

Table 1. Location notes, and local checks, 2004 RGON.

<b>Test/location</b>	<b>notes</b>
<b>Acid soil tolerance, Enid, OK (Brett Carver, Oklahoma State Univ.</b>	The standard clutivar used to determine acid-soil tolerance was 2163, with an assigned rating of 2 on a scale of 1 (tolerant) to 5 (highly susceptible.) Readings taken at Enid, OK (new location in 2004, pH = 4.6, 70 ppm Al, and Al saturation = 11%) on the dates indicated. The first set of readings may be confounded with winterhardiness expression.
<b>Vernalization and leaf rust, Castroville, TX (Allan Fritz, Kansas State Univ.; Jackie Rudd, Texas A&amp;M)</b>	1=fully vernalized, 2=delayed development, 3=poor vernalization, 4=no vernalization. Local checks: 1=Jagger, 2=Overly, 3=Jagalene
<b>Winter hardiness, Williston, ND (Jim Berg and Phil Bruckner, Montana St. U.)</b>	Spring emergence only. No observations on winter-hardiness.
<b>Winter hardiness, Watertown, SD (Amir Ibrahim, So. Dakota St. U.)</b>	Some uneven stands due to competition from weeds. Days to heading also obtained. Local checks: 1=Harding, 2=Expedition, 3=Jagger.
<b>Winterhardiness, Mead, NE</b>	no winterkill
<b>Hessian fly resistance and seedling leaf rust, Elburn Parker &amp; Bob Bowden, USDA-ARS, Manhattan, KS</b>	Seedling leaf rust readings: The culture was a composite of cultures collected in the wild around Kansas in the past years. 1 = R, 3 = MR, 5 = Mid range, 7 = MS, 9 = S, H = Off type plants
<b>WSBMV &amp; seedling leaf rust, Bob Hunger Oklahoma St. U., Stillwater, OK</b>	WSBMV infection mixed with WSSMV. **WSBMV rating of symptoms (field), where:1=no mosaic, no stunting. 2=slight mosaic and/or slight stunting. 3=moderate mosaic and/or moderate stunting. 4=severe mosaic and/or severe stunting.
<b>Seedling stem rust, Yue Jin, USDA-ARS, St. Paul, MN</b>	Races and isolates in the bulk: RCRS, TTTT, QFCS, QCCJ, 98ND82A, 01MN84A-1 03ND76C and 01SD80A. For TPMK, specific infection types were provided. For Bulk, low infection types were provided and high infection types (3 or higher) were given a "S" (susceptible) rating.
<b>Seedling leaf rust, Jim Kolmer, USDA-ARS, St. Paul, MN</b>	Seedling leaf rust infection types for the 2004 RGON nursery were obtained using a mixture of virulent races (MCDS, MCRK, TNRJ, MBBJ, MFBJ) that have virulence to the genes in the hard red winter wheats
<b>Seedling stripe &amp; leaf rust, Allan Fritz, Department of Agronomy, KSU, Manhattan, KS</b>	Stripe rust = bulk collection from Manhattan, KS (2003). Leaf rust virulence/avirulence patterns: MCDL=2a, 2c, 3ka, 9, 11, 16, 18, 24, 30/1, 3a, 10, 17, 26; PRTUS-35=3a, 9, 11, 16, 26/1, 2a, 2c, 3ka, 17, 24, 30, 41; PRTUS-49=11, 24, 26, 30/2a, 2c, 3a, 3ka, 9, 11, 12, 16, 17, 41.

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<b>Seedling leaf rust, Bob Bowden, USDA-ARS, Manhattan, KS</b>	Leaf rust was inoculated on 10-29-2003 using a composite culture collected at Hutchison, Ks in 2003. Read on 11/10/2003.
<b>WSMV, Joe Martin and Clayton Seaman, Kansas St. U., Hays, KS</b>	No results due to lack of curl mites.
<b>Russian wheat aphid, Scott Haley, Colorado State U., Akron, CO</b>	Plants were rated for response to Russian wheat aphid biotype B (the new one). Scores were obtained about three weeks post infestation. The rating scale is a combined rating of leaf rolling, leaf chlorosis, stunting, and plant death, with the following categories: 1-VR, 2-R, 3-MR, 4-S, 5-VS. Local checks 1, 2 & 3 = Prowers 99, Ankor, Halt.
<b>Russian wheat aphid, Cheryl Baker and Dave Porter, USDA-ARS, Stillwater, OK</b>	<p>RWA-A            Local check 1 = Halt (R)            Local check 2 = Intrada (S)            Local check 3 = Custer (S)</p> <p>Planted in cone flats, 5 seeds per cone, 3 cones per entry.            Additional check rows were planted in each flat.            Plants were infested shortly after germination when ~ 1" tall.            Clipped to ~ 4" tall two weeks after infestation.            Plants were rated ~ three weeks after infestation.            Rating Scale:            1= Highly resistant/immune, very little or no visible damage, excellent regrowth after clipping            2= Very resistant, may have slight flecking, excellent regrowth after clipping            3= Resistant, flat leaves with some minor chlorosis, good regrowth after clipping            4= Moderately resistant, flat leaves with more extensive chlorosis, may have some minor streaking, some regrowth after clipping            5= Moderate, stunted plant, flat leaves with extensive chlorosis and some streaking, little or no regrowth after clipping            6= Moderately susceptible, very stunted plant with flat leaves, very extensive chlorosis and streaking, no regrowth after clipping            7= Susceptible, leaves are rolled with white streak on midrib, plants show good regrowth after clipping</p>
<b>Greenbug, Cheryl Baker and Dave Porter, USDA-ARS, Stillwater, OK</b>	<p>Local check 1 = Amigo (S)            Local check 2 = Custer (S)            Local check 3 = Largo (R)</p> <p>Planted in cone flats, 5 seeds per cone, 3 cones per entry.            Plants were infested shortly after germination when ~ 1" tall.            Plants were rated either resistant (R) or susceptible (S) 2 weeks after infestation.</p>

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<b>Fusarium head blight, Julie Schimelfenig and Steve Baenziger, U. of Nebraska, Mead, NE</b>	Artificial inoculum and misting. Local checks, respectively = NE422T, Millennium, & Wesley.
<b>Fusarium head blight, Amir Ibrahim, So. Dakota St., Brookings, SD</b>	RGON nursery was planted into 4 ft long rows in November 2003. The misting system was started on June 4, 2004. Thirty gram of corn inoculums was spread on each row on June 4 and 9, 2004. Entire rows were inoculated initially when they reached 75% anthesis, then again one week later. The conidial suspension was at least 70,000 ml <sup>-1</sup> for 1st and 2nd inoculation. The suspension inoculation was started for early genotypes on June 11, 2004. Ratings were taken approximately 3 weeks after the initial spray inoculation. Twenty reading were taken from each row. FHB ratings were based on a 0-9 scale. Incidence (Inc%) is the number of infected ears. Severity (Sev%) is the average of the scab ratings * 10. Disease Index (Dis%) was calculated as incidence * severity/100.

Table 2. Entries in the 2004 Regional Germplasm Observation Nursery (RGON).

Entry	Line	putative market class	Cultivar or pedigree	Source	Protected trait?
1	TAM-107	HRW	PI 495594	check	
2	Karl 92	HRW	PI 564245	check	
3	Arapahoe	HRW	PI 518591	check	
4	local check 1		see comments	check	
5	local check 2		see comments	check	
6	local check 3		see comments	check	
7	KS02HW90-3	HWW	TREGO*2/JGR8W	KSU-HAYS	
8	KS02HW90-5	HWW	TREGO*2/JGR8W	KSU-HAYS	
9	KS02HW91-1	HWW	TREGO*2/JGR8W	KSU-HAYS	
10	KS02HW91-6	HWW	TREGO*2/JGR8W	KSU-HAYS	
11	KS02HW110-1	HWW	95HW431(RB/89H33)/JGR8W//TREGO	KSU-HAYS	
12	KS02HW110-4	HWW	95HW431(RB/89H33)/JGR8W//TREGO	KSU-HAYS	
13	KS02HW110-6	HWW	95HW431(RB/89H33)/JGR8W//TREGO	KSU-HAYS	
14	KS02HW118-1	HWW	95HW431(RB/89H33)/JGR8W//TREGO	KSU-HAYS	
15	KS02HW118-5	HWW	95HW431(RB/89H33)/JGR8W//TREGO	KSU-HAYS	
16	KS02HW152-2	HWW	95HW538(ARLIN/KS89H33)/2*TREGO	KSU-HAYS	
17	KS03HW156	HWW	TREGO/CO960293	KSU-HAYS	
18	KS03HW157	HWW	TREGO/CO960293	KSU-HAYS	
19	KS03HW158	HWW	TREGO/CO960293	KSU-HAYS	
20	KS03HW12	HWW	97HW29/97HW131//96HW100-5	KSU-HAYS	
21	KS03HW15	HWW	96HW91-1/TGO	KSU-HAYS	
22	KS03HW18	HWW	96HW91-1/TGO	KSU-HAYS	
23	G980984	HRW	9328706/KARL92//R17105	WestBred	
24	G990624	HRW	97V8054	WestBred	
25	G990558	HRW	FREEDOM/TOMAHAWK//JAGGER	WestBred	
26	G972791W	HWW	98 FTC F3 SEL	WestBred	
27	G000119	HRW	G2500/G13080	WestBred	
28	G000141	HRW	D8869/KARL92//G2500	WestBred	
29	G000143	HRW	D8869/KARL92//G2501	WestBred	
30	G000147	HRW	G13071/PL2571	WestBred	
31	G000198	HRW	G14449/PL2571	WestBred	
32	G000543	HRW	PL2163//G2500/G1980	WestBred	
33	G001784	HRW	SOLOMON/HALT	WestBred	
34	G000993W	HWW	TX92V2519/OROBLANCO//BETTY	WestBred	
35	G001004W	HWW	G223W/ABILENE//BETTY	WestBred	
36	G001011W	HWW	G13080/PLATTE//BETTY	WestBred	
37	G001154W	HWW	ARLIN/G2062W//JAGGER	WestBred	
38	G001172W	HWW	OROBLANCO/HALT	WestBred	
39	G001202	HRW	SOLOMON/HALT	WestBred	
40	G001424	HRW	T200/HALT	WestBred	
41	NE01419	HRW	TX93V5922/KARL92	WestBred	
42	NE01506	HRW	KS93H67/NE92608	WestBred	
43	NE01707	HRW	HBC059E/HBK0935W-24//137	WestBred	
44	G980122-3	HRW	RMNF12-71/JUPS-1-2/B17064//KARL92	WestBred	
45	OK02901C	HRW	(TXGH12588-26*4/FS4)/2174	OSU	yes
46	OK02908C	HRW	(TXGH12588-120*4/FS4)/2174	OSU	yes
47	OK02909C	HRW	(TXGH12588-120*4/FS4)/2174	OSU	yes

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48	OK02911C	HRW	(TXGH12588-105*4/FS4)/Custer	OSU	yes
49	OK02922C	HRW	(TXGH12588-120*4/FS4)/Jagger	OSU	yes
50	TAM-107	HRW	PI 495594	check	
51	Karl 92	HRW	PI 564245	check	
52	Arapahoe	HRW	PI 518591	check	
53	local check 1		see comments	check	
54	local check 2		see comments	check	
55	local check 3		see comments	check	
56	OK94P549-6716-R4	HRW	HBV756A/Siouxland//2180	OSU	
57	OK94P549-6719-R3	HRW	HBV756A/Siouxland//2180	OSU	
58	OK01526	HRW	P8-5/Kavkaz//2*2180	OSU	
59	OK01806	HRW	Century*3/TA2460//Cimarron	OSU	
60	OK01817	HRW	OK94P549/Custer	OSU	
61	OK01415	HRW	2174/Tonkawa//Jagger	OSU	
62	OK01418	HRW	Jagger*2/Custer	OSU	
63	OK01417	HRW	Jagger*2/Custer	OSU	
64	OK01410	HRW	Jagger*2/Tonkawa	OSU	
65	OK01409	HRW	Jagger*2/Tonkawa	OSU	
66	OK01420	HRW	KS93U206/Jagger	OSU	
67	OK01123	HRW	NE91651/Custer//2174	OSU	
68	OK01316	HRW	OK92P577/2174	OSU	
69	OK01307	HRW	OK94406/Jagger	OSU	
70	OK01202	HRW	Tonkawa*2/2137	OSU	
71	KS950826-118-3-3	HRW	HKK/KSU94U213//K92	Kansas State - Manhattan	
72	KS950911-112-2-3	HRW	KSU94U284/K92//JGR	Kansas State - Manhattan	
73	KS00F5--20-3-2	HRW	Bulk Selection	Kansas State - Manhattan	
74	KS00F5--20-3-3	HRW	Bulk Selection	Kansas State - Manhattan	
75	KS00F5--36-10-1	HRW	Bulk Selection	Kansas State - Manhattan	
76	KS00F5--42-4-1	HRW	Bulk Selection	Kansas State - Manhattan	
77	KS00F5--43-1-1	HRW	Bulk Selection	Kansas State - Manhattan	
78	KS00F5--43-1-2	HRW	Bulk Selection	Kansas State - Manhattan	
79	KS950301-DD-6-1	HRW	GA 83125-C5221/X86035*-V-7//PECOS	Kansas State - Manhattan	
80	KS950493-A-1-2	HRW	KS93U7/KS84063-9-39-3-27//X86036*-AX-11	Kansas State - Manhattan	
81	KS940786-6-9-1	HRW	U1275-1-4-2-2/KS85W663-7-4-2//JGR	Kansas State - Manhattan	
82	KS940786-6-11-1	HRW	U1275-1-4-2-2/KS85W663-7-4-2//JGR	Kansas State - Manhattan	
83	KS940786-6-11-2	HRW	U1275-1-4-2-2/KS85W663-7-4-2//JGR	Kansas State - Manhattan	
84	KS940793-2-2-2	HRW	KS86231B-10-1/KS85W663-7-4-2/4/2571	Kansas State - Manhattan	
85	KS970085-9-15	HRW	HBK0935-125-5-2/VBF0589-1//X960103	Kansas State - Manhattan	
86	KS970085-9-19	HRW	HBK0935-125-5-2/VBF0589-1//X960103	Kansas State - Manhattan	
87	KS970087-2-7	HRW	HBK0935-125-5-2/N575 (LYFENKO)//KS875811	Kansas State - Manhattan	
88	KS970104-1-6	HRW	HBK0630-4/1174-27-9//KS87024F-5-1	Kansas State - Manhattan	
89	KS970104-3-11	HRW	HBK0630-4/1174-27-9//KS87024F-5-1	Kansas State - Manhattan	
90	KS970199-3-3	HRW	KS94U424/KS84063-9-39-3-8W//HBK0948-2-3	Kansas State - Manhattan	
91	KS970210-4-2	HRW	N27 (LYFENKO)/KS94U337//KS891771-3-1	Kansas State - Manhattan	
92	KS970226-5-4	HRW	N674 (LYFENKO)/JAGGER//KS940589-1	Kansas State - Manhattan	
93	KS970226-5-5	HRW	N674 (LYFENKO)/JAGGER//KS940589-1	Kansas State - Manhattan	
94	KS970226-5-18	HRW	N674 (LYFENKO)/JAGGER//KS940589-1	Kansas State - Manhattan	

