

## **REGULATION OF FRUIT LOADERS IN APPLE ORCHARDS DECISIVE TECHNOLOGICAL ELEMENT TO INCREASING FRUIT QUALITY**

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The researches were carried out in the orchard of the company Ltd. „Codru ST” during 2014-2017, age of trees 9-12 years, varieties Gala Must, Golden Delicious Reinders, Idared, grafted on M9, planting distance 3,5x1,2m, crown shape improved slender spindle. For chemical thinning 3 growth regulators with different treatment basis were used: Geramid New (1.2; 1.5; 2.0 l/ha), Dirager (0.2; 0.3; 0.4 l/ha) and Gerba 4LG (2.0; 2.5; 3.0 l/ha).

Higher values of the given index during the research were scored in trees of Idared variety (170.3 g) compared to those of Golden Reinders (161.0 g) and Gala Must (154.8 g).

The largest fruit diameter in the years of research in the hand thinning variant was obtained in Idared (75.8 mm) compared to Golden Reinders and Gala Must, where the index in the study was 71.1 and 71.9 mm respectively.

The method of fruit load regulation influenced fruit diameter. The control variant, without thinning, recorded lower values, constituting in 2014, in the fruit of Gala Must 57.2 mm, Golden Reinders 54.3 mm and in the trees of Idared 64.3 mm. This legality was also recorded in 2016. In 2015 and 2017 in the given variant, the average fruit diameter within trees of Gala Must and Idared varieties as a result of the very small number of fruits recorded very high values (75.0-86.6 mm), which are more difficult to market.

Higher values of the index in the study, in trees of the Golden Reinders variety, were recorded in the variants Geramid New 2.0 l/ha, where fruits of the „Extra” category accounted for 58.2%, category I - 33.6% and category II - 8.2%. In the variants Dirager 0.4 l/ha and Gerba 4LG, 2.5 l/ha the studied index obtained identical values as in the previous variant, constituting 55.6; 32.5; 11.9 and 59.2; 30; 7.8%

In the other variants, the commercial qualities of the fruit were lower than in the variants mentioned above and only in the Gerba 4LG variant, 3.0 l/ha, higher values were recorded (category „Extra” - 63.9%; category I - 31.7%; category I - 31.7%; category II - 4.4%).

The obtained results allow us to conclude that the commercial quality of the fruit was influenced by the biological peculiarities of the variety and the way of regulating the fruit load.

***Keywords: area, projection, specific production, thinning, volume.***