

Disease suppression in Ganoderma-infected oil palm seedlings treated with Trichoderma harzianum

ABSTRACT

Disease suppression in Ganoderma-infected oil palm seedlings treated with a conidial suspension of *Trichoderma harzianum* FA 1132 was tested in plant house conditions to determine the effectiveness of the fungus as a biocontrol agent. The highest efficacy of control was achieved by treatment right after artificial infection; the total number of infected plants was reduced to give the lowest disease severity index (DSI) value of 5.0%, compared to the infected and non-treated control that had the highest DSI of 70.0%. After conidia suspension of FA 1132 was applied, the colony forming ability by *Trichoderma* in the soil was dramatically increased, but decreased after some time. Results of the present study are a useful reference basis for further tests in the field and large scale production trials.

Keyword: *Ganoderma boninense*; *Trichoderma harzianum*; Oil palm; Biological control; Basal stem rot