

PENGARUH PENAMBAHAN BUBUK BAWANG DAYAK (*Eleutherine palmifolia* (L.) Merr) TERHADAP AKTIVITAS ANTIOKSIDAN, KUALITAS KIMIA, DAN SENSORIS NUGGET AYAM PETELUR AFKIR

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk bawang dayak (*Eleutherine palmifolia* (L.) Merr) terhadap aktivitas antioksidan, kualitas kimia, dan sensoris *nugget* ayam petelur afkir. Bahan yang digunakan meliputi daging ayam petelur afkir, tepung tapioka, tepung sagu, susu skim, putih telur, bawang putih, bawang dayak, garam, lada, kaldu jamur, air es, dan tepung panir. Penelitian ini menggunakan penambahan bubuk bawang dayak dengan konsentrasi 0; 1; 2; dan 3% dari berat total adonan. Masing-masing perlakuan dilakukan pengulangan sebanyak empat kali. Parameter yang diuji pada penelitian ini meliputi aktivitas antioksidan, kualitas kimia (kadar air, protein, dan lemak), serta kualitas sensoris (warna, aroma, tekstur, rasa, dan *overall*). Data hasil uji aktivitas antioksidan dan kualitas kimia dianalisis menggunakan analisis variansi pola searah (*One Way ANOVA*) dan dilakukan uji lanjut dengan *Duncan's New Multiple Range Test* (DMRT). Data kualitas sensoris dianalisis dengan analisis non parametrik menggunakan uji hedonik menurut *Kruskal-Wallis* dan dilakukan uji lanjut menggunakan metode *Mann-Whitney Test*. Penambahan bubuk bawang dayak berpengaruh signifikan ($P < 0,05$) terhadap aktivitas antioksidan dan didapatkan hasil terbaik pada penambahan 3% ($30,67 \pm 0,58$). Penambahan bubuk bawang dayak tidak berpengaruh ($P > 0,05$) terhadap kualitas kimia. Penambahan bubuk bawang dayak berpengaruh signifikan ($P < 0,05$) terhadap kualitas sensoris dan didapatkan hasil terbaik pada penambahan 3% yaitu warna ($3,90 \pm 0,68$), dan penambahan 1% pada aroma ($4,00 \pm 0,26$), rasa ($3,97 \pm 0,61$), dan *overall* ($4,02 \pm 0,45$). Kesimpulan dari penelitian yang telah dilakukan adalah penambahan bawang dayak sebesar 1% menghasilkan nilai aktivitas antioksidan, kualitas kimia, dan sensoris *nugget* ayam petelur afkir yang terbaik.

Kata kunci: *Nugget* ayam petelur afkir, Bawang dayak, Aktivitas antioksidan, Kualitas kimia, Kualitas sensoris.

THE EFFECT OF DAYAK ONION POWDER (*Eleutherine palmifolia* (L.) Merr) ADDITION ON ANTIOXIDANT ACTIVITY, CHEMICAL, AND SENSORIAL QUALITIES OF CULLED LAYERS *NUGGET*

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ABSTRACT

The aim of this study was to determine the effect of dayak onion powder (*Eleutherine palmifolia* (L.) Merr) addition on antioxidant activity, chemical, and sensorial qualities of culled layers *nugget*. The ingredients used were culled layers meat, tapioca flour, sago flour, skim milk, egg white, garlic, dayak onion powder, salt, pepper, mushroom bouillon, ice water, and bread crumbs. This research used the addition of dayak onion powder with concentrations of 0; 1; 2 and 3% of the total dough weight. Each treatment was repeated four times. The observed parameters were antioxidant activity, chemical quality (moisture, protein, and fat content), as well as sensory quality (color, aroma, texture, taste, and *overall*). Data of antioxidant activity and chemical quality were analysed by Completely Randomized Design (CRD) One Way ANOVA and continued by Duncan's New Multiple Range Test (DMRT) method. Data of sensory analysis was analysed using hedonic models non parametric by Kruskal-Wallis and continued by Mann-Whitney Test. The addition of dayak onion powder had a significant effect ($P < 0,05$) on antioxidant activity and the best result was obtained at the addition of 3% ($30,67 \pm 0,58$). The addition of dayak onion powder had no significant effect ($P > 0,05$) on chemical quality. The addition of dayak onion powder had a significant effect ($P < 0,05$) on sensory quality. The best result of the sensory quality tests was obtained at the addition of 3%, which resulted in color ($3,90 \pm 0,68$), and the addition of 1% at aroma ($4,00 \pm 0,26$), taste ($3,97 \pm 0,61$), and *overall* ($4,02 \pm 0,45$). The conclusion of the research was that the addition of dayak onion powder at 1% resulted in the best antioxidant activity, chemical quality, and sensory of culled layers *nugget*.

Keywords: Culled layers *nugget*, Dayak onion, Antioxidant activity, Chemical quality, Sensory quality.