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Alterations in postharvest quality of industrial tomato fertilized with NPK doses

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RESUMO

The tomato is a productive and high nutritional demand. This study evaluated the agronomic yield and postharvest quality of industrial tomato fertilized with N, P and K rates. The study was conducted with the hybrid 'Heinz 1421'. The treatments consisted of four doses of N (35, 105, 175 and 245 kg ha⁻¹ of N), of P (100, 300, 500 and 700 kg ha⁻¹ of P₂O₅) and K (37.5, 112.5, 187.5 and 265.5 kg ha⁻¹ of K₂O). The experimental design was a randomized complete block design with three replications in a 4 x 4 x 4 factorial scheme. The results show that the application of high doses of phosphorus and potassium and low doses of nitrogen provided the best yield results with 92 fruits per plant, 7.6 kg of fruits per plant, 252 t ha⁻¹ of yield and 40.7 t ha⁻¹ of concentrated pulp. The doses of N, P and K promote few changes in the postharvest characteristics of the industrial tomato, modifying only the ripening, fruit pH and titratable acidity. Under the conditions of this study, fertilization with 35 kg ha⁻¹ of N, 700 kg ha⁻¹ of P₂O₅ and 187.5 kg ha⁻¹ of K₂O yielded the best results for the agronomic yield components of tomato Heinz 1421. And the doses of N, P and K do not change the soluble solids content, the relationship between soluble solids and acidity and the firmness of the fruits.

PALAVRAS-CHAVE: *Solanum lycopersicum*, fertilizing, industrial income.

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