

Sclerotinia Initiative 10th Annual Meeting
January 18-20, 2012
Crowne Plaza (formerly Holiday Inn Select) Minneapolis/St. Paul International Airport

Agenda

Wednesday - January 18, 2012

6 - 8 pm Poster Session/Reception (posters are displayed for the entire meeting)
(McIntosh/Jonathan)

Thursday - January 19, 2012

7:15 am Registration/Continental Breakfast **(McIntosh/Jonathan)**

8:15 am Welcome, Introductions & Meeting Charge – **Bill Kemp, USDA-Agricultural Research Service, Fargo, ND**

8:20 am Welcome and Update from the Northern Plains Area – **Mickey McGuire, USDA-Agricultural Research Service, Fort Collins, CO**

8:30 am ARS Office of National Programs Update – **Roy Scott, USDA-Agricultural Research Service, Beltsville, MD**

8:45 am Agreements Update – **Marcie Currie-Gross, USDA-Agricultural Research Service, Fort Collins, CO**

Sclerotinia Research Activities – Session 1 (Fireside)

Moderator – Kevin McPhee, North Dakota State University, Fargo, ND

9:00 am Functional verification of candidate defense-related genes to *Sclerotinia sclerotiorum* in soybean and *Arabidopsis* – **Steven Clough, USDA-ARS, Urbana, IL**

9:15 am eQTL analysis in soybean populations to elucidate genetic architecture of host response to infection by *Sclerotinia sclerotiorum* – **George Graef, University of Nebraska, Lincoln, NE**

9:30 am Identification of novel loci for partial resistance to *Sclerotinia* stem rot in perennial soybean accessions – **Leslie Domier, USDA-ARS, Urbana, IL**

9:45 am Enhancing soybean for resistance to *Sclerotinia* stem rot – **Dechun Wang, Michigan State University, East Lansing, MI**

10:00 am Discussion Break **(Ballroom Foyer)**

Featured Speaker:

10:30 am Genome structural variation and phenotypic diversity in soybean – **Robert Stupar, University of Minnesota, St. Paul, MN**

11:30 am Working Lunch **(McIntosh/Jonathan)**

***Sclerotinia* Research Activities – Session 2 (Fireside)**

Moderator – Thomas Gulya, USDA-ARS, Fargo, ND

- 12:45 am Characterization of the genetic basis for partial resistance to *Sclerotinia sclerotiorum* in pea – **Kevin McPhee, North Dakota State University, Fargo, ND; Lyndon Porter USDA-ARS, Prosser, WA**
- 1:00 pm Expression profiling of the pea-*Sclerotinia sclerotiorum* interaction for genomics-assisted breeding – **Martin Chilvers, Michigan State University, East Lansing, MI**
- 1:15 pm Transgenic expression of an oxalate oxidase gene in lentil to improve tolerance to *Sclerotinia* wilt – **George Vandemark, USDA-ARS, Pullman, WA**
- 1:30 pm 1) Variation in pathogenicity and fungicide sensitivity in relation to variation of neutral markers of *Sclerotinia sclerotiorum*; 2) Searching for resistance sources to *Sclerotinia* in wild relatives of cool season grain legumes – **Weidong Chen, USDA-ARS, Pullman, WA**
- 1:45 pm Identification and validation of QTL for white mold resistance in pinto bean – **James Kelly, Michigan State University, East Lansing, MI**
- 2:00 pm White mold resistance-QTL: Identification, interactions, and fine mapping in common bean – **Philip Miklas, USDA-ARS, Prosser, WA; James Myers, Oregon State University, Corvallis, OR; Philip McClean, North Dakota State University, Fargo, ND**
- 2:15 pm Inheritance studies of new potential sources of resistance to white mold in dry bean – **Juan Osorno, North Dakota State University, Fargo, ND**
- 2:30 pm Break & Poster Session (**McIntosh/Jonathan**)

