

**PENGARUH VARIASI KANDUNGAN LEMAK TERHADAP
KARAKTERISTIK FISIK, KIMIA, DAN SENSORIS
ES KRIM SARI KORO PEDANG PUTIH (*Canavalia ensiformis* L)**

ABSTRAK

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Koro pedang putih merupakan legum yang pemanfaatannya masih sedikit sehingga pada penelitian ini dilakukan pemanfaatan koro pedang putih menjadi es krim dengan variasi kandungan lemak. Tujuan dari penelitian ini, yaitu mengetahui pengaruh variasi kandungan lemak pada komposisi es krim sari koro pedang putih berdasarkan aspek fisik (*overrun* dan waktu leleh), kimiawi, dan organoleptik serta menentukan kandungan lemak es krim dengan tingkat penerimaan yang terbaik. Koro pedang putih diproses terlebih dahulu menjadi sari koro pedang putih dengan rasio koro pedang putih kupas dan air adalah 1:3 (b/v). Jenis es krim yang diolah, yaitu es krim *standard fat* (kandungan lemak 11%), *reduced fat* (kandungan lemak 8%), dan *low fat* (kandungan lemak 4%). Variasi kandungan lemak berasal dari variasi penggunaan *whipped cream*. Seluruh data kemudian dianalisis menggunakan SPSS (*One way ANNOVA*) dan *Post Hoc* Duncan. Berdasarkan hasil penelitian, variasi kandungan lemak berpengaruh terhadap kadar lemak, protein, dan total padatan es krim. Semakin tinggi kandungan lemak es krim, maka semakin tinggi kadar total padatan dan semakin rendah kadar protein es krim. Pada sifat fisik, semakin tinggi kandungan lemak, nilai *overrun* es krim semakin rendah, yaitu es krim *standard fat* sebesar $17,92 \pm 0,91\%$, *reduced fat* $20,33 \pm 0,86\%$, dan *low fat* $21,35 \pm 0,71\%$. Namun, semakin tinggi kandungan lemaknya, es krim semakin lama meleleh, yaitu es krim *standard fat* 26 menit, *reduced fat* 24 menit, dan *low fat* 22 menit, serta semakin terasa lembut, struktur berpasir rendah, kekerasan rendah, dan lebih *creamy*. Berdasarkan hasil penelitian, es krim *standard fat* merupakan es krim dengan variasi kandungan lemak dengan tingkat penerimaan terbaik.

Kata kunci : koro pedang putih, kandungan lemak, *standard fat*, *reduced fat*, *low fat*

EFFECT OF FAT CONCENTRATION VARIATION ON PHYSICAL, CHEMICAL, AND SENSORY PROPERTIES OF JACK BEAN (*Canavalia ensiformis* L) MILK ICE CREAM

ABSTRACT

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Jack bean is legume which only consumed locally, so that in this study jack beans were studied to make ice cream with various fat content. The aims of this study are to determine the effect of variations in fat content on the composition of jack bean milk ice cream based on physical (overrun and melting time), chemical, and organoleptic aspects and determine the fat content of ice cream with the best acceptance rate. Jack beans were processed first into a jack bean milk with the ratio of jack bean peeled and water to 1: 3 (w/v). The types of ice cream processed were standard fat ice cream (11% fat content), reduced fat (8% fat content), and low fat (4% fat content). This variation in fat content came from the variation of whipped cream used. All data were analyzed using SPSS (*One way ANNOVA*) and *Post Hoc* Duncan. The result show that variations in fat content affect fat content, protein content, and total solid of ice cream. The higher the fat content of ice cream, the higher total solid content and the lower protein content of ice cream. In physical properties, the higher fat content, the lower overrun of ice cream that are standard fat ice cream $17,92 \pm 0,91\%$, reduced fat $20,33 \pm 0,86\%$, and low fat $21,35 \pm 0,71\%$. But the higher the fat content of ice cream, the melting time of ice cream is longer that are the standard fat ice cream 26 minute, reduced fat 24 minute, and low fat 22 minute, and feels softer, has a low sandy structure, has a lower hardness, and is more creamy. Based on the results of the research, standard fat ice cream is a ice cream with variations in fat content with the best level of acceptance.

Keywords: jack bean, fat content, standard fat, reduced fat, low fat