

ABSTRACT

COMPARATIVE EFFECTS OF PURPLE SWEET FLOUR (*Ipomea batatas var ayumurasaki*) AND TAPIOCA AS FILLING MATERIALS ON PHYSICAL AND SENSORY PROPERTIES OF CATFISH NUGGET

By

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Utilization of processed catfish broodstock is less varied, thus it is necessary to process it into an economical product such as fish nuggets. The purpose of this study was to obtain a comparison of purple sweet potato flour (*Ipomea batatas var ayumurasaki*) and tapioca as a filler that can produce catfish nuggets with the best physical and sensory characteristics in accordance with SNI Fish Nugget 7758-2013. The method used was a single factor Completely Randomized Block Design (RAKL) and 4 replications. The treatment in this study used 6 levels of comparison between purple sweet potato and tapioca flour (w/w), namely P0 (0:100) % w/w, P1 (10:90) % w/w, P2(20:80) % b /b, P3 (30:70) %b/w, P4 (40:60) % and P5 (50:50)% w/w. This research consisted of the process of making fish nuggets, sensory testing, physical testing, cooking loss testing, antioxidant testing and chemical testing to get the best treatment. The data obtained were analyzed statistically using the Barlett and Tukey test and then continued with the ANOVA test and the BNT test at the 5% level. The results of this study showed that the best comparison of purple sweet potato flour and tapioca was at treatment P4 (40:60) %b /b which has the criteria of purple color (7.59), slightly fishy smell (5.41), slightly fishy taste (6.72), slightly dense texture, rather compact (7.91), overall acceptance (7.68), hardness 374.13 gf, springiness 10.05 mm, cohesiveness 1.06 mm, cooking loss value 1.45%, moisture content (41.57%), ash content (0.27%), protein content (9.23%), fat content (9.58%), carbohydrate content (38.14%) and antioxidants were 761.13 ppm.

Keywords: *filler, catfish broodstock, fish nuggets, purple sweet potato flour,*

ABSTRAK

PENGARUH PERBANDINGAN TEPUNG UBI JALAR UNGU (*Ipoemea batatas var ayumurasaki*) DAN TAPIOKA SEBAGAI BAHAN PENGISI TERHADAP SIFAT FISIK DAN SENSORI NUGGET IKAN LELE

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Pemanfaatan olahan dari indukan ikan lele kurang bervariasi, sehingga perlu dilakukan pengolahan menjadi produk yang ekonomis seperti nugget ikan. Tujuan penelitian untuk mendapatkan perbandingan tepung ubi jalar ungu (*Ipoemea batatas var ayumurasaki*) dan tapioka sebagai bahan pengisi yang dapat menghasilkan nugget ikan lele dengan karakteristik sifat fisik dan sensori terbaik yang sesuai dengan SNI Nugget Ikan 7758-2013. Metode yang digunakan Rancangan Acak Kelompok Lengkap (RAKL) faktor tunggal dan 4 ulangan. Perlakuan pada penelitian ini menggunakan 6 taraf perbandingan tepung ubi jalar ungu dan tapioka (b/b) yaitu P0 (0:100) % b/b, P1(10:90) % b/b, P2(20:80) % b/b, P3 (30:70) %b/b, P4 (40:60) % dan P5 (50:50) % b/b. Penelitian ini terdiri dari proses pembuatan nugget ikan, pengujian sensori, pengujian fisik, pengujian susut masak, pengujian antioksidan dan pengujian kimia untuk mendapatkan perlakuan terbaik. Data yang diperoleh dianalisis secara statistik dengan menggunakan uji Barlett dan Tukey lalu dilanjutkan dengan uji ANOVA dan uji BNT pada taraf 5 %. Hasil penelitian ini menunjukkan bahwa perbandingan tepung ubi jalar ungu dan tapioka terbaik yaitu pada perlakuan P4 (40:60)% b/b yang memiliki kriteria warna ungu (7, 59), aroma agak khas ikan (5,41), rasa agak khas ikan (6,72), tekstur agak padat, agak kompak (7,91), penerimaan keseluruhan suka (7,68), *hardness* 374,13 gf, *springiness* 10,05 mm, *cohesiveness* 1,06 mm, nilai susut masak 1,45%, kadar air (41,57%), kadar abu (0,27%), kadar protein (9,23%), kadar lemak (9,58%), kadar karbohidrat (38,14%) dan antioksidan sebesar 761,13 ppm.

Kata kunci: nugget ikan, tepung ubi jalar ungu, indukan ikan lele, bahan pengisi