Sclerotinia Initiative Funded Projects – 2006

Evaluation of Wild *Helianthus* Species for Resistance to *Sclerotinia* Stalk Rot
Charles Block – PI
USDA-ARS, Ames, IA
$33,829

Pyramiding Genes for White Mold Resistance from Common and Scarlet Runner Bean
Mark Brick – PI
Colorado State Univ., Ft. Collins, CO
$28,522

Identifying Virulence Factors of *Sclerotinia sclerotiorum* Through Insertional Mutagenesis
Weidong Chen – PI
USDA-ARS, Pullman, WA
$57,000

Gene Expression Profiling Soybean Response to Oxalic Acid, Its Major Virulence Factor
Steve Clough – PI
USDA-ARS, Urbana, IL
$60,000

Developing a Disease-warning System for *Sclerotinia* Stem Rot of Canola
Luis del Rio – PI
North Dakota State Univ., Fargo, ND
$67,811

Modeling the Relationship Between *Sclerotinia* Stem Rot and Yield Losses in Canola
Luis del Rio – PI
North Dakota State Univ., Fargo, ND
$11,105

Epidemiological Studies on *Sclerotinia S*tem Rot of Canola
Luis del Rio – PI
North Dakota State Univ., Fargo, ND
$24,453

Characterization of New *Brassica napus* – and Identification of New *B. rapa* – Plant Introductions as Sources of Resistance to *Sclerotinia sclerotiorum*
Luis del Rio – PI
North Dakota State Univ., Fargo, ND
$50,788

Optimizing Chemical Control of *Sclerotinia* Stem Rot on Canola
Luis del Rio – PI
North Dakota State Univ., Fargo, ND
$18,023

***Sclerotinia* Resistance Enhanced by Accumulation of QTL and Transgenic Approaches**

George Graef – PI
Univ. of Nebraska, Lincoln, NE
$78,000

Unraveling the Genetics of Resistance in Soybean to *Sclerotinia sclerotiorum* Using Multiple Evaluation Criteria
Craig Grau – PI
Univ. of Wisconsin, Madison, WI
$34,333

Development of Sunflower Germplasm with *Sclerotinia* Head and Stalk Rot Resistance
Tom Gulya – PI
USDA-ARS, Fargo, ND
$112,546

Sunflower Head Rot Screening Nursery and Fungicide Evaluation
Bob Henson – PI
North Dakota State Univ., Carrington, ND
$115,050

Map the Quantitative Trait Loci Responsible for *Sclerotinia* Tolerance in Two Sunflower F2 Populations
Jinguo Hu – PI
USDA-ARS, Fargo, ND
$67,000

Development of *Sclerotinia* Resistant Germplasm Utilizing Wild *Helianthus* Species
C. C. Jan – PI
USDA-ARS, Fargo, ND
$128,748

Identification of Defense Response Genes for White Mold Resistance in Dry Bean
Jim Kelly – PI
Michigan State Univ., East Lansing, MI
$31,200

Improved Resistance to *S. sclerotiorum* in Pea and Lentil Through Breeding and Biotechnology
Kevin McPhee – PI
USDA-ARS, Pullman, WA
$61,800

Genetic Characterization of Scarlet-runner Bean Derived Resistance to White Mold in Common Bean
Phil Miklas – PI
USDA-ARS, Prosser, WA
$71,500

Genetics and Mapping of Resistance to *Sclerotinia* White Mold in Lentil
Fred Muehlbauer – PI
USDA-ARS, Pullman, WA
$61,384

Mapping and Transfer of *Sclerotinia* Resistance from Scarlet Runner to Common Bean
Jim Myers – PI
Oregon State Univ., Corvallis, OR
$43,875

Sequencing of Expressed Sequence Tags of *Sclerotinia sclerotiorum* and *Pisum sativum*
Tobin Peever – PI
Washington State Univ., Pullman, WA
$53,698

A Novel Approach to Develop Elite, *Sclerotinia* Resistant Canola Cultivars
Dan Phillips – PI
Univ. of Georgia, Griffin, GA
$29,250

Screening of the *Pisum* Core Collection and Woody-stem Selections for Resistance to White Mold
Lyndon Porter – PI
USDA-ARS, Prosser, WA
$19,200

Influence of Crop Rotation and a Cover Crop on *Sclerotinia* in Canola
Paul Porter – PI
Univ. of Minnesota, St. Paul, MN
$5,362

Cultivar Selection and Fungicide by Isolate Origin Effects Upon White Mold Management in Dry Bean
Howard Schwartz – PI
Colorado State Univ., Ft. Collins, CO
$29,250

Introgressing White Mold Resistance from the Secondary Gene Pool of Common Bean
Shree Singh – PI
Univ. of Idaho, Kimberley, ID
$48,750

A Search for Improved Resistance in Common Bean Through Multi-site Screening and Pathogen Characterization
Jim Steadman – PI
Univ. of Nebraska, Lincoln, NE
$60,875

Genetic Basis of Oxalate Sensitivity in Relationship to *Sclerotinia* Diseases
Henrik Stotz – PI
Oregon State Univ., Corvallis, OR
$29,250

Development of Soybean Varieties or Germplasm Resistant to *Sclerotinia* Stem Rot

Dechun Wang – PI
Michigan State Univ., East Lansing, MI
$29,250

Tech Transfer
Ken Grafton – PI
North Dakota State Univ., Fargo, ND
$35,000