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95	KS970246-7-1	HRW	N48 (ABAKUMENKO)/KS94U338//KS875811-2-1	Kansas State - Manhattan	
96	KS970262-17-5	HRW	JAGGER/ARLIN//KS93U134	Kansas State - Manhattan	
97	KS970274-14-2	HRW	N10362 (RABINOVICH)/KS93U134//JAGGER	Kansas State - Manhattan	
98	KS970274-14-4	HRW	N10362 (RABINOVICH)/KS93U134//JAGGER	Kansas State - Manhattan	
99	KS970274-14-8	HRW	N10362 (RABINOVICH)/KS93U134//JAGGER	Kansas State - Manhattan	
100	TAM-107	HRW	PI 495594	check	
101	Karl 92	HRW	PI 564245	check	
102	Arapahoe	HRW	PI 518591	check	
103	local check 1		see comments	check	
104	local check 2		see comments	check	
105	local check 3		see comments	check	
106	KS970274-14-19	HRW	N10362 (RABINOVICH)/KS93U134//JAGGER	Kansas State - Manhattan	
107	U4024R-4-1-7-1R	HRW	Karl 92*4/ TA 1836 (Lr from Ae. speltoides)	ARS-Manhattan	
108	U4024R-4-1-7-2R	HRW	Karl 92*4/ TA 1836 (Lr from Ae. speltoides)	ARS-Manhattan	
109	U4024R-4-12-6-2R	HRW	Karl 92*4/ TA 1836 (Lr from Ae. speltoides)	ARS-Manhattan	
110	U4024-1-5-R	HRW	Karl 92*4/ TA 1836 (Lr from Ae. speltoides)	ARS-Manhattan	
111	U4484(1)-3-bulk	HRW	Jagger*3/92R149 (6VS.6AL--Pm, Yr, WCM)	ARS-Manhattan	
112	U3960-3R-3-3-bulk	HRW	KS94U216*2/92R149 (6VS.6AL + Lr21)	ARS-Manhattan	
113	U3960-3R-3-4-bulk	HRW	KS94U216*2/92R149 (6VS.6AL + Lr21)	ARS-Manhattan	
114	U3960-3R-3-7-bulk	HRW	KS94U216*2/92R149 (6VS.6AL + Lr21)	ARS-Manhattan	
115	U4551B-R10-5-2	HRW	Jagger*2//WL711*6/T. monococcum (Lr)	ARS-Manhattan	
116	U4551B-R10-5-11	HRW	Jagger*2//WL711*6/T. monococcum (Lr)	ARS-Manhattan	
117	U4551B-R11-2R-1	HWW	Jagger*2//WL711*6/T. monococcum (Lr)	ARS-Manhattan	
118	U3582-2-2-1-13	HRW	KS94U415/KS94U286	ARS-Manhattan	
119	U3445-23--1-1-1-9	HRW	Wrangler/W3//Jagger*2 (Lr from T. monococcum)	ARS-Manhattan	
120	U2665-8-13-1-1	HRW	Karl 92*3/ TA 28 (Lr from T. armeniacum)	ARS-Manhattan	
121	KS03A1001	HRW	Karl92*2/T. dicoccum//Jagger*2 (HF from T. dicoccum)	ARS-Manhattan	
122	KS03A1002	HRW	Karl92*2/T. dicoccum//Jagger*2 (HF from T. dicoccum)	ARS-Manhattan	
123	SD02W005	HWW	KS95HW62-6/SD97W603	SDSU	
124	SD02W011	HWW	KS95HW62-6/SD97W603	SDSU	
125	SD02W013	HWW	N95L1229/SD97W604	SDSU	
126	SD02W014	HWW	Crimson/SD97W603	SDSU	
127	SD02W041	HWW	SD94139W/Nekota	SDSU	
128	SD02W053	HWW	KS84063-9-39-3-4W/NE93405	SDSU	
129	SD02W057	HWW	KS84063-9-39-3-4W/SD94149	SDSU	
130	SD02W063	HWW	KS85W663-11-6-MB/KS84063-9-39-3-1W//Crimson	SDSU	
131	SD02W067	HWW	KS94HW115/KS94HW80//SD93267	SDSU	
132	SD02W121	HWW	OR908482/SD93267	SDSU	
133	SD02004	HRW	Crimson/SD97W604	SDSU	
134	SD02016	HRW	KS94H147/SD97W606	SDSU	
135	SD02017	HRW	KS94H147/SD97W606	SDSU	
136	SD02018	HRW	SD93267/W95-301	SDSU	
137	SD02024	HRW	N95L1229/SD97W604	SDSU	
138	SD02039	HRW	Crimson/SD97W603	SDSU	
139	SD02059	HRW	Crimson/SD97W606	SDSU	
140	SD02067	HRW	Crimson/SD97W606	SDSU	
141	SD02068	HRW	Crimson/SD97W606	SDSU	

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142	SD02091	HRW	Nekota/W95-301	SDSU	
143	SD02149	HRW	SD92107/NE93496	SDSU	
144	SD02188	HRW	SD92107/SD93195	SDSU	
145	SD02251	HRW	SD93380/SD96316	SDSU	
146	SD02279	HRW	SD93528/Culver	SDSU	
147	SD02386	HRW	SD94241/SD96132	SDSU	
148	SD02423	HRW	SD96132/NE93613	SDSU	
149	SD02446	HRW	SD96240/Culver	SDSU	
150	TAM-107	HRW	PI 495594	check	
151	Karl 92	HRW	PI 564245	check	
152	Arapahoe	HRW	PI 518591	check	
153	local check 1		see comments	check	
154	local check 2		see comments	check	
155	local check 3		see comments	check	
156	SD02480	HRW	Tandem/NE93496	SDSU	
157	SD02640	HRW	SD92107/SD93338	SDSU	
158	SD02835	HRW	SD3400/SD92107	SDSU	
159	NE02484	HRW	T861/NE93452//Jagger	UNL	
160	NE02495	HRW	NE94654 (ARAPAHOE 2*/ABILENE)/AP7601	UNL	
161	NE02496	HRW	NE94654 (ARAPAHOE 2*/ABILENE)/AP7601	UNL	
162	NE02513	HRW	KS92H363-2/NE95417 (ABILENE/KARL)	UNL	
163	NE02528	HRW	KS92H363-2/NE95417 (ABILENE/KARL)	UNL	
164	NE02533	HRW	NE94458 (=GK-SAGVARI/COLT//NE86582)	UNL	
165	NE02545	HRW	NE95632 (=TX84V1317/NE86488//NE87409)	UNL	
166	NE02549	HRW	KS940935-125-5-2	UNL	
167	NE02558	HRW	JAGGER	UNL	
168	NE02584	HRW	KS92H363-2	UNL	
169	NE02588	HRW	NE94458 (=GK-SAGVARI/COLT//NE86582)	UNL	
170	NE02592	HRW	W91-040	UNL	
171	NE02647	HRW	N95L161/K94H115	UNL	
172	NE02672	HRW	NE92608 (=NE82413/COLT)/Jagger	UNL	
173	NI02425	HRW	NE94654 (ARAPAHOE 2*/ABILENE)/AP7601	UNL	
174	NH01046	HRW	WINDSTAR/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
175	NE02465	HRW	NE95685 (=MO11785/NE87619//NE88492)/Karl92	UNL	
176	NE02501	HRW	NE92652 (=NE82413/NE82533)/KARL92//NE95544	UNL	
177	NE02512	HRW	KS92H363-2/NE95417 (ABILENE/KARL)	UNL	
178	NE02532	HRW	NE93552 (=KARL//NE82419/CODY)NE95417 (Abilene/Karl)	UNL	
179	NH01036	HRW	NE95L164/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
180	NH01037	HRW	NE95L164/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
181	NH01048	HRW	2137/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
182	NH01049	HRW	2137/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
183	NH01042	HRW	NE95L164/3/NE94481//TXGH125888-120*4/FS2	UNL	yes
184	NI03418	HRW	W91-248/NE95544//Thunderbird	UNL	
185	NI03419	HRW	854511#4/W81-133-3//N95L159	UNL	
186	NI03426	HRW	WI88-052/WI81-162-610W//N95L158	UNL	
187	NI03427	HRW	WI88-052/WI81-162-610W//N94L189	UNL	
188	NI03434	HRW	N94V220/KS84063-9-39-3-8W	UNL	

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189	CO00016	HRW	CO940606/TAM107R-2	CSU	
190	CO00345	HRW	T812/Yumar	CSU	
191	CO00347	HRW	T812/Yumar	CSU	
192	CO00554	HRW	TAM 302/Akron//Halt	CSU	
193	CO00698	HRW	CO931083/Oro Blanco//Halt	CSU	
194	CO00739	HRW	CO931111/CO910239//Halt	CSU	
195	CO00796	HRW	Transvaal/Arlin/2/CO910424//Halt	CSU	
196	CO01212	HRW	Glenson/Akron//Yumar	CSU	
197	CO01242	HRW	CO931012/Arlin//Halt	CSU	
198	CO01245	HRW	CO931052/Oro Blanco//Halt	CSU	
199	CO01252	HRW	CO920696/Akron//Yumar	CSU	
200	TAM-107	HRW	PI 495594	check	
201	Karl 92	HRW	PI 564245	check	
202	Arapahoe	HRW	PI 518591	check	
203	local check 1		see comments	check	
204	local check 2		see comments	check	
205	local check 3		see comments	check	
206	CO01287	HRW	Glenson/Akron//Yumar	CSU	
207	CO01385	HRW	Yumar/Arlin	CSU	
208	CO01433	HRW	96HW91-1/96HW114	CSU	
209	CO01434	HRW	96HW91-1/96HW114	CSU	
210	CO01473	HRW	NE93552/TX93V5922//NE94479	CSU	
211	CO99314-A1	HRW	TX91V4931/Halt	CSU	
212	CO980607-A1	HRW	Yuma/T-57//TAM 200/3/4*Yuma/4/NEWS08	CSU	
213	CO980607-A3	HRW	Yuma/T-57//TAM 200/3/4*Yuma/4/NEWS08	CSU	
214	CO980630-A1	HRW	Yuma/T-57//TAM 200/3/4*Yuma/4/NEWS08	CSU	
215	CO01W014	HWW	CO931012/Arlin//Halt	CSU	
216	CO01W073	HWW	CO940584/Yuma-R18//CO940607	CSU	
217	CO01W097	HWW	Oro Blanco/Yumar	CSU	
218	CO01W165	HWW	96HW100-5/96HW114	CSU	
219	CO01W171	HWW	96HW100-5/96HW114	CSU	
220	CO01W172	HWW	96HW100-5/96HW114	CSU	
221	CO01W173	HWW	96HW100-5/96HW114	CSU	
222	CO01W189	HWW	96HW91-1/96HW114	CSU	
223	CO01W190	HWW	96HW91-1/96HW114	CSU	
224	CO01W191	HWW	96HW91-1/96HW114	CSU	
225	NWX02Y4684	waxy	96MD7110-71/3/BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)	ARS-LNK	
226	NWX02Y4668	waxy	96MD7110-71/3/BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)	ARS-LNK	
227	NWX02Y4648	waxy	96MD7110-71/3/BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)	ARS-LNK	
228	NWX02Y4637	waxy	BaiHuoMai/Ike (97GC1015wx)//96MD7413-6	ARS-LNK	
229	NWX02Y4634	waxy	BaiHuoMai/Ike (97GC1015wx)//96MD7413-6	ARS-LNK	
230	NWX02Y4633	waxy	BaiHuoMai/Ike (97GC1015wx)//96MD7413-6	ARS-LNK	
231	NWX02Y4613	waxy	BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)/3/96MD7413-10	ARS-LNK	
232	NWX02Y4596	waxy	BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)/3/96MD7492-68	ARS-LNK	
233	NWX02Y4553	waxy	BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)/3/96MD7413-6	ARS-LNK	
234	NWX02Y4549	waxy	BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)/3/96MD7413-6	ARS-LNK	
235	NWX02Y4530	waxy	BaiHuo/Kanto107,F2-1//Ike (97GC1014wx)/3/96MD7413-6	ARS-LNK	



Table 2. Entries in the 2004 Regional Germplasm Observation Nursery (RGON).

Entry	Line	putative market class	Cultivar or pedigree	Source	Protected trait?
236	NWX02Y4505	waxy	BaiHuo/Kanto107,F2-1//lke (97GC1014wx)/3/96MD7413-10	ARS-LNK	
237	NWX02Y4481	waxy	BaiHuo/Kanto107,F2-1//lke (97GC1014wx)/3/psb7794	ARS-LNK	
238	NWX02Y4442	waxy	BaiHuo/Kanto107,F2-1//lke (97GC1014wx)/3/96MD7413-6	ARS-LNK	
239	NWX02Y4421	waxy	BaiHuo/Kanto107,F2-1//lke (97GC1014wx)/3/96MD7413-6	ARS-LNK	
240	NWX02Y4385	waxy	wx1044-2//lke (97GC1020wx)//lke	ARS-LNK	
241	N03Y2011	HWW	MO8/REDLAND//KS91H184/3*RIO BLANCO	ARS-LNK	
242	N03Y2014	HWW	MO8/REDLAND//KS91H184/3*RIO BLANCO	ARS-LNK	
243	N03Y2015	HWW	MO8/REDLAND//KS91H184/3*RIO BLANCO	ARS-LNK	
244	N03Y2016	HWW	MO8/REDLAND//KS91H184/3*RIO BLANCO	ARS-LNK	
245	N03Y2022	HWW	MO8/NE94406 (=NE86582//84MC29/NE82583)//KS91H184/3*RIO BLANCO	ARS-LNK	
246	TX01V6016	HRW	2163/U1254-4-7-2-V14	Texas A&M	
247	TX01V5135	HRW	TAM-200/JAGGER	Texas A&M	
248	TX00A0391	HRW	(X97V427) TX85V1830/TX84V1307//TX86V1540/TX81V6607-2	Texas A&M	
249	TX01A5937	HRW	TX91V3308/JAGGER	Texas A&M	
250	TAM-107	HRW	PI 495594	check	
251	Karl 92	HRW	PI 564245	check	
252	Arapahoe	HRW	PI 518591	check	
253	local check 1		see comments	check	
254	local check 2		see comments	check	
255	local check 3		see comments	check	
256	TX01V5314	HRW	TX89V4132/704 L I-2221	Texas A&M	
257	TX01V5425	HRW	TX93V5722/JAGGER	Texas A&M	
258	TX01V5136	HRW	TAM-200/JAGGER	Texas A&M	
259	TX01V5719	HRW	U1254-4-7-3/OGALLALA	Texas A&M	
260	TX01V6008	HRW	TX90V8410/KS84063-9-39-3	Texas A&M	
261	TX01U2527	HRW	TX94V2907/KARL	Texas A&M	
262	TX01U2598	HRW	TAM 201/COKER 9134//TAM 201	Texas A&M	
263	TX01U2601	HRW	TAM 201/COKER 9134//TAM 201	Texas A&M	
264	TX01U2723	HRW	COKER 9835/2*TAM-201	Texas A&M	
265	TX01U2733	HRW	COKER 9835/2*TAM-201	Texas A&M	
266	TX01U2685	HRW	VPOP11	Texas A&M	
267	TX01U2695	HRW	VPOP21	Texas A&M	
268	TX01U2699	HRW	VPOP36	Texas A&M	
269	TX95V4339	HRW	TX88V5435/YANTAR	Texas A&M	
270	TX00D2234	HRW		Texas A&M	
271	TX01D3215	HRW		Texas A&M	
272	TX01D3218	HRW		Texas A&M	
273	TX01D3472	HRW		Texas A&M	
274	TX01V5134	HRW	TAM-200/JAGGER	Texas A&M	
275	TX01V6334	HRW	U1254-15-2-5-V49/KARL	Texas A&M	
276	TX00D1622	HRW	P2163/Clark//P2551/3/TX89D6435 (=WX90D172-1-27-18)	Texas A&M	
277	TX02D5868	HRW	TX91D7013/Ogallala (=WX95D009-14-13)	Texas A&M	
278	TX02D6112	HRW	TMP64/3/KS8010-71/TA2470//TAM200 (=KS91WGRC15-D18-34-2)	Texas A&M	
279	TX02U2502	HRW	(TX88V4505/HBI0531-A2)/OGALLALA	Texas A&M	
280	TX02U2508	HRW	(TX88V4505/HBI0531-A2)/OGALLALA	Texas A&M	
281	TX02U2602	HRW	HICKOK/3/WALDRON/TAM 200//CA8055	Texas A&M	
282	TAM-107	HRW	PI 495594		

