**2018-19 NCERA-184 Meeting Minutes**

Fill-in Chair: Daren Mueller – Iowa State University

Fill-in Secretary: Andrew Friskop – North Dakota State University

Attendees:

Daren Mueller – Iowa State University

Kiersten Wise – University of Kentucky

Albert Tenuta – OMAFRA

Shaukat Ali – South Dakota State University

Erick DeWolf – Kansas State University

Pierce Paul – Ohio State University

Martin Nagelkirk – Michigan State University

Gary Bergstrom – Cornell University

Ruth Dill-Macky – University of Minnesota

Andrew Friskop – North Dakota State University

Jorge David Salgado – Ohio State University

Rachel Guyer – University of Tennessee

Boyd Padgett – Louisiana State University

Tom Allen – Mississippi State University

Trey Price – Louisiana State University

Alyssa Koehler – University of Delaware

Kaitlyn Bissonnette – University of Missouri

Darcy Telenko – Purdue University

Carl Bradley – University of Kentucky

Heather Kelly – University Tennessee

Nathan Kleczewski – University of Illinois

1. Brief Introductions of individuals
2. Albert Tenuta – Update on Crop Protection Network

-Inclusive effort to provide key resources for agribusiness individuals

-Over 271,000 CPN publications printed across the US and Canada

-Website has been updated to include twitter feed

-Small grain disease management series has now started

-Now has feature stories on timely disease issues

-Provided information on the process of getting publications created and printed

-Creating slide sets to help distribute information for specialists.

-Make sure to keep updated tables and documents on university websites

-Re-emphasize the importance of having at least three authors to create a publication (creates a national presences and distributes the work load).

1. Andrew Friskop – Farmer’s Guide Update, Wheat Disease Loss Estimates, Fusarium head blight Extension Project

-Provided the progress report on the Farmer’s Guide

-Provided list of disease photos needed for guide and group suggested to send to the plant diagnostic listservs to obtain images

-wheat disease loss estimates effort was discussion

-group suggested to work on guidelines for defining trace, maximum amount of disease loss, consistency in disease losses in a region, etc.

-group agreed to give their best estimates this year, Andrew will double check values, and then Andrew will host a conference call next year to discuss guidelines for wheat losses

-a suggestion was made to speak to the others that lead disease loss efforts in corn and soybean

1. State Reports

Kentucky

-300,000 acres harvested

-no big diseases issues in the state

-FHB not a widespread issue

-FHB rye trial – Caramba only labeled

-High FHB index, but low DON levels in rye

Indiana

-Leaf blotch

-300,000 acres

-loose smut, septoria leaf spot, BYDV

Missouri

-drought year

-no big disease issues

-520,000 acres harvested

-SRWW

Delaware and Maryland

-FHB issues and grain quality issues

-FHB was the #1 disease

-wet soils going into this spring

Louisiana

-bumper wheat crop, but very low wheat acreage

-no FHB issues in 2018

-tough planting conditions in 2018-19

-10,000 acres harvested this year

Mississippi

-35,000 acres

-wheat being used as a cover crop

-very low disease issue

-Bacterial leaf streak presented some issues

Tennessee

-drier year

-wetter 2018 fall

-disease pressure was low

-some fungal leaf spots, a little bit of rust

North Dakota

-Bacterial leaf streak was the #1 foliar disease

-FHB greatest in southeast ND

-Ergot problems in south central portion of the state

-barley acreage dropped with little disease issues

Minnesota

-wheat acreage increased

-barley acreage dropped and oat acreage increases with quality variable for both crops

-low levels of tan spot, no rust

-FHB issues in southern MN

-Bacterial leaf streak #1 disease (could be driven more by temperature)

-snowfall could cause spring planting problems

New York

-visible FHB in plots, but very little FHB in winter wheat or winter barley

-abandoned corn fields could present increases in FHB risk

-isolated Alternaria leaf spot symptoms in an isolated area (looks like barley scald)

-Alternaria appears to be a leaf complex

-winter barley looked great and spring barley dealt with problems

-FHB worst disease in barley, spot blotch for spring varieties and scald in winter varieties

-crown rust issues in ‘resistant’ oat varieties

Michigan

-550,000 acres of wheat

-barley acreage could increase (small right now)

