Total
	(1,000 trees)	(number)	(number)	(percentage)	(boxes/tree)	(boxes/hectare)	(1,000,000 boxes)	(boxes/tree)	(boxes/hectare)	(1,000,000 boxes)
TOTAL										
Hamlin, Westin and Rubi.....	27,308	972	277	10.00	2.84	1,235	77.48	2.84	1,235	77.48
Other early season ²	7,950	714	251	11.30	2.27	1,008	18.02	2.27	1,008	18.02
Pera Rio.....	60,235	666	253	17.00 17.50	1.96	943	118.19	1.97	945	118.47
Valencia and V.Folha Murcha ⁴	61,181	729	227 240	21.50 23.00	2.11	940	129.22	2.27	1,010	138.77
Natal.....	18,105	813	238 245	20.00 22.05	2.34	1,005	42.29	2.46	1,057	44.53
Average.....	(X)	753	247 252	17.20 18.09	2.20	999	(X)	2.27	1,030	(X)
Total.....	174,779	(X)	(X)	(X)	(X)	(X)	385.20	(X)	(X)	397.27
NORTH SECTOR										
Hamlin, Westin and Rubi.....	7,494	1,147	277	10.00	3.35	1,423	25.11	3.35	1,423	25.11
Other early season ²	1,910	709	251	11.30	2.25	1,095	4.30	2.25	1,095	4.30
Pera Rio.....	12,398	611	253	17.00 17.50	1.80	932	22.30	1.80	935	22.35
Valencia and V.Folha Murcha ⁴	14,317	779	227 240	21.50 23.00	2.26	995	32.32	2.42	1,068	34.71
Natal.....	3,171	878	238 245	20.00 22.05	2.52	1,011	8.00	2.65	1,065	8.42
Average.....	(X)	801	247 252	17.20 18.09	2.34	1,072	(X)	2.41	1,105	(X)
Subtotal.....	39,290	(X)	(X)	(X)	(X)	(X)	92.03	(X)	(X)	94.89
NORTHWEST SECTOR										
Hamlin, Westin and Rubi.....	2,656	823	277	10.00	2.40	1,045	6.38	2.40	1,045	6.38
Other early season ²	1,444	757	251	11.30	2.40	1,066	3.47	2.40	1,066	3.47
Pera Rio.....	8,320	588	253	17.00 17.50	1.73	733	14.41	1.74	735	14.44
Valencia and V.Folha Murcha ⁴	3,809	667	227 240	21.50 23.00	1.93	918	7.36	2.08	986	7.91
Natal.....	1,406	826	238 245	20.00 22.05	2.37	912	3.34	2.50	912	3.51
Average.....	(X)	673	247 252	17.20 18.09	1.98	861	(X)	2.03	880	(X)
Subtotal.....	17,635	(X)	(X)	(X)	(X)	(X)	34.96	(X)	(X)	35.71
CENTRAL SECTOR										
Hamlin, Westin and Rubi.....	7,328	905	277	10.00	2.64	1,148	19.37	2.64	1,148	19.37
Other early season ²	2,870	687	251	11.30	2.18	893	6.26	2.18	893	6.26
Pera Rio.....	17,219	672	253	17.00 17.50	1.98	967	34.08	1.98	970	34.17
Valencia and V.Folha Murcha ⁴	17,021	683	227 240	21.50 23.00	1.98	833	33.66	2.12	833	36.15
Natal.....	4,695	795	238 245	20.00 22.05	2.28	919	10.73	2.40	968	11.29
Average.....	(X)	723	247 252	17.20 18.09	2.12	953	(X)	2.18	981	(X)
Subtotal.....	49,133	(X)	(X)	(X)	(X)	(X)	104.10	(X)	(X)	107.24
SOUTH SECTOR										
Hamlin, Westin and Rubi.....	4,954	860	277	10.00	2.51	1,099	12.44	2.51	1,099	12.44
Other early season ²	0,556	593	251	11.30	1.88	741	1.05	1.88	741	1.05
Pera Rio.....	11,909	699	253	17.00 17.50	2.06	961	24.50	2.06	963	24.56
Valencia and V.Folha Murcha ⁴	13,926	741	227 240	21.50 23.00	2.15	891	29.89	2.30	956	32.09
Natal.....	2,871	828	238 245	20.00 22.05	2.38	990	6.82	2.50	990	7.19
Average.....	(X)	748	247 252	17.20 18.09	2.18	952	(X)	2.26	986	(X)
Subtotal.....	34,216	(X)	(X)	(X)	(X)	(X)	74.70	(X)	(X)	77.33
SOUTHWEST SECTOR										
Hamlin, Westin and Rubi.....	4,876	996	277	10.00	2.91	1,310	14.18	2.91	1,310	14.18
Other early season ²	1,170	793	251	11.30	2.52	1,292	2.94	2.52	1,292	2.94
Pera Rio.....	10,389	749	253	17.00 17.50	2.20	1,087	22.90	2.21	1,090	22.95
Valencia and V.Folha Murcha ⁴	12,108	741	227 240	21.50 23.00	2.15	995	25.99	2.31	995	27.91
Natal.....	5,962	783	238 245	20.00 22.05	2.25	1,057	13.40	2.37	1,057	14.12
Average.....	(X)	788	247 252	17.20 18.09	2.30	1,113	(X)	2.38	1,151	(X)
Subtotal.....	34,505	(X)	(X)	(X)	(X)	(X)	79.41	(X)	(X)	82.10

