PENGARUH PENAMBAHAN TEPUNG BUNGA TELANG (*Clitoria ternatea* L.) TERHADAP AKTIVITAS ANTIOKSIDAN, KUALITAS FISIK, DAN SENSORIS SOSIS AYAM PETELUR AFKIR

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung bunga telang (*Clitoria ternatea* L.) terhadap aktivitas antioksidan, kualitas fisik, dan sensoris sosis ayam petelur afkir. Pembuatan sosis ayam petelur afkir dilakukan sesuai formulasi dengan penambahan tepung bunga telang dengan level 0; 0,5; 1; dan 1,5% dari berat daging. Setiap perlakuan diulang sebanyak empat kali. Parameter yang diuji meliputi aktivitas antioksidan, kualitas fisik (pH, daya ikat air, profil tekstur, dan warna), dan kualitas sensoris (rasa, aroma, warna, tekstur, dan daya terima). Data hasil uji aktivitas antioksidan dan kualitas fisik dianalisis menggunakan *Analysis of Variance* (ANOVA) dengan Rancangan Acak Lengkap (RAL) pola searah dan apabila terdapat perbedaan nyata maka dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Data hasil uji sensoris dianalisis menggunakan *Kruskal Wallis Test* dan apabila tedapat perbedaan nyata maka dilanjutkan dengan *Mann-Whitney Test*. Penambahan tepung bunga telang memberikan pengaruh yang signifikan (P<0,05) terhadap aktivitas antioksidan, daya ikat air, profil tekstur, dan warna. Didapatkan hasil aktivitas antioksidan terbaik pada level penambahan 1,5% sebesar 93,20%. Didapatkan hasil kualitas fisik terbaik pada level penambahan 0% pada nilai pH 6,43, daya ikat air 52,01%, *hardness* 57,32 N, *cohesiveness* 0,81, *springiness* 0,86, *gumminess* 46,28 N, *chewiness* 39,80 N, L* 67,15, a* 1,57, dan b* 14,93. Penambahan tepung bunga telang memberikan pengaruh yang signifikan (P<0,05) terhadap warna, rasa, aroma, dan daya terima. Nilai kualitas sensoris terbaik pada level penambahan 0% yaitu warna 7,45, rasa 7,63, aroma 7,23, tekstur 6,80, dan daya terima 7,25. Kesimpulan penelitian adalah penambahan tepung bunga telang meningkatkan aktivitas antioksidan tetapi menurunkan kualitas fisik dan sensoris sosis ayam petelur afkir.

Kata kunci: Sosis, Daging Ayam Petelur Afkir, Tepung Bunga Telang, Aktivitas Antioksidan, Kualitas Fisik, Kualitas Sensoris.

THE EFFECT OF ADDITION OF BUTTERFLY PEA FLOWER FLOUR (*Clitoria ternatea* L.) ON ANTIOXIDANT ACTIVITY, PHYSICAL AND SENSORY QUALITY OF SPENT LAYING HEN SAUSAGES

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ABSTRACT

This research aims to determine the effect of butterfly pea flower flour (*Clitoria ternatea* L.) addition on antioxidant activity, physical quality, and sensory of spent laying hen sausages. The manufacture of spent laying hen sausages was carried out according to the formulation with the addition of butterfly pea flower flour at levels of 0; 0,5; 1; and 1,5% of the weight meat. Each treatment was repeated four times. The parameters tested included antioxidant activity, physical quality (pH, water holding capacity, tenderness, and color), and sensory quality (taste, aroma, color, texture, and acceptability). Data from the antioxidant activity and physical quality tests were analyzed using Analysis of Variance (ANOVA) with a Completely Randomized Design (CRD) in one direction and if there was a significant difference, it was continued with Duncan's New Multiple Range Test (DMRT) while the sensory test used the Kruskal Wallis Test and if there was a significant difference, it was continued with the Mann-Whitney Test. The addition of butterfly pea flower flour gave a significant effect (P<0,05) on antioxidant activity, water holding capacity, texture profile, and color. The best antioxidant activity results were obtained at an addition level of 1,5% of 93,20%. The best physical quality results were obtained at the 0% addition level at a pH value of 6.43, water binding capacity of 52.01%, hardness of 57.32 N, cohesiveness of 0.81, springiness of 0.86, gumminess of 46.28 N, chewiness of 39.80 N, L* 67.15, a* 1.57, and b* 14.93. The addition of butterfly pea flower flour had a significant effect (P<0.05) on color, taste, aroma, and acceptability. The best sensory quality values at the 0% addition level were color 7.45, taste 7.63, aroma 7.23, texture 6.80, and acceptability 7.25. The conclusion of the study was that the addition of butterfly pea flower flour increased antioxidant activity but decreased the physical and sensory quality of laying hen sausages.

Keywords: Sausage, Spent Laying Hen, Butterfly Pea Flower Flour, Antioxidant Activity, Physical Quality, Sensory Quality