UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Service

State Agricultural Experiment Stations, Cooperating

2002 - 2003

UNIFORM SOUTHERN SOFT RED WINTER WHEAT NURSERY

Report

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

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

USDA-ARS
National Small Grains Germplasm Research Facility
1691 S. 2700 W.
Aberdeen, ID 83210

November, 2003

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2002-2003 UNIFORM SOUTHERN SOFT RED WINTER WHEAT NURSERY

LIST OF ENTRIES AND PEDIGREES

Entry No.	Cultivar/ Designation	Pedigree	Contributor	1st Year in Nurs
1	Coker 9663	IN71761A4-31-5-48/FL 302	Check	97-98
2	AGS 2000	Pio.2555/PF84301//FL 302 (formerly GA89482E7)	Check	97-98
3	USG 3209	Saluda/4/Massey*2/3/Massey*3/Balkan//Saluda (formerly VA94-54-479)	Check	95-96
4	Pioneer 26R61	Omega78/S76/4/Arthur71/3/Stadler//Redcoat/Wisc1/5/Coker747 /6/2555sib (formerly XW663)	Check	97-98
5	SC 960057	VA66-54-6/VA55-54-19//Co?/3/H14H15/4/Andy	Graham	00-01
6	G/F 931241E16	Ck9134/881502	Johnson	01-02
7	G/F 93052E42	841266/881404//831378	Johnson	01-02
8	F/G 931470E62	83484/87467	Barnett	01-02
9	F/G 931233E17	Gore*2/83267	Barnett	01-02
10	AR 910-9-1	AR369-4-2/Bayles	Bacon	01-02
11	NC 98-26143	Saluda/GA801468//C9904	Murphy	01-02
12	NC 99-13022	W275126/Madison//FL85363/CL850643/3/GA8610-D6	Murphy	02-03
13	NC 98-24182	P81401A1-42-1/Saluda/3/P2555/C9907//MV14/Wakefield	Murphy	02-03
14	VA 00W-526	FFR555W/VA91-54-343(IN71761A4-31-5-48//71-54-147/MCN1813)// GA8619/D25(MCN1003/CK797/3/Hunter//Veery/Amigo)	Griffey	02-03
15	VA98W-335	CK983//GA-Andy/VA90-21-20(79IWWRN67//CK65-20/ATR)	Griffey	02-03
16	VAN98W-342	CK983//GA-Andy/VA90-21-20(79IWWRN67//CK65-20/ATR)	Griffey	02-03
17	VA98W-631	VA92-52-11(A55-2//AXM/9*CC/3/Pio2550)/VA92-52-52(Adria/2*Sal)	Griffey	02-03
18	LA 9330D11-1	GA80078-P1988/Tejon//SAV	Harrison	02-03
19	LA 9560CA22-1	FL302/FR81-19(GA85430-D17-2-P1)//CK9663	Harrison	02-03
20	AW D99-5261	AW91M*1365/T814	Fogleman	02-03
21	AW L96*9266-1	Bow'S/Pio2548//CK9134	Fogleman	02-03
22	AW D99*5725	AWE87-6646/Pio2580	Fogleman	02-03
23	AW M96*3978-4	AWSW85*96/AW88M-3454	Fogleman	02-03
24	AR 93035-4-1	Pio2548/4549-W2-1	Bacon	02-03
25	G/F 94261E7	AGS2000//GA841114/FFR518	Johnson	02-03
26	G 96195	OH413/L890690	Brown	02-03
27	G 96226	T814/L900819	Brown	02-03
28	G 19844	VA91-54-219/ABI89-4584	Brown	02-03
29	F/G 931630E48	Fleming/Pio2580//84200-7	Barnett	02-03
30	MO 002001	MO12278/Coker9474	McKendry	02-03
31	SC 980890	SC861562/VA66-54-6/VA66-54-10//Coker?/3/82104B1-3-2(H14H15) /5/GA811268-3-2-1-4	Graham	02-03
32	B980582	L881060/L880436	Hancock	02-03
33	B980696	L880421/Boranjka	Hancock	02-03
34	B980954	MOW9862/Coker9877	Hancock	02-03
35	B980416	Coker9543/ABI85-81	Hancock	02-03
36	MD 71-5	CK983//GA-Andy/VA90-21-20(79IWWRN67//CK65-20/ATR)	Costa	02-03
37	TX 00D1626	TX89D9615/L870537	Sutton	02-03

LOCATION NOTES

Belle Mina, Alabama

Cooperators:	Kathryn M. Glass Auburn University
Planted:	November 13, 2002
Harvested:	June 10, 2003
Fertilizer:	80 N

Bay, Arkansas

Cooperators:	June Hancock, Craig Allen, David Hill, Richard Gray Syngenta Seeds
Planted:	October 16, 2002
Harvested:	Jun 21, 2003
Comments:	Wet, wet, wet all season long. Long cool, wet spring.

DeWitt, Arkansas

Cooperators:	Barton Fogleman, Michael Montgomery, Chris DeArmond AgriPro Wheat
Planted:	October 31, 2002
Harvested:	June 5, 2003
Comments:	Stripe rust was very aggressive early, but diminished later in wheat development. Most "?" in leaf rust column indicate leaf already damaged from other disease (usually stripe rust).

Fayetteville,
Kibler,
Pine Tree, Arkansas

Cooperators:	Gene Milus University of Arkansas
Comments:	Fayetteville: Plot was inoculated with a stripe rust isolate that was supposed to be race PST-78 (virulent on Lemhi, Heines VII, Lee, Fielder, Express, Yr8, Yr9, Clement, and Compare), but the isolate was virulent only on Lemhi, Lee, Fielder, Express, and Yr9. Data recorded were percentage of flag leaf area with sporulating pustules on May 5 at soft dough stage. Pine Tree: Inoculated with infested straw from two locations. Data recorded were percentage of flag leaf area with tan spot symptoms on May 9 at the soft dough stage. Kibler: Inoculated with race TNRL leaf rust (virulent on Lr 1, 2a, 2c, 3, 9, 24, 3ka, 11, 30, 10). Data recorded were percentage of flag leaf area with leaf rust on May 21 at late soft dough stage; infection type used a 0-4 scale.

Stuttgart, Arkansas

Cooperators:	Robert Bacon, John Kelly, Charles Parsons University of Arkansas
Planted:	October 31, 2002
Harvested:	June 10, 2003
Fertilizer:	150 lbs of 0-46-0 + 100 N

Sussex County, Delaware

Cooperators:	Bob Uniatowski University of Delaware
Planted:	October 24, 2002
Harvested:	July 17, 2003
Fertilizer:	100 N

Marianna, Florida

Cooperators:	Ronald D. Barnett, Lloyd Schell University of Florida
Planted:	December 4, 2002
Fertilizer:	75-50-75

Quincy, Florida

Cooperators:	Ronald D. Barnett, Lloyd Schell University of Florida
Fertilizer:	75-50-75

Griffin, Georgia

Cooperators:	Jerry Johnson, Barry Cunfer, Dan Bland University of Georgia
Planted:	November 2, 2002
Harvested:	June 2, 2003
Fertilizer:	20 N preplant; 80 N topdress

Plains, Georgia

Cooperators:	Jerry Johnson, Barry Cunfer, Dan Bland University of Georgia
Planted:	November 23, 2002
Harvested:	May 28, 2003
Fertilizer:	15 N preplant; 80 N topdress

Aberdeen, Idaho

Cooperators:	Charles Erickson, Scott McNeil, Harold Bockelman USDA-ARS, National Small Grains Collection
Planted:	September 16, 2002
Harvested:	July 10, 2003

Ft. Branch, Indiana

Cooperators:	Benjamin Moreno-Sevilla, Justin Cooley Western Plant Breeders
Planted:	October 14, 2002
Harvested:	June 24, 2003

Greensburg, Indiana

Cooperators:	Sam Brown Genesis Seed Research
Planted:	September 10, 2002
Harvested:	July 8, 2003
Fertilizer:	80 N spring
Comments:	Very wet at harvest time.

Lafayette, Indiana

Cooperators:	Sam Brown Genesis Seed Research
Planted:	September 13, 2002
Harvested:	July 21, 2003
Fertilizer:	24-40-40 fall; 80-0-0 spring
Comments:	Cool spring, ample moisture. Very wet at harvest time. Yield and test weights taken after 14.5 inches of rain. Some Fusarium.

West Lafayette, Indiana

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

Manhattan,
Parsons, Kansas

Cooperators:	Allan Fritz, Lucretia Coonrod Kansas State University

Winfield, Kansas

Cooperators:	Sid Perry WestBred
Planted:	October 15, 2002
Harvested:	June 20, 2003
Comments:	Soil borne mosaic was not a factor. Leaf blight complex was primarily leaf rust/tan spot/some Septoria.

Logan County, Kentucky

Cooperators:	David Van Sanford University of Kentucky

Planted: October 18, 2002
Harvested: June 22, 2003
Fertilizer: 110 N split at GS3, 5

Woodford County, Kentucky
Cooperators: David Van Sanford
University of Kentucky
Planted: October 24, 2002
Harvested: July 2, 2003
Fertilizer: 110 N split at GS3, 5

Baton Rouge, Louisiana
Cooperators: Steven A. Harrison, Kelly Arceneaux, Fred LaRue
Louisiana State University
Planted: November 29, 2002
Harvested: May 22, 2003
Fertilizer: 16-48-48 preplant; 38-0-0 on 2/3; 60-0-0 on 3/11
Comments: Stands were somewhat irregular due o wet soil and rainfall after planting. Rainfall of about 12" in February. Very dry from mid-April through end of May with less than 1" over the 7-week period prior to harvest. Moderate stripe rust and light leaf rust pressure. No lodging. Phenotype is the mean of ratings taken on 4/18 and 5/4 with 0=best and 9=worst. Seed quality rating 0=very pretty seed; 9=very shriveled and poor.

Queenstown, Maryland
Cooperators: Jose Costa, Aaron Cooper
University of Maryland
Planted: October 15, 2002
Harvested: July 9, 2003
Comments: Good emergence, but flooding thinned several plots. Poor test, scab was heavy, rains delayed harvest which further reducing test weights.

St. Paul, Minnesota
Cooperators: James Kolmer, Dave Long
USDA-ARS Cereal Disease Laboratory
Comments: Seedling and adult plant reaction to leaf rust and stem rust.

Portageville, Missouri
Cooperators: Anne L. McKendry, David N. Tague
University of Missouri
Planted: November 8, 2002
Harvested: June 24, 2003
Fertilizer: 120 N

Comments:	Late planting into wet seedbed. Wet spring. Cool to normal temperatures during grainfill. Flag leaves clean through milk stage despite wet conditions. Stand and tiller numbers were reduced due to wet fall and winter conditions. These conditions limited yield. Harvest period was dry.

Cleveland, Mississippi

Cooperators:	Barton Fogleman, Michael Montgomery, Chris DeArmond AgriPro Wheat
Planted:	November 19, 2002
Harvested:	June 9, 2003

Newton, Mississippi

Cooperators:	Bernie White Mississippi State University
Planted:	November 25, 2002
Harvested:	May 29, 2003

Lincoln, Nebraska

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

Kinston, North Carolina

Cooperators:	Paul Murphy, Rene Navarro North Carolina State University
Planted:	November 11, 2002
Comments:	Rained from the day we planted to the day we harvested. Poor emergence and growth in low spots. Don't be fooled by the CV. This was a poor test with many missing plots. Yields are LS means.

Wooster, Ohio

Cooperators:	Clay Sneller Ohio State University, OARDC
Comments:	Prolonged wet and cool spring followed by a period of heat. Grain fill was poor resulting in lower yields than normal. Head diseases, though not rated as they came in late, were also a problem. Repeated rains during maturation reduced test weights.

Wooster, Ohio

Cooperators:	Charles Gaines USDA-ARS Soft Wheat Quality Lab
Comments:	Provided the quality data.

Enid, Oklahoma

Cooperators:	Brett Carver Oklahoma State University
Comments:	Acid soil tolerance ratings, where 1=tolerant and 5=susceptible. Standard was 2163 with a rating of 2. Genotypic differences in forage potential and winter dormancy pattern introduced bias in the first two ratings.

Florence, South Carolina

Cooperators:	Benjamin Edge, Doyce Graham, Myers Clemson University
Planted:	November 21, 2002
Harvested:	June 24, 2003
Fertilizer:	30 N preplant; 50 N topdress; 1000 lime
Comments:	Close to normal rainfall. Limited disease development. No evidence of Hessian fly damage.

Knoxville, Tennessee

Cooperators:	Dennis West University of Tennessee
Planted:	October 27, 2002
Harvested:	June 14, 2003
Fertilizer:	15-45-45 fall; 45 N spring

Prosper, Texas

Cooperators:	Russell Sutton Texas A&M University

Blacksburg, Virginia

Cooperators:	Carl A. Griffey, T. Pridgen Virginia Tech
Planted:	October 7, 2002
Harvested:	July 12, 2003
Fertilizer:	25-70-60 on 10/8; 80-0-0 on 3/23
Comments:	One-replicate observation. Belgian lodging scale: area x intensity x 0.2; area is rated 1=plot unaffected to 10=entire plot affected; intensity is rated 1=plants standing upright to 5=plants lying flat on ground. Greenhouse powdery mildew used a composite isolate from Lynda Whitcher, USDA-ARS, Raleigh, NC.

Warsaw, Virginia

Cooperators:	Carl A. Griffey, J. Kenner Virginia Tech
Planted:	October 21, 2002

Harvested:	June 29, 2003
Fertilizer:	30-100-60 on 10/2
Comments:	Belgian lodging scale: area x intensity x 0.2; area is rated 1=plot unaffected to 10=entire plot affected; intensity is rated 1=plants standing upright to 5=plants lying flat on ground. Wheat Spindle Streak Virus data taken on only one rep. Multiple disease scores indicate variability in disease reaction within plot.

Mt. Vernon,
Pullman, Washington

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

YIELD (bu/acre)

		Belle Mina		Bay		DeWitt		Stuttgart		Sussex Co.	
		AL		AR		AR		AR		DE	
		a		ab		ab		ab		a	
			rank		rank		rank		rank		rank
1	Coker 9663	67.4	3	67.4	19	91.8	30	84.6	14	33.6	10
2	AGS 2000	65.8	5	67.5	18	101.7	15	86.0	12	31.4	20
3	USG 3209	63.3	11	64.9	28	106.5	10	90.2	5	33.1	12
4	Pioneer 26R61	54.5	36	68.5	14	103.1	14	81.2	22	27.1	32
5	SC 960057	58.1	28	62.1	34	95.5	25	79.1	27	28.8	27
6	G/F 931241E16	62.4	14	68.5	15	101.0	17	87.1	10	36.6	5
7	G/F 93052E42	57.1	29	69.5	12	93.5	28	88.5	6	35.3	9
8	F/G 931470E62	60.3	22	65.3	27	95.1	26	80.8	24	35.7	7
9	F/G 931233E17	56.6	30	63.2	33	100.2	18	87.6	9	31.0	23
10	AR 910-9-1	59.8	23	66.2	26	112.5	2	81.5	21	26.7	33
11	NC 98-26143	62.8	13	66.2	25	83.0	32	72.3	36	31.8	18
12	NC 99-13022	59.8	23	64.8	29	112.0	4	91.4	3	30.1	25
13	NC 98-24182	55.8	33	64.6	30	94.2	27	80.9	23	32.7	14
14	VA 00W-526	56.0	32	73.9	5	110.3	5	99.9	1	35.7	7
15	VA 98W-335	55.2	35	67.8	16	80.9	35	77.7	31	33.1	12
16	VAN98W-342	60.5	20	63.3	32	79.2	36	76.0	33	40.9	1
17	VA98W-631	56.2	31	76.9	1	107.0	9	91.3	4	28.8	27
18	LA 9330D11-1	59.4	25	60.7	35	99.3	21	80.3	25	36.1	6
19	LA 9560CA22-1	66.4	4	72.8	6	105.7	12	86.7	11	31.8	18
20	AW D99-5261	63.6	9	75.1	2	112.3	3	93.9	2	25.4	34
21	AW L96*9266-1	65.5	7	66.3	24	116.8	1	83.7	16	33.6	10
22	AW D99*5725	75.1	1	72.7	7	107.5	8	84.3	15	32.7	14
23	AW M96*3978-4	69.1	2	74.5	3	99.2	22	78.9	28	30.6	24
24	AR 93035-4-1	60.4	21	69.0	13	104.3	13	82.7	18	28.8	27
25	G/F 94261E7	61.1	17	74.2	4	109.3	6	78.5	29	31.4	20
26	G 96195	61.8	15	67.1	21	101.5	16	82.5	19	18.9	37
27	G 96226	61.5	16	70.9	10	98.6	23	71.9	37	39.6	3
28	G 19844	63.5	10	66.5	22	87.6	31	87.9	8	32.7	14
29	F/G 931630E48	65.6	6	64.3	31	106.4	11	79.4	26	31.4	20
30	MO 002001	53.7	37	70.4	11	82.3	33	75.1	34	29.3	26
31	SC 980890	55.7	34	60.3	37	99.5	20	73.0	35	32.7	14
32	B 980582	59.0	27	67.4	20	91.8	29	77.8	30	28.4	30
33	B 980696	60.7	19	72.6	8	97.6	24	82.9	17	21.5	36
34	B 980954	63.0	12	66.5	23	99.8	19	88.4	7	27.5	31
35	B 980416	64.1	8	71.5	9	81.4	34	82.1	20	40.0	2
36	MD 71-5	59.1	26	60.5	36	78.4	37	77.7	31	37.4	4
37	TX 00D1626	60.8	18	67.7	17	108.8	7	85.4	13	25.0	35
LOCATION MEANS		61.1		67.9		98.8		83.0		31.5	
LSD (.05)				7.9		10.2		11.7		5.3	
CV %				7.1		5.1		8.7		10.4	
REPS		3		3		2		3		3	
Harvest Plot Size (sq.ft.)		100		63.4		45.5		70		52.5	

YIELD (bu/acre)

		Marianna FL		Quincy FL		Griffin GA		Plains GA		Aberdeen ID	
		a		a		a		ab		b	
			rank		rank		rank		rank		rank
1	Coker 9663	62.3	6	77.9	2	64.9	17	72.8	35	114.6	33
2	AGS 2000	59.7	13	73.2	8	63.7	18	86.1	13	126.9	17
3	USG 3209	49.7	24	75.1	4	57.8	23	93.6	3	122.4	22
4	Pioneer 26R61	60.5	11	71.4	11	52.6	27	88.8	10	131.6	12
5	SC 960057	25.4	37	49.4	37	19.6	37	54.3	37	103.7	37
6	G/F 931241E16	61.5	7	66.1	20	66.5	12	93.5	4	125.0	18
7	G/F 93052E42	60.0	12	63.8	23	66.1	15	91.1	7	113.9	34
8	F/G 931470E62	61.1	9	70.4	13	66.3	13	82.1	23	116.2	31
9	F/G 931233E17	52.1	19	59.2	30	67.8	11	89.0	9	113.5	35
10	AR 910-9-1	62.7	5	71.0	12	59.1	21	95.2	1	121.3	24
11	NC 98-26143	48.6	25	65.7	21	66.2	14	78.5	26	120.2	27
12	NC 99-13022	62.9	4	67.8	17	35.8	36	86.0	14	134.2	9
13	NC 98-24182	47.9	26	67.0	19	59.5	20	81.5	25	124.4	19
14	VA 00W-526	51.8	20	75.1	4	73.5	6	92.9	5	134.0	10
15	VA 98W-335	36.9	33	54.6	35	69.7	9	76.3	31	132.7	11
16	VAN98W-342	32.4	35	60.2	28	72.6	8	78.4	28	116.3	30
17	VA98W-631	53.4	16	71.5	10	73.3	7	88.6	11	130.6	14
18	LA 9330D11-1	56.0	15	74.6	7	58.8	22	82.6	22	115.7	32
19	LA 9560CA22-1	64.8	1	87.5	1	68.5	10	85.9	15	130.6	13
20	AW D99-5261	43.5	31	57.8	33	54.9	25	77.4	29	139.5	1
21	AW L96*9266-1	53.0	17	69.1	14	75.7	5	85.9	15	138.7	3
22	AW D99*5725	63.0	3	65.6	22	65.7	16	85.7	17	124.3	20
23	AW M96*3978-4	46.8	27	59.4	29	49.4	29	70.2	36	139.2	2
24	AR 93035-4-1	57.9	14	75.1	4	47.7	32	86.3	12	135.9	7
25	G/F 94261E7	60.6	10	69.1	14	48.7	31	83.6	21	137.7	6
26	G 96195	44.3	30	51.4	36	43.0	35	74.0	34	121.4	23
27	G 96226	51.0	23	67.8	17	56.4	24	75.7	32	137.9	5
28	G 19844	28.4	36	60.6	27	49.1	30	84.8	18	130.1	16
29	F/G 931630E48	51.5	21	58.4	32	50.4	28	84.4	19	121.0	25
30	MO 002001	45.9	29	56.3	34	62.8	19	75.6	33	120.7	26
31	SC 980890	46.1	28	62.6	25	44.4	34	78.5	26	124.2	21
32	B 980582	61.4	8	72.0	9	80.5	1	94.3	2	138.5	4
33	B 980696	40.7	32	62.8	24	53.7	26	82.1	23	134.6	8
34	B 980954	64.7	2	69.0	16	77.4	2	92.3	6	130.2	15
35	B 980416	51.2	22	60.8	26	76.4	3	76.6	30	112.6	36
36	MD 71-5	36.5	34	58.7	31	76.2	4	89.7	8	120.0	28
37	TX 00D1626	52.8	18	75.5	3	47.5	33	84.4	19	119.9	29
LOCATION MEANS		51.6		66.3		60.1		83.2		125.8	
LSD (.05)		7.1		17.6				12.2		15.48	
CV %		12.8		16.3				7.1		8.96	
REPS		3		3		2		3		4	
Harvest Plot Size (sq.ft.)		46				50		50		21.77	

YIELD (bu/acre)

		Ft. Branch IN [a]		Greensburg IN		Lafayette IN		Manhattan KS		Parsons KS	
			rank		rank		rank		rank		rank
1	Coker 9663	70.9	15	91.7	2	99.0	13	51.3	32	70.3	10
2	AGS 2000	57.7	32	70.9	15	107.4	5	76.4	5	73.6	3
3	USG 3209	74.7	9	76.1	10	97.7	15	53.2	30	48.9	34
4	Pioneer 26R61	70.8	16	50.1	34	101.1	11	79.1	2	68.7	14
5	SC 960057	66.2	21	68.2	18	84.0	34	64.9	14	56.0	29
6	G/F 931241E16	58.4	30	65.6	19	83.0	36	59.5	22	63.2	20
7	G/F 93052E42	44.4	36	52.6	31	85.3	33	57.2	25	59.3	25
8	F/G 931470E62	66.3	20	48.5	35	88.2	27	41.8	37	50.0	33
9	F/G 931233E17	63.2	24	70.7	17	93.4	22	52.6	31	59.9	24
10	AR 910-9-1	75.4	7	87.0	4	96.1	19	61.1	20	72.5	6
11	NC 98-26143	43.9	37	52.2	33	92.4	26	78.0	3	72.5	5
12	NC 99-13022	53.3	34	58.4	26	87.8	28	75.1	6	51.1	31
13	NC 98-24182	78.7	1	57.1	27	106.3	6	56.5	26	57.1	28
14	VA 00W-526	74.4	11	65.4	21	101.0	12	67.6	12	64.8	15
15	VA 98W-335	72.5	13	70.9	15	97.2	17	61.0	21	50.5	32
16	VAN98W-342	67.2	19	65.1	22	108.9	4	63.9	16	52.2	30
17	VA98W-631	61.2	26	72.5	13	110.2	3	65.2	13	70.9	8
18	LA 9330D11-1	72.5	12	75.1	12	101.6	10	43.0	36	47.8	35
19	LA 9560CA22-1	58.7	29	82.5	8	102.4	9	58.6	24	70.9	8
20	AW D99-5261	75.5	6	75.8	11	97.3	16	83.5	1	69.2	13
21	AW L96*9266-1	60.6	27	80.2	9	112.5	2	64.1	15	71.4	7
22	AW D99*5725	59.8	28	59.7	24	83.7	35	76.4	4	62.6	21
23	AW M96*3978-4	63.6	23	59.0	25	74.7	37	70.4	9	64.3	18
24	AR 93035-4-1	71.2	14	55.0	29	85.5	32	67.9	11	73.1	4
25	G/F 94261E7	50.8	35	36.8	37	92.8	25	50.2	33	69.8	11
26	G 96195	74.7	10	55.2	28	86.3	30	62.0	18	69.8	11
27	G 96226	76.2	5	52.5	32	102.8	8	53.8	28	78.6	1
28	G 19844	76.3	4	65.6	19	96.4	18	73.2	8	57.7	27
29	F/G 931630E48	67.7	18	47.2	36	94.2	21	74.6	7	62.1	22
30	MO 002001	65.4	22	63.8	23	93.1	24	58.8	23	61.0	23
31	SC 980890	54.5	33	52.8	30	93.3	23	53.4	29	44.5	37
32	B 980582	78.4	2	91.2	3	113.5	1	68.8	10	77.5	2
33	B 980696	69.8	17	71.6	14	87.1	29	48.3	35	63.7	19
34	B 980954	58.0	31	85.4	6	106.0	7	62.8	17	58.8	26
35	B 980416	75.1	8	95.4	1	98.7	14	56.4	27	64.8	15
36	MD 71-5	61.8	25	84.6	7	86.1	31	61.6	19	47.8	35
37	TX 00D1626	77.9	3	86.8	5	95.9	20	48.9	34	64.3	17
LOCATION MEANS		66.2		67.5		95.8		62.2		62.7	
LSD (.05)		9.2									
CV %		10									
REPS		2		1		1		3		3	
Harvest Plot Size (sq.ft.)				32		32					

