

# 2024-2025 ORANGE CROP FORECAST UPDATE FOR THE SÃO PAULO AND WEST-SOUTHWEST MINAS GERAIS CITRUS BELT FEBRUARY/2025

# Forecast update (variation in the December forecast):

## February, 10 2025

Total orange crop production forecast: 228.52 million boxes (2.4% increase) Hamlin, Westin and Rubi: 37.63 million boxes (unchanged) Other early season: 15.60 million boxes (1.3% increase) Pera Rio: 74.46 million boxes (2.7% increase) Valencia and Folha Murcha: 74.20 million boxes (3.2% increase) Natal: 26.63 million boxes (3.5% increase)

Publication Schedule 2024-2025

Final crop forecast: April 10, 2025

#### Table 1 - Orange crop forecast update by sector and variety group - citrus belt

	Ecrocost							Crop forecast undete		
	Forecast				Crop forecast update 2024-2025			Crop forecast update 2024-2025		
	components December/2024 and February/2025				2024-2023			2024-2025		
Month	(strike-through values were presented in December, to their left are their respective values updated in February)				December/2024			February/2025		
	Fruit per Fruit		Fruit		D	D			D	
Sector and variety group	Bearing	tree at	estimated	Estimated	Per	Per	Total	Per	Per	Total
	trees	stripping	per box	drop rate	tree	hectare		tree	hectare	
	(1,000 trees)	(number)	(number)	(percentage)	(boxes/	(boxes/	(1,000,000	(boxes/	(boxes/	(1,000,000
			` ´	u Uv	tree)	hectare)	boxes)	tree)	hectare)	boxes)
CITRUS BELT			202	10.50			07.00			07.00
Hamlin, Westin and Rubi	26,437.06	501	283	10.60	1.42	666	37.63			37.63
Other early	10,834.96	478	257 <del>262</del>	13.90 13.40	1.42	740	15.40	1.44	749	15.60
Pera Rio	59,601.12	422	252 <del>258</del>	17.00 17.30	1.22	639	72.51	1.25	656	74.46
Valencia and Folha Murcha	53,100.14	501	252 <del>253</del>	21.80 24.00	1.35	665	71.87	1.40		74.20
Natal	18,569.39 168,542.67	525 <b>474</b>	255 <del>258</del> 258 <del>261</del>	22.50 <del>24.30</del> <b>18.00 <del>19.00</del></b>	1.39 <b>1.32</b>	691 <b>664</b>	25.73 <b>223.14</b>	1.43 <b>1.36</b>	715 680	26.63 <b>228.52</b>
Total	100,542.07	4/4	230 <del>201</del>	10.00 17.00	1.32	004	443.14	1.50	000	220,52
NORTH SECTOR	6 0 7 2 0 0	100	074 070	14.00.10.40	1 41	(20)	0.60	1.07	(10	0.44
Hamlin, Westin and Rubi	6,872.89	488		14.20 12.40	1.41	628	9.69	1.37	612	9.44
Other early	2,146.81	506		12.20 12.20	1.69	805	3.62	1.67	796	3.58
Pera Rio	12,164.10	375	243 <del>246</del>	11.80 <del>13.10</del> 10 70 21 50	1.19	630	14.43	1.22	648	14.85
Valencia and Folha Murcha Natal	12,734.31 3,910.89	421 395	237 <del>233</del> 237 <del>233</del>	19.70 <del>21.50</del> 8.60 <del>9.70</del>	1.28 1.37	572 630	16.24 5.36	1.28 1.36	575 625	16.31 5.32
