ABSTRACT

Febriani Nadya Eka Pratiwi. B.1810158. Improving Physical And Hedonic Quality Of Dried Noodles From Wheat, Corn, And Cassava Starch Composite Flour With The Addition Of Lecithin. Undergraduate Thesis. Under the guidance ofAminullah dan Raden Siti Nurlaela.

Dried noodles made from a composite flour mixture of wheat flour, tapioca and corn flour is a new product developed in the context of food diversification and one of the efforts to suppress the use of imported wheat. The purpose of this study was to apply the use of lecithin to improve the texture of composite flour dry noodles. The research design used was a completely randomized design (CRD), which is a ratio of lecithin concentrations consisting of 4 levels, namely 0.5%, 1.0%, 1.5% and 2.0%. Each treatment was repeated 3 times. Product analysis includes physical properties consisting of cooking loss, cooking time, water absorption, swelling power, and elasticity, as well as hedonic tests consisting of color, aroma, texture, taste, and elasticity. Variations in observations were analyzed and continued with Duncan's test 5%, if there was a difference. The results of the analysis of physical properties showed that the higher the concentration of lecithin can reduce the value of cooking loss and cooking time, but can increase the value of water absorption, swelling power, and elasticity. While the results of the hedonic test which included color, aroma, texture, taste, and elasticity showed that there was an increase in the preference of the panelists when the addition of lecithin was up to 1% but there was a decrease when the addition of lecithin increased to 2%. Dried noodles with the addition of 1% lecithin resulted in physical quality of cooking loss of 10.01%, cooking time 5.3 minutes, water absorption capacity of 268.46%, swelling power of 57.93%, and elasticity of 29.02% and hedonic intake. in the category like to really like the taste, aroma, color, texture, and elasticity. From the results obtained, the addition of lecithin is known to be used as a texture improve, the best results from the study were dry noodles with the addition of 1% lecithin.

Keywords : composite flour dry noodles, hedonic, lecithin, physical quality, texture improver

ABSTRAK

Febriani Nadya Eka Pratiwi. B.1810158. Peningkatan Mutu Fisik Dan Hedonik Mi Kering Dari Tepung Komposit Gandum, Jagung, Dan Pati Singkong Dengan Penambahan Lesitin. Skripsi. Dibawah bimbingan Aminullah dan Raden Siti Nurlaela**.**

Mi kering berbahan baku tepung komposit campuran tepung terigu, tapioka dan tepung jagung merupakan produk baru yang dikembangkan dalam rangka diversifikasi pangan dan salah satu upaya untuk menekan penggunaan terigu impor. Tujuan penelitian ini adalah mengaplikasikan penggunaan lesitin untuk memperbaiki tekstur mi kering tepung komposit. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) yaitu perbandingan konsentrasi lesitin yang terdiri dari 4 taraf, yaitu 0,5%, 1,0%, 1,5% dan 2,0%. Masing-masing perlakuan dilakukan 3 kali ulangan. Analisis produk meliputi sifat fisik yang terdiri dari *cooking loss*, *cooking time*, daya serap air, daya pengembangan, dan daya elastisitas, serta uji hedonik yang terdiri dari warna, aroma, tekstur, rasa, dan kekenyalan. Variasi hasil pengamatan dianalisis dan dilanjutkan dengan uji duncan α≤ 5%, jika ada perbedaan. Hasil analisis sifat fisik menunjukkan semakin tinggi konsentrasi lesitin dapat menurunkan nilai *cooking loss* dan *cooking time*, namun dapat meningkatkan nilai daya serap air, daya pengembangan, dan daya elastisitas. Sedangkan hasil uji hedonik yang meliputi warna, aroma, tekstur, rasa, dan kekenyalan menunjukkan bahwa terjadi peningkatan kesukaan panelis saat penambahan lesitin sampai 1% namun terjadi penurunan saat penambahan lesitin meningkat hingga 2%. Mi kering dengan penambahan lesitin 1% menghasilkan mutu fisik *cooking loss* sebesar 10,01%, *cooking time* 5,3 menit, daya serap air 268,46%, daya pengembangan 57,93%, dan daya elastisitas 29,02% serta hedonik masuk dalam kategori suka sampai sangat suka terhadap rasa, aroma, warna, tekstur, dan kekenyalan. Dari hasil yang didapatkan penambahan lesitin diketahui dapat digunakan sebagai *tekstur improve*, hasil terbaik dari penelitian yaitu mi kering dengan penambahan lesitin 1%.

Kata Kunci : hedonik, lesitin, mi kering tepung komposit, mutu fisik, tekstur improver