-had good results in FHB efficacy trials

-more work on barley (both spring and winter) in foliar fungicide work

Ohio

-wheat acres decreased

-good yields

-low FHB problems

-late development of leaf diseases (powdery mildew, low rust)

-planting intentions for 2018-19 were up, but wet conditions will hinder crop

-more malting barley trials

-some interesting virus reports (brome mosaic virus – more of a model virus)

Kansas

-extremely dry

-heat stress problems lead to lower yields

-low disease pressure (trace levels for a few)

-Jessica Rupp is new applied wheat pathologist

South Dakota

-disease pressure varied by region in the state

-FHB pressure high in some winter wheat acreage in the state

-some low levels of leaf rust

-bacterial leaf streak in north-central SD on winter wheat
-ergot in variety trial in the northeast farm location

Nebraska

-lowest wheat acreage for several years

-very low levels of stripe rust

-most widespread diseases was bacterial leaf streak

-late leaf rust in southwest Nebraska

-FHB small area in west central NE

-WSMV in panhandle region

-confirmed pathogen for Fusarium head blight (*Fusarium boothii*)

Ontario

-900,000 acres

-good yields

-pretty low disease

-Septoria and powdery mildew early, but hot dry conditions hampered development

-very low levels of stripe rust

-low FHB levels prompted growers not to spray for FHB

1. Andrew Friskop – Ergot

-describe the ergot issues in ND in 2018

-potential factors that contributed to the ergot epidemic (frequency of rainfall)

-research direction on varietal resistance (genetic resistance vs. physiological resistance)

1. Erick DeWolf – FHB Forecasting Update

-presented overlying goals of decision support systems

-tangible products and educational content

-discussion on ways to help better utilize and implement the model

-current model is 70-75% accurate

-functional data analysis results

-current model has relative humidity values 14 days prior to anthesis and still a big driver

-some new variables examined such as temperature stability

-model accuracy has come a long ways

-group discussion on how the FHB model worked in each state

-ideas on how to covert it from a disease risk model to a decision making tool

1. Erick DeWolf - Fungicide Efficacy Chart

-discussion revolved around the addition and removal of products

-fungicide efficacy discussed for Miravis Ace, Lucento, Alto

1. David Salgado - Fungicide Efficacy for FHB

-results from the USWBSI sponsored fungicide UFT and IM trials was presented

-efficacy of Prosaro, Caramba and Miravis Ace was similar when applied at Feekes 10.51

-results presented across all wheat market classes and broken down by market class

1. Wheat Streak Mosaic Virus – Wegulo

-indicated the risk factors with WSMV (ie: volunteer wheat, weather, planting dates)

-gave a review of field observations and increased risk

-different mite types and influence on transmission of WSMV, HPWMoV, TriMV

-presented incidence data for single, double and triple infections of TriMV, WSMV and HPWMov

-yield loss studies involving single, double and triple virus infections

-reviewed management tools and decisions

-host resistance and varieties with virus and/or mite resistance

1. Wheat Stem Rust – DeWolf

-wheat stem rust risk has changed (ie: growers more willing to spray fungicides)

-there has been an increase in stem rust susceptibility

-30-35% of acres in western Kansas are planted to susceptible stem rust varieties

-as many as seven varieties are susceptible to stem rust in Kansas

-Colorado has approximately 50% of the acres susceptible to stem rust

-stem rust epidemics emerging in Western Europe and United Kingdom

-perhaps creates a heads-up on the vulnerability of varieties for the Northern Great Plains state

1. Bacterial Leaf Streak - Ruth Dill-Macky

-have seen an increase over the past couple years

-likely #2 disease in Minnesota

-inoculum source is seed, but likely has other sources

-broad grass host range

-storm events really drove BLS distribution in a field

-presented data on the role of fungicides increasing BLS, but data suggests the fungicides have little impact on BLS

-isolates derived from wheat more pathogenic on wheat than on barley

-data suggests that pathovars (*undulosa* and *translucens*) are two separate populations

-screening efforts for BLS resistance

-residue may be contributing more inoculum than seed source

Business Meeting

-Heather Kelly – University of Tennessee was nominated and elected for chair of 2020 and accepted

-Alyssa Koehler – University of Delaware was nominated and elected for secretary in 2020

-Location will be in Pensacola in 2020

Suggested Topics for 2020

-stripe rust and IPIPE use

-oat crown rust

-barley diseases

-fungicide update on scab