YIELD (bu/acre)

		Winfield KS		Logan Co. KY		Woodford Co. KY		Baton Rouge LA		Queenstown MD	
		ab		a		a		ab		a	
			rank		rank		rank		rank		rank
1	Coker 9663	77.4	1	79.5	5	63.5	36	74.1	25	49.3	5
2	AGS 2000	71.7	9	65.2	24	79.8	13	90.3	6	32.5	30
3	USG 3209	64.7	23	65.6	23	76.6	20	71.6	30	42.0	14
4	Pioneer 26R61	73.3	4	62.7	26	71.4	28	78.1	20	23.6	37
5	SC 960057	77.4	2	69.9	17	72.0	25	75.3	22	39.5	20
6	G/F 931241E16	68.7	14	70.3	15	74.5	24	87.5	9	44.0	12
7	G/F 93052E42	66.2	19	55.6	32	70.6	30	71.8	28	48.8	7
8	F/G 931470E62	62.1	28	59.4	30	54.4	37	74.0	26	35.3	28
9	F/G 931233E17	65.5	22	76.1	10	71.9	26	79.9	16	49.0	6
10	AR 910-9-1	60.1	31	73.3	13	75.7	22	88.1	8	39.0	21
11	NC 98-26143	71.9	7	71.3	14	69.1	31	48.2	37	40.7	19
12	NC 99-13022	47.6	37	70.0	16	82.7	6	85.9	12	35.9	26
13	NC 98-24182	64.1	24	69.7	19	78.0	16	79.6	18	38.5	22
14	VA 00W-526	60.2	30	58.6	31	93.2	1	77.0	21	51.6	3
15	VA 98W-335	71.7	8	54.7	33	81.4	9	54.7	35	37.2	25
16	VAN98W-342	59.5	32	67.5	21	75.6	23	54.4	36	59.5	2
17	VA98W-631	55.3	34	79.5	5	76.5	21	85.3	13	47.8	8
18	LA 9330D11-1	63.1	25	54.6	34	78.6	15	75.2	23	44.1	11
19	LA 9560CA22-1	57.8	33	68.3	20	80.5	11	93.6	2	44.0	12
20	AW D99-5261	67.0	18	83.9	1	82.1	7	81.5	15	37.6	23
21	AW L96*9266-1	69.6	11	62.6	27	80.0	12	88.9	7	29.7	32
22	AW D99*5725	62.4	27	67.4	22	76.9	18	101.7	1	33.9	29
23	AW M96*3978-4	69.5	13	77.5	8	77.9	17	86.1	11	32.4	31
24	AR 93035-4-1	72.2	6	79.7	4	87.8	4	93.2	3	29.6	34
25	G/F 94261E7	68.4	15	63.6	25	88.6	2	91.5	5	25.0	36
26	G 96195	72.5	5	78.3	7	78.7	14	92.5	4	35.7	27
27	G 96226	69.6	11	82.9	2	76.8	19	71.7	29	47.1	9
28	G 19844	69.7	10	75.7	11	84.9	5	67.7	31	46.4	10
29	F/G 931630E48	65.7	21	53.6	35	71.9	26	86.7	10	37.4	24
30	MO 002001	54.2	35	73.7	12	63.7	35	55.3	34	29.7	32
31	SC 980890	61.3	29	44.0	37	67.1	33	79.5	19	28.2	35
32	B 980582	75.9	3	60.3	29	64.0	34	79.8	17	49.9	4
33	B 980696	67.0	17	69.8	18	88.5	3	64.7	32	41.6	16
34	B 980954	65.9	20	76.8	9	70.9	29	73.1	27	41.3	18
35	B 980416	67.2	16	61.9	28	68.8	32	75.0	24	41.7	15
36	MD 71-5	53.9	36	53.4	36	81.6	8	57.4	33	61.9	1
37	TX 00D1626	62.6	26	80.7	3	81.3	10	81.7	14	41.6	17
LOCATION MEANS		65.8		68.0		76.1		77.6		40.4	
LSD (.05)		4.2		15.1		15.7		8.3 (.10)		11.1	
CV %		3.9		13.1		12.3		7.8		16.8	
REPS		2		2		2				3	
Harvest Plot Size (sq.ft.)		50		40		40				48	

YIELD (bu/acre)

		Portageville MO a	rank	Cleveland MS ab	rank	Newton MS a	rank	Kinston NC ab	rank	Wooster OH b	rank
1	Coker 9663	63.3	9	67.9	31	81.4	16	32.0	35	60.2	6
2	AGS 2000	60.1	14	81.7	5	73.5	32	49.2	19	50.3	22
3	USG 3209	53.2	29	75.6	16	88.4	4	56.1	5	49.5	23
4	Pioneer 26R61	65.5	6	78.2	10	76.2	29	50.6	14	53.9	15
5	SC 960057	58.2	16	66.1	32	53.9	37	42.5	26	45.1	28
6	G/F 931241E16	53.5	28	73.0	23	77.8	26	60.5	2	44.2	32
7	G/F 93052E42	62.5	11	69.6	26	78.3	22	55.7	6	52.3	17
8	F/G 931470E62	39.7	37	68.9	29	75.7	30	59.9	3	45.2	26
9	F/G 931233E17	57.7	17	73.6	20	81.8	13	50.3	16	52.7	16
10	AR 910-9-1	57.6	18	82.6	3	82.4	10	35.4	33	57.9	9
11	NC 98-26143	56.5	20	58.5	37	72.9	33	49.4	18	47.6	24
12	NC 99-13022	63.8	8	76.9	15	74.9	31	52.8	11	44.5	31
13	NC 98-24182	51.0	33	73.5	21	78.9	21	55.1	7	59.7	7
14	VA 00W-526	60.6	13	72.9	24	91.9	1	52.5	12	54.9	14
15	VA 98W-335	56.0	21	63.0	34	78.3	24	49.5	17	57.7	11
16	VAN98W-342	66.9	5	63.9	33	85.1	7	56.7	4	63.6	3
17	VA98W-631	68.3	1	73.0	22	84.8	8	50.6	15	64.6	1
18	LA 9330D11-1	44.4	35	68.5	30	77.8	27	47.2	21	43.7	33
19	LA 9560CA22-1	56.0	21	75.6	17	86.2	5	53.1	10	52.2	18
20	AW D99-5261	60.1	14	78.1	11	81.9	12			40.6	35
21	AW L96*9266-1	63.3	9	79.7	8	85.2	6	47.4	20	45.7	25
22	AW D99*5725	55.8	23	81.8	4	80.2	18	30.3	36	41.0	34
23	AW M96*3978-4	67.8	3	77.8	12	79.4	20	40.8	28	51.3	20
24	AR 93035-4-1	68.3	1	81.6	6	78.2	25	36.4	32	52.0	19
25	G/F 94261E7	52.6	31	88.4	1	77.2	28	44.5	24	40.2	36
26	G 96195	53.9	26	80.2	7	81.5	15	37.8	31	44.6	29
27	G 96226	53.0	30	75.1	19	82.7	9	46.4	22	61.6	4
28	G 19844	64.0	7	77.1	14	79.4	19	51.3	13	45.1	27
29	F/G 931630E48	54.2	25	79.5	9	78.3	23	45.6	23	44.6	30
30	MO 002001	67.4	4	62.6	36	62.7	36	43.8	25	57.1	12
31	SC 980890	46.3	34	75.3	18	71.7	34	40.9	27	39.1	37
32	B 980582	57.3	19	77.1	13	90.5	2	54.5	9	57.8	10
33	B 980696	53.8	27	84.7	2	69.7	35	38.8	30	60.4	5
34	B 980954	52.6	31	69.5	27	81.7	14	40.7	29	56.4	13
35	B 980416	60.8	12	72.2	25	80.3	17	54.7	8	59.4	8
36	MD 71-5	55.3	24	62.9	35	89.1	3	62.6	1	63.7	2
37	TX 00D1626	40.1	36	69.3	28	82.1	11	33.4	34	50.5	21
LOCATION MEANS		57.3		73.9		79.2		47.5		51.6	
LSD (.05)		12.1		10.6				7.4		5.8	
CV %		13		7.1				7.7		6.9	
REPS		3		2		2		2		3	
Harvest Plot Size (sq.ft.)		55		45.5				55		50	

YIELD (bu/acre)

		Florence SC		Knoxville TN		Prosper TX		Blacksburg VA		Warsaw VA	
		a		a		ab		a		ab	
			rank		rank		rank		rank		rank
1	Coker 9663	48.9	29	75.8	7	56.5	21	62.6	6	63.2	18
2	AGS 2000	63.6	6	67.7	29	58.7	19	56.7	20	55.2	32
3	USG 3209	62.0	8	75.3	8	60.9	14	46.6	29	58.6	26
4	Pioneer 26R61	59.8	13	71.4	17	51.0	32	44.2	33	59.0	25
5	SC 960057	46.1	32	59.7	35	47.9	33	41.0	35	53.7	35
6	G/F 931241E16	60.1	12	70.1	20	66.0	3	56.9	18	69.7	7
7	G/F 93052E42	62.1	7	76.9	5	44.0	36	65.5	5	75.1	3
8	F/G 931470E62	60.2	11	71.1	18	54.8	26	56.9	19	59.5	24
9	F/G 931233E17	53.8	23	69.6	21	60.9	13	59.0	13	65.7	11
10	AR 910-9-1	51.7	27	81.7	2	66.0	3	51.0	25	64.3	15
11	NC 98-26143	66.0	3	77.7	4	54.3	27	46.6	30	71.4	6
12	NC 99-13022	45.4	33	63.9	32	62.6	11	52.9	23	66.8	10
13	NC 98-24182	54.6	20	68.8	23	54.9	25	58.4	16	64.1	17
14	VA 00W-526	65.4	4	78.3	3	64.1	8	62.4	8	69.4	8
15	VA 98W-335	42.5	36	72.9	13	60.7	15	66.5	4	71.8	5
16	VAN98W-342	46.4	31	70.5	19	52.7	30	72.0	1	83.5	1
17	VA98W-631	56.0	19	74.7	9	64.7	6	62.5	7	75.0	4
18	LA 9330D11-1	51.6	28	76.5	6	47.4	35	58.8	14	60.6	22
19	LA 9560CA22-1	69.6	1	68.0	27	55.6	23	67.8	3	61.6	20
20	AW D99-5261	43.2	34	68.6	25	64.6	7	48.4	27	55.8	31
21	AW L96*9266-1	60.7	10	64.0	31	63.6	9	55.3	21	61.2	21
22	AW D99*5725	57.8	15	71.7	16	58.1	20	48.3	28	59.7	23
23	AW M96*3978-4	37.9	37	67.3	30	55.8	22	44.9	31	56.6	29
24	AR 93035-4-1	53.3	25	68.5	26	59.5	17	37.7	36	55.1	33
25	G/F 94261E7	67.9	2	62.7	33	59.6	16	49.5	26	53.5	36
26	G 96195	42.6	35	73.0	12	68.5	1	33.5	37	48.4	37
27	G 96226	54.2	22	67.8	28	58.9	18	61.0	10	63.2	18
28	G 19844	47.3	30	72.0	15	67.9	2	52.6	24	64.3	14
29	F/G 931630E48	53.7	24	60.4	34	47.7	34	53.3	22	56.6	29
30	MO 002001	56.7	18	69.5	22	53.5	29	44.8	32	64.7	13
31	SC 980890	63.7	5	51.7	37	52.3	31	44.2	34	56.8	28
32	B 980582	58.9	14	73.9	10	63.1	10	61.1	9	67.1	9
33	B 980696	57.1	17	68.8	23	66.0	5	59.5	12	57.4	27
34	B 980954	57.3	16	83.2	1	55.0	24	58.7	15	65.5	12
35	B 980416	61.0	9	73.5	11	61.3	12	60.5	11	64.3	15
36	MD 71-5	54.5	21	72.7	14	43.3	37	70.7	2	79.8	2
37	TX 00D1626	52.3	26	56.5	36	54.2	28	57.4	17	54.3	34
LOCATION MEANS		55.3		70.2		57.7		54.9		63.0	
LSD (.05)		11.53				10.3				4.78	
CV %		12.82				8.8				5.58	
REPS		3						1		3	
Harvest Plot Size (sq.ft.)		35						45		45	

YIELD (bu/acre)

		ENTRY MEANS ALL LOCATIONS	rank	ENTRY MEANS IN-REGION [a]	rank	ENTRY MEANS CV <10% [b]	rank
1	Coker 9663	69.2	10	66.2	13	71.9	30
2	AGS 2000	70.1	8	66.6	10	77.1	12
3	USG 3209	68.5	14	66.9	8	76.2	14
4	Pioneer 26R61	67.6	17	64.3	24	76.4	13
5	SC 960057	58.8	37	55.9	37	66.9	37
6	G/F 931241E16	69.2	11	68.1	5	78.7	6
7	G/F 93052E42	66.4	26	65.5	18	74.3	23
8	F/G 931470E62	63.5	34	63.1	29	72.0	29
9	F/G 931233E17	67.6	18	66.0	14	75.2	18
10	AR 910-9-1	70.5	6	67.5	7	77.6	8
11	NC 98-26143	64.5	32	61.4	34	68.5	35
12	NC 99-13022	66.6	25	64.4	22	77.1	11
13	NC 98-24182	67.1	21	64.7	21	74.7	22
14	VA 00W-526	73.0	2	70.9	1	80.2	3
15	VA 98W-335	65.2	30	61.9	33	72.0	28
16	VAN98W-342	67.2	20	64.4	23	70.6	32
17	VA98W-631	72.5	3	69.3	3	80.2	2
18	LA 9330D11-1	65.2	29	63.7	28	70.4	33
19	LA 9560CA22-1	72.1	4	69.4	2	77.6	7
20	AW D99-5261	70.3	7	66.6	11	80.5	1
21	AW L96*9266-1	71.1	5	67.6	6	79.0	4
22	AW D99*5725	68.2	16	66.6	12	75.8	15
23	AW M96*3978-4	65.7	28	63.1	30	75.0	21
24	AR 93035-4-1	68.5	15	66.0	15	77.3	10
25	G/F 94261E7	66.3	27	65.0	19	77.4	9
26	G 96195	64.5	33	62.3	32	74.3	24
27	G 96226	68.9	13	65.8	17	75.1	19
28	G 19844	67.5	19	64.9	20	75.0	20
29	F/G 931630E48	64.9	31	62.7	31	73.5	25
30	MO 002001	62.5	35	59.1	35	67.9	36
31	SC 980890	59.9	36	57.9	36	70.1	34
32	B 980582	73.1	1	68.5	4	78.8	5
33	B 980696	66.6	24	63.8	27	75.7	16
34	B 980954	69.9	9	66.6	9	75.3	17
35	B 980416	69.0	12	65.9	16	73.2	26
36	MD 71-5	66.6	23	64.0	25	70.8	31
37	TX 00D1626	66.6	22	63.9	26	72.7	27
LOCATION MEANS							
LSD (.05)							
CV %							
REPS							
Harvest Plot Size (sq.ft.)							

TEST WEIGHT (lbs/bu)

		Belle Mina AL	Bay AR	DeWitt AR	Stuttgart AR	Marianna FL
1	Coker 9663	56.2	56.4	58.3	57.9	55.7
2	AGS 2000	55.3	57.4	57.5	55.8	57.0
3	USG 3209	54.4	56.2	57.4	56.6	55.0
4	Pioneer 26R61	56.1	57.6	59.1	56.3	57.0
5	SC 960057	51.6	54.5	55.6	51.8	48.6
6	G/F 931241E16	55.0	57.9	57.4	55.9	57.3
7	G/F 93052E42	53.4	56.7	55.3	58.8	55.7
8	F/G 931470E62	56.7	57.4	59.1	58.6	56.6
9	F/G 931233E17	54.3	57.2	58.1	57.8	56.3
10	AR 910-9-1	54.5	56.9	57.2	54.6	55.0
11	NC 98-26143	52.6	56.2	54.9	52.0	52.5
12	NC 99-13022	54.1	56.4	57.5	55.9	55.7
13	NC 98-24182	55.4	57.9	58.0	56.7	56.0
14	VA 00W-526	55.1	57.4	58.2	55.5	54.1
15	VA 98W-335	54.0	56.2	55.6	54.5	52.8
16	VAN98W-342	54.2	55.3	56.8	55.5	51.2
17	VA98W-631	51.4	54.9	53.7	54.3	51.8
18	LA 9330D11-1	55.3	58.1	58.6	57.5	56.6
19	LA 9560CA22-1	58.1	59.1	59.7	56.0	57.9
20	AW D99-5261	53.5	56.4	58.0	55.6	51.5
21	AW L96*9266-1	56.3	58.1	58.2	57.2	56.3
22	AW D99*5725	54.5	56.5	56.9	56.8	55.4
23	AW M96*3978-4	55.3	58.9	58.9	56.3	56.6
24	AR 93035-4-1	55.4	57.8	59.0	55.6	56.0
25	G/F 94261E7	55.9	56.2	58.3	57.0	56.6
26	G 96195	54.8	57.4	58.5	56.7	52.5
27	G 96226	55.8	57.2	59.7	55.3	54.1
28	G 19844	57.4	59.0	60.2	58.4	53.1
29	F/G 931630E48	56.5	58.0	58.9	58.4	57.0
30	MO 002001	55.1	60.8	57.5	55.4	54.7
31	SC 980890	55.2	57.1	57.5	53.2	55.0
32	B 980582	57.0	57.6	59.8	55.2	57.6
33	B 980696	57.2	58.7	61.2	58.0	55.7
34	B 980954	53.7	56.6	57.7	54.9	55.4
35	B 980416	55.0	57.0	57.2	54.0	53.1
36	MD 71-5	53.2	55.8	56.5	53.8	52.2
37	TX 00D1626	54.6	57.4	57.1	56.7	54.7
LOCATION MEANS		55.0	57.2	57.8	56.0	54.9

TEST WEIGHT (lbs/bu)

		Quincy FL	Griffin GA	Plains GA	Aberdeen ID	Ft. Branch IN
1	Coker 9663	55.2	55.5	54.9	58.7	54.3
2	AGS 2000	56.8	54.2	56.2	59.0	55.4
3	USG 3209	54.6	51.3	55.2	57.0	57.0
4	Pioneer 26R61	55.7	54.9	58.4	60.1	55.9
5	SC 960057	42.3	42.9	46.7	59.0	54.5
6	G/F 931241E16	54.9	55.0	56.9	61.0	55.7
7	G/F 93052E42	55.0	54.8	56.1	59.3	51.3
8	F/G 931470E62	56.2	55.7	57.3	60.8	55.9
9	F/G 931233E17	55.5	56.7	55.9	61.1	56.7
10	AR 910-9-1	55.0	55.0	54.9	58.0	57.7
11	NC 98-26143	51.5	48.7	52.9	57.2	48.7
12	NC 99-13022	54.6	49.2	55.4	58.9	51.8
13	NC 98-24182	56.8	57.9	57.8	60.1	58.3
14	VA 00W-526	54.5	56.5	56.5	61.0	57.2
15	VA 98W-335	53.6	55.7	57.4	60.5	56.9
16	VAN98W-342	52.8	55.4	56.1	60.8	57.1
17	VA98W-631	52.2	51.1	55.6	57.4	52.5
18	LA 9330D11-1	56.8	56.8	57.4	59.8	56.9
19	LA 9560CA22-1	56.3	59.1	57.5	61.7	54.5
20	AW D99-5261	50.7	47.3	52.4	59.2	54.3
21	AW L96*9266-1	56.3	57.7	56.9	59.8	55.7
22	AW D99*5725	55.0	49.4	55.4	58.1	55.1
23	AW M96*3978-4	54.1	51.8	55.4	61.8	55.6
24	AR 93035-4-1	56.2	52.4	56.8	58.0	56.1
25	G/F 94261E7	55.5	49.5	56.3	59.4	53.7
26	G 96195	51.4	49.0	52.7	59.2	56.8
27	G 96226	56.0	54.2	56.8	60.6	59.4
28	G 19844	55.2	51.4	56.9	62.1	60.2
29	F/G 931630E48	57.1	52.9	56.8	61.4	59.8
30	MO 002001	53.8	53.4	55.4	60.7	58.2
31	SC 980890	54.2	51.1	54.2	59.1	54.5
32	B 980582	57.1	59.7	58.4	62.8	59.6
33	B 980696	54.6	52.9	57.9	61.8	57.0
34	B 980954	54.6	54.6	54.9	58.2	51.9
35	B 980416	54.0	55.4	54.7	59.2	55.3
36	MD 71-5	52.0	56.0	56.1	60.6	56.5
37	TX 00D1626	54.1	54.2	56.4	59.8	58.4
LOCATION MEANS		54.4	53.5	55.8	59.8	55.8

TEST WEIGHT (lbs/bu)

		Greensburg IN	Lafayette IN	Manhattan KS	Parsons KS	Winfield KS
1	Coker 9663	57.4	58.2	53.0	54.3	61.5
2	AGS 2000	53.4	59.2	55.5	54.7	59.5
3	USG 3209	55.0	52.2	50.7	56.2	59.5
4	Pioneer 26R61	52.8	57.4	54.8	56.5	63.0
5	SC 960057	52.5	50.2	56.3	56.2	57.0
6	G/F 931241E16	54.2	57.0	54.9	55.8	62.5
7	G/F 93052E42	49.6	54.1	54.4	55.6	59.0
8	F/G 931470E62	52.6	56.6	57.2	55.6	61.0
9	F/G 931233E17	57.0	55.5	53.7	54.0	62.0
10	AR 910-9-1	57.9	57.8	56.4	57.2	60.0
11	NC 98-26143	52.6	53.0	55.9	56.2	53.5
12	NC 99-13022	53.8	56.0	54.8	55.3	60.0
13	NC 98-24182	58.2	58.9	57.0	56.4	60.0
14	VA 00W-526	58.7	55.8	54.5	56.3	61.0
15	VA 98W-335	55.0	53.8	54.1	55.2	61.0
16	VAN98W-342	55.7	55.4	54.4	54.9	59.5
17	VA98W-631	51.5	51.5	51.6	53.2	57.5
18	LA 9330D11-1	58.2	56.2	55.3	55.3	60.0
19	LA 9560CA22-1	59.5	59.2	55.7	57.2	62.5
20	AW D99-5261	52.5	54.7	54.2	56.0	60.5
21	AW L96*9266-1	57.0	57.6	55.1	56.0	61.0
22	AW D99*5725	55.4	53.9	55.4	54.8	60.5
23	AW M96*3978-4	57.6	53.6	55.9	55.0	59.5
24	AR 93035-4-1	59.4	57.8	54.9	56.5	60.0
25	G/F 94261E7	50.1	55.0	53.2	55.1	62.0
26	G 96195	54.4	57.1	54.6	56.9	60.5
27	G 96226	56.8	59.0	54.4	56.6	61.5
28	G 19844	59.4	59.4	57.5	57.6	63.5
29	F/G 931630E48	55.2	57.4	56.9	55.7	62.0
30	MO 002001	57.4	57.6	54.3	56.2	59.0
31	SC 980890	53.3	55.0	54.9	52.8	59.0
32	B 980582	60.3	60.2	57.2	57.6	63.0
33	B 980696	58.4	59.4	56.0	58.7	62.0
34	B 980954	54.7	55.7	52.9	56.0	58.0
35	B 980416	59.0	56.3	53.5	55.7	58.0
36	MD 71-5	54.4	54.2	52.8	53.3	57.0
37	TX 00D1626	56.4	55.7	53.0	54.6	61.0
LOCATION MEANS		55.6	56.2	54.8	55.7	60.2

