

AGENDA

2015 Sclerotinia Initiative Annual Meeting January 21-23, 2015

Wednesday – January 21, 2015

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

Thursday – January 22, 2015

7:15 am Registration/Continental Breakfast **Cortland Room**

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

8:25 am Welcome & Update from the Plains Area – **John McMurtry, USDA-ARS, Fort Collins, CO**

8:35 am ARS Office of National Programs Update – **Roy Scott, USDA-ARS, Beltsville, MD**

8:45 am Genomic analysis of hybridization and introgression of wild disease-resistance traits into domesticated lineages - **Nolan Kane, Assistant Professor of Ecology & Evolutionary Biology, University of Colorado at Boulder, Boulder CO**

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

Sclerotinia Research Activities – Session 1 **Fireside Room**
Moderator – John Finer, The Ohio State University, Wooster, OH

10:30 am Sources of white mold resistance derived from wide crosses in common bean and progress in characterization of relevant pathogen isolates – **James Steadman, University of Nebraska, Lincoln, NE**

10:45 am 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**

11:15 am Metabolomic profiles associated with resistance to *Sclerotinia sclerotiorum* in dry edible beans – **Adam Heuberger & Mark Brick, Colorado State University, Ft. Collins, CO**

11:30 am Pyramiding QTL for white mold resistance in Mesoamerican beans – **James Kelly, Michigan State University, East Lansing, MI**

11:45 am Working Lunch **Cortland Room**

Sclerotinia Research Activities – Session 2 **Fireside Room**
Moderator – James Steadman, University of Nebraska, Lincoln, NE

1:15 pm Discovery and use of novel sources of resistance to head rot and stalk rot in sunflower and studies of Asteraceae genera stimulating myceliogenic germination – **Gerald Seiler, USDA-ARS, Fargo, ND**

1:30 pm Transferring Sclerotinia resistance genes from wild *Helianthus* species into cultivated sunflower – **Chao-Chien Jan, USDA-ARS, Fargo, ND**

1:45 pm Using genomic selection to optimize prediction of Sclerotinia and agronomic phenotypes for more efficient breeding – **Brent Hulke, USDA-ARS, Fargo, ND**

2:00 pm Identification of major genes-QTL for Sclerotinia resistance in cultivated sunflower and wild *Helianthus* – **Lili Qi, USDA-ARS, Fargo, ND**

2:15 pm Improved head rot resistance screening in sunflowers and impacts & implications of Sclerotinia infection timing in dry bean, soybean, and sunflower – **Michael Wunsch, North Dakota State University, Carrington, ND**

2:30 pm Use of a transformation system in sunflower for Sclerotinia resistance studies – **John Finer, The Ohio State University, Wooster, OH**

2:45 pm Break & Poster Session **Cortland Room**

Sclerotinia Research Activities – Session 3 **Fireside Room**
Moderator – Luis del Rio, North Dakota State University, Fargo, ND

3:15 pm Strategies to identify functionally significant defense genes against *Sclerotinia sclerotiorum* – **Daina Simmonds, Agriculture and Agri-Food Canada, Ottawa, ONT**

3:30 pm Identifying and verifying genes for defense to *Sclerotinia* – **Steven Clough, USDA-ARS, Urbana, IL**

3:45 pm Complex genetics underlying natural variation in soybean resistance to white mold – **Dechun Wang, Michigan State University, East Lansing, MI**

4:00 pm Fine mapping of loci for resistance to Sclerotinia stem rot in the wild perennial *Glycine latifolia* – **Leslie Domier, USDA-ARS, Urbana, IL**

4:15 pm Wrap-up & Adjourn (Dinner on your own)

Friday – January 23, 2015

- 7:00 am Steering Committee Breakfast Meeting **Apple Terrace Room**
- 7:15 am Continental Breakfast **Cortland Room**
- Sclerotinia* Research Activities – Session 4** **Fireside Room**
Moderator – Berlin Nelson, North Dakota State University, Fargo, ND
- 8:15 am Identification of candidate resistance genes to *Sclerotinia sclerotiorum* in canola using next generation sequencing – **Luis del Rio, North Dakota State University, Fargo, ND & Rubella Goswami, DuPont Crop Protection, Newark, DE**
- 8:30 am Identification of quantitative trait loci associated with resistance to *Sclerotinia* stem rot in canola – **Luis del Rio, North Dakota State University, Fargo, ND**
- 8:45 am Expression profiling of the pea-*Sclerotinia sclerotiorum* interaction for genomics assisted breeding – **Martin Chilvers, Michigan State University, East Lansing, MI**
- 9:00 am Characterization and validation of two distinct mechanisms for partial resistance to *Sclerotinia sclerotiorum* in pea – **Kevin McPhee, North Dakota State University, Fargo, ND & Lyndon Porter USDA-ARS, Prosser, WA**
- 9:15 am Applications of linkage disequilibrium decay to infer outcrossing in natural populations of the homothallic fungus *Sclerotinia sclerotiorum* – **Weidong Chen, USDA-ARS, Pullman, WA**
- 9:30 am Discussion Break **Ballroom Foyer**
- 10:00 am High density genotyping of a diverse population of *Sclerotinia sclerotiorum* – **Robert Brueggeman & Berlin Nelson, North Dakota State University, Fargo, ND**
- 10:15 am Evaluation of native and non-native phytoalexins in suppressing *in vitro*, *in vivo*, and *in planta* growth of *Sclerotinia sclerotiorum* – **Michelle Pawlowski, University of Illinois & Glen Hartman, USDA-ARS, Urbana, IL**
- 10:30 am Synergistic enhancement of resistance to *Sclerotinia sclerotiorum* – **Zhonglin Mou & Jeffrey Rollins, University of Florida, Gainesville, FL**
- Sclerotinia* Initiative Research: The next steps** **Fireside Room**
Moderator – Bill Kemp, USDA-ARS, Fargo, ND
- 10:45 am **Guest Speaker**
Strategic Planning & Reporting Progress – **Rich Wilson, USDA-ARS, Office of National Programs–Retired, Raleigh, NC**

- 11:15 am Strategic Plan Discussion – Writing Team Input/Revisions
Annual Reports
- 11:30 am Agreements Update
- 11:45 am Working Lunch **Cortland Room**
- 1:00 pm Assignment of Additional Tasks & Wrap-up of Initiative Business
- 2:00 pm Adjourn (Travel Safely!)