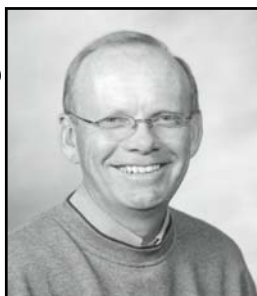


AGRONOMY NEWS

 *Grasslands for Tomorrow*

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2008 WINTER WHEAT VARIETY TRIAL RESULTS - LISBON, ND
Dr. Joel Ransom, Dr. Marcia McMullen, Dr. Hans Kandel, Scott Meyer, Chad Deplazes
Sponsors
BASF and Bayer CropScience
Ransom and Sargent County Extension Service and CIA
Ducks Unlimited

Lisbon 2008 Variety	Yield			Test Weight			Height (cm)		
	No Fung	Fung*	Avg	No Fung	Fung	Avg	No Fung	Fung	Avg
Roughrider	48.4	58.8	53.6	59.5	61.2	60.3	96.3	95.7	96.0
Jerry	62.3	68.0	65.1	60.1	60.2	60.1	97.0	95.3	96.2
Expedition	50.7	73.8	62.3	59.8	62.3	61.1	78.0	80.0	79.0
Alice	42.2	68.9	55.5	60.5	62.0	61.3	73.3	72.7	73.0
Darrell	51.8	79.8	65.8	60.6	62.4	61.5	81.0	83.0	82.0
Overland	67.0	77.5	72.3	62.0	62.2	62.1	83.3	84.3	83.8
Lyman	60.5	75.6	68.0	62.3	61.7	62.0	84.7	80.7	82.7
SD 01273	55.0	72.2	63.6	62.6	62.6	62.6	80.7	83.7	82.2
Wesley	55.0	69.2	62.1	60.0	60.1	60.1	68.7	67.3	68.0
Millennium	46.6	81.2	63.9	61.3	61.3	61.3	84.0	85.0	84.5
Yellowstone	47.8	85.0	66.4	57.3	59.6	58.5	86.7	88.7	87.7
Jagalene	53.7	77.8	65.7	60.9	63.1	62.0	78.7	77.3	78.0
NuDakota	60.9	70.8	65.9	58.4	60.5	59.5	65.0	67.7	66.3
Hawken	67.7	72.4	70.1	62.6	62.3	62.5	69.0	72.0	70.5
CDC Falcon	49.9	77.0	63.4	60.8	62.0	61.4	74.7	77.7	76.2
CDC Buteo	68.2	74.4	71.3	62.6	62.3	62.5	88.7	86.7	87.7
Radiant	44.8	72.4	58.6	57.1	60.7	58.9	84.0	84.0	84.0
Peregrine	67.9	82.2	75.1	61.8	61.6	61.7	95.0	91.7	93.3
DH99-39-121	63.9	81.8	72.9	61.3	61.2	61.2	94.7	97.0	95.8
Accipiter	73.6	86.2	79.9	60.6	62.4	61.5	83.3	82.3	82.8
Average	56.9	75.2	66.1	60.6	61.6	61.1	82.3	82.6	82.5

