

Title Thin-layer Drying Kinetics of Raw Mango Slices
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Abstract

Thin-layer drying behaviour of raw mango slices was studied in a laboratory model tunnel dryer. The samples were dried at 55, 60 and 65 °C air temperature with control, blanching and blanching in 1% potassium metabisulphide (KMS) solution as pre-treatments. Six thin-layer drying models (Newton, Page, Modified Page, Henderson and Pabis, logarithmic and Wang & Singh) were fitted to the moisture ratio data. Among the drying models investigated, the Page model satisfactorily described the drying behaviour of raw mango slices. The effective moisture diffusivity varied from 2.62×10^{-10} to $4.39 \times 10^{-10} \text{ m}^2 \text{ s}^{-1}$.