

Drying modeling of canelo regrowth

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Abstract

A phenomenological model has been used to describe the conventional drying curves of canelo *Drimys winteri* regrowth. This model is based on an overall mass transfer coefficient K . To determine K , six drying runs at laboratory and industrial-scale were performed. The model did suitably describe the transient moisture-transfer behaviour for laboratory-drying curves with the mass transfer coefficient ranging from 1.1×10^{-5} to 6.6×10^{-5} $\text{kg/m}^2 \cdot \text{s}$. Under similar conditions industrial kiln showed that the drying curves could be represented by a mass transfer coefficient from 0.3×10^{-5} to 4.7×10^{-5} $\text{kg/m}^2 \cdot \text{s}$.

Keywords: drying modeling, mass transfer coefficient, canelo, *Drimys winteri*, Chile.