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Title:	STUDIES ON DEHYDRATION OF MUSHROOMS FOR INCREASING SHELF LIFE
Publisher:	Birsa Agricultural University, Kanke, Ranchi, Jharkhand
Language:	en_US
Type:	Thesis
Pages:	54
Agrotags:	null
Keywords:	STUDIES ON DEHYDRATION OF MUSHROOMS FOR INCREASING SHELF LIFE

Abstract:	Dehydration is an important unit operation in the food processing industry. The basic objective in drying of food products is the removal of water up to a certain level at which microbial spoilage is minimized. Milky mushroom (Calocybe indica.) was used for dehydration to improve keeping quality. The pre-drying treatment conditions were optimized by using response surface methodology. The slices of mushroom were treated with concentration of citric acid (0.6-1.6 %) and sodium metabisulphite (0.6-1.6 %) at blanching time of 2.3 to 5.7 min before drying. Response variables were rehydration ratio and visual colour. The optimum values of concentration of citric acid, concentration of sodium metabisulphite and blanching time were found to be 1.4%, 1.4%, and 5.2 min respectively. The optimized values of pre-treatment conditions were used for dehydration of mushrooms. The optimization of process variables were also carried out for dehydration of mushrooms. Blanched mushroom samples of slice thickness (6-14 mm) were dehydrated in a tray dryer at air temperature of 50-700C. The response variables selected were drying time, rehydration ratio and visual colour. The optimized value of drying air temperature and slice thickness was found to be 67oC and 11.78 mm respectively at desirability value of 0.654. At this optimum operating condition, the drying time, value of rehydration ratio and visual colour were found to be 3.27 hours, 2.25 and 2.74 respectively. The dehydrated samples were packaged in LDPE, PET and laminated film and stored at room temperature for storage study. Mushroom samples were evaluated based on sensory score for visual colour and texture, and moisture absorption during storage. Since no appreciable change in quality parameters was found after 20 days of storage period stored in PET and laminated film and it found to be acceptable.
Description:	STUDIES ON DEHYDRATION OF MUSHROOMS FOR INCREASING SHELF LIFE
Subject:	Agricultural Engineering
Theme:	STUDIES ON DEHYDRATION OF MUSHROOMS FOR INCREASING SHELF LIFE
These Type:	M.Tech.
Issue Date:	2011
Appears in Collections:	Thesis (/handle/1/93550)

Files in This Item:

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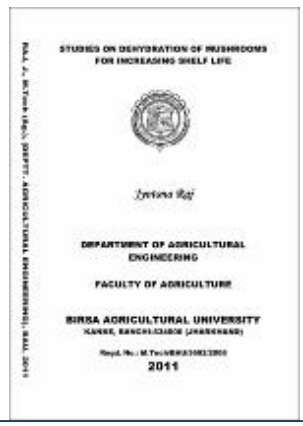

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