

UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Service

State Agricultural Experiment Stations, Cooperating

**2006 - 2007**

**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.

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National Small Grains Germplasm Research Facility  
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**2006-2007 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	AR96077-10-1	Jackson/Pioneer 2643	Bacon	05-06
6	ARTX5406	TX88V4624/Karl	Bacon	05-06
7	VA01W-205	Pio2684/VA93-54-185(WLR/3/MSY*3/Balkan//SAL)//Pocahontas	Griffey	05-06
8	VA02W-713	Ning7840/Pio2691//Roane	Griffey	05-06
9	TN601	Titan/Holley//SH9313/SH9302/3/Madison/P2551/Blueboy	West	05-06
10	MD00-72-5064	Pio2552/VA97W-375=Sisson 'S'	Costa	05-06
11	APCK B02-8443	Clemens/Mason//Shiloh	Fogleman	05-06
12	TN701	(Becker/Saluda)/P2552//TX92D7702/L930605	West	06-07
13	NC03-6228	A92-4452//NC96BGTD1sib/NC96BGTA6sib	Murphy	06-07
14	NC03-5921	P86982//NC96BGTA5sib/C9663	Murphy	06-07
15	NC03-8026	NC96BGTD1sib/NC94-7673//NCV93-612	Murphy	06-07
16	NC03-11158	L910568/NCV93-1007//LA854111	Murphy	06-07
17	0128A1-22	981129A1/981312A1	Ohm	06-07
18	011010A1-15	97395C1/981129A1//INW0316	Ohm	06-07
19	VA04W-259	VA97W-533 [FFR555W/Gore//Ck9803/VA87-54-636] /NC95-11612(Stella/KS85WGRC01//C8433/3/C8629/FL7927)	Griffey	06-07
20	VA03W-434	Roane/Coker9835//VA96-54-270(88-54-612(MSY*2/Balkan)/FFR511W)	Griffey	06-07
21	LA99005UC-31-3-C	Pio2548/Coker9835(LA90144B16-3-2)//AGS2000	Harrison	06-07
22	LA98214D-14-1-2-B	Shelby/LA87167D8-10-2(FR81-19/FL302//Coker983)	Harrison	06-07
23	LA98149BUB-3-4-B	FL931339AS/Pio26R61	Harrison	06-07
24	LA978UC-36-1-1-B	CK797/F7927-G41(LA8529)/3/(LA90239),CL850643/Pio2548//C9877	Harrison	06-07
25	MO011126	MO94-103/Pio2552	McKendry	06-07
26	B020815	2552/Coker9543	Hancock	06-07
27	D03*9804	Mallard Cross Bulk	Hancock	06-07
28	D03*9603	Elkhart/D95-8294	Hancock	06-07
29	M03*3861	Pio2552/M94-1407(SW85-93(Gentry//Frederick/MV-2)/SW84*90(W504/Olesen//Monon/Blueboy))	Fogleman	06-07
30	M03*3877	T8141/D93-6093(Steele/McNair1003)	Fogleman	06-07
31	SC021348	F1-VA85-24/H14H15//Brule, SC, VA, CO, EA9/CO68-15*2//Libellula//Aurora	Edge	06-07
32	SC027721	F2-FL7290/Stella//FL7946/FL303(sib)/3/DownyF2-FL7290/Stella//FL7946/FL303(sib)/3/Downy	Edge	06-07
33	G69141	T812/VA91-54-219	Brown	06-07
34	G59166	L900819//C916/T812	Brown	06-07
35	G69304	BL930390/VA91-54-219	Brown	06-07
36	G59015	Madison/Roazon//G3566	Brown	06-07
37	GA98401-5E23	AGS2000/GA91215	Johnson	06-07
38	GA981621-5E34	AGS2485/Pio26R61	Johnson	06-07
39	GA981622-5E35	AGS2000/Pio26R61	Johnson	06-07

## LOCATION NOTES

### **Belle Mina, Alabama**

Cooperators: Kathryn M. Glass  
Auburn University  
Planted: October 31, 2006  
Harvested: June 8, 2007  
Notes: This trial was conducted under drought conditions and sustained late spring freeze damage.

### **Bay, Arkansas**

Cooperators: June Hancock, David Hill, Richard Gray  
AgriPro-COKER  
Notes: Easter freeze killed the plots.

### **Stuttgart, Arkansas**

Cooperators: Robert Bacon, John Kelly  
University of Arkansas  
Notes: Nursery was abandoned due to the late freeze.

### **Sussex Co., Delaware**

Cooperators: Bob Uniatowski  
University of Delaware  
Planted: November 1, 2006  
Harvested: June 27, 2007  
Fertilizer: 100N; 60 K<sub>2</sub>O

### **Griffin, Georgia**

Cooperators: Jerry Johnson, Dan Bland, James Buck, John Youmans, Lilian Miranda  
University of Georgia  
Planted: November 1, 2006  
Harvested: May 31, 2007  
Fertilizer: 20N preplant; 80N topdress

### **Plains, Georgia**

Cooperators: Jerry Johnson, Dan Bland, James Buck, John Youmans  
University of Georgia  
Planted: November 15, 2006  
Harvested: May 23, 2007  
Fertilizer: 20N preplant; 75N topdress

### **Aberdeen, Idaho**

Cooperators: Harold Bockelman, Charles Erickson, Scott McNeil  
USDA-ARS, National Small Grains Collection

Notes: Winter damage caused excessive CV's. Only height data is reported.

**Brookston, Indiana**

Cooperators: Barton Fogleman  
AgriPro COKER

Notes: Winter survival data recorded prior to the April "Big Chill".

**Evansville, Indiana**

Cooperators: Herb Ohm  
Purdue University

Planted: October 6, 2006

Fertilizer: 35-90-0 fall; 100-0-0 spring

Notes: Low confidence in the yield data. Seeded into wet field conditions, so stands were variable. There was severe yellow dwarf with both fall and spring aphid infestations. Night temperatures were in the low to mid-20s for several nights in mid-late April. Essentially no natural FHB infection. Mid-May to early June was hot and very dry. Harvest date was the earliest ever at this location.

**Ft. Branch, Indiana**

Cooperators: Benjamin Moreno, Justin Cooley  
Westbred LLC

Planted: October 5, 2006

Harvested: June 17, 2007

Notes: Nursery was affected the Eastern freeze, however it had time for some regrowth. Low test weights might be a result of high moisture grain at harvest.

**Greensburg, Indiana**

Cooperators: Sam Brown  
Genesis Seed Research

Notes: Nursery was abandoned. Stand establishment in the fall was affected by excessive rain and the winter finished the job.

**Lafayette, Indiana**

Cooperators: Sam Brown  
Genesis Seed Research

Notes: Winter kill data recorded in observation plot.

**Lafayette, Indiana**

Cooperators: Benjamin Moreno, Justin Cooley  
Westbred LLC

Notes: Winter kill data recorded in observation plot.

### **West Lafayette, Indiana**

Cooperators: Herb Ohm  
Purdue University

Notes: Inoculated FHB nursery. Average % of spikelets diseased from inoculated spike (3<sup>rd</sup> or 4<sup>th</sup> spikelet from tip) toward the base of the spike, at 25 dai. Ten spikes were inoculated at flowering in a 1-meter row of each entry, a plastic bag was placed over inoculated spikes for 3 days, and plots were misted for 2-3 weeks after inoculation. Missing data for 1-meter plots in which all plants were winterkilled.

### **West Lafayette, Indiana**

Cooperators: Sue Cambron  
USDA-ARS, Crop Production & Pest Control Research

Notes: Hessian fly data. Data reported is Number of Plant Resistant – Number of Plants Susceptible.

### **Schochoh, Kentucky**

Cooperators: Dave Van Sanford  
University of Kentucky

Planted: October 24, 2006

Harvested: June 19, 2007

Fertilizer: P,K according to soil tests; 110N in split applications

Notes: Not a good year for wheat in Kentucky. Tremendous freeze damage at this location.

### **Woodford Co., Kentucky**

Cooperators: Dave Van Sanford  
University of Kentucky

Planted: October 30, 2006

Harvested: June 26, 2007

Fertilizer: P,K according to soil test; 110 N in split applications

Notes: Not a good year for wheat in Kentucky. Lots of lodging, very high CVs at this location.

### **Baton Rouge, Louisiana**

Cooperators: Stephen Harrison, Kelly Arceneaux, Glenn Schexnayder  
Louisiana State University

Planted: November 13, 2006

Harvested: May 19, 2007

Fertilizer: 20-60-60 preplant; 97-0-0 topdress; Harmony Extra plus Sencor herbicides used.

Notes: Mild winter with lots of bolting and vernalization problems. Very wet (12”) in January that limited tillering. Moderate disease pressure. Growth habit rated mid-winter: 0=very upright spring, 9=very prostrate winter. Phenotype average of three ratings from

flag leaf to harvest: 0=superb visual appearance, 9=very poor.  
Seed quality at harvest: 0=excellent, 5=average, 9=poor. Leaf rust  
is average of two ratings. NV=non-vernalized, PVL=partially  
vernalized, late. EOT=early offtypes or bolting in response to  
warm winter.

### **Winnsboro, Louisiana**

Cooperators: Stephen Harrison, Kelly Arceneaux, Glenn Schexnayder, Dustin  
Strickland  
Louisiana State University  
Notes: Mild winter. Heavy rainfall in January limited tillering. Light  
disease pressure, no stripe rust. Some low spots in field resulted in  
high CVs due to wet winter and heavy soil. Phenotype average of  
three ratings from flag leaf to harvest: 0=superb visual appearance,  
9=very poor.

### **Queenstown, Maryland**

Cooperators: Jose Costa, Aaron Cooper  
University of Maryland  
Planted: October 16, 2006  
Harvested: June 19, 2007  
Notes: Dry spring, little disease.

### **St. Paul, Minnesota**

Cooperators: Yue Jin, Lucy Wanschura  
USDA-ARS, Cereal Disease Laboratory  
Notes: Stem rust seedling and field data.

### **St. Paul, Minnesota**

Cooperators: Dave Long, Jim Kolmer  
USDA-ARS, Cereal Disease Laboratory  
Notes: Leaf rust seedling data.

### **Portageville, Missouri**

Cooperators: Anne McKendry, David Tague  
University of Missouri  
Planted: October 24, 2006  
Harvested: June 22, 2007  
Notes: Conditions were wet at planting and essentially stayed that way  
through the winter. Stands were reduced by wet, cold conditions.  
Freezing temperatures occurred well into crop growth but damage  
was much less severe than at Columbia where temperatures  
reached 19 degrees. Heading dates were delayed - compared with  
a normal year and the heading window was compressed with a lot  
of variance between reps due to unequal cold damage. Growing  
points at the location were damaged, reduced seed set and fertile

heads. Earlier heading types had more apparent damage from the cold. Freeze damage was assessed on a 0-9 scale after winter survival data were taken. We were interested to see if this correlated at all with yield and essentially made up a scale. Data were taken about 10 days after the freeze and do not reflect recovery. Yield will give some sense of the recovery. The scale we used combined burn back and stem collapse/lodging as follows: 0 - No visible damage; 1 - 10% burn back; no lodging; 2 - 20% burn back; up to 5% lodging; 3 - 30 % burn back; up to 10% lodging; 4 - 40 % burn back; up to 15% lodging; 5 - 50% burn back; up to 20% lodging; 6- 60% burn back; up to 25% lodging; 7 - 70% burn back; 30% lodging; 8 - 80% burn back; 50% lodging; 9 - complete burn back - completely lodged.

### **Cleveland, Mississippi**

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

Notes: Late planting, poor stands, no yield data.

### **Newton, Mississippi**

Cooperators: Bernie White  
Mississippi State University

Planted: December 14, 2006

Harvested: May 24, 2007

### **Lincoln, Nebraska**

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

Notes: IRS data.

### **Kinston, North Carolina**

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

Planted: October 24, 2006

Harvested: June 6, 2007

Fertilizer: 140 N total

Notes: Very heavy rains post planting led to heavy soil borne epidemic. Easter weekend freeze impacted lines that had heading dates earlier than day 105. I have eliminated that date, but I may not have accounted for all of the freeze damage. Lines heading later than day 105 and with poor yield likely suffered from Soil Borne. Leaf rust did not impact yield. Cereal Leaf Beetle data taken from separate nursery.

**Raleigh, North Carolina**

Cooperators: Gina Brown-Guedira  
USDA-ARS, Eastern Regional Small Grains Genotyping Lab

Notes: Marker analysis. DNA was isolated from a samples of 10 plants/entry. "nd"= not determined or lack of amplification. If marker is dominant, samples with no amplification are left blank. "yes?" or "no?" indicates that markers may not be diagnostic or data was not clear; therefore can be sure if gene is present or not.

**Wooster, Ohio**

Cooperators: Clay Sneller  
Ohio State University, OARDC

**Wooster, Ohio**

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

Notes: Milling and baking quality data.

**Enid, Oklahoma**

Cooperators: Brett Carver  
Oklahoma State University

Notes: Acid soil tolerance data. Soil pH=4.6, 70ppm Al, and Al saturation=11%). Scale 1=highly tolerant; 5=highly susceptible; 0=no discernable symptoms; Jagger = 2.

**Florence, South Carolina**

Cooperators: Benjamin Edge  
Clemson University

Planted: November 20, 2006

Harvested: June 6, 2007

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

Notes: Extreme drought combined with freeze damage led to low yields on early lines and high CVs.

**Knoxville, Tennessee**

Cooperators: Dennis West  
University of Tennessee

Notes: Due to the Easter freeze the nursery was abandoned. Damage was severe in most areas of Tennessee. Some very late planted wheat (December) reported to be worth harvesting.

**Castroville, Texas**

Cooperators: Sid Perry  
Westbred LLC

Notes: Leaf rust and Xanthomonas notes.

**Prosper, Texas**

Cooperators: Russell Sutton  
Texas A&M University

**Blacksburg, Virginia**

Cooperators: Carl Griffey  
Virginia Tech  
Notes: Belgian Lodging Scale=Area Affected(1-10) x Lodging  
Intensity(1-5) x 0.2

**Warsaw, Virginia**

Cooperators: Carl Griffey  
Virginia Tech  
Notes: Belgian Lodging Scale=Area Affected(1-10) x Lodging  
Intensity(1-5) x 0.2

**Mt. Vernon & Pullman, Washington**

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

## YIELD (bu/acre)

		Belle Mina		Sussex Co.		Griffin		Plains		Evansville		Ft. Branch	
		AL		DE		GA		GA		IN		IN	
		Glass	rank	Uniatowski	rank	Johnson	rank	Johnson	rank	Ohm	rank	Moreno	rank
1	AGS 2000	9.3	21	55.6	25	22.9	35	112.6	1	65.0	25	87.3	1
2	USG 3209	4.7	32	62.1	14	25.2	32	93.8	7	61.7	33	57.4	33
3	Pioneer Brand 26R61	4.4	35	57.5	20	23.6	33	88.3	16	51.0	39	71.3	18
4	McCormick	25.7	9	66.0	9	65.0	7	69.0	35	63.6	29	55.4	35
5	AR96077-10-1	6.3	27	60.1	16	34.3	26	83.2	21	59.9	37	65.5	22
6	ARTX5406	4.7	33	56.8	23	30.8	28	84.0	19	64.1	26	56.7	34
7	VA01W-205	13.4	18	58.4	19	60.6	12	89.9	14	71.8	11	59.5	29
8	VA02W-713	5.7	29	43.6	34	23.1	34	90.4	12	67.1	20	61.4	26
9	TN601	16.4	14	51.5	27	60.9	11	72.1	29	65.8	23	59.6	28
10	MD00-72-5064	14.7	17	81.3	1	58.4	15	70.4	31	76.0	5	65.0	23
11	APCK B02-8443	11.6	19	67.3	8	35.3	25	101.9	3	64.1	27	66.2	21
12	TN701	24.3	10	47.8	32	58.7	14	79.5	24	63.7	28	61.5	25
13	NC03-6228	8.2	22	48.2	31	46.9	18	92.8	9	60.9	36	58.7	31
14	NC03-5921	4.6	34	51.5	27	20.3	36	90.1	13	61.3	34	54.4	36
15	NC03-8026	5.2	30	53.5	26	41.6	19	87.5	17	67.2	19	71.4	17
16	NC03-11158	6.5	26	33.5	39	26.7	30	93.8	7	63.4	30	58.0	32
17	0128A1-22	29.2	6	58.6	18	41.2	20	69.3	34	67.7	18	72.0	14
18	011010A1-15	15.4	15	39.6	37	36.8	24	88.9	15	73.0	8	77.8	5
19	VA04W-259	40.6	2	48.5	30	66.2	5	85.4	18	67.9	17	71.8	15
20	VA03W-434	9.5	20	72.8	4	54.3	16	76.4	26	71.3	13	63.5	24
21	LA99005UC-31-3-C	4.2	36	72.6	5	4.4	39	99.9	5	66.5	22	76.2	10
22	LA98214D-14-1-2-B	2.8	39	47.2	33	14.7	37	101.0	4	65.2	24	77.2	8
23	LA98149BUB-3-4-B	7.4	24	64.2	11	37.8	22	83.8	20	61.8	32	79.3	4
24	LA978UC-36-1-1-B	5.0	31	34.5	38	25.7	31	91.3	10	55.9	38	60.6	27
25	MO011126	23.2	11	68.3	7	71.8	3	69.5	33	83.7	1	74.8	12
26	B020815	29.1	7	56.5	24	64.6	8	61.6	38	71.6	12	53.0	37
27	D03*9804	6.0	28	71.0	6	40.1	21	90.8	11	68.0	16	59.5	30
28	D03*9603	6.8	25	59.0	17	37.3	23	83.0	22	61.2	35	49.9	38
29	M03*3861	35.4	4	60.2	15	66.2	5	60.8	39	77.2	4	77.8	6
30	M03*3877	22.6	12	57.2	21	62.8	10	67.0	37	75.3	6	73.5	13
31	SC021348	4.1	38	64.2	11	5.7	38	98.0	6	68.2	15	49.5	39
32	SC027721	15.1	16	73.5	2	48.9	17	70.3	32	62.9	31	71.6	16
33	G69141	41.9	1	65.3	10	78.7	1	72.5	28	78.7	2	77.7	7
34	G59166	28.5	8	56.9	22	63.8	9	68.1	36	72.6	9	75.5	11
35	G69304	35.4	3	42.7	35	78.4	2	72.8	27	77.4	3	69.4	20
36	G59015	31.6	5	41.4	36	67.5	4	71.3	30	71.8	10	70.8	19
37	GA98401-5E23	4.1	37	49.5	29	33.3	27	82.2	23	67.1	20	80.7	3
38	GA981621-5E34	20.3	13	73.5	2	59.9	13	78.7	25	74.1	7	82.5	2
39	GA981622-5E35	7.7	23	62.2	13	28.0	29	102.3	2	71.0	14	76.7	9
LOCATION MEANS		15.2		57.3		44.2		83.2		67.6		67.4	
LSD (.05)				8.8		11.2		12.5		2.3		10.26	
CV %				9.4		12.5		9.3		8		11.43	
REPS		3		3		2		3		2		2	
Harvest Plot Area (sq.ft.)		100		56.26		50		50					

