

Influence of Calcium Diffusion on Thermal and Optic Properties on Components of Corn Grains During Traditional Nixtamalization Process

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We report the effect of the calcium ions diffusion through in different components of corn grain about the thermal and optics properties. The optical absorption in pericarp, germ and endosperm has been studied by spectroscopy and IR [1]. The amount of calcium taking place during nixtamalization process in the whole grains as well as in pericarp, endosperm, and germ is very important because the interaction among calcium hydroxide and different components of the grains determined and sensorial characteristics of the products final [2,3]. Calcium ion diffusion in the corn grains during the traditional nixtamalization process is influenced by cooking temperature, cooking time, steeping time, initial level of calcium hydroxide, and relation water-corn. We conclude that the percentage of calcium ions diffusion influences in the physiochemical properties of the components of the grain of corn like they are the pericarp germ and endosperm.

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