

SOUTHERN UNIFORM WINTER WHEAT SCAB NURSERY

2011 NURSERY REPORT

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This is a progress report of cooperative investigations underway and funded by the U. S. Wheat and Barley Scab Initiative, State Agricultural Experiment Stations, private companies and the United States Department of Agriculture, Agricultural Research Service. This report contains preliminary data that 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 a tool for the use of the cooperators and their official staff and those persons having direct interest in the development of agricultural research programs. This report 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 authors.

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LOCATION NOTES

Brookston, Indiana

- Cooperator: Barton Fogleman, Jennifer Vonderwell.
- Agripro-Syngenta Seeds Inc.

Fayetteville and Newport, Arkansas

- Cooperator: Gene Milus
- University of Arkansas

Urbana, Illinois

- Cooperators: Fred Kolb and Eric Brucker.
- University of Illinois

Lexington, Kentucky

- Cooperators: Nicki Mundell and Dave Van Sanford
- University of Kentucky

Blacksburg, Virginia

- Cooperators: Carl A. Griffey, Shuyu Liu, Patty Gundrum.
- Virginia Tech

Kinston, North Carolina

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

Columbia, Missouri

- Cooperators: Anne L. McKendry and David Tague.
- University of Missouri

Salisbury, Maryland.

- Cooperators: Jose Costa, and Aaron Cooper.
- University of Maryland.

Crowley, Louisiana.

- Cooperators: Harrison, Padgett, Growth, Arceneaux, Purvis and Strickland.
- Louisiana State University.

Griffin, Georgia

- Cooperator: Jerry Johnson.
- University of Georgia.

Fundulea, Romania.

- Cooperator: Marianna Iltu.
- National Agricultural Research Development Institute.

Szeged, Hungary.

- Cooperator: Akos Mesterhazy.
- Cereal Research Institute.

Raleigh, North Carolina

Cooperator: Gina Brown-Guedira

USDA-ARS Eastern Regional Small Grains Genotyping Lab

West Lafayette, Indiana

Cooperator: Sue Cambron

USDA-ARS Crop Production and Pest Control Research Unit:

- Hessian Fly resistance evaluations.

Wooster, Ohio

Cooperator: Ed Souza

USDA-ARS Soft Wheat Quality Laboratory

- Milling and Baking Quality evaluations.



**A happy, and wet, crew after setting up misting system at Kinston, NC, March, 2011.
Rene Navarro, George Van Esbroeck, Margaret Worthington, and Peter Maloney.**



Impact of *Fhb1* (left) on disease development in inoculated / misted nursery, Kinston, NC 2011



Fusarium damaged kernels harvested from susceptible RIL in the AGS 2000 x NC-Neuse mapping population, Kinston NC 2011

View original, color versions of photographs at:
http://www.scabusa.org/research_vdhr.html#vdhr-updates

Entry List and Pedigrees, 2011 Nursery

ENTRY NO	CULTIVAR/ DESIGNATION	PEDIGREE	CONTRIBUTOR	IN NURSERY SINCE
1	ERNIE	Check	CHECK(RES)	1999-00
2	COKER 9835	Check	CHECK(SUS)	2000-01
3	BESS	MO11769/Madison	CHECK(RES)	2006-07
4	JAMESTOWN	Roane / Pioneer 2691	Check (RES)	2007-08
5	ARS04-1267	KS98HW151-6/KS00HW120	Marshall	2009-10
6	M08*8005#	BRANSON/M99*3098	Fogleman	2009-10
7	MD03W61-09-1	Pio25R42/Chesapeake	Costa	2009-10
8	VA09W-641	Ernie / NC96-13374 // McCormick	Griffey	2009-10
9	ARGE04-1163-44	Freedom/Catbird//Mason/Catbird	Milus	2010-11
10	ARGE04-1163-67	Freedom/Catbird//Mason/Catbird	Milus	2010-11
11	ARS07-0245	FL9567/TX99D4628	Marshall	2010-11
12	ARS07-0262	FL95A331/Terrenzio17077-2	Marshall	2010-11
13	ARS07-0404	GA951079-3-5/NC96BGTD3	Marshall	2010-11
14	ARS07-0609	GA961662-1-7/B980582	Marshall	2010-11
15	ARS07-1227	McCormick/Trego	Marshall	2010-11
16	ARS07-1243	NC00-14622/2137	Marshall	2010-11
17	ARS08-0114	TX99D4441/TAM303	Marshall	2010-11
18	B050154	HOPEWELL/BL920520	Hancock	2010-11
19	B070495	PIO 26R24/BL940026	Hancock	2010-11
20	B070678	D97*6940/PATTON	Hancock	2010-11
21	B070738	D99-5003/NATCHEZ	Hancock	2010-11
22	GA04496-S6	VA01W-476/AGS 2485/3/AGS 2000//04400	Johnson	2010-11
23	GA041273-S14	AGS 2010/Truman	Johnson	2010-11
24	GA041273-S15	AGS 2010/Truman	Johnson	2010-11
25	GA04496-S5	VA01W-476/AGS 2485/3/AGS 2000//04400	Johnson	2010-11
26	GA04496-S8	VA01W-476/AGS 2485/3/AGS 2000//04400	Johnson	2010-11
27	GA051173W-S11	Truman/AGS 2010	Johnson	2010-11
28	GA051173W-S12	Truman/AGS 2010	Johnson	2010-11
29	GA051173W-S13	Truman/AGS 2010	Johnson	2010-11
30	IL02-18228	Pio25R26/ IL9634-24437 (IL90-4813/IL85-3132//Ning 7840) // IL95-4162	Kolb	2010-11
31	LA03012E-50	LA92283C64-1/ARLA97-1047-4-2	Harrison	2010-11
32	LA03130E66	ARGE97-1033-14-2(MASON/CATBIRD)/LA9415D104-5-2(PU8686A1-8/CK9134//PIO2684)	Milus / Harrison	2010-11
33	LA03130E68	ARGE97-1033-14-2(MASON/CATBIRD)/LA9415D104-5-2(PU8686A1-8/CK9134//PIO2684)	Milus	2010-11
34	LA03131E-1	ARGE97-1033-14-2/95361CA8-2-2	Milus	2010-11
35	LA03131E-7	ARGE97-1033-14-2/95361CA8-2-2	Milus / Harrison	2010-11
36	LA03135E-39	ARGM97-1047-4-2/NC98-26192 (5AE)	Harrison	2010-11
37	LA03136E71	ARLA97-1047-4-2(P2684/3/N7840//PARULA/VEERY#6)/LA95125BUB73-1	Harrison	2010-11
38	LA06148C-P30	JAMESTOWN/LA95135	Harrison	2010-11
39	M05-1526	FFR502/P931765C-H21	Fogleman	2010-11
40	M08-8036#	COKER 9511/BRANSON	Fogleman	2010-11
41	MD03W61-09-7	Pio25R42/Chesapeake	Costa	2010-11
42	MD03W61-10-2	Pio25R42/Chesapeake	Costa	2010-11
43	MD03W665-10-5	USG3209/TRIBUTE//CHESAPEAKE	Costa	2010-11
44	MD03W69-15	McCormick/Pio25R42	Costa	2010-11
45	NC05-15-99	NC99-13022*2 / PI 382167	Murphy	2010-11
46	NC05-39-314	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
47	NC05-39-337	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
48	NC05-39-349	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
49	NC05-39-354	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
50	NC05-39-370	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
51	NC05-39-380	NC99-13022*2 / PI 611899 (Sando)	Murphy	2010-11
52	NC06-16-26-988	Frontana / *2 NC99-13022 // NC-Neuse*3 / LDN(3ADIC)	Murphy	2010-11
53	NC99-13022	Susceptible Recurrent Parent	Murphy	2010-11
54	VA05W-251	VA98W-130 // VA96W-348 / Pioneer 26R61	Griffey	2010-11
55	VA08W-176	KY96C-0079-5 / McCormick	Griffey	2010-11
56	VA08W-193	AGS2000 / USG 3706 (VA98W-706) // Dominion	Griffey	2010-11
57	VA08W-294	SS520 / VA99W-188 // Tribute	Griffey	2010-11
58	VA08W-613	Freedom / Neuse"S" // VA98W-688	Griffey	2010-11
59	VA09W-623	NC96-13374 / Ceruga5 // McCormick"S"	Griffey	2010-11
60	VA09W-656	Neuse / VA99W-200 // McCormick	Griffey	2010-11

FHB Incidence (1-100)

CULTIVAR/ DESIGNATION	KINSTON	S'BURY	B'BURG	URBANA	B'KTON	LEX'TON	GRIFFIN	MEAN	RANK
	NC	MD	VA	IL	IN	KY	GA	ALL LOC.	
1 ERNIE	100	25	5	93	25	70	13	47	18
2 COKER 9835	100	20	35	100	73	93	100	74	60
3 BESS	100	10	5	95	7	60	16	42	7
4 JAMESTOWN	100	15	5	100	33	65	14	47	18
5 ARS04-1267	100	10	5	100	23	53	33	46	15
6 M08*8005#	100	35	8	83	5	28	23	40	6
7 MD03W61-09-1	98	30	5	100	20	45	83	54	40
8 VA09W-641	100	25	5	95	15	55	17	45	14
9 ARGE04-1163-44	98	15	5	82	5	50	18	39	5
10 ARGE04-1163-67	85	5	5	82	10	53	16	36	2
11 ARS07-0245	100	35	30	100	40	80	18	58	48
12 ARS07-0262	100	15	5	100	58	63	.	55	43
13 ARS07-0404	100	35	8	100	43	83	35	58	48
14 ARS07-0609	100	35	15	100	10	78	50	55	43
15 ARS07-1227	100	25	10	100	18	83	46	54	40
16 ARS07-1243	100	10	5	100	55	90	91	64	57
17 ARS08-0114	100	40	5	100	85	58	41	61	53
18 B050154	100	25	5	100	15	75	53	53	37
19 B070495	100	20	5	98	23	63	18	47	18
20 B070678	95	18	5	100	28	75	50	53	37
21 B070738	100	30	5	100	28	58	12	47	18
22 GA04496-S6	.	25	5	85	10	90	.	50	29
23 GA041273-S14	100	30	23	100	55	75	45	61	53
24 GA041273-S15	100	25	5	100	43	50	31	50	29
25 GA04496-S5	100	20	13	98	40	88	88	64	57
26 GA04496-S8	95	15	8	97	10	93	13	47	18
27 GA051173W-S11	100	15	5	100	10	78	25	48	25
28 GA051173W-S12	100	25	5	100	5	58	8	43	10
29 GA051173W-S13	100	10	5	100	15	53	20	43	10
30 IL02-18228	95	8	5	58	1	50	9	32	1
31 LA03012E-50	100	13	13	100	13	83	29	50	29
32 LA03130E66	100	23	8	97	5	45	19	42	7
33 LA03130E68	100	25	8	85	8	28	11	38	4
34 LA03131E-1	100	18	5	95	18	70	100	58	48
35 LA03131E-7	100	15	5	97	15	25	85	49	27
36 LA03135E-39	100	30	8	100	40	88	29	56	45
37 LA03136E71	100	30	5	97	15	88	40	53	37
38 LA06148C-P30	100	20	5	100	53	70	.	56	45
39 M05-1526	100	15	5	97	45	73	90	61	53
40 M08-8036#	98	20	5	92	7	53	21	42	7
41 MD03W61-09-7	95	20	5	98	5	88	100	59	51
42 MD03W61-10-2	100	15	5	87	5	93	5	44	12
43 MD03W665-10-5	100	23	5	100	33	85	87	62	56
44 MD03W69-15	100	8	5	95	10	75	55	50	29
45 NC05-15-99	85	8	5	97	5	40	10	36	2
46 NC05-39-314	100	25	8	97	25	43	12	44	12
47 NC05-39-337	100	25	15	93	15	38	44	47	18
48 NC05-39-349	100	25	15	100	35	53	51	54	40
49 NC05-39-354	100	25	10	97	25	68	73	57	47
50 NC05-39-370	100	35	8	95	35	45	6	46	15
51 NC05-39-380	100	50	5	100	23	35	14	47	18
52 NC06-16-26-988	100	25	5	100	7	93	19	50	29
53 NC99-13022	100	40	18	100	53	88	90	70	59
54 VA05W-251	100	35	5	100	15	78	34	52	35
55 VA08W-176	95	15	13	98	5	83	25	48	25
56 VA08W-193	100	20	10	100	25	80	19	51	34
57 VA08W-294	95	20	5	97	33	78	83	59	51
58 VA08W-613	100	15	5	92	11	80	38	49	27
59 VA09W-623	100	15	5	92	20	65	29	46	15
60 VA09W-656	95	20	5	100	40	70	34	52	35
Mean	99	22	8	96	24	67	39	0	0
LSD (0.05)	ns	27	6	8	26	27	.	28	0
CV%	.	61.0	45.0	5.2	53.3	20.1	.	28.0	0.0

FHB Severity (1-100)

