

Current forecast update (variation regarding the May forecast):

September, 10 2019

Total orange crop production forecast¹: 388.42 million boxes (decreased of 0.12%)

Hamlin, Westin and Rubi: 76.27 million boxes (decreased of 0.91%)

Other early season²: 19.98 million boxes (increased of 1.16%)

Pera Rio: 116.20 million boxes (unchanged)

Valencia and Valencia Folha Murcha: 128.30 million boxes (unchanged)

Natal: 47.67 million boxes (unchanged)

Publication Schedule 2019-2020

2nd Crop forecast update: December 10, 2019

3rd Crop forecast update: February 11, 2020

Final crop forecast: April 10, 2020

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

Month	Forecast components				Crop forecast 2019-2020			Crop forecast update 2019-2020		
	May/2019 and September/2019 (strike-through values were presented in May, to their left are their respective values updated in September)				May/2019			September/2019		
Sector and variety group	Bearing trees	Fruit per tree at stripping ³	Fruit estimated per box	Estimated drop rate	Per tree	Per hectare	Total	Per tree	Per hectare	Total
	(1,000 trees)	(number)	(number)	(percentage)	(boxes/tree)	(boxes/hectare)	(1,000,000 boxes)	(boxes/tree)	(boxes/hectare)	(1,000,000 boxes)
CITRUS BELT										
Hamlin, Westin and Rubi.....	25,482	1,114	300 296	10.50	3.02	1,331	76.97	2.99	1,319	76.27
Other early ²	8,016	834	265 270	12.00 11.00	2.88	1,116	19.75	2.49	1,129	19.98
Pera Rio.....	62,869	665	266	17.50	1.85	926	116.20	1.85	926	116.20
Valencia and Folha Murcha ⁴ ..	58,269	735	235	21.50	2.20	1,018	128.30	2.20	1,018	128.30
Natal.....	19,337	853	242	22.00	2.47	1,107	47.67	2.47	1,107	47.67
Total.....	173,973	783	260	17.60 17.50	2.24	1,051	388.89	2.23	1,050	388.42
NORTH SECTOR										
Hamlin, Westin and Rubi.....	6,970	1,210	300 296	10.50	3.28	1,415	22.86	3.25	1,403	22.66
Other early ²	2,029	808	265 270	12.00 11.00	2.39	1,145	4.85	2.42	1,157	4.90
Pera Rio.....	12,987	600	266	17.50	1.67	895	21.67	1.67	895	21.67
Valencia and Folha Murcha ⁴ ..	14,391	757	235	21.50	2.27	1,028	32.65	2.27	1,028	32.65
Natal.....	3,920	911	242	22.00	2.63	1,109	10.32	2.63	1,109	10.32
Subtotal.....	40,297	802	260	17.60 17.50	2.29	1,078	92.35	2.29	1,076	92.20
NORTHWEST SECTOR										
Hamlin, Westin and Rubi.....	2,565	1,031	300 296	10.50	2.79	1,233	7.16	2.77	1,223	7.10
Other early ²	1,407	618	265 270	12.00 11.00	1.83	839	2.57	1.86	852	2.61
Pera Rio.....	8,278	655	266	17.50	1.82	812	15.09	1.82	812	15.09
Valencia and Folha Murcha ⁴ ..	3,600	679	235	21.50	2.04	980	7.33	2.04	980	7.33
Natal.....	1,781	711	242	22.00	2.06	954	3.66	2.06	954	3.66
Subtotal.....	17,630	717	260	17.60 17.50	2.03	924	35.81	2.03	923	35.79
CENTRAL SECTOR										
Hamlin, Westin and Rubi.....	6,390	989	300 296	10.50	2.68	1,157	17.14	2.66	1,146	16.98
Other early ²	2,966	922	265 270	12.00 11.00	2.72	1,183	8.08	2.75	1,196	8.17
Pera Rio.....	18,074	671	266	17.50	1.87	942	33.75	1.87	942	33.75
Valencia and Folha Murcha ⁴ ..	15,835	746	235	21.50	2.23	1,025	35.39	2.23	1,025	35.39
Natal.....	4,497	921	242	22.00	2.66	1,128	11.97	2.66	1,128	11.97
Subtotal.....	47,762	778	260	17.60 17.50	2.23	1,036	106.33	2.22	1,036	106.26
SOUTH SECTOR										
Hamlin, Westin and Rubi.....	4,334	820	300 296	10.50	2.22	960	9.63	2.20	952	9.55
Other early ²	450	792	265 270	12.00 11.00	2.36	854	1.06	2.38	862	1.07
Pera Rio.....	13,177	681	266	17.50	1.89	926	24.96	1.89	926	24.96
Valencia and Folha Murcha ⁴ ..	11,846	719	235	21.50	2.15	919	25.51	2.15	919	25.51
Natal.....	3,193	836	242	22.00	2.42	1,056	7.72	2.42	1,056	7.72
Subtotal.....	33,000	729	260	17.60 17.50	2.09	940	68.88	2.09	939	68.81
SOUTHWEST SECTOR										
Hamlin, Westin and Rubi.....	5,223	1,424	300 296	10.50	3.86	1,832	20.17	3.83	1,815	19.98
Other early ²	1,164	931	265 270	12.00 11.00	2.75	1,379	3.20	2.78	1,392	3.23
Pera Rio.....	10,353	720	266	17.50	2.00	1,044	20.73	2.00	1,044	20.73
Valencia and Folha Murcha ⁴ ..	12,596	727	235	21.50	2.18	1,118	27.43	2.18	1,118	27.43
Natal.....	5,947	814	242	22.00	2.35	1,166	13.99	2.35	1,166	13.99
Subtotal.....	35,284	850	260	17.60 17.50	2.42	1,227	85.52	2.42	1,224	85.36