TEST WEIGHT (lbs/bu)

		Logan Co. KY	Woodford Co. KY	Baton Rouge LA	Queenstown MD	Portageville MO
1	Coker 9663	55.7	57.1	59.4	53.3	57.8
2	AGS 2000	54.5	58.1	58.2	51.9	57.9
3	USG 3209	53.7	56.0	56.7	50.1	57.4
4	Pioneer 26R61	55.7	56.5	60.0	50.6	58.0
5	SC 960057	52.4	54.0	52.7	46.0	55.9
6	G/F 931241E16	54.4	57.0	58.8	50.2	58.0
7	G/F 93052E42	50.7	55.2	56.4	51.8	55.7
8	F/G 931470E62	54.2	58.4	58.1	51.4	57.3
9	F/G 931233E17	53.7	58.0	58.7	51.0	56.9
10	AR 910-9-1	54.1	57.0	57.1	50.5	57.3
11	NC 98-26143	51.5	53.9	52.6	48.6	56.2
12	NC 99-13022	52.3	56.2	56.0	49.2	56.9
13	NC 98-24182	54.1	58.0	58.3	54.9	57.2
14	VA 00W-526	55.3	57.6	56.2	53.7	58.0
15	VA 98W-335	52.5	58.5	55.7	50.4	56.9
16	VAN98W-342	50.0	57.5	54.7	53.0	55.5
17	VA98W-631	50.7	55.3	55.1	48.0	54.7
18	LA 9330D11-1	54.3	59.2	57.5	55.7	58.6
19	LA 9560CA22-1	56.8	58.7	61.2	54.4	59.7
20	AW D99-5261	53.2	55.7	53.0	46.2	56.4
21	AW L96*9266-1	54.6	56.9	58.1	52.2	57.6
22	AW D99*5725	52.8	55.8	58.2	50.3	56.5
23	AW M96*3978-4	53.9	57.4	58.3	47.7	57.6
24	AR 93035-4-1	56.8	57.0	58.2	52.6	58.3
25	G/F 94261E7	52.7	55.5	58.3	52.1	56.6
26	G 96195	54.2	55.7	57.2	49.3	57.8
27	G 96226	57.0	57.9	57.5	54.6	58.2
28	G 19844	57.4	58.1	54.3	53.8	60.3
29	F/G 931630E48	56.3	57.6	59.8	55.0	57.5
30	MO 002001	56.8	56.6	55.4	52.1	57.5
31	SC 980890	52.2	56.5	57.7	48.0	56.1
32	B 980582	56.8	59.0	61.0	56.3	59.5
33	B 980696	57.7	59.6	53.5	53.9	60.2
34	B 980954	55.5	55.9	55.4	53.7	57.8
35	B 980416	55.9	54.9	55.6	52.9	58.5
36	MD 71-5	50.5	56.2	54.5	52.5	54.8
37	TX 00D1626	54.1	51.9	58.3	51.8	57.2
LOCATION MEANS		54.2	56.8	57.0	51.6	57.4

TEST WEIGHT (lbs/bu)

		Newton MS	Kinston NC	Wooster OH	Florence SC	Knoxville TN
1	Coker 9663	58.0	56.9	53.5	54.8	55.4
2	AGS 2000	58.0	58.3	52.2	55.5	56.5
3	USG 3209	56.0	57.2	52.3	52.9	55.5
4	Pioneer 26R61	58.0	57.7	53.5	54.9	58.4
5	SC 960057	48.0	49.6	46.0	45.7	51.3
6	G/F 931241E16	58.0	58.0	50.1	52.9	56.7
7	G/F 93052E42	58.0	57.1	51.3	54.7	56.1
8	F/G 931470E62	57.0	58.4	53.4	55.8	58.0
9	F/G 931233E17	57.0	56.8	53.6	54.2	56.5
10	AR 910-9-1	56.0	55.2	53.1	52.7	55.3
11	NC 98-26143	54.0	55.1	50.7	51.7	52.7
12	NC 99-13022	53.0	56.6	50.4	50.8	55.3
13	NC 98-24182	59.0	57.5	55.5	55.9	56.2
14	VA 00W-526	57.0	57.5	53.9	54.4	57.0
15	VA 98W-335	57.0	56.2	53.1	52.0	56.3
16	VAN98W-342	57.0	55.5	52.5	52.6	56.0
17	VA98W-631	53.0	54.0	51.6	49.6	55.2
18	LA 9330D11-1	59.0	57.6	49.6	54.3	57.9
19	LA 9560CA22-1	60.0	58.4	55.5	56.0	57.9
20	AW D99-5261	54.0	53.6	45.3	48.8	53.5
21	AW L96*9266-1	59.0	57.2	51.7	53.6	56.3
22	AW D99*5725	57.0	54.6	48.1	53.1	53.7
23	AW M96*3978-4	58.0	56.1	50.3	51.7	54.5
24	AR 93035-4-1	57.0	56.7	53.6	52.1	54.3
25	G/F 94261E7	58.0	57.3	50.4	53.6	53.9
26	G 96195	56.0	55.1	48.8	47.7	53.3
27	G 96226	58.0	57.3	54.2	55.8	56.2
28	G 19844	59.0	57.7	54.1	55.5	57.9
29	F/G 931630E48	59.0	57.1	51.6	54.8	56.7
30	MO 002001	57.0	56.2	53.6	54.8	55.4
31	SC 980890	55.0	55.2	48.3	53.2	53.9
32	B 980582	59.0	57.9	51.4	55.9	54.7
33	B 980696	59.0	58.2	56.2	55.5	59.0
34	B 980954	54.0	57.4	54.4	54.7	56.6
35	B 980416	57.0	57.0	52.6	53.4	56.1
36	MD 71-5	57.0	55.5	51.1	55.4	55.0
37	TX 00D1626	55.0	54.3	50.8	52.9	52.1
LOCATION MEANS		56.8	56.4	51.8	53.4	55.6

TEST WEIGHT (lbs/bu)

		Prosper TX	Blacksburg VA	Warsaw VA	ENTRY MEANS ALL LOCATIONS	rank
1	Coker 9663	56.9	53.5	57.2	56.3	14
2	AGS 2000	56.9	51.0	58.0	56.2	17
3	USG 3209	58.4	45.0	54.2	54.8	29
4	Pioneer 26R61	60.0	50.2	60.0	56.8	9
5	SC 960057	49.6	43.9	51.9	50.9	37
6	G/F 931241E16	58.6	51.1	59.6	56.2	16
7	G/F 93052E42	58.6	52.6	59.3	55.2	27
8	F/G 931470E62	60.0	48.3	58.7	56.7	10
9	F/G 931233E17	59.2	51.2	59.5	56.4	13
10	AR 910-9-1	57.9	51.5	57.0	55.8	19
11	NC 98-26143	53.3	45.6	55.7	52.9	36
12	NC 99-13022	57.0	49.5	57.2	54.6	31
13	NC 98-24182	58.6	54.3	59.7	57.3	5
14	VA 00W-526	58.7	52.3	57.5	56.5	12
15	VA 98W-335	56.9	52.8	58.2	55.5	22
16	VAN98W-342	56.8	53.1	59.0	55.3	25
17	VA98W-631	56.1	49.1	56.4	53.2	35
18	LA 9330D11-1	58.8	54.8	59.3	57.0	7
19	LA 9560CA22-1	59.1	56.3	60.9	58.2	1
20	AW D99-5261	55.0	47.1	53.9	53.3	34
21	AW L96*9266-1	58.2	51.0	58.3	56.6	11
22	AW D99*5725	57.6	49.8	55.0	54.8	28
23	AW M96*3978-4	56.1	48.5	56.5	55.5	21
24	AR 93035-4-1	59.4	49.3	58.5	56.3	15
25	G/F 94261E7	58.4	51.0	57.8	55.3	24
26	G 96195	57.0	45.7	53.0	54.4	32
27	G 96226	58.4	54.0	58.2	56.9	8
28	G 19844	57.5	52.4	59.0	57.4	4
29	F/G 931630E48	59.3	52.4	58.5	57.1	6
30	MO 002001	56.6	51.0	58.3	56.1	18
31	SC 980890	57.2	47.4	56.6	54.4	33
32	B 980582	58.3	55.8	50.5	57.8	2
33	B 980696	59.4	54.7	60.1	57.7	3
34	B 980954	55.4	53.2	57.8	55.4	23
35	B 980416	56.7	52.1	56.4	55.6	20
36	MD 71-5	56.2	51.6	58.1	54.7	30
37	TX 00D1626	57.8	50.7	57.0	55.3	26
LOCATION MEANS		57.5	50.9	57.4		

KERNEL WEIGHT (grams)

		Newton MS 100 count
1	Coker 9663	3.5
2	AGS 2000	3.9
3	USG 3209	3.6
4	Pioneer 26R61	4.1
5	SC 960057	2.8
6	G/F 931241E16	3.4
7	G/F 93052E42	3.7
8	F/G 931470E62	3.2
9	F/G 931233E17	3.5
10	AR 910-9-1	3.2
11	NC 98-26143	3.6
12	NC 99-13022	3.5
13	NC 98-24182	3.3
14	VA 00W-526	3.1
15	VA 98W-335	3.1
16	VAN98W-342	3.9
17	VA98W-631	3.3
18	LA 9330D11-1	3.7
19	LA 9560CA22-1	3.1
20	AW D99-5261	2.8
21	AW L96*9266-1	3.5
22	AW D99*5725	3.0
23	AW M96*3978-4	3.4
24	AR 93035-4-1	3.4
25	G/F 94261E7	3.8
26	G 96195	3.1
27	G 96226	3.4
28	G 19844	2.8
29	F/G 931630E48	3.6
30	MO 002001	3.3
31	SC 980890	3.2
32	B 980582	3.2
33	B 980696	3.2
34	B 980954	3.4
35	B 980416	2.7
36	MD 71-5	3.6
37	TX 00D1626	3.1
LOCATION MEANS		3.4

HEADING DATE (Julian)

		Belle Mina AL	Bay AR	DeWitt AR	Stuttgart AR	Sussex Co. DE
1	Coker 9663	106	111.0	109.0	112	135
2	AGS 2000	106	108.3	107.7	109	133
3	USG 3209	105	109.0	106.7	108	136
4	Pioneer 26R61	107	108.0	108.0	110	135
5	SC 960057	108	115.3	113.0	116	131
6	G/F 931241E16	107	113.0	108.0	112	137
7	G/F 93052E42	105	107.0	106.7	105	132
8	F/G 931470E62	105	108.7	107.0	108	132
9	F/G 931233E17	104	110.3	106.7	107	135
10	AR 910-9-1	107	109.0	107.0	108	131
11	NC 98-26143	108	114.3	109.0	109	137
12	NC 99-13022	107	110.3	107.7	109	135
13	NC 98-24182	104	108.7	106.7	105	131
14	VA 00W-526	108	112.3	107.3	107	136
15	VA 98W-335	107	110.7	109.0	110	136
16	VAN98W-342	106	108.7	106.7	111	133
17	VA98W-631	107	110.7	109.0	108	137
18	LA 9330D11-1	105	106.7	104.3	104	132
19	LA 9560CA22-1	106	111.0	109.0	104	135
20	AW D99-5261	108	113.3	111.2	111	137
21	AW L96*9266-1	106	109.3	106.7	107	135
22	AW D99*5725	104	109.7	107.7	109	135
23	AW M96*3978-4	105	112.0	109.7	107	135
24	AR 93035-4-1	108	112.7	109.7	110	137
25	G/F 94261E7	106	107.7	107.5	111	133
26	G 96195	107	112.3	110.0	112	133
27	G 96226	105	108.7	108.0	110	134
28	G 19844	108	113.7	111.5	112	137
29	F/G 931630E48	104	107.3	104.0	104	132
30	MO 002001	107	110.3	109.2	112	133
31	SC 980890	106	105.3	105.2	105	131
32	B 980582	105	106.7	107.0	107	132
33	B 980696	108	114.7	111.0	111	136
34	B 980954	108	113.0	109.0	109	139
35	B 980416	107	113.0	109.0	112	133
36	MD 71-5	107	108.7	106.7	110	132
37	TX 00D1626	104	110.0	106.0	106	132
LOCATION MEANS		106.2	110.3	108.0	108.8	134.2

HEADING DATE (Julian)

		Marianna FL	Quincy FL	Griffin GA	Plains GA	Ft. Branch IN
1	Coker 9663	90	84.5	107	100	128.5
2	AGS 2000	92	82.5	107	99	127.0
3	USG 3209	89	84.5	103	96	126.0
4	Pioneer 26R61	90	84.5	104	99	127.0
5	SC 960057	106	97.0		109	126.5
6	G/F 931241E16	92	88.0	106	100	128.0
7	G/F 93052E42	88	81.0	103	99	125.5
8	F/G 931470E62	90	82.5	104	101	126.5
9	F/G 931233E17	89	86.0	103	100	126.5
10	AR 910-9-1	88	84.0	104	99	127.0
11	NC 98-26143	97	88.0	106	102	128.5
12	NC 99-13022	86	82.5	107	99	126.5
13	NC 98-24182	89	86.0	103	101	125.0
14	VA 00W-526	92	85.5	104	100	127.0
15	VA 98W-335	100	94.5	104	103	128.0
16	VAN98W-342	100	93.0	104	100	126.0
17	VA98W-631	94	87.5	105	102	127.0
18	LA 9330D11-1	88	81.0	103	100	124.5
19	LA 9560CA22-1	87	82.0	106	102	129.0
20	AW D99-5261	93	86.5	107	103	127.0
21	AW L96*9266-1	89	84.5	104	99	127.0
22	AW D99*5725	89	85.5	105	98	126.0
23	AW M96*3978-4	94	90.5	107	101	126.0
24	AR 93035-4-1	92	87.5	108	101	128.5
25	G/F 94261E7	89	80.5	104	99	126.5
26	G 96195	97	92.5	106	102	127.5
27	G 96226	94	85.5	106	100	128.0
28	G 19844	108	95.0	108	106	128.5
29	F/G 931630E48	86	82.0	101	91	124.0
30	MO 002001	98	92.0	106	102	126.5
31	SC 980890	85	80.0	101	92	126.5
32	B 980582	88	81.5	102	97	124.0
33	B 980696	105	95.0	107	105	128.0
34	B 980954	89	83.5	106	101	129.0
35	B 980416	99	92.5	106	106	127.0
36	MD 71-5	98	94.5	102	103	125.5
37	TX 00D1626	90	85.5	106	97	126.0
LOCATION MEANS		92.7	86.7	104.9	100.4	126.8

HEADING DATE (Julian)

		Greensburg IN	Lafayette IN	Parsons KS	Winfield KS	Woodford Co. KY
1	Coker 9663	134	136	119.7	125	130
2	AGS 2000	133	136	118.7	126	130
3	USG 3209	133	135	121.7	125	130
4	Pioneer 26R61	135	137	120.0	127	130
5	SC 960057	136	136	118.3	128	131
6	G/F 931241E16	138	135	120.0	128	130
7	G/F 93052E42	133	135	119.3	125	125
8	F/G 931470E62	135	133	117.3	125	128
9	F/G 931233E17	137	136	121.0	124	130
10	AR 910-9-1	136	136	120.0	125	130
11	NC 98-26143	140	139	120.7	127	130
12	NC 99-13022	139	137	121.0	126	130
13	NC 98-24182	132	137	120.0	124	128
14	VA 00W-526	140	138	120.7	126	126
15	VA 98W-335	135	137	121.0	127	131
16	VAN98W-342	132	136	119.7	126	130
17	VA98W-631	138	136	120.0	127	130
18	LA 9330D11-1	132	135	118.0	125	130
19	LA 9560CA22-1	138	137	121.0	129	130
20	AW D99-5261	137	136	121.0	126	130
21	AW L96*9266-1	136	136	119.3	128	130
22	AW D99*5725	136	135	119.3	125	128
23	AW M96*3978-4	133	136	120.0	126	131
24	AR 93035-4-1	139	139	121.0	127	130
25	G/F 94261E7	136	137	119.7	127	130
26	G 96195	138	137	120.7	126	130
27	G 96226	135	135	121.0	125	130
28	G 19844	141	136	121.0	128	131
29	F/G 931630E48	132	135	117.3	125	125
30	MO 002001	137	136	119.7	126	128
31	SC 980890	136	136	119.0	126	130
32	B 980582	136	135	118.3	125	128
33	B 980696	138	137	122.3	127	130
34	B 980954	140	137	121.3	128	130
35	B 980416	135	136	120.0	126	130
36	MD 71-5	131	136	120.0	126	129
37	TX 00D1626	132	137	118.7	125	130
LOCATION MEANS		135.8	136.2	119.9	126.1	129.4

HEADING DATE (Julian)

		Baton Rouge LA	Queenstown MD	Portageville MO	Kinston NC	Wooster OH
1	Coker 9663	96	141	123.7	112.5	142
2	AGS 2000	98	140	122.3	108.0	139
3	USG 3209	93	138	122.3	108.0	141
4	Pioneer 26R61	93	141	122.0	108.5	141
5	SC 960057	107	139	124.7	117.0	139
6	G/F 931241E16	100	138	123.0	112.0	143
7	G/F 93052E42	91	134	119.4	108.0	140
8	F/G 931470E62	90	136	122.7	108.5	141
9	F/G 931233E17	98	137	122.0	110.5	140
10	AR 910-9-1	96	139	123.0	114.5	141
11	NC 98-26143	99	142	124.0	113.0	143
12	NC 99-13022	95	140	123.3	109.0	142
13	NC 98-24182	101	136	119.0	107.5	139
14	VA 00W-526	100	142	123.0	111.0	142
15	VA 98W-335		141	122.3	109.5	142
16	VAN98W-342	110	136	119.3	108.0	140
17	VA98W-631	100	140	122.0	110.5	141
18	LA 9330D11-1	91	135	120.7	107.5	138
19	LA 9560CA22-1	96	143	123.3	109.0	143
20	AW D99-5261	101	140	124.0	114.5	142
21	AW L96*9266-1	98	141	121.3	110.5	142
22	AW D99*5725	98	137	120.7	108.5	141
23	AW M96*3978-4	103	137	121.3	110.5	141
24	AR 93035-4-1	102	140	123.3	112.5	143
25	G/F 94261E7	90	137	121.7	110.0	142
26	G 96195	106	140	122.3	112.0	141
27	G 96226	103	136	121.0	109.5	140
28	G 19844		138	124.7	115.0	142
29	F/G 931630E48	92	135	118.3	106.5	140
30	MO 002001	109	137	121.3	112.0	139
31	SC 980890	88	137	119.3	108.5	140
32	B 980582	95	136	120.7	109.0	140
33	B 980696		140	123.3	114.0	144
34	B 980954	99	139	126.0	113.5	145
35	B 980416	107	140	122.7	111.0	141
36	MD 71-5	107	136	120.0	108.0	140
37	TX 00D1626	99	137	120.3	108.5	139
LOCATION MEANS		98.6	138.4	122.0	110.4	141.1

HEADING DATE (Julian)

		Florence SC	Knoxville TN	Blacksburg VA	Warsaw VA
1	Coker 9663	109.3	114	130	127.3
2	AGS 2000	108.3	111	128	127.7
3	USG 3209	108.0	111	129	126.0
4	Pioneer 26R61	110.0	114	130	126.3
5	SC 960057	114.0	121	128	127.3
6	G/F 931241E16	110.0	116	131	127.7
7	G/F 93052E42	108.7	111	128	124.3
8	F/G 931470E62	109.0	112	128	125.3
9	F/G 931233E17	107.3	112	130	127.3
10	AR 910-9-1	109.7	115	130	127.7
11	NC 98-26143	111.7	116	133	128.0
12	NC 99-13022	110.7	113	131	127.7
13	NC 98-24182	108.7	110	128	125.0
14	VA 00W-526	110.3	114	132	127.0
15	VA 98W-335	110.0	111	130	128.0
16	VAN98W-342	108.7	110	128	124.7
17	VA98W-631	111.0	114	132	126.7
18	LA 9330D11-1	109.0	114	129	126.0
19	LA 9560CA22-1	110.3	115	131	128.0
20	AW D99-5261	112.7	118	131	127.7
21	AW L96*9266-1	109.0	114	131	127.7
22	AW D99*5725	109.3	114	128	126.3
23	AW M96*3978-4	110.7	114	129	126.3
24	AR 93035-4-1	110.7	115	132	128.3
25	G/F 94261E7	108.7	114	128	127.0
26	G 96195	110.0	117	130	126.7
27	G 96226	107.7	110	129	126.3
28	G 19844	113.3	116	131	126.7
29	F/G 931630E48	106.7	109	127	125.0
30	MO 002001	111.0	115	128	125.3
31	SC 980890	108.3	113	129	126.0
32	B 980582	109.7	113	129	125.3
33	B 980696	112.0	117	130	128.0
34	B 980954	112.3	118	132	128.0
35	B 980416	112.0	118	130	127.3
36	MD 71-5	112.0	110	128	126.0
37	TX 00D1626	108.7	113	128	125.7
LOCATION MEANS		110.0	113.8	129.6	126.7

HEADING DATE (Julian)

		ENTRY MEANS ALL LOCATIONS	rank
1	Coker 9663	117.6	21
2	AGS 2000	116.6	12
3	USG 3209	116.0	8
4	Pioneer 26R61	117.0	15
5	SC 960057	121.2	36
6	G/F 931241E16	118.4	27
7	G/F 93052E42	114.7	3
8	F/G 931470E62	115.6	7
9	F/G 931233E17	116.7	13
10	AR 910-9-1	117.0	14
11	NC 98-26143	119.4	33
12	NC 99-13022	117.3	18
13	NC 98-24182	115.6	6
14	VA 00W-526	118.0	24
15	VA 98W-335	119.4	34
16	VAN98W-342	117.4	20
17	VA98W-631	118.1	25
18	LA 9330D11-1	114.9	4
19	LA 9560CA22-1	117.7	22
20	AW D99-5261	119.1	31
21	AW L96*9266-1	117.1	17
22	AW D99*5725	116.5	11
23	AW M96*3978-4	117.7	23
24	AR 93035-4-1	119.0	30
25	G/F 94261E7	116.3	10
26	G 96195	119.0	29
27	G 96226	117.0	16
28	G 19844	121.4	37
29	F/G 931630E48	113.7	1
30	MO 002001	118.3	26
31	SC 980890	114.7	2
32	B 980582	115.4	5
33	B 980696	121.0	35
34	B 980954	119.0	28
35	B 980416	119.2	32
36	MD 71-5	117.3	19
37	TX 00D1626	116.0	9

LOCATION MEANS

HEIGHT (inches)

		Belle Mina AL	Bay AR	DeWitt AR	Stuttgart AR	Sussex Co. DE
1	Coker 9663	40	34.0	43.7	38	37
2	AGS 2000	37	32.3	39.4	33	36
3	USG 3209	31	29.0	37.8	28	30
4	Pioneer 26R61	36	35.0	40.4	34	35
5	SC 960057	40	36.3	43.3	38	34
6	G/F 931241E16	36	35.0	42.7	35	36
7	G/F 93052E42	34	30.3	37.8	32	31
8	F/G 931470E62	34	29.3	35.4	29	28
9	F/G 931233E17	37	33.7	41.5	36	36
10	AR 910-9-1	39	34.3	44.1	36	37
11	NC 98-26143	37	35.7	40.2	36	39
12	NC 99-13022	32	29.7	35.6	29	31
13	NC 98-24182	30	26.7	35.2	29	27
14	VA 00W-526	30	28.7	34.6	31	31
15	VA 98W-335	29	27.3	34.6	28	28
16	VAN98W-342	29	28.3	34.8	27	29
17	VA98W-631	33	32.0	37.2	32	32
18	LA 9330D11-1	33	30.7	39.0	34	31
19	LA 9560CA22-1	40	35.0	42.9	38	37
20	AW D99-5261	33	31.3	39.0	33	30
21	AW L96*9266-1	37	31.7	42.3	33	34
22	AW D99*5725	35	29.7	40.2	34	31
23	AW M96*3978-4	36	32.0	39.8	33	31
24	AR 93035-4-1	35	32.3	39.4	33	34
25	G/F 94261E7	33	30.7	38.0	30	29
26	G 96195	39	35.7	44.9	37	37
27	G 96226	35	28.0	41.1	33	31
28	G 19844	36	32.0	41.1	36	33
29	F/G 931630E48	34	29.3	40.7	38	31
30	MO 002001	36	32.0	41.5	37	32
31	SC 980890	40	33.7	43.3	38	40
32	B 980582	38	31.0	42.3	35	33
33	B 980696	35	33.0	42.9	33	33
34	B 980954	41	37.7	45.1	36	43
35	B 980416	34	29.0	38.6	33	31
36	MD 71-5	29	26.7	35.6	29	28
37	TX 00D1626	33	30.0	38.0	32	29
LOCATION MEANS		35.0	31.6	39.8	33.4	32.8

