UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service

State Agricultural Experiment Stations, Cooperating

2004 - 2005

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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2004-2005 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 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	TN04-01	Jackson/Dozier	West	03-04
6	NC00-15332	Morey/Pio2580	Murphy	03-04
7	MV 5-46	71-54-147/CK68-15//IN65309C7-18-2-3-2/FFR555W//MSY*3/Balkan//Sal	Costa	03-04
8	SC996284	VA85-24/IN82104B1-3-2/5/SC828351/SC859056/SC859075// IN841453/3/KSH1127/4/IN8268G1-19-4/6/Coker9835	Edge	03-04
9	SC996289	VA85-24/IN82104B1-3-2/5/SC828351/SC859056/SC859075// IN841453/3/KSH1127/4/IN8268G1-19-4/6/Coker9835	Edge	03-04
10	961526-3E15	881175/Jackson//AGS2000	Johnson	04-05
11	961176-3A48	Jackson*2/881130	Johnson	04-05
12	96229-3A41	881130/2*881582	Johnson	04-05
13	951395-3A31	87110/VA55//88151	Johnson	04-05
14	B990081	L870537/PI382152	Hancock	04-05
15	B990133	L890145/LX8728D	Hancock	04-05
16	B990399	Pio2510/L881060	Hancock	04-05
17	B990816	L881036/LZ85133	Hancock	04-05
18	LA95181BUB40-1	FR93.12/Morey'sib',F1//Coker9835	Harrison	04-05
19	LA96140BUA70-2	VA88-52-69/TX89D6435//Coker9134,F1/3/Mason	Harrison	04-05
20	LA95135D54-2-3	CL850643/Pio2548//C9877/3/F302/C762	Harrison	04-05
21	AR 850-1-1	Verne/Ceruga-5	Bacon	04-05
22	AR 93027-5-1	Pio2571/Coker9024	Bacon	04-05
23	FL9547-B15-C1-D3	FL302/Coker762//FR81-19/Saluda	Barnett	04-05
24	FL95345-A10-C5	VA93-52-55/Pio2684	Barnett	04-05
25	FL99089-D35	AGS2000/FL8868(H9)	Barnett	04-05
26	D00*6874-9	89M-4035A(IL77-2656/NK79W810/Pio2580	Fogleman	04-05
27	D00*6874-2	89M-4035A(IL77-2656/NK79W810/Pio2580	Fogleman	04-05
28	D01-7017	Mason/Pio2580	Fogleman	04-05
29	D01*7759	Misc. bulk of 3 F1s (bulk pop was 33% Elkhart/Mason)	Fogleman	04-05
30	VA01W-21	VA91-54-222(Roane"S")/FFR555W//VA93-52-55(Massey*3/Balkan//Saluda)	Griffey	04-05
31	VA02W-513	L890682(SAL/CK797)/USG3209//VA94-52-60/Pio2643	Griffey	04-05
32	VA02W-555	VA94-52-60/Pio2643//USG3209	Griffey	04-05
33	VA02W-370	Roane/Pio2691	Griffey	04-05
34	981543A1-1-9-3	F201R/P9547B1//Patterson/Ernie	Ohm	04-05
35	99751RA1-6-3	INW0123/P961331/5/INW0123/4/F201R/3/P9547//Patterson/Len	Ohm	04-05
36	NC01-27750	Morey/L890682	Murphy	04-05
37	NC00-15371	VA92-52-85/C9663	Murphy	04-05
38	NC01-28087	VA92-52-85/C9474	Murphy	04-05
39	G20412	IL84-3010/T812	Brown	04-05
40	G20921	Pontiac/VA91-54-219	Brown	04-05
41	G20922	Pontiac/VA91-54-219	Brown	04-05

LOCATION NOTES

Belle Mina, Alabama

Cooperators:	Kathryn M. Glass Auburn University
Planted:	November 10, 2004
Harvested:	June 21, 2005

Bay, Arkansas

Cooperators:	June Hancock, David Hill, Richard Gray AgriPro COKER
Planted:	November 8, 2004
Harvested:	June 13, 2005
Comments:	Heading dates are a bit strange. We were just starting to head when very cool temperatures slowed things down. Some of the later lines may appear to be very late.

Fayetteville, Arkansas

Cooperators:	Gene Milus University of Arkansas
Comments:	Inoculated twice with a 2005 field collection from SW Arkansas and irrigated to promote disease. Data only for 1 rep because of planting screw up. Septoria tritici blotch came in late and was the only disease of significance other than stripe rust.

Stuttgart, Arkansas

Cooperators:	Robert Bacon University of Arkansas
Comments:	No data to report – we had a wipe out on all our cooperative nurseries.

Sussex Co., Delaware

Cooperators:	Bob Uniatowski University of Delaware
Planted:	October 18, 2004
Harvested:	July 14, 2005
Fertilizer:	100-0-0

Marianna, Florida

Cooperators:	Ron Barnett, Lloyd Schell University of Florida
Planted:	December 17, 2004
Fertilizer:	75-50-75
Comments:	This is the first year that stripe rust caused significant yield reductions. Low test weights were caused by diseases and delayed harvest due to rainy weather.

Quincy, Florida

Cooperators:	Ron Barnett, Lloyd Schell University of Florida
Planted:	November 16, 2004
Fertilizer:	75-50-75
Comments:	This is the first year that stripe rust caused significant yield reductions.

Griffin, Georgia

Cooperators:	Jerry Johnson, Dan Bland, Steve Sutton, J. Youman University of Georgia
Planted:	November 3, 2004
Harvested:	June 10, 2005
Fertilizer:	15-30-45; 80-0-0 topdress

Plains, Georgia

Cooperators:	Jerry Johnson, Dan Bland, Steve Sutton, J. Youman University of Georgia
Planted:	November 16, 2004
Harvested:	May 28, 2005
Fertilizer:	15-30-45; 80N topdress
Comments:	Low test weights with an asterisk (*) were late maturing and harvested at high moisture.

Aberdeen, Idaho

Cooperators:	Harold Bockelman, Charles Erickson, Scott McNeil USDA-ARS, National Small Grains Collection
Planted:	September 14, 2004
Comments:	Limited data collected due to high intra- and inter-plot variability caused by winter ice damage and low soil fertility.

Evansville, Indiana

Cooperators:	Herb Ohm Purdue University
Planted:	October 6, 2004
Harvested:	June 18, 2005
Fertilizer:	36-92-100 fall; 95-0-0 spring

Ft. Branch, Indiana

Cooperators:	Ben Moreno, J. Cooley Westbred LLC
Comments:	Nursery lost due to late planting/early flooding.

Greensburg, Indiana

Cooperators:	Sam Brown Genesis Seed Research
Planted:	October 14, 2004
Harvested:	July 6, 2005
Fertilizer:	30-0-0 fall; 60-0-0 spring
Comments:	The soil was wet at planting, and marginal stands were established. Winter heaving, leaf burning and dessication preceded perfect spring grain fill and tillering. Then it became very hot and dry the last 15 days.

Lafayette, Indiana

Cooperators:	Sam Brown Genesis Seed Research
Planted:	October 7, 2004
Harvested:	June 28, 2005
Fertilizer:	30-62.5-52.5 fall; 42-0-0 in March; 32-0-0 in April
Comments:	We had a wet fall, on light sandy soil. We had a warm and dry late winter, followed by a cool April and early May with adequate rain, then a hot and droughty grain ripening period.

Lafayette, Indiana

Cooperators:	Ben Moreno, J. Cooley Westbred LLC
Harvested:	June 29, 2005
Comments:	Winter kill note might be misleading, it should give an indication of leaf "burning" and "heaving"…Entries with scores of 6 or less were able to recover while scores 7 or higher had an effect on plot stand. We had a dry early spring, timely rains in April and early May then a dry fill up period. No scab was present, and leaf diseases pressure was low.

West Lafayette, Indiana

Cooperators:	Herb Ohm Purdue University
Comments:	FHB data: mean number of diseased spikelets at 25 d after point inoculation of 10-12 spikes at W. Lafayette, IN. Entries with missing data points were winterkilled.

West Lafayette, Indiana

Cooperators:	Sue Cambron USDA-ARS Crop Production & Pest Control Research
Comments:	Hessian fly data. Number of plants R vs number of plants S.

Manhattan, Kansas

Cooperators:	Allan Fritz Kansas State University
Comments:	Serious freeze in the first week of May. We were able to get seed back but the data was meaningless.

Winfield, Kansas

Cooperators:	Sid Perry Westbred LLC
Planted:	October 15, 2004
Harvested:	June 12, 2005
Comments:	Virus notes are primarily spindle streak, although cannot rule out some soil borne mosaic as well.

Schochoh (Logan Co.), Kentucky

Cooperators:	Dave Van Sanford University of Kentucky
Planted:	November 7, 2004
Harvested:	June 28, 2005
Fertilizer:	P,K according to soil tests; 100 units of N in two applications

Woodford Co., Kentucky

Cooperators:	Dave Van Sanford University of Kentucky
Planted:	October 31, 2004
Harvested:	June 28, 2005
Fertilizer:	P,K according to soil tests; 100 units of N in two applications

Baton Rouge, Louisiana

Cooperators:	Steve Harrison, Kelly Areceneaux, Fred LaRue Louisiana State University
Planted:	November 17, 2004
Harvested:	May 27, 2005
Fertilizer:	18-46-60; 90-0-0
Comments:	Wet fall and early winter resulted in some marginal stands. Warm winter and cool spring. Very dry grainfill period with excellent quality and testwt. Low leaf rust and moderate/high stripe rust. Little Septoria. No lodging due to very dry spring. Missing heading date data indicates very late (>113) or partial vernalization. Leaf rust is average of two ratings (3/24 & 4/11).

Winnsboro, Louisiana

Cooperators:	Steve Harrison, Kelly Areceneaux, Fred LaRue Louisiana State University
Planted:	November 16, 2004
Harvested:	May 24, 2005
Fertilizer:	90-0-0 on 2/17
Comments:	Wet fall and early winter resulted in some marginal stands. Warm winter and cool spring. Very dry grainfill period with excellent quality and testwt. Low leaf rust and moderate/high stripe rust. Little Septoria. No lodging due to very dry spring. Leaf rust is avergae of two ratings (3/11 & 4/14). Stripe rust is average of two ratings (3/11 & 4/14).

Queenstown, Maryland

Cooperators:	Jose Costa, Aaron Cooper University of Maryland
Planted:	October 12, 2004
Harvested:	July 3, 2005
Fertilizer:	P,K according to soil tests; 80 units N in two applications

St. Paul, Minnesota

Cooperators:	Yue Jin USDA-ARS, Cereal Disease Laboratory
Comments:	Stem rust seedling and field data. "/" indicates a mixture of plants, predominant type listed first. "S" indicate susceptible, including infection types 3 or 4. Bulk of races for field inoculation: MCCF, QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT.

St. Paul, Minnesota

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

St. Paul, Minnesota

Cooperators:	Jim Kolmer USDA-ARS, Cereal Disease Laboratory
Comments:	Leaf rust field data. Considerable winterkill.

Portageville, Missouri

Cooperators:	Anne McKendry, David Tague University of Missouri
Planted:	November 17, 2004
Harvested:	June 23, 2005
Fertilizer:	40-0-0 fall; 80-0-0 spring
Comments:	Planted into very wet soil, rained that night and wet all winter, resulting in extremely poor stand establishment. Spring was cool enough to allow some recovery. Yields better than expected.

Cleveland, Mississippi

Cooperators:	Barton Fogleman, Michael Montgomery, Chris DeArmond AgriPro COKER
Planted:	November 16, 2004
Harvested:	June 14, 2005

Newton, Mississippi

Cooperators:	Bernie White Mississippi State University

Lincoln, Nebraska

Cooperators:	Robert A. Graybosch USDA-ARS Wheat, Sorghum, and Forage Research Unit
Comments:	1RS data.

Kinston, North Carolina

Cooperators:	Paul Murphy, Rene Navarro, Christina Cowger North Carolina State University
Planted:	October 23, 2004
Harvested:	June 13, 2005
Fertilizer:	130-0-0
Comments:	Excellent fall with good growth. Very cool spring with extended grain filling period. Harvest was about 10 days later than normal.

Raleigh, North Carolina

Cooperators:	David Marshall USDA-ARS Plant Science Research
Comments:	Powdery mildew data not submitted due to high variability in the results.

Wooster, Ohio

Cooperators:	Clay Sneller Ohio State University, OARDC
Comments:	Big yields and test weights for Wooster.

Wooster, Ohio

Cooperators:	Charles Gaines USDA-ARS Soft Wheat Quality Lab
Comments:	Milling and baking quality data.

Enid, Oklahoma

Cooperators:	Brett Carver Oklahoma State University
Comments:	Readings taken at Enid, OK (pH = 4.6, 70 ppm Al, and Al saturation = 11%). Scale of 1 (highly tolerant) to 5 (highly susceptible), in which Jagger = 2. First reading could be biased by winter dormancy pattern; second reading could be biased by extreme differences in growth habit; third reading yielded greatest confidence.

Florence, South Carolina

Cooperators:	Ben Edge Clemson University
Planted:	December 2, 2004
Harvested:	June 15, 2005
Fertilizer:	210 lbs of 14-0-35 plus 10% sulfur
Comments:	Drift from Roundup used to burn-down neighboring field reduced yield of later maturing varieties. Little disease pressure.

Knoxville, Tennessee

Cooperators:	Dennis West University of Tennessee
Planted:	October 26, 2004
Harvested:	June 21, 2005
Fertilizer:	90-30-30

Prosper, Texas

Cooperators:	Russell Sutton Texas A&M University

Blacksburg, Virginia

Cooperators:	Carl Griffey, T. Pridgen, Joe Paling Virginia Tech
Comments:	Belgian Lodging = Area x Intensity x 0.2. Area is rated on a scale from 1 (plot unaffected) to 10 (entire plot affected). Intensity is rated on a scale from 1 (plants standing upright) to 5 (plants lying flat on the ground). In two separate greenhouse experiments, wheat lines were inoculated at the two-leaf seedling stage using leaf rust race TNRJ with virulence for resistance genes Lr1, 2a, 2c, 3a, 3ka, 9, 10, 11, 14a, 24, 30 and a composite of powdery mildew isolates with virulence for resistance genes Pm1, 2, 3a, 3c, 3f, 4a,

4b, 5, 6, 7. Two sets of powdery mildew differentials (the standard Chancellor set and an experimental Coker 68-15 set) were used. Note the Coker 68-15 differential set used in these tests is still being developed and refined by USDA-ARS at Raleigh, NC. In some cases where treated seed was sent by cooperators, the reaction types may not be reflective of genetic resistance. Infection type for leaf rust was rated on a 0-3 (0-2 = resistant and 3=susceptible) scale and for powdery mildew on a 0-4 (0-2 = resistant, 3 = moderately susceptible, and 4 = susceptible). Where indicated reaction types R=resistant, MR=moderately resistant, I=Intermediate, MS=moderately susceptible, and S=susceptible. Reaction types of heterogeneous lines are noted with the predominant disease score listed preceding the slash. For example a disease score of 12/TR4, indicates that most plants were scored as 12 and a Trace (TR) number of plants were scored as 4. Disease scores having "C" indicates Chlorosis was observed and "N" indicates Necrosis.

Warsaw, Virginia

Cooperators: Carl Griffey, T. Pridgen, Joe Paling
Virginia Tech

Comments: Belgian Lodging = Area x Intensity x 0.2. Area is rated on a scale from 1 (plot unaffected) to 10 (entire plot affected). Intensity is rated on a scale from 1 (plants standing upright) to 5 (plants lying flat on the ground).

Mt. Vernon,
Pullman, Washington

Cooperators: Xianming Chen
USDA-ARS Wheat Genetics, Quality, Physiology & Disease Res.

Comments: Adult stripe rust data.

2004-2005 USSRWWN
TESTING LOCATIONS
St. Paul, MN
Wooster, OH
Lafayette, IN
Greensburg, IN
Queenstown, MD
Sussex Co., DE
Evansville, IN
Woodford Co., KY
Warsaw, VA
Winfield, KS
Blacksburg, VA
Schochoh, KY (Logan Co)
Enid, Oklahoma
Portageville, MO
Fayetteville, AR
Knoxville, TN
Bay, AR
Raleigh, NC
Kinston, NC
Belle Mina, AL
Florence, SC
Cleveland, MS
Prosper, TX
Griffin, GA
Newton, MS
Winnsboro, LA
Plains, GA
Marianna, FL
Quincy, FL
Baton Rouge, LA

2004-2005 USSRWWN
Western Testing Locations
Mt. Vernon, WA
Pullman, WA
Aberdeen, ID
Winfield, KS
Enid, Oklahoma
Prosper, TX

YIELD (bu/acre)

		Belle Mina		Bay		Sussex Co.		Quincy		Marianna		Griffin	
		AL	ab	AR	ab	DE	ab	FL	a	FL	a	GA	a
		Glass	rank	Hancock	rank	Uniatowski	rank	Barnett	rank	Barnett	rank	Johnson	rank
1	AGS 2000	75	15	67.8	33	78.6	15	76.6	20	46.8	19	93.3	6
2	USG 3209	75	15	70.3	27	74.5	25	63.5	29	39.1	23	104.8	1
3	Pioneer 26R61	73	21	82.8	9	68.5	34	81.5	13	61.7	3	87.9	14
4	McCormick	68	31	71.2	26	78.7	13	43.3	39	16.2	37	83.5	22
5	TN04-01	71	24	72.7	25	71.0	31	69.8	24	28.7	31	77.2	34
6	NC00-15332	67	35	85.2	4	78.5	16	90.3	7	34.2	28	83.5	22
7	MV 5-46	82	3	68.1	32	82.4	4	67.4	26	30.9	30	88.0	12
8	SC996284	75	15	85.4	3	78.1	19	92.5	4	59.0	7	80.0	30
9	SC996289	78	9	93.6	1	84.6	2	92.3	5	59.9	5	87.9	14
10	961526-3E15	87	1	62.7	36	69.4	32	55.2	31	45.2	20	87.9	14
11	961176-3A48	76	14	84.6	5	78.8	12	78.3	19	57.4	8	79.7	31
12	96229-3A41	82	3	80.1	15	85.2	1	95.6	1	61.1	4	81.8	27
13	951395-3A31	72	22	82.3	11	72.7	27	90.4	6	48.0	16	99.8	2
14	B990081	74	18	82.7	10	79.1	10	76.6	20	27.0	32	84.6	20
15	B990133	66	37	77.7	22	66.3	36	71.9	23	31.0	29	84.2	21
16	B990399	78	9	83.6	7	78.7	13	81.6	12	47.5	18	93.9	4
17	B990816	67	35	79.2	18	82.5	3	24.7	40	9.2	41	74.7	37
18	LA95181BUB40-1	70	27	81.7	12	81.4	7	87.1	8	59.5	6	84.9	18
19	LA96140BUA70-2	71	24	84.0	6	71.5	30	79.2	17	62.0	2	79.6	32
20	LA95135D54-2-3	78	9	78.2	20	77.0	20	94.2	3	49.6	14	93.4	5
21	AR 850-1-1	69	29	80.9	13	72.3	28	72.2	22	35.6	27	83.2	25
22	AR 93027-5-1	68	31	69.2	31	75.7	23	45.3	37	18.1	35	72.9	38
23	FL9547-B15-C1-D3	77	12	77.7	21	81.9	5	84.7	10	75.3	1	96.4	3
24	FL95345-A10-C5	72	22	76.4	23	65.5	37	62.6	30	48.7	15	78.4	33
25	FL99089-D35	61	40	60.4	38	76.6	21	64.2	28	52.0	11	84.7	19
26	D00*6874-9	79	7	79.9	16	79.2	9	85.2	9	43.2	21	80.1	29
27	D00*6874-2	74	18	79.0	19	79.0	11	94.8	2	47.9	17	83.4	24
28	D01-7017	77	12	82.8	8	75.9	22	79.5	15	56.6	9	88.0	12
29	D01*7759	80	6	75.8	24	78.4	17	80.7	14	54.5	10	88.3	11
30	VA01W-21	82	3	69.3	30	81.8	6	65.6	27	38.0	24	91.9	8
31	VA02W-513	74	18	80.2	14	78.4	17	78.7	18	36.7	25	85.8	17
32	VA02W-555	83	2	89.9	2	79.6	8	83.4	11	36.5	26	93.0	7
33	VA02W-370	79	7	79.5	17	75.0	24	79.5	15	51.9	12	90.2	10
34	981543A1-1-9-3	57	41	65.7	35	60.3	38	51.9	34	16.6	36	59.2	41
35	99751RA1-6-3	68	31	65.9	34	57.5	41	48.9	36	23.6	34	63.3	40
36	NC01-27750	68	31	70.0	29	68.8	33	68.6	25	42.4	22	91.4	9
37	NC00-15371	71	24	61.0	37	71.8	29	52.6	33	50.6	13	82.1	26
38	NC01-28087	70	27	41.0	41	74.5	25	19.3	41	13.1	39	80.8	28
39	G20412	69	29	70.1	28	67.7	35	51.6	35	23.7	33	77.1	35
40	G20921	66	37	53.9	40	59.1	40	52.9	32	10.2	40	76.5	36
41	G20922	65	39	57.0	39	59.6	39	43.9	38	15.1	38	69.4	39
LOCATION MEANS		73.0		74.6		74.5		70.2		40.6		84.1	
LSD (.05)		6.8 (.10)		8.3		9.8		14.3		9.5		11.5	
CV %		8		6.8		8.1		10.1		14.3		12.4	
REPS		3		3		3		2		3		2	
Harvest Plot area (sq.ft.)		100		64.84		106		55		55		50	

YIELD (bu/acre)

		Plains GA a Johnson	rank	Evansville IN a Ohm	rank	Greensburg IN Brown	rank	Lafayette IN Brown	rank	Lafayette IN Moreno	rank	Winfield KS b Perry	rank
1	AGS 2000	89.1	21	83.6	9	100.1	29	36.9	40	55.1	37	41.5	38
2	USG 3209	103.7	10	90.5	3	82.5	37	50.4	36	60.7	36	71.9	4
3	Pioneer 26R61	85.5	23	66.3	35	103.0	28	51.4	35	70.5	32	69.4	7
4	McCormick	59.3	35	74.3	25	120.9	12	65.4	25	89.1	6	61.8	17
5	TN04-01	67.8	30	71.3	29	113.0	21	65.0	26	81.0	17	64.5	13
6	NC00-15332	48.9	37	81.9	11	123.7	9	77.2	9	99.9	1	67.6	10
7	MV 5-46	85.2	24	91.6	2	95.4	30	53.3	33	72.1	30	55.6	27
8	SC996284	94.6	16	74.5	24	123.6	10	63.4	28	87.7	8	46.1	36
9	SC996289	100.8	11	64.9	36	122.8	11	83.3	3	85.0	11	43.8	37
10	961526-3E15	90.9	20	88.9	4	90.5	33	45.0	37			56.6	25
11	961176-3A48	97.6	14	72.2	28	131.2	2	71.2	14	95.6	3	64.8	12
12	96229-3A41	119.1	1	75.3	23	120.2	13	90.7	1	76.5	22	63.0	15
13	951395-3A31	111.1	5	87.0	6	117.6	16	69.7	16	81.7	16	70.7	6
14	B990081	84.9	25	84.3	8	131.2	2	70.5	15	98.3	2	62.8	16
15	B990133	113.6	2	81.7	13	118.5	15	69.5	17	79.3	21	69.3	8
16	B990399	96.3	15	95.9	1	114.1	20	81.6	5	95.1	5	59.8	21
17	B990816	60.3	34	86.3	7	117.0	18	74.5	11	95.1	4	55.7	26
18	LA95181BUB40-1	113.0	3	80.2	15	116.2	19	85.8	2	69.8	33	58.8	22
19	LA96140BUA70-2	105.7	8	79.6	17	83.7	36	72.3	12	70.9	31	69.1	9
20	LA95135D54-2-3	105.4	9	79.4	18	88.5	34	65.7	23	80.5	19	34.9	40
21	AR 850-1-1	74.1	28	76.0	21	92.0	31	80.0	6	85.1	10	60.2	19
22	AR 93027-5-1	34.3	41	69.7	30	84.1	35	66.9	21	89.0	7	51.1	29
23	FL9547-B15-C1-D3	68.8	29	68.5	33	54.1	41	30.1	41			57.6	24
24	FL95345-A10-C5	79.4	27	69.4	31	58.4	40	44.7	38	32.5	39	71.4	5
25	FL99089-D35	65.1	32	69.1	32	78.2	38	58.4	31	52.4	38	50.6	30
26	D00*6874-9	97.7	13	78.1	20	127.7	5	65.5	24	83.9	13	75.0	3
27	D00*6874-2	92.9	19	82.6	10	117.6	16	68.7	19	84.0	12	58.1	23
28	D01-7017	94.6	16	81.7	12	119.2	14	64.2	27	74.9	23	82.0	1
29	D01*7759	93.3	18	81.3	14	126.8	7	76.6	10	81.9	15	64.0	14
30	VA01W-21	62.8	33	72.7	26	111.4	23	78.6	7	73.9	26	55.0	28
31	VA02W-513	110.8	6	75.9	22	126.5	8	69.0	18	81.0	18	65.6	11
32	VA02W-555	111.7	4	88.2	5	130.8	4	57.8	32	79.8	20	80.2	2
33	VA02W-370	109.9	7	79.9	16	126.9	6	61.7	30	73.2	27	61.3	18
34	981543A1-1-9-3	66.4	31	63.4	37	105.4	26	37.6	39	74.0	25	48.3	33
35	99751RA1-6-3	87.3	22	57.5	41	105.7	25	52.2	34	72.6	29	46.6	34
36	NC01-27750	100.5	12	72.5	27	112.9	22	81.7	4	82.7	14	46.6	34
37	NC00-15371	79.9	26	63.1	38	104.0	27	66.7	22	72.6	28	60.0	20
38	NC01-28087	44.6	39	78.5	19	64.3	39	72.2	13	74.3	24	28.9	41
39	G20412	42.1	40	62.2	39	135.1	1	78.6	7	87.2	9	50.5	31
40	G20921	59.2	36	66.7	34	105.8	24	62.0	29	69.4	34	41.2	39
41	G20922	45.0	38	61.0	40	90.8	32	67.0	20	62.8	35	50.4	32
LOCATION MEANS		84.2		76.3		107.1		65.4		77.7		58.3	
LSD (.05)		16.3		16								7.9	
CV %		18.8		10.4								8.1	
REPS		2		2		1		1		1		2	
Harvest Plot area (sq.ft.)		50				32		32		45		50	

YIELD (bu/acre)

		Logan Co. KY VanSanford	a rank	Woodford Co. KY VanSanford	a rank	Baton Rouge LA Harrison	ab rank	Winnsboro LA Harrison	ab rank	Queenstown MD Costa	ab rank	Portageville MO McKendry	a rank
1	AGS 2000	77.4	34	94.7	28	61.8	19	55.4	25	68.7	23	44.0	13
2	USG 3209	92.4	5	106.2	11	61.2	21	70.9	20	76.9	7	41.6	25
3	Pioneer 26R61	89.0	11	108.5	9	68.1	11	78.8	14	59.4	40	51.3	5
4	McCormick	83.8	21	111.8	4	38.7	37	47.3	30	75.0	11	33.6	40
5	TN04-01	83.5	22	98.3	23	56.1	27	52.0	27	68.1	24	55.9	2
6	NC00-15332	103.4	1	116.6	1	67.5	15	86.0	6	78.2	5	39.6	27
7	MV 5-46	79.5	28	108.0	10	55.3	28	46.6	31	78.3	3	41.7	24
8	SC996284	81.3	25	102.9	19	67.2	16	88.7	4	64.9	34	47.4	9
9	SC996289	79.5	28	112.0	3	67.7	13	80.5	13	78.9	2	41.2	26
10	961526-3E15	89.6	10	92.7	30	35.8	38	23.9	38	65.0	33	43.8	15
11	961176-3A48	87.6	15	104.5	16	75.4	3	94.8	1	82.3	1	53.7	3
12	96229-3A41	78.2	33	101.1	21	69.3	9	91.8	2	78.3	4	51.3	5
13	951395-3A31	81.8	24	109.1	7	70.8	6	85.0	8	73.4	14	43.1	19
14	B990081	91.1	6	102.6	20	61.3	20	61.7	23	77.0	6	48.7	7
15	B990133	98.1	3	104.2	18	62.9	18	52.9	26	76.8	8	43.6	16
16	B990399	90.4	8	109.5	6	79.4	2	70.6	21	74.8	12	46.6	11
17	B990816	85.5	17	104.5	16	27.5	41	35.4	36	67.3	28	36.4	32
18	LA95181BUB40-1	86.6	16	99.4	22	69.2	10	91.4	3	69.0	22	45.2	12
19	LA96140BUA70-2	78.9	30	97.0	25	70.1	7	84.0	10	66.4	31	34.6	39
20	LA95135D54-2-3	88.7	13	97.1	24	72.8	5	85.5	7	70.4	16	35.5	37
21	AR 850-1-1	74.1	39	92.1	32	59.6	24	71.2	19	66.6	30	38.6	29
22	AR 93027-5-1	82.5	23	76.5	41	35.7	39	34.6	37	63.2	36	35.0	38
23	FL9547-B15-C1-D3	79.6	27	90.7	34	67.7	13	78.3	15	66.8	29	41.9	23
24	FL95345-A10-C5	75.6	37	91.0	33	61.0	22	71.5	18	59.6	39	37.1	31
25	FL99089-D35	78.6	31	93.0	29	53.1	31	36.8	35	64.4	35	46.9	10
26	D00*6874-9	68.2	41	96.3	26	67.9	12	78.2	16	69.4	19	43.0	20
27	D00*6874-2	75.6	37	105.7	12	72.9	4	86.7	5	67.4	27	43.9	14
28	D01-7017	99.9	2	105.7	12	67.1	17	67.7	22	69.7	18	43.6	16
29	D01*7759	77.2	35	88.5	35	83.9	1	83.4	11	69.1	21	39.5	28
30	VA01W-21	81.2	26	104.8	15	54.8	29	45.0	32	75.6	10	43.5	18
31	VA02W-513	88.9	12	95.5	27	53.0	32	76.7	17	70.6	15	42.9	21
32	VA02W-555	90.6	7	92.4	31	60.9	23	81.5	12	73.5	13	58.5	1
33	VA02W-370	84.8	20	105.7	12	70.1	7	84.5	9	68.0	25	37.6	30
34	981543A1-1-9-3	73.3	40	85.1	36	51.9	33	57.8	24	49.4	41	51.5	4
35	99751RA1-6-3	85.1	18	81.0	38	53.5	30	50.9	29	69.4	20	48.1	8
36	NC01-27750	92.6	4	109.9	5	57.6	26	44.8	33	67.4	26	36.1	33
37	NC00-15371	78.5	32	82.2	37	58.2	25	51.1	28	62.0	37	35.6	36
38	NC01-28087	76.9	36	108.7	8	32.4	40	22.2	39	60.9	38	42.3	22
39	G20412	88.6	14	115.0	2	45.3	34	44.3	34	76.1	9	36.1	33
40	G20921	90.1	9	78.3	39	43.7	35	18.3	40	70.3	17	31.4	41
41	G20922	84.9	19	78.2	40	41.6	36	17.4	41	66.4	32	36.1	33
LOCATION MEANS		84.2		99.0		59.3		63.1		69.6		42.6	
LSD (.05)		20.2		22.1						10.1		13.9	
CV %		14.3		13.3		8		10		7.2		20.1	
REPS		2		2		2		2		2		3	
Harvest Plot area (sq.ft.)		40		40		70		70		40		55	

YIELD (bu/acre)

		Cleveland		Newton		Kinston		Wooster		Florence		Knoxville	
		MS	a	MS	a	NC	ab	OH	b	SC	a	TN	ab
		Fogleman	rank	White	rank	Murphy	rank	Sneller	rank	Edge	rank	West	rank
1	AGS 2000	59.0	30	61.1	32	86.0	5	83.0	26	75.0	10	88.7	13
2	USG 3209	65.1	26	72.5	26	83.4	12	73.6	39	72.8	14	82.5	26
3	Pioneer 26R61	86.5	13	98.6	13	66.4	35	80.9	29	60.0	33	73.4	33
4	McCormick	49.0	35	52.5	35	77.6	23	89.1	12	48.1	36	87.7	16
5	TN04-01	71.7	23	75.6	25	73.5	30	88.3	13	71.2	17	86.3	18
6	NC00-15332	95.3	4	106.5	3	85.2	6	77.7	33	74.0	11	88.6	14
7	MV 5-46	52.5	34	52.4	36	86.9	4	91.9	8	60.3	31	98.6	3
8	SC996284	89.0	8	93.4	19	75.1	29	86.1	20	73.8	12	84.4	22
9	SC996289	86.5	12	105.1	5	77.5	24	83.8	24	79.0	7	73.0	35
10	961526-3E15	29.4	38	29.7	39	78.8	19	77.0	34	94.2	1	92.1	9
11	961176-3A48	78.9	18	108.9	2	84.3	8	93.8	6	81.3	4	68.5	37
12	96229-3A41	109.4	1	116.6	1	87.2	3	87.4	15	84.9	3	82.7	25
13	951395-3A31	77.6	21	98.9	12	77.3	25	96.2	5	77.2	9	90.3	11
14	B990081	69.8	24	94.5	18	66.4	36	90.7	10	60.3	31	80.4	27
15	B990133	79.2	17	98.5	14	80.9	16	96.3	4	61.0	29	82.9	24
16	B990399	63.5	27	83.7	22	70.7	33	97.1	3	72.0	16	88.2	15
17	B990816	77.6	20	68.3	27	72.2	31	87.0	17	43.8	40	75.7	30
18	LA95181BUB40-1	106.8	2	106.5	4	88.3	2	84.4	22	72.4	15	85.0	21
19	LA96140BUA70-2	93.0	6	102.9	7	72.1	32	81.0	28	69.4	19	84.0	23
20	LA95135D54-2-3	91.2	7	99.8	10	84.0	9	91.8	9	67.4	24	90.8	10
21	AR 850-1-1	61.3	29	88.3	21	62.2	38	87.3	16	56.3	34	89.2	12
22	AR 93027-5-1	48.4	36	61.6	31	70.0	34	81.1	27	36.2	41	64.2	40
23	FL9547-B15-C1-D3	83.3	15	99.8	11	75.6	27	53.6	41	77.3	8	74.7	32
24	FL95345-A10-C5	74.2	22	78.1	24	77.6	22	72.5	40	73.3	13	65.6	39
25	FL99089-D35	55.5	31	44.6	37	79.2	18	84.1	23	81.0	5	75.8	29
26	D00*6874-9	100.4	3	100.7	9	83.9	10	86.9	19	67.7	23	99.7	2
27	D00*6874-2	85.5	14	101.7	8	82.6	13	87.9	14	71.2	17	98.4	4
28	D01-7017	86.7	11	89.1	20	78.6	21	75.8	35	79.1	6	92.5	8
29	D01*7759	94.9	5	95.1	17	80.8	17	80.7	30	68.5	21	86.8	17
30	VA01W-21	53.0	33	62.8	30	92.8	1	87.0	17	68.4	22	98.4	4
31	VA02W-513	77.6	19	97.7	15	85.0	7	89.6	11	61.3	28	97.6	6
32	VA02W-555	87.8	10	95.7	16	82.1	15	103.2	1	63.4	26	101.6	1
33	VA02W-370	88.1	9	104.2	6	82.2	14	85.3	21	88.1	2	94.1	7
34	981543A1-1-9-3	82.4	16	81.0	23	43.5	41	73.7	38	55.7	35	61.3	41
35	99751RA1-6-3	63.1	28	53.8	34	65.3	37	99.9	2	47.0	37	85.7	19
36	NC01-27750	55.0	32	56.2	33	78.8	20	93.4	7	68.7	20	85.5	20
37	NC00-15371	37.6	37	65.3	28	75.1	28	75.0	36	65.6	25	68.1	38
38	NC01-28087	16.4	41	25.9	40	83.7	11	83.4	25	44.3	39	72.6	36
39	G20412	65.8	25	64.8	29	76.4	26	80.6	31	45.9	38	79.2	28
40	G20921	22.4	40	25.9	41	52.8	39	80.2	32	62.6	27	73.1	34
41	G20922	22.6	39	30.6	38	52.1	40	74.2	37	60.9	30	75.1	31
LOCATION MEANS		70.6		79.2		76.4		84.7		66.8		83.5	
LSD (.05)		20.3				13.2		10.4		14		12.1	
CV %		14.2				8.7		6.1		12.9		8.8	
REPS		2		4		2		2		3		3	
Harvest Plot area (sq.ft.)		44.1				55		50		35		36	

YIELD (bu/acre)

		Prosper TX Sutton	a rank	Blacksburg VA Griffey	a rank	Warsaw VA Griffey	ab rank
1	AGS 2000	56.7	29	76.1	30	85.0	28
2	USG 3209	67.6	18	80.9	21	99.2	3
3	Pioneer 26R61	67.9	17	69.8	35	80.1	35
4	McCormick	46.6	33	81.1	19	93.0	12
5	TN04-01	59.6	26	77.3	27	84.3	29
6	NC00-15332	72.2	11	79.8	25	90.6	19
7	MV 5-46	42.8	35	82.5	16	93.6	11
8	SC996284	71.5	13	76.3	28	99.6	1
9	SC996289	75.0	8	83.8	14	96.3	7
10	961526-3E15	31.2	38	80.9	21	89.6	21
11	961176-3A48	76.2	6	74.7	33	86.5	25
12	96229-3A41	78.6	4	85.5	8	97.8	5
13	951395-3A31	74.3	9	84.3	11	91.8	16
14	B990081	76.3	5	91.1	2	94.6	10
15	B990133	71.4	14	76.3	28	85.8	26
16	B990399	64.5	21	90.2	3	91.6	17
17	B990816	49.1	31	81.4	18	85.2	27
18	LA95181BUB40-1	78.8	3	86.9	6	95.6	8
19	LA96140BUA70-2	64.1	22	64.2	38	81.7	33
20	LA95135D54-2-3	75.1	7	80.3	23	91.0	18
21	AR 850-1-1	71.7	12	82.7	15	73.7	40
22	AR 93027-5-1	46.9	32	81.1	19	79.5	36
23	FL9547-B15-C1-D3	59.4	27	86.1	7	96.7	6
24	FL95345-A10-C5	69.9	16	77.4	26	83.8	31
25	FL99089-D35	65.2	20	75.6	31	90.4	20
26	D00*6874-9	56.0	30	80.3	23	98.7	4
27	D00*6874-2	81.5	1	84.7	10	99.4	2
28	D01-7017	61.9	24	89.7	4	92.1	14
29	D01*7759	70.1	15	85.0	9	89.0	22
30	VA01W-21	43.7	34	87.9	5	95.2	9
31	VA02W-513	65.8	19	84.1	12	88.0	23
32	VA02W-555	79.5	2	92.8	1	93.0	12
33	VA02W-370	72.8	10	82.3	17	91.9	15
34	981543A1-1-9-3	63.4	23	58.4	39	70.7	41
35	99751RA1-6-3	58.8	28	68.6	36	79.5	37
36	NC01-27750	41.0	37	84.1	12	86.9	24
37	NC00-15371	41.7	36	65.4	37	81.1	34
38	NC01-28087	27.9	39	75.5	32	83.2	32
39	G20412	60.0	25	73.2	34	84.2	30
40	G20921	26.3	41	57.8	40	78.4	38
41	G20922	26.7	40	57.8	40	73.7	39
LOCATION MEANS		60.7		78.9		88.3	
LSD (.05)		10.7				8.2	
CV %		10.8				6.8	
REPS				1		3	
Harvest Plot area (sq.ft.)							

