

## **ABSTRAK**

### **UJI EFIKASI *Trichoderma harzianum* SEBAGAI PENGIMBAS KETAHANAN TERHADAP PENYAKIT BUSUK PANGKAL BATANG PADA TANAMAN LADA**

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Penelitian ini bertujuan untuk mengetahui efikasi *T. harzianum* sebagai pengimbas ketahanan bibit lada untuk mengendalikan penyakit BPBL. Hipotesis yang diajukan dalam penelitian ini adalah (1) *T. harzianum* sebagai pengimbas ketahanan dapat menurunkan intensitas penyakit busuk pangkal batang lada (BPBL) yang disebabkan oleh *P. capsici*. (2) Terdapat perbedaan kemampuan dalam mengendalikan penyakit BPBL di antara isolat *T. harzianum*. Penelitian dilaksanakan di Rumah Kaca Fakultas Pertanian Universitas Lampung dari Oktober 2011 sampai Maret 2012. Perlakuan dalam penelitian ini disusun dalam rancangan acak lengkap (RAL), yang terdiri atas lima perlakuan dengan enam ulangan sehingga terdapat 30 satuan percobaan. Perlakuan terdiri atas (1) *T. harzianum* isolat 1, (2) isolat 2, (3) isolat 3, (4) isolat 4 dan (5) kontrol tanpa *T. harzianum*. Peubah yang diamati adalah diameter bercak yang terbentuk pada daun dan keparahan penyakit pada batang. Semua perlakuan menggunakan media tanam campuran tanah dan pasir dengan perbandingan 2:1. Hasil penelitian menunjukkan bahwa *T. harzianum* tidak mampu mengimbas ketahanan tanaman lada terhadap *P. capsici*.

Kata kunci : *P. capsici*, *T. harzianum*, Penyakit BPBL.

## ABSTRACT

### EFFICACY OF *Trichoderma harzianum* AS RESISTANCE INDUCER TO CONTROL FOOT ROT IN BLACK PEPPER

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The objective of this study was to determine the efficacy of *T. harzianum* as resistance inducer in pepper seedling to control foot rot. The hypothesis proposed in this study was (1) *T.harzianum* as systemic resistance inducer can reduce the intensity of foot rot and (2) There are differences in the ability to control the disease among isolates *T.harzianum*. The research was carried out in the greenhouse of Faculty of Agriculture, University of Lampung from October 2011 to March 2012. The treatments in this experiment were arranged in a completely randomized design (CRD). There were five treatments and six replications so there were 30 experimental units. The treatments consisted of (1) *T. harzianum* isolate 1, (2) isolate 2, (3) isolate 3, (4) isolate 4 and (5) plants without the application of *T. harzianum* as a control. Observed variables were the diameter of the spots formed on the leaf and stem disease severity. All treatments used planting media of soil and sand mixture in the ratio of 2:1. The results showed that *T. harzianum* was not able to induce plant resistance in black pepper against *P.capsici*.

Key words: *P. capsici*, *T. harzianum*, Foot rot.