

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service

State Agricultural Experiment Stations, Cooperating

2005 - 2006

**UNIFORM SOUTHERN SOFT RED WINTER WHEAT
NURSERY**

Report

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This is a joint progress report of cooperative investigations underway in the State Agricultural Experiment Stations and the Agricultural Research Service of the U.S. Department of Agriculture containing preliminary data which have not been sufficiently confirmed to justify general release; interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for the use of the cooperators and their official staff and those persons having direct and special interest in the development of agricultural research programs.

This report includes data furnished by the State Agricultural Experiment Stations. The report is not intended for publication and should not be referred to in literature citations nor quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

USDA-ARS
National Small Grains Germplasm Research Facility
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**2005-2006 UNIFORM SOUTHERN SOFT RED WINTER WHEAT NURSERY
LIST OF ENTRIES AND PEDIGREES**

Entry No.	Cultivar/ Designation	Pedigree	Contributor	1st Year in Nursery
1	AGS 2000	Pio.2555/PF84301//FL 302 (formerly GA89482E7)	Check	97-98
2	USG 3209	Saluda/4/Massey*2/3/Massey*3/Balkan//Saluda (formerly VA94-54-479)	Check	95-96
3	Pioneer Brand 26R61	Omega78/S76/4/Arthur71/3/Stadler//Redcoat/Wisc1/5/Coker747/6/2555sib (formerly XW663)	Check	97-98
4	McCormick	VA92-51-39 (IN71761A4-31-5-48//VA7154-147/McNair1813)/AL870365 (Coker747*2/Amigo) (formerly VA98W-591)	Check	00-01
5	LA95135D54-2-3	CL850643/Pio2548//C9877/3/F302/C762	Harrison	04-05
6	VA02W-555	VA94-52-60/Pio2643//USG3209	Griffey	04-05
7	VA02W-370	Roane/Pio2691	Griffey	04-05
8	GA96693-4E16	GA88151/Hickory//AGS2000	Johnson	05-06
9	GA951231-4E25	881130/Coker9134	Johnson	05-06
10	GA951231-4E26	881130/Coker9134	Johnson	05-06
11	GA961171-4E21	881130*2/Gore	Johnson	05-06
12	AR96077-10-1	Jackson/Pioneer 2643	Bacon	05-06
13	ARTX5406	TX88V4624/Karl	Bacon	05-06
14	Z00-3538	Y91-28A/XY90-1B	Moreno	05-06
15	Z00-3554	Y91-28A/XY90-1B	Moreno	05-06
16	GX02-138	KY86C-61-8/VA94-52-25/2540	Moreno	05-06
17	VA01W-205	Pio2684/VA93-54-185(WLR/3/MSY*3/Balkan//SAL)//Pocahontas	Griffey	05-06
18	VA02W-713	Ning7840/Pio2691//Roane	Griffey	05-06
19	P981233A1-10-12-1-1-4	Freedom//Goldfield/X117	Ohm	05-06
20	P992060G1-1-9	Patterson/F201R//P92201D5	Ohm	05-06
21	P992133A2-1-2	Patterson/F201R//P92201D5/3/Patton*2/P92829A1	Ohm	05-06
22	TN601	Titan/Holley//SH9313/SH9302/3/Madison/P2551/Blueboy	West	05-06
23	TN604	Foster/P2628//Diallel H//IL90-6364	West	05-06
24	NC02-1957	TX85-119/C9904//P2643	Murphy	05-06
25	NC02-4518	TX85-119/C9904//P2643	Murphy	05-06
26	MD00-72-5064	Pio2552/VA97W-375=Sisson 'S'	Costa	05-06
27	MD99-483-5158	VA97W-358/Renwood3260	Costa	05-06
28	LA98094BUB-58-5	LA90185B24-4-3(FL85363-G21-6/C9835)/LA87167D8-2(GA8787:FR81-19/FL302//C983)	Harrison	05-06
29	LA9554-D68-3-2	FR81-19/Saluda.85411-D4-P5//Mason	Harrison	05-06
30	FL91226A-X4	Star 'S'/Coker 9105//FL302/Pioneer 2550	Barnett	05-06
31	FL98174-D44	Mason/Pioneer 26R61	Barnett	05-06
32	FL98031-D15-E4	8952-B-7/CM98322-0M-2Y//Pioneer 26R61	Barnett	05-06
33	SC013787	CL850643/P2548//C9877.90239A29-1-X/3/FL85238-G76	Edge	05-06
34	SC110329	Mallard/FL85238-G76,F1/3/F1,Mallard//C9134/Sunbird sib	Edge	05-06
35	G20915	Pacer/Roazon//T408	Brown	05-06
36	G28146	Auburn/T8-1-2	Brown	05-06
37	G30623	VA91-54-219/Patterson	Brown	05-06
38	G30204	AB189-4584A/T814	Brown	05-06
39	B010973	L880085/XW502	Hancock	05-06
40	B011260	Coker9877/VA85-52-24	Hancock	05-06
41	B02-8486	Nepal133/91D-2085//Pio2580/3/Savannah	Hancock	05-06
42	B02-8483	Coker9134/3/Nepal133/91D-2085//Pio2580	Hancock	05-06
43	APCK M00-3904-9	90D-8096/89D*4763	Fogleman	05-06
44	APCK M02-2152	Clemens//Savannah/FL8643-G13-G5	Fogleman	05-06
45	APCK B02-8443	Clemens/Mason//Shiloh	Fogleman	05-06

LOCATION NOTES

Belle Mina, Alabama

Cooperators: Kathryn M. Glass
Auburn University
Planted: November 3, 2005
Harvested: June 9, 2006
Fertilizer: 80 N

Bay, Arkansas

Cooperators: June Hancock, David Hill, Richard Gray
AgriPro COKER
Planted: October 7, 2005
Harvested: June 6, 2006
Comments: Season was unusually dry and warm. Growth habit is in the juvenile stage: 1=prostrate, 3=semi-erect, 5=erect.

Stuttgart, Arkansas

Cooperators: Robert Bacon, John Kelly
University of Arkansas
Planted: October 19, 2005
Harvested: June 6, 2006
Fertilizer: 60 N on 2/16; 40 N on 3/7

Sussex Co., Delaware

Cooperators: Bob Uniatowski
University of Delaware
Planted: November 3, 2005
Harvested: July 10, 2006
Fertilizer: 120 N

Quincy, Florida

Cooperators: Ron Barnett
University of Florida
Planted: November 22, 2005
Harvested: May 17, 2006
Comments: Good test. Warm, dry spring. Very little disease. Heavy infestation of Hessian fly – David Buntin said it was the worst he had seed in 10 years. He made the ratings, which were visual estimates of the damage with 0=no damage and 9=severe stunting.

Griffin, Georgia

Cooperators: Jerry Johnson, James Buck, Dan Bland, John Youmans
University of Georgia
Planted: November 1, 2005
Harvested: May 26, 2006
Fertilizer: 20 N at planting; 80 N topdress

Plains, Georgia

Cooperators: Jerry Johnson, James Buck, Dan Bland, John Youmans
University of Georgia
Planted: November 14, 2005
Harvested: May 19, 2006
Fertilizer: 10 N fall; 75 N topdress in February

Aberdeen, Idaho

Cooperators: Harold Bockelman, Charles Erickson, Scott McNeil
USDA-ARS, National Small Grains Collection
Planted: September 13, 2005
Comments: Nursery was not harvested due to a hail storm at grainfill. The only usable notes were heading dates.

Evansville, Indiana

Cooperators: Herb Ohm
Purdue University
Planted: October 10, 2005
Harvested: June 14, 2005
Fertilizer: 36-92-100 fall; 95-0-0 spring
Comments: No winterkill. BYDV was most significant limitation to performance, BYDV infection was uniform and the BYDV score is considered a very good indicator of genetic differences for BYDV tolerance/resistance. SBM: 0-9; 0 = no symptoms in early seedling stage (March 29). BYDV: 0-9; 0 = no symptoms to 9 = severe stunting and leaf discoloration. 0-2 - little expected reduction in yield; 3-4 - moderate yield loss; 5-6 - significant yield loss; 7-9 - severe yield loss.

Ft. Branch, Indiana

Cooperators: Benjamin Moreno, Justin Cooley
Westbred LLC
Planted: October 11, 2005
Harvested: June 19, 2006

Greensburg, Indiana

Cooperators: Sam Brown, Katie Russler
Genesis Seed Research
Planted: October 4, 2005
Harvested: July 6, 2006
Fertilizer: 30 N fall; 54 N spring
Comments: This site had water problems. The extra water which ran through the plots complicated winter damage, heaving, and spring recovery. Planted into corn stubble and somewhat wet soil conditions. It was an unusually mild January and February, cold

March, rains at heading, dry and warm grain fill. Then there was bird damage to the earliest and random plots.

Lafayette, Indiana

Cooperators: Benjamin Moreno, Justin Cooley
Westbred LLC
Planted: October 5, 2005
Harvested: June 30, 2006

West Lafayette, Indiana

Cooperators: Herb Ohm
Purdue University
Comments: FHB: average % of spikelets infected at 25 d after point inoculation of the 3rd spikelet from the tip of 10 spikes. Nursery seeded into disced corn residue and misted during 2 weeks prior to 3 weeks after heading.

West Lafayette, Indiana

Cooperators: Sue Cambron
USDA-ARS, Crop Production & Pest Control Research
Comments: Hessian fly data. Data reported is Number of Plants Resistant - Number of Plants Susceptible.

Winfield, Kansas

Cooperators: Sid Perry
Westbred LLC

Henderson, Kentucky

Cooperators: J. Barton Fogleman, Jen Vonderwell, Eugene Glover
AgriPro COKER
Planted: October 25, 2005
Harvested: July 16, 2006
Comments: Extra checks added: Branson (119bu/acre), Pioneer Brand 25R47 (105bu/acre), and Cooper (104bu/acre).

Schochoh, Kentucky

Cooperators: David Van Sanford
University of Kentucky
Planted: October 11, 2005
Harvested: June 15, 2006
Fertilizer: 110 N split application; P and K according to soil test

Woodford Co., Kentucky

Cooperators: David Van Sanford
University of Kentucky
Comments: Heading dates and powdery mildew ratings from this location,
which was not harvested due to severe lodging.

Baton Rouge, Louisiana

Cooperators: Steve Harrison, Kelly Arceneaux, Glenn Schexnayder
Louisiana State University
Planted: November 22, 2005
Harvested: May 9, 2006
Fertilizer: 18-46-90 + 0-0-90
Comments: Very mild winter and early spring. No rain from mid-February
until early May. Matured about 14 days early. Heading dates for
PV/NV may be for only a portion of plot. NV=non-vernalized;
PVL=partially-vernalized, late; missing heading day indicates very
late/partial vernalization. Phenotype: 0=superb visual appearance;
9=very poor; average of 2 ratings across spring (heading to
harvest). Leaf rust is average of two ratings.

Winnsboro, Louisiana

Cooperators: Steve Harrison, Rick Mascagni, Boyd Padgett, Kelly Arceneaux,
Glenn Schexnayder, Dustin Strickland, Bubba Bell
Louisiana State University
Planted: November 9, 2005
Harvested: May 16, 2006
Fertilizer: 0-0-90
Comments: Very mild winter and early spring. Low but adequate rain from
mid-February until early May. Matured about 14 days early.
Relatively low disease pressure due to dry conditions in spring.
Heading dates for PV/NV may be for only a portion of plot.
NV=non-vernalized; PVL=partially-vernalized, late; missing
heading day indicates very late/partial vernalization. Phenotype:
0=superb visual appearance; 9=very poor; average of 2 ratings
across spring (heading to harvest).

Queenstown, Maryland

Cooperators: Jose Costa, Aaron Cooper
University of Maryland
Planted: October 20, 2005
Harvested: July 5 and July 10, 2006
Fertilizer: 78 N on 3/20
Comments: Dry spring. Heavy rains at maturity (2 weeks) caused sprouting
and low test weights. Harvested on two separate days – July 5 and
July 10 (after more rain but damage was already done).

St. Paul, Minnesota

Cooperators: Yue Jin
USDA-ARS, Cereal Disease Laboratory

Comments: Stem rust seedling and field data. “/” indicates a mixture of plants, predominant type listed first; “S” indicate susceptible, including infection types 3 or 4; “low IF” denotes low infection frequency or low pustule density; “N” denotes prominent necrosis associated with pustules; “C” denotes prominent chlorosis associated with pustules.

St. Paul, Minnesota

Cooperators: Jim Kolmer
USDA-ARS, Cereal Disease Laboratory

Comments: Leaf rust field data.

Cleveland, Mississippi

Cooperators: June Hancock, David Hill, Richard Gray
AgriPro COKER

Planted: October 27, 2005

Harvested: May 30, 2006

Newton, Mississippi

Cooperators: Bernie White
Mississippi State University

Planted: November 3, 2006

Harvested: May 19, 2006

Columbia, Missouri

Cooperators: Anne McKendry, David Tague
University of Missouri

Planted: October 25, 2005

Harvested: June 14, 2006

Fertilizer: 40 N preplant; 80 N topdress spring

Comments: Very dry growing conditions all season. Mild winter with few days in January below freezing. Soilborne family viruses less than usual at this location due to longer rotation from field, not apparent at any time on any entries. BYDV confirmed by ELISA.

Lincoln, Nebraska

Cooperators: Robert Graybosch
USDA-ARS, Wheat, Sorghum, and Forage Research

Comments: IRS data.

Kinston, North Carolina

Cooperators: Paul Murphy, Rene Navarro, Christina Cowger
North Carolina State University and USDA-ARS

Planted: November 1, 2005

Fertilizer: 130 N

Comments: Mild winter, dry, hot early spring. Irrigated three times with 0.75 inches at one week intervals during stem elongation / early heading. Mild temperatures during grain filling. Hessian fly (biotype L presumably) was an overriding factor with respect to grain yields for susceptible lines. First Hessian fly rating was taken in late December based on missing or stressed plants. A second rating was taken in early May based on broken and lodged stems. Powdery mildew was slight, but leaf rust was heavy during grain fill. Stagonospora leaf and glume blotch ratings are from two separate experiments (Kinston and Plymouth NC) inoculated with wheat straw after seedling emergence in fall.

Wooster, Ohio

Cooperators: Clay Sneller
Ohio State University, OARDC

Wooster, Ohio

Cooperators: Edward Souza
USDA-ARS, Soft Wheat Quality Laboratory

Comments: Milling and baking quality data.

Enid, Oklahoma

Cooperators: Brett Carver, Ella Vogle
Oklahoma State University

Comments: Readings taken at Enid, OK (pH = 4.6, 70 ppm Al, and Al saturation = 11%). Scale of 1 (highly tolerant) to 5 (highly susceptible), 0=no discernable symptoms, in which Jagger = 2.

Florence, South Carolina

Cooperators: Benjamin Edge
Clemson University

Planted: November 17, 2005

Harvested: June 7, 2006

Fertilizer: 210lbs 14-0-35 + 10% S; 70 N topdress

Comments: Very dry spring and harvest season. Low disease pressure.
Maturity: 1=early, 5=late.

Prosper, Texas

Cooperators: Russell Sutton
Texas A&M University

Comments: Nursery was abandoned due to bad stands.

Knoxville, Tennessee

Cooperators: Dennis West
University of Tennessee
Planted: October 25, 2005
Harvested: June 14, 2006
Fertilizer: 30-30-30 fall; 60 N spring

Blacksburg, Virginia

Cooperators: Carl Griffey
Virginia Polytechnic Institute and State University
Planted: October 15, 2005
Harvested: July 2, 2006
Fertilizer: 25-80-80 preplant; 96 N on 3/27
Comments: Belgian Lodging = Area x Intensity x 0.2. Area is rated on a scale from 1 (plot unaffected) to 10 (entire plot affected). Intensity is rated on a scale from 1 (plants standing upright) to 5 (plants lying flat on the ground). Greenhouse disease screen – seedling reaction to powdery mildew composite.

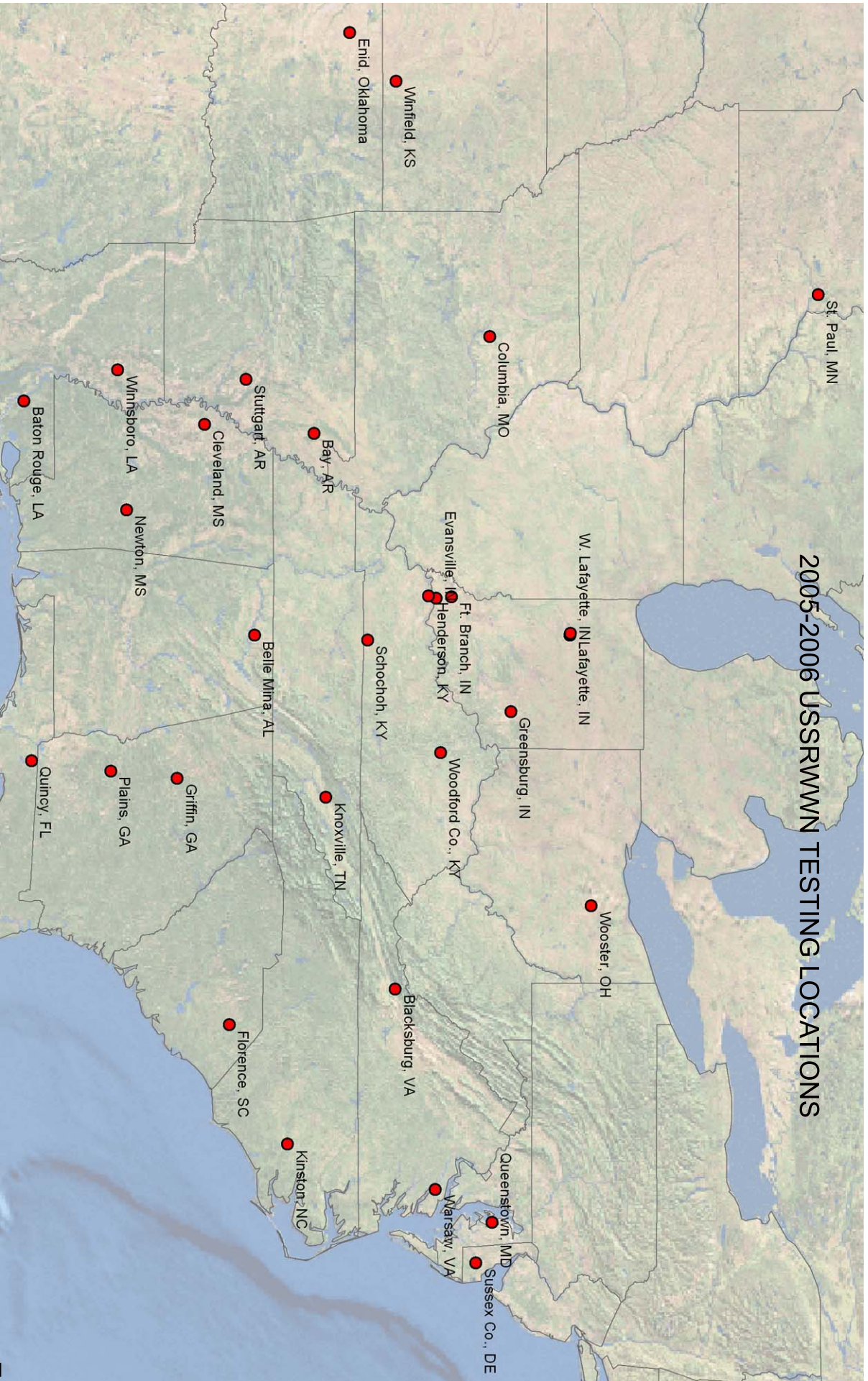
Warsaw, Virginia

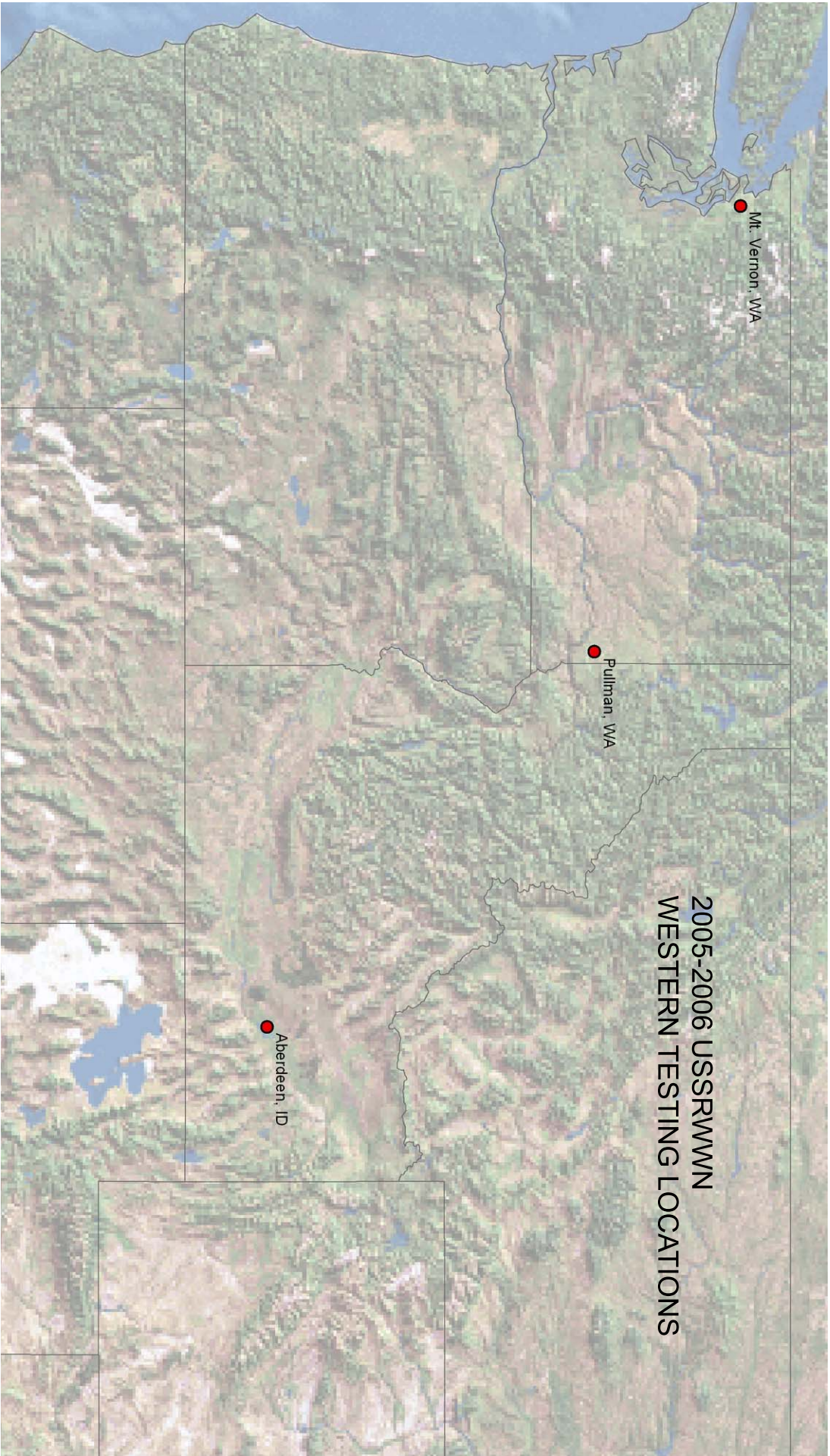
Cooperators: Carl Griffey, Bob Pitman, Mark Vaughn, Jason Kenner
Virginia Polytechnic Institute and State University
Planted: October 18, 2005
Harvested: June 19, 2006
Fertilizer: 27lbs 24-0-0 +S on 12/14; 30lbs 24-0-0 +S on 2/27; 60lbs 24-0-0 +S on 4/2
Comments: Belgian Lodging = Area x Intensity x 0.2. Area is rated on a scale from 1 (plot unaffected) to 10 (entire plot affected). Intensity is rated on a scale from 1 (plants standing upright) to 5 (plants lying flat on the ground).

**Mt. Vernon,
Pullman, Washington**

Cooperators: Xianming Chen
USDA-ARS, Wheat Genetics, Quality, Physiology, & Disease
Research
Comments: Adult stripe rust data.

