

PENGARUH LEVEL PENAMBAHAN PROPOLIS TERHADAP COOKING YIELD KUALITAS FISIK, DAN MIKROSTRUKTUR BAKSO AYAM BROILER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh propolis terhadap *cooking yield*, kualitas fisik dan mikrostruktur bakso ayam broiler. Bahan pembuatan bakso yaitu daging ayam broiler, tepung tapioka, bumbu bumbu dan penambahan propolis. Perlakuan level penambahan propolis 0% (kontrol), 0,5, 1 dan 1,5%. Variabel yang diamati pada penelitian ini yaitu *cooking yield*, kualitas fisik (pH, daya ikat air, keempukan), dan mikrostruktur bakso daging ayam broiler. Analisis data menggunakan *one way ANOVA* serta diuji lanjut dengan *Duncan's Multiple Range Test (DMRT)*. Mikrostruktur bakso ayam broiler dengan metode *pewarnaan Hematoksilin-Eosin* kemudian dilihat dengan menggunakan mikroskop dan dianalisis dengan analisis *descriptive* secara visual. Berdasarkan penelitian bakso ayam yang ditambahkan propolis dengan level 0, 0,5, 1, dan 1,5% diperoleh hasil *cooking yield* bakso ayam menunjukkan perbedaan tidak nyata ($P > 0,05$), Uji kualitas fisik menunjukkan perbedaan nyata ($P < 0,05$). uji kualitas fisik variabel pH, dan daya ikat air (DIA) mengalami penurunan, tetapi untuk variabel keempukan mengalami kenaikan. Mikrostruktur bakso ayam level kontrol lebih memiliki struktur yang lebih kompak dibandingkan bakso dengan penambahan propolis. Berdasarkan penelitian yang dilakukan, dapat disimpulkan bahwa penambahan propolis pada bakso ayam broiler tidak berpengaruh terhadap *cooking yield*, menurunkan pH, daya ikat air (DIA) dan kualitas mikrostruktur, tetapi meningkatkan nilai keempukan bakso, sehingga dapat dijadikan sebagai pengetahuan baru guna pengembangan teknologi pengolahan produk daging lebih lanjut.

Kata kunci: Bakso ayam, Propolis, *cooking yield*, Kualitas fisik, Mikrostruktur.

EFFECT OF PROPOLIS ADDITION ON COOKING YIELD, PHYSICAL QUALITY, AND MICROSTRUCTURE OF CHICKEN BROILER MEATBALLS

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ABSTRACT

This study aims to determine the effect of propolis on the cooking yield, physical quality, and microstructure of broiler chicken meatballs. The ingredients for making meatballs are broiler chicken, tapioca flour, seasoning, and the addition of propolis. Treatment of propolis addition level are 0% (control), 0.5, 1 and 1.5%. The variables were observed in this study are the cooking yield, physical quality (pH, water holding capacity, tenderness), and microstructure of broiler chicken meatballs. Data analysis uses one way ANOVA and Paired T-test then continue with Duncan's Multiple Range Test (DMRT). The microstructure of broiler chicken meatballs use the Haematoxylin-Eosin staining method then looked by using a microscope and analyzed by visual descriptive analysis. Based on the research of chicken meatballs by added propolis with levels 0, 0.5, 1, and 1.5% shows that the cooking yield of chicken meatballs are no significant difference ($P > 0.05$). Physical quality tests showed significant difference ($P < 0.05$), Physical quality test of the pH variable and the water holding capacity (DIA) decreased, but for the tenderness variable, it increased. The microstructure of chicken meatballs with the control level has more compact more than meatballs with propolis addition. Based on the research that has done, it can be concluded that the addition propolis to broiler chicken meatballs has no effect on cooking yield, reduces pH, water-holding capacity (DIA), and microstructure quality, but increases the meatball tender value, so it can be used as new knowledge for the development of meat product processing technology.

Keywords: Broiler chicken meatballs, propolis, cooking yield, physical quality, microstructure.