***Fungicide = Headline w/herbicide; Prosaro at early flower** **Prior crop: HRSW**

2008 SDSU Winter Wheat Variety Trial Results
2006-2008 South Dakota Western Locations

Variety (Hdg.)* - by 3-yr then 2008 state yield avg.	Location Yield Avg. (Bu/A at 13% moist.)										West Yield Avg.		State Yield Avg.	
	Wall		Ken- nebec	Hayes	Winner		Win- ner- IMS**	Stur- gis	Martin		(Bu/A)		(Bu/A)	
	2008	3-Yr	2008	2008	2008	3-Yr	2008	2008	2008	3-Yr	2008	3-Yr	2008	3-Yr
Overland (4)	85+	61+	91+	78	75+	57+	84+	45+	59	47+	74	55	78	60
NuDakota (W)(3)	78	62+	84	75	83+	58+	84+	38+	58	47+	71	56	77	60
Wendy (W)(-)	84+	64+	79	83+	68	52+	81+	30	60	48+	69	55	75	58
Expedition (0)	80+	61+	77	81+	70	51+	76+	40+	68+	48+	70	53	75	57
Wesley (2)	79+	61+	76	77	65	49	82+	39+	64+	52+	69	54	72	57
Arapahoe (3)	71	56	86	73	61	50+	68	28	61	49+	64	52	68	57
Millennium (4)	76	56	89	77	68	52+	71	40+	63	47+	69	52	72	56
Alice (W) (-)	77	60+	77	74	71	52+	78+	40+	63	48+	69	53	72	56
Hatcher (2)	65	56	73	71	72	49	77+	45+	71+	52+	68	52	70	56
Wahoo (3)	75	58+	82	75	58	47	58	39+	69+	50+	65	52	67	56
Darrell (5)	73	55	81	79+	67	47	73	41+	68+	49+	69	50	72	55
Harding (5)	67	52	86	71	61	49	60	34	59	44	63	48	66	53
Tandem (4)	68	55	82	82+	56	46	66	37+	62	46	65	49	65	52
Jerry (5)	62	49	76	66	56	42	69	33	55	43	60	45	62	50
Jagalene (3)	77	58+	62	70	57	42	82+	38+	54	39	63	46	67	49
Smoky Hill (4)	81+	.	84	85+	69	.	84+	41+	58	.	72	.	78	.
Hawken (3)	79+	.	78	73	79+	.	83	34	63	.	70	.	73	.
InfinityCL (3)	72	.	82	78	75+	.	70	33	69+	.	68	.	72	.
Lyman (3)	72	.	95	75	74	.	65	40	66	.	67	.	68	.
RonL (2)	71	.	79	75	73	.	81	37+	60	.	68	.	72	.
Fuller (2)	78	.	75	76	77+	.	70	38+	62	.	68	.	72	.
Settler CL (3)	75	.	74	79+	70	.	74	33	67+	.	67	.	68	.
Test avg.	74	57	81	76	69	50	74	37	63	47	68	52	71	56
High avg.	85	64	95	85	83	58	86	45	71	52	74	56	78	60
Low avg.	62	49	62	66	56	42	58	28	54	39	63	45	62	49
# LSD (0.05):	7	7	6	7	9	9	11	9	8	6				
## TPG-value:	79	58	90	79	75	50	76	36	64	47				
### C.V.:	6	10	5	6	10	10	11	14	8	9				

* Heading, the relative difference in days to heading, compared to Expedition.
If the difference between two varieties within a column equals or exceeds the LSD value, the difference is significant; if not, the difference is nonsignificant (NS) at the 0.05 level of probability.
Minimum value required for variety to qualify for the top performance group (TPG).
+ Indicates values within a column that qualify for the TPG. **IMS = Intensive Management System
A measure of experimental error, 15% or less is best for yield.

Winter Cereal Sponsors

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Syngenta Crop Protection

Natural Resources Conservation Service

*Brown, Day, Marshall, James River, Ransom
and Wild Rice, South & West McLean, Ward and
Mountrail Conservation Districts*

NDSU and SDSU Cooperative Ext. Service

Reminder

All "Agronomy News" issues can be found at Ducks Unlimited's website:

<http://www.ducks.org/agronomy>

Also, email Janell at jrath@ducks.org and let her know if you would like to receive it by email. Agronomy News will arrive 7-10 days sooner if you choose to receive it by email.

