Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
1	TAM-107	PI495594	
2	Karl 92	PI564245	
3	Arapahoe	PI518591	
4	Local Check 1	See subsequent tables	
5	Local Check 2	See subsequent tables	
6	Local Check 3	See subsequent tables	
7	97L9532	Siouxland/4*N86L177	ARS, UNL, Graybosch
8	97L9530	Siouxland/4*N86L177	ARS, UNL, Graybosch
9	97L9504	Siouxland/4*N86L177	ARS, UNL, Graybosch
10	97L9517	Siouxland/4*N86L177	ARS, UNL, Graybosch
11	97L9518	Siouxland/4*N86L177	ARS, UNL, Graybosch
12	97L9520	Siouxland/4*N86L177	ARS, UNL, Graybosch
13	97L9531	Siouxland/4*N86L177	ARS, UNL, Graybosch
14	97L9527	Siouxland/4*N86L177	ARS, UNL, Graybosch
15	97L9525	Siouxland/4*N86L177	ARS, UNL, Graybosch
16	97L9522	Siouxland/4*N86L177	ARS, UNL, Graybosch
17	97L9521	Siouxland/4*N86L177	ARS, UNL, Graybosch
18	97L9539	Siouxland/4*N86L177	ARS, UNL, Graybosch
19	97L9537	Siouxland/4*N86L177	ARS, UNL, Graybosch
20	97L9536	Siouxland/4*N86L177	ARS, UNL, Graybosch
21	97L9534	Siouxland/4*N86L177	ARS, UNL, Graybosch
22	97L9533	Siouxland/4*N86L177	ARS, UNL, Graybosch
23	97L9554	Siouxland/Newton/3*N86L177	ARS, UNL, Graybosch
24	97L9553	Siouxland/Newton/3*N86L177	ARS, UNL, Graybosch
25	97L9551	Siouxland/Newton/3*N86L177	ARS, UNL, Graybosch
26	97L9545	Siouxland/4*N86L177	ARS, UNL, Graybosch
27	97L9540	Siouxland/4*N86L177	ARS, UNL, Graybosch
28	97L9561	Siouxland/Newton//2*N86L177/4Karl	ARS, UNL, Graybosch
29	97L9590	TAM107/Karl/3*N86L177	ARS, UNL, Graybosch
30	97L9557	Siouxland/Newton//2*N86L177/4Karl	ARS, UNL, Graybosch
31	TAM-107	PI495594	
32	Karl 92	PI564245	
33	Arapahoe	PI518591	
34	Local Check 1	See subsequent tables	
35	Local Check 2	See subsequent tables	
36	Local Check 3	See subsequent tables	
37	NW97S112	N91L122/KSSB-369-7	ARS, UNL, Peterson
38	NW97S114	N91L122/KSSB-369-7	ARS, UNL, Peterson
39	NW97S343	N91L122/KSSB-369-7	ARS, UNL, Peterson
40	NW97S345	N91L122/KSSB-369-7	ARS, UNL, Peterson
41	NW97S061	NE90501/KSSB-369-7	ARS, UNL, Peterson
42	NW97S277	NE88584/KSSB-369-7	ARS, UNL, Peterson
43	NW97S278	NE88584/KSSB-369-7	ARS, UNL, Peterson
44	NW97S280	NE88584/KSSB-369-7	ARS, UNL, Peterson
45	NW97S078	KSSB-369-7/NE88584	ARS, UNL, Peterson
46	NW97S295	KSSB-369-7/NE88584	ARS, UNL, Peterson
47	NW97S304	KSSB-369-7/NE88584	ARS, UNL, Peterson
48	NW97S218	KS85W663-1-1/KARL92	ARS, UNL, Peterson
49	NW97S092	N90L119/KSSB369-7	ARS, UNL, Peterson
50	NW97S085	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
51	NW97S307	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
52	NW97S309	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
53	NW97S312	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
54	NW97S315	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
55	NW97S320	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
56	NW97S322	KM 602-90/NE89657//KSSB-369-7	ARS, UNL, Peterson
57	NW97S182	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
58	NW97S183	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
59	NW97S186	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
60	NW97S189	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
61	NW97S192	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
62	NW97S193	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
63	NW97S194	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
64	NW97S195	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
65	NW97S412	KS87809-10/ARAPAHOE	ARS, UNL, Peterson
66	TAM-107	PI495594	
67	Karl 92	PI564245	
68	Arapahoe	PI518591	
69	Local Check 1	See subsequent tables	
70	Local Check 2	See subsequent tables	
71	Local Check 3	See subsequent tables	
72	KS95U589-4	KS91WGRC12-1-9/VICTORY	ARS,KSU, Brown-Guedira
73	KS96WGRC36	TAM107*4/TA870	ARS,KSU, Brown-Guedira
74	KS96WGRC40	WGRC10 sib*3/TA2397	ARS,KSU, Brown-Guedira
75	KS98U661	TAM107*3/TA28	ARS,KSU, Brown-Guedira
76	KS98U662	Karl92*3/TA874	ARS,KSU, Brown-Guedira
77	KS98U663	Karl92*3/TA874	ARS,KSU, Brown-Guedira
78	KS98U664	WGRC10 sib*4/TA2455	ARS,KSU, Brown-Guedira
79	KS98U665	TAM107*2/TA759//WGRC10/WGRC16	ARS,KSU, Brown-Guedira
80	KS98U666	WGRC10 sib*3/TA2397//WGRC10/WGRC16	ARS,KSU, Brown-Guedira
81	KS98U667	WGRC10/WGRC16//KS90WGRC10 sib*3/TA2455	ARS,KSU, Brown-Guedira
82	KS98U668	WGRC10 sib*3/TA2455//WGRC10/WGRC16	ARS,KSU, Brown-Guedira
83	KS98U669	WGRC10 sib*3/TA2397//WGRC10 sib*3/TA2455	ARS,KSU, Brown-Guedira
84	KS98U670	Jagger/3/Karl*3//PI266844/PI355520	ARS,KSU, Brown-Guedira
85	KS98U672	TAM107*2/TA759//WGRC10 sib*3/TA2397	ARS,KSU, Brown-Guedira
86	G97018	G581/ARLIN//KARL92	Goertzen Seed
87	G97019	G33/TOMAHAWK//KARL92	Goertzen Seed
88	G97026	G1780/B2542	Goertzen Seed
89	G97057	G62/G2500	Goertzen Seed
90	G97058	W338-K1-1/B725//KARL92	Goertzen Seed
91	G97060	ABILENE/G1113/2*/G62	Goertzen Seed
92	G97064	G9112123/B725//KARL92	Goertzen Seed
93	G97070	G9116871/B725//KARL92	Goertzen Seed
94	G97361	W338-K1-1/B725//KARL92	Goertzen Seed
95	G97082	G33/KARL92//G2500	Goertzen Seed
96	G97099	G862022/R654//Karl92	Goertzen Seed
97	G97100	SWM12174/TOMAHAWK//KARL92	Goertzen Seed
98	G97159	G2500/KARL92	Goertzen Seed
99	G97160	G862074/B725//KARL92	Goertzen Seed
100	G97174	G33/WI89-055//KARL92	Goertzen Seed
101	TAM-107	G62/G2500	Goertzen Seed
102	G97187	G2542/G1980	Goertzen Seed

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
103	G97195	G9118477/B725//KARL92	Goertzen Seed
104	G97196	G577/ARLIN//KARL92	Goertzen Seed
105	G97200	HAVEN/G374//ARLIN	Goertzen Seed
106	G97232	PLS-H-T-43/KARL92	Goertzen Seed
107	G97246	G9113231/B725//KARL92	Goertzen Seed
108	G97252	RAEDER/R654//KARL92	Goertzen Seed
109	G97285	G911223/B725//KARL92	Goertzen Seed
110	G97310	90ORS-63/R654//KARL92	Goertzen Seed
111	G97380	G33/KARL92//G2500	Goertzen Seed
112	G97393	G861954/B725//KARL92	Goertzen Seed
113	G97431	G1113/G2500	Goertzen Seed
114	G97466	G9119021/B725//KARL92	Goertzen Seed
115	TAM-107	PI495594	
116	Karl 92	PI564245	
117	Arapahoe	PI518591	
118	Local Check 1	See subsequent tables	
119	Local Check 2	See subsequent tables	
120	Local Check 3	See subsequent tables	
121	H9520394	Quantum Hybrid Wheat	HybriTech
122	H9521563	Quantum Hybrid Wheat	HybriTech
123	H9525208	Quantum Hybrid Wheat	HybriTech
124	WX96-6601	Quantum Hybrid Wheat	HybriTech
125	WX96-3002	Quantum Hybrid Wheat	HybriTech
126	XH9801	Quantum Hybrid Wheat	HybriTech
127	XH9808	Quantum Hybrid Wheat	HybriTech
128	XH9811	Quantum Hybrid Wheat	HybriTech
129	XH9812	Quantum Hybrid Wheat	HybriTech
130	H9520400	Quantum Hybrid Wheat	HybriTech
131	H9520428	Quantum Hybrid Wheat	HybriTech
132	H9520436	Quantum Hybrid Wheat	HybriTech
133	H9520483	Quantum Hybrid Wheat	HybriTech
134	H9520842	Quantum Hybrid Wheat	HybriTech
135	H9520865	Quantum Hybrid Wheat	HybriTech
136	H9520871	Quantum Hybrid Wheat	HybriTech
137	WX96-0507	Quantum Hybrid Wheat	HybriTech
138	WX96-0802	Quantum Hybrid Wheat	HybriTech
139	WX97-1701	Quantum Hybrid Wheat	HybriTech
140	WX97-1711	Quantum Hybrid Wheat	HybriTech
141	WX97-1713	Quantum Hybrid Wheat	HybriTech
142	WX97-1718	Quantum Hybrid Wheat	HybriTech
143	WX97-3201	Quantum Hybrid Wheat	HybriTech
144	WX97-3207	Quantum Hybrid Wheat	HybriTech
145	WX97-3210	Quantum Hybrid Wheat	HybriTech
146	TAM-107	PI495594	
147	Karl 92	PI564245	
148	Arapahoe	PI518591	
149	Local Check 1	See subsequent tables	
150	Local Check 2	See subsequent tables	
151	Local Check 3	See subsequent tables	
152	KS97H115	IKE/VBE133E	KSU, Martin
153	KS97H125	VISTA/KS89H163-1(P2)	KSU, Martin

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
154	KS97HW4	ARLIN/3/KS91HW29//RB/KS91H184	KSU, Martin
155	KS98HW102	KS92HW10/IKE	KSU, Martin
156	KS98HW106	KS92HW10/IKE	KSU, Martin
157	KS98HW107	KS92HW10//TA2460/*3 TAM107	KSU, Martin
158	KS98HW109	KS92HW10//TA2460/*3 TAM107	KSU, Martin
159	KS98HW122	KS92HW10//TA2460/*3 TAM107	KSU, Martin
160	KS98HW127	KS92HW10//TA2460/*3 TAM107	KSU, Martin
161	KS98HW149	ARLIN/N87V106	KSU, Martin
162	KS98HW151	ARLIN//TA2460/*3 TAM107	KSU, Martin
163	KS98HW163	ARLIN/WGRC15	KSU, Martin
164	KS98HW164	ARLIN/WGRC15	KSU, Martin
165	KS98HW170	ARLIN/WGRC15	KSU, Martin
166	KS98HW180	85W663-11-6-1/KS87H6	KSU, Martin
167	KS98HW183	85W663-11-6-1/KS87H6	KSU, Martin
168	KS98HW184	85W663-11-6-1/KS87H6	KSU, Martin
169	KS98HW185	85W663-11-6-1/KS87H6	KSU, Martin
170	KS98HW189	85W663-11-6-1/3/KS91HW29//KS90HW53/KS91H184	KSU, Martin
171	KS98HW211	KS91HW29//KS90HW53/KS91H184/3/KS91H134-4	KSU, Martin
172	KS98HW215	KS91HW29//KS90HW53/KS91H184/3/KS91H134-4	KSU, Martin
173	KS98HW32	KS91HW19/KS91H153-4	KSU, Martin
174	KS98HW35	RIOBLANCO/HBFO429-157	KSU, Martin
175	KS98HW41	KS91HW19//TA2460/*3 TAM107	KSU, Martin
176	KS98HW43	KS91HW19//KS82W418/STEVENS	KSU, Martin
177	KS98HW46	KS91HW19//KS82W418/STEVENS	KSU, Martin
178	KS98HW6	KS91HW19/IKE	KSU, Martin
179	KS98HW66	KS91HW19/KS87H6	KSU, Martin
180	KS98HW91	KS91HW19/3/KS91HW29//KS90HW53/KS91H184	KSU, Martin
181	KS98HW98	KS91HW19/3/KS91HW29//KS90HW53/KS91H184	KSU, Martin
182	TAM-107	PI495594	
183	Karl 92	PI564245	
184	Arapahoe	PI518591	
185	Local Check 1	See subsequent tables	
186	Local Check 2	See subsequent tables	
187	Local Check 3	See subsequent tables	
188	OK98112	ID13.1/MTLsib66/N88V027	OSU, Carver
189	OK98113	N90V087/NE90573	OSU, Carver
190	OK98115	N90V087/NE90573	OSU, Carver
191	OK98119	N90L119/OK89421	OSU, Carver
192	OK98123	N87V106/OK88767	OSU, Carver
193	OK98124	N89L851/TX89V4135	OSU, Carver
194	OK98130	Karl*3/CIMMYT-61	OSU, Carver
195	OK98131	Cimarron*3/CIMMYT-58	OSU, Carver
196	OK98132	2158/3/Karl//2158/CIMMYT-25	OSU, Carver
197	OK98135	2158*3/CIMMYT-53	OSU, Carver
198	OK98136	Mesa/3/Karl/CIMMYT-33/Mesa	OSU, Carver
199	OK98138	Cimarron*3/Chisholm-T	OSU, Carver
200	OK98140	Cimarron*3/Chisholm-T	OSU, Carver
201	OK98207	HBC302E/OK88767	OSU, Carver
202	OK98208	HBC302E/OK88767	OSU, Carver
203	OK98216	Olivia/OK88767	OSU, Carver
204	OK98217	Bononya/Longhorn	OSU, Carver

