

PENGARUH SUBSTITUSI TEPUNG UBI JALAR UNGU DENGAN TEPUNG TERIGU TERHADAP KARAKTERISTIK MI BASAH

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ABSTRAK

Ubi jalar ungu potensial dimanfaatkan sebagai bahan pangan fungsional karena memiliki kandungan antosianin dan aktivitas antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung ubi jalar ungu terhadap karakteristik mi basah yang dihasilkan, untuk mengetahui formulasi dari substitusi tepung ubi jalar ungu dengan tepung terigu yang paling disukai secara organoleptik, dan mengetahui *break event point* dari industri pembuatan mi basah dengan substitusi tepung ubi jalar ungu. Penelitian ini dilaksanakan pada bulan Juni sampai Agustus 2023. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan perbandingan substitusi tepung ubi jalar ungu yaitu: A = 0%, B = 5%, C = 10%, D = 15%, E = 20% dengan 3 kali ulangan. Hasil pengamatan dari masing-masing perlakuan dianalisis dengan ANOVA (*Analysis of Variance*). Jika berbeda nyata maka dilanjutkan menggunakan uji lanjut DNMRT (*Duncan's New Multiple Range Test*) pada taraf 5%. Hasil pengujian terhadap mi basah didapatkan kadar air sebesar 31,77 – 34,11%, kadar protein 8,76 – 9,54%, kadar abu 2,07 – 3,13%, kadar antosianin 0,00 – 0,30%, aktivitas antioksidan 0,00 – 60,27%, daya pengembangan 36,6 – 41,67%, elastisitas 6,67 – 17,67%, masa simpan 34,67 – 36,33%, dan ALT 2.9×10^5 . Hasil uji organoleptik yang paling disukai adalah perlakuan D perbandingan tepung ubi jalar ungu dengan tepung terigu 15%:85% dengan nilai terhadap warna 3,76 (suka), tekstur 3,96 (suka), rasa 3,76 (suka) dan aroma 3,44 (agak suka). Hasil perhitungan *Break Event Point* (BEP) mi basah atas dasar unit sebesar 8.974 bungkus dan *Break Event Point* (BEP) atas dasar rupiah yaitu Rp. 89.586.572.

Kata kunci : Karakteristik Mutu, Mi Basah, Tepung Ubi Jalar Ungu

THE EFFECT OF SUBSTITUTION OF PURPLE SWEET POTATO FLOUR WITH WHEAT FLOUR ON THE CHARACTERISTICS OF WET NOODLES

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ABSTRACT

Purple sweet potato has the potential to be used as a functional food ingredient because it contains anthocyanins and antioxidant activity. This research aims to determine the effect of substitution of purple sweet potato flour on the characteristics of the wet noodles produced, to determine the formulation of the substitution of purple sweet potato flour with wheat flour which is most preferred organoleptically, and to determine the break event point of the wet noodle manufacturing industry with substitution of sweet potato flour. purple creeper. This research was carried out from June to August 2023. The research design used was a Completely Randomized Design (CRD) with substitution ratios for purple sweet potato flour, namely: A = 0%, B = 5%, C = 10%, D = 15%, E = 20% with 3 repetitions. The observation results from each treatment were analyzed using ANOVA (Analysis of Variance). If it is significantly different then continue using the DNMRT (Duncan's New Multiple Range Test) further test at the 5% level. Test results on wet noodles showed water content of 31.77 – 34.11%, protein content of 8.76 – 9.54%, ash content of 2.07 – 3.13%, anthocyanin content of 0.00 – 0.30% , antioxidant activity 0.00 – 60.27%, swelling power 36.6 – 41.67%, elasticity 6.67 – 17.67%, shelf life 34.67 – 36.33%, and ALT 2.9 x 10⁵. The most favorable organoleptic test results were treatment D, the ratio of purple sweet potato flour to wheat flour was 15%:85% with values for color 3.76 (like), texture 3.96 (like), taste 3.76 (like) and aroma. 3.44 (somewhat like it). The results of calculating the Break Event Point (BEP) for wet noodles on a unit basis of 8,974 packs and Break Event Point (BEP) on a rupiah basis, namely Rp. 89,586,572.

Keywords: Quality Characteristics, Wet Noodles, Purple Sweet Potato Flour