Title Chemical pretreatments and partial dehydration of ash gourd (*Benincasa hispida*) pieces for preservation of its quality attributes

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Citation LWT - Food Science and Technology,Volume 44, Issue 10, December 2011, Pages 2281-2284

Keywords Ash gourd; Hurdle technology; Chemical pretreatment; Preservation

Abstract

Ash gourd (*Benincasa hispida*) is a commonly consumed vegetable in Asian subcontinent. Cut ash gourd pieces undergo severe decay within two days probably due to physical, biochemical and microbiological activities. Ash gourd pieces were chemically pretreated with sodium salt of ethylene diamine tetra acetic acid (sodium EDTA), calcium chloride ($CaCl_2$), citric acid and potassium metabisulphite (KMS) and dehydrated up to 30 percent moisture with an aim to extend its shelf life. Storage study of these samples was done with respect to texture, colour, bacterial content and water holding capacity. Shelf life was extended from two days to one month. Pretreatment using a combination of 1 mM EDTA, 2.5 percent KMS, 0.5 percent citric acid and 2.5 percent $CaCl_2$ and partial dehydration to 30 percent moisture found to be a good method in preservation of cut ash gourd pieces.