Research Article

Effect of Abiotic Factors on the Development of Wet Bubble Disease (WBD) caused by *Mycogone perniciosa*

Kanika Mahajan[1], Anil Rao[2], Sunil Kumar[1], Ambrish Kumar Mahajan[1]

[1]*Central University of Himachal Pradesh;* [2]*ICAR-Directorate of Mushroom Research-DMR Solan, Himachal Pradesh; Email: sunilibes@gmail.com*

Abstract

The examinations were led under *in-vivo* conditions to see the impact of climate conditions (temperature and relative humidity) and various composition of casing materials on wet bubble disease of white button mushroom. The outcomes showed AUDPC and rate of disease increase (r) as 2258 per cent and 0.110 individually. Simple correlation showed positive correlation between disease incidence with mean temperature (0.383) and also positive with RH (0.189) while, multiple correlation coefficient between disease incidences with mean temperature and mean relative humidity were not huge. Regression equation $Y = 315.66 + 13.84X_1 - 7.38 X_2$ showed that predominant mean temperature had positive consequence while relative humidity almost negatively affected the development of disease. The viability and proliferation of mushrooms is associated with variety of things, which can act separately or have collective effects with them. As to materials coco peat gave least disease rate of 2 per cent and greatest yield was acquired in formalin treated coco peat + FYM (22 kg), while sand brought about least yield (8 kg) of sporophore under *in-vivo* conditions. The standardization of the moisture level within the casing layer is essential side of the scientific cultivation of button mushrooms. Reduced moisture content of casing soil favours *M. perniciosa* survival. *Mycogone* was unable to live in casing soil with moisture contents of 60 per cent or higher.

Key words: *Mycogone perniciosa,* mushroom, wet bubble disease

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