

Pengaruh Waktu Sterilisasi Dan Masa Simpan Terhadap Sifat Karakteristik Produk Bonggolan Ikan Bandeng (*Chanos chanos*)

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Abstrak

Bonggolan ikan bandeng sebagai produk olahan tradisional yang memiliki masa simpan relatif singkat yaitu empat hari, akibat kandungan air dan protein tinggi yang rentan terhadap kerusakan mikrobiologis. Penelitian ini bertujuan mengetahui pengaruh waktu sterilisasi dan masa simpan terhadap sifat karakteristik bonggolan ikan bandeng. Penelitian menggunakan metode sterilisasi dan penyimpanan pada suhu ruang 29°C. Rancangan yang digunakan yaitu Rancangan Acak Lengkap pola faktorial dengan dua faktor, yaitu waktu sterilisasi (5, 10, dan 15 menit) dan lama penyimpanan (minggu ke-0 sampai ke-4), masing-masing dua kali ulangan. Data dianalisis menggunakan ANOVA taraf kepercayaan 99 persen, dilanjutkan uji *Duncan Multiple Range Test*. Parameter yang diamati meliputi kadar air, kadar protein, pH, *Total Plate Count*, tekstur fisik, dan mutu hedonik meliputi rasa ikan, rasa gurih, warna, aroma, dan tekstur. Hasil menunjukkan waktu sterilisasi berpengaruh sangat nyata terhadap mutu hedonik rasa ikan, rasa gurih, warna, aroma, kadar protein, dan kadar air, serta berpengaruh nyata terhadap pH, namun tidak berpengaruh nyata terhadap tekstur. Interaksi waktu sterilisasi dan masa simpan berpengaruh sangat nyata terhadap mutu hedonik warna, aroma, kadar protein, dan kadar air. Disimpulkan bahwa waktu sterilisasi 5 menit merupakan perlakuan terbaik, menghasilkan mutu sensori tertinggi dengan nilai *Total Plate Count* tetap di bawah batas maksimum cemaran mikroba selama empat minggu penyimpanan.

Kata Kunci: *bonggolan; ikan bandeng; masa simpan; sterilisasi*

The Effect of Sterilization Time and Storage Period on the Characteristics of Milkfish (*Chanos chanos*) Bonggolan Products

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Abstract

Bonggolan made from milkfish is a traditional processed product with a relatively short shelf life of four days, due to high moisture and protein content that makes it susceptible to microbiological spoilage. This study aimed to determine the effect of sterilization time and storage duration on the characteristics of milkfish bonggolan. The study employed sterilization and storage at room temperature (29°C). Completely Randomized Design with a factorial pattern was used, involving two factors: sterilization time (5, 10, and 15 minutes) and storage duration (weeks 0 through 4), with two replications for each treatment. Data were analyzed using ANOVA 99% confidence level, followed by Duncan's Multiple Range Test. Observed parameters included moisture content, protein content, pH, Total Plate Count, physical texture, and hedonic quality attributes (fish flavor, savoriness, color, aroma, and texture). The results showed that sterilization time had a highly significant effect on hedonic quality attributes (fish flavor, savoriness, color, and aroma), protein content, and moisture content, as well as a significant effect on pH, but no significant effect on texture. The interaction between sterilization time and storage duration had a highly significant effect on the hedonic quality attributes of color, aroma, protein content, and moisture content. It was concluded that a sterilization time of 5 minutes was the best treatment, yielding the highest sensory quality while maintaining the Total Plate Count below the maximum limit for microbial contamination throughout the four-week storage period.

Keywords: *bonggolan; milkfish; shelf life; sterilization,*