## YIELD (bu/acre)

	Schochoh		Woodford Co.		Baton Rouge		Winnsboro		Queenstown		Portageville		
	KY	a	KY	a	LA	ab	LA	a	MD	ab	MO	a	
	VanSanford	rank	VanSanford	rank	Harrison	rank	Harrison	rank	Costa	rank	McKendry	rank	
1	AGS 2000	51.5	26	66.5	26	72.3	9	82.6	2	66.8	29	32.0	26
2	USG 3209	41.7	37	61.9	32	67.6	14	84.5	1	66.7	30	25.9	37
3	Pioneer Brand 26R61	55.1	18	79.2	15	71.1	11	73.3	17	50.8	39	30.7	28
4	McCormick	46.5	34	66.5	26	36.4	39	27.2	39	79.5	3	38.3	17
5	AR96077-10-1	52.1	23	65.0	29	73.7	7	75.1	16	75.7	8	30.2	29
6	ARTX5406	56.0	15	68.4	24	52.5	35	68.3	22	71.4	15	28.7	35
7	VA01W-205	51.9	24	76.6	17	59.9	22	80.4	7	78.7	5	34.0	23
8	VA02W-713	56.1	13	58.9	36	70.7	12	64.4	27	73.8	12	29.4	32
9	TN601	52.1	22	58.5	37	53.8	33	58.3	32	75.6	9	35.8	22
10	MD00-72-5064	54.5	19	80.2	11	58.3	25	51.4	34	70.8	17	38.4	16
11	APCK B02-8443	55.2	17	64.4	30	74.8	6	66.2	25	65.4	33	36.0	21
12	TN701	53.3	21	66.2	28	63.5	16	80.3	8	75.3	10	37.0	19
13	NC03-6228	46.5	34	56.1	39	57.5	27	78.3	11	68.2	25	29.8	30
14	NC03-5921	47.2	32	63.0	31	58.1	26	62.6	28	64.6	34	29.0	33
15	NC03-8026	51.7	25	71.5	20	61.3	21	66.7	24	71.0	16	32.1	25
16	NC03-11158	59.5	9	80.3	10	63.0	18	70.1	20	70.5	21	39.9	13
17	0128A1-22	68.1	2	79.6	13	64.2	15	49.9	35	70.7	20	46.4	9
18	011010A1-15	65.2	5	80.9	9	54.1	31	60.2	31	61.7	37	46.5	8
19	VA04W-259	57.1	11	60.5	34	58.5	24	78.4	10	71.6	14	39.6	14
20	VA03W-434	49.4	29	68.2	25	61.9	20	69.7	21	80.8	2	45.8	10
21	LA99005UC-31-3-C	57.0	12	79.6	14	75.2	5	76.5	13	68.2	25	33.0	24
22	LA98214D-14-1-2-B	47.8	31	69.4	22	71.5	10	75.8	15	68.3	24	21.9	38
23	LA98149BUB-3-4-B	58.3	10	90.3	2	77.3	4	66.1	26	79.1	4	39.1	15
24	LA978UC-36-1-1-B	53.4	20	81.9	7	81.5	2	80.8	6	70.8	17	36.3	20
25	MO011126	62.9	6	81.5	8	50.3	38	72.9	18	81.4	1	47.8	6
26	B020815	65.6	4	86.3	4	54.0	32	67.7	23	68.2	25	48.7	5
27	D03*9804	47.0	33	60.3	35	68.8	13	71.0	19	69.5	22	32.0	26
28	D03*9603	48.6	30	61.1	33	59.8	23	79.9	9	66.3	31	29.8	30
29	M03*3861	67.9	3	93.4	1	50.3	37	58.0	33	75.2	11	46.7	7
30	M03*3877	55.9	16	83.9	5	62.8	19	81.9	3	68.7	23	49.2	3
31	SC021348	40.2	39	76.3	18	52.2	36	41.7	38	62.0	35	19.5	39
32	SC027721	46.4	36	56.3	38	63.1	17	42.1	37	65.7	32	37.4	18
33	G69141	76.1	1	83.9	5	55.8	29	49.3	36	78.2	6	55.6	1
34	G59166	50.2	28	71.4	21	55.8	30	76.1	14	72.6	13	41.8	11
35	G69304	60.7	8	74.1	19	56.9	28	62.1	29	77.7	7	50.9	2
36	G59015	41.7	37	69.3	23	52.9	34	61.6	30	70.8	17	40.7	12
37	GA98401-5E23	50.4	27	78.0	16	73.4	8	77.1	12	62.0	35	26.8	36
38	GA981621-5E34	62.3	7	80.1	12	83.2	1	81.7	4	68.2	25	49.0	4
39	GA981622-5E35	56.0	14	89.8	3	79.3	3	81.0	5	56.2	38	28.9	34
LOCATION MEANS		54.3		72.8		63.0		68.0		70.2		36.9	
LSD (.05)		17		21.8		6.6		15.5		9.9		7.3	
CV %		15.7		15.7		6		13		7		12.1	
REPS		2		2		2		2		2		3	
Harvest Plot Area (sq.ft.)				40		70		70				55	

## YIELD (bu/acre)

		Newton		Kinston		Wooster		Florence		Prosper		Blacksburg	
		MS	a	NC	a	OH	b	SC	a	TX	b	VA	ab
		White	rank	Murphy	rank	Sneller	rank	Edge	rank	Sutton	rank	Griffey	rank
1	AGS 2000	58.8	15			69.3	22	34.0	35	67.9	19	85.3	15
2	USG 3209	60.8	4			65.8	25	45.9	28	79.9	5	77.3	28
3	Pioneer Brand 26R61	52.8	32	32.2	28	61.6	34	48.3	26	66.5	23	74.8	34
4	McCormick	58.3	18	54.6	20	82.7	9	42.3	31	61.4	35	83.5	21
5	AR96077-10-1	61.7	3	64.7	7	72.2	19	61.2	13	76.1	9	77.3	28
6	ARTX5406	59.6	9	54.7	19	64.6	27	49.0	25	61.5	34	84.9	16
7	VA01W-205	55.6	24	70.9	3	69.8	21	63.1	11	76.1	8	100.4	1
8	VA02W-713	58.8	14			79.2	13	46.4	27	56.7	37	84.5	18
9	TN601	55.5	25	62.1	12	84.7	3	75.1	4	72.8	14	81.3	25
10	MD00-72-5064	54.0	30	60.1	14	80.4	12	34.0	35	53.4	38	84.0	19
11	APCK B02-8443	59.8	7	57.8	17	68.1	23	64.8	9	72.5	15	88.3	10
12	TN701	59.3	13	66.6	6	78.5	14	52.0	20	74.5	11	81.6	23
13	NC03-6228	55.6	23	61.3	13	60.0	35	45.8	29	63.8	29	71.4	35
14	NC03-5921	52.8	33			62.9	30	49.7	22	66.1	24	76.8	31
15	NC03-8026	55.1	27			59.4	37	55.6	17	65.0	27	83.3	22
16	NC03-11158	54.1	29	52.2	21	65.0	26	49.9	21	66.6	22	86.3	14
17	0128A1-22	47.8	38	62.2	10	75.4	16	54.6	18	52.4	39	87.8	11
18	011010A1-15	49.0	37	50.7	22	76.2	15	56.9	16	67.7	20	91.5	8
19	VA04W-259	45.9	39	72.6	2	83.5	7	62.4	12	83.3	2	99.3	3
20	VA03W-434	52.0	35	69.0	4	82.9	8	66.3	7	85.7	1	93.0	5
21	LA99005UC-31-3-C	69.5	1			59.6	36	49.2	24	82.8	3	79.2	27
22	LA98214D-14-1-2-B	60.3	6			49.1	38	45.4	30	70.9	16	75.5	32
23	LA98149BUB-3-4-B	58.5	16	38.3	27	62.5	31	59.0	14	67.7	21	69.8	38
24	LA978UC-36-1-1-B	55.8	21			66.2	24	28.5	37	70.0	18	70.7	37
25	MO011126	59.6	10	49.9	24	80.9	11	75.9	3	73.5	13	92.0	6
26	B020815	59.6	11	57.7	18	88.1	1	68.0	6	61.7	33	95.1	4
27	D03*9804	60.8	5	59.3	15	70.7	20	76.1	2	65.8	25	79.3	26
28	D03*9603	59.7	8	62.1	11	64.0	29	49.5	23	65.4	26	81.6	23
29	M03*3861	55.4	26	59.0	16	87.1	2	37.8	34	63.2	31	88.7	9
30	M03*3877	59.4	12	63.4	9	82.3	10	64.9	8	61.8	32	87.4	12
31	SC021348	53.5	31			61.6	33	20.7	39	61.0	36	71.1	36
32	SC027721	50.8	36	50.6	23	73.6	18	68.2	5	64.3	28	75.1	33
33	G69141	56.0	19	67.5	5	75.0	17	41.4	32	70.2	17	100.1	2
34	G59166	54.1	28	47.8	26	83.7	6	63.3	10	75.3	10	83.6	20
35	G69304	55.7	22	81.3	1	84.5	4	76.7	1	78.0	7	92.0	6
36	G59015	52.3	34	64.3	8	83.7	5	58.7	15	63.7	30	86.7	13
37	GA98401-5E23	56.0	20			64.4	28	53.0	19	74.0	12	67.7	39
38	GA981621-5E34	62.9	2	49.0	25	62.3	32	40.5	33	81.4	4	84.8	17
39	GA981622-5E35	58.5	17			47.0	39	25.2	38	79.1	6	76.9	30
LOCATION MEANS		56.6		58.6		71.5		52.8		69.2		83.3	
LSD (.05)				12.8		14		23.3		11		10.4	
CV %				11.9		9.8		21.8		9.7		6.1	
REPS		4		2		2		2					
Harvest Plot Area (sq.ft.)		80		55				35					

## YIELD (bu/acre)

	Warsaw		ENTRY MEANS		ENTRY MEANS		ENTRY MEANS		
	VA	ab	ALL LOCATIONS		IN-REGION		CV <10%		
	Griffey	rank		rank	[a]	rank	[b]	rank	
1	AGS 2000	85.0	15	62.5	16	61.7	14	75.5	7
2	USG 3209	81.7	19	59.1	28	57.4	28	73.0	13
3	Pioneer Brand 26R61	74.5	29	56.1	37	55.2	37	66.2	39
4	McCormick	83.6	17	58.2	31	56.5	36	69.5	27
5	AR96077-10-1	85.2	13	62.1	18	60.7	21	73.7	12
6	ARTX5406	77.4	25	57.6	34	56.9	32	68.6	33
7	VA01W-205	97.7	1	66.8	6	66.0	5	78.1	2
8	VA02W-713	74.4	32	58.0	32	56.8	33	71.2	23
9	TN601	83.2	18	61.8	20	59.9	24	71.2	22
10	MD00-72-5064	80.6	20	61.4	22	60.7	20	72.8	14
11	APCK B02-8443	85.5	12	63.4	13	62.6	11	76.4	6
12	TN701	83.8	16	63.5	12	62.0	13	72.0	16
13	NC03-6228	75.5	28	57.1	36	56.6	35	66.5	38
14	NC03-5921	74.5	29	55.0	38	53.8	38	67.3	36
15	NC03-8026	75.6	27	59.7	26	59.4	25	69.3	28
16	NC03-11158	85.1	14	59.2	27	58.4	27	69.7	25
17	0128A1-22	74.3	33	61.6	21	61.4	19	68.9	31
18	011010A1-15	70.9	36	61.2	23	59.9	23	69.3	29
19	VA04W-259	93.5	4	67.7	4	65.9	6	76.8	4
20	VA03W-434	87.7	8	66.3	7	64.2	10	79.2	1
21	LA99005UC-31-3-C	71.7	35	62.5	15	61.4	18	75.1	10
22	LA98214D-14-1-2-B	64.6	38	57.1	35	56.8	34	68.1	35
23	LA98149BUB-3-4-B	76.7	26	61.9	19	61.6	17	71.4	18
24	LA978UC-36-1-1-B	85.9	9	58.6	29	57.4	29	69.6	26
25	MO011126	91.4	5	69.0	2	68.0	3	76.8	5
26	B020815	85.7	10	65.4	10	64.3	9	71.4	19
27	D03*9804	88.3	7	62.3	17	61.6	15	74.7	11
28	D03*9603	74.2	34	57.8	33	57.0	31	68.3	34
29	M03*3861	85.7	10	65.6	9	64.4	8	72.0	15
30	M03*3877	79.5	23	66.3	8	65.6	7	71.3	21
31	SC021348	61.6	39	50.6	39	49.3	39	66.7	37
32	SC027721	74.5	29	58.4	30	57.2	30	69.2	30
33	G69141	80.2	21	68.6	3	68.2	2	75.1	9
34	G59166	77.9	24	64.2	11	62.4	12	71.8	17
35	G69304	95.8	2	69.6	1	68.2	1	75.3	8
36	G59015	94.0	3	62.9	14	61.6	16	70.7	24
37	GA98401-5E23	79.7	22	60.0	25	58.8	26	68.9	32
38	GA981621-5E34	90.7	6	67.6	5	67.1	4	77.4	3
39	GA981622-5E35	68.3	37	60.8	24	60.5	22	71.4	20
LOCATION MEANS		80.9		61.7		60.7		71.8	
LSD (.05)		9.3							
CV %		5.7							
REPS									
Harvest Plot Area (sq.ft.)									

## TEST WEIGHT (lbs/bu)

	Sussex Co. DE Uniatowski	Griffin GA Johnson	Plains GA Johnson	Evansville IN Ohm	Ft. Branch IN Moreno	
1	AGS 2000	58.4	59.4	61.9	61.7	57.4
2	USG 3209	59.6	59.0	60.1	61.3	53.6
3	Pioneer Brand 26R61	60.0	59.9	61.4	62.9	
4	McCormick	60.2	62.3	59.2	62.6	59.1
5	AR96077-10-1	60.8	60.1	59.4	61.2	57.3
6	ARTX5406	61.6	61.3	62.0	60.4	55.5
7	VA01W-205	60.6	60.4	60.5	62.5	58.9
8	VA02W-713	61.9	60.5	61.3	63.1	57.6
9	TN601	59.6	60.9	57.3	61.1	53.8
10	MD00-72-5064	59.1	59.6	58.5	62.2	59.4
11	APCK B02-8443	58.5	59.8	60.6	60.5	52.8
12	TN701	60.6	61.5	60.6	61.9	57.9
13	NC03-6228	60.8	60.0	59.5	62.8	58.5
14	NC03-5921	60.4	61.0	61.4	61.8	56.1
15	NC03-8026	59.0	58.8	60.4	61.9	54.9
16	NC03-11158	57.3	56.6	57.0	60.4	55.6
17	0128A1-22	56.4	57.1	56.6	59.7	56.7
18	011010A1-15	59.5	59.0	59.3	60.2	59.4
19	VA04W-259	60.3	61.9	57.7	61.8	56.7
20	VA03W-434	58.8	60.9	58.3	61.1	55.4
21	LA99005UC-31-3-C	58.5		61.2	60.7	53.3
22	LA98214D-14-1-2-B	57.7	60.6	60.9	61.4	57.5
23	LA98149BUB-3-4-B	59.7	60.4	60.5	61.4	55.2
24	LA978UC-36-1-1-B	57.6	58.4	61.1	60.8	58.0
25	MO011126	58.3	60.1	56.1	62.4	58.0
26	B020815	59.7	59.0	51.4	61.9	55.6
27	D03*9804	59.6	60.3	60.2	60.7	55.0
28	D03*9603	62.0	60.0	59.6	61.0	55.4
29	M03*3861	59.6	56.3	54.2	62.2	57.3
30	M03*3877	59.1	59.5	53.9	61.9	56.0
31	SC021348	60.1	53.5	61.5	60.2	56.0
32	SC027721	60.9	60.3	59.3	61.9	55.4
33	G69141	61.5	57.8	54.4	61.4	57.7
34	G59166	58.7	60.3	57.7	61.9	56.4
35	G69304	60.8	59.0	56.0	62.1	53.3
36	G59015	57.7	60.0	54.0	59.8	55.7
37	GA98401-5E23	55.6	58.4	60.0	60.5	60.4
38	GA981621-5E34	60.1	59.8	58.2	60.7	
39	GA981622-5E35	59.0	59.5	60.7	61.0	54.8
LOCATION MEANS	59.5	59.6	58.8	61.4	56.4	

## TEST WEIGHT (lbs/bu)

	Schochoh	Woodford Co.	Baton Rouge	Winnsboro	Queenstown	
	KY	KY	LA	LA	MD	
	Van Sanford	Van Sanford	Harrison	Harrison	Costa	
1	AGS 2000	56.0	57.2	58.8	60.1	59.4
2	USG 3209	56.0	57.7	57.6	57.2	58.5
3	Pioneer Brand 26R61	59.9	61.1	57.9	59.9	61.5
4	McCormick	58.3	59.3	56.8	53.6	61.0
5	AR96077-10-1	56.3	58.0	57.8	55.4	57.3
6	ARTX5406	58.3	59.7	59.3	58.5	59.4
7	VA01W-205	56.6	58.3	55.4	59.0	59.7
8	VA02W-713	57.3	58.2	58.4	58.4	61.1
9	TN601	55.4	56.4	49.7	58.1	59.8
10	MD00-72-5064	56.7	59.3	56.9	58.0	59.2
11	APCK B02-8443	54.5	56.2	55.9	56.5	58.3
12	TN701	56.1	55.9	56.9	57.2	60.0
13	NC03-6228	55.9	59.7	55.4	59.2	59.6
14	NC03-5921	56.4	57.1	57.4	57.7	59.9
15	NC03-8026	56.2	57.1	57.8	57.2	58.5
16	NC03-11158	55.2	55.7	55.1	56.2	57.3
17	0128A1-22	56.3	56.9	55.2	53.2	58.2
18	011010A1-15	56.8	57.4	56.5	56.4	59.5
19	VA04W-259	55.8	55.2	48.1	59.8	58.5
20	VA03W-434	55.7	56.3	54.1	57.0	57.7
21	LA99005UC-31-3-C	56.3	56.4	57.1	57.8	59.3
22	LA98214D-14-1-2-B	57.3	57.4	57.6	58.5	58.3
23	LA98149BUB-3-4-B	58.2	60.0	57.6	57.7	59.0
24	LA978UC-36-1-1-B	55.9	56.8	56.4	57.4	58.6
25	MO011126	57.7	58.6	50.6	57.5	59.2
26	B020815	57.4	59.2	52.1	58.2	58.8
27	D03*9804	55.3	56.9	58.4	57.6	59.4
28	D03*9603	57.0	56.3	56.2	57.7	60.7
29	M03*3861	57.2	59.5	46.8	57.7	58.8
30	M03*3877	57.2	58.3	53.6	61.0	59.0
31	SC021348	55.9	55.8	54.0	55.9	59.7
32	SC027721	57.4	56.3	58.9	57.5	60.8
33	G69141	56.3	57.8	50.9	55.7	59.2
34	G59166	56.5	58.5	55.3	59.2	59.3
35	G69304	55.7	57.7	49.2	56.6	59.0
36	G59015	54.8	55.2	51.5	56.4	57.3
37	GA98401-5E23	57.4	58.0	58.5	57.8	60.1
38	GA981621-5E34	56.8	58.9	58.6	57.8	58.2
39	GA981622-5E35	57.1	59.2	58.0	58.0	60.1
LOCATION MEANS	56.6	57.6	55.4	57.6	59.2	

