EVALUATION OF EFFECTIVE MICROORGANISMS (EM) FOR GROWTH PERFORMANCE AND YIELD IN RADISH

(Raphanus sativus)

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ABSTRACT

Raphanus sativus is one of the important tuber and cool-season vegetable crops in Sri Lanka. The EM used to improve growth and yield. The plot experiment was conducted to study the evaluation of effective microorganisms (EM) for growth performance and yield in radish *(Raphanus sativus)* in reddish earth & low humic gley soils. EM is a vital part of modern agriculture. It enhanced the amount of food and fiber produced. The experiment was conducted in a Randomized Completely Block Design (RCBD) with fifty replicates. Treatments were ; T1-25mL of EM solution diluted with 10L of water , T2-50 mL of EM solution diluted with 10L of water , T3-100 mL of EM solution diluted with 10Lof water , T4- 200 mL of EM solution diluted with 10L of water , and control - without application of EM measurements were taken after two weeks planting and after the harvesting. The statistical analysis was conducted using MiniTab 17. A one-way ANOVA using the Dunnett test assessed the significant difference of mean values were performed to test the significance of applying EM as a soil enricher for the growth and yield performance of radish. Means were compared with the control using Duncan's Multiple Range Test. The application of EM for the radish cultivation were effective but there was no significant difference among treatments for the parameters evaluated.

Keywords – Effective Micro-organisms, radish, Growth parameters, Yield Parameters

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