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
205	RMH-05/99	Mesa/IWWRN#082//TBD	OSU, Hunger
206	RMH-11/99	TAM108/IWWRN#189	OSU, Hunger
207	RMH-15/99	TAM108/IWWRN#189	OSU, Hunger
208	RMH-20/99	CSM/IWWRN#189	OSU, Hunger
209	RMH-21/99	CSM/IWWRN#189	OSU, Hunger
210	RMH-22/99	CSM/IWWRN#189	OSU, Hunger
211	RMH-24/99	KS90WGRC10/KRL	OSU, Hunger
212	RMH-25/99	KS90WGRC10/KRL	OSU, Hunger
213	RMH-26/99	KS90WGRC10/TNK	OSU, Hunger
214	RMH-27/99	KS90WGRC10/ABL	OSU, Hunger
215	TAM-107	PI495594	
216	Karl 92	PI564245	
217	Arapahoe	PI518591	
218	Local Check 1	See subsequent tables	
219	Local Check 2	See subsequent tables	
220	Local Check 3	See subsequent tables	
221	SD97008	Karl/Niobrara	SD, Haley
222	SD97010	Karl/Niobrara	SD, Haley
223	SD97049	ND8889/Karl	SD, Haley
224	SD97057	ND8889/NE90574	SD, Haley
225	SD97058	ND8889/NE90574	SD, Haley
226	SD97059	ND8889/NE90574	SD, Haley
227	SD97060	ND8889/NE90574	SD, Haley
228	SD97063	ND8889/NE90574	SD, Haley
229	SD97064	ND8889/Redland	SD, Haley
230	SD97102	ND8955/Alliance	SD, Haley
231	SD97197	ND8974/KS84W063-9-3-2	SD, Haley
232	SD97214	ND8974/SWO780127B	SD, Haley
233	SD97376	Niobrara/Tandem	SD, Haley
234	SD97427	SD88201/Karl	SD, Haley
235	SD97W603	SD89333/Abilene	SD, Haley
236	SD97W604	SD89333/Abilene	SD, Haley
237	SD97W606	SD89333/Abilene	SD, Haley
238	SD97W609	Abilene/Karl	SD, Haley
239	SD97W615	Abilene/Karl	SD, Haley
240	SD97W616	Abilene/Karl	SD, Haley
241	SD97W623	Karl/NE87612	SD, Haley
242	SD97W624	Karl/NE87612	SD, Haley
243	SD97W634	RioBlanco/Redland	SD, Haley
244	SD97W638	RioBlanco/Redland	SD, Haley
245	SD97W641	RioBlanco/Redland	SD, Haley
246	SD97W642	RioBlanco/Redland	SD, Haley
247	SD97W648	Dawn/RioBlanco	SD, Haley
248	SD97W650	Dawn/RioBlanco	SD, Haley
249	SD97W651	Dawn/RioBlanco	SD, Haley
250	SD97W664	RioBlanco/Rose	SD, Haley
251	TAM-107	PI495594	
252	Karl 92	PI564245	
253	Arapahoe	PI518591	
254	Local Check 1	See subsequent tables	
255	Local Check 2	See subsequent tables	

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
256	Local Check 3	See subsequent tables	
257	TX97A0030	KS84063-9-7/TX89V4133	TX, Lazar
258	TX97A0036	KS92WGRC22//TAM-107/TX85V1340	TX, Lazar
259	TX97A0064	TX86V1540/ARAPAHOE	TX, Lazar
260	TX97A0080	TX87V1138/KS84063-9-7	TX, Lazar
261	TX97A0089	TX89D6452/U1254-4-0-8-V14	TX, Lazar
262	TX97A0096	TX90D9716//TX71A937/TX81V6599	TX, Lazar
263	TX97A0097	TX90V7911/TAM-200	TX, Lazar
264	TX97A0100	TX90V7911/TX90A9516	TX, Lazar
265	TX97A0110	TX90V7917/TX90A9516	TX, Lazar
266	TX97A0116	TX91A311/U1254-1-5-2-5-V46	TX, Lazar
267	TX97A0124	TAM-105/TX81V6599/U1254-1-5-2-5-V37	TX, Lazar
268	TX97A0125	TAM-105/TX81V6599/U1254-1-5-2-5-V37	TX, Lazar
269	TX97A0130	TX91V3920/TX90A9524	TX, Lazar
270	TX97A0148	KS82207/TAM-108//U1254-4-8-2-V49	TX, Lazar
271	TX97A0160	KARL/TX85V1836//FL302/NE77465	TX, Lazar
272	TX97A0161	KARL/TX85V1836//U1254-4-9-8-V32	TX, Lazar
273	TX97A0166	FL302/NE77465//KARL92	TX, Lazar
274	TX97A0182	OGALLALA/TX89V4133	TX, Lazar
275	TX97A0190	COKER68-15/ARLAN//OK88767-02	TX, Lazar
276	TX97A0196	TX87V1233-3/U1254-4-6-6//KARL92	TX, Lazar
277	TX97A0198	TX87V1233-3/U1254-4-6-6//KARL92	TX, Lazar
278	TX97A0207	CO860086/3/SERI*3//RL6010/4*YR/4/KARL	TX, Lazar
279	TX97A0214	TAM-202/3/SERI*3//RL6010/4*YR/4/KARL	TX, Lazar
280	TX97A0216	TAM-202/3/SERI*3//RL6010/4*YR/4/KARL	TX, Lazar
281	TX97A0232	TX86V1540/VEE "S"//KARL	TX, Lazar
282	TX97A0260	TAM-105*4/AMIGO*5//LARGO/3/NE87403	TX, Lazar
283	TX97A0270	TX81V6610/TX89V4132//KS82206/TX81V6599	TX, Lazar
284	TX97A0271	TX81V6610/TX89V4132//KS82206/TX81V6599	TX, Lazar
285	TX97A0273	VEERY*8/TX87A6821//KARL	TX, Lazar
286	TX97A0274	VEERY*8/TX87A6821//KARL	TX, Lazar
287	TAM-107	PI495594	
288	Karl 92	PI564245	
289	Arapahoe	PI518591	
290	Local Check 1	See subsequent tables	
291	Local Check 2	See subsequent tables	
292	Local Check 3	See subsequent tables	
293	TX94D4148	TX86D1310/Kavkaz//TX86D1308 (=WX87D144-13-10)	TX, Marshall
294	TX96D1693	Adder//TX84U4408/Pavon 76 (=WX88D057-292)	TX, Marshall
295	TX96D1865	WX86D109-6/Sconger (=WX87D006-08)	TX, Marshall
296	TX96D2267	TXGH12588/Siouxland//TX87V1209 (=WX90D045-9-25-14)	TX, Marshall
297	TX96D2279	CI13227/4/PI429155/3/CLN/Mit//TXGH12588 (=WX90D062-1-47-28)	TX, Marshall
298	TX96D2837	83YldComp#21/W3432//W9426C (=TX92D5130-4-136-2) (HBG0783)	TX, Marshall
299	TX96D2845	T200*HBY242H/AOE*HBY242H (=TX92D6697-1-5-1-49) (HBK0279)	TX, Marshall
300	TX97D4375	WX86D109-6/TX88D3495 (=WX89D237-5-705-1)	TX, Marshall
301	TX97D5514	Sturdy/P2157//TX86D1320 (=WX88D002-4-3-20-3-213-11)	TX, Marshall
302	TX97D5851	Mit//TX87V1209/Sturdy (=WX89D032-26-5-1-860-22)	TX, Marshall
303	TX97D6122	Era//Len/TX82D4751 (=WX86D108-7-29-9-18-97-16)	TX, Marshall
304	TX97D6178	Wheaton/Sturdy/4/TXGH10563B/3/Len/Oslo//Mit (=WX90D033-9-16-52-3)	TX, Marshall
305	TX97D6335	Lutescens 10286/TX93D3302 (=WX93D248-1)	TX, Marshall

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
306	TX97D6337	HBG026+NE78659*Arkan/2180 (=TX94D6111-11) (HBG0726)	TX, Marshall
307	TX97D6778	Syrian #79/Sturdy//TXGH12588/TX87V1138 (=WX90D270-13-92-11)	TX, Marshall
308	NE97407	NE88527 (=SVDONSKIA/SXL)/Niobrara sib//ABILENE	UNL, Baenziger
309	NE97421	KS88H164/NE86507 (=COLT/CODY)//NE86606 (=WRR/SUT//MOW6811/3/AGATESIB/4/CODY	UNL, Baenziger
310	NE97426	BRIGANTINA/2*ARAPAHOE	UNL, Baenziger
311	NE97465	SD3055/KS88H164//NE89646 (=COLT*2/PATRIZANKA)	UNL, Baenziger
312	NE97489	NE87613 (=NE76668/4/T105/3/LRN//EGL/SAGE)/KS88H145//NE87612 (=NWT//WRR*5/AGT/3/NE69441)	UNL, Baenziger
313	NE97518	NE87612 (=NWT//WRR*5/AGT/3/NE69441)/KS87H6/Nekota	UNL, Baenziger
314	NE97553	NE88527 (=SVDONSKIA/SXL)/Niobrara sib//ABILENE	UNL, Baenziger
315	NE97558	ARAPAHOE/NE89523 (=T105*4/AMIGO//BENNETT)//REDLAND	UNL, Baenziger
316	NE97612	CODY/NE89476 (=NE7060/SXL)//ABILENE	UNL, Baenziger
317	NE97638	NE90614 (=BRL/4/PKR*4/AGT//BEL.198/LCR/3/NWT/BRL) (=BRL/4/PKR*4/AGT//BEL.198/LCR/3/NWT/BRL)/NE87612 (=NWT//WRR*5/AGT/3/NE69441)	UNL, Baenziger
318	NE97669	VISTA/KS87H6//KSSB-369--7	UNL, Baenziger
319	NE97670	ARAPAHOE/NE89523 (=T105*4/AMIGO//BENNETT)//REDLAND	UNL, Baenziger
320	NE97675	NE87409 (=NWT/2/WRR*5/AGT/4/TAM105/3/LRN//EGL/SAGE)/0K87630	UNL, Baenziger
321	NE97689	NE90614 (=BRL/4/PKR*4/AGT//BEL.198/LCR/3/NWT/BRL) (=BRL/4/PKR*4/AGT//BEL.198/LCR/3/NWT/BRL)/NE87612 (=NWT//WRR*5/AGT/3/NE69441)	UNL, Baenziger
322	NE97693	KS8010-1-4-2/ XW171//NE86606 (=WRR/SUT//MOW6811/3/AGATESIB/4/CODY	UNL, Baenziger
323	NE97716	N96L030	UNL, Baenziger
324	NI97423	OK87630/Nekota	UNL, Baenziger
325	TAM-107	PI495594	
326	Karl 92	PI564245	
327	Arapahoe	PI518591	
328	Local Check 1	See subsequent tables	
329	Local Check 2	See subsequent tables	
330	Local Check 3	See subsequent tables	
331	CO960002	Karl92/Halt	CSU
332	CO960004	Karl92/Halt	CSU
333	CO960006	Karl92/Halt	CSU
334	CO960020	Karl92/Halt	CSU
335	CO960026	RWAE5R/CO880210	CSU
336	CO960037	RWAE5R/CO880210	CSU
337	CO960047	RWAE5R/CO880210	CSU
338	CO960053	RWAE5R/CO880210	CSU
339	CO960065	RWAE5R/CO880210	CSU
340	CO960091	RWAE5R/Akron	CSU
341	CO960102	PI294994/CO870438	CSU
342	CO960211	CI16501//TAM-107/CO850034	CSU
343	CO960223	CI16501//TAM-107/Yuma	CSU
344	CO960230	CI16501//TAM-107/Yuma	CSU
345	CO960255	CI16501//Lamar/TAM-107	CSU
346	CO960293	PI222668//TAM-107/CO850034	CSU
347	CO960315	PI222668//Lamar/TAM-107	CSU
348	CO960326	PI222668//Lamar/CO850034	CSU
349	CO960329	PI222668//Lamar/Yuma	CSU
350	CO960333	PI222668//Lamar/Yuma	CSU

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
351	CO960551	Akron/Lamar	CSU
352	CO960603	Akron/Yuma	CSU
353	CO960686	KS95H154	CSU
354	CO960689	KS95H169	CSU
355	CO960691	KS95H176	CSU
356	W95-188-134	Abilene/KS90WGRC10	Agripro
357	W95-188-08	Abilene/KS90WGRC10	Agripro
358	W95-385	WI90-425/WI89-483	Agripro
359	W95-392	WI90-425/WI89-483	Agripro
360	W95-091	KS85W663-2-4/W87-085	Agripro
361	W94-244-132	WI89-088/WI88-052	Agripro
362	W94-480W	HBK0927	Agripro
363	W95-610W	WI89-282/Arlin	Agripro
364	W96-359	WI90-008/W91-040	Agripro
365	W96-410	87PYI140-100/87F27515	Agripro
366	W96-392	WI88-052-08/W91-037	Agripro
367	W96-078	WI90-162/WI89-197	Agripro
368	W96-300	Tomahawk/W91-040	Agripro
369	W96-332	Ponderosa/2163	Agripro
370	W97-234	Jagger/WI89-189-14	Agripro
371	W97-075	WI89-197/WI90-385	Agripro
372	W97-169	WI88-052-11/WI89-018	Agripro
373	W97-231	WI88-112/Dominator	Agripro
374	W97-276	WI89-197*3/wcm002	Agripro
375	W97-283	KS91H184/WI89-360	Agripro
376	W97-371	WI89-197/W92-153	Agripro
377	W97-430	KS86323A-5/Hickok	Agripro
378	W97-435	W92-394/Pecos	Agripro
379	TAM-107	PI495594	
380	Karl 92	PI564245	
381	Arapahoe	PI518591	
382	Local Check 1	See subsequent tables	
383	Local Check 2	See subsequent tables	
384	Local Check 3	See subsequent tables	
385	X920232-8-1	HAWK/81PYI9641//MESA MOTHER LINE/3/KS82W418/SPN	KSU, Sears
386	X920232-26-1	HAWK/81PYI9641//MESA MOTHER LINE/3/KS82W418/SPN	KSU, Sears
387	X920232-5	HAWK/81PYI9641//MESA MOTHER LINE/3/KS82W418/SPN	KSU, Sears
388	X920618-C-4-1	KSSB369-7/X85110-2-5//KS84W063-9-9-12	KSU, Sears
389	KS920639-B-3-1	IKE/K92//THK	KSU, Sears
390	KS920656-B-8-1	HBC059E/HBE0780A//KS87807-23	KSU, Sears
391	X920663-B-14-1	HBC059E/X84W063-9-39-2//KS369-7	KSU, Sears
392	KS920676-D-12-1	HBC302E/X85110-6-8-1//K92	KSU, Sears
393	X920709-B-5-2	T67/X84W063-9-45//K92	KSU, Sears
394	KS920709-B-6-1	T67/X84W063-9-45//K92	KSU, Sears
395	X920750-A-13-1	HBF0290/X84W063-9-39-2//ARH	KSU, Sears
396	X920750-A-11-2	HBF0290/X84W063-9-39-2//ARH	KSU, Sears
397	X920879-C-15-1	X84W063-9-45/T63//KS87807-23	KSU, Sears
398	X920879-C-15-3	X84W063-9-45/T63//KS87807-23	KSU, Sears
399	X920946-B-15-1	ABI 86*3414/X84W063-9-39-2//K92	KSU, Sears
400	KS920946-B-15-2	ABI 86*3414/X84W063-9-39-2//K92	KSU, Sears
401	X921025-A-3-2	X85W663-7-4-2/85HF011-6-3-3//X87807-22/K	KSU, Sears

