

**Title** Effect of fertilization on the postharvest quality of tomato (*Physalis Ixocarpa* Brot.) cv. Titan

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### Abstract

The objective of this study was to evaluate the relationship of dosages of fertilizers and quality. Five fertilization treatments were evaluated: T1, 10-5-10 + 1 F (kg.ha<sup>-1</sup> of N, P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O + one plus foliar application); T2, 10-5-10 + 2 F; T3, 20-10-20 + 1 F; T4, 40-20-40 + 2 F) and T5, 10-5-10 (control). The plus foliar applications were 950 g MgSO<sub>4</sub>·7H<sub>2</sub>O, 1230 g Ca(NO<sub>3</sub>)<sub>2</sub>, 140 g KNO<sub>3</sub>, 297 g NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub>, 551 g K<sub>2</sub>SO<sub>4</sub>, 150 g FeSO<sub>4</sub>·7H<sub>2</sub>O, 60 g MnSO<sub>4</sub>·5 H<sub>2</sub>O, 84 g H<sub>3</sub>BO<sub>3</sub>, 6 g CuSO<sub>4</sub>·5H<sub>2</sub>O and 60 g ZnSO<sub>4</sub>·7H<sub>2</sub>O. The cv of tomato were Titan. For the postharvest analyses, four periods of storage were evaluated: 1(initial), 2(15 days), 3(30 days) and 4(45 days). Parameters evaluated were: Weight loss, total soluble solids, C Vitamin and titratable acidity. At the 45 days of storage the fruits of tomato fertilized with and 40-20-40 + 2F had the lowest. At the end of the storage period, the fruits of tomato cv Titán fertilized with the formula 40-20-20 +2 F and 20-10-10 +1 F, had the highest percentage of total soluble solids at the end of the storage the fruits of tomato cv Titán fertilized with the formula 20-10-20+ 1F had the lowest. At the end of the storage period the fruits of plants of tomato cv Titán fertilized with the formula 10-5-10 +1F had the highest content of C vitamin.