

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

and

Cooperating State Agricultural Experiment Stations

2004-2005

UNIFORM WINTER OAT TRIAL

Final Report

Coordinator: David Marshall/Myron Fountain

This is a joint progress report of cooperative investigations underway in the Agricultural Research Service of the U. S. Department of Agriculture and the State Agricultural Experiment Stations 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. This report is primarily a tool for use by cooperators 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 and is not intended for publication and should not be referred to in literature citations or quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

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The purpose of the Uniform Winter Oat Trial (UWOT) is to evaluate winter-habit (fall-sown) oat advanced lines for adaptation to those areas in the United States where winter oats are grown commercially. The entries in the 2004-05 UWOT were submitted by public oat breeding programs in Arkansas, Florida, Louisiana, North Carolina, South Carolina, and Texas. A total of 24 entries (23 hulled and 1 hulless (NC98-197N)) were included in the trial. The 2004-05 UWOT was grown at 13 locations; one in Alabama, one in Arkansas, one in Florida, two in Georgia, one in Louisiana, one in Mississippi, one in North Carolina, two in South Carolina, and two in Texas.

LA96006BSB-270-S2 had the highest yield, about 137 bu/a, and thirteen varieties were not significantly different. The three checks, TAM-O-397, Harrison, and Rodgers, yielded about the same as the average of all 24 entries (115 bu/a). The hulless variety, NC98-197N, yielded about 114 bu/a with a testweight of about 39 lb/bu. Experimental varieties LA9825SBSB-59-C, LA9810SBS-58, FL9605-Ab-B4, NC01-3981 had excellent yield and testweight.

Prattville, AL - Wet fall resulting in delayed planting. Plot size-75ft²; Reps-3; Planting Date-16 Dec 04; Harvest Date-21 June 05; Cooperator-K.Glass.

Stuttgart, AR - Terrible year; no data. Cooperator-Robert Bacon.

Sussex, DE - Plot size-106ft²; Planting Date-5 Nov 04; Harvest Date-15 July 05; B.Uniatowski.

Quincy, FL - Plot size = 50ft²; only 1 rep harvested; Nursery grew very tall; lodging was a problem; crown rust came in late, but did reduce yield and test weight on susceptible entries. Cooperators: R. Barnett and L. Schell.

Griffin, GA - Plot size-50ft²; Reps-3; Planting Date-4 Nov 04; Harvest Date-11 June 05; Cooperators-J.W.Johnson, D.Bland, and S.Sutton.

Plains, GA - Plot size-50ft²; Reps-3; Planting Date-16 Nov 04; Harvest Date-28 May 05; Cooperators-J.W.Johnson, D.Bland, and S.Sutton.

Baton Rouge, LA - Wet fall, warm winter, cool spring, and very dry grain fill. Heavy crown rust, no stem rust. Plot size-70ft²; Reps-3; Planting date-11 Nov 04; Harvest Date-17 May 05; Cooperators-S.Harrison, K.Arceneaux, & F.LaRue.

Newton, MS - Plot size-90ft²; Reps-4; Cooperator-B.White.

Kinston, NC - Excellent fall with good growth; very cool spring with extended grain filling period; Harvest about 10 days later than normal. Plot size-55ft²; Reps-2; Planting Date-20 Oct 04; Harvest Date-15 June 05; Cooperator-P.Murphy

Clemson, SC - No data received for report. Cooperator-B.Edge

Florence, SC - No data received for report. Cooperator-B.Edge

Castroville, TX - Entire nursery lost due to a storm in April; Cooperator-R.Herrington.

Prosper, TX - Cooperator-R.Sutton.

