

**PENGARUH SUBSTITUSI TEPUNG TAPIOKA DENGAN TEPUNG  
KETAN HITAM (*Oryza sativa* L var. *glutinosa*) TERHADAP  
KUALITAS KIMIA DAN SENSORIS BAKSO  
AYAM BROILER**

Kartini Sekar Arum  
20/455750/PT/08430

**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung ketan hitam (*Oryza sativa* L var. *glutinosa*) terhadap kualitas kimia dan sensoris bakso ayam broiler. Bahan yang digunakan pada penelitian ini yaitu daging ayam broiler, tepung tapioka, STPP, bumbu-bumbu (ketumbar, merica, bawang putih, garam), air es, dan penambahan tepung ketan hitam (*Oryza sativa* L var. *glutinosa*). Variabel yang diamati meliputi kualitas kimia (kadar air, kadar protein, kadar lemak, kadar abu, kadar karbohidrat, dan nilai indeks glikemik), kualitas sensoris (warna, aroma, tekstur, rasa, dan daya terima) bakso ayam broiler. Penelitian ini dilakukan dengan analisis *One Way Anova* dengan uji lanjut *Duncan's New Multiple Range Test* (DMRT) pada kualitas kimia, sedangkan pada sensoris menggunakan analisis *Kruskal and Wallis Test* dengan uji lanjut *Mann-Whitney* dengan faktor banyaknya jumlah tepung ketan hitam yang terdiri atas empat level perlakuan, dengan perbandingan tepung tapioka dengan tepung ketan hitam, yaitu P0 = 0%; P1 = 25%; P2 = 50%; dan P3 = 75%. Substitusi tepung ketan hitam memberikan pengaruh yang sangat signifikan ( $P < 0,01$ ) terhadap kadar air, lemak, protein, karbohidrat, warna, aroma, tekstur, rasa, dan daya terima. Akan tetapi substitusi tepung ketan hitam tidak berpengaruh ( $P < 0,01$ ) terhadap kadar abu. Kesimpulan dari penelitian yang telah dilakukan adalah level substitusi tepung ketan hitam dapat menurunkan kadar karbohidrat, estimasi indeks glikemik dan menurunkan kualitas sensoris bakso ayam broiler. Perlakuan yang terbaik adalah P1 = 25%.

**Kata kunci:** Bakso ayam broiler, Tepung ketan hitam, Kualitas kimia, Kualitas sensoris.

**THE EFFECT OF SUBSTITUTION OF TAPIOCA FLOUR WITH BLACK  
GLUTINOUS RICE FLOUR (*Oryza sativa* L var. *glutinosa*)  
ON THE CHEMICAL AND SENSORY QUALITY OF  
BROILER CHICKEN MEATBALLS**

Kartini Sekar Arum  
20/455750/PT/08430

**ABSTRACT**

This research aims to determine the effect of substitution of black sticky rice flour (*Oryza sativa* L var. *glutinosa*) on the chemical and sensory quality of broiler chicken meatballs. The ingredients used in this research were broiler chicken meat, tapioca flour, STPP, spices (coriander, pepper, garlic, salt), ice water, and the addition of black sticky rice flour (*Oryza sativa* L var. *glutinosa*). The variables observed included chemical quality (moisture content, protein content, fat content, ash content, carbohydrate content, and glycemic index value), and sensory quality (color, aroma, texture, taste, and acceptability) of broiler chicken meatballs. This research was carried out using One Way Anova analysis with Duncan's New Multiple Range Test (DMRT) on chemical quality, while for sensory analysis using the Kruskal and Wallis Test with the Mann-Whitney test with the factor of the amount of black sticky rice flour consisting of four levels. treatment, with a ratio of tapioca flour to black sticky rice flour, namely P0 = 0%; P1 = 25%; P2 = 50%; and P3 = 75%. The substitution of black glutinous rice flour had a very significant effect ( $P < 0.01$ ) on water content, fat, protein, carbohydrates, color, aroma, texture, taste, and acceptability. However, the levels substitution of black sticky rice flour had no effect ( $P < 0.01$ ) on the ash content. The conclusion from the research that has been carried out is that the substitution of black sticky rice flour can reduce carbohydrate levels, estimate the glycemic index, and reduce the sensory quality of broiler chicken meatballs. The best treatment is P1 = 25%.

**Key words:** Broiler chicken meatballs, Black glutinous rice flour, Chemical quality, Sensory quality.