Subtotal	37,829.00	420	$237 \pm 33$ 247 $245$	8.00 <del>9.70</del> <b>14.70</b> <del>15.40</del>	<b>1.37</b> <b>1.30</b>	619	<b>49.34</b>	1.30 1.31	623 621	<b>49.50</b>
	57,829.00	420	24/243	14.70 15.40	1.50	017	77.57	1.51	021	<b>4</b> 7.50
NORTHWEST SECTOR	2 0 4 2 7 2	220	267 262	6 60 7 10	0.00	327	1.42	0.69	325	1 4 1
Hamlin, Westin and Rubi	2,043.73 1,906.61	220 288		6.60 <del>7.10</del> 8.50 <del>8.60</del>	0.69 0.96	527 524	1.42	0.69	525 539	1.41 1.88
Other early Pera Rio	6,993.74	200 322	$240 \pm 40$ 229 $\pm 32$	8.30 <del>3.00</del> 14.00 <del>12.50</del>	1.09	515	7.60	1.08	513	1.88 7.57
Valencia and Folha Murcha	2,613.54	362	$229 \frac{232}{233}$ 241 $\frac{233}{233}$	14.00 + 2.50 14.40 + 15.60	1.18	570	3.08	1.08	559	3.02
Natal	1,125.00	174	$272 \frac{255}{268}$	32.60 <del>24.70</del>	0.44	229	0.50	0.39	202	0.44
Subtotal	14,682.62	299	272 200	13.50 <del>12.70</del>	0.98	478	14.43	0.99	474	14.32
CENTRAL SECTOR	11,002.02		207	10.00 12.70	0.70	470	1	0.70		1402
Hamlin, Westin and Rubi	6,775.50	484	294 <del>296</del>	11.90 <del>12.50</del>	1.28	629	8.69	1.30	639	8.83
Other early	4,208.31	484		11.90 + 2.50 11.90 + 1.80	1.28	700	5.46		719	5.61
Pera Rio	18,007.25	379	$258 \frac{260}{260}$	21.40 20.90	1.03	563	18.59	1.03	564	18.63
Valencia and Folha Murcha	14,350.90	451	$250\ 200$ $262\ 260$	22.90 <del>23.70</del>	1.05	624	17.08	1.05	624	17.10
Natal	4,661.85	535	$262\ 200$ $262\ 257$	31.30 33.40	1.24	608	5.79	1.26		5.86
Subtotal	48,003.81	437			1.16	607	55.61	1.17		56.03
SOUTH SECTOR	- ,	_						-	_	
Hamlin, Westin and Rubi	4,586.72	489	278 <del>276</del>	7.80 <del>8.40</del>	1.45	690	6.67	1.46	692	6.69
Other early	637.46	527	270 270 281 <del>287</del>	7.40	1.43	761	0.97			0.99
Pera Rio	10,649.26	466		22.10 23.20	1.20	620	12.74	1.24	644	13.22
Valencia and Folha Murcha	9,649.05	551	270 <del>267</del>	21.00 24.00	1.41	662	13.60	1.45	679	13.96
Natal	2,523.71	628	267 <del>268</del>	26.50 30.40	1.46	757	3.69	1.55	802	3.91
Subtotal	28,046.20	515		19.60 <del>21.60</del>	1.34	662	37.67		681	38.77
SOUTHWEST SECTOR	,									
Hamlin, Westin and Rubi	6,158.22	638	287	8.50 <del>9.10</del>	1.81	841	11.16	1.83	848	11.26
Other early	1,935.77	680		22.10 20.30	1.82	938	3.52	1.83	943	3.54
Pera Rio	11,786.77	557	253 <del>265</del>	13.20 13.70	1.62	860	19.15	1.71	907	20.19
Valencia and Folha Murcha	13,752.34	616		23.60 26.80	1.59	827	21.87	1.73	900	23.81
Natal	6,347.94	620		20.30 21.80	1.64	854	10.39		912	11.10
Subtotal	39,981.04	606	256 265	17.70 <del>19.20</del>	1.65	848	66.09	1.75	897	69.90



