

Effect of Mutagenic Compounds on the Yield of Cultivated *Pleurotus Pulmonarius*

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Abstract : Quality and yield are always the target of farmers, including mushroom farmers. This study investigated how better *Pleurotus pulmonarius* can be obtained with the induction of mutagens into the process of spawn production in order to improve both the quality and the yield. Mushroom spawns were treated with ultraviolet radiation (UV) and hydroxylamine hydrochloride (HA) at different exposure times (2, 6, and 10 minutes) and different concentrations (10, 30, and 50Mm), respectively. The treated spawns were used to cultivate mushrooms on five substrates in the family of Gramineae viz: sorghum, rice, bamboo, sugarcane, and corn straws. Matured fruit bodies were harvested after a few weeks, and their parameters were taken and recorded. This study reveals a significant yield increase in mushroom grown on all the substrates when treated with ultraviolet radiation (UV) for 10 minutes and 6 minutes, respectively. Mushroom spawns treated with hydroxylamine hydrochloride showed a negative correlation in the yield with an increased in mutagen concentration. Hence, Ultraviolet light could be employed to enhance the quality and yield of mushroom production.

Keywords : mushroom, protein, mutagens, yield

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