USE ENZYMATIC CATALYSIS IN THE PRODUCTION OF BLUEBERRIES JUICE

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Usage of blueberries allows enriching foods with biologically active complex, that is contained in it.

The purpose is to study the chemical composition of and the impact of enzymatic catalysis on the quality of blueberry juice.

We investigated the impact of the active enzymes complex on the outlet of blueberries juice and the change of biologically active substances in it.

The mass concentrations of organic acids, sugars, phenolic compounds, amino acids in berries and blueberries juices were determined by a method of highly liquid chromatography.

Analysis of the chemical composition of blueberries has confirmed the presence of a significant number of biologically active substances in its structure. The impact of pretreated blueberries by active enzymes complex on the outlet and quality of bilberries juice was investigated. It was established that harvesting period of berries and type of pretreatment influence the composition of phenolic compounds in blueberries juices. Positive impact of enzymatic catalysis on the transition of colorful substances from the berries in the blueberries juice was confirmed. Analysis of the fractional composition of phenolic compounds and amino acid composition of juice after enzymatic catalysis by complex active enzymes confirmed that the maximum transition of phenolic compounds is achieved in the prewarmed marc by multienzymatic composition (MEC) of enzymes of pectolytic and cellulolitical actions and complex enzyme Fr. Color.

It was proved that the usage of enzymatic catalysis in the production of juice promotes the formation of finished product with increased biological value.

Keywords: blueberries, juice, chemical composition, enzymes, multienzymatic composition, phenolic compounds.