



RESEARCH OF TECHNOLOGICAL PARAMETERS AND CRITERIA FOR EVALUATING DISTILLATE PRODUCTION FROM DRIED JERUSALEM ARTICHOKE

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ABSTRACT

In this paper, it is proposed to use dried Jerusalem artichoke as a raw material for distillate production. The purpose of the research was to develop a distillate technology from dried Jerusalem artichoke and to determine the criteria for assessing its quality. The work revealed patterns of changes in the concentrations of the main distillate volatile components, depending on the strength of the fermented wort and its composition. It was established that the increase in the strength of fermented wort by 2.0-2.5 %, leads to an increase in the yield of distillate on average by 3.0 % and enriching it with valuable volatile components. A new technical solution was proposed, based on the regulation of the strength of fermented wort from Jerusalem artichoke due to the addition of distillate. A high degree of correlation was established between the tasting evaluation of Jerusalem artichoke distillates and the concentration of 1-propanol, ethyl caproate, ethyl caprylate, the sum of enanthic ethers, the ratio of C₃ and C₄ alcohols, and was found the ratio of the amount of enanthic ethers to ethyl acetate. It is proposed to use the methanol concentration, the content of enanthic ethers, the total content of carbonyl compounds, the ratio of the sum of enanthic ethers to the concentration of ethyl acetate as criteria for assessing the quality of distillates from dried Jerusalem artichoke.