Table 2. Entries in the 2004 Regional Germplasm Observation Nursery (RGON).

Entry	Line	putative market class	Cultivar or pedigree	Source	Protected trait?
283	Karl 92	HRW	PI 564245		
284	Arapahoe	HRW	PI 518591		
285	local check 1		see comments		
286	local check 2		see comments		
287	local check 3		see comments		
288	G001404	HRW	G13027/Halt	WestBred	
289	G00984W	HWW	TX92V2519/OroBlanco//Betty	WestBred	
290	NW03Y2458	HWW	KS91H184/3*RBL//N87V106	ARS-LNK	
291	NW03Y2552	HWW	KS91H184/3*RBL//N87V106	ARS-LNK	
292	NW98S104	HWW	KS91H184/3*RBL//N87V106	ARS-LNK	

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival Days (from 1/1)		Vernalization, Castroville, TX 1-4 (see notes)	Acid soil tolerance, Enid, Oklahoma	
		(0-9), Watertown, SD	to heading; Watertown, SD		Mar. 2, 2004	May 28, 2004
1	TAM-107	1	161		4	5
2	Karl 92	1	161		4	4
3	Arapahoe	3	163	2	3	3
4	local check 1	3			4	2
5	local check 2	4			3	4
6	local check 3	1			2	1
7	KS02HW90-3	3	159		2	2
8	KS02HW90-5	1	160		3	3
9	KS02HW91-1	2	158		2	1
10	KS02HW91-6	2	163		3	2
11	KS02HW110-1	7	162		4	4
12	KS02HW110-4	5	163		3	3
13	KS02HW110-6	3	165		4	3
14	KS02HW118-1	2	163		4	3
15	KS02HW118-5	6	162		3	2
16	KS02HW152-2	3	163		3	2
17	KS03HW156	3	159	2	4	4
18	KS03HW157	3	162	2	4	5
19	KS03HW158	7	156		4	4
20	KS03HW12	2	161	2	4	1
21	KS03HW15	8	158		4	5
22	KS03HW18	7	156		4	4
23	G980984	1	161	2	4	4
24	G990624	1	163	2	3	3
25	G990558	0			2	2
26	G972791W	5	156		5	4
27	G000119	9	160	2	3	2
28	G000141	8	162	2	4	4
29	G000143	4	157	2	4	3
30	G000147	1	160	2	3	1
31	G000198	2	160		3	2
32	G000543	3	160	2	4	2
33	G001784	2	160	2	4	3
34	G000993W	1	162		3	3
35	G001004W	6	159	2	3	3
36	G001011W	5	162	2	3	3
37	G001154W	2	161		3	4
38	G001172W	2	161		4	2
39	G001202	2	162	2	4	3
40	G001424	0		2	3	3
41	NE01419	3	162	2	4	4
42	NE01506	3	163	2	3	4
43	NE01707	8	160	2	4	2
44	G980122-3	5	161		4	4
45	OK02901C	7	157	2+	3	3
46	OK02908C	5	158	2	4	4
47	OK02909C	3	162	2	4	3
48	OK02911C	3	162	2	4	3
49	OK02922C	6	159		2	2
50	TAM-107	5	159	2	5	5
51	Karl 92	7	156	2	4	3
52	Arapahoe	7	162	3	2	3
53	local check 1	8	163		4	2
54	local check 2	8	159		3	4
55	local check 3	0			3	1
56	OK94P549-6716-R4	0		3	3	1

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival	Days (from 1/1)	Vernalization,	Acid soil tolerance, Enid,	
		(0-9), Watertown, SD	to heading; Watertown, SD		Castroville, TX 1-4 (see notes)	Oklahoma Mar. 2, 2004
57	OK94P549-6719-R3	1	162		3	1
58	OK01526	1	163	2+	4	3
59	OK01806	4	161	2	2	2
60	OK01817	5	159	2+	4	3
61	OK01415	2	158		2	2
62	OK01418	1	158	3	3	3
63	OK01417	2	159		3	3
64	OK01410	1	164		3	2
65	OK01409	2	160	3	3	4
66	OK01420	2	159	3	2	3
67	OK01123	2	162	2	3	3
68	OK01316	0		2	4	5
69	OK01307	6	161		3	3
70	OK01202	1	161		4	3
71	KS950826-\18-3-3	5	156	2	2	2
72	KS950911-\12-2-3	1	161	2	3	3
73	KS00F5--20-3-2	5	157		3	2
74	KS00F5--20-3-3	3	159		3	2
75	KS00F5--36-10-1	8	155	2+	3	4
76	KS00F5--42-4-1	2	159	2	3	2
77	KS00F5--43-1-1	3	159		2	3
78	KS00F5--43-1-2	1	161		1	2
79	KS950301-DD-6-1	4	162	3	3	4
80	KS950493-A-1-2	4	160		3	3
81	KS940786-6-9-1	3	160		2	4
82	KS940786-6-11-1	4	163		3	4
83	KS940786-6-11-2	1	165		2	4
84	KS940793-2-2-2	2	161	3	1	2
85	KS970085-9-15	1	164		2	3
86	KS970085-9-19	3	162		2	1
87	KS970087-2-7	1	163	3	3	5
88	KS970104-1-6	4	160		4	2
89	KS970104-3-11	1	163		4	4
90	KS970199-3-3	0			2	2
91	KS970210-4-2	3	161		3	4
92	KS970226-5-4	4	162		2	2
93	KS970226-5-5	3	164		2	3
94	KS970226-5-18	3	162		3	4
95	KS970246-7-1	1	162	2	4	2
96	KS970262-17-5	4	161		3	2
97	KS970274-14-2	1	163		2	2
98	KS970274-14-4	1	163		2	2
99	KS970274-14-8	1	160		1	1
100	TAM-107	1	158		4	5
101	Karl 92	6	157		4	3
102	Arapahoe	8	162	3	3	3
103	local check 1	3	163		2	1
104	local check 2	6	158		2	5
105	local check 3	0			5	1
106	KS970274-14-19	3	159		2	3
107	U4024R-4-1-7-1R	4	160	2	5	4
108	U4024R-4-1-7-2R	4	157	2+	4	3
109	U4024R-4-12-6-2R	3	161	2	3	3
110	U4024-1-5-R	4	159	2+	4	3
111	U4484(1)-3-bulk	3	160		3	4
112	U3960-3R-3-3-bulk	1	163	seg	4	4

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival Days (from 1/1)		Vernalization, Castroville, TX 1-4 (see notes)	Acid soil tolerance, Enid, Oklahoma	
		(0-9), Watertown, SD	to heading; Watertown, SD		Mar. 2, 2004	May 28, 2004
113	U3960-3R-3-4-bulk	0		3	5	4
114	U3960-3R-3-7-bulk	1	157	3	5	5
115	U4551B-R10-5-2	1	164		4	4
116	U4551B-R10-5-11	4	156		5	4
117	U4551B-R11-2R-1	2	159		3	1
118	U3582-2-2-1-13	4	158	2	4	3
119	U3445-23--1-1-1-9	0		2	5	3
120	U2665-8-13-1-1	4	159		3	2
121	KS03A1001	1	162		4	4
122	KS03A1002	3	159		3	3
123	SD02W005	6	163	3	5	3
124	SD02W011	8	160	3	4	3
125	SD02W013	8	160	2,3	5	3
126	SD02W014	8	159	3	4	4
127	SD02W041	2	159		4	5
128	SD02W053	3	163	3	4	4
129	SD02W057	3	166	3	3	3
130	SD02W063	4	165	2	3	3
131	SD02W067	4	161		5	3
132	SD02W121	2	159	2	4	5
133	SD02004	6	162	3	4	4
134	SD02016	9	159	3	3	3
135	SD02017	3	161	3	4	3
136	SD02018	6	162	3	5	5
137	SD02024	4	161	3	5	4
138	SD02039	4	161	2+	5	2
139	SD02059	5	163	3	4	3
140	SD02067	7	162	3	4	4
141	SD02068	6	161	3	4	4
142	SD02091	8	158	2+	4	5
143	SD02149	7	163	2	4	5
144	SD02188	8	164	3	5	5
145	SD02251	5	165	3	5	2
146	SD02279	4		2	5	3
147	SD02386	3	165	2	5	3
148	SD02423	5		2	4	5
149	SD02446	8	163	2	4	3
150	TAM-107	5	160	2	3	4
151	Karl 92	4	156	2	3	4
152	Arapahoe	7	162	3	3	3
153	local check 1	6	165		3	2
154	local check 2	6	157		3	4
155	local check 3	0			4	2
156	SD02480	8	160	3	5	4
157	SD02640	6	164	3	4	4
158	SD02835	8	162	3	5	4
159	NE02484	4	161		4	5
160	NE02495	4	163		2	3
161	NE02496	0			4	4
162	NE02513	1	163	2+	5	3
163	NE02528	8	160	2+	3	2
164	NE02533	4			4	3
165	NE02545	8	158	3	4	5
166	NE02549	5	164	2,3	4	4
167	NE02558	4	163		3	1
168	NE02584	4	162	2	2	4

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival	Days (from 1/1)	Vernalization,	Acid soil tolerance, Enid,	
		(0-9), Watertown, SD	to heading; Watertown, SD	Castroville, TX 1-4 (see notes)	Mar. 2, 2004	May 28, 2004
169	NE02588	3	160	2	1	3
170	NE02592	5	161	2	2	4
171	NE02647	6	161		4	4
172	NE02672	3	163		4	4
173	NI02425	4	164		4	3
174	NH01046	2		3	5	3
175	NE02465	6	163		2	2
176	NE02501	7	161		3	3
177	NE02512	6	162		5	5
178	NE02532	3		2	3	3
179	NH01036	6	163		4	2
180	NH01037	4	164	3	4	4
181	NH01048	8	160	3	4	4
182	NH01049	5	161	2	4	5
183	NH01042	1	160	2	3	3
184	NI03418	1	161	2	5	4
185	NI03419	4	159	3	3	5
186	NI03426	2	160	2	3	3
187	NI03427	6	159	2	4	4
188	NI03434	6	157	2	5	5
189	CO00016	5	159	3	4	5
190	CO00345	1	161	3	4	3
191	CO00347	3	162	3	4	3
192	CO00554	1	164	3	4	3
193	CO00698	2	160	2	4	5
194	CO00739	1	161	2	4	4
195	CO00796	9	159	3	3	3
196	CO01212	8	160	2	3	2
197	CO01242	5	157	2	4	5
198	CO01245	3	157	3	4	3
199	CO01252	0		3	2	4
200	TAM-107	0		2	5	5
201	Karl 92	7	156		4	4
202	Arapahoe	7	164	3	4	5
203	local check 1	5			3	2
204	local check 2	6	160		3	4
205	local check 3	4	159		3	1
206	CO01287	8	161	3	4	4
207	CO01385	1	163		4	4
208	CO01433	0		2	5	3
209	CO01434	5	162		4	4
210	CO01473	5	163	2	3	3
211	CO99314-A1	3	161		4	2
212	CO980607-A1	1	163	2	4	3
213	CO980607-A3	5	161		5	4
214	CO980630-A1	3			3	4
215	CO01W014	5	165	3	4	4
216	CO01W073	0		3	3	5
217	CO01W097	3	160		2	1
218	CO01W165	3	159	3	4	3
219	CO01W171	7	160	3	4	3
220	CO01W172	6	161	3	4	3
221	CO01W173	5	161	2	4	5
222	CO01W189	3	162	2+	4	4
223	CO01W190	6	160	3	4	3
224	CO01W191	2		3	4	4

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival	Days (from 1/1)	Vernalization,	Acid soil tolerance, Enid,	
		(0-9), Watertown, SD	to heading; Watertown, SD	Castroville, TX 1-4 (see notes)	Mar. 2, 2004	May 28, 2004
225	NWX02Y4684	1	164		4	4
226	NWX02Y4668	0		3	3	5
227	NWX02Y4648	2	161		4	2
228	NWX02Y4637	2	160		4	4
229	NWX02Y4634	1	164		3	3
230	NWX02Y4633	1	165		3	2
231	NWX02Y4613	4	158	3	4	5
232	NWX02Y4596	0			4	4
233	NWX02Y4553	2	159		5	5
234	NWX02Y4549	0		2	4	4
235	NWX02Y4530	5	158	2	2	3
236	NWX02Y4505	3	161		3	3
237	NWX02Y4481	0		2	3	4
238	NWX02Y4442	1	165		5	5
239	NWX02Y4421	3	161		4	4
240	NWX02Y4385	0			4	4
241	N03Y2011	3	162	2	5	5
242	N03Y2014	7	163		4	4
243	N03Y2015	5	163		4	4
244	N03Y2016	4	163		5	4
245	N03Y2022	0		2	4	5
246	TX01V6016	5	161	3	3	1
247	TX01V5135	3	161		3	3
248	TX00A0391	0			5	4
249	TX01A5937	1	164		4	2
250	TAM-107	5	158	2	4	5
251	Karl 92	8	157	2	4	4
252	Arapahoe	9	162	3	3	4
253	local check 1	5			4	3
254	local check 2	7	159		5	5
255	local check 3	1	161		3	1
256	TX01V5314	5	160		4	5
257	TX01V5425	0			5	2
258	TX01V5136	4	160	2	2	3
259	TX01V5719	3	162		3	4
260	TX01V6008	6	159	2	4	4
261	TX01U2527	6	159		3	5
262	TX01U2598	7	157		2	3
263	TX01U2601	1	161		3	1
264	TX01U2723	3	159		2	1
265	TX01U2733	3	162		4	2
266	TX01U2685	1			4	4
267	TX01U2695	3	160		4	5
268	TX01U2699	6	161		3	3
269	TX95V4339	1	161		2	4
270	TX00D2234	5	157		3	5
271	TX01D3215	1	161		1	4
272	TX01D3218	5	160		4	3
273	TX01D3472	1	168		5	1
274	TX01V5134	1	161		2	3
275	TX01V6334	0			4	5
276	TX00D1622	4	158		3	3
277	TX02D5868	0			2	2
278	TX02D6112	6	158		4	3
279	TX02U2502	0			3	2
280	TX02U2508	0			4	3

Table 3. Agronomic characteristics of entries in the 2004 RGON. See notes for local check identification.

