

Effects of Pre-treatments Prior Drying on Young Corn Kernel Instant (YCKI)

Marleni Limonu, Sugiyono ., Feri Kusnandar

Abstract

The objective of this research was to study the effects of pre-gelatinization and freezing processes on physico-chemical characteristics of young corn kernel instant. The results showed that pre-gelatinization and slow freezing processes significantly affected bulk density, rehydration capacity, hardness and cooking time of young corn kernel instant. The study of water sorption isothermic showed that the product had a sigmoid curve. Based on this curve, shelf life of the product had been calculated. The YCKI waxy, YCKI Flint, and YCKI Sweet products packed in alufo had shelf life of 7.2, 12.1 and 13.8 months respectively.

Key words: *young corn kernel instant, pre-gelatinization, slow freezing, drying, water sorption isothermic, shelf life*