

**RESEARCH ARTICLE :**

## Effect of pretreatments on shelf life and quality characteristics of sun dried tomatoes

■ P. GEETHA

**ARTICLE CHRONICLE :**

**Received :**

11.07.2017;

**Accepted :**

25.08.2017

**SUMMARY :** The main objective of the study the effect of pretreatments on shelf life and quality characteristics of sun dried tomatoes. Tomatoes of var. Avinash were sorted and washed with water to remove dirt and soil; and cut into the slices manually with thickness of approximately 1 cm. The Tomato slices were treated in a) Dipping in Sodium benzoate 2 g/100g solution( $T_4$ ) b) Dipping in 2 g/100g sugar solution( $T_2$ ) c) Dipping in 2 g/100g salt solution ( $T_3$ ) in the ratio of 1:1 at room temperature for  $\frac{1}{2}$  an hour and d) Tomato slices were considered as control sample( $T_1$ ). The water is drained and the slices were dried under solar drying. Then the slices were packed in 200 gauge polyethylene packs. During storage, the chemical, sensory and microbiological qualities were analyzed. The control samples kept at open drying spoiled within a day itself whereas the pretreated samples had a shelf life of 180 days at ambient temperature ( $31 \pm 2^\circ\text{C}$  and  $65 \pm 5\%$  RH). Initially the moisture content of the sample was  $93 \pm 5$  g/100g and reduced to 7 to 7.5 g/100g of sample. The other parameters such as pH (4.83), total sugar (6.62 mg/100g) decreased and acidity (0.45g/100g), ascorbic acid ( $16.50 \pm 0.03$  mg/100g), lycopene ( $10.86 \pm 0.09$  mg/100g) increased in dehydrated sample. It was concluded that 2 % sugar pretreated sun dried tomatoes ( $T_2$ ) were best without affecting its nutrients.

**KEY WORDS:**

Pretreatments, Shelf life, Dried tomatoes

**How to cite this article :** Geetha, P. (2017). Effect of pretreatments on shelf life and quality characteristics of sun dried tomatoes. *Agric. Update*, **12** (TECHSEAR-10) : 2929-2935.

**Author for correspondence :**

**P. GEETHA**

Department of Food  
Science and Nutrition,  
Krishi Vigyan Kendra,  
Sandhiyur, SALEM (T.N.)  
INDIA  
Email:geethapadmanaban  
2@gmail.com