

IMPACT OF SEA BUCKTHORN BERRIES (*HIPPOPHAE RHAMNOIDE*) ON YOGHURT BIOLOGICAL VALUE AND QUALITY

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In this research, an integrated physico-chemical and sensory approach was implemented to study the impact of sea buckthorn addition in a fermented dairy product such as yogurt. For this, yogurt samples were prepared with the addition of sea buckthorn puree in different concentrations - 1%, 3%, 5%, 7%. Thus, research has been done to determine the impact of the addition of sea buckthorn on the quality of yogurt. The obtained results demonstrate that fat content, is decreasing from 4.4% for the sample with 1% sea buckthorn to 4.2% for the sample with 7% sea buckthorn, which is caused by the addition of sea buckthorn, which gradually replaces the milk content of the product.

The protein content for all samples meets the requirements of the regulation for dairy products (min. 1.6%), ranging from 3.29% to 2.6%.

During fermentation and storage, the acidity values are increasing and this is most noticeable in samples with the highest sea buckthorn content due to the significant intake of acids from sea buckthorn that speed up the acidification.

It has been shown that sea buckthorn has a positive influence on the number of viable microorganisms, probably due to the presence of factors with prebiotic and nutritional action (oligosaccharides, mineral salts), which stimulate the growth of bacteria.

The determination of yogurt quality indices confirmed the positive role of the introduction of sea buckthorn in yogurt. Following the organoleptic examination, it was deduced that the sample with 5% and 7% added sea buckthorn has favorable characteristics for the consumer, but the latter are to be improved, because they have values of over 35% serum release.

Keywords: sea buckthorn, yoghurt, prebiotics, probiotics

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