

**PENGARUH *PLASTICIZER* YANG BERBEDA TERHADAP
KUALITAS FISIK, KIMIA DAN SENSORIS SOSIS AYAM
YANG MENGGUNAKAN *EDIBLE COATING* DARI
GELATIN KULIT KAMBING KACANG
(*Capra aegagrus hircus*)**

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan jenis *plasticizer* terhadap kualitas fisik, kimia dan sensoris sosis ayam yang di *coating* menggunakan *edible coating* dari gelatin kulit kambing kacang (*Capra aegagrus hircus*). *Plasticizer* yang digunakan pada larutan *edible coating* meliputi P1 (gliserol), P2 (sorbitol), dan P3 (propilen glikol) dengan lima kali pengulangan. *Plasticizer* ditambahkan sejumlah 0,5% (v/b) dari kuantitas gelatin pada larutan *edible coating*. Parameter yang diamati yaitu kualitas fisik (nilai pH, daya ikat air, dan keempukan), kimia (kadar air, protein, dan lemak), dan sensoris (warna, aroma, tekstur, rasa, dan daya terima). Data kualitas fisik dan kimia dianalisis menggunakan Rancangan Acak Lengkap (RAL) pola searah (ANOVA). Data kualitas sensoris dianalisis menggunakan analisis nonparametrik *Kruskal and Wallis Test*. Data dengan perbedaan nyata diuji lanjut menggunakan *Duncan's New Multiple Range Test* (DMRT). Hasil menunjukkan bahwa perbedaan jenis *plasticizer* memberikan pengaruh nyata ($P < 0,05$) terhadap nilai pH, daya ikat air (DIA) dan keempukan sosis ayam. Nilai pH pada P1, P2, dan P3 secara berturut-turut yaitu 6,33, 6,32, dan 6,34, nilai DIA secara berturut-turut yaitu 42,21, 42,84, dan 42,52%, dan nilai keempukan secara berturut-turut yaitu 6,23, 6,61, dan 6,43 mm/50g. Perbedaan jenis *plasticizer* tidak memberikan pengaruh nyata ($P > 0,05$) terhadap kadar air, protein, lemak, warna, aroma, tekstur, rasa, dan daya terima sosis ayam. Berdasarkan penelitian dapat disimpulkan bahwa penggunaan jenis *plasticizer* yang berbeda mempengaruhi nilai pH, DIA, dan keempukan, namun tidak mempengaruhi kualitas kimia dan sensoris sosis ayam. Perlakuan terbaik yaitu pada penggunaan jenis *plasticizer* sorbitol.

(Kata kunci : *Edible coating*, Gliserol, Propilen glikol, Sorbitol, Sosis ayam)

**EFFECT OF DIFFERENT *PLASTICIZERS* ON PHYSICAL, CHEMICAL
AND SENSORIAL QUALITIES OF CHICKEN SAUSAGE THAT
USING EDIBLE COATING FROM KACANG GOAT
(*Capra aegagrus hircus*) SKIN GELATIN**

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ABSTRACT

The study aimed to determine the effect of different types of plasticizers on the physical, chemical and sensory quality of chicken sausage coated using edible coating from kacang goat (*Capra aegagrus hircus*) skin gelatin. Plasticizers used in edible coating solution include P1 (glycerol), P2 (sorbitol), and P3 (propylene glycol) with five replications. Plasticizers were added at 0.5% (v/w) of the quantity of gelatin in the edible coating solution. The parameters observed were physical (pH value, water holding capacity, and tenderness), chemical (moisture, protein, and fat content), and sensory (color, aroma, texture, taste, and acceptability) qualities. Physical and chemical quality data were analyzed using a Completely Randomized Design (CRD) one-way (ANOVA). Sensory quality data were analyzed using nonparametric analysis Kruskal and Wallis Test. Data with significant differences were further tested using Duncan's New Multiple Range Test (DMRT). The results showed that the different types of plasticizers had a significant effect ($P < 0.05$) on the pH value, water holding capacity (WHC) and tenderness of chicken sausage. The pH value of P1, P2, and P3 were 6.33, 6.32, and 6.34 respectively, the WHC value were 42.21, 42.84, and 42.52%, and the tenderness value were 6.23, 6.61, and 6.43 mm/50g. The different types of plasticizers had no significant affect ($P > 0.05$) on the moisture, protein, and fat content; color, aroma, texture, taste, and acceptability of chicken sausage. Based on this study, it can be concluded that the use of different types of plasticizers in edible coating causes differences in pH value, WHC, and tenderness, but has no effect on the chemical and sensory quality of chicken sausages. The best treatment was on the use of sorbitol plasticizer.

(Key words : Edible coating, Glycerol, Propylene glycol, Sorbitol, Chicken sausage)