

## Sclerotinia Initiative Funded Projects – 2002 and 2003

### **Sources of Resistance to White Mold in the Pea and Lentil Core Collections**

Weidong Chen - PI  
USDA-ARS, Pullman, WA  
\$59,000 in 2002

### **Genetic Analysis of White Mold Resistance Using Microarrays**

Steven Clough - PI  
USDA-ARS, Urbana, IL  
\$68,000 in 2002

### **Characterization of Soybean Genotypes with Partial Resistance to *Sclerotinia* Stem Rot**

Brian Diers - PI  
Univ. of Illinois, Champaign, IL  
\$65,000 in 2002  
\$65,000 in 2003

### **Enhancing *Sclerotinia* Resistance Using Modern and Traditional Methods**

George Graef - PI  
Univ. of Nebraska, Lincoln, NE  
\$42,000 in 2002

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

Ken Grafton - PI  
North Dakota State Univ, Fargo, ND  
\$12,000 in 2002  
\$47,000 in 2003

### **Development of *Sclerotinia* Head Rot Resistant Sunflower Germplasm**

Tom Gulya - PI  
USDA-ARS, Fargo, ND  
\$50,500 in 2002  
\$71,571 in 2003

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

Phil Miklas - PI  
USDA-ARS, Prosser, WA  
\$19,800 in 2002  
\$31,000 in 2003

### **Genetics of *Sclerotinia* Resistance in Canola**

Tom Osborn - PI  
Univ. of Wisconsin, Madison, WI  
\$61,000 in 2002  
\$141,680 in 2003 (for 2 years)

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

Shree Singh - PI  
Univ. of Idaho, Moscow, ID  
\$30,000 in 2002  
\$49,000 in 2003

**Transfer of Total *Sclerotinia* Resistance from *Phaseolus coccinues* to *P. vulgaris***

James Myers - PI  
Oregon State Univ., Corvallis, OR  
\$55,000 in 2002

**Combining Conventional and Contemporary Approaches to Develop White Mold Resistance in Dry Bean (*Phaseolus vulgaris*)**

James Kelly - PI  
Michigan St. Univ., E. Lansing, MI  
\$10,000 in 2002 (for 2 years)

**Use of Intercept for Control of *Sclerotinia* on Dry Beans, Canola, and Sunflower in North Dakota**

Luis del Rio - PI  
North Dakota State Univ., Fargo, ND  
\$29,500 in 2002 (for 2 years)

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

Marty Draper - PI  
South Dakota State Univ., Brookings, SD  
\$24,500 in 2002  
\$23,813 in 2003

**Population Structure of the White Mold Pathogen on Pea and Lentil in the U.S**

Nik Grunwald - PI  
USDA-ARS, Prosser, WA  
\$55,000 in 2002  
\$72,024 in 2003

**Planting System, Fungicide, and Application Timing for Control of White Mold in Field Peas**

Scott Halley - PI  
North Dakota State Univ., Fargo, ND  
\$29,500 in 2002 (for 2 years)

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

Robert Henson - PI  
North Dakota State Univ., Fargo, ND  
\$9,500 in 2002 (partial to Paul Porter at the Univ. of Minnesota, St. Paul, MN)  
\$16,000 in 2003 (partial to Paul Porter at the Univ. of Minnesota, St. Paul, MN)

**Management Practices and *Sclerotinia* on Canola, Pea, Sunflower, and Lentils**

Joe Krupinsky - PI  
USDA-ARS, Mandan, ND  
\$53,000 in 2002  
\$65,000 in 2003

***Sclerotinia* Control and Management in Canola**

Art Lamey - PI

North Dakota State Univ., Fargo, ND

\$75,000 in 2002

**Epidemiology and Control of *Sclerotinia* Head Rot in Sunflower and Wild Sunflower Species**

Khalid Rashid - PI

National Sunflower Assoc. of Canada, Morden, Manitoba, Canada

\$10,000 in 2002

\$15,000 in 2003

**Eco-tillage, Biopesticide and Resistance Management of White Mold in Dry Bean**

Howard Schwartz - PI

Colorado State Univ., Ft. Collins, CO

\$58,000 in 2002

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

Mark Brick - PI

Colorado State Univ., Ft. Collins, CO

\$31,768 in 2003

**Development and Use of DNA Markers for the Control of *Sclerotinia* in Sunflower**

Jinguo Hu - PI

USDA-ARS, Fargo, ND

\$110,800 in 2003 (for 2 years)

**Biological Control of *Sclerotinia sclerotiorum***

Helene Dillard - PI

Cornell Univ., Ithaca, NY

\$10,000 in 2003

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

James Kelly - PI

Michigan State Univ., E. Lansing, MI

\$27,587 in 2003

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

James Myers - PI

Oregon State Univ., Corvallis, OR

\$53,115 in 2003

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

George Graef - PI

Univ. of Nebraska, Lincoln, NE

\$150,991 in 2003 (for 2 years)

**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

\$61,610 in 2003

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

Weidong Chen - PI

USDA-ARS, Pullman, WA

\$126,364 in 2003 (for 2 years)

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

Brian Jenks - PI

North Dakota State Univ., Fargo, ND

\$11,000 in 2003

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

Berlin Nelson - PI

North Dakota State Univ., Fargo, ND

\$21,540 in 2003

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

Paul Porter - PI

Univ. of Minnesota, St. Paul, MN

\$5,500 in 2003

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

Jim Steadman - PI

Univ. of Nebraska, Lincoln, NE

\$49,475 in 2003

**Tech Transfer**

Ken Grafton - PI

North Dakota State Univ., Fargo, ND

\$30,000 in 2002

\$35,000 in 2003