

## PENGARUH DAUN SENGKUBAK DAN LAMA PENYIMPANAN TERHADAP KOMPOSISI KIMIA, RANSIDITAS, DAN TOTAL MIKROBA EMPAL GENTONG KALENG

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### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh daun sengkubak terhadap komposisi kimia, total bakteri, dan TBA pada penyimpanan suhu ruang empal gentong dengan kemasan kaleng. Bahan utama yang digunakan yaitu daging sapi. Bumbu rempah yang digunakan yaitu kunyit, jahe, laos, serai, kencur, bawang merah, bawang putih, kemiri, ketumbar, lada, kelabat, pala, kapulaga, jintan, cengkeh, kayu manis, dan mesoyi. Penyedap yang digunakan yaitu daun salam, kaldu sapi instan, vetsin, gula merah, gula pasir, garam, bumbu empal getong kering, dan santan. Perlakuan daun sengkubak terdiri dari kelompok perlakuan pada konsentrasi 0, 5, 10, dan 15%. Pengujian kimia (kandungan protein, air, lemak, kolagen), total bakteri, dan nilai *Thiobarbituric acid* (TBA) dilakukan pada penyimpanan minggu ke-0, 2, 4, dan 6. Komposisi kimia diuji dengan NIRS (*Near Infrared Spectroscopy*) *Foodscan*. Data dianalisis menggunakan analisis variansi Rancangan Acak Lengkap (RAL) pola faktorial dan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT). Hasil analisis statistik menunjukkan bahwa daun sengkubak berpengaruh nyata ( $P < 0,05$ ) terhadap kadar air, protein, dan nilai TBA, namun tidak berpengaruh nyata ( $P > 0,05$ ) terhadap kadar lemak, kolagen, dan total bakteri. Lama penyimpanan berpengaruh nyata terhadap kadar air, kadar lemak, total bakteri, dan TBA, namun tidak berpengaruh nyata ( $P > 0,05$ ) terhadap kadar protein dan kolagen. Kesimpulan penelitian ini yaitu daun sengkubak dapat menurunkan nilai TBA empal gentong, sedangkan lama penyimpanan dapat meningkatkan nilai TBA dan meningkatkan total bakteri empal gentong.

**Kata kunci:** Empal gentong, Daun sengkubak, Komposisi kimia, Total Bakteri, Ransiditas

## EFFECT OF SENGKUBAK LEAVES AND STORAGE ON THE CHEMICAL COMPOSITION, RANCIDITY, AND TOTAL MICROBES OF CANNED EMPAL GENTONG

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### ABSTRACT

This study aimed to determine the effect of substitution of sengkubak leaves on chemical composition, rancidity, and total bacteria at room temperature storage of canned empal gentong. The main ingredient used is beef. The spices used are turmeric, ginger, galangal, lemongrass, aromatic ginger, shallots, garlic, candlenut, coriander, pepper, fenugreek, nutmeg, cardamom, cumin, cloves, cinnamon and mesoyi. The seasonings used are bay leaves, instant beef broth, MSG, palm sugar, granulated sugar, salt, dry empal getong seasoning, and coconut milk. Sengkubak leaves substitution treatment consisted of treatment groups at concentrations of 0, 5, 10, and 15%. Chemical tests (protein, water, fat, collagen content), total bacteria, and Thiobarbituric acid (TBA) values were carried out at weeks 0, 2, 4 and 6 of storage. Chemical quality was tested by NIRS (Near Infrared Spectroscopy) Foodscan. Data were analyzed using factorial pattern Completely Randomized Design (CRD) analysis of variance and continued with Duncan's Multiple Range Test (DMRT). The results of statistical analysis showed that substitution of sengkubak leaves had a significant effect ( $P < 0.05$ ) on water, protein and TBA content, but had no significant effect ( $P > 0.05$ ) on fat, collagen and total bacteria content. Storage time had a significant effect on moisture content, fat content, total bacteria, and TBA, but had no significant effect ( $P > 0.05$ ) on protein and collagen levels. In conclusion, sengkubak leaves can reduce the value of TBA empal gentong, while long storage time can increase the value of TBA and total bacteria empal gentong.

**Keywords:** Empal Gentong, Sengkubak leaves, Chemical quality, Total bacteria, Rancidity