CULTIVAR/ DESIGNATION	GRIF'N		F'VILLE		NEWPORT		SZEGED ¹		S'BURY		B'BURG		URBANA		KINSTON		LEX'TON		B'KTON		FUN'LEA ¹		MEAN	
	GA	AR	AR	HUN	MD	VA	IL	NC	KY	IN	ROM	ALL	LOC.											
	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK
1 ERNIE	5	1	8	9	42	13	31	14	15	24	6	17	40	18	20	11	54	39	13	16	23	32	23	10
2 COKER 9835	90	55	30	56	77	48	51	51	35	60	41	60	86	58	80	55	55	43	40	42	32	46	56	59
3 BESS	5	1	7	7	30	4	34	20	15	24	3	1	46	24	23	14	35	9	5	2	16	14	20	8
4 JAMESTOWN	10	15	8	9	53	31	43	35	10	3	7	26	61	43	22	13	36	10	43	46	15	12	28	24
5 ARS04-1267	20	26	10	14	47	24	24	6	15	24	6	17	47	26	43	34	50	27	18	20	21	24	27	20
6 M08*8005#	15	22	7	7	43	17	35	25	20	40	13	42	41	20	35	27	30	3	15	19	10	1	24	11
7 MD03W61-09-1	70	52	5	4	43	17	22	5	20	40	7	26	30	8	11	3	39	12	7	11	11	3	24	11
8 VA09W-641	5	1	8	9	45	22	31	14	20	40	6	17	39	17	40	31	43	17	13	16	21	24	25	14
9 ARGE04-1163-44	15	22	3	3	15	2	21	3	10	3	5	11	19	2	11	4	30	3	5	2	22	30	14	2
10 ARGE04-1163-67	5	1	2	1	13	1	6	1	5	1	3	1	19	2	7	1	21	1	3	1	14	8	9	1
11 ARS07-0245	10	15	33	57	100	57	56	56	15	24	39	59	86	58	90	56	59	48	45	47	28	40	51	56
12 ARS07-0262	.	.	23	48	72	44	43	35	15	24	4	4	83	53	63	47	61	50	58	58	28	40	45	53
13 ARS07-0404	30	34	20	44	72	44	54	53	20	40	10	39	66	46	65	49	67	55	28	28	19	21	41	47
14 ARS07-0609	30	34	25	51	85	50	59	57	25	51	18	49	85	56	63	48	55	40	38	40	30	44	46	54
15 ARS07-1227	40	40	25	51	90	53	34	20	10	3	20	51	83	53	73	54	57	45	28	28	19	21	43	50
16 ARS07-1243	25	30	15	35	32	8	39	30	20	40	5	11	58	38	23	16	45	21	30	33	57	58	32	30
17 ARS08-0114	40	40	50	59	95	55	61	58	30	59	4	4	84	55	93	58	64	52	40	42	44	55	55	57
18 B050154	50	45	23	48	60	36	35	25	10	3	6	17	66	46	37	29	66	54	33	35	35	50	38	40
19 B070495	10	15	20	44	57	33	36	27	25	51	6	17	46	24	28	20	50	27	33	35	46	57	32	30
20 B070678	50	45	20	44	70	42	39	30	8	2	14	45	52	31	43	36	50	27	40	42	41	53	39	43
21 B070738	5	1	17	39	75	47	46	43	20	40	4	4	58	38	30	25	52	34	45	47	33	48	35	36
22 GA04496-S6	.	.	5	4	.	.	32	16	10	3	9	37	28	6	.	.	33	6	5	2	15	12	20	8
23 GA041273-S14	30	34	55	60	97	56	41	34	20	40	33	58	81	51	95	59	62	51	50	53	37	51	55	57
24 GA041273-S15	40	40	10	14	87	52	25	7	15	24	9	37	86	58	70	53	57	45	40	42	25	37	42	49
25 GA04496-S5	95	57	5	4	.	.	51	51	10	3	24	53	50	27	65	50	55	40	28	28	33	48	44	51
26 GA04496-S8	10	15	2	1	.	.	44	39	15	24	7	26	53	32	65	51	40	14	45	47	13	5	32	30
27 GA051173W-S11	15	22	12	19	52	30	43	35	15	24	11	40	73	48	28	21	39	12	28	28	22	30	31	28
28 GA051173W-S12	5	1	10	14	43	17	46	43	15	24	4	4	56	36	23	15	43	17	18	20	17	16	25	14
29 GA051173W-S13	5	1	12	19	48	28	37	29	10	3	5	11	54	33	25	18	60	49	18	20	21	24	27	20
30 IL02-18228	5	1	8	9	30	4	39	30	10	3	6	17	18	1	16	6	33	6	5	2	13	5	17	4
31 LA03012E-50	10	15	20	44	78	49	34	20	13	22	22	52	60	41	42	33	48	24	23	24	17	16	33	33
32 LA03130E66	10	15	27	54	35	10	26	8	15	24	12	41	24	5	65	52	50	27	7	11	16	14	26	17
33 LA03130E68	5	1	23	48	38	12	30	13	15	24	16	48	28	6	38	30	50	27	23	24	14	8	25	14
34 LA03131E-1	50	45	18	43	33	9	33	18	10	3	7	26	38	14	18	8	53	36	38	40	24	35	29	27
35 LA03131E-7	50	45	12	19	30	4	34	20	10	3	5	11	33	12	35	28	42	16	7	11	28	40	26	17
36 LA03135E-39	20	26	12	19	43	17	47	45	15	24	14	45	74	50	57	42	67	55	50	53	41	53	40	44
37 LA03136E71	25	30	13	30	47	24	43	35	20	40	7	26	51	30	63	46	49	25	35	38	19	21	34	34
38 LA06148C-P30	.	.	12	19	85	50	63	59	20	40	7	26	82	52	55	40	67	55	28	28	23	32	44	51
39 M05-1526	80	53	8	9	35	10	36	27	10	3	5	11	31	11	24	17	44	20	13	16	14	8	27	20
40 M08-8036#	10	15	17	39	42	13	26	8	10	3	7	26	30	8	15	5	21	1	6	10	14	8	18	5
41 MD03W61-09-7	60	49	12	19	42	13	32	16	15	24	7	26	40	18	20	12	47	23	5	2	15	12	27	20
42 MD03W61-10-2	5	1	12	19	30	4	21	3	10	3	4	4	22	4	17	7	31	5	5	2	22	30	16	3
43 MD03W665-10-5	60	49	10	14	68	39	47	45	13	22	7	26	50	27	55	41	67	55	30	33	13	5	38	40
44 MD03W69-15	40	40	13	30	22	3	11	2	10	3	5	11	30	8	20	10	43	17	5	2	11	3	19	6
45 NC05-15-99	5	1	12	19	43	17	29	11	10	3	7	26	42	22	11	2	40	14	5	2	10	1	19	6
46 NC05-39-314	5	1	13	30	67	37	54	53	25	51	13	42	55	35	48	37	53	36	50	53	28	40	37	39
47 NC05-39-337	30	34	15	35	73	46	47	45	20	40	28	56	54	33	58	43	50	27	35	38	31	45	40	44
48 NC05-39-349	30	34	13	30	68	39	45	41	25	51	18	49	60	41	50	39	67	55	50	53	27	39	41	47
49 NC05-39-354	80	52	17	39	67	37	50	50	25	51	24	53	64	45	60	45	34	8	65	59	39	52	48	55
50 NC05-39-370	5	1	12	19	70	42	66	60	25	51	15	47	56	36	58	44	57	45	65	59	26	38	40	44
51 NC05-39-380	5	1	15	35	68	39	49	49	25	51	4	4	73	48	49	38	50	27	45	47	32	46	38	40
52 NC06-16-26-988	15	22	15	35	47	24	34	20	10	3	6	17	38	14	28	22	69	60	7	11	21	24	26	17
53 NC99-13022	60	49	33	57	93	54	55	55	25	51	25	55	85	56	90	57	65	53	45	47	44	55	56	59
54 VA05W-251	25	30	17	39	57	33	47	45	20	40	8	36	61	43	43	35	52	34	33	35	23	32	35	36
55 VA08W-176	30	34	27	54	50	29	39	30	10	3	28	56	50	27	18	9	55	40	50	53	18	18	34	34
56 VA08W-193	20	26	25	51	58	35	44	39	15	24	13	42	58	38	40	32	56	44	45	47	24	35	36	38
57 VA08W-294	90	55	12	19	42	13	33	18	10	3	6	17	38	14	28	23	46	22	18	20	18	18	31	28
58 VA08W-613	40	40	13	30	55	32	29	11	15	24	4	4	36	13	32	26	38	11	25	26	21	24	28	28
59 VA09W-623	20	26	10	14	45	22	45	41	15	24	6	17	41	20	29	24	53	36	25	26	21	24	28	28
60 VA09W-656	25	30	12	19	47	24	28	10	10	3	3	1	42	23	27	19	49	25	7	11	18	18	24	11

Mean	16	55	39	16	11	52	42	49	28	24	33
LSD (0.05)	3	3	7	16	11	16	26	22	27	16	25
CV%	47.7	16.1	.	51.8	58.9	18.8	30.9	22	49.1	.	38.3

Severity by Individual Isolates, Szeged, Hungary

Cultivar/ Designation	<i>F. culm.</i>	<i>F. gram.</i>	<i>F. culm.</i>	<i>F. gram.</i>	Mean	Rank
	Isol 12551	Isol 12377/ 6a	Isol 12375/ 8	Isol 13.05		
1 ERNIE	3	48	33	38	31	14
2 COKER 9835	46	45	48	64	51	51
3 BESS	19	36	38	42	34	20
4 JAMESTOWN	18	45	53	54	43	35
5 ARS04-1267	2	21	21	51	24	6
6 M08*8005#	5	38	32	65	35	25
7 MD03W61-09-1	3	28	28	29	22	5
8 VA09W-641	5	33	35	50	31	14
9 ARGE04-1163-44	2	12	20	49	21	3
10 ARGE04-1163-67	0	5	4	16	6	1
11 ARS07-0245	13	65	70	78	56	56
12 ARS07-0262	16	49	46	61	43	35
13 ARS07-0404	8	69	60	79	54	53
14 ARS07-0609	23	70	63	80	59	57
15 ARS07-1227	23	21	43	49	34	20
16 ARS07-1243	13	44	44	57	39	30
17 ARS08-0114	25	73	68	80	61	58
18 B050154	5	30	46	61	35	25
19 B070495	18	42	37	47	36	27
20 B070678	21	45	35	56	39	30
21 B070738	16	52	50	67	46	43
22 GA04496-S6	23	24	28	52	32	16
23 GA041273-S14	5	53	42	64	41	34
24 GA041273-S15	21	22	22	37	25	7
25 GA04496-S5	39	48	50	66	51	51
26 GA04496-S8	9	47	52	68	44	39
27 GA051173W-S11	19	55	48	51	43	35
28 GA051173W-S12	18	52	52	62	46	43
29 GA051173W-S13	7	56	41	46	37	29
30 IL02-18228	15	61	28	52	39	30
31 LA03012E-50	2	41	31	61	34	20
32 LA03130E66	7	33	23	42	26	8
33 LA03130E68	3	40	34	44	30	13
34 LA03131E-1	9	40	32	53	33	18
35 LA03131E-7	8	39	37	53	34	20
36 LA03135E-39	40	50	40	59	47	45
37 LA03136E71	4	53	45	70	43	35
38 LA06148C-P30	13	82	72	84	63	59
39 M05-1526	23	45	30	48	36	27
40 M08-8036#	4	30	33	40	26	8
41 MD03W61-09-7	4	42	33	49	32	16
42 MD03W61-10-2	0	26	21	38	21	3
43 MD03W665-10-5	20	58	44	64	47	45
44 MD03W69-15	6	12	8	18	11	2
45 NC05-15-99	19	30	22	46	29	11
46 NC05-39-314	17	63	62	76	54	53
47 NC05-39-337	19	52	48	70	47	45
48 NC05-39-349	8	54	50	67	45	41
49 NC05-39-354	18	54	53	74	50	50
50 NC05-39-370	20	82	79	84	66	60
51 NC05-39-380	21	57	57	62	49	49
52 NC06-16-26-988	18	41	35	43	34	20
53 NC99-13022	21	60	57	84	55	55
54 VA05W-251	21	57	52	61	47	45
55 VA08W-176	27	45	37	49	39	30
56 VA08W-193	33	48	38	59	44	39
57 VA08W-294	8	35	39	52	33	18
58 VA08W-613	8	36	31	42	29	11
59 VA09W-623	15	57	46	61	45	41
60 VA09W-656	6	25	31	51	28	10

Mean 14.3 44.5 40.9 56.1 39

Head Severity Expressed as Area Under the Disease Progress Curve (AUDPC) 20 Days Post Inoculation Fundulea, Romania.

Cultivar/ Designation	<i>F. gram.</i> <i>Isol 96</i>	<i>F. culm.</i> <i>Isol 46</i>	Mean	Rank
1 ERNIE	307	217	262	41
2 COKER 9835	310	313	311	51
3 BESS	181	114	147	16
4 JAMESTOWN	211	89	150	17
5 ARS04-1267	228	205	216	31
6 M08*8005#	107	104	106	4
7 MD03W61-09-1	95	109	102	3
8 VA09W-641	215	195	205	28
9 ARGE04-1163-44	179	158	169	23
10 ARGE04-1163-67	107	121	114	6
11 ARS07-0245	250	278	264	43
12 ARS07-0262	190	331	260	40
13 ARS07-0404	231	156	193	26
14 ARS07-0609	372	241	307	50
15 ARS07-1227	189	174	182	25
16 ARS07-1243	349	491	420	60
17 ARS08-0114	474	359	417	59
18 B050154	270	331	300	49
19 B070495	537	290	414	58
20 B070678	339	431	385	56
21 B070738	321	242	281	46
22 GA04496-S6	103	167	135	10
23 GA041273-S14	406	292	349	53
24 GA041273-S15	222	264	243	37
25 GA04496-S5	197	358	278	45
26 GA04496-S8	86	178	132	9
27 GA051173W-S11	335	213	274	44
28 GA051173W-S12	219	101	160	21
29 GA051173W-S13	192	228	210	30
30 IL02-18228	134	119	127	8
31 LA03012E-50	243	105	174	24
32 LA03130E66	143	179	161	22
33 LA03130E68	163	120	141	11
34 LA03131E-1	237	244	241	36
35 LA03131E-7	223	284	253	39
36 LA03135E-39	273	360	316	52
37 LA03136E71	179	222	200	27
38 LA06148C-P30	253	245	249	38
39 M05-1526	167	123	145	15
40 M08-8036#	171	131	151	18
41 MD03W61-09-7	107	113	110	5
42 MD03W61-10-2	132	152	142	13
43 MD03W665-10-5	161	73	117	7
44 MD03W69-15	97	81	89	1
45 NC05-15-99	80	101	90	2
46 NC05-39-314	324	239	281	46
47 NC05-39-337	306	288	297	48
48 NC05-39-349	295	231	263	42
49 NC05-39-354	635	123	379	55
50 NC05-39-370	88	392	240	35
51 NC05-39-380	414	341	378	54
52 NC06-16-26-988	222	194	208	29
53 NC99-13022	282	516	399	57
54 VA05W-251	231	217	224	33
55 VA08W-176	189	124	156	20
56 VA08W-193	258	212	235	34
57 VA08W-294	131	153	142	13
58 VA08W-613	228	209	219	32
59 VA09W-623	188	118	153	19
60 VA09W-656	165	118	141	11
Mean	236	217	227	
LSD (0.05)	.	.	158	