ENTRIES

<i>Entry</i>	<i>Designation</i>	<i>Pedigree</i>	<i>Origin</i>	<i>Yrs in Trial</i>	<i>2004-05 Source</i>
1	Rodgers	Coker 80-33/NC81-376 (=PI 593020; NC88-1818)	NC	7	04USDA
2	TAM-O-397	C75-12/4/Coker227/Coker234/3/TAM-O-301/TAM-O-312//CI9221/5/TAM-O-312/Coker227 (=TX92M1096)	TX	7	04USDA
3	Harrison	C74C70/Florida 502 (=PI590937)	AR	7	04USDA
4	ARO231-3	PA8017-26//Simpson/T81-1251	AR	2	04USDA
5	ARO289-9	TAM-O-386/FL501	AR	2	04USDA
6	ARO336-3	TAM-O-386//C86-13/T81-1251	AR	2	04USDA
7	ARO336-12	TAM-O-386//C86-13/T81-1251	AR	1	04AR
8	FL9304-Y11-B3-C5	TX91Ab2987/FL783-G31-3-2-G19(PA7428-185/Ck77-22)	FL	2	04USDA
9	FL9605-Ab-B4	FL95OHR39,327-G7(LA89104-U1)/GA8702-C13-4-7 (TAMO386/Florida 502)	FL	2	04USDA
10	FL98107-C3	TX96M1123/GA882B8-2	FL	2	04USDA
11	FL-TX96M1418-C2	TAMO 386 'S' (C seed)	FL	2	04USDA
12	LA96006BSB-270-S2	FL9595MEO29/TX93M2103	LA	1	04LA
13	LA976GBS-22-B-S2	FL92OHR26763/TX93M2107	LA	3	04USDA
14	LA98001SBSBSB-82-S	833/LA604	LA	1	04LA
15	LA9810SBS-58	90120C2-3-AB1/TX93M1558	LA	3	04USDA
16	LA9825SBSB-59-C	TAMO397/90120C2-3-2 (91020 = HH506 seln = C75-27/76-29/3/76-23//75-28/CI8336/4/76-30*4/76-29)	LA	2	04USDA
17	LA99016SBSB-98-S	TX96M1385/LA604	LA	1	04LA
18	NC98-197N (hulless)	Rogers sib//AR FOB30/Coker 84-27	NC	2	04NC
19	NC01-3981	NC88-1834/NC89-4708//TX83Ab2923/3/NC91-6448	NC	1	04NC
20	SC010907	Coker 84-15/C78-28/C79-26 (C475-1-B2-5)	SC	1	04SC
21	TX01CSRH sel 1	unknown	TX	3	04TX
22	TX02U7097	TX92M1505/TX83Ab2923	TX	1	04TX
23	TX02U7344	Mitchell/TX83Ab2923/TAMO386R	TX	2	04TX
24	TX02U7605	TX92M1596/TX83Ab2923	TX	1	04TX

