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Client Sample ID: Turf Pro Natural...      Date Sampled: Unknown  
Matrix: Granular      Date Submitted: 08-15-08  
Laboratory ID: 81143      Date Reported: 01-09-09

## PATHOGEN INHIBITION ASSAY

### METHODS

The product was added to sterile water in a 1:100 ratio, per client's instructions, for preparation of product extract. The extract was used in an undiluted form in the assay to determine whether active (biological) pathogen inhibitors were present. The pathogen was challenged in 12 trials for the extract and 12 trials for the sterile water control. Each trial utilized 20 µL of product. Inhibition of pathogen growth was scored after a suitable culture time and was determined to be either strongly inhibitory, partially inhibitory, or not inhibitory according to the size of the zone of inhibition.

### RESULTS

Pathogen Challenged	Inhibition to Pathogen Growth
<i>Collectotrichum</i> sp.	Strong Inhibition - 100% Trials (12/12)
<i>Helminthosporium</i> sp.	Strong Inhibition - 100% Trials (12/12)
<i>Sclerotium rolfsii</i>	Strong Inhibition - 100% Trials (12/12)
<i>Sclerotinia sclerotiorum</i>	Strong Inhibition - 100% Trials (12/12)

### INTERPRETATION

A trial is scored as strong inhibition if the pathogen shows little or no growth in the presence of a product sample, as partial inhibition if the pathogen shows some growth but is unable to expand and contact the product sample, and as no inhibition if the pathogen is able to grow up to and contact the product sample. This assay measures only direct inhibition, and does not reflect inhibition due to competition or plant responses under field conditions.

*Trichoderma* sp. growing from product appears to be the causal agent of inhibition.

This assay is a screening mechanism only and should be followed by field trials for confirmation.

Reviewed by: