

ABSTRACT

CHEMICAL AND SENSORY CHARACTERISTICS OF BAJI-BAJI FISH MEATBALLS (*Grammoplites scaber.*) WITH SUBSTITUTION WHITE OYSTER MUSHROOM (*Pleurotus ostreatus*)

By

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Fish meatballs contain high protein but low fiber. White oyster mushroom has a fiber content of 33.44% so it is suitable to be substituted for making baji-baji fish meatballs. The aims of the study was to determine the effect of white oyster mushroom substitution on the chemical and sensory characteristics of baji-baji fish meatballs and to determine the best formulation for making baji-baji fish meatballs with white oyster mushroom substitution. The study was arranged in a Completely Randomized Block Design (CRBD) with a single factor using 6 levels of ratio of baji-baji fish to white oyster mushrooms, P1 (100%: 0%); P2 (90%: 10%); P3 (80% : 20%); P4 (70%: 30%); P5 (60%: 40%); P6 (50%: 50%). The research consisted of the process of preparing white oyster mushrooms, making fish meatballs, sensory testing covering parameters of color, aroma, texture, taste, and overall acceptance and chemical testing including water content and ash content, to get the best treatment which was then tested for protein content and crude fiber content. The data obtained were analyzed statistically using the Bartlett and Tuckey test and then continued with the ANOVA test and the 5% LSD test. The results showed that the substitution of white oyster mushrooms in the manufacture of fish meatballs had a significant effect on the chemical properties of fish meatballs including water content and ash content and sensory properties such as color, aroma, texture, taste and overall acceptance. The best treatment was P2 (90% baji-baji fish and 10% white oyster mushroom) with sensory characteristics of white color, distinctive fish aroma, very chewy texture, taste and overall acceptance of liking, water content 67.07%, ash content 2.12 %, protein content of 11.07% and crude fiber content of 2.21% and are in accordance with Indonesian National Standard of fish meatballs (SNI 7266:2017).

Keywords: meatballs, baji-baji fish, white oyster mushrooms

ABSTRAK

KARAKTERISTIK KIMIA DAN SENSORI BAKSO IKAN BAJI-BAJI (*Grammoplites scaber*.) DENGAN SUBSTITUSI JAMUR TIRAM PUTIH (*Pleurotus ostreatus*)

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Bakso ikan mengandung protein tinggi namun rendah serat. Jamur tiram putih memiliki kandungan serat 33,44 % sehingga cocok untuk disubstitusikan pada pembuatan bakso ikan baji-baji. Penelitian bertujuan untuk mengetahui pengaruh substitusi jamur tiram putih terhadap karakteristik kimia dan sensori bakso ikan baji-baji serta mengetahui formulasi terbaik pada pembuatan bakso ikan baji-baji dengan substitusi jamur tiram putih. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal menggunakan 6 taraf perbandingan ikan baji-baji dengan jamur tiram putih, P1 (100% :0%); P2 (90%:10%); P3 (80% : 20%); P4 (70%: 30%); P5 (60%: 40%); P6 (50%: 50%). Penelitian terdiri dari proses persiapan jamur tiram putih, pembuatan bakso ikan, pengujian sensori meliputi parameter warna, aroma, tekstur, rasa, dan penerimaan keseluruhan dan uji kimia meliputi kadar air dan kadar abu, untuk mendapatkan perlakuan terbaik yang selanjutnya diuji kadar protein dan kadar serat kasar. Data yang diperoleh dianalisis secara statistik dengan menggunakan uji Bartlett dan Tuckey lalu dilanjutkan dengan uji ANOVA dan uji BNT taraf 5%. Hasil penelitian menunjukkan bahwa substitusi jamur tiram putih dalam pembuatan bakso ikan baji-baji berpengaruh nyata terhadap sifat kimia bakso ikan diantaranya kadar air dan kadar abu serta sifat sensori berupa warna, aroma, tekstur, rasa dan penerimaan keseluruhan. Perlakuan terbaik adalah P2 (90% ikan baji-baji dan 10% jamur tiram putih) dengan karakteristik sensori warna putih, aroma khas ikan, tekstur sangat kenyal, rasa dan penerimaan keseluruhan suka, kadar air 67,07%, kadar abu 2,12%, kadar protein sebesar 11,07% dan kadar serat kasar sebesar 2,21% dan telah sesuai dengan SNI Bakso Ikan 7266:2017.

Kata kunci : bakso, ikan baji-baji, jamur tiram putih