

# Area Growers Seminars

2018



- Jan. 24<sup>th</sup> SMBSC Growers Seminar  
Holiday Inn, Willmar, MN
- Feb. 6<sup>th</sup> Grand Forks Growers Seminar  
Alerus Center
- Feb. 8<sup>th</sup> Grafton Growers Seminar  
Parish Center
- Feb. 14<sup>th</sup> Fargo Growers Seminar  
Holiday Inn Fargo, ND
- Feb. 16<sup>th</sup> Minn-Dak Growers Seminar  
Eagles Club Wahpeton, ND

March 14 -15, 2018

International Sugarbeet Institute Show  
Alerus Center, Grand Forks, ND



# 48th Annual

Sugarbeet Research  
Reporting Session



Tuesday January 9, 2018  
Fargo Holiday Inn



( \* ) Author presenting the paper

( \*\* ) Partially funded by the Sugarbeet  
Research and Education Board of  
Minnesota and North Dakota

*CEU Credits will be awarded to CCA holders*

*Sponsored by: North Dakota State University,  
University of Minnesota, and Sugarbeet Research  
and Education Board of MN & ND*

*Lunch Sponsored by Sumitomo Corporation*

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Speakers should use 12 to 13 minutes for presentations and leave 2 to 3 minutes for questions.

**Welcome and Announcements:** Mohamed Khan, Professor & Extension Sugarbeet Specialist, North Dakota State University and University of Minnesota.

Moderator: Mr. Mark Bloomquist, Research Director Southern Minnesota Beet Sugar Cooperative

#### 7:45 Coffee

8:00 **\*\*Wireworm and springtail control using granular, liquid, and seed treatment insecticides.** Allen J. Schroeder\*, Mark A. Boetel, and Jacob J. Rikhus. Department of Entomology, NDSU, Fargo.

8:15 **\*\*Experimental and conventional tools for sugarbeet root maggot control.** Jacob J. Rikhus\*, Mark A. Boetel, and Allen J. Schroeder. Department of Entomology, NDSU, Fargo.

8:30 **\*\*Postemergence insecticide timing for root maggot control and the 2018 forecast.** Mark A. Boetel\*, Allen J. Schroeder, and Jacob J. Rikhus. Department of Entomology, NDSU, Fargo.

8:45 **Ethofumesate Applied Postemergence in Sugarbeet: Repurposing a 1960s Herbicide.** Alexa Lystad\*<sup>1</sup>, Thomas J. Peters<sup>2</sup>, and Christie Sprague<sup>3</sup>, Graduate Research Assistant<sup>1</sup> and Extension Sugarbeet Agronomist and Weed Control Specialist<sup>2</sup> and Extension Weed Management Specialist<sup>3</sup>, North Dakota State University and University of Minnesota, Fargo, ND and Michigan State University, Lansing, MI.

9:00 **\*\*Delayed Cultivation to Supplement Chloroacetamide Herbicides in Sugarbeet.** Nathan H. Haugrud\*<sup>1</sup> and Thomas J Peters<sup>2</sup>, Graduate Research Assistant<sup>1</sup> and Extension Sugarbeet Agronomist and Weed Control Specialist<sup>2</sup>, North Dakota State University and University of Minnesota, Fargo, ND.

9:15 **\*\*Terminating Fall-Seed Cover Crops.** Thomas J. Peters\*<sup>1</sup> and Andrew B. Lueck<sup>2</sup>, and David Mettler<sup>3</sup>, Cody Groen<sup>4</sup>, and Mark Bloomquist<sup>5</sup>, Ext Sugarbeet Agronomist & Weed Control Specialist<sup>1</sup>, Research Technician<sup>2</sup>, Research Agronomist<sup>3</sup>, Production Agronomist<sup>4</sup>, Research Director<sup>5</sup>, North Dakota State University and the University of Minnesota, Fargo, ND and Southern Minnesota Beet Sugar Cooperative, Renville, MN.

