

AGENDA

Sclerotinia Initiative 9th Annual Meeting January 19-21, 2011

Wednesday – January 19, 2011

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

Thursday – January 20, 2011

7:30 am Registration/Continental Breakfast McIntosh/Jonathan Room

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

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

8:30 am *Invited Panel: Augmenting Genetic Tolerance with Novel Fungicide Chemistries*

9:45 am Discussion Break Ballroom Foyer

Sclerotinia Research Activities – Session 1

Moderator – Mark Brick, Colorado State University, Fort Collins, CO

Fireside Room

10:15 am Improved resistance in common bean through multi-site screening and pathogen characterization throughout major production areas – **Jim Steadman, University of Nebraska, Lincoln, NE**

10:30 am Genetic variation and virulence of *Sclerotinia sclerotiorum* on six crops in the United States – **Berlin Nelson, North Dakota State University, Fargo, ND**

10:45 am The requirement for oxalate during pathogenesis on multiple crops – **Jeff Rollins, University of Florida, Gainesville, FL**

11:00 am On-farm validation of cultural practice adjustments to improve white mold management in dry bean irrigation systems – **Howard Schwartz, Colorado State University, Ft. Collins, CO (Mark Brick, presenting)**

11:15 am (1) Genetic and phenotypic diversity of *Sclerotinia sclerotiorum* on a small geographic scale and (2) Screening accessions of wild relatives of pea for resistance to *Sclerotinia sclerotiorum* – **Weidong Chen, USDA-ARS, Pullman, WA**

11:30 am (1) Optimizing management of *Sclerotinia* diseases through fungicide use (2) Defining critical environmental and biological parameters required for development of *Sclerotinia* stem rot in canola and (3) 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**

11:45 am Identification of resistance and pathogenicity genes associated with *Sclerotinia sclerotiorum* infection using next generation sequencing – **Rubella Goswami, North Dakota State University, Fargo, ND**

Noon Working Lunch **McIntosh/Jonathan Room**

***Sclerotinia* Research Activities – Session 2**

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

Fireside Room

1:30 pm Expression profiling of the pea-*Sclerotinia sclerotiorum* interaction for genomics-assisted breeding – **Martin Chilvers, Michigan State University, East Lansing, MI**

1:45 pm Identification of novel loci for resistance to *Sclerotinia* stem rot in perennial soybean accessions – **Leslie Domier, USDA-ARS, Urbana, IL (Glen Hartman, presenting)**

2:00 pm Enhancing soybean for resistance to *Sclerotinia* stem rot – **Dechun Wang, Michigan State University, East Lansing, MI**

2:15 pm Functional verification of candidate defense-related genes to *Sclerotinia sclerotiorum* in soybean and *Arabidopsis* – **Steve Clough, USDA-ARS, Urbana, IL**

2:30pm Candidate genes for fungal resistance: Mapping and SNP development for LysM-domain encoding genes in soybean – **George Graef, University of Nebraska, Lincoln, NE**

2:45pm Fine mapping of quantitative resistance genes to *Sclerotinia* stem rot in two soybean populations – **Glen Hartman, USDA-ARS, Urbana, IL**

3:00 pm Break & Poster Session **McIntosh/Jonathan Room**

***Sclerotinia* Research Activities – Session 3**

Moderator – Brent Hulke, USDA-ARS, Fargo, ND

Fireside Room

3:15pm White mold resistance QTL: Identification, Interactions, and fine mapping in common bean – **Phil Miklas, USDA-ARS, Prosser, WA; James Myers, Oregon State University, Corvallis, OR; Phil McClean, North Dakota State University, Fargo, ND**

3:30 pm Gamete selection for simultaneously pyramiding and introgressing white mold resistance from Phaseolus species into pinto beans – **Shree Singh, University of Idaho, Kimberly, ID**

- 3:45 pm Expression of the oxalate oxidase gene in transgenic lentils and evaluation of transgenic plants for resistance to *Sclerotinia sclerotiorum* – **George Vandemark, USDA-ARS, Pullman, WA**
- 4:00 pm Identification of QTL for white mold resistance in pinto bean – **James Kelly, Michigan State University, East Lansing, MI**
- 4:15 pm Genetic resistance to white mold derived from multiple sources of common bean and scarlet runner bean – **Mark Brick, Colorado State University, Fort Collins, CO**
- 4:30 pm Wrap-up & Adjourn (Dinner on your own)

Friday – January 21, 2011

- 7:00 am Steering Committee Breakfast Meeting Beacon Conference Room
- 7:15 am Continental Breakfast McIntosh/Jonathan Room
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- Sclerotinia* Research Activities – Session 4**
- Moderator – George Vandemark, USDA-ARS, Pullman, WA** Fireside Room
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- 8:15 am Discovery of novel sources of resistance to head rot and stalk rot in cultivated sunflower and wild *Helianthus* – **Tom Gulya, USDA-ARS, Fargo, ND**
- 8:30 am Evaluation of sunflower hybrids and germplasm for resistance to *Sclerotinia* – **Blaine Schatz, North Dakota State University, Carrington, ND (Michael Wunsch, presenting)**
- 8:45 am Transferring *Sclerotinia* resistance genes from wild *Helianthus* species into cultivated sunflower – **Chao Chien Jan, USDA-ARS, Fargo, ND**
- 9:00 am Use of a transformation system in sunflower for *Sclerotinia* resistance studies – **John Finer, Ohio State University, Wooster, OH**
- 9:15 am Evaluation of wild *Helianthus* species for resistance to *Sclerotinia* stalk rot – **Charles Block, USDA-ARS, Ames, IA**
- 9:30am Pyramiding *Sclerotinia* head rot and stalk rot resistances into elite sunflower breeding lines with the aid of DNA markers – **Brent Hulke, USDA-ARS, Fargo, ND**
- 9:45am 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 (Behzod Tashtemirov, presenting)**

10:00 am	Break	Ballroom Foyer
	<i>Sclerotinia Initiative Research: The next steps</i> Moderator – Bill Kemp, USDA-ARS, Fargo, ND	Fireside Room
10:15 am	<i>Guest Speaker</i> Strategic Planning & Reporting Progress – Rich Wilson (USDA-Agricultural Research Service, Office of National Programs–Retired, Raleigh, NC)	
10:45 am	Strategic Plan Discussion, RFPP Process Improvement, Updating Website, On-line reprints & Fact sheets, Assignment of Additional Tasks & Wrap-up of Initiative Business	
11:45 am	Working Lunch	McIntosh/Jonathan Room
1:30 pm	Adjourn (Travel Safely!)	