SUPPRESSION OF *PHYTOPHTHORA CAPSICI* ON BELL PEPPER WITH ISOLATES OF *TRICHODERMA*

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Biologically based disease management strategies, including biological control, are being developed for *Phytophthora capsici* on bell pepper. Biological control agents that are effective in controlling this disease under a number of soil environmental conditions when applied alone or with cover crops or chemical pesticides are being sought. As a first step, a number of *Trichoderma* isolates, other fungi, and bacteria were screened for suppression of *P. capsici* in a greenhouse pot assay. For this assay, biological control agents were mixed in planting medium in starter cells at the time of seeding. Six to eight-week-old pepper plants were transplanted into a greenhouse soil containing five isolates of *P. capsici*. Biological control agents were also applied as a drench a week prior to transplant and at the time of transplant. The time to symptom expression was recorded for each plant. Treatments were compared based on time to disease on 50 percent of plants in each treatment. In all, five isolates of *Trichoderma* provided control when compared to the disease check in two pot assays. These isolates were applied alone, or in combination, with the bioactive peptide Messenger® in these pot assays. There was no advantage found to the use of Messenger in combination with these *Trichoderma* isolates. In the future assays will be run to determine suppressiveness of these *Trichoderma* isolates applied in combination with cover crops or chemical pesticides. Effective combinations will be screened for suppression of *P. capsici* on bell pepper under a number of soil environmental conditions.