2005-2006 USSRWMN TESTING LOCATIONS





YIELD (bu/acre)

	Belle Mina		Bay		Stuttgart		Sussex Co.		Quincy		Griffin		
	AL	ab	AR	a	AR	a	DE	ab	FL	a	GA	a	
	Glass	rank	Hancock	rank	Bacon	rank	Uniatowski	rank	Barnett	rank	Johnson	rank	
1	AGS 2000	71.7	5	68.2	33	111.5	1	96.6	16	77.1	3	96.8	1
2	USG 3209	66.0	20	64.9	35	101.0	8	90.8	25	66.9	19	85.0	8
3	Pioneer Brand 26R61	59.8	38	53.5	44	85.8	27	90.8	25	69.8	15	81.5	15
4	McCormick	52.3	45	83.7	2	55.0	44	98.1	13	58.8	31	84.3	11
5	LA95135D54-2-3	69.7	10	72.8	18	82.8	34	83.6	40	60.5	29	76.5	29
6	VA02W-555	72.0	4	86.9	1	93.3	20	103.3	4	63.7	23	75.5	33
7	VA02W-370	70.3	8	76.2	10	95.8	17	96.0	18	66.7	20	92.7	2
8	GA96693-4E16	71.1	7	73.4	17	85.8	27	101.4	6	87.9	1	75.4	34
9	GA951231-4E25	63.5	30	75.2	13	102.8	6	102.8	5	69.3	16	80.2	21
10	GA951231-4E26	71.6	6	64.8	37	96.1	15	107.7	1	76.8	4	84.4	10
11	GA961171-4E21	61.1	35	82.4	4	79.2	38	88.1	33	65.7	21	77.9	27
12	AR96077-10-1	67.2	17	71.9	24	106.4	2	99.2	9	72.4	10	76.5	29
13	ARTX5406	69.5	11	79.2	6	97.1	14	93.0	21	60.2	30	76.2	32
14	Z00-3538	64.7	25	72.7	19	104.3	5	90.6	27	41.6	39	79.6	24
15	Z00-3554	64.8	22	80.0	5	98.8	10	105.4	2	70.1	13	87.8	6
16	GX02-138	74.6	2	75.1	15	96.1	15	105.4	2	57.0	32	87.8	6
17	VA01W-205	66.1	19	63.5	41	97.4	11	99.7	8	55.4	34	79.8	23
18	VA02W-713	75.0	1	68.3	31	85.1	29	95.0	19	81.0	2	79.6	24
19	P981233A1-10-12-1-1-4	59.9	37	64.4	38	84.3	32	79.4	43	38.6	40	59.0	44
20	P992060G1-1-9	58.8	40	75.5	12	59.0	43	98.4	11	32.7	43	61.0	42
21	P992133A2-1-2	57.4	43	79.1	7	53.8	45	98.7	10	30.1	44	60.2	43
22	TN601	67.6	15	64.8	36	90.4	22	96.5	17	35.9	41	88.0	5
23	TN604	64.8	22	75.9	11	105.2	4	89.1	32	72.2	11	80.2	21
24	NC02-1957	60.8	36	72.4	22	85.0	30	90.4	28	56.2	33	76.5	29
25	NC02-4518	61.5	33	62.1	42	100.1	9	97.5	15	63.0	26	74.8	35
26	MD00-72-5064	69.1	13	64.3	40	88.6	24	85.5	37	50.5	36	81.4	16
27	MD99-483-5158	64.8	22	72.7	20	101.7	7	97.9	14	69.2	17	84.1	12
28	LA98094BUB-58-5	63.9	29	72.3	23	80.6	37	89.8	30	73.0	9	84.7	9
29	LA9554-D68-3-2	57.1	44	69.9	27	82.3	35	98.2	12	63.4	24	71.9	38
30	FL91226A-X4	69.3	12	68.2	32	70.0	42	88.1	33	62.8	27	77.6	28
31	FL98174-D44	61.4	34	52.8	45	81.6	36	82.5	42	76.3	6	55.5	45
32	FL98031-D15-E4	58.4	41	59.8	43	73.7	40	78.4	45	61.8	28	88.6	4
33	SC013787	69.9	9	69.4	28	76.2	39	85.3	38	71.3	12	64.9	40
34	SC110329	59.8	38	71.1	26	84.5	31	79.4	43	76.7	5	74.7	36
35	G20915	63.5	30	68.7	30	94.6	18	83.6	40	63.1	25	80.8	20
36	G28146	64.6	26	69.2	29	97.3	12	90.3	29	54.1	35	67.6	39
37	G30623	68.1	14	71.4	25	90.5	21	87.0	36	42.6	38	89.9	3
38	G30204	67.3	16	77.6	8	106.2	3	88.0	35	65.0	22	73.9	37
39	B010973	64.5	28	67.3	34	94.3	19	92.3	22	35.5	42	81.4	16
40	B011260	65.8	21	75.1	14	89.4	23	89.3	31	76.3	6	81.1	18
41	B02-8486	67.1	18	72.4	21	97.2	13	99.8	7	76.0	8	79.6	24
42	B02-8483	64.6	26	77.5	9	87.5	25	91.7	23	69.0	18	82.7	13
43	APCK M00-3904-9	72.7	3	64.4	39	86.9	26	84.5	39	30.1	44	81.6	14
44	APCK M02-2152	57.5	42	82.4	3	72.0	41	91.2	24	49.6	37	64.7	41
45	APCK B02-8443	63.5	30	73.5	16	83.7	33	93.3	20	69.9	14	81.1	18
LOCATION MEANS		65.2		71.3		88.7		92.7		61.5		78.3	
LSD (.05)		4	(.10)			18.2		13.7				20.5	
CV %		6		11.9		12.6		9.1				13	
REPS		3		2		3		3		2		2	
Harvest Plot Area (sq.ft.)		100		63.43		61.25		52.25		60		50	

YIELD (bu/acre)

	Plains		Evansville		Ft. Branch		Greensburg		Lafayette		Winfield		
	GA	ab	IN	ab	IN	ab	IN		IN		KS	b	
	Johnson	rank	Ohm	rank	Moreno	rank	Brown	rank	Moreno	rank	Perry	rank	
1	AGS 2000	90.9	31	61.3	24	74.3	29	63.8	34	93.0	34	57.2	20
2	USG 3209	102.6	14	64.4	19	70.5	39	64.4	32	96.0	27	60.8	12
3	Pioneer Brand 26R61	93.3	28	56.5	35	71.3	38	77.8	18	98.0	22	61.8	8
4	McCormick	72.0	41	69.5	12	81.0	15	79.4	17	89.9	39	61.0	10
5	LA95135D54-2-3	106.9	10	60.4	26	80.1	18	88.8	5	93.5	33	48.1	31
6	VA02W-555	98.7	22	81.2	1	73.2	32	84.1	10	97.7	24	65.0	5
7	VA02W-370	114.6	5	70.2	11	84.5	11	96.7	2	97.4	25	55.2	23
8	GA96693-4E16	114.7	4	63.8	21	72.0	36	87.5	6	100.5	18	53.7	25
9	GA951231-4E25	114.1	6	59.3	30	90.4	4	80.3	14	105.3	10	61.0	10
10	GA951231-4E26	116.4	2	60.4	28	77.9	21	71.8	28	110.0	5	59.6	15
11	GA961171-4E21	122.4	1	54.6	36	77.1	25	81.4	13	97.8	23	48.3	30
12	AR96077-10-1	100.3	18	63.7	22	76.9	26	72.9	25	107.4	7	58.5	16
13	ARTX5406	104.3	12	50.5	40	79.5	20	75.8	21	96.0	27	39.7	40
14	Z00-3538	68.1	42	65.1	18	92.3	2	101.5	1	118.7	2	57.5	19
15	Z00-3554	102.1	15	71.5	9	72.9	35	90.1	4	104.4	11	71.5	2
16	GX02-138	98.7	21	70.3	10	87.6	7	80.1	15	115.2	3	65.9	3
17	VA01W-205	114.9	3	74.9	7	75.8	27	55.2	41	99.9	19	55.3	22
18	VA02W-713	92.0	30	74.5	8	86.0	8	94.0	3	99.6	20	54.9	24
19	P981233A1-10-12-1-1-4	55.6	45	58.4	31	77.2	24	53.2	42	89.6	40	30.6	44
20	P992060G1-1-9	88.1	36	77.9	3	92.2	3	74.1	24	111.7	4	45.4	36
21	P992133A2-1-2	101.3	16	76.4	5	88.4	5	68.0	31	120.0	1	35.9	42
22	TN601	64.2	44	66.0	15	77.2	23	84.3	9	87.1	42	60.6	13
23	TN604	92.4	29	58.1	32	75.1	28	76.0	20	101.2	15	58.3	17
24	NC02-1957	79.5	39	51.8	38	59.7	45	72.1	27	92.5	35	53.5	26
25	NC02-4518	83.0	38	59.8	29	66.2	41	75.6	22	73.2	45	56.5	21
26	MD00-72-5064	99.8	19	63.7	22	73.7	31	59.9	39	105.9	9	49.4	28
27	MD99-483-5158	89.8	33	60.4	26	73.1	33	82.7	12	93.7	32	35.6	43
28	LA98094BUB-58-5	109.5	9	39.6	45	63.5	44	63.1	36	90.2	37	50.1	27
29	LA9554-D68-3-2	103.9	13	50.0	41	71.5	37	45.8	45	102.7	13	44.1	37
30	FL91226A-X4	94.1	27	45.7	44	80.2	17	59.2	40	103.6	12	24.7	45
31	FL98174-D44	88.3	35	49.8	42	66.1	42	74.2	23	87.7	41	45.5	35
32	FL98031-D15-E4	94.3	26	49.0	43	70.1	40	63.7	35	86.7	43	39.7	40
33	SC013787	97.8	23	50.9	39	64.1	43	51.4	43	78.6	44	41.7	39
34	SC110329	89.9	32	54.3	37	73.0	34	72.8	26	91.2	36	42.9	38
35	G20915	111.0	8	65.8	16	85.6	9	48.2	44	101.0	16	57.9	18
36	G28146	96.7	24	65.4	17	82.9	12	79.9	16	98.1	21	49.4	28
37	G30623	75.1	40	67.0	14	79.7	19	82.9	11	90.1	38	47.5	33
38	G30204	99.8	20	57.2	34	80.7	16	60.6	38	96.8	26	47.8	32
39	B010973	89.6	34	67.2	13	74.1	30	71.6	29	94.2	31	60.0	14
40	B011260	106.8	11	63.9	20	84.8	10	62.5	37	94.7	30	46.3	34
41	B02-8486	113.2	7	75.3	6	77.3	22	69.4	30	101.7	14	72.6	1
42	B02-8483	94.4	25	61.0	25	81.5	14	85.9	8	95.5	29	65.5	4
43	APCK M00-3904-9	67.8	43	76.7	4	81.5	13	86.7	7	107.1	8	62.5	7
44	APCK M02-2152	87.8	37	80.5	2	88.2	6	76.7	19	108.5	6	62.8	6
45	APCK B02-8443	101.2	17	57.4	33	93.1	1	64.2	33	100.9	17	61.3	9
LOCATION MEANS		95.6		62.7		77.8		73.6		98.3		53.0	
LSD (.05)		12.1		12.7		9.2		16.8				8.16	
CV %		7.8		10		9.01		17.9				7.55	
REPS		3		2		2		2		1		2	
Harvest Plot Area (sq.ft.)		50						32					

YIELD (bu/acre)

	Henderson		Schochoh		Baton Rouge		Winnsboro		Queenstown		Cleveland		
	KY	ab	KY	ab	LA	ab	LA	ab	MD	a	MS	a	
	Fogleman	rank	VanSanford	rank	Harrison	rank	Harrison	rank	Costa	rank	Hancock	rank	
1	AGS 2000	85.7	40	84.2	26	62.8	26	71.7	5	76.3	1	81.8	13
2	USG 3209	86.8	37	77.0	36	76.9	5	68.2	11	70.7	11	71.7	39
3	Pioneer Brand 26R61	81.2	44	87.2	22	61.5	28	61.5	27	64.3	25	80.9	16
4	McCormick	96.0	26	97.5	3	24.6	41	23.3	45	67.6	19	74.6	33
5	LA95135D54-2-3	101.8	14	74.3	41	66.2	19	69.8	7	69.3	14	89.3	3
6	VA02W-555	102.8	13	94.8	8	72.3	9	66.4	15	73.9	2	77.6	26
7	VA02W-370	93.9	29	87.6	21	83.7	1	72.3	4	73.1	4	73.7	34
8	GA96693-4E16	105.0	7	79.9	31	80.6	4	82.6	1	61.5	34	80.7	17
9	GA951231-4E25	97.4	24	95.7	5	75.5	7	67.0	13	61.4	35	76.0	30
10	GA951231-4E26	96.9	25	74.7	40	70.2	11	77.8	2	62.0	33	82.8	12
11	GA961171-4E21	90.7	34	83.4	28	70.4	10	63.5	22	51.3	43	68.8	43
12	AR96077-10-1	99.4	18	88.0	20	66.9	17	65.6	17	62.5	31	76.6	29
13	ARTX5406	99.2	19	95.2	6	66.6	18	68.0	12	73.3	3	83.0	11
14	Z00-3538	104.8	9	85.9	24	10.7	44	41.5	40	67.9	18	77.6	27
15	Z00-3554	98.3	21	93.3	9	58.4	32	62.2	25	71.4	10	78.8	21
16	GX02-138	106.2	4	103.8	1	23.8	43	62.5	23	68.7	16	78.8	19
17	VA01W-205	85.4	42	88.5	18	63.4	25	68.7	8	66.4	20	73.2	37
18	VA02W-713	91.1	33	88.8	17	81.6	2	64.8	19	54.3	42	77.7	25
19	P981233A1-10-12-1-1-4	99.7	16	77.3	35	29.3	38	41.4	41	45.5	45	72.9	38
20	P992060G1-1-9	98.2	22	90.6	13	31.6	37	40.6	42	65.6	23	70.2	41
21	P992133A2-1-2	102.8	12	86.0	23	33.6	36	39.2	43	71.5	9	75.7	32
22	TN601	87.5	36	71.4	44	24.5	42	51.7	37	63.5	29	77.4	28
23	TN604	92.8	30	88.4	19	61.2	29	60.3	29	63.6	28	78.1	23
24	NC02-1957	94.7	28	76.9	37	64.5	22	60.1	30	56.0	39	73.5	36
25	NC02-4518	99.6	17	84.8	25	64.4	24	70.4	6	62.1	32	81.6	14
26	MD00-72-5064	105.4	5	94.9	7	40.8	33	53.2	36	66.0	21	85.0	9
27	MD99-483-5158	86.4	38	92.0	12	65.4	21	61.6	26	63.9	27	84.8	10
28	LA98094BUB-58-5	78.3	45	76.0	38	72.7	8	63.6	21	72.3	6	68.8	44
29	LA9554-D68-3-2	86.1	39	70.1	45	60.9	30	59.0	32	59.5	37	87.5	6
30	FL91226A-X4	82.4	43	78.4	34	61.7	27	58.0	33	54.8	40	78.8	20
31	FL98174-D44	88.5	35	72.5	43	69.8	12	59.3	31	49.7	44	69.7	42
32	FL98031-D15-E4	97.5	23	79.5	32	59.3	31	54.9	35	59.2	38	73.6	35
33	SC013787	98.8	20	75.6	39	69.5	13	68.6	9	73.0	5	78.5	22
34	SC110329	104.3	10	89.6	15	67.5	16	65.9	16	62.6	30	89.1	4
35	G20915	104.8	8	90.2	14	64.5	22	56.5	34	70.4	12	67.8	45
36	G28146	104.1	11	93.2	10	27.3	39	42.5	39	71.9	8	81.3	15
37	G30623	106.4	3	83.2	29	36.1	34	44.9	38	64.1	26	71.2	40
38	G30204	92.0	31	84.0	27	75.8	6	64.1	20	72.1	7	76.0	31
39	B010973	85.5	41	73.7	42	35.1	35	61.5	27	60.1	36	79.1	18
40	B011260	110.9	2	92.8	11	68.2	15	68.6	9	64.5	24	85.2	7
41	B02-8486	101.8	15	89.4	16	81.6	2	74.5	3	69.6	13	77.8	24
42	B02-8483	95.4	27	79.5	32	66.2	19	66.5	14	54.8	41	90.4	2
43	APCK M00-3904-9	91.7	32	96.4	4			62.4	24	69.2	15	93.3	1
44	APCK M02-2152	105.3	6	99.0	2	26.3	40	34.7	44	65.8	22	85.2	8
45	APCK B02-8443	111.4	1	83.2	29	69.1	14	65.1	18	68.4	17	87.8	5
LOCATION MEANS		96.3		85.5		57.8		60.1		64.8		78.8	
LSD (.05)		14.2		10.1						13.6			
CV %		8.7		7		10		10		10.4		13.7	
REPS		2		2		2		2		2		2	
Harvest Plot Area (sq.ft.)		45.6		40		70		70		36		60.2	

YIELD (bu/acre)

	Newton		Columbia		Kinston		Wooster		Florence		Knoxville		
	MS	a	MO	ab	NC	ab	OH	b	SC	a	TN	ab	
	White	rank	McKendry	rank	Murphy	rank	Sneller	rank	Edge	rank	West	rank	
1	AGS 2000	87.7	18	79.7	31	69.5	6	65.9	22	91.7	1	81.1	16
2	USG 3209	89.9	10	78.7	34	55.4	24	61.3	33	70.9	20	79.9	20
3	Pioneer Brand 26R61	89.1	12	82.5	18	66.6	9	59.3	38	66.4	26	68.4	40
4	McCormick	74.7	35	80.0	30	50.9	31	61.1	35	76.9	8	77.1	27
5	LA95135D54-2-3	82.9	23	82.1	19	52.3	27	65.1	25	71.3	19	81.1	16
6	VA02W-555	93.9	4	85.9	6	50.3	33	78.2	4	30.5	45	96.7	3
7	VA02W-370	73.5	37	85.6	9	69.0	7	65.3	24	68.7	23	81.8	15
8	GA96693-4E16	90.4	7	81.6	22	58.1	19	60.7	37	88.3	3	79.7	21
9	GA951231-4E25	80.4	26	81.4	24	89.9	1	63.5	31	66.8	25	82.8	11
10	GA951231-4E26	90.0	9	80.8	27	83.6	2	73.3	9	73.2	14	85.4	9
11	GA961171-4E21	59.3	45	71.2	43	70.0	5	48.8	45	48.9	43	62.2	42
12	AR96077-10-1	88.4	15	79.2	33	51.3	30	67.0	21	78.5	6	79.6	22
13	ARTX5406	90.6	6	84.9	16	40.3	44	62.5	32	71.5	18	69.1	38
14	Z00-3538	73.6	36	86.5	5	78.5	3	80.0	2	52.9	41	79.2	24
15	Z00-3554	95.7	1	88.7	2	75.8	4	81.5	1	73.1	15	82.6	12
16	GX02-138	79.0	27	87.0	4	65.5	11	77.7	5	89.1	2	81.9	14
17	VA01W-205	88.6	14	85.9	6	68.1	8	70.8	14	65.8	27	76.4	30
18	VA02W-713	76.6	32	85.1	14	61.5	16	64.8	26	81.5	5	78.8	26
19	P981233A1-10-12-1-1-4	65.9	43	78.3	36	50.5	32	58.0	42	41.2	44	69.5	37
20	P992060G1-1-9	75.0	34	78.1	37	41.9	42	76.6	7	51.7	42	79.5	23
21	P992133A2-1-2	62.8	44	85.0	15	40.7	43	73.0	10	53.5	39	87.3	6
22	TN601	78.3	28	79.6	32	50.1	34	64.8	27	76.3	9	86.6	7
23	TN604	88.1	17	85.8	8	58.6	18	74.4	8	75.5	10	82.5	13
24	NC02-1957	87.6	19	81.9	21	55.6	23	67.4	20	53.1	40	84.8	10
25	NC02-4518	91.8	5	77.4	39	64.4	12	68.8	16	65.0	29	80.9	18
26	MD00-72-5064	77.0	31	85.3	11	66.4	10	68.4	17	68.0	24	90.8	4
27	MD99-483-5158	90.4	8	85.3	11	51.6	28	58.6	39	58.3	36	85.6	8
28	LA98094BUB-58-5	76.0	33	78.5	35	57.0	20	58.2	40	73.5	13	70.0	35
29	LA9554-D68-3-2	89.5	11	71.4	42	46.3	39	61.1	35	70.6	21	76.1	31
30	FL91226A-X4	83.2	22	73.0	40	46.3	38	51.6	44	74.4	12	61.7	44
31	FL98174-D44	77.4	30	69.2	44	52.8	26	53.7	43	59.8	34	63.6	41
32	FL98031-D15-E4	72.8	39	81.2	25	62.9	13	58.1	41	56.6	37	70.4	34
33	SC013787	68.6	42	69.2	44	45.5	40	61.2	34	78.2	7	68.6	39
34	SC110329	82.9	24	82.9	17	50.0	35	64.7	28	71.8	17	76.6	29
35	G20915	85.4	20	88.0	3	51.4	29	77.1	6	69.2	22	76.8	28
36	G28146	69.5	41	77.6	38	62.5	14	67.9	19	64.2	30	78.9	25
37	G30623	70.9	40	81.2	25	55.7	22	72.4	11	74.6	11	73.6	32
38	G30204	85.2	21	73.0	40	61.6	15	71.0	13	62.5	31	61.8	43
39	B010973	80.4	25	80.7	28	36.8	45	63.7	30	65.7	28	46.5	45
40	B011260	88.1	16	80.1	29	48.5	36	71.1	12	54.0	38	99.2	2
41	B02-8486	73.5	37	81.5	23	54.4	25	64.5	29	84.2	4	104.5	1
42	B02-8483	95.6	2	82.1	19	60.0	17	68.0	18	61.1	33	73.3	33
43	APCK M00-3904-9	78.3	29	91.7	1	45.0	41	65.5	23	72.7	10	80.8	19
44	APCK M02-2152	88.8	13	85.2	13	47.3	37	70.8	14	62.2	32	90.1	5
45	APCK B02-8443	95.0	3	85.5	10	56.5	21	78.7	3	59.4	35	69.7	36
LOCATION MEANS		81.8		81.2		57.3		66.6		67.2		78.1	
LSD (.05)				7.2		9.7		7.1		3.1		11.9	
CV %				5.4		8.4		5.4		10.96		9.3	
REPS		4		3		2		3		3		3	
Harvest Plot Area (sq.ft.)				52		55		50		35		39	

YIELD (bu/acre)

		Blacksburg		Warsaw	
		VA	a	VA	ab
		Griffey	rank	Griffey	rank
1	AGS 2000	116.1	6	107.5	13
2	USG 3209	111.9	13	112.6	4
3	Pioneer Brand 26R61	108.5	17	99.0	36
4	McCormick	100.1	31	98.7	37
5	LA95135D54-2-3	103.1	27	109.3	8
6	VA02W-555	117.7	5	105.1	19
7	VA02W-370	105.2	24	103.3	28
8	GA96693-4E16	118.4	3	117.2	1
9	GA951231-4E25	106.3	23	109.7	7
10	GA951231-4E26	110.1	14	112.7	3
11	GA961171-4E21	90.7	43	97.8	39
12	AR96077-10-1	102.1	29	109.1	9
13	ARTX5406	106.7	21	99.4	35
14	Z00-3538	114.2	9	111.0	6
15	Z00-3554	119.9	2	106.5	16
16	GX02-138	115.8	7	115.8	2
17	VA01W-205	122.3	1	112.3	5
18	VA02W-713	118.3	4	109.0	10
19	P981233A1-10-12-1-1-4	98.5	33	91.2	44
20	P992060G1-1-9	114.4	8	103.0	30
21	P992133A2-1-2	113.5	11	104.9	21
22	TN601	113.4	12	103.8	27
23	TN604	107.2	19	100.2	33
24	NC02-1957	108.8	16	100.1	34
25	NC02-4518	107.0	20	98.4	38
26	MD00-72-5064	103.5	26	104.8	23
27	MD99-483-5158	98.9	32	105.0	20
28	LA98094BUB-58-5	96.0	37	104.8	22
29	LA9554-D68-3-2	95.6	38	102.2	32
30	FL91226A-X4	94.3	41	108.0	12
31	FL98174-D44	85.0	45	88.9	45
32	FL98031-D15-E4	92.8	42	97.3	40
33	SC013787	109.6	15	94.4	42
34	SC110329	94.4	40	93.8	43
35	G20915	108.3	18	108.4	11
36	G28146	97.9	35	104.0	25
37	G30623	106.7	21	105.6	18
38	G30204	101.3	30	103.8	26
39	B010973	94.8	39	96.1	41
40	B011260	98.2	34	103.0	31
41	B02-8486	96.3	36	103.0	29
42	B02-8483	88.5	44	104.1	24
43	APCK M00-3904-9	113.6	10	107.4	14
44	APCK M02-2152	102.9	28	107.3	15
45	APCK B02-8443	104.4	25	105.8	17
LOCATION MEANS		105.2		104.1	
LSD (.05)				8.1	
CV %				4.8	
REPS		1			
Harvest Plot Area (sq.ft.)					

