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FTIR aplicada durante la deshidratación osmótica de mango Ataulfo (*Magnífera indica* L.)

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Abstract

The aim of this study was to implement a method to observe changes in Ataulfo mango (*Magnífera indica* L.) molecular structure, during osmotic dehydration with a sucrose solution (45%) at 60° C. The samples dried at different process times were analyzed, such as using KBr pellets, on a FTIR Perkin Elmer (Spectrum one), between 400-4000 cm⁻¹ and 4 cm⁻¹ resolution. Moreover, with this technique were obtained reference spectra for pure compounds of pectin, sucrose, glucose and cellulose, as well as the fresh mango and its extracted alcohol insoluble solids (AIS). Once the spectrums were obtained from the osmotic dehydration monitoring, these were analyzed over constituent atoms characteristic vibration frequencies of the sucrose molecules and were obtained its diffusion kinetic during the process.

Keywords

Mango Ataulfo, FTIR, Osmotic dehydration.

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