



#### Fusarium Head Blight

"A Grower's Perspective"





#### Laird Larson Clark, South Dakota

- § Farmer
- S Certified Seed Producer/Dealer
- Secontinuous Student of the Cooperative Extension Service
- § Producer Representative, U.S. Wheat & Barley Scab Initiative
- § Vice Chair, South Dakota Foundation Seed Stocks
- § Past Chair, South Dakota Wheat Commission
- § Past Chair, Northern Crops Institute, Fargo ND
- § Past Chair, South Dakota Crop Improvement Association
- § Past Chair, SDSU Northeast Research Farm



DON

FHB

# Deoxynivalenol Fusarium Head Blight Vomitoxin Scab



DON

Deoxynivationol

Fusarious Head Blight

Vonitoxin



### "Wheat sells like diamonds ... ... there are discounts for everything!"

Randy Englund
Past Executive Director
SD Wheat Commission



CONTRACT	SHEET#		BUSHELS	PRICE	EXTENSION
			5,028.97	5.050	\$25,396.30
TOTAL:			5,028.97		\$25,396.30
		DAMAGE			\$653.77-
		GRAIN ASSE	SSMENT		\$101.59-
		PROTEIN			\$150.87-
		VOMITOXIN			\$502.90-
SETTLEMENT AMOUNT:					\$23,987.17









PROBLEMS SOLVED HERE





Tural residents

(2) Comments

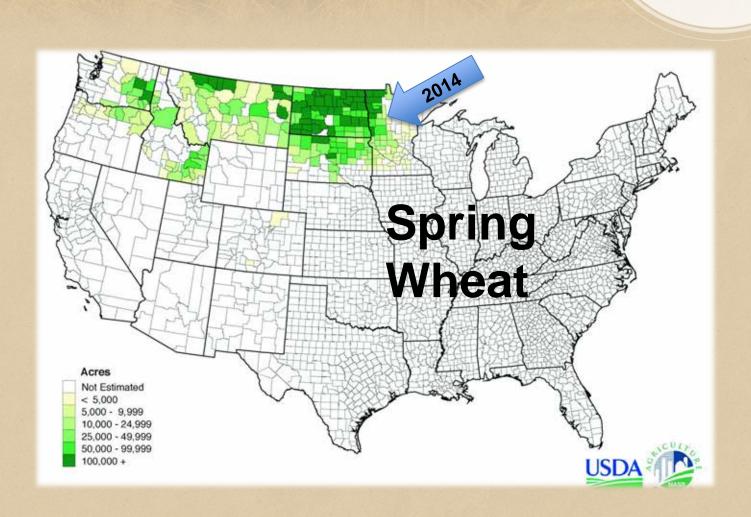
Rural residents may be getting the impression that their way of life is under assault. First, the U.S.

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Rural residents may be getting the impression that their way of life is under assault. First, the U.S. Rural residents may be getting the impression that their way of life is under assault. First, the U.S. and in two weeks county extension offices postal service wants to close small rural post offices, and in two weeks county extension offices. F Recommend 0 Tweet 0 October 06, 2011 7:30 am . Journal editorial board









#### Scab Resistance .....



.... Breeder Priority?



		DON
Plot	Name	ppm
115	SD08080	4.2
206	SD08080	1.8
345	SD08080	2.9
135	SD08200	10.3
239	SD08200	6.7
315	SD08200	7.8

#### **Varietal Differences?**





Spraying ...

... What ?

... When?





When conditions do not permit!

Does late spraying produce higher DON levels than no spraying?

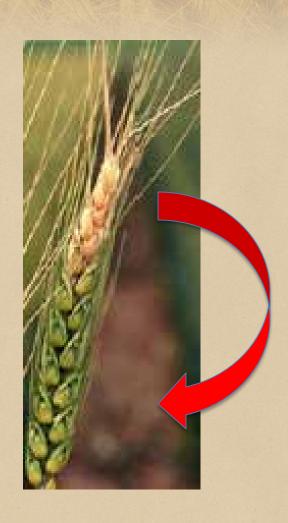


#### Impact of spraying ....



... on soil health?





Transference of Mycotoxin on plant or tillers?





## Increased Fan Speed DOES NOT EQUAL Grain Cleaning





#### Sampling ...





... one hot kernel!



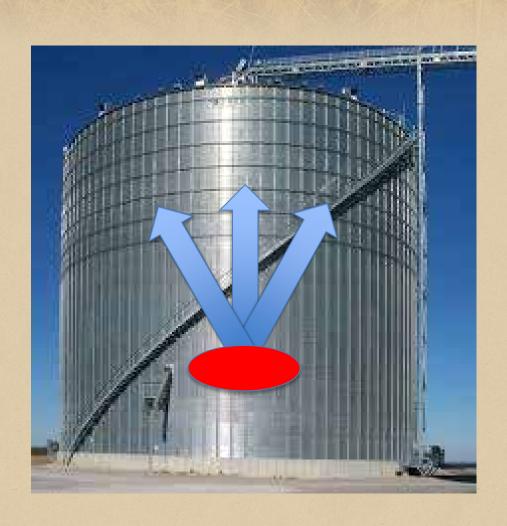


**Changing levels** 

... consolidation?

... through time?





Transference of Mycotoxin within the bin?





VS



Do the DON levels decrease?

Does the elevator scrutiny decrease?





# Quick Tests ... Qualitative or Quantitative ?



Easy access to:

ü Fast

ü Low cost









#### High levels ...





... now what ?



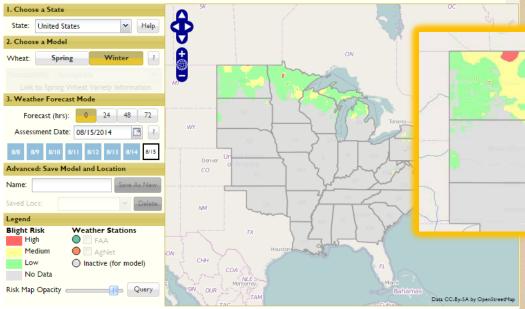
#### FUSARIUM HEAD BLIGHT Prediction Center

RISK SASSESSMENT Tool

Introduction
Model Basics
User Guide
Fusarium
Developers
Login

JS Commentary last update 2014-08-14 Erick DeWolf,

The Fusarium head blight prediction center will stop generating new risk maps on Aug 15. Maps from earlier this year will be available for testing and evaluation purposes. The system will resume service spring of 2016.











http://www.wheatscab.psu.edu/



#### Discounts for high levels ....



... Premiums for low levels?



### CODEX International Food Standards ALIMENTARIUS

#### 1 ppm ?