Table 1. 1999 RGON, entries

Entry	Line	Pedigree	Source
402	X921043-A-3	X84W063-9-18-3/HBF0435//2180	KSU, Sears
403	X921054-D-13	X84W063-9-45-1/X85W663-7-4-2//HBB036J	KSU, Sears
404	X921054-E-15	X84W063-9-45-1/X85W663-7-4-2//HBB036J	KSU, Sears
405	KS921084-C-5-1	X86509-1-1/X84W063-9-39-2//K92	KSU, Sears
406	X930332-4-1	KARL*3/TA2473/3/KS82W422/SWM754308//KS831182/KS82W422	KSU, Sears
407	TAM-107	PI495594	
408	Karl 92	PI564245	
409	Arapahoe	PI518591	
410	Local Check 1	See subsequent tables	
411	Local Check 2	See subsequent tables	
412	Local Check 3	See subsequent tables	

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
1	TAM-107	2-,2=	2, 2=	2=	2-	0;,2,2-	2	2
2	Karl 92	S, 2+	2, S	2	2	2	2	2
3	Arapahoe	0; ,2-	0;	2	0;,2	0;,2	2CN,2-	2-
4	Local Check 1	S	S	S	S	S	S	S
5	Local Check 2	S	S	S	S	S	S	S
6	Local Check 3	S	S	S	S	S	S	S
7	97L9532	0; ,2, S	2	2, 2=	2	2C, 2	2	2, 2+
8	97L9530	2, 2+	2	2, 2+	2	2C, 2	2	2
9	97L9504	2, 2=	2, 2-	2	2, 2=	2	2, 2=	2CN
10	97L9517	0; ,2=	2 , 2=	2, 2=	2, 2-	2C	2, 2=	2
11	97L9518	2, 2=	2, 2=	2	2	2	2, 2CN	2CN
12	97L9520	2, 2=	2, 2=	2 2-	2, 2C	2, 2=	2, 2-	2, 2C
13	97L9531	2, 2+-	2, S	2	2, 2=	2	2	2
14	97L9527	2+-	2, 2=	2, 2-	2	2	2, 2-	2, 2-
15	97L9525	0; ,2	2	2, 2-	2	0;	2	2, 2-
16	97L9522	0;,2,2=	2, 2-	2	2	2	2, 2-	2
17	97L9521	0; ,2	2, 2-	2, 2=	2, 2=	0;	2, 2=	2-
18	97L9539	2, 2=	2, 2C	0;,2,2C	0; ,2	2N	2 CN	2CN
19	97L9537	2, 2=	0; ,2	2	2, 0;	2	2, 2-	2, 2-
20	97L9536	2	1, 2	2	2	2	2	2
21	97L9534	2, 2=	2, 2=	2, 2=	2, 2C	2, 2-	2-	2
22	97L9533	2, 2=	2, 2C	0;,2	2	2	2	2
23	97L9554	2, S	2,S	2, 2=	0;,2+	2	2, 2+	2
24	97L9553	2, 2-	2	0;,2	2	0;	2	2, 2-
25	97L9551	2	2,2+-	2	2-, 2	2-	2	2, 2-
26	97L9545	2	2C	0;,2C	0;,2C	2	2	2, 2-
27	97L9540	2, 2=	2	2	2=, 2	2-	2	2
28	97L9561	2-C	1, 2-	2	2	2, 2=	2	2
29	97L9590	2C, 2=	2-C	2-,2=	2	2	0	2
30	97L9557	2-	2-C	0	2	2-	2CN,2-	2CN
31	TAM-107	2-, 2	2	2	2, 2-	2	2	2
32	Karl 92	S,2+	S,2	2, 2+	2, 2+	2	-	2, 2+
33	Arapahoe	0;	0;	2	0;	2=	2=	2-, 2=
34	Local Check 1	S	S	S	S	S	S	S
35	Local Check 2	S	S	S	S	S	S	S
36	Local Check 3	S	S	S	S	S	S	S
37	NW97S112	2	2	2	0	0	2	2, S
38	NW97S114	S, 2	2, S	2	2, 0;	2	2, S	2, 2+
39	NW97S343	2	S, 2	2, S	2	2, 2+	2	2, 2+
40	NW97S345	S, 2	S, 2	2	2+	0;,2	2, 2=	2,S
41	NW97S061	2, 2+	2, 2+	2, 2+	2, S	2	2,S	2, S
42	NW97S277	2+	0	2, S	0	2	2	S,2
43	NW97S278	2	0	2, S	0	2, 2+	2,S	2, 2+
44	NW97S280	2	2	2, S	0	2, 2+	_	_
45	NW97S078	2, 2-	2	2, S	0;	2	2, 2+	2, 2+
46	NW97S295	2+-	2, 2+	2, S	0	2, 2+	2	2
47	NW97S304	0;,2	0;	2, S	0	2	2, S	2, S
48	NW97S218	2, 2+	2, 2+	2+-	0;	2	0;,2	2
49	NW97S092	2	2	2	0;	0;	-	0
50	NW97S085	0;	0	2, S	2, 2+	2	-	2, S

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
51	NW97S307	2	2	2, S	S	2	-	2,S
52	NW97S309	2	2	0;,2=	0; 2=	2	-	2
53	NW97S312	0;,2,2-	1, 2	2, S	2, 2+	0-;	-	2, 2+
54	NW97S315	2, 2+	2	2, S	2, S	2	-	0;,2
55	NW97S320	0;,2	2, 2=	2, 2=	2, S	0;	-	2
56	NW97S322	2	0;,2	2, S	S	2, S	-	0;,2+
57	NW97S182	2+ 0;	2, S	2, S	2, 2+	2, 2+	2	S
58	NW97S183	2, S	S	2, S	2, S	S, 2	S	2, S
59	NW97S186	2C	_	2, 2-	0;,2C	2	0;,2-	2C
60	NW97S189	2C	_	S-C	0;,2	2, 2+	2, 2+	2+, 2C
61	NW97S192	2	_	S,2,2-	2	2, S	2, S	2, S
62	NW97S193	2, S	2	2, S	0;,2	2, S	S	2, S
63	NW97S194	2,S,0;	0;	2,S,2-	0;,2	2, S	2, S	2, S
64	NW97S195	2, 2+	2, 2+	2, S	0;,2+	2, S	S,S	2, S
65	NW97S412	2C	2	2+, S	2C	2, S	2	2, S
66	TAM-107	2, 2-	2, 2-	2, 2-C	2, 2-	2-C	2, 2+	2
67	Karl 92	2, 2+	2, 2+	2, S	2, 2+	2-C	2	2, S
68	Arapahoe	0;	0;	2	0;	-	2, 2=	2, 2=
69	Local Check 1	S	S	S	S	S	S	S
70	Local Check 2	S	S	S	S	S	S	S
71	Local Check 3	S	S	S	S	S	S	S
72	KS95U589-4	2+	2+, 2	2, 2+	2, 2+	2CN	2+, 2	2
73	KS96WGRC36	2	2	2, 2-	2-	2	2	2
74	KS96WGRC40	2, 2-	2, 2=	0;,2	0;	2	2	2, 2-
75	KS98U661	S, 2	S, 2	2, S	2, 2+	2, 2-	2, 2+-	2, S
76	KS98U662	2, S	S, 2	2, S	2, S	2, S	2, S	2, S
77	KS98U663	2, S	S, 2	2, S-C	2, S	2	2, 2=	2, S
78	KS98U664	2,2-,S	S, 2	2C,S-C	2, S	2+-	2	2, 2+
79	KS98U665	2, 2-	2, 2-	2, 2-	2, 2-	2	2, 2-	2
80	KS98U666	2+-	2, S	2, S	2, S	2, 2=	2	2, S
81	KS98U667	0;,2=	2, 2-	0;,2-	2, 0;	2	0;,2	2
82	KS98U668	2	2, S	2, 2+	2, S	2, 2+	2, 2+	2, S
83	KS98U669	2, 2-	2-CN	0;	0;,2=	2, 2C	2	2
84	KS98U670	2	2, 2-	2	2C, 2	2	2	2,0;
85	KS98U672	2, 2-	0; 1	2, 2=	0;,2	0;,2-	2-	2-, 0;
86	G97018	2, 2+	2, 2+	2, 2=	2, 2+	2	2	2
87	G97019	2, 2+	2, 2+	2, 2+	2, 2-C	2, 2=	2, 2-	2
88	G97026	0;,2-,2	2	2, 2+	2, S	2	2	2, 2+
89	G97057	2	2	2, S	S	S, 2	S	S
90	G97058	2+-	2, 2+	2+-	2, S	2, 2=	2, S	2
91	G97060	2, 2-	2	2, S	2	2	2	2=
92	G97064	2, 2-	2	2, 2=	2	0;,2=	2	2, 2=
93	G97070	2	2	2, 2+	2	2, 2=	2, 2-	2CN
94	G97361	2, 2+	2, S	2	2, 2+	2	2, 2+-	2
95	G97082	2	2	2, 2+	2, S	2	2, S	2, S
96	G97099	2	2, 2-	2, 2=	2	2-	2, 2+	2+
97	G97100	2, S	2, 2+	2, S	S, 2	2, S	S, 2	2, S
98	G97159	2, S	2	2, S	S, 2	2,S	S, 2	S, 2
99	G97160	2	2-	2, 2-	2	0;,2-	2, 2-	2-, 2=
100	G97174	2, S	2, S	2, 2+	2	2	S, 2	S, 2

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
101	TAM-107	2	2	2=	2	2	2	2, 2-
102	G97187	2, 2-	2, 2-	2,S	0;,2	2, 2+	2, 2+	2, S
103	G97195	2+, S	2+	2=, S	2, 2+	2	2, S	2, 2-
104	G97196	S, 2	S, 2	2, S	S, 2	2, 2=	2, S	2, S
105	G97200	2, 2+	2, 2+	2C, S	S, 2	0; ,S	2, S	2, 2+
106	G97232	2, 2-C	2, S	2, S	2, S-C	2	2, S	2, S
107	G97246	2, S	0	2	0;,2	2	2	2, 2CN
108	G97252	2, S	2, S	2, 2+	S, 2	2, S	2, S	2, S
109	G97285	2, 2+	2, S	S, 2	2	2	2, S	2, S
110	G97310	2, 2-	2	2	0;,2	0;,2=	2, 2-	2C
111	G97380	2, S	0	2, S	2,S	2, S	S, 2	2, S
112	G97393	2, S	2CN	2-, 2=	2CN	2	2, 2=	2, 2-
113	G97431	S	S	S	S	2, S	S	2, S
114	G97466	2, S	S, 2	2, S	2	2	2, S	2
115	TAM-107	2-	2-	2-	2, 2-	2=	2, 2-	2, 2-
116	Karl 92	2, 2+	2, S	2	2, 2+	2=	2,2+	2, 2+
117	Arapahoe	0;	0	2	0;	2=	2=, 2	2=
118	Local Check 1	S	S	S	S	S	S	S
119	Local Check 2	S	S	S	S	S	S	S
120	Local Check 3	S	S	S	S	S	S	S
121	H9520394	0;	2, 2=	2	0;,2	0;	2, 2=	2-CN
122	H9521563	2, 2=	2-	2, 2-	2, 2=	2	2	2, 2-
123	H9525208	2=	0;,2	2-	0	2	2	2, 2-
124	WX96-6601	0; 1	2C, 2-	0;,2C	0;,2	0	0; ,1	0;,2-
125	WX96-3002	0;,2=	2	0;,2	2	0;	0;,2	0;, 2-
126	XH9801	2=, 2	2	2=	2	0;	2	2
127	XH9808	2=, 2	2	2	2	2	2	2
128	XH9811	2	2	2-	2-	2=	2, 2-	2, 2-
129	XH9812	2, 2=	2	2, S	2	2	2, S	2
130	H9520400	0;,2=	2=	2=	2-	0;	2	2
131	H9520428	2=, 2	2, 2-	2, S	2	2=	2	2, S
132	H9520436	2, 2-	2, 2-	0;,2C	0;	2=	2, 2C	2=
133	H9520483	0;,2=	2=	2, S	0;	2=	2	2-CN
134	H9520842	2	0	0;,2	0	2	2	2, 2=
135	H9520865	2	S	2	0;,2	2	2	2
136	H9520871	2	2, S	2C	2	2-	2	2
137	WX96-0507	0;,2=	2, 2-	2	0;	2	2, 2=	2
138	WX96-0802	2, S	2C, S-	2, 2+	2, 2-	2	2, S	2
139	WX97-1701	2=	2, 2=	2	0	0;	2	2=
140	WX97-1711	2	2	2, 0;	0	2-	2-	2=
141	WX97-1713	2	2, 2=	2=	2	2=	2	2=
142	WX97-1718	2, 2=	2, 2+	0;,2	2	0;	0;,2	2
143	WX97-3201	2	2, S	2	2, S	0;	2	2, S
144	WX97-3207	1, 2-	2, 2-	0;	2, 2-	2-	2-	2=
145	WX97-3210	1, 2=	2, 2-	2, 2-	2	2	2	2
146	TAM-107	2	2-	2	2C	2, 2C	2-	2
147	Karl 92	S, 2	2+,S	2	2, S	2-C 2	2	2, S
148	Arapahoe	2, 2-	0;	2	0;	2-,2=	2-	0;1
149	Local Check 1	S	S	S	S	S	S	S
150	Local Check 2	S	S	S	S	S	S	S

