

**KUALITAS FISIK DAN SENSORIS SOSIS AYAM BROILER
SUBTITUSI *FILLER* TEPUNG TAPIOKA DENGAN
TEPUNG SORGUM (*Sorghum bicolor* L.)**

Mustika Azzahra Putri Perwitosari
21/481773/PT/09054

INTISARI

Tujuan penelitian ini untuk mengetahui kualitas fisik dan sensoris produk sosis ayam broiler substitusi tepung tapioka dengan tepung sorgum (*Sorghum bicolor* L.). Penelitian dilaksanakan dengan 5 perlakuan P0 (0%), P1(2,5%), P2 (5%), P3 (7,5%) dan P4 (10%) setiap perlakuan diulang 4 kali. Parameter yang diukur sifat fisik meliputi daya mengikat air (DIA), tekstur, pH, dan profil warna. Data hasil penelitian fisik diolah dengan analisis Rancangan Acak Lengkap pola searah (ANOVA) dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT) dan data hasil penelitian sensoris diolah dengan analisis *Kruskal Wallis* dilanjutkan dengan *Mann Whitney*. Berdasarkan hasil penelitian diperoleh bahwa hasil terbaik kualitas fisik dan sensoris sosis ayam broiler substitusi filler tepung tapioka dengan tepung sorgum terdapat pada P1 dengan level substitusi sebesar 2,5%. Substitusi tepung tapioka dengan tepung sorgum pada level 2,5% dapat meningkatkan daya ikat air, tekstur, dan sensoris sosis ayam broiler.

Kata kunci: tepung sorgum, sosis ayam, kualitas sensoris, kualitas fisik

PHYSICAL AND SENSORY QUALITY BROILER CHICKEN SAUSAGE SUBSTITUTION FILLER TAPIOCA FLOUR WITH SORGHUM FLOUR (*Sorghum bicolor* L.)

Mustika Azzahra Putri Perwitosari
21/481773/PT/09054

ABSTRACT

This study aimed to assess the physical and sensory characteristics of broiler chicken sausages formulated with partial substitution of tapioca flour using sorghum flour (*Sorghum bicolor* L.). The experimental design consisted of five treatment groups: P0 (0%), P1 (2.5%), P2 (5%), P3 (7.5%), and P4 (10%), with four replications per treatment. Physical quality parameters evaluated included water holding capacity (WHC), texture profile (hardness, chewiness, springiness, gumminess), pH, and color profile. Physical data were analyzed using a one-way Completely Randomized Design (CRD), followed by Duncan's New Multiple Range Test (DMRT) for post hoc comparisons. Sensory data were analyzed using the Kruskal-Wallis test, followed by the Mann-Whitney test. Based on the findings of the study, the optimal physical and sensory quality of broiler chicken sausages with partial substitution of tapioca flour by sorghum flour was achieved in treatment P1, corresponding to a substitution level of 2.5%. The incorporation of sorghum flour at this level enhanced the water-holding capacity, texture, and sensory characteristics of the broiler chicken sausages.

Keywords: sorghum flour, chicken sausage, sensory quality,
physical quality