YIELD (bu/acre)

	ENTRY MEANS ALL LOCATIONS		ENTRY MEANS IN-REGION		ENTRY MEANS CV <10%		
		rank	[a]	rank	[b]	rank	
1	AGS 2000	81.7	9	83.8	6	79.8	17
2	USG 3209	78.7	17	80.1	15	79.2	19
3	Pioneer Brand 26R61	76.0	28	76.3	27	75.3	31
4	McCormick	72.6	39	72.6	40	70.9	42
5	LA95135D54-2-3	78.5	20	79.4	19	79.8	16
6	VA02W-555	82.3	8	82.5	9	84.8	6
7	VA02W-370	82.8	7	83.6	7	85.6	4
8	GA96693-4E16	83.5	2	85.0	1	85.2	5
9	GA951231-4E25	83.0	6	84.0	5	86.9	1
10	GA951231-4E26	83.5	3	84.4	3	85.9	3
11	GA961171-4E21	73.6	34	74.4	35	77.9	23
12	AR96077-10-1	80.3	11	81.0	13	80.5	14
13	ARTX5406	78.1	21	79.9	17	78.4	21
14	Z00-3538	77.7	22	75.6	30	75.3	32
15	Z00-3554	84.8	1	84.5	2	83.3	9
16	GX02-138	83.4	4	83.2	8	83.3	7
17	VA01W-205	79.8	13	81.5	12	83.1	11
18	VA02W-713	81.5	10	82.1	10	83.3	8
19	P981233A1-10-12-1-1-4	64.2	45	65.4	45	66.7	45
20	P992060G1-1-9	72.8	38	72.0	42	75.3	33
21	P992133A2-1-2	73.0	36	72.8	39	77.0	27
22	TN601	73.5	35	73.4	37	71.3	41
23	TN604	79.4	15	79.8	18	77.6	24
24	NC02-1957	73.7	33	74.1	36	73.9	36
25	NC02-4518	76.5	27	78.0	25	77.5	26
26	MD00-72-5064	77.0	25	78.1	24	79.5	18
27	MD99-483-5158	77.4	23	79.2	20	78.4	22
28	LA98094BUB-58-5	74.1	32	75.7	29	74.4	34
29	LA9554-D68-3-2	72.9	37	74.7	34	73.3	39
30	FL91226A-X4	71.2	42	73.2	38	72.8	40
31	FL98174-D44	68.5	44	69.1	44	70.2	43
32	FL98031-D15-E4	70.8	43	72.4	41	73.3	38
33	SC013787	72.3	40	74.9	32	73.7	37
34	SC110329	75.6	29	77.0	26	75.9	30
35	G20915	78.6	18	79.9	16	80.8	13
36	G28146	75.3	30	75.6	31	76.2	29
37	G30623	74.6	31	74.8	33	74.1	35
38	G30204	77.1	24	78.6	21	77.6	25
39	B010973	71.2	41	71.0	43	69.5	44
40	B011260	79.5	14	81.5	11	83.2	10
41	B02-8486	83.0	5	84.1	4	86.4	2
42	B02-8483	78.6	19	78.5	22	78.5	20
43	APCK M00-3904-9	78.8	16	78.5	23	79.9	15
44	APCK M02-2152	76.6	26	76.1	28	77.0	28
45	APCK B02-8443	80.1	12	80.8	14	81.1	12
LOCATION MEANS		77.1		77.8		78.1	
LSD (.05)							
CV %							
REPS							
Harvest Plot Area (sq.ft.)							

TEST WEIGHT (lbs/bu)

	Belle Mina AL	Bay AR	Stuttgart AR	Sussex Co. DE	Quincy FL	Griffin GA	
	Glass	Hancock	Bacon	Uniatowski	Barnett	Johnson	
1	AGS 2000	57.1	53.6	63.5	59.3	57.6	61.1
2	USG 3209	55.8	56.0	62.0	60.3	57.6	60.9
3	Pioneer Brand 26R61	57.3	56.3	62.2	62.0	59.5	62.4
4	McCormick	54.0	59.8	53.6	61.8	58.6	62.8
5	LA95135D54-2-3	54.9	57.3	56.6	59.0	57.3	60.3
6	VA02W-555	55.1	59.5	56.2	60.1	57.0	59.9
7	VA02W-370	57.3	58.5	62.0	61.8	57.9	62.3
8	GA96693-4E16	56.3	58.4	56.0	60.9	57.6	60.8
9	GA951231-4E25	55.5	59.6	60.0	61.1	57.3	61.1
10	GA951231-4E26	55.7	58.9	60.5	60.5	56.6	61.2
11	GA961171-4E21	55.5	57.9	58.4	60.6	57.3	59.9
12	AR96077-10-1	53.0	58.0	61.7	59.6	57.3	60.4
13	ARTX5406	56.6	59.1	62.2	62.4	59.8	61.4
14	Z00-3538	55.8	54.1	61.3	57.6	49.9	55.7
15	Z00-3554	53.7	56.4	56.1	59.2	56.6	58.5
16	GX02-138	53.0	58.7	53.8	57.0	53.8	58.6
17	VA01W-205	56.5	60.0	57.6	62.7	57.3	61.6
18	VA02W-713	57.7	56.1	58.2	59.8	57.9	62.3
19	P981233A1-10-12-1-1-4	53.8	56.4	56.2	58.5	54.1	58.8
20	P992060G1-1-9	50.7	53.0	50.7	57.4	52.5	57.7
21	P992133A2-1-2	50.8	58.7	50.7	57.2	51.8	57.2
22	TN601	56.9	56.6	57.8	61.3	51.0	61.7
23	TN604	55.0	54.5	61.1	57.6	55.7	59.1
24	NC02-1957	54.7	57.4	61.0	59.9	56.3	60.9
25	NC02-4518	53.2	56.7	62.1	59.8	55.4	59.9
26	MD00-72-5064	57.2	56.3	61.6	61.3	58.6	64.9
27	MD99-483-5158	54.1	59.0	60.1	61.4	56.3	61.3
28	LA98094BUB-58-5	57.1	55.4	60.8	60.1	57.0	61.3
29	LA9554-D68-3-2	54.0	57.0	55.9	60.8	54.4	60.1
30	FL91226A-X4	54.5	59.3	56.9	56.3	54.1	57.9
31	FL98174-D44	56.4	58.6	57.7	61.2	57.0	61.5
32	FL98031-D15-E4	57.3	58.7	58.7	60.9	57.9	61.9
33	SC013787	56.8	58.0	58.6	60.9	57.3	59.9
34	SC110329	57.8	58.7	62.0	60.8	59.2	62.0
35	G20915	57.2	56.8	63.7	60.7	58.2	61.5
36	G28146	54.9	57.3	62.2	59.6	56.3	60.2
37	G30623	55.4	60.0	59.7	59.7	53.8	60.2
38	G30204	56.6	57.2	62.0	60.5	57.3	60.6
39	B010973	56.4	57.1	58.4	59.3	58.2	61.3
40	B011260	55.6	56.7	56.2	59.5	57.0	60.7
41	B02-8486	56.9	59.3	59.1	60.6	57.0	62.2
42	B02-8483	55.0	59.2	56.7	60.4	58.0	61.8
43	APCK M00-3904-9	57.5	57.3	58.2	60.7	45.1	60.5
44	APCK M02-2152	53.4	58.0	55.2	59.6	55.4	59.2
45	APCK B02-8443	54.5	58.1	56.1	58.8	56.6	60.3
LOCATION MEANS:	55.4	57.5	58.7	60.0	56.2	60.6	

TEST WEIGHT (lbs/bu)

	Plains GA	Evansville IN	Ft. Branch IN	Greensburg IN	Lafayette IN	Henderson KY	
	Johnson	Ohm	Moreno	Brown	Moreno	Fogleman	
1	AGS 2000	57.8	59.3	59.5	55.8	58.0	60.1
2	USG 3209	57.5	58.6	58.5	57.5	58.5	58.7
3	Pioneer Brand 26R61	58.7	NA	56.6	55.5	56.6	59.3
4	McCormick	57.2	61.2	60.0	59.1	58.0	60.9
5	LA95135D54-2-3	57.3	57.8	58.9	52.3	53.2	56.8
6	VA02W-555	57.8	58.1	58.6	56.9	57.6	58.4
7	VA02W-370	59.4	61.0	61.2	57.9	59.5	61.6
8	GA96693-4E16	58.5	60.2	60.2	47.5	57.6	59.6
9	GA951231-4E25	58.2	58.0	58.2	53.4	57.1	58.1
10	GA951231-4E26	58.1	57.5	60.1	54.9	56.7	58.4
11	GA961171-4E21	58.4	58.1	59.2	53.5	57.6	57.8
12	AR96077-10-1	58.4	59.9	59.9	54.9	57.9	57.8
13	ARTX5406	58.8	60.4	61.0	54.6	58.7	60.3
14	Z00-3538	50.8	57.5	55.2	56.1	58.4	55.6
15	Z00-3554	54.8	57.5	54.7	56.6	53.6	54.6
16	GX02-138	51.4	57.6	57.1	54.5	57.2	55.4
17	VA01W-205	58.2	61.4	61.2	57.5	58.6	60.3
18	VA02W-713	58.4	61.1	61.0	58.8	60.4	61.2
19	P981233A1-10-12-1-1-4	43.4	56.9	58.3	54.4	58.4	59.3
20	P992060G1-1-9	55.2	58.4	57.8	52.8	55.1	56.9
21	P992133A2-1-2	55.0	58.1	57.6	54.0	57.0	57.6
22	TN601	49.3	59.6	58.5	56.0	55.2	58.1
23	TN604	55.9	57.6	56.2	53.4	55.5	57.8
24	NC02-1957	56.7	59.6	59.4	54.7	58.2	58.7
25	NC02-4518	55.1	58.8	58.2	52.2		57.5
26	MD00-72-5064	56.5	60.1	59.0	56.5	58.7	59.7
27	MD99-483-5158	57.3	60.2	58.0	53.3	55.4	58.8
28	LA98094BUB-58-5	58.5	57.7	58.7	55.1		59.5
29	LA9554-D68-3-2	56.4	58.6	60.0	54.3	54.6	57.1
30	FL91226A-X4	56.3	55.6	55.2	54.7		56.2
31	FL98174-D44	58.6	59.5	61.2	56.9	58.3	61.6
32	FL98031-D15-E4	59.3	60.9	59.7	57.6	57.8	60.3
33	SC013787	58.6	59.7	61.0	51.5		60.3
34	SC110329	59.3	62.6	62.2	57.0	58.5	61.9
35	G20915	59.2	60.3	59.0	57.4	59.6	60.0
36	G28146	49.2	58.0	58.4	55.1	58.8	58.0
37	G30623	50.3	59.4	60.0	57.6	58.2	57.1
38	G30204	58.9	59.8	59.4	56.5	58.7	59.7
39	B010973	55.8	59.7	59.4	57.2	59.1	59.6
40	B011260	57.1	58.3	59.3	54.4	54.1	58.5
41	B02-8486	58.5	59.9	61.5	54.9	58.9	59.8
42	B02-8483	58.0	59.4	60.5	55.4	59.0	59.2
43	APCK M00-3904-9	46.0	62.2	61.1	58.0	61.9	60.5
44	APCK M02-2152	53.8	59.6	56.3	55.5	57.9	57.9
45	APCK B02-8443	57.8	58.1	58.4	56.8	58.5	57.8
LOCATION MEANS:	56.1	59.2	59.0	55.3	57.6	58.8	

TEST WEIGHT (lbs/bu)

	Schochoh KY	Baton Rouge LA	Winnsboro LA	Queenstown MD	Cleveland MS	Newton MS	
	Van Sanford	Harrison	Harrison	Costa	Hancock	White	
1	AGS 2000	59.0	58.7	60.1	55.8	60.3	59.0
2	USG 3209	57.0	57.3	59.3	54.1	57.6	59.0
3	Pioneer Brand 26R61	60.3	59.9	61.3	54.9	57.6	61.0
4	McCormick	61.6	57.7	56.6	56.4	58.2	60.0
5	LA95135D54-2-3	57.1	58.6	59.2	52.4	58.0	57.0
6	VA02W-555	58.2	58.5	59.2	54.2	56.4	59.0
7	VA02W-370	60.3	59.0	59.6	56.9	59.8	60.0
8	GA96693-4E16	57.8	58.4	59.6	55.4	59.7	58.0
9	GA951231-4E25	58.5	56.3	57.0	54.2	60.1	59.0
10	GA951231-4E26	57.3	57.0	59.2	55.2	59.2	59.0
11	GA961171-4E21	58.5	57.0	58.6	52.9	58.5	58.0
12	AR96077-10-1	58.8	57.7	58.7	55.7	55.9	60.0
13	ARTX5406	60.3	59.6	61.4	55.9	58.4	60.0
14	Z00-3538	59.1	45.2	53.7	53.9	57.7	48.0
15	Z00-3554	57.1	57.0	57.3	54.1	58.3	55.0
16	GX02-138	57.4	47.6	55.3	52.2	55.3	55.0
17	VA01W-205	59.7	58.4	59.7	55.4	57.1	59.0
18	VA02W-713	61.5	59.1	59.5	56.7	59.0	61.0
19	P981233A1-10-12-1-1-4	57.9	51.5	55.2	52.7	56.6	56.0
20	P992060G1-1-9	56.3	53.2	51.7	53.3	57.5	57.0
21	P992133A2-1-2	56.2	53.7	51.9	53.6	55.6	56.0
22	TN601	59.0	43.5	57.3	55.6	57.5	58.0
23	TN604	57.2	55.5	56.6	52.2	59.6	56.0
24	NC02-1957	58.5	57.8	57.8	55.0	58.2	60.0
25	NC02-4518	57.5	55.9	56.2	53.2	58.7	58.0
26	MD00-72-5064	60.6	58.5	59.4	54.4	60.5	62.0
27	MD99-483-5158	59.0	57.2	58.6	55.1	56.8	60.0
28	LA98094BUB-58-5	58.5	57.7	59.0	54.9	59.2	58.0
29	LA9554-D68-3-2	57.6	56.7	57.0	55.0	57.1	58.0
30	FL91226A-X4	55.5	55.4	56.5	52.3	57.4	56.0
31	FL98174-D44	58.7	59.0	59.1	50.4	59.4	61.0
32	FL98031-D15-E4	60.2	59.2	59.0	54.7	58.8	59.0
33	SC013787	57.4	57.8	59.0	54.1	57.6	57.0
34	SC110329	61.4	59.5	60.5	55.7	59.3	60.0
35	G20915	60.8	60.4	59.9	55.2	57.8	60.0
36	G28146	59.3	53.4	55.3	54.5	57.0	57.0
37	G30623	59.5	44.7	56.9	54.5	57.6	57.0
38	G30204	59.9	58.9	59.3	55.9	57.4	59.0
39	B010973	58.4	55.6	60.0	55.8	54.7	59.0
40	B011260	58.3	57.3	58.3	54.2	59.3	59.0
41	B02-8486	59.6	58.6	59.3	55.3	59.8	59.0
42	B02-8483	58.4	58.0	59.5	54.6	58.5	58.0
43	APCK M00-3904-9	60.4		53.2	55.5	59.8	60.0
44	APCK M02-2152	59.3	54.8	53.6	53.7	57.9	58.0
45	APCK B02-8443	58.4	57.4	59.0	54.3	57.7	60.0
LOCATION MEANS:	58.7	56.2	57.9	54.5	58.1	58.3	

TEST WEIGHT (lbs/bu)

		Columbia MO	Kinston NC	Florence SC	Knoxville TN	Blacksburg VA	Warsaw VA
		McKendry	Murphy	Edge	West	Griffey	Griffey
1	AGS 2000	60.5	61.1	58.5	54.4	60.7	61.7
2	USG 3209	59.5	58.1	56.8	54.4	59.3	61.2
3	Pioneer Brand 26R61	60.7	61.9	58.6	55.7	62.0	62.0
4	McCormick	60.7	60.8	58.7	57.9	62.0	62.3
5	LA95135D54-2-3	58.8	58.9	57.1	55.0	60.1	60.5
6	VA02W-555	60.1	58.2	56.3	54.7	59.3	59.9
7	VA02W-370	61.0	61.0	58.8	58.5	60.6	62.1
8	GA96693-4E16	59.5	60.8	58.3	55.3	60.0	61.0
9	GA951231-4E25	58.9	60.9	58.1	54.3	59.8	60.5
10	GA951231-4E26	58.8	60.0	58.0	55.6	59.9	60.9
11	GA961171-4E21	58.3	60.3	58.4	56.6	59.0	61.8
12	AR96077-10-1	57.0	59.6	56.8	55.0	60.0	61.1
13	ARTX5406	61.9	58.2	58.3	55.5	60.3	61.3
14	Z00-3538	60.2	58.0	56.5	54.6	59.8	60.3
15	Z00-3554	59.0	59.6	57.4	52.9	59.0	60.1
16	GX02-138	56.8	56.9	56.1	59.5	57.7	58.8
17	VA01W-205	60.8	60.7	57.4	55.4	60.5	61.8
18	VA02W-713	62.4	61.8	58.7	57.4	60.3	62.5
19	P981233A1-10-12-1-1-4	59.2	58.4	53.9	54.9	58.1	59.0
20	P992060G1-1-9	56.9	54.9	54.7	48.6	57.1	58.3
21	P992133A2-1-2	55.6	54.2	54.2	51.3	56.3	58.3
22	TN601	60.0	59.1	59.0	57.1	61.1	61.8
23	TN604	56.2	58.7	56.6	56.1	58.7	59.1
24	NC02-1957	59.6	60.1	56.5	56.5	59.9	60.8
25	NC02-4518	55.8	59.5	56.2	52.1	58.6	58.8
26	MD00-72-5064	61.8	61.4	57.1	56.1	61.2	62.1
27	MD99-483-5158	60.5	60.6	57.1	54.3	60.5	60.6
28	LA98094BUB-58-5	60.0	60.6	57.6	58.3	60.2	61.4
29	LA9554-D68-3-2	57.9	58.9	54.7	53.4	59.1	60.0
30	FL91226A-X4	56.8	57.4	56.0	50.1	58.9	59.6
31	FL98174-D44	60.8	61.2	57.6	57.2	60.3	61.3
32	FL98031-D15-E4	61.6	61.7	57.5	59.0	60.8	61.2
33	SC013787	60.3	58.8	57.1	55.6	59.4	60.2
34	SC110329	62.0	60.8	58.5	60.0	61.3	62.2
35	G20915	61.4	60.4	58.0	55.8	60.7	61.4
36	G28146	59.3	59.8	55.1	55.3	58.9	60.1
37	G30623	58.6	59.2	56.9	53.9	59.6	60.5
38	G30204	60.0	59.1	57.3	57.6	61.3	61.2
39	B010973	59.0	59.2	57.6	53.2	60.5	60.7
40	B011260	58.4	58.5	57.5	57.0	60.1	59.6
41	B02-8486	61.0	61.0	58.0	59.1	60.0	61.1
42	B02-8483	58.8	59.8	57.3	49.9	59.8	60.9
43	APCK M00-3904-9	61.6	59.0	57.7	54.1	61.6	61.8
44	APCK M02-2152	57.5	57.3	56.4	56.1	58.2	59.2
45	APCK B02-8443	58.4	57.9	56.6	53.0	59.6	60.2
LOCATION MEANS:		59.4	59.4	57.1	55.3	59.8	60.7

TEST WEIGHT (lbs/bu)

ENTRY MEANS ALL LOCATIONS

		rank
1	AGS 2000	14
2	USG 3209	20
3	Pioneer Brand 26R61	8
4	McCormick	10
5	LA95135D54-2-3	31
6	VA02W-555	28
7	VA02W-370	2
8	GA96693-4E16	18
9	GA951231-4E25	23
10	GA951231-4E26	16
11	GA961171-4E21	26
12	AR96077-10-1	24
13	ARTX5406	4
14	Z00-3538	43
15	Z00-3554	39
16	GX02-138	42
17	VA01W-205	11
18	VA02W-713	3
19	P981233A1-10-12-1-1-4	41
20	P992060G1-1-9	45
21	P992133A2-1-2	44
22	TN601	33
23	TN604	38
24	NC02-1957	17
25	NC02-4518	36
26	MD00-72-5064	6
27	MD99-483-5158	21
28	LA98094BUB-58-5	15
29	LA9554-D68-3-2	35
30	FL91226A-X4	40
31	FL98174-D44	12
32	FL98031-D15-E4	7
33	SC013787	25
34	SC110329	1
35	G20915	5
36	G28146	32
37	G30623	34
38	G30204	13
39	B010973	22
40	B011260	29
41	B02-8486	9
42	B02-8483	19
43	APCK M00-3904-9	27
44	APCK M02-2152	37
45	APCK B02-8443	30

LOCATION MEANS: 57.9

HEADING DATE (Julian Days)

		Belle Mina	Bay	Stuttgart	Sussex Co.	Griffin	Plains
		AL	AR	AR	DE	GA	GA
		Glass	Hancock	Bacon	Uniatowski	Johnson	Johnson
1	AGS 2000	106	103.5	104	118	95	93
2	USG 3209	104	103.5	105	121	97	91
3	Pioneer Brand 26R61	107	104.5	105	121	97	92
4	McCormick	107	106.5	105	121	99	97
5	LA95135D54-2-3	105	104.0	106	121	98	96
6	VA02W-555	104	104.0	105	121	97	96
7	VA02W-370	102	102.0	105	118	96	91
8	GA96693-4E16	103	102.5	104	114	98	88
9	GA951231-4E25	103	103.0	105	117	96	91
10	GA951231-4E26	103	103.0	105	118	96	92
11	GA961171-4E21	102	101.5	105	118	96	88
12	AR96077-10-1	105	105.0	105	122	97	95
13	ARTX5406	104	104.5	104	121	96	93
14	Z00-3538	108	108.0	105	127	108	
15	Z00-3554	107	106.5	105	123	99	98
16	GX02-138	108	107.0	105	123	105	104
17	VA01W-205	104	104.5	106	121	100	98
18	VA02W-713	103	103.5	105	118	98	88
19	P981233A1-10-12-1-1-4	106	105.5	105	121	103	106
20	P992060G1-1-9	103	105.0	105	118	100	96
21	P992133A2-1-2	104	105.0	105	117	100	96
22	TN601	104	105.0	105	118	99	
23	TN604	105	105.5	105	123	99	94
24	NC02-1957	102	104.5	102	117	96	92
25	NC02-4518	103	103.5	104	117	95	91
26	MD00-72-5064	107	107.5	105	124	103	102
27	MD99-483-5158	107	106.5	105	124	96	94
28	LA98094BUB-58-5	102	103.0	107	121	96	85
29	LA9554-D68-3-2	105	104.0	105	118	97	93
30	FL91226A-X4	108	106.5	108	125	98	95
31	FL98174-D44	103	103.5	104	116	94	91
32	FL98031-D15-E4	108	107.5	106	125	100	95
33	SC013787	102	101.5	105	114	94	86
34	SC110329	102	104.0	100	117	94	89
35	G20915	106	104.5	105	118	100	94
36	G28146	108	107.5	105	123	105	
37	G30623	109	108.5	105	125	106	
38	G30204	108	107.5	105	124	103	96
39	B010973	104	105.5	105	116	98	
40	B011260	104	105.5	105	121	97	94
41	B02-8486	102	103.5	105	116	95	91
42	B02-8483	103	104.5	105	118	96	93
43	APCK M00-3904-9	107	106.0	105	121	103	
44	APCK M02-2152	106	105.0	105	121	104	97
45	APCK B02-8443	107	106.5	106	124	100	95
LOCATION MEANS:		104.9	104.9	104.9	120.1	98.6	93.7

HEADING DATE (Julian Days)