YIELD (bu/acre)

		ENTRY MEANS ALL LOCATIONS	rank	ENTRY MEANS IN-REGION [a]	rank	ENTRY MEANS CV <10% [b]	rank
1	AGS 2000	71.0	28	72.7	23	71.9	26
2	USG 3209	75.3	21	77.0	19	76.3	17
3	Pioneer 26R61	75.6	20	75.7	22	72.8	24
4	McCormick	68.4	30	64.6	32	71.6	27
5	TN04-01	72.4	26	70.1	29	71.6	28
6	NC00-15332	81.4	9	79.7	12	79.3	9
7	MV 5-46	72.0	27	71.6	24	76.3	18
8	SC996284	80.1	14	79.8	11	77.3	16
9	SC996289	82.1	6	81.7	6	78.0	14
10	961526-3E15	66.6	33	66.5	31	67.1	33
11	961176-3A48	82.9	4	81.0	9	80.9	4
12	96229-3A41	86.3	1	86.0	1	82.3	2
13	951395-3A31	82.7	5	81.7	5	80.2	6
14	B990081	78.6	17	75.9	20	75.5	21
15	B990133	77.8	18	75.8	21	74.3	22
16	B990399	81.4	10	79.6	13	79.3	8
17	B990816	67.5	32	63.4	35	66.8	34
18	LA95181BUB40-1	83.5	3	83.6	2	79.5	7
19	LA96140BUA70-2	76.7	19	77.0	18	75.9	20
20	LA95135D54-2-3	79.5	15	81.1	8	77.7	15
21	AR 850-1-1	72.4	25	70.5	26	72.0	25
22	AR 93027-5-1	60.8	38	57.7	38	62.9	37
23	FL9547-B15-C1-D3	73.2	23	77.6	16	73.4	23
24	FL95345-A10-C5	67.7	31	70.4	27	70.6	29
25	FL99089-D35	66.5	34	67.0	30	66.6	36
26	D00*6874-9	80.4	13	78.8	15	81.6	3
27	D00*6874-2	81.7	8	81.4	7	80.5	5
28	D01-7017	80.6	11	80.0	10	78.3	12
29	D01*7759	80.5	12	79.3	14	79.3	10
30	VA01W-21	73.2	22	71.4	25	76.1	19
31	VA02W-513	79.1	16	77.5	17	78.1	13
32	VA02W-555	84.1	2	82.7	3	84.4	1
33	VA02W-370	81.8	7	81.8	4	79.2	11
34	981543A1-1-9-3	61.7	37	60.3	37	58.1	39
35	99751RA1-6-3	65.1	36	62.8	36	67.5	32
36	NC01-27750	72.7	24	70.3	28	69.8	30
37	NC00-15371	65.9	35	63.6	34	66.8	35
38	NC01-28087	56.2	40	54.3	39	59.3	38
39	G20412	68.5	29	64.5	33	67.6	31
40	G20921	56.8	39	53.4	40	57.9	40
41	G20922	55.0	41	51.8	41	57.5	41
LOCATION MEANS		73.8		72.7		73.2	
LSD (.05)							
CV %							
REPS							
Harvest Plot area (sq.ft.)							

TEST WEIGHT (lbs/bu)

		Belle Mina AL	Bay AR	Sussex Co. DE	Marianna FL	Quincy FL
		Glass	Hancock	Uniatowski	Barnett	Barnett
1	AGS 2000	57.2	55.6	58.1	51.8	59.8
2	USG 3209	56.6	55.4	56.5	51.2	56.6
3	Pioneer 26R61	57.6	59.3	58.4	54.4	60.8
4	McCormick	56.9	56.8	59.2	47.7	56.6
5	TN04-01	59.9	59.9	61.5	53.4	62.7
6	NC00-15332	55.3	56.7	55.7	49.9	59.2
7	MV 5-46	57.3	57.8	58.3	50.9	60.8
8	SC996284	58.3	59.4	59.6	55.4	62.1
9	SC996289	57.5	58.3	57.9	54.1	60.2
10	961526-3E15	57.2	57.2	57.5	47.4	54.7
11	961176-3A48	57.2	61.0	58.8	57.9	59.2
12	96229-3A41	56.7	59.3	58.2	51.5	59.5
13	951395-3A31	56.2	58.9	56.7	50.9	59.8
14	B990081	57.9	59.1	58.3	48.0	57.0
15	B990133	57.1	58.3	57.9	49.6	60.2
16	B990399	58.7	59.4	59.2	53.8	59.5
17	B990816	58.3	60.1	57.9	47.4	48.6
18	LA95181BUB40-1	55.0	58.7	56.7	52.5	57.3
19	LA96140BUA70-2	57.3	59.5	57.8	54.7	59.5
20	LA95135D54-2-3	54.9	58.2	56.4	49.9	57.6
21	AR 850-1-1	56.0	60.5	58.1	49.6	58.6
22	AR 93027-5-1	56.4	57.4	56.9	43.5	49.9
23	FL9547-B15-C1-D3	55.1	57.0	56.5	53.1	57.0
24	FL95345-A10-C5	57.7	60.1	60.1	54.1	59.5
25	FL99089-D35	58.9	61.6	57.8	51.8	60.2
26	D00*6874-9	57.8	58.6	58.7	52.8	60.5
27	D00*6874-2	58.0	58.7	58.2	53.1	60.5
28	D01-7017	55.5	57.3	56.0	51.5	56.3
29	D01*7759	56.5	57.4	57.7	52.8	56.6
30	VA01W-21	57.3	59.4	58.4	52.8	60.5
31	VA02W-513	57.5	59.0	59.2	50.6	60.8
32	VA02W-555	55.8	54.7	55.6	48.3	58.2
33	VA02W-370	57.8	59.3	59.7	54.4	59.2
34	981543A1-1-9-3	57.2	59.3	59.9	49.9	60.8
35	99751RA1-6-3	55.3	57.3	57.4	48.0	56.6
36	NC01-27750	55.6	57.4	56.5	51.2	57.0
37	NC00-15371	56.9	58.1	59.4	52.5	57.9
38	NC01-28087	56.2	55.2	56.5	47.4	49.9
39	G20412	56.3	55.5	57.2	47.7	55.0
40	G20921	57.4	56.9	59.3	48.6	59.2
41	G20922	57.8	58.0	58.8	48.6	59.2
LOCATION MEANS		57.0	58.2	58.0	51.1	58.2

TEST WEIGHT (lbs/bu)

		Griffin GA	Plains GA	Evansville IN	Lafayette IN	Greensburg IN
		Johnson	Johnson	Ohm	Moreno	Brown
1	AGS 2000	58.3	58	61.7		59.5
2	USG 3209	56.7	59	61.0	53.5	54.9
3	Pioneer 26R61	58.0	60	62.0		59.0
4	McCormick	58.6	57	62.9	63.3	59.5
5	TN04-01	57.6	54	61.3	64.7	62.1
6	NC00-15332	54.5	56	60.8	60.1	59.5
7	MV 5-46	53.6	58	62.4	58.7	57.6
8	SC996284	57.5	61	62.2	60.5	61.5
9	SC996289	57.0	59	61.6	59.7	60.1
10	961526-3E15	58.4	58	61.2	48.9	56.9
11	961176-3A48	56.1	60	62.1	61.7	58.7
12	96229-3A41	55.5	58	61.0	58.2	56.2
13	951395-3A31	56.8	59	63.0	57.9	59.0
14	B990081	57.9	48*	62.5	62.1	60.2
15	B990133	57.6	56	64.0	63.3	61.2
16	B990399	57.2	56	62.6	61.6	61.0
17	B990816	50.9	*	61.0	60.2	61.0
18	LA95181BUB40-1	55.1	58	61.6	53.8	56.5
19	LA96140BUA70-2	56.6	56	63.0	61.4	60.1
20	LA95135D54-2-3	55.8	54	60.2	57.5	56.6
21	AR 850-1-1	57.0	54*	59.9	58.6	59.0
22	AR 93027-5-1	56.4	51	61.1	60.1	55.8
23	FL9547-B15-C1-D3	56.1	56	60.1		56.8
24	FL95345-A10-C5	58.3	60	63.3		59.9
25	FL99089-D35	59.1	56	63.7		62.0
26	D00*6874-9	57.4	61	63.0	62.0	61.8
27	D00*6874-2	54.3	60	63.2	61.9	61.8
28	D01-7017	55.2	57	61.5	57.4	54.7
29	D01*7759	56.6	55	61.3	61.1	58.7
30	VA01W-21	53.0	53	63.6	61.4	59.8
31	VA02W-513	57.8	56	62.9	62.2	61.6
32	VA02W-555	56.7	56	61.4	58.0	58.7
33	VA02W-370	57.7	61	64.7	62.6	62.0
34	981543A1-1-9-3	56.7	54	64.0	65.1	61.8
35	99751RA1-6-3	50.6	55	62.1	59.8	57.9
36	NC01-27750	54.9	56	62.5	60.1	58.4
37	NC00-15371	51.1	59	63.0	60.5	59.8
38	NC01-28087	55.7	46*	61.4	55.9	50.2
39	G20412	56.3	*	61.4	62.2	58.8
40	G20921	48.2	52*	63.6	63.5	57.9
41	G20922	52.5	49*	62.9	63.4	58.8
LOCATION MEANS		55.9	56.2	62.2	60.1	59.0

TEST WEIGHT (lbs/bu)

		Winfield KS Perry	Logan Co. KY Van Sanford	Woodford Co. KY Van Sanford	Baton Rouge LA Harrison	Winnsboro LA Harrison
1	AGS 2000	59.1	59.7	60.3	59.3	59.6
2	USG 3209	59.1	60.2	59.4	59.3	59.9
3	Pioneer 26R61	60.2	62.3	62.3	61.8	62.7
4	McCormick	59.1	62.6	62.8	59.2	58.5
5	TN04-01	61.2	63.8	63.0	62.9	63.7
6	NC00-15332	58.5	59.9	60.7	58.4	60.2
7	MV 5-46	58.3	61.8	62.1	60.8	61.9
8	SC996284	61.2	61.9	64.0	62.2	62.4
9	SC996289	59.7	61.0	62.3	61.3	61.5
10	961526-3E15	58.9	60.7	61.9	56.7	55.8
11	961176-3A48	60.7	61.6	63.5	61.2	62.0
12	96229-3A41	59.7	61.3	60.8	60.7	61.7
13	951395-3A31	59.1	61.8	61.3	59.8	61.8
14	B990081	58.6	63.0	62.4	55.6	60.1
15	B990133	59.1	61.9	62.8	61.4	61.7
16	B990399	59.4	62.8	61.3	60.6	61.3
17	B990816	60.5	61.9	60.8	47.4	47.8
18	LA95181BUB40-1	58.6	60.4	62.4	58.4	59.9
19	LA96140BUA70-2	58.9	60.9	61.9	61.4	62.2
20	LA95135D54-2-3	57.3	59.0	60.8	59.8	60.5
21	AR 850-1-1	59.1	60.7	61.1	58.9	60.5
22	AR 93027-5-1	57.6	59.3	61.0	54.2	59.9
23	FL9547-B15-C1-D3	58.6	57.7	58.8	57.8	58.5
24	FL95345-A10-C5	60.7	61.9	63.8	61.7	62.7
25	FL99089-D35	59.1	61.6	63.0	61.3	61.7
26	D00*6874-9	60.7	60.9	63.5	61.1	61.9
27	D00*6874-2	60.7	60.9	63.5	61.4	62.3
28	D01-7017	58.3	59.8	60.5	56.3	57.4
29	D01*7759	58.9	60.2	60.8	59.8	60.5
30	VA01W-21	57.8	61.4	63.0	61.6	62.0
31	VA02W-513	60.2	61.7	63.3	59.8	62.1
32	VA02W-555	59.1	60.9	61.1	58.7	60.1
33	VA02W-370	60.2	61.1	68.6	62.3	63.5
34	981543A1-1-9-3	58.3	61.2	63.3	59.5	61.8
35	99751RA1-6-3	56.0	60.0	61.7	58.1	60.1
36	NC01-27750	57.3	59.7	62.1	59.1	60.3
37	NC00-15371	58.6	60.9	62.6	58.8	59.2
38	NC01-28087	56.0	59.0	60.2	52.0	57.0
39	G20412	58.6	60.0	60.9	53.8	56.4
40	G20921	59.7	62.0	63.1	59.5	60.1
41	G20922	58.9	63.5	63.7	59.0	60.3
LOCATION MEANS		59.1	61.0	62.1	59.1	60.3

TEST WEIGHT (lbs/bu)

		Queenstown MD	Portageville MO	Cleveland MS	Newton MS	Kinston NC
		Costa	McKendry	Fogleman	White	Murphy
1	AGS 2000	60.6	59.6	55.3	50	60.0
2	USG 3209	58.7	57.8	55.4	52	59.3
3	Pioneer 26R61	61.8	60.4	55.4	57	60.6
4	McCormick	61.8	58.3	52.3	53	61.3
5	TN04-01	63.8	63.0	50.4	57	62.6
6	NC00-15332	58.6	59.3	55.0	55	58.4
7	MV 5-46	60.1	58.2	57.0	55	60.3
8	SC996284	60.8	59.8	57.1	57	60.8
9	SC996289	60.0	59.3	57.3	57	59.9
10	961526-3E15	59.6	59.2	41.5	41	60.5
11	961176-3A48	61.8	59.0	54.2	57	61.3
12	96229-3A41	59.4	58.2	58.0	56	61.1
13	951395-3A31	59.4	58.3	57.0	58	60.1
14	B990081	59.4	57.6	56.2	57	60.8
15	B990133	60.9	58.4	56.9	59	60.4
16	B990399	61.0	56.9	55.1	56	60.3
17	B990816	59.7	57.1	56.3	57	60.3
18	LA95181BUB40-1	58.5	55.9	57.0	55	58.0
19	LA96140BUA70-2	61.8	60.6	57.6	59	59.7
20	LA95135D54-2-3	59.3	56.0	55.6	57	58.6
21	AR 850-1-1	59.4	58.7	55.7	57	60.6
22	AR 93027-5-1	60.2	57.9	54.9	55	59.3
23	FL9547-B15-C1-D3	58.7	56.0	56.0	56	58.5
24	FL95345-A10-C5	62.6	59.6	57.8	56	60.3
25	FL99089-D35	62.8	58.8	57.0	55	60.6
26	D00*6874-9	62.6	60.2	57.7	57	59.1
27	D00*6874-2	63.4	60.3	56.8	58	60.4
28	D01-7017	58.3	53.6	55.5	56	58.1
29	D01*7759	59.9	58.1	56.4	56	58.6
30	VA01W-21	60.5	59.5	56.9	57	60.1
31	VA02W-513	62.9	60.3	57.0	57	60.4
32	VA02W-555	60.1	59.1	56.1	56	59.2
33	VA02W-370	62.4	59.8	56.8	58	60.1
34	981543A1-1-9-3	62.1	62.0	58.0	59	60.1
35	99751RA1-6-3	58.9	58.5	56.3	54	58.3
36	NC01-27750	59.5	56.3	55.0	53	58.5
37	NC00-15371	61.6	56.5	52.6	50	59.9
38	NC01-28087	57.2	57.3	22.0	52	60.6
39	G20412	59.3	56.0	55.9	55	59.1
40	G20921	61.2	59.6	28.7	50	59.3
41	G20922	62.5	58.2	31.2	52	59.0
LOCATION MEANS		60.5	58.5	53.5	55.2	59.8

TEST WEIGHT (lbs/bu)

		Wooster OH	Florence SC	Knoxville TN	Prosper TX	Blacksburg VA
		Sneller	Edge	West	Sutton	Griffey
1	AGS 2000	59.8	56.7	57.7	60.2	58.5
2	USG 3209	59.2	54.5	55.9	60.2	57.4
3	Pioneer 26R61	62.0	56.4	58.5	60.9	59.8
4	McCormick	61.3	53.2	57.5	59.3	60.0
5	TN04-01	61.6	59.9	60.0	61.8	61.6
6	NC00-15332	60.0	55.7	56.1	55.1	56.1
7	MV 5-46	60.3	56.1	59.1	60.6	59.7
8	SC996284	60.2	57.6	59.1	62.0	59.9
9	SC996289	59.4	56.4	57.7	60.7	58.6
10	961526-3E15	60.0	58.3	58.0	56.4	59.9
11	961176-3A48	60.9	58.0	57.1	61.9	60.1
12	96229-3A41	60.5	57.4	57.8	61.3	58.5
13	951395-3A31	60.4	56.6	59.1	60.3	58.4
14	B990081	60.7	55.0	59.0	59.3	59.3
15	B990133	59.2	56.1	58.2	59.1	58.8
16	B990399	62.1	56.7	59.3	60.6	59.8
17	B990816	61.4	54.2	59.5	60.4	59.7
18	LA95181BUB40-1	58.7	56.3	55.5	58.8	57.2
19	LA96140BUA70-2	60.0	57.2	59.0	60.2	59.6
20	LA95135D54-2-3	58.5	54.7	56.6	59.6	58.0
21	AR 850-1-1	60.9	56.1	57.9	59.1	58.2
22	AR 93027-5-1	59.1	49.4	56.7	59.8	57.6
23	FL9547-B15-C1-D3	57.7	57.3	56.4	57.5	57.0
24	FL95345-A10-C5	61.6	57.8	58.7	60.5	60.4
25	FL99089-D35	60.5	59.3	58.4	58.2	59.9
26	D00*6874-9	60.8	58.3	58.6	61.8	60.8
27	D00*6874-2	60.5	57.9	58.7	61.9	60.6
28	D01-7017	56.9	54.8	56.6	58.8	58.1
29	D01*7759	58.6	55.3	56.7	59.2	58.9
30	VA01W-21	60.4	55.6	58.3	60.6	59.9
31	VA02W-513	60.4	56.1	57.5	59.7	59.9
32	VA02W-555	58.7	54.9	56.3	58.8	58.3
33	VA02W-370	59.3	58.1	57.8	60.8	59.3
34	981543A1-1-9-3	61.6	57.6	59.6	59.4	60.2
35	99751RA1-6-3	57.8	53.8	55.7	57.9	56.9
36	NC01-27750	59.3	55.3	56.9	59.9	57.7
37	NC00-15371	60.2	57.8	59.1	59.1	58.4
38	NC01-28087	60.0	51.1	56.8	59.0	57.5
39	G20412	58.4	49.8	57.2	58.4	59.1
40	G20921	59.2	55.7	58.8	58.9	58.9
41	G20922	60.3	55.2	58.1	58.7	58.8
LOCATION MEANS		60.0	56.0	57.8	59.7	59.0