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GRAIN YIELD

		<i>Prattville, AL</i>		<i>Sussex, DE</i>		<i>Quincy, FL</i>		<i>Griffin, GA</i>		<i>Plains, GA</i>		<i>BRouge, LA*</i>		<i>Newton, MS</i>		<i>Kinston, NC</i>		<i>Prosper, TX</i>		<i>8-location mean*</i>	
<i>Entry</i>	<i>Designation</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>	<i>bu/ac</i>	<i>rank</i>
1	Rodgers	51	17	99.3	3	44.3	24	143.3	17	109.6	18	5.3	21	133.8	4	205.2	1	100.3	6	110.9	18
2	TAM-O-397	54	14	81.1	23	108.0	14	142.0	18	170.0	10	70.9	11	121.5	12	161.9	17	80.7	18	114.9	11
3	Harrison	31	22	92.6	11	78.5	18	162.2	1	128.8	14	39.8	14	115.5	16	201.9	2	78.7	20	111.2	16
4	ARO231-3	67	6	94.7	9	76.2	19	157.2	4	117.4	15	5.6	20	122.3	11	176.1	9	77.3	21	111.0	17
5	ARO289-9	51	18	105.3	2	64.8	20	153.8	7	117.1	16	7.2	16	119.7	14	193.2	4	97.8	7	112.8	14
6	ARO336-3	68	4	110.0	1	50.0	22	146.2	13	86.8	22	2.5	22	114.4	17	164.3	14	97.3	8	104.6	21
7	ARO336-12	56	12	97.2	5	62.5	21	154.0	6	86.8	23	2.5	23	131.7	6	170.1	12	96.1	9	106.8	20
8	FL9304-Y11-B3-C5	57	10	85.3	20	139.9	9	152.1	8	184.1	2	79.3	10	127.6	8	170.5	11	70.6	23	123.4	8
9	FL9605-Ab-B4	53	15	90.0	13	135.3	11	154.9	5	166.7	11	62.6	13	121.2	13	177.9	7	100.3	5	124.9	7
10	FL98107-C3	60	9	96.8	6	129.6	12	160.4	2	183.1	3	7.2	17	124.8	10	162.2	16	108.4	1	128.2	5
11	FL-TX96M1418-C2	71	2	95.1	8	147.8	7	144.0	16	176.2	8	97.6	7	127.7	7	147.8	19	93.4	11	125.4	6
12	LA96006BSB-270-S2	70	3	86.6	18	159.2	4	136.7	22	208.3	1	151.8	1	157.2	1	171.4	10	106.5	2	137.0	1
13	LA976GBS-22-B-S2	57	11	96.8	7	94.4	15	144.1	15	110.1	17	79.8	9	109	20	130.4	22	73.2	22	101.9	22
14	LA98001SBSBSB-82-S	51	19	88.7	15	94.4	16	118.0	24	101.5	20	64.0	12	127.6	9	91.3	24	81.6	17	94.3	23
15	LA9810SBS-58	55	13	92.1	12	144.4	8	150.1	11	178.2	6	7.2	18	139.4	3	183.5	6	88.8	13	128.9	4
16	LA9825SBSB-59-C	66	7	86.6	19	184.2	2	146.8	12	180.7	5	118.3	5	116.4	15	177.6	8	105.9	3	133.0	2
17	LA99016SBSB-98-S	73	1	93.0	10	164.9	3	151.4	9	181.0	4	102.4	6	109.4	19	198.0	3	85.2	14	132.0	3
18	NC98-197N (hulless)	31	23	87.5	17	80.7	17	151.4	10	177.6	7	2.4	24	132.6	5	158.5	18	94.8	10	114.3	12
19	NC01-3981	61	8	98.1	4	153.5	5	140.6	20	87.4	21	10.7	15	141.4	2	185.7	5	67.9	24	117.0	10
20	SC010907	24	24	90.0	14	45.5	23	146.2	14	64.8	24	7.2	19	100.2	22	138.4	21	80.2	19	86.2	24
21	TX01CSRH sel 1	53	16	78.1	24	136.4	10	141.6	19	174.5	9	129.1	2	107.1	21	168.5	13	85.0	15	118.0	9
22	TX02U7097	50	20	88.3	16	121.7	13	137.8	21	157.6	12	97.3	8	91.9	23	144.6	20	83.0	16	109.4	19
23	TX02U7344	68	5	85.3	21	150.1	6	158.1	3	107.6	19	122.6	4	114.4	18	109.3	23	102.7	4	111.9	15
24	TX02U7605	39	21	82.4	22	213.8	1	128.0	23	138.5	13	128.4	3	53	24	162.3	15	91.3	12	113.5	13
	<i>Mean</i>	55		91.7		115.8		146.7		141.4		63.6		119.2		164.6		89.5		115.5	
	<i>LSD (5%)</i>	10		12.9		—		20.3		36.0		15.9		29.2		35.7		22.7		24.4	
	<i>CV (%)</i>	16		9		—		8		15		18		17		11		15		21	
* data from Baton Rouge, LA not included in 8-location mean																					