## TEST WEIGHT (lbs/bu)

		Portageville	Newton	Kinston	Wooster	Florence
		MO	MS	NC	OH	SC
		McKendry	White	Murphy	Sneller	Edge
1	AGS 2000	57.5	59		61.3	58.3
2	USG 3209	57.6	59		59.8	55.8
3	Pioneer Brand 26R61	59.6	62	58.5	62.5	56.9
4	McCormick	58.6	61	58.5	62.4	54.5
5	AR96077-10-1	56.3	57	58.6	60.4	54.2
6	ARTX5406	57.7	62	58.4	62.9	56.4
7	VA01W-205	57.2	62	58.1	61.9	55.8
8	VA02W-713	58.4	62		61.8	56.9
9	TN601	57.6	61	59.7	61.2	57.0
10	MD00-72-5064	59.2	62	59.1	62.1	54.2
11	APCK B02-8443	57.6	61	58.2	59.2	55.8
12	TN701	56.8	60	58.4	60.9	56.0
13	NC03-6228	58.3	62	59.0	62.6	55.5
14	NC03-5921	56.5	60		61.5	54.7
15	NC03-8026	57.5	60		61.7	55.6
16	NC03-11158	57.1	59	56.5	61.1	54.0
17	0128A1-22	56.4	53	55.8	60.1	53.3
18	011010A1-15	56.9	59	56.7	60.0	55.6
19	VA04W-259	57.7	56	58.5	60.6	54.9
20	VA03W-434	57.2	60	57.5	59.9	54.1
21	LA99005UC-31-3-C	56.1	60		61.1	55.5
22	LA98214D-14-1-2-B	58.3	60		61.1	57.5
23	LA98149BUB-3-4-B	58.4	61	58.5	62.0	57.4
24	LA978UC-36-1-1-B	57.1	59		60.3	53.8
25	MO011126	58.1	59	59.2	61.7	58.4
26	B020815	58.7	59	58.8	62.1	58.5
27	D03*9804	56.6	60	57.2	60.8	56.6
28	D03*9603	57.7	61	58.8	61.2	56.5
29	M03*3861	58.1	55	59.1	61.4	55.9
30	M03*3877	58.5	60	58.6	61.4	57.8
31	SC021348	56.2	59		58.6	54.2
32	SC027721	58.1	61	58.1	60.7	57.0
33	G69141	58.0	58	58.4	60.7	53.5
34	G59166	58.2	62	58.4	62.1	56.1
35	G69304	58.2	58	59.3	61.8	56.3
36	G59015	57.1	58	58.5	60.6	53.5
37	GA98401-5E23	57.8	60		60.9	55.6
38	GA981621-5E34	60.1	60	58.6	62.0	56.7
39	GA981622-5E35	58.6	60		61.6	55.2
LOCATION MEANS		57.7	59.7	58.3	61.2	55.8

## TEST WEIGHT (lbs/bu)

		Prosper	Blacksburg	Warsaw	ENTRY MEANS	
		TX	VA	VA	ALL LOCATIONS	
		Sutton	Griffey	Griffey		rank
1	AGS 2000	56.0	57.4	62.5	58.9	8
2	USG 3209	57.4	56.8	61.6	58.1	23
3	Pioneer Brand 26R61	57.8	59.3	62.8	60.2	1
4	McCormick	54.3	60.2	63.4	59.2	5
5	AR96077-10-1	56.4	55.2	61.6	58.0	27
6	ARTX5406	57.4	58.2	63.4	59.6	3
7	VA01W-205	56.9	58.3	62.0	59.1	7
8	VA02W-713	56.6	58.5	62.4	59.7	2
9	TN601	56.3	57.2	61.1	57.9	28
10	MD00-72-5064	54.6	59.0	61.6	58.9	10
11	APCK B02-8443	56.6	57.1	61.1	57.8	30
12	TN701	55.7	57.0	61.8	58.6	16
13	NC03-6228	55.2	58.9	63.4	59.2	4
14	NC03-5921	57.0	56.9	62.6	58.7	13
15	NC03-8026	55.6	57.4	61.5	58.3	21
16	NC03-11158	52.2	55.1	60.4	56.8	37
17	0128A1-22	50.3	57.2	59.6	56.2	39
18	011010A1-15	54.1	57.5	60.7	58.0	26
19	VA04W-259	56.3	58.6	60.7	57.7	32
20	VA03W-434	54.5	56.6	60.0	57.5	33
21	LA99005UC-31-3-C	56.3	57.2	61.8	58.0	25
22	LA98214D-14-1-2-B	57.4	57.2	62.4	58.9	11
23	LA98149BUB-3-4-B	56.2	59.6	62.5	59.2	6
24	LA978UC-36-1-1-B	54.8	56.3	60.8	57.8	29
25	MO011126	56.9	59.4	61.9	58.5	19
26	B020815	55.9	59.6	62.1	58.2	22
27	D03*9804	53.8	56.6	61.3	58.1	24
28	D03*9603	55.5	57.3	61.2	58.6	17
29	M03*3861	55.0	59.7	61.0	57.5	34
30	M03*3877	56.0	59.5	61.7	58.5	20
31	SC021348	54.8	54.9	60.2	57.1	36
32	SC027721	54.2	57.9	60.6	58.7	14
33	G69141	54.5	56.3	60.5	57.4	35
34	G59166	55.8	58.2	60.7	58.6	15
35	G69304	56.3	58.8	61.8	57.8	31
36	G59015	50.8	56.2	60.1	56.5	38
37	GA98401-5E23	55.1	57.1	62.3	58.6	18
38	GA981621-5E34	55.1	58.6	61.6	58.9	9
39	GA981622-5E35	56.9	58.6	62.0	58.8	12
LOCATION MEANS		55.4	57.7	61.6	58.3	

## HEADING DATE (Julian Days)

	Belle Mina	Griffin	Plains	Evansville	Woodford Co.	
	AL	GA	GA	IN	KY	
	Glass	Johnson	Johnson	Ohm	Van Sanford	
1	AGS 2000	92	89	89	120.5	130.5
2	USG 3209	89	91	92	122.0	130.0
3	Pioneer Brand 26R61	92	91	92	123.0	131.0
4	McCormick	99	106	95	123.0	130.0
5	AR96077-10-1	93	95	95	122.0	130.0
6	ARTX5406	92	95	97	120.5	128.0
7	VA01W-205	94	103	101	119.5	129.5
8	VA02W-713	89	87	90	119.5	130.0
9	TN601	99	107	96	120.0	130.0
10	MD00-72-5064	104	108	105	123.5	131.0
11	APCK B02-8443	92	94	92	121.5	129.0
12	TN701	101	110	97	122.5	129.0
13	NC03-6228	91	95	96	118.0	128.0
14	NC03-5921	92	90	89	122.0	130.5
15	NC03-8026	90	93	94	119.5	130.0
16	NC03-11158	93	95	97	120.5	131.0
17	0128A1-22	102	104	97	124.5	131.5
18	011010A1-15	99	103	98	121.5	128.5
19	VA04W-259	108	110	105	122.5	132.0
20	VA03W-434	99	111	97	122.5	130.5
21	LA99005UC-31-3-C	89	88	82	119.0	130.0
22	LA98214D-14-1-2-B	89	89	87	122.5	132.0
23	LA98149BUB-3-4-B	94	93	90	123.0	131.0
24	LA978UC-36-1-1-B	94	92	97	121.0	130.5
25	MO011126	108	109	106	125.0	131.0
26	B020815	107	109	108	123.5	130.5
27	D03*9804	92	96	104	120.5	129.5
28	D03*9603	92	103	102	118.5	130.0
29	M03*3861	108	111	108	124.0	132.0
30	M03*3877	105	110	105	123.5	131.0
31	SC021348	89	87	80	117.0	126.0
32	SC027721	100	105	104	124.5	133.0
33	G69141	108	110	108	125.5	132.5
34	G59166	108	109	107	122.5	129.5
35	G69304	108	109	109	125.5	130.5
36	G59015	106	109	107	123.0	130.5
37	GA98401-5E23	89	91	89	120.5	130.5
38	GA981621-5E34	101	99	92	125.5	137.5
39	GA981622-5E35	89	90	91	122.0	132.0
LOCATION MEANS	97.1	99.6	97.2	121.9	130.5	

## HEADING DATE (Julian Days)

		Baton Rouge		Winnsboro	Queenstown	Portageville
		LA		LA	MD	MO
		Harrison		Harrison	Costa	McKendry
1	AGS 2000	83.5		85.0	124.0	113.0
2	USG 3209	88.0		85.0	125.5	111.3
3	Pioneer Brand 26R61	87.0		85.0	126.0	114.3
4	McCormick	89.0	RAGGED PV	92.0	127.5	117.3
5	AR96077-10-1	92.5	EOT	88.0	125.0	114.7
6	ARTX5406	94.0	EOT	90.0	124.5	114.3
7	VA01W-205	101.0	EOT NV	92.0	127.5	116.0
8	VA02W-713	85.0	EOT MIX HD	83.0	125.0	113.3
9	TN601	91.0	EOT MIX HD	90.0	128.0	116.0
10	MD00-72-5064	100.5	PV	95.0	131.0	117.3
11	APCK B02-8443	87.0		85.0	126.0	114.3
12	TN701	101.5	EOT PV	92.0	129.0	119.0
13	NC03-6228	90.0	EOT PV	88.0	124.5	114.0
14	NC03-5921	87.5		88.5	126.5	114.3
15	NC03-8026	90.0	EOT PV	74.5	124.5	115.0
16	NC03-11158	94.0	EOT RAGGED	88.0	126.5	116.0
17	0128A1-22	91.5		92.0	127.5	121.0
18	011010A1-15	95.0	PV	92.0	126.5	118.0
19	VA04W-259	107.5		92.0	130.5	117.0
20	VA03W-434	88.0	EOT PV	92.0	129.0	118.0
21	LA99005UC-31-3-C	79.0		81.0	123.0	113.0
22	LA98214D-14-1-2-B	85.0		83.0	123.5	112.0
23	LA98149BUB-3-4-B	87.5	RAGGED	86.5	129.0	116.3
24	LA978UC-36-1-1-B	82.5		85.0	124.5	116.7
25	MO011126	108.0	EOT NV	97.0	130.0	118.7
26	B020815	105.0	EOT NV	95.0	129.0	118.0
27	D03*9804	96.5	EOT PV	93.5	126.5	116.0
28	D03*9603	99.0	EOT PV	88.0	126.0	113.3
29	M03*3861	105.0	EOT NV	97.0	130.0	119.7
30	M03*3877	103.0	EOT NV	92.0	128.0	118.0
31	SC021348	79.0		81.0	122.5	109.3
32	SC027721	93.5	EOT	93.5	129.0	116.7
33	G69141	103.0	EOT NV	99.0	131.0	118.0
34	G59166	106.0	NV	93.5	129.0	118.7
35	G69304	105.0	NV	97.0	131.0	117.7
36	G59015	102.0	EOT NV	92.0	127.5	119.0
37	GA98401-5E23	85.0		83.0	124.0	113.0
38	GA981621-5E34	89.0		88.0	129.5	118.0
39	GA981622-5E35	92.0		83.0	124.0	112.3
LOCATION MEANS		93.6		89.2	127.0	115.9

## HEADING DATE (Julian Days)

	Kinston NC Murphy	Wooster OH Sneller	Prosper TX Sutton	Blacksburg VA Griffey	Warsaw VA Griffey	
1	AGS 2000	139	99	129.0	115.0	
2	USG 3209	143	99	129.0	115.0	
3	Pioneer Brand 26R61	104.5	143	99	129.5	116.5
4	McCormick	111.0	141	102	130.0	120.0
5	AR96077-10-1	105.5	142	102	130.0	119.0
6	ARTX5406	106.5	139	101	128.0	117.0
7	VA01W-205	107.0	140	100	130.0	120.5
8	VA02W-713		139	99	129.0	116.5
9	TN601	109.5	139	102	130.0	121.0
10	MD00-72-5064	110.5	141	102	132.0	122.0
11	APCK B02-8443	104.5	141	99	131.0	118.0
12	TN701	107.5	141	102	130.5	121.5
13	NC03-6228	105.0	138	99	127.5	116.0
14	NC03-5921		142	102	130.0	117.0
15	NC03-8026		140	101	129.5	116.0
16	NC03-11158	106.0	143	102	130.0	119.0
17	0128A1-22	110.0	141	103	131.0	121.0
18	011010A1-15	110.0	139	102	130.0	120.0
19	VA04W-259	111.0	141	102	132.0	124.0
20	VA03W-434	110.5	141	102	130.0	123.0
21	LA99005UC-31-3-C		139	99	129.0	114.0
22	LA98214D-14-1-2-B		143	99	128.5	115.0
23	LA98149BUB-3-4-B	105.5	143	100	131.5	120.0
24	LA978UC-36-1-1-B		142	99	130.0	117.5
25	MO011126	112.0	143	102	132.5	124.0
26	B020815	111.0	142	103	131.0	123.0
27	D03*9804	107.0	140	102	129.0	119.5
28	D03*9603	106.5	140	102	129.5	119.5
29	M03*3861	112.0	142	103	131.5	123.0
30	M03*3877	111.5	142	103	132.0	121.5
31	SC021348		137	99	124.5	111.5
32	SC027721	109.5	141	104	132.5	121.0
33	G69141	113.0	143	102	132.0	123.5
34	G59166	111.5	140	103	130.5	122.0
35	G69304	112.5	142	102	132.0	123.5
36	G59015	110.0	139	99	131.0	121.0
37	GA98401-5E23		140	104	128.0	115.0
38	GA981621-5E34	106.0	144	99	131.5	120.0
39	GA981622-5E35		143	103	129.0	114.5
LOCATION MEANS	108.8	141.0	101.2	130.1	119.2	

## HEADING DATE (Julian Days)

### ENTRY MEANS ALL LOCATIONS

		rank
1	AGS 2000	108.3 4
2	USG 3209	109.2 8
3	Pioneer Brand 26R61	109.6 10
4	McCormick	113.1 25
5	AR96077-10-1	111.0 17
6	ARTX5406	110.5 15
7	VA01W-205	112.9 23
8	VA02W-713	108.1 3
9	TN601	112.8 21
10	MD00-72-5064	115.9 31
11	APCK B02-8443	109.6 11
12	TN701	114.5 28
13	NC03-6228	109.3 9
14	NC03-5921	110.1 13
15	NC03-8026	109.0 7
16	NC03-11158	111.5 18
17	0128A1-22	114.1 27
18	011010A1-15	113.0 24
19	VA04W-259	116.8 34
20	VA03W-434	113.8 26
21	LA99005UC-31-3-C	106.5 2
22	LA98214D-14-1-2-B	108.3 4
23	LA98149BUB-3-4-B	110.7 16
24	LA978UC-36-1-1-B	110.1 14
25	MO011126	117.6 37
26	B020815	116.8 35
27	D03*9804	112.3 20
28	D03*9603	112.1 19
29	M03*3861	117.6 37
30	M03*3877	116.1 32
31	SC021348	104.8 1
32	SC027721	114.8 29
33	G69141	117.8 39
34	G59166	116.4 33
35	G69304	117.5 36
36	G59015	115.4 30
37	GA98401-5E23	108.6 6
38	GA981621-5E34	112.9 22
39	GA981622-5E35	109.6 12
LOCATION MEANS		112.3

## HEIGHT (inches)

	Belle Mina AL	Sussex Co. DE	Plains GA	Aberdeen ID	Woodford Co. KY	Baton Rouge LA
1	AGS 2000	29	27	34	35.5	40.0
2	USG 3209	25	25	30	33.3	34.0
3	Pioneer Brand 26R61	29	29	36	36.8	41.0
4	McCormick	25	25	31	32.0	34.0
5	AR96077-10-1	25	23	31	34.3	36.5
6	ARTX5406	26	22	31	31.8	34.5
7	VA01W-205	23	23	27	30.0	32.0
8	VA02W-713	31	24	31	33.5	38.5
9	TN601	27	27	34	34.5	37.5
10	MD00-72-5064	29	28	35	34.5	39.0
11	APCK B02-8443	27	27	32	34.3	38.0
12	TN701	30	25	36	38.0	38.5
13	NC03-6228	26	23	32	35.0	36.5
14	NC03-5921	29	24	28	32.5	33.0
15	NC03-8026	25	24	32	33.8	37.0
16	NC03-11158	24	24	30	33.0	36.0
17	0128A1-22	26	25	32	31.5	35.0
18	011010A1-15	25	23	31	33.8	33.5
19	VA04W-259	27	25	30	30.8	34.5
20	VA03W-434	20	24	28	28.3	31.0
21	LA99005UC-31-3-C	31	27	33	32.3	37.5
22	LA98214D-14-1-2-B	31	28	35	33.3	39.5
23	LA98149BUB-3-4-B	28	26	34	33.5	37.5
24	LA978UC-36-1-1-B	26	22	31	30.8	36.0
25	MO011126	28	25	34	34.0	39.0
26	B020815	28	25	37	34.5	38.0
27	D03*9804	26	26	34	31.8	40.0
28	D03*9603	28	26	34	34.0	39.0
29	M03*3861	29	24	35	33.3	37.5
30	M03*3877	27	25	33	33.8	38.5
31	SC021348	28	24	28	29.0	33.0
32	SC027721	32	28	36	38.0	42.5
33	G69141	30	27	36	35.5	39.0
34	G59166	30	24	34	39.3	41.0
35	G69304	30	25	37	37.0	39.5
36	G59015	31	25	37	37.8	40.5
37	GA98401-5E23	29	24	32	31.8	39.0
38	GA981621-5E34	32	29	38	35.3	43.0
39	GA981622-5E35	31	28	35	29.5	40.5
LOCATION MEANS	27.8	25.3	32.9	33.6	34.5	37.4

## HEIGHT (inches)

		Queenstown MD	Portageville MO	Newton MS	Kinston NC	Wooster OH	Florence SC
1	AGS 2000	35.5	25	32	30.1	39	33.5
2	USG 3209	32.0	23	31	26.2	35	29.5
3	Pioneer Brand 26R61	35.0	26	34	27.2	35	29.5
4	McCormick	33.5	25	29	28.1	33	30.0
5	AR96077-10-1	34.0	24	31	28.0	33	31.0
6	ARTX5406	33.0	25	30	28.5	31	29.5
7	VA01W-205	32.5	24	25	27.4	31	28.5
8	VA02W-713	36.0	24	33	29.5	35	31.0
9	TN601	37.0	24	31	32.1	38	32.0
10	MD00-72-5064	37.5	26	32	34.1	36	31.0
11	APCK B02-8443	33.5	27	33	29.3	36	32.5
12	TN701	38.5	27	33	34.1	37	33.5
13	NC03-6228	33.5	21	32	29.5	32	31.0
14	NC03-5921	31.5	22	31	27.0	30	27.5
15	NC03-8026	33.5	21	32	27.2	31	30.5
16	NC03-11158	35.0	22	29	25.8	33	28.0
17	0128A1-22	33.0	26	31	30.1	33	30.0
18	011010A1-15	34.0	23	35	28.0	35	32.5
19	VA04W-259	33.5	23	29	30.1	33	28.5
20	VA03W-434	32.0	23	35	22.0	32	27.5
21	LA99005UC-31-3-C	32.5	23	32	26.0	32	31.0
22	LA98214D-14-1-2-B	34.5	25	35	28.9	33	33.0
23	LA98149BUB-3-4-B	37.0	28	34	27.8	34	32.5
24	LA978UC-36-1-1-B	33.5	24	34	25.6	33	25.0
25	MO011126	38.5	25	32	31.5	35	35.5
26	B020815	36.5	26	32	30.5	35	34.5
27	D03*9804	35.0	24	32	30.5	35	36.0
28	D03*9603	35.5	25	32	33.3	34	34.5
29	M03*3861	36.0	24	31	32.1	35	33.0
30	M03*3877	36.5	25	33	31.3	36	36.0
31	SC021348	30.5	22	30	24.2	31	28.0
32	SC027721	38.5	27	34	36.0	40	37.5
33	G69141	37.5	25	34	33.5	38	31.0
34	G59166	36.0	25	32	32.3	38	35.5
35	G69304	38.5	26	32	36.4	38	37.0
36	G59015	37.5	22	34	36.0	38	35.5
37	GA98401-5E23	33.0	26	32	26.8	34	30.5
38	GA981621-5E34	39.0	30	36	34.3	36	38.0
39	GA981622-5E35	36.0	28	34	33.9	35	33.0
LOCATION MEANS		35.0	24.6	32.1	29.9	34.6	31.9

