

RESEARCH PAPER

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Studies on drying and drying characteristics of tomato

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SUMMARY :

Dehydrated tomato products (pieces, slices) were prepared to study the effect of drying time on moisture content and drying rate. The tomato pieces and slices (5, 10, 15 mm thick) were treated with citric acid (0.1%) and NaCl (2%) and further dried in tray dryer ($55 \pm 2^\circ\text{C}$). Another sample was prepared by removing peel and cutting into pieces further dried in tray dryer at $55 \pm 2^\circ\text{C}$. Drying curves were plotted and drying behaviour was studied. Total drying time of 12 to 28 h was required to dry the material to about 7 to 8.1 per cent, d.b. moisture content. Drying rate varied between 919.48 to 0.84 g/100 g for all tomato products. Drying of tomato pieces/slices was followed in the falling rate period. Dehydration ratio varied between 15.5:1 and 16.9:1 for all dehydrated tomato products.

KEY WORDS : Tomato, Drying, Drying rate, Drying curves, Moisture content

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