HEIGHT (inches)

		Quincy FL	Griffin GA	Plains GA	Ft. Branch IN	Greensburg IN
1	Coker 9663	41.0	34	42	41.5	36
2	AGS 2000	36.3	30	38	40.0	32
3	USG 3209	31.7	28	32	36.0	32
4	Pioneer 26R61	36.7	33	39	40.0	35
5	SC 960057	40.7	32	41	39.5	35
6	G/F 931241E16	40.3	35	35	38.5	33
7	G/F 93052E42	35.0	30	35	36.0	29
8	F/G 931470E62	32.0	34	32	36.0	28
9	F/G 931233E17	38.7	34	36	40.5	33
10	AR 910-9-1	41.3	35	40	40.5	35
11	NC 98-26143	40.0	29	38	40.0	36
12	NC 99-13022	34.3	27	34	35.0	30
13	NC 98-24182	32.0	27	31	36.5	26
14	VA 00W-526	32.0	29	33	32.5	31
15	VA 98W-335	32.0	30	37	33.5	28
16	VAN98W-342	31.3	30	34	33.5	28
17	VA98W-631	34.7	31	36	35.5	29
18	LA 9330D11-1	31.7	32	33	36.0	29
19	LA 9560CA22-1	40.3	34	38	39.0	37
20	AW D99-5261	34.7	34	37	37.5	29
21	AW L96*9266-1	35.0	32	40	40.5	30
22	AW D99*5725	34.0	33	38	39.0	36
23	AW M96*3978-4	36.0	35	39	40.0	33
24	AR 93035-4-1	40.3	34	36	38.5	34
25	G/F 94261E7	32.7	36	34	35.5	30
26	G 96195	40.3	37	39	40.5	32
27	G 96226	36.7	31	38	40.0	31
28	G 19844	38.3	36	39	38.0	33
29	F/G 931630E48	36.3	34	39	40.5	30
30	MO 002001	39.7	36	39	39.0	32
31	SC 980890	39.3	36	44	42.0	37
32	B 980582	37.7	36	42	42.0	34
33	B 980696	39.3	35	37	40.0	32
34	B 980954	38.3	38	41	44.0	38
35	B 980416	34.3	34	34	36.5	31
36	MD 71-5	33.0	30	32	34.5	31
37	TX 00D1626	36.0	30	35	37.5	31
LOCATION MEANS		36.3	32.7	36.9	38.3	32.1

HEIGHT (inches)

		Lafayette IN	Logan Co. KY	Woodford Co. KY	Baton Rouge LA	Queenstown MD
1	Coker 9663	41	44	41	42.5	33.0
2	AGS 2000	35	40	37	40.5	31.7
3	USG 3209	33	35	36	38.5	29.7
4	Pioneer 26R61	37	40	38	40.5	32.7
5	SC 960057	34	42	39	42.0	32.0
6	G/F 931241E16	38	39	39	41.5	31.0
7	G/F 93052E42	32	36	35	40.5	29.0
8	F/G 931470E62	30	35	34	35.5	28.0
9	F/G 931233E17	36	39	36	41.5	33.0
10	AR 910-9-1	37	42	39	41.5	31.7
11	NC 98-26143	33	38	36	40.5	35.7
12	NC 99-13022	29	35	36	36.5	29.7
13	NC 98-24182	32	34	34	35.0	23.7
14	VA 00W-526	29	37	34	34.5	28.3
15	VA 98W-335	30	33	34	33.0	26.7
16	VAN98W-342	30	33	32	33.0	27.3
17	VA98W-631	32	36	35	38.5	29.3
18	LA 9330D11-1	32	35	35	38.0	29.7
19	LA 9560CA22-1	36	45	41	42.5	32.3
20	AW D99-5261	32	38	32	39.5	29.3
21	AW L96*9266-1	36	40	38	40.0	31.0
22	AW D99*5725	32	38	38	40.5	31.7
23	AW M96*3978-4	32	39	37	38.5	31.3
24	AR 93035-4-1	32	40	35	39.5	31.0
25	G/F 94261E7	32	37	37	39.0	31.0
26	G 96195	35	42	38	41.5	33.0
27	G 96226	34	40	37	41.0	30.3
28	G 19844	34	37	36	39.5	32.7
29	F/G 931630E48	34	38	38	40.5	27.3
30	MO 002001	35	39	38	42.5	29.7
31	SC 980890	40	39	43	43.5	34.7
32	B 980582	40	39	40	42.5	30.7
33	B 980696	36	39	37	41.5	32.3
34	B 980954	39	42	40	43.0	38.0
35	B 980416	34	35	36	39.5	29.0
36	MD 71-5	27	33	31	35.5	26.7
37	TX 00D1626	31	33	34	36.0	27.3
LOCATION MEANS		33.8	38.0	36.6	39.4	30.6

HEIGHT (inches)

		Portageville MO	Cleveland MS	Newton MS	Kinston NC	Wooster OH
1	Coker 9663	38	40.2	38	34.6	44
2	AGS 2000	36	35.6	39	35.0	43
3	USG 3209	31	30.7	33	31.5	40
4	Pioneer 26R61	36	36.6	36	35.6	41
5	SC 960057	37	40.0	43	37.3	41
6	G/F 931241E16	35	37.4	38	35.2	44
7	G/F 93052E42	34	34.1	31	38.3	39
8	F/G 931470E62	31	31.3	31	32.5	41
9	F/G 931233E17	36	37.0	37	34.4	43
10	AR 910-9-1	38	38.8	36	37.7	43
11	NC 98-26143	35	38.0	38	37.1	43
12	NC 99-13022	34	32.1	31	35.4	37
13	NC 98-24182	29	30.9	30	30.4	36
14	VA 00W-526	30	31.5	32	31.9	35
15	VA 98W-335	30	30.7	30	28.3	35
16	VAN98W-342	29	29.7	30	31.3	38
17	VA98W-631	33	34.6	33	34.0	39
18	LA 9330D11-1	33	33.7	40	32.9	37
19	LA 9560CA22-1	37	38.8	32	38.1	42
20	AW D99-5261	32	34.8	37	34.6	38
21	AW L96*9266-1	35	38.2	33	36.3	43
22	AW D99*5725	34	35.6	37	34.0	43
23	AW M96*3978-4	36	36.4	35	34.6	43
24	AR 93035-4-1	35	36.2	36	31.7	44
25	G/F 94261E7	34	32.9	41	34.2	41
26	G 96195	37	38.4	38	37.7	43
27	G 96226	32	38.0	37	32.5	40
28	G 19844	34	36.2	33	34.4	41
29	F/G 931630E48	33	34.3	36	31.5	41
30	MO 002001	36	37.6	38	34.4	43
31	SC 980890	38	40.9	37	34.6	47
32	B 980582	36	38.8	37	36.7	39
33	B 980696	35	37.2	40	34.8	43
34	B 980954	40	39.4	35	40.2	49
35	B 980416	32	33.7	32	31.7	36
36	MD 71-5	29	28.1	32	29.6	39
37	TX 00D1626	29	33.5	40	31.0	37
LOCATION MEANS		34.0	35.5	35.5	34.2	40.8

HEIGHT (inches)

		Florence SC	Prosper TX	Blacksburg VA	Warsaw VA
1	Coker 9663	38.5	36	40	37.3
2	AGS 2000	36.0	33	35	32.0
3	USG 3209	30.0	29	32	30.7
4	Pioneer 26R61	35.5	31	35	35.3
5	SC 960057	39.5	37	35	34.0
6	G/F 931241E16	37.5	33	35	33.7
7	G/F 93052E42	32.0	30	32	32.3
8	F/G 931470E62	31.5	26	31	29.3
9	F/G 931233E17	36.0	33	33	34.0
10	AR 910-9-1	34.5	35	37	36.0
11	NC 98-26143	37.0	32	37	35.3
12	NC 99-13022	30.5	31	31	30.0
13	NC 98-24182	29.5	29	28	29.3
14	VA 00W-526	31.5	29	29	28.7
15	VA 98W-335	30.5	28	28	29.0
16	VAN98W-342	30.5	28	27	29.7
17	VA98W-631	32.5	32	31	30.7
18	LA 9330D11-1	33.5	29	32	30.7
19	LA 9560CA22-1	40.0	34	39	36.3
20	AW D99-5261	32.5	35	32	30.3
21	AW L96*9266-1	33.5	35	35	34.3
22	AW D99*5725	34.0	33	35	32.3
23	AW M96*3978-4	34.5	30	34	32.0
24	AR 93035-4-1	34.0	28	31	31.7
25	G/F 94261E7	34.5	29	32	30.0
26	G 96195	35.5	36	36	34.7
27	G 96226	34.0	33	36	33.3
28	G 19844	36.0	33	34	32.0
29	F/G 931630E48	31.0	28	34	31.7
30	MO 002001	37.0	34	33	34.3
31	SC 980890	30.0	31	37	36.3
32	B 980582	38.5	33	36	35.3
33	B 980696	35.5	30	35	32.7
34	B 980954	38.0	34	37	37.7
35	B 980416	33.0	28	30	31.0
36	MD 71-5	37.0	25	28	29.0
37	TX 00D1626	32.5	29	31	29.3
LOCATION MEANS		34.3	31.3	33.3	32.5

HEIGHT (inches)

		ENTRY MEANS ALL LOCATIONS	rank
1	Coker 9663	39.0	2
2	AGS 2000	36.0	16
3	USG 3209	32.3	31
4	Pioneer 26R61	36.4	13
5	SC 960057	38.0	5
6	G/F 931241E16	36.8	10
7	G/F 93052E42	33.6	25
8	F/G 931470E62	31.9	32
9	F/G 931233E17	36.5	12
10	AR 910-9-1	37.9	6
11	NC 98-26143	36.9	9
12	NC 99-13022	32.3	30
13	NC 98-24182	30.5	37
14	VA 00W-526	31.4	33
15	VA 98W-335	30.6	35
16	VAN98W-342	30.6	36
17	VA98W-631	33.5	26
18	LA 9330D11-1	33.4	27
19	LA 9560CA22-1	38.1	4
20	AW D99-5261	34.0	23
21	AW L96*9266-1	36.0	15
22	AW D99*5725	35.3	19
23	AW M96*3978-4	35.3	18
24	AR 93035-4-1	35.1	21
25	G/F 94261E7	33.9	24
26	G 96195	37.8	7
27	G 96226	35.1	20
28	G 19844	35.6	17
29	F/G 931630E48	34.6	22
30	MO 002001	36.5	11
31	SC 980890	38.6	3
32	B 980582	37.2	8
33	B 980696	36.2	14
34	B 980954	39.8	1
35	B 980416	33.2	28
36	MD 71-5	30.8	34
37	TX 00D1626	32.7	29

LOCATION MEANS

LODGING

		Belle Mina AL 0-9	DeWitt AR 0-9	Stuttgart AR %	Sussex Co. DE 0-9	Quincy FL 0-9
1	Coker 9663	0	6.4	6.7	1	1.7
2	AGS 2000	0	2.0	0.0	1	1.3
3	USG 3209	0	4.5	0.0	1	0.3
4	Pioneer 26R61	0	1.0	0.0	1	0.0
5	SC 960057	0	3.0	1.7	1	0.0
6	G/F 931241E16	0	4.9	3.3	1	2.3
7	G/F 93052E42	0	6.0	1.7	1	0.7
8	F/G 931470E62	0	6.7	1.7	1	0.7
9	F/G 931233E17	0	2.0	1.7	1	2.3
10	AR 910-9-1	0	1.0	0.0	1	0.7
11	NC 98-26143	0	1.0	0.0	1	1.0
12	NC 99-13022	0	1.0	0.0	1	0.0
13	NC 98-24182	0	1.0	1.7	1	0.3
14	VA 00W-526	0	1.7	0.0	1	0.0
15	VA 98W-335	0	1.2	0.0	1	0.0
16	VAN98W-342	0	1.0	0.0	1	0.3
17	VA98W-631	0	1.0	0.0	1	0.0
18	LA 9330D11-1	0	2.8	0.0	1	0.7
19	LA 9560CA22-1	0	2.0	1.7	1	0.3
20	AW D99-5261	0	1.0	0.0	1	0.0
21	AW L96*9266-1	0	1.5	0.0	1	0.3
22	AW D99*5725	0	3.5	0.0	1	0.0
23	AW M96*3978-4	0	1.0	0.0	1	0.0
24	AR 93035-4-1	0	1.0	0.0	1	0.0
25	G/F 94261E7	0	2.5	3.3	1	0.0
26	G 96195	0	1.0	0.0	1	1.0
27	G 96226	0	2.0	0.0	1	1.3
28	G 19844	0	1.5	0.0	1	0.0
29	F/G 931630E48	0	2.0	0.0	1	0.0
30	MO 002001	0	2.5	0.0	1	2.7
31	SC 980890	0	6.5	8.3	1	2.0
32	B 980582	0	5.0	0.0	1	1.3
33	B 980696	0	2.5	0.0	1	1.0
34	B 980954	0	1.0	0.0	1	1.0
35	B 980416	0	3.5	0.0	1	3.0
36	MD 71-5	0	1.0	0.0	1	0.0
37	TX 00D1626	0	1.0	0.0	1	0.0
LOCATION MEANS		0.0	2.4	0.9	1.0	0.7
DATE / GROWTH STAGE			7-May			

LODGING

		Griffin GA %	Plains GA %	Lafayette IN 0-9	Parsons KS	Logan Co. KY %
1	Coker 9663		70	0	1.3	45
2	AGS 2000		30	0	8.0	0
3	USG 3209		20	0	1.3	50
4	Pioneer 26R61		10	0	1.7	0
5	SC 960057		5	0	4.0	0
6	G/F 931241E16	40	80	0	2.3	15
7	G/F 93052E42		50	0	1.0	45
8	F/G 931470E62		30	0	5.0	15
9	F/G 931233E17		80	4	2.0	30
10	AR 910-9-1		50	0	2.0	10
11	NC 98-26143		20	0	1.3	50
12	NC 99-13022		30	0	1.3	20
13	NC 98-24182		20	0	1.0	45
14	VA 00W-526		40	0	1.0	98
15	VA 98W-335		20	0	4.0	100
16	VAN98W-342		20	0	3.3	100
17	VA98W-631		60	0	2.7	0
18	LA 9330D11-1		20	0	3.7	100
19	LA 9560CA22-1		5	0	2.7	45
20	AW D99-5261		10	0	1.0	15
21	AW L96*9266-1		80	0	1.7	15
22	AW D99*5725		60	0	4.7	0
23	AW M96*3978-4		20	0	4.0	0
24	AR 93035-4-1		5	0	1.0	0
25	G/F 94261E7		50	0	4.3	0
26	G 96195		20	0	3.3	0
27	G 96226		40	0	2.7	50
28	G 19844		10	0	1.0	10
29	F/G 931630E48		10	0	3.3	50
30	MO 002001	40	80	3	2.7	0
31	SC 980890	40	50	0	5.0	40
32	B 980582	40	70	0	3.0	58
33	B 980696	10	20	0	1.0	0
34	B 980954		10	0	1.3	0
35	B 980416	30	30	0	3.7	50
36	MD 71-5		10	0	4.0	60
37	TX 00D1626		10	0	2.3	0
LOCATION MEANS			33.6	0.2	2.7	30.1
DATE / GROWTH STAGE						

LODGING

		Woodford Co. KY	Queenstown MD 0-9	Portageville MO 0-9	Newton MS 0-9	Wooster OH 0-9
1	Coker 9663	0	2.0	2.7	2	1.0
2	AGS 2000	0	1.7	2.0	0	0.3
3	USG 3209	0	2.0	2.7	0	0.7
4	Pioneer 26R61	0	0.7	0.0	0	0.0
5	SC 960057	0	3.7	1.0	0	0.7
6	G/F 931241E16	0	5.7	1.3	2	2.7
7	G/F 93052E42	0	1.3	3.7	2	0.7
8	F/G 931470E62	0	6.0	2.0	3	0.7
9	F/G 931233E17	0	5.3	0.7	5	0.0
10	AR 910-9-1	0	1.7	1.7	0	0.0
11	NC 98-26143	0	3.0	2.3	0	0.0
12	NC 99-13022	0	2.3	0.3	0	0.0
13	NC 98-24182	0	0.0	2.3	0	0.0
14	VA 00W-526	0	1.7	1.3	0	0.0
15	VA 98W-335	0	1.7	2.0	0	1.7
16	VAN98W-342	0	0.0	1.7	0	0.0
17	VA98W-631	0	1.0	0.0	0	0.3
18	LA 9330D11-1	0	0.0	1.7	0	0.0
19	LA 9560CA22-1	0	0.7	0.3	0	0.3
20	AW D99-5261	0	1.0	1.0	0	0.0
21	AW L96*9266-1	0	3.7	1.3	0	0.0
22	AW D99*5725	0	1.7	1.7	0	0.3
23	AW M96*3978-4	0	3.0	0.3	0	0.3
24	AR 93035-4-1	0	0.3	0.0	0	0.0
25	G/F 94261E7	0	0.7	0.7	0	0.0
26	G 96195	0	1.3	2.7	0	0.0
27	G 96226	0	1.3	2.0	0	0.0
28	G 19844	0	0.3	0.3	0	0.0
29	F/G 931630E48	0	1.7	2.0	3	0.0
30	MO 002001	0	4.3	2.3	1	0.0
31	SC 980890	0	7.3	2.3	1	0.3
32	B 980582	0	2.7	2.3	0	1.0
33	B 980696	0	3.7	2.0	0	0.7
34	B 980954	0	2.3	2.0	2	0.3
35	B 980416	0	6.3	3.3	0	5.0
36	MD 71-5	0	0.0	0.0	0	0.0
37	TX 00D1626	0	0.7	0.0	0	0.0
LOCATION MEANS DATE / GROWTH STAGE		0.0	2.2	1.5	0.6	0.5

LODGING

		Knoxville TN %	Blacksburg VA 0.2-10	Warsaw VA 0.2-10
1	Coker 9663	6.6	3.0	1.1
2	AGS 2000	8.3	1.2	0.2
3	USG 3209	3.3	2.4	0.2
4	Pioneer 26R61	11.6	0.4	0.2
5	SC 960057	3.3	0.4	0.2
6	G/F 931241E16	16.6	1.2	1.5
7	G/F 93052E42	18.3	0.4	2.1
8	F/G 931470E62	13.3	4.0	0.4
9	F/G 931233E17	13.3	2.0	0.2
10	AR 910-9-1	5.0	1.2	0.2
11	NC 98-26143	5.0	2.0	0.3
12	NC 99-13022	18.3	0.4	0.2
13	NC 98-24182	0.0	1.2	0.3
14	VA 00W-526	8.3	0.2	0.2
15	VA 98W-335	5.0	0.4	0.2
16	VAN98W-342	0.0	0.4	0.2
17	VA98W-631	16.6	0.2	0.2
18	LA 9330D11-1	0.0	0.4	0.2
19	LA 9560CA22-1	8.3	0.6	0.6
20	AW D99-5261	6.6	0.4	0.2
21	AW L96*9266-1	23.3	1.2	0.2
22	AW D99*5725	11.6	1.6	0.2
23	AW M96*3978-4	8.3	0.8	0.3
24	AR 93035-4-1	5.0	0.4	0.2
25	G/F 94261E7	58.3	0.4	0.2
26	G 96195	1.6	1.2	0.2
27	G 96226	1.6	1.2	0.2
28	G 19844	1.6	1.2	0.2
29	F/G 931630E48	11.6	1.2	0.2
30	MO 002001	8.3	2.0	0.8
31	SC 980890	5.0	3.0	0.7
32	B 980582	11.6	2.4	1.7
33	B 980696	15.0	0.4	0.2
34	B 980954	16.6	0.4	0.3
35	B 980416	6.6	3.2	1.5
36	MD 71-5	6.6	1.6	0.2
37	TX 00D1626	6.6	0.4	0.2
LOCATION MEANS		9.9	1.2	0.4
DATE / GROWTH STAGE				

WINTER SURVIVAL

		Portageville MO %
1	Coker 9663	44
2	AGS 2000	50
3	USG 3209	38
4	Pioneer 26R61	60
5	SC 960057	45
6	G/F 931241E16	44
7	G/F 93052E42	58
8	F/G 931470E62	29
9	F/G 931233E17	34
10	AR 910-9-1	51
11	NC 98-26143	45
12	NC 99-13022	38
13	NC 98-24182	45
14	VA 00W-526	37
15	VA 98W-335	48
16	VAN98W-342	68
17	VA98W-631	58
18	LA 9330D11-1	30
19	LA 9560CA22-1	45
20	AW D99-5261	35
21	AW L96*9266-1	45
22	AW D99*5725	31
23	AW M96*3978-4	57
24	AR 93035-4-1	38
25	G/F 94261E7	33
26	G 96195	30
27	G 96226	30
28	G 19844	42
29	F/G 931630E48	34
30	MO 002001	57
31	SC 980890	51
32	B 980582	40
33	B 980696	34
34	B 980954	38
35	B 980416	43
36	MD 71-5	63
37	TX 00D1626	22
LOCATION MEANS		43.0

LEAF RUST

		Belle Mina AL 0-9	DeWitt AR 1-9	Kibler AR % Infection	Kibler AR Infection Type	Plains GA
1	Coker 9663		4	7.3	2.5	
2	AGS 2000		1?	0.7	2.0	
3	USG 3209		1	10.7	2.5	
4	Pioneer 26R61		1	10.0	4.0	
5	SC 960057		1	10.0	4.0	
6	G/F 931241E16		1?	0.0		
7	G/F 93052E42		?	0.0		
8	F/G 931470E62		5	17.3	3.0	
9	F/G 931233E17		2	0.0		
10	AR 910-9-1		3	1.3	2.0	
11	NC 98-26143		?	33.3	4.0	
12	NC 99-13022		1	0.0		
13	NC 98-24182		2	26.7	3.5	
14	VA 00W-526		2	35.7	3.3	S
15	VA 98W-335		1?	0.0		
16	VAN98W-342		?	0.0		
17	VA98W-631	2	5.5	0.7	2.0	MR
18	LA 9330D11-1		1?	0.0		
19	LA 9560CA22-1		1	0.0		
20	AW D99-5261		1.5	3.7	2.0	
21	AW L96*9266-1		1	0.0		
22	AW D99*5725		3.2	42.3	3.7	
23	AW M96*3978-4		2.9	29.0	3.3	
24	AR 93035-4-1		2	36.7	3.3	
25	G/F 94261E7		1?	50.0	4.0	
26	G 96195	1	5	31.7	3.7	
27	G 96226	1.3	5	38.3	3.7	
28	G 19844		3?	43.3	4.0	S
29	F/G 931630E48		1?	13.0	2.3	
30	MO 002001		?	26.7	3.5	
31	SC 980890		2?	25.0	3.0	
32	B 980582		1.3	20.0	3.0	
33	B 980696		3.7	10.0	3.0	TR
34	B 980954		1?	50.0	4.0	
35	B 980416	1	2?	2.0	2.0	
36	MD 71-5		?			
37	TX 00D1626		?	0.0		
LOCATION MEANS				16.0		
DATE / GROWTH STAGE				21-May	21-May	

