

RESPONSE OF TOMATO QUALITY (*LYCOPERSICON ESCULENTUM* MILL.) CV. HEEM SOHNA TO ORGANIC AND INORGANIC UNDER PROTECTED CULTIVATION

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ABSTRACT

The experiment was carried out in vegetable Research Farm, during mid-November to 8- may the year 2012 - 2013 with following combination of which was T₁ (control), T₂ (FYM 1.5 kg / m²), T₃ (FYM 2.5 kg / m²), T₄ ((30.86 g N 18.51 g P and 18.51 g K) / m²), T₅ ((30.86 g N 18.51 g P and 18.51 g K / m² + FYM 1.5 kg / m²), T₆ ((30.86 g N 18.51 g P and 18.51 g K) / m² + FYM 2.5 kg / m²), T₇ ((46.29 g N 37.02 g P and 37.02 g K) / m²), T₈ ((46.29 g N 37.02 g P and 37.02 g K) / m² + FYM 1.5 kg / m²) T₉ ((46.29 g N 37.02 g P and 37.02 g K) / m² + FYM 2.5 kg / m²), T₁₀ (Micronutrient 2.5ml/l) T₁₁ (FYM 1.5 kg / m² + Micronutrient 2.5ml/l) T₁₂ (FYM 2.5 kg / m² + Micronutrient 2.5ml/l) T₁₃ ((30.86 g N 18.51 g P and 18.51 g K) / m² + Micronutrient 2.5ml/l) T₁₄ ((30.86 g N 18.51 g P and 18.51 g K) / m² + FYM 1.5 kg / m² + Micronutrient 2.5ml/l) T₁₅ ((30.86 g N 18.51 g P and 18.51 g K) / m² + FYM 2.5 kg / m² + Micronutrient 2.5ml/l) T₁₆ ((46.29 g N 37.02 g P and 37.02 g K) / m² + Micronutrient 2.5ml/l) T₁₇ ((46.29 g N 37.02 g P and 37.02 g K) / m² + FYM 1.5 kg / m² + Micronutrient 2.5 ml/l) and T₁₈ ((46.29 g N 37.02 g P and 37.02 g K) / m² + FYM 2.5 kg / m² + Micronutrient 2.5ml/l). The cultivar of tomato was "heem shona" syngenta company. The highest Chlorophyll pigment (221.17 mg / 100 g), lycopene pigment (3.49 mg / 100 g), shelf life (19.83 days) Total soluble solid (⁰Brix) (5.77) and Vitamin C (25.50 mg / 100 g) was recorded in T₁₈ treatment.

KEYWORDS: Tomato, *Lycopersicon esculentum* Mill, Chlorophyll Pigment, Lycopene Pigment, Shelf Life, Vitamin C and "Heem Shona"