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
151	Local Check 3	S	S	S	S	S	S	S
152	KS97H115	S, 2	S	2	2	2	2	2
153	KS97H125	2	2, 2+	2, 0;	2C	2, 2-	2, 2C	2, 2C
154	KS97HW4	2	2	2, 2=	0;,2C	0;,2	2, 2C	2, 2=
155	KS98HW102	S, 2	S	2	0;	2, 2=	2	2
156	KS98HW106	2-C	0;	2, 2-	0;	2	2	2
157	KS98HW107	1, 2=	2, 2=	2, 2=	0;	0;,2-	2, 2CN	2, 2CN
158	KS98HW109	2, 2=	2=	2, 2=	2, 2=	2, 2=	2	2, 2CN
159	KS98HW122	2, 2=	2-, 2=	2, 2-	0;	2	2,S	2
160	KS98HW127	2=	2=	2, 2=	2, 2-	2, 2-	2	2, 2C
161	KS98HW149	2, 2+	S	2. 2+	0;,2	2	2	2, 2+
162	KS98HW151	2	2, 2-	2, 2-	0;,2CN	2	2	2
163	KS98HW163	2+, S	2+	2, 2-	2, S	2	2	2, 2+
164	KS98HW164	2	S	2, S	S	2=	2, 2+	2,S
165	KS98HW170	2, 2+	2+	2, 2+	2, 2+	2, 2-	2, 2-	2
166	KS98HW180	;2, 2+	0;,2	2	0;,2C	2CN	0;,2C	0;,2CN
167	KS98HW183	2	2+	2, 2+	0;,2+	2	2+	2, S
168	KS98HW 184	; 2C	1, 2	0	0;	2	0;	0;,2
169	KS98HW185	2+	2	2	0;,2+	2	2	S, S-C
170	KS98HW189	0;	2+	0;	0;,2	2, 0;	0;	0;
171	KS98HW211	2, 2C	0;,2+	2, 2=	0;	2=, 2	2	2-CN
172	KS98HW215	1, 2=	0;	2, 2=	0;,2=	2=	2	2-
173	KS98HW32	2	0; 1	2	0;	2CN	2-	2
174	KS98HW35	2C	2=, 2	2, 2-	2	0;,2=	2-	2, 2=
175	KS98HW41	2	2	2	2	2, 2-	2-	2-
176	KS98HW43	2, 2+	2=	2	; 2, 2-	0;,2	0;,2	0;,2+
177	KS98HW46	2, S	2, S	0	0;,2C	2, 0;	2C	0;
178	KS98HW6	S, 2C	0;	2	0;,2	2	2CN	2
179	KS98HW66	2, 2+	2, S	2, 2+	2, 2+	0;	0;,2-	0;,2
180	KS98HW91	2+	2+, S	2, 2+	0;,2	2, 0;	2, 2-	2
181	KS98HW98	2	2, 2+	2, 2+	;2, 2+	0;,2=	2, 2+	2, 2-
182	TAM-107	2	2,2-,;	2, 0;	0;	2	2	2
183	Karl 92	2+,S	2, S	2,2+-	2,2-C	2=	2, 2=	2
184	Arapahoe	0;,2=	0;	2, 2=	0;,2=	2-	2, 2-	2, 2-
185	Local Check 1	S	S	S	S	S	S	S
186	Local Check 2	S	S	S	S	S	S	S
187	Local Check 3	S	S	S	S	S	S	S
188	OK98112	2	2, S	2, 2+	0;,2	2, S	2, 2+	2, 2+
189	OK98113	2, 2-	2	2, 2-	2, 2-	2C	2, 2-	2, 2-
190	OK98115	2, 2+	2, 2-	2, 2+	2,S	2, S	2, 2+	2
191	OK98119	0;,2	2=	0;,2	0;	2=	2-	2-
192	OK98123	0;,2C	2=, 2-	2=, 2-	0;,2C	2-	2-, 2=	1, 2
193	OK98124	2	S	2	2	2	2, 2-	2
194	OK98130	2C, S	2,S	2, 2+	2, 2+	2	2	2, 2+
195	OK98131	2, 2-N	2	2, 2=	2	2=	2-	2,1
196	OK98132	2, 2+	2+-	2, 2+	2, 2+	2	2	2, 2+
197	OK98135	2	2, S	2, 2+	2, S	2, 2+	2, 2+	2, S
198	OK98136	2, 2-	2, S	2, -	0;,2	2, S	2, 2-	2, 2+
199	OK98138	2, 2-	2	2, 2-	2	2	2	2
200	OK98140	2	2	2	2	2, 2=	2+-	2, 1

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
201	OK98207	2-C	2	2, 2-	2, 2-	2-	2-	2, 2-
202	OK98208	2-C	2, 2=	2,-C	2-C	2- ,2=	2-C	2, 2-
203	OK98216	2,2+	2	2, 2+	2, S	2	2, S	2, 2+
204	OK98217	0; 1	2= 0;	2-	0;,2=	2-	2-C	1, 2-
205	RMH-05/99	2-	2	2-	0 ;	2=	2-	2, 2=
206	RMH-11/99	2+-	2, 2+	0;,2	2, 0;	2	2	2
207	RMH-15/99	0;,2	0;	2, 2+	0;,2, S	2, S	2, 2+	2, S
208	RMH-20/99	2	2-, S=	0;,2-	0;	2	2-CN	2-, 2=
209	RMH-21/99	0;	2, 2=	0; 1	0;	0;,2-	2-C	1, 2=
210	RMH-22/99	0;	2-	0;,2	0;	0;,2-	2, 2=	1, 2=
211	RMH-24/99	2	2+-	2	2, 2-	2	2, 2=	2
212	RMH-25/99	2-	0;,2-	0;,2=	0;	2=	2C	1,2=
213	RMH-26/99	2	2+-	2, 2-	2, 2-C	2-CN	2=	2, 2=
214	RMH-27/99	2, 2-	2-	2, 2-	2, 2-	2, 2-	2-, 2=	2, 2=
215	TAM-107	2, 2=	2-, 2=	2, 2-	2, 2-C	2=	2-	2-, 2=
216	Karl 92	2, 2+	2, 2+	2, S	2, 2+	2	2, 2=	2
217	Arapahoe	0;,2-	0;	2,2-	0;,2-	2, 2-	2=	2-, 2=
218	Local Check 1	S	S	S	S	S	S	S
219	Local Check 2	S	S	S	S	S	S	S
220	Local Check 3	S	S	S	S	S	S	S
221	SD97008	2, 2+	2, S	2, S	2, S	2, 2+	2, 2+	2, S
222	SD97010	2+	2, S	2	0;	2	2	2
223	SD97049	0;	0;	2, S	2, 2+	2	2, S	2, 2C
224	SD97057	2-, 2=	2-,2=	2, 2-	2-,2=	2	2, 2=	2
225	SD97058	2	2, 2+	2	2, 2-	2	2	2, 2C
226	SD97059	2C	2-C	2C	2, 2C	2-	2=	2, 2=
227	SD97060	2-, 2=	2	2, 2-	0;,2-	2, 2=	2, 2-	2
228	SD97063	2+-	2,2+	2, 2+-	2+-	2, 2+	2, 2+	2, 2+
229	SD97064	2	0;	2	2	2, 2CN	0;,2	2-
230	SD97102	0;	0;	2	S, 2	2, 2+	2CN	2
231	SD97197	2	0;	2	2	2	0;,2	0;,2
232	SD97214	2	2=	2	2, S	2-	2	2
233	SD97376	2, 2+	2, 2+	2	0;,2	2, 2+	2, 2+	2, 2+
234	SD97427	2+	2, 2+	2, 2-	0;	2-	2CN	2, 2-
235	SD97W603	2-	2, 2-	2, 2-	2, 2-	2	2, 2-	2-
236	SD97W604	2-	2, 2=	2, 2=	2	2	2	2-
237	SD97W606	2, 2C	2-	2	2, 2C	2	died	2
238	SD97W609	2, 2+	2	2-	2, 2C	2, 2-	2=	2
239	SD97W615	2+	2, 2+	2	2, 2C	2-	2-	2-, 2=
240	SD97W616	2+	2	2	2C	2	2	2, 2-
241	SD97W623	S, 2C	2	2, S	0;,2,S	2,S	2,S	---
242	SD97W624	2, 2-	2	2, 2-	2, 2-	2, 2-	2, S	2, S
243	SD97W634	2C	2-	2, S	; 2, 2=	2, S	2	2, S
244	SD97W638	2C	0; 2	2	2	died	2	2=, 2
245	SD97W641	2C	0;	2+-	2, S	2	0;,2+	O; 2-
246	SD97W642	2C, 2-	0	2=	0	2, 2=	2, S	2, 2+
247	SD97W648	2	0	2, 2-	2, 2+	2	2, 2-	2, 2C
248	SD97W650	2, S	2	2	2, 2+	2, 2+	2	2, 2-
249	SD97W651	2+	0'	2	2	2, 2+	2, 2-	2-
250	SD97W664	2-, 2=	0	2, 2-	2+-	2, 2=	2	2-

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
251	TAM-107	2-	2	2-	2-	2-	2-CN	2
252	Karl 92	22+	2-	2	2, S	2	2	2, S
253	Arapahoe	0;,2-	0;	2, 2-	0;,2-	2	2, 2=	2, 2=
254	Local Check 1	S	S	S	S	S	S	S
255	Local Check 2	S	S	S	S	S	S	S
256	Local Check 3	S	S	S	S	S	S	S
257	TX97A0030	2+	2+, S	0;,2	02, S	2+	0;,2	0; S
258	TX97A0036	2-	2	O;	0;,2-	2	0;,2-	2-
259	TX97A0064	S	S	2	2	2	2-	2- 2-C
260	TX97A0080	0; 1	2-, 2=	0	; 2,2-	2, 2-	2, 2CN	2-
261	TX97A0089	2, S	2, S	2, 2+	2, S	2	2, S	2, S
262	TX97A0096	2, S	S, 2	2, 2+	0;,2	2	2+	S, S
263	TX97A0097	1, 2	2	2	2	2, 2=	2=	2
264	TX 97A0100	2+	S, S	2	2, 2=	2	2	2, 2=
265	TX97A0110	S	S	2	2, S	2, 2+	2, 2+	S, 2
266	TX97A0116	2	2	0;	0;, 2=	0;,2	2	2
267	TX97A0124	2	2, 2-	2, 2=	2	2, 2=	2, 2=	2-, 2=
268	TX97A0125	2, 2C	2CN	2, 2C	2	2, 2=	2, 2=	2, 2-
269	TX97A0130	S,	2, S	2	2, 2+	2	2, 2+	2CN
270	TX97A0148	2+, 2	2, 2+	2	2, 2+	2	2, 2+	2, S
271	TX97A0160	S	S, S	2, S	S	2	2, S	2, S
272	TX97A0161	2, S	2, S	2, S	2, S	2, 2+	2, S	2, S
273	TX97A0166	S	S, S	2, S	0;	2	2, 2C	2, 2-
274	TX97A0182	2	2	2-C	2, 2=	2, 2=	2	2, 2=
275	TX97A0190	2, S	S, 2	2, S	2, S	2, 2+	2	2, 2+
276	TX97A0196	2C, 2+	S	2+-	2C, 2-	2, 2=	2, CN	2
277	TX97A0198	S	2, S	0	0;,2-C	2, 2+	2, S	2, S
278	TX97A0207	S	2, 2+	2	2, S	2	2, S	2, 2+
279	TX97A0214	S,	2+, S	2, S	2, S	2	2, S	2, S
280	TX97A0216	S	2+, 2	2-	2, S	2=	2, S	2, S
281	TX97A0232	S	2, S	S, 2	2, 2+	2	2, 2+	2
282	TX97A0260	2, 2-C	2, 2-C	2, 2-	2-C	2, 2CN	2, 2-C	2, 2-
283	TX97A0270	2	2	2	2	2, 2-	2, 2=	1, 2
284	TX97A0271	2, 2-C	2	2	2, 2-C	2	2, 2-	2-, 2=
285	TX97A0273	2,S	2	2	2, 2-	0;,2=	2	2
286	TX97A0274	2, S	2	2, 2+	2C	2, 2+	2-, 2	2, 1
287	TAM-107	2, 2-C	2, 2-C	2	0;,2-C	2	2, 2=	2
288	Karl 92	2	2C, 2+	2, 2+	2C, 2+	2, 2-	2	2
289	Arapahoe	2-	0	-	0;	2, 2-	2, 2-	2-N
290	Local Check 1	S	S	-	S	S	S	S
291	Local Check 2	S	S	-	S	S	S	S
292	Local Check 3	S	S	-	S	S	S	S
293	TX94D4148	2, S	2, S	-	0	2	2	2
294	TX96D1693	2	2	-	2	2	0;,2	0
295	TX96D1865	2, 2-	0	-	2, 2-C	2	2CN	2
296	TX96D2267	2	2,2-	-	2	2	2, 2-	2
297	TX96D2279	2, 2+	2	-	2, 2-C	2=, 1	2, S	2, S
298	TX96D2837	2, 2+	2	-	2-	2, 2-	2, S	S, 2
299	TX96D2845	0;, 2-	0;,2-	-	2	0;	0;,2	0;
300	TX97D4375	0;,2-	0;,2=	-	2	0;,2	0;,2=	0;,2

