



## INFLUENCE OF FREEZING METHOD ON COLOR CHANGE AND ANTIOXIDANT ACTIVITY IN CHERRY FRUIT

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### ABSTRACT

Showing preprocessing cherry fruit of varieties Shpanka and Lotovka by sugar solution with the addition of chitosan or ascorutin. For this studies conducted over the years 2016–2017 with the fruits of cherry varieties Shpanka and Lotovka. Prepare fruit included: sorting, inspection, washing, hold 30 minutes in solutions of 20% sugar ascorutin 4% or 20% of the sugar with the addition of 1% chitosan, remove moisture, freezing at  $-25^{\circ}\text{C}$ , packing in plastic bags of 0.5 kg and storage at  $-18^{\circ}\text{C}$ . By taking control of raw fruit cherries packed in plastic bags. The content of tannins and colorants in cherry fruits is a varietal feature and after freezing in the fruits of the cherry varieties of Shpanka and Lotovka is reduced by 22 and 29%. Whereas in pre-treated fruits cherries by 20% sugar solutions with addition of 4% ascorutin or 1% chitosan decreased to 10 and 12%. The number of ascorbic acid in fruits, respectively, decreased to 23 and 38%. In addition, the smallest losses were for fruits treated with 20% sugar solution with the addition of 1% chitosan. According to the research, preservation of quality and biological value of frozen fruit cherry preprocessing contributes 20% sugar solution with the addition of 1% chitosan. The color indicator is a varietal feature. Antioxidant activity during freezing did not change significantly. It has been established that antioxidant activity correlates with the content of tannins and colorants and correlates with the content of ascorbic acid inverted.

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