

Title Effectiveness of *Trichoderma virens* in controlling mango anthracnose
Author J. Jomduang, S. Aemprapa and T. Manond.
Citation Journal of Plant Pathology Volume 90 (2, Supplement) August 2008, Book of Abstract, 9th International Congress of Plant Pathology, August 24-29, 2008 Torino, Italy,. 507 pages.
Keywords mango; anthracnose; biocontrol

Abstract

Chemical fungicides have been used for controlling mango anthracnose, caused by *Colletotrichum gloeosporioides*, for a long time in Thailand. However, the disease still causes serious damage on mango produce. Therefore, antagonistic microorganisms are proposed as alternatives. The present study was done to evaluate the effectiveness of *Trichoderma virens* to control anthracnose by spraying on mango trees in an orchard, 3 or 5 times starting from bearing thumb-sized fruits. Three sprays were applied at 30-day intervals while five sprays were applied at 15-day intervals. Air-dried PDB-biomass of *T. virens* mixed with rice bran (1:1 w/w) was used at a concentration of 100 g per 20 litre of water. Anthracnose development on mango fruits was determined, using 0-6 disease scoring, at two weeks after ripening. The result showed that 5 sprays of *T. virens* could reduce anthracnose development as effectively as 3 sprays of the chemical fungicide mancozeb. This was indicated by disease scores of 1.09 and 1.00, respectively. Five sprays of mancozeb provided the best control (disease score of 0.6). Meanwhile, three *T. virens* sprays provided satisfactory control (disease score of 1.58) even though less effective than the fore-mentioned treatments. All treatments significantly reduced anthracnose compared to the non-spraying (control) treatment which showed a disease score of 2.49.