

**PENGARUH DURASI PRODUKSI TERHADAP KUALITAS BAWANG PUTIH KUPAS DAN ANALISIS UMUR SIMPANNYA PADA SUHU REFRIGERASI DI PT SUMBER INTI PANGAN**

**INTISARI**

**Oleh:**

**ARCELY MARITZA WINATA**

Produksi Bawang Putih Kupas menghadapi tantangan kualitas akibat kerusakan mekanis yang dapat mempercepat reaksi enzim-substrat dan memicu kerusakan biokimiawi, serta berpotensi menyebabkan kontaminasi mikrobiologis, terutama saat produksi berlangsung lama. Selain itu, umur simpan produk diperkirakan hanya bertahan 3–4 hari, dicirikan oleh lesi coklat, bintik hitam, perubahan warna, dan titik air dalam kemasan.

Penelitian ini menganalisis hubungan antara jumlah cemaran mikroorganisme dan durasi produksi dengan mengambil sampel dari lima tahapan produksi (*Raw Material, Hasil Pengupasan, Pipil Sortir, Buang Bonggol, dan Penimbangan*) sebanyak 10 g per tahapan dengan tiga kali ulangan. Uji umur simpan dilakukan selama 28 hari dengan mengamati perubahan fisik, organoleptik, mikrobiologi, dan kondisi kemasan.

Hasil penelitian menunjukkan bahwa cemaran mikroorganisme dipengaruhi oleh berbagai faktor, termasuk durasi produksi, heterogenitas sampel, sanitasi, hingga potensi kontaminasi silang. Bawang Putih Kupas tetap berkualitas baik hingga H+4 sebelum mengalami perubahan signifikan. Oleh karena itu, diperlukan peningkatan konsistensi higienitas, pengendalian suhu, perbaikan proses dan pengemasan, serta penyesuaian suhu penyimpanan untuk memperpanjang umur simpan produk.

**Kata kunci:** Bawang Putih Kupas, kemasan vakum, cemaran mikroorganisme, durasi produksi, umur simpan.

**THE EFFECT OF PRODUCTION DURATION ON THE QUALITY OF  
GARLIC PEELED AND ANALYSIS OF ITS SHELF LIFE AT  
REFRIGERATION TEMPERATURES AT PT SUMBER INTI PANGAN**

**ABSTRACT**

**By:**

**ARCELY MARITZA WINATA**

Garlic Peeled production faces quality challenges due to mechanical damage that can accelerate enzyme-substrate reactions and trigger biochemical damage, as well as potentially causing microbiological contamination, especially during long production runs. In addition, the shelf life of the product is estimated to last only 3-4 days, characterized by brown lesions, black spots, discoloration, and water spots in the packaging.

This study analyzed the relationship between the amount of microorganism contamination and production duration by taking samples from five production stages (Raw Material, Peeling Results, Sorting Seeds, Removing Corms, and Weighing) as much as 10 g per stage with three replications. The shelf life test was carried out for 28 days by observing physical, organoleptic, microbiological changes, and packaging conditions.

The results showed that microorganism contamination was influenced by various factors, including production duration, sample heterogeneity, sanitation, and potential cross-contamination. Peeled Garlic remained of good quality until D+4 before experiencing significant changes. Therefore, it is necessary to improve the consistency of hygiene, temperature control, process and packaging improvements, and adjust storage temperatures to extend the shelf life of the product.

**Keywords:** Garlic Peeled, vacuum packaging, microorganism contamination, production duration, shelf life