TEST WEIGHT (lbs/bu)

		Warsaw VA Griffey	ENTRY MEANS ALL LOCATIONS	rank
1	AGS 2000	62.0	58.3	22
2	USG 3209	61.8	57.4	32
3	Pioneer 26R61	62.6	59.8	9
4	McCormick	64.4	58.6	20
5	TN04-01	64.4	60.7	1
6	NC00-15332	61.5	57.6	29
7	MV 5-46	62.6	58.8	19
8	SC996284	63.5	60.3	3
9	SC996289	63.1	59.3	15
10	961526-3E15	63.0	56.5	40
11	961176-3A48	63.2	59.9	7
12	96229-3A41	63.4	58.8	18
13	951395-3A31	62.8	58.9	17
14	B990081	63.2	58.4	21
15	B990133	63.6	59.3	14
16	B990399	63.5	59.4	13
17	B990816	62.1	57.3	34
18	LA95181BUB40-1	60.8	57.6	28
19	LA96140BUA70-2	62.9	59.6	12
20	LA95135D54-2-3	61.5	57.5	30
21	AR 850-1-1	61.5	58.3	23
22	AR 93027-5-1	61.3	56.6	39
23	FL9547-B15-C1-D3	62.1	57.3	33
24	FL95345-A10-C5	63.9	60.1	4
25	FL99089-D35	63.8	59.7	10
26	D00*6874-9	63.5	60.1	5
27	D00*6874-2	63.6	60.0	6
28	D01-7017	61.3	57.0	38
29	D01*7759	61.4	58.2	25
30	VA01W-21	62.8	59.1	16
31	VA02W-513	63.2	59.6	11
32	VA02W-555	61.6	57.8	26
33	VA02W-370	64.3	60.4	2
34	981543A1-1-9-3	63.7	59.8	8
35	99751RA1-6-3	61.7	57.1	36
36	NC01-27750	62.4	57.8	27
37	NC00-15371	62.8	58.3	24
38	NC01-28087	61.0	54.3	41
39	G20412	61.3	57.2	35
40	G20921	63.2	57.1	37
41	G20922	63.5	57.4	31
LOCATION MEANS		62.7	58.5	

HEADING DATE (Julian Days)

		Belle Mina AL	Bay AR	Sussex Co. DE	Quincy FL	Griffin GA
		Glass	Hancock	Uniatowski	Barnett	Johnson
1	AGS 2000	106	112.7	129	84	103
2	USG 3209	104	114.0	130	90	103
3	Pioneer 26R61	105	113.0	131	87	103
4	McCormick	109	115.0	132	97	107
5	TN04-01	108	114.0	132	98	107
6	NC00-15332	109	115.3	134	98	114
7	MV 5-46	105	112.7	132	98	107
8	SC996284	106	113.0	130	91	107
9	SC996289	105	112.3	129	92	106
10	961526-3E15	103	113.3	129	75	101
11	961176-3A48	105	114.3	130	91	100
12	96229-3A41	108	116.3	131	92	105
13	951395-3A31	106	113.7	130	93	104
14	B990081	112	114.0	132	105	112
15	B990133	109	112.7	129	110	106
16	B990399	111	119.0	134	91	107
17	B990816	117	124.3	136	NV	118
18	LA95181BUB40-1	106	112.7	132	82	102
19	LA96140BUA70-2	107	112.7	130	83	102
20	LA95135D54-2-3	108	113.0	132	94	104
21	AR 850-1-1	116	121.7	137	100	114
22	AR 93027-5-1	111	113.7	131	107	112
23	FL9547-B15-C1-D3	103	113.0	129	88	99
24	FL95345-A10-C5	103	113.0	131	83	100
25	FL99089-D35	103	110.7	128	79	97
26	D00*6874-9	106	112.0	129	92	103
27	D00*6874-2	105	112.0	129	91	103
28	D01-7017	108	113.3	131	83	103
29	D01*7759	109	114.7	132	90	104
30	VA01W-21	108	114.7	132	98	104
31	VA02W-513	108	114.3	131	96	104
32	VA02W-555	108	113.0	131	96	105
33	VA02W-370	102	110.0	129	83	101
34	981543A1-1-9-3	108	112.3	130	101	106
35	99751RA1-6-3	107	113.7	131	94	103
36	NC01-27750	108	114.0	133	89	103
37	NC00-15371	105	112.7	129	83	101
38	NC01-28087	113	120.3	136	108	113
39	G20412	113	119.3	131	106	111
40	G20921	113	118.3	131	104	113
41	G20922	112	120.0	131	105	113
LOCATION MEANS		107.8	114.5	131.1	93.2	105.6

HEADING DATE (Julian Days)

		Plains GA Johnson	Aberdeen ID Bockelman	Evansville IN Ohm	Lafayette IN Moreno	Lafayette IN Brown
1	AGS 2000	96	152.5	136.5	139	135
2	USG 3209	97	154.3	124.0	135	133
3	Pioneer 26R61	98	155.0	125.5	135	137
4	McCormick	102	152.0	128.5	133	137
5	TN04-01	102	152.3	127.5	133	136
6	NC00-15332	102	153.5	131.0	136	137
7	MV 5-46	102	155.5	139.0	133	135
8	SC996284	95	152.8	126.5	132	135
9	SC996289	97	153.5	128.5	132	135
10	961526-3E15	92	154.3	139.5	140	137
11	961176-3A48	98	153.8	128.0	132	135
12	96229-3A41	99	154.8	130.0	136	135
13	951395-3A31	99	154.5	125.5	133	137
14	B990081	107	150.8	127.5	132	135
15	B990133	103	151.0	125.0	130	134
16	B990399	103	155.0	130.5	136	137
17	B990816	115	154.3	131.5	136	138
18	LA95181BUB40-1	94	156.8	126.0	137	137
19	LA96140BUA70-2	98	153.3	125.0	135	131
20	LA95135D54-2-3	102	153.8	129.5	136	138
21	AR 850-1-1	108	157.8	132.5	138	140
22	AR 93027-5-1	112	150.0	131.0	133	135
23	FL9547-B15-C1-D3	93	152.0	125.0		137
24	FL95345-A10-C5	93	155.5	125.5	142	137
25	FL99089-D35	91	151.5	137.0	138	135
26	D00*6874-9	98	151.3	125.5	131	135
27	D00*6874-2	97	150.3	125.5	131	135
28	D01-7017	96	154.0	126.5	134	136
29	D01*7759	102	153.3	127.0	133	137
30	VA01W-21	102	155.0	127.5	133	136
31	VA02W-513	102	154.5	127.5	134	136
32	VA02W-555	99	154.0	126.5	133	137
33	VA02W-370	95	153.0	136.5	131	134
34	981543A1-1-9-3	103	151.3	126.5	130	135
35	99751RA1-6-3	102	156.0	127.5	132	138
36	NC01-27750	101	155.0	129.5	137	138
37	NC00-15371	93	151.0	137.5	131	134
38	NC01-28087	112	157.0	130.0	137	138
39	G20412	113	152.3	129.0	134	135
40	G20921	112	150.0	127.5	131	134
41	G20922	111	149.5	127.5	131	134
LOCATION MEANS		100.9	153.3	129.1	134.1	135.9

HEADING DATE (Julian Days)

		Woodford Co. KY	Baton Rouge LA	Queenstown MD	Cleveland MS	Kinston NC
		Van Sanford	Harrison	Costa	Fogleman	Murphy
1	AGS 2000	129.5	87	133.5	102.0	105.0
2	USG 3209	132.5	90	134.0	104.0	111.0
3	Pioneer 26R61	132.0	88	135.0	104.0	111.5
4	McCormick	133.0	99	134.0	109.0	115.5
5	TN04-01	132.5	101	134.0	107.5	113.5
6	NC00-15332	134.0	103	135.0	108.5	116.5
7	MV 5-46	132.5	93	134.0	109.5	111.0
8	SC996284	129.5	95	134.0	104.0	111.5
9	SC996289	130.5	96	134.0	104.0	111.5
10	961526-3E15	134.0	84	133.5	100.0	105.0
11	961176-3A48	130.5	94	132.0	104.0	112.0
12	96229-3A41	133.5	98	134.0	104.0	113.0
13	951395-3A31	133.0	103	133.5	104.0	112.5
14	B990081	133.0		134.0	110.0	115.0
15	B990133	130.0	106	131.0	108.5	112.5
16	B990399	133.5	94	136.5	108.0	114.0
17	B990816	135.0		137.0	120.0	118.0
18	LA95181BUB40-1	132.5	86	134.0	104.0	108.0
19	LA96140BUA70-2	133.5	87	134.5	104.0	106.5
20	LA95135D54-2-3	133.0	97	135.5	104.0	113.5
21	AR 850-1-1	135.0	105	138.0	116.5	119.5
22	AR 93027-5-1	133.5		134.0	109.0	115.0
23	FL9547-B15-C1-D3	131.5	85	136.0	104.0	105.0
24	FL95345-A10-C5	132.0	88	134.5	104.0	105.0
25	FL99089-D35	131.0	83	131.5	102.0	100.0
26	D00*6874-9	130.0	96	132.0	104.0	111.5
27	D00*6874-2	129.0	95	132.0	104.0	112.0
28	D01-7017	131.0	88	134.0	104.0	110.5
29	D01*7759	133.5	91	134.0	106.0	111.5
30	VA01W-21	132.5	106	133.5	109.0	112.0
31	VA02W-513	130.5	107	134.0	104.0	112.5
32	VA02W-555	131.0	103	134.0	104.0	112.5
33	VA02W-370	129.0	88	131.0	102.0	104.5
34	981543A1-1-9-3	128.5	107	132.0	109.0	113.0
35	99751RA1-6-3	128.5	105	133.0	108.5	113.5
36	NC01-27750	133.0	93	135.0	104.0	111.5
37	NC00-15371	128.5	92	133.0	102.0	107.5
38	NC01-28087	135.0		137.5	118.0	116.5
39	G20412	132.0		134.0	112.0	115.0
40	G20921	131.0	109	131.5	111.0	115.0
41	G20922	129.5	109	132.0	112.0	114.5
LOCATION MEANS		131.8	95.9	133.9	106.6	111.6

HEADING DATE (Julian Days)

		Wooster OH	Florence SC	Knoxville TN	Prosper TX	Blacksburg VA
		Sneller	Edge	West	Sutton	Griffey
1	AGS 2000	145	121.0	120	95	132
2	USG 3209	145	121.0	118	96	133
3	Pioneer 26R61	145	123.0	120	96	133
4	McCormick	146	125.0	122	98	134
5	TN04-01	146	124.5	122	99	135
6	NC00-15332	150	123.5	123	99	136
7	MV 5-46	145	124.0	119	96	132
8	SC996284	143	120.5	118	95	132
9	SC996289	146	121.5	120	98	133
10	961526-3E15	141	119.0	122	94	133
11	961176-3A48	146	121.0	120	98	132
12	96229-3A41	147	122.0	123	98	135
13	951395-3A31	146	122.0	122	97	132
14	B990081	146	124.0	124	104	133
15	B990133	142	123.5	121	98	130
16	B990399	149	123.0	121	102	136
17	B990816	148	125.0	127	107	137
18	LA95181BUB40-1	145	122.0	122	97	133
19	LA96140BUA70-2	144	123.0	119	96	132
20	LA95135D54-2-3	147	122.5	123	99	134
21	AR 850-1-1	152	124.0	128	105	136
22	AR 93027-5-1	147	125.0	125	102	133
23	FL9547-B15-C1-D3	143	120.0	124	95	129
24	FL95345-A10-C5	143	120.0	122	95	131
25	FL99089-D35	142	119.5	119	95	131
26	D00*6874-9	141	122.5	118	95	131
27	D00*6874-2	142	122.0	118	97	131
28	D01-7017	144	122.5	120	95	133
29	D01*7759	145	122.5	122	98	135
30	VA01W-21	147	123.5	119	98	133
31	VA02W-513	147	124.0	120	98	133
32	VA02W-555	143	122.5	122	98	132
33	VA02W-370	141	119.5	117	95	131
34	981543A1-1-9-3	143	123.5	120	99	132
35	99751RA1-6-3	145	123.0	122	98	133
36	NC01-27750	147	123.0	123	99	135
37	NC00-15371	142	120.5	118	98	130
38	NC01-28087	150	125.0	128	105	137
39	G20412	147	124.0	125	104	133
40	G20921	143	124.5	125	103	132
41	G20922	143	124.0	123	102	133
LOCATION MEANS		145.1	122.6	121.6	98.4	133.0

HEADING DATE (Julian Days)

		Warsaw VA Griffey	ENTRY MEANS ALL LOCATIONS	rank
1	AGS 2000	125.0	118.5	10
2	USG 3209	125.0	118.8	12
3	Pioneer 26R61	126.7	119.2	16
4	McCormick	128.3	121.7	31
5	TN04-01	128.0	121.6	30
6	NC00-15332	128.7	123.2	35
7	MV 5-46	127.0	121.1	26
8	SC996284	123.7	118.8	13
9	SC996289	124.0	119.5	17
10	961526-3E15	124.3	117.8	5
11	961176-3A48	124.7	119.1	15
12	96229-3A41	126.7	121.0	25
13	951395-3A31	127.0	120.4	19
14	B990081	127.3	123.9	36
15	B990133	124.0	120.8	22
16	B990399	129.3	122.4	32
17	B990816	132.7	129.3	41
18	LA95181BUB40-1	125.7	118.8	14
19	LA96140BUA70-2	124.0	118.1	6
20	LA95135D54-2-3	126.3	121.2	28
21	AR 850-1-1	132.3	126.5	39
22	AR 93027-5-1	128.3	124.4	37
23	FL9547-B15-C1-D3	122.7	116.7	2
24	FL95345-A10-C5	125.7	118.2	8
25	FL99089-D35	123.7	116.6	1
26	D00*6874-9	122.0	118.4	9
27	D00*6874-2	121.7	118.2	7
28	D01-7017	125.7	118.7	11
29	D01*7759	126.3	120.3	18
30	VA01W-21	127.0	121.5	29
31	VA02W-513	127.7	121.2	27
32	VA02W-555	124.3	120.4	20
33	VA02W-370	121.0	116.8	3
34	981543A1-1-9-3	124.7	120.7	21
35	99751RA1-6-3	126.7	121.0	24
36	NC01-27750	127.0	120.9	23
37	NC00-15371	122.0	117.7	4
38	NC01-28087	132.7	127.5	40
39	G20412	128.3	124.9	38
40	G20921	125.0	123.0	34
41	G20922	126.0	123.0	33
LOCATION MEANS		126.1	120.8	

HEIGHT (inches)

		Belle Mina AL	Bay AR	Sussex Co. DE	Marianna FL	Quincy FL
		Glass	Hancock	Uniatowski	Barnett	Barnett
1	AGS 2000	37	35.3	36.3	38	40.5
2	USG 3209	33	32.7	31.7	32	39.5
3	Pioneer 26R61	39	37.3	35.0	40	41.0
4	McCormick	32	34.0	32.7	32	35.5
5	TN04-01	38	38.0	37.3	37	40.0
6	NC00-15332	37	37.3	36.0	36	39.0
7	MV 5-46	34	33.7	35.3	31	37.0
8	SC996284	41	39.7	37.3	32	41.0
9	SC996289	41	39.7	38.0	40	42.0
10	961526-3E15	36	35.0	36.3	35	40.5
11	961176-3A48	38	38.3	34.3	39	38.0
12	96229-3A41	39	35.0	34.7	39	40.5
13	951395-3A31	36	34.0	32.7	34	38.5
14	B990081	38	36.3	33.7	35	39.5
15	B990133	35	34.0	31.7	35	38.5
16	B990399	40	40.3	39.3	35	42.0
17	B990816	37	37.3	39.7	33	37.5
18	LA95181BUB40-1	40	37.0	38.7	37	42.0
19	LA96140BUA70-2	36	36.3	36.7	33	40.5
20	LA95135D54-2-3	39	35.7	36.0	37	42.0
21	AR 850-1-1	40	39.7	37.0	40	41.5
22	AR 93027-5-1	38	35.3	37.0	34	39.5
23	FL9547-B15-C1-D3	41	37.3	34.7	38	42.5
24	FL95345-A10-C5	35	35.0	33.7	35	38.5
25	FL99089-D35	44	39.7	37.3	40	45.5
26	D00*6874-9	38	36.7	33.7	37	41.0
27	D00*6874-2	37	36.7	34.7	38	39.5
28	D01-7017	36	37.0	34.7	34	40.0
29	D01*7759	37	36.0	37.0	36	40.0
30	VA01W-21	34	34.0	34.3	35	36.5
31	VA02W-513	34	33.3	31.7	34	35.5
32	VA02W-555	33	34.0	30.3	32	35.5
33	VA02W-370	34	34.0	32.7	34	36.0
34	981543A1-1-9-3	37	36.3	36.3	39	39.0
35	99751RA1-6-3	34	35.0	32.3	34	36.0
36	NC01-27750	40	39.3	37.3	36	42.5
37	NC00-15371	38	36.7	36.0	35	42.0
38	NC01-28087	33	34.3	34.0	29	34.5
39	G20412	37	37.3	38.3	37	41.5
40	G20921	35	36.0	33.0	34	36.5
41	G20922	43	38.7	35.7	36	39.5
LOCATION MEANS		37.2	36.3	35.2	35.5	39.5

HEIGHT (inches)