***Sclerotinia* Research Activities – Session 3 (Fireside)**

Moderator – Rubella Goswami, North Dakota State University, Fargo, ND

- 2:45 pm Discovery and use of novel sources of resistance to head rot and stalk rot in cultivated sunflower and wild *Helianthus* – **Thomas Gulya, USDA-ARS, Fargo, ND**
- 3:00 pm Transferring *Sclerotinia* resistance genes from wild *Helianthus* species into cultivated sunflower – **Chao-Chien Jan, USDA-ARS, Fargo, ND**
- 3:15 pm Use of a transformation system in sunflower for *Sclerotinia* resistance studies – **John Finer, The Ohio State University, Wooster, OH**
- 3:30 pm Evaluation of wild *Helianthus* species for resistance to *Sclerotinia* stalk rot – **Charles Block, USDA-ARS, Ames, IA**
- 3:45 pm Evaluation of sunflower hybrids and germplasm for resistance to *Sclerotinia* – **Michael Wunsch, North Dakota State University, Carrington, ND**

- 4:00pm Deployment of novel sources of *Sclerotinia* resistance in sunflower – **Lili Qi, USDA-ARS, Fargo, ND**
- 4:15 pm Association mapping of *Sclerotinia* stalk rot resistance in domesticated sunflower plant introductions – **Zahirul Talukder, North Dakota State University, Fargo, ND; Brent Hulke, USDA-ARS, Fargo, ND**
- 4:30 pm Evaluation of fungicides for control of *Sclerotinia* head rot of sunflower and determination of yield impacts– **Samuel Markel, North Dakota State University, Fargo, ND**
- 4:45 pm Wrap-up & Adjourn (Dinner on your own)

Friday - January 20, 2010

- 7:00 am Steering Committee Breakfast Meeting (**Beacon Conference Room**)
- 7:15 am Continental Breakfast (**McIntosh/Jonathan**)
- Sclerotinia* Research Activities – Session 4 (Fireside)**
Moderator – **George Vandemark, USDA-ARS, Pullman, WA**
- 8:15 am On-farm validation of cultural practice adjustments to improve white mold management in dry bean irrigation systems – **Howard Schwartz & Mark Brick, Colorado State University, Ft. Collins, CO**
- 8:30 am Improved white mold resistance in dry and snap beans through multi-site screening and pathogen characterization throughout major production areas – **James Steadman, University of Nebraska, Lincoln, NE**
- 8:45 am Genetic variation and virulence of *Sclerotinia sclerotiorum* in the United States – **Berlin Nelson, North Dakota State University, Fargo, ND**
- 9:00 am Identification of resistance and pathogenicity genes associated with *Sclerotinia sclerotiorum* infection using next-generation sequencing – **Rubella Goswami, North Dakota State University, Fargo, ND**
- 9:15 am (1) Optimizing management of *Sclerotinia* diseases through fungicide use (2) Development of canola breeding populations and identification of herbicide-tolerant breeding lines with resistance to *Sclerotinia sclerotiorum* – **Luis del Rio, North Dakota State University, Fargo, ND**
- 9:30 am Use of multiple pathogen isolates, inoculations, and evaluations for selecting common bean breeding lines with broadly effective high levels of white mold resistance – **Shree Singh, University of Idaho, Kimberly, ID**
- 9:45 am Break (**Ballroom Foyer**)

Sclerotinia Initiative Research: The next steps – (Fireside)
Moderator – Bill Kemp

- 10:15 am ***Guest Speaker***
- Strategic Planning & Reporting Progress – **Rich Wilson (USDA-Agricultural Research Service, Office of National Programs–Retired, Raleigh, NC)**
- 10:45 am Strategic Plan Discussion – Writing Team Input/Revisions
- 11:45am Working Lunch (**McIntosh/Jonathan**)
- 1:00pm Assignment of Additional Tasks & Wrap-up of Initiative Business
- 2:00 pm Adjourn (Travel Safely!)