		Aberdeen	Evansville	Greensburg	Lafayette	Henderson	Woodford Co.
		ID	IN	IN	IN	KY	KY
		Bockelman	Ohm	Brown	Moreno	Fogleman	Van Sanford
1	AGS 2000	146.5	114.5	127	130	117.0	122.0
2	USG 3209	150.5	115.5	127	132	119.0	124.5
3	Pioneer Brand 26R61	146.0	115.0	130	131	118.5	125.0
4	McCormick	148.5	116.0	132	134	118.0	126.5
5	LA95135D54-2-3	147.5	116.5	127	134	119.0	125.5
6	VA02W-555	148.0	114.0	126	130	118.0	124.0
7	VA02W-370	146.5	113.5	126	129	116.0	121.0
8	GA96693-4E16	143.0	114.0	128	131	117.5	122.0
9	GA951231-4E25	148.0	114.5	126	128	115.0	121.0
10	GA951231-4E26	147.5	114.5	126	128	116.0	122.0
11	GA961171-4E21	148.0	113.5	125	128	115.0	120.5
12	AR96077-10-1	149.5	117.0	128	131	118.5	125.0
13	ARTX5406	148.5	114.0	127	129	115.5	121.0
14	Z00-3538	151.5	118.0	131	136	122.5	125.0
15	Z00-3554	149.5	117.0	132	136	121.0	126.0
16	GX02-138	152.0	117.0	130	132	120.5	125.0
17	VA01W-205	149.5	117.0	130	130	118.5	124.5
18	VA02W-713	146.0	115.0	128	129	116.5	121.5
19	P981233A1-10-12-1-1-4	149.0	114.0	127	129	115.5	124.0
20	P992060G1-1-9	148.0	113.5	127	128	116.0	121.5
21	P992133A2-1-2	148.5	114.0	126	128	116.0	121.5
22	TN601	149.0	113.5	126	128	116.5	121.0
23	TN604	152.0	115.0	132	134	119.5	126.5
24	NC02-1957	150.0	113.5	128	132	117.0	121.5
25	NC02-4518	149.0	113.5	127	132	116.0	121.5
26	MD00-72-5064	150.0	116.0	130	132	119.0	125.5
27	MD99-483-5158	147.5	115.0	127	131	117.5	122.5
28	LA98094BUB-58-5	151.0	114.0	132	140	118.5	126.5
29	LA9554-D68-3-2	147.5	113.5	125	130	116.0	121.5
30	FL91226A-X4	150.0	118.5	132	146	124.0	128.5
31	FL98174-D44	145.5	112.0	125	128	123.0	119.0
32	FL98031-D15-E4	150.0	117.5	133	141	113.5	128.0
33	SC013787	145.5	112.5	127	132	114.5	123.5
34	SC110329	148.0	112.5	126	130	115.0	121.0
35	G20915	147.0	116.0	126	131	117.5	121.0
36	G28146	148.5	117.0	128	131	119.5	126.0
37	G30623	149.5	119.0	128	136	120.0	126.5
38	G30204	148.5	118.0	128	134	122.0	125.0
39	B010973	147.5	114.5	128	129	116.0	125.5
40	B011260	150.5	114.5	128	131	118.5	125.0
41	B02-8486	148.5	113.0	126	128	115.0	119.5
42	B02-8483	147.5	114.5	126	129	116.0	120.0
43	APCK M00-3904-9	148.5	116.0	126	130	117.0	123.5
44	APCK M02-2152	151.0	116.0	127	130	118.5	123.5
45	APCK B02-8443	152.0	116.0	129	131	118.5	125.0
LOCATION MEANS:		148.6	115.1	127.9	131.5	117.7	123.5

HEADING DATE (Julian Days)

	Baton Rouge LA	Queenstown MD	Cleveland MS	Columbia MO	Kinston NC	
	Harrison	Costa	Hancock	McKendry	Murphy	
1	AGS 2000	75.5	124.0	96.0	110.3	103.5
2	USG 3209	75.0	123.5	95.0	108.7	102.5
3	Pioneer Brand 26R61	75.5	124.5	97.0	110.0	103.5
4	McCormick	88.5	124.5	103.5	111.0	106.5
5	LA95135D54-2-3	80.0	125.0	98.0	110.0	104.5
6	VA02W-555	82.0	123.5	98.5	108.0	103.5
7	VA02W-370	73.5	121.0	95.5	107.3	99.5
8	GA96693-4E16	72.0	119.0	94.0	107.0	99.0
9	GA951231-4E25	74.0	121.5	94.0	109.3	103.0
10	GA951231-4E26	75.0	122.5	94.0	108.0	103.5
11	GA961171-4E21	74.0	120.5	94.0	107.3	100.5
12	AR96077-10-1	79.5	123.5	98.5	110.7	104.5
13	ARTX5406	88.0	122.5	95.5	109.0	105.5
14	Z00-3538		NV/PVL 126.5	106.0	116.0	111.0
15	Z00-3554	87.0	PVL 125.5	103.0	112.0	106.5
16	GX02-138	96.0	PVL 123.5	105.0	114.3	109.5
17	VA01W-205	87.0	123.5	97.5	110.0	103.0
18	VA02W-713	75.0	123.0	95.5	108.7	102.0
19	P981233A1-10-12-1-1-4	97.0	PVL 121.0	102.5	109.3	106.5
20	P992060G1-1-9	88.5	122.0	100.5	108.3	103.0
21	P992133A2-1-2	88.5	PVL 122.0	101.0	108.3	104.0
22	TN601		NV/PVL 122.5	101.5	108.0	104.5
23	TN604	81.5	125.0	97.5	110.3	103.5
24	NC02-1957	79.0	120.5	93.5	108.7	101.0
25	NC02-4518	76.5	120.5	94.0	108.3	101.0
26	MD00-72-5064	83.0	PVL 126.0	102.5	112.3	107.0
27	MD99-483-5158	74.5	123.0	99.0	110.7	104.0
28	LA98094BUB-58-5	73.0	123.5	94.0	109.0	99.5
29	LA9554-D68-3-2	76.5	121.5	95.0	107.7	102.0
30	FL91226A-X4	78.0	127.0	97.5	115.3	106.5
31	FL98174-D44	71.5	118.0	93.5	106.7	97.0
32	FL98031-D15-E4	81.0	125.0	101.0	114.3	108.5
33	SC013787	72.5	118.5	94.0	105.7	98.5
34	SC110329	72.5	121.0	93.5	108.7	100.0
35	G20915	81.5	122.0	98.0	111.3	104.0
36	G28146	97.0	PVL 125.0	102.5	115.3	107.0
37	G30623		PVL 124.5	105.5	116.7	109.5
38	G30204	78.0	126.0	101.5	113.3	108.0
39	B010973	97.5	PVL 123.0	98.0	109.3	102.5
40	B011260	76.0	124.5	96.5	110.0	102.0
41	B02-8486	72.0	120.5	94.5	106.3	97.5
42	B02-8483	78.0	122.0	97.0	107.0	103.5
43	APCK M00-3904-9		NV 123.0	102.5	109.7	107.0
44	APCK M02-2152	89.5	PVL 122.0	101.5	112.0	105.5
45	APCK B02-8443	77.0	124.5	100.5	112.0	105.5
LOCATION MEANS:		80.4	122.9	98.2	110.0	103.8

HEADING DATE (Julian Days)

		Wooster	Knoxville	Blacksburg	Warsaw	ENTRY MEANS	
		OH	TN	VA	VA	ALL LOCATIONS	
		Sneller	West	Griffey	Griffey		rank
1	AGS 2000	139	116	121	108.3	112.9	15
2	USG 3209	139	116	123	109.3	113.4	17
3	Pioneer Brand 26R61	140	117	124	110.7	114.0	25
4	McCormick	139	118	124	110.7	116.0	34
5	LA95135D54-2-3	139	119	124	109.7	114.7	27
6	VA02W-555	137	115	124	109.0	113.7	22
7	VA02W-370	136	114	123	107.0	111.6	7
8	GA96693-4E16	136	116	123	107.0	111.3	6
9	GA951231-4E25	133	114	122	107.7	111.7	8
10	GA951231-4E26	133	113	124	108.0	112.0	9
11	GA961171-4E21	133	115	120	107.3	111.1	4
12	AR96077-10-1	139	116	126	109.7	114.5	26
13	ARTX5406	133	115	124	108.3	113.3	16
14	Z00-3538	142	122	131	114.7	121.5	45
15	Z00-3554	140	121	129	113.0	117.0	38
16	GX02-138	140	117	127	114.0	117.8	42
17	VA01W-205	139	115	125	109.3	114.9	28
18	VA02W-713	137	115	124	107.7	112.4	13
19	P981233A1-10-12-1-1-4	137	116	123	111.3	115.6	33
20	P992060G1-1-9	137	113	125	109.0	113.7	21
21	P992133A2-1-2	137	113	125	108.7	113.7	23
22	TN601	136	115	123	109.3	116.0	35
23	TN604	141	118	130	110.7	115.6	32
24	NC02-1957	137	114	121	108.0	112.3	12
25	NC02-4518	137	114	123	107.3	112.1	10
26	MD00-72-5064	140	117	128	114.0	116.7	37
27	MD99-483-5158	136	113	125	109.0	113.7	20
28	LA98094BUB-58-5	142	118	122	107.3	113.5	18
29	LA9554-D68-3-2	135	115	120	108.0	112.2	11
30	FL91226A-X4	143	123	128	110.7	117.5	41
31	FL98174-D44	132	113	119	106.3	110.5	2
32	FL98031-D15-E4	142	122	130	114.0	117.3	39
33	SC013787	132	116	117	106.0	110.4	1
34	SC110329	135	115	121	108.0	111.1	5
35	G20915	138	116	124	109.3	113.8	24
36	G28146	140	116	127	111.7	118.0	43
37	G30623	143	121	129	114.3	120.8	44
38	G30204	139	123	127	112.3	116.5	36
39	B010973	137	116	122	108.3	115.1	29
40	B011260	140	115	120	109.0	113.7	19
41	B02-8486	134	112	120	107.7	110.8	3
42	B02-8483	136	114	124	108.0	112.5	14
43	APCK M00-3904-9	138	115	123	110.7	117.5	40
44	APCK M02-2152	140	115	124	110.7	115.4	31
45	APCK B02-8443	140	116	125	111.0	115.3	30
LOCATION MEANS:		137.7	116.2	124.1	109.6	114.3	

HEIGHT (inches)

	Belle Mina	Stuttgart	Sussex Co.	Griffin	Plains	Ft. Branch	
	AL	AR	DE	GA	GA	IN	
	Glass	Bacon	Uniatowski	Johnson	Johnson	Moreno	
1	AGS 2000	32	36	34	35	37	39.0
2	USG 3209	28	31	29	29	33	34.5
3	Pioneer Brand 26R61	34	34	35	35	39	38.0
4	McCormick	28	35	29	29	34	33.5
5	LA95135D54-2-3	31	36	33	32	42	36.5
6	VA02W-555	27	29	29	29	36	31.5
7	VA02W-370	27	30	30	29	36	33.0
8	GA96693-4E16	30	30	32	29	38	34.0
9	GA951231-4E25	27	33	27	29	34	32.0
10	GA951231-4E26	28	31	28	30	35	31.5
11	GA961171-4E21	27	37	26	27	33	30.0
12	AR96077-10-1	32	33	30	27	35	34.5
13	ARTX5406	31	32	30	28	37	33.0
14	Z00-3538	28	36	32	30	38	37.0
15	Z00-3554	32	34	35	32	39	38.5
16	GX02-138	27	31	30	26	35	35.0
17	VA01W-205	25	28	30	25	33	31.0
18	VA02W-713	29	32	33	29	35	36.0
19	P981233A1-10-12-1-1-4	28	33	29	26	34	33.0
20	P992060G1-1-9	26	31	29	26	34	31.5
21	P992133A2-1-2	28	31	27	25	33	30.5
22	TN601	28	34	32	31	35	34.0
23	TN604	32	34	33	31	38	39.0
24	NC02-1957	27	29	27	27	34	32.0
25	NC02-4518	27	31	28	27	34	30.5
26	MD00-72-5064	30	37	33	34	40	37.0
27	MD99-483-5158	33	36	33	34	38	33.5
28	LA98094BUB-58-5	25	30	29	30	34	30.5
29	LA9554-D68-3-2	29	35	34	35	39	32.5
30	FL91226A-X4	33	31	37	36	37	38.5
31	FL98174-D44	33	36	33	41	39	37.5
32	FL98031-D15-E4	35	35	37	36	39	39.0
33	SC013787	37	34	32	33	41	35.5
34	SC110329	35	37	33	37	39	39.0
35	G20915	35	40	35	36	42	41.0
36	G28146	34	39	35	33	42	40.0
37	G30623	31	37	33	34	39	39.0
38	G30204	30	38	31	27	37	37.5
39	B010973	26	34	25	26	35	31.0
40	B011260	32	37	33	30	39	39.0
41	B02-8486	28	31	31	29	36	32.5
42	B02-8483	28	30	30	29	35	33.0
43	APCK M00-3904-9	29	32	31	31	36	34.5
44	APCK M02-2152	29	33	32	27	36	35.5
45	APCK B02-8443	30	34	31	28	35	36.0
LOCATION MEANS:	29.8	33.5	31.2	30.4	36.6	34.9	

HEIGHT (inches)

	Greensburg	Lafayette	Henderson	Schochoh	Winnsboro	Queenstown	
	IN	IN	KY	KY	LA	MD	
	Brown	Moreno	Fogleman	Van Sanford	Harrison	Costa	
1	AGS 2000	37	40	38.2	40.5	41.0	41.5
2	USG 3209	32	36	34.8	33.5	37.5	31.0
3	Pioneer Brand 26R61	39	40	40.0	39.0	42.0	35.0
4	McCormick	35	36	34.1	34.5	36.0	31.0
5	LA95135D54-2-3	44	40	36.8	37.0	42.5	37.0
6	VA02W-555	35	34	33.5	34.0	36.5	31.0
7	VA02W-370	38	36	34.6	34.0	37.0	31.5
8	GA96693-4E16	39	37	37.8	35.0	40.0	32.5
9	GA951231-4E25	35	37	34.4	34.0	36.5	31.0
10	GA951231-4E26	35	36	33.3	32.0	38.5	32.0
11	GA961171-4E21	35	34	31.5	31.5	37.0	29.0
12	AR96077-10-1	36	38	37.2	35.0	38.5	32.5
13	ARTX5406	36	35	34.4	33.5	38.5	32.5
14	Z00-3538	38	39	39.4	39.5	41.0	34.0
15	Z00-3554	37	40	40.6	38.5	42.0	34.5
16	GX02-138	30	36	37.4	35.0	38.5	31.5
17	VA01W-205	31	32	31.5	32.0	37.0	29.0
18	VA02W-713	36	39	38.4	35.0	37.5	34.0
19	P981233A1-10-12-1-1-4	33	34	39.0	35.5	39.5	29.5
20	P992060G1-1-9	32	34	33.5	35.0	37.5	29.0
21	P992133A2-1-2	33	33	33.9	32.0	37.0	29.5
22	TN601	36	37	36.4	34.5	42.0	33.5
23	TN604	42	40	41.7	40.0	41.5	36.5
24	NC02-1957	35	35	34.3	31.0	37.0	29.5
25	NC02-4518	35	34	33.7	31.0	35.0	29.5
26	MD00-72-5064	38	40	40.6	37.5	41.5	34.0
27	MD99-483-5158	38	37	34.6	37.5	39.0	34.0
28	LA98094BUB-58-5	30	34	34.4	31.5	35.0	33.0
29	LA9554-D68-3-2	33	37	36.6	35.5	40.0	33.5
30	FL91226A-X4	36	39	41.5	40.5	41.5	36.0
31	FL98174-D44	33	41	39.2	36.5	41.5	37.5
32	FL98031-D15-E4	38	42	40.2	39.5	43.5	39.0
33	SC013787	36	39	41.3	36.5	36.5	35.0
34	SC110329	37	39	42.1	38.0	41.0	33.5
35	G20915	41	42	41.5	39.5	45.5	38.0
36	G28146	40	42	43.5	39.5	42.5	37.5
37	G30623	36	40	40.4	40.0	40.5	35.5
38	G30204	33	37	38.4	36.5	39.5	32.0
39	B010973	31	32	32.7	31.0	36.0	29.0
40	B011260	40	40	40.6	38.0	40.5	36.0
41	B02-8486	34	35	36.2	34.5	38.5	31.0
42	B02-8483	34	35	34.6	32.0	38.5	31.0
43	APCK M00-3904-9	35	35	35.4	36.0	40.0	33.5
44	APCK M02-2152	36	36	37.6	35.5	40.0	32.0
45	APCK B02-8443	36	37	39.6	37.0	41.0	34.0
LOCATION MEANS:	35.8	37.1	37.1	35.7	39.3	33.2	

HEIGHT (inches)

		Cleveland MS	Newton MS	Columbia MO	Kinston NC	Wooster OH	Florence SC
		Hancock	White	McKendry	Murphy	Sneller	Edge
1	AGS 2000	39.0	42	35.3	30.9	42	33.0
2	USG 3209	33.5	35	32.3	25.8	36	28.0
3	Pioneer Brand 26R61	40.0	41	34.3	29.9	40	31.5
4	McCormick	38.5	32	30.7	26.2	35	28.0
5	LA95135D54-2-3	41.0	44	33.3	27.8	39	31.5
6	VA02W-555	34.0	35	30.3	24.8	35	27.0
7	VA02W-370	34.0	36	30.0	26.6	35	28.5
8	GA96693-4E16	38.0	38	32.3	28.9	35	33.0
9	GA951231-4E25	36.0	36	30.3	28.3	33	28.0
10	GA951231-4E26	37.0	38	31.3	27.6	34	28.5
11	GA961171-4E21	35.0	33	30.7	28.1	32	27.0
12	AR96077-10-1	40.0	38	31.0	25.6	36	29.5
13	ARTX5406	36.5	37	31.3	24.8	36	30.5
14	Z00-3538	40.0	38	35.3	33.3	38	31.0
15	Z00-3554	40.5	40	36.7	32.7	41	34.5
16	GX02-138	40.0	36	31.0	29.1	36	29.0
17	VA01W-205	34.0	35	30.0	26.0	33	26.5
18	VA02W-713	39.0	39	35.0	28.9	38	31.0
19	P981233A1-10-12-1-1-4	36.0	35	29.3	26.0	33	26.5
20	P992060G1-1-9	37.5	33	29.3	22.8	35	27.0
21	P992133A2-1-2	36.5	32	30.0	23.0	34	26.5
22	TN601	41.0	35	35.7	30.3	36	35.0
23	TN604	39.0	37	35.7	30.9	41	32.5
24	NC02-1957	36.5	37	29.3	24.2	36	26.0
25	NC02-4518	34.5	35	29.0	24.8	35	26.5
26	MD00-72-5064	41.5	40	34.0	29.9	40	31.0
27	MD99-483-5158	40.0	38	31.7	26.6	36	29.0
28	LA98094BUB-58-5	33.5	34	28.3	24.8	34	27.5
29	LA9554-D68-3-2	39.0	39	32.7	28.3	39	31.0
30	FL91226A-X4	38.0	49	36.3	29.5	40	32.0
31	FL98174-D44	40.0	41	34.7	31.7	43	35.5
32	FL98031-D15-E4	40.5	43	36.7	33.7	41	32.0
33	SC013787	37.0	39	34.0	27.6	39	34.0
34	SC110329	39.0	40	33.3	29.5	39	30.5
35	G20915	43.0	44	38.3	32.3	41	33.5
36	G28146	41.5	41	37.0	32.9	41	34.5
37	G30623	44.5	39	35.0	30.5	41	31.5
38	G30204	36.5	37	31.3	28.7	35	28.5
39	B010973	36.0	34	28.0	22.0	33	27.0
40	B011260	39.5	38	35.3	28.9	40	32.5
41	B02-8486	37.0	37	33.7	28.5	34	32.5
42	B02-8483	37.0	37	30.0	26.8	35	28.5
43	APCK M00-3904-9	41.0	38	32.7	27.2	37	30.0
44	APCK M02-2152	39.0	38	33.3	27.0	39	30.0
45	APCK B02-8443	39.5	36	33.7	27.8	39	29.5
LOCATION MEANS:		38.2	37.8	32.7	28.0	37.1	30.1

HEIGHT (inches)

	Blacksburg VA Griffey	Warsaw VA Griffey	ENTRY MEANS ALL LOCATIONS	rank	
1	AGS 2000	35	32.0	37.0	6
2	USG 3209	32	29.0	32.0	35
3	Pioneer Brand 26R61	38	34.0	36.9	7
4	McCormick	31	28.0	32.2	33
5	LA95135D54-2-3	36	34.7	36.8	11
6	VA02W-555	30	27.3	31.4	37
7	VA02W-370	32	27.7	32.3	31
8	GA96693-4E16	33	31.3	34.2	22
9	GA951231-4E25	33	29.3	32.2	34
10	GA951231-4E26	32	30.3	32.4	30
11	GA961171-4E21	28	26.7	30.9	40
12	AR96077-10-1	33	31.0	33.6	26
13	ARTX5406	32	28.3	32.9	28
14	Z00-3538	33	33.3	35.7	16
15	Z00-3554	36	34.0	36.9	9
16	GX02-138	31	28.7	32.7	29
17	VA01W-205	31	28.0	30.4	43
18	VA02W-713	35	31.3	34.6	20
19	P981233A1-10-12-1-1-4	32	27.3	31.9	36
20	P992060G1-1-9	28	25.0	30.8	42
21	P992133A2-1-2	28	25.0	30.4	44
22	TN601	36	30.0	34.6	19
23	TN604	40	33.7	36.9	8
24	NC02-1957	33	27.7	31.4	38
25	NC02-4518	31	25.3	30.8	41
26	MD00-72-5064	35	33.7	36.4	14
27	MD99-483-5158	35	33.7	34.9	17
28	LA98094BUB-58-5	33	29.3	31.0	39
29	LA9554-D68-3-2	35	32.0	34.8	18
30	FL91226A-X4	38	35.7	37.3	5
31	FL98174-D44	38	33.7	37.3	4
32	FL98031-D15-E4	41	38.3	38.5	2
33	SC013787	39	31.7	35.9	15
34	SC110329	38	31.3	36.6	12
35	G20915	41	34.7	39.2	1
36	G28146	39	34.0	38.4	3
37	G30623	38	33.0	36.9	10
38	G30204	36	29.3	34.0	23
39	B010973	29	26.3	30.2	45
40	B011260	39	32.0	36.5	13
41	B02-8486	32	29.0	33.0	27
42	B02-8483	32	28.7	32.3	32
43	APCK M00-3904-9	34	29.3	33.9	24
44	APCK M02-2152	33	28.7	33.9	25
45	APCK B02-8443	36	30.7	34.5	21
LOCATION MEANS:	34.2	30.5	34.2		

LODGING

	Belle Mina	Stuttgart	Sussex Co.	Griffin	Plains	Ft. Branch	
	AL	AR	DE	GA	GA	IN	
	Glass	Bacon	Uniatowski	Johnson	Johnson	Moreno	
	0-9	0-9	0-9	0-9	%	1-9	
1	AGS 2000	0	2	1	0	5	2.5
2	USG 3209	0	4	1	0	10	3.5
3	Pioneer Brand 26R61	0	0	1	0	5	2.0
4	McCormick	0	8	1	0	60	1.5
5	LA95135D54-2-3	0	4	1	0	10	4.5
6	VA02W-555	0	3	1	0	10	1.5
7	VA02W-370	0	1	1	0	10	4.5
8	GA96693-4E16	0	3	2	0	15	7.5
9	GA951231-4E25	2	4	2	0	20	5.5
10	GA951231-4E26	2	5	1	0	10	5.5
11	GA961171-4E21	3	5	1	0	10	5.0
12	AR96077-10-1	0	4	1	0	5	2.0
13	ARTX5406	0	4	1	0	5	2.0
14	Z00-3538	0	4	1	0	15	1.5
15	Z00-3554	0	2	2	0	10	1.5
16	GX02-138	0	4	1	0	5	2.5
17	VA01W-205	0	5	2	0	5	4.0
18	VA02W-713	0	5	1	0	10	5.5
19	P981233A1-10-12-1-1-4	0	4	1	0	0	1.5
20	P992060G1-1-9	0	2	1	0	0	1.0
21	P992133A2-1-2	0	2	1	0	5	1.0
22	TN601	0	6	2	0	40	6.5
23	TN604	0	3	2	0	5	4.5
24	NC02-1957	0	3	1	0	0	4.0
25	NC02-4518	0	3	1	0	0	3.0
26	MD00-72-5064	0	4	1	0	5	1.5
27	MD99-483-5158	0	5	2	0	10	4.5
28	LA98094BUB-58-5	0	1	1	0	5	5.5
29	LA9554-D68-3-2	0	4	2	0	5	4.5
30	FL91226A-X4	0	0	2	0	20	3.0
31	FL98174-D44	0	2	2	0	5	6.0
32	FL98031-D15-E4	0	4	2	0	10	6.0
33	SC013787	0	0	2	0	10	2.0
34	SC110329	0	4	2	0	10	5.5
35	G20915	0	3	2	5	10	5.0
36	G28146	0	3	1	0	5	2.5
37	G30623	0	4	1	0	5	2.0
38	G30204	0	3	1	0	5	2.0
39	B010973	0	1	1	0	0	1.5
40	B011260	0	5	1	0	5	5.5
41	B02-8486	0	5	1	0	5	3.5
42	B02-8483	0	6	1	0	5	2.0
43	APCK M00-3904-9	2	9	1	5	50	6.0
44	APCK M02-2152	2	4	1	0	5	2.0
45	APCK B02-8443	0	6	1	0	5	3.5
LOCATION MEANS:	0.2	3.6	1.3	0.2	10.0	3.5	