TEST WEIGHT											
		<i>Prtt</i> vill	<i>Sussex</i>	<i>Quincy</i>	<i>Griffin</i>	<i>Plains</i>	<i>BRouge</i> ‡	<i>Kinston</i>	<i>Prosper</i>	<i>7-location</i> ‡	
		<u>AL</u>	<u>DE</u>	<u>FL</u>	<u>GA</u>	<u>GA</u>	<u>LA</u>	<u>NC</u>	<u>TX</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>lb/bu</i>	<i>rank</i>
1	Rodgers	31.1	33.4	24.3	32	32	ng*	38.2	35.9	32.4	22
2	TAM-O-397	30.0	29.4	30.7	30	33	28.7	38.6	35.0	32.4	23
3	Harrison	34.3	34.5	30.7	32	30	30.5	38.4	35.1	33.6	20
4	ARO231-3	33.9	37.7	29.4	36	32	ng	39.2	36.7	35.0	11
5	ARO289-9	35.7	35.5	24.3	36	33	ng	40.0	40.8	35.0	8
6	ARO336-3	35.0	34.6	20.5	28	27	ng	33.9	38.2	31.0	24
7	ARO336-12	34.6	34.5	24.3	33	31	ng	38.7	38.2	33.5	21
8	FL9304-Y11-B3-C5	33.8	31.7	37.1	30	35	32.6	37.7	34.8	34.3	17
9	FL9605-Ab-B4	35.5	35.5	37.1	31	37	32.1	39.5	39.4	36.4	6
10	FL98107-C3	33.5	33.4	37.1	33	34	ng	36.7	37.4	35.0	10
11	FL-TX96M1418-C2	32.2	32.0	35.8	28	35	35.7	38.5	40.3	34.5	16
12	LA96006BSB-270-S2	30.3	32.4	34.6	31	36	37.3	36.8	36.1	33.9	19
13	LA976GBS-22-B-S2	36.0	35.7	35.8	nd†	37	33.4	37.5	38.5	36.3	7
14	LA98001SBSBSB-82-S	34.5	34.2	33.3	33	35	36.6	36.1	38.8	35.0	12
15	LA9810SBS-58	37.4	35.4	35.8	36	38	38.1	41.3	41.8	38.0	2
16	LA9825SBSB-59-C	33.8	35.1	33.3	34	39	34.4	41.4	40.6	36.7	3
17	LA99016SBSB-98-S	34.1	32.5	35.8	31	36	38.1	38.3	35.0	34.7	14
18	NC98-197N (hulless)	38.6	30.6	41.0	34	40	ng	46.2	44.7	39.3	1
19	NC01-3981	36.2	36.4	35.8	30	40	ng	39.8	37.4	36.5	5
20	SC010907	38.4	32.6	25.0	39	31	ng	41.0	49.2	36.6	4
21	TX01CSRH sel 1	30.3	31.4	34.6	33	37	34.7	40.2	38.7	35.0	9
22	TX02U7097	32.2	30.3	33.3	nd	34	32.4	40.8	36.0	34.0	18
23	TX02U7344	34.3	31.9	34.6	32	36	36.0	38.0	37.9	35.0	13
24	TX02U7605	33.7	32.6	35.8	32	32	35.1	40.5	36.0	34.7	15
	<i>Mean</i>	34.1	33.5	32.8	32.5	34.6	34.4	39	38.4	34.95	
	<i>LSD (5%)</i>	—	1.1	—	—	—	2.0	2.7	—	3.0	
	<i>CV (%)</i>	—	2	—	—	—	4	3	—	8	
* ng = not enough grain to determine test weight.											
† = no data reported.											
‡ data from Baton Rouge, LA not included in 7-location mean											

HEADING DATE (JULIAN)									
		<i>Quincy</i>	<i>Griffin</i>	<i>Plains</i>	<i>BRouge</i>	<i>Kinston</i>	<i>Prosper</i>	<i>6-location</i>	
<i>Entry</i>	<i>Designation</i>	<i>FL</i>	<i>GA</i>	<i>GA</i>	<i>LA</i>	<i>NC</i>	<i>TX</i>	<i>mean</i>	<i>rank</i>
1	Rodgers	101	113	99	96	114	102	104	17
2	TAM-O-397	99	106	95	86	110	101	100	4
3	Harrison	100	111	97	94	113	101	103	11
4	ARO231-3	104	118	100	100	117	105	107	23
5	ARO289-9	103	110	99	97	117	102	105	19
6	ARO336-3	103	115	100	nd*	118	105	106	22
7	ARO336-12	106	116	100	nd	118	107	108	24
8	FL9304-Y11-B3-C5	97	109	97	94	112	102	102	8
9	FL9605-Ab-B4	97	107	96	92	110	101	101	5
10	FL98107-C3	99	110	98	96	116	101	103	13
11	FL-TX96M1418-C2	99	110	98	96	116	104	104	16
12	LA96006BSB-270-S2	98	110	96	92	112	102	102	7
13	LA976GBS-22-B-S2	100	113	99	95	117	105	105	20
14	LA98001SBSBSB-82-S	100	112	100	95	117	102	104	18
15	LA9810SBS-58	99	111	98	91	111	104	102	10
16	LA9825SBSB-59-C	97	111	99	93	115	103	103	12
17	LA99016SBSB-98-S	96	109	97	95	114	102	102	9
18	NC98-197N (hulless)	97	110	99	90	111	98	101	6
19	NC01-3981	100	109	97	95	117	102	103	14
20	SC010907	103	111	102	nd	118	102	105	21
21	TX01CSRH sel 1	93	105	96	87	106	98	98	2
22	TX02U7097	97	106	96	88	111	98	99	3
23	TX02U7344	99	110	99	94	116	104	104	15
24	TX02U7605	89	102	94	85	107	98	96	1
	<i>Mean</i>	99	110	98	93	114	102	103	
	<i>LSD (5%)</i>	—	—	—	1	1	—	2	
	<i>CV (%)</i>	—	—	—	1	1	—	2	
*nd = no data reported.									

