

ABSTRACT

Aziza Ramadianingsih Muzaini. B.1710272. Physical and Chemical Quality Properties of Mocaf Wet Noodles with Addition of Rice Bran Flour and Lecithin Emulsifier. Essay. Supervised by Aminullah and Siti Aminah.

Rice bran flour is a high-protein flour that can be used to supply protein in wet noodles. This study aims to study the effect of adding rice bran flour and lecithin emulsifier on the manufacture of Mocaf wet noodles using the extrusion method. The research design used was a two-factor Completely Randomized Design (CRD), namely the ratio of mocaf and bran flour with three treatment levels (95%:5%, 90%:10%, 85%:15%) and the addition of lecithin with three treatment levels (0.5%, 1%, 1.5%). Product analysis includes cooking loss, water absorption, rehydration time, water content, protein content and proximate test for selected wet noodle products. Research data were analyzed using variance (ANOVA). Increasing the concentration of bran flour can increase the value of cooking loss, water absorption, protein content and reduce rehydration time, color and texture of wet noodles. Meanwhile, the addition of lecithin concentration can reduce cooking loss and increase water absorption, protein content and water content of wet noodles. The interaction between the addition of mocaf flour and rice bran and lecithin concentration had a significant effect on the value of cooking loss, water absorption, rehydration time, water content and protein content of wet noodles. The selected wet noodles were noodles with the addition of 90% mocaf flour + 10% bran flour, with a lecithin concentration of 1.5%. This selected wet noodle has a cooking loss value of 7.32%, water absorption capacity of 146.59%, rehydration time of 105 s, water content of 34.73%, ash content of 2.09%, protein content of 11.69%, fat content of 1.21%, 3.6% crude fiber content, and 46.68% carbohydrate content.

Keywords: extrusion, wet noodles, mocaf, bran flour, lecithin.

ABSTRAK

Aziza Ramadianingsih Muzaini. B.1710272. Sifat Mutu Fisik dan Kimia Mi Basah Mocaf dengan Penambahan Tepung Bekatul dan Emulsifier Lesitin. Skripsi. Dibawah bimbingan Aminullah dan Siti Aminah.

Tepung bekatul merupakan tepung tinggi protein yang bisa digunakan untuk mensuplai protein pada mi basah. Penelitian ini bertujuan untuk mempelajari pengaruh penambahan tepung bekatul dan emulsifier lesitin pada pembuatan mi basah mocaf dengan metode ekstrusi. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dua faktor yaitu perbandingan mocaf dan tepung bekatul dengan tiga taraf perlakuan (95%:5%, 90%:10%, 85%:15%) dan penambahan lesitin dengan tiga taraf perlakuan (0,5%, 1%, 1,5%). Analiss produk meliputi *cooking loss*, daya serap air, waktu rehidrasi, kadar air, kadar protein serta uji proksimat untuk produk mi basah terpilih. Data penelitian dianalisis menggunakan sidik ragam (ANOVA). Peningkatan konsentrasi tepung bekatul dapat meningkatkan nilai *cooking loss*, daya serap air, kadar protein serta menurunkan waktu rehidrasi, warna dan tekstur dari mi basah. Sedangkan penambahan konsentrasi lesitin dapat menurunkan *cooking loss* dan meningkatkan daya serap air, kadar protein serta kadar air mi basah. Interaksi antara penambahan tepung mocaf dan bekatul serta konsentrasi lesitin berpengaruh nyata pada nilai *cooking loss*, daya serap air, waktu rehidrasi, kadar air dan kadar protein mi basah. Mi basah terpilih adalah mi dengan penambahan tepung mocaf 90% + tepung bekatul 10%, dengan konsentrasi lesitin 1,5%. Mi basah terpilih ini memiliki nilai *cooking loss* 7,32%, daya serap air 146,59%, waktu rehidrasi 105 s, kadar air 34,73%, kadar abu 2,09%, kadar protein 11,69%, kadar lemak 1,21%, kadar serat kasar 3,6%, dan kadar karohidrat 46,68%.

Kata kunci: ekstrusi, mi basah, mocaf, tepung bekatul, lesitin.