ABSTRACT

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THE EFFECT OF DIFFERENT CONCENTRATION OF MUNG BEAN MILK, RED RICE BRAN, AND TYPE OF OIL TOWARD THE QUALITY OF ICE CREAM
(xv + 74 pages: 31 figures, 16 tables, and 23 appendices)

Generally, ice cream was made from cow milk which rich in animal fat and almost have no dietary fiber. Red rice bran was used as dietary fiber source in ice cream making and vegetable oil was used to replace the animal fat in ice cream. The aim of the research was to develop the utilization of red rice bran in the making of low fat ice cream, observed the effect of red rice bran concentration (5%, 10%, and 15%) and type of oil (soybean, corn, and palm) towards physicochemical properties, consumer acceptance, and nutritional composition. Different concentration of red rice bran affect pH and total soluble solid of ice cream. Both red rice bran and different type of oil affect the melting time and color of ice cream but did not affect overrun of ice cream. The best formulation were selected based on hedonic test in terms of color, taste, aroma, mouthfeel, and overall acceptance. Ice cream which used 5% of red rice bran and palm oil as animal fat replacer was selected as the best ice cream formula. The best formula ice cream contained 3.99% dietary fiber, 27.12% carbohydrate, 3.13% fat, 1.40% protein, 67.74% moisture, and 0.61% ash.

Keywords : dietary fiber, ice cream, mung bean milk, red rice bran, vegetable oil
References : 70 (1975-2014)