

ABSTRACT

STUDY OF FORMULATION OF YELLOW SWEET POTATO FLOUR (*Ipomea Batatas L*) AND TAPIOCA FLOUR ON CHARACTERISTICS OF ORGANOLEPTIC AND CHEMICALS PROPERTIES OF TRASH FISH NUGGET

By

Egit Noviansyah

The purpose of this study was to obtain the best formulation of yellow sweet potato flour and tapioca flour in the manufacture of trash fish nugget with organoleptic and chemical characteristics according to SNI No. 7758-2013. This study was arranged in a Randomized Complete Block Design (RCBD) with a single factor consisting of 6 levels with 4 replications. The single factor used was the formulation of yellow sweet potato flour with tapioca flour with Control treatment (0: 3), A1 (1: 2), A2 (1: 1), A3 (2: 1), A4 (1: 3) and A5 (3: 1). The results of the research data in the test of equality of variance with the Bartlett test and the addition of data with the Tukey test. Furthermore, data were analyzed by variance to determine the effect between treatments. If there is a significant effect, the data is further analyzed with the Smallest Significant Difference Test (LSD) at the level of 5%. The results showed that the different concentrations of yellow sweet potato flour and tapioca flour affected organoleptic properties (color, texture, aroma, taste, and overall acceptance), elasticity. In the best treatment chemical properties are tested by different methods. The best treatment was found

in A2 formulation of yellow sweet potato flour and tapioca flour (1 : 1) with characteristics of half-cooked nugget color score of 4.62 (slightly brown), texture score of 7.48 (rather dense and rather compact), and aroma score of 7.40 (less typical of fish) Characteristics of mature nugget scores were 6.59 (pale yellow), 7.24 (rather dense and rather compact) score, aroma score 6.69 (less fish-specific), taste score 7.02 (less fish-specific), elasticity score 214.25 gf (very chewy), and overall acceptance 7.02 (likes). The proximate analysis results using the best cooked trash fish nugget have fulfilled the SNI requirements for fish nugget No. 7758-2013 which produces water content of 52.89% (bb), ash content 1.78% (bb), protein 6.55% (bb), fat 13.27% (bb), crude fiber 3.20% (bb) and carbohydrates 25.50% (bb).

Keywords: Trash fish, nugget, proximate, tapioca flour, yellow sweet potato flour

ABSTRAK

KAJIAN FORMULASI TEPUNG UBI JALAR KUNING (*Ipomea Batatas L*) DAN TEPUNG TAPIOKA TERHADAP KARAKTERISTIK SIFAT ORGANOLEPTIK DAN KIMIA NUGGET IKAN RUCAH

Oleh

EGIT NOVIANSYAH

Tujuan dari penelitian ini adalah mendapatkan formulasi tepung ubi jalar kuning dan tepung tapioka terbaik dalam pembuatan nugget ikan rucah dengan karakteristik sifat organoleptik dan kimia sesuai SNI No. 7758-2013. Penelitian ini disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal yang terdiri dari 6 taraf dengan 4 ulangan. Faktor tunggal yang digunakan adalah formulasi tepung ubi jalar kuning dengan tepung tapioka dengan perlakuan Kontrol (0 : 3), A1 (1 : 2), A2 (1 : 1), A3 (2 : 1), A4 (1 : 3) dan A5 (3 : 1). Data hasil penelitian di uji kesamaan ragam dengan uji Bartlett dan kementerian data dengan uji Tukey. Selanjutnya data dianalisis sidik ragam untuk mengetahui pengaruh antar perlakuan. Apabila terdapat pengaruh yang nyata, data di analisis lebih lanjut dengan Uji Beda Nyata Terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukkan bahwa konsentrasi tepung ubi jalar kuning dan tepung tapioka yang berbeda mempengaruhi sifat organoleptik (warna, tekstur, aroma, rasa, dan penerimaan keseluruhan), kekenyalan. Pada perlakuan terbaik diuji sifat kimia dengan metode by different. Perlakuan terbaik terdapat pada formulasi

tepung ubi jalar kuning dan tepung tapioka A2 (1 : 1) dengan karakteristik skor warna nugget setengah matang sebesar 4.62 (Agak coklat), skor tekstur sebesar 7.48 (agak padat dan agak kompak), dan skor aroma sebesar 7.40 (kurang khas ikan). Karakteristik skor warna nugget matang sebesar 6.59 (kuning pucat), skor tesktur 7.24 (agak padat dan agak kompak), skor aroma 6.69 (kurang khas ikan), skor rasa 7.02 (kurang khas ikan), skor kekenyalan 214.25 gf (sangat kenyal), dan penerimaan keseluruhan 7.02 (suka). Hasil analisis proksimat menggunakan nugget ikan rucah matang terbaik telah memenuhi persyaratan SNI nugget ikan No. 7758-2013 yang menghasilkan kadar air 52.89% (bb), abu 1.78% (bb), protein 6.55% (bb), lemak 13.27% (bb), serat kasar 3.20% (bb) dan karbohidrat 25.50% (bb).

Kata kunci: Ikan rucah, nugget, proksimat, tepung tapioka, tepung ubi jalar kuning