LODGING

	Henderson KY	Baton Rouge LA	Winnsboro LA	Cleveland MS	Newton MS	Columbia MO	
	Fogleman 0-9	Harrison 0-9	Harrison 0-9	Hancock 1-9	White	McKendry 0-9	
1	AGS 2000	3	2.5	2.0	1.0	1	2.7
2	USG 3209	5	2.0	1.5	1.5	1	2.0
3	Pioneer Brand 26R61	4	0.0	2.0	1.0	1	0.7
4	McCormick	1	4.0	4.5	2.0	4	3.0
5	LA95135D54-2-3	6	4.5	2.0	2.0	1	2.7
6	VA02W-555	2	1.5	1.5	1.0	1	3.3
7	VA02W-370	1	1.0	1.5	1.0	1	1.7
8	GA96693-4E16	4	3.5	3.0	1.5	4	3.7
9	GA951231-4E25	1	2.5	1.5	2.0	3	2.0
10	GA951231-4E26	2	4.5	3.5	2.0	4	3.3
11	GA961171-4E21	1	1.5	2.5	2.0	2	2.7
12	AR96077-10-1	1	1.5	1.0	1.5	2	1.0
13	ARTX5406	1	0.5	1.5	1.5	2	1.0
14	Z00-3538	1	1.5	1.5	1.0	1	1.0
15	Z00-3554	1	4.0	1.0	1.0	2	1.0
16	GX02-138	1	5.5	1.5	1.0	1	2.3
17	VA01W-205	1	0.5	1.5	1.5	1	3.0
18	VA02W-713	5	2.0	2.0	3.0	1	2.7
19	P981233A1-10-12-1-1-4	1	0.5	1.0	1.0	1	1.3
20	P992060G1-1-9	1	1.0	1.5	1.0	1	2.0
21	P992133A2-1-2	1	2.0	1.5	1.5	1	1.3
22	TN601	2	3.5	2.5	3.0	3	4.0
23	TN604	1	2.5	2.0	1.5	2	3.0
24	NC02-1957	1	0.0	1.5	1.0	2	2.0
25	NC02-4518	1	0.5	1.0	1.0	1	1.7
26	MD00-72-5064	1	3.0	1.0	1.0	1	1.7
27	MD99-483-5158	4	2.5	1.5	2.5	1	3.3
28	LA98094BUB-58-5	3	3.5	2.5	1.5	2	2.7
29	LA9554-D68-3-2	6	3.0	2.0	1.5	1	3.3
30	FL91226A-X4	1	3.0	1.5	1.5	3	0.7
31	FL98174-D44	3	1.5	2.0	1.0	1	3.3
32	FL98031-D15-E4	4	7.0	1.5	2.5	3	1.7
33	SC013787	1	1.5	1.0	1.5	1	0.7
34	SC110329	5	1.5	1.5	1.5	2	2.3
35	G20915	3	4.0	2.0	1.5	2	3.3
36	G28146	6	7.0	1.5	1.0	2	3.3
37	G30623	4	3.0	1.5	1.0	1	1.7
38	G30204	1	0.5	1.0	1.0	1	2.0
39	B010973	1	0.0	1.0	1.0	1	2.0
40	B011260	2	4.5	2.5	1.5	1	2.7
41	B02-8486	1	4.5	1.0	2.5	1	3.0
42	B02-8483	2	1.5	1.5	1.5	1	3.3
43	APCK M00-3904-9	7	7.5	3.0	4.0	3	3.7
44	APCK M02-2152	1	2.0	2.0	2.0	1	2.0
45	APCK B02-8443	1	0.5	1.5	2.5	1	1.7
LOCATION MEANS:	2.4	2.5	1.8	1.6	1.6	2.3	

LODGING

		Blacksburg VA Griffey 0.2-10	Warsaw VA Griffey 0.2-10
1	AGS 2000	0.2	0.2
2	USG 3209	0.8	0.4
3	Pioneer Brand 26R61	0.2	0.2
4	McCormick	0.2	0.2
5	LA95135D54-2-3	0.8	0.2
6	VA02W-555	0.8	0.2
7	VA02W-370	0.2	0.2
8	GA96693-4E16	0.2	0.2
9	GA951231-4E25	0.2	0.3
10	GA951231-4E26	0.2	0.4
11	GA961171-4E21	0.2	0.4
12	AR96077-10-1	0.2	0.2
13	ARTX5406	0.2	0.2
14	Z00-3538	0.8	0.2
15	Z00-3554	0.2	0.2
16	GX02-138	0.2	0.2
17	VA01W-205	0.2	0.3
18	VA02W-713	0.2	0.2
19	P981233A1-10-12-1-1-4	0.2	0.2
20	P992060G1-1-9	0.2	0.2
21	P992133A2-1-2	0.2	0.2
22	TN601	1.6	0.4
23	TN604	0.8	0.3
24	NC02-1957	0.8	0.2
25	NC02-4518	0.8	0.2
26	MD00-72-5064	0.2	0.2
27	MD99-483-5158	1.2	0.4
28	LA98094BUB-58-5	0.8	0.2
29	LA9554-D68-3-2	0.8	0.2
30	FL91226A-X4	0.2	0.2
31	FL98174-D44	1.2	0.4
32	FL98031-D15-E4	0.2	0.2
33	SC013787	0.2	0.2
34	SC110329	0.2	0.2
35	G20915	1.2	0.3
36	G28146	1.2	0.2
37	G30623	1.2	0.2
38	G30204	0.2	0.2
39	B010973	0.2	0.2
40	B011260	1.2	0.3
41	B02-8486	0.2	0.2
42	B02-8483	0.8	0.3
43	APCK M00-3904-9	1.2	0.4
44	APCK M02-2152	0.8	0.4
45	APCK B02-8443	0.2	0.2
LOCATION MEANS:		0.5	0.2

WINTER DAMAGE

	Belle Mina	Greensburg	Lafayette	
	AL	IN	IN	
	Glass	Brown	Moreno	
	Winter Kill	Winter Kill	Winter Kill	
	0-9	1-9	1-9	
1	AGS 2000	0	1	4
2	USG 3209	0	1	2
3	Pioneer Brand 26R61	0	1	2
4	McCormick	0	1	1
5	LA95135D54-2-3	0	1	2
6	VA02W-555	0	1	1
7	VA02W-370	0	1	1
8	GA96693-4E16	0	1	2
9	GA951231-4E25	2	1	1
10	GA951231-4E26	0	1	2
11	GA961171-4E21	2	1	1
12	AR96077-10-1	0	1	2
13	ARTX5406	0	1	1
14	Z00-3538	0	1	2
15	Z00-3554	0	1	2
16	GX02-138	0	1	2
17	VA01W-205	0	1	2
18	VA02W-713	0	1	1
19	P981233A1-10-12-1-1-4	0	1	2
20	P992060G1-1-9	0	1	1
21	P992133A2-1-2	0	1	1
22	TN601	0	1	2
23	TN604	0	1	2
24	NC02-1957	0	1	3
25	NC02-4518	0	1	2
26	MD00-72-5064	0	1	2
27	MD99-483-5158	0	1	2
28	LA98094BUB-58-5	0	6	4
29	LA9554-D68-3-2	0	4	3
30	FL91226A-X4	0	7	7
31	FL98174-D44	0	1	3
32	FL98031-D15-E4	0	1	4
33	SC013787	0	5	4
34	SC110329	0	3	3
35	G20915	0	1	2
36	G28146	0	1	2
37	G30623	0	1	3
38	G30204	0	1	2
39	B010973	0	1	1
40	B011260	0	1	1
41	B02-8486	0	1	2
42	B02-8483	0	1	2
43	APCK M00-3904-9	0	1	2
44	APCK M02-2152	0	1	1
45	APCK B02-8443	0	1	1
LOCATION MEANS:	0.1	1.4	2.1	
GROWTH STAGE / DATE		June 6		

LEAF RUST

		Belle Mina	Bay	Plains	Greensburg	Baton Rouge	Winnsboro
		AL	AR	GA	IN	LA	LA
		Glass	Hancock	Johnson	Brown	Harrison	Harrison
		0-9	1-9		1-9	%	%
1	AGS 2000	4	1.5	1	1	0.0	0.0
2	USG 3209	4	2.5	4	1	2.5	0.0
3	Pioneer Brand 26R61	4	2.0	3	1	1.0	0.0
4	McCormick	8	9.0	9	5	67.5	90.0
5	LA95135D54-2-3	0	1.0	0	1	0.0	0.0
6	VA02W-555	3	1.0	2	1	1.0	0.0
7	VA02W-370	3	1.5	5	1	0.5	1.0
8	GA96693-4E16	1	1.0	1	1	0.0	0.0
9	GA951231-4E25	0	1.0	2	1	0.0	0.0
10	GA951231-4E26	0	1.0	2	1	0.0	0.0
11	GA961171-4E21	0	1.0	1	1	0.0	0.0
12	AR96077-10-1	4	1.5	7	1	1.5	0.0
13	ARTX5406	0	1.5	4	1	0.0	0.0
14	Z00-3538	3	2.5	3	1	11.5	3.0
15	Z00-3554	4	3.5	4	1	3.0	0.5
16	GX02-138	0	1.0	1	1	0.0	0.0
17	VA01W-205	0	1.0	1	1	0.0	0.0
18	VA02W-713	4	1.5		1	10.0	0.5
19	P981233A1-10-12-1-1-4	0	2.5	1	3	2.5	0.0
20	P992060G1-1-9	8	6.5	5	1	12.5	20.0
21	P992133A2-1-2	4	4.0	3	1	7.5	2.5
22	TN601	7	5.0	4	1	4.0	0.0
23	TN604	5	7.5	5	1	42.5	12.5
24	NC02-1957	0	2.0	5	1	0.0	0.0
25	NC02-4518	0	1.0		1	0.0	0.0
26	MD00-72-5064	4	5.5	7	1	5.5	4.0
27	MD99-483-5158	0	1.0		1	0.0	0.0
28	LA98094BUB-58-5	0	1.0	0	1	0.0	0.0
29	LA9554-D68-3-2	0	1.5	0	1	0.0	0.0
30	FL91226A-X4	6	6.0	4	1	11.5	1.5
31	FL98174-D44	0	2.0	0	1	0.0	0.0
32	FL98031-D15-E4	0	1.0	2	1	0.5	0.0
33	SC013787	0	1.5	5	1	0.0	0.0
34	SC110329	0	2.0	0	1	22.5	0.5
35	G20915	3	2.0	4	1	2.0	2.0
36	G28146	4	5.5	2	1	5.0	5.5
37	G30623	3	1.5	5	2	5.0	0.0
38	G30204	0	3.5	6	1	10.0	0.0
39	B010973	0	1.0	0	1	1.0	0.0
40	B011260	3	1.0	4	1	1.5	0.0
41	B02-8486	0	2.0	2	1	0.0	0.0
42	B02-8483	2	1.5	4	1	4.0	0.0
43	APCK M00-3904-9	0	1.0	0	1	0.0	0.0
44	APCK M02-2152	6	6.5	8	1	52.5	22.5
45	APCK B02-8443	3	2.0	5	1	1.5	0.0
LOCATION MEANS:		2.2	2.5	3.1	1.2	6.4	3.7
GROWTH STAGE / DATE					June 6		

LEAF RUST

	St. Paul MN Kolmer	Kinston NC Murphy	Warsaw VA Griffey		
	% severity / IT	% canopy	0-9		
1	AGS 2000	20 MR-MS	0	0.0	2.0
2	USG 3209	50 MS	65	7.5	6.0
3	Pioneer Brand 26R61	20 R-MR	10	1.5	1.0
4	McCormick	30 S	45	5.5	7.7
5	LA95135D54-2-3	5R/20 MS	0	0.0	1.0
6	VA02W-555	10 R	16	2.0	3.0
7	VA02W-370	20 MR-MS	15	2.0	1.3
8	GA96693-4E16	5 R	0	0.0	1.0
9	GA951231-4E25	5 R	0	0.0	1.3
10	GA951231-4E26	5 R	0	0.0	1.0
11	GA961171-4E21	5 R	0	0.0	1.0
12	AR96077-10-1	60 S	8	1.5	1.7
13	ARTX5406	50 S	9	1.5	1.7
14	Z00-3538	50 S	3	0.5	1.7
15	Z00-3554	50 MS	15	2.5	2.7
16	GX02-138	50 MS-S	0	0.0	1.3
17	VA01W-205	5 MR	2	0.5	1.3
18	VA02W-713	40 MS	45	5.5	5.0
19	P981233A1-10-12-1-1-4	20 R-MR	27	3.0	1.3
20	P992060G1-1-9	30 MS-S	18	2.5	2.0
21	P992133A2-1-2	5 R	5	1.0	1.0
22	TN601	5 M/20 MS	37	4.0	4.3
23	TN604	40 S	63	7.0	5.7
24	NC02-1957	TR	0	0.0	1.3
25	NC02-4518	10 MS	0	0.0	1.0
26	MD00-72-5064	20 MS	22	2.5	3.7
27	MD99-483-5158	10 MR	0	0.0	0.7
28	LA98094BUB-58-5	TR	0	0.0	1.0
29	LA9554-D68-3-2	50 S	0	0.0	1.0
30	FL91226A-X4	-	9	1.5	1.3
31	FL98174-D44	20 MS	0	0.0	1.0
32	FL98031-D15-E4	30 MS	0	0.0	0.7
33	SC013787	50 MR-MS	43	5.0	5.3
34	SC110329	50 S	53	6.0	3.3
35	G20915	30 MS	12	2.0	1.3
36	G28146	40 MS	3	1.0	1.0
37	G30623	60 MS	24	3.0	4.3
38	G30204	60 MS	1	0.5	1.3
39	B010973	20 MR-MS	0	0.0	1.0
40	B011260	5 MR	20	3.0	2.3
41	B02-8486	50 MS	2	0.5	1.7
42	B02-8483	40 MS	8	1.5	2.0
43	APCK M00-3904-9	5 MR	0	0.0	1.0
44	APCK M02-2152	40 S	65	7.5	8.3
45	APCK B02-8443	20 MR-MS	37	4.0	2.0
LOCATION MEANS:		15.0	1.9	2.3	
GROWTH STAGE / DATE					

STEM RUST

St. Paul
MN

Yue Jin

		Adult		Seedling Reaction					TTKS
		Field Reaction	QFCS	MCCF	RKQQ	TPMK	QTHJ	TTTT	
		% severity / IT	03ND76C	59KS19	99KS76A-1	74MN1409	75ND717C	01MN84A-1-2 04KEN1562/15/06	
1	AGS 2000	40 MS/10 R	1	1	2-	2-/S	-	-	S
2	USG 3209	5 R/30 MS-S	;	0/2	2-	1+/S	0	;1	0;
3	Pioneer Brand 26R61	30 R-MR	1	1	2-	2	2	2-	S
4	McCormick	50 R-MR	1	1	1	1/S	2	2-	2
5	LA95135D54-2-3	70 S	2	2	S	S	S/2	S	S
6	VA02W-555	5 R/30 MS	0	;	0	;1	0	S	0;
7	VA02W-370	60 MS-S	2+	23	S	S	0	;S	S
8	GA96693-4E16	60 S/20 R-MR	2	S	0	0	0;	S	2
9	GA951231-4E25	30 MS	;S	;S	;	S	S	S	S
10	GA951231-4E26	30 MS	;3	;3	;	S	S	S	S
11	GA961171-4E21	50 S	S	S	;3	S	S	S	S
12	AR96077-10-1	100 S	S	S	S	S	S	S	S
13	ARTX5406	100 S	S	S	;3	S	S	S	S
14	Z00-3538	70 S	1/S	1/S	S	1	S/2	;1/S	S
15	Z00-3554	100 S	2/S	2	S	S	S	S/2	S
16	GX02-138	80 S	S	S	S	S	S	S	S
17	VA01W-205	30 MS	;	;	S	23 low IF	0	S	0?
18	VA02W-713	30 MS	1	1;/3	S	S	S/1	S	S
19	P981233A1-10-12-1-1-4	T R-MR	0	0	2/S	2/S	0	2/S	0/2
20	P992060G1-1-9	5 R-MR/50 S	;1	;1	;3	;23	;13	S	S
21	P992133A2-1-2	10 MR-MS	;12	;1	;	;23	;	S/2	S
22	TN601	40 MS	0	0	;S	;3	0	S	0
23	TN604	10 R-MR	0	0	2	2	0/S	2	0/S
24	NC02-1957	30 MR/60 S	;	0;	2/S	S	;	S	0;
25	NC02-4518	50 MR-MS	;	;	S	S	;	S	;
26	MD00-72-5064	70 S	S/2	S	;1/S	23C	S	S/2	S/2
27	MD99-483-5158	80 S	2+	2+	2	S	S	S	S
28	LA98094BUB-58-5	0, very late	;	0	;	;S	0	S	0
29	LA9554-D68-3-2	100 S	S	S	S	S	S	S	S
30	FL91226A-X4	60 S	;2	;1	;23	;1	;1	S	S
31	FL98174-D44	70 S	;	;	S	;S	S	S	S
32	FL98031-D15-E4	80 S	S	;1	S	S	S	S	S
33	SC013787	50 MR-MS	;2	;1	0	;12	2	2	S
34	SC110329	30 MS	0	0/2	S low IF	;23	0	S	0
35	G20915	20 MR-MS	2	2	S	2+	S	S	S
36	G28146	40 MS	2	2	2	2	S	S	S
37	G30623	70 MS	2	2	S	S/2	S	S	S
38	G30204	60 MS	;	0;	S low IF	S	0/S	S	S
39	B010973	30 MR-MS	;	;	S	S	0	S	;
40	B011260	0/10 MR	;2	0	2;/S	S	0	13	S
41	B02-8486	80 S	S	S	S	S/;	S	S	S
42	B02-8483	100 S	S	S	S	S	S	S	S
43	APCK M00-3904-9	40 MR	2	2-	;	2	2	2	S
44	APCK M02-2152	50 MS-S	S	S	S	S	S	S	S
45	APCK B02-8443	60 S	S	S	2/S	S	S	S	S

GROWTH STAGE / DATE July 3

STRIPE RUST

		Plains	Greensburg	Winnsboro	Pullman	
		GA	IN	LA	WA	
		Johnson	Brown	Harrison	Chen	
			1-9	%	IT	%
1	AGS 2000	7	1	2	8	90
2	USG 3209	1	3	0	8	80
3	Pioneer Brand 26R61	1	1	0	2	2
4	McCormick		4	0	8	40
5	LA95135D54-2-3	2	1	0	5	30
6	VA02W-555	0	1	0	2	2
7	VA02W-370	1	1	0	8	60
8	GA96693-4E16	1	1	0	8	70
9	GA951231-4E25	0	1	1	2	2
10	GA951231-4E26	0	1	0	2	2
11	GA961171-4E21	0	1	0	2,8	30
12	AR96077-10-1	0	1	0	8	30
13	ARTX5406	1	1	0	5	20
14	Z00-3538	4+	1	0	8	80
15	Z00-3554	0	1	0	8	50
16	GX02-138	3	1	0	8	30
17	VA01W-205	2	1	0	2	2
18	VA02W-713	9	1	2.5	8	90
19	P981233A1-10-12-1-1-4	9	1	5	8	100
20	P992060G1-1-9	0-6	1	0	8	20
21	P992133A2-1-2	0	1	0	2	2
22	TN601	7	1	3	8	100
23	TN604	6	1	0	8	70
24	NC02-1957	9	1	10	8	100
25	NC02-4518	9	1	5	8	100
26	MD00-72-5064	2	1	0	8	80
27	MD99-483-5158	9	1	4	8	90
28	LA98094BUB-58-5	0	1	0	2	2
29	LA9554-D68-3-2	0-3	1	0	5	10
30	FL91226A-X4	0	1	0	8	10
31	FL98174-D44	0	1	0	5	10
32	FL98031-D15-E4	1	1	0	8	20
33	SC013787	0	1	0.5	2	5
34	SC110329	9	1	0.5	8	90
35	G20915	2	1	0	8	20
36	G28146	1	1	0	8	30
37	G30623	1	1	0	2	2
38	G30204	1	1	0	8	20
39	B010973	0	1	0	8	50
40	B011260	1	1	0	8	10
41	B02-8486	0	1	0	8	20
42	B02-8483	0	1	0	8	10
43	APCK M00-3904-9	1	1	0	8	10
44	APCK M02-2152	1	1	0	8	60
45	APCK B02-8443	1	1	0	2	10

LOCATION MEANS: 1.1 0.7 39.1
GROWTH STAGE / DATE June 6 June 28 / soft dough

STRIPE RUST

Mt. Vernon
WA
Chen

	IT	%	IT	%
1 AGS 2000	8	20	8	80
2 USG 3209	8	10	8	20
3 Pioneer Brand 26R61	2	2	2	2
4 McCormick	8	30	8	90
5 LA95135D54-2-3	2	5	2	10
6 VA02W-555	2	5	2	2
7 VA02W-370	2	5	5	30
8 GA96693-4E16	5	20	8	30
9 GA951231-4E25	8	20	5	30
10 GA951231-4E26	8	30	5,8	50
11 GA961171-4E21	8	40	8	80
12 AR96077-10-1	2	5	5	40
13 ARTX5406	2	5	2	10
14 Z00-3538	8	30	8	60
15 Z00-3554	5	20	8	40
16 GX02-138	2	5	2	10
17 VA01W-205	2	5	2	10
18 VA02W-713	8	40	8	60
19 P981233A1-10-12-1-1-4	8	70	8	90
20 P992060G1-1-9	8	40	2	10
21 P992133A2-1-2	8	30	5	20
22 TN601	8	70	8	100
23 TN604	8	40	8	60
24 NC02-1957	8	30	8	100
25 NC02-4518	8	30	8	90
26 MD00-72-5064	8	30	8	60
27 MD99-483-5158	5	30	8	70
28 LA98094BUB-58-5	8	40	8	40
29 LA9554-D68-3-2				
30 FL91226A-X4	5	40	8	90
31 FL98174-D44	2	5	5	30
32 FL98031-D15-E4	8	50	8	80
33 SC013787	5	10	2	2
34 SC110329	8	50	8	80
35 G20915	5,8	30	8	50
36 G28146	8	70	8	100
37 G30623	2	5	2	10
38 G30204	2	5	2	2
39 B010973	8	40	5	60
40 B011260	8	40	8	80
41 B02-8486	2	5	8	60
42 B02-8483	2	5	2	30
43 APCK M00-3904-9	2	5	2	2
44 APCK M02-2152	5	20	2	2
45 APCK B02-8443	2	5	2	2

LOCATION MEANS: 24.8 44.9
GROWTH STAGE / DATE April 19 / stem elongation June 7 / flowering

SEPTORIA

	Belle Mina	Ft. Branch	Greensburg	Lafayette	Columbia
	AL	IN	IN	IN	MO
	Glass	Moreno	Brown	Moreno	McKendry
	Leaf Blotch	Sep. Leaf Complex	Leaf Blotch		Leaf Blotch
		1-9		1-9	% canopy
1	AGS 2000	4	4.5	4	17
2	USG 3209	4	3.0	4	15
3	Pioneer Brand 26R61	4	2.0	4	13
4	McCormick	2	2.5	3	27
5	LA95135D54-2-3	4	3.5	2	17
6	VA02W-555	4	3.0	2	13
7	VA02W-370	5	4.5	2	25
8	GA96693-4E16	4	5.0	4	20
9	GA951231-4E25	4	5.5	4	17
10	GA951231-4E26	4	3.5	4	20
11	GA961171-4E21	4	4.5	4	19
12	AR96077-10-1	4	3.5	2	18
13	ARTX5406	3	3.0	4	14
14	Z00-3538	4	2.0	4	13
15	Z00-3554	4	2.5	4	19
16	GX02-138	4	2.5	2	19
17	VA01W-205	5	5.0	2	16
18	VA02W-713	4	5.0	2	17
19	P981233A1-10-12-1-1-4	4	2.5	4	14
20	P992060G1-1-9	4	2.0	2	20
21	P992133A2-1-2	4	2.0	2	21
22	TN601	4	4.0	4	21
23	TN604	5	5.0	2	21
24	NC02-1957	4	6.0	4	15
25	NC02-4518	4	4.5	2	18
26	MD00-72-5064	4	2.5	2	11
27	MD99-483-5158	4	3.5	1	17
28	LA98094BUB-58-5	4	4.5	2	26
29	LA9554-D68-3-2	4	4.5	4	16
30	FL91226A-X4	4	3.5	1	15
31	FL98174-D44	4	4.5	2	16
32	FL98031-D15-E4	4	4.0	4	11
33	SC013787	4	2.0	2	23
34	SC110329	4	5.5	2	18
35	G20915	4	4.0	2	18
36	G28146	4	3.5	4	16
37	G30623	4	3.5	4	11
38	G30204	4	2.0	2	19
39	B010973	4	3.0	4	29
40	B011260	3	4.0	2	12
41	B02-8486	4	4.0	4	17
42	B02-8483	4	2.0	1	19
43	APCK M00-3904-9	0	4.0	2	13
44	APCK M02-2152	4	2.0	4	13
45	APCK B02-8443	4	3.5	4	18
LOCATION MEANS:	3.9	3.6	2.9	3.8	17.5
GROWTH STAGE / DATE			June 6		

