

HOST RANGE OF *MYROTHECIUM VERRUCARIA* ISOLATED FROM SICKLEPOD. Kathleen I. Anderson and Steven G. Hallett, Research Assistant and Assistant Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907.

A frequent problem with pathogens developed as bioherbicides for cropping systems is a high level of host specificity and their concomitant inability to deliver effective control of complex weed communities. *Myrothecium verrucaria* (Hyphomycetes), isolated from sicklepod, was investigated for bioherbicide potential against a range of economically important weed species from agronomic and horticultural systems. *M. verrucaria* was grown on PDA for 14-21 d, and then plates were flooded with 30 ml sterile distilled water and colonies agitated with a sterile cotton swab. The resulting suspension was filtered through three layers of cheesecloth and adjusted to a conidial concentration of  $2 \times 10^7$  conidia/ml in 0.05% (v/v) Silwet L-77 and applied as a foliar spray. Symptoms typically appeared within 1-3 days after application, and were primarily characterized as wilting and necrosis. A number of weed species, including common lambsquarters, hemp sesbania, waterhemp and most other dicots tested were highly susceptible, whereas some species, including yellow nutsedge, large crabgrass, green foxtail and most other monocots tested were resistant. These findings suggest that the sicklepod isolate of *M. verrucaria* deserves further investigation for broad spectrum weed control.