

Inhibition of *Aspergillus flavus* by *Momordica charantia* Ethanolic Leaves Extract for Mushroom Protection

Abstract

Pleurotus ostreatus, better known as oyster mushroom is one of the world's widely cultivated mushroom. Infection from pathogenic fungi is one of the major reasons causing losses of mushroom during cultivation. The objective of this study is to investigate the antifungal property of *Momordica charantia* leaves extract against *Aspergillus flavus* for mushroom protection. The inhibitory effect of *M. charantia* leaves extract against *A. flavus* isolated from infected *P. ostreatus* mushroom bag was investigated using pour plate technique. Inhibition of *A. flavus* mycelial growth was the highest at extract concentration of 9.64 v/v %, temperature 26°C and incubation time of 96 hours with inhibitory value of 70.58 ± 0.00 %, 78.4 ± 0.00 % and 63.33 ± 2.89 % respectively. Structural morphology of the mycelia grown on the treated plate also showed morphological alteration compared to the control plate. Hence, *Momordica charantia* leaves extract may serve as a promising fungicide alternative to chemical use for controlling invasion of *A. flavus* on oyster mushroom.