SEPTORIA

		Kinston NC		Wooster OH	
		Murphy		Sneller	
		Leaf Blotch	Glume Blotch	Leaf Blotch	Glume Blotch
				0-9	0-9
1	AGS 2000	6.5	1.0	3.5	1.0
2	USG 3209	5.5	5.0	3.0	2.0
3	Pioneer Brand 26R61	5.0	3.5	1.5	0.0
4	McCormick	3.5	5.0	4.5	0.0
5	LA95135D54-2-3	5.0	4.5	5.5	4.5
6	VA02W-555	7.0	4.5	4.5	4.0
7	VA02W-370	6.5	3.5	4.0	2.0
8	GA96693-4E16	7.0	2.0	5.5	2.0
9	GA951231-4E25	5.0	3.0	5.5	3.0
10	GA951231-4E26	5.0	2.5	3.0	2.0
11	GA961171-4E21	4.0	4.0	3.5	3.0
12	AR96077-10-1	6.0	3.0	4.0	3.0
13	ARTX5406	7.5	5.5	4.5	4.0
14	Z00-3538	3.5	1.5	4.5	0.0
15	Z00-3554	4.5	1.5	4.0	2.0
16	GX02-138	5.5	2.5	4.0	4.5
17	VA01W-205	7.0	3.0	5.5	3.5
18	VA02W-713	6.0	3.5	5.5	1.0
19	P981233A1-10-12-1-1-4	4.5	4.5	4.5	3.0
20	P992060G1-1-9	6.0	7.5	3.0	2.5
21	P992133A2-1-2	6.0	7.5	3.5	3.0
22	TN601	5.0	5.0	4.5	2.0
23	TN604	3.5	1.5	3.0	1.0
24	NC02-1957	7.0	3.0	2.5	0.0
25	NC02-4518	5.5	4.0	4.0	0.0
26	MD00-72-5064	3.5	2.5	2.0	2.0
27	MD99-483-5158	3.5	3.0	2.5	2.0
28	LA98094BUB-58-5	3.0	2.5	3.0	2.5
29	LA9554-D68-3-2	4.5	5.5	5.5	4.5
30	FL91226A-X4	2.5	2.5	4.0	0.0
31	FL98174-D44	8.0	4.5	4.0	5.5
32	FL98031-D15-E4	3.5	1.5	3.0	3.0
33	SC013787	6.0	5.0	4.0	3.5
34	SC110329	7.0	4.5	2.0	3.5
35	G20915	6.5	3.0	5.5	1.5
36	G28146	4.5	4.0	3.0	2.0
37	G30623	3.0	4.0	4.0	3.0
38	G30204	5.0	4.0	5.5	4.0
39	B010973	8.0	6.5	3.0	4.5
40	B011260	5.0	4.0	2.5	2.0
41	B02-8486	7.0	4.5	4.5	2.0
42	B02-8483	7.5	6.5	6.0	4.0
43	APCK M00-3904-9	3.0	1.5	4.5	2.0
44	APCK M02-2152	3.0	2.0	4.5	2.0
45	APCK B02-8443	6.0	4.0	4.5	4.0
LOCATION MEANS:		5.3	3.7	4.0	2.5
GROWTH STAGE / DATE					

FUSARIUM HEAD BLIGHT (SCAB)

		Greensburg IN Brown	Lafayette IN Moreno	W. Lafayette IN Ohm inoculated % severity
		1-9	1-9	
1	AGS 2000	5	6	93
2	USG 3209	3	3	47
3	Pioneer Brand 26R61	5	7	72
4	McCormick	4	3	45
5	LA95135D54-2-3	8	8	89
6	VA02W-555	7	3	13
7	VA02W-370	7	6	37
8	GA96693-4E16	8	8	77
9	GA951231-4E25	8	6	32
10	GA951231-4E26	8	7	43
11	GA961171-4E21	8	7	39
12	AR96077-10-1	6	3	60
13	ARTX5406	8	6	69
14	Z00-3538	3	3	72
15	Z00-3554	3	4	66
16	GX02-138	3	3	61
17	VA01W-205	3	4	23
18	VA02W-713	3	4	22
19	P981233A1-10-12-1-1-4	2	2	25
20	P992060G1-1-9	3	2	54
21	P992133A2-1-2	3	2	42
22	TN601	8	5	74
23	TN604	6	6	83
24	NC02-1957	7	5	81
25	NC02-4518	8	5	93
26	MD00-72-5064	3	4	38
27	MD99-483-5158	6	6	54
28	LA98094BUB-58-5	3		30
29	LA9554-D68-3-2	3	3	54
30	FL91226A-X4	4		71
31	FL98174-D44	5	4	29
32	FL98031-D15-E4	2	3	87
33	SC013787	7	4	93
34	SC110329	6	6	58
35	G20915	3	4	56
36	G28146	3	3	48
37	G30623	3	4	61
38	G30204	3	4	22
39	B010973	2	3	35
40	B011260	6	7	63
41	B02-8486	7	4	22
42	B02-8483	3	2	67
43	APCK M00-3904-9	4	4	69
44	APCK M02-2152	2	3	74
45	APCK B02-8443	3	4	60
LOCATION MEANS:		4.8	4.4	55.5
GROWTH STAGE / DATE		June 6		

POWDERY MILDEW

	Plains GA Johnson	Ft. Branch IN Moreno	Lafayette IN Moreno	Woodford Co. KY Van Sanford	Wooster OH Sneller	
		1-9	1-9	0-9	0-9	
1	AGS 2000	1	4.0	1	4.0	3
2	USG 3209	2	3.5	1	4.5	0
3	Pioneer Brand 26R61	2	1.0	1	3.0	1
4	McCormick	0	1.0	1	1.5	0
5	LA95135D54-2-3	2	2.0	1	3.0	0
6	VA02W-555	0	1.0	1	4.0	0
7	VA02W-370	2	2.5	1	3.0	0
8	GA96693-4E16	1	2.0	1	2.5	0
9	GA951231-4E25	3	3.5	1	4.5	1
10	GA951231-4E26	2	2.0	1	4.0	2
11	GA961171-4E21	0	1.5	1	4.0	1
12	AR96077-10-1	2	2.0	1	5.5	0
13	ARTX5406	1	2.0	1	5.0	1
14	Z00-3538	2	2.5	1	5.0	3
15	Z00-3554	2	2.0	1	3.0	0
16	GX02-138	2	3.0	1	5.0	0
17	VA01W-205	0	2.0	1	5.5	0
18	VA02W-713	1	1.0	1	1.5	0
19	P981233A1-10-12-1-1-4	2	3.0	1	5.5	1
20	P992060G1-1-9	2	3.0	1	5.5	6
21	P992133A2-1-2	1	1.5	1	4.5	6
22	TN601	4	6.5	1	7.0	1
23	TN604	2	1.5	1	4.0	0
24	NC02-1957	2	1.5	1	2.5	0
25	NC02-4518	2	1.0	1	1.5	0
26	MD00-72-5064	1	1.0	1	3.0	0
27	MD99-483-5158	2	1.0	1	2.5	0
28	LA98094BUB-58-5	1	1.0	1	3.5	0
29	LA9554-D68-3-2	3	1.0	1	5.0	1
30	FL91226A-X4	0	1.5	1	0.0	0
31	FL98174-D44	0	4.0	1	5.5	3
32	FL98031-D15-E4	3	1.5	1	2.5	0
33	SC013787	4	3.0	1	5.0	3
34	SC110329	4	2.0	1	6.0	0
35	G20915	1	4.5	1	1.0	0
36	G28146	7	7.0	4	7.0	2
37	G30623	2	5.5	2	5.5	4
38	G30204	1	6.0	2	5.5	1
39	B010973	3	3.0	1	5.0	1
40	B011260	1	2.5	1	6.0	0
41	B02-8486	1	4.5	2	5.0	0
42	B02-8483	0	4.5	1	6.0	5
43	APCK M00-3904-9	4	2.5	1	4.5	2
44	APCK M02-2152	1	2.0	1	4.5	1
45	APCK B02-8443	0	2.0	1	4.5	0
LOCATION MEANS:	1.8	2.6	1.1	4.1	1.1	

POWDERY MILDEW

Blacksburg

VA

Griffey

seedling / greenhouse

		PM 06		Pm gene	PM 06
1	AGS 2000	12-	Pm differential	Chancellor	Susc 4
2	USG 3209	0	Pm differential	Axminster	Pm 1 34
3	Pioneer Brand 26R61	0/TR3	Pm differential	C68-15*7/CI 13836	Pm 1 3
4	McCormick	0	Pm differential	Ulka	Pm 2 4
5	LA95135D54-2-3	12	Pm differential	Asosan	Pm 3a 4
6	VA02W-555	23	Pm differential	Chul	Pm 3b 01-
7	VA02W-370	23C	Pm differential	Sonora*	Pm 3c 3
8	GA96693-4E16	01-	Pm differential	C68-15*6/Sonora	Pm 3c 34
9	GA951231-4E25	4	Pm differential	C68-15*6/Trit	Pm 3c 34
10	GA951231-4E26	4	Pm differential	Michigan Amber	Pm 3f 4
11	GA961171-4E21	34	Pm differential	Yuma	Pm 4a 4
12	AR96077-10-1	3	Pm differential	C68-15*5/Yuma	Pm 4a 4/0
13	ARTX5406	4	Pm differential	C68-15*5/Kapli	Pm 4a 4/TR0
14	Z00-3538	3	Pm differential	Ronos	Pm 4b 4
15	Z00-3554	0/TR3	Pm differential	Hope	Pm 5 34
16	GX02-138	12	Pm differential	C747*	Pm 6 4
17	VA01W-205	3	Pm differential	Transec*	Pm 7 4
18	VA02W-713	12	Pm differential	C68-15*7/Transec	Pm 7 4
19	P981233A1-10-12-1-1-4	4	Pm differential	Federation/Kavkaz	Pm 8 23
20	P992060G1-1-9	23	Pm differential	Amigo	Pm 17 N/A
21	P992133A2-1-2	23	Pm differential	C68-15*5//747/Amigo	Pm 17 N/A
22	TN601	4			
23	TN604	4			
24	NC02-1957	0/TR3			
25	NC02-4518	0/TR3			
26	MD00-72-5064	3			
27	MD99-483-5158	01			
28	LA98094BUB-58-5	12			
29	LA9554-D68-3-2	3			
30	FL91226A-X4	01			
31	FL98174-D44	4			
32	FL98031-D15-E4	12			
33	SC013787	01			
34	SC110329	2			
35	G20915	3			
36	G28146	23			
37	G30623	3			
38	G30204	23			
39	B010973	3			
40	B011260	12			
41	B02-8486	3			
42	B02-8483	34			
43	APCK M00-3904-9	3			
44	APCK M02-2152	3			

VIRUSES

		Belle Mina	Bay	Evansville		Columbia
		AL	AR	IN		MO
		Glass	Hancock	Ohm		McKendry
		BYDV	WSSMV	SBMV	BYDV	BYDV
		% plants affected		0-9	0-9	% flag leaf
1	AGS 2000	43	2.0	3.5	3.5	8
2	USG 3209	27	2.0	3.0	4.5	4
3	Pioneer Brand 26R61	33	2.5	3.0	4.0	3
4	McCormick	50	2.5	3.0	5.5	3
5	LA95135D54-2-3	43	3.0	4.0	4.0	1
6	VA02W-555	23	2.0	3.0	2.5	2
7	VA02W-370	27	2.5	4.0	4.0	3
8	GA96693-4E16	37	2.5	4.5	1.5	2
9	GA951231-4E25	43	2.0	3.5	4.5	2
10	GA951231-4E26	60	2.0	3.0	3.5	3
11	GA961171-4E21	67	2.0	3.0	4.5	4
12	AR96077-10-1	27	3.0	3.0	4.5	2
13	ARTX5406	33	3.0	4.0	5.5	3
14	Z00-3538	27	3.0	1.5	3.0	1
15	Z00-3554	27	3.0	3.0	3.5	2
16	GX02-138	50	2.5	1.0	5.0	5
17	VA01W-205	50	3.0	3.5	4.0	2
18	VA02W-713	27	3.0	3.0	4.5	2
19	P981233A1-10-12-1-1-4	47	3.5	3.0	5.5	5
20	P992060G1-1-9	67	2.5	2.0	4.0	6
21	P992133A2-1-2	43	3.5	2.0	4.5	4
22	TN601	43	2.5	3.0	3.0	2
23	TN604	40	2.0	4.0	3.5	2
24	NC02-1957	40	2.5	5.0	3.0	2
25	NC02-4518	47	3.0	4.0	3.0	2
26	MD00-72-5064	27	3.0	2.5	2.5	2
27	MD99-483-5158	47	3.0	4.0	4.5	2
28	LA98094BUB-58-5	33	2.0	6.0	5.0	2
29	LA9554-D68-3-2	28	3.0	4.0	5.0	14
30	FL91226A-X4	27	2.0	5.0	3.5	1
31	FL98174-D44	50	2.5	4.5	5.0	20
32	FL98031-D15-E4	40	2.5	4.0	4.0	1
33	SC013787	37	2.0	4.0	4.0	3
34	SC110329	23	3.0	3.5	3.5	1
35	G20915	47	3.5	3.5	4.5	2
36	G28146	47	3.0	2.5	4.0	3
37	G30623	20	3.0	2.5	4.0	2
38	G30204	30	3.0	3.5	5.0	15
39	B010973	60	3.0	3.0	3.5	2
40	B011260	33	3.0	3.0	2.5	4
41	B02-8486	47	2.5	2.0	3.0	4
42	B02-8483	57	3.5	4.0	6.0	3
43	APCK M00-3904-9	37	2.0	2.0	1.5	1
44	APCK M02-2152	67	3.0	2.5	4.5	3
45	APCK B02-8443	43	3.0	4.5	5.5	4
LOCATION MEANS:		40.4	2.7	3.3	4.0	3.6
GROWTH STAGE / DATE				March 29		

HESSIAN FLY

	Quincy FL Barnett 0-9	Kinston NC Murphy	
1	AGS 2000	0	4.5 5.0
2	USG 3209	1	5.0 5.0
3	Pioneer Brand 26R61	0	4.0 4.0
4	McCormick	2	4.0 4.5
5	LA95135D54-2-3	3	4.0 5.0
6	VA02W-555	3	6.0 6.0
7	VA02W-370	2	2.5 2.5
8	GA96693-4E16	0	4.5 4.5
9	GA951231-4E25	0	3.0 2.5
10	GA951231-4E26	1	3.0 3.5
11	GA961171-4E21	1	3.0 3.5
12	AR96077-10-1	4	3.5 5.0
13	ARTX5406	3	5.0 6.5
14	Z00-3538	4	2.5 2.0
15	Z00-3554	3	4.0 3.0
16	GX02-138	6	4.0 2.5
17	VA01W-205	5	6.0 5.5
18	VA02W-713	0	4.0 3.5
19	P981233A1-10-12-1-1-4	4	4.0 5.0
20	P992060G1-1-9	8	4.5 5.5
21	P992133A2-1-2	7	5.0 7.0
22	TN601	8	4.0 5.0
23	TN604	0	5.0 4.0
24	NC02-1957	0	4.0 4.5
25	NC02-4518	2	3.5 4.5
26	MD00-72-5064	2	4.0 4.0
27	MD99-483-5158	1	4.5 4.5
28	LA98094BUB-58-5	1	4.0 5.0
29	LA9554-D68-3-2	0	4.0 5.0
30	FL91226A-X4	3	6.0 6.5
31	FL98174-D44	0	5.0 6.0
32	FL98031-D15-E4	2	4.0 4.0
33	SC013787	2	4.0 5.0
34	SC110329	1	5.5 5.5
35	G20915	4	4.5 4.5
36	G28146	4	3.5 3.0
37	G30623	6	3.0 3.5
38	G30204	1	4.0 4.5
39	B010973	3	3.5 7.0
40	B011260	2	5.5 6.5
41	B02-8486	1	4.0 5.0
42	B02-8483	3	5.0 4.5
43	APCK M00-3904-9	6	4.0 6.5
44	APCK M02-2152	4	4.0 4.5
45	APCK B02-8443	0	3.5 4.5
LOCATION MEANS:		2.5	4.2 4.6
GROWTH STAGE / DATE		April 26	Dec 28 May 9

HESSIAN FLY

W. Lafayette
IN

Cambron

	B	C	D	L
1 AGS 2000	8-3	0-17	0-14	1-15
2 USG 3209	16-0	0-14	0-12	0-15
3 Pioneer Brand 26R61	0-13	0-17	0-12	0-14
4 McCormick	0-14	0-21	0-18	0-15
5 LA95135D54-2-3	0-10	0-15	0-17	0-16
6 VA02W-555	0-11	0-14	0-15	0-18
7 VA02W-370	0-10	14-1	0-13	0-16
8 GA96693-4E16	0-17	0-16	0-14	0-14
9 GA951231-4E25	16-0	15-0	15-0	12-0
10 GA951231-4E26	16-0	16-0	15-0	18-0
11 GA961171-4E21	15-0	18-0	12-0	13-0
12 AR96077-10-1	0-15	0-14	0-15	0-18
13 ARTX5406	0-16	0-15	0-18	0-18
14 Z00-3538	11-0	16-0	0-12	13-3
15 Z00-3554	15-0	8-3	0-14	0-16
16 GX02-138	14-1	0-15	0-18	0-18
17 VA01W-205	0-16	0-14	0-11	0-16
18 VA02W-713	16-0	16-0	13-3	0-18
19 P981233A1-10-12-1-1-4	0-11	14-3	0-14	0-16
20 P992060G1-1-9	0-14	0-15	0-16	0-19
21 P992133A2-1-2	0-17	0-17	0-16	0-16
22 TN601	0-15	0-14	0-12	0-14
23 TN604	0-16	0-15	0-13	0-17
24 NC02-1957	0-15	8-7	0-15	0-16
25 NC02-4518	0-18	13-1	0-17	0-13
26 MD00-72-5064	0-15	0-16	0-15	0-16
27 MD99-483-5158	0-16	15-1	0-16	0-14
28 LA98094BUB-58-5	0-15	0-17	0-14	0-16
29 LA9554-D68-3-2	0-14	0-16	0-16	0-18
30 FL91226A-X4	0-16	0-17	0-17	0-19
31 FL98174-D44	0-14	0-16	0-13	0-17
32 FL98031-D15-E4	0-11	0-13	0-12	0-11
33 SC013787	0-14	0-12	0-14	0-9
34 SC110329	0-12	0-14	0-14	0-19
35 G20915	0-12	13-2	0-16	0-15
36 G28146	13-0	0-15	0-16	0-19
37 G30623	15-0	11-5	0-17	0-18
38 G30204	0-15	0-13	0-14	0-18
39 B010973	0-16	0-16	0-12	0-19
40 B011260	14-2	11-2	0-17	0-16
41 B02-8486	0-13	0-13	0-15	0-18
42 B02-8483	0-13	0-16	0-15	0-16
43 APCK M00-3904-9	0-12	0-16	0-14	0-16
44 APCK M02-2152	0-11	0-14	0-16	0-18
45 APCK B02-8443	0-12	0-19	0-17	0-19

LOCATION MEANS:
GROWTH STAGE / DATE

ACID SOIL TOLERANCE

		Enid OK Carver	
	0-5	0-5	0-5
1	AGS 2000	3	2
2	USG 3209	2	3
3	Pioneer Brand 26R61	3	4
4	McCormick	3	3
5	LA95135D54-2-3	3	2
6	VA02W-555	2	3
7	VA02W-370	4	4
8	GA96693-4E16	3	2
9	GA951231-4E25	3	3
10	GA951231-4E26	3	2
11	GA961171-4E21	3	3
12	AR96077-10-1	3	3
13	ARTX5406	3	3
14	Z00-3538	2	3
15	Z00-3554	3	3
16	GX02-138	2	3
17	VA01W-205	3	3
18	VA02W-713	2	3
19	P981233A1-10-12-1-1-4	2	3
20	P992060G1-1-9	4	4
21	P992133A2-1-2	4	4
22	TN601	2	3
23	TN604	1	2
24	NC02-1957	3	4
25	NC02-4518	3	4
26	MD00-72-5064	3	4
27	MD99-483-5158	0	2
28	LA98094BUB-58-5	4	3
29	LA9554-D68-3-2	1	2
30	FL91226A-X4	4	5
31	FL98174-D44	4	4
32	FL98031-D15-E4	3	2
33	SC013787	5	5
34	SC110329	2	3
35	G20915	3	3
36	G28146	2	2
37	G30623	4	4
38	G30204	2	1
39	B010973	3	2
40	B011260	2	2
41	B02-8486	3	1
42	B02-8483	3	2
43	APCK M00-3904-9	2	2
44	APCK M02-2152	3	2
45	APCK B02-8443	1	1
LOCATION MEANS:	2.1	2.7	2.8
GROWTH STAGE / DATE	October 28	April 11	May 31

1RS STATUS

Lincoln
NE

Graybosch

1	AGS 2000	1BL.1RS
2	USG 3209	1BL.1RS
3	Pioneer Brand 26R61	1BL.1RS
4	McCormick	1AL.1RS
5	LA95135D54-2-3	non-1RS
6	VA02W-555	1BL.1RS
7	VA02W-370	non-1RS
8	GA96693-4E16	non-1RS
9	GA951231-4E25	non-1RS
10	GA951231-4E26	non-1RS
11	GA961171-4E21	non-1RS
12	AR96077-10-1	non-1RS
13	ARTX5406	non-1RS
14	Z00-3538	1BL.1RS
15	Z00-3554	non-1RS
16	GX02-138	non-1RS
17	VA01W-205	non-1RS
18	VA02W-713	? Unclear
19	P981233A1-10-12-1-1-4	1BL.1RS
20	P992060G1-1-9	non-1RS
21	P992133A2-1-2	non-1RS
22	TN601	non-1RS
23	TN604	non-1RS
24	NC02-1957	non-1RS
25	NC02-4518	non-1RS
26	MD00-72-5064	non-1RS
27	MD99-483-5158	non-1RS
28	LA98094BUB-58-5	non-1RS
29	LA9554-D68-3-2	non-1RS
30	FL91226A-X4	non-1RS
31	FL98174-D44	non-1RS
32	FL98031-D15-E4	non-1RS
33	SC013787	1BL.1RS
34	SC110329	non-1RS
35	G20915	non-1RS
36	G28146	non-1RS
37	G30623	non-1RS
38	G30204	non-1RS
39	B010973	non-1RS
40	B011260	non-1RS
41	B02-8486	non-1RS
42	B02-8483	non-1RS
43	APCK M00-3904-9	1BL.1RS
44	APCK M02-2152	non-1RS
45	APCK B02-8443	non-1RS

PHENOTYPE

		Bay AR	Baton Rouge LA	Winnsboro LA
		Hancock Growth Habit	Harrison Phenotype	Harrison Phenotype
		1-5	0-9	0-9
1	AGS 2000	4.0	3.8	3.3
2	USG 3209	4.0	3.5	4.0
3	Pioneer Brand 26R61	3.0	2.8	4.0
4	McCormick	3.0	8.0	7.8
5	LA95135D54-2-3	3.5	3.8	4.0
6	VA02W-555	3.0	4.3	4.5
7	VA02W-370	3.5	3.5	3.8
8	GA96693-4E16	3.0	3.5	3.0
9	GA951231-4E25	3.0	3.5	4.0
10	GA951231-4E26	3.0	3.0	4.0
11	GA961171-4E21	3.5	4.0	3.8
12	AR96077-10-1	3.0	4.3	3.8
13	ARTX5406	3.0	5.3	4.0
14	Z00-3538	3.0	8.0	6.0
15	Z00-3554	3.0	6.3	5.3
16	GX02-138	2.5	7.5	5.8
17	VA01W-205	3.0	6.8	5.5
18	VA02W-713	3.0	3.8	4.0
19	P981233A1-10-12-1-1-4	3.0	8.0	6.5
20	P992060G1-1-9	3.0	7.3	5.5
21	P992133A2-1-2	2.5	7.0	6.0
22	TN601	3.0	8.0	5.8
23	TN604	3.5	6.0	5.5
24	NC02-1957	3.5	4.3	5.3
25	NC02-4518	3.0	4.3	5.3
26	MD00-72-5064	2.0	7.8	5.3
27	MD99-483-5158	3.0	3.3	3.8
28	LA98094BUB-58-5	4.0	3.3	4.0
29	LA9554-D68-3-2	3.5	3.5	3.5
30	FL91226A-X4	4.0	3.5	3.3
31	FL98174-D44	3.5	4.5	4.0
32	FL98031-D15-E4	3.0	4.8	5.0
33	SC013787	4.5	3.5	4.3
34	SC110329	3.0	4.5	4.0
35	G20915	3.0	5.5	5.3
36	G28146	3.0	7.8	6.0
37	G30623	3.0	7.8	6.0
38	G30204	3.0	4.5	5.0
39	B010973	3.0	7.3	4.8
40	B011260	3.0	4.8	4.0
41	B02-8486	3.0	3.5	3.3
42	B02-8483	3.0	4.8	4.0
43	APCK M00-3904-9	3.0	7.5	5.8
44	APCK M02-2152	3.0	7.3	6.8
45	APCK B02-8443	3.0	4.0	3.5
LOCATION MEANS:		3.2	5.2	4.7
GROWTH STAGE / DATE		juvenile	head to harvest	head to harvest

