ABSTRACT

Neng Arum Kusmawati, 2026, Protein and Organoleptic Analysis of Ice Cream Made from Red Bean Milk (Phaseolus vulgaris L.). Advised by Prof. Dr. Hj. Mia Nurkanti, M.Kes., and Dr. Fitri Aryanti, S.T., M.Pd.

Red kidney beans (Phaseolus vulgaris L.) are a potential source of plant-based protein that can be developed into value-added food products. One form of utilization is as a raw material for producing non-dairy ice cream. This study aimed to determine the protein content, identify the organoleptic characteristics based on color, aroma, taste, and texture, and evaluate consumer acceptance of red kidney bean milk ice cream. This study employed a quantitative approach using an experimental method with a non-factorial Completely Randomized Design (CRD). The treatments consisted of P0 (0% red kidney bean milk), P1 (50%), P2 (75%), and P3 (100%) with six replications for each treatment. Protein content was analyzed using the Kjeldahl method, while organoleptic evaluation was conducted with 35 untrained panelists using a 5-point hedonic scale covering color, aroma, taste, texture, and overall acceptance. eSThe results showed that increasing the concentration of red kidney bean milk led to an increase in the protein content of the ice cream. The highest average protein content was obtained in treatment P3 (100%) at 4.01%, while the lowest was found in treatment P0 (0%) at 2.12%. The organoleptic test results indicated that treatment P3 achieved the highest average scores for color (3.57), aroma (3.34), taste (4.37), texture (3.69), and overall acceptance (4.17). Therefore, red kidney bean milk ice cream has the potential to serve as an alternative plant-based protein food product with a favorable level of consumer acceptance, particularly at the 100% red kidney bean milk concentration.

Keywords: Ice Cream, Red Bean, Red Bean Milk, Red Bean Milk Ice Cream, Protein, Organoleptic