HEIGHT												
		Prattville	Sussex	Quincy	Griffin	Plains	BRouge ‡	Newton	Kinston	Prosper	8-location ‡	
		<u>AL</u>	<u>DE</u>	<u>FL</u>	<u>GA</u>	<u>GA</u>	<u>LA</u>	<u>MS</u>	<u>NC</u>	<u>TX</u>	<u>mean</u>	
Entry	Designation	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	rank
1	Rodgers	44	37	58	40	49	ndl†	53	49	39	46	16
2	TAM-O-397	42	35	59	41	53	54	46	51	38	46	11
3	Harrison	44	38	60	41	62	56	54	51	38	49	22
4	ARO231-3	36	30	49	34	44	ndl	45	41	31	39	2
5	ARO289-9	46	38	60	41	49	ndl	51	59	39	48	20
6	ARO336-3	39	33	49	37	44	ndl	38	45	32	40	3
7	ARO336-12	45	37	60	41	44	ndl	50	56	41	47	18
8	FL9304-Y11-B3-C5	45	37	57	43	47	55	50	50	37	46	12
9	FL9605-Ab-B4	47	42	59	41	52	55	54	53	46	49	23
10	FL98107-C3	44	35	59	43	49	ndl	50	50	38	46	15
11	FL-TX96M1418-C2	45	35	58	41	52	61	49	55	38	47	17
12	LA96006BSB-270-S2	39	28	54	32	47	53	42	44	36	40	4
13	LA976GBS-22-B-S2	49	42	58	nd*	55	60	54	54	40	50	24
14	LA98001SBSBSB-82-S	43	34	55	42	49	53	47	50	37	45	8
15	LA9810SBS-58	43	38	55	43	48	58	52	50	35	46	10
16	LA9825SBSB-59-C	43	36	53	42	54	60	50	49	39	46	13
17	LA99016SBSB-98-S	47	37	59	43	52	61	50	54	41	48	21
18	NC98-197N (hulless)	41	30	55	48	48	ndl	49	46	34	44	7
19	NC01-3981	38	32	53	38	42	ndl	44	44	31	40	5
20	SC010907	44	36	58	44	51	ndl	48	55	38	47	19
21	TX01CSRH sel 1	36	29	47.5	30	40	45	36	37	31	36	1
22	TX02U7097	46	37	58	39	50	59	46	48	42	46	14
23	TX02U7344	44	34	60	41	49	55	48	49	37	45	9
24	TX02U7605	42	32	56	39	47	57	43	51	40	44	6
	Mean	43	35	56	40	49	56	48	50	37	45	
	LSD (5%)	—	3	—	—	—	3	—	6	—	2	
	CV (%)	—	5	—	—	—	3	—	6	—	5	
*nd = No data reported.												
†ndl = No data due to severe lodging early in grain fill, resulting from severe crown rust.												
‡ data from Baton Rouge, LA not included in 8-location mean												

