

INTISARI

Pupuk dan fase kematangan merupakan faktor yang mempengaruhi kandungan nutrisi dan mutu buah tomat. Penelitian ini bertujuan untuk mendapatkan dosis pupuk daun Amiboost terbaik terhadap mutu fisiologis, fisik, kimia, dan daya simpan buah serta mengetahui pengaruh fase kematangan terhadap mutu fisiologis, fisik, dan kimia buah tomat varietas Servo. Penelitian menggunakan Rancangan Acak Kelompok Lengkap Faktorial dengan 3 blok sebagai ulangan. Tomat Servo yang digunakan dalam penelitian ini ditanam di Wonosobo dan dipupuk daun dengan 5 aras dosis pupuk Amiboost, yaitu 0 L/ha, pupuk Ajifol 2 L/ha (sebagai kontrol), pupuk Amiboost 1 L/ha, pupuk Amiboost 2 L/ha, dan pupuk Amiboost 4 L/ha. Pengamatan mutu buah tomat dilakukan di Sublaboratorium Hortikultura, Universitas Gadjah Mada pada suhu 27,5°C dengan kelembaban relatif berkisar 73%. Mutu fisiologis yang diamati yaitu konsentrasi CO₂ hasil respirasi. Mutu fisik yang diamati yaitu *visual quality ratings* (VQR), susut bobot, kekerasan dan warna buah. Mutu kimia yang diamati yaitu kandungan padatan total terlarut (PTT), total asam tertitrasi (TAT), karotenoid, likopen, flavonoid, dan vitamin C. Akhir pengamatan ditandai dengan nilai VQR 3 sebagai batas daya simpan komersial tomat. Analisis statistik yang digunakan adalah *Analysis of Variance* (ANOVA) dan uji lanjut *Duncan Multiple Range Test* (DMRT). Hasil menunjukkan bahwa tidak terdapat interaksi antara dosis pupuk Amiboost dengan fase kematangan. Perbedaan dosis pupuk Amiboost memberikan pengaruh nyata pada nilai VQR saat 42 HSP, nilai kemerahan buah (a*) parameter warna buah, dan total asam tertitrasi pada 4 HSP dengan dosis terbaik 2 L/ha. Fase kematangan berpengaruh nyata terhadap kekerasan buah, susut bobot, VQR, konsentrasi CO₂, kandungan total asam tertitrasi, padatan total terlarut, karotenoid, dan flavonoid.

Kata kunci: Amiboost, fase kematangan, mutu buah, tomat Servo

ABSTRACT

Fertilizer and maturity stage are factors that affect the nutritional content and quality of tomatoes. This study aims to obtain the best dosage of Amiboost foliar fertilizer on the physiological, physical, chemical qualities and shelf life and to determine the effect of the maturity stage on the physiological, physical, and chemical qualities of Servo tomatoes. The design used factorial randomized complete block design factorial with 3 blocks as repetition. The Servo tomatoes used in this study were grown in Wonosobo and foliar fertilized with 5 levels of Amiboost fertilizer, namely 0 L/ha, 2 L/ha Ajifol fertilizer (as control), 1 L/ha Amiboost fertilizer, 2 L/ha Amiboost fertilizer, and 4 L/ha Amiboost fertilizer. Observation of tomato fruit quality was conducted in the Horticulture Sublaboratory, Gadjah Mada University at a temperature of 27,5°C with a relative humidity of around 73%. The physiological quality observed was the concentration of CO₂ produced by respiration. The physical qualities observed were visual quality ratings (VQR), weight loss, firmness and fruit color. The chemical qualities observed were total soluble solids (TSS), total titrable acidity (TTA), carotenoids, lycopene, flavonoids, and vitamin C. The observation was terminated when the score of VQR reached 3. The statistical analysis used was Analysis of Variance (ANOVA) and the Duncan Multiple Range Test (DMRT). The results showed that there was no interaction between the dosage of Amiboost fertilizer and the maturity stage. The different doses of Amiboost fertilizer had a significant effect on the VQR value at 42 days after harvest, fruit redness (a) on fruit color parameter, and total titrable acidity at 4 days after harvest with the best dose is 2 L/ha. The maturity stage significantly affected fruit firmness, weight loss, VQR, CO₂ concentration, total titrable acidity, total soluble solids, carotenoids, and flavonoids.*

Keywords: Amiboost, fruit quality, maturity stage, Servo tomato