

Potency of *Trichoderma* spp. and *Kaempferia galanga* L.) on Banana Resistance Against Sigatoka Disease

Ivayani, Joko Prasetyo, & Suskandini Ratih Dirmawati

¹⁾Departement of Plant Protection, Faculty of Agriculture, University of Lampung

²⁾Departement of Agrotechnology, Faculty of Agriculture, University of Lampung
St. Prof. Dr. Soemantri Brodjonegoro, No. 1 Bandar Lampung 35145

^{a)}E-mail: ivayani.hpt@gmail.com

Abstract. An experiment was conducted to evaluate the effects of *Trichoderma* spp. and *K. galanga* extract on banana resistance against sigatoka disease (*Mycosphaerella musicola*). The experiment was done in the Laboratory of Plant Pests and Diseases, Faculty of Agriculture, University of Lampung from September 2016 to January 2017. The experiment was arranged in randomized completely design with 6 replicates. Banana roots were applied with *Trichoderma* spp. and *Kamferia galanga*. Variables observed were spot diameter of sigatoka, salicylic acid on banana leaf, and banana growth. Data obtained were analyzed statistically with anova and the difference between treatments were tested using LSD at 5% significant level. Results of the experiment showed that application of *Trichoderma* spp. and *K. Galanga* extract in the banana rhizosphere decreased diameter of sigatoka spot on banana leaves, delayed incubation periode of sigatoka disease, and increased Salicylic Acid (SA) levels on banana leaves. Increased levels of salicylic acid in plants due to application of *Trichoderma* sp. and *K. galanga* in the rhizosphere of the plant showed that there was an increase in the resistance of banana plants.