FHB Index (1-100)

CULTIVAR/ DESIGNATION	S'BURY	F'VILLE	NEWPORT	B'BURG	URBANA	LEX'TON	GRIF'N	KINSTON	B'KTON	MEAN										
	MD	AR	AR	VA	IL	KY	GA	NC	IN	ALL LOC.										
	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK									
1 ERNIE	3.5	31	0.3	1	19	29	0.3	9	37	15	40	40	6	27	20	12	3	24	14	11
2 COKER 9835	7.0	50	10	48	32	52	14.2	60	86	58	51	55	90	56	80	55	29	58	44	60
3 BESS	1.5	6	1	2	13	19	0.2	1	43	24	21	12	1	9	23	14	0	7	11	7
4 JAMESTOWN	1.5	6	1	2	9	9	0.4	24	61	43	24	16	1	14	22	13	17	50	15	16
5 ARS04-1267	1.5	6	1.7	15	12	16	0.3	9	47	26	28	20	7	28	43	35	3	23	16	21
6 M08*8005#	8.5	55	1	2	10	10	1.1	43	35	14	8	1	3	22	35	27	1	13	11	7
7 MD03W61-09-1	8.0	54	2	18	12	16	0.4	24	30	10	17	8	58	50	11	4	2	17	16	21
8 VA09W-641	5.0	39	1	2	17	26	0.3	9	38	19	24	16	1	11	40	31	2	17	14	11
9 ARGE04-1163-44	3.0	30	1	2	5	2	0.3	9	16	3	16	6	3	19	11	3	0	4	6	2
10 ARGE04-1163-67	0.3	1	2	18	6	5	0.2	1	15	2	14	4	1	9	6	1	0	2	5	1
11 ARS07-0245	5.0	39	25	59	60	59	12.1	59	86	58	47	50	2	15	90	56	24	56	39	57
12 ARS07-0262	2.5	22	10	48	53	58	0.2	1	83	53	38	36	.	.	63	47	33	59	35	55
13 ARS07-0404	7.0	50	13	55	43	57	0.8	41	66	46	56	56	11	33	65	50	12	45	30	50
14 ARS07-0609	9.5	57	4	35	30	49	3.1	52	85	56	42	45	15	37	63	48	4	27	28	46
15 ARS07-1227	2.5	22	11	52	28	43	2.0	49	83	53	48	53	19	41	73	54	6	35	30	50
16 ARS07-1243	2.0	15	27	60	22	36	0.3	9	58	38	41	43	23	43	23	16	17	49	23	43
17 ARS08-0114	18.0	60	3	29	63	60	0.2	1	84	55	38	36	17	40	93	58	35	60	39	57
18 B050154	2.5	22	8	45	33	53	0.4	24	66	46	49	54	26	45	37	29	4	30	25	45
19 B070495	5.5	44	12	54	27	41	0.4	24	45	25	32	29	2	15	28	21	8	37	18	27
20 B070678	1.6	13	9	47	22	36	0.7	39	52	33	38	36	25	44	42	34	11	42	22	36
21 B070738	7.0	50	4	35	27	41	0.2	1	58	38	30	23	1	5	30	25	11	41	19	28
22 GA04496-S6	2.5	22	15	56	11	13	0.5	36	24	6	30	23	.	.	.	.	0	10	15	16
23 GA041273-S14	7.0	50	7	42	25	40	8.1	58	81	51	46	49	14	36	95	59	28	57	34	54
24 GA041273-S15	4.0	35	4	35	28	43	0.5	36	86	58	28	21	12	34	70	53	17	51	28	46
25 GA04496-S5	2.0	15	23	58	28	43	3.1	52	50	27	47	50	83	55	65	51	11	42	35	55
26 GA04496-S8	2.0	15	16	57	20	32	0.7	39	51	32	37	35	1	13	63	49	4	27	22	36
27 GA051173W-S11	2.5	22	1	2	11	13	0.6	38	73	48	30	23	4	23	28	22	3	20	17	24
28 GA051173W-S12	4.0	35	1.7	15	8	7	0.2	1	56	37	24	16	.	.	23	15	1	14	14	11
29 GA051173W-S13	1.0	5	1	2	10	10	0.3	9	54	36	33	30	1	12	25	18	4	29	14	11
30 IL02-18228	0.8	2	1	2	5	2	0.3	9	11	1	17	8	0	3	15	6	0	1	6	2
31 LA03012E-50	2.1	21	3	29	20	32	3.9	55	60	41	40	40	3	20	42	33	3	26	20	31
32 LA03130E66	4.3	38	1	2	18	28	1.0	42	23	5	21	12	2	17	65	52	0	7	15	16
33 LA03130E68	3.5	31	2	18	19	29	1.5	47	24	6	14	4	1	5	38	30	2	16	11	7
34 LA03131E-1	1.8	14	7	42	19	29	0.4	24	37	15	38	36	50	47	18	9	8	38	20	31
35 LA03131E-7	1.5	6	7	42	13	13	0.3	9	32	12	11	2	42	46	35	28	1	15	16	21
36 LA03135E-39	5.0	39	10	48	42	55	1.2	45	74	50	58	59	6	26	57	42	21	53	30	50
37 LA03136E71	6.0	45	3	29	20	32	0.4	24	50	27	43	46	10	32	63	46	3	20	22	36
38 LA06148C-P30	5.0	39	3	29	33	53	0.4	24	82	52	47	50	.	.	55	40	16	47	30	50
39 M05-1526	1.5	6	2	18	14	22	0.3	9	30	10	31	26	72	53	24	17	6	34	20	31
40 M08-8036#	2.0	15	1	2	12	16	0.4	24	28	8	12	3	2	18	15	5	0	7	8	4
41 MD03W61-09-7	3.5	31	1.7	15	8	7	0.4	24	39	21	41	43	60	52	20	10	0	4	19	28
42 MD03W61-10-2	1.5	6	1	2	5	2	0.2	1	19	4	29	22	0	1	17	8	0	4	8	4
43 MD03W665-10-5	4.1	37	1	2	20	32	0.4	24	50	27	56	56	52	48	55	41	10	40	28	46
44 MD03W69-15	0.8	2	2	18	3	1	0.3	9	29	9	32	28	22	42	20	11	1	10	12	10
45 NC05-15-99	0.8	2	2	18	11	13	0.4	24	41	22	16	6	0	3	9	2	0	2	9	6
46 NC05-39-314	6.0	45	2	18	24	39	1.1	43	53	34	21	12	1	5	48	37	13	46	19	28
47 NC05-39-337	5.0	39	3	29	29	48	4.2	56	50	27	19	11	13	35	58	43	5	32	21	35
48 NC05-39-349	6.5	48	1	2	28	43	2.9	51	60	41	35	32	15	38	50	39	19	52	24	44
49 NC05-39-354	6.0	45	4	35	31	50	2.4	50	62	45	23	15	59	51	60	45	16	48	29	49
50 NC05-39-370	9.0	56	2	18	29	47	1.3	46	53	34	26	19	0	1	58	44	23	54	22	36
51 NC05-39-380	13.0	58	2	18	31	50	0.3	9	73	48	18	10	1	8	49	38	10	39	22	36
52 NC06-16-26-988	2.5	22	2	18	17	26	0.3	9	38	19	63	60	3	20	28	23	1	10	17	24
53 NC99-13022	14.5	59	8	46	42	55	4.5	57	85	56	57	58	54	49	90	57	23	54	42	59
54 VA05W-251	6.5	48	3	29	14	22	0.4	24	61	43	40	40	9	30	43	36	5	30	20	31
55 VA08W-176	1.5	6	11	52	14	22	3.7	54	50	27	45	47	8	29	17	7	3	19	17	24
56 VA08W-193	3.5	31	10	48	23	38	1.7	48	58	38	45	47	4	24	40	32	11	44	22	36
57 VA08W-294	2.0	15	4	35	10	10	0.3	9	37	15	36	34	75	54	27	20	6	33	22	36
58 VA08W-613	2.5	22	2	18	14	22	0.3	9	34	13	31	26	15	39	32	26	3	20	15	16
59 VA09W-623	2.5	22	4	35	7	6	0.3	9	37	15	34	31	6	25	29	24	6	36	14	11
60 VA09W-656	2.0	15	5	41	13	13	0.2	1	42	23	35	32	9	30	26	19	3	24	15	16

Mean	4.2	5.4	21.2	1.4	51	33	18	42	8	21
LSD (0.05)	10	.	.	2.8	16	20	.	26	14	25
CV%	119	.	.	118.4	19.8	29.9	.	32.0	84.6	61.1

Percent Fusarium Damaged Kernels

Cultivar/ Designation	URBANA		F'VILLE		NEWPORT		KINSTON		S'BURY		LEX'TON		FUN'LEA		SZEGED		MEAN	
	IL		AR		AR		NC		MD		KY		ROM		HUN		All LOCS	
	RANK		RANK		RANK		RANK		RANK		RANK		RANK		RANK		RANK	
1 ERNIE	32	5	0	1	19	29	7	8	5	42	16	48	25	23	37	40	18	23
2 COKER 9835	92	57	10	48	32	52	70	55	9	57	15	43	38	36	44	49	39	53
3 BESS	17	2	1	2	13	19	7	8	1	2	8	8	15	11	2	2	8	2
4 JAMESTOWN	50	25	1	2	9	9	7	8	2	10	17	52	14	10	33	33	17	19
5 ARS04-1267	47	23	2	15	12	16	17	31	2	10	8	8	32	32	33	33	19	26
6 M08*8005#	42	14	1	2	10	10	10	16	0	1	13	25	19	16	29	29	16	14
7 MD03W61-09-1	45	20	2	15	12	16	2	1	1	2	6	2	7	3	26	26	13	9
8 VA09W-641	32	5	1	2	17	26	9	14	2	10	11	19	39	37	20	18	16	14
9 ARGE04-1163-44	43	15	1	2	5	2	7	8	2	10	9	11	12	6	19	14	12	7
10 ARGE04-1163-67	33	7	2	15	6	5	4	4	1	2	7	5	12	6	13	5	10	4
11 ARS07-0245	95	60	25	59	60	59	90	59	9	57	16	48	82	59	71	60	56	60
12 ARS07-0262	83	53	10	48	53	58	53	50	6	48	6	2	76	55	57	58	43	57
13 ARS07-0404	78	49	13	55	43	57	58	52	7	55	13	25	43	39	62	59	40	54
14 ARS07-0609	85	55	4	35	30	49	43	44	5	42	14	39	77	57	39	44	37	49
15 ARS07-1227	70	43	11	52	28	45	53	50	2	10	14	39	34	34	16	9	29	42
16 ARS07-1243	80	51	27	60	22	36	38	41	3	25	13	25	66	52	53	54	38	51
17 ARS08-0114	88	56	3	29	63	60	58	52	5	42	18	57	53	46	45	50	42	56
18 B050154	70	43	8	45	33	53	15	27	6	48	17	52	34	34	52	53	29	42
19 B070495	62	34	12	54	27	41	9	14	4	32	15	43	65	51	9	4	25	34
20 B070678	70	43	9	47	22	36	48	48	4	32	13	25	56	49	24	23	31	46
21 B070738	67	39	4	35	27	41	30	36	4	32	14	39	28	28	36	39	26	36
22 GA04496-S6	70	43	15	56	11	13			4	32	9	11	20	19	25	25	22	29
23 GA041273-S14	78	49	7	42	25	40	78	57	9	57	20	59	73	53	53	54	43	57
24 GA041273-S15	83	53	4	35	28	43	50	49	2	10	19	58	28	28	27	27	30	44
25 GA04496-S5	80	51	23	58	28	45	78	57	6	48	13	25	44	43	55	57	41	55
26 GA04496-S8	62	34	16	57	20	32	63	54	4	32	8	8	32	32	19	14	28	40
27 GA051173W-S11	53	26	1	2	11	13	12	22	3	25	10	16	27	26	22	20	17	19
28 GA051173W-S12	25	4	2	15	8	7	5	5	1	2	12	22	17	13	15	8	10	4
29 GA051173W-S13	43	15	1	2	10	10	14	25	2	10	12	22	22	20	27	27	16	14
30 IL02-18228	13	1	1	2	5	2	3	2	1	2	6	2	10	5	13	5	6	1
31 LA03012E-50	53	26	3	29	20	32	21	35	3	25	17	52	22	20	38	43	22	29
32 LA03130E66	40	11	1	2	18	28	13	24	2	10	14	39	6	2	40	47	17	19
33 LA03130E68	45	20	2	15	19	29	16	30	2	10	13	25	5	1	24	23	16	14
34 LA03131E-1	47	23	7	42	19	29	7	8	2	10	13	25	64	50	39	44	25	34
35 LA03131E-7	63	36	7	42	13	19	10	16	4	32	13	25	76	55	33	33	27	37
36 LA03135E-39	93	59	10	48	42	55	45	46	7	55	21	60	46	45	37	40	38	51
37 LA03136E71	38	10	3	29	20	32	38	41	3	25	11	19	44	43	37	40	24	31
38 LA06148C-P30	73	48	3	29	33	53	19	33	6	48	15	43	29	30	50	51	28	40
39 M05-1526	57	29	2	15	14	22	14	25	2	10	13	25	43	39	17	12	20	27
40 M08-8036#	43	15	1	2	12	16	5	5	1	2	9	11	18	15	23	21	14	10
41 MD03W61-09-7	35	8	2	15	8	7	12	22	3	25	9	11	8	4	21	19	12	7
42 MD03W61-10-2	18	3	1	2	5	2	6	7	2	10	5	1	17	13	19	14	9	3
43 MD03W665-10-5	58	32	1	2	20	32	35	39	4	32	17	52	23	22	32	32	24	31
44 MD03W69-15	43	15	2	15	3	1	3	2	1	2	10	16	54	48	1	1	15	11
45 NC05-15-99	40	11	2	15	11	13	8	13	1	2	7	5	12	6	3	3	10	4
46 NC05-39-314	68	42	2	15	24	39	40	43	5	42	13	25	81	58	51	52	36	48
47 NC05-39-337	70	43	3	29	29	47	35	39	6	48	13	25	42	38	39	44	30	44
48 NC05-39-349	67	39	1	2	28	43	20	34	6	48	15	43	53	46	23	21	27	37
49 NC05-39-354	65	37	4	35	31	50	45	46	6	48	16	48	43	39	34	36	31	46
50 NC05-39-370	60	33	2	15	29	47	33	38	4	32	15	43	43	39	34	36	27	37
51 NC05-39-380	67	39	2	15	31	50	43	44	5	42	17	52	90	60	40	47	37	49
52 NC06-16-26-988	57	29	2	15	17	26	18	32	3	25	16	48	16	12	13	5	18	23
53 NC99-13022	92	57	8	45	42	55	75	56	12	60	11	19	74	54	53	54	46	59
54 VA05W-251	57	29	3	29	14	22	11	21	3	25	13	25	27	26	29	29	20	27
55 VA08W-176	53	26	11	52	14	22	10	16	2	10	12	22	19	16	19	14	17	19
56 VA08W-193	65	37	10	48	23	38	31	37	4	32	13	25	26	25	16	9	24	31
57 VA08W-294	45	20	4	35	10	10	15	27	2	10	9	11	12	6	30	31	16	14
58 VA08W-613	35	8	2	15	14	22	10	16	4	32	10	16	30	31	17	12	15	11
59 VA09W-623	40	11	4	35	7	6	15	27	5	42	13	25	25	23	34	36	18	23
60 VA09W-656	43	15	5	41	13	19	10	16	2	10	7	5	19	16	16	9	15	11
Mean	57		5		21		27		4		13		36		31		24	
LSD (0.05)	15		6		12		.		4		.		31		11		23	
CV%	16.2		69.1		35.8		35.0		59.3		.		.		.		47.9	