9:30 **\*\*Effect of methyl jasmonate on sugarbeet yield, sucrose content, and storage properties.** K. Fugate\*<sup>1</sup>, L. Campbell<sup>1</sup>, M. Metzger<sup>2</sup>, J. Eide<sup>1</sup>, A. Lafta<sup>3</sup>, and M. Khan<sup>3</sup> <sup>1</sup>USDA-ARS, Red River Valley Agricultural Research Center, Fargo, ND <sup>2</sup>, Minn-Dak Farmers Cooperative, Wahpeton, ND <sup>3</sup>, North Dakota State Univ., Dept. of Plant Pathology.

9:45 **\*\*Update on the Oliver Kelly Farm Revitalization Project.** Karen Humphrey and Bob Quist, Oliver Kelly Farm, Elk River, MN.

#### 10:00 BREAK.

Moderator: Mr. Mike Metzger, Research Agronomist, Minn-Dak Farmers Cooperative

10:30 **\*\*Sugarbeet Response to Fertilizer Nitrogen-Research Review of Last Four Decades.** Amitava Chatterjee, North Dakota State University.

10:45 **\*\*Topical application methodologies to induce RNAi for Rhizomania disease management.** John J. Weiland\* and Melvin D. Bolton.

11:00 **\*\*Deciphering how BNYVV overcomes Rhizomania resistance genes in sugarbeet through metabolome analysis.** William Wintermantel, USDA-ARS, Salinas, CA.

11:15 **\*\*Plant-parasitic Nematodes on Sugarbeet in North Dakota and Minnesota.** Guiping Yan\*, Dept. Plant Pathology, North Dakota State University.

11:30 **Evaluation of Rhizoctonia-infested barley and millet as a source of inoculum for field trials.** Jason R. Brantner\* and Ashok K. Chanda, University of Minnesota Northwest Research and Outreach Center, Crookston, MN and Department of Plant Pathology.

11:45 **\*\*Managing root diseases of Sugarbeet.** Ashok K. Chanda\* and Jason R. Brantner, University of Minnesota Northwest Research and Outreach Center, Crookston, MN and Department of Plant Pathology.

Dr. Dexter's Scholarship Award and Distinguished Service Award- Mr. Allen Tucker, Chair, SBREB

#### 12:00 – 1:00 Lunch

#### Lunch Sponsored by Sumitomo Corporation

Moderator: Mr. Tyler Grove, General Agronomist, American Crystal Sugar Company

1:15 **Optimizing Spray Droplet Performance for Optimum Fungicide Coverage.** Mark Gladly, Land O Lakes/Winfield.

1:30 **\*\*Does varietal differences exist in sugarbeet tissue nutrient concentrations?** Daniel Kaiser, University of Minnesota, Twin Cities.

1:45 **\*\*Fusarium interactions in sugarbeet: what makes a disease?** Kimberly Webb, USDA-ARD, Fort Collins, CO

2:00 **A novel inoculation method for Fusarium diseases on Sugarbeet.** Xiao Lai\* and Mohamed F.R. Khan. North Dakota State University and University of Minnesota

2:15 **\*\*Update on Cercospora projects.** Subi Shrestha\*, Rebecca Spanner, Nicolas Metz and Melvin D. Bolton

2:30 **\*\*Sensitivity of Cercospora beticola to foliar fungicides in 2017.** \*Gary Secor<sup>1</sup>, Viviana Rivera<sup>1</sup> and Melvin Bolton<sup>2</sup> <sup>1</sup>North Dakota State University, Fargo and <sup>2</sup>USDA-ARS.

2:45 **\*\*Detection of QoI fungicide resistant and sensitive Cercospora beticola air-borne inoculum using quantitative PCR.** Kishore Chittem\* and Mohamed Khan, <sup>2</sup>Anja Milosavljevic <sup>1</sup>North Dakota State University, <sup>2</sup>Institute for Plant Protection and Environment, Serbia.

3:00 **\*\*Managing QoI resistant Cercospora beticola in sugarbeet.** Mohamed F. R. Khan\* and Peter Hakk. North Dakota State University & University of Minnesota.