



Current forecast update (variation regarding the December forecast):
Total orange crop production forecast: 264.14 million boxes (unchanged)
Hamlin, Westin and Rubi: 47.16 million boxes (unchanged)
Other early season: 14.85 million boxes (unchanged)
Pera Rio: 74.87 million boxes (unchanged)
Valencia and Valencia Folha Murcha: 97.26 million boxes (unchanged)
Natal: 30.00 million boxes (unchanged)

February 10, 2022

Publication Schedule 2021-2022

Final crop forecast: April 11, 2022

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

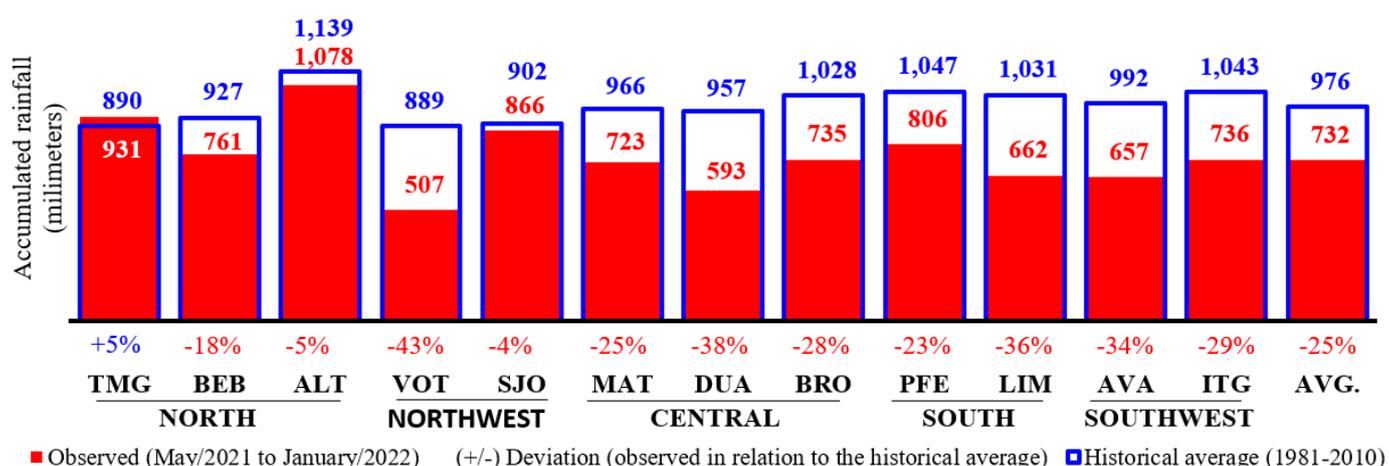
Month	Forecast components				Crop forecast update 2021-2021			Crop forecast update 2021-2021		
	December/2021 and February/2022 (strike-through values were presented in December, to their left are their respective values updated in February)				December/2021			February/2022		
Sector and variety group	Bearing trees	Fruit per tree at stripping	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....	25,410	780	332	12.0	1.86	819	47.16	1.86	819	47.16
Other early.....	9,003	614	289	13.5	1.65	804	14.85	1.65	804	14.85
Pera Rio.....	59,147	531	290	23.0	1.27	654	74.87	1.27	654	74.87
Valencia and Folha Murcha	54,121	696	264	24.0	1.80	844	97.26	1.80	844	97.26
Natal.....	18,878	638	274	24.0	1.59	744	30.00	1.59	744	30.00
Total.....	166,560	639	287	20.9	1.59	763	264.14	1.59	763	264.14
NORTH SECTOR										
Hamlin, Westin and Rubi....	6,620	826	332	12.0	1.97	808	13.01	1.97	808	13.01
Other early.....	2,088	770	289	13.5	2.07	1,022	4.32	2.07	1,022	4.32
Pera Rio.....	13,007	540	290	23.0	1.29	700	16.74	1.29	700	16.74
Valencia and Folha Murcha	13,637	765	264	24.0	1.98	893	26.96	1.98	893	26.96
Natal.....	4,313	635	274	24.0	1.58	714	6.82	1.58	714	6.82
Subtotal.....	39,665	688	287	20.9	1.71	808	67.85	1.71	808	67.85
NORTHWEST SECTOR										
Hamlin, Westin and Rubi....	2,245	553	332	12.0	1.31	597	2.95	1.31	597	2.95
Other early.....	1,661	512	289	13.5	1.37	668	2.28	1.37	668	2.28
Pera Rio.....	6,697	604	290	23.0	1.44	661	9.63	1.44	661	9.63
Valencia and Folha Murcha	3,597	575	264	24.0	1.49	724	5.35	1.49	724	5.35
Natal.....	1,771	411	274	24.0	1.02	491	1.81	1.02	491	1.81
Subtotal.....	15,971	559	287	20.9	1.38	648	22.02	1.38	648	22.02
CENTRAL SECTOR										
Hamlin, Westin and Rubi....	7,062	791	332	12.0	1.88	850	13.28	1.88	850	13.28
Other early.....	3,169	563	289	13.5	1.51	692	4.79	1.51	692	4.79
Pera Rio.....	17,647	485	290	23.0	1.16	601	20.41	1.16	601	20.41
Valencia and Folha Murcha	13,967	680	264	24.0	1.76	815	24.52	1.76	815	24.52
Natal.....	4,634	701	274	24.0	1.74	768	8.08	1.74	768	8.08
Subtotal.....	46,479	617	287	20.9	1.53	732	71.08	1.53	732	71.08
SOUTH SECTOR										
Hamlin, Westin and Rubi....	4,590	687	332	12.0	1.63	736	7.50	1.63	736	7.50
Other early.....	494	850	289	13.5	2.29	1,015	1.13	2.29	1,015	1.13
Pera Rio.....	12,310	488	290	23.0	1.16	591	14.32	1.16	591	14.32
Valencia and Folha Murcha	11,123	670	264	24.0	1.73	786	19.25	1.73	786	19.25
Natal.....	2,738	565	274	24.0	1.41	689	3.85	1.41	689	3.85
Subtotal.....	31,255	595	287	20.9	1.47	702	46.05	1.47	702	46.05
SOUTHWEST SECTOR										
Hamlin, Westin and Rubi....	4,894	895	332	12.0	2.13	969	10.42	2.13	969	10.42
Other early.....	1,591	544	289	13.5	1.46	834	2.33	1.46	834	2.33
Pera Rio.....	9,486	609	290	23.0	1.45	770	13.77	1.45	770	13.77
Valencia and Folha Murcha	11,796	695	264	24.0	1.80	918	21.18	1.80	918	21.18
Natal.....	5,422	699	274	24.0	1.74	862	9.44	1.74	862	9.44
Subtotal.....	33,189	694	287	20.9	1.72	873	57.14	1.72	873	57.14