LODGING									
		<i>Prattville</i>	<i>Sussex</i>	<i>Quincy</i>	<i>Plains</i>	<i>BRouge</i>	<i>Newton</i>	<i>5-location</i>	
		<u>AL</u>	<u>DE</u>	<u>FL</u>	<u>GA</u>	<u>LA</u>	<u>MS</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>0-9</i>	<i>0-9</i>	<i>0-9</i>	<i>%</i>	<i>0-9</i>	<i>0-9</i>	<i>0-9</i>	<i>rank</i>
1	Rodgers	0	3	8	30	9.0	1	4	20
2	TAM-O-397	0	1	1	0	7.5	1	2	8
3	Harrison	7	1	7	20	8.0	1	5	23
4	ARO231-3	0	1	8	40	9.0	1	4	16
5	ARO289-9	4	2	8	80	9.0	1	5	24
6	ARO336-3	0	1	8	20	9.0	1	4	17
7	ARO336-12	1	1	8	70	9.0	1	4	19
8	FL9304-Y11-B3-C5	0	2	2	0	5.5	1	2	9
9	FL9605-Ab-B4	1	2	1	5	8.0	1	3	12
10	FL98107-C3	2	1	3	30	9.0	1	3	14
11	FL-TX96M1418-C2	0	1	1	20	0.5	1	1	2
12	LA96006BSB-270-S2	0	1	0	0	1.0	1	1	1
13	LA976GBS-22-B-S2	1	1	3	70	3.0	1	2	5
14	LA98001SBSBSB-82-S	0	2	4	60	3.5	1	2	10
15	LA9810SBS-58	5	1	2	20	0.5	1	2	7
16	LA9825SBSB-59-C	0	1	1	10	4.0	1	1	4
17	LA99016SBSB-98-S	0	2	2	10	0.0	1	1	3
18	NC98-197N (hulless)	2	2	4	5	9.0	2	4	18
19	NC01-3981	0	1	2	40	9.0	2	3	13
20	SC010907	4	1	7	40	9.0	2	5	22
21	TX01CSRH sel 1	0	1	1	0	3.0	4	2	6
22	TX02U7097	0	3	2	20	4.5	1	2	11
23	TX02U7344	5	4	6	70	3.5	4	5	21
24	TX02U7605	1	4	3	40	7.5	1	3	15
	<i>Mean</i>	1	2	4	29	5.8	1	3	
	<i>LSD (5%)</i>	—	1	—	—	2.7	—	3	
	<i>CV (%)</i>	—	34	—	—	26	—	71	

DISEASE AND OTHER TRAITS							
		Crown Rust			BYDV	Freeze Damage	Phenotype*
		<i>Quincy</i>	<i>Plains</i>	<i>BRouge</i>	<i>Prattville</i>	<i>Kinston</i>	<i>Baton Rouge</i>
		<i>FL</i>	<i>GA</i>	<i>LA</i>	<i>AL</i>	<i>NC</i>	<i>LA</i>
Entry	Designation	%	0-9	%	0-9	0-9	0-9
1	Rodgers	73	9	100	3	2.5	7.0
2	TAM-O-397	3	0	43	3	6.0	4.6
3	Harrison	63	5	58	5	3.5	5.6
4	ARO231-3	67	9	98	3	5.0	6.4
5	ARO289-9	80	9	100	3	3.5	7.5
6	ARO336-3	83	9	100	1	3.5	8.1
7	ARO336-12	77	9	95	1	4.0	7.9
8	FL9304-Y11-B3-C5	0	0	38	1	4.0	4.0
9	FL9605-Ab-B4	7	0	50	1	3.5	5.5
10	FL98107-C3	3	0	95	1	4.0	6.9
11	FL-TX96M1418-C2	0	0	0	1	5.0	4.5
12	LA96006BSB-270-S2	0	0	0	2	6.0	3.3
13	LA976GBS-22-B-S2	0	0	0	3	5.5	3.9
14	LA98001SBSBSB-82-S	33	7	15	1	2.0	4.6
15	LA9810SBS-58	0	0	0	1	4.5	3.4
16	LA9825SBSB-59-C	10	0	10	2	5.0	4.0
17	LA99016SBSB-98-S	0	0	0	1	4.5	3.9
18	NC98-197N (hulless)	60	0	100	2	3.0	6.5
19	NC01-3981	23	5	95	1	3.0	5.8
20	SC010907	73	9	100	3	3.5	7.5
21	TX01CSRH sel 1	0	0	0	4	5.0	3.5
22	TX02U7097	0	0	0	1	6.5	3.8
23	TX02U7344	0	0	0	1	5.0	3.9
24	TX02U7605	3	0	0	5	4.0	3.5
	<i>Mean</i>	28	3.0	46.0	2.1	4.3	5.2
	<i>LSD (5%)</i>	—	—	14	—	1.2	0.8
	<i>CV (%)</i>	—	—	17	—	14.4	9.1

* Phenotype rated by S. Harrison in Baton Rouge, LA, where 0=excellent visual appearance; 5=average, and 9=very poor.

