

Effects of culture age on conidia production, viability and pathogenicity of *Dactylaria higginsii*.

ABSTRACT

Effects of culture age on conidia production, viability and pathogenicity of *Dactylaria higginsii*, a potential bioherbicide for controlling *Cyperus rotundus* (purple nutsedge) were investigated both in the laboratory and the greenhouse. This fungus was capable of producing conidia after five days of culturing on potato dextrose agar (PDA), with the highest conidia production obtained from the 15 day-old culture compared to other culture ages. Conidia harvested from 15 days of culturing on PDA, produced higher viability and were more pathogenic to purple nutsedge compared to conidia harvested before or after 15 days of culturing. The infection rate of conidia harvested from the 15 day-old cultures was faster ($rL0.40$ logit/day) compared to the infection rate of conidia harvested from other culture ages.

Keyword: Mycoherbicide; Purple nutsedge; *Dactylaria higginsii*; Harvesting age.