Incidence, Severity, Kernel Rating (ISK) Index
(0.3 * Incidence + 0.3 * Severity + 0.4 * Fusarium Damaged Kernels)

CULTIVAR/ DESIGNATION	KINSTON NC		URBANA IL		LEX'TON KY		S'BURY MD		MEAN ALL LOC.	
	RANK		RANK		RANK		RANK		RANK	
1 ERNIE	39	11	53	9	44	39	0.5	34	34	14
2 COKER 9835	82	56	93	59	50	55	1.7	54	57	57
3 BESS	39	11	49	5	32	10	0.1	4	30	7
4 JAMESTOWN	39	11	68	30	37	18	0.1	4	36	23
5 ARS04-1267	49	31	63	25	34	13	0.1	4	37	26
6 M08*8005#	45	24	54	11	22	1	0.1	4	30	7
7 MD03W61-09-1	33	3	57	16	28	8	0.3	22	30	7
8 VA09W-641	46	27	53	9	34	13	0.4	30	33	12
9 ARGE04-1163-44	35	5	48	4	27	5	0.2	15	28	3
10 ARGE04-1163-67	29	1	43	3	25	2	0.0	1	24	2
11 ARS07-0245	93	59	94	60	48	50	1.8	56	59	59
12 ARS07-0262	70	49	88	53	39	23	0.7	41	50	49
13 ARS07-0404	73	51	81	49	50	55	1.7	54	51	51
14 ARS07-0609	66	47	90	56	45	43	2.0	57	51	51
15 ARS07-1227	73	51	83	50	48	50	0.2	15	51	51
16 ARS07-1243	52	34	79	47	46	44	0.2	15	44	40
17 ARS08-0114	81	54	90	56	44	39	4.5	59	55	56
18 B050154	47	28	78	46	49	53	0.6	37	44	40
19 B070495	42	17	68	30	40	28	0.9	44	38	27
20 B070678	60	39	74	41	43	37	0.3	22	44	40
21 B070738	51	32	74	41	38	21	1.6	52	41	31
22 GA04496-S6	.	.	62	24	40	28	0.3	22	38	27
23 GA041273-S14	90	58	86	52	49	53	2.2	58	57	57
24 GA041273-S15	71	50	89	54	40	28	0.3	22	50	49
25 GA04496-S5	81	54	77	45	48	50	0.4	30	51	51
26 GA04496-S8	73	51	70	35	43	37	0.3	22	46	47
27 GA051173W-S11	43	18	73	38	39	23	0.4	30	39	30
28 GA051173W-S12	39	11	57	16	35	17	0.1	4	32	10
29 GA051173W-S13	43	18	64	26	38	21	0.1	4	36	23
30 IL02-18228	34	4	28	1	27	5	0.4	30	22	1
31 LA03012E-50	51	32	69	33	46	44	0.3	22	42	34
32 LA03130E66	55	38	52	6	34	13	0.5	34	35	17
33 LA03130E68	47	28	52	6	29	9	0.3	22	32	10
34 LA03131E-1	38	8	59	19	42	35	0.1	4	35	17
35 LA03131E-7	44	23	64	26	25	2	0.2	15	34	14
36 LA03135E-39	65	46	89	54	55	59	1.0	47	52	55
37 LA03136E71	64	45	60	21	46	44	0.6	37	42	34
38 LA06148C-P30	54	36	84	51	47	49	0.9	44	46	47
39 M05-1526	43	18	61	23	40	28	0.1	4	36	23
40 M08-8036#_	36	6	54	11	26	4	0.1	4	29	4
41 MD03W61-09-7	39	11	55	13	44	39	0.2	15	35	17
42 MD03W61-10-2	38	8	40	2	39	23	0.1	4	29	4
43 MD03W665-10-5	61	42	68	30	53	58	0.7	41	45	45
44 MD03W69-15	37	7	55	13	39	23	0.0	1	33	12
45 NC05-15-99	32	2	58	18	27	5	0.0	1	29	4
46 NC05-39-314	60	39	73	38	34	13	1.0	47	42	34
47 NC05-39-337	61	42	72	37	32	10	0.9	44	42	34
48 NC05-39-349	53	35	75	44	42	35	1.5	51	43	39
49 NC05-39-354	66	47	74	41	37	18	1.4	49	45	45
50 NC05-39-370	60	39	69	33	37	18	1.4	49	42	34
51 NC05-39-380	62	44	79	47	32	10	1.6	52	44	40
52 NC06-16-26-988	45	24	64	26	55	59	0.3	22	41	31
53 NC99-13022	87	57	92	58	50	55	5.8	60	59	59
54 VA05W-251	47	28	71	36	44	39	0.7	41	41	31
55 VA08W-176	38	8	66	29	46	44	0.1	4	38	27
56 VA08W-193	54	36	73	38	46	44	0.6	37	44	40
57 VA08W-294	43	18	59	19	40	28	0.2	15	35	17
58 VA08W-613	43	18	52	6	40	28	0.5	34	34	14
59 VA09W-623	45	24	56	15	41	34	0.6	37	35	17
60 VA09W-656	41	16	60	21	39	23	0.2	15	35	17

Mean	53	67	40	0.7	40
LSD (0.05)	.	9	.	2.7	17
CV%	.	8.6	.	179.8	21.4

SEED CHARACTERISTICS and Grain Yield

Cultivar/ Designation	1000 GR. WT. S'BURY MD	Grain Yield	Grain Yield
		(gr) F'VILLE AR	(gr) NEWPORT AR
1 ERNIE	33	354	213
2 COKER 9835	24	297	46
3 BESS	27	415	278
4 JAMESTOWN	28	402	255
5 ARS04-1267	21	435	213
6 M08*8005#	26	457	290
7 MD03W61-09-1	39	384	230
8 VA09W-641	37	330	202
9 ARGE04-1163-44	28	332	301
10 ARGE04-1163-67	30	266	304
11 ARS07-0245	30	349	23
12 ARS07-0262	24	226	87
13 ARS07-0404	20	235	89
14 ARS07-0609	24	355	108
15 ARS07-1227	22	372	92
16 ARS07-1243	26	186	128
17 ARS08-0114	23	366	148
18 B050154	27	370	133
19 B070495	27	347	141
20 B070678	28	369	126
21 B070738	30	335	246
22 GA04496-S6	30	314	256
23 GA041273-S14	30	322	80
24 GA041273-S15	26	327	99
25 GA04496-S5	25	312	156
26 GA04496-S8	24	253	200
27 GA051173W-S11	33	378	175
28 GA051173W-S12	32	426	227
29 GA051173W-S13	33	368	177
30 IL02-18228	27	342	313
31 LA03012E-50	37	271	147
32 LA03130E66	32	279	248
33 LA03130E68	36	264	257
34 LA03131E-1	37	210	266
35 LA03131E-7	33	253	225
36 LA03135E-39	21	331	113
37 LA03136E71	30	370	237
38 LA06148C-P30	32	433	130
39 M05-1526	35	384	219
40 M08-8036#	27	371	198
41 MD03W61-09-7	28	458	209
42 MD03W61-10-2	26	438	246
43 MD03W665-10-5	27	448	152
44 MD03W69-15	24	423	266
45 NC05-15-99	32	273	177
46 NC05-39-314	31	410	173
47 NC05-39-337	27	466	202
48 NC05-39-349	29	454	208
49 NC05-39-354	29	416	197
50 NC05-39-370	28	387	220
51 NC05-39-380	28	432	229
52 NC06-16-26-988	36	399	156
53 NC99-13022	25	350	63
54 VA05W-251	32	512	254
55 VA08W-176	30	337	162
56 VA08W-193	26	317	231
57 VA08W-294	35	410	240
58 VA08W-613	30	264	212
59 VA09W-623	25	348	219
60 VA09W-656	25	368	229
Mean	29	355	190
LSD (0.05)	6	98	64
CV%	11	17	21

DON (ppm)

Cultivar/ Designation	URBANA	KINSTON	F'VILLE	NEWPORT	MEAN
	IL	NC	AR	AR	ALL LOC.
	RANK	RANK	RANK	RANK	RANK
1 ERNIE	10 16	6 11	1.2 23	16 35	8 19
2 COKER 9835	18 40	47 55	2.7 44	19 45	22 54
3 BESS	8 8	7 14	0.8 9	9 6	6 7
4 JAMESTOWN	12 25	6 11	0.5 2	9 6	7 11
5 ARS04-1267	18 40	14 33	2.1 39	21 47	14 37
6 M08*8005#	6 3	9 23	0.8 9	10 9	6 7
7 MD03W61-09-1	12 25	2 3	1.1 21	10 9	6 7
8 VA09W-641	9 11	5 9	0.7 7	13 21	7 11
9 ARGE04-1163-44	5 2	3 5	1.0 18	8 3	4 2
10 ARGE04-1163-67	6 3	1 1	1.4 27	11 13	5 4
11 ARS07-0245	46 60	99 58	6.5 56	35 59	46 60
12 ARS07-0262	21 50	11 27	1.7 37	22 50	14 37
13 ARS07-0404	20 46	36 53	2.6 43	13 21	18 50
14 ARS07-0609	20 46	18 40	2.4 40	18 39	15 43
15 ARS07-1227	17 36	17 39	1.3 25	18 39	13 35
16 ARS07-1243	19 43	20 41	9.5 58	23 51	18 50
17 ARS08-0114	35 58	35 52	1.6 33	28 56	25 56
18 B050154	17 36	13 32	2.9 47	28 56	15 43
19 B070495	10 16	11 27	4.6 54	18 39	11 27
20 B070678	15 32	20 41	3.5 51	15 31	14 37
21 B070738	14 30	14 33	0.8 9	14 25	11 27
22 GA04496-S6	15 32	. .	7.6 57	14 25	14 37
23 GA041273-S14	20 46	71 57	3.2 50	21 47	29 57
24 GA041273-S15	8 8	20 41	0.9 16	17 38	12 31
25 GA04496-S5	31 57	62 56	15.1 60	31 58	35 58
26 GA04496-S8	15 32	38 54	5.7 55	24 53	21 53
27 GA051173W-S11	21 50	12 31	3.8 52	18 39	14 37
28 GA051173W-S12	24 55	4 8	2.9 47	12 18	11 27
29 GA051173W-S13	22 53	8 20	1.6 33	15 31	12 31
30 IL02-18228	4 1	2 3	0.7 7	5 1	3 1
31 LA03012E-50	18 40	14 33	1.7 37	18 39	13 35
32 LA03130E66	12 25	11 27	0.9 16	14 25	9 23
33 LA03130E68	14 30	9 23	1.0 18	14 25	10 26
34 LA03131E-1	9 11	5 9	0.6 4	10 9	6 7
35 LA03131E-7	10 16	7 14	0.8 9	9 6	7 11
36 LA03135E-39	28 56	33 50	9.5 59	25 54	24 55
37 LA03136E71	9 11	24 46	1.5 30	12 18	12 31
38 LA06148C-P30	22 53	15 36	1.0 18	22 49	15 43
39 M05-1526	11 22	9 23	1.2 23	13 21	9 23
40 M08-8036#_	7 7	6 11	0.6 4	7 2	5 4
41 MD03W61-09-7	10 16	8 20	1.3 25	10 9	7 11
42 MD03W61-10-2	6 3	3 5	0.5 2	8 3	4 2
43 MD03W665-10-5	12 25	15 36	0.6 4	16 35	11 27
44 MD03W69-15	6 3	1 1	0.3 1	11 13	5 4
45 NC05-15-99	9 11	3 5	3.0 49	13 21	7 11
46 NC05-39-314	17 36	33 50	1.6 33	14 25	16 48
47 NC05-39-337	19 43	23 45	1.5 30	14 25	14 37
48 NC05-39-349	17 36	26 47	1.1 21	15 31	15 43
49 NC05-39-354	21 50	30 49	1.5 30	19 45	18 50
50 NC05-39-370	19 43	21 44	1.4 27	18 39	15 43
51 NC05-39-380	20 46	26 47	1.4 27	23 51	17 49
52 NC06-16-26-988	10 16	9 23	0.8 9	16 35	9 23
53 NC99-13022	42 59	101 59	4.0 53	27 55	43 59
54 VA05W-251	10 16	8 20	0.8 9	11 13	7 11
55 VA08W-176	11 22	7 14	2.7 44	11 13	8 19
56 VA08W-193	16 35	16 38	2.4 40	15 31	12 31
57 VA08W-294	11 22	7 14	2.7 44	11 13	8 19
58 VA08W-613	12 25	7 14	0.8 9	12 18	8 19
59 VA09W-623	8 8	11 27	1.6 33	8 3	7 11
60 VA09W-656	9 11	7 14	2.5 42	10 9	7 11

