Progress report 2008-2009 December 2010

Project: Characterization of the reaction of *Brassica napus*, *B. rapa*, and *B. juncea* plant introductions to isolates of pathogenicity groups 3 and 4 of *Leptosphaeria maculans*

PI: Luis del Rio, Department of Plant Pathology, NDSU, Fargo, ND 58105

Co PIs: Mukhlesur Rahman, Department of Plant Sciences, NDSU, Fargo

Abstract

The objectives of this project were to identify materials among three *Brassica* spp. collections that could be used as sources of resistance against PG3 and PG4 strains of blackleg. As part of this project, approximately 72 commercial canola genotypes were evaluated in greenhouse conditions for their reaction to strains of both PGs. Results indicated none of the evaluated materials proved to be resistant. We finished evaluating the *B. rapa* collection (388 accessions) as well as the *B. juncea* collection (406 accessions). None of the materials evaluated was considered resistant, although approximately 25 accessions, considered moderately resistant, were transplanted for seed production. Seeds produced by self-pollination of these materials will be screened again and the best lines used as parental lines to develop breeding populations