

“PENGARUH BERBAGAI KONDISI PERLAKUAN TERHADAP KUALITAS CABAI MERAH (*Capsicum annuum* L.)”

Rehulina, Anwar kasim, Dewi Arziyah

Abstrak

Cabai merah (*Capsicum annuum* L.) merupakan komoditas hortikultura yang memiliki nilai ekonomi tinggi namun memiliki umur simpan yang singkat akibat kandungan airnya yang tinggi. Penelitian ini bertujuan untuk mengetahui pengaruh berbagai kondisi perlakuan pendahuluan terhadap kualitas cabai merah selama penyimpanan suhu ruang dan menentukan perlakuan yang paling efektif dan memperpanjang umur simpannya. Penelitian ini menggunakan metode deskriptif kuantitatif dengan lima perlakuan, yaitu tanpa perlakuan (kontrol), kemasan vakum, pengemasan dengan gas nitrogen, perlakuan microwave, dan perendaman dalam larutan kinetin 15 ppm. Sampel berupa cabai merah keriting dengan tingkat kematangan lebih dari 90% dikemas menggunakan plastik *polypropylene* (PP) dan disimpan pada suhu ruang selama 12 hari. Parameter yang diamati meliputi kadar air, susut bobot, warna dan uji organoleptik. Data dianalisis menggunakan uji normalitas *Shapiro-Wilk*, analisis ragam (ANOVA), dan uji Beda Nyata Terkecil (BNT) untuk mengetahui perbedaan antar perlakuan. Hasil penelitian menunjukkan bahwa perlakuan pendahuluan memberikan pengaruh nyata terhadap perubahan kualitas fisik dan sensoris cabai selama penyimpanan. Perlakuan perendaman dalam larutan kinetin 15 ppm mampu menekan laju susut bobot dan menjaga kadar air relatif stabil, serta mempertahankan kesegaran dan tekstur terbaik berdasarkan uji organoleptik. Oleh karena itu, dapat disimpulkan bahwa perlakuan kinetin lebih unggul dalam mempertahankan mutu keseluruhan cabai merah, sementara perlakuan vakum lebih efektif dalam mempertahankan warna pada akhir penyimpanan.

Kata kunci: cabai merah, kinetin, kemasan vakum, penyimpanan suhu ruang, mutu, warna, organoleptik

**“THE EFFECT OF VARIOUS TREATMENT CONDITIONS ON THE
QUALITY OF RED CHILI (*Capsicum annuum* L.)”**

Rehulina, Anwar kasim, Dewi Arziyah

Abstract

*Red chili pepper (*Capsicum annuum* L.) is a horticultural commodity with high economic value but a short shelf life due to its high moisture content. This condition makes it highly susceptible to physiological and microbiological damage during distribution and storage, leading to postharvest losses and market price instability. This study aimed to evaluate the effects of various pre-treatment conditions on the quality of red chili peppers during ambient storage and to determine the most effective treatment in extending shelf life. This research employed a descriptive quantitative method using five treatments: no treatment (control), vacuum packaging, nitrogen gas packaging, microwave treatment, and soaking in a 15 ppm kinetin solution. The samples used were curly red chili peppers with a maturity level above 90%, packed in polypropylene (PP) plastic, and stored at room temperature for 12 days. The observed parameters included moisture content, weight loss, color, and organoleptic properties. Data were analyzed using the Shapiro-Wilk normality test, analysis of variance (ANOVA), and Least Significant Difference (LSD) test to assess the significance of treatment effects. The results indicated that the pre-treatments significantly affected the physical and sensory quality of the chilies during storage. Soaking in a 15 ppm kinetin solution effectively reduced weight loss, maintained stable moisture content, and preserved the best freshness and texture based on organoleptic evaluation. Therefore, the kinetin treatment was concluded to be the most effective in maintaining the overall quality of red chili peppers. Meanwhile, vacuum packaging proved to be the most effective in preserving color, particularly at the end of the storage period.*

Keywords: red chili pepper, kinetin, vacuum packaging, ambient storage, quality, color, organoleptic