Title Drying of chopped spring onion using fluidization technique

Authors Thanit Swasdisevi, Somchart Soponronnarit,Sonkisat Prachayawarakorn and Wichai Phetdasada

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Abstract

This research investigates several parameters affecting the drying characteristics of chopped spring onion and develops an empirical model for predicting its drying behaviour in a fluidized bed dryer. Experimental results showed that at air temperature of 32 °C and relative humidity of 62 %, the minimum fluidization velocities were approximately 1.36, 1.20, 0.95 and 0.62 m/s at initial moisture contents of 95, 71, 56 and 5% w.b., respectively. Drying air temperature and specific air flow rate were parameters which affected drying rate. Page's model could predict the value closest to the experimental data. The air-product temperature should be kept lower than 53 °C to maintain the acceptable green color of the dried product.