ABSTRAK

PENGARUH PENGGUNAAN BERBAGAI JENIS HIDROKOLOID TERHADAP KARAKTERISTIK SENSORI SELAI LEMBARAN CAMPURAN PEPAYA (*Carica Papaya*) DAN SIRSAK (*Annona Muricata*)

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Tujuan dari penelitian ini yaitu mengetahui pengaruh penggunaan beberapa jenis hidrokoloid yaitu karagenan, pektin, gelatin dan CMC terhadap karakteristik sensori selai lembaran campuran sirsak dan pepaya serta mengetahui jenis hidrokoloid yang digunakan sehingga menghasilkan selai lembaran campuran sirsak dan pepaya dengan sifat sensori terbaik. Penelitian ini disusun menggunakan Rancangan Acak Kelompok Lengkap (RAKL) dengan 5 perlakuan dan 5 kali ulangan. Perlakuan dalam penelitian ini yaitu P1 (Tanpa penambahan hidrokoloid), P2 (Penambahan pektin 2%), P3 (Penambahan karagenan 2%), P4 (Penambahan gelatin 1,5%) dan P5 (Penambahan CMC 1%). Data dianalisis menggunakan uji Bartlett dan uji Tuckey, dilanjut dengan analisis ragam (ANARA), dan uji lanjut BNT (Beda Nyata Terkecil) dengan taraf 5%. Berdasarkan hasil penelitian, penggunaan berbagai jenis hidrokoloid berpengaruh terhadap parameter tekstur dan penerimaan keseluruhan. Pektin dengan konsentrasi 2% merupakan hidrokoloid yang menghasilkan selai lembaran dengan karakteristik sensori terbaik dengan hasil skor kesukaan tekstur 3,313 (suka) dan skoring tekstur 3,425 (kompak dan plastis), aroma 3,133 (suka), warna 3,040 (suka), rasa 3,193 (suka), penerimaan keseluruhan 3,733 (sangat suka), kadar air 10,87%, vitamin C 0,9725 mg/g, *hardness* (kekerasan) 601,25 gf, *cohesiveness* (kekompakan) 0,815 dan *springiness* (kekenyalan) 2,85 mm.

Kata kunci : hidrokoloid, selai lembaran, pektin, karagenan, gelatin, CMC

ABSTRACT

THE EFFECT OF USING VARIOUS TYPES OF HYDROCOLLOIDS ON THE SENSORY CHARACTERISTICS OF MIXED PAPAYA (*Carica Papaya*) AND SOURSOP (*Annona Muricata*) SHEET JAM

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The aim of this research was to determine the effect of using different types of hydrocolloids, namely carrageenan, pectin, gelatin, and CMC, on the sensory characteristics of soursop and papaya mixed fruit leather, as well as to identify the type of hydrocolloid that yields the best sensory properties for the mixed fruit leather. The study was designed using a Completely Randomized Block Design (CRBD) with 5 treatments and 5 replications. The treatments in this study were P1 (No hydrocolloid added), P2 (2% pectin addition), P3 (2% carrageenan addition), P4 (1.5% gelatin addition), and P5 (1% CMC addition). The data were analyzed using Bartlett's test and Tukey's test, followed by variance analysis (ANOVA), and further analyzed using the Least Significant Difference (LSD) test at a 5% significance level. Based on the research results, the use of different types of hydrocolloids affected the texture parameters and overall acceptance. Pectin at a concentration of 2% was the hydrocolloid that produced the best sensory characteristics for the fruit leather, with a texture preference score of 3.313 (like) and a texture scoring of 3.425 (compact and plastic), aroma 3.133 (like), color 3.040 (like), taste 3.193 (like), overall acceptance 3.733 (very like), moisture content 10.87%, vitamin C content 0.9725 mg/g, hardness 601.25 gf, cohesiveness 0.815, and springiness 2.85 mm.

Key words: hydrocolloid, sheet jam, pectin, carrageenan, gelatin, CMC