2006-2008 Winter Wheat Yield Results - South Dakota Eastern Locations

Variety (Hdg.)* - by 3-yr then 2008 state yield avg.	Location Yield Avg. (Bu/A at 13% moisture)								East Yield Avg.		State Yield Avg.	
	Brookings		Brook-ings-IMS**	South Shore	Selby	Onida	Pierre	Platte	2008	3-Yr	2008	3-Yr
	2008	3-Yr	2008	2008	2008	2008	2008	2008				
Overland (4)	79	74+	90+	65	84+	85+	57+	85+	77	.	78	60
NuDakota (W) (3)	91+	73+	95+	44	83+	79+	55+	88+	75	.	77	60
Wendy (W) (-)	83	69+	89	56	84+	81+	42	81+	73	.	75	58
Expedition (0)	80	69+	96+	60	76	81+	45	85+	73	.	75	57
Wesley (2)	77	66+	92+	57	73	80+	49	71	71	.	72	57
Arapahoe (3)	75	71+	72	53	74	73	44	67	65	.	68	57
Millennium (4)	74	69+	78	60	78	76	49	77	69	.	72	56
Alice (W) (-)	79	62	88	63	71	79+	48	69	71	.	72	56
Hatcher (2)	81	66+	87	50	75	66	48	73	68	.	70	56
Wahoo (3)	78	67+	79	53	67	69	45	66	65	.	67	56
Darrell (5)	84	67+	90+	54	76	74	49	72	71	.	72	55
Harding (5)	75	65+	73	52	71	69	52	64	65	.	66	53
Tandem (4)	70	60	75	51	70	69	36	63	62	.	65	52
Jerry (5)	68	65+	70	48	74	65	28	66	59	.	62	50
Jagalene (3)	70	55	82	43	65	80+	60+	72	67	.	67	49
Smoky Hill (4)	94+	.	97+	58	78	80+	58+	84+	78	.	78	.
Hawken (3)	88	.	89	62	73	71	37	72	70	.	73	.
InfinityCL (3)	82	.	85	55	78	71	47	71	70	.	72	.
Lyman (3)	80	.	78	63	81	73	48	70	71	.	68	.
RonL (2)	74	.	89	59	72	75	53	70	70	.	72	.
Fuller (2)	84	.	92+	49	77	79+	51	69	72	.	72	.
Settler CL (3)	75	.	87	41	61	70	37	66	62	.	68	.
Test avg. :	81	67	86	53	75	75	46	74	69	.	71	56
High avg. :	97	74	97	65	84	86	60	88	78	.	78	60
Low avg. :	68	55	70	36	61	65	25	63	59	.	62	49
# LSD (0.05):	7	65	8	-	6	9	8	9				
## TPG-value :	91	10	90	-	79	78	53	80				
### C.V. :	6	8	6	21	6	9	12	9				

The winter wheat seed increase growers for SD and ND are available at the following websites:

South Dakota
<http://plantsci.sdstate.edu/seedcert>
North Dakota
<http://ndseed.com>
 Ducks Unlimited
<http://www.ducks.org/agronomy>

<p><u>Agronomy News</u> Editors: Blake Vander Vorst Janell Rath</p> <p>Phone: 701-355-3533 E-mail: bvandervorst@ducks.org</p>

Growers and companies who have called with winter wheat seed for sale:

Pat Freeberg - 701.683.4051 ~ Jerry

Greg Richter - 701.320.3696 ~ Overland

David Kinzler - 701.320.3792 ~ Millennium

WestBred - Ron Gienger - 701.840.9894
CDC Falcon, CDC Buteo & Smokey Hill

AgriPro - David Boehm - 701.799.5085
Jagalene, Hawken & Art

Western Ag Innovations - Ken Greer -
 877.978.1777 **Peregrine & Accipiter**

Joe Breker - 701.680.0379
CDC Falcon & CDC Buteo

2008 DICKEY COUNTY, ND WINTER WHEAT TRIAL RESULTS
Cooperators: Larry and Jane Anderson, Ellendale, ND

Dickey 2008 Variety	Yield			Test Weight			Protein		
	No Fung	Fung	Avg	No Fung	Fung	Avg	No Fung	Fung	Avg
Accipiter	105.7	94.5	100.1	60.0	58.9	59.4	13.25	13.90	13.58
Alice	80.7	100.3	90.5	61.7	62.2	62.0	13.85	13.60	13.73
CDC Buteo	94.9	92.4	93.6	63.1	61.9	62.5	13.75	14.35	14.05
CDC Falcon	94.9	110.9	102.9	60.5	62.2	61.4	13.5	13.45	13.48
Darrell	96.0	102.6	99.3	61.8	59.6	60.7	13.85	13.60	13.73
DH-0039-121	79.6	90.8	85.2	61.1	61.9	61.5	15.15	14.00	14.58
Expedition	117.5	127.8	122.7	63.1	62.5	62.8	13.00	13.00	13.00
Hawken	98.2	95.3	96.8	62.8	61.8	62.3	13.40	14.85	14.13
Hitch*	105.6	78.0	91.8	60.2	59.3	59.7	13.10	13.55	13.33
Jagalene	95.8	109.1	102.5	61.0	64.3	62.6	13.60	14.35	13.98
Jerry	98.0	99.3	98.7	62.0	60.3	61.2	14.25	14.55	14.40
Millennium	89.3	102.2	95.7	62.7	61.4	62.0	13.90	13.05	13.48
Overland	89.0	103.7	96.3	62.7	62.5	62.6	13.60	13.00	13.30
Peregrine	95.1	94.8	94.9	61.1	60.3	60.7	14.05	13.00	13.53
Radiant	66.4	91.2	78.8	56.5	59.0	57.7	12.30	13.85	13.08
Ripper	80.4	89.8	85.2	59.5	61.4	60.4	13.85	13.65	13.75
Santa Fe*	78.8	71.8	75.3	61.0	61.7	61.3	15.10	14.95	15.03
Lyman	92.4	88.7	90.5	61.4	62.5	61.9	14.35	14.00	14.18
SD01273	71.8	109.9	90.9	62.8	62.9	62.9	13.00	12.50	12.75
Settler CL	104.0	105.7	104.9	62.2	61.8	62.0	12.90	13.45	13.18
Smokey Hill*	110.8	84.1	97.5	62.6	63.3	62.9	13.25	14.35	13.80
T81*	72.5	88.8	80.7	61.8	60.7	61.2	13.30	13.30	13.30
Wesley	79.2	96.2	87.7	61.3	62.1	61.7	14.35	14.05	14.20
Winterhawk*	103.9	73.4	88.6	60.3	58.9	59.6	11.05	13.25	12.15
Average	91.7	95.9	93.8	61.4	61.4	61.4	13.57	13.73	13.65

Seeded: 9-19-07; 1.2 million PLS; 1.0 to 1.5 inches in depth; no seed treatment; Great Plains 3P605NT drill; seeded by Dr. Joel Ransom and Scott Meyer

Fertility: Soil N = 193 (stream bars)
 4-14-08 - 14 gpa 28-0-0 or 42 lbs of N
 5-16-08 - 10 gpa of 12-0-0-26 + 10 gpa water

Herbicide: 9-07 Roundup burndown
 5-15-08 - Axial + Adigor + Orion

Fungicide: (applied to 2 of the 4 replications),
 5-15-08 Tilt (2 oz./A) applied with the herbicide
 6-8-08 Quilt + NIS (7 oz./A) flag leaf stage
 6-17-08 Prosaro + NIS (6.5 oz./A) early flower

The yield data contained more variation than normal and is the result of two issues. One, there is only 2 replications each of fungicide treated and untreated plots. However, the overall varietal average is the combination of the fungicide treated and untreated data or 4 replications.

Second, the southern varieties suffered winter kill and injury in the first replication of the trial because there was little standing residue and snow cover was minimal. The varieties experiencing significant stand loss and yield loss in the fungicide treated plots in the first replication are asterisked (*).

The replication with the stand loss was also one of the two fungicide treated replications, so the stand loss from winter kill resulted in lower yields in the fungicide treated plots of those varieties. This resulted in a lower yield response for the fungicide treatment across varieties. To obtain a better picture of fungicide response at the Dickey site look at the individual varieties you are familiar with for your area.

The rep with the poor standing residue provided the opportunity to assess winter hardiness of a number of the varieties. This will also be reflected in the overall average yield of a variety. Where standing residue was adequate, stands of all varieties were also adequate regardless of winter hardiness.

THANK YOU TO THESE SPONSORS

Syngenta Crop Protection
Wheat Growers of Oakes
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David Kinzler

Fullerton Agronomy Services
Dickey CIA
SD Foundation Seed
Joe Breker

Cenex of Ellendale
NDSU Extension Service
AgriPro Seed
WestBred

South Dakota Releases New Hard Red Winter Wheat

Lyman (SD0111-9)

LYMAN is a new hard red winter wheat developed by the South Dakota Ag Experiment Station and is to be released to Certified Seed Growers this fall. The variety will have a \$.30/bushel royalty assessed on all Certified Seed sold. It will also have three classes of Certified Seed, Foundation, Registered and Certified. Plant Variety Protection is being applied for. There are limited supplies of Foundation Seed available.