LEAF RUST

		Baton Rouge LA %	St. Paul MN	Cleveland MS 1-9	Warsaw VA 0-9
1	Coker 9663	0	trace r	1	0.0
2	AGS 2000	0	5 mr	1	1.3
3	USG 3209	4	5 mr	1	7.3
4	Pioneer 26R61	0	10 mrms	1	1.0
5	SC 960057	0	10 mrms	1	0.3
6	G/F 931241E16	0	10 ms	1	0.0
7	G/F 93052E42	0	10 ms	1	0.3
8	F/G 931470E62	0	10 mr	1	0.3
9	F/G 931233E17	0	missing	1	1.7
10	AR 910-9-1	13	5 mr/ 30 ms	1	0.7
11	NC 98-26143	0	10 mrms	1	1.7
12	NC 99-13022	0	10 mr	1	0.0
13	NC 98-24182	1	trace r	1	0.0
14	VA 00W-526	5	20 mrms	1	1.0
15	VA 98W-335	0	trace r	1	0.3
16	VAN98W-342	0	10 mr	1	2.0
17	VA98W-631	45	trace r	2	0.7
18	LA 9330D11-1	0	5 ms	1	0.3
19	LA 9560CA22-1	0	trace r	1	0.3
20	AW D99-5261	0	20 mrms	1	0.3
21	AW L96*9266-1	0	10 mr	1	0.3
22	AW D99*5725	10	30 ms	2	5.0
23	AW M96*3978-4	1	10 mrms	1	1.7
24	AR 93035-4-1	5	20 mrms	1	1.7
25	G/F 94261E7	0	10 mrms	1	0.3
26	G 96195	18	20 mrms	1	0.0
27	G 96226	13	10-30 mss	1	4.0
28	G 19844	0	20 mrms	1	1.3
29	F/G 931630E48	0	5 mrms	4	0.3
30	MO 002001	0	20-30 ms	1	0.0
31	SC 980890	0	30 mrms	1	0.3
32	B 980582	0	trace r	1	0.3
33	B 980696	0	5-10 ms	1	0.3
34	B 980954	0	5 mr/ 10ms	1	0.0
35	B 980416	0	10 ms	1	2.3
36	MD 71-5	0	10-20 mrms	1	3.0
37	TX 00D1626	0	30 ms	1	0.0
LOCATION MEANS		3.1		1.1	1.1
DATE / GROWTH STAGE		4-May	27-Jun		

LEAF RUST

St. Paul
MN
Reactions produced by NA Race*

		MBDS	PMML	LBBK	KDGJ	CBGJ	TNRJ	TLGJ	SCJD	Postulated Genes***
1	Coker 9663	;	;	;	;	;	3-;	3	;	2a, 9, 10, 11
2	AGS 2000	;lc	;lc	;lc	;	;	;	;	3	11,.26.+
3	USG 3209	;	;	;lc	;	;	;	;-3	3	11,26,+
4	Pioneer 26R61	;	;lc	;lc	;	;	;	;	;lc	+
5	SC 960057	;	;	;lc	;lc2	;	3-;	3-;	3	11,26,+
6	G/F 931241E16	;	;	;	;	;	;lc	;	;	+
7	G/F 93052E42	0;	;lc	;	;	;	;	;	;	+
8	F/G 931470E62	;	;-3	;	;	;	3	3	;	9,+
9	F/G 931233E17	;	;	3-;	;lc	;lc	;	;	;lc	+
10	AR 910-9-1	-	;	;-3	;2c	;	;	;	;	+
11	NC 98-26143	;	;	;	3	;	;-3	;	;	24, +
12	NC 99-13022	;	;	;	3	;	3	;	;	24
13	NC 98-24182	;	;	;	;	;	3	3	;	9,11,+
14	VA 00W-526	;	;	;-3	3	3-;	3	;-3	3	11,+
15	VA 98W-335	;	;	;	;	;	;	;	;	+
16	VAN98W-342	;	;l	;	;	;	-	;	;	+
17	VA98W-631	3	;lc	;	;lc	;lc	;	;lc	;	10,17,+
18	LA 9330D11-1	;	;	;	;	;	;	;	;	+
19	LA 9560CA22-1	;	;	;	;	;	;	;	;	+
20	AW D99-5261	3	;	3;	;l2	;	;l	;	3	17, +
21	AW L96*9266-1	;	;	;	;	;	;	;	;	+
22	AW D99*5725	;l	;lc	;	3	3	;	;2	;	11,+
23	AW M96*3978-4	;lc	;	;lc	;	;	;	;lc2	3	11,26,+
24	AR 93035-4-1	;2c	3	;	;-3	;lc2	3	3,1c	;	9, +
25	G/F 94261E7	;	;	;	3-;	;	3-;	;	;	+
26	G 96195	3	-	3	;	;	;	3	3	+
27	G 96226	3	-	3	;	3	;	3	3	10, +
28	G 19844	;	;	;	3-;	;	3	;-3	3	+
29	F/G 931630E48	;	;	;	;	;	;lc	;	;	+
30	MO 002001	;	;lc	;	;	;	;	;lc	;	+
31	SC 980890	;	;	;	;	;	;	;	;	+
32	B 980582	;	;	;	;	;	3	;	;lc	9, 24, +
33	B 980696	3;	;lc	;	;lc	3-;	;lc	;	;	+
34	B 980954	;	;	;	;	;	;	;	;	+
35	B 980416	;lc3	;	;	;	;	;	;	;	+
36	MD 71-5	;	;	;	;	;	;	;	;	+
37	TX 00D1626	;	;	;	;lc	;	;lc	;	3	11,26,+

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

**Virulence formula:

MBDS=1,3,10,14a,17,B
PMML=1,2c,3,3Ka,9,26,30,B
LBBK=1,10,14a,18
KDGJ=2a,2c,3,10,11,14a,24
CBGJ=3,10,11,14a
TNRJ=1,2a,2c,3,3Ka,9,10,11,14a,24,30
TLGJ=1,2a,2c,3, 9,10,11,14a
SCJD=1,2a,2c,11,14a,17,26

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

LEAF RUST

		TNRJ03
1	Coker 9663	3S
2	AGS 2000	0;
3	USG 3209	;1=
4	Pioneer 26R61	0;
5	SC 960057	2;
6	G/F 931241E16	3S
7	G/F 93052E42	3S
8	F/G 931470E62	3S
9	F/G 931233E17	;1
10	AR 910-9-1	23;
11	NC 98-26143	23;
12	NC 99-13022	3S
13	NC 98-24182	3S
14	VA 00W-526	3S
15	VA 98W-335	0;
16	VAN98W-342	0;
17	VA98W-631	;1
18	LA 9330D11-1	;1=
19	LA 9560CA22-1	3S/;1
20	AW D99-5261	2;
21	AW L96*9266-1	2;
22	AW D99*5725	3S
23	AW M96*3978-4	3S
24	AR 93035-4-1	3S
25	G/F 94261E7	3S
26	G 96195	3S
27	G 96226	3S
28	G 19844	3S
29	F/G 931630E48	;1
30	MO 002001	3S
31	SC 980890	3S
32	B 980582	3S
33	B 980696	3;
34	B 980954	3S
35	B 980416	23;
36	MD 71-5	0;
37	TX 00D1626	;1

Blacksburg
VA

		TNRJ03
lr differential	Tc LR1	3S
lr differential	Tc LR2a	3S
lr differential	Tc LR2c	3S
lr differential	Tc LR3a	3S
lr differential	Tc LR9	3S
lr differential	Tc LR16	;1-N
lr differential	Tc LR24	3S
lr differential	Tc LR26	;1=
lr differential	Tc LR3ka	3S
lr differential	Tc LR11	23
lr differential	Tc LR17	;1=
lr differential	Tc LR30	3S
lr differential	Tc LR18	2C
lr differential	Tc LR14a	3S
lr differential	Tc LR10	3S
lr differential	Tc LRb	2N

STEM RUST

		St. Paul MN
1	Coker 9663	trace r
2	AGS 2000	10 mr
3	USG 3209	trace r
4	Pioneer 26R61	10 mr
5	SC 960057	-
6	G/F 931241E16	70 s
7	G/F 93052E42	60 s
8	F/G 931470E62	5 ms
9	F/G 931233E17	-
10	AR 910-9-1	50 mss
11	NC 98-26143	50 s
12	NC 99-13022	trace r
13	NC 98-24182	5 ms
14	VA 00W-526	-
15	VA 98W-335	trace r
16	VAN98W-342	trace r
17	VA98W-631	5 ms
18	LA 9330D11-1	-
19	LA 9560CA22-1	trace r
20	AW D99-5261	60 s
21	AW L96*9266-1	20 mr
22	AW D99*5725	60 s
23	AW M96*3978-4	60 s
24	AR 93035-4-1	60 s
25	G/F 94261E7	10 mr
26	G 96195	60 mss
27	G 96226	trace r
28	G 19844	40 s
29	F/G 931630E48	10 mr
30	MO 002001	60 s
31	SC 980890	-
32	B 980582	10 ms
33	B 980696	60 s
34	B 980954	10 mr
35	B 980416	5 mrms
36	MD 71-5	trace r
37	TX 00D1626	60 s
DATE / GROWTH STAGE		2-Jul

STEM RUST

		St. Paul MN			
		01 TX 27C TTTT	74 MN 1409A TPMK	72 MEX 53-A RTQQ	69 MN 399 QTHJ
1	Coker 9663	3	0	0	0;
2	AGS 2000	1	1/2/4	1+	1
3	USG 3209	1	1+	1	0
4	Pioneer 26R61	1+	2-	2-	2-
5	SC 960057	3-	2+	;1-	1+
6	G/F 931241E16	3	4	;12	3-
7	G/F 93052E42	3+	4/1	12	4
8	F/G 931470E62	3-	34	3/;	;/1
9	F/G 931233E17	4	4	3	3
10	AR 910-9-1	4	4	0	3+
11	NC 98-26143	3+	1	1+	3
12	NC 99-13022	1	-	-	1+
13	NC 98-24182	-	4	0	23-
14	VA 00W-526	1	0	;1	0
15	VA 98W-335	1	0;	1	0
16	VAN98W-342	1	0;	0	0
17	VA98W-631	3+	4	0;	;12
18	LA 9330D11-1	3+	4	0	0
19	LA 9560CA22-1	2-	;	;	0
20	AW D99-5261	3+	4	1	3
21	AW L96*9266-1	1+	1/3	2-	1
22	AW D99*5725	3+	4	3	3
23	AW M96*3978-4	1	4	3-	2-
24	AR 93035-4-1	3	4	3	4
25	G/F 94261E7	1	23	0	2-
26	G 96195	4	3-	;12	3-
27	G 96226	1	3-	0/3	-
28	G 19844	4	4	;3	4
29	F/G 931630E48	1	1	1+	1+
30	MO 002001	3	-	3/1	3
31	SC 980890	2	3	2-	2-
32	B 980582	3	4	0	;
33	B 980696	3+	4	;12	3
34	B 980954	2+	3-	;1	2
35	B 980416	3	4	0	;/3
36	MD 71-5	;1	0	0	0
37	TX 00D1626	4	4	4	4

STRIPE RUST

		DeWitt AR 1-9	Fayetteville AR % flag	Plains GA	Winfield KS 1-5	Baton Rouge LA 0-9	Cleveland MS 1-9
1	Coker 9663	5.5	45.0	MS	3	3.0	3.0
2	AGS 2000	6.5	50.0	S	4	2.5	6.7
3	USG 3209	4.5	26.7	MR	1	1.0	4.5
4	Pioneer 26R61	2.0	1.3	R	1	0.0	2.0
5	SC 960057	3.9	17.3	TR	3	0.8	3.5
6	G/F 931241E16	6.0	17.3	S	4	1.8	6.0
7	G/F 93052E42	7.5	56.7	MS	5	6.5	7.5
8	F/G 931470E62	6.2	56.7	S	3	1.8	3.5
9	F/G 931233E17	2.0	1.3	MR	1	1.0	1.0
10	AR 910-9-1	2.0	2.0	R	1	0.0	1.5
11	NC 98-26143	9.0	85.0	S	5	7.0	8.0
12	NC 99-13022	3.5	12.3	S	4	0.0	1.5
13	NC 98-24182	1.5	1.3	TR	1	0.0	1.0
14	VA 00W-526	2.5	3.0	MS	1	0.0	1.0
15	VA 98W-335	7.5	61.7	S	4	2.0	7.5
16	VAN98W-342	8.5	82.7	S	4	3.3	8.5
17	VA98W-631	3.5	5.3	MR	1	0.0	2.0
18	LA 9330D11-1	7.0	36.7	S	3	3.8	7.5
19	LA 9560CA22-1	3.5	15.0	MS	1	2.0	4.5
20	AW D99-5261	3.8	29.0	R	2	0.5	3.0
21	AW L96*9266-1	7.0	26.7	S	4	2.3	6.0
22	AW D99*5725	2.0	19.7	R	2	0.0	2.0
23	AW M96*3978-4	5.5	17.3	R	3	1.5	4.5
24	AR 93035-4-1	3.5	30.7	R	2	0.3	2.0
25	G/F 94261E7	6.5	25.0	TR	4	1.0	6.0
26	G 96195	3.0	18.0	R	1	0.0	2.0
27	G 96226	5.5	38.3	S	3	2.0	5.0
28	G 19844	7.5	8.0	S	2	0.5	4.5
29	F/G 931630E48	7.0	8.0	R	2	0.5	2.0
30	MO 002001	8.4	61.7	S	5	3.0	7.0
31	SC 980890	6.5	43.3	MS	2	1.5	1.5
32	B 980582	6.0	50.0	S	4	1.5	3.5
33	B 980696	2.0	5.7	TR	1	0.0	1.0
34	B 980954	7.5	43.3	S	4	4.3	6.0
35	B 980416	8.0	68.3	S	4	0.5	7.5
36	MD 71-5	8.0	85.3	S	5	4.0	8.5
37	TX 00D1626	7.5	64.3	S	5	3.8	7.5
LOCATION MEANS		5.3	33.0		2.8	1.7	4.3
DATE / GROWTH STAGE		7-May	5-May			24-Apr	6-May

STRIPE RUST

		Mt. Vernon WA				Pullman WA	
		%	T	%	T	%	T
1	Coker 9663	90	8	99	8	50	8
2	AGS 2000	20	8	70	8	70	8
3	USG 3209	5	2	0	0	80	8
4	Pioneer 26R61	2	2	0	0	0	0
5	SC 960057	90	8	90	8	90	8
6	G/F 931241E16	95	8	99	8	90	8
7	G/F 93052E42	95	8	99	8	95	8
8	F/G 931470E62	95	8	99	8	90	8
9	F/G 931233E17	1	2	2	2	30	5
10	AR 910-9-1	15	5	30	8	60	8
11	NC 98-26143	90	8	99	8	80	8
12	NC 99-13022	90	8	99	8	20	8
13	NC 98-24182	90	8	40	8	10	8
14	VA 00W-526	15	5	15	5	2	8
15	VA 98W-335	90	8	95	8	90	8
16	VAN98W-342	90	8	99	8	95	8
17	VA98W-631	90	8	20	5	40	8
18	LA 9330D11-1	95	8	99	8	95	8
19	LA 9560CA22-1	90	8	20	5	80	8
20	AW D99-5261	80	8	20	5	80	8
21	AW L96*9266-1	90	8	20	5	80	8
22	AW D99*5725	5	2	20	8	5	5
23	AW M96*3978-4	90	8	99	8	95	8
24	AR 93035-4-1	10	5	10	2	70	8
25	G/F 94261E7	70	8	99	8	95	8
26	G 96195	90	8	99	8	10	2
27	G 96226	95	8	99	8	95	8
28	G 19844	10	5	15	5	90	8
29	F/G 931630E48	5	2	5	2	5	5
30	MO 002001	90	8	99	8	95	8
31	SC 980890	95	8	90	8	70	8
32	B 980582	95	8	95	8	70	8
33	B 980696	0	0	0	0	0	0
34	B 980954	95	8	95	8	95	8
35	B 980416	95	8	95	8	95	8
36	MD 71-5	95	8	99	8	95	8
37	TX 00D1626	90	8	99	8	95	8
LOCATION MEANS		66.2	6.6	63.0	6.4	65.1	7.2
DATE / GROWTH STAGE		April 29 / Stage 3		May 30 / Stage 5		June 25 / Stage 6	

SEPTORIA

		Belle Mina AL leaf blotch	Plains GA	Ft. Branch IN 1-9	Greensburg IN #leaves remaining	Baton Rouge LA glume blotch
1	Coker 9663	3.0		3.5	2.5	2.5
2	AGS 2000	4.3		3.0	2.0	1.5
3	USG 3209	3.5		2.5	2.5	2.0
4	Pioneer 26R61	3.0		2.5	2.0	1.5
5	SC 960057	2.3		4.0	2.0	2.5
6	G/F 931241E16	3.0		4.5	1.5	2.5
7	G/F 93052E42	4.2		5.0	1.5	2.0
8	F/G 931470E62	3.3		3.0	1.3	4.0
9	F/G 931233E17	4.0		2.5	2.0	2.0
10	AR 910-9-1	3.3		2.5	2.3	1.0
11	NC 98-26143	3.3	S	3.5	2.0	2.5
12	NC 99-13022	4.8	S	3.0	2.3	1.5
13	NC 98-24182	3.7		2.5	2.0	1.0
14	VA 00W-526	3.0		2.0	2.5	1.0
15	VA 98W-335	3.7		6.0	1.5	1.0
16	VAN98W-342	3.7		6.0	1.3	2.0
17	VA98W-631	3.7		2.5	3.0	1.0
18	LA 9330D11-1	4.0		4.0	2.0	1.0
19	LA 9560CA22-1	3.0		3.5	3.0	2.5
20	AW D99-5261	4.0	S	4.0	1.5	2.0
21	AW L96*9266-1	3.0	MS	3.0	2.0	2.0
22	AW D99*5725	5.0	S	4.5	1.5	4.5
23	AW M96*3978-4	5.0	MS	5.5	1.5	2.0
24	AR 93035-4-1	3.7		3.5	1.3	1.0
25	G/F 94261E7	4.7		4.0	1.5	2.0
26	G 96195	4.0	S	3.0	1.0	1.5
27	G 96226	3.8		4.0	1.8	2.0
28	G 19844	3.3		3.5	1.5	1.0
29	F/G 931630E48	6.0	S	3.0	1.0	2.5
30	MO 002001	4.3		5.0	1.5	2.0
31	SC 980890	3.8	MS	4.0	1.3	1.5
32	B 980582	3.0		4.5	2.0	2.5
33	B 980696	3.7		2.5	1.5	1.0
34	B 980954	3.0		3.5	2.3	2.5
35	B 980416	3.3		3.5	1.8	2.0
36	MD 71-5	3.7		6.5	1.0	2.0
37	TX 00D1626	3.7		3.0	1.0	2.0
LOCATION MEANS		3.7		3.7	1.8	1.9
DATE / GROWTH STAGE					11-Jun	4-May

SEPTORIA

		Kinston NC glume blotch	Wooster OH leaf blotch 0-9	Florence SC 0-9
1	Coker 9663		2.3	2
2	AGS 2000	3	2.7	2
3	USG 3209	3	5.0	3
4	Pioneer 26R61	4	3.0	2
5	SC 960057	3	3.3	2
6	G/F 931241E16	3	3.3	5
7	G/F 93052E42	3	3.3	3
8	F/G 931470E62	3	2.3	1
9	F/G 931233E17	4	2.3	3
10	AR 910-9-1	3	4.0	2
11	NC 98-26143	4	2.3	2
12	NC 99-13022	3	2.7	5
13	NC 98-24182	4	2.3	2
14	VA 00W-526	3	2.0	2
15	VA 98W-335	3	4.3	2
16	VAN98W-342	2	2.7	2
17	VA98W-631	3	4.0	3
18	LA 9330D11-1	5	3.7	7
19	LA 9560CA22-1	4	2.3	2
20	AW D99-5261	3	2.7	3
21	AW L96*9266-1	4	2.0	2
22	AW D99*5725	5	2.3	4
23	AW M96*3978-4	5	3.7	5
24	AR 93035-4-1		4.3	3
25	G/F 94261E7	5	4.7	3
26	G 96195	5	3.7	4
27	G 96226	5	3.0	2
28	G 19844	3	2.3	2
29	F/G 931630E48	3	4.0	6
30	MO 002001		3.0	2
31	SC 980890	3	3.3	1
32	B 980582	3	2.0	1
33	B 980696	4	3.3	2
34	B 980954	4	1.3	3
35	B 980416	3	2.0	3
36	MD 71-5	3	2.3	2
37	TX 00D1626	4	2.3	4
LOCATION MEANS		3.6	3.0	2.8
DATE / GROWTH STAGE				

FUSARIUM HEAD BLIGHT (SCAB)

		Ft. Branch IN	Greensburg IN	Logan Co. KY
			incidence	
		1-9	% heads w symptoms	0-5
1	Coker 9663	4.0	30	1.5
2	AGS 2000	5.5	50	3.0
3	USG 3209	4.0	45	3.0
4	Pioneer 26R61	7.0	55	3.5
5	SC 960057	3.5	10	2.0
6	G/F 931241E16	6.0	30	2.5
7	G/F 93052E42	8.0	65	3.5
8	F/G 931470E62	6.5	55	2.5
9	F/G 931233E17	4.0	30	2.0
10	AR 910-9-1	3.5	30	2.0
11	NC 98-26143	6.5	10	2.5
12	NC 99-13022	6.5	20	2.5
13	NC 98-24182	4.5	25	1.5
14	VA 00W-526	3.0	25	1.5
15	VA 98W-335	4.0	45	2.5
16	VAN98W-342	4.0	45	2.0
17	VA98W-631	4.5	40	2.0
18	LA 9330D11-1	6.0	55	2.5
19	LA 9560CA22-1	4.0	15	1.5
20	AW D99-5261	2.5	15	1.5
21	AW L96*9266-1	6.0	20	2.0
22	AW D99*5725	7.0	25	1.5
23	AW M96*3978-4	5.5	40	2.0
24	AR 93035-4-1	3.0	10	1.0
25	G/F 94261E7	7.5	50	3.0
26	G 96195	3.0	15	1.5
27	G 96226	3.0	15	1.0
28	G 19844	3.0	10	2.0
29	F/G 931630E48	6.5	50	1.5
30	MO 002001	5.0	15	1.5
31	SC 980890	6.5	45	2.5
32	B 980582	2.5	15	1.0
33	B 980696	2.0	15	1.0
34	B 980954	5.5	15	2.5
35	B 980416	2.5	15	1.0
36	MD 71-5	4.0	50	2.5
37	TX 00D1626	2.0	45	1.5
LOCATION MEANS		4.6	30.9	2.0
DATE / GROWTH STAGE			11-Jun	

POWDERY MILDEW

		Plains GA	Queenstown MD	Kinston NC	Wooster OH	Florence SC 0-9
1	Coker 9663		5	4.5	1.3	2
2	AGS 2000		2	1.0	1.3	2
3	USG 3209		1	1.5	0.7	3
4	Pioneer 26R61		7	1.0	2.0	2
5	SC 960057		5	2.0	1.0	2
6	G/F 931241E16		4	3.0	1.3	5
7	G/F 93052E42		0	0.0	1.0	3
8	F/G 931470E62		0	2.0	1.0	1
9	F/G 931233E17	MS	1	2.0	1.3	3
10	AR 910-9-1	S	8	5.0	1.7	2
11	NC 98-26143		0	0.0	1.3	2
12	NC 99-13022		0	0.0	1.3	5
13	NC 98-24182		3	4.0	1.3	2
14	VA 00W-526		0	0.0	1.0	2
15	VA 98W-335		0	2.0	0.3	2
16	VAN98W-342		0	0.0	0.7	2
17	VA98W-631		3	4.0	1.3	3
18	LA 9330D11-1		5	5.5	1.7	7
19	LA 9560CA22-1	S	5	5.5	2.0	2
20	AW D99-5261		6	5.0	2.0	3
21	AW L96*9266-1	S	6	5.0	2.3	2
22	AW D99*5725		3	1.5	2.0	4
23	AW M96*3978-4		7	3.0	1.3	5
24	AR 93035-4-1		8	4.0	3.3	3
25	G/F 94261E7		0	1.5	1.0	3
26	G 96195	S	8	5.5	2.0	4
27	G 96226		2	2.5	1.0	2
28	G 19844		8	5.5	1.3	2
29	F/G 931630E48		7	3.5	1.3	6
30	MO 002001		6	4.0	2.3	2
31	SC 980890		4	4.0	1.7	1
32	B 980582		6	3.0	2.0	1
33	B 980696	S	6	3.5	0.7	2
34	B 980954	S	5	6.0	1.0	3
35	B 980416		4	1.0	1.0	3
36	MD 71-5		0	0.5	1.0	2
37	TX 00D1626		6	2.5	0.7	4
LOCATION MEANS			3.8	2.8	1.4	2.8

