

SRI WULANDARI NPM 18.03.3.1.1.00085. Pengaruh Konsentrasi Pektin dan Gula Terhadap Karakteristik Fisik, Kimia dan Sensoris *Fruit Leather* Juwet (*Syzygium cumini*). Pembimbing **Prof. Ir. Umi Purwandari, M. App. Sc., Ph.D.** dan **Rakhmawati, S.TP., M.T.**

ABSTRAK

Fruit leather merupakan salah satu olahan kudapan yang berasal dari bubur buah yang dikeringkan menggunakan dehidrator atau panggang. Elastisitas menjadi kendala yang utama pada pembuatan *fruit leather* termasuk yang menggunakan bahan dasar buah juwet, sehingga bahan pembentuk gel perlu ditambahkan, salah satunya yaitu pektin. Tujuan penelitian ini yaitu mengkaji pengaruh konsentrasi pektin dan gula terhadap karakteristik fisik, kimia dan sensoris *fruit leather* juwet serta menemukan formulasi terbaik berdasarkan karakteristik yang disukai. Desain penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan 2 faktor yaitu konsentrasi pektin (2%, 4%, 6%) dan konsentrasi gula (3%, 6%, 9%). Parameter penelitian yang diuji yaitu warna, kadar air, sensoris, kuat tarik dan elongasi. Hasil penelitian menunjukkan variasi konsentrasi pektin berpengaruh nyata terhadap nilai kadar air. Namun tidak berpengaruh nyata terhadap nilai kecerahan (L^*), kemerahan (a^*) dan kekuningan (b^*) *fruit leather* juwet. Variasi konsentrasi gula tidak memberikan pengaruh nyata terhadap semua parameter penelitian. Variasi konsentrasi pektin dan gula memberikan pengaruh nyata terhadap parameter sensoris warna, aroma serta rasa. Namun tidak memberikan pengaruh nyata terhadap parameter sensoris tekstur dan keseluruhan. Formulasi terbaik dari uji sensoris yaitu formulasi pektin 2% dan gula 9% dengan nilai warna kecerahan (L^*) 17,883, kemerahan (a^*) 10,663, kekuningan (b^*) 26,467, kadar air 16,525%, kuat tarik 9,927 mPa dan elongasi 0,236%.

Kata Kunci: Fruit Leather, Juwet, Pektin, Gula

SRI WULANDARI NPM 18.03.3.1.1.00085. Effect of Pectin and Sugar Concentration on Physical, Chemical and Sensory Characteristics of Fruit Leather Juwet (*Syzygium cumini*). Under the guidance of **Prof. Ir. Umi Purwandari, M. App. Sc., Ph.D.** dan **Rakhmawati, S.TP., M.T.**

ABSTRACT

Fruit leather is one of the processed snacks that comes from fruit pulp that is dried using a dehydrator or roasted. Elasticity is the main obstacle in the manufacture of fruit leather, including those using juwet fruit as the basic ingredients, so that gelling agents need to be added, one of which is pectin. The purpose of this study was to examine the effect of the concentration of pectin and sugar on the physical, chemical and sensory characteristics of fruit leather juwet and to find the best formulation based on preferred characteristics. The research design used a completely randomized design (RAL) with 2 factors, pectin concentration (2%, 4%, 6%) and sugar concentration (3%, 6%, 9%). The research parameters tested were color, moisture content, sensory, tensile strength and elongation. The results showed that the variation of pectin concentration significantly affected the water content value. However, it didn't significantly affect the value of brightness (L^*), redness (a^*) and yellowness (b^*) of fruit leather juwet. Variations in sugar concentration did not have a significant effect on all research parameters. Variations in the concentration of pectin and sugar have a significant effect on the sensory parameters of color, aroma and taste. However, it does not have a significant effect on the texture and overall sensory parameters. The best formulation from sensory test was the formulation of 2% pectin and 9% sugar with indigo color brightness (L^*) 17,883, redness (a^*) 10,663, yellowness (b^*) 26,467, water content 16,525%, tensile strength 9,927 mPa and elongation 0,236 %.

Keywords: Fruit Leather, Juwet, Pectin, Sugar