

**PHYSICO-CHEMICAL CHARACTERISTICS, BIOLOGICAL
VALUE, AND ACCEPTABILITY OF QUINCE AND SEA
BUCKTHORN SAUCES**

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The last two decades have seen considerable research and development efforts dedicated to new food technologies. The main reasons for this interest in new food technologies is the anticipated range of benefits they can bring to consumers and the food sector, and the reduction of the demonstrated negative effects of conventional foods. In this regard, in the study, an integrated technological, physico-chemical and sensory approach was implemented to study the possibility of Sea buckthorn berries and quince fruits use in the production of sauce. Sauce samples were prepared combining different quince/sea buckthorn pulp ratios (100:0; 80:20; 60:40, 50:50). The biologically active potential of the sauces was determined by assessing the total content of polyphenols, vitamin C and antioxidant activity. Thus, the sample with 60g:40c(%) recorded the best values in terms of the total polyphenol content reaching the value of 84,41mg/100 g product and the second highest antioxidant activity of 87.35 %. Vitamin C content ranged between 35 mg/100 g and 70 mg/100 g, being higher in the samples with a greater amount of sea buckthorn pulp. Performing the sensorial analysis, it was deduced that the 60:40% quince:sea buckthorn had the best characteristics for the consumer, but the latter is to be improved because it had a too airy consistency caused probably by the use of immersion blender. Concerning the color parameters, an inversely proportional correlation was established between the brightness (L*) of the sauces and the amount of added sea buckthorn pulp. In the case of parameters a* and b*, the samples with a higher content of sea buckthorn showed a higher red color intensity.

Keywords: polyphenols, antioxidant activity, vitamin C, color parameters

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