Entry	Line or Selection	Winter survival	Days (from 1/1)	Vernalization, Castroville, TX 1-4 (see notes)	Acid soil tolerance, Enid, Oklahoma	
		(0-9), Watertown, SD	to heading; Watertown, SD		Mar. 2, 2004	May 28, 2004
281	TX02U2602	3	163		4	3
282	TAM-107	3	161		4	4
283	Karl 92	7	158		3	4
284	Arapahoe	8	162	3	4	4
285	local check 1	9	164		3	2
286	local check 2	9	157		3	4
287	local check 3	0			4	1
288	G001404	4	160		3	5
289	G00984W	0			4	2
290	NW03Y2458	5	163	3	5	4
291	NW03Y2552	1	161	3	5	5
292	NW98S104	2	160	3	5	4



Table 4. Reactions of entries in the 2004 RGON to leaf rust. See notes for identification of local checks.

Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS USDA (see notes)
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
1	TAM-107	60S	100S	3;	3+	S	3+	4	3+	9
2	Karl 92	80S	100S	3;	3+	S	1	3+	3+	9
3	Arapahoe	40R	80MS/S	2c	;	R	;1	;	;	3
4	local check 1	90S	100S	2	3+	S	3+	3+	3+	
5	local check 2	80S	100S	3;	3	S	0	4	4	
6	local check 3	5S	60MS/S	2c,3	3+	S	;1	4	1	
7	KS02HW90-3	5S	100S	3	;	R	;	4	;1	7
8	KS02HW90-5	10S	100S	3	;	R	;	4	;1	6
9	KS02HW91-1	10S	100S	3	;	R	;	4	;	6
10	KS02HW91-6	5S	100S	3,1c	;	R	;	3	;	5
11	KS02HW110-1	5MS	60MS/S	3,1c	;	R	;	4	;1C	7
12	KS02HW110-4	tMR	40MS/S	2c;	;	R	1	4	;1C	7
13	KS02HW110-6	tMR	60MS/S	2c,2	X;3-	MR	;1	3	1	6
14	KS02HW118-1	tMS	100S	1c,2	;	R	;1	3	;	6
15	KS02HW118-5	5S	100S	1c,2	;	R	;1,3	4	1	7
16	KS02HW152-2	60S/5MR	100S	1c	3+	S	3	;	;C,4	7H
17	KS03HW156	50R	100S	1c	;	R	;	;	;	2
18	KS03HW157	50R	100S	3,2c	;	R	;	;	;	2
19	KS03HW158	tMR2	100S	-	;	R	;	;	0;	3
20	KS03HW12	tMS	100S	3	X;3-	MR	;1	4	3	3*
21	KS03HW15	10S	100S	3	;	R	;1	4	1C	4
22	KS03HW18	20S	100S	1c,2	;	R	;	4	;1	5
23	G980984	90S	100S	3	3+	S	2	23	3+	9
24	G990624	5MS	100S	1c	;	R	;	3+	4	3*
25	G990558	30R	?	2c,3	X;3	MR	2C	;	;	3
26	G972791W	80S	100S	2c,3	3+	S	;1	4	3+	9
27	G000119	10MR	100S	-	3-	S	;	;1	2C	7
28	G000141	30R	80S/MS	2c,3	3+	S	;	;	3C	8
29	G000143	40R	60MR/MS	3	3+	S	3	1	3	7
30	G000147	20MR	20MR/R	3	X;3-	MR	0	4	;	3
31	G000198	30MR	100S	3,2c	3	S	;	3+	1X	7

Table 4. Reactions of entries in the 2004 RGON to leaf rust. See notes for identification of local checks.

Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	USDA (see notes)
32	G000543	80S	100S	2c,3	3+	S	;	4	4	9
33	G001784	20R	30R/MR	3	3+	S	;	3+	3+	9
34	G000993W	80S	100S	3	;	R	0	4	;	5
35	G001004W	100S	100S	3	X;3-	MR	3	2	1	4
36	G001011W	80S	100S	3;	3+	S	2	3+	4	9
37	G001154W	90S	100S	3	3+	S	4	4	4	9
38	G001172W	90S	100S	3	3+	S	4	4	4	9
39	G001202	100S	100S	3	3+	S	0	4	;1	9
40	G001424	5MR	100S	3	3	S	4	3	3	9
41	NE01419	20R	80MS/S	3	3+	S	4	4	4	9
42	NE01506	30MS	40MR/MS	3,2c	3+	S	4	2C	3	8
43	NE01707	80S	30MR/100S	3	3+	S	1C	4	4	9
44	G980122-3	60S	100S	3	3+	S	3C	3C	4	8
45	OK02901C	90S	30R/MR	3	3+	S	4	3,2	4	9
46	OK02908C	90S	30MS/100S	3	3	S	4	4	3	9
47	OK02909C	100S	30MS/100S	3	3	S	4	4	4	9
48	OK02911C	80S	100S/30MS	3	3	S	4	3,2C	4	9
49	OK02922C	90S	100S	1c,3	3-	S	4	4	4	9
50	TAM-107	80S	100S	;1c,2	4	S	3C	3+	3	9
51	Karl 92	90S	100S	;1c	3+	S	1	3	3	8
52	Arapahoe	30R	80S/MS	;1c,3	;	R	;1	;1	;	3
53	local check 1	100S	100S	3	3+	S	3C	3	3+	
54	local check 2	40S	100S	;1c,3	3	S	0	3C	4	
55	local check 3	10S	60S/MS	3,1c	3+	S	;1	4	;1	
56	OK94P549-6716-R4	20R	20R/MR ;	;1c,2	X;3-	MR	3	1N	1C	4
57	OK94P549-6719-R3	10MR/MS	100S	;1c,3	;	R	;	1	;	3
58	OK01526	10S	100S	;1c,3	;	R	2	4	3	8
59	OK01806	10R	40MS/MR	;1c,3	3	S	0	4	;N	3*
60	OK01817	10R	20R/MR	3,1c	X;3	MR	4	4	3+	9
61	OK01415	20S	?	3,1c	3+	S	4	4	4	9
62	OK01418	40MS	100S	3,1c	3	S	3C	4	4	9

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Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	USDA (see notes)
63	OK01417	80S	60MS/S	;1c,3	3	S	3	3C	3	9
64	OK01410	80S	100S	3;	3+	S	3C	;1	2	5
65	OK01409	40R	20MR/R ;	;1c,2	3	S	3C	4	4	9
66	OK01420	30R	40R/MR	;1c,2	;	R	0	3	3	3*
67	OK01123	80S	100S	;1c	3+	S	3	3	4	9
68	OK01316	40R	60MS/MR	;1c,2	3+	S	3+	4	3+	8
69	OK01307	80S	100S	;1c,2	;	R	;1	3	;	6
70	OK01202	100S	100S	;1c,2	3+	S	1,3	4	12C	3
71	KS950826-118-3-3	20R	10R	;1c,3	;	R	0	;	1	6
72	KS950911-112-2-3	10R	TR	3	;	R	0	;1	;,3	2*
73	KS00F5--20-3-2	5R	20R/MR	3	;	R	0	1	2	3*
74	KS00F5--20-3-3	20MS	?	3	X;3-	MR	2	;	2	8
75	KS00F5--36-10-1	5R	20MR/MS	3	X;3	MR	0	;	1	3
76	KS00F5--42-4-1	5MR	80S	;1c,3	;	R	1	1	;	1
77	KS00F5--43-1-1	20S	?	3	3+	S	3C	1	3C	9
78	KS00F5--43-1-2	60S	?	3	3+	S	3	2	2C	9
79	KS950301-DD-6-1	tMR	?	3	X;3	MR	;	1	1	7
80	KS950493-A-1-2	60S	100S	;1c,3	3+	S	2	1	3	9
81	KS940786-6-9-1	5MS	60S/MS	3	;	R	0	1+	4	3H*
82	KS940786-6-11-1	80S	100S	3	;	R	0	3	3+	2*
83	KS940786-6-11-2	60S	100S	3;	3-	S	0	3	3+	2*
84	KS940793-2-2-2	tR	TR	3;	3	S	;	1	1	4
85	KS970085-9-15	5MR	40MR/MS	3,1c;	3+	S	0	4	3	9
86	KS970085-9-19	10MR	60MR/MS	3,1c;	3+	S	0	3	4	9
87	KS970087-2-7	40S	30MR	3	3+	S	3+	4,2	4	9
88	KS970104-1-6	5MR/20S	20R/MR	3	X;3-	MR	0	1	;	2
89	KS970104-3-11	30MR	?	3	3	S	0	2,4	;1	5
90	KS970199-3-3	10S	?	3	X;3-	MR	0	2	;1	6
91	KS970210-4-2	5R	60S	3	;	R	0	1	;	1H
92	KS970226-5-4	10R	40R/MR	3	3=	MS	3	;,3	;1	4
93	KS970226-5-5	10MR/60S	60S	3	;	R	;	;1	;,1,3	3

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Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	USDA (see notes)
94	KS970226-5-18	20R	60S	;1c,2	X;3	MR	;;2C	;1	;1,3	4
95	KS970246-7-1	10S	80S/MS	3	3+	S	1	4	3	1H-*
96	KS970262-17-5	5S	80S	3	;	R	1	3	;	8
97	KS970274-14-2	20R/30S	60MS/S	3	;	R	;	2,4	1	3
98	KS970274-14-4	10R	30MR/MS	2,1c	;	R	;	3+	;1,3	2
99	KS970274-14-8	20S (flag)	?	2,1c	;	R	1	4	1,3	3
100	TAM-107	90S	100S	3	4	S	3	4	3	9
101	Karl 92	90S	100S	3	3+	S	;1	3+	3	8
102	Arapahoe	40R	60S/MS	2,1c	;3P3	R (seg)	;1	;	;	5H
103	local check 1	90S	100S	2,1c,3	3+	S	3+	3	3	
104	local check 2	60S	100S	3	3+	S	;	3+	4	
105	local check 3	5S	60S/MS	3	3+	S	;1	4	;1	
106	KS970274-14-19	20S	?	3;	X;3	MR	;1	4	1	2H-
107	U4024R-4-1-7-1R	60S	TR/100S	3;	X;3-	MR	0	;1,4	2C	8
108	U4024R-4-1-7-2R	30MR	TR/100S	3;	3	S	0	0	3	3H
109	U4024R-4-12-6-2R	30R	5R	2c;	;3P3	R (seg)	0	0,4	;;2C	1H
110	U4024-1-5-R	40MS	TR/100S	2c;	3	S	0	4,0	;;3	2H
111	U4484(1)-3-bulk	60S	100S	-	3+	S	3	3+	3+	9
112	U3960-3R-3-3-bulk	20R	20R	;1c,2	;	R	;	;	;	2
113	U3960-3R-3-4-bulk	10R	20R ;	3	;	R	;	;	;	2
114	U3960-3R-3-7-bulk	10R	TR	3;	;	R	;	;	;	2
115	U4551B-R10-5-2	5R/60S	?	2c;	3+	S	3	2X	3C	2H*
116	U4551B-R10-5-11	tMR	?	2c,3	;	R	;1	1	3C	2*
117	U4551B-R11-2R-1	tR	40S	2c,2	;	R	;1	3,1	4	2*
118	U3582-2-2-1-13	20MS	100S	3	;	R	;	2	;	2*
119	U3445-23--1-1-1-9	30MS	100S	3	;	R	0	0,2	3	3
120	U2665-8-13-1-1	10MR/MS	100S	2c	3+	S	0	0	3	9X
121	KS03A1001	90S	100S	3	3+	S	3+	4	4	9
122	KS03A1002	90S	100S	3	3+	S	;;2C	3+	3+	9
123	SD02W005	20R	100S	3	X;3-	MR	;1,3+	;1	1	8
124	SD02W011	30R	100S	3	3	S	;1,3	;	1	6

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Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS USDA (see notes)
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
125	SD02W013	60S	TR/80S	1c;	3+	S	0	3+	3	7H
126	SD02W014	80S	100S	;2c,3	3+	S	4	4,2	4	7
127	SD02W041	100S	100S	;1c	3+	S	;	3	3	9
128	SD02W053	40S	100S	;1c	;	R	1	4	1	7
129	SD02W057	20S	100S	;1c,3	3+	S	1	4	4	9
130	SD02W063	60S	100S	;1c	3+	S	2C	2	3C	8
131	SD02W067	20S	100S	;1c	3+	S	1	4	1,3	6
132	SD02W121	60S	100S	;1c	X;3	MR	;	4	;1	5
133	SD02004	40S	100S	3	3-	S	;	3	;N	6
134	SD02016	80S	100S	3	3-	S	;1	;	1	5
135	SD02017	40S	100S	3	;	MR	;1	;1	1	6
136	SD02018	20MR	TR	3	3+	S	2	3	3+	9
137	SD02024	10S	80S	3	;	R	0	4	;	7
138	SD02039	10R	80S	3	X;3-	MR	3	1	1N	6
139	SD02059	60S	100S	;1c,2	;	R	;	;1	;1	5
140	SD02067	80S	100S	3;	;	R	;	;	;	3
141	SD02068	10S	100S	3;	;	R	;	;	;	2
142	SD02091	10MR	20R	3	3	S	3C	1	3+	9
143	SD02149	10MR	60MS/S	3	;	R	;	;	2C	2H
144	SD02188	40S	60S/MS	3	;	R	;	4	;1	3
145	SD02251	80S	100S	;1c,3	X;3-	MR	;	1+	;1,3+	4H
146	SD02279	20S	60S	3	X;3-	MR	1	;	1N	6
147	SD02386	20S	100S	3	X;3-	MR	1	;	1N	2H
148	SD02423	30MS	100S	3;	X;3	MR	1+	1	12C	7H
149	SD02446	80S	100S	3;	3	S	1	1	1N	3H
150	TAM-107	80S	100S	;1c,3	4	S	3	3	4	9
151	Karl 92	90S	100S	3	3+	S	;1	3+	3	9
152	Arapahoe	20MS	80MS	3	;1P3	R (seg)	;1	;	;	4H
153	local check 1	90S	100S	3	3+	S	3+	3	3	
154	local check 2	90S	100S	2c,3	3+	S	0	4	4	
155	local check 3	30S	80S	2c,3	3+	S	;1	4	;1	

