



THE IMPACT OF THE INFUSION METHOD OF CHOKEBERRY POWDER IN WHITE TEA

Mirabela Ioana Lupu¹, Cristina Maria Canja^{1✉}, Alina Maier¹, Vasile Padureanu¹,
Geronimo Raducu Branescu¹ and Ana-Maria Manolica^{1,2}

¹Faculty of Food and Tourism, Transilvania University of Brasov, Romania

² Faculty of Biotechnology, University of Agronomic Sciences and Veterinary Medicine of Bucharest,
Romania

✉ canja.c@unitbv.ro

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ABSTRACT

The objective of this study was to evaluate the impact of chokeberry powder on the properties of white tea, with the aim of developing a new product with high bioactive compounds. Initially, the influence of the infusion technique on the characteristics of white tea was investigated. A comparative analysis was conducted between hot and cold infusion methods for both plain white tea and white tea with chokeberry powder at varying concentrations (0.6%, 0.8%, 1%). In the course of the experimental research, the total polyphenol content, antioxidant activity, viscosity, and pH of the tea were evaluated. A sensory analysis was also conducted on all varieties of tea presented in this paper. The experimental research demonstrated that the incorporation of chokeberry powder has a beneficial impact on the properties of white tea, resulting in a notable increase in polyphenol content (1% chokeberry powder in a cold infusion resulted in a total phenol concentration of 12.7 ± 0.6 mg GAE/100 mL). This enhancement in polyphenol content was accompanied by an increase in the beneficial effects of tea on the human body. Additionally, the sensory analysis indicated that the 1% chokeberry powder cold infusion (TC3) was the most preferred tea among consumers. This suggests that the TC3 sample exhibited the optimal balance between bioactive properties and consumer acceptance.
