

## ABSTRACT

### THE EFFECT OF COMBINATION *Trichoderma* spp. WITH BOTANICAL FUNGICIDES TO THE SEVERITY TOBACCO LEAF SPOT (*Cercospora Nicotianae* Ell. Et. Ev)

By

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Leaf spot disease on tobacco (*Cercospora nicotianae*) is one of the important diseases in tobacco cultivation. Control techniques were done in this study combined biological agents with botanical fungicides. The purpose of this study to determine the effect combination of *Trichoderma* spp. with botanical fungicides against to the severity tobacco leaf spot.

The research was carried out at garden and Plant Protection's Laboratory of the University of Lampung, on July 2011 to January 2012. These experiment were arranged in Completely Randomized Design (CRD) primarily to three replicates. The experiment consisted of seven treatments namely control, *T.viride* combined galangale, *T.viride* combined turmeric, *T.viride* combined betel leaf, *T.harzianum* combined galangale, *T.harzianum* combined turmeric, and *T.harzianum* combined betel leaf. Variable observed in this study was the severity of the disease. Observations carried out once in a week for five weeks. The data obtained were analyzed using analysis of variance continued by Least Significant Different Test (LSD) on the real level 5%.

The results of the experiment showed the combined of *Trichoderma* spp with botanical fungicides from the third week observation inhibited the severity of tobacco leaf spot. The severity of tobacco leaf spot from the third week observation, *T.harzianum* combined turmeric, *T.harzianum* combined galangale, *T.harzianum* combined betel leaf, *T.viride* combined turmeric, *T.viride* combined betel leaf, and *T.viride* combined galangale no significantly different.

Keyword : *Trichoderma* spp., botanical fungicide, tobacco leaf spot, disease severity