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Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	USDA (see notes)
156	SD02480	50R	30R/MR ;	2c,3	X;3	MR	0	2	1	5
157	SD02640	30R	40MS/MR	2c,3	3	S	3C	2C	3	8
158	SD02835	30R	60MS/MR	2c,3	;3P3	R (seg)	1	;	2N	4H
159	NE02484	60S	100S	3	X;3-	MR	3	2	4	9
160	NE02495	30S	40MR/MS	3;	3+	S	3	4	1,3	3H
161	NE02496	30S	60MS/MR	;1c	3+	S	0	4	3,;	5H
162	NE02513	10MS	60S/MS	2c,3	;	R	;	4	;1	5
163	NE02528	20S	100S	2c,3	3	S	;1	3	3C	8
164	NE02533	10R	80S/MS	2c,3	;	R	1	3C	1C	4
165	NE02545	60S	100S	3	X;3-	MR	2	3C	3C	9
166	NE02549	30MR	30MR/MS	3	X;3	MR	;	4	;	6
167	NE02558	20MS	100S	;1c	3+	S	3	2	3+	9
168	NE02584	20R	100S	;3	3	S	1	4	3C,1	5H
169	NE02588	tMS	80MS	;3	;	R	;	1	1	2
170	NE02592	5R	5R	;1c	;	R	;	;1	;1	2
171	NE02647	60S	100S	;1c,3	3	S	1,2	2+	1+C	3
172	NE02672	60S	100S	3	X;3	MR	;	2	3C	7
173	NI02425	40S	100S	3	3-	S	0	4	3,;1	9H
174	NH01046	10MR	30R ;	;3	;	R	1	3C	3C	3
175	NE02465	40S	?	3	3	S	2+	4	3C	9
176	NE02501	60S	100S	3,1c	3+	S	3C	4	3C	9
177	NE02512	40S	100S	3	3	S	2	4	4	9
178	NE02532	80S	100S	3;	X;3-	MR	3	2	;1	4
179	NH01036	60S	80S	3;	;	R	;	4	;1	3
180	NH01037	20S	80MS/S	3	;	R	;	4	;	3*
181	NH01048	90S	100S	;1c	3+	S	0	4	3C,;	9
182	NH01049	60S	100S	;1c	3+	S	2	4	4	3H*
183	NH01042	30S	100S	;1c,3	3+	S	;	4	4	7H
184	NI03418	20MR	60MS/S	3;1c	3+	S	0	;1	3C	8
185	NI03419	40MS	80MS/MR	3	3+	S	0	4	4	6H
186	NI03426	20R	80MS/S	3	3+	S	0	4	1	8

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		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS USDA (see notes)
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
187	NI03427	20R	100S	3	3	S	;1	4	;1	3H*
188	NI03434	40R	60MS/MR	3	3+	S	;	3	1+	6H
189	CO00016	80S	100S	3	3+	S	3	1	3	9
190	CO00345	60S	100S	3	3+	S	4	4,2	3+	8
191	CO00347	40S	60MS/MR	3	3+	S	4	4	4	9
192	CO00554	40S	100S	3,1c;	3+	S	3C	4	4	9
193	CO00698	80S	100S	3	3+	S	4	4	4	
194	CO00739	80S	100S	3	3+	S	1+	3	4	9
195	CO00796	90S	100S	3	3+	S	4	4	4	9
196	CO01212	90S	100S	3	3+	S	4	4	4	8
197	CO01242	60S	100S	3	3+	S	4	4	3+	8
198	CO01245	80S	100S	3	3+	S	4	4	4	9
199	CO01252	40S	100S	3	3	S	3C	3	3	9
200	TAM-107	90S	100S	3	4	S	3+	3+	4	9
201	Karl 92	90S	100S	3	3+	S	;1	3+	3	8
202	Arapahoe	40MR	60MS	3	;3P3	R (seg)	;1	;1	;	3
203	local check 1	80S	100S	3,1c	3+	S	3+	3	3	
204	local check 2	80S	100S	3	3+	S	0	4	3+	
205	local check 3	20S	60S	3	3	S	;1	4	;1	
206	CO01287	40S	100S	3	3+	S	4	4	3+	9
207	CO01385	40MR	80S	3	3	S	4	3	3	9
208	CO01433	20S	100S	3,1c	3+	S	4	4	4	9
209	CO01434	90S	100S	3	3+	S	4	4	4	9
210	CO01473	40MS	?	3,1c	3-	S	3C	3	3+	8
211	CO99314-A1	60S	?	3,1c	3+	S	4	4	4	9
212	CO980607-A1	90S	?	3	3	S	4	4	4	9
213	CO980607-A3	90S	?	3	3+	S	3C	4	3C	9
214	CO980630-A1	90S	?	3	3	S	4	4	4	9
215	CO01W014	30S	60MS	;1c,3	3+	S	4	3C	4	9
216	CO01W073	60S	100S	3	3+	S	4	4	4	9
217	CO01W097	90S	100S	;1c,3	3+	S	4	3	4	9

Table 4. Reactions of entries in the 2004 RGON to leaf rust. See notes for identification of local checks.

Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS USDA (see notes)
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
218	CO01W165	30MR	100S	;1c,3	X;3	MR	4,2	1N,4	4,2C	7
219	CO01W171	90S	100S	;1c,3	3	S	2	3,2	3	9
220	CO01W172	40MS	100S	3	3	S	2	1	2,3	9
221	CO01W173	20R	100S	3	3+	S	2	1	2	8
222	CO01W189	80S	100S	3;	3	S	4	4	4	9
223	CO01W190	60S	100S	3	3+	S	4	3	3+	9
224	CO01W191	80S	100S	;1c,2	3	S	4	4	4	9
225	NWX02Y4684	80S	100S	3	;	R	3	4	4	9
226	NWX02Y4668	60S	?	;2c	;	R	;	;	3	5
227	NWX02Y4648	100S	100S	3	3	S	;1	1	3	5H
228	NWX02Y4637	90S	100S	3	3+	S	2+	2	3C	7
229	NWX02Y4634	40S	?	3	;3P3	R (seg)	3	4	4	8
230	NWX02Y4633	20MR	100S	3	3	S	2	;1	3C	8
231	NWX02Y4613	60S	?	;1c	3+	S	4	4	3+	8
232	NWX02Y4596	80S	100S	3	3	S	2+	2	3C	8
233	NWX02Y4553	80S	100S	3	;2P3	R (seg)	2	;1	3	6
234	NWX02Y4549	60S	100S	;1c	;3P3	R (seg)	2+	2	3	3*
235	NWX02Y4530	90S	100S	;1c,3	3+	S	4	4	4	9
236	NWX02Y4505	90S	100S	3	3	S	;	3	3	8
237	NWX02Y4481	80S	100S	;1c	;1P3	R (seg)	;	4	3	5
238	NWX02Y4442	100S	100S	;1c,3	3	S	3	4	3	7
239	NWX02Y4421	80S	100S	;1c,3	;2P3	R (seg)	;	;	1	6
240	NWX02Y4385	80S	100S	;	;2P3	R (seg)	;,3	4	3	3H
241	N03Y2011	60S	100S	;1c,2	3+	S	1	;1	2	6
242	N03Y2014	80S	100S	3,1c	;	R	;1	4	1	5
243	N03Y2015	80S	100S	3,1c	X;3-	MR	;1	4	1	5
244	N03Y2016	80S	100S	3,1c;	X;3-	MR	;1	4	1+	7
245	N03Y2022	90S	100S	3	;2P3	R (seg)	;1	4	1+	4
246	TX01V6016	20MS	100S	3	;2P3	R (seg)	0	2C	3	2*
247	TX01V5135	60S	?	3	;	R	;1	4	1N	3
248	TX00A0391	80S	?	3	;	R	;	4	1N	2



Table 4. Reactions of entries in the 2004 RGON to leaf rust. See notes for identification of local checks.

Entry	Line or Selection	Field response			Seedling responses					
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			Manhattan, KS USDA (see notes)
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
249	TX01A5937	10R	20MR/MS	;1c,2	X;3	MR	;	;1	1	3
250	TAM-107	80S	100S	3	4	S	3+	4	4	9
251	Karl 92	80S	100S	;1c,3	3+	S	;1	4	3	9
252	Arapahoe	40MR/MS	80S/MS	;1c,3	;1P3	R (seg)	;1	;1	;	
253	local check 1	90S	100S	3	3+	S	3+	3	3	
254	local check 2	80S	100S	3	3+	S	0	4	4	
255	local check 3	40S	80S/MS	;1c,3	3	S	;1	4	;1	
256	TX01V5314	tR	TR	;1c,3	;	R	;	1	3	2*
257	TX01V5425	5R	5R	3	X;3-	MR	;	2+	3C	1
258	TX01V5136	tR	TR	3	3+	S	2	2	23	8
259	TX01V5719	tR	TR	3	;	R	;	1	;1	2
260	TX01V6008	20MR	20MR/R	;1c,3	3+	S	3	23	3	9
261	TX01U2527	20R/60S	100S	;1c,3	3	S	;1	;1	1C	8
262	TX01U2598	5MR	20R/MR	;1c	;	R	;	;	1+C	5
263	TX01U2601	5MS	30R/MR	;1c,3	;	R	1+,3	;	;,3	4
264	TX01U2723	20MR/MS	?	3	;	R	;	4	;1	2H
265	TX01U2733	10R	20MR/MS	3	;	R	;1	3	;1	
266	TX01U2685	10R	20R	0; the best	;2P3	R (seg)	;	3,1	;	2
267	TX01U2695	10R	60MS/MR	3	;	R	;	;	1	3
268	TX01U2699	20MR	80MS/S	0;	;	R	;	4	1	3
269	TX95V4339	30R	TR/30MS	3	;3P3	R (seg)	;	3	3	4H
270	TX00D2234	10R	60S/MS	3	X;3	MR	;	1	;	1
271	TX01D3215	40MR	TR	3	X;3-	MR	1	3	3;,1	8
272	TX01D3218	50MS	10MR/MS		;	R	;,3	4	3	5H
273	TX01D3472	tR	5R		;	R	;	1+	3	2
274	TX01V5134	5R/60S	TMR/MS		3+	S	3	2	1+,3+	5H
275	TX01V6334	40S	80S		3-	S	;	3	3+	9
276	TX00D1622	30R	?		X;3-	MR	3	;	4	9
277	TX02D5868	40S	60S/MS		3	S	2+	3	3	9
278	TX02D6112	5R	TR		;	R	0	1	3-	2*
279	TX02U2502	30R	?		;	R	;	4	;	5

Table 4. Reactions of entries in the 2004 RGON to leaf rust. See notes for identification of local checks.

Entry	Line or Selection	Field response			Seedling responses					Manhattan, KS USDA (see notes)
		Castroville, TX (2/05)	Castroville, TX (5/05)	St. Paul, MN (see notes)	Stillwater, OK		Manhattan, KS, Agronomy (see notes)			
					Stakeman	Overall	MCDL	PRTUS-35	PRTUS-49	
280	TX02U2508	20R	?		;	R	;1,3	2,3	;1	3
281	TX02U2602	40R	?		;3P3	R (seg)	;	2+	;1,3	5H
282	TAM-107	80S	100S		4	S	3+	4	4	9
283	Karl 92	80S	100S		3+	S	;1	4	3	9
284	Arapahoe	40MS	100S		;1P3	R (seg)	;1	;1	;	3H
285	local check 1	80S	100S		3+	S	3+	3	3+	
286	local check 2	60S	100S		3+	S	0	4	4	
287	local check 3	30S	80S		3	S	;1	4	;1	
288	G001404	60S	80MS/S		3+	S	4	4	4	9
289	G00984W	100S	100S		X;3	MR	0	4	;1	3
290	NW03Y2458	40S	10R ;		3+	S	4	4	4	9
291	NW03Y2552	30S	10R/MR ;		3+	S	4	4	4	9
292	NW98S104	30S	30R/MR ;		3+	S	4	4	4	9

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
1	TAM-107	3	0	1+
2	Karl 92	3-	3	2
3	Arapahoe	3-	0	1
4	local check 1	1		
5	local check 2	2+		
6	local check 3	3-		
7	KS02HW90-3	0C,2C	0	1
8	KS02HW90-5	3	0	;
9	KS02HW91-1	4	0	;
10	KS02HW91-6	4	0	;
11	KS02HW110-1	4	1	1N
12	KS02HW110-4	4	2	1N
13	KS02HW110-6	3	2-	1N
14	KS02HW118-1	4	0	0
15	KS02HW118-5	4	0	1+
16	KS02HW152-2	3+	0	S
17	KS03HW156	3,1C	2	1
18	KS03HW157	3	2	1
19	KS03HW158	3	2+	1
20	KS03HW12	4	S 4	S
21	KS03HW15	3-	0	1N
22	KS03HW18	4	0	1
23	G980984	3	2+	1
24	G990624	3+	4	2+
25	G990558	1C	0	0
26	G972791W	3-	0	S
27	G000119	3+	0	S
28	G000141	3+	0	S
29	G000143	3	0	3
30	G000147	4	3+	2+
31	G000198	3+	3+	2-
32	G000543	4	2	2
33	G001784	3+	2+	2+
34	G000993W	4	2	1N
35	G001004W	4	1+	1N
36	G001011W	3	2+	2+
37	G001154W	3	2	2
38	G001172W	4	3	2
39	G001202	4	2+	2+
40	G001424	4	4	2-
41	NE01419	1,2C	2	2
42	NE01506	3	2-	2-
43	NE01707	3	1+	2
44	G980122-3	3+	2/3	1
45	OK02901C	4	4	1+
46	OK02908C	3	4	2+
47	OK02909C	3+	3+	2+

