Pengaruh Konsentrasi Pektin dan Sari Belimbing Wuluh (*Averrhoa bilimbi L*.) Terhadap Sifat Fisik, Kimia, dan Organoleptik Selai Wortel (*Daucus*

carota L.) (The Comparison of Pectin Concentration and Extract of Belimbing Wuluh (Averrhoa bilimbi L.) on the Physical, Chemical, and Organoleptic Properties of Carrot Jam (Daucus carota L.). Supervisor : Dr. Elly Kurniawati, S.TP., M.P. (Pembimbing)

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ABSTRACT

Research has been carried out on the Comparison of Pectin Concentration and Extract of Belimbing Wuluh (Averrhoa bilimbi L.) on the Physical, Chemical, and Organoleptic Properties of Carrot Jam (Daucus carota L.). The aims of the study were to determine the effect of pectin and starfruit juice on the physical, chemical and organoleptic properties of carrot jam, to determine the concentration of pectin and starfruit juice on organoleptic properties and to determine the best product. The research method used a randomized block design (CRD) with 2 factors and was repeated 3 times. Comparative concentrations of starfruit juice (S) and pectin (P) is S1P1 = (15%; 1%), S1P2 = (15%; 1%)1.5%), S1P3 = (15%; 2%), S2P1 = (20%; 1%), S2P2 = (20%; 1.5%), S2P3 = (20%; 1.5%)2%, S3P1 = (25% : 1%), S3P2 = (25% : 1.5%), S3P3 = (25% : 2%). The study obtained the best results, the rub power of 6.5 cm in S1P1, water content 35.51% wb in S3P2, ash content of 1.10% in S3P2, vitamin C content of 39.57 mg/100g in S3P3, total dissolved solids 7, 2 Brix on S3P3, and pH 3.57 on S3P3. The best hedonic quality test produced 3.25 color (orange) on S2P3, carrot aroma 2.45 (not typical of carrots) on S3P3, sour aroma 3.25 (sour) on S3P3, 3.50 taste (sour taste) on S2P2, texture 3.85 (smooth) on S3P2, appearance of 2.30 (not runny) on S3P2, and the hedonic test, namely overall preference 3.70 (very like) on S3P2. The best treatment of all tests is S3P2 (25% : 1.5%).

Keywords: Citric Acid, Starfruit, Pectin, Jam, Carrot.