

**EKSTRAK DAUN SENGKUBAK (*Pycnarrhena cauliflora*) TERHADAP
KARAKTERISTIK ASAM GLUTAMAT, TOTAL BAKTERI,
FISIKOKIMIA, DAN SENSORIS BAKSO AYAM KALENG
PADA PENYIMPANAN SUHU RUANG**

INTISARI

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Bakso merupakan makanan yang banyak dikonsumsi oleh semua kalangan masyarakat di Indonesia. Bakso dengan penambahan zat aditif alami merupakan salah satu alternatif pangan yang aman dikonsumsi dalam jangka panjang. Penambahan ekstrak daun sengkubak pada bakso bertujuan untuk mengevaluasi dampak penambahan terhadap aspek kualitas, keamanan mikrobiologis, dan daya terima sensoris selama penyimpanan menggunakan kemasan kaleng. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) pola faktorial 4x4 dengan 3 kali pengulangan. Faktor pertama yaitu penambahan ekstrak daun sengkubak dengan level 0%; 0,25%; 0,50%; dan 0,75%, dan faktor kedua yaitu lama penyimpanan dalam kemasan kaleng di penyimpanan suhu ruang 27°C selama 0; 4; 8; dan 12 minggu. Pengeringan daun sengkubak dilakukan menggunakan metode *spray dry* dengan suhu inlet 170°C dan outlet 70°C. Variable yang diuji yakni kadar asam glutamat, total bakteri, kualitas fisik (pH, warna, daya ikat air, tekstur, dan mikrostruktur), kualitas kimia (kadar lemak, kadar protein, dan kadar air), dan kualitas sensoris. Apabila terjadi perbedaan nyata dilanjutkan dengan uji *Duncan new Multiple Range Test* (DMRT). Data hasil pengujian sensoris dianalisis menggunakan analisis non parametrik dengan uji *Friedman*. Data hasil penelitian pada kadar asam glutamat pada bakso berkisar antara 0,30 hingga 0,38, pada kuah bakso berkisar antara 0,15 hingga 0,21; Total bakteri berkisar antara 4,91 hingga 4,68 (log CFU/g); kualitas fisik yaitu pH berkisar antara 6,59 hingga 6,52, L* berkisar antara 23,94 hingga 24,16, a* berkisar antara -0,19 hingga -0,17, b* berkisar antara 0,28 hingga 0,87, DIA berkisar antara 53,15 hingga 52,23; Kualitas kimia yaitu kadar lemak berkisar antara 2,28 hingga 2,24, kadar protein berkisar antara 19,55 hingga 19,49, kadar air berkisar antara 78,04 hingga 79,01; dan kualitas sensoris meningkatkan nilai rasa gurih. Berdasarkan hasil dapat disimpulkan bahwa penambahan daun sengkubak 0,5% adalah penambahan paling baik pada bakso ayam dan kemasan kaleng dapat mempertahankan kualitas bakso hingga masa simpan 12 minggu pada suhu ruang.

Kata kunci : Bakso ayam, Daun sengkubak, Kemasan kaleng

SENGKUBAK LEAF EXTRACT (*Pycnarrhena cauliflora*) TO THE
GLUTAMIC ACID, TOTAL BACTERIES, PHYSICOCHEMICAL
CHARACTERISTICS, AND SENSORIES
OF CANNED CHICKEN MEATBALLS
AT ROOM TEMPERATURE STORAGE

ABSTRACT

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Meatballs were a food that was widely consumed by all circles of society in Indonesia. Meatballs with the addition of natural additives became an alternative food that was safe for long-term consumption. The addition of sengkubak leaf extract to meatballs aimed to evaluate the effect of the addition on aspects of quality, microbiological safety, and sensory acceptability during storage using canned packaging. The experimental design used a 4x4 factorial complete randomized design consisting of the addition of sengkubak leaf extract (0%, 0.25%, 0.50%, 0.75%) and the length of storage in canned at 27°C room temperature storage (0, 4, 8, 12 weeks), each treatment was replicated 3 times. The drying of sengkubak leaves was carried out using the spray dry method with an inlet temperature of 170°C and an outlet temperature of 70 °C. The variables tested included glutamic acid content, total bacteria, physical quality (pH, color, water binding capacity, texture, and microstructure), chemical quality (fat content, protein content, and moisture content), and sensory quality. If there was a significant difference, it was continued with Duncan's multiple range test (DMRT). Sensory test data were analyzed using non-parametric analysis with the Friedman test. The research data showed that the glutamic acid levels in meatballs ranged from 0.30 to 0.38, in meatball sauce ranged from 0.15 to 0.21; the total bacteria ranged from 4.91 to 4.68 (log CFU/g); the physical quality pH ranged from 6.59 to 6.52, L* ranged from 23.94 to 24.16, a* ranged from -0.19 to -0.17, b* ranged from 0.28 to 0.87, WHC ranged from 53.15 to 52.23; the chemical quality was fat content ranged from 2.28 to 2.24, protein content ranged from 19.55 to 19.49, moisture content ranged from 78.04 to 79.01; and the sensory quality improved the umami taste value. It is concluded that the addition of 0.5% sengkubak leaves is the best addition to chicken meatballs and canned packaging can maintain the quality of meatballs for up to 12 weeks at room temperature.

Keywords: Chicken meatballs, Sengkubak leaves extract, Canned packaging