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“Development on the margin”

## The Influence of Pre-treatments on Drying Kinetics of Chilli Pepper

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### Abstract

The aim of this work is to investigate the influence of pre-treatment on drying kinetics of chilli pepper at various air temperatures. Dehydration of agricultural product is energy intensive process in which energy expense constitute a major portion of drying cost. At temperatures of 35, 50, 60, 70, 90°C for pre-treated and untreated red chillis, the total drying time were determined experimentally. It was observed that as the temperature of drying air increases, drying time decreases for pre-treated as well as un-tread chillis but much shorter drying time could be achieved with application of pr-treatments. Because of availability of water and its low cost, blanching with hot water was found to be the best pre-treatment method relatively with shorter drying time. Based on the standard value of the final moisture content of dried material, *i.e.*, 13.6 %( db), an optimum drying temperature was between 50°C and 60°C.

**Keywords:** Chilli pepper, drying kinetics, drying time, energy, moisture content, pre-treatment