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ECONOMIC EFFICIENCY OF PRESERVATION OF CHERRY FRUITS FOR TREATMENTS BY POLYSACCHARIDIC COMPOSITIONS

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The article shows the economic efficiency of storage of cherry fruits, pre-treated with polysaccharide compositions: a solution of chitosan, sodium alginate before storage. As the demand for the production of fruit and berry products causes an increase in fruit production and the emergence of new fruit and berry farms, so the problem of cooling and storage of fruit becomes relevant. The aim of the research was to determine the economic efficiency of cherry fruits, pre-treated with polysaccharide compositions after storage.

The research was conducted during 2016−2019 on the basis of the pomology research station named after L.P. Symyrenko IS NAAS with cherry fruits of varieties Alpha and Memory Artemenko. The cherry fruits were sprayed with a solution of chitosan with salicylic acid the day before harvest, then removed at the consumer stage of ripeness and placed in storage boxes at a temperature of 1±0,5°C and relative humidity of 95 ± 1%. Raw fruits were taken as control. Selected cherry fruits were washed with water and immersed in 5% sodium alginate solutions according to the options: without treatment (control) and treated with sodium alginate solutions.

Pre-treatment with solutions of chitosan with salicylic acid, allowed to obtain a higher yield of marketable products 92,3−93%, for treatment of cherries with a solution

of sodium alginate −91,3−92,4%. Which makes it possible to obtain a higher yield of 7,8−8,7% and 5,6−6,8% of marketable products, compared to unprocessed fruits.

Pre-treatment of cherry fruits before storage with solutions of polysaccharides: chitosan and sodium alginate, made it possible to obtain a profit of 287,03−311,23 thousand UAH. at the level of profitability of 16,7−18,1%.

Key words: cherry fruits, economic efficiency, chitosan, sodium alginate, storage.