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
301	TX97D5514	0;,2	2, 2=	-	0	2=	2=	2, 2-
302	TX97D5851	0;,2	2	-	2-	2, 1	2, 2=	2
303	TX97D6122	2, 2+	2, 2+	-	2+, 2	2	0	0;
304	TX97D6178	2, 2+	2, 2-	-	2	2	2	2, 2+
305	TX97D6335	2	2, S	-	0	2+	2, 2+	2, 2CN
306	TX97D6337	0;	0	-	2,2-C	2-	2, 2-C	2, 2-
307	TX97D6778	0;,2=	2	-	0	2-	2=	1, 2-
308	NE97407	0;	0	-	0	0	2	2, 2-
310	NE97426	2, S	2, S	-	0;	2-CN	2-	2-C
311	NE97465	2, S	0	-	2-CN	2, 2+	2	2
312	NE97489	0;, 2=	0	-	0;,2=	2, 1	2, 2-	2-C
313	NE97518	0;,2, S	0	-	2CN	2, 2=	2CN	2-C
314	NE97553	2	2	-	2-N	2	2	2
315	NE97558	2	0	-	0;	2	2	2, 2+
316	NE97612	2, 2-	2, 2-	-	2, 2-	2, 2-	2, 2-	2, 2-
317	NE97638	0;	0	-	2	1, 2	2, 2=	2-
318	NE97669	2, S	2, 2+	-	2	2	2, S	2
319	NE97670	2- ,2	0	-	0;	2, 2=	2- ,2=`	2, 2-
320	NE97675	S	2, S	-	2	2	2	2
321	NE97689	2	0	-	0;	1, 2=	0;	2C
322	NE97693	2, 2-	2, S	-	0;	2	2, 2-	2CN
323	NE97716	2, S	2	-	0	2	2	2-, 2=
324	NI97423	2	0;	-	2+, 2	2, 2+	2, 2+	2
325	TAM-107	2	2	-	2	2	2	2-
326	Karl 92	S,2+	2+	-	2, 2+	2, 2=	2, 2+	2
327	Arapahoe	0;,2-	0;	-	0;	1	2, 2=	2-C
328	Local Check 1	S	S	-	S	S	S	S
329	Local Check 2	S	S	-	S	S	S	S
330	Local Check 3	S	S	-	S	S	S	S
331	CO960002	S	S	S	S	2, S	2, S	2
332	CO960004	S, 2	2, 2+	0	2	0; 1	2	2
333	CO960006	S, 2	2, 2+	0	2	0; 1	2	2
334	CO960020	2, 2+	2, 2+	0	2, S	2	2, S	2, 2+
335	CO960026	2=, 2	2C, 2-	2=	2-C	2	2, 2=	2-C
336	CO960037	2, 2=	2+-	2=	0	0; 1	2, 2=	2-
337	CO960047	2	2, S	0	0;,2	2	2	2-
338	CO960053	2	2	2=	2, 2+	2, 2=	2, 2-	2, 2-
339	CO960065	2, 2-	2, 2-	2=	0;	1, 2	2, 2-	2-
340	CO960091	2, S	2, S	2, 2=	2	2,2=,S	2, S	2
341	CO960102	2, S	S	0	0;	2	2	2
342	CO960211	2, S	S, 2	0;	0;,2C	2, S	2, S	2, S
343	CO960223	2	2, S	0;	0;	0;,2	2, S	1, 2=
344	CO960230	2, 2-	2, 2-	2	0;,2	2	2, 2-	2-
345	CO960255	S, 2	2, S	2, 0;	2, 2-	2	S, 2	2, S
346	CO960293	S, 2	S, 2	2, 2=	2C	2, S	S, 2	2, S
347	CO960315	2, S	S, 2	0;,2	0;,2	2	2	2, 2-
348	CO960326	2, S	2, S	2, S	2, S	2, S	S, 2	S, 2
349	CO960329	S	S	-	S	2, S	S	S, 2
350	CO960333	2, S	2, S	-	0;	S	2, S	2, S
351	CO960551	2, S	2, S	-	2,S	2, S	S, 2	2, 2+

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
352	CO960603	2, S	2, 2+	-	0;	2, 1	2, 2+	2=
353	CO960686	2, S	S ,2	2, 2=	2, S	2	2	2, S
354	CO960689	0;,2=	0	2, 2C	2, 2C	2C	2CN	2CN
355	CO960691	2	0	0	2-N	2, 2=	2, 2=	1, 2=
356	W95-188-134	2, S	S	S	2, S	2	2, S	2, 2+
357	W95-188-08	S	2, S	2, S	2, S	2, S	S	S, 2
358	W95-385	2, 2C	0	2-	0	2	2, 2C	1, 2C
359	W95-392	2, S	0	2, S	2+	2, S	2C	2-C
360	W95-091	S	2, S	0	0;	0;	0;	0; 1
361	W94-244-132	2	2, 2-	-	2	0;,2	2	1, 2
362	W94-480W	2, S	2, S	-	0;	2, 2+	2, S	2, 2+
363	W95-610W	S	2, S	-	0;,2	2, S	2, S	2, S
364	W96-359	2C S	2, S	-	0;,2C	0;	0;	0;
365	W96-410	0;	0	-	0;	0; 1	2-	2-
366	W96-392	2,2C,S	0	-	2, S	2, S	2, 2C	2C, 2
367	W96-078	2	2, 2+	-	0	2, 2+	0;	0;
368	W96-300	2, 2C	2, S	-	2, S	2-	0;	0;,2+-
369	W96-332	S	2, 2=	-	0;	2, S	0;,2CN	2
370	W97-234	2-C	2-C	-	0;	2, 2=	0;	0;
371	W97-075	0;	0	-	0	0;,2,2+	2, 2-	2, 2C
372	W97-169	2, 2-C	2, 2=	-	2-	2	2, 0;	0;,2-
373	W97-231	2-, 2	2, 2=	-	2	0	2, 2-	2CN
374	W97-276	0;	2, 2-	-	2, S	0; 1	2, 2+	2C, 2+
375	W97-283	0;,2	2	-	0;	2, 2=	2=	2
376	W97-371	S	2, S	-	0;,2C	0;	2CN	2
377	W97-430	2+, S	2, S	-	S	2, 2CN	2	2
378	W97-435	2C	S	-	0;	2, 2+	2, 2+	2, 2+
379	TAM-107	2	2	-	-	2, 2-	2CN	2
380	Karl 92	2	2	-	2	2	2	2C
381	Arapahoe	0;	0;	-	0;	2=	2, 2-	1, 2
382	Local Check 1	S	S	-	S	S	S	S
383	Local Check 2	S	S	-	S	S	S	S
384	Local Check 3	S	S	-	S	S	S	S
385	X920232-8-1	0;	0;	-	0;	0;	0;	0;
386	X920232-26-1	0;,2-	0;,2-	-	2, 2-	2	0;	0; 1
387	X920232-5	S	2, S	-	0;	0;	0;	0;,2
388	X920618-C-4-1	0;	2-	-	2,2-C	2=	0;	1, 2-
389	KS920639-B-3-1	S	S	-	0;,2	S	2	2
390	KS920656-B-8-1	2, S	2, S	-	0;,2,2-	0;	0;,2	0;,2
391	X920663-B-14-1	2=, S	0;,2, S	-	0;	0;	0;,2	0;,2+
392	KS920676-D-12-1	2, S	2, S	-	0;,2	2	0;,2CN	0;,2
393	X920709-B-5-2	S	S	-	0;	2	0;,2	0;,2+
394	KS920709-B-6-1	S-, S	2, S	-	0;	2	2-	S,2
395	X920750-A-13-1	2, S	2, S	-	2-	2	0;,2C	0;,2C
396	X920750-A-11-2	2, 2+	2, 2-	-	0;,2	0	2C	2+
397	X920879-C-15-1	2, S	2, S	-	0;,2	1	0;,2	0;,2C
398	X920879-C-15-3	2, S	2, S	-	0;,2	0;,2	0;,2	0;,2C
399	X920946-B-15-1	0;,2	0	-	0	0	0;	0;
400	KS920946-B-15-2	0;,2	0;	-	0;	0;	0;	0; 1
401	X921025-A-3-2	2, 2+	2, 2+	-	2, 2+	0; 1	2=	2, 2C

Table 2. Seedling reactions to stem rust infection, 1999 RGON.

		Stem rust isolates						
Entry	Line	TTRT	TPMK	RTRQ	RTQQ	RHMS	RTHJ	QKCS
402	X921043-A-3	2, 2+	2,2+	-	2, 0;	2, 2+	2CN,2+	2C
403	X921054-D-13	2, 2+	S	-	0	2+	0;,2C	0;,2CN
404	X921054-E-15	2, S	2, S	-	0;	0;,2	0;,2	0;,2C
405	KS921084-C-5-1	2, S	S	2, S	2	0	2, 2+	0;,S
406	X930332-4-1	2, 2+	2, 2CN	2, 2+	2-	0;	0;,1	0;,2
379	TAM-107	2	2	-	-	2, 2-	-	2
380	Karl 92	2	2	-	2	2	2	2C
381	Arapahoe	0;	0;	-	0;	2=	2, 2-	1, 2
410	Local Check 1	S	S	S	S	S	S	S
411	Local Check 2	S	S	S	S	S	S	S
412	Local Check 3	S	S	S	S	S	S	S

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
1	TAM-107	S	90 S	6	2	+
2	Karl 92	S	80 S	9	1	-
3	Arapahoe	MS	60 MS	7	2	-
4	Local check 1	S	20 MS	9	2	+
5	Local Check 2	S	10 MR	4	1	-
6	Local check 3	R	0	1	2	-
7	97L9532	MR	50 S-MS	8	1	-
8	97L9530	S	50 S-MS	7	1	-
9	97L9504	S	50 S-MS	8	2	-
10	97L9517	S	50 S-MS	7	1	-
11	97L9518	S	50 S-MS	8	1	-
12	97L9520	S	50 S-MS	8	1	-
13	97L9531	S	50 S-MS	8	1	-
14	97L9527	MR	50 S-MS	8	1	-
15	97L9525	S	50 S-MS	8	1	-
16	97L9522	MR	50 S-MS	8	1	-
17	97L9521	MR	50 S-MS	8	1	-
18	97L9539	SEG-R	50 S-MS	8	1	-
19	97L9537	MS	50 S-MS	8	2	-
20	97L9536	S	50 S-MS	8	2	-
21	97L9534	MS	50 S-MS	6	1	-
22	97L9533	MR	50 S-MS	8	1	-
23	97L9554	S	90 S	8	2-3	+
24	97L9553	MR	50 S-MS	7	1	-
25	97L9551	S	50 S-MS	8	1	-
26	97L9545	S	40 S-MS	7	1	-
27	97L9540	S	30 MS	7	1	-
28	97L9561	MR	50 S-MS	7	1	-
29	97L9590	MR	70 S	7	1	-
30	97L9557	MR	90 S	6	3	+
31	TAM-107	S	80 S	5	3	+
32	Karl 92	S	90 S	8	1	-
33	Arapahoe	MR	60 MS	6	2	-
34	Local check 1	S	10 MS-MR	8	3	+
35	Local Check 2	S	5 MS-MR	4	1	-
36	Local check 3	R	0	1	2	-
37	NW97S112	S	60 S	7	2	-
38	NW97S114	S	70 S	7	2	+
39	NW97S343	S	30 MS-MR	7	2	+
40	NW97S345	S	70 S	6	2	+
41	NW97S061	S	50 S	8	2	-
42	NW97S277	S	60 S	8	2	+
43	NW97S278	S	70 S	8	3ss	+
44	NW97S280	S	100 S	7	3ss	-
45	NW97S078	S	70 S	5	3	+
46	NW97S295	S	20 MS	8	3	+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
47	NW97S304	S	40 S-MS	7	3	+
48	NW97S218	S	60 S	8	1	-
49	NW97S092	S	70 S	7	2	-
50	NW97S085	MR	70 S	7	3	+
51	NW97S307	S	50 S	5	3	+
52	NW97S309	MS	70 S	8	3	+
53	NW97S312	MR	40 S-MS	8	3	+
54	NW97S315	S	50 S	9	3	+
55	NW97S320	MR	50 S-MS	8	2	+
56	NW97S322	MR	60 MS-S	9	2	+
57	NW97S182	MR	70 S	8	3	-
58	NW97S183	MR	50 S-MS	8	2	+
59	NW97S186	MS	50 S	8	2	+
60	NW97S189	MR	100 S	7	1?	-
61	NW97S192	S	100 S	7	3	-
62	NW97S193	MS	90 S	7	3	-
63	NW97S194	MS	90 S	7	2	-
64	NW97S195	S	70 S	7	2	-
65	NW97S412	S	50 S	8	3	-
66	TAM-107	S	90 S	6	2ss	-
67	Karl 92	S	90 S	8	1	-
68	Arapahoe	MR	70 MS-S	7	1	-
69	Local check 1	S	20 MS	8	3	+
70	Local Check 2	S	1 MR-MS	4	1	-
71	Local check 3	R	0	1	2	-
72	KS95U589-4	S	10 R-MR	8	1	-
73	KS96WGRC36	S	5 MR	6	2	+
74	KS96WGRC40	R	0	7	2	-
75	KS98U661	S	1 R	7	3ss	-
76	KS98U662	S	5 R	7	1	-
77	KS98U663	S	5 R	7	1	-
78	KS98U664	R	0	5	2	-
79	KS98U665	MS	0	6	1	-
80	KS98U666	R	0	6	1	-
81	KS98U667	R	0 ;	5	2	-
82	KS98U668	R	0	5	2	-
83	KS98U669	R	0	7	1	-
84	KS98U670	S	0 ;	7	1	-
85	KS98U672	MS	seg 0-30 S	7	1	-
86	G97018	S	40 S	8	3	+
87	G97019	S	60 S-MS	8	1	-
88	G97026	S	70 S	8	2	-
89	G97057	S	50 S	9	2	-
90	G97058	S	90 S	7	3	+
91	G97060	S	30 S	6	2	-
92	G97064	S	70 S	9	3	+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
93	G97070	MS	60 S-MS	8	4	+
94	G97361	MS	50 S	7	1	-
95	G97082	S	70 S	7	2	-
96	G97099	MS	seg 70 S-20 MS	7	2	+
97	G97100	S	10 R-MR	6	2	-
98	G97159	MR	20 MR-MS	7	2	-
99	G97160	MR	50 S	7	1	-
100	G97174	S	70 S	8	2ss	-
101	TAM-107	S	90 S	5	3	+
102	G97187	S	50 S	8	1	-
103	G97195	S	70 S	8	2	+
104	G97196	S	70 S	6	1	-
105	G97200	S	seg 70 S-5 MR	8	2	+
106	G97232	S	90 S	8	2	-
107	G97246	S	90 S	7	1	-
108	G97252	S	90 S	7	1	-
109	G97285	S	90 S	6	3	+
110	G97310	MR	80 S	7	2	-
111	G97380	MS	40 MS	6	3	+
112	G97393	MR	1 R	8	2	-
113	G97431	MS	40 MS	7	3	+
114	G97466	S	70 S	8	2	-
115	TAM-107	S	90 S	5	3	+
116	Karl 92	S	90 S	9	1	-
117	Arapahoe	MS	60 MS	6	3	+
118	Local check 1	S	20 MS-MR	8	3	+
119	Local Check 2	S	1 MR	4	1	-
120	Local check 3	R	0	1	2	-
121	H9520394	MR	50 S	4	2	-
122	H9521563	MR	30 S	7	1	-
123	H9525208	MR	20 S-MS	7	1	+
124	WX96-6601	MR	10 MR	6	1	-
125	WX96-3002	S	30 S	7	1	-/+
126	XH9801	S	30 S	8	2	-
127	XH9808	R	seg 0 - 20 S	4	1	-
128	XH9811	MR	30 MS-S	8	2	-
129	XH9812	S	20 MS-S	8	1	-
130	H9520400	MR	40 S-MS	4	1	-
131	H9520428	MS	5 MR	7	1	-
132	H9520436	MR	50 S	7	2	-
133	H9520483	MS	20 MR-MS	7	1	-
134	H9520842	S	50 S	5	1	-
135	H9520865	S	50 S	7	1	-
136	H9520871	S	50 S	6	1	-
137	WX96-0507	MR	30 S-MS	6	1	-
138	WX96-0802	S	20 MS-MR	8	1	-