Mean	15	19	2.4	16	13
LSD (0.05)	8	16	2.2	7.9	18
CV%	26	43.4	.	.	70.0

Greenhouse Screening

	Cultivar/ Designation	AR SEVERITY		AR AUDPC	
		% @ 5 dai	RANK	5-21 days	RANK
1	ERNIE	53	48	1084	48
2	COKER 9835	40	34	998	41
3	BESS	23	8	402	5
4	JAMESTOWN	66	58	1170	53
5	ARS04-1267	21	6	705	17
6	M08*8005#	39	32	737	19
7	MD03W61-09-1	12	2	255	2
8	VA09W-641	64	56	1166	52
9	ARGE04-1163-44	30	16	661	14
10	ARGE04-1163-67	22	7	391	3
11	ARS07-0245	28	14	930	36
12	ARS07-0262	44	39	1074	47
13	ARS07-0404	52	46	1158	51
14	ARS07-0609	66	57	1312	58
15	ARS07-1227	36	27	931	37
16	ARS07-1243	43	37	918	34
17	ARS08-0114	58	53	1214	55
18	B050154	17	4	402	4
19	B070495	60	55	1251	57
20	B070678	38	31	871	30
21	B070738	57	50	1130	49
22	GA04496-S6	36	29	1056	44
23	GA041273-S14	50	44	1235	56
24	GA041273-S15	24	10	645	12
25	GA04496-S5	35	26	1144	50
26	GA04496-S8	27	12	760	21
27	GA051173W-S11	23	9	618	11
28	GA051173W-S12	47	43	856	27
29	GA051173W-S13	38	30	862	29
30	IL02-18228	28	13	568	9
31	LA03012E-50	43	38	1066	46
32	LA03130E66	35	25	732	18
33	LA03130E68	45	41	827	24
34	LA03131E-1	57	51	993	39
35	LA03131E-7	45	40	823	23
36	LA03135E-39	36	28	837	25
37	LA03136E71	34	24	790	22
38	LA06148C-P30	31	18	903	33
39	M05-1526	33	22	646	13
40	M08-8036#	20	5	464	6
41	MD03W61-09-7	24	11	541	8
42	MD03W61-10-2	29	15	613	10
43	MD03W665-10-5	42	36	1053	43
44	MD03W69-15	7	1	155	1
45	NC05-15-99	33	20	671	15
46	NC05-39-314	41	35	872	31
47	NC05-39-337	31	17	674	16
48	NC05-39-349	16	3	511	7
49	NC05-39-354	39	33	1014	42
50	NC05-39-370	33	21	756	20
51	NC05-39-380	32	19	858	28
52	NC06-16-26-988	56	49	963	38
53	NC99-13022	59	54	1350	60
54	VA05W-251	47	42	996	40
55	VA08W-176	58	52	1066	45
56	VA08W-193	71	60	1333	59
57	VA08W-294	70	59	1198	54
58	VA08W-613	52	47	923	35
59	VA09W-623	51	45	900	32
60	VA09W-656	33	23	838	26

Mean	40	864
SD @ 5%	30	451
CV%	51	37

**SSR Analyses of Regions Associated with FHB Resistance
and Other Pertinent Loci**

DESIGNATION	Rht-B1b/1	Rht-D1b/2	Rht8	Ppd-D1a	Vrr-A1 short vern	Fhb1	Fhb Ernie 3BS	Fhb 2DL- Wuhan1/W14	Fhb Ernie 5AS	Fhb Ning7840 5AS	Fhb Ernie 4B	Fhb Ernie 2B	Sr2	Sr36	Sr24/Lr24	Sr9a
1 ERNIE	yes	no	no	no	A1a	no	Yes	no	Yes	no	0	0	no	Yes	no	0
2 COKER 9835	no	Yes	no	Yes	A1b	no	no	no	no	no	0	0	no	Yes	no	0
3 BESS	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
4 JAMESTOWN	no	Yes	no	Yes	A1a	no	no	no	no	no	0	0	no	no	no	0
5 ARS04-1267	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
6 M08*8005#	Yes	no	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
7 MD03W61-09-1	no	Yes	no	Yes	A1b	Yes	no	no	no	no	0	0	no	no	no	0
8 VA09W-641	no	Yes	no	no	A1b	no	no	no	Yes	no	0	0	no	no	no	0
9 ARGE04-1163-44	Yes	no	no	no	A1b	no	no	no	no	Yes?	0	0	no	no	no	0
10 ARGE04-1163-67	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
11 ARS07-0245	no	Yes	0	no	A1b	no	no	no	no	no	0	0	no	no	no	0
12 ARS07-0262	no	no	Yes	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
13 ARS07-0404	no	Yes	no	no	A1a	no	no	no	no	no	0	0	no	het	no	0
14 ARS07-0609	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	Yes	no	0
15 ARS07-1227	no	Yes	no	Yes	A1b	no	no	no	Yes	no	0	0	no	Yes	no	0
16 ARS07-1243	Yes	no	no	Yes	A1a	no	no	no	no	no	0	0	no	no	no	0
17 ARS08-0114	Yes	no	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
18 B050154	no	het	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
19 B070495	Yes	no	0	no	A1a	no	Yes?	no	no	no	0	0	no	no	Yes	0
20 B070678	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	Yes	0
21 B070738	Yes	no	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
22 GA04496-S6	no	Yes	no	no	A1b	Yes	no	no	no	no	0	0	no	no	no	0
23 GA041273-S14	no	Yes	no	no	A1a	no	no	no	Yes	no	0	0	no	no	no	0
24 GA041273-S15	Yes	no	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
25 GA04496-S5	no	Yes	no	no	A1b	Yes	no	no	no	no	0	0	no	no	no	0
26 GA04496-S8	no	Yes	no	no	A1b	Yes	no	no	no	no	0	0	no	no	no	0
27 GA051173W-S11	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
28 GA051173W-S12	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
29 GA051173W-S13	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
30 IL02-18228	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
31 LA03012E-50	no	Yes	no	Yes	A1a	no	no	no	no	no	0	0	no	no	no	0
32 LA03130E66	Yes	no	no	het	het	no	no	het	no	no	0	0	no	Yes	no	0
33 LA03130E68	Yes	no	no	Yes	A1a	no	no	no	no	no	0	0	no	Yes	no	0
34 LA03131E-1	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
35 LA03131E-7	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	0	no	0
36 LA03135E-39	Yes	no	no	no	A1b	no	no	no	Yes	no	0	0	no	no	no	0
37 LA03136E71	Yes	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
38 LA06148C-P30	no	Yes	no	Yes	A1b	no	no	no	no	no	0	0	no	no	no	0
39 M05-1526	Yes	sgativ	no	no	A1b	0	Yes?	no	0	0	0	0	no	no	no	0
40 M08-8036#	no	no	no	Yes	A1b	no	no	no	no	no	0	0	no	Yes	no	0
41 MD03W61-09-7	het	het	t or n	het	A1b	or m	no	no	no	no	0	0	no	no	no	0
42 MD03W61-10-2	no	Yes	no	Yes	A1b	Yes	no	no	no	no	0	0	no	no	no	0
43 MD03W665-10-5	no	Yes	no	Yes	A1b	no	no	no	no	no	0	0	no	Yes	no	0
44 MD03W69-15	no	Yes	no	Yes	A1b	Yes	no	no	no	no	0	0	no	no	no	0
45 NC05-15-99	no	no	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
46 NC05-39-314	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
47 NC05-39-337	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
48 NC05-39-349	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
49 NC05-39-354	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
50 NC05-39-370	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
51 NC05-39-380	Yes	no	Yes	no	A1a	no	no	no	no	no	0	0	no	no	no	0
52 NC06-16-26-988	no	Yes	no	no	A1b	no	no	no	Yes	no	0	0	no	Yes	no	0
53 NC99-13022	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	Yes	0
54 VA05W-251	no	Yes	no	Yes	A1a	no	no	no	no	no	0	0	no	no	no	0
55 VA08W-176	0	Yes	no	no	legativ	no	no	no	no	no	0	0	no	no	0	0
56 VA08W-193	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
57 VA08W-294	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
58 VA08W-613	no	Yes	no	Yes	A1a	no	no	no	no	no	0	0	no	no	no	0
59 VA09W-623	no	Yes	no	no	A1b	no	no	no	no	no	0	0	no	no	no	0
60 VA09W-656	no	Yes	no	no	A1a	no	no	no	no	no	0	0	no	no	no	0

**SSR Analyses of Regions Associated with FHB Resistance
and Other Pertinent Loci**

DESIGNATION	1RS	H13	H9	H25	H26	BVD2/3	Lr9	Lr19/Sr25	Lr37/Yr17/Sr38	Lr34/Yr18	Yr P26R61 Qyr.uga-2AS*	Sbm1	Bx7 overexpressin g	Glu-D1	Glu-A1
1 ERNIE	no	no	no	no	no	no	no	no	no	no	no	0	no	2+12	Ax1 or null
2 COKER 9835	no	no	no	no	no	no	Yes	no	no	no	?	0	no	2+12	Ax2*
3 BESS	no	no	no	no	no	no	no	no	no	no	?	0	no	het	Ax1 or null
4 JAMESTOWN	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
5 ARS04-1267	1AL	no	0	no	no	no	no	no	het	no	no	0	no	5+10	Ax2*
6 M08*8005#	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax2*
7 MD03W61-09-1	1BL	no	no	no	no	no	no	no	no	no	no	0	no	2+12	Ax1 or null
8 VA09W-641	1AL	no	0	no	no	no	Yes	no	no	no	?	0	no	2+12	Ax2*
9 ARGE04-1163-44	1BL	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
10 ARGE04-1163-67	1BL	no	no	0	no	no	no	no	no	no	no	0	no	2+12	het
11 ARS07-0245	no	no	no	no	no	no	no	no	Yes	no	no	0	no	2+12	Ax2*
12 ARS07-0262	no	no	no	no	no	no	no	no	Yes	Yes	no	0	no	2+12	Ax1 or null
13 ARS07-0404	no	Yes	no	no	no	no	no	no	het	no	het	0	no	2+12	Ax2*
14 ARS07-0609	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax2*
15 ARS07-1227	no	no	no	no	no	no	no	no	no	no	?	0	no	5+10	Ax1 or null
16 ARS07-1243	1AL	no	0	no	no	no	no	no	Yes	no	no	0	no	2+12	Ax2*
17 ARS08-0114	1AL	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
18 B050154	no	no	no	0	no	no	no	no	no	no	?	0	het	het	Ax2*
19 B070495	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax1 or null
20 B070678	no	0	0	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax2*
21 B070738	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax1 or null
22 GA04496-S6	no	0	0	no	no	no	no	no	no	no	no	0	no	5+10	Ax2*
23 GA041273-S14	1BL	no	no	no	no	no	no	no	no	no	no	0	no	2+12	Ax2*
24 GA041273-S15	no	Yes	no	no	no	no	no	no	Yes	no	no	0	no	2+12	Ax1 or null
25 GA04496-S5	no	0	no	no	no	no	no	no	no	no	no	0	0	5+10	Ax2*
26 GA04496-S8	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax2*
27 GA051173W-S11	no	Yes	no	no	no	no	no	no	Yes	no	no	0	no	2+12	het
28 GA051173W-S12	no	no	no	no	no	no	no	no	Yes	no	no	0	no	2+12	Ax1 or null
29 GA051173W-S13	no	Yes	no	no	no	no	no	no	Yes	no	no	0	no	2+12	het
30 IL02-18228	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax1 or null
31 LA03012E-50	no	no	no	no	no	no	no	no	no	no	no	0	no	5+10	Ax2*
32 LA03130E66	no	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	het
33 LA03130E68	no	no	no	no	no	no	no	no	no	Yes	no	0	no	2+12	Ax2*
34 LA03131E-1	no	no	no	no	no	no	Yes	no	no	Yes	?	0	no	2+12	Ax2*
35 LA03131E-7	1BL	no	no	no	no	no	Yes	no	no	Yes	?	0	no	2+12	Ax2*
36 LA03135E-39	1BL	no	no	no	no	no	Yes	no	no	no	Yes	0	no	2+12	Ax1 or null
37 LA03136E71	no	no	no	no	no	no	Yes	no	no	no	?	0	Yes	2+12	Ax1 or null
38 LA06148C-P30	no	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax1 or null
39 M05-1526	1BL	no	no	no	no	no	no	no	no	no	no	0	het	2+12	Ax1 or null
40 M08-8036#	no	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax2*
41 MD03W61-09-7	1BL	no	no	no	no	no	no	no	no	no	?	0	no	het	het
42 MD03W61-10-2	1BL	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax1 or null
43 MD03W665-10-5	1BL	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax1 or null
44 MD03W69-15	1BL	no	no	no	no	no	no	no	no	no	no	0	no	2+12	Ax1 or null
45 NC05-15-99	1BL	no	no	no	no	no	Yes	no	no	no	?	0	no	het	Ax2*
46 NC05-39-314	no	no	no	0	no	no	no	no	no	no	?	0	no	2+12	Ax2*
47 NC05-39-337	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
48 NC05-39-349	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
49 NC05-39-354	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
50 NC05-39-370	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
51 NC05-39-380	no	no	no	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
52 NC06-16-26-988	no	no	no	no	no	no	no	no	no	no	Yes	0	no	2+12	Ax1 or null
53 NC99-13022	1AL	no	0	no	no	no	no	no	no	no	?	0	no	5+10	Ax2*
54 VA05W-251	no	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax2*
55 VA08W-176	1AL	no	0	no	no	no	no	no	no	no	no	0	no	2+12	Ax2*
56 VA08W-193	1AL	no	0	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
57 VA08W-294	1AL	no	0	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax2*
58 VA08W-613	no	no	no	no	no	no	Yes	no	no	no	no	0	no	2+12	Ax2*
59 VA09W-623	1AL	no	0	no	no	no	no	no	no	no	?	0	no	2+12	Ax2*
60 VA09W-656	1AL	no	0	no	no	no	no	no	no	no	no	0	no	2+12	Ax2*