## HEIGHT (inches)

		Blacksburg VA	Warsaw VA	ENTRY MEANS ALL LOCATIONS	rank
1	AGS 2000	33.0	32.0	33.2	10
2	USG 3209	29.5	28.5	29.8	33
3	Pioneer Brand 26R61	33.0	31.5	32.9	12
4	McCormick	30.5	29.0	29.9	31
5	AR96077-10-1	30.5	30.0	30.3	27
6	ARTX5406	31.0	31.0	29.8	34
7	VA01W-205	30.0	28.5	28.1	37
8	VA02W-713	32.0	26.0	31.3	22
9	TN601	32.5	30.5	32.0	20
10	MD00-72-5064	32.5	34.0	33.2	9
11	APCK B02-8443	33.0	31.5	32.0	21
12	TN701	35.0	34.0	34.0	5
13	NC03-6228	30.5	30.0	30.0	29
14	NC03-5921	30.5	27.0	28.7	36
15	NC03-8026	31.0	29.5	30.1	28
16	NC03-11158	31.0	30.0	29.6	35
17	0128A1-22	33.0	29.0	30.7	25
18	011010A1-15	32.5	30.5	30.7	26
19	VA04W-259	32.0	30.0	29.8	32
20	VA03W-434	30.0	26.0	27.7	39
21	LA99005UC-31-3-C	32.5	28.5	30.7	24
22	LA98214D-14-1-2-B	33.0	29.0	32.3	16
23	LA98149BUB-3-4-B	32.0	31.0	32.2	18
24	LA978UC-36-1-1-B	33.0	30.0	29.9	30
25	MO011126	34.0	34.0	32.9	11
26	B020815	33.5	33.0	32.8	13
27	D03*9804	33.5	30.5	32.1	19
28	D03*9603	33.0	32.5	32.6	14
29	M03*3861	33.0	32.5	32.3	17
30	M03*3877	34.0	31.0	32.5	15
31	SC021348	28.0	26.5	28.1	38
32	SC027721	36.5	33.5	35.4	2
33	G69141	35.5	34.5	34.0	6
34	G59166	34.0	32.0	33.4	8
35	G69304	35.0	35.0	34.5	3
36	G59015	36.0	36.0	34.5	4
37	GA98401-5E23	30.5	31.0	31.1	23
38	GA981621-5E34	35.0	35.5	35.6	1
39	GA981622-5E35	34.0	34.0	33.7	7
LOCATION MEANS		32.5	31.0	31.7	

# LODGING

	Belle Mina	Plains	Evansville	Woodford Co.	Baton Rouge
	AL	GA	IN	KY	LA
	Glass	Johnson	Ohm	Van Sanford	Harrison
	0-9	%	0-9	0-9	0-9
1	AGS 2000	0	4.0	1.5	2.5
2	USG 3209	0	4.0	2.5	1.5
3	Pioneer Brand 26R61	0	4.0	0.5	2.0
4	McCormick	0	4.0	1.0	2.0
5	AR96077-10-1	0	4.5	0.0	1.0
6	ARTX5406	0	3.5	1.5	1.0
7	VA01W-205	0	3.5	0.0	1.0
8	VA02W-713	0	5.0	0.0	2.5
9	TN601	0	4.5	4.0	1.0
10	MD00-72-5064	0	3.5	1.5	1.0
11	APCK B02-8443	0	4.5	2.0	1.5
12	TN701	0	5.0	2.0	1.5
13	NC03-6228	0	4.5	1.0	1.0
14	NC03-5921	0	4.0	2.5	2.0
15	NC03-8026	0	5.0	2.0	1.5
16	NC03-11158	0	3.5	0.0	1.0
17	0128A1-22	0	3.5	0.0	1.0
18	011010A1-15	0	4.0	2.0	1.0
19	VA04W-259	0	3.0	0.5	1.0
20	VA03W-434	0	4.0	1.5	1.0
21	LA99005UC-31-3-C	0	3.5	0.0	1.0
22	LA98214D-14-1-2-B	0	4.0	0.0	1.5
23	LA98149BUB-3-4-B	0	3.5	1.0	1.5
24	LA978UC-36-1-1-B	0	3.5	1.0	2.0
25	MO011126	0	5.0	2.0	1.0
26	B020815	0	4.5	1.5	1.0
27	D03*9804	2	5.0	4.5	1.0
28	D03*9603	0	3.5	5.5	1.0
29	M03*3861	0	4.0	0.0	1.0
30	M03*3877	0	3.5	0.0	1.0
31	SC021348	0	4.0	3.0	1.0
32	SC027721	0	4.5	3.5	2.0
33	G69141	0	4.0	2.5	1.0
34	G59166	0	4.5	2.5	1.5
35	G69304	0	4.5	2.0	2.0
36	G59015	0	4.5	3.5	1.5
37	GA98401-5E23	0	4.5	0.0	2.0
38	GA981621-5E34	0	5.0	0.0	1.5
39	GA981622-5E35	0	4.5	0.0	1.5
LOCATION MEANS	0.1	0.1	4.1	1.5	1.4

# LODGING

	Portageville	Blacksburg	Warsaw	
	MO	VA	VA	
	McKendry	Griffey	Griffey	
	0-9	0.2-10	0.2-10	
1	AGS 2000	1.7	3.5	0.2
2	USG 3209	1.0	3.6	0.4
3	Pioneer Brand 26R61	0.7	1.9	0.2
4	McCormick	1.3	2.5	0.5
5	AR96077-10-1	0.7	0.8	0.2
6	ARTX5406	1.0	3.4	0.2
7	VA01W-205	0.7	1.6	0.3
8	VA02W-713	1.0	3.2	0.2
9	TN601	2.0	4.8	0.8
10	MD00-72-5064	0.7	0.7	0.3
11	APCK B02-8443	2.0	1.0	0.2
12	TN701	1.0	4.5	0.2
13	NC03-6228	2.3	3.6	0.4
14	NC03-5921	1.7	2.1	0.2
15	NC03-8026	1.7	4.0	0.9
16	NC03-11158	1.3	2.5	0.2
17	0128A1-22	0.3	0.2	0.2
18	011010A1-15	1.3	1.0	0.2
19	VA04W-259	1.0	2.1	0.2
20	VA03W-434	1.3	0.5	0.3
21	LA99005UC-31-3-C	0.0	0.5	0.2
22	LA98214D-14-1-2-B	0.0	0.5	0.2
23	LA98149BUB-3-4-B	1.0	0.7	0.2
24	LA978UC-36-1-1-B	1.7	1.3	0.2
25	MO011126	1.7	0.8	0.2
26	B020815	1.3	0.2	0.2
27	D03*9804	1.3	3.1	0.3
28	D03*9603	0.7	1.7	0.2
29	M03*3861	1.7	0.2	0.2
30	M03*3877	1.0	0.5	0.2
31	SC021348	0.3	1.5	0.2
32	SC027721	2.7	2.4	0.3
33	G69141	1.7	5.0	0.2
34	G59166	3.3	2.2	0.5
35	G69304	2.3	3.2	0.3
36	G59015	2.7	1.2	0.6
37	GA98401-5E23	0.7	1.0	0.2
38	GA981621-5E34	2.0	3.1	0.2
39	GA981622-5E35	1.7	1.6	0.2
LOCATION MEANS	1.3	2.0	0.3	

## WINTER DAMAGE

	Belle Mina AL Glass Spring Freeze 1-10	Brookston IN Fogleman Winter Survival 1-9	Ft. Branch IN Moreno Freeze Damage	Lafayette IN Moreno Winter Kill	Lafayette IN Brown Winter Kill	
1	AGS 2000	8.3	8.0	4.0	8	3
2	USG 3209	9.3	8.7	6.5	9	6
3	Pioneer Brand 26R61	7.3	7.0	3.5	9	6
4	McCormick	5.0	6.0	6.0	2	2
5	AR96077-10-1	9.0	7.3	6.0	9	8
6	ARTX5406	10.0	8.0	6.0	9	6
7	VA01W-205	6.0	8.0	6.5	9	6
8	VA02W-713	9.0	6.0	5.5	8	6
9	TN601	5.3	3.0	6.0	1	2
10	MD00-72-5064	5.3	5.0	4.5	4	3
11	APCK B02-8443	8.7	4.7	3.5	2	3
12	TN701	5.7	4.7	6.5	1	2
13	NC03-6228	8.7	8.0	6.0	8	8
14	NC03-5921	9.3	9.0	6.0	9	8
15	NC03-8026	9.7	8.0	3.5	8	7
16	NC03-11158	8.3	9.0	5.0	9	9
17	0128A1-22	6.7	6.3	2.5	4	3
18	011010A1-15	7.3	5.0	2.5	1	1
19	VA04W-259	1.7	9.0	6.0	8	3
20	VA03W-434	7.0	7.3	3.0	2	1
21	LA99005UC-31-3-C	9.3	9.0	6.0	9	9
22	LA98214D-14-1-2-B	9.7	9.0	5.0	9	9
23	LA98149BUB-3-4-B	8.3	9.0	5.0	8	7
24	LA978UC-36-1-1-B	9.7	9.0	4.0	9	7
25	MO011126	3.3	5.3	2.0	1	3
26	B020815	4.0	7.0	3.5	2	3
27	D03*9804	9.0	4.0	5.5	1	2
28	D03*9603	8.3	5.3	7.0	2	3
29	M03*3861	2.0	4.0	4.5	2	2
30	M03*3877	5.3	5.0	3.5	2	3
31	SC021348	10.0	7.0	7.5	5	5
32	SC027721	5.0	4.7	4.5	1	1
33	G69141	1.7	7.7	1.5	4	2
34	G59166	7.0	5.3	3.0	1	2
35	G69304	2.7	7.0	2.0	2	3
36	G59015	2.0	5.3	2.0	2	1
37	GA98401-5E23	9.0	8.3	2.5	8	9
38	GA981621-5E34	3.7	9.0	4.5	9	9
39	GA981622-5E35	8.3	9.0	4.5	9	9
LOCATION MEANS	6.8	6.9	4.5	5.3	4.7	
GROWTH STAGE/DATE	May 10	April 6				

## WINTER DAMAGE

	Portageville MO	Portageville MO	Portageville MO	Blacksburg VA	
	McKendry	McKendry	McKendry	Griffey	
	Winter Kill	Freeze Damage	Winter Survival	Spring Freeze	
	0-9		%	0-9	
1	AGS 2000	5.4	1.3	46	3.0
2	USG 3209	5.1	1.3	49	4.5
3	Pioneer Brand 26R61	4.3	1.0	57	4.5
4	McCormick	3.7	1.0	63	2.0
5	AR96077-10-1	4.0	1.7	60	4.0
6	ARTX5406	5.3	1.3	47	3.5
7	VA01W-205	4.4	0.7	56	2.0
8	VA02W-713	5.7	2.3	43	4.0
9	TN601	5.2	1.0	48	3.0
10	MD00-72-5064	4.4	1.0	56	2.0
11	APCK B02-8443	3.8	0.7	62	1.5
12	TN701	4.0	0.7	60	1.5
13	NC03-6228	4.6	2.0	54	4.0
14	NC03-5921	4.6	0.7	54	1.0
15	NC03-8026	4.1	1.7	59	3.0
16	NC03-11158	3.5	1.0	65	4.0
17	0128A1-22	6.3	1.0	37	2.5
18	011010A1-15	5.6	0.1	44	1.0
19	VA04W-259	3.4	0.7	66	2.0
20	VA03W-434	5.3	0.4	47	3.0
21	LA99005UC-31-3-C	5.0	1.7	50	3.5
22	LA98214D-14-1-2-B	5.1	2.3	49	3.5
23	LA98149BUB-3-4-B	2.7	1.0	73	3.5
24	LA978UC-36-1-1-B	4.8	0.7	52	4.0
25	MO011126	2.8	0.7	72	2.0
26	B020815	4.9	1.0	51	2.5
27	D03*9804	4.2	0.7	58	2.0
28	D03*9603	3.4	1.3	66	2.5
29	M03*3861	5.0	1.0	50	2.5
30	M03*3877	4.4	1.0	56	3.0
31	SC021348	5.3	3.3	47	5.0
32	SC027721	3.0	0.4	70	1.0
33	G69141	6.1	0.1	39	1.0
34	G59166	6.2	0.1	38	1.0
35	G69304	5.2	0.7	48	1.5
36	G59015	5.1	0.1	49	1.0
37	GA98401-5E23	4.4	2.0	56	5.5
38	GA981621-5E34	4.3	0.7	57	3.5
39	GA981622-5E35	4.7	2.3	53	3.5
LOCATION MEANS	4.6	1.1	54	2.8	
GROWTH STAGE/DATE					

# LEAF RUST

	Belle Mina AL Glass	Bay AR Hancock	Griffin GA Johnson	Plains GA Johnson	Baton Rouge LA Harrison	Winnsboro LA Harrison	
		1-9	0-9	0-9	%	%	
1	AGS 2000	0	3.0	0	1	0	0
2	USG 3209	0	3.5	4	5	0	0
3	Pioneer Brand 26R61	0	3.0	1	2	0	0
4	McCormick	2	5.5	3	7	80	63
5	AR96077-10-1	0	3.0	0	9	0	0
6	ARTX5406	0	2.5	TR	4	0	0
7	VA01W-205	0	3.0	0	1	0	0
8	VA02W-713	0	2.5	4	9	3	0
9	TN601	0	4.0	0	7	0	0
10	MD00-72-5064	0	3.5	3	6	3	8
11	APCK B02-8443	0	3.0	2	7	0	0
12	TN701	0	3.0	0	4	0	0
13	NC03-6228	0	2.5	0	2	0	0
14	NC03-5921	0	1.5	0	1	0	0
15	NC03-8026	0	3.0	0	3	1	0
16	NC03-11158	0	2.0	0	5	0	0
17	0128A1-22	0	2.5	TR	6	4	0
18	011010A1-15	0	3.0	0	3	5	0
19	VA04W-259	0	3.0	0	3	0	0
20	VA03W-434	0	2.5	2	6	0	3
21	LA99005UC-31-3-C	0	2.0	0	3	0	0
22	LA98214D-14-1-2-B	0	2.0	0	0	0	0
23	LA98149BUB-3-4-B	0	3.0	TR	3	0	0
24	LA978UC-36-1-1-B	0	1.5	0	0	0	0
25	MO011126	0	3.0	TR	4	0	0
26	B020815	0	3.5	1	4	0	0
27	D03*9804	0	3.0	1	8	0	0
28	D03*9603	0	2.0	TR	6	0	0
29	M03*3861	1	3.5	1	7	0	0
30	M03*3877	0	3.5	1	8	0	0
31	SC021348	0	2.5	0	7	0	0
32	SC027721	0	4.5	0	3	8	15
33	G69141	0	3.0	2	7	0	0
34	G59166	0	2.5	1	8	0	0
35	G69304	0	2.5	0	3	0	0
36	G59015	0	3.0	1	1	0	8
37	GA98401-5E23	0	2.5	1	0	0	0
38	GA981621-5E34	0	2.0	TR	0	0	0
39	GA981622-5E35	0	1.0	0	0	0	0
LOCATION MEANS	0	3		4	3	2	
GROWTH STAGE/DATE			May 10	April 30			

# LEAF RUST

	Cleveland MS Hancock 1-9	Kinston NC Murphy	Castroville TX Perry	Prosper TX Sutton %	Warsaw VA Griffey 0-9	
1	AGS 2000	4.5	1	1	0	3.5
2	USG 3209	6.5	5	1	0	8.0
3	Pioneer Brand 26R61	6.5	0	1	5	3.0
4	McCormick	6.0	3	9	100	8.5
5	AR96077-10-1	6.5	3	3	5	3.5
6	ARTX5406	6.0	0	2	0	4.5
7	VA01W-205	6.0	0	1	0	1.0
8	VA02W-713	5.5	1	3	10	6.5
9	TN601	6.0	0	1	100	6.0
10	MD00-72-5064	5.5	2	1	80	6.0
11	APCK B02-8443	6.0	0	2	5	5.0
12	TN701	6.0	1	1	40	2.0
13	NC03-6228	7.0	1	1	80	2.5
14	NC03-5921	5.0	0	1	0	0.5
15	NC03-8026	6.0	1	1	0	1.0
16	NC03-11158	5.0	1	7	0	1.5
17	0128A1-22	3.5	0	1	0	2.0
18	011010A1-15	4.5	1	1	5	3.0
19	VA04W-259	4.5	0	1	0	0.0
20	VA03W-434	5.0	1	1	0	1.0
21	LA99005UC-31-3-C	5.5	0	1	0	1.0
22	LA98214D-14-1-2-B	5.5	0	1	0	1.0
23	LA98149BUB-3-4-B	4.5	1	1	0	1.0
24	LA978UC-36-1-1-B	6.0	0	1	0	0.5
25	MO011126	6.0	2	1	10	4.5
26	B020815	5.0	2	1	0	5.0
27	D03*9804	6.5	3	3	0	5.5
28	D03*9603	6.0	0	2	5	4.5
29	M03*3861	5.0	3	1	5	5.5
30	M03*3877	4.5	3	1	5	5.0
31	SC021348	7.5	0	2	100	3.0
32	SC027721	5.5	0	1	80	1.0
33	G69141	4.0	1	1	5	7.0
34	G59166	5.5	1	1	10	6.5
35	G69304	4.0	0	1	0	0.5
36	G59015	5.5	0	4	0	1.0
37	GA98401-5E23	4.0	0	1	5	1.5
38	GA981621-5E34	3.5	0	1	0	2.0
39	GA981622-5E35	4.0	0	1	0	2.0
LOCATION MEANS	5	1	2	17	3	
GROWTH STAGE/DATE						

# LEAF RUST

St. Paul  
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Reactions produced by NA race\* \*\*

		BBBD	MFPS	MJBJ	MCRK	KFBJ	MHDS
1	AGS 2000	;	3	;1c1	3	3	3-;
2	USG 3209	;	21c;	;1c	3	;	;1c2
3	Pioneer Brand 26R61	;1c	3-2c;	;1c2	3	3-1c;	3,2c
4	McCormick	;1c	3	3	;1c	3	;
5	AR96077-10-1	;	;	;	3	;1c	;
6	ARTX5406	;1c	;1c	;1c2	3	;1c	;1c
7	VA01W-205	;1c	;	;1c	3	;2c	;1c
8	VA02W-713	;-2c	;1c	;2	3	2c23	;-3
9	TN601	1c-2	3	3	3	;3	3
10	MD00-72-5064	3	3	3	3	3	3-2c;
11	APCK B02-8443	;1c	;1c3	;1c2	3	;1c	2,1c
12	TN701	;-3	;1c-3	3-1c	3	2c;-3	3
13	NC03-6228	;1c	;1c	;	3	;1c	;1c
14	NC03-5921	;	;	0;	0;	0;	0;
15	NC03-8026	;	3	;1c2	;1c2	3	;
16	NC03-11158	;	;	;	0;	;1c1	;
17	0128A1-22	;1c	;1c	1c;-3	1c;	1c;	;1c
18	011010A1-15	;1c	3-2;	3-1c;	3	;1c-3	;2
19	VA04W-259	;	;1c	;	;	;3	;
20	VA03W-434	;	3	;	;	;1c	;
21	LA99005UC-31-3-C	;1c	;	;1c	;3	;	;
22	LA98214D-14-1-2-B	;	2c;	;1c2	23;	;1c	;1c1
23	LA98149BUB-3-4-B	;	3;	3	;1c	3;	;1c
24	LA978UC-36-1-1-B	;	;	;	;1c	;	;1c
25	MO011126	3	3	3	3	3	3
26	B020815	;	;1c	;1c1	;1c	;1c	;1c
27	D03*9804	;	;	;1c	3	;1c	;1c
28	D03*9603	;	;1c	;1c2	;1c	;1c	;1c
29	M03*3861	;	;1c2	;1c1	;1c2	;21c	;1c1
30	M03*3877	;1c2	;1c2	;1c2	;1c2	;1	;1c1
31	SC021348	;	;1c	;1c	;1c	;1c	;2c
32	SC027721	;1c	;1c2	3	;1c	;1c	3;
33	G69141	;1	;1c2	;1c2	3	;1c	;1c1
34	G59166	0;	;1c2	;1c2	3	;	;1c
35	G69304	;	;	;	;	;1c1	;
36	G59015	3	3	3	3	3	3
37	GA98401-5E23	;	;1c2	;1c1	;1c1	;1c	;1c
38	GA981621-5E34	;	;23	;2c2	;1c1	;1c2	;1c2
39	GA981622-5E35	;	;1c2	;1c2	;1c	;1c2	;1c