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
48	OK02911C	4	4	S
49	OK02922C	2C	2	S
50	TAM-107	3	2/4	2-
51	Karl 92	3	23-	2-
52	Arapahoe	3+	0	1
53	local check 1	3-		
54	local check 2	3-		
55	local check 3	3		
56	OK94P549-6716-R4	3	0	1N
57	OK94P549-6719-R3	3	0	1
58	OK01526	3	4	2-
59	OK01806	3-	1	1
60	OK01817	3	4	2+
61	OK01415	3C	2+	1N
62	OK01418	3	3+	2
63	OK01417	3	3-	1
64	OK01410	;1C	0	1
65	OK01409	3	3	2+
66	OK01420	;1N	3+	2
67	OK01123	3	4	2
68	OK01316	3	4	3
69	OK01307	3	1/4	;
70	OK01202	3-	;3	2+
71	KS950826-\18-3-3	3	3-	2
72	KS950911-\12-2-3	3-	3-	;
73	KS00F5--20-3-2	3	0	0
74	KS00F5--20-3-3	3	0/4	0
75	KS00F5--36-10-1	3	2+	3
76	KS00F5--42-4-1	3-	2	1
77	KS00F5--43-1-1	3-	3-	1
78	KS00F5--43-1-2	3	0	0
79	KS950301-DD-6-1	3	4	2+
80	KS950493-A-1-2	1C	3	1N
81	KS940786-6-9-1	3+	3+	0
82	KS940786-6-11-1	3	;3	0
83	KS940786-6-11-2	3	3-	;
84	KS940793-2-2-2	3	3-	;
85	KS970085-9-15	3+	4	1
86	KS970085-9-19	3	2+	2
87	KS970087-2-7	3	2	2
88	KS970104-1-6	3+	2	1
89	KS970104-3-11	4	2	1
90	KS970199-3-3	3C	1	;
91	KS970210-4-2	3	0	0
92	KS970226-5-4	3	0	;
93	KS970226-5-5	3	0	0
94	KS970226-5-18	3-	0	0

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
95	KS970246-7-1	2+	4	2
96	KS970262-17-5	3	1	0
97	KS970274-14-2	3+	2	1N
98	KS970274-14-4	3	2-	1
99	KS970274-14-8	3	1	0
100	TAM-107	3	2-	2-
101	Karl 92	2C	3-	2-
102	Arapahoe	3	0	1
103	local check 1	;;3		
104	local check 2	3-		
105	local check 3	3		
106	KS970274-14-19	3+	1	MISSING
107	U4024R-4-1-7-1R	3	2-	1
108	U4024R-4-1-7-2R	2+	2	2
109	U4024R-4-12-6-2R	3-	2	2
110	U4024-1-5-R	3-	2+	2-
111	U4484(1)-3-bulk	3	2-	1
112	U3960-3R-3-3-bulk	3+	2-	1
113	U3960-3R-3-4-bulk	4	2-	1
114	U3960-3R-3-7-bulk	3+	2	1
115	U4551B-R10-5-2	;2C	0	0
116	U4551B-R10-5-11	;2N	0	;
117	U4551B-R11-2R-1	;N	;1	1
118	U3582-2-2-1-13	3	2	1
119	U3445-23--1-1-1-9	3	3-	1
120	U2665-8-13-1-1	3	2+	2
121	KS03A1001	2	3	2
122	KS03A1002	2+	2	2+
123	SD02W005	3	2	1
124	SD02W011	3	0	1
125	SD02W013	3-	0/3	2+
126	SD02W014	3-	0	3
127	SD02W041	3C-	0	2
128	SD02W053	3-	2	MISSING
129	SD02W057	2	3-	2+
130	SD02W063	3-	4	S
131	SD02W067	3	3	S
132	SD02W121	3	2	1N
133	SD02004	3	0	0(3 PLANTS)
134	SD02016	3+	0	1N
135	SD02017	3	0	2-
136	SD02018	2+	3-	2+
137	SD02024	3+	2	1N
138	SD02039	3-	0	1N
139	SD02059	3-	;	1
140	SD02067	2+	0	1
141	SD02068	2	0	1

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
142	SD02091	3	0/3	1N
143	SD02149	3+	4	1
144	SD02188	3+	0	1N
145	SD02251	3-	0	1
146	SD02279	3-	0	1
147	SD02386	2+	0	1
148	SD02423	3	3+	2
149	SD02446	3-	0	2
150	TAM-107	3C	2+	1
151	Karl 92	3,1	3	2
152	Arapahoe	2	0	1
153	local check 1	0;		
154	local check 2	2+		
155	local check 3	3-		
156	SD02480	3-	0	1N
157	SD02640	3C	0	0
158	SD02835	2+	3	S
159	NE02484	3	3+	2
160	NE02495	3	0	2+
161	NE02496	3	0	1
162	NE02513	3	0	1N
163	NE02528	3C	3	S
164	NE02533	3	2	1
165	NE02545	2+	3+	S
166	NE02549	3+	2	1
167	NE02558	2N,3	3-	2
168	NE02584	3	3	S
169	NE02588	3	2	0
170	NE02592	2+	0	;
171	NE02647	3	;	2+
172	NE02672	3	3+	;
173	NI02425	3	0	3
174	NH01046	1	;	;
175	NE02465	2	3	2
176	NE02501	3-	3	3
177	NE02512	3+	0	S
178	NE02532	3	2	1
179	NH01036	3	2+	1
180	NH01037	3-	2+	1
181	NH01048	3+	3	2
182	NH01049	3	3	1
183	NH01042	3-	3+	S
184	NI03418	3	0	S
185	NI03419	3	0	1
186	NI03426	3	2	S
187	NI03427	;N,2	2-	S
188	NI03434	3C	0	;1

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
189	CO00016	3	3+	1+
190	CO00345	3	2	S
191	CO00347	3+	3+	S
192	CO00554	3	0	1
193	CO00698	3C	3+	1
194	CO00739	3	3	S
195	CO00796	3+	3	S
196	CO01212	3-	3+	1
197	CO01242	3	3-	1+
198	CO01245	3	3	1+
199	CO01252	2+	3-	1
200	TAM-107	3	2	1+
201	Karl 92	3	3	2
202	Arapahoe	2+	0	0;
203	local check 1	;N		
204	local check 2	2		
205	local check 3	3		
206	CO01287	2	4	S
207	CO01385	2	3+	S
208	CO01433	3	4	S
209	CO01434	3-	4	S
210	CO01473	2+	4	0/S
211	CO99314-A1	3-	3	2
212	CO980607-A1	2+	0	S
213	CO980607-A3	3-	0	S
214	CO980630-A1	3-	;	S
215	CO01W014	3-	4	S
216	CO01W073	3-	4	S
217	CO01W097	2+	4	2
218	CO01W165	3	4	S
219	CO01W171	23	3+	2+
220	CO01W172	3	3+	S
221	CO01W173	2+N	4	S
222	CO01W189	3-	3+	2+
223	CO01W190	2-	3+	2+
224	CO01W191	3-	4	2+
225	NWX02Y4684	3-	0	1
226	NWX02Y4668	3-	4	1+
227	NWX02Y4648	3-	3+	S
228	NWX02Y4637	3-	4	S
229	NWX02Y4634	3-	0	S
230	NWX02Y4633	3	0	S
231	NWX02Y4613	3	0	2
232	NWX02Y4596	0;,2+	4	S
233	NWX02Y4553	;N,3	4	2/S
234	NWX02Y4549	3-	0	1
235	NWX02Y4530	3	;	2

Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
236	NWX02Y4505	3-	0	2+
237	NWX02Y4481	3-	0/3	1
238	NWX02Y4442	3-	0	S
239	NWX02Y4421	3-	0;	2
240	NWX02Y4385	3-	0;	S
241	N03Y2011	3	1	1
242	N03Y2014	3+	2	2
243	N03Y2015	4	2	2
244	N03Y2016	4	2	2
245	N03Y2022	3-	2	1
246	TX01V6016	3	2-	1
247	TX01V5135	;N,3	2-	1
248	TX00A0391	3-	2	1
249	TX01A5937	3-	2	1
250	TAM-107	3	2-	2/S
251	Karl 92	3	23-	2/S
252	Arapahoe	3-	0	0
253	local check 1	2		
254	local check 2	3-		
255	local check 3	3+		
256	TX01V5314	2N,3	0	0
257	TX01V5425	3-	3	;
258	TX01V5136	3-	0/4	0/S
259	TX01V5719	3-	2	2
260	TX01V6008	3	3-	S
261	TX01U2527	1,3	2+/3	2-
262	TX01U2598	2	0	2
263	TX01U2601	3-	0	1
264	TX01U2723	3	0	0;
265	TX01U2733	3-	0	1-
266	TX01U2685	3-	2+	1
267	TX01U2695	3-	2	2-
268	TX01U2699	;;2+	2+	2
269	TX95V4339	;	0/3	2
270	TX00D2234	2	1	1+
271	TX01D3215	3	2/3	2/S
272	TX01D3218	3-	3-	1
273	TX01D3472	3;N	3	S
274	TX01V5134	3-	0/3	0
275	TX01V6334	3-	2	2+
276	TX00D1622	3-	4	S
277	TX02D5868	3-N	2	2+
278	TX02D6112	3-	2+	S
279	TX02U2502	3-	2	2
280	TX02U2508	3-	2	1
281	TX02U2602	3-	;	;1
282	TAM-107	3-	2-	2



Table 5. Reactions of entries in the 2004 RGON to stripe and stem rusts.

Entry	Line or Selection	Stem rust, St. Paul, MN		
		Seedling stripe rust, Manhattan, KS	TPMK74-MN- 1409	Bulk (see notes)
283	Karl 92	3-	3	2
284	Arapahoe	3	;	1
285	local check 1	;;3		
286	local check 2	3-		
287	local check 3	3		
288	G001404	3	3-	1
289	G00984W	2N,3	2+	1+
290	NW03Y2458	3	4	2+
291	NW03Y2552	3	3+	2+
292	NW98S104	4	4	S

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
1	TAM-107	2	3	69.3	12.7	8.8	30	55	55
2	Karl 92	1	1	50	7.9	4	0	0	0
3	Arapahoe	4	4	43.6	9.4	4.1	0	0	0
4	local check 1	4	4				2	25	8
5	local check 2	1	1				3	45	7
6	local check 3	3 (ss)	3 (ss)				6	50	11
7	KS02HW90-3	3	4	100	43.2	43.2	11	50	21
8	KS02HW90-5	3	4	69.8	14.2	9.9	5	40	13
9	KS02HW91-1	4	4	94.8	20.7	19.6	6	65	10
10	KS02HW91-6	4	4	100	39.2	39.2	6	85	7
11	KS02HW110-1	2	1	100	30.2	30.2	7	100	7
12	KS02HW110-4	2	1	100	26.2	26.2	7	95	8
13	KS02HW110-6	1	1	100	27.2	27.2	3	40	7
14	KS02HW118-1	1	1	49.8	8.7	4.3	4	30	13
15	KS02HW118-5	1	1	59.8	12.2	7.3	2	5	40
16	KS02HW152-2	4	4	89.8	19.2	17.2	1	15	9
17	KS03HW156	3	3	74.8	15.7	11.7	24	95	26
18	KS03HW157	2	seg-R	79.8	14.7	11.7	30	100	30
19	KS03HW158	1	1	74.8	14.2	10.6	21	70	30
20	KS03HW12	3	4	29.8	6.2	1.8	6	40	14
21	KS03HW15	3	4	84.8	17.2	14.6	8	65	12
22	KS03HW18	2	2	100	22.7	22.7	8	65	12
23	G980984	3	3	89.8	17.2	15.4	4	25	14
24	G990624	1	1	100	22.2	22.2	6	45	13
25	G990558	1	1	89.8	15.7	14.1	2	30	7
26	G972791W	2	4	64.8	10.2	6.6	0	0	0
27	G000119	3	4	44.8	8.2	3.7	1	15	7
28	G000141	1	1	69.8	12.2	8.5	0	5	7
29	G000143	1	1	89.8	15.7	14.1	4	10	37
30	G000147	1	1	74.8	13.7	10.2	2	5	44
31	G000198	2	3	100	25.7	25.7	1	10	7
32	G000543	3	4	64.8	13.7	8.9	0	0	0
33	G001784	3	4	69.8	12.7	8.9	2	5	33
34	G000993W	2	2	100	26.2	26.2	4	10	37
35	G001004W	1	1	100	24.2	24.2	0	0	0
36	G001011W	1	1	64.8	12.2	7.9	0	5	7
37	G001154W	4	4	94.8	19.2	18.2	10	50	19
38	G001172W	3	3	94.8	19.2	18.2	9	80	12
39	G001202	1	2	99.8	27.7	27.6	20	60	34
40	G001424	3	4	100	40.7	40.7	12	85	14
41	NE01419	2	3	100	26.7	26.7	3	20	16
42	NE01506	3	4	79.8	15.7	12.5	3	20	14
43	NE01707	2	1	100	35.7	35.7	7	35	21
44	G980122-3	1	1	94.8	20.2	19.1	0	5	7
45	OK02901C	1	2	100	28.7	28.7	5	45	11

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
46	OK02908C	1	1	100	32.7	32.7	5	45	11
47	OK02909C	3	3	100	19.2	19.2	25	85	30
48	OK02911C	3	3	100	28.7	28.7	1	15	7
49	OK02922C	2	3	64.8	10.2	6.6	0	0	0
50	TAM-107	2	3				0	5	7
51	Karl 92	1	1				1	10	7
52	Arapahoe	3	4				1	15	9
53	local check 1	4	4				2	30	7
54	local check 2	1	1				2	30	7
55	local check 3	4	4 (ss)				4	40	11
56	OK94P549-6716-R4	1	1	100	46.7	46.7	6	30	20
57	OK94P549-6719-R3	2	2	58.9	6.5	3.8	4	40	11
58	OK01526	2	1	53.9	5.5	2.9	2	20	9
59	OK01806	1	1	48.9	5	2.4	0	0	0
60	OK01817	3	3	68.9	15	10.3	2	25	7
61	OK01415	1	1	38.9	4	1.5	0	0	0
62	OK01418	2	1	88.9	21	18.6	0	0	0
63	OK01417	2	1	98.9	20	19.7	10	20	52
64	OK01410	2	2	78.9	11	8.6	5	30	17
65	OK01409	1	1	83.9	13.5	11.3	1	10	14
66	OK01420	1	1	88.9	13	11.5	1	10	14
67	OK01123	1	1	88.9	12.5	11.1	1	15	7
68	OK01316	2	1	98.9	17.5	17.3	1	20	7
69	OK01307	2	1	78.9	11	8.6	12	20	62
70	OK01202	2	2	100	23.5	23.5	5	20	25
71	KS950826-18-3-3	1	2	100	34.5	34.5	3	5	60
72	KS950911-12-2-3	1	1	40.5	4.2	1.7	0	0	0
73	KS00F5--20-3-2	1	1	100	35.5	35.5	10	35	28
74	KS00F5--20-3-3	1	1	100	23.5	23.5	16	50	32
75	KS00F5--36-10-1	1	1	78.9	14.5	11.4	2	25	7
76	KS00F5--42-4-1	1	1	43.9	5	2.2	1	10	7
77	KS00F5--43-1-1	1	1	38.9	4	1.5	0	0	0
78	KS00F5--43-1-2	1	1	68.9	6	4.1	3	15	19
79	KS950301-DD-6-1	1	1	100	17	17	4	30	13
80	KS950493-A-1-2	1	1	73.9	10	7.4	2	35	7
81	KS940786-6-9-1	1	1	44.6	7.1	3.1	5	20	25
82	KS940786-6-11-1	1	1	38.9	5.5	2.1	11	40	26
83	KS940786-6-11-2	1	1	68.9	10.5	7.2	5	35	15
84	KS940793-2-2-2	1	2	63.9	7	4.4	2	30	7
85	KS970085-9-15	1	1	53.9	5	2.7	0	0	0
86	KS970085-9-19	1	1	98.9	14.5	14.3	0	0	0
87	KS970087-2-7	1	1	48.9	4.5	2.2	1	15	7
88	KS970104-1-6	3	2	58.9	10	5.9	4	25	17
89	KS970104-3-11	3	2	83.9	13.5	11.3	2	25	8
90	KS970199-3-3	1	2	48.9	6	2.9	5	10	47