MATURITY

		Florence
		SC
		Edge
		1-5
1	AGS 2000	2.0
2	USG 3209	3.0
3	Pioneer 26R61	2.5
4	McCormick	4.0
5	LA95135D54-2-3	3.0
6	VA02W-555	2.5
7	VA02W-370	1.5
8	GA96693-4E16	1.0
9	GA951231-4E25	2.0
10	GA951231-4E26	2.0
11	GA961171-4E21	1.5
12	AR96077-10-1	2.0
13	ARTX5406	2.0
14	Z00-3538	5.0
15	Z00-3554	3.5
16	GX02-138	4.0
17	VA01W-205	3.0
18	VA02W-713	1.5
19	P981233A1-10-12-1-1-4	4.0
20	P992060G1-1-9	2.0
21	P992133A2-1-2	3.0
22	TN601	3.5
23	TN604	2.0
24	NC02-1957	1.5
25	NC02-4518	1.0
26	MD00-72-5064	4.0
27	MD99-483-5158	3.0
28	LA98094BUB-58-5	2.5
29	LA9554-D68-3-2	2.0
30	FL91226A-X4	3.0
31	FL98174-D44	1.0
32	FL98031-D15-E4	4.0
33	SC013787	1.5
34	SC110329	1.5
35	G20915	3.0
36	G28146	4.0
37	G30623	5.0
38	G30204	3.0
39	B010973	3.5
40	B011260	2.0
41	B02-8486	1.0
42	B02-8483	2.0
43	APCK M00-3904-9	4.5
44	APCK M02-2152	3.5
45	APCK B02-8443	3.0

LOCATION MEANS: 2.7
 GROWTH STAGE / DATE April 14

2006 Crop Advanced Nursery Evaluation

A total of 90 entries were submitted from the Uniform Southern Soft Red Winter Wheat Nursery. These were divided into two regions (Interior and Coastal) each considered separately for evaluation purposes. The standard data is compared to the "historical average" for the cultivar, and quality scores for all entries are adjusted to this average. The samples were compared to the PION 26R61 check contained in each nursery. Of the 767 cultivars in the SWQL database of Allis-milled cultivars, PION 26R61 ranks 306th for Milling Score based on data from 3 millings. The following table compares the PION 26R61 standards with the "historical data" from the Allis and Quad databases:

	Allis Database	Interior	Coastal	Quad Database
Test Weight	62.9	61.6	61.1	62.9
Flour Yield	77.4	70.0	68.9	70.8
Break Flour	31.1			
E.S.I.	9.6			
Friability	28.8			
Softness Equivalent		54.8	53.3	54.1
Protein	9.5	9.2	9.6	9.6
Ash	0.45			
Cookie Diameter	17.4	17.1	17.0	17.6
Lactic Acid Retention	97	109	113	110
Mill Score	69.3 C			
Bake Score	52.2 D			
S.E. Score	64.6 C			
Test Wt. Score	72.5 B			

The following table shows how much the quality scores are adjusted to be similar to the adjustment of the standard, after comparison to the “historical data”:

	Interior	Coastal
Milling Quality Score Factor	+10.9	+16.6
Baking Quality Score Factor	+9.5	+13.5
Softness Equivalent Factor	-7.7	-3.4
Test Weight Score Factor	+10.6	+15.0

This crop year a new tab called “Grain Condition” has been added to the evaluation spreadsheet. On this sheet we attempt to give an overview of each entry’s grain condition prior to milling. We would welcome any feedback on this new information.

In addition to the standard, AGS 2000, USG 3209 and McCORMICK have been previously analyzed by the SWQL and were included in these nurseries.

With regard to grain condition, the samples were not cleaned prior to milling. The Coastal Region was in somewhat poorer condition than the Interior Region as the Coastal Region had higher amounts of both shriveling and weathering.

While test weight values for the standard and three other checks were all lower than their historic values in each location, they tended to agree well between the two locations with the exception of McCORMICK which had a 2.2 lb/bu difference between the Interior and Coastal Regions. Among the two locations, the Coastal Region had an average test weight 0.8 lb/bu higher than the Interior Region.

Milling yields were somewhat lower than historic values for each of the four checks from the Interior Region, while the checks from the Coastal Region showed further reduction in milling yield. The average milling yields for the Interior and Coastal Regions were 69.5% and 68.9%, respectively. On average, the Interior Region (59.0% S.E.) was slightly softer than the Coastal Region (55.4% S.E.).

Lactic Acid SRC values for the checks from both locations matched very well with previous data.

Comments from SWQL Director

Included in the data summary for this year is a two year average for entries that were repeated from 2005. Of the seven lines four are checks. This summary should provide an indicator of size of interactions between genotypes and test years. In the 2006 data, the division of nursery into coastal and interior test sites should be used to assess a cultivar's quality within a target adaptation zone. As most released cultivars tend to find their way into environments outside of their original target zone, the average of the composite evaluations may be of more value. Based on trait variability within the data set and the trait's ability to predict of end-use quality, extra weight should be assigned to the milling quality score, the softness equivalence, and the sucrose SRC value.

Genotypes with milling quality scores or softness equivalence less than McCormick by 2.5 times the standard deviation of the mean (See 'Summary information of US Nursery') likely are less than desirable for soft wheat milling characteristics. Genotypes with sucrose SRC values greater than McCormick by 2.5 times the standard deviation of the mean likely are less than desirable for soft wheat flour characteristics. Genotypes that are significantly lower than McCormick for milling quality score and softness equivalence and are significantly greater than McCormick for sucrose SRC, are likely to be cultivars that have quality inconsistent with traditional soft wheat characteristics. Unless there is a specialty application known for the wheat, breeders should consider if the merits of releasing the wheat out-weigh the damage to the overall market class that comes from releasing poorer quality lines.

For this nursery, we conducted both a sugar snap cookie test and a sucrose SRC test. Normally we conduct one or the other because these two tests are correlated. This was the case for both composites of the Uniform Southern Nursery (See graphs). In some datasets protein is also correlated to cookie diameter. Among samples of the Interior Composite, flour protein was weakly correlated to cookie diameter. Yet flour protein was not correlated to cookie diameter in the Coastal Composite, either as an independent predictor or as a second variable in a multiple regression model with sucrose SRC. Protein is an inconsistent phenotypic predictor of cookie diameter among elite soft wheats in many cases and is a very poor genotypic predictor of cookie diameter and typically should not be used as selection criteria for soft wheats, except in the most extreme cases.

Respectfully submitted by,
Edward Souza
Research Leader
Soft Wheat Quality Laboratory

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA		MILLING QUALITY SCORE	BAKING QUALITY SCORE	TEST WT. SCORE	SOFT. EQUIV. SCORE				
	STANDARD (#2503, Pioneer Brand 26R61)		69.3	C	52.2	D	72.5	B	64.6	C
2501	1	AGS 2000	79.7	B	68.2	C	63.4	C	78.7	B
2502	2	USG 3209	67.5	C	37.9	F	62.3	C	66.9	C
2503	3	Pioneer Brand 26R61	69.3	C	52.2	D	72.5	B	64.6	C
2504	4	McCormick	60.9	C	51.2	D	51.2	D	88.0	A
2505	5	LA95135D54-2-3	63.4	C	40.5	E	47.0	E	87.5	A
2506	6	VA02W-555	66.5	C	37.5	F	50.5	D	68.4	C
2507	7	VA02W-370	64.9	C	42.5	E	63.7	C	76.0	B
2508	8	GA96693-4E16	77.9	B	104.5	A	55.3	D	77.3	B
2509	9	GA951231-4E25	66.4	C	22.2	F	47.7	E	80.0	A
2510	10	GA951231-4E26	73.4	B	40.2	E	48.3	E	85.4	A
2511	11	GA961171-4E21	58.8	D	17.2	F	44.5	E	53.2	D
2512	12	AR96077-10-1	69.6	C	68.2	C	51.8	D	79.6	B
2513	13	ARTX5406	68.5	C	62.9	C	67.0	C	76.8	B
2514	14	Z00-3538	68.9	C	64.9	C	42.4	E	66.9	C
2515	15	Z00-3554	62.5	C	61.5	C	31.5	F	74.0	B
2516	16	GX02-138	62.6	C	67.9	C	28.8	F	90.1	A
2517	17	VA01W-205	73.8	B	87.2	A	61.3	C	90.1	A
2518	18	VA02W-713	62.3	C	70.5	B	62.1	C	87.1	A
2519	19	P981233A1-10-12-1-1-4	55.5	D	55.9	D	37.1	F	73.9	B
2520	20	P992060G1-1-9	56.9	D	56.2	D	8.8	F	85.1	A
2521	21	P992133A2-1-2	63.4	C	54.5	D	10.7	F	84.7	A
2522	22	TN601	74.0	B	59.9	D	64.6	C	72.3	B
2523	23	TN604	71.1	B	61.2	C	35.8	F	81.0	A
2524	24	NC02-1957	64.6	C	57.2	D	47.0	E	75.7	B
2525	25	NC02-4518	64.1	C	68.9	C	37.9	F	75.5	B
2526	26	MD00-72-5064	57.0	D	27.9	F	58.2	D	75.7	B
2527	27	MD99-483-5158	46.3	E	56.2	D	50.6	D	75.5	B
2528	28	LA98094BUB-58-5	66.6	C	62.5	C	55.6	D	69.2	C
2529	29	LA9554-D68-3-2	67.1	C	53.5	D	43.7	E	86.4	A
2530	30	FL91226A-X4	82.2	A	87.5	A	42.7	E	77.7	B
2531	31	FL98174-D44	66.7	C	52.2	D	52.6	D	82.4	A
2532	32	FL98031-D15-E4	74.7	B	68.5	C	61.3	C	66.3	C
2533	33	SC013787	61.3	C	27.5	F	61.7	C	67.7	C
2534	34	SC110329	78.5	B	75.9	B	65.2	C	72.2	B
2535	35	G20915	73.4	B	61.9	C	62.6	C	74.1	B
2536	36	G28146	70.9	B	87.9	A	45.3	E	93.0	A
2537	37	G30623	66.3	C	52.2	D	50.4	D	78.6	B
2538	38	G30204	75.8	B	89.2	A	63.6	C	71.3	B
2539	39	B010973	66.4	C	68.2	C	55.0	D	65.9	C
2540	40	B011260	72.2	B	74.2	B	44.8	E	70.7	B
2541	41	B02-8486	74.2	B	75.9	B	68.3	C	75.4	B
2542	42	B02-8483	68.2	C	68.5	C	58.4	D	83.5	A
2543	43	APCK M00-3904-9	59.2	D	57.5	D	69.9	C	63.9	C
2544	44	APCK M02-2152	56.9	D	31.9	F	36.9	F	76.3	B
2545	45	APCK B02-8443	57.5	D	56.2	D	48.5	E	79.4	B

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA		MICRO T.W. LB/BU	FLOUR YIELD %	SOFT. EQUIV. %	FLOUR PROT. %		
	STANDARD (#2503, Pioneer Brand 26R61)		61.6	70.0	54.8	9.22		
2501	1	AGS 2000	60.5	72.1	59.7	9.10		
2502	2	USG 3209	60.4	*	69.7	55.6	8.74	
2503	3	Pioneer Brand 26R61	61.6		70.0	54.8	9.22	
2504	4	McCormick	59.1	Q	68.3	Q	63.0	8.60
2505	5	LA95135D54-2-3	58.6	Q	68.8	*	62.8	8.65
2506	6	VA02W-555	59.0	Q	69.4		56.1	9.27
2507	7	VA02W-370	60.6		69.1	*	58.8	10.08
2508	8	GA96693-4E16	59.6	*	71.7		59.3	7.89
2509	9	GA951231-4E25	58.7	Q	69.4		60.2	8.31
2510	10	GA951231-4E26	58.7	Q	70.8		62.1	8.38
2511	11	GA961171-4E21	58.3	Q	67.9	Q	50.8	* 8.75
2512	12	AR96077-10-1	59.2	Q	70.1		60.1	8.53
2513	13	ARTX5406	61.0		69.8		59.1	8.45
2514	14	Z00-3538	58.0	Q	69.9		55.6	8.44
2515	15	Z00-3554	56.7	Q	68.7	*	58.1	7.92
2516	16	GX02-138	56.4	Q	68.7	*	63.7	8.28
2517	17	VA01W-205	60.3	*	70.9		63.8	8.36
2518	18	VA02W-713	60.4	*	68.6	*	62.7	8.38
2519	19	P981233A1-10-12-1-1-4	57.4	Q	67.2	Q	58.1	9.67
2520	20	P992060G1-1-9	54.0	Q	67.5	Q	62.0	9.46
2521	21	P992133A2-1-2	54.2	Q	68.8	*	61.8	8.56
2522	22	TN601	60.7		71.0		57.5	8.63
2523	23	TN604	57.2	Q	70.4		60.5	8.58
2524	24	NC02-1957	58.6	Q	69.1	*	58.7	8.89
2525	25	NC02-4518	57.5	Q	69.0	*	58.6	8.01
2526	26	MD00-72-5064	59.9	*	67.5	Q	58.7	9.63
2527	27	MD99-483-5158	59.0	Q	65.4	Q	58.6	8.51
2528	28	LA98094BUB-58-5	59.6	*	69.5		56.4	8.87
2529	29	LA9554-D68-3-2	58.2	Q	69.6		62.5	8.87
2530	30	FL91226A-X4	58.1	Q	72.6		59.4	7.98
2531	31	FL98174-D44	59.2	Q	69.5		61.0	9.29
2532	32	FL98031-D15-E4	60.3	*	71.1		55.4	10.15
2533	33	SC013787	60.3	*	68.4	Q	55.9	9.07
2534	34	SC110329	60.8		71.8		57.5	8.89
2535	35	G20915	60.5		70.8		58.1	8.62
2536	36	G28146	58.4	Q	70.3		64.8	8.24
2537	37	G30623	59.0	Q	69.4		59.7	8.11
2538	38	G30204	60.6		71.3		57.2	7.51
2539	39	B010973	59.5	*	69.4		55.3	8.72
2540	40	B011260	58.3	Q	70.6		57.0	8.56
2541	41	B02-8486	61.1		71.0		58.6	8.73
2542	42	B02-8483	59.9	*	69.8		61.4	8.22
2543	43	APCK M00-3904-9	61.3		68.0	Q	54.6	7.98
2544	44	APCK M02-2152	57.4	Q	67.5	Q	58.9	8.17
2545	45	APCK B02-8443	58.8	Q	67.7	Q	60.0	8.62

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA		LACTIC ACID RET'N	COOKIE DIAM. CM.	TOP GR.	SUCROSE RET'N	
	STANDARD (#2503, Pioneer Brand 26R61)		109.0	17.08	3	95.7	
2501	1	AGS 2000	108.0	17.56	4	97.6	
2502	2	USG 3209	112.9	16.65	*	3	108.9
2503	3	Pioneer Brand 26R61	109.0	17.08		3	95.7
2504	4	McCormick	122.4	17.05		3	99.8
2505	5	LA95135D54-2-3	122.3	16.73	*	2	113.6
2506	6	VA02W-555	116.2	16.64	*	2	99.9
2507	7	VA02W-370	112.9	16.79	*	4	97.4
2508	8	GA96693-4E16	109.9	18.65		6	87.8
2509	9	GA951231-4E25	132.7	16.18	Q	1	103.3
2510	10	GA951231-4E26	135.4	16.72	*	2	104.1
2511	11	GA961171-4E21	113.6	16.03	Q	3	100.8
2512	12	AR96077-10-1	137.0	17.56		7	95.5
2513	13	ARTX5406	110.1	17.40		4	96.2
2514	14	Z00-3538	103.2	17.46		4	94.2
2515	15	Z00-3554	105.2	17.36		4	93.5
2516	16	GX02-138	126.9	17.55		3	97.5
2517	17	VA01W-205	123.0	18.13		4	88.9
2518	18	VA02W-713	107.6	17.63		4	98.9
2519	19	P981233A1-10-12-1-1-4	116.5	17.19		3	94.9
2520	20	P992060G1-1-9	116.5	17.20		2	97.3
2521	21	P992133A2-1-2	119.0	17.15		2	96.3
2522	22	TN601	140.6	17.31		3	97.4
2523	23	TN604	115.6	17.35		3	94.5
2524	24	NC02-1957	130.6	17.23		2	99.6
2525	25	NC02-4518	129.3	17.58		4	103.7
2526	26	MD00-72-5064	140.4	16.35	Q	1	111.6
2527	27	MD99-483-5158	124.9	17.20		3	95.7
2528	28	LA98094BUB-58-5	105.4	17.39		4	92.9
2529	29	LA9554-D68-3-2	134.6	17.12		5	98.5
2530	30	FL91226A-X4	117.5	18.14		4	92.7
2531	31	FL98174-D44	129.5	17.08		2	104.9
2532	32	FL98031-D15-E4	131.5	17.57		3	98.5
2533	33	SC013787	107.6	16.34	Q	1	106.8
2534	34	SC110329	116.0	17.79		5	96.8
2535	35	G20915	123.7	17.37		5	94.0
2536	36	G28146	117.7	18.15		4	91.5
2537	37	G30623	108.6	17.08		5	99.2
2538	38	G30204	121.6	18.19		5	90.6
2539	39	B010973	114.4	17.56		5	91.0
2540	40	B011260	103.8	17.74		4	88.4
2541	41	B02-8486	109.0	17.79		3	93.6
2542	42	B02-8483	128.0	17.57		3	98.5
2543	43	APCK M00-3904-9	110.8	17.24		3	99.3
2544	44	APCK M02-2152	134.4	16.47	Q	2	108.7
2545	45	APCK B02-8443	124.7	17.20		3	98.3

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA		FHB	WEATHERING	SPROUTING	SHRIVELING
			(0-9)	(Yes/No)	(0-9)	(0-3)
STANDARD (#2503, Pioneer Brand 26R61)						
2501	1	AGS 2000	1	y	0	1
2502	2	USG 3209	1	n	0	1
2503	3	Pioneer Brand 26R61	2	n	0	1
2504	4	McCormick	1	n	0	2
2505	5	LA95135D54-2-3	3	y	0	2
2506	6	VA02W-555	2	y	0	1
2507	7	VA02W-370	1	y	0	1
2508	8	GA96693-4E16	1	n	0	1
2509	9	GA951231-4E25	3	y	0	2
2510	10	GA951231-4E26	3	y	0	1
2511	11	GA961171-4E21	3	y	0	2
2512	12	AR96077-10-1	2	y	0	1
2513	13	ARTX5406	1	y	0	1
2514	14	Z00-3538	1	n	0	1
2515	15	Z00-3554	1	n	0	2
2516	16	GX02-138	2	y	0	1
2517	17	VA01W-205	1	n	0	1
2518	18	VA02W-713	1	n	0	1
2519	19	P981233A1-10-12-1-1-4	3	n	0	2
2520	20	P992060G1-1-9	3	y	0	2
2521	21	P992133A2-1-2	2	y	0	2
2522	22	TN601	1	n	0	1
2523	23	TN604	1	n	0	1
2524	24	NC02-1957	3	y	0	2
2525	25	NC02-4518	3	n	0	2
2526	26	MD00-72-5064	3	y	0	0
2527	27	MD99-483-5158	3	n	0	0
2528	28	LA98094BUB-58-5	2	n	0	0
2529	29	LA9554-D68-3-2	3	y	0	0
2530	30	FL91226A-X4	3	y	0	0
2531	31	FL98174-D44	2	n	2	0
2532	32	FL98031-D15-E4	2	n	0	0
2533	33	SC013787	3	y	0	2
2534	34	SC110329	2	y	0	2
2535	35	G20915	1	n	0	1
2536	36	G28146	1	y	0	0
2537	37	G30623	1	y	0	0
2538	38	G30204	1	n	0	0
2539	39	B010973	0	n	0	0
2540	40	B011260	4	y	0	0
2541	41	B02-8486	1	y	1	0
2542	42	B02-8483	3	y	0	0
2543	43	APCK M00-3904-9	1	n	0	0
2544	44	APCK M02-2152	3	y	1	2
2545	45	APCK B02-8443	2	y	0	0

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

		Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA		
LAB NO.				
		STANDARD (#2503, Pioneer Brand 26R61)		
2501	1	AGS 2000		
2502	2	USG 3209		
2503	3	Pioneer Brand 26R61		
2504	4	McCormick		
2505	5	LA95135D54-2-3	GRAIN CONDITION SCALE	
2506	6	VA02W-555		
2507	7	VA02W-370	FHB and SPROUTING	
2508	8	GA96693-4E16	0	None
2509	9	GA951231-4E25	1	1%
2510	10	GA951231-4E26	2	2%
2511	11	GA961171-4E21	3	5%
2512	12	AR96077-10-1	4	10%
2513	13	ARTX5406	5	20%
2514	14	Z00-3538	6	40%
2515	15	Z00-3554	7	60%
2516	16	GX02-138	8	80%
2517	17	VA01W-205	9	100%
2518	18	VA02W-713		
2519	19	P981233A1-10-12-1-1-4	SHRIVELING	
2520	20	P992060G1-1-9	0	None
2521	21	P992133A2-1-2	1	Some
2522	22	TN601	2	Moderate
2523	23	TN604	3	Heavy
2524	24	NC02-1957		
2525	25	NC02-4518		
2526	26	MD00-72-5064		
2527	27	MD99-483-5158		
2528	28	LA98094BUB-58-5		
2529	29	LA9554-D68-3-2		
2530	30	FL91226A-X4		
2531	31	FL98174-D44		
2532	32	FL98031-D15-E4		
2533	33	SC013787		
2534	34	SC110329		
2535	35	G20915		
2536	36	G28146		
2537	37	G30623		
2538	38	G30204		
2539	39	B010973		
2540	40	B011260		
2541	41	B02-8486		
2542	42	B02-8483		
2543	43	APCK M00-3904-9		
2544	44	APCK M02-2152		
2545	45	APCK B02-8443		

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Interior Region: Belle Mina, AL; Stuttgart, AR; Warsaw, VA

EVALUATION SUMMARY

	STD. DATA		AVG. DATA
MILLING QUALITY SCORE	69.30	C	66.8
BAKING QUALITY SCORE	52.20	D	58.8
TW SCORE	72.50	B	50.9
SE SCORE	64.60	C	76.5

	STD. DATA	AVG. DATA	ADJ. L.S.D.	NOTATION BEGINS	
				*	Q
TEST WEIGHT	61.63	59.04	1.19	60.44	59.25
FLOUR YIELD	70.01	69.52	0.75	69.26	68.51
SOFTNESS EQUIV.	54.82	58.99	2.95	51.87	48.92
FLOUR PROTEIN	9.22	8.66	0.75	9.96	10.71
LACTIC ACID RETENTION	108.98	119.56			
COOKIE DIAMETER	17.08	17.28	0.23	16.85	16.62

	A	B	C	D	E	F	TOTAL
MILLING SCORE	1	13	23	7	1	0	45
BAKING SCORE	5	4	13	13	3	7	
TEST WT. SCORE	0	1	14	11	11	8	
SOFTNESS EQUIV. SCORE	14	21	9	1	0	0	

