

## PENGARUH LAMA STERILISASI TERHADAP MUTU ARES KALENG

*[Effects of Duration of Sterilization on The Quality of Canned Ares (Banana Trunk)]*

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### ABSTRACT

*This study aim to determine the effect of duration of sterilization on the quality of canned ares. The design used in this study was Completely Randomized Block Design (CRBD) with a single factor of sterilization time with 6 treatment ie. Sterilization for 4, 8, 12, 16, 20, 24 minutes. Parameter observed consisted of physics quality (lightness and °Hue), chemical quality (pH, crude fiber, protein, and rancidity), microbial quality (total microbe) and sensory quality in hedonic and scoring (appearance, colour, aroma, texture and taste). Data physics, chemical, and organoleptic quality were analyzed using ANOVA diversity analyzed at 5% level using Co-Stat Software and the result that had significant differences were continued to analyzed using Honestly Significant Difference Test (BNJ) at 5% level. Meanwhile microbial data were analyzed by using descriptive method. The results showed that the duration of sterilization had significant effects on chemical quality (crude fiber) and sensory quality in scoring (aroma and texture), but had non significant effects on physics quality, chemical quality (pH, protein and rancidity) microbial quality, sensory quality in hedonic at all treatments and scoring (appearance, color and taste). Total microbe of canned ares has average value  $<1,0 \times 10^4$  CFU/g. Sterilization for minimum 4 min and maximum 16 minute are recommended to produce canned ares (banana trunk) with pH value 6,10-6,29, rancidity 0,53%-0,56%, proyein 1,40%-1,56% and crude fiber 0,25%-0,43%.*

**Keyword:** Ares, Canned, Sterilization

### ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh lama sterilisasi terhadap mutu ares kaleng. Rancangan yang digunakan dalam penelitian ini adalah Rancangan Acak Kelompok (RAK) dengan faktor tunggal lama sterilisasi dengan 6 perlakuan yaitu sterilisasi 4, 8, 12, 16, 20 dan 24 menit. Parameter yang diamati terdiri dari mutu fisik (kecerahan dan °Hue), mutu kimia (pH, serat kasar, protein dan ketengikan), mutu mikrobiologis (total mikroba), dan mutu organoleptik secara hedonik dan skoring (kenampakan, warna, aroma, tekstur dan rasa). Data hasil pengamatan mutu fisik, kimia dan organoleptik dianalisis menggunakan ANOVA pada taraf nyata 5% menggunakan *software Co-Stat* dan perlakuan yang berbeda nyata diuji lanjut dengan menggunakan uji Beda Nyata Jujur (BNJ) pada taraf 5%. Sedangkan data hasil pengamatan mikrobiologi dianalisis menggunakan metode deskriptif. Hasil perlakuan menunjukkan bahwa Perlakuan lama sterilisasi ares kaleng berpengaruh nyata terhadap mutu kimia (serat) dan mutu organoleptik (aroma dan tekstur) tetapi tidak berpengaruh nyata terhadap mutu fisik (warna), mutu kimia (pH, protein dan ketengikan), mutu mikrobiologi (total mikroba) dan mutu organoleptik hedonik seluruh perlakuan dan skoring (kenampakan, warna, dan rasa). Total mikroba ares kaleng memiliki nilai rata-rata  $<1,0 \times 10^4$  CFU/g. Sterilisasi minimal 4 menit dan maksimal 16 menit adalah waktu yang direkomendasikan untuk memproduksi ares kaleng dengan kadar pH 6,10-6,29, ketengikan 0,53%-0,56%, protein 1,40%-1,56%, dan serat kasar 0,25%-0,43%

**Kata Kunci:** Ares, Pengalengan, Sterilisasi.