

ABSTRACT

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STUDY OF PHYSICOCHEMICAL AND ORGANOLEPTIC CHARACTERISTICS OF EDAMAME (*GLYCINE MAX* L. MERR) PAREVINE USING RICE FLOUR AS STABILIZER

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Parevine is a dessert that is not made from meat, dairy milk and its derivatives. Thus, parevine is served as an alternative for people who do not consume dairy products. In parevine making process, a non-dairy substitute for milk fat is required and obtained from edamame seeds as a basic ingredient for edamame milk. Edamame is a group of soybeans that have relatively high nutritional value. Similar to ice cream in general, the stabilizers used in making parevine are CMC and gelatine. However, this study was conducted by performing rice flour as a stabilizer in order to produce low-calorie and gluten-free parevine. This research is divided into two stages, namely preliminary research and the main stage. The preliminary research is the production process of edamame milk with particular edamame and water ratios (1:6, 1:8, and 1:10). Proximate analysis is carried out in order to choose edamame milk with the best nutritional content. Afterwards, the best edamame milk will be chosen as the ingredients to make parevine. The selected ratio of edamame and water was 1:6 with value 95.56% water content, 2.44% protein content, 2.06% fat content, 0.20% ash content, and 1.72% carbohydrate content. The main stage is the making of parevine that mixed with rice flour as a stabilizer. There were 6 concentrations of rice flour tested (0.5, 2, 3.5, 5, 6.5, and 8%). The best parevine edamame can be known by conducting proximate analysis, physical analysis, and organoleptic tests. The chosen parevine is parevine with 8% rice flour concentration. Parevine of 8% rice flour content has the highest nutritional value with value 78.79% moisture content, 2.24% protein content, 3.52% fat content, 0.36% ash content, and 15.09% carbohydrate content. The physical analysis produced by 8% rice flour contains the highest melting point, total solids, and pH values with values of 25.02 minutes, 18.25 °Brix, and 6.63, followed by the overrun and color with value 40, 72%, 63.41 brightness, 164.47 °hue, that still on standard range. Meanwhile, the hedonic sensory analysis shows that parevine with 8% rice flour is the most acceptable.

Keywords : Edamame, ice cream, parevine, rice flour

References : 74 (1995-2020)