POWDERY MILDEW

		Warsaw VA 0-9
1	Coker 9663	4.7
2	AGS 2000	0.3
3	USG 3209	0.7
4	Pioneer 26R61	4.3
5	SC 960057	1.0
6	G/F 931241E16	1.3
7	G/F 93052E42	1.7
8	F/G 931470E62	1.0
9	F/G 931233E17	0.0
10	AR 910-9-1	5.0
11	NC 98-26143	0.0
12	NC 99-13022	0.7
13	NC 98-24182	2.7
14	VA 00W-526	0.0
15	VA 98W-335	0.7
16	VAN98W-342	0.0
17	VA98W-631	3.0
18	LA 9330D11-1	4.3
19	LA 9560CA22-1	4.0
20	AW D99-5261	2.0
21	AW L96*9266-1	4.7
22	AW D99*5725	0.7
23	AW M96*3978-4	4.7
24	AR 93035-4-1	5.3
25	G/F 94261E7	1.3
26	G 96195	5.0
27	G 96226	1.7
28	G 19844	4.0
29	F/G 931630E48	3.0
30	MO 002001	4.3
31	SC 980890	1.7
32	B 980582	5.0
33	B 980696	2.7
34	B 980954	5.0
35	B 980416	2.0
36	MD 71-5	0.7
37	TX 00D1626	3.7
LOCATION MEANS		2.5

POWDERY MILDEW

Blacksburg
VA

		PM03 Comp
1	Coker 9663	3MS
2	AGS 2000	1R
3	USG 3209	1R
4	Pioneer 26R61	0R
5	SC 960057	3S
6	G/F 931241E16	4S
7	G/F 93052E42	1R
8	F/G 931470E62	12MR
9	F/G 931233E17	23MSI
10	AR 910-9-1	3MS
11	NC 98-26143	12MR
12	NC 99-13022	1R
13	NC 98-24182	3MS
14	VA 00W-526	0R
15	VA 98W-335	0R
16	VAN98W-342	1R
17	VA98W-631	3MS
18	LA 9330D11-1	3MS
19	LA 9560CA22-1	23MSI
20	AW D99-5261	12MR
21	AW L96*9266-1	34MS
22	AW D99*5725	34MS
23	AW M96*3978-4	4S
24	AR 93035-4-1	4S
25	G/F 94261E7	12MR
26	G 96195	34S
27	G 96226	3MS
28	G 19844	4S
29	F/G 931630E48	2MR
30	MO 002001	4S
31	SC 980890	34S
32	B 980582	34S
33	B 980696	4S
34	B 980954	4S
35	B 980416	34S
36	MD 71-5	1R
37	TX 00D1626	4S

		PM03 Comp
pm differential	Chancellor	4S
pm differential	Axminster	4S
pm differential	C68-15*7/CI13836	34S
pm differential	Ulka	4S
pm differential	Asosan	4S
pm differential	Chul	34S
pm differential	Sonora	23MRI
pm differential	C68-15*6/Sonora	34S
pm differential	C68-15*6/Triticale	34S
pm differential	Michigan Amber	4S
pm differential	Yuma	4S
pm differential	C68-15*5/Yuma	34S
pm differential	C68-15*5/Khapli	34S
pm differential	Ronos	4S
pm differential	Hope	4S
pm differential	Coker 747	3MS
pm differential	Transec	4S
pm differential	C68-15*7/Transec	34S
pm differential	Federation/Kavkaz	3MS
pm differential	Amigo	12MR
pm differential	C68-15*5//C747/Amigo	4S

LEAF BLIGHT

		Winfield KS 1-5
1	Coker 9663	2
2	AGS 2000	3
3	USG 3209	2
4	Pioneer 26R61	1
5	SC 960057	2
6	G/F 931241E16	3
7	G/F 93052E42	4
8	F/G 931470E62	2
9	F/G 931233E17	3
10	AR 910-9-1	2
11	NC 98-26143	4
12	NC 99-13022	3
13	NC 98-24182	1
14	VA 00W-526	2
15	VA 98W-335	2
16	VAN98W-342	4
17	VA98W-631	4
18	LA 9330D11-1	4
19	LA 9560CA22-1	2
20	AW D99-5261	2
21	AW L96*9266-1	2
22	AW D99*5725	3
23	AW M96*3978-4	3
24	AR 93035-4-1	2
25	G/F 94261E7	3
26	G 96195	2
27	G 96226	2
28	G 19844	1
29	F/G 931630E48	1
30	MO 002001	3
31	SC 980890	4
32	B 980582	1
33	B 980696	2
34	B 980954	3
35	B 980416	4
36	MD 71-5	5
37	TX 00D1626	3
LOCATION MEANS		2.6

TAN SPOT

		Pine Tree AR % flag leaf
1	Coker 9663	56.7
2	AGS 2000	75.0
3	USG 3209	31.7
4	Pioneer 26R61	36.7
5	SC 960057	12.3
6	G/F 931241E16	22.3
7	G/F 93052E42	75.0
8	F/G 931470E62	20.0
9	F/G 931233E17	63.3
10	AR 910-9-1	63.3
11	NC 98-26143	36.7
12	NC 99-13022	50.0
13	NC 98-24182	63.3
14	VA 00W-526	20.0
15	VA 98W-335	63.3
16	VAN98W-342	63.3
17	VA98W-631	63.3
18	LA 9330D11-1	70.0
19	LA 9560CA22-1	56.7
20	AW D99-5261	36.7
21	AW L96*9266-1	50.0
22	AW D99*5725	70.0
23	AW M96*3978-4	75.0
24	AR 93035-4-1	43.3
25	G/F 94261E7	75.0
26	G 96195	43.3
27	G 96226	26.7
28	G 19844	30.0
29	F/G 931630E48	36.7
30	MO 002001	43.3
31	SC 980890	82.7
32	B 980582	56.7
33	B 980696	20.0
34	B 980954	63.3
35	B 980416	20.0
36	MD 71-5	38.3
37	TX 00D1626	14.7
LOCATION MEANS		47.8
DATE / GROWTH STAGE		9-May

XANTHOMONAS

		Lafayette IN 0-9	Baton Rouge LA 0-9
1	Coker 9663	6.0	1.5
2	AGS 2000	8.0	2.0
3	USG 3209	9.0	3.5
4	Pioneer 26R61	8.5	3.5
5	SC 960057	9.0	2.0
6	G/F 931241E16	9.0	3.0
7	G/F 93052E42	8.5	2.0
8	F/G 931470E62	8.5	1.5
9	F/G 931233E17	9.0	2.0
10	AR 910-9-1	8.5	2.5
11	NC 98-26143	8.5	1.5
12	NC 99-13022	9.0	1.0
13	NC 98-24182	8.5	1.5
14	VA 00W-526	8.5	3.5
15	VA 98W-335	9.0	2.0
16	VAN98W-342	8.5	2.0
17	VA98W-631	8.0	2.0
18	LA 9330D11-1	5.0	4.0
19	LA 9560CA22-1	5.0	2.0
20	AW D99-5261	9.0	2.0
21	AW L96*9266-1	8.0	3.5
22	AW D99*5725	9.0	1.5
23	AW M96*3978-4	8.5	2.0
24	AR 93035-4-1	8.5	2.5
25	G/F 94261E7	6.0	2.0
26	G 96195	8.5	1.0
27	G 96226	5.0	4.0
28	G 19844	7.0	1.5
29	F/G 931630E48	8.0	3.0
30	MO 002001	8.5	1.5
31	SC 980890	6.0	2.5
32	B 980582	6.0	1.5
33	B 980696	8.0	1.0
34	B 980954	7.0	2.5
35	B 980416	8.5	1.5
36	MD 71-5	8.5	3.0
37	TX 00D1626	8.5	3.5
LOCATION MEANS		7.9	2.2

VIRUSES

		Belle Mina AL BYDV % symtomatic plants	Griffin GA SBMV	Plains GA SBMV	Warsaw VA WSSV 0-9
1	Coker 9663	53.3	SB	S	6
2	AGS 2000	60.0	SB	S	6
3	USG 3209	66.7			3
4	Pioneer 26R61	40.0			2
5	SC 960057	45.0	SB	S	1
6	G/F 931241E16	51.7			1
7	G/F 93052E42	56.7			6
8	F/G 931470E62	66.7		S	4
9	F/G 931233E17	76.7			4
10	AR 910-9-1	40.0			6
11	NC 98-26143	63.3			2
12	NC 99-13022	70.0	SB		1
13	NC 98-24182	80.0		S	1
14	VA 00W-526	66.7			3
15	VA 98W-335	70.0			4
16	VAN98W-342	66.7			1
17	VA98W-631	66.7			3
18	LA 9330D11-1	60.0		S	6
19	LA 9560CA22-1	46.7		S	1
20	AW D99-5261	60.0			2
21	AW L96*9266-1	50.0			2
22	AW D99*5725	66.7	SB		6
23	AW M96*3978-4	73.3			8
24	AR 93035-4-1	60.0			7
25	G/F 94261E7	78.3	SB		8
26	G 96195	66.7			4
27	G 96226	53.3	SB		6
28	G 19844	46.7	SB		4,8
29	F/G 931630E48	85.0			5
30	MO 002001	63.3			4,8
31	SC 980890	53.3			6
32	B 980582	63.3			4
33	B 980696	50.0	SB	S	2
34	B 980954	41.7			0
35	B 980416	53.3			5
36	MD 71-5	60.0			4
37	TX 00D1626	63.3	SB		1
LOCATION MEANS		60.4			

HESSIAN FLY

W. Lafayette IN

		Biotype B	Biotype C	Biotype D	Biotype E	Biotype L
1	Coker 9663	12 - 2	12 - 3	10 - 5	7 - 10	0 - 19
2	AGS 2000	0 - 16	1 - 17	0 - 18	8 - 11	2 - 16
3	USG 3209	17 - 2	0 - 23	0 - 19	15 - 0	0 - 18
4	Pioneer 26R61	0 - 15	0 - 19	0 - 17	16 - 0	0 - 16
5	SC 960057	16 - 2	0 - 13	0 - 16	18 - 0	0 - 20
6	G/F 931241E16	0 - 17	0 - 19	0 - 18	18 - 3	0 - 22
7	G/F 93052E42	0 - 14	4 - 13	0 - 18	0 - 15	0 - 15
8	F/G 931470E62	3 - 15	6 - 17	4 - 18	0 - 19	0 - 18
9	F/G 931233E17	0 - 22	0 - 20	0 - 28	0 - 21	0 - 22
10	AR 910-9-1	0 - 19	0 - 18	0 - 19	0 - 20	0 - 20
11	NC 98-26143	0 - 16	21 - 2	0 - 22	0 - 20	0 - 19
12	NC 99-13022	0 - 17	0 - 14	0 - 15	0 - 16	0 - 12
13	NC 98-24182	0 - 13	0 - 23	0 - 23	15 - 6	0 - 11
14	VA 00W-526	0 - 17	0 - 25	0 - 19	0 - 19	0 - 19
15	VA 98W-335	0 - 18	13 - 4	0 - 16	0 - 17	0 - 19
16	VAN98W-342	0 - 18	3 - 16	0 - 19	0 - 16	0 - 21
17	VA98W-631	0 - 18	18 - 2	0 - 19	0 - 15	0 - 18
18	LA 9330D11-1	0 - 12	0 - 30	0 - 18	0 - 15	0 - 17
19	LA 9560CA22-1	0 - 16	5 - 10	2 - 17	15 - 2	0 - 18
20	AW D99-5261	0 - 16	0 - 21	0 - 19	0 - 22	0 - 23
21	AW L96*9266-1	0 - 18	0 - 23	0 - 18	17 - 3	0 - 22
22	AW D99*5725	0 - 16	0 - 25	0 - 21	0 - 22	0 - 16
23	AW M96*3978-4	0 - 16	0 - 22	0 - 13	0 - 24	0 - 16
24	AR 93035-4-1	0 - 16	0 - 25	0 - 17	5 - 18	0 - 19
25	G/F 94261E7	0 - 17	3 - 17	0 - 16	0 - 25	0 - 20
26	G 96195	8 - 4	0 - 21	5 - 10	20 - 1	0 - 19
27	G 96226	0 - 19	3 - 9	0 - 14	12 - 8	0 - 14
28	G 19844	11 - 5	1 - 19	0 - 24	3 - 22	0 - 21
29	F/G 931630E48	0 - 15	0 - 20	0 - 21	4 - 19	0 - 24
30	MO 002001	7 - 5	7 - 13	1 - 17	19 - 5	0 - 19
31	SC 980890	20 - 1	3 - 21	17 - 0	14 - 0	25 - 0
32	B 980582	0 - 19	0 - 19	0 - 21	0 - 16	0 - 22
33	B 980696	0 - 16	8 - 14	0 - 19	0 - 20	0 - 17
34	B 980954	0 - 21	0 - 21	0 - 22	0 - 18	0 - 20
35	B 980416	5 - 6	13 - 2	11 - 9	18 - 3	0 - 18
36	MD 71-5	0 - 17	2 - 20	0 - 12	0 - 16	0 - 19
37	TX 00D1626	18 - 0	0 - 24	0 - 25	25 - 0	0 - 23

ACID SOIL TOLERANCE

			Enid OK	
		1-5	1-5	1-5
1	Coker 9663	2	2	1
2	AGS 2000	3	2	3
3	USG 3209	4	3	2
4	Pioneer 26R61	2	2	1
5	SC 960057	1	1	2
6	G/F 931241E16	2	2	1
7	G/F 93052E42	2	1	1
8	F/G 931470E62	2	1	3
9	F/G 931233E17	2	1	3
10	AR 910-9-1	2	1	2
11	NC 98-26143	3	3	3
12	NC 99-13022	4	4	3
13	NC 98-24182	4	5	5
14	VA 00W-526	3	3	1
15	VA 98W-335	5	4	3
16	VAN98W-342	2	2	2
17	VA98W-631	4	5	4
18	LA 9330D11-1	3	1	3
19	LA 9560CA22-1	2	1	3
20	AW D99-5261	2	2	2
21	AW L96*9266-1	3	2	2
22	AW D99*5725	1	1	1
23	AW M96*3978-4	3	4	3
24	AR 93035-4-1	3	3	1
25	G/F 94261E7	1	1	3
26	G 96195	3	4	3
27	G 96226	4	4	2
28	G 19844	1	4	1
29	F/G 931630E48	3	2	4
30	MO 002001	4	4	4
31	SC 980890	3	2	3
32	B 980582	2	2	1
33	B 980696	2	3	1
34	B 980954	2	4	1
35	B 980416	3	3	3
36	MD 71-5	2	1	1
37	TX 00D1626	2	2	1
DATE		11-Nov	8-Jan	5-May

1RS STATUS

		Lincoln NE	
1	Coker 9663	Non.1RS	
2	AGS 2000	1BL.1RS	
3	USG 3209	1BL.1RS	
4	Pioneer 26R61	1BL.1RS	
5	SC 960057	Non.1RS	
6	G/F 931241E16	Non.1RS	
7	G/F 93052E42	Non.1RS	
8	F/G 931470E62	Non.1RS	
9	F/G 931233E17	Non.1RS	
10	AR 910-9-1	Non.1RS	
11	NC 98-26143	Non.1RS	
12	NC 99-13022	1AL.1RS	
13	NC 98-24182	Non.1RS	
14	VA 00W-526	1AL.1RS	
15	VA 98W-335	1BL.1RS	heterogeneous
16	VAN98W-342	1BL.1RS	heterogeneous
17	VA98W-631	Non.1RS	
18	LA 9330D11-1	Non.1RS	
19	LA 9560CA22-1	Non.1RS	
20	AW D99-5261	Non.1RS	
21	AW L96*9266-1	Non.1RS	
22	AW D99*5725	Non.1RS	
23	AW M96*3978-4	Non.1RS	
24	AR 93035-4-1	Non.1RS	
25	G/F 94261E7	Non.1RS	
26	G 96195	Non.1RS	
27	G 96226	Non.1RS	
28	G 19844	Non.1RS	
29	F/G 931630E48	1BL.1RS	
30	MO 002001	Non.1RS	
31	SC 980890	Non.1RS	
32	B 980582	Non.1RS	
33	B 980696	Non.1RS	
34	B 980954	Non.1RS	
35	B 980416	Non.1RS	
36	MD 71-5	1BL.1RS	
37	TX 00D1626	Non.1RS	

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1: INTERIOR (Bay, AR; Stuttgart, AR; Belle Mina, AL,; Knoxville, TN; Warsaw, VA)

LAB NO.		STD=2502, AGS 2000	MILLING QUALITY SCORE		BAKING QUALITY SCORE		TEST WT. SCORE		SOFT. EQUIV. SCORE	
****		STANDARD	85.9	A	62.4	C	79.7	B	63.1	C
2501	1	Coker 9663	75.3	B	59.4	D	70.7	B	47.5	E
2502	2	AGS 2000	85.9	A	62.4	C	79.7	B	63.1	C
2503	3	USG 3209	70.2	B	57.7	D	70.7	B	56.5	D
2504	4	Pioneer 26R61	76.1	B	56.2	D	86.4	A	52.7	D
2505	5	SC 960057	83.5	A	64.7	C	55.8	D	49.2	E
2506	6	G/F 931241E16	77.8	B	71.9	B	79.2	B	68.9	C
2507	7	G/F 93052E42	78.0	B	73.4	B	74.6	B	58.6	D
2508	8	F/G 931470E62	77.1	B	73.7	B	84.8	A	54.8	D
2509	9	F/G 931233E17	75.7	B	50.7	D	78.8	B	61.2	C
2510	10	AR 910-9-1	82.7	A	66.6	C	66.7	C	58.0	D
2511	11	NC 98-26143	79.7	B	58.1	D	63.1	C	67.4	C
2512	12	NC 99-13022	75.3	B	52.9	D	72.8	B	53.6	D
2513	13	NC 98-24182	81.2	A	67.9	C	77.2	B	62.7	C
2514	14	VA 00W-526	79.8	B	65.4	C	76.0	B	44.0	E
2515	15	VA 98W-335	75.4	B	63.7	C	75.8	B	68.2	C
2516	16	VAN98W-342	76.5	B	48.9	E	68.2	C	67.4	C
2517	17	VA98W-631	76.0	B	56.4	D	60.1	C	53.6	D
2518	18	LA 9330D11-1	78.5	B	55.9	D	80.6	A	52.6	D
2519	19	LA 9560CA22-1	79.2	B	64.4	C	89.7	A	49.4	E
2520	20	AW D99-5261	74.5	B	78.2	B	63.5	C	73.3	B
2521	21	AW L96*9266-1	76.9	B	55.9	D	72.9	B	65.6	C
2522	22	AW D99*5725	72.1	B	57.9	D	60.8	C	54.4	D
2523	23	AW M96*3978-4	81.4	A	75.7	B	71.5	B	66.1	C
2524	24	AR 93035-4-1	87.0	A	28.2	F	76.9	B	27.4	F
2525	25	G/F 94261E7	77.4	B	69.2	C	70.7	B	62.4	C
2526	26	G 96195	80.3	A	75.4	B	64.5	C	65.4	C
2527	27	G 96226	73.6	B	70.6	B	75.2	B	51.3	D
2528	28	G 19844	79.9	B	73.7	B	84.8	A	59.8	D
2529	29	F/G 931630E48	74.1	B	50.9	D	76.9	B	48.9	E
2530	30	MO 002001	74.2	B	74.2	B	75.2	B	58.2	D
2531	31	SC 980890	71.9	B	57.4	D	61.5	C	62.0	C
2532	32	B 980582	77.1	B	65.7	C	83.2	A	54.9	D
2533	33	B 980696	86.5	A	39.9	F	85.2	A	40.6	E
2534	34	B 980954	71.6	B	75.7	B	75.6	B	58.2	D
2535	35	B 980416	76.7	B	69.9	C	71.2	B	60.0	C
2536	36	MD 71-5	75.9	B	47.9	E	64.0	C	72.1	B
2537	37	TX 00D1626	73.0	B	57.2	D	66.3	C	62.1	C

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1: INTERIOR (Bay, AR; Stuttgart, AR; Belle Mina, AL,; Knoxville, TN; Warsaw, VA)

LAB NO.		STD=2502, AGS 2000	MICRO T.W. LB/BU		SOFT. EQUIV. %		FLOUR YIELD %		FLOUR PROT. %
****		STANDARD	61.1		60.9		73.1		9.28
2501	1	Coker 9663	60.0		53.9	Q	70.3	Q	8.99
2502	2	AGS 2000	61.1		60.9		73.1		9.28
2503	3	USG 3209	60.0		57.9		69.0	Q	9.39
2504	4	Pioneer 26R61	61.9		56.2	*	70.6	Q	9.94
2505	5	SC 960057	58.2	Q	54.7	*	72.5		9.69
2506	6	G/F 931241E16	61.0		63.4		71.0	Q	8.81
2507	7	G/F 93052E42	60.5		58.8		71.0	Q	9.59
2508	8	F/G 931470E62	61.7		57.1	*	70.8	Q	9.84
2509	9	F/G 931233E17	61.0		60.0		70.5	Q	9.08
2510	10	AR 910-9-1	59.5	*	58.6		72.3	*	9.55
2511	11	NC 98-26143	59.1	*	62.8		71.5	Q	9.78
2512	12	NC 99-13022	60.3		56.6	*	70.3	Q	9.63
2513	13	NC 98-24182	60.8		60.7		71.9	*	10.72
2514	14	VA 00W-526	60.6		52.3	Q	71.5	Q	9.64
2515	15	VA 98W-335	60.6		63.1		70.4	Q	9.98
2516	16	VAN98W-342	59.7	*	62.8		70.7	Q	10.14
2517	17	VA98W-631	58.7	*	56.6	*	70.5	Q	9.28
2518	18	LA 9330D11-1	61.2		56.2	*	71.2	Q	10.19
2519	19	LA 9560CA22-1	62.3		54.8	*	71.4	Q	9.79
2520	20	AW D99-5261	59.1	*	65.4		70.1	Q	8.27
2521	21	AW L96*9266-1	60.3		62.0		70.8	Q	9.22
2522	22	AW D99*5725	58.8	*	57.0	*	69.5	Q	9.16
2523	23	AW M96*3978-4	60.1		62.2		71.9	*	9.27
2524	24	AR 93035-4-1	60.7		44.9	Q	73.4		9.31
2525	25	G/F 94261E7	60.0		60.5		70.9	Q	9.54
2526	26	G 96195	59.3	*	61.9		71.6	*	9.29
2527	27	G 96226	60.5		55.6	*	69.9	Q	9.37
2528	28	G 19844	61.7		59.4		71.6	*	8.93
2529	29	F/G 931630E48	60.7		54.5	*	70.0	Q	9.76
2530	30	MO 002001	60.5		58.7		70.1	Q	9.68
2531	31	SC 980890	58.9	*	60.4		69.5	Q	10.05
2532	32	B 980582	61.5		57.2	*	70.8	Q	10.17
2533	33	B 980696	61.7		50.8	Q	73.3		9.39
2534	34	B 980954	60.6		58.7		69.4	Q	8.46
2535	35	B 980416	60.1		59.5		70.7	Q	8.68
2536	36	MD 71-5	59.2	*	64.9		70.5	Q	10.02
2537	37	TX 00D1626	59.5	*	60.4		69.7	Q	9.78

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 1: INTERIOR (Bay, AR; Stuttgart, AR; Belle Mina, AL,; Knoxville, TN; Warsaw, VA)