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)						
Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
139	WX97-1701	S	30 MS-S	5	1	-
140	WX97-1711	MR	50 S-MS	5	1	-
141	WX97-1713	MR	50 S	7	1	-
142	WX97-1718	MR	60 S	5	1	-
143	WX97-3201	MR	seg 60 S-1 MR	6	1	-
144	WX97-3207	MR	30 S	8	1	-
145	WX97-3210	MR	20 MR	8	1	-
146	TAM-107	S	90 S	5	3	+
147	Karl 92	S	80 S	9	1	-
148	Araphoe	MR	60 S	7	3	+
149	Local check 1	S	5 MR-MS	8	3	+
150	Local Check 2	S	1 MR	4	1	-
151	Local check 3	R	0	1	4	-
152	KS97H115	S	10 MS-MR	5	3	+
153	KS97H125	MR	30 S-MS	8	2	-
154	KS97HW4	S	10 MR	1	3	+
155	KS98HW102	S	10 MS-MR	8	3	+
156	KS98HW106	MS	10 MS-MR	7	3	-
157	KS98HW107	R	0	5	4	+
158	KS98HW109	R	0	6	4	+
159	KS98HW122	R	0	6	4	+
160	KS98HW127	R	0 ;	7	4	+
161	KS98HW149	MR	80 S	6	1-2	+
162	KS98HW151	S	seg 0-20 S	6	4	+
163	KS98HW163	MR	1 R	8	4	+
164	KS98HW164	MR	1 R	8	4	+
165	KS98HW170	MS	10 MS-S	8	3	-
166	KS98HW180	S	40 S	4	1	-
167	KS98HW183	MR	seg 20 MS-0	6	2	-
168	KS98HW184	MR	20 MS-S	4	1	-
169	KS98HW185	MR	20 MS-S	4	1	-
170	KS98HW189	MR	30 S	1	1	-
171	KS98HW211	S	40 S	8	3	+
172	KS98HW215	MR	5 MR-R	8	4	+
173	KS98HW32	MR	10 S	6	3	+
174	KS98HW35	MR	20 S-MS	7	1	-
175	KS98HW41	R	0	7	1	-
176	KS98HW43	S	10 S	6	1	-
177	KS98HW46	S	20 S	5	2	-
178	KS98HW6	S	50 S	7	1	-
179	KS98HW66	S	1 S	4	1-2	-
180	KS98HW91	S	30 S	6	1-2	-
181	KS98HW98	S	40 S	6	1	-
182	TAM-107	S	80 S	5	3	+
183	Karl 92	S	70 S	8	1	-
184	Arapahoe	MR	50 S-MS	7	2	-

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
185	Local check 1	S	10 MS	8	3	+
186	Local Check 2	S	1 MR	4	1	-
187	Local check 3	R	0	1	4	-
188	OK98112	S	10 MS	8	2-3	+
189	OK98113	S	seg 0-30 S	7	2-3	+
190	OK98115	R	seg 0-50 S	7	2	+
191	OK98119	MR	seg 30 MS-5 MR	5	1	-
192	OK98123	MR	20 S-MS	7	2-3	+
193	OK98124	S	40 S	5	2-3	+
194	OK98130	S	seg 0-40 MS	8	1	-/+
195	OK98131	S	90 S	8	3	+
196	OK98132	S	70 S	8	2	-
197	OK98135	S	50 S	8	1	-
198	OK98136	S	70 S	7	3	+
199	OK98138	S	60 S	6	3	+
200	OK98140	S	60 S-MS	6	3	+
201	OK98207	MR	30 MS-S	4	2	-
202	OK98208	MR	30 MS-S	7	1	-
203	OK98216	S	10 S-MS	7	1-2	-
204	OK98217	MR	5 MR	5	2	-
205	RMH-05/99	S	1 R-MR	7	1	-
206	RMH-11/99	S	20 MS	9	1	-
207	RMH-15/99	S	20 MS	8	1	-
208	RMH-20/99	MR	1 R-MR	7	3	+
209	RMH-21/99	MR	5 MR	7	3	+
210	RMH-22/99	MR	10 MS-MR	6	3	+
211	RMH-24/99	R	seg 0-5 S	7	1	-
212	RMH-25/99	R	seg 0-5 S	7	1	-
213	RMH-26/99	R	seg 0-30 S	7	1	+
214	RMH-27/99	R	seg 0-30 S	8	1-2	-
215	TAM-107	S	90 S	5	3	+
216	Karl-92	S	80 S	8	1	-
217	Arapahoe	MR	70 MS-S	7	3	+
218	Local check 1	S	10 MS	8	3	+
219	Local Check 2	S	1 MR	4	1	-
220	Local check 3	R	0	1	1	-
221	SD97008	S	40 S	7	1-2	-
222	SD97010	S	60 S	8	3	+
223	SD97049	MS	90 S	6	3	+
224	SD97057	S	80 S	8	1	-
225	SD97058	MS	30 MS-S	8	2	-
226	SD97059	S	90 S	5	1	-/+
227	SD97060	S	70 S	7	1	-
228	SD97063	S	80 S	6	3	+
229	SD97064	MS	70 S	4	3	+
230	SD97102	R	50 S	8	3	+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
231	SD97197	S	80 S	5	3	+
232	SD97214	S	70 S	5	2	+
233	SD97376	S	30 MS-S	7	1	-
234	SD97427	S	90 S	9	3	+
235	SD97W603	MR	100 S	7	3	+
236	SD97W604	MR	100 S	7	3	-
237	SD97W606	MR	100 S	7	2	+
238	SD97W609	S	90 S	8	1	-
239	SD97W615	S	100 S	8	2	-
240	SD97W616	S	90 S	8	1	-
241	SD97W623	S	60 S	8	2	-/+
242	SD97W624	S	80 S	8	1	-
243	SD97W634	S	90 S	7	1	-
244	SD97W638	S	70 S	7	1	-
245	SD97W641	MS	70 S	7	1	-
246	SD97W642	S	70 S	8	1	-
247	SD97W648	MS	30 S	6	1	-
248	SD97W650	S	50 S	5	1	-
249	SD97W651	S	50 S	5	1	-
250	SD97W664	S	30 MS-S	5	1	-
251	TAM-107	S	90 S	5	2	+
252	Karl 92	S	80 S	8	1	-
253	Arapahoe	MS	60 S-MS	7	3	+
254	Local check 1	S	5 MS-MR	8	3	+
255	Local Check 2	S	1 MR	4	1	-
256	Local check 3	R	0	1	2ss	-
257	TX97A0030	S	90 S	7	2	-
258	TX97A0036	MR	60 S-MS	5	2	+
259	TX97A0064	R	0	7	3	+
260	TX97A0080	MR	seg 90 S-50 MS	5	3	+
261	TX97A0089	S	seg 0-40 S	7	3	+
262	TX97A0096	R	0	6	3	+
263	TX97A0097	R	0	6	4	+
264	TX97A0100	S	100 S	6	4	+
265	TX97A0110	S	100 S	8	3	+
266	TX97A0116	S	seg 0-30 MS	8	1	-
267	TX97A0124	R	0	8	2	+
268	TX97A0125	R	0	6	2	+
269	TX97A0130	R	0	8	4	+
270	TX97A0148	S	seg 0-30 S	4	1	-
271	TX97A0160	S	1 R-MR	8	1	-
272	TX97A0161	R	seg 0-30 S	5	1	-
273	TX97A0166	S	20 S-MS	8	1	-
274	TX97A0182	S	seg 0-50 S	9	2	+
275	TX97A0190	S	10 MS	7	1	+
276	TX97A0196	S	30 MS	8	3	+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)						
Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
277	TX97A0198	MR	90 S	7	1	-
278	TX97A0207	S	90 S	8	2	+
279	TX97A0214	S	60 S	8	3	+
280	TX97A0216	S	70 S	8	2	+
281	TX97A0232	S	90 S	7	2	+
282	TX97A0260	MS	100 S	5	2	+
283	TX97A0270	R	0	5	4	+
284	TX97A0271	R	0	7	4	+
285	TX97A0273	S	20 S-MS	9	3	+
286	TX97A0274	S	90 S	8	2	-
287	TAM-107	S	100 S	5	3	+
288	Karl 92	S	90 S	9	1	-
289	Arapahoe	S	70 S-MS	7	2	+
290	Local check 1	S	10 MS	8	3	+
291	Local Check 2	S	1 R-MR	4	1	-
292	Local check 3	R	0	1	3	-
293	TX94D4148	MR	5 MR	6	1	-
294	TX96D1693	MS	seg 0-10 MS	7	2	+
295	TX96D1865	MR	30 MS	9	2	+
296	TX96D2267	RE	0	7	2	+
297	TX96D2279	MR	40 S	6	2	+
298	TX96D2837	MR	30 MS	6	2-3	+
299	TX96D2845	MS	20 MR-MS	7	1	-
300	TX97D4375	MR	40 MS	8	4	+
301	TX97D5514	MR	20 MS	5	2-3	-
302	TX97D5851	S	1 R	9	3	+
303	TX97D6122	R	0	9	4	+
304	TX97D6178	S	5 MR	5	2	-
305	TX97D6335	S	1 MR	8	1	-
306	TX97D6337	MR	1 R	6	1	+
307	TX97D6778	MS	40 MS	5	1	-
308	NE97407	MR	30 S	6	1	-
309	NE97421	MS	50 S	8	3	+
310	NE97426	S	20 S	7	1	-
311	NE97465	S	40 S-MS	7	2	+
312	NE97489	MR	100 S	7	2	+
313	NE97518	MR	90 S	9	3	+
314	NE97553	MS	100 S	7	4	+
315	NE97558	MS	100 S	7	3	+
316	NE97612	MR	80 S-MS	8	1	-
317	NE97638	MS	100 S	7	3	+
318	NE97669	S	30 MS-MR	8	3	+
319	NE97670	MS	90 S	7	3	+
320	NE97675	S	80 S	9	1	+
321	NE97689	MR	100 S	7	3	+
322	NE97693	S	90 S	9	3	+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)

Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
323	NE97716	S	100 S	9	1	+
324	NI97423	S	90 S	8	2	+
325	TAM-107	S	100 S	6	2	+
326	Karl 92	S	90 S	9	1	-
327	Arapahoe	MR	70 S-MS	7	2	+
328	Local check 1	S	20 MS	9	3	+
329	Local Check 2	S	1 MR	4	1	-
330	Local check 3	R	0	1	3	+
331	CO960002	S	100 S	9	1	+
332	CO960004	S	100 S	7	1	-
333	CO960006	S	100 S	8	1	-
334	CO960020	S	100 S	7	1	-
335	CO960026	S	100 S	5	1	-
336	CO960037	S	100 S	6	3	+
337	CO960047	S	100 S	6	1	-
338	CO960053	S	100 S	6	1	-
339	CO960065	S	100 S	66	1	-
340	CO960091	S	100 S	9	1	-
341	CO960102	S	100 S	9	2	+
342	CO960211	S	100 S	9	2	+
343	CO960223	S	100 S	7	3	+
344	CO960230	S	100 S	7	3	+
345	CO960255	S	100 S	6	3	+
346	CO960293	S	100 S	1	2	+
347	CO960315	S	100 S	6	3	+
348	CO960326	S	100 S	8	3	+
349	CO960329	S	100 S	8	3	+
350	CO960333	S	100 S	8	3	+
351	CO960551	S	100 S	7	3	+
352	CO960603	S	100 S	7	3	+
353	CO960686	S	100 S	7	3	+
354	CO960689	MR	50 S-MS	5	3	+
355	CO960691	S	90 S	6	3	+
356	W95-188-134	R	0	5	3	+
357	W95-188-08	R	0	5	4	+
358	W95-385	MR	40 MS	5	1ss	-
359	W95-392	S	40 MS	6	1	-
360	W95-091	S	0	9	1	-
361	W94-244-132	MR	5 R-MR	7	1	-
362	W94-480W	S	70 S	7	2	-
363	W95-610W	S	90 S	4	2	+
364	W96-359	S	20 MS-MR	8	2	-
365	W96-410	MS	60 S	5	1	-
366	W96-392	MR	50 MS	6	1	-
367	W96-078	S	60 S	8	1	-
368	W96-300	S	seg 0-20 MR	9	2	-/+

Table 3. Field reactions to leaf rust, WSMV and WSBMV, 1999 RGON.

