

ABSTRACT

THE EFFICACY OF GASEOUS OZONE FOR THE CONTROL OF *TRICHODERMA* IN TRAYS USED FOR MUSHROOM GROWING

Trichoderma harzianum infests compost used for mushroom propagation and causes patches on the compost or cap spotting on mushrooms. Th4 (a strain of *Trichoderma harzianum*) is known to cause epidemics in the North American countries. The present control method for *Trichoderma* is spraying the wood with fungicide. However, it is not encouraged as it might lead to fungicide resistance in the mold. In our experiment, the efficacy of gaseous ozone as a sanitizer to control *Trichoderma* found in trays used for mushroom growing was evaluated by treating colonized wooden cubes of 1 cm³. The inoculated wooden cubes were treated with gaseous ozone at 5000 µL/L and 10,000 µL/L for a period of 2, 4 and 8 h. The population reduction for an 8 h treatment using 5,000 µL/L and 10,000 µL/L were 3.64 and 5.78 log₁₀ CFU/g, respectively. Therefore, we concluded that 10,000 µL/L was more effective in controlling *Trichoderma harzianum*.

Janani Krishnan Tulasendrapuram
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