Variety	Maturity	Height	Protein %	Test Wt	2007 Yield	2008 Yield
Lyman	3	39	13.6	59	57	72
Overland	3	38	12.4	59	57	78
Arapahoe	3	40	12.9	57	53	68
Wesley	2	33	13.1	56	50	72

Preliminary DATA for 30 varieties and experimental lines.

2008 Winter Wheat Yield Trials Preliminary Data

Location	Lyman	Arapahoe	Overland	Wesley
Brookings	80	75	79	77
Brookings-IMS*	78	72	90+	92+
Watertown	63	53	65	57
Selby	81+	74	84+	73
Pierre	48	44	57+	49
Platte	70	67	85+	71
Kennebec	95+	86	91+	76
Winner	74	61	75+	65
Winner-IMS*	65	68	84+	82+
Martin	66+	61	59	64+
Onida	73	73	85+	80+
Wall	72	71	85+	79+
Hayes	75	73	78	77
Average	72	68	78	72

*IMS-Intensive Management System
+ Indicates the Variety is in the top yielding group

LYMAN is the result from the cross KS93U134/Arapahoe. It ranked 1st of 30 varieties and experimental lines in the SDSU CPT yield trials in 2007 and 10th in 2008. Its superior disease package contributed to its performance in 2007 (Note the lack of response to the Intensive Management System locations on LYMAN at Brookings and Winner in 2008). LYMAN has the best scab resistance of any variety tested in the North Central region. It is resistance to both leaf and stem rust and has acceptable end use quality.

LYMAN is similar to Arapahoe in both maturity (medium), height (medium) and winter hardiness, but has slightly less straw strength. It ranked #1 in protein in the 2007 CPT trials and 3rd in 2008. It also ranked 1st in test weight in both 2007 and 2008 in those same trials.

AGRONOMY NEWS

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 *Grasslands for Tomorrow*

Volume 8, Issue 3

August 2008

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Bismarck, ND 58503-9011

RETURN SERVICE REQUESTED

High Priority *Wheat Streak Mosaic Management* High Priority

Control volunteer small grains and grassy weeds 2 weeks prior to seeding winter wheat to eliminate the "green bridge" to manage the disease wheat streak mosaic. The wheat curl mite spreads wheat streak mosaic virus and volunteer grain and grassy plants are hosts to the mite. Eliminating the grassy hosts for a two week period breaks the life cycle of the mite and stops the spread of the disease. Neighboring corn fields can also be a host to the mite. Seeding later during the optimal seeding period can also assist in reducing exposure to wheat streak mosaic.

Also, control volunteer winter wheat in the 2008 winter wheat fields to prevent the spread of wheat streak mosaic and other green-bridge diseases. Following winter wheat with broadleaf crop can also reduce the risk of wheat streak mosaic.

Winter Annual Bromes: Late fall, just before freeze-up, is a great time to aid in the control Downy and Japanese brome and Foxtail Barley. These winter annual grasses are much easier to control with a fall burn down than they are in the spring of the year. When winter wheat is part of a crop rotation, it is very important to control these grasses in the other crops.

2008 WINTER WHEAT VARIETY TRIAL INFORMATION

Due to the later maturity of many of the North Dakota winter wheat variety trials, most NDSU Research Extension Centers are just compiling their variety trial yield data. Below are web site addresses that will allow you to view and download the variety trial information as it is posted. I know the Hettinger, Mandan, Carrington, Wishek, Prosper and Lisbon, ND data are posted at the time of this writing. The Ipswich, SD and Berthold and Underwood, ND variety data will be posted to the DU website when we receive the data. The NDSU variety trial data and the aforementioned trials will be included in the next issue of *Agronomy News*.

NDSU Small Grains page: <http://www.ag.ndsu.edu/smgrains/index.html>

NDSU Research Extension Center page: <http://www.ag.ndsu.edu/research/recenthp.htm>

SDSU <http://plantsci.sdstate.edu/varietytrials/>

The DU agronomy web site will also have the data: <http://ducks.org/agronomy>