GROAT PERCENT					
		<i>Prattville</i>	<i>Kinston</i>	<i>2-location</i>	
		<u>AL</u>	<u>NC</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>rank</i>
1	Rodgers	60	71	66	15
2	TAM-O-397	68	67	68	6
3	Harrison	62	70	66	12
4	ARO231-3	58	64	61	22
5	ARO289-9	62	68	65	17
6	ARO336-3	58	66	62	21
7	ARO336-12	61	71	66	13
8	FL9304-Y11-B3-C5	62	66	64	20
9	FL9605-Ab-B4	64	71	68	7
10	FL98107-C3	64	67	66	16
11	FL-TX96M1418-C2	62	70	66	14
12	LA96006BSB-270-S2	53	60	57	24
13	LA976GBS-22-B-S2	63	70	67	9
14	LA98001SBSBSB-82-S	65	65	65	18
15	LA9810SBS-58	64	69	67	10
16	LA9825SBSB-59-C	68	75	72	4
17	LA99016SBSB-98-S	65	70	68	8
18	NC98-197N (hulless)	87	93	90	1
19	NC01-3981	66	67	67	11
20	SC010907	88	81	85	2
21	TX01CSRH sel 1	56	65	61	23
22	TX02U7097	66	78	72	3
23	TX02U7344	60	69	65	19
24	TX02U7605	66	75	71	5
	<i>Mean</i>	65	70	67	
	<i>LSD (5%)</i>	—	—	6	
	<i>CV (%)</i>	—	—	4	

GROAT PROTEIN PERCENT					
		<i>Prattville</i>	<i>Kinston</i>	<i>2-location</i>	
		<u>AL</u>	<u>NC</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>rank</i>
1	Rodgers	13.46	15.01	14.24	15
2	TAM-O-397	15.48	15.52	15.50	2
3	Harrison	15.26	15.94	15.60	1
4	ARO231-3	13.16	16.16	14.66	9
5	ARO289-9	13.16	14.65	13.91	18
6	ARO336-3	11.86	14.73	13.30	22
7	ARO336-12	12.08	12.59	12.34	24
8	FL9304-Y11-B3-C5	14.08	16.03	15.06	3
9	FL9605-Ab-B4	13.44	13.76	13.60	21
10	FL98107-C3	12.61	15.13	13.87	19
11	FL-TX96M1418-C2	13.75	15.61	14.68	8
12	LA96006BSB-270-S2	14.11	14.93	14.52	12
13	LA976GBS-22-B-S2	13.88	14.46	14.17	16
14	LA98001SBSBSB-82-S	12.58	17.11	14.85	7
15	LA9810SBS-58	14.30	14.77	14.54	11
16	LA9825SBSB-59-C	13.96	15.18	14.57	10
17	LA99016SBSB-98-S	13.46	14.14	13.80	20
18	NC98-197N	13.59	16.20	14.90	5
19	NC01-3981	13.41	15.39	14.40	14
20	SC010907	12.04	13.31	12.68	23
21	TX01CSRH sel 1	14.59	15.14	14.87	6
22	TX02U7097	14.40	14.46	14.43	13
23	TX02U7344	13.15	14.89	14.02	17
24	TX02U7605	15.44	14.59	15.02	4
	<i>Mean</i>	13.63	14.99	14.31	
	<i>LSD (5%)</i>	—	—	1.74	
	<i>CV (%)</i>	—	—	5.88	

GROAT β -GLUCAN PERCENT					
		<i>Prattville</i>	<i>Kinston</i>	<i>2-location</i>	
		<u>AL</u>	<u>NC</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>rank</i>
1	Rodgers	4.35	4.50	4.43	8
2	TAM-O-397	3.87	3.74	3.81	21
3	Harrison	4.10	3.92	4.01	15
4	ARO231-3	4.42	3.79	4.11	11
5	ARO289-9	3.50	3.62	3.56	23
6	ARO336-3	4.14	4.81	4.48	7
7	ARO336-12	4.12	4.86	4.49	6
8	FL9304-Y11-B3-C5	3.95	4.77	4.36	9
9	FL9605-Ab-B4	4.63	4.47	4.55	4
10	FL98107-C3	3.83	4.03	3.93	18
11	FL-TX96M1418-C2	3.57	3.06	3.32	24
12	LA96006BSB-270-S2	3.92	4.09	4.01	16
13	LA976GBS-22-B-S2	5.40	4.68	5.04	2
14	LA98001SBSBSB-82-S	3.46	4.01	3.74	22
15	LA9810SBS-58	4.91	4.31	4.61	3
16	LA9825SBSB-59-C	3.29	4.51	3.90	19
17	LA99016SBSB-98-S	3.83	4.14	3.99	17
18	NC98-197N	5.50	4.97	5.24	1
19	NC01-3981	4.03	3.59	3.81	20
20	SC010907	4.70	4.34	4.52	5
21	TX01CSRH sel 1	4.14	4.48	4.31	10
22	TX02U7097	4.18	4.03	4.11	12
23	TX02U7344	3.67	4.47	4.07	14
24	TX02U7605	3.99	4.21	4.10	13
	<i>Mean</i>	4.14	4.23	4.19	
	<i>LSD (5%)</i>	—	—	0.78	
	<i>CV (%)</i>	—	—	9.02	

