

ABSTRACT

EVALUATION COMPARISON OF MORINGA LEAF FLOUR (*Moringa oleifera*) AND WHEAT FLOUR ON THE PHYSICAL AND SENSORY PROPERTIES OF DRY CHOUX PASTRY

By

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This research aimed to determine the effect of moringa leaf flour and wheat flour ratios on the physical and sensory properties of dry choux pastry, and to identify the optimal ratio of moringa leaf flour to wheat flour for producing dry choux pastry with the best physical and sensory characteristics. The study was arranged in a non-factorial Randomized Complete Block Design (RAKL) with 4 replications. The treatment ratios of moringa leaf flour to wheat flour consisted of 6 levels with the following concentrations: P0 (0:100)g, P1 (1:99)g, P2 (2:98)g, P3 (3:97)g, P4 (4:96)g, and P5 (5:95)g. The research results indicated that the ratio of moringa leaf flour to wheat flour significantly affected the physical properties, specifically the expansion power and bulk density of the dry choux pastry, as well as the sensory properties, including the color, texture, taste, and aroma of the resulting dry choux pastry. The best treatment for dry choux pastry, P1 (1g moringa leaf flour : 99g wheat flour), had an expansion power of 189.28%, a bulk density of 0.130g/ml, a color score of 2.37 (brownish yellow), a texture score of 4.62 (crispy), a taste score of 4.37 (savory), an aroma score of 4.37 (slightly fragrant, typical of dry choux pastry), a water content of 2.88%, an ash content of 3.37%, a fat content of 25.30%, a protein content of 5.07%, a carbohydrate content of 63.38%, and an antioxidant content of 33.35%. Dry choux pastry from treatment P1 exhibited superior texture, taste, aroma, and overall acceptance, which were more preferred by panelists compared to dry choux pastry without the use of moringa leaf flour.

Keywords: choux pastry, moringa leaf flour, physical, sensory.

ABSTRAK

EVALUASI PERBANDINGAN TEPUNG DAUN KELOR (*Moringa oleifera*) DAN TEPUNG TERIGU TERHADAP SIFAT FISIK DAN SENSORI SUS KERING

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Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan tepung daun kelor dan tepung terigu terhadap sifat fisik dan sensori sus kering serta mengetahui perbandingan tepung daun kelor dan tepung terigu yang tepat untuk menghasilkan sus kering dengan sifat fisik dan sensori terbaik. Penelitian disusun secara non faktorial dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan 4 kali ulangan. Perlakuan perbandingan tepung daun kelor dan tepung terigu terdiri dari 6 taraf dengan konsentrasi P0 (0:100)g, P1 (1:99)g, P2 (2:98)g, P3 (3:97)g, P4 (4:96)g, and P5 (5:95)g. Hasil penelitian menunjukkan bahwa perbandingan tepung daun kelor dan tepung terigu berpengaruh nyata terhadap sifat fisik berupa daya kembang dan densitas kamba sus kering, serta sifat sensori meliputi warna, tekstur, rasa, dan aroma sus kering yang dihasilkan. Sus kering perlakuan terbaik yaitu P1 (tepung daun kelor 1g : tepung terigu 99g) memiliki daya kembang 189,28%, densitas kamba 0,130g/ml, warna 2,37 (kuning kecoklatan), tekstur 4,62 (renyah), rasa 4,37 (gurih), aroma 4,37 (sedikit harum khas sus kering), kadar air 2,88%, kadar abu 3,37%, kadar lemak 25,30%, kadar protein 5,07%, kadar karbohidrat 63,38%, antioksidan 33,35% dan sus kering perlakuan P1 memiliki keunggulan tekstur, rasa, aroma dan penerimaan keseluruhan yang lebih disukai panelis dibandingkan sus kering tanpa penggunaan tepung daun kelor.

Kata kunci: Sus kering, tepung daun kelor, sifat fisik, sensori.