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 fingicides 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 fingicide, tobacco leaf spot, disease severity