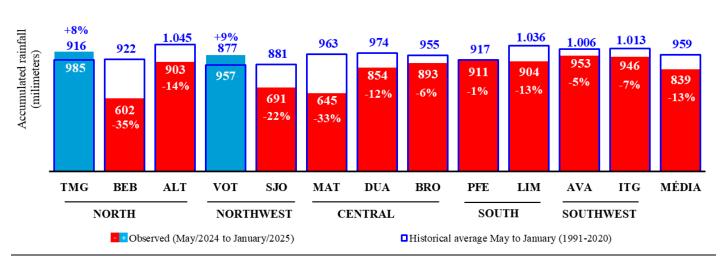


# Total orange production<sup>1</sup> is updated at 228.52 million boxes

The third update of the 2024-2025 orange crop forecast for the São Paulo and West-Southwest Minas Gerais citrus belt, published on February 10, 2025 by Fundecitrus, carried out in cooperation with full professor from FCAV/Unesp<sup>2</sup>, is 228.52 million boxes of 40.8 kg, which corresponds to a reduction of 3.86 million boxes, the equivalent to -1.7% in relation to the initial estimate projected in May 2024. It is also estimated that around 14.81 million boxes will be harvested in the Triângulo Mineiro region.

In comparison to the last forecast in December, which projected 223.14 million boxes, the new forecast indicates an increase of 2.4%, corresponding to an increase of 5.38 million boxes. The Valencia and Folha Murcha varieties, with 2.33 million boxes, and the Pera Rio variety, with 1.95 million boxes, were the ones that had the greatest contribution to this increase, while the Other Early varieties and Natal variety had a smaller contribution, with 200 and 900 thousand boxes, respectively. The increase in the number of boxes observed in this February forecast is a result of the reduction in the drop rate observed in the field and the growth of the fruits above that projected, especially those of the fourth bloom.

According to data from Climatempo Meteorologia, rainfall in the last two months was well distributed across all regions of the citrus belt, exceeding forecasts and the historical average in December, but falling below expectations and the historical average in January. The average accumulated rainfall in the citrus belt from May 2024 to January 2025 was 839 millimeters, which corresponds to a 13% deficit in relation to the historical average. In the accumulated amount from the beginning of this crop until the end of January 2025, the regions of West-Southwest Minas Gerais and Votuporanga registered a slight increase of 8% and 9% in rainfall, respectively, in relation to the historical data. The regions of Porto Ferreira, Avaré, Brotas, Itapetininga, Duartina, Limeira, and Altinópolis presented volumes slightly below the historical average, with negative variations from 1% to 14%. In the regions of São José do Rio Preto, Matão, and Bebedouro, the observed reductions in rainfall were more pronounced, between 22% and 35% below the historical average, as shown in Graph 1.



Graph 1 - Total accumulated rainfall from May 2024 to January 2025 in the citrus belt regions Source: Fundecitrus, based on data from Climatempo Meteorologia



### 2024-2025 ORANGE CROP FORECAST UPDATE FOR THE SÃO PAULO AND WEST-SOUTHWEST MINAS GERAIS CITRUS BELT FEBRUARY/2025

The above average rainfall in December continued the trend observed in October and November, when volumes also exceeded the historical average, contributing to the increase in fruit size. However, in January, the below average rainfall did not allow the fruits to grow further. This rainfall did not affect the final average size of the Hamlin, Westin, and Rubi oranges, as almost all of this group's production had already been harvested by January. The fruits of the other early varieties should be harvested with weights greater than those estimated in December, but the impact on the crop will be insignificant, since only 3% of this group's production remains to be harvested. On the other hand, approximately, 5% and 10% of the production of the Pera Rio and Natal varieties are still awaiting harvest, and these fruits tend to present weights greater than those estimated in December. Although the projected growth for the Valencia and Folha Murcha oranges was small, it exceeded the forecast of the previous estimate and contributed to the increase in this estimate, considering that around 16% of the production of this group still needs to be harvested.

The projection of the size of the fruits of the first, second, and third blooms, considering all varieties, remained at 161 grams (5.68 oz), while the fruits of the fourth bloom registered an increase of 20 grams (0.71 oz) in relation to the December estimate, reaching 146 grams (5.15 oz). This is due to the fact that most of the production that will be harvested comes from the fourth bloom, which occurred late. Therefore, in this forecast, the fruit should be harvested with 158 grams (5.57 oz) on the general average, two grams (0.07 oz) more than previously predicted. With this, it is estimated that 258 fruits will be needed to make up a 40.8 kg box, three fruits less than previously estimated.

For the Hamlin, Westin, and Rubi varieties, the number of oranges per box remained at 283 fruits (144 grams / 5.08 oz per fruit). Among the other early varieties, the quantity changed from 262 fruits (156 grams / 5.50 oz per fruit) to 257 fruits (159 grams / 5.61 oz). The Pera variety, previously projected at 258 fruits per box (158 grams / 5.57 oz per fruit), was adjusted to 252 fruits (162 grams / 5.71 oz). The Valencia and Folha Murcha varieties had the number of fruits per box revised from 253 (161 grams / 5.68 oz per fruit) to 252 (162 grams / 5.71 oz). The Natal variety also showed a change, from 258 fruits (158 grams / 5.57 oz per fruit) to 255 fruits (160 grams / 5.64 oz). The detailed sizes by sector and variety are presented in Table 2.

