

MUH. SHOLAHUDDIN ASSYIFA'. NIM 210331100064 Efek Rasio Buah Sawo dengan Jahe dan Jenis Hidrokoloid terhadap Sifat Fisikokimia serta Sensoris *Fruit leather*. Di bawah bimbingan **Dr. Askur Rahman, S.TP., M.P. dan Dr. Enung Siti Nurhidayah**

ABSTRAK

Bangkalan merupakan penghasil buah sawo yang terbilang banyak melalui perkebunan dan rumahan. Sawo termasuk komoditas pertanian yang cepat rusak, maka dari itu membutuhkan suatu alternatif pengolahan sawo yang dapat memperpanjang umur simpan, memudahkan transportasi, dan untuk meningkatkan nilai ekonomis sawo. *Fruit leather* merupakan produk olahan makanan yang terbuat dari daging buah yang dihancurkan dan dikeringkan hingga membentuk lembaran tipis dengan tekstur plastis, yang dapat digulung. Tujuan penelitian ini untuk mengetahui pengaruh rasio buah sawo dengan jahe serta jenis hidrokoloid terhadap sifat fisikokimia dan sifat sensoris *fruit leather* yang dihasilkan. Penelitian ini dilakukan dengan Rancangan Acak Lengkap (RAL), diperoleh 9 perlakuan, dengan tiga kali ulangan setiap perlakuan. Analisis yang dilakukan meliputi kadar air, kadar abu, pH, aktivitas antioksidan DPPH, kuat tarik, dan sensoris. Data hasil uji fisikokimia dianalisis menggunakan ANOVA dua arah dan lanjut dianalisis menggunakan uji Beda Nyata Terkecil. Data uji sensoris dianalisis menggunakan metode kruskal wallis, dan lanjut dianalisis menggunakan uji mann whitney. Hasil penelitian menunjukkan bahwa kadar air *fruit leather* antara 11,70 sampai 14,48%, hasil tersebut sesuai dengan SNI No.1718, 1996 yaitu <25%, terdapat 2 sampel hasil uji kadar abu yang tidak memenuhi SNI 01, 1718-1996, kadar abu pada sampel 85:5 pektin dan 85:5 CMC melebihi batas kadar abu maksimal 4%. Kadar pH *fruit leather* antara 5,70 sampai 6,27. Aktivitas antioksidan menghasilkan %inhibisi dari 76,00 sampai 82,14%, kuat tarik menghasilkan nilai dari 1,71 sampai 7,44. Rasio buah sawo dan sari jahe berpengaruh secara signifikan pada uji aktivitas antioksidan, sedangkan pada kadar air, kadar abu dan kuat tarik berpengaruh meskipun tidak secara nyata. Jenis hidrokoloid berpengaruh terhadap hasil uji kadar air, kadar abu, pH, aktivitas antioksidan, kuat tarik dan sensoris meskipun tidak berpengaruh secara signifikan.

Kata kunci: CMC, Fruit Leather, Gum arab, Jahe, Pektin, Sawo

MUH. SHOLAHUDDIN ASSYIFA'. NIM 210331100064 *The Effect of Sapodilla Fruit to Ginger Ratio and Hydrocolloid Type on the Physicochemical and Sensory Properties of Fruit leather*. Under the guidance of **Dr. Askur Rahman, S.TP., M.P. dan Dr. Enung Siti Nurhidayah**

ABSTRACT

Bangkalan is a producer of sapodilla fruit which is quite large through plantations and home cultivation. Sapodilla is an agricultural commodity that is easily damaged, therefore it requires an alternative sapodilla processing that can extend its shelf life, facilitate transportation, and to increase its economic value. Fruit leather is a processed food product made from crushed and dried fruit flesh to form thin sheets with a plastic texture, which can be rolled. The purpose of this study was to determine the effect of the ratio of sapodilla fruit to ginger and the type of hydrocolloid on the physicochemical properties and sensory properties of the resulting fruit leather. This study was conducted with a Completely Randomized Design (CRD), obtained 9 treatments, with three replications for each treatment. The analysis carried out included water content, ash content, pH, DPPH antioxidant activity, tensile strength, and sensory. The data from the physicochemical test were analyzed using a two-way ANOVA and further analyzed using the Least Significant Difference test. The sensory test data were analyzed using the Kruskal Wallis method, and further analyzed using the Mann Whitney test. The research results show that the water content of fruit leather is between 11.70 and 14.48%, The results are in accordance with SNI No. 1718, 1996, which is <25%, there are 2 samples of ash content test results that do not meet SNI 01, 1718-1996, the ash content in the 85:5 pectin and 85:5 CMC samples exceeds the maximum ash content limit of 4%. The pH level of fruit leather is between 5.70 and 6.27. Antioxidant activity produces % inhibition from 76.00 to 82.14%, tensile strength produces values from 1.71 to 7.44. The ratio of sapodilla fruit and ginger juice has a significant effect on the antioxidant activity test, while the water content, ash content and tensile strength have an effect although not significantly. The type of hydrocolloid affects the results of the water content, ash content, pH, antioxidant activity, tensile strength and sensory tests although not significantly.

Keywords: CMC, Fruit Leather, Gum arabic, Ginger, Pectin, Sapodilla