

ABSTRACT

EFFECT OF ADDITION OF SUNKIST ORANGE PEEL (*Citrus sinensis L. Osbeck*) JUICE ON CHEMICAL AND SENSORY PROPERTIES OF GOAT'S MILK HARD CANDY

By

RAHMA DANI

Goat's milk has a high nutritional value but is susceptible to damage and has a typical goat's smell and taste. Goat's milk can be processed into hard candy to extend its shelf life, and sweet orange peel juice can be added as a flavoring agent so that it is considered a diversified product. The research aimed to determine the effect of adding sunkist orange peel concentration on the chemical and sensory properties of goat's milk hard candy and to find out the best concentration of sunkist orange peel to produce goat's milk hard candy in accordance with SNI 3547.1:2008. The research was structured in a complete randomized block design (RAKL) with one factor and four replications. The factor studied was the concentration of sunkist orange peel juice with 6 treatment levels of 0% (P1), 15% (P2), 30% (P3), 45% (P4), 60% (P5), and 75% (P6). The data obtained were analyzed using the Barlett test and the Tuckey test. The data was then analyzed for variance (ANARA) and continued with further analysis if there was a real effect between treatments using the Honestly Significant Difference (BNJ) test at the 5% level. The best goat's milk hard candy is the P4 treatment (45% Sunkist orange peel juice). Goat's milk hard candy with the best treatment P4 produces a water content of 3.30%, ash content of 1.87%, sensory criteria flavor score of 3.54 (tastes orange peel flavor and nothing typical of goat's milk) and 3.63 (likes), texture score of 3.63 (hard and not easily crushed and melted) and 3.60 (like), color score of 3.06 (bright brown) and 3.65 (like), overall acceptance score of 3.63 (like), and chemical testing reduces sugar content by 7.36% and saccharose content by 7.72%.

Keywords: goat's milk, hard candy, pectin, sunkist orange peel

ABSTRAK

PENGARUH PENAMBAHAN SARI KULIT JERUK SUNKIST (*Citrus sinensis* L. *Osbeck*) TERHADAP SIFAT KIMIA DAN SENSORI PERMEN KERAS (*HARD CANDY*) SUSU KAMBING

Oleh

RAHMA DANI

Susu kambing memiliki nilai kandungan gizi yang tinggi namun rentan mengalami kerusakan serta memiliki aroma dan citarasa pengus khas kambing. Susu kambing dapat diolah menjadi *hard candy* untuk memperpanjang masa simpannya dan dapat ditambahkan sari kulit jeruk sunkist sebagai *flavoring agent* sehingga dianggap menjadi produk diversifikasi. Tujuan penelitian mengetahui pengaruh penambahan konsentrasi kulit jeruk sunkist terhadap sifat kimia dan sensori *hard candy* susu kambing serta mengetahui konsentrasi kulit jeruk sunkist terbaik untuk menghasilkan *hard candy* susu kambing yang sesuai dengan SNI 3547.1:2008. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan satu faktor dan empat kali ulangan. Faktor yang dikaji adalah konsentrasi sari kulit jeruk sunkist dengan 6 taraf perlakuan 0% (P1), 15% (P2), 30% (P3), 45% (P4), 60% (P5), dan 75% (P6). Data yang diperoleh dianalisis dengan uji Barlett dan uji Tuckey. Data selanjutnya dianalisis ragam (ANARA) dan dilanjutkan dengan analisis lebih lanjut apabila ada pengaruh nyata antar perlakuan dengan uji Beda Nyata Jujur (BNJ) pada taraf 5%. *Hard candy* susu kambing terbaik adalah perlakuan P4 (45% sari kulit jeruk sunkist). *Hard candy* susu kambing perlakuan terbaik P4 menghasilkan kadar air 3,30%, kadar abu 1,87%, kriteria sensori skor *flavour* 3,54 (terasa *flavour* kulit jeruk dan tidak ada khas susu kambing) dan 3,63 (suka), skor tekstur 3,63 (keras serta tidak mudah hancur dan meleleh) dan 3,60 (suka), skor warna 3,06 (coklat cerah) dan 3,65 (suka), skor penerimaan keseluruhan 3,63 (suka) serta pengujian kimia kadar gula reduksi 7,36%, dan kadar sakarosa 7,72%.

Kata kunci: kulit jeruk sunkist, pektin, permen keras, susu kambing