(X) Not applicable.

¹ Hamlin, Westin, Rubi, Valencia Americana, Valencia Argentina, Seleta, Pineapple, Pera Rio, Valencia, Valencia Folha Murcha and Natal.

² Valencia Americana, Valencia Argentina, Seleta and Pineapple.

³ Weighted average per stratum bearing trees.

⁴ V. Folha Murcha – Valencia Folha Murcha.

Total orange¹ crop forecast update is 397.27 million of boxes

The orange production forecast update of the São Paulo and West-Southwest of Minas Gerais citrus belt for the 2017-2018 season, published on February 15th, 2018 by Fundecitrus with the cooperation of Markestrat, FEA-RP/USP and FCAV/Unesp² – is 397.27 million boxes, weighing 40.8kg each. This figure corresponds to an increase of 3.13% compared to the update published in December 2017 and an increase of 9.00% in relation to the initial May 2017 forecast. Out of the total crop, about 30.42 million boxes are estimated for the Triângulo Mineiro region.

The positive performance of this harvest, evidenced by the increased production reported at each update, continues to be largely the result of increased fruit weight, currently at an average of 165 grams per unit vis-à-vis 162 grams in the December 2017 update. This fact is explained by the rainfall above the historical average, which provided a higher water buildup in the fruit, which was also potentialized by the improved crop management of groves. Another factor which contributed to the increased harvest, albeit with a lower intensity degree, is the reduction of fruit droppage by about one percent point from the initially estimated value.

The abundant rainfall on all citrus belt producing regions took place from October 2017 to January 2018. The effect of such rainfall is observed mainly on Pera Rio variety and more intensely on late-season varieties due to their harvesting time. The data gathered from the continuous crop monitoring show that during that rainy period approximately 40% of the Pera Rio production and 70% of the late-season varieties had been harvested, with a total rainfall of 905 millimeters, which corresponds to a 25-percent increase as compared to the historical average, according to Somar Meteorologia.

The harvesting of early-season varieties finished in January 2018, with size and droppage rate equal to those revised in September 2017 and maintained in the December 2017 update. Therefore, the final size of the Hamlin, Westin, and Rubi varieties in this harvest is 277 fruits per box and a 10.00-percent droppage rate. The other early-season varieties finished with a size of 251 fruits per box and an 11.30-percent droppage rate. Final sizes are bigger than those forecast in May 2017 because more than half of the production was harvested by mid-July, when the soil was still wet due to the rainfall above historical average which occurred in the beginning of the harvesting period.

The Pera Rio harvest, a mid-season variety, has virtually ended, with only 1% still remaining to finish the harvest. The fruit size of that variety is the same as that published in the December 2017 update, that is, 253 oranges per box, but with a half percentage point decrease in droppage rate, which is now 17.00%.

The harvesting of Valencia and Valencia Folha Murcha attained 95% of the production, the size has been adjusted to 227 fruits per box and the droppage rate to 21.50% in this update. In the case of the Natal variety, harvesting is at 90% of the production, its size has been revised to 238 fruits per box, and the droppage rate is now 20.00%. Considering all the varieties, 97% of the production has already been harvested, with an average size being revised to 247 fruits per box and a droppage rate being re-estimated at 17.20%.

The method used for updating is the same as that adopted during the previous season. The information is obtained from the monitoring of fruit size and fruit droppage on 900 blocks, as of May 2017, which cease to be visited as their harvest is completed. The details of this methodology are found in the document “Methodology for the Orange Production Forecast Update” available at www.fundecitrus.com.br. Another supplementary information is the size of fruits received at the processing plants throughout the season by the orange juice companies that are members of Fundecitrus – Citrosuco, Cutrale and Louis Dreyfus – for the purpose of industrial processing. Each processing company provides, under confidentiality, the individual data to an independent consulting firm to ascertain the average size of the fruits processed.

¹ Hamlin, Westin, Rubi, Valencia Americana, Valencia Argentina, Seleta, Pineapple Pera Rio, Valencia, Valencia Folha Murcha and Natal.

² Exact Sciences Department, FCAV/Unesp Jaboticabal.