LAB NO.		STD=2502, AGS 2000	LACTIC ACID RET'N	COOKIE DIAM. CM.		TOP GR.
****		STANDARD	104.3	17.66		3
2501	1	Coker 9663	114.2	17.54		3
2502	2	AGS 2000	104.3	17.66		3
2503	3	USG 3209	107.0	17.47		2
2504	4	Pioneer 26R61	111.7	17.41	*	2
2505	5	SC 960057	99.2	17.75		3
2506	6	G/F 931241E16	121.9	18.04		4
2507	7	G/F 93052E42	107.7	18.10		4
2508	8	F/G 931470E62	105.7	18.11		3
2509	9	F/G 931233E17	121.4	17.19	*	2
2510	10	AR 910-9-1	110.3	17.83		3
2511	11	NC 98-26143	103.3	17.49		2
2512	12	NC 99-13022	127.0	17.28	*	3
2513	13	NC 98-24182	106.9	17.88		2
2514	14	VA 00W-526	117.5	17.78		4
2515	15	VA 98W-335	100.0	17.71		3
2516	16	VAN98W-342	91.4	17.12	Q	1
2517	17	VA98W-631	128.8	17.42	*	2
2518	18	LA 9330D11-1	147.0	17.40	*	3
2519	19	LA 9560CA22-1	123.2	17.74		3
2520	20	AW D99-5261	138.0	18.29		4
2521	21	AW L96*9266-1	120.8	17.40	*	2
2522	22	AW D99*5725	117.5	17.48		3
2523	23	AW M96*3978-4	127.8	18.19		3
2524	24	AR 93035-4-1	122.3	16.29	Q	1
2525	25	G/F 94261E7	111.3	17.93		2
2526	26	G 96195	104.5	18.18		3
2527	27	G 96226	124.8	17.99		2
2528	28	G 19844	109.6	18.11		4
2529	29	F/G 931630E48	100.7	17.20	*	3
2530	30	MO 002001	128.6	18.13		5
2531	31	SC 980890	134.6	17.46		2
2532	32	B 980582	130.7	17.79		3
2533	33	B 980696	125.4	16.76	Q	2
2534	34	B 980954	108.9	18.19		4
2535	35	B 980416	114.2	17.96		3
2536	36	MD 71-5	97.8	17.08	Q	2
2537	37	TX 00D1626	107.8	17.45		2

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2: WARMER (Quincy, FL; Plains, GA; Baton Rouge, LA; Newton, MS; Florence, SC)

LAB NO.		STD=2552, AGS 2000	MILLING QUALITY SCORE		BAKING QUALITY SCORE		TEST WT. SCORE		SOFT. EQUIV. SCORE	
****		STANDARD	85.9	A	62.4	C	79.7	B	63.1	C
2551	1	Coker 9663	72.6	B	66.4	C	77.1	B	44.6	E
2552	2	AGS 2000	85.9	A	62.4	C	79.7	B	63.1	C
2553	3	USG 3209	66.7	C	42.1	E	72.4	B	55.7	D
2554	4	Pioneer 26R61	74.9	B	57.9	D	84.9	A	55.0	D
2555	5	SC 960057	82.0	A	72.2	B	54.2	D	53.0	D
2556	6	G/F 931241E16	80.5	A	65.9	C	77.8	B	72.9	B
2557	7	G/F 93052E42	78.6	B	86.4	A	65.4	C	57.6	D
2558	8	F/G 931470E62	78.4	B	71.6	B	81.4	A	55.6	D
2559	9	F/G 931233E17	75.4	B	52.2	D	80.4	A	58.3	D
2560	10	AR 910-9-1	82.5	A	68.2	C	68.9	C	59.6	D
2561	11	NC 98-26143	80.4	A	74.4	B	47.6	E	70.8	B
2562	12	NC 99-13022	76.4	B	57.7	D	69.1	C	53.7	D
2563	13	NC 98-24182	79.1	B	79.2	B	79.4	B	60.7	C
2564	14	VA 00W-526	80.0	B	63.1	C	75.2	B	45.9	E
2565	15	VA 98W-335	73.5	B	69.2	C	73.5	B	67.1	C
2566	16	VAN98W-342	75.5	B	70.4	B	60.3	C	72.4	B
2567	17	VA98W-631	74.4	B	50.4	D	52.8	D	59.2	D
2568	18	LA 9330D11-1	77.6	B	65.2	C	75.6	B	57.7	D
2569	19	LA 9560CA22-1	78.1	B	66.4	C	78.6	B	61.1	C
2570	20	AW D99-5261	73.5	B	79.2	B	52.8	D	80.9	A
2571	21	AW L96*9266-1	76.5	B	64.2	C	70.8	B	71.2	B
2572	22	AW D99*5725	70.9	B	54.4	D	59.4	D	54.4	D
2573	23	AW M96*3978-4	79.3	B	77.9	B	66.4	C	69.5	C
2574	24	AR 93035-4-1	83.2	A	25.4	F	77.1	B	29.8	F
2575	25	G/F 94261E7	78.4	B	57.2	D	60.4	C	63.4	C
2576	26	G 96195	78.5	B	92.9	A	63.3	C	73.5	B
2577	27	G 96226	73.8	B	62.2	C	73.3	B	56.3	D
2578	28	G 19844	78.1	B	77.7	B	77.8	B	65.0	C
2579	29	F/G 931630E48	74.3	B	57.7	D	74.3	B	49.4	E
2580	30	MO 002001	75.6	B	72.2	B	68.1	C	63.0	C
2581	31	SC 980890	74.7	B	54.9	D	59.9	D	70.1	B
2582	32	B 980582	76.1	B	72.2	B	80.8	A	55.9	D
2583	33	B 980696	80.1	A	37.9	F	80.2	A	37.1	F
2584	34	B 980954	70.6	B	77.7	B	64.0	C	70.1	B
2585	35	B 980416	77.0	B	80.4	A	65.7	C	67.4	C
2586	36	MD 71-5	74.9	B	64.4	C	60.3	C	69.8	C
2587	37	TX 00D1626	74.2	B	57.4	D	64.3	C	64.1	C

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2: WARMER (Quincy, FL; Plains, GA; Baton Rouge, LA; Newton, MS; Florence, SC)

LAB NO.		STD=2552, AGS 2000	MICRO T.W. LB/BU		SOFT. EQUIV. %		FLOUR YIELD %		FLOUR PROT. %
****		STANDARD	61.1		58.2		73.9		9.34
2551	1	Coker 9663	60.8		50.0	Q	70.3	Q	9.30
2552	2	AGS 2000	61.1		58.2		73.9		9.34
2553	3	USG 3209	60.2		55.0	*	68.8	Q	9.57
2554	4	Pioneer 26R61	61.7		54.6	*	70.9	Q	10.01
2555	5	SC 960057	58.1	Q	53.8	*	72.8	*	10.10
2556	6	G/F 931241E16	60.9		62.6		72.4	*	8.76
2557	7	G/F 93052E42	59.4	*	55.8		71.9	Q	9.44
2558	8	F/G 931470E62	61.3		54.9	*	71.9	Q	9.87
2559	9	F/G 931233E17	61.2		56.1		71.1	Q	9.30
2560	10	AR 910-9-1	59.8	*	56.7		72.9	*	9.52
2561	11	NC 98-26143	57.3	Q	61.7		72.4	*	9.17
2562	12	NC 99-13022	59.8	*	54.1	*	71.3	Q	9.43
2563	13	NC 98-24182	61.1		57.2		72.0	Q	10.31
2564	14	VA 00W-526	60.6		50.6	Q	72.3	*	9.59
2565	15	VA 98W-335	60.4		60.0		70.6	Q	9.69
2566	16	VAN98W-342	58.8	*	62.4		71.1	Q	9.43
2567	17	VA98W-631	57.9	Q	56.5		70.8	Q	9.28
2568	18	LA 9330D11-1	60.6		55.9		71.7	Q	9.56
2569	19	LA 9560CA22-1	61.0		57.4		71.8	Q	8.47
2570	20	AW D99-5261	57.9	Q	66.2		70.6	Q	7.81
2571	21	AW L96*9266-1	60.1		61.8		71.4	Q	8.90
2572	22	AW D99*5725	58.7	Q	54.3	*	69.9	Q	8.16
2573	23	AW M96*3978-4	59.5	*	61.1		72.1	Q	9.15
2574	24	AR 93035-4-1	60.8		43.4	Q	73.2		9.31
2575	25	G/F 94261E7	58.8	*	58.4		71.9	Q	8.77
2576	26	G 96195	59.2	*	62.9		71.9	Q	8.19
2577	27	G 96226	60.4		55.2		70.6	Q	8.64
2578	28	G 19844	60.9		59.1		71.8	Q	8.27
2579	29	F/G 931630E48	60.5		52.1	*	70.8	Q	8.77
2580	30	MO 002001	59.7	*	58.2		71.1	Q	9.10
2581	31	SC 980890	58.7	Q	61.3		70.9	Q	9.84
2582	32	B 980582	61.2		55.0	*	71.2	Q	9.71
2583	33	B 980696	61.2		46.6	Q	72.3	*	9.51
2584	34	B 980954	59.2	*	61.4		69.8	Q	8.12
2585	35	B 980416	59.4	*	60.2		71.5	Q	8.40
2586	36	MD 71-5	58.8	*	61.2		70.9	Q	9.05
2587	37	TX 00D1626	59.3	*	58.7		70.8	Q	9.36

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

REGION 2: WARMER (Quincy, FL; Plains, GA; Baton Rouge, LA; Newton, MS; Florence, SC)

LAB NO.		STD=2552, AGS 2000	LACTIC ACID RET'N	COOKIE DIAM. CM.		TOP GR.
****		STANDARD	102.5	17.62		3
2551	1	Coker 9663	109.2	17.78		5
2552	2	AGS 2000	102.5	17.62		3
2553	3	USG 3209	114.3	16.81	Q	2
2554	4	Pioneer 26R61	108.4	17.44		3
2555	5	SC 960057	94.1	18.01		5
2556	6	G/F 931241E16	124.2	17.76		3
2557	7	G/F 93052E42	101.1	18.58		4
2558	8	F/G 931470E62	117.5	17.99		4
2559	9	F/G 931233E17	114.9	17.21	*	2
2560	10	AR 910-9-1	114.5	17.85		2
2561	11	NC 98-26143	106.2	18.10		3
2562	12	NC 99-13022	134.2	17.43		3
2563	13	NC 98-24182	103.7	18.29		3
2564	14	VA 00W-526	119.4	17.65		4
2565	15	VA 98W-335	98.7	17.89		3
2566	16	VAN98W-342	99.2	17.94		3
2567	17	VA98W-631	137.5	17.14	Q	1
2568	18	LA 9330D11-1	155.3	17.73		3
2569	19	LA 9560CA22-1	135.2	17.78		4
2570	20	AW D99-5261	143.3	18.29		4
2571	21	AW L96*9266-1	131.6	17.69		3
2572	22	AW D99*5725	121.3	17.30	*	3
2573	23	AW M96*3978-4	130.2	18.24		3
2574	24	AR 93035-4-1	127.3	16.14	Q	1
2575	25	G/F 94261E7	116.0	17.41		3
2576	26	G 96195	108.2	18.84		5
2577	27	G 96226	130.8	17.61		2
2578	28	G 19844	109.0	18.23		4
2579	29	F/G 931630E48	109.2	17.43		2
2580	30	MO 002001	130.9	18.01		3
2581	31	SC 980890	123.0	17.32	*	1
2582	32	B 980582	132.8	18.01		3
2583	33	B 980696	130.2	16.64	Q	2
2584	34	B 980954	114.8	18.23		3
2585	35	B 980416	114.6	18.34		4
2586	36	MD 71-5	100.5	17.70		2
2587	37	TX 00D1626	105.7	17.42		3

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	MILLING QUALITY SCORE		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	75.3	72.6	73.9
2	AGS 2000	85.9	85.9	85.9
3	USG 3209	70.2	66.7	68.4
4	Pioneer 26R61	76.1	74.9	75.5
5	SC 960057	83.5	82.0	82.8
6	G/F 931241E16	77.8	80.5	79.1
7	G/F 93052E42	78.0	78.6	78.3
8	F/G 931470E62	77.1	78.4	77.7
9	F/G 931233E17	75.7	75.4	75.6
10	AR 910-9-1	82.7	82.5	82.6
11	NC 98-26143	79.7	80.4	80.0
12	NC 99-13022	75.3	76.4	75.8
13	NC 98-24182	81.2	79.1	80.1
14	VA 00W-526	79.8	80.0	79.9
15	VA 98W-335	75.4	73.5	74.5
16	VAN98W-342	76.5	75.5	76.0
17	VA98W-631	76.0	74.4	75.2
18	LA 9330D11-1	78.5	77.6	78.1
19	LA 9560CA22-1	79.2	78.1	78.7
20	AW D99-5261	74.5	73.5	74.0
21	AW L96*9266-1	76.9	76.5	76.7
22	AW D99*5725	72.1	70.9	71.5
23	AW M96*3978-4	81.4	79.3	80.3
24	AR 93035-4-1	87.0	83.2	85.1
25	G/F 94261E7	77.4	78.4	77.9
26	G 96195	80.3	78.5	79.4
27	G 96226	73.6	73.8	73.7
28	G 19844	79.9	78.1	79.0
29	F/G 931630E48	74.1	74.3	74.2
30	MO 002001	74.2	75.6	74.9
31	SC 980890	71.9	74.7	73.3
32	B 980582	77.1	76.1	76.6
33	B 980696	86.5	80.1	83.3
34	B 980954	71.6	70.6	71.1
35	B 980416	76.7	77.0	76.9
36	MD 71-5	75.9	74.9	75.4
37	TX 00D1626	73.0	74.2	73.6
	MINIMUM	70.2	66.7	68.4
	MAXIMUM	87.0	85.9	85.9
	MEAN	77.5	76.8	77.2

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	BAKING QUALITY SCORE		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	59.4	66.4	62.9
2	AGS 2000	62.4	62.4	62.4
3	USG 3209	57.7	42.1	49.9
4	Pioneer 26R61	56.2	57.9	57.0
5	SC 960057	64.7	72.2	68.4
6	G/F 931241E16	71.9	65.9	68.9
7	G/F 93052E42	73.4	86.4	79.9
8	F/G 931470E62	73.7	71.6	72.7
9	F/G 931233E17	50.7	52.2	51.4
10	AR 910-9-1	66.6	68.2	67.4
11	NC 98-26143	58.1	74.4	66.3
12	NC 99-13022	52.9	57.7	55.3
13	NC 98-24182	67.9	79.2	73.5
14	VA 00W-526	65.4	63.1	64.3
15	VA 98W-335	63.7	69.2	66.4
16	VAN98W-342	48.9	70.4	59.7
17	VA98W-631	56.4	50.4	53.4
18	LA 9330D11-1	55.9	65.2	60.5
19	LA 9560CA22-1	64.4	66.4	65.4
20	AW D99-5261	78.2	79.2	78.7
21	AW L96*9266-1	55.9	64.2	60.0
22	AW D99*5725	57.9	54.4	56.2
23	AW M96*3978-4	75.7	77.9	76.8
24	AR 93035-4-1	28.2	25.4	26.8
25	G/F 94261E7	69.2	57.2	63.2
26	G 96195	75.4	92.9	84.2
27	G 96226	70.6	62.2	66.4
28	G 19844	73.7	77.7	75.7
29	F/G 931630E48	50.9	57.7	54.3
30	MO 002001	74.2	72.2	73.2
31	SC 980890	57.4	54.9	56.2
32	B 980582	65.7	72.2	68.9
33	B 980696	39.9	37.9	38.9
34	B 980954	75.7	77.7	76.7
35	B 980416	69.9	80.4	75.2
36	MD 71-5	47.9	64.4	56.2
37	TX 00D1626	57.2	57.4	57.3
	MINIMUM	28.2	25.4	26.8
	MAXIMUM	78.2	92.9	84.2
	MEAN	62.0	65.0	63.5

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	TEST WEIGHT SCORE		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	70.7	77.1	73.9
2	AGS 2000	79.7	79.7	79.7
3	USG 3209	70.7	72.4	71.6
4	Pioneer 26R61	86.4	84.9	85.6
5	SC 960057	55.8	54.2	55.0
6	G/F 931241E16	79.2	77.8	78.5
7	G/F 93052E42	74.6	65.4	70.0
8	F/G 931470E62	84.8	81.4	83.1
9	F/G 931233E17	78.8	80.4	79.6
10	AR 910-9-1	66.7	68.9	67.8
11	NC 98-26143	63.1	47.6	55.3
12	NC 99-13022	72.8	69.1	71.0
13	NC 98-24182	77.2	79.4	78.3
14	VA 00W-526	76.0	75.2	75.6
15	VA 98W-335	75.8	73.5	74.6
16	VAN98W-342	68.2	60.3	64.2
17	VA98W-631	60.1	52.8	56.5
18	LA 9330D11-1	80.6	75.6	78.1
19	LA 9560CA22-1	89.7	78.6	84.2
20	AW D99-5261	63.5	52.8	58.1
21	AW L96*9266-1	72.9	70.8	71.8
22	AW D99*5725	60.8	59.4	60.1
23	AW M96*3978-4	71.5	66.4	68.9
24	AR 93035-4-1	76.9	77.1	77.0
25	G/F 94261E7	70.7	60.4	65.6
26	G 96195	64.5	63.3	63.9
27	G 96226	75.2	73.3	74.2
28	G 19844	84.8	77.8	81.3
29	F/G 931630E48	76.9	74.3	75.6
30	MO 002001	75.2	68.1	71.7
31	SC 980890	61.5	59.9	60.7
32	B 980582	83.2	80.8	82.0
33	B 980696	85.2	80.2	82.7
34	B 980954	75.6	64.0	69.8
35	B 980416	71.2	65.7	68.5
36	MD 71-5	64.0	60.3	62.2
37	TX 00D1626	66.3	64.3	65.3
	MINIMUM	55.8	47.6	55.0
	MAXIMUM	89.7	84.9	85.6
	MEAN	73.3	69.5	71.4

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	SOFT EQUIV. SCORE		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	47.5	44.6	46.0
2	AGS 2000	63.1	63.1	63.1
3	USG 3209	56.5	55.7	56.1
4	Pioneer 26R61	52.7	55.0	53.9
5	SC 960057	49.2	53.0	51.1
6	G/F 931241E16	68.9	72.9	70.9
7	G/F 93052E42	58.6	57.6	58.1
8	F/G 931470E62	54.8	55.6	55.2
9	F/G 931233E17	61.2	58.3	59.7
10	AR 910-9-1	58.0	59.6	58.8
11	NC 98-26143	67.4	70.8	69.1
12	NC 99-13022	53.6	53.7	53.7
13	NC 98-24182	62.7	60.7	61.7
14	VA 00W-526	44.0	45.9	44.9
15	VA 98W-335	68.2	67.1	67.6
16	VAN98W-342	67.4	72.4	69.9
17	VA98W-631	53.6	59.2	56.4
18	LA 9330D11-1	52.6	57.7	55.2
19	LA 9560CA22-1	49.4	61.1	55.3
20	AW D99-5261	73.3	80.9	77.1
21	AW L96*9266-1	65.6	71.2	68.4
22	AW D99*5725	54.4	54.4	54.4
23	AW M96*3978-4	66.1	69.5	67.8
24	AR 93035-4-1	27.4	29.8	28.6
25	G/F 94261E7	62.4	63.4	62.9
26	G 96195	65.4	73.5	69.4
27	G 96226	51.3	56.3	53.8
28	G 19844	59.8	65.0	62.4
29	F/G 931630E48	48.9	49.4	49.2
30	MO 002001	58.2	63.0	60.6
31	SC 980890	62.0	70.1	66.0
32	B 980582	54.9	55.9	55.4
33	B 980696	40.6	37.1	38.8
34	B 980954	58.2	70.1	64.2
35	B 980416	60.0	67.4	63.7
36	MD 71-5	72.1	69.8	70.9
37	TX 00D1626	62.1	64.1	63.1
	MINIMUM	27.4	29.8	28.6
	MAXIMUM	73.3	80.9	77.1
	MEAN	57.6	60.4	59.0

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	MICRO T.W. LB/BU		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	60.0	60.8	60.4
2	AGS 2000	61.1	61.1	61.1
3	USG 3209	60.0	60.2	60.1
4	Pioneer 26R61	61.9	61.7	61.8
5	SC 960057	58.2	58.1	58.1
6	G/F 931241E16	61.0	60.9	61.0
7	G/F 93052E42	60.5	59.4	59.9
8	F/G 931470E62	61.7	61.3	61.5
9	F/G 931233E17	61.0	61.2	61.1
10	AR 910-9-1	59.5	59.8	59.7
11	NC 98-26143	59.1	57.3	58.2
12	NC 99-13022	60.3	59.8	60.1
13	NC 98-24182	60.8	61.1	60.9
14	VA 00W-526	60.6	60.6	60.6
15	VA 98W-335	60.6	60.4	60.5
16	VAN98W-342	59.7	58.8	59.2
17	VA98W-631	58.7	57.9	58.3
18	LA 9330D11-1	61.2	60.6	60.9
19	LA 9560CA22-1	62.3	61.0	61.6
20	AW D99-5261	59.1	57.9	58.5
21	AW L96*9266-1	60.3	60.1	60.2
22	AW D99*5725	58.8	58.7	58.7
23	AW M96*3978-4	60.1	59.5	59.8
24	AR 93035-4-1	60.7	60.8	60.8
25	G/F 94261E7	60.0	58.8	59.4
26	G 96195	59.3	59.2	59.2
27	G 96226	60.5	60.4	60.4
28	G 19844	61.7	60.9	61.3
29	F/G 931630E48	60.7	60.5	60.6
30	MO 002001	60.5	59.7	60.1
31	SC 980890	58.9	58.7	58.8
32	B 980582	61.5	61.2	61.4
33	B 980696	61.7	61.2	61.5
34	B 980954	60.6	59.2	59.9
35	B 980416	60.1	59.4	59.7
36	MD 71-5	59.2	58.8	59.0
37	TX 00D1626	59.5	59.3	59.4
	MINIMUM	58.2	57.3	58.1
	MAXIMUM	62.3	61.7	61.8
	MEAN	60.3	59.9	60.1

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	SOFT EQUIV. %		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	53.9	50.0	51.9
2	AGS 2000	60.9	58.2	59.5
3	USG 3209	57.9	55.0	56.4
4	Pioneer 26R61	56.2	54.6	55.4
5	SC 960057	54.7	53.8	54.2
6	G/F 931241E16	63.4	62.6	63.0
7	G/F 93052E42	58.8	55.8	57.3
8	F/G 931470E62	57.1	54.9	56.0
9	F/G 931233E17	60.0	56.1	58.1
10	AR 910-9-1	58.6	56.7	57.6
11	NC 98-26143	62.8	61.7	62.2
12	NC 99-13022	56.6	54.1	55.3
13	NC 98-24182	60.7	57.2	58.9
14	VA 00W-526	52.3	50.6	51.4
15	VA 98W-335	63.1	60.0	61.6
16	VAN98W-342	62.8	62.4	62.6
17	VA98W-631	56.6	56.5	56.5
18	LA 9330D11-1	56.2	55.9	56.0
19	LA 9560CA22-1	54.8	57.4	56.1
20	AW D99-5261	65.4	66.2	65.8
21	AW L96*9266-1	62.0	61.8	61.9
22	AW D99*5725	57.0	54.3	55.7
23	AW M96*3978-4	62.2	61.1	61.6
24	AR 93035-4-1	44.9	43.4	44.2
25	G/F 94261E7	60.5	58.4	59.5
26	G 96195	61.9	62.9	62.4
27	G 96226	55.6	55.2	55.4
28	G 19844	59.4	59.1	59.2
29	F/G 931630E48	54.5	52.1	53.3
30	MO 002001	58.7	58.2	58.4
31	SC 980890	60.4	61.3	60.9
32	B 980582	57.2	55.0	56.1
33	B 980696	50.8	46.6	48.7
34	B 980954	58.7	61.4	60.0
35	B 980416	59.5	60.2	59.8
36	MD 71-5	64.9	61.2	63.0
37	TX 00D1626	60.4	58.7	59.5
	MINIMUM	44.9	43.4	44.2
	MAXIMUM	65.4	66.2	65.8
	MEAN	58.4	57.0	57.7

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	FLOUR YIELD %		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	70.3	70.3	70.3
2	AGS 2000	73.1	73.9	73.5
3	USG 3209	69.0	68.8	68.9
4	Pioneer 26R61	70.6	70.9	70.7
5	SC 960057	72.5	72.8	72.7
6	G/F 931241E16	71.0	72.4	71.7
7	G/F 93052E42	71.0	71.9	71.5
8	F/G 931470E62	70.8	71.9	71.3
9	F/G 931233E17	70.5	71.1	70.8
10	AR 910-9-1	72.3	72.9	72.6
11	NC 98-26143	71.5	72.4	71.9
12	NC 99-13022	70.3	71.3	70.8
13	NC 98-24182	71.9	72.0	72.0
14	VA 00W-526	71.5	72.3	71.9
15	VA 98W-335	70.4	70.6	70.5
16	VAN98W-342	70.7	71.1	70.9
17	VA98W-631	70.5	70.8	70.7
18	LA 9330D11-1	71.2	71.7	71.4
19	LA 9560CA22-1	71.4	71.8	71.6
20	AW D99-5261	70.1	70.6	70.4
21	AW L96*9266-1	70.8	71.4	71.1
22	AW D99*5725	69.5	69.9	69.7
23	AW M96*3978-4	71.9	72.1	72.0
24	AR 93035-4-1	73.4	73.2	73.3
25	G/F 94261E7	70.9	71.9	71.4
26	G 96195	71.6	71.9	71.8
27	G 96226	69.9	70.6	70.3
28	G 19844	71.6	71.8	71.7
29	F/G 931630E48	70.0	70.8	70.4
30	MO 002001	70.1	71.1	70.6
31	SC 980890	69.5	70.9	70.2
32	B 980582	70.8	71.2	71.0
33	B 980696	73.3	72.3	72.8
34	B 980954	69.4	69.8	69.6
35	B 980416	70.7	71.5	71.1
36	MD 71-5	70.5	70.9	70.7
37	TX 00D1626	69.7	70.8	70.2
	MINIMUM	69.0	68.8	68.9
	MAXIMUM	73.4	73.9	73.5
	MEAN	70.9	71.4	71.2