\*Single genes tested: = 1,2a,2c,3,3Ka,9,10,11,14a,16,17,18,24,26,30,B

\*\*Virulence formula:

BBBD=14a

KFBJ=2a,2c,3,10,14a,24,26

MFPS=1,3,3ka,10,14a,17,24,26,30,B

MHDS=1,3,10,14a,16,17,26,B

MJBJ=1,3,10,14a,16,24

TGBG=1,2a,2c,3,10,16

MCRK=1,3,3ka,10,11,14a,18,26,30

TNRJ=1,2a,2c,3,3ka,9,10,11,14a,24,30

\*\*\*+=Lr gene(s) present but unable to identify with these Lr virulence combinations

# LEAF RUST

St. Paul

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		TGBG	TNRJ	Postulated genes***
1	AGS 2000	;1c	;1c-1	26
2	USG 3209	;1c	;1	11,26
3	Pioneer Brand 26R61	;1c	;2c	26,+
4	McCormick	;	3	24
5	AR96077-10-1	;	;	11,26
6	ARTX5406	;1c	;1	11,26
7	VA01W-205	;1c	;1	11,26
8	VA02W-713	;1c1	;1	11,26
9	TN601	3	3	10
10	MD00-72-5064	3	3	0
11	APCK B02-8443	;1c	3	11
12	TN701	,2c	,1c	26
13	NC03-6228	;1c	;	11,26
14	NC03-5921	0;	;1c	+
15	NC03-8026	;1c	;1c3	24,26
16	NC03-11158	;1c	;	+
17	0128A1-22	;1c	;1c	+
18	011010A1-15	31c	;	+
19	VA04W-259	;1	;1c	+
20	VA03W-434	;1	;	1,24,26
21	LA99005UC-31-3-C	;	3	9
22	LA98214D-14-1-2-B	;1c	3	+
23	LA98149BUB-3-4-B	;1c	3	24,+
24	LA978UC-36-1-1-B	;	;	+
25	MO011126	3	3	0
26	B020815	;1c	3	9
27	D03*9804	;1c	3	11
28	D03*9603	;1c	;	+
29	M03*3861	;1c	3	9
30	M03*3877	;1c	3	9
31	SC021348	;1c	;1c	+
32	SC027721	3	;	16,+
33	G69141	;	3	11
34	G59166	;1c	3	11
35	G69304	;	3	9
36	G59015	3	3	0
37	GA98401-5E23	;1c	;1c	+
38	GA981621-5E34	;1c	2c;	+
39	GA981622-5E35	;1c2	;1c	+

# STEM RUST

St. Paul  
MN

Jin

Seedling reactions produced by Pgt race

	QFCS	QTHJ	RCRS	RKQQ	TPMK	TTTT
	06ND76C	75ND717C	77ND82A	99KS76A-1	74MN1409	01MN84A-1-2
1	AGS 2000	2	2	2	2/S	;1/2-
2	USG 3209	0/2	0	2	;2	2
3	Pioneer Brand 26R61	2	2	2-	2	2-
4	McCormick	2-	2	2	2-	2
5	AR96077-10-1	S	S	S	S	S
6	ARTX5406	S	S	S	S	S
7	VA01W-205	0	0	S/2 LIF	S	;13 LIF
8	VA02W-713	S	2/2+	2/S	S/2	2/S
9	TN601	0/S	0	S LIF	S LIF	;13 LIF
10	MD00-72-5064	S	S	S	S	S/2;1
11	APCK B02-8443	S	S	S	S	S
12	TN701	S	S	S	S	S/2
13	NC03-6228	0	0	0/2+	S LIF/0;	0;
14	NC03-5921	0	0	0;	0;	0;
15	NC03-8026	0/S	0	0;/2	0;	0;
16	NC03-11158	0	0	S	;1+	;13 LIF
17	0128A1-22	S	S	2	S	0
18	011010A1-15	S/0	0	2	S	2++
19	VA04W-259	0/1	0	S	S	S
20	VA03W-434	0	0	2/S	S LIF	S/2
21	LA99005UC-31-3-C	2	2+	2+ LIF	S	2+
22	LA98214D-14-1-2-B	;	0;3	;2+ LIF	0;	2+;/1
23	LA98149BUB-3-4-B	S	S	2	0;1+	S
24	LA978UC-36-1-1-B	S	S	2+3-	S;/1	S
25	MO011126	S	S	S	S	S
26	B020815	S	S	S	S LIF	S
27	D03*9804	S	S	S	S	S
28	D03*9603	S	S	S	S	S
29	M03*3861	S	S/0	S LIF	S LIF	S
30	M03*3877	S	S	S	;1/S LIF	-
31	SC021348	2	S	2	S	S
32	SC027721	S	3N	2+	S	3-;1
33	G69141	S	S	S	-	-
34	G59166	S	S	S	S	S
35	G69304	S	S	S	S	S
36	G59015	2	S	S	S	-
37	GA98401-5E23	;	0	;	0	;1-
38	GA981621-5E34	2	2	0;	2 LIF	2
39	GA981622-5E35	2	2	2- LIF	2 LIF	2

GROWTH STAGE/DATE

# STEM RUST

St. Paul

MN

Jin

	TTKS 04KEN156/04	TTKS repeat 04KEN156/04	TTKS w/Sr24V 06KEN19v3	Field Adult Sev/IT
1	AGS 2000	S?		0
2	USG 3209	0/2	0;	0
3	Pioneer Brand 26R61	S LIF	S	5 R
4	McCormick	0/2	2	5 R
5	AR96077-10-1	S		70 S
6	ARTX5406	S		60 S
7	VA01W-205	0	0	5 MR-MS
8	VA02W-713	S		50 MS/0
9	TN601	0	0	20 S
10	MD00-72-5064	S		70 S
11	APCK B02-8443	S		50 MS-S
12	TN701	S		60 S
13	NC03-6228	0	0	50 MS-S
14	NC03-5921	0	0	T R
15	NC03-8026	0	0/S	0
16	NC03-11158	0;1	0;1-	T MR
17	0128A1-22	S		50 S
18	011010A1-15	S		0/70 S
19	VA04W-259	;1 LIF	0;	40 MS-S
20	VA03W-434	;1	0;	10 MR
21	LA99005UC-31-3-C	2++	2+	40 MS
22	LA98214D-14-1-2-B	S		-
23	LA98149BUB-3-4-B	S		80 S
24	LA978UC-36-1-1-B	S		60 S
25	MO011126	S		60 MS-S
26	B020815	S		70 S
27	D03*9804	S		50 MS-S
28	D03*9603	S		40 MS-S
29	M03*3861	S		60 S
30	M03*3877	-	S	50 S
31	SC021348	S		20 MS
32	SC027721	S		30 MS
33	G69141	S		40 S/0
34	G59166	-	S	40 MS
35	G69304	S		60 S
36	G59015	S		50 MS-S
37	GA98401-5E23	S		0
38	GA981621-5E34	S		-
39	GA981622-5E35	S		0

GROWTH STAGE/DATE

July 2/soft-hard dough

# STRIPE RUST

		Griffin	Pullman	
		GA	WA	
		Johnson	Chen	
		0-9	IT	%
1	AGS 2000	4	8	90
2	USG 3209	4	7	60
3	Pioneer Brand 26R61	0	2	1
4	McCormick	0	5	5
5	AR96077-10-1	0	5	1
6	ARTX5406	0	5	30
7	VA01W-205	2	2	1
8	VA02W-713	6	8	60
9	TN601	6	8	80
10	MD00-72-5064	0	5	40
11	APCK B02-8443	2	5	1
12	TN701	4	8	100
13	NC03-6228	6	8	100
14	NC03-5921	0	3	1
15	NC03-8026	3	8	90
16	NC03-11158	0	5	1
17	0128A1-22	5	8	100
18	011010A1-15	3	8	100
19	VA04W-259	2	7	80
20	VA03W-434	2	8	90
21	LA99005UC-31-3-C	4	2,8	5,40
22	LA98214D-14-1-2-B	2	5	5
23	LA98149BUB-3-4-B	0	0	0
24	LA978UC-36-1-1-B	0	5	10
25	MO011126	0	5	30
26	B020815	0	5	5
27	D03*9804	1	5	1
28	D03*9603	TR	5	50
29	M03*3861	TR	8	30
30	M03*3877	TR	5	40
31	SC021348	7	8	100
32	SC027721	0	0	0
33	G69141	0	2	5
34	G59166	TR	5	50
35	G69304	2	8	60
36	G59015	1	8	50
37	GA98401-5E23	0	5	10
38	GA981621-5E34	0	2	1
39	GA981622-5E35	3	3	5
GROWTH STAGE/DATE		May 10	10.53 / June 22	

# STRIPE RUST

Mt. Vernon  
WA  
Chen

	IT	%	IT	%
1 AGS 2000	8	50	8	60
2 USG 3209	5	40	2	10
3 Pioneer Brand 26R61	5	30	2	5
4 McCormick	8	50	8	60
5 AR96077-10-1	5	20	2	10
6 ARTX5406	2	20	2	5
7 VA01W-205	2	20	2	5
8 VA02W-713	8	30	5	40
9 TN601	8	60	8	100
10 MD00-72-5064	8	60	5	50
11 APCK B02-8443	2	10	2	5
12 TN701	8	50	8	100
13 NC03-6228	8	60	8	100
14 NC03-5921	5	30	5	70
15 NC03-8026	5	30	8	90
16 NC03-11158	8	10	2	5
17 0128A1-22	8	60	8	100
18 011010A1-15	8	60	8	90
19 VA04W-259	5,8	30	5	40
20 VA03W-434	8	60	8	100
21 LA99005UC-31-3-C	8	30	2	5
22 LA98214D-14-1-2-B	5	20	3	5
23 LA98149BUB-3-4-B	5	20	2	2
24 LA978UC-36-1-1-B	5	20	2	5
25 MO011126	5	20	2	2
26 B020815	8	20	2	5
27 D03*9804	8	20	2	5
28 D03*9603	5	20	2	5
29 M03*3861	8	20	2	2
30 M03*3877	8	20	2,8	10
31 SC021348	8	60	8	100
32 SC027721	5	20	2	2
33 G69141	5	30	2	10
34 G59166	5	20	2	5
35 G69304	5	20	5	30
36 G59015	8	40	8	90
37 GA98401-5E23	5	20	3	5
38 GA981621-5E34	5	10	5,8	15
39 GA981622-5E35	5	10	2	10

GROWTH STAGE/DATE

6 / April 18

10.1 / June 1

# SEPTORIA

	Belle Mina	Winnsboro	Wooster	
	AL	LA	OH	
	Glass	Harrison	Sneller	
	leaf blotch	LGB	leaf blotch	
	0-9	0-9	0-9	
1	AGS 2000	2	2.5	1.0
2	USG 3209	3	1.5	0.5
3	Pioneer Brand 26R61	2	2.0	0.5
4	McCormick	2	1.5	1.0
5	AR96077-10-1	3	1.0	1.0
6	ARTX5406	2	2.0	1.5
7	VA01W-205	3	2.0	1.5
8	VA02W-713	3	2.5	1.0
9	TN601	2	1.0	0.5
10	MD00-72-5064	2	2.0	2.0
11	APCK B02-8443	2	2.5	2.0
12	TN701	2	1.5	2.0
13	NC03-6228	2	1.0	3.0
14	NC03-5921	3	1.5	2.0
15	NC03-8026	2	1.0	1.0
16	NC03-11158	3	1.0	1.0
17	0128A1-22	2	1.0	2.0
18	011010A1-15	2	2.0	2.0
19	VA04W-259	2	1.0	1.5
20	VA03W-434	2	1.5	2.0
21	LA99005UC-31-3-C	2	3.5	4.0
22	LA98214D-14-1-2-B	3	1.0	3.0
23	LA98149BUB-3-4-B	3	1.0	2.0
24	LA978UC-36-1-1-B	2	2.0	3.5
25	MO011126	2	0.5	1.5
26	B020815	2	1.5	3.0
27	D03*9804	3	0.5	3.0
28	D03*9603	2	1.0	4.5
29	M03*3861	2	1.0	2.0
30	M03*3877	2	1.0	2.0
31	SC021348	2	3.0	4.0
32	SC027721	2	2.5	1.0
33	G69141	2	2.0	2.0
34	G59166	3	1.5	3.0
35	G69304	2	1.5	2.5
36	G59015	1	3.0	2.5
37	GA98401-5E23	2	1.5	3.0
38	GA981621-5E34	2	1.0	1.5
39	GA981622-5E35	2	2.0	2.0
LOCATION MEANS	2.2	1.6	2.0	

# FUSARIUM HEAD BLIGHT (SCAB)

W. Lafayette

IN

Ohm

inoculated

% severity

1	AGS 2000	71
2	USG 3209	24
3	Pioneer Brand 26R61	10
4	McCormick	27
5	AR96077-10-1	14
6	ARTX5406	36
7	VA01W-205	22
8	VA02W-713	
9	TN601	94
10	MD00-72-5064	16
11	APCK B02-8443	60
12	TN701	54
13	NC03-6228	13
14	NC03-5921	19
15	NC03-8026	10
16	NC03-11158	
17	0128A1-22	10
18	011010A1-15	14
19	VA04W-259	19
20	VA03W-434	23
21	LA99005UC-31-3-C	19
22	LA98214D-14-1-2-B	
23	LA98149BUB-3-4-B	17
24	LA978UC-36-1-1-B	16
25	MO011126	37
26	B020815	39
27	D03*9804	40
28	D03*9603	43
29	M03*3861	14
30	M03*3877	39
31	SC021348	
32	SC027721	65
33	G69141	28
34	G59166	10
35	G69304	22
36	G59015	14
37	GA98401-5E23	10
38	GA981621-5E34	
39	GA981622-5E35	70

## POWDERY MILDEW

	Plains GA Johnson 0-9	Blacksburg VA Griffey 0-9	Warsaw VA Griffey 0-9
1	AGS 2000	2	1.5
2	USG 3209	2	0.0
3	Pioneer Brand 26R61	4	0.5
4	McCormick	0	0.0
5	AR96077-10-1	2	1.5
6	ARTX5406	2	0.0
7	VA01W-205	1	0.0
8	VA02W-713	2	2.0
9	TN601	1	2.5
10	MD00-72-5064	0	1.0
11	APCK B02-8443	2	0.0
12	TN701	2	1.0
13	NC03-6228	0	0.0
14	NC03-5921	T	0.0
15	NC03-8026	T	0.5
16	NC03-11158	0	1.0
17	0128A1-22	4	1.0
18	011010A1-15	3	2.0
19	VA04W-259	0	0.0
20	VA03W-434	0	0.5
21	LA99005UC-31-3-C	2	0.5
22	LA98214D-14-1-2-B	1	1.5
23	LA98149BUB-3-4-B	4	1.0
24	LA978UC-36-1-1-B	1	0.0
25	MO011126	1	0.5
26	B020815	0	0.5
27	D03*9804	2	0.0
28	D03*9603	4	0.5
29	M03*3861	3	1.0
30	M03*3877	3	2.0
31	SC021348	0	1.0
32	SC027721	0	0.0
33	G69141	0	1.5
34	G59166	3	4.5
35	G69304	3	0.0
36	G59015	5	4.5
37	GA98401-5E23	6	0.0
38	GA981621-5E34	4	0.0
39	GA981622-5E35	3	1.0
LOCATION MEANS		1.9	0.9
GROWTH STAGE/DATE		April 3	

# VIRUSES

	Belle Mina	Kinston	Wooster	Blacksburg	Warsaw
	AL	NC	OH	VA	VA
	Glass	Murphy	Sneller	Griffey	Griffey
	BYDV	soil borne virus	BYDV	BYDV	BYDV
	0-9	4	0-9	0-9	0-9
1	AGS 2000	2.0	4.5	1.0	1.0
2	USG 3209	5.0	3.0	1.5	3.0
3	Pioneer Brand 26R61	3.0	3.0	1.0	3.0
4	McCormick	3.5	1.0	1.0	3.0
5	AR96077-10-1	3.0	1.5	1.5	2.0
6	ARTX5406	2.5	2.0	1.0	3.0
7	VA01W-205	2.5	2.0	0.0	1.0
8	VA02W-713	3.0	1.5	2.0	4.5
9	TN601	2.5	2.0	1.0	1.0
10	MD00-72-5064	3.0	2.0	1.0	3.5
11	APCK B02-8443	2.5	5.0	1.5	5.5
12	TN701	2.5	2.5	1.0	1.5
13	NC03-6228	2.5	2.0	1.0	1.5
14	NC03-5921	3.0	4.0	0.5	3.5
15	NC03-8026	4.5	1.0	1.0	3.0
16	NC03-11158	3.5	2.0	0.5	1.0
17	0128A1-22	4.5	1.5	1.0	2.0
18	011010A1-15	2.0	2.0	0.0	1.5
19	VA04W-259	3.0	4.5	1.0	1.0
20	VA03W-434	3.0	1.5	0.5	1.0
21	LA99005UC-31-3-C	2.5	4.0	1.0	1.5
22	LA98214D-14-1-2-B	3.0	3.0	3.0	5.5
23	LA98149BUB-3-4-B	2.5	4.0	1.0	3.0
24	LA978UC-36-1-1-B	4.5	5.0	1.5	3.5
25	MO011126	4.0	2.0	0.0	2.5
26	B020815	3.0	2.5	0.5	1.0
27	D03*9804	3.0	3.0	1.0	4.0
28	D03*9603	3.0	5.0	1.5	3.5
29	M03*3861	3.5	1.5	1.0	2.0
30	M03*3877	2.0	1.5	1.0	3.0
31	SC021348	3.0	6.5	1.5	5.0
32	SC027721	3.0	2.0	1.0	2.5
33	G69141	4.5	2.5	0.5	0.5
34	G59166	2.0	1.5	1.0	3.0
35	G69304	4.0	2.0	1.0	1.0
36	G59015	2.5	6.5	1.5	3.0
37	GA98401-5E23	4.0	2.0	1.5	2.0
38	GA981621-5E34	3.0	1.0	1.0	2.0
39	GA981622-5E35		2.0	1.5	4.0
LOCATION MEANS	5.0	3.1	2.7	1.1	2.5

# XANTHOMONAS

Castroville

TX

Perry

1	AGS 2000	3
2	USG 3209	7
3	Pioneer Brand 26R61	8
4	McCormick	6
5	AR96077-10-1	4
6	ARTX5406	5
7	VA01W-205	6
8	VA02W-713	8
9	TN601	2
10	MD00-72-5064	5
11	APCK B02-8443	2
12	TN701	6
13	NC03-6228	7
14	NC03-5921	1
15	NC03-8026	2
16	NC03-11158	1
17	0128A1-22	6
18	011010A1-15	5
19	VA04W-259	2
20	VA03W-434	5
21	LA99005UC-31-3-C	1
22	LA98214D-14-1-2-B	1
23	LA98149BUB-3-4-B	4
24	LA978UC-36-1-1-B	8
25	MO011126	1
26	B020815	3
27	D03*9804	8
28	D03*9603	7
29	M03*3861	1
30	M03*3877	1
31	SC021348	1
32	SC027721	3
33	G69141	1
34	G59166	1
35	G69304	1
36	G59015	1
37	GA98401-5E23	4
38	GA981621-5E34	3
39	GA981622-5E35	3
LOCATION MEANS		3.7

