

DE LA SALLE UNIVERSITY

THE EFFECTS OF VARYING DOSES OF GAMMA RADIATION ON THE  
MYCELIAL PROLIFERATION, MORPHOLOGY, PRODUCTIVITY  
AND SHELF-LIFE OF OYSTER MUSHROOM (Pleurotus  
sajor-caju (Fr.) Singer) IN THREE  
SUCCESSIVE GENERATIONS

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by

CECILIA TAWAYO CALVEZ

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ABSTRACT

This study was conducted to determine the effects of varying doses of gamma radiation on the mycelial proliferation, morphology, productivity and shelf-life of Pleurotus sajor-caju (Fr.) Singer in three successive generations.

Results showed that 300 and 400 kr radiation delayed the initiation of mycelial growth in both plated RBDA medium and spawn substrate. More days were required for the mycelia to proliferate the medium and the substrate.

Effects of radiation were highly significant on the mycelial proliferation in both plated RBDA medium and substrate. Significant effects of radiation were observed on the average length of stipe and length of productivity/cropping period.

Morphology of Pleurotus sajor-caju (Fr.) Singer was not altered and the shelf-life of harvested basidiocarps was not extended.

Effects of radiation in the first generation were generally higher which were eventually reduced in the succeeding generations.

