

ABSTRACT

EFFECT OF ADDITION OF KEPOK BANANA (*Musa paradisiaca* Linn) PEEL FLOUR AS A STABILIZER TO CHEMICAL AND ORGANOLEPTIC CHARACTERISTIC OF ICE CREAM

By

MOCHAMAD KAREL SAPUTRA

Waste of kepok banana chips industries is banana peel which have potential added value if it is used to be a product. Kepok banana peel contains pectin component. Amount component of pectin in banana kepok peel is about 3.72%. Generally, pectin is used to be as functional component for food because it have ability to stabilizing emulsion. Because of its properties, it is also used to be stabilizer on making ice cream. Aim of research was determined effect of amount addition of kepok banana flour precisely so it could produce ice cream with best of chemistry and organoleptic characteristic.

The research was arranged by non factorial Random Complete Block Design (RCBD) with four replications. The treatment was given on each replication was the amount of kepok banana peel that consisted of six different levels, they were 0.1%, 0.2%, 0.3%, 0.4%, 0.5%, and 0.6% (w/v). As reference, researcher was added gelatin 0.5% as stabilizer which it was used to analyze organoleptic property. The observations of research were organoleptic property, overrun,

emulsion stability and melting time. Best result of observations was analyzed about proksimat property of ice cream.

The amount of kepok banana peel was 0.1% (w/v) that showed results of organoleptic property: aroma score was 3.20 (bit of banana); flavor score was 3.85 (sweet); color score was 3.66 (brown); texture score was 4.00 (soft); and acceptable panelist to product was 3.48 (bit of like). Results of proksimat analyze were: water content was 63.48%; protein content was 1.37%; fat content was 2.20%; ash content was 1.13%; fiber content was 1.56%; and carbohydrate content by different was 30.26%.

Key words: kepok banana peel, stabilizer, ice cream

ABSTRAK

PENGARUH PENAMBAHAN TEPUNG KULIT PISANG KEPOK (*Musa paradisiaca* Linn) SEBAGAI *STABILIZER* TERHADAP SIFAT KIMIA DAN ORGANOLEPTIK ES KRIM

Oleh

MOCHAMAD KAREL SAPUTRA

Limbah dari industri keripik pisang kepok adalah kulit pisang yang berpotensi memiliki nilai jual jika dimanfaatkan sebagai suatu produk. Kulit pisang kepok berpotensi untuk menghasilkan senyawa pektin. Kandungan pektin dalam kulit pisang kepok berkisar antara 3.72%. Pektin digunakan secara luas sebagai komponen fungsional pada makanan karena kemampuannya menstabilkan emulsi. Sifat penstabil pektin pada kulit pisang kepok juga dapat dimanfaatkan sebagai bahan penstabil (*stabilizer*) dalam proses pembuatan es krim. Tujuan penelitian adalah menentukan pengaruh jumlah penambahan tepung kulit pisang kepok yang tepat sehingga dapat menghasilkan es krim dengan sifat kimia dan organoleptik terbaik.

Penelitian dilakukan dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal yang terdiri dari 6 taraf yaitu konsentrasi penambahan tepung kulit pisang kepok yakni 0.1%, 0.2%, 0.3%, 0.4%, 0.5%, dan 0.6% (b/v) dengan 4 kali ulangan serta penambahan gelatin 0.5 % sebagai *reference* dalam menguji sifat

organoleptik es krim. Pengamatan yang dilakukan pada penelitian yaitu sifat organoleptik, sifat *overrun*, stabilitas emulsi, dan kecepatan meleleh. Perlakuan terbaik kemudian dilakukan uji proksimat es krim.

Perlakuan penambahan tepung kulit pisang kepok (C1) sebanyak 0.1% menghasilkan es krim dengan sifat organoleptik yakni: skor aroma 3.20 (agak khas pisang); skor rasa 3.85 (manis); skor warna 3.66 (coklat); skor tekstur 4.00 (lembut); dan penerimaan keseluruhan 3.48 (agak suka), serta kecepatan leleh selama 42.13 menit, *overrun* 5.76%, dan stabilitas emulsi 60.64%. Hasil analisis proksimat perlakuan C1 yaitu kadar air sebesar 63.48%, kadar protein sebesar 1.37%, kadar lemak sebesar 2.20%, kadar abu sebesar 1.13%, kadar serat kasar sebesar 1.56%, dan kadar karbohidrat *by different* sebesar 30.26%.

Kata kunci: kulit pisang kepok, *stabilizer*, es krim