Heading Date (Julian Days*)

	KINSTON NC	WARSAW VA	S'BURY MD	LEX'TON KY	URBANA IL	FUN'LEA ROM	MEAN ALL LOC.	RANK
1 ERNIE	105	115	122	133	134	139	125	18
2 COKER 9835	108	117	125	138	142	141	128	50
3 BESS	108	116	123	134	137	139	126	29
4 JAMESTOWN	104	114	123	133	136	137	124	9
5 ARS04-1267	107	116	123	133	136	135	125	18
6 M08*8005#	104	115	122	132	133	138	124	9
7 MD03W61-09-1	105	117	123	132	136	139	125	18
8 VA09W-641	104	119	122	131	135	134	124	9
9 ARGE04-1163-44	108	116	124	133	139	141	127	40
10 ARGE04-1163-67	108	117	124	133	140	141	127	40
11 ARS07-0245	108	118	124	139	142	139	128	50
12 ARS07-0262	106	117	123	135	139	141	127	40
13 ARS07-0404	107	116	123	134	139	135	126	29
14 ARS07-0609	106	115	122	133	136	139	125	18
15 ARS07-1227	106	117	124	133	138	135	125	18
16 ARS07-1243	113	118	125	137	139	134	128	50
17 ARS08-0114	104	115	122	131	132	139	124	9
18 B050154	106	117	123	133	137	141	126	29
19 B070495	109	118	123	136	141	141	128	50
20 B070678	112	118	124	137	142	141	129	56
21 B070738	103	115	122	131	135	138	124	9
22 GA04496-S6	.	124	128	148	144	143	133	58
23 GA041273-S14	105	116	123	133	140	139	126	29
24 GA041273-S15	105	115	123	131	137	138	125	18
25 GA04496-S5	115	124	128	146	144	144	134	59
26 GA04496-S8	115	124	127	147	144	144	134	59
27 GA051173W-S11	107	116	123	133	138	140	126	29
28 GA051173W-S12	109	116	123	134	136	137	126	29
29 GA051173W-S13	108	116	123	133	136	139	126	29
30 IL02-18228	107	115	122	131	133	137	124	9
31 LA03012E-50	106	116	124	132	138	139	126	29
32 LA03130E66	101	114	122	132	134	138	123	2
33 LA03130E68	100	114	121	130	132	137	122	1
34 LA03131E-1	103	115	122	131	133	136	123	2
35 LA03131E-7	103	115	122	131	132	137	123	2
36 LA03135E-39	110	117	124	135	140	139	127	40
37 LA03136E71	104	114	123	135	136	138	125	18
38 LA06148C-P30	102	115	123	131	134	138	124	9
39 M05-1526	108	116	123	132	133	140	125	18
40 M08-8036#	104	116	121	133	134	140	125	18
41 MD03W61-09-7	108	117	125	133	136	140	126	29
42 MD03W61-10-2	106	117	124	133	137	140	126	29
43 MD03W665-10-5	104	117	124	134	134	140	125	18
44 MD03W69-15	107	118	124	134	139	141	127	40
45 NC05-15-99	108	118	124	140	142	141	129	56
46 NC05-39-314	104	115	123	134	133	134	124	9
47 NC05-39-337	104	114	122	131	132	136	123	2
48 NC05-39-349	103	114	123	131	133	135	123	2
49 NC05-39-354	103	114	122	133	135	136	124	9
50 NC05-39-370	104	114	122	131	133	137	123	2
51 NC05-39-380	104	114	123	131	134	135	123	2
52 NC06-16-26-988	107	119	125	134	139	141	127	40
53 NC99-13022	109	117	124	135	141	141	128	50
54 VA05W-251	107	116	123	135	139	139	127	40
55 VA08W-176	109	117	124	135	141	140	128	50
56 VA08W-193	108	117	124	133	141	139	127	40
57 VA08W-294	108	116	123	134	140	139	127	40
58 VA08W-613	105	115	123	132	135	137	125	18
59 VA09W-623	107	116	123	132	139	139	126	29
60 VA09W-656	108	117	124	133	139	141	127	40

Mean	106	116	123	134	137	139	125
LSD (0.05)	2		1	3			3
CV%	1		1	1			1.3

*Days after December 31, 2010

Plant Height (in)

CULTIVAR/ DESIGNATION	KINSTON NC	S'BURY MD	LEX'TON KY	FUN'LEA ROM	SZEGED HUN	MEAN ALL LOC.	RANK
1 ERNIE	32	32	28	35	40	33	2
2 COKER 9835	32	32	26	33	40	33	2
3 BESS	39	36	33	38	46	38	45
4 JAMESTOWN	32	34	25	44	42	35	11
5 ARS04-1267	35	35	32	38	44	37	32
6 M08*8005#	34	36	30	35	42	35	11
7 MD03W61-09-1	37	36	30	38	46	37	32
8 VA09W-641	34	35	29	36	40	35	11
9 ARGE04-1163-44	35	37	32	40	46	38	45
10 ARGE04-1163-67	37	41	35	44	46	40	54
11 ARS07-0245	38	39	32	36	46	38	45
12 ARS07-0262	34	33	24	31	42	33	2
13 ARS07-0404	33	32	29	33	40	33	2
14 ARS07-0609	31	33	27	36	42	34	9
15 ARS07-1227	31	34	29	33	40	33	2
16 ARS07-1243	35	36	31	30	44	35	11
17 ARS08-0114	33	33	29	38	42	35	11
18 B050154	34	35	32	36	40	35	11
19 B070495	34	36	30	33	44	35	11
20 B070678	36	36	28	38	46	37	32
21 B070738	37	36	32	42	48	39	51
22 GA04496-S6	36	38	37	42	46	40	54
23 GA041273-S14	38	35	33	38	46	38	45
24 GA041273-S15	35	36	29	37	42	36	22
25 GA04496-S5	35	37	34	40	42	37	32
26 GA04496-S8	34	38	34	40	42	37	32
27 GA051173W-S11	42	43	34	45	50	43	59
28 GA051173W-S12	40	42	32	42	48	41	57
29 GA051173W-S13	42	42	33	38	50	41	57
30 IL02-18228	36	40	32	38	46	39	51
31 LA03012E-50	36	40	33	43	48	40	54
32 LA03130E66	34	37	26	41	46	37	32
33 LA03130E68	34	36	26	40	44	36	22
34 LA03131E-1	36	38	29	46	44	38	45
35 LA03131E-7	37	38	30	38	42	37	32
36 LA03135E-39	31	32	24	33	38	32	1
37 LA03136E71	35	34	30	42	46	37	32
38 LA06148C-P30	35	36	30	38	46	37	32
39 M05-1526	35	38	28	33	46	36	22
40 M08-8036#	34	36	29	33	42	35	11
41 MD03W61-09-7	36	37	28	40	46	37	32
42 MD03W61-10-2	34	33	29	38	38	34	9
43 MD03W665-10-5	32	33	25	35	42	33	2
44 MD03W69-15	34	35	30	33	44	35	11
45 NC05-15-99	44	46	37	52	56	47	60
46 NC05-39-314	37	34	29	38	44	36	22
47 NC05-39-337	36	33	29	36	46	36	22
48 NC05-39-349	34	36	29	38	44	36	22
49 NC05-39-354	35	34	29	29	40	33	2
50 NC05-39-370	36	36	30	43	48	39	51
51 NC05-39-380	36	36	27	40	46	37	32
52 NC06-16-26-988	33	37	30	38	46	37	32
53 NC99-13022	33	35	31	35	48	36	22
54 VA05W-251	34	34	29	35	44	35	11
55 VA08W-176	34	39	30	40	46	38	45
56 VA08W-193	35	36	28	36	42	35	11
57 VA08W-294	33	37	28	40	42	36	22
58 VA08W-613	34	34	30	35	46	36	22
59 VA09W-623	35	38	30	34	44	36	22
60 VA09W-656	36	37	31	36	44	37	32

Mean	35	36	30	38	44	37
LSD (0.05)	3	4	4	.	.	4
CV%	4.0	4.8	7.1	.	.	5.4

Leaf and Viral Disease Ratings

CULTIVAR/ DESIGNATION	LEAF	LEAF	LEAF	LEAF	POWDERY	POWDERY	POWDERY	Stripe	Stripe
	RUST	RUST	RUST	RUST	MILDEW	MILDEW	MILDEW	Rust	Rust
	(0-9)	(0-9)	(0-9)	%	(0-9)	(0-9)	%	IT	%
	WARSAW	KINSTON	FUN'LEA	SZEGED	KINSTON	WARSAW	F'VILLE	L. SPR.	L. SPR.
	VA	NC	ROM	HUN	NC	VA	AR	NC	NC
1 ERNIE	30S	6.5	3-4	S 100	1	4	20	9	90
2 COKER 9835	1MR	1.5	2	MRT	1	1	10	9	80
3 BESS	30MS	4.5	4	MS 30	4	3	30	5	40
4 JAMESTOWN	1R	2.0	2	MRT	2	0	5	3	5
5 ARS04-1267	90S	3.0	4	MS 40	1	0	0	7	50
6 M08*8005#	20MS	2.0	3-4	MR 10	2	0	6	2	10
7 MD03W61-09-1	50MS	6.5	4	S 50	0	0	1	9	80
8 VA09W-641	0R	1.0	0	MRT	1	0	0	9	90
9 ARGE04-1163-44	1R	1.0	1	S 100	4	3	57	7	50
10 ARGE04-1163-67	1R	1.5	2	MRT	4	6	57	2	10
11 ARS07-0245	2MR	0.0	2	MRT	1	1	6	2	5
12 ARS07-0262	2MR	0.0	5	MRT	1	0	3	2	10
13 ARS07-0404	0R	0.5	1	MRT	1	1	16	6	40
14 ARS07-0609	10MR	2.0	1-2	MR 10	1	0	1	8	80
15 ARS07-1227	0R	1.0	0	MR 5	0	0	0	8	80
16 ARS07-1243	20MR	0.0	0	MR 5	0	2	0	1	1
17 ARS08-0114	0R	2.0	1-2	MR 5	0	0	12	2	10
18 B050154	10MR	5.0	0	MRT	2	6	15	3	5
19 B070495	0R	0.5	0	MR 5	0	4	0	7	40
20 B070678	1R	0.0	0	MR 20	1	4	2	1	5
21 B070738	20MR	4.0	1-2	MRT	2	1	12	8	70
22 GA04496-S6	25MS	4.5	0	MRT	2	3	25	9	50
23 GA041273-S14	0R	0.0	0	MR 5	2	1	32	6	50
24 GA041273-S15	1MR	0.0	0	MRT	0	0	5	2	5
25 GA04496-S5	5MR	3.0	2	MRT	1	3	8	8	60
26 GA04496-S8	15MR	3.5	2	MR 5	7	4	30	8	60
27 GA051173W-S11	15MR	0.5	3-4	MR 5	1	1	1	3	5
28 GA051173W-S12	10MR	0.0	3-4	MRT	2	1	5	3	5
29 GA051173W-S13	15MR	1.5	3-4	MRT	1	1	5	3	5
30 IL02-18228	1MR	1.0	3	MRT	6	5	25	7	50
31 LA03012E-50	0R	1.5	0	MRT	1	5	12	5	20
32 LA03130E66	15MR	4.0	5	MS 30	3	2	1	seg2-7	seg10-60
33 LA03130E68	5MR	2.0	4	MS 30	2	1	5	8	60
34 LA03131E-1	0R	0.0	2	MRT	1	2	17	7	60
35 LA03131E-7	0R	0.5	2	MRT	2	0	11	7	60
36 LA03135E-39	0R	1.0	0	MRT	1	3	22	2	10
37 LA03136E71	0R	0.0	0	MRT	5	6	38	3	10
38 LA06148C-P30	0R	1.0	2	MRT	0	2	0	3	10
39 M05-1526	2MR	0.5	2	MR 20	2	3	30	7	60
40 M08-8036#	0R	0.0	0	MRT	5	6	20	3	20
41 MD03W61-09-7	30S	5.5	4-5	MR 30	1	0	1	8	80
42 MD03W61-10-2	15MS	6.0	1-2	MRT	0	0	1	9	80
43 MD03W665-10-5	0R	1.0		MR 5	0	0	0	9	80
44 MD03W69-15	15MS	5.5	2	MS 30	4	2	0	9	70
45 NC05-15-99	0R	1.5	3-4	MRT	5	1	3	seg1-7	seg5-50
46 NC05-39-314	5S	4.0	2	MRT	3	4	17	8	60
47 NC05-39-337	2/TrMR/S	3.0	1	MRT	3	3	29	8	70
48 NC05-39-349	5S	1.5	1	MRT	0	4	27	7	70
49 NC05-39-354	10S	2.0	1	MRT	5	5	15	7	70
50 NC05-39-370	15S	4.0	1	MRT	5	5	11	7	70
51 NC05-39-380	10S	4.0	1	MRT	3	4	15	7	70
52 NC06-16-26-988	1R	0.5		MR 5	0	0	0	9	90
53 NC99-13022	75S	2.0		MR 5	5	3	0	7	70
54 VA05W-251	0R	0.0		MRT	1	1	3	8	90
55 VA08W-176	0R	0.0	2	MRT	1	1	0	3	10
56 VA08W-193	1MR	0.0	2	MR 5	3	3	0	3	10
57 VA08W-294	0R	0.0	1	MRT	0	0	0	2	5
58 VA08W-613	0R	0.5	3	MRT	0	0	2	6	50
59 VA09W-623	2MR	1.5	2	MRT	1	1	0	1	5
60 VA09W-656	1R	0.5	1	MRT	1	1	0	4	20

Mean	.	1.9	.	.	2	.	11	.	.
LSD (0.05)	.	.	.	.	.	.	11	.	.
CV%	.	.	.	.	.	.	62	.	.

