

Project #8925

Control of Sclerotia-forming Fungi

Researcher: Prof. Greg Boland & Prof. Mary Ruth McDonald

Institution: University of Guelph

Duration of Project: June 1, 2006 – December 1, 2007



I. Brief Project Description

To obtain funding for a graduate student to investigate the control of sclerotia-forming plant pathogens, with the emphasis on *Sclerotinia sclerotiorum* on carrots, lettuce and beans. Field trials will focus on minor-use registrations for the fungicides on beans, carrots and lettuce and the related crop groups. Results from the greenhouse and laboratory trials will also have applications for other sclerotia-forming pathogens, such as *Sclerotinia minor* (lettuce drop), *Sclerotium cepivorum* (white rot of onion) and *Rhizoctonia spp.*

II. Project Objectives

1. To determine the efficacy of reduced-risk fungicides Allegro, Switch and Pristine for control of *Sclerotinia* diseases on beans, carrots and lettuce, and develop data for minor-use registration for the materials
2. To determine the efficacy of biological controls of *Sclerotinia* diseases and control of sclerotia in soil and develop the data for minor-use registration for these materials
3. Determine if the biocontrols are effective when used on crops or in soil treated with fungicides
4. Determine the factors that will provide long-term control of sclerotia in the soil.