

ABSTRACT

PHYSICAL AND SENSORY CHARACTERISTICS OF ETAWA GOAT MILK ICE CREAM WITH THE USE OF DURIAN SEED FLOUR (*Durio zibethinus* Murr) as STABILIZER

By

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Goat milk and durian seed flour contain proteins, fats, and carbohydrates that are still rarely used. The high starch content of durian seed flour consisting of amylose and amylopectin can be used as a stabilizer. This study aims to determine the effect of the addition of durian seed flour on physical and sensory properties, as well as the criteria for goat milk ice cream according to SNI 3713-2018. The study was conducted with a Randomized Complete Block Design (RCBD) five tests with a single factor, namely durian seed flour with 5 treatment levels of 0% (F1), 1.5% (F2), 3% (F3), 4.5% (F4), 6% (F5). As a control used gelatin 0.5%. The data obtained in the similarity of the variables were tested using the Bartlett test. The data was analyzed using fingerprints to obtain an error variation estimator. Data analysis continued with the Honestly Significant Difference (HSD) test at the level of 5%. The results showed that the use of various concentrations of durian seed flour affects the overrun, melting speed, emulsion stability, color, texture, and overall acceptance of goat milk ice cream. The best concentration of goat milk ice cream with the addition of durian seed flour is found at a concentration of 3% (F3) with a soft texture, yellowish-white color, overrun value (33.40%), melting speed (25 minutes), emulsion stability (83%), as well as the nutritional value of fats, proteins and total solids according to SNI No 01-3713-2018.

Key word : Goat's milk, durian seed flour, starch, stabilizer

ABSTRAK

KARAKTERISTIK FISIK DAN SENSORI ES KRIM SUSU KAMBING ETAWA DENGAN PENGGUNAAN TEPUNG BIJI DURIAN (*Durio zibethinus* Murr) SEBAGAI PENSTABIL

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Susu kambing dan tepung biji durian mengandung protein, lemak dan karbohidrat yang masih jarang dimanfaatkan. Kandungan pati tepung biji durian yang tinggi terdiri dari amilosa dan amilopektin dapat digunakan sebagai stabilizer. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung biji durian terhadap sifat fisik dan sensori, serta kriteria es krim susu kambing sesuai SNI 3713-2018. Penelitian dilakukan dengan Rancangan Acak Kelompok Lengkap (RAKL) lima ulangan dengan faktor tunggal yaitu tepung biji durian dengan 5 taraf perlakuan 0% (F1), 1,5% (F2), 3% (F3), 4,5% (F4), 6% (F5). Sebagai kontrol digunakan gelatin 0,5%. Data yang diperoleh kesamaan ragamnya diuji menggunakan uji Bartlett. Data dianalisis menggunakan sidik ragam untuk mendapatkan penduga ragam galat. Analisis data dilanjutkan dengan uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa penggunaan berbagai konsentrasi tepung biji durian berpengaruh terhadap *overrun*, kecepatan leleh, stabilitas emulsi, warna, tekstur, dan penerimaan keseluruhan es krim susu kambing. Konsentrasi terbaik es krim susu kambing dengan penambahan tepung biji durian terdapat pada konsentrasi 3% (F3) dengan tekstur lembut, warna putih kekuningan, nilai *overrun* (33,40%), kecepatan leleh (25 menit), stabilitas emulsi (83%), serta nilai gizi lemak, protein dan total padatan sesuai SNI no 01-3713-2018.

Kata kunci : Susu kambing, tepung biji durian, pati, penstabil