# HESSIAN FLY

W. Lafayette  
IN

Cambron

		Biotype B	Biotype C	Biotype D	Biotype L
1	AGS 2000	0-20	0-12	0-17	0-12
2	USG 3209	14-4	0-12	0-15	0-15
3	Pioneer Brand 26R61	0-19	8-4	0-14	1-14
4	McCormick	0-20	0-13	0-19	0-14
5	AR96077-10-1	0-18	0-16	0-17	0-13
H7H8	check	0-18	0-12	0-15	0-14
H5	check	17-3	15-0	16-1	0-14
6	ARTX5406	0-15	0-10	0-15	0-15
7	VA01W-205	0-17	0-15	0-18	0-14
8	VA02W-713	0-17	15-0	6-7	2-13
9	TN601	0-14	0-14	0-15	0-13
10	MD00-72-5064	0-17	0-13	0-17	0-15
11	APCK B02-8443	0-18	0-14	0-17	0-15
12	TN701	0-17	0-14	0-16	0-14
13	NC03-6228	0-17	0-15	0-16	0-11
14	NC03-5921	16-3	10-0	12-2	0-12
15	NC03-8026	0-15	0-13	0-17	0-16
H3(H13)	check *H13 for L only	0-17	12-3	0-17	13-0
H6	check	18-1	0-11	0-16	0-12
16	NC03-11158	0-17	0-14	0-19	0-11
17	0128A1-22	0-13	0-9	0-14	0-10
18	011010A1-15	0-14	8-3	0-16	0-11
19	VA04W-259	0-21	0-14	0-16	0-14
20	VA03W-434	0-17	0-15	0-12	0-16
21	LA99005UC-31-3-C	0-17	0-16	0-14	0-14
22	LA98214D-14-1-2-B	0-16	0-15	0-15	0-14
23	LA98149BUB-3-4-B	0-16	0-16	0-14	0-16
24	LA978UC-36-1-1-B	0-19	0-12	0-16	0-16
25	MO011126	0-19	0-14	0-16	0-15
H7H8	check	0-14	0-13	0-16	0-14
H5	check	15-1	14-0	16-1	0-12
26	B020815	0-16	0-12	0-14	0-12
27	D03*9804	0-16	0-15	0-14	0-16
28	D03*9603	3-13	0-16	0-17	0-15
29	M03*3861	0-14	0-13	0-18	0-15
30	M03*3877	5-12	0-12	0-13	0-17
31	SC021348	0-19	0-13	0-16	0-15
32	SC027721	16-3	0-13	0-14	0-16
33	G69141	16-1	11-3	17-3	0-15
34	G59166	15-3	0-13	0-14	0-13
35	G69304	15-2	0-12	0-17	0-13
H3(H13)	check *H13 for L only	0-13	11-3	0-15	11-0
H6	check	13-2	0-13	0-16	0-14
36	G59015	12-2	0-11	0-16	0-14
37	GA98401-5E23	0-13	0-11	0-14	0-13
38	GA981621-5E34	0-12	0-11	0-13	0-12
39	GA981622-5E35	0-17	0-10	0-18	0-13

# CEREAL LEAF BEETLE

Kinston  
NC  
Murphy

1	AGS 2000	5
2	USG 3209	5
3	Pioneer Brand 26R61	7
4	McCormick	7
5	AR96077-10-1	4
6	ARTX5406	5
7	VA01W-205	6
8	VA02W-713	4
9	TN601	4
10	MD00-72-5064	4
11	APCK B02-8443	5
12	TN701	6
13	NC03-6228	4
14	NC03-5921	4
15	NC03-8026	5
16	NC03-11158	3
17	0128A1-22	5
18	011010A1-15	6
19	VA04W-259	2
20	VA03W-434	6
21	LA99005UC-31-3-C	4
22	LA98214D-14-1-2-B	3
23	LA98149BUB-3-4-B	5
24	LA978UC-36-1-1-B	5
25	MO011126	7
26	B020815	7
27	D03*9804	7
28	D03*9603	4
29	M03*3861	7
30	M03*3877	6
31	SC021348	5
32	SC027721	3
33	G69141	7
34	G59166	4
35	G69304	3
36	G59015	6
37	GA98401-5E23	5
38	GA981621-5E34	3
39	GA981622-5E35	6
LOCATION MEANS		5.0

## ACID SOIL TOLERANCE

	Enid	OK
	Carver	
	0-5	0-5
1 AGS 2000	2	2
2 USG 3209	2	3
3 Pioneer Brand 26R61	2	3
4 McCormick	2	4
5 AR96077-10-1	2	3
6 ARTX5406	1	2
7 VA01W-205	2	2
8 VA02W-713	1	2
9 TN601	4	4
10 MD00-72-5064	3	2
11 APCK B02-8443	3	2
12 TN701	3	2
13 NC03-6228	2	2
14 NC03-5921	3	3
15 NC03-8026	3	2
16 NC03-11158	3	2
17 0128A1-22	4	4
18 011010A1-15	2	2
19 VA04W-259	1	2
20 VA03W-434	1	2
21 LA99005UC-31-3-C	1	2
22 LA98214D-14-1-2-B	1	1
23 LA98149BUB-3-4-B	1	2
24 LA978UC-36-1-1-B	1	2
25 MO011126	1	1
26 B020815	1	2
27 D03*9804	2	2
28 D03*9603	1	1
29 M03*3861	2	2
30 M03*3877	2	1
31 SC021348	2	3
32 SC027721	2	2
33 G69141	2	1
34 G59166	1	1
35 G69304	2	1
36 G59015	2	2
37 GA98401-5E23	2	2
38 GA981621-5E34	2	1
39 GA981622-5E35	3	2
LOCATION MEANS	2.0	2.1
GROWTH STAGE/DATE	March 19	May 21

# 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	AR96077-10-1	Non.1RS
6	ARTX5406	1BL.1RS
7	VA01W-205	Non.1RS
8	VA02W-713	Non.1RS
9	TN601	Non.1RS
10	MD00-72-5064	1BL.1RS
11	APCK B02-8443	Non.1RS
12	TN701	Non.1RS
13	NC03-6228	Non.1RS
14	NC03-5921	Non.1RS
15	NC03-8026	1BL.1RS
16	NC03-11158	Non.1RS
17	0128A1-22	Non.1RS
18	011010A1-15	Non.1RS
19	VA04W-259	Non.1RS
20	VA03W-434	N/A
21	LA99005UC-31-3-C	Non.1RS
22	LA98214D-14-1-2-B	Non.1RS
23	LA98149BUB-3-4-B	Non.1RS
24	LA978UC-36-1-1-B	Non.1RS
25	MO011126	Non.1RS
26	B020815	Non.1RS
27	D03*9804	Non.1RS
28	D03*9603	Non.1RS
29	M03*3861	Non.1RS
30	M03*3877	Non.1RS
31	SC021348	Non.1RS
32	SC027721	Non.1RS
33	G69141	1BL.1RS
34	G59166	Non.1RS
35	G69304	Non.1RS
36	G59015	1BL.1RS
37	GA98401-5E23	1BL.1RS
38	GA981621-5E34	1BL.1RS
39	GA981622-5E35	1BL.1RS

# MARKER DATA

Raleigh  
NC  
Brown-Guedira

		<b>Lr34</b>	<b>Bx7oe</b>	<b>Dwarfing</b>	<b>3BS FHB QTL</b>	<b>5AS FHB QTL</b>	<b>2DL FHB QTL</b>	<b>H13</b>
1	AGS 2000	no	no	Rht2	no	no	no	no
2	USG 3209	no	no	Rht2	no	no	no	no
3	Pioneer Brand 26R61	no	<b>yes</b>	unclear	no	no	no	no
4	McCormick	no	no	Rht2	no	no	no	no
5	AR96077-10-1	no	no	Rht2	no	no	no	no
6	ARTX5406	no	no	Rht2	no	no	no	no
7	VA01W-205	no	no	Rht2	no	no	no	no
8	VA02W-713	no	no	Rht2	no	no	no	no
9	TN601	no	no	Rht1	no	no	no	no
10	MD00-72-5064	no	<b>yes</b>	Rht2	no	no	no	no
11	APCK B02-8443	no	no	unclear	no	no	no	no
12	TN701	no	no	Rht1	no	no	no	no
13	NC03-6228	no	no	Rht2	no	no	no	no
14	NC03-5921	no	no	Rht1	no	no	no	no
15	NC03-8026	no	no	Rht2	no	no	no	no
16	NC03-11158	no	<b>yes</b>	Rht2	no	no	no	no
17	0128A1-22	no	no	Rht1	<b>yes</b>	no	no	no
18	011010A1-15	no	nd	Rht1	no	no	no	no
19	VA04W-259	no	no	unclear	no	no	no	no
20	VA03W-434	no	no	unclear	no	no	no	no
21	LA99005UC-31-3-C	no	no	Rht2	no	no	no	no
22	LA98214D-14-1-2-B	no	<b>yes</b>	Rht2	no	no	no	no
23	LA98149BUB-3-4-B	no	<b>yes</b>	Rht2?	no	no	no	no
24	LA978UC-36-1-1-B	no	no	Rht2	no	no	no	no
25	MO011126	no	nd	NA	no	no	no	no
26	B020815	no	no	unclear	no	no	no	no
27	D03*9804	no	no	unclear	no	no	no	no
28	D03*9603	no	no	Rht2	no	no	no	no
29	M03*3861	no	<b>hetero</b>	unclear	no	no	no	no
30	M03*3877	no	<b>yes</b>	Rht2	no	no	no	no
31	SC021348	no	no	Rht2	no	no	no	no
32	SC027721	no	no	Rht1	no	no	no	no
33	G69141	no	no	Rht2	no	no	no	no
34	G59166	no	no	Rht2	no	no	no	no
35	G69304	no	no	Rht2	no	no	no	no
36	G59015	no	no	Rht1	no	no	no	no
37	GA98401-5E23	no	no	Rht2	no	no	no	no
38	GA981621-5E34	no	<b>yes</b>	Rht2	no	no	no	no
39	GA981622-5E35	no	<b>yes</b>	Rht2	no	no	no	no

# MARKER DATA

Raleigh  
NC  
Brown-Guedira

		H9	Yr17/Lr37/Sr38	Sr24/Lr24	Sr36	1RS:1BL	1RS:1AL
1	AGS 2000	no	no	no	no	yes	
2	USG 3209	no	no	no	yes	yes	
3	Pioneer Brand 26R61	no	no	no	no	yes	
4	McCormick	no	no	yes	no		yes
5	AR96077-10-1	no	no	no	no		
6	ARTX5406	no	no	no	no		
7	VA01W-205	no	no	no	yes		
8	VA02W-713	no	no	no	no		yes
9	TN601	no	no	no	yes		
10	MD00-72-5064	no	no	no	no?	yes	
11	APCK B02-8443	no	no	no	no		
12	TN701	no	no	no	no		
13	NC03-6228	no	no	no	yes		
14	NC03-5921	no	no	no	yes		
15	NC03-8026	no	no	no	yes	yes	
16	NC03-11158	no	yes	no	yes		
17	0128A1-22	no	no	no	no		
18	011010A1-15	no	yes?	no	no		
19	VA04W-259	no	no	no	yes		
20	VA03W-434	no	no	no	yes	yes	
21	LA99005UC-31-3-C	no	no	no	no		
22	LA98214D-14-1-2-B	no	yes	no	no		
23	LA98149BUB-3-4-B	no	no	no	no		
24	LA978UC-36-1-1-B	no	no	no	no	yes	
25	MO011126	no	no	no	no		
26	B020815	no	no	no	no		
27	D03*9804	no	no	no	no		
28	D03*9603	no	no	no	no		
29	M03*3861	no	no	no	no		
30	M03*3877	no	no	no	no		
31	SC021348	no	no	no	no		
32	SC027721	no	no	no	no		
33	G69141	no	no	no	no		
34	G59166	no	no	no	no		
35	G69304	no	no	no	no		
36	G59015	no	no	no	no		
37	GA98401-5E23	no	yes	no	no	yes	
38	GA981621-5E34	no	no	no	no	yes	
39	GA981622-5E35	no	no	no	no	yes	

# SEED QUALITY

Baton Rouge

LA

Harrison

0-9

1	AGS 2000	1.0
2	USG 3209	2.0
3	Pioneer Brand 26R61	2.0
4	McCormick	3.5
5	AR96077-10-1	3.0
6	ARTX5406	1.5
7	VA01W-205	2.5
8	VA02W-713	2.5
9	TN601	5.5
10	MD00-72-5064	3.5
11	APCK B02-8443	2.5
12	TN701	3.0
13	NC03-6228	3.0
14	NC03-5921	2.5
15	NC03-8026	3.5
16	NC03-11158	4.0
17	0128A1-22	3.0
18	011010A1-15	2.0
19	VA04W-259	5.5
20	VA03W-434	2.5
21	LA99005UC-31-3-C	1.5
22	LA98214D-14-1-2-B	1.0
23	LA98149BUB-3-4-B	1.5
24	LA978UC-36-1-1-B	1.0
25	MO011126	6.5
26	B020815	6.5
27	D03*9804	2.5
28	D03*9603	2.0
29	M03*3861	7.5
30	M03*3877	3.5
31	SC021348	2.5
32	SC027721	3.0
33	G69141	4.5
34	G59166	3.5
35	G69304	5.5
36	G59015	3.5
37	GA98401-5E23	2.0
38	GA981621-5E34	2.0
39	GA981622-5E35	2.0
LOCATION MEANS		3.1

## GROWTH HABIT

	Bay AR Hancock Habit 1-5	Baton Rouge LA Harrison Habit 0-9	Baton Rouge LA Harrison Phenotype 0-9	Winnsboro LA Harrison Phenotype 0-9	
1	AGS 2000	5.0	4	3.2	3.2
2	USG 3209	3.5	5	4.6	4.0
3	Pioneer Brand 26R61	4.0	5	3.6	3.7
4	McCormick	2.5	6	5.9	7.8
5	AR96077-10-1	3.5	5	4.8	4.8
6	ARTX5406	3.5	8	5.0	5.2
7	VA01W-205	3.0	7	6.4	5.2
8	VA02W-713	4.0	4	3.9	3.8
9	TN601	3.0	7	6.8	6.3
10	MD00-72-5064	2.5	8	5.9	6.7
11	APCK B02-8443	3.5	4	3.3	4.0
12	TN701	3.0	7	5.5	5.0
13	NC03-6228	3.0	8	6.4	5.2
14	NC03-5921	3.5	6	3.9	3.7
15	NC03-8026	3.5	7	5.8	4.5
16	NC03-11158	4.0	7	5.8	5.3
17	0128A1-22	2.5	6	5.2	6.3
18	011010A1-15	2.0	7	5.5	6.5
19	VA04W-259	4.0	6	6.2	5.3
20	VA03W-434	2.5	7	6.2	5.3
21	LA99005UC-31-3-C	5.0	3	3.1	4.0
22	LA98214D-14-1-2-B	4.5	4	3.4	4.3
23	LA98149BUB-3-4-B	3.5	5	3.3	3.8
24	LA978UC-36-1-1-B	3.0	4	2.7	3.0
25	MO011126	2.0	8	6.3	6.0
26	B020815	2.5	7	6.0	5.5
27	D03*9804	3.0	6	4.3	4.0
28	D03*9603	3.0	7	5.5	4.2
29	M03*3861	2.0	8	6.3	5.0
30	M03*3877	3.0	7	6.1	4.8
31	SC021348	4.5	2	5.1	6.7
32	SC027721	2.5	7	4.0	5.8
33	G69141	2.0	8	6.2	5.8
34	G59166	2.0	8	6.0	5.5
35	G69304	2.5	8	6.5	5.8
36	G59015	3.0	8	5.9	6.0
37	GA98401-5E23	4.5	4	3.4	3.5
38	GA981621-5E34	3.5	4	3.8	3.0
39	GA981622-5E35	5.0	4	3.9	3.8
LOCATION MEANS		3.3	6.1	5.0	4.9

**2007 Crop  
Advanced Nursery Evaluation**

**Stephen Harrison  
Uniform Southern Nursery**

**Entries #722501 - #722578**

A total of 78 entries were analyzed from the Uniform Southern Nursery. These entries were divided into two nurseries (Coastal and Interior) which were each evaluated separately. PION 26R61 was used as the standard for each group. Of the 830 cultivars in the SWQL database of Allis-milled cultivars, PION 26R61 ranks 334<sup>th</sup> for Milling Score based on data from 3 millings.

The standard data is compared to the “historical average” for the cultivar, and quality scores are adjusted to this average. Quality scores for each of the entries in the nursery are then adjusted by the same factor as the standard. These factors are shown in the following table:

	Coastal	Interior
Milling Quality Score Factor	+15.3	+13.7
Baking Quality Score Factor	+3.2	-20.1
Softness Equivalent Factor	+2.1	-5.1

This year a new tab called “HISTORICAL” has been added to the evaluation worksheet. On this page we will present data from the SWQL Allis and Advanced Nursery databases for the check cultivars as a historical comparison. In addition to the standard, AGS 2000, MC CORMICK, and USG 3209 were also included as checks.

Neither location showed evidence of weathering or sprouting. The samples were lightly cleaned prior to milling and shriveled grain was seen in a greater percentage of the entries from the Coastal Region than the Interior region, however, amounts were generally low.

## **Coastal Region Entries**

**#722501- #722539**

Each of the checks produced a test weight that slightly exceeded its historic value with the exception of MC CORMICK which had a lower than expected test weight (61.9 lb/bu vs. 63.0 lb/bu, historically). Some reduction was seen in flour yield as the checks ranged from 1.4% to 2.1% below their database values. S.E. values, however, showed excellent agreement with historic averages. Lactic Acid SRC values also agreed well with previous data.

## **Interior Region Entries**

**#722540 - #722578**

In several respects, the checks showed trends that were similar to those seen in the Coastal Region. When compared to historic values, test weights again were slightly higher and flour yields were also slightly lower. In addition, nice agreement was seen for the Lactic Acid values.

However, there were several areas that showed some differences between the two regions. S.E. values of the checks ranged from 2.5% to 4.5% higher in the Interior Region than the Coastal Region. The Interior Region had an average S.E. value for all entries of 59.4% compared to 54.8% for the Coastal Region.

Larger cookies were seen in the Interior Region with the average diameter being nearly 0.65 cm larger than the Coastal Region. In addition, Sucrose SRC values were approximately 2.5% lower on average than those from the Coastal Region.

## **Comments from Ed Souza**

The milling and baking qualities of the two USN regions were different for all measures except baking quality score. In general the samples from the coastal regions were softer and better suited for cookies and cakes. This is indicated by the sucrose SRC values for the Coastal region which are significantly lower than the Interior and the cookie diameter measures which are larger for the Coastal region than for the Interior (See file marked USN Averages for values mentioned in the comments).

The USN trial had significant variation for milling quality among the cultivars. The values for the checks in both the Interior and Coastal composites were close to the historical values for most measures and were ranked correctly relative to the historical rankings. The results of these trials are representative of how the cultivar is likely to perform in commercial evaluations. USG 3209 was the check with lowest flour yield, 68.9% in the two composite average. Breeding lines with flour yield below 68.5% are significantly poorer milling wheats than USG 3209

and are likely to be unacceptable for most commercial applications. Similarly, USG 3209 and Pioneer 26R61 were lower (poorer) than McCormick for softness equivalent. Lines with softness equivalent values similar to these two cultivars are likely to be coarse milling wheats and may cause problems for some soft wheat products that require small particle size flours.

