

**ACCLIMATIZATION OF POTATO (*Solanum tuberosum* L.) WITH VARIOUS  
DOSES AND CONCENTRATIONS OF *Trichoderma* spp.**

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**ABSTRACT**

*The low availability of quality seeds is a major challenge in potato cultivation. One potential solution for procuring quality seeds is the application of *Trichoderma* spp. during the acclimatization stage in tissue culture propagation. The aim of this study was to examine the interaction between the dose and concentration of *Trichoderma* spp. during potato acclimatization and to determine the optimal dose and concentration of this microorganism for the process. The research used a two-factor Completely Randomized Design (CRD). The first factor was the dose of *Trichoderma* spp. (10, 15, and 20 g/10<sup>-1</sup> m), and the second factor was the concentration of *Trichoderma* spp. (5, 10, and 15 g/L). Data were analyzed using ANOVA at the 5% significance level and further tested with the Duncan Multiple Range Test (DMRT) at the 5% level. The results of the study showed an interaction between the treatment dose and the concentration of *Trichoderma* spp. in the parameters of plant height at 4 weeks after planting (WAP), number of leaves at 2 WAP and 8 WAP, and leaf length at 6 WAP. A dose of 15 g/10<sup>-1</sup> m of *Trichoderma* spp. showed the best results in the parameters of plant height at planting, 2, 6, and 8 WAP, leaf length at 4 WAP, and fresh weight at 8 WAP. The concentration treatment of *Trichoderma* spp. showed similar results for all parameters, except for the parameters where there was an interaction between treatment dose and concentration of *Trichoderma* spp.*

**Keywords:** *Acclimatization, Doses, Concentrations, *Trichoderma* spp.*