Local checks: Stillwater leaf rust = Danne (1), Siouxland (2), Thatcher (3); Prosper leaf rust = TAM302 (1), Sturdy (2), Coker 9835 (3); Hays WSMV = Tomahawk (1), 2137 (2), HW10-3 (3); Stillwater SBMV = Vona (1), Hawk (2), Sierra (3)						
Entry	Line	Seedling leaf rust, Stillwater, OK	Field reaction, Prosper, TX	WSMV, Hays, KS, 0-10	SBMV, Stillwater, OK Vis. (1-4)	ELISA
369	W96-332	S	30 MS	6	2	-
370	W97-234	MS	0	4	1	-
371	W97-075	S	30 MS	7	1	-
372	W97-169	MR	50 S	4	1	-
373	W97-231	MS	70 S	5	2	-
374	W97-276	MR	10 MR	8	1	-
375	W97-283	MS	60 S	8	3	+
376	W97-371	S	60 S	9	2	-
377	W97-430	S	5 MR	8	1	-
378	W97-435	S	40 S	6	2	-
379	TAM-107	S	100 S	5	3	+
380	Karl 92	S	90 S	8	1	+
381	Arapahoe	MR	70 S-MS	7	3	+
382	Local check 1	S	20 MS-MR	8	3	+
383	Local Check 2	S	1 MR	4	1	-
384	Local check 3	R	0	1	3	-
385	X920232-8-1	MR	1 MR-MS	6	1	-
386	X920232-26-1	MR	seg 1 MR-10 S	5	1	-
387	X920232-5	MR	20 MS-MR	6	1	-
388	X920618-C-4-1	S	seg 1 MR-40 S	6	1	-
389	KS920639-B-3-1	S	20 S	7	2	-
390	KS920656-B-8-1	S	5 MR-R	7	2	+
391	X920663-B-14-1	S	100 S	4	2	-
392	KS920676-D-12-1	MS	1 S	4	1	-/+
393	X920709-B-5-2	S	1 R	6	1	-
394	KS920709-B-6-1	S	1 R	5	1	-
395	X920750-A-13-1	S	5 S	7	1	-
396	X920750-A-11-2	S	1 MR	6	1	-
397	X920879-C-15-1	S	40 S	4	1	-
398	X920879-C-15-3	S	30 S	4	1	-
399	X920946-B-15-1	MR	5 S	6	1	-
400	KS920946-B-15-2	MS	1 R	6	1	+
401	X921025-A-3-2	S	1 S	4	1	-
402	X921043-A-3	S	5 MS-S	6	2	-
403	X921054-D-13	S	30 S	6	2	-
404	X921054-E-15	S	30 S	7	1	-/+
405	KS921084-C-5-1	S	50 S	7	1	-
406	X930332-4-1	S	40 S	7	1	+
407	TAM-107	S	100 S	5	3	-
408	Karl 92	S	90 S	8	1	-
409	Arapahoe	MR	70 S-MS	7	3	+

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Watertown, SD, 6/15/99
1	TAM 107	91	60	80
2	Karl 92	91	70	90
3	Arapahoe	107	70	70
4	Local check 1	97	80	100
5	Local check 2	97	60	70
6	Local check 3	81	80	90
7	97L9532	89	50	90
8	97L9530	85	40	90
9	97L9504	85	40	90
10	97L9517	85	30	90
11	97L9518	85	30	80
12	97L9520	85	50	80
13	97L9531	88	50	90
14	97L9527	88	40	100
15	97L9525	89	40	100
16	97L9522	89	30	100
17	97L9521	85	40	100
18	97L9539	88	40	100
19	97L9537	84	50	100
20	97L9536	84	50	100
21	97L9534	88	50	100
22	97L9533	88	50	90
23	97L9554	107	60	100
24	97L9553	83	40	90
25	97L9551	83	40	100
26	97L9545	89	40	100
27	97L9540	85	40	100
28	97L9561	85	60	100
29	97L9590	84	60	90
30	97L9557	97	50	100
31	TAM 107	91	40	80
32	Karl 92	90	50	100
33	Arapahoe	107	70	100
34	Local check 1	97	70	100
35	Local check 2	96	50	80
36	Local check 3	80	80	100
37	NW97S112	97	40	90
38	NW97S114	96	30	100
39	NW97S343	107	40	100
40	NW97S345	106	30	90
41	NW97S061	96	60	90
42	NW97S277	105	50	100
43	NW97S278	103	60	100
44	NW97S280	103	50	100
45	NW97S078	96	60	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
46	NW97S295	82	50	100
47	NW97S304	105	50	100
48	NW97S218	85	40	100
49	NW97S092	99	40	70
50	NW97S085	104	50	80
51	NW97S307	97	50	90
52	NW97S309	85	40	90
53	NW97S312	84	40	100
54	NW97S315	88	40	100
55	NW97S320	85	40	100
56	NW97S322	89	40	100
57	NW97S182	97	50	100
58	NW97S183	91	60	100
59	NW97S186	97	40	100
60	NW97S189	108	40	100
61	NW97S192	108	50	100
62	NW97S193	97	50	100
63	NW97S194	91	40	100
64	NW97S195	91	50	100
65	NW97S412	90	50	90
66	TAM 107	91	40	100
67	Karl 92	90	50	100
68	Arapahoe	107	70	100
69	Local check 1	97	60	100
70	Local check 2	96	40	100
71	Local check 3	81	70	100
72	KS95U589-4	90	30	100
73	KS96WGRC36	95	20	80
74	KS96WGRC40	91	20	90
75	KS98U661	83	30	100
76	KS98U662	84	30	100
77	KS98U663	91	20	100
78	KS98U664	95	20	100
79	KS98U665	89	20	80
80	KS98U666	90	30	100
81	KS98U667	91	40	80
82	KS98U668	95	30	100
83	KS98U669	89	20	80
84	KS98U670	84	10	100
85	KS98U672	85	20	90
86	G97018	82	40	90
87	G97019	105	50	90
88	G97026	97	40	90
89	G97057	85	30	90
90	G97058	96	30	90

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
91	G97060	89	30	90
92	G97064	91	30	90
93	G97070	91	40	80
94	G97361	96	30	100
95	G97082	96	30	100
96	G97099	95	10	90
97	G97100	96	20	90
98	G97159	91	10	100
99	G97160	85	10	80
100	G97174	99	10	80
101	TAM-107	95	30	100
102	G97187	91	30	100
103	G97195	94	40	100
104	G97196	95	50	100
105	G97200	82	50	90
106	G97232	91	40	90
107	G97246	106	50	90
108	G97252	107	40	100
109	G97285	81	30	100
110	G97310	99	30	90
111	G97380	84	30	80
112	G97393	106	30	80
113	G97431	96	50	100
114	G97466	82	40	100
115	TAM 107	91	30	100
116	Karl 92	90	30	100
117	Arapahoe	107	50	100
118	Local check 1	97	60	100
119	Local check 2	96	40	100
120	Local check 3	80	70	100
121	H9520394	91	40	80
122	H9521563	96	40	90
123	H9525208	95	60	100
124	WX96-6601	82	40	100
125	WX96-3002	81	30	100
126	XH9801	80	30	100
127	XH9808	91	40	100
128	XH9811	85	30	100
129	XH9812	95	40	90
130	H9520400	91	50	100
131	H9520428	90	50	100
132	H9520436	95	40	90
133	H9520483	91	40	100
134	H9520842	91	30	90
135	H9520865	90	40	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
136	H9520871	89	50	100
137	WX96-0507	91	40	100
138	WX96-0802	85	50	90
139	WX97-1701	90	60	100
140	WX97-1711	97	50	100
141	WX97-1713	95	30	100
142	WX97-1718	105	30	90
143	WX97-3201	93	40	100
144	WX97-3207	99	50	100
145	WX97-3210	96	50	100
146	TAM 107	91	30	100
147	Karl 92	90	40	100
148	Arapahoe	107	70	100
149	Local check 1	97	70	90
150	Local check 2	96	50	80
151	Local check 3	80	80	100
152	KS97H115	105	40	100
153	KS97H125	96	50	100
154	KS97HW4	103	20	100
155	KS98HW102	106	40	90
156	KS98HW106	106	40	100
157	KS98HW107	104	30	90
158	KS98HW109	104	30	100
159	KS98HW122	104	30	80
160	KS98HW127	104	30	90
161	KS98HW149	99	40	80
162	KS98HW151	106	30	90
163	KS98HW163	90	30	70*
164	KS98HW164	90	30	90*
165	KS98HW170	91	20	70*
166	KS98HW180	104	30	100
167	KS98HW183	85	50	100
168	KS98HW184	85	50	100
169	KS98HW185	85	40	90
170	KS98HW189	84	10	90
171	KS98HW211	95	10	100
172	KS98HW215	95	10	100
173	KS98HW32	103	40	90
174	KS98HW35	93	15	100
175	KS98HW41	106	30	80
176	KS98HW43	103	40	100
177	KS98HW46	103	30	100
178	KS98HW6	106	50	100
179	KS98HW66	105	40	100
180	KS98HW91	105	30	90

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
181	KS98HW98	107	20	100
182	TAM 107	94	30	100
183	Karl 92	91	30	90
184	Arapahoe	107	60	100
185	Local check 1	97	70	100
186	Local check 2	95	50	100
187	Local check 3	80	80	100
188	OK98112	95	10	100
189	OK98113	95	5	90
190	OK98115	97	10	90
191	OK98119	90	30	100
192	OK98123	91	40	100
193	OK98124	96	10	100
194	OK98130	91	20	100
195	OK98131	88	1	90
196	OK98132	91	10	90
197	OK98135	91	1	100
198	OK98136	98	10	100
199	OK98138	94	5	100
200	OK98140	94	5	100
201	OK98207	96	30	90
202	OK98208	96	30	80
203	OK98216	97	20	90
204	OK98217	95	30	80
205	RMH-05/99	104	40	100
206	RMH-11/99	110	30	100
207	RMH-15/99	108	20	100
208	RMH-20/99	94	20	100
209	RMH-21/99	94	20	100
210	RMH-22/99	84	20	70
211	RMH-24/99	90	30	100
212	RMH-25/99	91	30	100
213	RMH-26/99	91	40	100
214	RMH-27/99	97	30	100
215	TAM 107	90	40	100
216	Karl 92	90	40	100
217	Arapahoe	106	50	100
218	Local check 1	97	50	100
219	Local check 2	95	40	80
220	Local check 3	81	70	100
221	SD97008	85	50	90
222	SD97010	105	40	100
223	SD97049	106	30	100
224	SD97057	85	20	100
225	SD97058	91	40	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
226	SD97059	106	30	100
227	SD97060	110	30	100
228	SD97063	105	40	100
229	SD97064	106	50	100
230	SD97102	106	60	100
231	SD97197	105	40	100
232	SD97214	103	30	100
233	SD97376	105	40	100
234	SD97427	106	40	100
235	SD97W603	91	40	100
236	SD97W604	95	40	100
237	SD97W606	91	60	100
238	SD97W609	91	50	100
239	SD97W615	99	40	90
240	SD97W616	99	60	100
241	SD97W623	107	30	90
242	SD97W624	105	30	100
243	SD97W634	103	30	90
244	SD97W638	103	40	100
245	SD97W641	105	50	90
246	SD97W642	104	40	100
247	SD97W648	103	30	90
248	SD97W650	103	30	100
249	SD97W651	103	40	80*
250	SD97W664	103	40	100
251	TAM 107	91	30	90
252	Karl 92	90	40	100
253	Arapahoe	106	70	100
254	Local check 1	97	60	100
255	Local check 2	96	50	100
256	Local check 3	80	70	100
257	TX97A0030	99	50	90
258	TX97A0036	91	20	90
259	TX97A0064	103	30	90
260	TX97A0080	94	50	80
261	TX97A0089	90	30	90
262	TX97A0096	97	40	90
263	TX97A0097	104	10	70
264	TX97A0100	104	20	80
265	TX97A0110	103	10	60
266	TX97A0116	91	20	100
267	TX97A0124	95	20	100
268	TX97A0125	102	40	100
269	TX97A0130	104	30	90
270	TX97A0148	93	20	90

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
271	TX97A0160	91	20	90
272	TX97A0161	99	20	100
273	TX97A0166	98	20	100
274	TX97A0182	91	10	100
275	TX97A0190	94	20	90
276	TX97A0196	75	10	90
277	TX97A0198	89	30	100
278	TX97A0207	97	40	100
279	TX97A0214	91	10	90
280	TX97A0216	85	5	100
281	TX97A0232	104	5	90
282	TX97A0260	113	20	100
283	TX97A0270	103	10	90
284	TX97A0271	103	10	100
285	TX97A0273	107	10	100
286	TX97A0274	95	0	100
287	TAM 107	92	30	90
288	Karl 92	91	40	100
289	Arapahoe	108	60	100
290	Local check 1	98	70	100
291	Local check 2	97	50	90
292	Local check 3	81	80	100
293	TX94D4148	90	10	100
294	TX96D1693	88	5	100
295	TX96D1865	94	10	100
296	TX96D2267	91	1	90
297	TX96D2279	95	10	100
298	TX96D2837	95	20	100
299	TX96D2845	89	1	80
300	TX97D4375	99	0	80
301	TX97D5514	97	20	100
302	TX97D5851	99	10	90
303	TX97D6122	97	30	100
304	TX97D6178	99	40	100
305	TX97D6335	95	40	100
306	TX97D6337	94	20	100
307	TX97D6778	99	30	100
308	NE97407	97	50	90
309	NE97421	103	40	100
310	NE97426	107	30	100
311	NE97465	99	30	90
312	NE97489	115	40	100
313	NE97518	106	50	100
314	NE97553	116	40	100
315	NE97558	115	50	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
316	NE97612	117	30	100
317	NE97638	115	40	100
318	NE97669	107	40	100
319	NE97670	106	40	100
320	NE97675	114	30	100
321	NE97689	114	40	100
322	NE97693	114	30	100
323	NE97716	106	40	100
324	NI97423	115	50	100
325	TAM 107	91	20	100
326	Karl 92	91	30	100
327	Arapahoe	107	60	100
328	Local check 1	98	70	100
329	Local check 2	96	60	100
330	Local check 3	81	90	100
331	CO960002	90	20	90
332	CO960004	84	20	100
333	CO960006	91	20	100
334	CO960020	95	40	100
335	CO960026	96	30	100
336	CO960037	91	30	100
337	CO960047	90	30	90
338	CO960053	94	20	100
339	CO960065	91	30	90
340	CO960091	98	30	100
341	CO960102	94	10	100
342	CO960211	90	20	100
343	CO960223	91	5	80
344	CO960230	97	10	70
345	CO960255	99	5	70
346	CO960293	117	30	90
347	CO960315	97	30	100
348	CO960326	91	20	100
349	CO960329	89	20	80*
350	CO960333	104	20	100
351	CO960551	105	40	100
352	CO960603	89	40	100
353	CO960686	91	30	100
354	CO960689	96	40	100
355	CO960691	107	60	100
356	W95-188-134	97	50	90
357	W95-188-08	102	40	100
358	W95-385	93	20	90
359	W95-392	90	20	100
360	W95-091	103	20	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
361	W94-244-132	97	10	100
362	W94-480W	104	30	100
363	W95-610W	107	20	100
364	W96-359	89	10	100
365	W96-410	89	10	100
366	W96-392	90	20	90
367	W96-078	82	10	100
368	W96-300	82	30	100
369	W96-332	103	60	100
370	W97-234	97	30	90
371	W97-075	96	30	100
372	W97-169	85	40	100
373	W97-231	81	20	100
374	W97-276	85	20	100
375	W97-283	82	30	100
376	W97-371	80	10	100
377	W97-430	85	20	100
378	W97-435	78	30	100
379	TAM 107	92	30	100
380	Karl 92	91	40	100
381	Arapahoe	107	60	100
382	Local check 1	97	70	100
383	Local check 2	96	40	100
384	Local check 3	80	90	100
385	X920232-8-1	91	30	100
386	X920232-26-1	85	30	100
387	X920232-5	107	50	100
388	X920618-C-4-1	95	50	100
389	KS920639-B-3-1	106	30	100
390	KS920656-B-8-1	106	50	100
391	X920663-B-14-1	91	30	100
392	KS920676-D-12-1	95	40	100
393	X920709-B-5-2	105	50	100
394	KS920709-B-6-1	105	40	100
395	X920750-A-13-1	95	30	90
396	X920750-A-11-2	104	30	100
397	X920879-C-15-1	98	40	90
398	X920879-C-15-3	95	40	90
399	X920946-B-15-1	104	30	100
400	KS920946-B-15-2	104	30	100
401	X921025-A-3-2	99	40	100
402	X921043-A-3	97	40	100
403	X921054-D-13	85	30	100
404	X921054-E-15	98	40	100
405	KS921084-C-5-1	103	30	100

Table 4. Agronomic properties, 1999 RGON.

