

## Sclerotinia Initiative Funded Projects – 2004

### **Innovative Methods to Identify Resistance to *Sclerotinia sclerotiorum***

Berlin Nelson – PI  
North Dakota State Univ., Fargo, ND  
\$21,540

### **Resistance Improvement of Bean Through Multi-site Screening and Pathogen Characterization**

James Steadman – PI  
Univ. of Nebraska, Lincoln, NE  
\$45,000

### **Minimizing *Sclerotinia* on Canola, Pea, Sunflower, Chickpeas, and Lentils Using Crop Sequence and Biological Control**

Joe Krupinsky – PI  
USDA-ARS, Mandan, ND  
\$65,000

### **Introgressing White Mold Resistance from the Secondary Gene Pool of Common Bean**

Shree Singh – PI  
Univ. of Idaho, Moscow, ID  
\$40,000

### **Multi-action Pesticide and Resistance Management of White Mold in Dry Bean**

Howard Schwartz – PI  
Colorado State Univ., Ft. Collins, CO  
\$28,000

### **Towards Marker-assisted Breeding for White Mold Resistance in Common Bean**

Phil Miklas – PI  
USDA-ARS, Prosser, WA  
\$23,000

### **Identify and Introgress Molecular Markers for White Mold Resistance in Dry Bean**

Phil Miklas – PI  
USDA-ARS, Prosser, WA  
\$40,000

### **Mapping and Transfer of *Sclerotinia* Resistance from Scarlet Runner to Common Bean**

James Myers – PI  
Oregon State Univ., Corvallis, OR  
\$40,000

### **Quantitative Trait Loci for Resistance to *Sclerotinia sclerotiorum* in PI391589A**

Anne Dorrance – PI  
Ohio State Univ., Wooster, OH  
\$16,079

### **Genetics and Mapping of Resistance to *Sclerotinia* White Mold in Lentil**

Fred Muehlbauer – PI  
USDA-ARS, Pullman, WA  
\$76,384

**Sources of Resistance to White Mold in the Grain Legume Core Collections**

Weidong Chen – PI  
USDA-ARS, Pullman, WA  
\$35,975

**Validation and Introgression of White Mold Resistance from Andean into Middle American Germplasm**

Mark Brick – PI  
Colorado State Univ., Ft. Collins, CO  
\$28,000

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

Dechun Wang – PI  
Michigan State Univ., E. Lansing, MI  
\$29,209

**Improving White Mold Resistance by Transforming Dry Bean with the Germin Oxalate Oxidase gene**

James Kelly – PI  
Michigan State Univ., E. Lansing, MI  
\$27,000

**Genetic Basis of Oxalate Sensitivity in Relationship to *Sclerotinia* Diseases**

Henrik Stotz – PI  
Oregon State Univ., Corvallis, OR  
\$54,855

**Development of PCR-based Molecular Markers for Resistance to *Sclerotinia* Stem Rot in Soybean**

Glen Hartman – PI  
USDA-ARS, Urbana, IL  
\$55,000

**Soybean Genome Response to *Sclerotinia* and Oxalate, its Major Virulence Factor**

Steven Clough – PI  
USDA-ARS, Urbana, IL  
\$64,500

**Sequencing of Expressed Sequence Tags of *Sclerotinia sclerotiorum* and *Pisum sativum***

Nik Grunwald – PI  
USDA-ARS, Pullman, WA  
\$60,544

**Population Structure of the White Mold Pathogen on Pea and Lentil in the US**

Nik Grunwald – PI  
USDA-ARS, Pullman, WA  
\$64,484

**Influence of Crop Rotation and a Cover Crop on *Sclerotinia* in Canola**

Paul Porter – PI

Univ. of Minnesota, St. Paul, MN

\$5,500

**Application of Genomic Technology to the Analysis of Gene Expression in *Sclerotinia***

Jeffrey Rollins – PI

Univ. of Florida, Gainesville, FL

\$70,800

**Fungicides and Application Timings for *Sclerotinia* Disease Control on Field Pea**

Scott Halley – PI

North Dakota State Univ., Langdon, ND

\$16,000

**Evaluation of Canola Cultivars for Resistance to *Sclerotinia***

Bob Henson – PI

North Dakota State Univ., Carrington, ND

\$18,000

**Sunflower Head Rot Screening Nursery**

Bob Henson – PI

North Dakota State Univ., Carrington, ND

\$25,597

**Evaluation of *Brassica napus* Accessions for Resistance to *Sclerotinia* Under Mist-irrigation**

Carl Bradley – PI

North Dakota State Univ., Fargo, ND

\$8,000

**Validation of a White Mold Forecasting System for Dry Beans and Canola in North Dakota and Minnesota**

Luis del Rio – PI

North Dakota State Univ., Fargo, ND

\$45,000

**A Novel Approach to Develop Elite, *Sclerotinia* Resistant Canola Cultivars**

D. V. Phillips – PI

Univ. of Georgia, Athens, GA

\$40,000

***Sclerotinia* Resistance and Management Strategies Among Susceptible South Dakota Crops**

Marty Draper – PI

South Dakota State Univ., Brookings, SD

\$26,403

**Gene Expression Changes in *Brassica napus* Challenged by *Sclerotinia***

Tom Osborn – PI  
Univ. of Wisconsin, Madison, WI  
\$10,500

**Impact of Preceding Crops on Incidence and Severity of Disease in Canola**

Brian Jenks – PI  
North Dakota State Univ., Minot, ND  
\$11,000

**Epidemiology and Control of *Sclerotinia* Headrot in Wild Sunflower Species**

Khalid Rashid – co-PI  
Agriculture and Agri-food Canada, Morden, Manitoba & Gerald Seiler – co-PI USDA-ARS, Fargo, ND  
\$15,000

**Development of Sunflower Germplasm with *Sclerotinia* Head Rot and Stalk Rot Resistance**

Tom Gulya – PI  
USDA-ARS, Fargo, ND  
\$75,284

**Management of *Sclerotinia* on Canola in the Northern United States**

Jack Rasmussen – PI  
North Dakota State Univ., Fargo, ND  
\$65,150

**Tech Transfer**

Ken Grafton – PI  
North Dakota State Univ., Fargo, ND  
\$28,000