

## **EFFECTS OF DRIP-APPLIED ACROLEIN ON NATURAL SOIL POPULATIONS OF TRICHODERMA AND FUSARIUM.**

L. J. Simmons, R. Rodríguez-Kábana, J. L. Belcher, and R. H. Walker. Auburn University and the Alabama Agricultural Experiment Station, Auburn, AL 36078. [simmole@auburn.edu](mailto:simmole@auburn.edu)

Acrolein has been studied in depth at Auburn University for its potential as an alternative to methyl bromide to control a broad-spectrum of soil-borne pests. Many broad-spectrum soil-applied pesticides have the potential to leave problematic microbiological voids in the soil or even to select for organisms deleterious to plants. Greenhouse and field studies were conducted with acrolein to investigate the effects of the compound on the soil microflora and particularly the effects of the compound on *Trichoderma* spp and *Fusarium* spp. Results indicate that acrolein may stimulate *Trichoderma* spp in the soil and that it can reduce the number of *Fusarium* spp. Methyl bromide:choropicrin treatments resulted in the opposite effect.