		Griffin GA Johnson	Plains GA Johnson	Evansville IN Ohm	Greensburg IN Brown	Lafayette IN Brown
1	AGS 2000	38	33	38	40	28
2	USG 3209	37	34	35	35	26
3	Pioneer 26R61	39	38	37	42	32
4	McCormick	32	32	37	35	29
5	TN04-01	36	40	40	43	31
6	NC00-15332	36	40	40	44	33
7	MV 5-46	33	35	36	38	30
8	SC996284	38	39	41	41	32
9	SC996289	39	40	40	41	35
10	961526-3E15	32	32	36	39	31
11	961176-3A48	33	38	37	39	33
12	96229-3A41	34	37	36	38	33
13	951395-3A31	34	35	32	35	28
14	B990081	38	39	36	39	27
15	B990133	36	38	37	37	27
16	B990399	39	40	42	43	33
17	B990816	39	39	39	42	36
18	LA95181BUB40-1	37	40	40	43	36
19	LA96140BUA70-2	34	39	39	38	35
20	LA95135D54-2-3	39	42	39	39	32
21	AR 850-1-1	41	41	39	39	34
22	AR 93027-5-1	38	39	37	38	32
23	FL9547-B15-C1-D3	37	33	36	38	26
24	FL95345-A10-C5	35	35	36	36	28
25	FL99089-D35	37	32	39	41	33
26	D00*6874-9	36	36	37	39	29
27	D00*6874-2	37	34	38	39	31
28	D01-7017	36	36	36	39	32
29	D01*7759	37	37	37	41	33
30	VA01W-21	34	36	35	35	32
31	VA02W-513	34	35	31	33	27
32	VA02W-555	34	34	32	31	24
33	VA02W-370	33	33	32	32	27
34	981543A1-1-9-3	37	39	34	40	32
35	99751RA1-6-3	35	36	33	34	30
36	NC01-27750	39	42	38	41	34
37	NC00-15371	38	34	36	41	34
38	NC01-28087	36	35	33	33	29
39	G20412	39	38	40	40	36
40	G20921	44	37	35	38	29
41	G20922	48	45	40	38	33
LOCATION MEANS		36.8	37.0	36.9	38.5	31.0

HEIGHT (inches)

		Lafayette IN	Logan Co. KY	Woodford Co. KY	Queenstown MD	Portageville MO
		Moreno	Van Sanford	Van Sanford	Costa	McKendry
1	AGS 2000	32	42.0	39.0	39.0	29
2	USG 3209	37	36.5	36.0	34.5	27
3	Pioneer 26R61	32	41.0	39.5	37.0	30
4	McCormick	30	35.5	36.5	35.5	25
5	TN04-01	34	41.5	38.5	41.0	33
6	NC00-15332	33	41.5	38.5	38.5	26
7	MV 5-46	31	38.0	38.0	38.0	26
8	SC996284	35	41.5	41.0	43.0	30
9	SC996289	35	42.0	41.0	42.5	27
10	961526-3E15	30	39.0	38.5	38.0	29
11	961176-3A48	34	39.0	38.5	37.5	28
12	96229-3A41	31	39.0	38.5	39.5	27
13	951395-3A31	29	36.0	36.5	36.5	26
14	B990081	33	41.0	37.5	36.5	28
15	B990133	31	37.5	38.0	37.5	25
16	B990399	36	46.5	42.5	42.5	29
17	B990816	34	41.5	42.5	41.5	29
18	LA95181BUB40-1	32	40.0	38.0	42.5	30
19	LA96140BUA70-2	30	40.0	39.5	40.5	27
20	LA95135D54-2-3	33	41.5	40.0	40.0	28
21	AR 850-1-1	35	43.0	44.0	40.0	28
22	AR 93027-5-1	32	38.5	39.0	37.0	25
23	FL9547-B15-C1-D3		40.5	43.0	38.0	27
24	FL95345-A10-C5	28	36.0	36.5	37.5	26
25	FL99089-D35	30	43.5	48.5	42.5	28
26	D00*6874-9	34	40.0	39.5	39.0	27
27	D00*6874-2	33	38.0	39.0	39.5	26
28	D01-7017	31	42.5	37.5	38.5	26
29	D01*7759	34	40.0	40.0	40.0	31
30	VA01W-21	31	37.5	37.5	38.0	29
31	VA02W-513	27	36.0	34.5	35.0	25
32	VA02W-555	27	41.0	38.0	34.5	26
33	VA02W-370	29	35.0	33.5	35.5	24
34	981543A1-1-9-3	33	41.5	37.0	37.5	30
35	99751RA1-6-3	31	36.5	39.0	36.5	25
36	NC01-27750	33	44.0	40.5	39.0	30
37	NC00-15371	31	42.0	35.0	40.5	27
38	NC01-28087	30	37.0	38.0	35.0	28
39	G20412	33	43.0	37.0	41.5	27
40	G20921	32	41.0	36.0	37.5	27
41	G20922	32	45.5	39.0	39.0	26
LOCATION MEANS		32.0	40.1	38.8	38.6	27.5

HEIGHT (inches)

		Cleveland MS Fogleman	Newton MS White	Kinston NC Murphy	Wooster OH Sneller	Florence SC Edge
1	AGS 2000	37.0	40	37.5	44	32.5
2	USG 3209	32.5	37	35.6	37	31.5
3	Pioneer 26R61	38.5	38	35.6	41	34.0
4	McCormick	33.0	39	35.0	38	30.0
5	TN04-01	36.5	39	39.4	42	36.0
6	NC00-15332	37.5	37	36.9	40	34.5
7	MV 5-46	34.0	31	35.0	39	29.5
8	SC996284	41.5	43	39.8	42	37.5
9	SC996289	42.0	44	40.6	42	37.5
10	961526-3E15	37.0	34	35.2	34	33.5
11	961176-3A48	38.0	45	34.4	39	36.0
12	96229-3A41	37.0	41	35.6	39	37.0
13	951395-3A31	35.5	38	34.0	36	32.5
14	B990081	36.5	42	35.4	39	37.0
15	B990133	34.0	38	36.9	40	34.0
16	B990399	36.0	41	37.7	44	37.5
17	B990816	40.0	39	38.3	40	36.0
18	LA95181BUB40-1	40.0	39	39.0	40	39.0
19	LA96140BUA70-2	38.0	39	37.7	40	33.0
20	LA95135D54-2-3	41.0	40	37.9	43	33.0
21	AR 850-1-1	36.0	43	36.9	44	35.5
22	AR 93027-5-1	31.5	36	36.5	40	30.0
23	FL9547-B15-C1-D3	37.5	40	37.9	38	38.0
24	FL95345-A10-C5	35.5	38	34.0	36	32.5
25	FL99089-D35	39.0	41	38.5	42	38.5
26	D00*6874-9	38.0	37	38.1	39	34.5
27	D00*6874-2	35.5	38	38.8	40	32.5
28	D01-7017	37.0	38	37.1	39	34.0
29	D01*7759	39.0	39	38.3	40	37.0
30	VA01W-21	34.5	32	34.6	37	30.5
31	VA02W-513	31.5	33	32.5	37	30.0
32	VA02W-555	31.5	36	33.1	36	29.0
33	VA02W-370	34.0	36	33.3	36	32.0
34	981543A1-1-9-3	36.5	40	35.4	40	36.0
35	99751RA1-6-3	36.5	35	34.0	38	31.5
36	NC01-27750	39.5	39	40.0	43	35.5
37	NC00-15371	37.5	36	39.6	41	37.5
38	NC01-28087	28.5	30	33.8	35	29.0
39	G20412	40.0	42	39.8	23	32.0
40	G20921	29.0	34	34.0	39	34.0
41	G20922	34.5	36	40.2	42	39.0
LOCATION MEANS		36.3	38.1	36.7	39.1	34.1

HEIGHT (inches)

		Prosper TX	Blacksburg VA	Warsaw VA	ENTRY MEANS ALL LOCATIONS	
		Sutton	Griffey	Griffey		rank
1	AGS 2000	34	31	35.7	36.4	19
2	USG 3209	31	29	34.0	33.7	36
3	Pioneer 26R61	35	34	37.7	37.1	13
4	McCormick	32	30	33.0	33.2	37
5	TN04-01	34	34	37.7	37.7	9
6	NC00-15332	37	33	37.0	36.9	15
7	MV 5-46	29	30	35.7	33.8	35
8	SC996284	34	34	40.3	38.5	4
9	SC996289	29	36	40.7	38.9	2
10	961526-3E15	34	33	34.0	34.9	28
11	961176-3A48	29	32	36.3	36.3	21
12	96229-3A41	33	32	35.3	36.1	23
13	951395-3A31	35	30	33.0	33.8	34
14	B990081	34	32	38.0	36.2	22
15	B990133	35	29	34.7	34.8	29
16	B990399	32	36	40.7	38.9	1
17	B990816	31	34	37.7	37.6	11
18	LA95181BUB40-1	27	34	38.7	37.8	8
19	LA96140BUA70-2	28	32	37.0	36.1	24
20	LA95135D54-2-3	36	32	38.3	37.6	10
21	AR 850-1-1	33	36	39.0	38.5	3
22	AR 93027-5-1	32	33	35.7	35.4	27
23	FL9547-B15-C1-D3	35	31	38.7	36.7	16
24	FL95345-A10-C5	33	30	36.0	34.2	31
25	FL99089-D35	28	34	38.0	38.3	6
26	D00*6874-9	35	33	37.7	36.3	20
27	D00*6874-2	27	33	37.7	35.8	25
28	D01-7017	31	32	37.0	35.7	26
29	D01*7759	32	31	38.3	37.0	14
30	VA01W-21	30	33	34.0	34.1	32
31	VA02W-513	37	30	32.7	32.6	38
32	VA02W-555	32	27	32.3	32.3	40
33	VA02W-370	27	28	31.7	32.3	41
34	981543A1-1-9-3	35	30	37.3	36.5	17
35	99751RA1-6-3	33	29	34.0	33.8	33
36	NC01-27750	35	34	40.0	38.3	5
37	NC00-15371	33	29	37.3	36.4	18
38	NC01-28087	31	29	32.0	32.5	39
39	G20412	38	36	39.3	37.2	12
40	G20921	31	31	35.7	34.7	30
41	G20922	35	34	40.0	38.2	7
LOCATION MEANS		32.5	32.0	36.6	35.9	

LODGING

		Belle Mina AL	Marianna FL	Plains GA	Portageville MO	Cleveland MS
		Glass	Barnett	Johnson	McKendry	Fogleman
		0-9	0-9	%	0-9	0-9
1	AGS 2000	1	1	0	2.3	1.0
2	USG 3209	1	1	0	2.3	3.5
3	Pioneer 26R61	0	1	0	0.3	1.0
4	McCormick	0	2	0	0.3	1.0
5	TN04-01	1	1	0	1.7	1.0
6	NC00-15332	0	1	0	1.0	1.0
7	MV 5-46	1	0	0	2.0	3.5
8	SC996284	0	1	5	1.7	3.5
9	SC996289	0	1	5	2.0	2.5
10	961526-3E15	0	1	0	1.0	1.0
11	961176-3A48	0	1	10	0.3	3.5
12	96229-3A41	0	1	0	0.7	1.0
13	951395-3A31	0	0	0	1.0	2.0
14	B990081	0	0	0	1.3	1.0
15	B990133	0	0	0	1.7	1.0
16	B990399	1	0	5	1.3	1.0
17	B990816	0	0	5	2.0	2.5
18	LA95181BUB40-1	1	0	0	0.3	1.0
19	LA96140BUA70-2	1	1	0	2.3	1.0
20	LA95135D54-2-3	0	1	0	1.0	1.0
21	AR 850-1-1	0	1	0	0.7	1.0
22	AR 93027-5-1	0	0	0	1.7	1.0
23	FL9547-B15-C1-D3	1	1	50	0.0	4.5
24	FL95345-A10-C5	0	1	0	1.0	3.5
25	FL99089-D35	1	1	0	1.3	2.0
26	D00*6874-9	0	1	5	2.3	1.0
27	D00*6874-2	0	1	0	1.7	1.0
28	D01-7017	1	1	0	1.7	1.0
29	D01*7759	0	1	0	1.7	1.0
30	VA01W-21	0	0	0	1.0	1.0
31	VA02W-513	0	0	0	0.7	1.0
32	VA02W-555	0	0	0	1.3	1.0
33	VA02W-370	0	1	0	1.0	1.0
34	981543A1-1-9-3	0	1	0	1.0	1.0
35	99751RA1-6-3	0	0	0	0.7	1.0
36	NC01-27750	0	1	0	1.7	1.0
37	NC00-15371	1	2	30	3.0	3.0
38	NC01-28087	0	0	0	1.0	1.0
39	G20412	1	1	0	2.3	1.0
40	G20921	0	1	0	1.0	1.0
41	G20922	1	1	0	0.0	1.0
LOCATION MEANS		0.3	0.7	2.8	1.3	1.6

LODGING

		Newton MS	Knoxville TN	Blacksburg VA	Warsaw VA
		White	West	Griffey	Griffey
		0-9	%	0.2-10	0.2-10
1	AGS 2000	3	8	0.2	3.5
2	USG 3209	2	10	0.2	1.5
3	Pioneer 26R61	1	7	0.2	0.3
4	McCormick	2	25	0.2	0.3
5	TN04-01	2	0	0.2	0.4
6	NC00-15332	1	0	0.2	0.7
7	MV 5-46	3	2	0.2	0.3
8	SC996284	1	20	0.2	3.8
9	SC996289	2	35	0.2	3.7
10	961526-3E15	2	8	0.2	0.2
11	961176-3A48	1	75	0.2	5.4
12	96229-3A41	1	15	0.2	0.5
13	951395-3A31	1	3	0.2	0.5
14	B990081	1	2	0.2	0.8
15	B990133	1	0	0.2	0.3
16	B990399	1	12	0.2	0.8
17	B990816	1	0	0.2	0.5
18	LA95181BUB40-1	1	7	0.2	3.7
19	LA96140BUA70-2	1	0	0.2	0.2
20	LA95135D54-2-3	1	0	0.2	2.3
21	AR 850-1-1	1	0	0.2	0.2
22	AR 93027-5-1	2	0	0.2	0.3
23	FL9547-B15-C1-D3	1	80	1.6	5.0
24	FL95345-A10-C5	1	17	0.2	0.2
25	FL99089-D35	1	33	0.2	5.8
26	D00*6874-9	1	27	0.2	1.6
27	D00*6874-2	1	27	0.2	1.3
28	D01-7017	1	40	0.2	0.5
29	D01*7759	1	0	0.2	0.5
30	VA01W-21	2	5	0.2	0.7
31	VA02W-513	1	15	0.2	0.2
32	VA02W-555	1	5	0.2	0.4
33	VA02W-370	1	10	0.2	0.2
34	981543A1-1-9-3	1	42	0.2	0.9
35	99751RA1-6-3	1	2	0.2	0.3
36	NC01-27750	2	0	0.2	0.7
37	NC00-15371	3	45	0.2	2.0
38	NC01-28087	2	2	0.2	0.2
39	G20412	1	3	0.2	2.2
40	G20921	3	2	0.2	1.7
41	G20922	1	23	0.2	2.3
LOCATION MEANS		1.4	14.8	0.2	1.4

WINTER DAMAGE

		Aberdeen ID Bockelman Winter Kill 0-9	Greensburg IN Brown Winter Kill 0-9	Lafayette IN Brown Winter Kill 0-9	Lafayette IN Moreno Winter Kill 0-9
1	AGS 2000	2.0	3	8	9
2	USG 3209	0.3	6	8	8
3	Pioneer 26R61	0.5	3	7	7
4	McCormick	1.0	2	2	6
5	TN04-01	0.8	2	3	6
6	NC00-15332	1.0	2	3	5
7	MV 5-46	1.3	5	7	8
8	SC996284	1.0	2	4	7
9	SC996289	2.0	2	4	7
10	961526-3E15	4.8	6	8	9
11	961176-3A48	1.0	2	2	7
12	96229-3A41	1.3	3	4	8
13	951395-3A31	1.3	3	4	7
14	B990081	0.8	2	3	4
15	B990133	1.0	2	1	3
16	B990399	1.0	2	1	5
17	B990816	0.5	2	1	4
18	LA95181BUB40-1	1.3	5	7	9
19	LA96140BUA70-2	0.8	4	4	8
20	LA95135D54-2-3	0.8	4	4	6
21	AR 850-1-1	1.0	3	2	3
22	AR 93027-5-1	1.3	4	3	6
23	FL9547-B15-C1-D3	1.3	8	8	9
24	FL95345-A10-C5	5.0	8	8	9
25	FL99089-D35	2.3	7	7	9
26	D00*6874-9	0.5	3	4	7
27	D00*6874-2	0.3	2	3	6
28	D01-7017	1.5	3	4	8
29	D01*7759	1.3	2	3	6
30	VA01W-21	2.0	4	6	7
31	VA02W-513	0.8	3	4	6
32	VA02W-555	2.8	3	7	7
33	VA02W-370	1.5	2	3	8
34	981543A1-1-9-3	1.5	2	2	3
35	99751RA1-6-3	1.0	2	4	4
36	NC01-27750	1.0	2	1	5
37	NC00-15371	0.5	3	2	6
38	NC01-28087	2.0	6	5	7
39	G20412	1.0	2	2	4
40	G20921	1.8	3	2	5
41	G20922	2.0	3	2	5
LOCATION MEANS		1.4	3.3	4.1	6.4
GROWTH STAGE / DATE				March 11	

LEAF RUST

		Belle Mina AL	Marianna FL	Quincy FL	Griffin GA	Plains GA	Evansville IN
		Glass	Barnett	Barnett	Johnson	Johnson	Ohm
			0-9	0-9			
1	AGS 2000	1	1	0	0	3	0
2	USG 3209	0	7	1	5	4	0
3	Pioneer 26R61	0	2	2	2	3	0
4	McCormick	0	7	7	2	7	tr/R
5	TN04-01	0	0	0	0	0	0
6	NC00-15332	0	5	1	0	3	0
7	MV 5-46	0	4	2	1	5	0
8	SC996284	0	0	0	0	0	tr/R
9	SC996289	0	0	1	0	0	0
10	961526-3E15	0	1	1	0	3	0
11	961176-3A48	0	0	0	0	1	0
12	96229-3A41	0	0	0	0	0	0
13	951395-3A31	0	0	0	0	0	0
14	B990081	0	0	0	0	0	0
15	B990133	0	0	0	0	0	0
16	B990399	0	3	2	2	4	0
17	B990816	0	4	2	0	0	0
18	LA95181BUB40-1	0	0	1	0	0	tr/R
19	LA96140BUA70-2	0	1	0	0	0	tr/Ms
20	LA95135D54-2-3	0	1	0	0	0	tr/R
21	AR 850-1-1	0	4	1	0	4	0
22	AR 93027-5-1	0	0	1	0	0	0
23	FL9547-B15-C1-D3	0	2	4	0	3	tr/R
24	FL95345-A10-C5	0	7	4	5	5	tr/R
25	FL99089-D35	0	0	5	0	5	0
26	D00*6874-9	0	3	2	0	3	0
27	D00*6874-2	1	3	3	1	5	tr/R
28	D01-7017	0	5	2	5	3	tr/R
29	D01*7759	0	2	2	0	3	tr/R
30	VA01W-21	0	2	6	2	4	0
31	VA02W-513	0	0	0	0	2	tr/R
32	VA02W-555	0	2	1	0	4	tr/R
33	VA02W-370	0	4	4	0	4	tr/R
34	981543A1-1-9-3	0	3	1	1	3	tr/R
35	99751RA1-6-3	0	1	1	0	2	0
36	NC01-27750	0	2	5	1	3	tr/R
37	NC00-15371	0	0	1	0	1	tr/R
38	NC01-28087	0	0	0	0	0	0
39	G20412	0	4	4	0	4	tr/R
40	G20921	0	4	0	2	3	tr/R
41	G20922	0	4	4	4	2	0
LOCATION MEANS		0.0	2.1	1.7	0.8	2.3	
GROWTH STAGE / DATE			April 28	April 6		May 2	

