

Title Pretreatment effect on sun drying of mulberry fruits (*Morus alba* L.)
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Abstract

In this paper an experimental investigation is presented on sun drying of mulberry fruits. Sun drying experiments were conducted for mulberry fruits (*Morus alba* L.) grown in Istanbul, Turkey. Both treated with ethyl oleate solution and untreated mulberries were dried in the thin layer drying in the sun. The drying time was shorter for treated with ethyl oleate solution compared to the untreated. Two mathematical models were studied for the description thin layer drying characteristics of mulberries. The models considered were the Page model and the Exponential model. Comparing the correlation coefficients (r^2) and chi-square (χ^2) values of two models, it was concluded that the Exponential model represents drying characteristics better than the Page model. The effective moisture diffusivity values were estimated from Fick's diffusional model. These values were $4.69 \times 10^{-10} \text{ m}^2/\text{s}$ for treated and $4.26 \times 10^{-11} \text{ m}^2/\text{s}$ for untreated samples.