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Coastal Region: Plains,GA; Cleveland, MS; Kinston, NC; Florence, SC		MILLING QUALITY		BAKING QUALITY		TEST WT. SCORE		SOFT. EQUIV. SCORE	
			SCORE		SCORE		SCORE		SCORE	
	STANDARD (#2548, Pioneer Brand 26R61)		69.3	C	52.2	D	72.5	B	64.6	C
2546	1	AGS 2000	80.8	A	67.2	C	69.8	C	78.5	B
2547	2	USG 3209	66.1	C	43.9	E	69.3	C	63.4	C
2548	3	Pioneer Brand 26R61	69.3	C	52.2	D	72.5	B	64.6	C
2549	4	McCormick	64.8	C	62.2	C	74.3	B	84.9	A
2550	5	LA95135D54-2-3	59.7	D	36.9	F	61.2	C	79.6	B
2551	6	VA02W-555	66.2	C	51.2	D	64.1	C	61.4	C
2552	7	VA02W-370	75.0	B	54.5	D	83.3	A	76.6	B
2553	8	GA96693-4E16	81.8	A	87.9	A	68.7	C	74.1	B
2554	9	GA951231-4E25	71.2	B	33.5	F	71.6	B	76.7	B
2555	10	GA951231-4E26	75.0	B	49.2	E	70.7	B	84.3	A
2556	11	GA961171-4E21	52.4	D	11.2	F	68.0	C	36.2	F
2557	12	AR96077-10-1	70.0	C	63.2	C	66.5	C	71.8	B
2558	13	ARTX5406	68.8	C	56.9	D	71.8	B	72.0	B
2559	14	Z00-3538	66.5	C	81.9	A	22.1	F	58.8	D
2560	15	Z00-3554	67.3	C	63.9	C	64.4	C	60.1	C
2561	16	GX02-138	60.0	D	63.2	C	40.2	E	77.3	B
2562	17	VA01W-205	76.5	B	97.2	A	75.5	B	82.7	A
2563	18	VA02W-713	67.7	C	60.2	C	73.2	B	82.7	A
2564	19	P981233A1-10-12-1-1-4	50.9	D	60.9	C	43.6	E	60.4	C
2565	20	P992060G1-1-9	72.5	B	70.2	B	41.6	E	80.9	A
2566	21	P992133A2-1-2	69.2	C	67.9	C	37.6	F	75.9	B
2567	22	TN601	75.4	B	73.5	B	35.2	F	71.0	B
2568	23	TN604	69.1	C	72.5	B	53.2	D	75.7	B
2569	24	NC02-1957	64.8	C	54.5	D	65.5	C	65.2	C
2570	25	NC02-4518	65.6	C	63.2	C	54.0	D	67.9	C
2571	26	MD00-72-5064	63.1	C	57.2	D	73.2	B	69.6	C
2572	27	MD99-483-5158	47.9	E	46.2	E	71.3	B	63.3	C
2573	28	LA98094BUB-58-5	68.9	C	57.9	D	70.1	B	61.4	C
2574	29	LA9554-D68-3-2	72.6	B	63.5	C	59.6	D	84.4	A
2575	30	FL91226A-X4	83.3	A	78.2	B	54.6	D	72.3	B
2576	31	FL98174-D44	69.7	C	46.2	E	73.9	B	75.6	B
2577	32	FL98031-D15-E4	67.5	C	83.2	A	75.2	B	53.0	D
2578	33	SC013787	58.4	D	43.5	E	64.5	C	61.8	C
2579	34	SC110329	85.7	A	67.2	C	82.4	A	65.8	C
2580	35	G20915	79.0	B	76.9	B	73.8	B	72.7	B
2581	36	G28146	74.4	B	86.9	A	44.6	E	86.9	A
2582	37	G30623	68.4	C	63.9	C	43.9	E	80.5	A
2583	38	G30204	80.3	A	91.5	A	70.7	B	68.3	C
2584	39	B010973	62.0	C	48.5	E	64.8	C	56.9	D
2585	40	B011260	73.9	B	74.5	B	62.2	C	62.3	C
2586	41	B02-8486	77.7	B	87.9	A	74.8	B	75.8	B
2587	42	B02-8483	70.0	C	83.5	A	63.1	C	79.9	B
2588	43	APCK M00-3904-9	58.1	D	49.5	E	56.4	D	58.1	D
2589	44	APCK M02-2152	58.1	D	48.9	E	46.2	E	70.3	B
2590	45	APCK B02-8443	63.8	C	75.5	B	61.1	C	78.5	B

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Coastal Region: Plains,GA; Cleveland, MS; Kinston, NC; Florence, SC		MICRO	FLOUR	SOFT.	FLOUR
			T.W. LB/BU	YIELD %	EQUIV. %	PROT. %
	STANDARD (#2548, Pioneer Brand 26R61)		61.1	68.9	53.3	9.64
2546	1	AGS 2000	60.8	71.2	58.2	8.51
2547	2	USG 3209	60.7	68.2	52.9	8.86
2548	3	Pioneer Brand 26R61	61.1	68.9	53.3	9.64
2549	4	McCormick	61.3	68.0	* 60.4	8.65
2550	5	LA95135D54-2-3	59.8	* 67.0	Q 58.6	9.11
2551	6	VA02W-555	60.1	68.2	52.2	9.46
2552	7	VA02W-370	62.4	70.0	57.5	8.61
2553	8	GA96693-4E16	60.6	71.4	56.6	8.64
2554	9	GA951231-4E25	61.0	69.2	57.5	8.19
2555	10	GA951231-4E26	60.9	70.0	60.2	7.93
2556	11	GA961171-4E21	60.6	65.5	Q 43.3	Q 9.74
2557	12	AR96077-10-1	60.4	69.0	55.8	8.86
2558	13	ARTX5406	61.0	68.8	55.9	8.48
2559	14	Z00-3538	55.1	Q 68.3	51.3	8.60
2560	15	Z00-3554	60.1	68.5	51.7	8.48
2561	16	GX02-138	57.2	Q 67.0	Q 57.7	8.73
2562	17	VA01W-205	61.5	70.3	59.6	8.23
2563	18	VA02W-713	61.2	68.5	59.6	8.55
2564	19	P981233A1-10-12-1-1-4	57.6	Q 65.2	Q 51.8	9.84
2565	20	P992060G1-1-9	57.4	Q 69.5	59.0	8.18
2566	21	P992133A2-1-2	56.9	Q 68.8	57.3	8.31
2567	22	TN601	56.6	Q 70.1	55.5	8.14
2568	23	TN604	58.8	* 68.8	57.2	8.21
2569	24	NC02-1957	60.3	68.0	* 53.5	9.05
2570	25	NC02-4518	58.9	* 68.1	54.5	8.97
2571	26	MD00-72-5064	61.2	67.6	* 55.0	8.73
2572	27	MD99-483-5158	61.0	64.6	Q 52.8	9.23
2573	28	LA98094BUB-58-5	60.8	68.8	52.2	9.35
2574	29	LA9554-D68-3-2	59.6	* 69.5	60.2	8.82
2575	30	FL91226A-X4	59.0	* 71.7	56.0	9.16
2576	31	FL98174-D44	61.3	69.0	57.1	9.72
2577	32	FL98031-D15-E4	61.4	68.5	49.3	* 10.65 §
2578	33	SC013787	60.1	66.7	Q 52.3	9.30
2579	34	SC110329	62.3	72.1	53.7	8.70
2580	35	G20915	61.3	70.8	56.1	8.39
2581	36	G28146	57.8	Q 69.9	61.1	8.41
2582	37	G30623	57.7	Q 68.7	58.9	8.02
2583	38	G30204	60.9	71.1	54.6	8.87
2584	39	B010973	60.2	67.4	* 50.6	9.40
2585	40	B011260	59.9	* 69.8	52.5	8.76
2586	41	B02-8486	61.4	70.5	57.2	8.70
2587	42	B02-8483	60.0	69.0	58.7	8.23
2588	43	APCK M00-3904-9	59.2	* 66.6	Q 51.0	8.04
2589	44	APCK M02-2152	57.9	Q 66.6	Q 55.3	8.75
2590	45	APCK B02-8443	59.7	* 67.8	* 58.2	8.77

§ Sample unusually high for protein, the combination of elevated sucrose SRC and large cookie diameter suggest an unusually high gliadin concentration.

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Coastal Region: Plains, GA; Cleveland, MS; Kinston, NC; Florence, SC		LACTIC ACID RET'N	COOKIE DIAM. CM.	TOP GR.	SUCROSE RET'N
	STANDARD (#2548, Pioneer Brand 26R61)		112.7	16.96	2	96.7
2546	1	AGS 2000	106.6	17.41	4	91.5
2547	2	USG 3209	113.4	16.71	* 2	104.1
2548	3	Pioneer Brand 26R61	112.7	16.96	2	96.7
2549	4	McCormick	118.1	17.26	3	95.2
2550	5	LA95135D54-2-3	125.8	16.50	Q 2	110.7
2551	6	VA02W-555	115.7	16.93	2	103.1
2552	7	VA02W-370	114.1	17.03	2	93.5
2553	8	GA96693-4E16	115.3	18.03	4	89.4
2554	9	GA951231-4E25	132.8	16.40	Q 3	99.5
2555	10	GA951231-4E26	128.8	16.87	3	96.5
2556	11	GA961171-4E21	111.5	15.73	Q 1	104.9
2557	12	AR96077-10-1	128.6	17.29	3	92.1
2558	13	ARTX5406	100.1	17.10	3	93.0
2559	14	Z00-3538	99.7	17.85	5	95.0
2560	15	Z00-3554	99.6	17.31	3	91.7
2561	16	GX02-138	114.2	17.29	3	97.5
2562	17	VA01W-205	118.6	18.31	5	87.6
2563	18	VA02W-713	108.4	17.20	4	96.4
2564	19	P981233A1-10-12-1-1-4	108.1	17.22	3	95.1
2565	20	P992060G1-1-9	104.3	17.50	4	93.5
2566	21	P992133A2-1-2	109.6	17.43	4	93.6
2567	22	TN601	122.9	17.60	4	94.6
2568	23	TN604	103.9	17.57	2	90.2
2569	24	NC02-1957	119.6	17.03	3	93.8
2570	25	NC02-4518	126.2	17.29	3	94.5
2571	26	MD00-72-5064	132.7	17.11	3	101.1
2572	27	MD99-483-5158	111.9	16.78	3	96.0
2573	28	LA98094BUB-58-5	101.4	17.13	2	92.6
2574	29	LA9554-D68-3-2	124.4	17.30	3	95.5
2575	30	FL91226A-X4	112.0	17.74	3	92.5
2576	31	FL98174-D44	125.4	16.78	2	99.8
2577	32	FL98031-D15-E4	117.6	17.89	5	102.5
2578	33	SC013787	103.7	16.70	* 2	105.2
2579	34	SC110329	106.0	17.41	4	93.0
2580	35	G20915	118.2	17.70	5	90.5
2581	36	G28146	101.7	18.00	5	88.1
2582	37	G30623	101.2	17.31	5	96.9
2583	38	G30204	115.5	18.14	4	94.7
2584	39	B010973	109.8	16.85	4	94.6
2585	40	B011260	92.2	17.63	3	88.2
2586	41	B02-8486	109.5	18.03	4	89.8
2587	42	B02-8483	115.5	17.90	4	94.1
2588	43	APCK M00-3904-9	103.4	16.88	2	108.3
2589	44	APCK M02-2152	116.7	16.86	3	103.5
2590	45	APCK B02-8443	115.0	17.66	3	94.6

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Coastal Region: Plains,GA; Cleveland, MS; Kinston, NC; Florence, SC		FHB	WEATHERING	SPROUTING	SHRIVELING
			(0-9)	(Yes/No)	(0-9)	(0-3)
STANDARD (#2548, Pioneer Brand 26R61)						
2546	1	AGS 2000	4	y	0	1
2547	2	USG 3209	4	y	0	1
2548	3	Pioneer Brand 26R61	3	y	0	2
2549	4	McCormick	1	n	0	2
2550	5	LA95135D54-2-3	5	y	0	2
2551	6	VA02W-555	5	y	0	2
2552	7	VA02W-370	3	n	0	1
2553	8	GA96693-4E16	3	y	0	1
2554	9	GA951231-4E25	4	y	0	1
2555	10	GA951231-4E26	4	y	0	1
2556	11	GA961171-4E21	3	y	6	2
2557	12	AR96077-10-1	1	y	1	1
2558	13	ARTX5406	3	y	1	1
2559	14	Z00-3538	1	y	0	1
2560	15	Z00-3554	1	y	0	1
2561	16	GX02-138	3	y	0	1
2562	17	VA01W-205	1	y	1	1
2563	18	VA02W-713	3	y	0	1
2564	19	P981233A1-10-12-1-1-4	4	y	0	2
2565	20	P992060G1-1-9	3	y	0	2
2566	21	P992133A2-1-2	4	y	0	2
2567	22	TN601	1	y	0	1
2568	23	TN604	3	y	0	1
2569	24	NC02-1957	4	y	0	1
2570	25	NC02-4518	3	y	0	1
2571	26	MD00-72-5064	2	y	1	2
2572	27	MD99-483-5158	2	y	0	1
2573	28	LA98094BUB-58-5	3	y	1	1
2574	29	LA9554-D68-3-2	3	y	0	1
2575	30	FL91226A-X4	3	y	0	2
2576	31	FL98174-D44	3	y	4	1
2577	32	FL98031-D15-E4	2	y	1	1
2578	33	SC013787	3	y	2	2
2579	34	SC110329	2	y	1	1
2580	35	G20915	2	y	0	1
2581	36	G28146	2	y	0	1
2582	37	G30623	2	y	0	1
2583	38	G30204	1	y	0	1
2584	39	B010973	2	y	0	1
2585	40	B011260	1	y	1	1
2586	41	B02-8486	1	y	0	1
2587	42	B02-8483	3	y	0	1
2588	43	APCK M00-3904-9	3	y	0	1
2589	44	APCK M02-2152	2	y	1	1
2590	45	APCK B02-8443	2	y	0	1

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Coastal Region: Plains,GA; Cleveland, MS; Kinston, NC; Florence, SC		COMMENTS
	STANDARD (#2548, Pioneer Brand 26R61)		
2546	1	AGS 2000	
2547	2	USG 3209	
2548	3	Pioneer Brand 26R61	
2549	4	McCormick	
2550	5	LA95135D54-2-3	GRAIN CONDITION SCALE
2551	6	VA02W-555	
2552	7	VA02W-370	FHB and SPROUTING
2553	8	GA96693-4E16	0 None
2554	9	GA951231-4E25	1 1%
2555	10	GA951231-4E26	2 2%
2556	11	GA961171-4E21	3 5%
2557	12	AR96077-10-1	4 10%
2558	13	ARTX5406	5 20%
2559	14	Z00-3538	6 40%
2560	15	Z00-3554	7 60%
2561	16	GX02-138	8 80%
2562	17	VA01W-205	9 100%
2563	18	VA02W-713	
2564	19	P981233A1-10-12-1-1-4	SHRIVELING
2565	20	P992060G1-1-9	0 None
2566	21	P992133A2-1-2	1 Some
2567	22	TN601	2 Moderate
2568	23	TN604	3 Heavy
2569	24	NC02-1957	
2570	25	NC02-4518	
2571	26	MD00-72-5064	
2572	27	MD99-483-5158	
2573	28	LA98094BUB-58-5	
2574	29	LA9554-D68-3-2	
2575	30	FL91226A-X4	
2576	31	FL98174-D44	red & white mix
2577	32	FL98031-D15-E4	
2578	33	SC013787	
2579	34	SC110329	
2580	35	G20915	
2581	36	G28146	
2582	37	G30623	
2583	38	G30204	
2584	39	B010973	
2585	40	B011260	
2586	41	B02-8486	
2587	42	B02-8483	
2588	43	APCK M00-3904-9	moldy
2589	44	APCK M02-2152	
2590	45	APCK B02-8443	

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Coastal Region:

Plains, GA; Cleveland, MS;
Kinston, NC; Florence, SC

EVALUATION SUMMARY

	STD. DATA	AVG. DATA					
MILLING QUALITY SCORE	69.30 C	68.7					
BAKING QUALITY SCORE	52.20 D	62.9					
TW SCORE	72.50 B	62.3					
SE SCORE	64.60 C	70.7					
	STD. DATA	AVG. DATA	ADJ. L.S.D.	NOTATION BEGINS			
				*	Q		
TEST WEIGHT	61.11	59.88	1.18	59.93	58.74		
FLOUR YIELD	68.87	68.74	0.74	68.13	67.39		
SOFTNESS EQUIV.	53.30	55.43	2.87	50.44	47.57		
FLOUR PROTEIN	9.64	8.80	0.78	10.42	11.20		
LACTIC ACID RETENTION	112.71	113.16					
COOKIE DIAMETER	16.96	17.28	0.23	16.73	16.51		
	A	B	C	D	E	F	TOTAL
MILLING SCORE	5	11	21	7	1	0	
BAKING SCORE	8	7	12	7	8	3	45
TEST WT. SCORE	2	15	14	5	6	3	
SOFTNESS EQUIV. SCORE	8	18	14	4	0	1	

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	Average scores for both Regions (Interior and Coastal)	Milling quality score	Baking quality score	Test weight score	Softness equivalent score	Test weight lb/bu	Flour yield (%)	Softness equivalent
1	AGS 2000	80.3	67.7	66.6	78.6	60.7	71.7	59.0
2	USG 3209	66.8	40.9	65.8	65.2	60.6	69.0	54.3
3	Pioneer Brand 26R61	69.3	52.2	72.5	64.6	61.4	69.5	54.1
4	McCormick	62.9	56.7	62.8	86.5	60.2	68.2	61.7
5	LA95135D54-2-3	61.6	38.7	54.1	83.6	59.2	67.9	60.7
6	VA02W-555	66.4	44.4	57.3	64.9	59.6	68.8	54.2
7	VA02W-370	70.0	48.5	73.5	76.3	61.5	69.6	58.2
8	GA96693-4E16	79.9	96.2	62.0	75.7	60.1	71.6	58.0
9	GA951231-4E25	68.8	27.9	59.7	78.4	59.9	69.3	58.9
10	GA951231-4E26	74.2	44.7	59.5	84.9	59.8	70.4	61.2
11	GA961171-4E21	55.6	14.2	56.3	44.7	59.5	66.7	47.1
12	AR96077-10-1	69.8	65.7	59.2	75.7	59.8	69.6	58.0
13	ARTX5406	68.7	59.9	69.4	74.4	61.0	69.3	57.5
14	Z00-3538	67.7	73.4	32.3	62.9	56.6	69.1	53.5
15	Z00-3554	64.9	62.7	48.0	67.1	58.4	68.6	54.9
16	GX02-138	61.3	65.6	34.5	83.7	56.8	67.9	60.7
17	VA01W-205	75.2	92.2	68.4	86.4	60.9	70.6	61.7
18	VA02W-713	65.0	65.4	67.7	84.9	60.8	68.6	61.2
19	P981233A1-10-12-1-1-4	53.2	58.4	40.4	67.2	57.5	66.2	55.0
20	P992060G1-1-9	64.7	63.2	25.2	83.0	55.7	68.5	60.5
21	P992133A2-1-2	66.3	61.2	24.2	80.3	55.6	68.8	59.6
22	TN601	74.7	66.7	49.9	71.7	58.7	70.6	56.5
23	TN604	70.1	66.9	44.5	78.4	58.0	69.6	58.9
24	NC02-1957	64.7	55.9	56.3	70.5	59.5	68.6	56.1
25	NC02-4518	64.9	66.1	46.0	71.7	58.2	68.6	56.6
26	MD00-72-5064	60.1	42.6	65.7	72.7	60.6	67.6	56.9
27	MD99-483-5158	47.1	51.2	61.0	69.4	60.0	65.0	55.7
28	LA98094BUB-58-5	67.8	60.2	62.9	65.3	60.2	69.2	54.3
29	LA9554-D68-3-2	69.9	58.5	51.7	85.4	58.9	69.6	61.4
30	FL91226A-X4	82.8	82.9	48.7	75.0	58.6	72.2	57.7
31	FL98174-D44	68.2	49.2	63.3	79.0	60.3	69.3	59.1
32	FL98031-D15-E4	71.1	75.9	68.3	59.7	60.9	69.8	52.4
33	SC013787	59.9	35.5	63.1	64.8	60.2	67.6	54.1
34	SC110329	82.1	71.6	73.8	69.0	61.6	72.0	55.6
35	G20915	76.2	69.4	68.2	73.4	60.9	70.8	57.1
36	G28146	72.7	87.4	45.0	90.0	58.1	70.1	63.0
37	G30623	67.4	58.1	47.2	79.6	58.4	69.1	59.3
38	G30204	78.1	90.4	67.2	69.8	60.8	71.2	55.9
39	B010973	64.2	58.4	59.9	61.4	59.9	68.4	53.0
40	B011260	73.1	74.4	53.5	66.5	59.1	70.2	54.8
41	B02-8486	76.0	81.9	71.6	75.6	61.3	70.8	57.9
42	B02-8483	69.1	76.0	60.8	81.7	60.0	69.4	60.1
43	APCK M00-3904-9	58.7	53.5	63.2	61.0	60.3	67.3	52.8
44	APCK M02-2152	57.5	40.4	41.6	73.3	57.7	67.1	57.1
45	APCK B02-8443	60.7	65.9	54.8	79.0	59.3	67.8	59.1
	Standard error	2.1	5.4	6.0	2.2	0.7	0.4	0.8

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	Average scores for both Regions (Interior and Coastal)	Flour protein %	Lactic acid %	Cookie diameter cm	Top grain score	Sucrose SRC %
1	AGS 2000	8.8	107	17.5	4.0	94.6
2	USG 3209	8.8	113	16.7	2.5	106.5
3	Pioneer Brand 26R61	9.4	111	17.0	2.5	96.2
4	McCormick	8.6	120	17.2	3.0	97.5
5	LA95135D54-2-3	8.9	124	16.6	2.0	112.2
6	VA02W-555	9.4	116	16.8	2.0	101.5
7	VA02W-370	9.3	114	16.9	3.0	95.5
8	GA96693-4E16	8.3	113	18.3	5.0	88.6
9	GA951231-4E25	8.3	133	16.3	2.0	101.4
10	GA951231-4E26	8.2	132	16.8	2.5	100.3
11	GA961171-4E21	9.2	113	15.9	2.0	102.9
12	AR96077-10-1	8.7	133	17.4	5.0	93.8
13	ARTX5406	8.5	105	17.3	3.5	94.6
14	Z00-3538	8.5	101	17.7	4.5	94.6
15	Z00-3554	8.2	102	17.3	3.5	92.6
16	GX02-138	8.5	121	17.4	3.0	97.5
17	VA01W-205	8.3	121	18.2	4.5	88.3
18	VA02W-713	8.5	108	17.4	4.0	97.7
19	P981233A1-10-12-1-1-4	9.8	112	17.2	3.0	95.0
20	P992060G1-1-9	8.8	110	17.4	3.0	95.4
21	P992133A2-1-2	8.4	114	17.3	3.0	95.0
22	TN601	8.4	132	17.5	3.5	96.0
23	TN604	8.4	110	17.5	2.5	92.4
24	NC02-1957	9.0	125	17.1	2.5	96.7
25	NC02-4518	8.5	128	17.4	3.5	99.1
26	MD00-72-5064	9.2	137	16.7	2.0	106.4
27	MD99-483-5158	8.9	118	17.0	3.0	95.9
28	LA98094BUB-58-5	9.1	103	17.3	3.0	92.8
29	LA9554-D68-3-2	8.8	130	17.2	4.0	97.0
30	FL91226A-X4	8.6	115	17.9	3.5	92.6
31	FL98174-D44	9.5	127	16.9	2.0	102.4
32	FL98031-D15-E4	10.4	125	17.7	4.0	100.5
33	SC013787	9.2	106	16.5	1.5	106.0
34	SC110329	8.8	111	17.6	4.5	94.9
35	G20915	8.5	121	17.5	5.0	92.3
36	G28146	8.3	110	18.1	4.5	89.8
37	G30623	8.1	105	17.2	5.0	98.1
38	G30204	8.2	119	18.2	4.5	92.7
39	B010973	9.1	112	17.2	4.5	92.8
40	B011260	8.7	98	17.7	3.5	88.3
41	B02-8486	8.7	109	17.9	3.5	91.7
42	B02-8483	8.2	122	17.7	3.5	96.3
43	APCK M00-3904-9	8.0	107	17.1	2.5	103.8
44	APCK M02-2152	8.5	126	16.7	2.5	106.1
45	APCK B02-8443	8.7	120	17.4	3.0	96.5
	Standard error	0.3	2.8	0.16	0.6	1.9

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Average milling and baking quality of cultivars and breeding lines grown in the Uniform Southern Soft Winter Wheat Nursery for two years, 2005 and 2006, average of evaluations from three composites (Interior in 2005, Coastal and Interior in 2006).

Cultivars	Milling quality score	Baking quality score	Test weight score	Softness equivalent score	Test weight lb/bu	Flour yield (%)	Softness equivalent	Flour protein %	Lactic acid %	Cookie diameter cm	Top grain score
1 AGS 2000	75.8	68.0	65.0	74.8	60.9	71.9	59.3	8.7	108	17.6	4.3
2 LA95135D54-2-3	57.7	42.8	52.4	82.8	59.5	68.3	62.1	8.6	124	16.8	2.3
3 McCormick	61.7	58.8	63.5	83.1	60.8	69.1	62.2	8.6	121	17.3	3.3
4 Pioneer Brand 26R61	64.0	52.2	72.2	61.5	61.8	69.5	54.7	9.3	113	17.1	3.0
5 USG 3209	62.3	41.6	63.3	62.9	60.7	69.2	55.1	8.5	114	16.8	2.7
6 VA02W-370	63.6	49.2	72.4	71.3	61.8	69.4	58.1	8.9	117	17.0	3.0
7 VA02W-555	62.0	51.5	56.9	63.1	60.0	69.1	55.2	9.0	115	17.1	2.3

Standard error 2.1 3.3 2.6 1.7 0.3 0.4 0.6 N.S. 1.5 0.1 0.3

N.S. = Means of cultivars not significantly different at the 95% confidence interval.

