

## Sclerotinia Initiative Funded Projects – 2005

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

Berlin Nelson – PI  
North Dakota State Univ., Fargo, ND  
\$20,160

### **A Search for Improved Resistance in Common Bean Through Multi-site Screening and Pathogen Characterization**

James Steadman – PI  
Univ. of Nebraska, Lincoln, NE  
\$55,000

### **Crop Sequencing and Biological Control to Minimize *Sclerotinia* and Impact of *Sclerotinia* Inoculum on Disease**

Joe Krupinsky – PI  
USDA-ARS, Mandan, ND  
\$50,000

### **Introgression and Pyramiding of White Mold Resistance from the Secondary Gene Pool of Dry Bean**

Shree Singh – PI  
Univ. of Idaho, Moscow, ID  
\$50,000

### **Genetic Characterization of Scarlet-runner Bean Derived Resistance**

Phil Miklas – PI  
USDA-ARS, Prosser, WA  
\$59,000

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

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

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

Fred Muehlbauer – PI  
USDA-ARS, Pullman, WA  
\$63,384

### **Identifying Virulence Factors of *Sclerotinia sclerotiorum* Through Transformation**

Weidong Chen – PI  
USDA-ARS, Pullman, WA  
\$52,215

### **Validation and Pyramiding White Mold Resistance from *P. vulgaris* and *P. coccineus* into an Interspecific Recombinant Inbred Population**

Mark Brick – PI  
Colorado State Univ., Ft. Collins, CO  
\$29,000

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

Dechun Wang – PI

Michigan State Univ., E. Lansing, MI

\$30,000

**Identification of Defense Response Genes for White Mold Resistance in Dry Bean**

James Kelly – PI

Michigan State Univ., E. Lansing, MI

\$32,000

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

Henrik Stotz – PI

Oregon State Univ., Corvallis, OR

\$50,000

**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

\$64,534

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

Paul Porter – PI

Univ. of Minnesota, St. Paul, MN

\$5,500

**Microarray Gene Expression Profiling of *Sclerotinia sclerotiorum* Development and Pathogenesis**

Jeffrey Rollins – PI

Univ. of Florida, Gainesville, FL

\$32,265

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

Scott Halley – PI

North Dakota State Univ., Langdon, ND

\$15,000

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

Bob Henson – PI

North Dakota State Univ., Carrington, ND

\$14,000

**Sunflower Head Rot Screening Nursery and Fungicide Evaluation**

Bob Henson – PI  
North Dakota State Univ., Carrington, ND  
\$60,320

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

Carl Bradley – PI  
North Dakota State Univ., Fargo, ND  
\$19,460

**Epidemiological Studies on *Sclerotinia* Stem Rot of Canola**

Luis del Rio – PI  
North Dakota State Univ., Fargo, ND  
\$28,100

**Evaluation of the *Brassica rapa* NGRP Collection for their Reaction to *Sclerotinia sclerotiorum***

Luis del Rio – PI  
North Dakota State Univ., Fargo, ND  
\$19,265

**Modeling the Relationship Between *Sclerotinia* Stem Rot and Yield Losses in Canola**

Luis del Rio – PI  
North Dakota State Univ., Fargo, ND  
\$11,350

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

Dan Phillips – PI  
Univ. of Georgia, Athens, GA  
\$30,000

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

Tom Gulya – PI  
USDA-ARS, Fargo, ND  
\$80,057

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

George Graef – PI  
University of Nebraska, Lincoln, NE  
\$78,564

**Map the Quantitative Trait Loci Responsible for *Sclerotinia* Tolerance in USDA Sunflower Lines**

Jinguo Hu – PI  
USDA-ARS, Fargo, ND  
\$67,240

**Development of *Sclerotinia* Resistant Germplasm Utilizing Wild *Helianthus* Species**

C.C. Jan – PI  
USDA-ARS, Fargo, ND  
\$79,240

**Improved Resistance to *S. sclerotiorum* in Pea and Lentil Through Breeding and Biotechnology.**

Kevin McPhee – PI

USDA-ARS, Pullman, WA

\$47,120

**Tech Transfer**

Ken Grafton – PI

North Dakota State Univ., Fargo, ND

\$20,000