LEAF RUST

		Greensburg IN	Lafayette IN	Woodford Co. KY	Baton Rouge LA	Winnsboro LA
		Brown	Brown	Van Sanford	Harrison	Harrison
		1-9	1-9	% flag	%	%
1	AGS 2000	1	4	1	0	0
2	USG 3209	2	9	3	0	0
3	Pioneer 26R61	1	3	1	0	0
4	McCormick	3	7	1	20	4
5	TN04-01	1	1	1	0	0
6	NC00-15332	1	3	1	0	0
7	MV 5-46	1	1	1	3	0
8	SC996284	2	3	0	0	0
9	SC996289	3	3	0	0	0
10	961526-3E15	1	2	1	0	0
11	961176-3A48	1	1	0	0	0
12	96229-3A41	1	1	0	0	0
13	951395-3A31	1	1	0	0	0
14	B990081	1	1	0	0	0
15	B990133	1	1	0	0	0
16	B990399	2	1	3	0	0
17	B990816	1	1	1	1	1
18	LA95181BUB40-1	1	1	1	1	0
19	LA96140BUA70-2	2	1	0	1	0
20	LA95135D54-2-3	1	1	1	0	0
21	AR 850-1-1	2	6	3	0	0
22	AR 93027-5-1	1	1	1	0	0
23	FL9547-B15-C1-D3	2	9	0	23	3
24	FL95345-A10-C5	2	9	5	10	0
25	FL99089-D35	2	6	1	5	0
26	D00*6874-9	1	3	1	1	0
27	D00*6874-2	1	3	1	1	0
28	D01-7017	2	1	1	0	3
29	D01*7759	2	1	1	0	1
30	VA01W-21	2	1	1	10	0
31	VA02W-513	2	1	1	0	0
32	VA02W-555	2	1	1	0	0
33	VA02W-370	2	1	1	0	0
34	981543A1-1-9-3	2		3	0	0
35	99751RA1-6-3	1	3	1	1	0
36	NC01-27750	3	1	1	0	0
37	NC00-15371	2	1	0	0	0
38	NC01-28087	3	3	0	1	0
39	G20412	2	3	1	8	2
40	G20921	7		30	0	0
41	G20922	3		15	0	0
LOCATION MEANS		1.8	2.6	2.1	2.1	0.3
GROWTH STAGE / DATE		11/June11	11/June19		3/24 & 4/11	3/11 & 4/14

LEAF RUST

		St. Paul MN		Kinston NC	Wooster OH	Prosper TX	Blacksburg VA	Warsaw VA
		Kolmer		Murphy	Sneller	Sutton	Griffey	Griffey
		% severity	IT		0-9		0-9	0-9
1	AGS 2000			1	3.0	0	0	0
2	USG 3209			7	4.0	3	8	4
3	Pioneer 26R61	10	MR-MS	2	0.5	0	3	0
4	McCormick			6	1.5	5	8	0
5	TN04-01			1	0.5	1	0	0
6	NC00-15332	10	MR-MS	3	0.5	0	0	0
7	MV 5-46			5	2.5	0	4	3
8	SC996284			1	1.5	0	1	0
9	SC996289			2	1.5	0	2	0
10	961526-3E15			0	0.0		0	0
11	961176-3A48			1	0.0	0	0	0
12	96229-3A41			0	0.0	0	0	0
13	951395-3A31			0	0.0	0	0	0
14	B990081			0	1.0	0	0	0
15	B990133			0	1.0	0	0	0
16	B990399	20	MS	2	1.0	3	2	0
17	B990816			0	0.0	0	1	0
18	LA95181BUB40-1			0	1.0	0	0	0
19	LA96140BUA70-2			0	0.0	0	0	0
20	LA95135D54-2-3			0	0.0	0	0	0
21	AR 850-1-1	10	MR-MS	3	1.5	5	3	0
22	AR 93027-5-1	30	MS	1	0.0	1	0	0
23	FL9547-B15-C1-D3			0	1.0	1	3	0
24	FL95345-A10-C5			4	1.5	1	5	0
25	FL99089-D35			0	1.0	0	2	0
26	D00*6874-9			4	2.0	5	1	0
27	D00*6874-2			1	0.5	6	1	0
28	D01-7017			0	0.0	1	0	0
29	D01*7759			2	1.5	0	2	0
30	VA01W-21			5	2.0	0	4	0
31	VA02W-513			1	0.5	1	2	0
32	VA02W-555			2	3.0	1	4	0
33	VA02W-370			3	0.5	0	1	0
34	981543A1-1-9-3			3	3.0	6	2	0
35	99751RA1-6-3			3	1.0	0	0	0
36	NC01-27750			3	1.0		0	0
37	NC00-15371			0	0.0	3	0	0
38	NC01-28087			0	0.0		0	0
39	G20412	30	MS	5	0.5	5	2	0
40	G20921	30	MS	5	5.0		6	4
41	G20922			6	5.0		6	3
LOCATION MEANS				2.0	1.2	1.3	1.8	0.3
GROWTH STAGE / DATE								

LEAF RUST

Blacksburg
VA

Griffey

		LR05 TNRJ
1	AGS 2000	;1=
2	USG 3209	;1=
3	Pioneer 26R61	;1=
4	McCormick	3S
5	TN04-01	;12/TR3S
6	NC00-15332	3S/;1
7	MV 5-46	;1
8	SC996284	2;
9	SC996289	2;
10	961526-3E15	0;
11	961176-3A48	;12
12	96229-3A41	0;
13	951395-3A31	0;
14	B990081	;12
15	B990133	23
16	B990399	;1
17	B990816	3S
18	LA95181BUB40-1	23
19	LA96140BUA70-2	3S
20	LA95135D54-2-3	3S
21	AR 850-1-1	3S
22	AR 93027-5-1	3S
23	FL9547-B15-C1-D3	23;
24	FL95345-A10-C5	;1
25	FL99089-D35	23
26	D00*6874-9	3S
27	D00*6874-2	3S
28	D01-7017	23
29	D01*7759	23
30	VA01W-21	;1
31	VA02W-513	0;
32	VA02W-555	0;
33	VA02W-370	;1
34	981543A1-1-9-3	;1
35	99751RA1-6-3	0;
36	NC01-27750	;1
37	NC00-15371	23
38	NC01-28087	0;
39	G20412	3S
40	G20921	3S
41	G20922	3S

	LR gene	LR05 TNRJ
Lr differential	Tc Lr1	3S
Lr differential	Tc Lr2a	23
Lr differential	Tc Lr2c	2C
Lr differential	Tc Lr3a	3S
Lr differential	Tc Lr9	3S
Lr differential	Tc Lr16	12=C
Lr differential	Tc Lr24	3S
Lr differential	Tc Lr26	;1
Lr differential	Tc Lr3ka	3S
Lr differential	Tc Lr11	3S/0
Lr differential	Tc Lr17	;12
Lr differential	Tc Lr30	3S
Lr differential	Tc Lr18	;1
Lr differential	Tc Lr14a	3S
Lr differential	Tc Lr10	3S
Lr differential	Tc LrB	;12

LEAF RUST

St. Paul
MN
Long

		Reactions produced by NA race* **										Postulated
		BBBD	NBBK	SBDD	THBJ	MCRK	MLDS	TBBF	TLGK	TNRJ	MCDS	Genes***
1	AGS 2000	;	;	;	3	3	-	;	;	;	;1C	10,26,+
2	USG 3209	;	;	;	;	3	;	;	;	;1c	;1C	11,26
3	Pioneer 26R61	;	;	;	;1c2	;	;	;1c	;	;1c	;1C2	+
4	McCormick	;	;	;	;	;	;	;	;	3	;	24
5	TN04-01	;	;	;	;1c2	;	;	;	;	;	;	+
6	NC00-15332	;	;	;	;	;	;	;	;1c2	3-,	;	24,+
7	MV 5-46	;	;	;	3	;	;	;	;1c1	;	3	26,+
8	SC996284	;	;	;	;	;	;	;	;	;	;1c2	+
9	SC996289	;	;	;	;	3	;	;1c	;	;1c	;1c2	11,26
10	961526-3E15	;	;	;	;3	3;	;	;	;-3	;	;1c	+
11	961176-3A48	;	;	;	;	;	;	;	3	;	;1c1	9,18
12	96229-3A41	;	;	;	;	;	;1	;	;	;	+	++
13	951395-3A31	;	;	;	;	;1c	;	;	;	;	;1c	+
14	B990081	,-3	3	;	3	3	3	;1c2	3	3;	3	10,+
15	B990133	;	;	;	;	;	3	;	3	3	;	9
16	B990399	;	;	;	3	;1c	;	;	3	;	;1c3	+
17	B990816	;	;	;	;	;	3	;	3	3	;	9
18	LA95181BUB40-1	;	;	;	;	;	;	;	3	3	;	2a,9
19	LA96140BUA70-2	;	;	-	-	;	3	;	3	3	;	9
20	LA95135D54-2-3	;	;	;	;	;	;	;	;	3	;	9,24
21	AR 850-1-1	;	;	;1c	;	3	;	;1c	;	;	;1c2	11,26
22	AR 93027-5-1	;	;	3	3	;	;	-	;	3;	;	+
23	FL9547-B15-C1-D3	;	;	;1c2	;	;	;	;	;	;	;-3	+
24	FL95345-A10-C5	;	;	;	;	3	;	;	;	;	;1c2	11,26
25	FL99089-D35	;	3	;	3	3	3	;1c2	3	3	3	10,+
26	D00*6874-9	;	;	;	;	3	;	;1c	3	3	;	11
27	D00*6874-2	;	;	;	;1c	3	;	;1c	3	3	;	11
28	D01-7017	;	3-;	;	3	3	3	3	3	3	;	10,+
29	D01*7759	3-,	3	3-,	3	3	3	3	3	3	3	0
30	VA01W-21	;	;	;	3-;	3	;	;	;	;1c	3	26,+
31	VA02W-513	;	;	;	;	3	;	;	;	;	;1c	11,26
32	VA02W-555	;	;	;	;	3	;	;	;	;	;1c	11,26
33	VA02W-370	;	3;	;	;	3	;	;	3	;	;1c2	18,+
34	981543A1-1-9-3	;	;	;	3	3	;	;	;	;	3;	26,+
35	99751RA1-6-3	;	;	;	;	3	;2	;	;	;	;1c	11,26
36	NC01-27750	;	;	;	;	;	;	;	;	;1c2	;	+
37	NC00-15371	;	;	;	;	;	;	;	3;	3;	;	2a,9,+
38	NC01-28087	;	;	;	;	;3	;	;	;	;	;1c	11,26,+
39	G20412	3	3	3	3	3	3	3	3	3	3	0
40	G20921	-	;	;	3	3	3	3	3	3	3	3
41	G20922	;	3;	;	3	3	-	-	3	3	-	0

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

** Virulence formula:

BBDB=14a
NBBK=1,2c,10,14a,18
SBDD=1,2a,2c,,14a,17
THBJ=1,2a,2c,3,10, 14a,16,26
MCRK=1,3,3ka,10,11,14a,18,26,30
MLDS=1,3,9,10,14a,17,B
TBBF=1,2a,2c,3,14a,18
TLGJ=1,2a,2c,3,9,10,11,14a
TNRJ=1,2a,2c,3,3ka,9,10,11,14a,24,30
MCDS=1,3,10,14a,17,26,B

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

Note: MCRK, MCDS, and TNRJ were the most commonly races identified in the U.S. in 2004.

STEM RUST

St. Paul
MN

Yue Jin

		Seedling Reaction					Adult Field Reaction		
		01MN 84A-1-2	74MN 1049	03ND76C	77ND82A	99KS76A-1	Severity	Infection	winter kill
		TTTT	TPMK	QFCS	RCRS	RKQQ		response	%
1	AGS 2000	;1	2/S	2-	;1	;1/S			100
2	USG 3209	;12-	1+	0;	1	;			100
3	Pioneer 26R61	2-	2-	1	1	1	0		99
4	McCormick	2-	2-	1+	1	1			100
5	TN04-01	2-	2-	2	1	1-	0		99
6	NC00-15332	1+	2	12	1+	;	0		60
7	MV 5-46	0;1	0;2-	1+	1/S	1+	0		99
8	SC996284	S	0;	;4	;3	;			100
9	SC996289	S	0;	;4	;4	;			100
10	961526-3E15	1	2-	;1+	1	1+			100
11	961176-3A48	S	0;	0;/S	0;/S	0			100
12	96229-3A41	S/12	0?	;	S	0;			100
13	951395-3A31	0	0?	0	0;	0			100
14	B990081	S	S	S	S	S			100
15	B990133	S	S	;	S	S			100
16	B990399	2-	2-	2-	1	1	TR		95
17	B990816	2-	2	1+	1+	1+	0		80
18	LA95181BUB40-1	-	0;12	;	S	;	TS		90
19	LA96140BUA70-2	;12	0;	0	0	0			100
20	LA95135D54-2-3	S	2-	-	-	S			100
21	AR 850-1-1	S	-	2-/S	2+	S	60	S	70
22	AR 93027-5-1	S	2/S	2	S	S	40	S	70
23	FL9547-B15-C1-D3	S	S	0	S	;123			100
24	FL95345-A10-C5	;1	0;	0	0;	0;			100
25	FL99089-D35	S	S	S/2	S low IF	S			100
26	D00*6874-9	S	S	S	S	S	10	MS-S	90
27	D00*6874-2	S	S	S	S	S			100
28	D01-7017	S/2	S	2	S	S/S			100
29	D01*7759	S	2	2-	S	S (1PL)			100
30	VA01W-21	1-/S	-	1	1/3	1			100
31	VA02W-513	S	0;	0	S	S			100
32	VA02W-555	;	0;	0	1+	1			100
33	VA02W-370	S	S	2+	S	S			100
34	981543A1-1-9-3	1	-	;1	;1	;1	0		90
35	99751RA1-6-3	;	-	0	;	;			100
36	NC01-27750	1+	2-	1	1	0;			100
37	NC00-15371	S	S	S	S	S			100
38	NC01-28087	0;1	;1	0	1	0			100
39	G20412	S	2-	-	S	S	30	S	80
40	G20921	1	S	S	S	S	40	S	90
41	G20922	;2	S	S	S	S			80
DATE		1/27/2005	1/27/05	2/28/2005	3/1/2005	3/1/2005			

"/" indicates a mixture of plants, predominant type listed first. "S" indicate susceptible, including infection types 3 or 4.
Bulk of races for field inoculation: MCCF, QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT.

STRIPE RUST

		Bay AR Hancock 1-9	%	Fayetteville AR Milus %	total leaf area	Marianna FL Barnett 0-9
1	AGS 2000	9.0	30	30	85	5
2	USG 3209	3.3	2	15	30	1
3	Pioneer 26R61	2.7	0	0	30	1
4	McCormick	5.0	2	15	50	0
5	TN04-01	8.3	30	50	85	4
6	NC00-15332	2.7	2	2	50	0
7	MV 5-46	9.0	30	70	98	1
8	SC996284	3.7	0	0	50	1
9	SC996289	2.3	0	0	70	1
10	961526-3E15	9.0	30	70	98	8
11	961176-3A48	3.0	0	0	50	0
12	96229-3A41	2.0	0	0	30	0
13	951395-3A31	2.7	0	0	50	0
14	B990081	6.3	2	2	50	0
15	B990133	2.3	2	2	50	0
16	B990399	4.3	2	15	70	0
17	B990816	4.0	7	50	85	0
18	LA95181BUB40-1	2.7	0	2,70	50	2
19	LA96140BUA70-2	2.7	0	0	50	0
20	LA95135D54-2-3	2.7	0	0	30	0
21	AR 850-1-1	2.7	0	0	30	1
22	AR 93027-5-1	6.7	30	50	93	4
23	FL9547-B15-C1-D3	2.3	0	2	70	0
24	FL95345-A10-C5	2.7	0	0	70	0
25	FL99089-D35	9.0	50	85	98	5
26	D00*6874-9	2.7	0	0	30	0
27	D00*6874-2	3.7	0	0	30	0
28	D01-7017	2.0	0	0,70	30	1
29	D01*7759	2.3	2	2	30	0
30	VA01W-21	9.0	50	70	98	0
31	VA02W-513	3.3	0	7	50	0
32	VA02W-555	2.0	0	0	30	0
33	VA02W-370	3.7	2	2,70	50	0
34	981543A1-1-9-3	3.3	0	0	50	1
35	99751RA1-6-3	6.3	0,50	2,70	30,98	3
36	NC01-27750	7.0	30	50	98	4
37	NC00-15371	6.7	30	50	85	5
38	NC01-28087	9.0	50	70	98	3
39	G20412	5.7	30	50	85	2
40	G20921	9.0	50	85	98	0
41	G20922	8.7	50	93	98	3
LOCATION MEANS		4.8				1.4
GROWTH STAGE / DATE			April 27	May 4	May 19	April 28

STRIPE RUST

		Quincy FL	Griffin GA	Plains GA	Evansville IN	Greensburg IN
		Barnett	Johnson	Johnson	Ohm	Brown
		0-9				1-9
1	AGS 2000	2	3	5	S0	4
2	USG 3209	1	1	0	0	3
3	Pioneer 26R61	0	0	1	0	1
4	McCormick	0	2	0	0	3
5	TN04-01	1	3	2	0	3
6	NC00-15332	1	0	0	S	2
7	MV 5-46	2	7	3	0	4
8	SC996284	2	0	2	tr	1
9	SC996289	1	2	2	S	2
10	961526-3E15	7	4	7	0	6
11	961176-3A48	0	0	0	0	2
12	96229-3A41	0	0	0	0	1
13	951395-3A31	0	2	1	0	2
14	B990081	0	2	2	0	2
15	B990133	0	0	0	0	1
16	B990399	0	0	1	0	1
17	B990816	0	1	1	0	3
18	LA95181BUB40-1	0	0	0	tr	1
19	LA96140BUA70-2	0	0	0	0	1
20	LA95135D54-2-3	1	0	0	0	1
21	AR 850-1-1	0	0	0	0	2
22	AR 93027-5-1	0	1	1	0	2
23	FL9547-B15-C1-D3	0	0	0	0	1
24	FL95345-A10-C5	0	0	0	0	1
25	FL99089-D35	5	3	3	S	3
26	D00*6874-9	0	0	0	0	1
27	D00*6874-2	0	0	0	0	1
28	D01-7017	0	0	0	0	2
29	D01*7759	0	0	0	0	1
30	VA01W-21	0	3	4	tr	4
31	VA02W-513	0	2	2	0	1
32	VA02W-555	0	0	2	0	2
33	VA02W-370	0	0	0	0	1
34	981543A1-1-9-3	0	1	0	0	1
35	99751RA1-6-3	1	1	2	tr	3
36	NC01-27750	1	5	4	tr	4
37	NC00-15371	2	2	2	tr	3
38	NC01-28087	1	4	6	S	8
39	G20412	0	2	0	0	3
40	G20921	4	5	6	0	2
41	G20922	5	4	6	0	2
LOCATION MEANS		0.9	1.5	1.6		2.2
GROWTH STAGE / DATE		April 6		May 2		11/June 11

