



# **DEVELOPMENT OF EXTRUSION TECHNOLOGY OF BREATHABLE FILM FOR INDUSTRIAL APPLICATIONS.**

BY

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## Abstract

The present research was pursued to develop breathable plastic packaging suited for desired level of moisture permeable application. The monolayer plastic films differed by resin composition were extruded by blown film equipment and two types of packaging with different architecture were prepared from the films extruded. To evaluate the package quality, the shelf life of fresh mushrooms packed in the packages was studied. Water vapour transmission rate and other performance properties of plastic films were determined. Results demonstrated good breathability of the developed packaging. Preference was given to the filled polyolefin compounds. Importance of filler particle size, treatment and processing conditions, including biaxial orientation were shown. Use of local filler and traditional single layer extrusion equipment did not contribute to the cost significantly, making packaging affordable easily by local consumer.