Fusarium Head Blight and DON (Vomitoxin) levels in the Texas Panhandle for 2015

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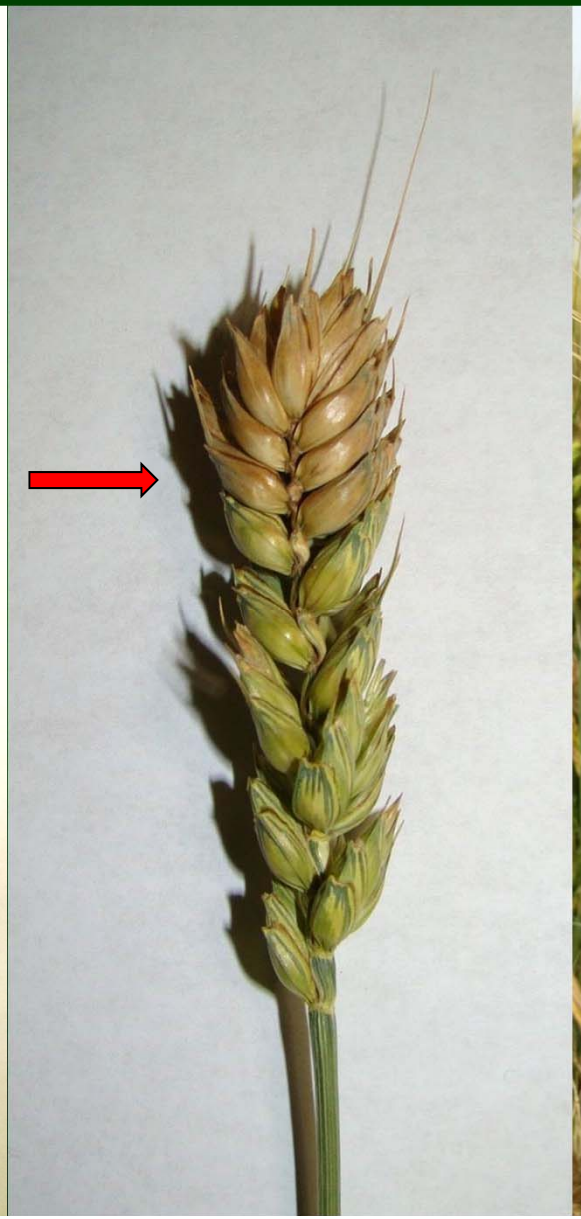
August 2015

Fusarium Head Blight



Fusarium Head Blight (Fusarium Head Scab)-FHB

- Affects wheat, barley, rye, corn, triticale, forage grasses.
- Reduction in yield, grade, quality.
- Shrunken, low weight kernels
- Fungus favored by warm weather (60-86F, optimum ~80F) during flowering, high humidity, rain (12 hrs or more), inoculum (spores) from residue or wind-blown, resistance levels in variety.
- FHB ≠ DON

DON (vomitoxin) from *Fusarium graminearum* and other spp. in wheat

- At least 90% of tricothecenes in grain.
- **1ppm on wheat products** (flour, germ)- humans
- **10 ppm on grain or by-products** for ruminating beef and feedlot cattle older than 4 months.
- **5 ppm on grain or by-products for swine** (and not exceed 20% of diet).

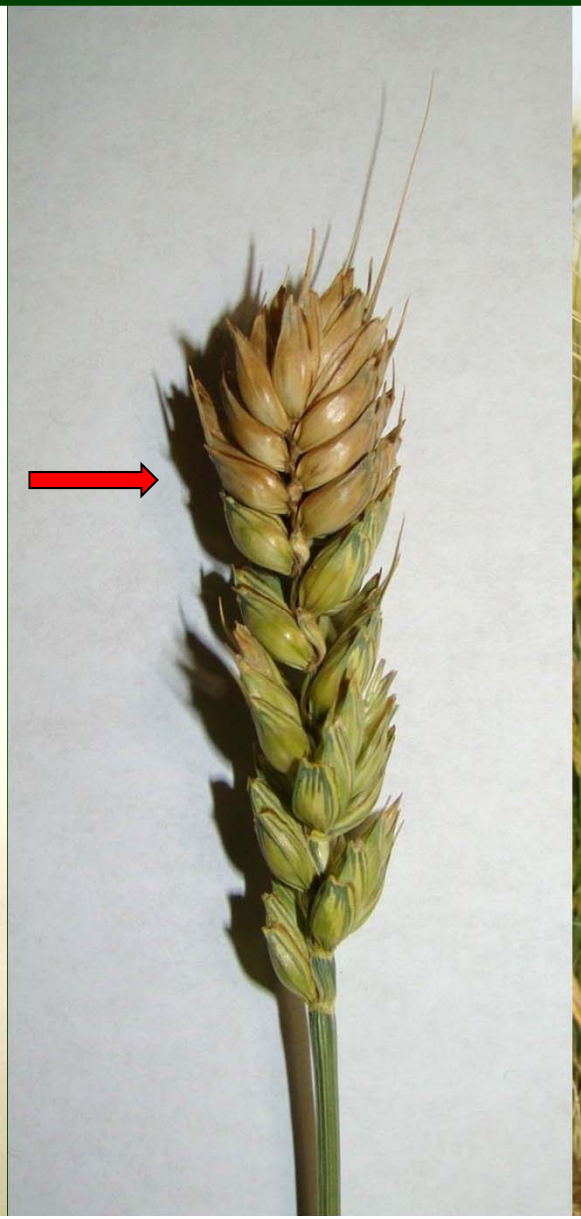
http://www.scabusa.org/pdfs/don_white-paper_6-07.pdf (Cowger et al.)