Group of varieties	Sector (hatched values were presented in December 2024 and their respective values updated in February 2025 are on the left)							
	North	Northwest	Central	South	Southwest	Total		
	(Fruits per box)	(Fruits per box)	(Fruits per box)	(Fruits per box)	(Fruits per box)	(Fruits per box)		
Hamlin, Westin and Rubi	274 <del>272</del>	267 <del>263</del>	294 <del>296</del>	278 <del>276</del>	287	283		
Other earlies	239 <del>236</del>	240 246	267 <del>274</del>	281 <del>287</del>	260 <del>267</del>	257 <del>262</del>		
Pera Rio	243 <del>246</del>	229 <del>232</del>	258 <del>260</del>	262 <del>268</del>	253 <del>265</del>	252 <del>258</del>		
Valencia and Folha Murcha	237 <del>233</del>	241 233	262 <del>260</del>	270 <del>267</del>	244 <del>255</del>	252 <del>253</del>		
Natal	237 <del>233</del>	272 <del>268</del>	262 <del>257</del>	267 <del>268</del>	253 <del>265</del>	255 <del>258</del>		
Total	247 <del>245</del>	239	266 <del>267</del>	268 <del>269</del>	256 <del>265</del>	258 <del>261</del>		

Table 2 – Average fruit size, as pieces of fruit per box, by sect	or and variaty?
$-1$ able $\Delta - A$ verage if uit size, as pieces of if uit per box, by second	

 $^{3}$  The precision of the overall average of the citrus belt is higher than that of the sectors, ages or variety groups, due to the larger sample size.

The projection of the fruit drop rate decreased to 18%, compared to 19% projected in December, mainly due to observations in the field monitoring of the late maturing varieties Valencia, Folha Murcha, and Natal. This lower drop rate is related to the earlier harvest of the fruits from the first two blooms and the lower quantity of fruits on the trees compared to previous crops. Despite the slight reduction, the premature fruit drop rate remains at a significant level, mainly due to greening, fruit fly, and other factors, in addition to mechanized grove management operations.



For the Hamlin, Westin, and Rubi oranges, the drop rate remained at 10.6%. For the Other Early varieties, Pera Rio, Valencia/Folha Murcha and Natal, the rate was revised to 13.9%, 17.0%, 21.8%, and 22.5%, respectively. Drop rates by sector and variety are detailed in Table 3.

Group of varieties	Sector (hatched values were presented in December 2024 and their respective values updated in February 2025 are on the left)							
	North	Northwest	Central	South	Southwest	Total		
	(percentual)	(percentual)	(percentual)	(percentual)	(percentual)	(percentual)		
Hamlin, Westin and Rubi	14.20 <del>12.40</del>	6.60 7.10	11.90 <del>12.50</del>	7.80 <del>8.40</del>	8.50 <del>9.10</del>	10.60		
Other earlies	12.20 12.20	8.50 <del>8.60</del>	11.90 11.80	7.40	22.10 <del>20.30</del>	13.90 <del>13.40</del>		
Pera Rio	11.80 <del>13.10</del>	14.00 12.50	21.40 20.90	22.10 23.20	13.20 13.70	17.00 <del>17.30</del>		
Valencia and Folha Murcha	19.70 <del>21.50</del>	14.40 15.60	22.90 <del>23.70</del>	21.00 24.00	23.60 <del>26.80</del>	21.80 <del>24.00</del>		
Natal	8.60 <del>9.70</del>	32.60 24.70	31.30 <del>33.40</del>	26.50 <del>30.40</del>	20.30 21.80	22.50 <del>24.30</del>		
Total	14.70 <del>15.40</del>	13.50 <del>12.70</del>	<b>20.70</b> <del>21.10</del>	19.60 <del>21.60</del>	17.70 <del>19.20</del>	<b>18.00 <del>19.00</del></b>		

## Table 3 – Average drop rates by sector and variety<sup>4</sup>

<sup>4</sup> The precision of the overall average of the citrus belt is higher than that of the sectors, ages or variety groups, due to the larger sample size.

Based on field data, it is estimated that by mid-November, around 89% of the production had been harvested. In the early varieties, Hamlin, Westin and Rubi, the harvest reached 99%, while the other early varieties reached 97%. The harvest of the Pera variety was at 85%. Among the late varieties, Valencia and Folha Murcha registered 84%, and the Natal variety, 90%.

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 for the calculation of the average size of processed fruit.

<sup>1</sup> Hamlin, Westin, Rubi, Valencia Americana, Seleta, Pineapple, Alvorada, Pera Rio, Valencia, Folha Murcha and Natal.

<sup>2</sup> Department of Exact Sciences, FCAV/Unesp Jaboticabal Campus.

