

**THE EFFECT BIOLOGICAL FERTILIZER (*Trichoderma*
sp.) ON THE GROWTH OF VANILA CATING
(*Vanilla planifolia* Andrews)**

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ABSTRACT

Vanilla is one of the introduced plants originating from Mexico and Central America whose fruit is widely used in the food, beverage, pharmaceutical, and cosmetic industries because the fruit contains vanillin which gives off a distinctive aroma. Vanilla in Indonesia still has good prospects from the economic sector, in 2006 Indonesia was a country that produced 3,900 tons of vanilla plants/year which tended to fluctuate from 5 countries in the world. 2,000,000, - up to Rp. 3,000,000/kg . The purpose of this study was to determine the application of biological fertilizer (*Trichoderma*, sp) to the growth of vanilla cuttings (*Vanilla planifolia* Andrews). This research was conducted at the beginning of June 2022 in Kesambirampak Village, Kapongan District, Situbondo Regency using a Non-Factorial Randomized Design (RAK), consisting of 5 treatment combinations with 5 replications, namely P1 control (without *Trichoderma*), P2 50gr+400ml water per plant, P3 100gr+400ml water per plant, P4 150gr+400ml water per plant, P5 200gr+400ml water per plant. The results showed that giving *Trichoderma* had a significant effect on vanilla cuttings. *Trichoderma* sp also had the best concentration in treatment A3 for all parameters, namely the best concentration was found in treatment A3 for all parameters, namely percentage alive 88, percentage finished 72, shoot height 10.70 cm, shoot diameter 7.19 mm, number of nodes 4.87 and root length 22.42 cm.

Keywords: Vanilla (*Vanilla planifolia* Andrews), Cuttings, Biological fertilizer, *Trichoderma* sp.