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
91	KS970210-4-2	1	1	53.9	5	2.7	1	15	7
92	KS970226-5-4	1	2	88.9	13.5	12	4	45	8
93	KS970226-5-5	1	2	100	18.5	18.5	1	10	7
94	KS970226-5-18	1	1	93.9	18	16.9	1	10	11
95	KS970246-7-1	1	1	83.9	16.5	13.8	0	0	0
96	KS970262-17-5	1	1	83.9	11	9.2	7	45	15
97	KS970274-14-2	1	2				2	25	8
98	KS970274-14-4	1	2	78.9	9.5	7.5	7	60	11
99	KS970274-14-8	1	2	58.9	5.5	3.2	3	35	9
100	TAM-107	2	3				13	55	23
101	Karl 92	1	1				3	5	60
102	Arapahoe	4	4				0	0	0
103	local check 1	4	4				0	0	0
104	local check 2	1	1				0	5	7
105	local check 3	3 (ss)	3				6	60	9
106	KS970274-14-19	2	2	13.9	5	0.7	0	5	7
107	U4024R-4-1-7-1R	2	1	68.9	11.1	7.6	1	15	7
108	U4024R-4-1-7-2R	1	1	18.9	5	0.9	1	10	7
109	U4024R-4-12-6-2R	1	1	8.9	5	0.4	0	0	0
110	U4024-1-5-R	1	1	28.9	7	2	0	0	0
111	U4484(1)-3-bulk	2	2	3.9	3.5	0.1	0	0	0
112	U3960-3R-3-3-bulk	3	3	15	2.5	0.4	0	0	0
113	U3960-3R-3-4-bulk	3	3	8.9	3	0.3	0	0	0
114	U3960-3R-3-7-bulk	3	3				0	0	0
115	U4551B-R10-5-2	1	1	3.9	5.5	0.2	4	15	28
116	U4551B-R10-5-11	1	1	58.9	9.6	5.6	6	15	42
117	U4551B-R11-2R-1	2	seg-R	28.9	7	2	22	80	28
118	U3582-2-2-1-13	2	seg-S	20	2	0.4	1	15	7
119	U3445-23--1-1-1-9	2	2	18.9	7	1.3	13	70	18
120	U2665-8-13-1-1	1	1	5	0.5	0	11	40	28
121	KS03A1001	1	1	48.9	1.1	0.5	3	40	8
122	KS03A1002	1	1	23.9	6	1.4	0	5	7
123	SD02W005	2	1	78.9	34.1	26.9	5	20	27
124	SD02W011	4	4	68.9	16.1	11.1	4	35	10
125	SD02W013	3	seg-R	73.9	15.1	11.1	4	50	7
126	SD02W014	3	3	33.9	7.5	2.5	3	35	8
127	SD02W041	2	1	23.9	7.5	1.8	5	15	34
128	SD02W053	4	4	78.9	49.6	39.1	16	75	21
129	SD02W057	1	1	78.9	35.1	27.6	0	0	0
130	SD02W063	2	2	78.9	19.6	15.4	5	35	14
131	SD02W067	3	4	10	1	0.1	1	15	7
132	SD02W121	2	1	63.9	4.6	2.9	1	10	7
133	SD02004	4	4	78.9	16.1	12.7	0	5	7
134	SD02016	4	4	43.9	5.1	2.2	1	15	9
135	SD02017	4	4	8.9	4	0.4	5	30	17

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
136	SD02018	4	4	78.9	28.1	22.1	5	20	24
137	SD02024	4	4	78.9	54.6	43	11	50	22
138	SD02039	3	3	28.9	7	2	2	25	10
139	SD02059	3	4	10	1	0.1	1	20	7
140	SD02067	3	4	8.9	4	0.4	1	15	7
141	SD02068	4	4	13.9	3.5	0.5	3	40	8
142	SD02091	1	1	68.9	15.1	10.4	2	25	8
143	SD02149	3	3	73.9	14.6	10.8	2	25	8
144	SD02188	4	4	78.9	25.6	20.2	0	0	0
145	SD02251	4	4	58.9	5.6	3.3	4	35	10
146	SD02279	4	4	78.9	33.6	26.5	2	15	14
147	SD02386	3	4	3.9	4	0.2	0	5	7
148	SD02423	3	4	58.9	10.1	5.9	1	20	7
149	SD02446	4	4	38.9	9	3.5	4	30	13
150	TAM-107	3	4				1	5	14
151	Karl 92	1	1				0	0	0
152	Arapahoe	3	4				1	10	7
153	local check 1	4	4				1	20	7
154	local check 2	1	1				4	50	8
155	local check 3	3 (ss)	3(ss)				1	20	7
156	SD02480	4	4	65.1	13.5	8.8	2	20	9
157	SD02640	4	4	70.1	14	9.8	1	10	14
158	SD02835	3	4	30.1	5	1.5	3	40	7
159	NE02484	1	2(ss)	55.1	6.5	3.6	0	0	0
160	NE02495	2	2(ss)	95.1	18.5	17.6	4	15	27
161	NE02496	2	2(ss)	85.1	14.5	12.4	1	5	14
162	NE02513	1	1	100	58.1	58.1	10	45	21
163	NE02528	1	1	90.1	20.5	18.5	6	25	25
164	NE02533	1	1	75.1	13	9.8	12	50	23
165	NE02545	3	3	35.1	4.5	1.6	6	25	23
166	NE02549	1	2	100	46.5	46.5	6	25	23
167	NE02558	1	2	15.1	1.5	0.2	3	40	7
168	NE02584	1	1	100	49.6	49.6	3	35	8
169	NE02588	1	1	100	26.5	26.5	0	0	0
170	NE02592	3	4	25.1	2.5	0.6	0	0	0
171	NE02647	3	4	100	33	33	1	20	7
172	NE02672	1	2	75.1	9.5	7.2	0	5	7
173	NI02425	2	2	70.1	11	7.7	1	10	7
174	NH01046	2	3	30.1	4	1.2	0	5	7
175	NE02465	3	2	25.1	2.5	0.6	0	0	0
176	NE02501	2	2	100	19.5	19.5	0	5	7
177	NE02512	1	2	100	23	23	0	5	7
178	NE02532	3	4	60.1	7	4.2	7	30	24
179	NH01036	3	4	100	47.5	47.5	1	20	7
180	NH01037	3	4	35.1	4	1.4	1	10	7

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
181	NH01048	3	4	100	38.5	38.5	2	25	7
182	NH01049	3	4	100	44	44	13	60	21
183	NH01042	2	2	95.1	24	22.9	9	25	36
184	NI03418	2	3	50.1	5.5	2.8	4	30	14
185	NI03419	2	2	75.1	12	9	5	35	14
186	NI03426	2	1	85.1	14.5	12.4	5	15	31
187	NI03427	2	1	45.1	7	3.2	1	10	7
188	NI03434	2	1	50.1	8	4	5	25	19
189	CO00016	2	1	100	26.5	26.5	2	25	7
190	CO00345	2	3	55.1	7.5	4.2	0	0	0
191	CO00347	2	3	50.1	7.5	3.8	0	0	0
192	CO00554	1	1	35.1	3.5	1.2	0	0	0
193	CO00698	1	1	100	21	21	0	0	0
194	CO00739	1	2	45.1	9	4.1	0	0	0
195	CO00796	2	2	100	27	27	7	20	37
196	CO01212	3	4	45.1	6	2.7	0	0	0
197	CO01242	2	2	100	35	35	8	50	17
198	CO01245	2	2	95.1	23	21.9	8	45	17
199	CO01252	3	4	70.1	10	7	2	15	12
200	TAM-107	2	3				2	20	9
201	Karl 92	1	1				1	15	7
202	Arapahoe	4	4				0	5	7
203	local check 1	4	4				0	5	7
204	local check 2	1	1				7	30	23
205	local check 3	4 (ss)	3 (ss)				6	60	10
206	CO01287	4	4	67.6	15.2	10.3	3	25	11
207	CO01385	4	4	77.6	13.2	10.3	5	50	9
208	CO01433	4	4	72.6	16.2	11.8	3	40	8
209	CO01434	2	3(ss)	47.6	5.7	2.7	1	5	14
210	CO01473	4	4	27.6	3.2	0.9	4	30	12
211	CO99314-A1	2	2(ss)	62.6	9.2	5.8	2	20	9
212	CO980607-A1	4	4	77.6	12.2	9.5	2	30	8
213	CO980607-A3	4	4	62.6	13.2	8.3	9	40	22
214	CO980630-A1	4	4	77.6	14.2	11	4	40	9
215	CO01W014	1	1	22.6	1.7	0.4	3	35	8
216	CO01W073	4	4	57.6	6.2	3.6	0	5	7
217	CO01W097	3	2	22.6	1.7	0.4	1	15	7
218	CO01W165	1	1	72.6	6.7	4.9	2	25	7
219	CO01W171	1	1	37.6	4.2	1.6	0	0	0
220	CO01W172	1	1	5	0.5	0	0	5	7
221	CO01W173	1	1	77.6	14.7	11.4	2	5	30
222	CO01W189	1	1	32.6	3.2	1.1	4	25	15
223	CO01W190	2	3	22.6	1.2	0.3	6	20	29
224	CO01W191	3	3	42.6	4.2	1.8	1	20	7
225	NWX02Y4684	3	3	57.6	9.2	5.3	0	5	7

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
226	NWX02Y4668	3	4	37.6	4.7	1.8	1	10	7
227	NWX02Y4648	2	1	52.6	9.7	5.1	1	20	7
228	NWX02Y4637	3	3	47.6	4.7	2.3	5	15	33
229	NWX02Y4634	3	3	77.6	20.2	15.7	1	15	7
230	NWX02Y4633	3	4	27.6	1.7	0.5	2	20	9
231	NWX02Y4613	2	1	70.9	16.7	11.9	0	0	0
232	NWX02Y4596	2	2	17.6	3.5	0.6	0	5	7
233	NWX02Y4553	3	4	77.6	17.7	13.8	0	5	7
234	NWX02Y4549	3	4	42.6	7.2	3.1	0	5	7
235	NWX02Y4530	3	1	37.6	3.2	1.2	3	20	15
236	NWX02Y4505	3	3	87.6	18.2	16	2	15	12
237	NWX02Y4481	3	4	77.6	10.7	8.3	12	40	29
238	NWX02Y4442	2	2(ss)	72.6	11.7	8.5	6	25	24
239	NWX02Y4421	3	4	47.6	8.2	3.9	2	15	12
240	NWX02Y4385	2	1	47.6	6.7	3.2	5	60	8
241	N03Y2011	3	3	37.6	4.2	1.6	6	60	10
242	N03Y2014	3	3	27.6	5.7	1.6	2	25	8
243	N03Y2015	3	3	87.6	73.2	64.1	2	30	8
244	N03Y2016	3	3	37.6	6.7	2.5	0	5	7
245	N03Y2022	2	1	10	1.5	0.2	0	0	0
246	TX01V6016	1	1	87.6	22.7	19.9	1	10	11
247	TX01V5135	2	1	87.6	34.7	30.4	8	25	32
248	TX00A0391	3	3	87.6	47.7	41.8	2	30	7
249	TX01A5937	1	1	67.6	8.7	5.9	6	15	40
250	TAM-107	4	4				0	0	0
251	Karl 92	1	1				0	0	0
252	Arapahoe	4	4				1	10	7
253	local check 1	4	4				0	0	0
254	local check 2	1	1				1	10	7
255	local check 3	3	3(ss)				1	10	7
256	TX01V5314	1	1	90.1	19.1	17.2	5	30	18
257	TX01V5425	1	1	90.1	23.1	20.8	14	50	29
258	TX01V5136	3	3	65.1	18.1	11.8	8	40	20
259	TX01V5719	2	2	60.1	16.1	9.7	38	60	64
260	TX01V6008	3	3	95.1	32.1	30.6	12	80	15
261	TX01U2527	1	1	45.1	16.1	7.3	10	20	49
262	TX01U2598	1	1	80.1	22.6	18.1	0	0	0
263	TX01U2601	2	1	35.1	10.6	3.7	1	15	9
264	TX01U2723	1	1	95.1	27.1	25.8	1	15	7
265	TX01U2733	1	2	30.1	9.1	2.7	0	5	7
266	TX01U2685	3	3	40.1	13.1	5.3	1	15	9
267	TX01U2695	3	4	95.1	19.1	18.2	1	5	14
268	TX01U2699	4	4	90.1	23.1	20.8	5	35	13
269	TX95V4339	1	1	75.1	27.6	20.8	0	5	7
270	TX00D2234	3	4	65.1	14.1	9.2	0	0	0

Table 6. Reactions of entries in the 2004 RGON to Wheat Soilborne Mosaic Virus (WSBMV) and Fusarium head blight. See notes for identification of local checks.