STRIPE RUST

		Winfield KS Perry 0-5	Logan Co. KY Van Sanford 0-5	Baton Rouge LA Harrison %	Winnsboro LA Harrison %	Cleveland MS Fogleman
1	AGS 2000	4	2	30	55	8.0
2	USG 3209	1	1	3	38	7.0
3	Pioneer 26R61	1	0	0	8	3.5
4	McCormick	3	0	10	38	6.5
5	TN04-01	4	2	25	43	8.0
6	NC00-15332	3	1	3	20	4.5
7	MV 5-46	5	4	38	63	9.0
8	SC996284	3	0	2	8	2.5
9	SC996289	2	1	0	10	6.0
10	961526-3E15	5	4	75	73	9.0
11	961176-3A48	1	0	0	0	1.0
12	96229-3A41	1	2	0	0	1.0
13	951395-3A31	3	0	5	15	4.0
14	B990081	3	1	5	8	5.0
15	B990133	2	0	2	33	3.0
16	B990399	4	0	4	30	5.0
17	B990816	5	0	8	30	7.0
18	LA95181BUB40-1	2	0	0	5	2.5
19	LA96140BUA70-2	1	0	0	0	1.5
20	LA95135D54-2-3	5	0	0	8	4.5
21	AR 850-1-1	2	0	5	25	4.5
22	AR 93027-5-1	5	1	73	45	7.0
23	FL9547-B15-C1-D3	2	0	0	3	7.0
24	FL95345-A10-C5	1	1	1	8	3.0
25	FL99089-D35	5	1	35	65	9.0
26	D00*6874-9	1	1	0	0	2.5
27	D00*6874-2	1	1	0	0	2.5
28	D01-7017	2	0	0	18	6.0
29	D01*7759	2	0	3	25	4.5
30	VA01W-21	5	4	45	45	9.0
31	VA02W-513	3	1	5	28	6.0
32	VA02W-555	1	0	0	0	1.5
33	VA02W-370	2	1	2	13	2.5
34	981543A1-1-9-3	2	1	2	10	4.0
35	99751RA1-6-3	4	1	15	35	9.0
36	NC01-27750	5	1	20	53	8.0
37	NC00-15371	4	0	8	45	8.5
38	NC01-28087	5	4	83	70	9.0
39	G20412	5	1	28	33	6.0
40	G20921	5	3	73	48	9.0
41	G20922	5	3	73	55	9.0
LOCATION MEANS		3.0	1.0	16.6	27.0	5.5
GROWTH STAGE / DATE		10.5		March 24	3/11 & 4/14	

STRIPE RUST

		Prosper TX Sutton	Pullman WA Chen	
			IT 0-8	%
1	AGS 2000	2		
2	USG 3209	0		
3	Pioneer 26R61	3		
4	McCormick	5		
5	TN04-01	3		
6	NC00-15332	1		
7	MV 5-46	9		
8	SC996284	1	8	90
9	SC996289	0	8	90
10	961526-3E15	9	8	100
11	961176-3A48	0	8	40
12	96229-3A41	0	8	10
13	951395-3A31	0		
14	B990081	0		
15	B990133	0		
16	B990399	3		
17	B990816	3	8	80
18	LA95181BUB40-1	0	8	80
19	LA96140BUA70-2	0		
20	LA95135D54-2-3	0		
21	AR 850-1-1	1		
22	AR 93027-5-1	9		
23	FL9547-B15-C1-D3	4		
24	FL95345-A10-C5	3		
25	FL99089-D35	9		
26	D00*6874-9	0		
27	D00*6874-2	0		
28	D01-7017	0		
29	D01*7759	1		
30	VA01W-21	9		
31	VA02W-513	7		
32	VA02W-555	0		
33	VA02W-370	0		
34	981543A1-1-9-3	0		
35	99751RA1-6-3	0		
36	NC01-27750	9	8	90
37	NC00-15371	9	8	80
38	NC01-28087	9		
39	G20412	7		
40	G20921	9		
41	G20922	9		
LOCATION MEANS		3.3		
GROWTH STAGE / DATE			June 16 - Flowering	

STRIPE RUST

		Mt. Vernon WA Chen			
		IT 0-8	%	IT 0-8	%
1	AGS 2000				
2	USG 3209				
3	Pioneer 26R61				
4	McCormick				
5	TN04-01				
6	NC00-15332				
7	MV 5-46				
8	SC996284	8	80	8	100
9	SC996289	8	80	8	100
10	961526-3E15	8	80	8	100
11	961176-3A48	5	40	2	20
12	96229-3A41	5	10	2	2
13	951395-3A31	5	10	2	20
14	B990081	8	60	5	20
15	B990133	8	60	8	70
16	B990399	5	60	2	2
17	B990816	8	100	8	100
18	LA95181BUB40-1	8	80	8	90
19	LA96140BUA70-2	2	10	2	1
20	LA95135D54-2-3	5	10	2	2
21	AR 850-1-1	5	10	2	2
22	AR 93027-5-1	8	60	8	100
23	FL9547-B15-C1-D3	8	40	8	70
24	FL95345-A10-C5	2	10	2	10
25	FL99089-D35	8	80	8	100
26	D00*6874-9	2	10	2	10
27	D00*6874-2	2	10	2	10
28	D01-7017	5	20	8	20
29	D01*7759	5	20	2	10
30	VA01W-21	8	80	8	100
31	VA02W-513	8	60	8	100
32	VA02W-555	2	10	2	5
33	VA02W-370	5	40	5	20
34	981543A1-1-9-3	5	20	2,8	90
35	99751RA1-6-3	8	40	8	90
36	NC01-27750	8	40	8	100
37	NC00-15371	8	80	8	100
38	NC01-28087	8	80	8	100
39	G20412	8	80	8	100
40	G20921	8	80	8	100
41	G20922	8	80	8	100

LOCATION MEANS

GROWTH STAGE / DATE	April 22 - Stem elongation	May 25 - Heading

SEPTORIA

		Logan Co. KY Van Sanford tritici 0-9
1	AGS 2000	3
2	USG 3209	3
3	Pioneer 26R61	3
4	McCormick	3
5	TN04-01	3
6	NC00-15332	4
7	MV 5-46	4
8	SC996284	3
9	SC996289	3
10	961526-3E15	4
11	961176-3A48	3
12	96229-3A41	4
13	951395-3A31	3
14	B990081	4
15	B990133	4
16	B990399	5
17	B990816	4
18	LA95181BUB40-1	4
19	LA96140BUA70-2	5
20	LA95135D54-2-3	5
21	AR 850-1-1	4
22	AR 93027-5-1	5
23	FL9547-B15-C1-D3	4
24	FL95345-A10-C5	6
25	FL99089-D35	5
26	D00*6874-9	4
27	D00*6874-2	4
28	D01-7017	5
29	D01*7759	5
30	VA01W-21	4
31	VA02W-513	4
32	VA02W-555	4
33	VA02W-370	6
34	981543A1-1-9-3	5
35	99751RA1-6-3	5
36	NC01-27750	6
37	NC00-15371	4
38	NC01-28087	4
39	G20412	4
40	G20921	4
41	G20922	3
LOCATION MEANS		4.1

FUSARIUM HEAD BLIGHT (SCAB)

		W. Lafayette IN Ohm Mean no. dis. Spikelets
1	AGS 2000	
2	USG 3209	1.7
3	Pioneer 26R61	4.7
4	McCormick	3.0
5	TN04-01	1.8
6	NC00-15332	4.0
7	MV 5-46	1.7
8	SC996284	4.6
9	SC996289	2.0
10	961526-3E15	
11	961176-3A48	1.8
12	96229-3A41	
13	951395-3A31	
14	B990081	2.8
15	B990133	1.6
16	B990399	5.0
17	B990816	3.6
18	LA95181BUB40-1	5.8
19	LA96140BUA70-2	3.3
20	LA95135D54-2-3	1.8
21	AR 850-1-1	7.3
22	AR 93027-5-1	3.9
23	FL9547-B15-C1-D3	
24	FL95345-A10-C5	
25	FL99089-D35	
26	D00*6874-9	1.9
27	D00*6874-2	1.2
28	D01-7017	3.1
29	D01*7759	2.0
30	VA01W-21	2.0
31	VA02W-513	2.4
32	VA02W-555	
33	VA02W-370	2.3
34	981543A1-1-9-3	1.3
35	99751RA1-6-3	4.4
36	NC01-27750	3.3
37	NC00-15371	3.4
38	NC01-28087	7.6
39	G20412	4.4
40	G20921	2.1
41	G20922	1.6
LOCATION MEAN		3.1
LSD (.05)		2.1
CV %		62
REPS		8

POWDERY MILDEW

		Belle Mina AL	Marianna FL	Quincy FL	Plains GA	Greensburg IN
		Glass	Barnett	Barnett	Johnson	Brown
			0-9	0-9		1-9
1	AGS 2000	0	0	0	1	1
2	USG 3209	0	0	1	3	1
3	Pioneer 26R61	0	0	0	5	4
4	McCormick	0	0	0	0	1
5	TN04-01	0	0	0	5	6
6	NC00-15332	0	0	0	2	7
7	MV 5-46	0	0	0	0	1
8	SC996284	0	0	0	0	1
9	SC996289	0	0	0	0	1
10	961526-3E15	0	0	0	3	6
11	961176-3A48	0	0	1	7	5
12	96229-3A41	0	0	0	0	1
13	951395-3A31	0	0	1	3	1
14	B990081	0	0	1	2	3
15	B990133	0	0	0	0	1
16	B990399	0	0	2	5	1
17	B990816	0	0	0	2	4
18	LA95181BUB40-1	0	0	0	4	1
19	LA96140BUA70-2	0	0	0	0	1
20	LA95135D54-2-3	0	0	0	0	1
21	AR 850-1-1	0	0	1	7	3
22	AR 93027-5-1	1	0	1	7	4
23	FL9547-B15-C1-D3	0	0	0	0	1
24	FL95345-A10-C5	0	0	0	1	1
25	FL99089-D35	0	0	0	5	1
26	D00*6874-9	0	0	0	2	1
27	D00*6874-2	0	0	0	2	1
28	D01-7017	0	1	0	5	3
29	D01*7759	1	0	3	8	6
30	VA01W-21	0	0	0	0	1
31	VA02W-513	0	0	0	0	1
32	VA02W-555	0	0	0	1	1
33	VA02W-370	0	0	0	1	3
34	981543A1-1-9-3	0	0	0	0	1
35	99751RA1-6-3	0	0	0	1	1
36	NC01-27750	0	0	0	4	1
37	NC00-15371	0	0	0	2	1
38	NC01-28087	0	0	0	1	1
39	G20412	0	0	0	6	3
40	G20921	0	0	0	1	7
41	G20922	0	0	0	1	8
LOCATION MEANS		0.0	0.0	0.3	2.4	2.4
GROWTH STAGE / DATE			April 28	April 6		11/May 31

POWDERY MILDEW

		Woodford Co. KY	Kinston NC	Wooster OH	Blacksburg VA	Warsaw VA
		Van Sanford	Murphy	Sneller	Griffey	Griffey
		0-9	0-9	0-9	0-9	0-9
1	AGS 2000	0	3.0	0.0	0	0.3
2	USG 3209	2	2.0	0.0	0	0.0
3	Pioneer 26R61	3	2.5	0.0	0	1.7
4	McCormick	0	0.5	0.0	0	0.0
5	TN04-01	4	4.0	0.0	0	2.3
6	NC00-15332	2	1.5	0.0	0	0.0
7	MV 5-46	2	1.5	0.0	0	0.0
8	SC996284	0	1.0	0.0	0	0.0
9	SC996289	0	1.0	0.0	0	0.0
10	961526-3E15	3	2.5	0.0	0	1.0
11	961176-3A48	3	4.5	0.0	0	2.0
12	96229-3A41	0	0.5	0.5	0	0.0
13	951395-3A31	3	2.0	0.0	0	2.3
14	B990081	2	2.0	0.5	0	2.0
15	B990133	2	1.0	0.0	0	0.0
16	B990399	5	3.5	0.0	0	2.0
17	B990816	4	1.0	0.5	0	0.7
18	LA95181BUB40-1	3	3.5	0.0	0	2.0
19	LA96140BUA70-2	1	2.0	0.0	0	0.7
20	LA95135D54-2-3	0	2.5	0.0	0	1.0
21	AR 850-1-1	3	3.0	0.0	0	2.3
22	AR 93027-5-1	5	3.0	1.5	4	4.7
23	FL9547-B15-C1-D3	2	2.0	0.5	0	1.0
24	FL95345-A10-C5	0	0.0	0.0	0	0.0
25	FL99089-D35	1	3.5	0.0	0	1.0
26	D00*6874-9	1	3.0	0.5	0	0.3
27	D00*6874-2	1	2.5	0.0	0	0.3
28	D01-7017	3	3.0	0.0	0	1.7
29	D01*7759	3	5.0	2.0	0	3.7
30	VA01W-21	1	0.5	0.0	0	0.0
31	VA02W-513	1	1.5	0.0	0	0.3
32	VA02W-555	2	1.0	0.0	0	0.3
33	VA02W-370	1	1.5	0.0	0	1.0
34	981543A1-1-9-3	5	2.0	1.5	0	1.3
35	99751RA1-6-3	1	1.5	0.0	0	1.0
36	NC01-27750	0	2.0	0.0	0	1.3
37	NC00-15371	1	1.0	0.0	0	0.0
38	NC01-28087	1	1.5	0.0	0	0.3
39	G20412	3	4.0	0.0	0	3.7
40	G20921	5	5.0	3.0	0	5.7
41	G20922	6	6.0	6.0	1	6.0
LOCATION MEANS		2.1	2.3	0.4	0.1	1.3
GROWTH STAGE / DATE						

POWDERY MILDEW

Blacksburg
VA

Griffey

		PM05 Comp
1	AGS 2000	23
2	USG 3209	0
3	Pioneer 26R61	0
4	McCormick	1
5	TN04-01	4
6	NC00-15332	23
7	MV 5-46	2
8	SC996284	23
9	SC996289	3
10	961526-3E15	0/TR4
11	961176-3A48	4
12	96229-3A41	0
13	951395-3A31	0
14	B990081	4
15	B990133	4
16	B990399	3
17	B990816	3
18	LA95181BUB40-1	3
19	LA96140BUA70-2	34
20	LA95135D54-2-3	23
21	AR 850-1-1	4
22	AR 93027-5-1	4
23	FL9547-B15-C1-D3	12
24	FL95345-A10-C5	0
25	FL99089-D35	3
26	D00*6874-9	4
27	D00*6874-2	4
28	D01-7017	4
29	D01*7759	4
30	VA01W-21	12
31	VA02W-513	34
32	VA02W-555	34
33	VA02W-370	34
34	981543A1-1-9-3	01/4
35	99751RA1-6-3	01/TR4
36	NC01-27750	4
37	NC00-15371	4
38	NC01-28087	34
39	G20412	4
40	G20921	4
41	G20922	4

		PM gene	PM05 Comp
Pm differential	Chancellor	Susc	4
Pm differential	Axminster	Pm 1	3
Pm differential	C68-15*7/CI 13836	Pm 1	3
Pm differential	Ulka	Pm 2	4
Pm differential	Asosan	Pm 3a	4
Pm differential	Chul	Pm 3b	1
Pm differential	Sonora*	Pm 3c	4
Pm differential	C68-15*6/Sonora	Pm 3c	4
Pm differential	C68-15*6/Trit	Pm 3c	34
Pm differential	Michigan Amber	Pm 3f	4
Pm differential	Yuma	Pm 4a	4
Pm differential	C68-15*5/Yuma	Pm 4a	4/1
Pm differential	C68-15*5/Kapli	Pm 4a	4/1
Pm differential	Ronos	Pm 4b	4
Pm differential	Hope	Pm 5	34
Pm differential	C747*	Pm 6	4
Pm differential	Transec*	Pm 7	4
Pm differential	C68-15*7/Transec	Pm 7	3
Pm differential	Federation/Kavkaz	Pm 8	12
Pm differential	Amigo	Pm 17	0
Pm differential	C68-15*5//747/Amigo	Pm 17	0

LEAF DISEASES

		Bay AR Hancock Septoria Glume Blotch & Bacterial Blight 1-9
1	AGS 2000	3.0
2	USG 3209	5.0
3	Pioneer 26R61	3.7
4	McCormick	4.0
5	TN04-01	3.3
6	NC00-15332	3.3
7	MV 5-46	3.3
8	SC996284	4.0
9	SC996289	4.3
10	961526-3E15	4.0
11	961176-3A48	4.0
12	96229-3A41	4.0
13	951395-3A31	4.3
14	B990081	4.3
15	B990133	5.0
16	B990399	4.0
17	B990816	3.0
18	LA95181BUB40-1	3.7
19	LA96140BUA70-2	4.0
20	LA95135D54-2-3	4.0
21	AR 850-1-1	4.7
22	AR 93027-5-1	5.0
23	FL9547-B15-C1-D3	4.0
24	FL95345-A10-C5	4.7
25	FL99089-D35	4.3
26	D00*6874-9	5.3
27	D00*6874-2	5.3
28	D01-7017	3.3
29	D01*7759	5.7
30	VA01W-21	4.3
31	VA02W-513	4.0
32	VA02W-555	3.0
33	VA02W-370	4.0
34	981543A1-1-9-3	5.3
35	99751RA1-6-3	6.3
36	NC01-27750	4.0
37	NC00-15371	3.0
38	NC01-28087	4.0
39	G20412	5.3
40	G20921	5.3
41	G20922	5.3
LOCATION MEAN		4.3

VIRUSES

		Belle Mina AL	Bay AR	Plains GA	Winfield KS	Blacksburg VA
		Glass	Hancock	Johnson	Perry	Griffey
		BYDV	Wheat Spindle Streak	Soilborne	SSMV	BYDV
		0-9	1-9		0-5	0-9
1	AGS 2000	1	4.5	7	4	3
2	USG 3209	1	4.0	0	1	4
3	Pioneer 26R61	4	3.5	0	1	3
4	McCormick	4	3.5	0	1	2
5	TN04-01	2	3.0	0	1	3
6	NC00-15332	2	4.0	1	1	2
7	MV 5-46	4	4.5	1	1	3
8	SC996284	4	4.5	5	5	3
9	SC996289	2	4.5	5	5	3
10	961526-3E15	1	5.0	0	2	3
11	961176-3A48	5	4.5	0	1	3
12	96229-3A41	1	6.0	0	2	3
13	951395-3A31	4	5.0	0	1	2
14	B990081	4	3.0	0	1	3
15	B990133	2	3.0	0	1	3
16	B990399	2	3.0	1	1	3
17	B990816	2	3.0	0	1	2
18	LA95181BUB40-1	3	5.0	1	1	3
19	LA96140BUA70-2	4	3.5	3	1	4
20	LA95135D54-2-3	4	5.0	5	5	3
21	AR 850-1-1	1	3.5	0	1	1
22	AR 93027-5-1	5	4.0	0	4	1
23	FL9547-B15-C1-D3	1	7.0	0	3	3
24	FL95345-A10-C5	1	4.5	1	1	2
25	FL99089-D35	4	4.5	1	3	3
26	D00*6874-9	2	6.0	0	2	2
27	D00*6874-2	2	5.5	0	2	1
28	D01-7017	1	5.5	0	1	1
29	D01*7759	3	4.5	5	3	1
30	VA01W-21	2	4.5	0	1	2
31	VA02W-513	1	4.0	0	1	1
32	VA02W-555	1	4.0	0	1	2
33	VA02W-370	1	4.0	0	1	2
34	981543A1-1-9-3	2	3.0	0	1	2
35	99751RA1-6-3	4	3.5	2	1	3
36	NC01-27750	1	4.0	1	1	3
37	NC00-15371	3	5.0	0	2	3
38	NC01-28087	4	5.0	0	1	3
39	G20412	3	3.5	0	2	3
40	G20921	3	4.5	0	2	4
41	G20922	2	5.5	0	3	3
LOCATION MEANS		2.5	4.3	1.0	1.8	2.5