DON (vomitoxin) from *Fusarium graminearum* and other spp. in wheat

- 5ppm on grain or by-products destined for other animals (not exceed 40% of diet).
- In Kansas/Northern Great Plains, grain elevators can test for DON, and many impose discounts against wheat contaminated with more than 2 parts per million (ppm).
- To increase seed quality and decrease potential DON levels when harvesting, adjust combine air velocities to remove lightweight kernels.

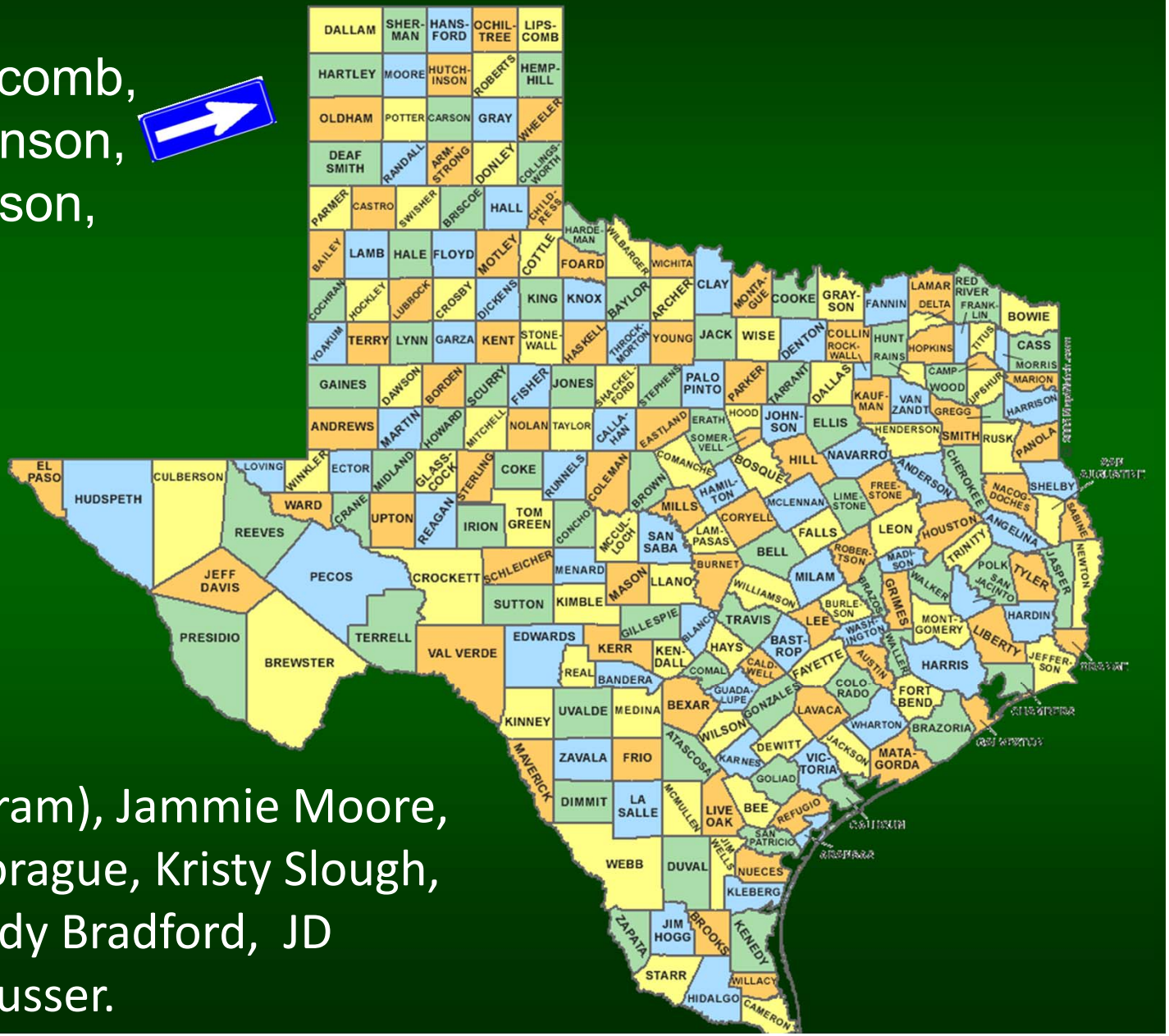
Fusarium seed scab (blight)
(*Fusarium graminearum/Giberella zeae*)

Fusarium Head Blight



33 Samples, 7 Counties (June 12-29)

Ochiltree, Lipscomb, Moore, Hutchinson, Roberts, Carson, Randall,



Jourdan Bell (Program), Jammie Moore, Scott Strawn, JR Sprague, Kristy Slough, Michael Wilkes, Jody Bradford, JD Ragland, Danny Nusser.


2015-0288


2015-0272


VICAM
VICAM
Vortex

Results

- 8 of 33 samples tested positive (>1ppm)
- 5 samples of wheat and 3 of triticale tested positive (>1ppm).
- Positives from Hutchinson, Carson, and Moore Counties.
- When there was enough non-shriveled seed for testing, values were less than 2 ppm (using quantitative testing).