Entry	Line or Selection	Wheat soilborne mosaic virus (WSBMV), Stillwater, OK		Fusarium head blight, Brookings, SD			Fusarium head blight, Mead, NE		% Avg Head Severity (1-100)
		3/2/04	3/10/04	Incidence	Severity	Disease Index	% Avg Plot Severity (1-100)	% Incidence	
271	TX01D3215	2	3	25.1	9.6	2.4	0	0	0
272	TX01D3218	4	4	45.1	13.6	6.1	0	0	0
273	TX01D3472	1	1	75.1	19.1	14.4	3	30	9
274	TX01V5134	2	2	10.1	6.6	0.7	1	10	7
275	TX01V6334	2	1	75.1	25.1	18.9	1	20	7
276	TX00D1622	4	4	80.1	22.1	17.7	0	0	0
277	TX02D5868	3	3	60.1	13.1	7.9	2	30	8
278	TX02D6112	1	1	60.1	14.6	8.8	2	25	10
279	TX02U2502	4	4	70.1	17.6	12.4	15	40	37
280	TX02U2508	4	4	85.1	23.6	20.1	5	35	16
281	TX02U2602	3	4	60.1	12.6	7.6	11	30	36
282	TAM-107	2	4				2	25	8
283	Karl 92	1	1				0	0	0
284	Arapahoe	3	4				0	0	0
285	local check 1	3	4				0	0	0
286	local check 2	1	1				2	30	8
287	local check 3	3 (ss)	3 (ss)				1	20	7
288	G001404	2	3	99.9	25.4	25.3	2	10	20
289	G00984W	1	1	99.9	45.4	45.3	1	10	7
290	NW03Y2458	2	3	39.9	8.4	3.3	2	20	11
291	NW03Y2552	2	3	64.9	9.4	6.1	16	65	24
292	NW98S104	2	3	69.9	13.4	9.3	2	15	12



Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
1	TAM-107	S	S	7	10	4
2	Karl 92	S	S	8	11	5
3	Arapahoe	R	S	8	10	5
4	local check 1		S	3	11	4
5	local check 2		S	8	10	4
6	local check 3		R	7	8	4
7	KS02HW90-3	H	S	9	11	5
8	KS02HW90-5	H-	S	7	11	5
9	KS02HW91-1	H-	S	8	9	5
10	KS02HW91-6	S	S	8	11	5
11	KS02HW110-1	S	S	8	10	5
12	KS02HW110-4	S	S	8	10	5
13	KS02HW110-6	S	S	8	11	5
14	KS02HW118-1	S	S	8	10	5
15	KS02HW118-5	S	S	8	8	5
16	KS02HW152-2	H	S	9	8	5
17	KS03HW156	S	S	8	11	5
18	KS03HW157	H	S	8	11	5
19	KS03HW158	S	S	9	9	5
20	KS03HW12	S	S	8	10	5
21	KS03HW15	S	S	9	10	5
22	KS03HW18	S	S	9	11	5
23	G980984	S	S	9	11	5
24	G990624	S	S	9	9	5
25	G990558	H-	S	8	10	5
26	G972791W	S	S	9	11	5
27	G000119	S	S	9	11	5
28	G000141	S	S	8	11	5
29	G000143	S	S	9	11	5
30	G000147	S	S	9	11	5
31	G000198	S	S	8	10	5
32	G000543	H-	S	9	10	5
33	G001784	S	S	9	11	5
34	G000993W	S	S	8	11	5
35	G001004W	S	S	8	10	5
36	G001011W	H-	S	8	10	5
37	G001154W	S	S	8	8	5
38	G001172W	S	S	8	11	5
39	G001202	S	S	8	11	5
40	G001424	S	S	4	11	5
41	NE01419	S	S	8	11	5
42	NE01506	S	S	8	11	5
43	NE01707	H-	S	8	11	5
44	G980122-3	S	S	8	11	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
45	OK02901C	S	S	8	10	5
46	OK02908C	S	S	8	11	5
47	OK02909C	S	6R / 6S	9	8	5
48	OK02911C	S	11R / 3S	8	9	5
49	OK02922C	S	6R / 7S	8	11	5
50	TAM-107	S	S	8	10	5
51	Karl 92	S	S	9	10	5
52	Arapahoe	R-	S	9	10	5
53	local check 1		S	3	10	5
54	local check 2		S	9	11	5
55	local check 3		R	8	9	5
56	OK94P549-6716-R4	S	S	8	8	5
57	OK94P549-6719-R3	S	S	8	8	5
58	OK01526	S	S	9	6	5
59	OK01806	H	S	8	10	5
60	OK01817	S	S	9	10	5
61	OK01415	S	S	9	10	5
62	OK01418	S	S	9	10	5
63	OK01417	S	S	9	9	5
64	OK01410	S	S	9	9	5
65	OK01409	S	S	8	11	5
66	OK01420	S	S	8	8	5
67	OK01123	S	S	8	9	5
68	OK01316	S	S	8	10	5
69	OK01307	S	S	8	11	5
70	OK01202	S	S	8	11	5
71	KS950826-118-3-3	S	S	8	11	5
72	KS950911-112-2-3	S	S	9	10	5
73	KS00F5--20-3-2	S	S	9	10	5
74	KS00F5--20-3-3	S	S	9	11	5
75	KS00F5--36-10-1	S	S	9	11	5
76	KS00F5--42-4-1	S	S	9	11	5
77	KS00F5--43-1-1	S	S	9	10	5
78	KS00F5--43-1-2	S	S	9	11	5
79	KS950301-DD-6-1	S	S	8	11	5
80	KS950493-A-1-2	S	S	9	11	5
81	KS940786-6-9-1	S	S	9	11	5
82	KS940786-6-11-1	S	S	9	9	5
83	KS940786-6-11-2	S	S	9	11	5
84	KS940793-2-2-2	S	S	9	11	5
85	KS970085-9-15	S	S	9	10	5
86	KS970085-9-19	H-	S	9	11	5
87	KS970087-2-7	S	S	8	11	5
88	KS970104-1-6	S	S	9	11	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
89	KS970104-3-11	S	S	9	10	5
90	KS970199-3-3	S	S	8	10	5
91	KS970210-4-2	H+	S	8	10	5
92	KS970226-5-4	S	S	8	10	5
93	KS970226-5-5	S	S	9	10	5
94	KS970226-5-18	H-	S	9	11	5
95	KS970246-7-1	S	S	8	10	5
96	KS970262-17-5	S	S	9	9	5
97	KS970274-14-2	S	S	9	11	5
98	KS970274-14-4	S	S	8	11	5
99	KS970274-14-8	S	S	9	11	5
100	TAM-107	S	S	9	10	5
101	Karl 92	S	S	8	10	5
102	Arapahoe	H	S	8	11	5
103	local check 1		S	4	11	4
104	local check 2		S	8	11	5
105	local check 3		R	7	8	5
106	KS970274-14-19	S	S	9	11	5
107	U4024R-4-1-7-1R	S	S	9	11	5
108	U4024R-4-1-7-2R	S	S	9	11	5
109	U4024R-4-12-6-2R	S	S	9	9	5
110	U4024-1-5-R	S	S	9	10	5
111	U4484(1)-3-bulk	S	S	8	11	5
112	U3960-3R-3-3-bulk	S	S	7	7	5
113	U3960-3R-3-4-bulk	S	S	8	11	5
114	U3960-3R-3-7-bulk	S	S	8	9	5
115	U4551B-R10-5-2	S	S	8	9	5
116	U4551B-R10-5-11	S	S	8	7	5
117	U4551B-R11-2R-1	S	S	8	10	5
118	U3582-2-2-1-13	S	S	8	10	5
119	U3445-23--1-1-1-9	S	S	9	10	5
120	U2665-8-13-1-1	S	S	9	11	5
121	KS03A1001	R-	S	9	11	5
122	KS03A1002	R-	S	9	11	5
123	SD02W005	S	S	9	11	5
124	SD02W011	S	S	9	11	5
125	SD02W013	S	S	9	11	5
126	SD02W014	S	S	9	11	5
127	SD02W041	H	S	9	6	5
128	SD02W053	S	S	8	10	5
129	SD02W057	S	S	8	10	5
130	SD02W063	S	S	9	11	5
131	SD02W067	H	S	8	12	5
132	SD02W121	H-	S	8	7	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
133	SD02004	H	S	9	11	5
134	SD02016	H-	S	9	11	5
135	SD02017	H	S	8	10	5
136	SD02018	S	S	8	10	5
137	SD02024	S	S	9	10	5
138	SD02039	S	S	8	9	5
139	SD02059	S	S	8	8	5
140	SD02067	H	S	8	10	5
141	SD02068	H	S	9	10	5
142	SD02091	S	S	8	10	5
143	SD02149	H	S	8	10	5
144	SD02188	S	S	8	9	5
145	SD02251	H-	S	8	8	5
146	SD02279	H-	S	9	7	5
147	SD02386	S	S	9	10	5
148	SD02423	S	S	9	8	5
149	SD02446	S	S	8	8	5
150	TAM-107	S	S	8	8	5
151	Karl 92	S	S	9	11	5
152	Arapahoe	R-	S	9	11	5
153	local check 1		S	4	11	4
154	local check 2		S	8	11	5
155	local check 3		R	7	7	5
156	SD02480	S	S	8	11	5
157	SD02640	S	S	9	5	5
158	SD02835	S	S	8	10	5
159	NE02484	S	S	7	11	5
160	NE02495	R-	S	8	10	5
161	NE02496	H-	S	8	11	5
162	NE02513	H-	S	9	10	5
163	NE02528	S	S	8	11	5
164	NE02533	H	S	8	12	5
165	NE02545	S	S	9	9	5
166	NE02549	S	S	8	9	5
167	NE02558	H	S	8	10	5
168	NE02584	S	S	8	11	5
169	NE02588	S	S	8	10	5
170	NE02592	S	S	8	11	5
171	NE02647	H-	S	8	10	5
172	NE02672	S	S	8	10	5
173	NI02425	S	S	8	11	5
174	NH01046	S	S	8	11	5
175	NE02465	S	S	8	11	5
176	NE02501	H	S	8	11	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
177	NE02512	S	S	8	10	5
178	NE02532	S	S	8	12	5
179	NH01036	H-	S	8	10	5
180	NH01037	H	S	8	10	5
181	NH01048	S	R	8	11	5
182	NH01049	S	8R / 7S	8	11	5
183	NH01042	S	8R / 5S	8	11	5
184	NI03418	S	S	8	11	5
185	NI03419	S	S	8	10	5
186	NI03426	S	S	8	10	5
187	NI03427	S	S	8	10	5
188	NI03434	S	S	8	11	5
189	CO00016	S	S	3	11	5
190	CO00345	S	S	7	10	5
191	CO00347	S	S	8	11	5
192	CO00554	S	S	7	10	5
193	CO00698	S	S	seg: 6 plants rated 4, 7 rated 7	11	5
194	CO00739	S	S	seg: 2 plants rated 4, 13 rated 7	11	5
195	CO00796	S	S	3-4	11	5
196	CO01212	S	S	7-8	9	5
197	CO01242	S	S	8-9	11	5
198	CO01245	S	S	3-4	11	4
199	CO01252	S	S	3-4	11	5
200	TAM-107	S	S	7-8	10	5
201	Karl 92	S	S	8-9	10	5
202	Arapahoe	R-	S	9	10	5
203	local check 1		S	3-4	9	5
204	local check 2		S	8-9	11	5
205	local check 3		R	7-8	9	5
206	CO01287	S	S	4	11	5
207	CO01385	H-	S	6	10	5
208	CO01433	S	S	7	11	5
209	CO01434	S	S	8	10	5
210	CO01473	S	S	9	11	5
211	CO99314-A1	S	S	7	11	5
212	CO980607-A1	S	S	5; some roll	10	4
213	CO980607-A3	S	S	5	11	5
214	CO980630-A1	S	S	4	10	5
215	CO01W014	S	S	8-9	10	5
216	CO01W073	H	S	5	8	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B	No. of plants	rating (1-5)
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A		
217	CO01W097	S	S	4-5; some cupping	10	5
218	CO01W165	S	S	9	11	5
219	CO01W171	S	S	8	11	5
220	CO01W172	S	S	8	11	5
221	CO01W173	S	S	8	11	5
222	CO01W189	S	S	8	10	5
223	CO01W190	S	S	8	11	5
224	CO01W191	S	S	8	12	5
225	NWX02Y4684	R-	S	8	9	5
226	NWX02Y4668	S	S	8	9	5
227	NWX02Y4648	H-	S	9	8	5
228	NWX02Y4637	H	S	8	10	5
229	NWX02Y4634	H	S	8	11	5
230	NWX02Y4633	H	S	8	9	5
231	NWX02Y4613	H+	S	8	10	5
232	NWX02Y4596	H+	S	8	9	5
233	NWX02Y4553	H-	S	8	11	5
234	NWX02Y4549	H	S	8	10	5
235	NWX02Y4530	H	S	9	10	5
236	NWX02Y4505	H	S	8	11	5
237	NWX02Y4481	H+	S	8	10	5
238	NWX02Y4442	S	S	8	10	5
239	NWX02Y4421	H-	S	8	10	5
240	NWX02Y4385	S	S	8	9	5
241	N03Y2011	S	S	8	10	5
242	N03Y2014	H	S	8	11	5
243	N03Y2015	H	S	8	11	5
244	N03Y2016	H	S	8	10	5
245	N03Y2022	S	S	8	11	5
246	TX01V6016	S	S	8	11	5
247	TX01V5135	S	S	8	9	5
248	TX00A0391	S	S	8	10	5
249	TX01A5937	S	S	8	10	5
250	TAM-107	S	S	8	11	5
251	Karl 92	S	S	8	11	5
252	Arapahoe	R-	S	8	11	5
253	local check 1		S	4	11	5
254	local check 2		S	8	10	5
255	local check 3		R	7	11	5
256	TX01V5314	S	S	7	12	5
257	TX01V5425	S	S	7	10	5
258	TX01V5136	S	S	7	8	5
259	TX01V5719	S	S	7	11	5
260	TX01V6008	S	S	7	9	5

Table 7. Reactions of entries in the 2004 RGON to Hessian fly, Russian wheat aphid and greenbug. See notes for identification of local checks.

Entry	Line	Manhattan, KS	Stillwater, OK	Akron, CO - Russian Wheat Aphid Biotype B		
		Hessian fly	Greenbug biotype E rating	Russ. Wheat Aphid Biotype A	No. of plants	rating (1-5)
261	TX01U2527	S	S	7	11	5
262	TX01U2598	S	S	7	10	5
263	TX01U2601	S	S	7	11	5
264	TX01U2723	S	S	7	10	5
265	TX01U2733	S	S	7	10	5
266	TX01U2685	S	S	7	8	5
267	TX01U2695	S	S	7	10	5
268	TX01U2699	S	S	7	10	5
269	TX95V4339	S	S	7	11	5
270	TX00D2234	H	S	7	11	5
271	TX01D3215	S	S	7	11	5
272	TX01D3218	H	S	7	11	5
273	TX01D3472	S	S	7	11	5
274	TX01V5134	S	S	7	11	5
275	TX01V6334	S	S	7	11	5
276	TX00D1622	S	S	7	11	5
277	TX02D5868	S	S	7	11	5
278	TX02D6112	S	S	7	11	5
279	TX02U2502	S	S	7	11	5
280	TX02U2508	S	S	7	11	5
281	TX02U2602	S	S	8	11	5
282	TAM-107	S	S	8	11	5
283	Karl 92	S	S	8	11	5
284	Arapahoe	R-	S	8	11	5
285	local check 1		S	4	11	5
286	local check 2		S	8	11	5
287	local check 3		R	8	11	5
288	G001404	S	S	8	11	5
289	G00984W	S	S	8	11	5
290	NW03Y2458	S	S	8	11	5
291	NW03Y2552	S	S	8	11	5
292	NW98S104	S	S	8	11	5