HESSIAN FLY

		W. Lafayette IN Cambron				
		Biotype B	Biotype C	Biotype D	Biotype E	Biotype L
1	AGS 2000	0-16	0-15	0-15	3-11	0-12
2	USG 3209	12-2	0-15	0-16	13-2	0-15
3	Pioneer 26R61	2-12	0-15	0-11	14-0	0-18
4	McCormick	0-16	0-17	0-18	0-13	0-16
5	TN04-01	0-15	0-15	0-16	0-16	0-12
6	NC00-15332	0-18	0-20	0-15	8-5	0-15
7	MV 5-46	0-19	0-16	0-12	0-14	0-16
8	SC996284	13-1	3-11	11-4	14-0	11-5
9	SC996289	16-0	4-14	11-2	14-0	14-4
10	961526-3E15	0-16	0-15	0-15	0-12	0-17
11	961176-3A48	18-0	15-0	16-0	14-0	20-0
12	96229-3A41	16-1	17-0	4-15	13-0	0-20
13	951395-3A31	0-19	0-15	0-15	0-15	0-16
14	B990081	12-3	0-15	0-15	17-0	0-18
15	B990133	14-1	0-15	0-16	16-0	0-17
16	B990399	0-15	0-15	0-15	0-16	0-15
17	B990816	0-17	0-14	0-16	0-11	0-19
18	LA95181BUB40-1	0-15	0-14	0-13	15-0	0-17
19	LA96140BUA70-2	0-18	0-19	0-17	2-14	0-19
20	LA95135D54-2-3	1-12	6-8	0-16	0-16	0-14
21	AR 850-1-1	0-18	0-16	0-16	0-16	0-17
22	AR 93027-5-1	8-8	2-13	1-17	13-2	0-16
23	FL9547-B15-C1-D3	0-14	11-2	0-14	10-5	0-16
24	FL95345-A10-C5	0-14	0-15	0-13	0-17	0-19
25	FL99089-D35	0-17	0-18	0-18	8-9	0-20
26	D00*6874-9	0-19	0-16	0-18	0-18	0-18
27	D00*6874-2	0-17	0-16	0-17	0-16	0-17
28	D01-7017	0-19	0-14	0-17	0-18	0-17
29	D01*7759	12-4	0-17	0-14	15-0	0-20
30	VA01W-21	0-17	0-15	0-18	0-17	0-15
31	VA02W-513	0-16	0-15	0-19	0-12	0-17
32	VA02W-555	0-18	0-14	0-15	0-13	0-18
33	VA02W-370	18-0	14-4	8-5	15-0	0-19
34	981543A1-1-9-3	0-17	2-12	0-20	0-12	0-16
35	99751RA1-6-3	11-3	3-9	4-12	9-0	10-4
36	NC01-27750	0-18	0-16	0-16	0-17	0-20
37	NC00-15371	0-15	0-16	0-15	0-16	0-17
38	NC01-28087	0-15	0-13	0-15	12-0	0-18
39	G20412	10-3	0-16	0-17	13-0	0-14
40	G20921	10-4	0-18	0-16	17-0	0-14
41	G20922	12-2	0-13	0-13	14-0	0-17

ACID SOIL TOLERANCE

		Enid OK Carver		
		1-5	1-5	1-5
1	AGS 2000	2	3	3
2	USG 3209	1	2	2
3	Pioneer 26R61	3	2	2
4	McCormick	3	3	4
5	TN04-01	2	1	1
6	NC00-15332	2	1	1
7	MV 5-46	2	2	3
8	SC996284	3	3	3
9	SC996289	3	2	2
10	961526-3E15	3	3	4
11	961176-3A48	2	1	2
12	96229-3A41	2	3	3
13	951395-3A31	2	3	2
14	B990081	4	4	4
15	B990133	2	1	1
16	B990399	3	2	3
17	B990816	1	1	2
18	LA95181BUB40-1	2	3	4
19	LA96140BUA70-2	1	1	2
20	LA95135D54-2-3	3	3	3
21	AR 850-1-1	3	3	1
22	AR 93027-5-1	3	3	3
23	FL9547-B15-C1-D3	4	4	5
24	FL95345-A10-C5	2	3	3
25	FL99089-D35	1	2	3
26	D00*6874-9	1	1	2
27	D00*6874-2	2	2	3
28	D01-7017	1	1	1
29	D01*7759	1	1	2
30	VA01W-21	1	1	3
31	VA02W-513	1	2	3
32	VA02W-555	1	1	1
33	VA02W-370	1	2	3
34	981543A1-1-9-3	2	2	3
35	99751RA1-6-3	2	3	4
36	NC01-27750	1	1	2
37	NC00-15371	3	1	3
38	NC01-28087	2	2	4
39	G20412	2	2	2
40	G20921	2	2	4
41	G20922	1	1	2
DATE		March 19	April 14	May 18

1RS STATUS

		Lincoln NE Graybosch
1	AGS 2000	1BL.1RS
2	USG 3209	1BL.1RS
3	Pioneer 26R61	1BL.1RS
4	McCormick	1AL.1RS
5	TN04-01	1BL.1RS
6	NC00-15332	1BL.1RS+/-
7	MV 5-46	1BL.1RS
8	SC996284	Non.1RS
9	SC996289	Non.1RS
10	961526-3E15	1BL.1RS
11	961176-3A48	Non.1RS
12	96229-3A41	Non.1RS
13	951395-3A31	1BL.1RS
14	B990081	Non.1RS
15	B990133	Non.1RS
16	B990399	1BL.1RS
17	B990816	Non.1RS
18	LA95181BUB40-1	Non.1RS
19	LA96140BUA70-2	Non.1RS
20	LA95135D54-2-3	Non.1RS
21	AR 850-1-1	Non.1RS
22	AR 93027-5-1	Non.1RS
23	FL9547-B15-C1-D3	Non.1RS
24	FL95345-A10-C5	1BL.1RS
25	FL99089-D35	Non.1RS
26	D00*6874-9	Non.1RS
27	D00*6874-2	Non.1RS
28	D01-7017	Non.1RS
29	D01*7759	Non.1RS
30	VA01W-21	1BL.1RS
31	VA02W-513	Non.1RS
32	VA02W-555	1BL.1RS
33	VA02W-370	Non.1RS
34	981543A1-1-9-3	1BL.1RS
35	99751RA1-6-3	1BL.1RS
36	NC01-27750	1BL.1RS
37	NC00-15371	Non.1RS
38	NC01-28087	1BL.1RS
39	G20412	Non.1RS
40	G20921	Non.1RS
41	G20922	Non.1RS

United States Department of Agriculture
Research, Education, and Economics
Agricultural Research Service

September 30, 2005

Dr. Steve Harrison
Louisiana State University
Agronomy Dept.
104 M.B. Sturgis Hall
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Dr. Harrison:

Attached are the quality data for the 2005 crop year of the Southern Soft Red Winter Wheat Nursery. You will recall that, as the samples are composites, we do only a minimal cleaning of the grain before milling. Even though test weights do not suggest a significant problem with grain condition, we did notice a significant portion of shriveled grain after the light cleaning.

That shriveled condition appears to have reduced the flour yield and elevated the softness of the checks, resulting in lowered mill scores than expected for AGS 2000 and Pioneer 26R61. Often, poor grain condition has a greater effect on the better milling wheat cultivars. Thus, we could not utilize either of those two cultivars as quality checks for analyses.

We chose USG 3209 as the quality check. The overall result was that most of the samples scored a “C” or a “D” for milling quality. Again, the scores of the better milling checks were depressed by grain condition and it can be expected that the scores of the better milling test lines were depressed, as well. From this set, lactic acid solvent retention capacities above 140 indicate soft wheats that have strong gluten.

The other data look good. As always, each line should be compared against the others and, even though the data were influenced by grain condition, that influence does not appear so large as to suggest that the results for 2005 cannot be utilized for comparative purposes.

Best regards,

Charles Gaines
Research Leader

Charles Gaines
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2005 Crop
Advanced Nursery Evaluation

Entries #2501-#2541
Steve Harrison
Baton Rouge, LA
Uniform Southern Nursery

The standard data is compared to the "Historical Average" for the cultivar, and quality scores for all entries are adjusted to this average.

The samples in this nursery were compared to entry #2502, USG 3209. Of the 734 cultivars in the SWQL data-base of Allis-milled cultivars, USG 3209 ranked 633rd for Milling Score, based on data from 5 Allis millings.

	Allis Data-base	Standard	Quad Data-base
Test Weight	61.2	61.1	61.2
Flour Yield	76.5	69.7	70.1
Break Flour	28.9		
E.S.I.	11.6		
Softness Equivalent	49.9	56.9	49.9
Friability	26.5		
Protein	8.5	8.0	8.5
Ash	0.45		
Cookie Diameter	17.1	17.1	17.4
Lactic Acid Retention	97	116	111
Mill Score	53.2 D	53.2 D	
Bake Score	43.0 E	43.0 E	
Test Wt. Score	58.3 D	58.3 D	
S.E. Score	58.3 D	58.3 D	

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

Milling Quality Score Factor	-3.4
Baking Quality Score Factor	+1.3
Softness Equivalent Factor	-20.0
Test Weight Score Factor	+1.2

Samples were "lightly" cleaned prior to analysis. Several of the samples still had light to moderate shriveled kernels.

Test weights for the nursery were generally good with an average test weight for all 41 entries of 61.6 lb/bu. Of particular note was entry #2505 (TN04-01) which had a test weight of 64.0 lb/bu and was the only entry to earn an "A".

The S.E. of the standard was much higher than expected (56.9% vs. 49.9%, historically). Both AGS 2000 (60.0% vs. 56.3%) and McCormick (63.2% vs. 57.3%) exhibited S.E. values that were similarly elevated. This would indicate that the samples were weathered causing them to be softer than normal. The S.E. Scores were adjusted downward by 20.0 points as a result.

While the flour yields of USG 3209 and McCormick matched very well with their historic values, the flour yields of AGS 2000 and Pioneer 26R61 were lower by 1.1% and 1.2%, respectively.

Sample #2509, (SC996289) had yellow flour when milled.

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.		Samples composited from Bay AR, Belle Mina AL, Evansville IN, Queenstown MD, Newton MS, Knoxville TN, Warsaw VA	MILLING QUALITY SCORE		BAKING QUALITY SCORE		TEST WT. SCORE		SOFT. EQUIV. SCORE		MICRO T.W. LB/BU
		STANDARD (#2502, USG 3209)	53.2	D	43.0	E	58.3	D	58.3	D	61.1
2501	1	AGS 2000	66.9	C	68.7	C	61.8	C	67.2	C	61.5
2502	2	USG 3209	53.2	D	43.0	E	58.3	D	58.3	D	61.1
2503	3	Pioneer 26R61	53.4	D	52.3	D	71.7	B	55.4	D	62.7
2504	4	McCormick	59.3	D	63.0	C	65.1	C	76.4	B	61.9
2505	5	TN04-01	63.6	C	65.7	C	82.7	A	64.4	C	64.0
2506	6	NC00-15332	40.0	E	66.3	C	48.7	E	67.0	C	59.9
2507	7	MV 5-46	51.8	D	66.0	C	61.8	C	66.2	C	61.5
2508	8	SC996284	56.3	D	60.3	C	71.8	B	77.0	B	62.7
2509	9	SC996289	53.0	D	41.7	E	65.8	C	74.2	B	62.0
2510	10	961526-3E15	51.2	D	62.3	C	62.1	C	69.9	C	61.5
2511	11	961176-3A48	47.6	E	27.7	F	71.9	B	62.8	C	62.7
2512	12	96229-3A41	52.5	D	59.0	D	63.8	C	64.7	C	61.7
2513	13	951395-3A31	64.0	C	48.0	E	65.4	C	58.6	D	61.9
2514	14	B990081	56.8	D	84.7	A	65.6	C	65.5	C	61.9
2515	15	B990133	58.9	D	77.3	B	68.7	C	66.9	C	62.3
2516	16	B990399	66.1	C	73.0	B	76.0	B	61.1	C	63.2
2517	17	B990816	65.8	C	79.0	B	69.5	C	55.0	D	62.4
2518	18	LA95181BUB40-1	56.9	D	81.0	A	52.3	D	83.8	A	60.3
2519	19	LA96140BUA70-2	52.2	D	68.0	C	68.5	C	54.2	D	62.3
2520	20	LA95135D54-2-3	49.9	E	51.0	D	49.1	E	81.4	A	60.0
2521	21	AR 850-1-1	68.4	C	69.0	C	55.7	D	69.2	C	60.7
2522	22	AR 93027-5-1	55.4	D	72.7	B	55.4	D	78.8	B	60.7
2523	23	FL9547-B15-C1-D3	68.0	C	79.7	B	48.8	E	63.5	C	59.9
2524	24	FL95345-A10-C5	53.6	D	52.0	D	72.3	B	54.2	D	62.7
2525	25	FL99089-D35	57.9	D	64.7	C	70.6	B	54.5	D	62.5
2526	26	D00*6874-9	49.2	E	60.3	C	66.5	C	68.7	C	62.0
2527	27	D00*6874-2	49.4	E	47.7	E	68.1	C	64.6	C	62.2
2528	28	D01-7017	45.9	E	55.7	D	53.4	D	65.7	C	60.5
2529	29	D01*7759	59.7	D	60.7	C	57.3	D	76.7	B	60.9
2530	30	VA01W-21	49.7	E	60.7	C	65.4	C	64.9	C	61.9
2531	31	VA02W-513	48.4	E	49.0	E	66.4	C	57.3	D	62.0
2532	32	VA02W-555	53.3	D	65.7	C	56.1	D	59.4	D	60.8
2533	33	VA02W-370	50.8	D	50.7	D	70.2	B	61.4	C	62.5
2534	34	981543A1-1-9-3	53.6	D	46.3	E	68.3	C	62.1	C	62.3
2535	35	99751RA1-6-3	40.1	E	44.0	E	50.4	D	64.2	C	60.1
2536	36	NC01-27750	54.1	D	58.3	D	50.7	D	61.4	C	60.1
2537	37	NC00-15371	58.2	D	67.0	C	62.7	C	57.1	D	61.6
2538	38	NC01-28087	48.9	E	89.7	A	53.5	D	75.5	B	60.5
2539	39	G20412	51.3	D	65.7	C	51.7	D	66.3	C	60.3
2540	40	G20921	43.7	E	34.3	F	67.8	C	53.9	D	62.2
2541	41	G20922	41.0	E	53.3	D	66.4	C	49.9	E	62.0

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.		Samples composited from Bay AR, Belle Mina AL, Evansville IN, Queenstown MD, Newton MS, Knoxville TN, Warsaw VA	FLOUR YIELD %		SOFT. EQUIV. %	FLOUR PROT. %		LACTIC ACID RET'N	COOKIE DIAM. CM.		TOP GR.
		STANDARD (#2502, USG 3209)	69.7		56.9	7.97		116.3	17.05		3
2501	1	AGS 2000	72.4		60.0	8.52		110.8	17.82		5
2502	2	USG 3209	69.7		56.9	7.97		116.3	17.05		3
2503	3	Pioneer 26R61	69.7		55.9	8.97	*	117.0	17.33		4
2504	4	McCormick	70.9		63.2	8.43		123.9	17.65		4
2505	5	TN04-01	71.7		59.0	9.22	*	106.1	17.73		4
2506	6	NC00-15332	67.0	Q	60.0	7.84		109.0	17.75		4
2507	7	MV 5-46	69.4		59.7	8.35		106.9	17.74		3
2508	8	SC996284	70.3		63.4	8.42		134.4	17.57		4
2509	9	SC996289	69.6		62.5	8.45		137.0	17.01		2
2510	10	961526-3E15	69.3		61.0	8.38		118.7	17.63		3
2511	11	961176-3A48	68.5	*	58.5	8.48		136.7	16.59	Q	1
2512	12	96229-3A41	69.5		59.2	8.39		133.7	17.53		4
2513	13	951395-3A31	71.8		57.0	8.20		106.0	17.20		3
2514	14	B990081	70.4		59.4	8.15		138.2	18.30		4
2515	15	B990133	70.8		59.9	8.67	*	140.5	18.08		4
2516	16	B990399	72.2		57.9	7.92		109.7	17.95		4
2517	17	B990816	72.2		55.8	8.12		118.0	18.13		5
2518	18	LA95181BUB40-1	70.4		65.8	7.15		119.6	18.19		4
2519	19	LA96140BUA70-2	69.5		55.5	9.01	*	117.6	17.80		4
2520	20	LA95135D54-2-3	69.0		65.0	7.89		123.5	17.29		3
2521	21	AR 850-1-1	72.7		60.7	8.05		127.2	17.83		4
2522	22	AR 93027-5-1	70.1		64.1	7.93		123.9	17.94		4
2523	23	FL9547-B15-C1-D3	72.6		58.7	8.10		135.4	18.15		3
2524	24	FL95345-A10-C5	69.7		55.5	8.91	*	116.7	17.32		2
2525	25	FL99089-D35	70.6		55.6	8.89	*	119.2	17.70		4
2526	26	D00*6874-9	68.9	*	60.5	8.47		115.0	17.57		3
2527	27	D00*6874-2	68.9	*	59.1	8.78	*	119.4	17.19		2
2528	28	D01-7017	68.2	*	59.5	8.40		139.9	17.43		3
2529	29	D01*7759	71.0		63.4	8.41		149.0	17.58		3
2530	30	VA01W-21	69.0		59.2	7.93		110.1	17.58		3
2531	31	VA02W-513	68.7	*	56.6	8.64	*	125.4	17.23		3
2532	32	VA02W-555	69.7		57.3	8.35		114.2	17.73		3
2533	33	VA02W-370	69.2		58.0	8.14		123.4	17.28		3
2534	34	981543A1-1-9-3	69.7		58.2	9.15	*	115.4	17.15		2
2535	35	99751RA1-6-3	67.0	Q	59.0	8.84	*	119.6	17.08		2
2536	36	NC01-27750	69.8		58.0	8.36		111.3	17.51		2
2537	37	NC00-15371	70.6		56.5	8.77	*	124.1	17.77		3
2538	38	NC01-28087	68.8	*	62.9	8.16		91.5	18.45		4
2539	39	G20412	69.3		59.7	8.47		117.3	17.73		5
2540	40	G20921	67.8	Q	55.4	8.45		135.1	16.79	*	1
2541	41	G20922	67.2	Q	54.0	9.08	*	133.5	17.36		2