Total orange¹ production remains at 264.14 million boxes

The third 2021-2022 orange crop forecast update for the São Paulo and West-Southwest Minas Gerais citrus belt, published on February 10, 2022, by Fundecitrus – performed in cooperation with Markestrat, FEA-RP/USP and FCAV/Unesp² –, remains at the volume projected in the previous forecast update carried out in December 2021, of 264.14 million boxes of 40.8 kg each. Should this forecast hold true until harvest ends, then this crop, affected by climatic factors for the second consecutive year, will fall short by 30 million boxes, which is 10.21% of the initial expectation. Out of the total forecasted volume, 23.46 million boxes are still expected to be produced in the Triângulo Mineiro.

The arid landscape of groves prevailing at the beginning of this crop season, caused by the most severe drought in history and frosts of rare intensity, started to change when rains resumed as of October last year. Rainfall volume increased in January 2022, although the accumulated amount since May 2021 is still far from the historical average. In that period, from May 2021 to January 2022, rainfall totaled 732 millimeters on average for the regions of the citrus belt, which is 25% below the climatological normal (1981-2020), according to data from Somar/Climatempo Meteorologia. Deviations were negative in 11 regions: -43% in Votuporanga; -38% in Duartina; -36% in Limeira; -34% in Avaré; -29% in Itapetininga; -28% in Brotas; -25% in Matão; -23% in Porto Ferreira; -18% in Bebedouro; -5% in Altinópolis; -4% in São José do Rio Preto. Rainfall surpassed the historical average only in the Triângulo Mineiro, with a positive deviation of 5%, as presented in Graph 1. The atypical drought in the citrus belt and the milder temperatures observed in this crop season result from the La Niña phenomenon that should last until May.



Graph 1: Accumulated rainfall from May 2021 to January 2022 (observed and historical average) of the citrus belt

Source: Fundecitrus, according to data from Somar/Climatempo Meteorologia.

Orange growth was affected in this crop season as a consequence of adverse climate conditions. Therefore, the average fruit weight was reduced to 142.2 grams (287 fruits per box) in the previous forecast update, which is 15.9% lower than that in the last five crop seasons (169 grams average).

Survey data shows that the average weight of fruits harvested by January 2022 is slightly lower than the projected weight, although fruits to be harvested in February and March this year should be somewhat larger, since that is a rainier period. Rainfall, combined with the advanced fruit maturation stage will also contribute to reaching the projected premature fruit drop rate of 20.90%. Thus, in this crop forecast update before last, projected fruit size and fruit drop rate figures remain the same. Updated parameters will be final only after harvests end in April.

The plot monitoring survey shows that harvest reached 82% of the total production in mid-January. Harvest of the early varieties Hamlin, Westin and Rubi is complete; harvest reached 97% completion for other early varieties Valencia Americana, Seleta and Pineapple; 89% for Pera Rio, 66% for Valencia and Valencia Folha Murcha, and 69% for Natal.

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 is 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 Department of math and science, FCAV/Unesp Jaboticabal Campus.