

Overview of Canola Sclerotinia Management Trial

R.A. Henson, G.J. Endres, and H.A. Lamey

A research program on management of sclerotinia (white mold) in canola was initiated at the Carrington Research Extension Center in 2001. This work is part of a four-site (Minnesota and North Dakota) project funded by the federal government and several agrochemical companies to examine tolerance of canola production cultivars to sclerotinia and effectiveness of foliar fungicides in controlling this disease. The trials were planted on the site of the 2000 sunflower head rot screening nursery (see CREC 2000 annual report), which was heavily-infested with sclerotia. To insure disease infection, both trials were inoculated with sclerotinia ascospores and a misting system was installed to maintain favorable humidity for disease development. The misting system was run at 30-minute intervals from early July until swathing. Adequate disease levels for evaluation were achieved. Disease incidence was visually evaluated on August 9-10. The trials were swathed on August 10 and machine-harvested on August 17.

The evaluation of **cultivar tolerance to sclerotinia** included 17 entries representing the diversity of architecture, relative maturity, herbicide tolerance, and breeding method (open-pollinated, hybrid, synthetic) in current production cultivars. Significant differences in disease incidence were observed and will be confirmed in 2002.



The **foliar fungicide trial** was conducted to evaluate the effectiveness of 24 treatments including seven fungicides and three foliar application timings. “Minot” canola was seeded May 10. Fungicides were applied during June 29 to July 5 to canola at the 10-20%, 30-40%, and 50-60% flowering stages. Generally, fungicide application at 30-60% flowering provided greater reduction in disease incidence and tended to have higher seed yield compared to the early application.