Hessian Fly Screening (Resistant - Susceptible Plants)¹

CULTIVAR/ DESIGNATION	Biotype C	Biotype O	Biotype L
1 ERNIE	0-17	20-2	0-15
2 COKER 9835	17-0	0-21	0-18
3 BESS	0-14	0-19	0-19
4 JAMESTOWN	16-0	0-20	0-18
5 ARS04-1267	0-11	0-19	0-14
6 M08*8005#	0-13	21-1	0-18
7 MD03W61-09-1	0-17	18-0	0-14
8 VA09W-641	0-18	0-21	0-20
9 ARGE04-1163-44	0-17	16-2	0-17
10 ARGE04-1163-67	21-0	0-19	0-19
11 ARS07-0245	0-17	0-19	0-14
12 ARS07-0262	0-15	0-23	0-17
13 ARS07-0404	18-0	17-1	16-0
14 ARS07-0609	13-3	17-5	12-5
15 ARS07-1227	11-5	17-6	14-3
16 ARS07-1243	0-16	0-19	0-15
17 ARS08-0114	0-20	12-6	0-15
18 B050154	0-20	0-18	0-13
19 B070495	0-18	0-15	0-16
20 B070678	0-16	0-18	0-19
21 B070738	0-16	9-4	0-16
22 GA04496-S6	0-7	4-1	0-12
23 GA041273-S14	0-18	0-12	0-16
24 GA041273-S15	16-0	13-0	16-0
25 GA04496-S5	0-13	6-2	0-9
26 GA04496-S8	0-15	10-1	0-12
27 GA051173W-S11	15-0	7-4	14-2
28 GA051173W-S12	14-1	6-7	7-10
29 GA051173W-S13	18-0	9-0	13-3
30 IL02-18228	0-17	0-11	0-16
31 LA03012E-50	0-18	8-3	0-17
32 LA03130E66	0-15	0-12	0-7
33 LA03130E68	0-14	0-6	0-13
34 LA03131E-1	0-10	0-14	0-13
35 LA03131E-7	0-8	4-3	0-13
36 LA03135E-39	18-0	0-17	0-16
37 LA03136E71	0-17	0-16	0-15
38 LA06148C-P30	13-5	0-15	0-18
39 M05-1526	18-0	0-17	0-17
40 M08-8036#_	0-17	0-13	0-15
41 MD03W61-09-7	0-17	0-15	0-13
42 MD03W61-10-2	0-21	1-14	0-17
43 MD03W665-10-5	0-17	0-16	0-14
44 MD03W69-15	0-14	0-13	0-15
45 NC05-15-99	0-17	0-10	0-17
46 NC05-39-314	0-17	0-20	0-15
47 NC05-39-337	0-18	0-16	0-19
48 NC05-39-349	0-12	0-20	0-15
49 NC05-39-354	0-15	0-18	0-17
50 NC05-39-370	0-18	0-15	0-16
51 NC05-39-380	0-17	0-20	0-14
52 NC06-16-26-988	0-20	1-12	2-10
53 NC99-13022	0-12	0-16	0-14
54 VA05W-251	18-0	2-13	0-13
55 VA08W-176	0-17	0-14	0-17
56 VA08W-193	0-22	0-14	0-18
57 VA08W-294	0-19	0-17	0-19
58 VA08W-613	0-19	0-20	0-20
59 VA09W-623	0-20	0-21	0-18
60 VA09W-656	0-21	0-18	0-17

¹ Sue Cambron, USDA-ARS, Dept Entomology, Purdue Univ.

Milling and Baking Quality Scores¹

Cultivar/ Designation	MILLING		BAKING		SOFT.	TEST	FLOUR	SOFT.	GRAIN	GRAIN.	FLOUR	LACTIC	SUCRE.	COOK.						
	QUALITY	SCORE	QUALITY	SCORE	EQUIV.	WT.	YIELD	EQUIV.	HARD.	PROT.	PROT.	ACID	SRC	DIA.						
	SCORE		SCORE		SCORE	LB/BU	%	%	(0-100)	%	%	SRC(%)	%	CM						
1 ERNIE	61	C	71	B	65	C	58.5	66.7	58.6	18.5	11.9	9.1	101.6	88.6	+	18.1	+			
2 COKER 9835	63	C	53	D	83	A	57.6	67.0	64.8	+	24.2	12.0	9.2	98.1	102.0	q	17.7			
3 BESS	65	C	48	E	55	D	59.9	67.5	55.1	q	21.0	11.9	9.9	100.6	96.7		17.5			
4 JAMESTOWN	59	D	46	E	66	C	60.7	66.3	58.9		29.4	12.3	9.5	110.3	s	100.6	q	17.5		
5 ARS04-1267	72	B	23	F	7	F	61.6	69.0	+	38.2	q	29.4	13.1	13.0	117.1	s	93.5	+	16.8	q
6 M08*8005#	77	B	67	C	71	B	58.6	69.8	+	60.6		25.7	12.2	10.1	106.6		91.2	+	18.0	+
7 MD03W61-09-1	68	C	43	E	56	D	60.1	68.1	+	55.3	q	30.5	12.8	10.9	92.1	w	98.4		17.4	
8 VA09W-641	70	B	53	D	60	C	58.6	68.5	+	56.9	q	27.8	12.4	9.9	102.5		95.4		17.6	
9 ARGE04-1163-44	84	A	30	F	10	F	58.8	71.2	+	39.0	q	29.3	13.0	12.1	95.6		91.5	+	17.0	q
10 ARGE04-1163-67	61	C	40	F	49	E	58.8	66.8		53.0	q	26.1	13.7	10.9	92.1	w	98.1		17.3	q
11 ARS07-0245	60	C	21	F	71	B	56.6	66.5		60.5		29.7	13.8	10.8	131.5	s	113.2	q	16.9	q
12 ARS07-0262	59	D	36	F	56	D	58.3	66.4		55.5	q	32.6	13.7	11.5	81.3	w	101.3	q	17.3	q
13 ARS07-0404	62	C	57	D	66	C	0.5	66.8		58.8		34.1	12.9	10.8	102.2		94.1		17.8	
14 ARS07-0609	83	A	74	B	86	A	56.0	71.1	+	66.1	+	24.7	12.6	9.8	103.8		92.2	+	18.2	+
15 ARS07-1227	80	A	71	B	47	E	58.3	70.5	+	52.4	q	24.4	12.9	10.4	92.5	w	82.6	+	18.1	+
16 ARS07-1243	76	B	29	F	14	F	60.0	69.7	+	40.6	q	34.1	14.0	13.4	115.3	s	92.2	+	17.0	q
17 ARS08-0114	83	A	33	F	30	F	54.9	71.0	+	46.3	q	29.3	12.2	11.6	116.9	s	95.7		17.1	q
18 B050154	78	B	79	B	79	B	57.0	70.2	+	63.6	+	22.1	11.0	9.0	99.5		88.5	+	18.3	+
19 B070495	69	C	64	C	56	D	57.6	68.4	+	55.5	q	22.2	12.8	9.9	92.1	w	88.9	+	17.9	
20 B070678	65	C	67	C	66	C	59.3	67.4		58.9		22.0	12.6	10.0	96.4		90.0	+	18.0	
21 B070738	86	A	57	D	68	C	59.8	71.8	+	59.8		22.3	12.5	10.4	99.9		95.6		17.8	
22 GA04496-S6	71	B	78	B	68	C	58.2	68.7	+	59.6		30.7	11.6	9.4	97.1		85.5	+	18.3	+
23 GA041273-S14	82	A	81	A	72	B	58.9	71.0	+	61.1		25.7	11.6	9.3	69.8	w	85.3	+	18.4	+
24 GA041273-S15	56	D	52	D	52	D	59.9	65.8	q	53.9	q	28.6	11.2	9.4	97.8		94.2		17.6	
25 GA04496-S5	68	C	70	B	75	B	55.9	68.2	+	62.2	+	28.6	12.1	9.7	100.1		91.2	+	18.1	+
26 GA04496-S8	69	C	71	B	73	B	57.8	68.4	+	61.2		28.2	11.8	9.3	102.8		90.5	+	18.1	+
27 GA051173W-S11	65	C	46	E	44	E	61.3	67.6		51.2	q	20.1	11.0	8.6	99.8		95.6		17.3	
28 GA051173W-S12	62	C	47	E	56	D	61.5	67.0		55.4	q	24.6	11.3	8.8	108.4		97.9		17.4	
29 GA051173W-S13	64	C	53	D	43	E	61.4	67.3		50.7	q	21.8	11.2	8.8	99.2		91.3	+	17.6	
30 IL02-18228	79	B	59	D	39	F	62.3	70.4	+	49.4	q	30.4	11.9	10.3	100.4		86.5	+	17.7	
31 LA03012E-50	80	A	75	B	67	C	59.2	70.6	+	59.3		21.7	11.1	8.6	94.2	w	87.4	+	18.2	+
32 LA03130E66	81	A	62	C	49	E	60.0	70.7	+	52.9	q	21.2	11.7	9.3	99.1		88.3	+	17.8	
33 LA03130E68	80	B	65	C	50	D	60.1	70.4	+	53.3	q	22.7	11.5	9.0	91.8	w	87.3	+	17.9	
34 LA03131E-1	83	A	65	C	59	D	59.8	71.1	+	56.5	q	26.0	12.0	9.6	77.2	w	89.7	+	17.9	
35 LA03131E-7	85	A	74	B	60	D	60.1	71.4	+	56.7	q	26.0	11.3	8.8	80.0	w	85.7	+	18.1	+
36 LA03135E-39	49	E	49	E	75	B	58.8	64.2	q	62.0	+	26.5	13.0	10.6	98.9		100.9	q	17.6	
37 LA03136E71	73	B	68	C	70	C	60.5	69.2	+	60.2		21.4	11.9	9.3	101.9		91.2	+	18.0	
38 LA06148C-P30	68	C	44	E	60	C	59.4	68.0	+	56.9	q	24.1	11.7	9.3	97.1		100.3	q	17.4	
39 M05-1526	77	B	70	B	69	C	58.4	69.8	+	60.1		19.5	11.2	8.7	85.7	w	90.4	+	18.0	+
40 M08-8036#_	74	B	68	C	57	D	60.1	69.4	+	55.6	q	25.4	12.5	9.8	103.3		87.0	+	18.0	
41 MD03W61-09-7	70	B	61	C	61	C	59.2	68.6	+	57.0	q	29.2	12.1	10.0	100.2		91.7	+	17.8	
42 MD03W61-10-2	65	C	62	C	65	C	61.4	67.5		58.6		27.4	11.7	9.3	88.9	w	92.8	+	17.9	
43 MD03W665-10-5	70	C	76	B	72	B	58.2	68.4	+	61.1		27.2	11.2	8.7	84.1	w	88.4	+	18.2	+
44 MD03W69-15	72	B	71	B	76	B	59.5	68.9	+	62.4	+	25.8	11.2	9.3	97.5		91.3	+	18.1	+
45 NC05-15-99	55	D	29	F	41	E	59.5	65.4	q	50.0	q	36.6	14.2	11.4	84.6	w	100.7	q	17.0	q
46 NC05-39-314	75	B	70	C	72	B	58.7	69.6	+	61.0		18.4	10.5	8.4	103.2		91.6	+	18.0	
47 NC05-39-337	80	A	79	B	72	B	59.5	70.6	+	60.8		19.6	10.0	7.4	97.0		87.7	+	18.2	+
48 NC05-39-349	78	B	76	B	69	C	60.1	70.1	+	60.1		18.3	10.2	7.8	95.7		88.4	+	18.2	+
49 NC05-39-354	76	B	75	B	73	B	58.3	69.6	+	61.2		21.7	10.6	7.9	102.2		89.4	+	18.2	+
50 NC05-39-370	76	B	65	C	66	C	59.1	69.7	+	59.0		20.1	10.6	8.2	100.0		92.6	+	17.9	
51 NC05-39-380	79	B	77	B	70	B	59.4	70.3	+	60.4		22.8	10.1	7.5	95.5		87.9	+	18.2	+
52 NC06-16-26-988	75	B	70	C	53	D	60.6	69.5	+	54.4	q	28.5	12.7	10.1	97.5		85.1	+	18.1	+
53 NC99-13022	76	B	47	E	56	D	58.2	69.7	+	55.2	q	27.4	12.1	9.9	114.3	s	96.9		17.5	
54 VA05W-251	77	B	71	B	51	D	59.9	69.8	+	53.6	q	25.2	11.1	9.2	77.2	w	84.4	+	18.1	+
55 VA08W-176	70	B	80	B	66	C	61.3	68.6	+	59.0		24.1	11.3	8.6	90.9	w	84.8	+	18.3	+
56 VA08W-193	72	B	62	C	68	C	59.0	69.0	+	59.5		24.5	11.6	8.9	112.2	s	93.7	+	17.8	
57 VA08W-294	63	C	58	D	68	C	59.0	67.0		59.8		22.5	11.3	8.6	108.2		96.2		17.7	
58 VA08W-613	69	C	57	D	63	C	59.0	68.2	+	57.7		22.8	12.0	9.3	91.0	w	94.6		17.7	
59 VA09W-623	75	B	69	C	52	D	61.4	69.503	+	54.0	q	28.8	12.1	9.8	111.44	s	85.5	+	18.0	
60 VA09W-656	70	C	63	C	54	D	60.8	68.5	+	54.5	q	29.1	12.0	9.5	101.5		88.9	+	17.9	
Mean	72		60		59		58.3	68.8	56.595	25.5	11.9	9.6	98.4	92.2		17.8				

¹ Seed kindly supplied to USDA-ARS Wooster Quality Lab by Carl Griffey, Va Tech.

