

**PREPARATION OF ALTERNATIVE CULTURE MEDIA FROM NATURAL
PLANT SOURCES FOR CULTIVATION OF *Botrytis cinerea***

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Abstract

This study was conducted to find out the best alternative, cheap solid culture media derived from plant products for the cultivation of *Botrytis cinerea* instead of the potato used in routine microbiological studies. The selected plant-based alternative nutrient media, namely cowpea media, mung bean media, maize media, and lentil media, were investigated in this experiment along with the natural Potato Dextrose Agar (PDA) media as the control. The experiment was arranged in a Completely Randomized Design with five treatments and four replicates. Treatment effects were determined by analysis of variance. The effects of different culture media on mycelial growth and conidia production were evaluated. The results revealed that the lentil media significantly ($p < 0.05$) increased the rate of mycelial growth and conidia production. Further, there were no significant differences between lentil- and potato-based media in colony growth and conidia formation. Also, the cost of production of the lentil media was lesser than that of natural PDA media. The findings suggest that the lentil-based nutrient medium could serve as a better alternative medium for culturing *B. cinerea* fungus.

Keywords: Alternative culture media, *Botrytis cinerea*, Plant-based nutrient media, Protein-rich plant sources

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