

**EFFECT OF *Trichoderma harzianum* AS BIOFERTILIZER
FOR GARLIC (*Allium sativum* L.)
PRODUCTION**

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ABSTRACT

Background: Application of biofertilizer in agricultural lands can minimize the use of chemical fertilizers. It can increase the economic viability and enhance the productivity of crops by managing the major nutrients such as nitrogen and phosphorus in order to attain sustainability. **Methods:** The experiment was conducted at the Ramon Magsaysay-Center for Agricultural Resources and Environment Studies (RM-CARES), Central Luzon State University, Science City of Muñoz, Nueva Ecija. The study was conducted to evaluate the growth and yield performance of garlic applied with *Trichoderma* sp. as biofertilizer. The experiment was laid out using Randomized Complete Block Design (RCBD) having eight treatments with three replications. The area utilized in this experiment was a certified organic area. **Results:** The results showed that comparable yield was obtained from the application of organic at recommended rate (T2), *Trichoderma* at recommended rate (T3) and the application of 25% of the recommended rate of organic fertilizer plus 75% of the recommended rate of *Trichoderma* obtained the highest significant yield. **Conclusion:** Based from the results, application of *Trichoderma* alone at recommended rate produced comparable result with application of organic fertilizer alone. However, combined application of *Trichoderma* and organic fertilizer at the rate of 50-50 resulted to higher yield. A reduction of 75% of the recommended rate of organic fertilizer plus the addition of 75% of the recommended rate of *Trichoderma* resulted to higher yield. It shows that *Trichoderma* application as biofertilizer for garlic production showed positive effect, it has the potential to increase its yield.

Keywords: *Trichoderma harzianum*, biofertilizer, microorganism, pathogenic fungi, pollution

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