

**THE EFFECT OF APPLICATION *Trichoderma* sp. ON THE GROWTH
AND YIELD OF CAYENNE PEPPER VARIETIES BONITA AND ORI 212
(*Capsicum frutescens* L.)**

By: Muhammad Faiz Almadany
Supervised by: Endah Wahyurini

ABSTRACT

*Cayenne pepper (*Capsicum frutescens* L.) is one of the commodities that is widely cultivated in Indonesia. The aim of this research was to obtain the interaction between the cayenne pepper varieties Bonita IPB and Ori 212 with doses of *Trichoderma* sp. in growth and yield. The research method used was a 2 Factorial Completely Randomized Design (CRD). Factor I is the Bonita IPB and Ori 212 varieties. Factor II is the *Trichoderma* sp. dose of 0 g/polybag, 50g/polybag, 75 g/polybag and 100 g/polybag. The experimental results were analyzed using Analysis of Variance (ANOVA) followed by the Duncan' Multiple Range Test at the 5% level. The research results showed that there was an interaction between the Ori 212 variety and the dose of *Trichoderma* sp. 75g/polybag can increase fruit weight per plant, fruit weight per fruit, fruit diameter and fruit width. The Ori 212 variety gave greater yields in plant height at 15 HST, dichotomous height, stem diameter at 15, 30 and 45 HST, flowering time, number of fruit per plant and fruit length. Treatment dose of *Trichoderma* sp. 75g/polybag can increase plant height at 15, 30 and 45 HST, dichotomous height, stem diameter at 15, 30 and 45 HST, age when flowering begins. number of fruits per plant, fruit length and incidence of fusarium wilt disease.*

Keywords: *Cayenne pepper, growth and yield, *Trichoderma* sp.*