

Report on fruit size and droppage rate

April 10, 2023

This publication presents the final estimates of fruit size (pieces of fruit to make a standard 40.8 kg box at harvest) and droppage rate from 2015-2016 to 2022-2023 orange crops. 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 information was obtained from the monitoring survey conducted on 1,200 blocks since May, which cease to be visited as their harvest is concluded. The details of this methodology are found in the document “Methodology for the Orange Production Forecast Update” available at www.fundecitrus.com.br. Other source of data used was the average size of fruit received throughout the crop 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.

Table 1 – Oranges¹: Final estimates of fruits per box (average size) and droppage rate from 2015-2016 to 2022-2023 crops by sector, age, variety groups and reasons of fruit drop since 2016-2017 crop

Sector, age, variety and reasons of fruit drop	Final estimate of fruit per box								Final estimate of droppage rate							
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
	(number)	(number)	(number)	(number)	(number)	(number)	(number)	(number)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
North.....	237	220	248	252	256	248	267	242	18.09	10.18	15.55	19.68	16.72	17.96	19.06	19.40
Northwest.....	219	224	245	281	255	267	273	287	14.81	12.73	22.27	26.74	17.44	23.74	20.49	18.10
Central.....	211	214	227	241	257	269	303	247	19.94	16.25	19.50	15.81	18.79	27.03	24.35	19.70
South.....	237	230	268	273	263	268	288	281	22.28	13.58	19.94	15.04	22.81	20.34	26.26	22.30
Southwest.....	225	224	246	265	271	246	276	251	11.16	12.75	11.82	14.89	13.11	19.60	18.65	25.00
3 to 5 years.....	228	229	221	238	217	224	249	233	11.21	9.14	12.86	11.60	13.90	12.63	13.25	12.73
6 to 10 years.....	223	221	242	253	247	253	263	241	14.93	11.22	15.63	14.69	16.38	18.18	17.83	18.59
Above 10 years.....	228	222	252	264	271	262	293	258	20.98	16.15	19.16	18.31	18.40	23.48	23.90	23.09
Hamlin, Westin and Rubi.....	272	243	277	320	300	278	332	310	12.12	9.40	10.00	11.00	10.50	12.80	12.00	10.40
Valencia Americana, Seleta, Pineapple and Alvorada.....	233	210	251	282	262	255	289	266	11.91	10.30	11.30	12.30	13.20	11.50	13.50	14.20
Pera Rio.....	225	224	253	261	261	263	287	258	15.51	12.00	17.00	16.80	17.50	22.90	23.80	20.30
Valencia and Valencia Folha Murcha.....	200	211	223	224	239	247	262	229	22.62	17.00	21.80	18.40	21.50	25.20	25.00	27.50
Natal.....	211	220	235	237	247	246	269	233	19.71	17.50	20.00	23.80	22.00	23.70	26.30	28.00
Natural and physical.....	-	-	-	-	-	-	-	-	NA	5.99	7.45	5.16	5.15	6.63	5.50	3.94
Greening.....	-	-	-	-	-	-	-	-	NA	1.37	4.06	2.70	4.39	3.71	3.08	5.48
Fruit borer and Fruit fly.....	-	-	-	-	-	-	-	-	NA	2.34	2.70	5.70	4.29	4.76	5.63	6.27
Black spot.....	-	-	-	-	-	-	-	-	NA	3.75	2.16	2.02	2.12	2.98	2.90	2.34
Leprosis.....	-	-	-	-	-	-	-	-	NA	0.25	0.62	0.82	1.30	1.70	2.83	1.99
Cancker.....	-	-	-	-	-	-	-	-	NA	0.03	0.31	0.30	0.38	0.37	0.21	0.17
Fruit peel cracking	-	-	-	-	-	-	-	-	NA	ND	ND	ND	ND	1.45	1.65	1.10
Citrus Belt.....	226	222	246	259	261	258	285	256	17.49	13.73	17.31	16.70	17.63	21.60	21.80	21.30

NA – Not Available.

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