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Microwave convection drying characteristics of beet root (Beta vulgaris L.) using modelling equations for drying

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In the present work, an attempt has been made to study the effect of microwave convection drying on the drying characteristics of *Beta vulgaris* L. Beet root was dried at the 7% moisture content level on dry basis. The temperatures selected were $100 \, ^{\circ}$ C to $150 \, ^{\circ}$ C and thickness of beet root cube was $10 \, \text{mm}$. It was also observed that the beetroot samples obtained from the microwave convection drying system had lower final moisture content than those obtained from the other system. Two mathematical models, the Page's and the generalized exponential models, available in the literature were fitted to the experimental data. It shows that both model had approximately same and satisfactory value for R^2 in all experiment runs and similarly standard errors of estimate are same in both models. The performance of these models is evaluated by comparing the coefficient of determination (R^2) and standard error between the observed and predicted moisture ratio.

Biography

Suman Singh is pursuing Ph.D. in Process & Food Engineering from Dept. of Post Harvest Process and Food Engineering, G. B. Pant University of Agriculture & Technology, Pantnagar, India. She completed her M. Tech with Gold Medal from Allahabad Agriculture University, Allahabad. She has published 2 papers in international and 3 papers national journals.

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