

Title Fertilization and postharvest quality of tomatillo (*Physalis ixocarpa* Brot.)

Author Alma Delia Hernandez-Fuentes, Jose Manuel Pinedo-Espinoza, Francisco Reyes-Reyes, and Ma. Isabil Reyes-Santamaria

Citation Abstracts of 27th International Horticultural Congress & Exhibition (IHC 2006), August 13-19, 2006, COEX (Convention & Exhibition), Seoul, Korea. 494 pages.

Keywords fertilization; quality; postharvest; tomato

Abstract

The objective of this study was to evaluate the relationship of dosages of fertilizers to fruit quality of Premier tomatoes. Five fertilization treatments were evaluated: T1, 10-5-10+1 F(kg.ha⁻¹ of N,P₂O₅ and K₂O + one plus foliar application) ; T2, 10-5-10 + 2 F; T3, 20-10-20 + 1 F; T4, 40-20-40+2F) and T5, 10-5-10 (control). The plus foliar applications were 950 g MgSO₄.7H₂O, 1230 g Ca(NO₃)₂, 140 g KNO₃, 297 g NH₄H₂PO₄, 551 g K₂SO₄, 150 g FeSO₄. 7H₂O, 60 g MnSO₄. 5 H₂O, 84 g H₃BO₃, 6 g CuSO₄. 5H₂O and 60 g ZnSO₄. 7H₂O . For postharvest analyses, four periods of storage were evaluated: 1 (initial at harvest), 2 (15 days), 3 (30 days) and 4 (45 days), the temperature of storage were ± 20 °C. Parameters evaluated were: weight loss, total soluble solids, vitamin C and titratable acidity. At the end of storage fruit fertilized with the formula 20-10-10 + 1 F had the lowest weight loss with 32.7%. At the beginning of storage the tomatoes fertilized with the formula 40-20-40 + 2 F, had the highest total soluble solids content. At the end of storage, fruit fertilized with the formula 10-5-10 + 1 F had the highest percentage of total soluble solids. After 45 days tomatoes fertilized with the formula 20-10-20 + 1 F had the highest percentage of C Vitamin. The control fruit (10-5-10) had the highest percentage of titratable acidity.