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	FLOUR PROTEIN %		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	8.99	9.30	9.15
2	AGS 2000	9.28	9.34	9.31
3	USG 3209	9.39	9.57	9.48
4	Pioneer 26R61	9.94	10.01	9.97
5	SC 960057	9.69	10.10	9.89
6	G/F 931241E16	8.81	8.76	8.79
7	G/F 93052E42	9.59	9.44	9.51
8	F/G 931470E62	9.84	9.87	9.85
9	F/G 931233E17	9.08	9.30	9.19
10	AR 910-9-1	9.55	9.52	9.54
11	NC 98-26143	9.78	9.17	9.47
12	NC 99-13022	9.63	9.43	9.53
13	NC 98-24182	10.72	10.31	10.51
14	VA 00W-526	9.64	9.59	9.61
15	VA 98W-335	9.98	9.69	9.84
16	VAN98W-342	10.14	9.43	9.79
17	VA98W-631	9.28	9.28	9.28
18	LA 9330D11-1	10.19	9.56	9.87
19	LA 9560CA22-1	9.79	8.47	9.13
20	AW D99-5261	8.27	7.81	8.04
21	AW L96*9266-1	9.22	8.90	9.06
22	AW D99*5725	9.16	8.16	8.66
23	AW M96*3978-4	9.27	9.15	9.21
24	AR 93035-4-1	9.31	9.31	9.31
25	G/F 94261E7	9.54	8.77	9.16
26	G 96195	9.29	8.19	8.74
27	G 96226	9.37	8.64	9.01
28	G 19844	8.93	8.27	8.60
29	F/G 931630E48	9.76	8.77	9.27
30	MO 002001	9.68	9.10	9.39
31	SC 980890	10.05	9.84	9.95
32	B 980582	10.17	9.71	9.94
33	B 980696	9.39	9.51	9.45
34	B 980954	8.46	8.12	8.29
35	B 980416	8.68	8.40	8.54
36	MD 71-5	10.02	9.05	9.53
37	TX 00D1626	9.78	9.36	9.57
	MINIMUM	8.27	7.81	8.04
	MAXIMUM	10.72	10.31	10.51
	MEAN	9.50	9.17	9.34

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	LACTIC ACID RETENTION		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	114.2	109.2	111.7
2	AGS 2000	104.3	102.5	103.4
3	USG 3209	107.0	114.3	110.7
4	Pioneer 26R61	111.7	108.4	110.0
5	SC 960057	99.2	94.1	96.6
6	G/F 931241E16	121.9	124.2	123.0
7	G/F 93052E42	107.7	101.1	104.4
8	F/G 931470E62	105.7	117.5	111.6
9	F/G 931233E17	121.4	114.9	118.2
10	AR 910-9-1	110.3	114.5	112.4
11	NC 98-26143	103.3	106.2	104.7
12	NC 99-13022	127.0	134.2	130.6
13	NC 98-24182	106.9	103.7	105.3
14	VA 00W-526	117.5	119.4	118.4
15	VA 98W-335	100.0	98.7	99.4
16	VAN98W-342	91.4	99.2	95.3
17	VA98W-631	128.8	137.5	133.2
18	LA 9330D11-1	147.0	155.3	151.2
19	LA 9560CA22-1	123.2	135.2	129.2
20	AW D99-5261	138.0	143.3	140.7
21	AW L96*9266-1	120.8	131.6	126.2
22	AW D99*5725	117.5	121.3	119.4
23	AW M96*3978-4	127.8	130.2	129.0
24	AR 93035-4-1	122.3	127.3	124.8
25	G/F 94261E7	111.3	116.0	113.6
26	G 96195	104.5	108.2	106.3
27	G 96226	124.8	130.8	127.8
28	G 19844	109.6	109.0	109.3
29	F/G 931630E48	100.7	109.2	105.0
30	MO 002001	128.6	130.9	129.7
31	SC 980890	134.6	123.0	128.8
32	B 980582	130.7	132.8	131.7
33	B 980696	125.4	130.2	127.8
34	B 980954	108.9	114.8	111.9
35	B 980416	114.2	114.6	114.4
36	MD 71-5	97.8	100.5	99.1
37	TX 00D1626	107.8	105.7	106.7
	MINIMUM	91.4	94.1	95.3
	MAXIMUM	147.0	155.3	151.2
	MEAN	115.5	118.1	116.8

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	COOKIE DIAMETER CM		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	17.54	17.78	17.66
2	AGS 2000	17.66	17.62	17.64
3	USG 3209	17.47	16.81	17.14
4	Pioneer 26R61	17.41	17.44	17.43
5	SC 960057	17.75	18.01	17.88
6	G/F 931241E16	18.04	17.76	17.90
7	G/F 93052E42	18.10	18.58	18.34
8	F/G 931470E62	18.11	17.99	18.05
9	F/G 931233E17	17.19	17.21	17.20
10	AR 910-9-1	17.83	17.85	17.84
11	NC 98-26143	17.49	18.10	17.80
12	NC 99-13022	17.28	17.43	17.36
13	NC 98-24182	17.88	18.29	18.09
14	VA 00W-526	17.78	17.65	17.72
15	VA 98W-335	17.71	17.89	17.80
16	VAN98W-342	17.12	17.94	17.53
17	VA98W-631	17.42	17.14	17.28
18	LA 9330D11-1	17.40	17.73	17.57
19	LA 9560CA22-1	17.74	17.78	17.76
20	AW D99-5261	18.29	18.29	18.29
21	AW L96*9266-1	17.40	17.69	17.55
22	AW D99*5725	17.48	17.30	17.39
23	AW M96*3978-4	18.19	18.24	18.22
24	AR 93035-4-1	16.29	16.14	16.22
25	G/F 94261E7	17.93	17.41	17.67
26	G 96195	18.18	18.84	18.51
27	G 96226	17.99	17.61	17.80
28	G 19844	18.11	18.23	18.17
29	F/G 931630E48	17.20	17.43	17.32
30	MO 002001	18.13	18.01	18.07
31	SC 980890	17.46	17.32	17.39
32	B 980582	17.79	18.01	17.90
33	B 980696	16.76	16.64	16.70
34	B 980954	18.19	18.23	18.21
35	B 980416	17.96	18.34	18.15
36	MD 71-5	17.08	17.70	17.39
37	TX 00D1626	17.45	17.42	17.44
	MINIMUM	16.29	16.14	16.22
	MAXIMUM	18.29	18.84	18.51
	MEAN	17.64	17.73	17.68

ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

	COMBINED REGIONS	TOP GR.		
		INTERIOR	COASTAL	MEAN
1	Coker 9663	3	5	4
2	AGS 2000	3	3	3
3	USG 3209	2	2	2
4	Pioneer 26R61	2	3	3
5	SC 960057	3	5	4
6	G/F 931241E16	4	3	4
7	G/F 93052E42	4	4	4
8	F/G 931470E62	3	4	4
9	F/G 931233E17	2	2	2
10	AR 910-9-1	3	2	3
11	NC 98-26143	2	3	3
12	NC 99-13022	3	3	3
13	NC 98-24182	2	3	3
14	VA 00W-526	4	4	4
15	VA 98W-335	3	3	3
16	VAN98W-342	1	3	2
17	VA98W-631	2	1	2
18	LA 9330D11-1	3	3	3
19	LA 9560CA22-1	3	4	4
20	AW D99-5261	4	4	4
21	AW L96*9266-1	2	3	3
22	AW D99*5725	3	3	3
23	AW M96*3978-4	3	3	3
24	AR 93035-4-1	1	1	1
25	G/F 94261E7	2	3	3
26	G 96195	3	5	4
27	G 96226	2	2	2
28	G 19844	4	4	4
29	F/G 931630E48	3	2	3
30	MO 002001	5	3	4
31	SC 980890	2	1	2
32	B 980582	3	3	3
33	B 980696	2	2	2
34	B 980954	4	3	4
35	B 980416	3	4	4
36	MD 71-5	2	2	2
37	TX 00D1626	2	3	3
	MINIMUM	1	1	1
	MAXIMUM	5	5	4
	MEAN	3	3	3

2003 Crop
Advanced Nursery Evaluation

Steve Harrison
Baton Rouge Louisiana

Entries #2501 - 2587
MBQ _ USN Composites

There have been substantial changes to the Advanced Nursery Evaluation program, and those changes are described in a separate document. The standard data is compared to the "Historical Average" for the cultivar, and all entries are adjusted to this average.

Composite samples were submitted from two regions: Interior (2501 -2537) and Coastal (2538 – 2587). Each region had 37 entries, and was analyzed separately, using the AGS 2000 entries as the standards:

	Allis Data-base	Quad Data-base	Interior Standard	Coastal Standard
Test Weight	63.8	62.53	61.1	61.1
Flour Yield	79.0	73.63	73.1	73.9
Break Flour	30.5			
E.S.I.	7.6			
Softness Equivalent	55.5	56.52	60.9	58.2
Friability	30.3			
Flour Protein		8.33	9.28	9.34
Ash	0.39			
Cookie Diameter	17.90	18.12	17.66	17.62
A.W.R.C.	55.8	57.25		
Lactic Acid Retention		108.29	104.3	102.5
Mill Score	85.9 (A)		85.9 (A)	85.9 (A)
Bake Score	62.4 (C)		62.4 (C)	62.4 (C)
Test Wt. Score	79.7 (B)		79.7 (B)	79.7 (B)
S.E. Score	63.1 (C)		63.1 (C)	63.1 (C)

The above table compares the standards from both regions with the historical data for AGS 2000 from the Allis and Quadrumat Jr. data-bases. The Quad data in the data-base is the mean of 5 quad millings, and the Allis data-base also had 5 millings for AGS 2000. In the Quad Jr. data-base, AGS 2000 ranked 11th for flour yield out of the 337 cultivars included. In the Allis data-base, AGS ranked 17th out of 687 cultivars for mill score.

With the new scoring system, the scores are calculated to adjust the current samples to the historical Allis values for the standard. Notice that the quality scores for the standards from both regions are the same as the "Historical" Allis values.

Notice also that the standards vary from the "Historical" Quad values. Test weights were lower, S.E. and flour protein values were higher, and cookie diameters were .5cm smaller than expected.

There were eight cultivars that were repeated from the 2002 crop. The following table compared the 2002 data with the mean data from the 2003 crop, and also shows the historical Quad Jr. data, when available:

Cultivar	T. W.	S.E.	Flour Yield	Flour Prot.	A.W.R.C.	Lactic Acid	Cookie Diam.
COKER 9663							
2002	59.6	54.5	71.5	9.15	56.7	111.6	17.25
2003	60.4	51.9	70.3	9.15	-	111.7	17.66
D.B.	61.1	52.55	70.88	8.61	56.82	114.8	17.53
AGS 2000							
2002	61.4	59.0	74.1	9.74	59.0	102.5	17.31
2003	61.1	59.5	73.5	9.31	-	103.4	17.64
D.B.	62.53	56.52	73.63	8.33	57.25	108.29	18.12
USG 3209							
2002	60.4	55.5	70.2	9.48	62.7	108.4	16.88
2003	60.1	56.4	68.9	9.48	-	110.7	17.14
D.B.	62.04	51.97	70.01	7.92	61.18	107.77	17.59
PION. 26R61							
2002	61.9	55.3	71.2	10.48	57.7	109.8	17.08
2003	61.8	55.4	70.7	9.97	-	110.0	17.43
D.B.	62.39	54.18	71.13	9.47	56.7	110.64	17.62
SC 960057							
2002	58.5	53.7	72.3	10.02	57.1	104.4	17.49
2003	58.1	54.2	72.7	9.89	-	96.6	17.88
D.B.	-	-	-	-	-	-	-
G/F 931241F16							
2002	61.5	61.6	71.1	9.00	58.5	119.1	17.61
2003	61.0	63.0	71.7	8.79	-	123.0	17.90
D.B.	-	-	-	-	-	-	-
AR 910-9-1							
2002	60.5	57.5	72.7	9.39	56.8	111.7	18.01
2003	59.7	57.6	72.6	9.54	-	112.4	17.84
D.B.	-	-	-	-	-	-	-
NC 98-26143							
2002	60.1	59.9	71.5	9.37	57.2	103.6	17.90
2003	58.2	62.2	71.9	9.47	-	104.7	17.80
D.B.	-	-	-	-	-	-	-

Summary

When quality scores are compared, there was good agreement between the two regions, with similar responses from the same cultivars.

There were very low Baking Quality Scores for entries #24 (AR 93036-4-1) and #33 (B 980696).

Test Weight scores were low from both regions for entry #5 (SC 960057). The coastal entries were also low for entries #11 (NC 98-26143), #17 (VA 98W-631), and #20 (AWD 99-5261).

The Softness Equivalent scores for entries #24 (AR 93036-4-1) and #33 (B 980696) were low: the mean scores were 44.2 and 48.3, respectively.

Both regions had low four yields for entry #3 (USG 3209), with a mean flour yield of 68.91%.

Both regions also had low protein content for entries #20 (AWD 99-5261) and #34 (B 980954).

Lactic acid retention values were almost always above 100%. The lowest was entry #16, interior region (VAN 98W-342), with 91.4%.

Entries #24 (AR 93036-4-1) and #33 (B 980696) had very small cookie diameters, with mean cookie diameters of 16.22 cm. and 16.70 cm. respectively.

Notes on the 2003 revision of the Advanced Nursery Evaluation Program

There have been substantial changes made to the Advanced Nursery Evaluation, with the 2003 revision. Both the Milling and Baking Quality Scores are calculated in a different manner. Combined Quality Scores are no longer calculated, and there is no ranking by Combined Quality Score.

The Alkaline Water Retention Capacity (A.W.R.C.) test is no longer being run for Advanced Nursery samples. The A.W.R.C. test used to be 25% of the Baking Quality Scores, along with Softness Equivalent (25%) and Cookie Diameter (50%). With this version, the Baking Quality Score is calculated from the cookie diameter, and compared to the historical cookie diameter for the standard cultivar, from the SWQL Allis-Chalmers data-base.

The Milling Quality Score is calculated in the same manner as in previous versions, however, instead of weighing a test line against a standard with a Milling Score of 100, now the test line is compared to a standard with the same Milling Score as it has in the SWQL data-base of Allis-Chalmers millings.

In previous versions, the standard always had Milling and Baking Quality scores of 100, and the test lines were measured against this score. In the current version, the historical values, from the SWQL data-base of Allis Chalmers millings for the standard cultivar are used.

In the past, if a lenient standard cultivar was used, the test lines could receive high scores although they might have had poor quality attributes. For example, a cultivar might receive a high score when compared to a weak standard, and a low score if compared to a more stringent standard. With this revision, a test line should receive more consistent Milling and Baking Quality Scores, regardless of the standard used.

The assignment of Letter Scores is different, too:

"Old Scores"		**"New Scores"**	
100.0 and above	= "A"	80.0 and above	= "A"
95.9 – 99.9	= "B"	70.0 – 79.9	= "B"
90.0 – 94.9	= "C"	60.0 – 69.9	= "C"
85.0 – 89.9	= "D"	50.0 – 59.9	= "D"
80.0 – 84.9	= "E"	40.0 - 49.9	= "E"
Below 80.0	= "F'	Below 40.0	= "F"

The new Quality Scores are intended to represent the normal distribution of Mill Score and Cookie Diameter from the SWQL data-base of Allis-Chalmers millings.

Grain quality scores are now reported for Test Weight and Softness Equivalent (S.E.). These scores are calculated by normalizing the quality data to fit a scale of 100, and adjusting it according to the response of the standard. (The standard is compared to the historical data for that cultivar, and all entries are adjusted accordingly).

The letter scores associated with the grain quality scores are assigned in the same manner as they are for the Milling and Baking Quality Scores.

The Evaluation of Advanced Nursery Cultivars and Breeding Lines for Milling and Baking Quality (Revised August, 2003)

USDA/ARS
Soft Wheat Quality Lab
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Introduction

This cooperative program for the Eastern soft wheat breeding lines of the Advanced Nursery, provides for the evaluation of milling and baking quality potential. The evaluation consists of three parts: milling quality, baking quality, and grain quality scores.

Appraisals of the quality of test lines are made on a relative basis, comparing test line data with those of the control or standard cultivar. For that purpose, the reference cultivar entry should be harvested from plots in the same nursery and of the same size as those of the test lines in order that environmental effects may be minimized. When several standard cultivars are present in a nursery, we generally select as the reference one whose data indicates the highest quality score. By doing that, we hope to exert maximum quality pressure on the breeding lines.

The scores calculated for the standard are adjusted to approximate the historical values from the SWQL data-base of Allis-Chalmers millings. This correction is then used for the rest of the entries in the nursery, so that variations due to environment are minimalized.

Sample Testinq Procedure

Evaluation requires at least 300-g samples with 500-g being desirable to allow cleaning to remove damaged or shriveled kernels. Because tests performed on abnormal kernels do not provide a valid measurement of quality potential, samples should be clean and essentially free of badly shriveled kernels, or of kernels damaged by insects or disease. Shriveled kernels are removed by aspiration.

A 200-g sample is then tempered for 48 hours to 15 ~ moisture and milled on a modified Quadrumat Jr. mill that has roll corrugations of 31, 36, 39, and 40 corrugations per inch and roll spacings of .040, .008, and .0035 inch. The ground wheat is collected and transferred to a Great Western sifter assembly containing a 40-mesh and a 94-mesh screen and sieved for 90 seconds. The overs of both sieves are weighed and used to calculate the flour yield and Softness Equivalent (SE).

The weight of the overs of the 40-mesh sieve is used to calculate the flour yield by using the following equation:

$$\text{YIELD} = [\ 1 - (\text{OVER 40} / \text{WHEAT WT.})\ ] \times 100$$

In the same manner the weight of the overs of the 94-mesh sieve is used to calculate the softness equivalent (SE) by using the equation:

$$\text{SOFTNESS EQUIVALENT} = [\ 1-(\text{OVER 94} / (\text{WHEAT WT.} - \text{OVER 40}))\ ] \times 100$$

It has been found that with the simple milling procedure used, The flour yields can be affected by the inherent granulation of the wheat cultivar. Therefore, for every one percent change in S.E. there is a .17 % change in flour yield. The flour yields are adjusted to a 52 % S.E. (the mean of all cultivars) by the following equation:

ADJ. FLOUR YIELD = { AS-IS FLOUR YIELD - [.17 X (52.0 - S.E.)] }

Then the overs of the 94-mesh sieve are passed through a second Quadrumat mill and sieved for 90 seconds over a 94-mesh sieve. The overs of the second milling are discarded and the thrus of the 94-mesh sieve from both millings are combined.

The recovered flour is then blended and used to determine moisture, protein, A.W.R.C., and baked into cookies. Moisture and protein are determined by NIR analysis, and a 1-g subsample is used to determine A.W.R.C. The Wooster Sugar-Snap Cookie Method requires an additional 40 g. of flour.

The additional milling step was added to produce a flour that would bake cookies similar in size and appearance to Allis-Chalmers milled flours.

Reference Values

The reference values are simply typical values for the respective tests that one would expect from a good quality soft wheat.

Least Significant Differences

The LSD values determine the size of score penalties for quality shortcomings. In making appraisals of breeding lines for milling and baking quality, we rely on least significant difference (LSD_{05}) values obtained in independent trials in determining whether a breeding line sample differs significantly from the standard cultivar in a given test.

These LSD values are valid only when the standard is equal to the reference value, however, and must be adjusted to compensate for deviation of the actual value from the reference value.

For example, the LSD_{05} for adjusted yield is 0.79% at the reference value (73.59%). The adjusted LSD for a group of samples whose standard has an adjusted yield of 75% is calculated as follows:

(3)

$$LSD_{adj;} = LSD_{.05} \left(\frac{\text{ADJ. YIELD}_s}{\text{ADJ. YIELD}_R}\right) \text{ or}$$

$$LSD_{adj} = (0.79\%)\frac{75.0}{73.6} = .805\% \text{ (at 75\%)}$$

where:

ADJ. YIELD_s = adj. yield of standard cultivar

ADJ. YIELD_p = reference value for add. yield

In the presentation of test data, the LSD values are used as a basis for identifying entries with specific quality deficiencies. Values that deviate (in the wrong direction) from the standard by one LSD are designated with an asterisk (*). Values that deviate by more than two LSD's are designated by a "Q".

The LSD_{05} for the tests are shown in the following table:

Test	Reference Value	$LSD_{.05}$ at Reference Value
Yield	73.6%	0.79%
Softness Equiv.	53.0	2.85
Test Weight	77.0 kg/hl	1.16 kg/hl
A.W.R.C.	52.0%	1.43%
Cookie Diam.	18.0 cm.	.24 cm.

Scoring levels

The number of points given per LSD variation from the standard is called the scoring level. The scoring levels were assigned by taking into consideration the range in variation for each test and the size of the LSD associated with the test.

Milling Ouality Score

Milling Quality is based on flour yield from a 200-gram milling. High flour yield is associated with high straight-grade flour yield and with low endosperm separation index (ESI) in Allis-Chalmers milling, both indices of economic advantage in milling. The adjusted yield obtained from the Quadrumat Jr. milling correlates highly with Allis-Chalmers ESI and extraction. Therefore entries with high flour yield receive high Milling Quality Scores.

Milling quality score is based on the comparison of flour yield of an entry to the yield of the standard cultivar. i.e.

$$\text{Milling Quality Score} = (\text{MS Std}) - X \frac{(Y_s - Y_t)}{\text{LSD}}$$

Where MS Std is the Mill Score of the Standard Cultivar, from the SWQL data-base of Allis-Chalmers millings, Y_s and Y_t are flour yields of standard and test line, respectively. LSD is $LSD_{.05}$, for the test, and X is a coefficient calculated to change the score by 2.6 points for each L.S.D. variation. (A test line with adjusted yield one L.S.D. value lower than the standard yield thus will be penalized 2.6 points.)

Scoring for Baking Quality

A large cookie diameter leads to a high baking quality score. The cookie diameter becomes the Baking Quality Score when it is normalized to a scale of 0 – 100 by:

Bake Score = (25 x Predicted Cookie) – 385

Finally, the Bake Score is adjusted to the standard by adding the difference between the Baking Score of the standard, and the Historical Baking Score of the standard, from the SWQL data-base.

Scoring for Grain Quality

A good soft wheat cultivar should have a high Softness Equivalent (S.E.) and a high Test Weight. High SE indicates friable endosperm, and it correlates highly with Allis-Chalmers break flour yield. High break flour yield is necessary for a finely granulated flour, which is in turn associated with large cake volume. The softness equivalent (SE) is also known to relate to kernel softness.

The Test Weight and S.E. scores are calculated by normalizing the quality data to fit a scale of 100. The scores are then adjusted to the standard by comparison to the historical data.

For example, the test weight adjustment factor is calculated by:

$$(\text{Test Weight}_{\text{Historical}}) - (\text{Test Weight}_{\text{Standard}})$$

Letter Scores:

For convenience of grouping entries, we assign letters to numerical scores as follows:

Score Range	Letter Rating
Over 79.9	A
70.0 – 79.9	B
60.0 - 69.9	C
50.0 - 59.9	D
40.0 - 49.9	E
Under 40.0	F

An Appeal for Prudence

We wish to call attention to the fact that this evaluation is on the basis of a single sample with single determinations, with no assurance that either the standard or the entry under test is truly representative of the genotype. Data and evaluation under this program should not be used as the sole basis for quality claims or for decisions on release.

An entry considered promising should be retested again, as further submissions under this program, or after multiplication as Regional Drill Plot and/or Uniform Nursery entry for more rigorous testing and evaluation.