

Report on fruit size and droppage rate

April 12, 2021

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 2020-2021 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 – Citrusuco, 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 2020-2021 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 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 |
| | (number) | (number) | (number) | (number) | (number) | (number) | (%) | (%) | (%) | (%) | (%) | (%) |
| North..... | 237 | 220 | 248 | 252 | 256 | 248 | 18.09 | 10.18 | 15.55 | 19.68 | 16.72 | 17.96 |
| Northwest..... | 219 | 224 | 245 | 281 | 255 | 267 | 14.81 | 12.73 | 22.27 | 26.74 | 17.44 | 23.74 |
| Central..... | 211 | 214 | 227 | 241 | 257 | 269 | 19.94 | 16.25 | 19.50 | 15.81 | 18.79 | 27.03 |
| South..... | 237 | 230 | 268 | 273 | 263 | 268 | 22.28 | 13.58 | 19.94 | 15.04 | 22.81 | 20.34 |
| Southwest..... | 225 | 224 | 246 | 265 | 271 | 246 | 11.16 | 12.75 | 11.82 | 14.89 | 13.11 | 19.60 |
| 3 to 5 years..... | 228 | 229 | 221 | 238 | 217 | 224 | 11.21 | 9.14 | 12.86 | 11.60 | 13.90 | 12.63 |
| 6 to 10 years..... | 223 | 221 | 242 | 253 | 247 | 253 | 14.93 | 11.22 | 15.63 | 14.69 | 16.38 | 18.18 |
| Above 10 years..... | 228 | 222 | 252 | 264 | 271 | 262 | 20.98 | 16.15 | 19.16 | 18.31 | 18.40 | 23.48 |
| Hamlin, Westin and Rubi..... | 272 | 243 | 277 | 320 | 300 | 278 | 12.12 | 9.40 | 10.00 | 11.00 | 10.50 | 12.80 |
| Valencia Americana, Seleta and Pineapple..... | 233 | 210 | 251 | 282 | 262 | 255 | 11.91 | 10.30 | 11.30 | 12.30 | 13.20 | 11.50 |
| Pera Rio..... | 225 | 224 | 253 | 261 | 261 | 263 | 15.51 | 12.00 | 17.00 | 16.80 | 17.50 | 22.90 |
| Valencia and Valencia Folha Murcha..... | 200 | 211 | 223 | 224 | 239 | 247 | 22.62 | 17.00 | 21.80 | 18.40 | 21.50 | 25.20 |
| Natal..... | 211 | 220 | 235 | 237 | 247 | 246 | 19.71 | 17.50 | 20.00 | 23.80 | 22.00 | 23.70 |
| Natural and physical..... | - | - | - | - | - | - | ND | 5.99 | 7.45 | 5.16 | 5.15 | 6.63 |
| Greening..... | - | - | - | - | - | - | ND | 1.37 | 4.06 | 2.70 | 4.39 | 3.71 |
| Fruit borer and Fruit fly..... | - | - | - | - | - | - | ND | 2.34 | 2.70 | 5.70 | 4.29 | 4.76 |
| Black spot..... | - | - | - | - | - | - | ND | 3.75 | 2.16 | 2.02 | 2.12 | 2.98 |
| Leprosis..... | - | - | - | - | - | - | ND | 0.25 | 0.62 | 0.82 | 1.30 | 1.70 |
| Cancker..... | - | - | - | - | - | - | ND | 0.03 | 0.31 | 0.30 | 0.38 | 0.37 |
| Fruit peel cracking | - | - | - | - | - | - | ND | ND | ND | ND | ND | 1.45 |
| Citrus Belt..... | 226 | 222 | 246 | 259 | 261 | 258 | 17.49 | 13.73 | 17.31 | 16.70 | 17.63 | 21.60 |

NA – Not Available.

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