MO 011126 is a relatively strong gluten cultivar that carries the over-expressed glutenin allele for Bx7. Wheat cultivars with similar or greater lactic acid levels may be candidates for cracker production, if they meet other soft wheat criteria. These include the lines, AR96077-10-1, D03\*9603, LA98149BUB-3-4-B, LA978UC-36-1-1-B, and TN601.

A number of the experimental lines were better than the checks for cookie and cake quality, with low sucrose SRC and large cookie diameters. These lines were: G59015, MO011126, VA03W-434, and M03\*3877.

Best regards,  
Edward Souza

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

		Region 1 (Interior): Quantico, MD:Warsaw, VA	MILLING QUALITY SCORE		BAKING QUALITY SCORE		SOFT. EQUIV. SCORE	
LAB NO.	STANDARD (#722542, Pio. Brand 26R61)		69.3	C	52.2	D	64.6	C
722540	1	AGS 2000	79.2	B	58.5	D	75.2	B
722541	2	USG 3209	68.1	C	53.9	D	67.8	C
722542	3	Pioneer Brand 26R61	69.3	C	52.2	D	64.6	C
722543	4	McCormick	72.6	B	67.2	C	86.5	A
722544	5	AR96077-10-1	70.2	B	72.5	B	80.0	B
722545	6	ARTX5406	68.3	C	58.5	D	75.6	B
722546	7	VA01W-205	78.1	B	97.5	A	93.0	A
722547	8	VA02W-713	66.3	C	74.2	B	82.7	A
722548	9	TN601	83.3	A	69.9	C	80.0	B
722549	10	MD00-72-5064	62.4	C	42.9	E	77.4	B
722550	11	APCK B02-8443	62.3	C	68.2	C	85.2	A
722551	12	TN701	60.4	C	77.5	B	78.1	B
722552	13	NC03-6228	66.0	C	43.5	E	65.4	C
722553	14	NC03-5921	62.4	C	73.9	B	68.8	C
722554	15	NC03-8026	70.7	B	64.9	C	69.2	C
722555	16	NC03-11158	70.8	B	69.5	C	85.1	A
722556	17	0128A1-22	67.1	C	67.2	C	77.2	B
722557	18	011010A1-15	67.0	C	60.2	C	77.6	B
722558	19	VA04W-259	72.7	B	73.2	B	79.0	B
722559	20	VA03W-434	68.1	C	80.2	A	88.0	A
722560	21	LA99005UC-31-3-C	78.2	B	64.5	C	85.9	A
722561	22	LA98214D-14-1-2-B	75.5	B	76.5	B	74.4	B
722562	23	LA98149BUB-3-4-B	77.5	B	62.9	C	72.3	B
722563	24	LA978UC-36-1-1-B	66.8	C	54.9	D	84.4	A
722564	25	MO011126	86.6	A	85.2	A	86.4	A
722565	26	B020815	74.8	B	72.2	B	83.2	A
722566	27	D03*9804	58.3	D	60.2	C	73.0	B
722567	28	D03*9603	73.5	B	47.2	E	76.2	B
722568	29	M03*3861	79.6	B	78.2	B	89.7	A
722569	30	M03*3877	78.6	B	77.9	B	86.7	A
722570	31	SC021348	59.3	D	61.5	C	87.6	A
722571	32	SC027721	75.0	B	51.2	D	71.7	B
722572	33	G69141	68.9	C	70.9	B	87.2	A
722573	34	G59166	75.4	B	69.2	C	93.8	A
722574	35	G69304	63.5	C	54.2	D	85.7	A
722575	36	G59015	81.7	A	76.5	B	90.0	A
722576	37	GA98401-5E23	60.4	C	53.9	D	81.0	A
722577	38	GA981621-5E34	84.9	A	73.9	B	88.5	A
722578	39	GA981622-5E35	78.3	B	54.2	D	77.2	B

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

		Region 1 (Interior): Quantico, MD:Warsaw, VA	MICRO T.W. LB/BU	FLOUR YIELD %	SOFT. EQUIV. %	FLOUR PROT. %		
LAB NO.	STANDARD (#722542, Pio. Brand 26R61)		64.1	69.5	53.9	8.70		
722540	1	AGS 2000	63.5	71.4	57.6	8.18		
722541	2	USG 3209	62.6	*	69.2	55.0	7.63	
722542	3	Pioneer Brand 26R61	64.1		69.5	53.9	8.70	
722543	4	McCormick	63.8		70.1	61.6	7.88	
722544	5	AR96077-10-1	62.8	*	69.6	59.3	7.57	
722545	6	ARTX5406	63.3		69.3	57.7	8.20	
722546	7	VA01W-205	62.7	*	71.2	63.8	7.43	
722547	8	VA02W-713	63.8		68.9	60.2	8.22	
722548	9	TN601	63.1		72.3	59.3	7.86	
722549	10	MD00-72-5064	63.3		68.1	*	58.4	8.31
722550	11	APCK B02-8443	62.1	*	68.0	*	61.1	7.98
722551	12	TN701	62.4	*	67.7	Q	58.6	7.85
722552	13	NC03-6228	64.2		68.8		54.2	8.25
722553	14	NC03-5921	62.6	*	68.1	*	55.4	8.41
722554	15	NC03-8026	63.1		69.7		55.5	8.20
722555	16	NC03-11158	61.6	Q	69.8		61.1	8.32
722556	17	0128A1-22	61.2	Q	69.0		58.3	8.09
722557	18	011010A1-15	61.3	Q	69.0		58.5	8.97
722558	19	VA04W-259	61.9	*	70.1		58.9	8.00
722559	20	VA03W-434	61.4	Q	69.2		62.1	7.57
722560	21	LA99005UC-31-3-C	62.6	*	71.2		61.4	7.90
722561	22	LA98214D-14-1-2-B	62.6	*	70.7		57.3	8.02
722562	23	LA98149BUB-3-4-B	63.1		71.1		56.6	8.16
722563	24	LA978UC-36-1-1-B	61.8	*	69.0		60.8	8.26
722564	25	MO011126	62.9	*	72.9		61.5	7.76
722565	26	B020815	63.2		70.6		60.4	8.00
722566	27	D03*9804	61.9	*	67.3	Q	56.9	7.33
722567	28	D03*9603	62.5	*	70.3		58.0	8.24
722568	29	M03*3861	62.1	*	71.5		62.7	7.52
722569	30	M03*3877	62.7	*	71.3		61.7	7.70
722570	31	SC021348	61.7	*	67.5	Q	61.9	8.20
722571	32	SC027721	62.7	*	70.6		56.4	8.33
722572	33	G69141	62.6	*	69.4		61.8	7.76
722573	34	G59166	62.3	*	70.7		64.1	7.60
722574	35	G69304	63.2		68.3	*	61.3	7.74
722575	36	G59015	61.4	Q	71.9		62.8	7.73
722576	37	GA98401-5E23	63.5		67.7	Q	59.6	8.02
722577	38	GA981621-5E34	63.3		72.6		62.3	7.78
722578	39	GA981622-5E35	63.4		71.3		58.3	8.32

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Region 1 (Interior): Quantico, MD:Warsaw, VA			LACTIC ACID SRC	SUCROSE SRC %	COOKIE DIAM. CM.	TOP GR.
LAB NO.	STANDARD (#722542, Pio. Brand 26R61)		107.6	88.14	17.97	6
722540	1	AGS 2000	108.0	88.70	18.16	5
722541	2	USG 3209	106.9	95.92	18.02	5
722542	3	Pioneer Brand 26R61	107.6	88.14	17.97	6
722543	4	McCormick	115.1	85.89	18.42	6
722544	5	AR96077-10-1	124.7	87.26	18.58	6
722545	6	ARTX5406	100.3	89.18	18.16	6
722546	7	VA01W-205	115.4	83.01	19.33	7
722547	8	VA02W-713	98.4	90.24	18.63	6
722548	9	TN601	124.0	87.69	18.50	6
722549	10	MD00-72-5064	136.5	97.82	17.69	* 5
722550	11	APCK B02-8443	119.4	90.72	18.45	6
722551	12	TN701	120.1	89.75	18.73	7
722552	13	NC03-6228	126.1	97.12	17.71	* 4
722553	14	NC03-5921	110.7	88.08	18.62	6
722554	15	NC03-8026	108.2	93.81	18.35	6
722555	16	NC03-11158	98.1	90.74	18.49	6
722556	17	0128A1-22	101.5	84.69	18.42	7
722557	18	011010A1-15	111.4	87.66	18.21	5
722558	19	VA04W-259	110.9	86.53	18.60	5
722559	20	VA03W-434	110.1	85.82	18.81	6
722560	21	LA99005UC-31-3-C	110.1	86.15	18.34	5
722561	22	LA98214D-14-1-2-B	117.2	87.77	18.70	6
722562	23	LA98149BUB-3-4-B	125.0	88.46	18.29	5
722563	24	LA978UC-36-1-1-B	125.0	96.23	18.05	3
722564	25	MO011126	120.1	85.02	18.96	7
722565	26	B020815	113.1	90.86	18.57	6
722566	27	D03*9804	109.3	91.15	18.21	6
722567	28	D03*9603	127.5	94.62	17.82	4
722568	29	M03*3861	113.8	87.55	18.75	6
722569	30	M03*3877	117.0	88.97	18.74	6
722570	31	SC021348	118.7	94.66	18.25	5
722571	32	SC027721	116.0	94.57	17.94	5
722572	33	G69141	97.8	89.31	18.53	7
722573	34	G59166	103.7	84.84	18.48	7
722574	35	G69304	119.1	90.71	18.03	4
722575	36	G59015	110.0	83.90	18.70	6
722576	37	GA98401-5E23	117.2	100.70	18.02	5
722577	38	GA981621-5E34	107.3	88.32	18.62	6
722578	39	GA981622-5E35	112.9	91.77	18.03	5

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Region 1 (Interior): Quantico, MD:Warsaw, VA			FHB	WEATHERING	SPROUTING	BLACK POINT	SHRIVELING AFTER CLEANING
LAB NO.	STANDARD (#722542, Pio. Brand 26R61)		(0-3)	(Yes/No)	(0-3)	(0-3)	(0-3)
722540	1	AGS 2000					
722541	2	USG 3209					
722542	3	Pioneer Brand 26R61				1	
722543	4	McCormick					
722544	5	AR96077-10-1				1	
722545	6	ARTX5406				1	
722546	7	VA01W-205				1	
722547	8	VA02W-713				1	
722548	9	TN601				1	
722549	10	MD00-72-5064				1	
722550	11	APCK B02-8443					
722551	12	TN701	1			1	1
722552	13	NC03-6228				1	
722553	14	NC03-5921					
722554	15	NC03-8026	1				1
722555	16	NC03-11158					
722556	17	0128A1-22					
722557	18	011010A1-15					1
722558	19	VA04W-259					
722559	20	VA03W-434					
722560	21	LA99005UC-31-3-C	1				1
722561	22	LA98214D-14-1-2-B					1
722562	23	LA98149BUB-3-4-B				1	
722563	24	LA978UC-36-1-1-B				1	1
722564	25	MO011126					
722565	26	B020815					
722566	27	D03*9804					
722567	28	D03*9603				1	
722568	29	M03*3861				1	
722569	30	M03*3877				1	
722570	31	SC021348				1	1
722571	32	SC027721				1	
722572	33	G69141				1	
722573	34	G59166				1	1
722574	35	G69304				1	
722575	36	G59015					
722576	37	GA98401-5E23	1				1
722577	38	GA981621-5E34				1	
722578	39	GA981622-5E35	1			1	1

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 1 (Interior):**  
Quantico, MD:Warsaw, VA

LAB  
NO. STANDARD (#722542, Pio. Brand 26R61)

722540	1	AGS 2000	
722541	2	USG 3209	
722542	3	Pioneer Brand 26R61	GRAIN CONDITION SCALE
722543	4	McCormick	
722544	5	AR96077-10-1	FHB, SPROUTING and BLACK POINT
722545	6	ARTX5406	0 None
722546	7	VA01W-205	1 up to 10%
722547	8	VA02W-713	2 10% to 40%
722548	9	TN601	3 above 40%
722549	10	MD00-72-5064	
722550	11	APCK B02-8443	SHRIVELING
722551	12	TN701	0 None
722552	13	NC03-6228	1 Some
722553	14	NC03-5921	2 Moderate
722554	15	NC03-8026	3 Heavy
722555	16	NC03-11158	
722556	17	0128A1-22	
722557	18	011010A1-15	
722558	19	VA04W-259	
722559	20	VA03W-434	
722560	21	LA99005UC-31-3-C	
722561	22	LA98214D-14-1-2-B	
722562	23	LA98149BUB-3-4-B	
722563	24	LA978UC-36-1-1-B	
722564	25	MO011126	
722565	26	B020815	
722566	27	D03*9804	
722567	28	D03*9603	
722568	29	M03*3861	
722569	30	M03*3877	
722570	31	SC021348	
722571	32	SC027721	
722572	33	G69141	
722573	34	G59166	
722574	35	G69304	
722575	36	G59015	
722576	37	GA98401-5E23	
722577	38	GA981621-5E34	
722578	39	GA981622-5E35	

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

## Region 1 (Interior):

Quantico, MD:Warsaw, VA

## EVALUATION SUMMARY

	STD. DATA		AVG. DATA					
MILLING QUALITY SCORE	69.30	C	71.34					
BAKING QUALITY SCORE	52.20	D	65.92					
SE SCORE	64.60	C	80.28					
	STD. DATA		AVG. DATA	ADJ. L.S.D.	NOTATION BEGINS			
					*	Q		
TEST WEIGHT	64.11		62.68	1.24	62.87	61.63		
FLOUR YIELD	69.45		69.86	0.75	68.71	67.96		
SOFTNESS EQUIV.	53.91		59.40	2.90	51.01	48.11		
FLOUR PROTEIN	8.70		8.00	0.70	9.40	10.11		
LACTIC ACID SRC	107.62		113.70					
SUCROSE SRC	88.14		89.89					
COOKIE DIAMETER	17.97		18.38	0.24	17.73	17.49		
	A		B	C	D	E	F	TOTAL
MILLING SCORE	4		17	16	2	0	0	
BAKING SCORE	3		12	12	9	3	0	39
SOFTNESS EQUIV. SCOR	19		15	5	0	0	0	

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 1 (Interior):** Quantico,  
MD:Warsaw, VA

HISTORICAL

LAB NO.	ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	SOFT. EQUIV. SCORE	MICRO T.W. LB/BU	FLOUR YIELD %			
722540 (Database)	40 AGS 2000	79.2	B	58.5	D	75.2	B	63.5	71.4
	AGS 2000	85.9	A	69.9	C	62.9	C	62.4	73.4
722543 (Database)	43 McCormick	72.6	B	67.2	C	86.5	A	63.8	70.1
	McCormick	68.1	C	46.6	E	64.2	C	63.0	70.9
722542 (Database)	42 Pioneer 26R61	69.3	C	52.2	D	64.6	C	64.1	69.5
	Pioneer 26R61	69.3	C	52.2	D	64.6	C	62.9	70.8
722541 (Database)	41 USG 3209	68.1	C	53.9	D	67.8	C	62.6	69.2
	USG 3209	55.3	D	37.0	F	58.6	D	61.3	70.0

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 1 (Interior):** Quantico,  
MD:Warsaw, VA

HISTORICAL

LAB NO.		ENTRY	SOFT. EQUIV. %	FLOUR PROT. %	LACTIC ACID SRC	SUCROSE SRC %	COOKIE DIAM. CM.	TOP GR.
722540 (Database)	40	AGS 2000	57.6	8.2	108.0	88.7	18.2	5
		AGS 2000	56.6	8.9	108.0		18.0	4
722543 (Database)	43	McCormick	61.6	7.9	115.1	85.9	18.4	6
		McCormick	57.6	8.8	115.8		17.5	3
722542 (Database)	42	Pioneer 26R61	53.9	8.7	107.6	88.1	18.0	6
		Pioneer 26R61	54.1	9.6	110.4		17.6	4
722541 (Database)	41	USG 3209	55.0	7.6	106.9	95.9	18.0	5
		USG 3209	50.3	8.4	110.7		17.4	4

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

<b>Region 2 (Coastal):</b> Plains, GA; Winnsboro, LA; Newton, MS			MILLING QUALITY SCORE		BAKING QUALITY SCORE		SOFT. EQUIV. SCORE	
LAB NO.	STANDARD (#722503, Pioneer Brand 26R61)		69.3	C	52.2	D	64.6	C
722501	1	AGS 2000	83.9	A	72.2	B	72.8	B
722502	2	USG 3209	66.9	C	49.5	E	62.1	C
722503	3	Pioneer Brand 26R61	69.3	C	52.2	D	64.6	C
722504	4	McCormick	67.5	C	66.5	C	86.5	A
722505	5	AR96077-10-1	69.0	C	70.9	B	73.8	B
722506	6	ARTX5406	66.6	C	65.9	C	68.6	C
722507	7	VA01W-205	72.0	B	95.2	A	81.6	A
722508	8	VA02W-713	66.5	C	80.2	A	83.1	A
722509	9	TN601	75.0	B	72.5	B	69.4	C
722510	10	MD00-72-5064	60.0	D	55.5	D	77.9	B
722511	11	APCK B02-8443	61.7	C	72.2	B	79.9	B
722512	12	TN701	58.1	D	65.2	C	68.0	C
722513	13	NC03-6228	61.5	C	56.2	D	65.7	C
722514	14	NC03-5921	60.0	C	74.2	B	59.6	D
722515	15	NC03-8026	72.0	B	71.2	B	71.2	B
722516	16	NC03-11158	65.8	C	73.9	B	77.1	B
722517	17	0128A1-22	64.8	C	76.9	B	76.0	B
722518	18	011010A1-15	62.4	C	77.5	B	72.5	B
722519	19	VA04W-259	69.2	C	63.2	C	63.5	C
722520	20	VA03W-434	65.2	C	79.9	B	72.9	B
722521	21	LA99005UC-31-3-C	81.4	A	71.9	B	78.3	B
722522	22	LA98214D-14-1-2-B	77.5	B	74.5	B	70.2	B
722523	23	LA98149BUB-3-4-B	75.0	B	50.9	D	69.8	C
722524	24	LA978UC-36-1-1-B	62.6	C	45.9	E	76.2	B
722525	25	MO011126	84.6	A	72.2	B	73.4	B
722526	26	B020815	76.7	B	78.5	B	77.6	B
722527	27	D03*9804	63.1	C	72.2	B	59.6	D
722528	28	D03*9603	68.0	C	47.5	E	69.9	C
722529	29	M03*3861	78.9	B	73.9	B	78.5	B
722530	30	M03*3877	78.3	B	80.5	A	70.5	B
722531	31	SC021348	59.2	D	65.2	C	89.5	A
722532	32	SC027721	73.4	B	42.9	E	60.5	C
722533	33	G69141	68.0	C	70.5	B	91.7	A
722534	34	G59166	78.2	B	66.9	C	82.1	A
722535	35	G69304	61.6	C	64.9	C	88.0	A
722536	36	G59015	80.9	A	78.5	B	83.5	A
722537	37	GA98401-5E23	54.7	D	49.2	E	78.2	B
722538	38	GA981621-5E34	80.4	A	57.2	D	83.9	A
722539	39	GA981622-5E35	79.4	B	64.5	C	75.8	B