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

² Valencia Americana, Seleta and Pineapple.

³ Weighted average per stratum bearing trees.

⁴ Folha Murcha – Valencia Folha Murcha.

Updated orange¹ crop forecast totals 388.42 million boxes

The 2019-2020 orange crop forecast update for São Paulo and West-Southwest Minas Gerais citrus belt, published on September 10, 2019 by Fundecitrus – performed in cooperation with Markestrat, FEA-RP/USP and FCAV/Unesp² – is of 388.42 million boxes of 40.8 kg each. This figure corresponds to a decrease of 0.12% in relation to the estimate published in May/2019. Approximately 27,14 million boxes of the total crop should be produced in the Triângulo Mineiro region.

Significant rainfall rates were recorded in the citrus belt during the first months of 2019, which maintained soil moisture. However, as of May, when the crop started, rainfall became scarce thus leading to a drier climate. According to data from Somar Meteorologia, the total accumulated volume from May to August was 111 millimeters in the citrus belt, 32% below its historical average (1981-2010). The rainfall spatial distribution map for the period shows that the precipitation status was clear-cut different among the regions: the closer to north of the citrus belt, the lower the absolute values. As compared to the historical average, rainfalls were consistent only in the region of Votuporanga, while negative deviations were observed in the other regions as follows: - 69% in Bebedouro, - 60% in Triângulo Mineiro, - 48% in Itapetininga, - 45% in Brotas, - 44% in São José do Rio Preto, - 42% in Matão, - 33% in Limeira, - 18% in Altinópolis, - 12% in Duartina, - 11% in Porto Ferreira, and - 6% in Avaré.

Fruit of early Hamlin, Westin and Rubi varieties harvested up to August presented average weight of 136 grams (4.8 oz), slightly below the 138 grams (4.9 oz) of May estimate. Therefore, the fruit size of these varieties has been updated to 300 fruits per box, while in May it was estimated at 296 fruits per box. The fruits of the other early Valencia Americana, Seleta and Pineapple varieties weighed 154 grams (5.4 oz), a slight variation when compared to the previously estimated 151 grams (5.3 oz), which changed the size to 265 fruits per box, in comparison to the 270 fruits per box projected in May. The fruit size of the other varieties did not present any changes in this update because the data available about these varieties were insufficient in view of the low volume harvested. Considering all varieties, the average size of the 260 fruits per box projected in May remain unchanged because the drop in the weight of Hamlin, Westin and Rubi varieties were offset by the increase in the weight of Valencia Americana, Seleta and Pineapple varieties.

Harvest reached 96% completion for the early Hamlin, Westin and Rubi varieties, and 85% for other earlies. Harvest totaled 23% for the Pera variety, 6% for the Valencia and Valencia Folha Murcha varieties, and 4% for the Natal variety. The harvest progressed more slowly for the mid-season and late varieties - an expected fluctuation considering the higher volume of early varieties produced in this crop season. Approximately 35% of the total 2019-2020 crop was harvested.

All varieties considered, fruit drop rate increased from 17.50% to 17.60%, on average. This minor adjustment results from the further drop observed in the Valencia Americana, Seleta and Pineapple varieties that was updated to 12.00%, one percentage point above May projection. The drop rate of Hamlin, Westin and Rubi varieties was confirmed at 10.50%. Since the harvest period of the remaining varieties is still at the beginning, their projections remain unchanged.

The method used for the update is the same adopted in the previous crop season. Information was obtained from the monitoring survey started in May on 1,200 plots that are no longer visited when fruit harvest is complete. Other data used in this study was size of fruit received throughout the crop season by orange juice companies associated to Fundecitrus – Citrosuco, Cutrale and Louis Dreyfus – for industrial processing. Each processing company supplies individual data under confidentiality to the independent consulting firm for the calculation of the average size of processed fruit.

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

² Departament of Math and Science at FCAV/Unesp Campus Jaboticabal.