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EFFECT OF ORGANIC AND PHOSPHATE FERTILIZATION ON SURVIVAL OF BIOLOGICAL CONTROL TRICHODERMA HARZIANUM AND ASPERGILLUS TERRUS IN SOIL

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Abstract: This research conducted to the study of the effect of levels of organic manure (poultry manure) (0, 5, 10, 15) ton/ha and phosphate fertilizer (super calcium phosphate $46\% P_2O_5$ /ha) (0, 60, 120, 180) kg/ha on survival. Bio-control pesticides (*Trichoderma harzianum* and *Aspergillus terrus*) in soil. The results showed the ability of Bio-control pesticides to survive in the soil at different levels, where the highest average of fungal colonies was 34.1×510 spores/1 g soil for *T. harzianum* isolate of challenge when added 15 tons/ha of organic fertilizer. While the highest average of fungal colonies was 45.3×510 spores /1 g of soil for *A. terrus* pesticide when added 180 kg P_2O_5 /ha of calcium superphosphate fertilizer. The results also showed a decrease in the numbers of colonies of the bio-control fungi during the period of their stay in the soil for both fertilizers used.

Key words: Organic Fertilization, Fungal Colonies, Bio-control pesticides.

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