GROAT LIPID PERCENT					
		<i>Prattville</i>	<i>Kinston</i>	<i>2-location</i>	
		<u>AL</u>	<u>NC</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>rank</i>
1	Rodgers	7.77	8.48	8.13	10
2	TAM-O-397	6.74	7.68	7.21	20
3	Harrison	5.97	6.38	6.18	24
4	ARO231-3	9.38	9.35	9.37	2
5	ARO289-9	7.36	7.65	7.51	16
6	ARO336-3	9.26	9.09	9.18	3
7	ARO336-12	8.41	9.08	8.75	7
8	FL9304-Y11-B3-C5	9.71	9.76	9.74	1
9	FL9605-Ab-B4	8.59	9.19	8.89	5
10	FL98107-C3	7.02	7.68	7.35	17
11	FL-TX96M1418-C2	7.07	8.57	7.82	13
12	LA96006BSB-270-S2	7.37	8.81	8.09	11
13	LA976GBS-22-B-S2	6.86	7.45	7.16	21
14	LA98001SBSBSB-82-S	7.86	8.14	8.00	12
15	LA9810SBS-58	6.76	7.52	7.14	22
16	LA9825SBSB-59-C	7.01	7.51	7.26	19
17	LA99016SBSB-98-S	7.36	7.97	7.67	15
18	NC98-197N	7.41	9.01	8.21	9
19	NC01-3981	7.33	7.27	7.30	18
20	SC010907	8.69	8.89	8.79	6
21	TX01CSRH sel 1	6.05	7.57	6.81	23
22	TX02U7097	8.91	9.31	9.11	4
23	TX02U7344	7.81	8.81	8.31	8
24	TX02U7605	7.61	7.89	7.75	14
	<i>Mean</i>	7.68	8.29	7.99	
	<i>LSD (5%)</i>	—	—	0.74	
	<i>CV (%)</i>	—	—	4.50	

FLOUR FALLING NUMBER					
		<i>Prattville</i>	<i>Kinston</i>	<i>2-location</i>	
		<u>AL</u>	<u>NC</u>	<u>mean</u>	
<i>Entry</i>	<i>Designation</i>	<i>s</i>	<i>s</i>	<i>s</i>	<i>rank</i>
1	Rodgers	493	553	523	10
2	TAM-O-397	534	574	554	5
3	Harrison	766	645	706	1
4	ARO231-3	429	565	497	14
5	ARO289-9	533	516	525	9
6	ARO336-3	420	474	447	22
7	ARO336-12	389	535	462	19
8	FL9304-Y11-B3-C5	360	399	380	24
9	FL9605-Ab-B4	449	534	492	15
10	FL98107-C3	465	490	478	17
11	FL-TX96M1418-C2	497	673	585	3
12	LA96006BSB-270-S2	410	499	455	20
13	LA976GBS-22-B-S2	483	475	479	16
14	LA98001SBSBSB-82-S	441	458	450	21
15	LA9810SBS-58	403	595	499	13
16	LA9825SBSB-59-C	526	574	550	6
17	LA99016SBSB-98-S	453	606	530	7
18	NC98-197N	399	473	436	23
19	NC01-3981	516	601	559	4
20	SC010907	477	574	526	8
21	TX01CSRH sel 1	538	661	600	2
22	TX02U7097	412	589	501	12
23	TX02U7344	414	520	467	18
24	TX02U7605	468	554	511	11
	<i>Mean</i>	470	547	509	
	<i>LSD (5%)</i>	—	—	104	
	<i>CV (%)</i>	—	—	10	