

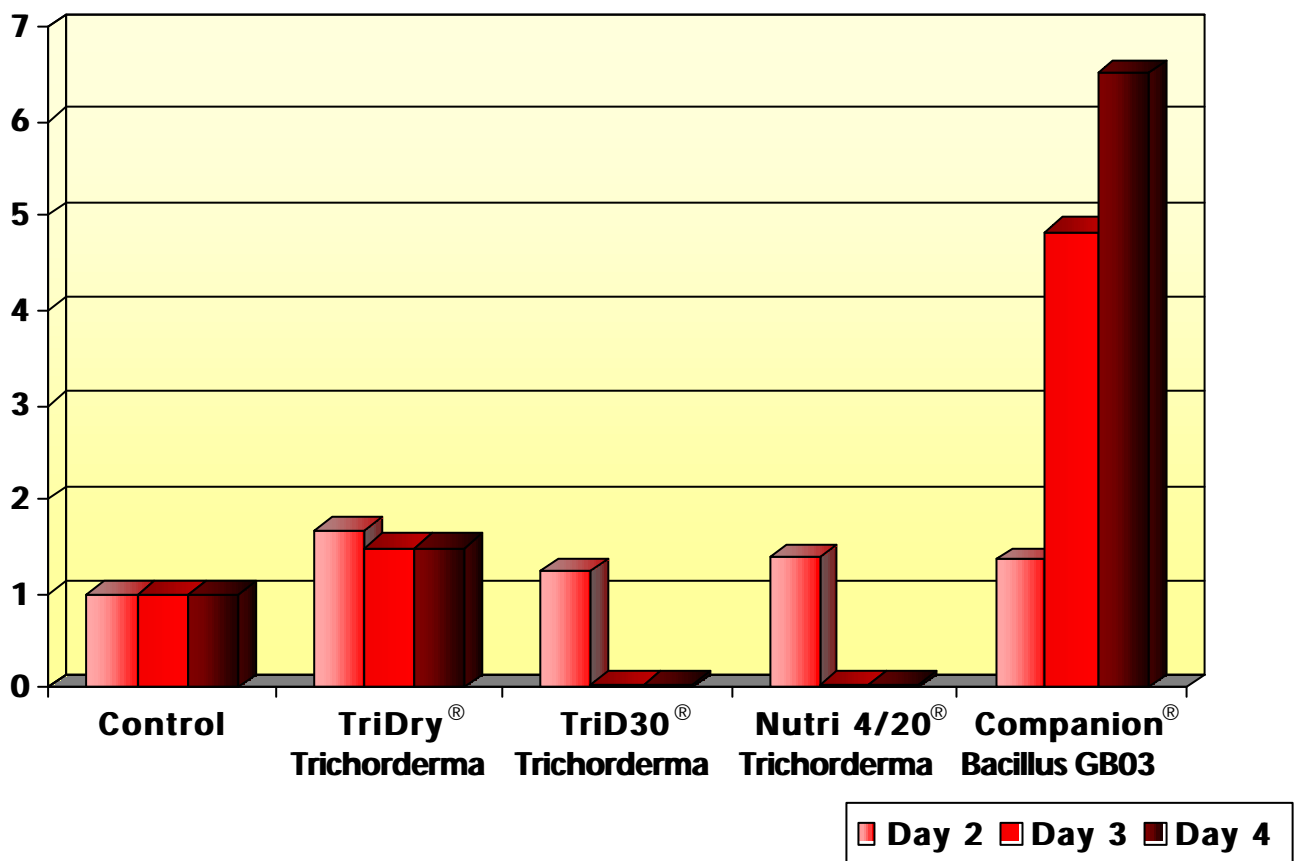
Evaluation of Efficacy of Biological Antagonists

N Gallace, Sydney University, 2001

AIM: Suppressing Seedling damping off ~ *Pythium aphanidermatum* in soil

- Glasshouse/Cucumber seedlings @ 30°C
- Biological agents introduced to pasteurised potting mix 3 days prior to transplanting 10 days old seedlings

**% Healthy Seedlings vs Control
with 0.5% inoculum of *Pythium Aphanidermatum***



- For any given inoculum level, Companion increased the likelihood of maintaining healthy seedlings x 6 fold vs Control

- No fungal biocontrol agents were able to initiate significant biocontrol activity.
- We hypothesise that Companion[®] was able to regenerate & rapidly following application to exert significant control in the rhizosphere.
- Bacillus Subtilis - Companion[®] has also been observed to produce antibiotics, effective against a wide range of plant pathogens.
- The ability of bacteria (-Companion[®]) to exert significant control of Pythium is a result of its inherent ecological adaptations to high temperature and moist conditions & ability to initiate activity rapidly in the infection court of the pathogen.