

**THE DIFFERENT RATE OF VERMICOMPOST ON
GROWTH PERFORMANCE OF RICE
(*oryza sativa*)**

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APPROVAL SHEET

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ABSTRACT

THE DIFFERENT RATE OF VERMICOMPOST ON GROWTH PERFORMANCE OF RICE (*oryza sativa*)

This study was conducted to determine the effectiveness of vermicompost fertilizers, which is applied together with the regular inorganic fertilizer, NPK Blue in ratio 12:12:17:2. By using the completely randomized design (CRD), there were five treatments involved, including the control with three replications. Beside that's, the treatment used were given in five treatments (control), (30% vermicompost + 70% NPK), (50% Vermicompost + 50% NPK), (70% Vermicompost + 30% NPK), and (100% Vermicompost). The result of the study showed some of the treatments were significantly influence the growth performance. The best growth performance and the maximum yield noted in planted treated with (70% vermicompost + 30% NPK). The result was may be due to the increased of plant height, number of leaves, and fresh and dry weight of leaves and root. For treatment with using 50% of vermicompost and 50% inorganic fertilizer showed an increased in the number of tiller and number of panicles. While, for some other treatment, such as treatment one, two and five each respectively showed the rate of performance are medium compared to treatment three and four. This may be due to treatment one uses 100% inorganic fertilizer and treatment five using 100% organic fertilizer and no fertilizer mixture make causes and results growth in terms of dose study performed underachievement.

Keyword: *Oryza sativa*, vermicompost fertilizer, growth performance

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