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Region 2 (Coastal): Plains, GA; Winnsboro, LA; Newton, MS			MICRO T.W. LB/BU	FLOUR YIELD %	SOFT. EQUIV. %	FLOUR PROT. %		
LAB NO.	STANDARD (#722503, Pioneer Brand 26R61)		63.2	69.1	51.4	9.85		
722501	1	AGS 2000	63.3	72.0	54.3	9.08		
722502	2	USG 3209	62.0	68.6	50.5	8.91		
722503	3	Pioneer Brand 26R61	63.2	69.1	51.4	9.85		
722504	4	McCormick	61.9	*	68.8	59.0	9.28	
722505	5	AR96077-10-1	61.6	*	69.1	54.6	9.26	
722506	6	ARTX5406	63.4		68.6	52.8	9.03	
722507	7	VA01W-205	63.1		69.7	57.3	9.09	
722508	8	VA02W-713	63.0		68.6	57.8	8.95	
722509	9	TN601	62.2		70.3	53.1	9.49	
722510	10	MD00-72-5064	62.4		67.3	Q	56.0	9.73
722511	11	APCK B02-8443	60.9	*	67.6	Q	56.7	9.11
722512	12	TN701	62.2		66.9	Q	52.6	9.77
722513	13	NC03-6228	62.8		67.6	Q	51.7	9.59
722514	14	NC03-5921	62.6		67.3	Q	49.6	9.73
722515	15	NC03-8026	61.9		69.7		53.7	9.05
722516	16	NC03-11158	60.5	Q	68.4		55.8	9.43
722517	17	0128A1-22	59.6	Q	68.2	*	55.4	9.44
722518	18	011010A1-15	60.7	*	67.7	*	54.1	9.55
722519	19	VA04W-259	62.1		69.1		51.0	10.15
722520	20	VA03W-434	61.4	*	68.3	*	54.3	9.46
722521	21	LA99005UC-31-3-C	62.1		71.5		56.2	8.70
722522	22	LA98214D-14-1-2-B	62.4		70.8		53.3	9.01
722523	23	LA98149BUB-3-4-B	62.3		70.3		53.2	9.54
722524	24	LA978UC-36-1-1-B	61.7	*	67.8	*	55.4	9.34
722525	25	MO011126	62.3		72.2		54.4	9.77
722526	26	B020815	61.4	*	70.6		55.9	9.60
722527	27	D03*9804	61.9	*	67.9	*	49.6	9.28
722528	28	D03*9603	61.9	*	68.9		53.2	10.06
722529	29	M03*3861	61.0	*	71.0		56.2	9.65
722530	30	M03*3877	62.1		70.9		53.4	9.62
722531	31	SC021348	61.0	*	67.1	Q	60.1	8.86
722532	32	SC027721	61.5	*	70.0		49.9	10.52
722533	33	G69141	60.1	Q	68.9		60.9	9.16
722534	34	G59166	62.0		70.9		57.5	9.19
722535	35	G69304	61.3	*	67.6	Q	59.6	9.18
722536	36	G59015	61.3	*	71.4		58.0	9.65
722537	37	GA98401-5E23	62.1		66.2	Q	56.1	9.47
722538	38	GA981621-5E34	61.5	*	71.3		58.1	9.42
722539	39	GA981622-5E35	62.2		71.1		55.3	9.25

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

<b>Region 2 (Coastal):</b> Plains, GA; Winnsboro, LA; Newton, MS			LACTIC ACID SRC	SUCROSE SRC %	COOKIE DIAM. CM.	TOP GR.
LAB NO.	STANDARD (#722503, Pioneer Brand 26R61)		105.1	92.01	17.27	2
722501	1	AGS 2000	105.1	90.99	17.87	3
722502	2	USG 3209	109.3	98.80	17.19	3
722503	3	Pioneer Brand 26R61	105.1	92.01	17.27	2
722504	4	McCormick	113.1	93.60	17.70	5
722505	5	AR96077-10-1	120.6	90.68	17.83	5
722506	6	ARTX5406	94.0	90.13	17.68	4
722507	7	VA01W-205	113.6	86.14	18.56	6
722508	8	VA02W-713	97.1	94.61	18.11	5
722509	9	TN601	124.7	92.72	17.88	4
722510	10	MD00-72-5064	131.4	97.24	17.37	2
722511	11	APCK B02-8443	109.7	92.78	17.87	4
722512	12	TN701	127.0	92.70	17.66	2
722513	13	NC03-6228	121.0	99.23	17.39	1
722514	14	NC03-5921	110.3	90.96	17.93	5
722515	15	NC03-8026	105.2	95.20	17.84	4
722516	16	NC03-11158	97.2	90.44	17.92	2
722517	17	0128A1-22	95.7	86.83	18.01	5
722518	18	011010A1-15	110.7	89.38	18.03	2
722519	19	VA04W-259	110.2	92.44	17.60	2
722520	20	VA03W-434	107.8	88.52	18.10	5
722521	21	LA99005UC-31-3-C	108.9	89.10	17.86	5
722522	22	LA98214D-14-1-2-B	115.6	94.79	17.94	4
722523	23	LA98149BUB-3-4-B	130.0	93.58	17.23	2
722524	24	LA978UC-36-1-1-B	123.2	101.76	17.08	1
722525	25	MO011126	117.9	87.80	17.87	4
722526	26	B020815	111.0	90.16	18.06	3
722527	27	D03*9804	103.2	90.92	17.87	5
722528	28	D03*9603	131.4	97.95	17.13	1
722529	29	M03*3861	118.2	89.74	17.92	5
722530	30	M03*3877	116.5	90.53	18.12	4
722531	31	SC021348	123.7	94.11	17.66	3
722532	32	SC027721	105.5	95.44	16.99	2
722533	33	G69141	96.7	87.77	17.82	3
722534	34	G59166	98.8	85.78	17.71	3
722535	35	G69304	116.1	93.85	17.65	2
722536	36	G59015	109.7	87.24	18.06	5
722537	37	GA98401-5E23	117.5	103.41	17.18	2
722538	38	GA981621-5E34	108.0	91.78	17.42	3
722539	39	GA981622-5E35	108.7	91.63	17.64	5

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	STANDARD (#722503, Pioneer Brand 26R61)	Region 2 (Coastal): Plains, GA; Winnsboro, LA; Newton, MS		FHB	WEATHERING	SPROUTING	BLACK POINT	SHRIVELING AFTER CLEANING
		(0-3)	(Yes/No)	(0-3)	(0-3)	(0-3)	(0-3)	
722501	1	AGS 2000						1
722502	2	USG 3209		1				
722503	3	Pioneer Brand 26R61						1
722504	4	McCormick						1
722505	5	AR96077-10-1		1				
722506	6	ARTX5406						
722507	7	VA01W-205						
722508	8	VA02W-713						1
722509	9	TN601						1
722510	10	MD00-72-5064						1
722511	11	APCK B02-8443						
722512	12	TN701						
722513	13	NC03-6228		1				1
722514	14	NC03-5921						
722515	15	NC03-8026		1				1
722516	16	NC03-11158						1
722517	17	0128A1-22						1
722518	18	011010A1-15						1
722519	19	VA04W-259						1
722520	20	VA03W-434		1				1
722521	21	LA99005UC-31-3-C						1
722522	22	LA98214D-14-1-2-B						1
722523	23	LA98149BUB-3-4-B		1			1	1
722524	24	LA978UC-36-1-1-B						1
722525	25	MO011126						
722526	26	B020815						
722527	27	D03*9804						
722528	28	D03*9603		1				1
722529	29	M03*3861						1
722530	30	M03*3877						1
722531	31	SC021348		1				1
722532	32	SC027721					1	1
722533	33	G69141						
722534	34	G59166						
722535	35	G69304						1
722536	36	G59015					1	
722537	37	GA98401-5E23		1				1
722538	38	GA981621-5E34		1				1
722539	39	GA981622-5E35					1	

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 2 (Coastal):** Plains,  
GA; Winnsboro, LA; Newton, MS

LAB

NO. STANDARD (#722503, Pioneer Brand 26R61)

722501	1	AGS 2000	
722502	2	USG 3209	GRAIN CONDITION SCALE
722503	3	Pioneer Brand 26R61	
722504	4	McCormick	FHB, SPROUTING & BLACK POINT
722505	5	AR96077-10-1	0 None
722506	6	ARTX5406	1 up to 10%
722507	7	VA01W-205	2 10% to 40%
722508	8	VA02W-713	3 above 40%
722509	9	TN601	
722510	10	MD00-72-5064	SHRIVELING
722511	11	APCK B02-8443	0 None
722512	12	TN701	1 Some
722513	13	NC03-6228	2 Moderate
722514	14	NC03-5921	3 Heavy
722515	15	NC03-8026	
722516	16	NC03-11158	
722517	17	0128A1-22	
722518	18	011010A1-15	
722519	19	VA04W-259	
722520	20	VA03W-434	
722521	21	LA99005UC-31-3-C	
722522	22	LA98214D-14-1-2-B	
722523	23	LA98149BUB-3-4-B	
722524	24	LA978UC-36-1-1-B	
722525	25	MO011126	
722526	26	B020815	
722527	27	D03*9804	
722528	28	D03*9603	
722529	29	M03*3861	
722530	30	M03*3877	
722531	31	SC021348	
722532	32	SC027721	
722533	33	G69141	
722534	34	G59166	
722535	35	G69304	
722536	36	G59015	
722537	37	GA98401-5E23	
722538	38	GA981621-5E34	
722539	39	GA981622-5E35	

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 2 (Coastal):** Plains,  
GA; Winnsboro, LA; Newton, MS

## EVALUATION SUMMARY

	STD. DATA	AVG. DATA
MILLING QUALITY SCORE	69.30	69.72
BAKING QUALITY SCORE	52.20	67.15
SE SCORE	64.60	74.47

	STD. DATA	AVG. DATA	ADJ. L.S.D.	NOTATION BEGINS	
				*	Q
TEST WEIGHT	63.15	61.87	1.22	61.93	60.71
FLOUR YIELD	69.12	69.21	0.74	68.38	67.64
SOFTNESS EQUIV.	51.37	54.83	2.76	48.61	45.85
FLOUR PROTEIN	9.85	9.42	0.80	10.65	11.45
LACTIC ACID SRC	105.12	112.04			
SUCROSE SRC	92.01	92.41			
COOKIE DIAMETER	17.27	17.72	0.23	17.04	16.81

	A	B	C	D	E	F	TOTAL
MILLING SCORE	5	11	19	4	0	0	
BAKING SCORE	3	18	8	5	5	0	39
SOFTNESS EQUIV. SCORE	9	18	10	2	0	0	

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 2 (Coastal):** Plains,  
GA; Winnsboro, LA; Newton, MS

## HISTORICAL

LAB NO.	ENTRY	MILLING QUALITY SCORE	BAKING QUALITY SCORE	SOFT. EQUIV. SCORE		MICRO T.W. LB/BU	FLOUR YIELD %	SOFT. EQUIV. %	FLOUR PROT. %
722501 (Database)	1 AGS 2000	83.9	72.2	72.8	B	63.3	72.0	54.3	9.1
	AGS 2000	85.9	69.9	62.9	C	62.4	73.4	56.6	8.9
722504 (Database)	4 McCormick	67.5	66.5	86.5	A	61.9	68.8	59.0	9.3
	McCormick	68.1	46.6	64.2	C	63.0	70.9	57.6	8.8
722503 (Database)	3 Pioneer 26R61	69.3	52.2	64.6	C	63.2	69.1	51.4	9.9
	Pioneer 26R61	69.3	52.2	64.6	C	62.9	70.8	54.1	9.6
722502 (Database)	2 USG 3209	66.9	49.5	62.1	C	62.0	68.6	50.5	8.9
	USG 3209	55.3	37.0	58.6	D	61.3	70.0	50.3	8.4

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

**Region 2 (Coastal):** Plains, GA;  
Winnsboro, LA; Newton, MS

HISTORICAL

LAB NO.	ENTRY	LACTIC ACID SRC	SUCROSE SRC %	COOKIE DIAM. CM.	TOP GR.
722501 (Database)	1 AGS 2000	105.1	91.0	17.9	3
	AGS 2000	108.0		18.0	4
722504 (Database)	4 McCormick	113.1	93.6	17.7	5
	McCormick	115.8		17.5	3
722503 (Database)	3 Pioneer 26R61	105.1	92.0	17.3	2
	Pioneer 26R61	110.4		17.6	4
722502 (Database)	2 USG 3209	109.3	98.8	17.2	3
	USG 3209	110.7		17.4	4

## ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Average of the two regions		MILLING QUALITY SCORE	BAKING QUALITY SCORE	SOFT. EQUIV. SCORE	MICRO T.W. LB/BU	FLOUR YIELD %	SOFT. EQUIV. %
<b>STANDARD</b> (#722503, Pioneer Brand 26R61)		69.3	52.2	64.6	63.7	69.3	52.7
1	AGS 2000	81.6	65.4	74.0	63.4	71.7	56.0
2	USG 3209	67.5	51.7	65.0	62.3	68.9	52.8
3	Pioneer Brand 26R61	69.3	52.2	64.6	63.7	69.3	52.7
4	McCormick	70.1	66.9	86.5	62.9	69.5	60.3
5	AR96077-10-1	69.6	71.7	76.9	62.2	69.4	57.0
6	ARTX5406	67.5	62.2	72.1	63.4	69.0	55.3
7	VA01W-205	75.1	96.4	87.3	62.9	70.5	60.6
8	VA02W-713	66.4	77.2	82.9	63.4	68.8	59.0
9	TN601	79.2	71.2	74.7	62.7	71.3	56.2
10	MD00-72-5064	61.2	49.2	77.7	62.9	67.7	57.2
11	APCK B02-8443	62.0	70.2	82.6	61.5	67.8	58.9
12	TN701	59.3	71.4	73.1	62.3	67.3	55.6
13	NC03-6228	63.8	49.9	65.6	63.5	68.2	53.0
14	NC03-5921	61.2	74.1	64.2	62.6	67.7	52.5
15	NC03-8026	71.4	68.1	70.2	62.5	69.7	54.6
16	NC03-11158	68.3	71.7	81.1	61.1	69.1	58.5
17	0128A1-22	66.0	72.1	76.6	60.4	68.6	56.9
18	011010A1-15	64.7	68.9	75.1	61.0	68.4	56.3
19	VA04W-259	71.0	68.2	71.3	62.0	69.6	55.0
20	VA03W-434	66.7	80.1	80.5	61.4	68.8	58.2
21	LA99005UC-31-3-C	79.8	68.2	82.1	62.4	71.4	58.8
22	LA98214D-14-1-2-B	76.5	75.5	72.3	62.5	70.8	55.3
23	LA98149BUB-3-4-B	76.3	56.9	71.1	62.7	70.7	54.9
24	LA978UC-36-1-1-B	64.7	50.4	80.3	61.8	68.4	58.1
25	MO011126	85.6	78.7	79.9	62.6	72.6	58.0
26	B020815	75.8	75.4	80.4	62.3	70.6	58.2
27	D03*9804	60.7	66.2	66.3	61.9	67.6	53.3
28	D03*9603	70.8	47.4	73.1	62.2	69.6	55.6
29	M03*3861	79.3	76.1	84.1	61.6	71.3	59.5
30	M03*3877	78.5	79.2	78.6	62.4	71.1	57.6
31	SC021348	59.3	63.4	88.6	61.4	67.3	61.0
32	SC027721	74.2	47.1	66.1	62.1	70.3	53.2
33	G69141	68.5	70.7	89.5	61.4	69.2	61.4
34	G59166	76.8	68.1	88.0	62.2	70.8	60.8
35	G69304	62.6	59.6	86.9	62.3	68.0	60.5
36	G59015	81.3	77.5	86.8	61.4	71.7	60.4
37	GA98401-5E23	57.6	51.6	79.6	62.8	67.0	57.9
38	GA981621-5E34	82.7	65.6	86.2	62.4	72.0	60.2
39	GA981622-5E35	78.9	59.4	76.5	62.8	71.2	56.8
Standard Error		1.5	4.1	2.7	0.3	0.3	1.0
F-test for Genotypes		26***	7***	7***	5***	26***	7***
Interior Average		69.7	67.1	74.5	61.9	69.2	54.8
Coastal Average		71.3	65.9	80.3	62.7	69.9	59.4
Standard Error		0.3	0.9	0.6	0.08	0.07	0.2
F-test for Regions		11**	1	44***	55***	47***	219***

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

Average of the two regions		FLOUR PROT. %	LACTIC ACID SRC	SUCROSE SRC %	COOKIE DIAM. CM.	TOP GR.
<b>STANDARD</b> (#722503, Pioneer Brand 26R61)		9.28	106.4	90.08	17.62	4.0
1	AGS 2000	8.63	106.6	89.85	18.02	4.0
2	USG 3209	8.27	108.1	97.36	17.61	4.0
3	Pioneer Brand 26R61	9.28	106.4	90.08	17.62	4.0
4	McCormick	8.58	114.1	89.75	18.06	5.5
5	AR96077-10-1	8.42	122.7	88.97	18.21	5.5
6	ARTX5406	8.62	97.2	89.66	17.92	5.0
7	VA01W-205	8.26	114.5	84.58	18.95	6.5
8	VA02W-713	8.59	97.8	92.43	18.37	5.5
9	TN601	8.68	124.4	90.21	18.19	5.0
10	MD00-72-5064	9.02	134.0	97.53	17.53	3.5
11	APCK B02-8443	8.55	114.6	91.75	18.16	5.0
12	TN701	8.81	123.6	91.23	18.20	4.5
13	NC03-6228	8.92	123.6	98.18	17.55	2.5
14	NC03-5921	9.07	110.5	89.52	18.28	5.5
15	NC03-8026	8.63	106.7	94.51	18.10	5.0
16	NC03-11158	8.88	97.7	90.59	18.21	4.0
17	0128A1-22	8.77	98.6	85.76	18.22	6.0
18	011010A1-15	9.26	111.1	88.52	18.12	3.5
19	VA04W-259	9.08	110.6	89.49	18.10	3.5
20	VA03W-434	8.52	109.0	87.17	18.46	5.5
21	LA99005UC-31-3-C	8.30	109.5	87.63	18.10	5.0
22	LA98214D-14-1-2-B	8.52	116.4	91.28	18.32	5.0
23	LA98149BUB-3-4-B	8.85	127.5	91.02	17.76	3.5
24	LA978UC-36-1-1-B	8.80	124.1	99.00	17.57	2.0
25	MO011126	8.77	119.0	86.41	18.42	5.5
26	B020815	8.80	112.1	90.51	18.32	4.5
27	D03*9804	8.31	106.3	91.04	18.04	5.5
28	D03*9603	9.15	129.5	96.29	17.48	2.5
29	M03*3861	8.59	116.0	88.65	18.34	5.5
30	M03*3877	8.66	116.8	89.75	18.43	5.0
31	SC021348	8.53	121.2	94.39	17.96	4.0
32	SC027721	9.43	110.8	95.01	17.47	3.5
33	G69141	8.46	97.3	88.54	18.18	5.0
34	G59166	8.40	101.3	85.31	18.10	5.0
35	G69304	8.46	117.6	92.28	17.84	3.0
36	G59015	8.69	109.9	85.57	18.38	5.5
37	GA98401-5E23	8.75	117.4	102.06	17.60	3.5
38	GA981621-5E34	8.60	107.7	90.05	18.02	4.5
39	GA981622-5E35	8.79	110.8	91.70	17.8	5.0
Standard Error		0.2	1.9	1.1	0.1	0.6
F-test for Genotypes		2	25***	14***	7***	3***
Interior Average		9.4	112.0	92.38	17.7	3.4
Coastal Average		8.0	113.7	89.85	18.4	5.6
Standard Error		0.05	0.4	0.2	0.03	0.1
F-test for Regions		391***	8**	55***	282***	145***