

## ABSTRACT

### THE EFFECT OF APPLICATION *Trichoderma* spp. TO THE SEVERITY TOBACCO LEAF SPOT (*Cercospora nicotianae* Ell. et Ev.,)

By

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Tobacco leaf spot (*Cercospora nicotianae*) is one of the important disease in tobacco cultivation. One of the biological agents are effective and efficient and safe for consumers and is environmentally friendly in disease control is *Trichoderma*. This study aims to determine the effect of *Trichoderma* applications to the severity of tobacco leaf spot. The hypothesis is *Trichoderma* spp. as biological control agents capable of suppressing the severity tobacco leaf spot. The research was carried out in the Land of Department of Plant Protection Faculty of Agriculture, University of Lampung began from June 2011 until January 2012. The treatment in this experiment were arranged in a completely randomized design (CRD) with four replications. The treatments consisted of plants without application of *Trichoderma* as a control (co), application of *T.harzianum* (Th), application of *T. viride* (Tv) and application of *T.koningii* (Tk). Observed variable is the severity tobacco leaf spot, rate of infection, and area under disease progression curve (AUDPC). Data were analyzed using the analysis of variance and the mean differences between treatments were tested with LSD in the real level 5%. The results of the experiment showed that the use of *Trichoderma* can inhibit the severity tobacco leaf spot at the observation of 14 days after application. This is showed that *Trichoderma* spp. have capable to control tobacco leaf spot.

Key words: *C. nicotianae*, *Trichoderma* spp, the severity tobacco leaf spot, infection rate (r), AUDPC.