

PENGARUH PENAMBAHAN TEH HIJAU (*Camellia sinensis*) TERHADAP AKTIVITAS ANTIOKSIDAN, KIMIA DAN SENSORIS BAKSO DAGING AYAM LAYER AFKIR

Vicky Adlien Ramadhan Putra
20/462769/PT/08686

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk teh hijau (*Camellia sinensis*) terhadap kualitas kimia (kadar air, lemak dan protein), kualitas antioksidan dan kualitas sensoris pada bakso ayam petelur afkir. Bahan yang digunakan dalam pembuatan bakso ayam petelur afkir adalah daging ayam petelur afkir, teh hijau bubuk, tepung tapioka, garam, bawang putih, ketumbar, merica, telur, bawang merah goreng, air dingin, dan STPP. Penelitian ini dilakukan dengan penambahan bubuk teh hijau pada empat perlakuan, yaitu 0%, 0,20%, 0,30%, dan 0,40% dari total adonan. Setiap perlakuan dilakukan sebanyak 4 kali pengulangan. Data yang diperoleh dari uji kualitas kimia (kadar air, lemak, dan protein) dianalisis menggunakan metode variansi Rancangan Acak Lengkap (RAL) pola searah (*one way anova*). Apabila terdapat pengaruh nyata, maka dilanjutkan dengan *Duncan's New Multiple Range Test* (DMRT). Data uji aktivitas antioksidan menggunakan DPPH dianalisis menggunakan analisis variansi pola searah (*one way anova*) dan perbedaan reratanya diuji menggunakan *Duncan's New Multiple Range Test* (DMRT). Data pengujian kualitas sensoris yang diperoleh dianalisis menggunakan uji *Statistic Non Parametric* dari *Kruskal Wellis Test*. Hasil penelitian menunjukkan penambahan bubuk teh hijau dengan level penambahan 0,30% menunjukkan hasil terbaik pada peningkatan aktivitas antioksidan dengan rata-rata 87,06%, peningkatan nilai uji kimia yang meliputi kadar lemak dan air berturut-turut 3,68 dan 70,94 dan peningkatan nilai sensoris yang meliputi warna, rasa, dan daya terima berturut-turut 6,80; 6,90; dan 7,55. Kesimpulan yang diperoleh penambahan bubuk teh hijau dengan level penambahan yang berbeda dapat menurunkan kadar lemak dan kadar air, serta dapat meningkatkan aktivitas antioksidan dan kualitas warna, tekstur, daya terima, namun tidak berpengaruh nyata pada kadar protein, nilai sensoris aroma dan tekstur pada bakso daging ayam petelur afkir.

Kata Kunci : Aktivitas Antioksidan, Kualitas Kimia, Kualitas Sensoris, Teh Hijau (*Camellia sinensis*), Bakso Ayam Petelur Afkir.

THE EFFECT OF GREEN TEA (*Camellia sinensis*) ADDITION ON ANTIOXIDANT ACTIVITY, CHEMICAL, AND SENSORY PROPERTIES OF CHICKEN MEATBALLS MADE FROM SPENT LAYER CHICKEN

Vicky Adlien Ramadhan Putra
20/462769/PT/08686

ABSTRACT

This study aimed to determine the effect of adding green tea powder (*Camellia sinensis*) on the chemical quality (moisture, fat, and protein content), antioxidant activity, and sensory quality of meatballs made from spent layer chicken. The ingredients used in making the meatballs included spent layer chicken meat, green tea powder, tapioca flour, salt, garlic, coriander, pepper, eggs, fried shallots, cold water, and STPP. The study was conducted with the addition of green tea powder at four levels: 0%, 0,20%, 0,30%, and 0,40% of the total mixture. Each treatment was repeated four times. Data obtained from chemical quality tests (moisture, fat, and protein content) were analyzed using a one-way ANOVA (Completely Randomized Design). If significant differences were observed, Duncan's New Multiple Range Test (DMRT) was used for further analysis. Antioxidant activity data obtained using the DPPH method were also analyzed using one-way ANOVA, followed by DMRT for mean comparisons. Sensory quality data were analyzed using the non-parametric Kruskal-Wallis test. The results showed that the addition of 0,30% green tea powder provided the best outcomes, with an average increase in antioxidant activity of 87,06% and improved sensory scores for color, taste, and acceptability at 6,80, 6,90, and 7,55, respectively. Chemical quality analysis showed reduced fat and moisture content at 3,68 and 70,94, respectively. In conclusion, the addition of green tea powder at different levels reduced fat and moisture content while increasing antioxidant activity and improving sensory attributes such as color, texture, and acceptability. However, it did not significantly affect protein content or the sensory attributes of aroma and texture in spent layer chicken meatballs.

Keywords: Antioxidant Activity, Chemical Quality, Sensory Quality, Green Tea (*Camellia sinensis*), Spent Layer Chicken Meatballs.