Means Across Locations 2010-11

Cultivar/ Designation	FHB Incidence		FHB Severity		FHB Index		FDK		ISK		DON	
	RANK		RANK		RANK		RANK		RANK		RANK	
1 ERNIE	47	18	23	10	14	11	18	23	34	14	8	19
2 COKER 9835	74	60	56	59	44	60	39	53	57	57	22	54
3 BESS	42	7	20	8	11	7	8	2	30	7	6	7
4 JAMESTOWN	47	18	28	24	15	16	17	19	36	23	7	11
5 ARS04-1267	46	15	27	20	16	21	19	26	37	26	14	37
6 M08*8005#	40	6	24	11	11	7	16	14	30	7	6	7
7 MD03W61-09-1	54	40	24	11	16	21	13	9	30	7	6	7
8 VA09W-641	45	14	25	14	14	11	16	14	33	12	7	11
9 ARGE04-1163-44	39	5	14	2	6	2	12	7	28	3	4	2
10 ARGE04-1163-67	36	2	9	1	5	1	10	4	24	2	5	4
11 ARS07-0245	58	48	51	56	39	57	56	60	59	59	46	60
12 ARS07-0262	55	43	45	53	35	55	43	57	50	49	14	37
13 ARS07-0404	58	48	41	47	30	50	40	54	51	51	18	50
14 ARS07-0609	55	43	46	54	28	46	37	49	51	51	15	43
15 ARS07-1227	54	40	43	50	30	50	29	42	51	51	13	35
16 ARS07-1243	64	57	32	30	23	43	38	51	44	40	18	50
17 ARS08-0114	61	53	55	57	39	57	42	56	55	56	25	56
18 B050154	53	37	38	40	25	45	29	42	44	40	15	43
19 B070495	47	18	32	30	18	27	25	34	38	27	11	27
20 B070678	53	37	39	43	22	36	31	46	44	40	14	37
21 B070738	47	18	35	36	19	28	26	36	41	31	11	27
22 GA04496-S6	50	29	20	8	15	16	22	29	38	27	14	37
23 GA041273-S14	61	53	55	57	34	54	43	57	57	57	29	57
24 GA041273-S15	50	29	42	49	28	46	30	44	50	49	12	31
25 GA04496-S5	64	57	44	51	35	55	41	55	51	51	35	58
26 GA04496-S8	47	18	32	30	22	36	28	40	46	47	21	53
27 GA051173W-S11	48	25	31	28	17	24	17	19	39	30	14	37
28 GA051173W-S12	43	10	25	14	14	11	10	4	32	10	11	27
29 GA051173W-S13	43	10	27	20	14	11	16	14	36	23	12	31
30 IL02-18228	32	1	17	4	6	2	6	1	22	1	3	1
31 LA03012E-50	50	29	33	33	20	31	22	29	42	34	13	35
32 LA03130E66	42	7	26	17	15	16	17	19	35	17	9	23
33 LA03130E68	38	4	25	14	11	7	16	14	32	10	10	26
34 LA03131E-1	58	48	29	27	20	31	25	34	35	17	6	7
35 LA03131E-7	49	27	26	17	16	21	27	37	34	14	7	11
36 LA03135E-39	56	45	40	44	30	50	38	51	52	55	24	55
37 LA03136E71	53	37	34	34	22	36	24	31	42	34	12	31
38 LA06148C-P30	56	45	44	51	30	50	28	40	46	47	15	43
39 M05-1526	61	53	27	20	20	31	20	27	36	23	9	23
40 M08-8036#_	42	7	18	5	8	4	14	10	29	4	5	4
41 MD03W61-09-7	59	51	27	20	19	28	12	7	35	17	7	11
42 MD03W61-10-2	44	12	16	3	8	4	9	3	29	4	4	2
43 MD03W665-10-5	62	56	38	40	28	46	24	31	45	45	11	27
44 MD03W69-15	50	29	19	6	12	10	15	11	33	12	5	4
45 NC05-15-99	36	2	19	6	9	6	10	4	29	4	7	11
46 NC05-39-314	44	12	37	39	19	28	36	48	42	34	16	48
47 NC05-39-337	47	18	40	44	21	35	30	44	42	34	14	37
48 NC05-39-349	54	40	41	47	24	44	27	37	43	39	15	43
49 NC05-39-354	57	47	48	55	29	49	31	46	45	45	18	50
50 NC05-39-370	46	15	40	44	22	36	27	37	42	34	15	43
51 NC05-39-380	47	18	38	40	22	36	37	49	44	40	17	49
52 NC06-16-26-988	50	29	26	17	17	24	18	23	41	31	9	23
53 NC99-13022	70	59	56	59	42	59	46	59	59	59	43	59
54 VA05W-251	52	35	35	36	20	31	20	27	41	31	7	11
55 VA08W-176	48	25	34	34	17	24	17	19	38	27	8	19
56 VA08W-193	51	34	36	38	22	36	24	31	44	40	12	31
57 VA08W-294	59	51	31	28	22	36	16	14	35	17	8	19
58 VA08W-613	49	27	28	28	15	16	15	11	34	14	8	19
59 VA09W-623	46	15	28	28	14	11	18	23	35	17	7	11
60 VA09W-656	52	35	24	11	15	16	15	11	35	17	7	11

Mean	51	33	21	21	40	13
LSD (0.05)	28.0	25	25	21	17	18
CV%	28.0	38.3	61.1	50.6	21.4	70.0

Means Across Locations 2010 - 2011

Cultivar/ Designation	Heading Date		Plant Height		Hessian Fly Biotype L	MILLING QUALITY SCORE		BAKING QUALITY SCORE		SOFT. EQUIV. SCORE		Leaf Rust (0-9)	Stripe Rust %	Powdery Mildew (0-9)
	RANK	RANK	RANK	RANK							NC AR	L. SPR. NC	Mean NC+VA	
1 ERNIE	125	20	31	7	0-15	61	C	71	B	65	C	7	90	3
2 COKER 9835	128	55	30	3	0-18	63	C	53	D	83	A	2	80	1
3 BESS	126	34	36	51	0-19	65	C	48	E	55	D	5	40	4
4 JAMESTOWN	124	17	30	4	0-18	59	D	46	E	66	C	2	5	1
5 ARS04-1267	125	22	34	38	0-14	72	B	23	F	7	F	3	50	0
6 M08*8005#	124	13	33	25	0-18	77	B	67	C	71	B	2	10	1
7 MD03W61-09-1	125	25	34	43	0-14	68	C	43	E	56	D	7	80	0
8 VA09W-641	124	14	33	21	0-20	70	B	53	D	60	C	1	90	1
9 ARGE04-1163-44	127	42	35	46	0-17	84	A	30	F	10	F	1	50	3
10 ARGE04-1163-67	127	47	37	56	0-19	61	C	40	F	49	E	2	10	5
11 ARS07-0245	128	54	36	53	0-14	60	C	21	F	71	B	0	5	1
12 ARS07-0262	127	43	30	5	0-17	59	D	36	F	56	D	0	10	0
13 ARS07-0404	126	29	31	8	16-0	62	C	57	D	66	C	1	40	1
14 ARS07-0609	125	24	30	6	12-5	83	A	74	B	86	A	2	80	0
15 ARS07-1227	125	27	31	9	14-3	80	A	71	B	47	E	1	80	0
16 ARS07-1243	128	51	34	37	0-15	76	B	29	F	14	F	0	1	1
17 ARS08-0114	124	11	31	10	0-15	83	A	33	F	30	F	2	10	0
18 B050154	126	35	34	35	0-13	78	B	79	B	79	B	5	5	4
19 B070495	128	53	33	30	0-16	69	C	64	C	56	D	1	40	2
20 B070678	129	57	33	34	0-19	65	C	67	C	66	C	0	5	2
21 B070738	124	15	35	47	0-16	86	A	57	D	68	C	4	70	2
22 GA04496-S6	133	58	37	55	0-12	71	B	78	B	68	C	5	50	3
23 GA041273-S14	126	32	35	48	0-16	82	A	81	A	72	B	0	50	1
24 GA041273-S15	125	21	33	29	16-0	56	D	52	D	52	D	0	5	0
25 GA04496-S5	134	59	35	50	0-9	68	C	70	B	75	B	3	60	2
26 GA04496-S8	134	60	35	49	0-12	69	C	71	B	73	B	4	60	5
27 GA051173W-S11	126	38	40	59	14-2	65	C	46	E	44	E	1	5	1
28 GA051173W-S12	126	31	38	57	7-10	62	C	47	E	56	D	0	5	1
29 GA051173W-S13	126	33	39	58	13-3	64	C	53	D	43	E	2	5	1
30 IL02-18228	124	16	36	52	0-16	79	B	59	D	39	F	1	50	6
31 LA03012E-50	126	30	36	54	0-17	80	A	75	B	67	C	2	20	3
32 LA03130E66	123	7	32	13	0-7	81	A	62	C	49	E	4	seg10-60	2
33 LA03130E68	122	1	32	11	0-13	80	B	65	C	50	D	2	60	1
34 LA03131E-1	123	2	34	40	0-13	83	A	65	C	59	D	0	60	1
35 LA03131E-7	123	5	35	44	0-13	85	A	74	B	60	D	1	60	1
36 LA03135E-39	127	48	29	1	0-16	49	E	49	E	75	B	1	10	2
37 LA03136E71	125	23	33	26	0-15	73	B	68	C	70	C	0	10	6
38 LA06148C-P30	124	12	33	33	0-18	68	C	44	E	60	C	1	10	1
39 M05-1526	125	26	34	36	0-17	77	B	70	B	69	C	1	60	3
40 M08-8036#	125	18	33	24	0-15	74	B	68	C	57	D	0	20	6
41 MD03W61-09-7	126	39	33	32	0-13	70	B	61	C	61	C	6	80	0
42 MD03W61-10-2	126	36	32	12	0-17	65	C	62	C	65	C	6	80	0
43 MD03W665-10-5	125	28	30	2	0-14	70	C	76	B	72	B	1	80	0
44 MD03W69-15	127	46	33	27	0-15	72	B	71	B	76	B	6	70	3
45 NC05-15-99	129	56	42	60	0-17	55	D	29	F	41	E	2	seg5-50	3
46 NC05-39-314	124	9	33	28	0-15	75	B	70	C	72	B	4	60	4
47 NC05-39-337	123	4	33	18	0-19	80	A	79	B	72	B	3	70	3
48 NC05-39-349	123	3	33	20	0-15	78	B	76	B	69	C	2	70	2
49 NC05-39-354	124	10	32	16	0-17	76	B	75	B	73	B	2	70	5
50 NC05-39-370	123	6	34	39	0-16	76	B	65	C	66	C	4	70	5
51 NC05-39-380	123	8	33	23	0-14	79	B	77	B	70	B	4	70	4
52 NC06-16-26-988	127	49	33	31	2-10	75	B	70	C	53	D	1	90	0
53 NC99-13022	128	52	33	17	0-14	76	B	47	E	56	D	2	70	4
54 VA05W-251	127	40	32	14	0-13	77	B	71	B	51	D	0	90	1
55 VA08W-176	128	50	34	41	0-17	70	B	80	B	66	C	0	10	1
56 VA08W-193	127	44	33	22	0-18	72	B	62	C	68	C	0	10	3
57 VA08W-294	127	41	33	19	0-19	63	C	58	D	68	C	0	5	0
58 VA08W-613	125	19	32	15	0-20	69	C	57	D	63	C	1	50	0
59 VA09W-623	126	37	34	42	0-18	75	B	69	C	52	D	2	5	1
60 VA09W-656	127	45	35	45	0-17	70	C	63	C	54	D	1	20	1

Mean	125	34	.	.	.	72	.	60	.	59	.	.	.	2
LSD (0.05)	3	3	.	.	.	.	.	.	.	.	.	.	.	.
CV%	1.3	4.5	.	.	.	.	.	.	.	.	.	.	.	.

Means Across 2010 and 2011

	Cultivar/ Designation	FHB Incidence		FHB Severity		FHB Index		FDK		ISK		DON		Heading Date	Plant Height	Milling Quality	Baking Quality	Soft Equiv.
		RANK	RANK	RANK	RANK	RANK	RANK	RANK	RANK	days	in	Score	Score	Score				
1	ERNIE	43	1	22	1	12	1	18	5	30	3	9	6	126	32	59	61	63
2	C9835	69	8	57	8	42	8	40	8	56	8	21	8	129	31	64	59	82
3	BESS	43	1	22	1	12	1	8	1	26	1	8	3	128	36	66	55	61
4	JAMESTOWN	47	4	25	5	14	4	16	4	32	5	8	3	125	31	61	49	65
5	ARS04-1267	48	5	29	7	16	7	18	5	32	5	14	7	127	34	67	24	11
6	M08*8005#	46	3	26	6	13	3	14	2	29	2	7	1	125	34	73	72	68
7	MD03W61-09-1	52	7	22	1	15	6	15	3	30	3	8	3	127	34	62	45	56
8	VA09W-641	49	6	24	4	14	4	19	7	33	7	7	1	125	33	66	54	60
	Mean	49		28		17		18		33		10		126	33	64	52	58
	LSD (0.05)	13		7		5		5		7		4		1	2	ns	18	10
	CV%	10.9		9.8		12.5		11.7		8.8		16.1		0.4	2.6	6.6	14.2	7.4