Local checks: Prosper, TX, 1=TAM302, 2=Sturdy, 3=Coker9835; Williston, ND, 1=Erhardt, 2=Judith, 3=Morgan; Brookings, SD, 1=Harding, 2=Jagger, 3=Alliance.

Entry No.	Line/selection	Days to heading from 1/1, Prosper, TX	Stand/vigor (%), Williston, ND, 5/21/99	Stand/vigor, Brookings, SD, 6/15/99
406	X930332-4-1	90	20	100
407	TAM 107	91	30	100
408	Karl 92	90	40	100
409	Arapahoe	106	60	100
410	Local check 1	97	50	100
411	Local check 2	96	30	100
412	Local check 3	80	70	100
*reduced stand possibly due to planting problems				

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Reaction to Russian wheat aphid (RWA), greenbug biotype E (GBE) and Hessian Fly (HF: Great Plains Biotype), 1999 Regional Germplasm Observation Nursery

RWA: R=resistant: flat leaves with little or no chlorosis; good plant growth MR=moderately resistant:flat leaves with more chlorosis; good plant growth M=intermediate: flat leaves, some generalized chlorosis, stunted plants, S=susceptible: tightly rolled leaves, white streaking.

GBE: R=resistant, S=susceptible, seg=segregating.

HF: R=resistant, S=susceptible, H=heterogeneous

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
1	1	TAM-107	S		S		S
2	2	Karl 92	S		S		S
3	3	Arapahoe	S		S		H
4	4	Local Check 1	M	STARS 9302	S	Amigo	
5	5	Local Check 2	R	PI372129	R	Largo	
6	6	Local Check 3	R	STARS 3-8	R	GRS1201	
7	7	97L9532	S		S		S
8	8	97L9530	S		S		S
9	9	97L9504	S		S		S
10	10	97L9517	S		S		S
11	11	97L9518	S		S		S
12	12	97L9520	S		S		S
13	13	97L9531	S		S		S
14	14	97L9527	S		S		S
15	15	97L9525	S		S		S
16	16	97L9522	S		S		S
17	17	97L9521	S		S		S
18	18	97L9539	S		S		S
19	19	97L9537	S		S		S
20	20	97L9536	S		S		S
21	21	97L9534	S		S		S
22	22	97L9533	S		S		S
23	23	97L9554	S		S		S
24	24	97L9553	S		S		S
25	25	97L9551	S		S		S
26	26	97L9545	S		S		S
27	27	97L9540	S		S		S
28	28	97L9561	S		S		S
29	29	97L9590	S		S		S
30	30	97L9557	S		S		S
31	31	TAM-107	S		S		S
32	32	Karl 92	S		S		S
33	33	Arapahoe	S		S		R-
34	34	Local Check 1	MR	STARS 9302	S	Amigo	
35	35	Local Check 2	R	PI372129	R	Largo	
36	36	Local Check 3	R	STARS 3-8	R	GRS1201	

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
37	37	NW97S112	S		S		S
38	38	NW97S114	S		S		S
39	39	NW97S343	S		S		S
40	40	NW97S345	S		S		S
41	41	NW97S061	S		S		S
42	42	NW97S277	S		S		S
43	43	NW97S278	S		S		S
44	44	NW97S280	S		S		S
45	45	NW97S078	S		S		S
46	46	NW97S295	S		S		S
47	47	NW97S304	S		S		S
48	48	NW97S218	S		S		S
49	49	NW97S092	S		S		S
50	50	NW97S085	S		S		S
51	51	NW97S307	S		S		S
52	52	NW97S309	S		S		S
53	53	NW97S312	S		S		S
54	54	NW97S315	S		S		S
55	55	NW97S320	S		S		S
56	56	NW97S322	S		S		S
57	57	NW97S182	S		S		S
58	58	NW97S183	S		S		S
59	59	NW97S186	S		S		S
60	60	NW97S189	S		S		S
61	61	NW97S192	S		S		S
62	62	NW97S193	S		S		S
63	63	NW97S194	S		S		S
64	64	NW97S195	S		S		S
65	65	NW97S412	S		S		S
66	66	TAM-107	S		S		S
67	67	Karl 92	S		S		S
68	68	Arapahoe	S		S		R-
69	69	Local Check 1	R	STARS 9302	S	Amigo	
70	70	Local Check 2	R	PI372129	R	Largo	
71	71	Local Check 3	R	STARS 3-8	R	GRS1201	
72	72	KS95U589-4	S		S		S
73	73	KS96WGRC36	S		S		S
74	74	KS96WGRC40	S		Seg	3R-11S	S
75	75	KS98U661	S		S		S
76	76	KS98U662	S		S		S
77	77	KS98U663	S		S		S
78	78	KS98U664	S		S		S
79	79	KS98U665	S		S		S
80	80	KS98U666	S		S		S
81	81	KS98U667	S		S		H-
82	82	KS98U668	S		S		S
83	83	KS98U669	R		Seg	10R-5S	H
84	84	KS98U670	S		S		S
85	85	KS98U672	S		S		S

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
86	86	G97018	S		S		S
87	87	G97019	S		S		S
88	88	G97026	S		S		S
89	89	G97057	S		S		S
90	90	G97058	S		S		S
91	91	G97060	S		S		S
92	92	G97064	S		S		S
93	93	G97070	S		S		S
94	94	G97361	S		S		S
95	95	G97082	S		S		S
96	96	G97099	S		S		S
97	97	G97100	S		S		H+
98	98	G97159	S		S		S
99	99	G97160	S		S		S
100	100	G97174	S		S		S
101	101	TAM-107	S		S		S
102	102	G97187	S		S		S
103	103	G97195	S		S		S
104	104	G97196	S		S		S
105	105	G97200	S		S		S
106	106	G97232	S		S		S
107	107	G97246	S		S		H+
108	108	G97252	S		S		S
109	109	G97285	S		S		S
110	110	G97310	S		S		S
111	111	G97380	S		S		S
112	112	G97393	S		S		S
113	113	G97431	S		S		S
114	114	G97466	S		S		S
115	115	TAM-107	S		S		S
116	116	Karl 92	S		S		S
117	117	Arapahoe	S		S		R-
118	118	Local Check 1	MR	STARS 9302	S	Amigo	
119	119	Local Check 2	R	PI372129	R	Largo	
120	120	Local Check 3	R	STARS 3-8	R	GRS1201	
121	121	H9520394	S		Seg?	2MR-13S	S
122	122	H9521563	S		S		S
123	123	H9525208	S		S		H
124	124	WX96-6601	S		S		S
125	125	WX96-3002	S		S		S
126	126	XH9801	S		S		S
127	127	XH9808	S		S		S
128	128	XH9811	S		S		S
129	129	XH9812	S		S		S
130	130	H9520400	S		S		S
131	131	H9520428	S		S		H
132	132	H9520436	S		S		S
133	133	H9520483	S		S		H
134	134	H9520842	S		S		H

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
135	135	H9520865	S		S		H
136	136	H9520871	S		S		H
137	137	WX96-0507	S		S		S
138	138	WX96-0802	S		S		H
139	139	WX97-1701	S		S		S
140	140	WX97-1711	S		S		S
141	141	WX97-1713	S		S		S
142	142	WX97-1718	S		S		S
143	143	WX97-3201	S		S		S
144	144	WX97-3207	S		S		S
145	145	WX97-3210	S		S		S
146	146	TAM-107	S		S		S
147	147	Karl 92	S		S		S
148	148	Arapahoe	S		S		R-
149	149	Local Check 1	M	STARS 9302	S	Amigo	
150	150	Local Check 2	R	PI372129	R	Largo	
151	151	Local Check 3	R	STARS 3-8	R	GRS1201	
152	152	KS97H115	S		S		H
153	153	KS97H125	S		S		R-
154	154	KS97HW4	S		S		H
155	155	KS98HW102	S		S		S
156	156	KS98HW106	S		S		R-
157	157	KS98HW107	S		S		S
158	158	KS98HW109	S		S		S
159	159	KS98HW122	S		S		S
160	160	KS98HW127	S		S		S
161	161	KS98HW149	S		S		S
162	162	KS98HW151	S		S		S
163	163	KS98HW163	S		S		S
164	164	KS98HW164	S		S		S
165	165	KS98HW170	S		S		S
166	166	KS98HW180	S		S		S
167	167	KS98HW183	S		S		S
168	168	KS98HW184	S		S		S
169	169	KS98HW185	S		S		S
170	170	KS98HW189	S		S		H
171	171	KS98HW211	S		S		R-
172	172	KS98HW215	S		S		R
173	173	KS98HW32	S		S		S
174	174	KS98HW35	S		S		R
175	175	KS98HW41	S		S		R-
176	176	KS98HW43	S		S		H
177	177	KS98HW46	S		S		R-
178	178	KS98HW6	S		S		R-
179	179	KS98HW66	S		S		R
180	180	KS98HW91	S		S		R-
181	181	KS98HW98	S		S		S
182	182	TAM-107	S		S		S
183	183	Karl 92	S		S		S

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
184	184	Arapahoe	S		S		R-
185	185	Local Check 1	MR	STARS 9302	S	Amigo	
186	186	Local Check 2	MR	PI372129	R	Largo	
187	187	Local Check 3	R	STARS 3-8	R	GRS1201	
188	188	OK98112	S		S		S
189	189	OK98113	S		S		S
190	190	OK98115	S		S		S
191	191	OK98119	S		S		S
192	192	OK98123	S		S		S
193	193	OK98124	S		S		S
194	194	OK98130	S		S		S
195	195	OK98131	S		S		S
196	196	OK98132	S		S		R-
197	197	OK98135	S		S		R
198	198	OK98136	S		S		S
199	199	OK98138	S		S		S
200	200	OK98140	S		S		S
201	201	OK98207	S		S		S
202	202	OK98208	S		S		S
203	203	OK98216	S		S		S
204	204	OK98217	S		S		S
205	205	RMH-05/99	S		S		S
206	206	RMH-11/99	S		S		S
207	207	RMH-15/99	S		S		S
208	208	RMH-20/99	S		S		S
209	209	RMH-21/99	S		S		S
210	210	RMH-22/99	S		S		S
211	211	RMH-24/99	S		S		S
212	212	RMH-25/99	S		S		S
213	213	RMH-26/99	S		S		S
214	214	RMH-27/99	S		S		H
215	215	TAM-107	S		S		S
216	216	Karl 92	S		S		S
217	217	Arapahoe	S		S		R
218	218	Local Check 1	MR	STARS 9302	S	Amigo	
219	219	Local Check 2	R	PI372129	R	Largo	
220	220	Local Check 3	R	STARS 3-8	R	GRS1201	
221	221	SD97008	S		S		S
222	222	SD97010	S		S		S
223	223	SD97049	S		S		R-
224	224	SD97057	S		S		S
225	225	SD97058	S		S		S
226	226	SD97059	S		S		S
227	227	SD97060	S		S		S
228	228	SD97063	S		S		S
229	229	SD97064	S		S		H
230	230	SD97102	S		S		R-
231	231	SD97197	S		S		H+

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
232	232	SD97214	S		S		S
233	233	SD97376	S		S		S
234	234	SD97427	S		S		R
235	235	SD97W603	S		S		S
236	236	SD97W604	S		S		S
237	237	SD97W606	S		S		S
238	238	SD97W609	S		S		S
239	239	SD97W615	S		S		S
240	240	SD97W616	S		S		S
241	241	SD97W623	S		S		R
242	242	SD97W624	S		S		H
243	243	SD97W634	S		S		S
244	244	SD97W638	S		S		S
245	245	SD97W641	S		S		S
246	246	SD97W642	S		S		S
247	247	SD97W648	S		S		S
248	248	SD97W650	S		S		R-
249	249	SD97W651	S		S		R
250	250	SD97W664	S		S		S
251	251	TAM-107	S		S		S
252	252	Karl 92	S		S		S
253	253	Arapahoe	S		S		R-
254	254	Local Check 1	MR	STARS 9302	S	Amigo	
255	255	Local Check 2	R	PI372129	R	Largo	
256	256	Local Check 3	R	STARS 3-8	R	GRS1201	
257	257	TX97A0030	S		S		S
258	258	TX97A0036	S		S		S
259	259	TX97A0064	S		S		S
260	260	TX97A0080	S		S		S
261	261	TX97A0089	S		S		S
262	262	TX97A0096	S		S		S
263	263	TX97A0097	S		S		S
264	264	TX97A0100	S		S		S
265	265	TX97A0110	S		S		S
266	266	TX97A0116	S		S		S
267	267	TX97A0124	S		S		S
268	268	TX97A0125	S		S		S
269	269	TX97A0130	S		S		S
270	270	TX97A0148	S		S		S
271	271	TX97A0160	S		S		S
272	272	TX97A0161	S		S		S
273	273	TX97A0166	S		S		S
274	274	TX97A0182	S		S		S
275	275	TX97A0190	S		S		S
276	276	TX97A0196	S		S		S
277	277	TX97A0198	S		S		S
278	278	TX97A0207	S		S		S
279	279	TX97A0214	S		S		S
280	280	TX97A0216	S		S		S

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
281	281	TX97A0232	S		S		S
282	282	TX97A0260	S		S		H
283	283	TX97A0270	S		S		S
284	284	TX97A0271	S		S		S
285	285	TX97A0273	S		S		S
286	286	TX97A0274	S		S		S
287	287	TAM-107	S		S		S
288	288	Karl 92	S		S		S
289	289	Arapahoe	S		S		R-
290	290	Local Check 1	R	STARS 9302	S	Amigo	
291	291	Local Check 2	MR	PI372129	R	Largo	
292	292	Local Check 3	R	STARS 3-8	R	GRS1201	
293	293	TX94D4148	S		S		S
294	294	TX96D1693	S		S		S
295	295	TX96D1865	S		S		S
296	296	TX96D2267	S		S		S
297	297	TX96D2279	S		S		R
298	298	TX96D2837	S		S		R
299	299	TX96D2845	S		S		S
300	300	TX97D4375	S		R		S
301	301	TX97D5514	S		S		S
302	302	TX97D5851	S		S		S
303	303	TX97D6122	S		S		R
304	304	TX97D6178	S		S		H
305	305	TX97D6335	S		S		S
306	306	TX97D6337	S		S		R
307	307	TX97D6778	S		S		S
308	308	NE97407	S		S		R-
309	309	NE97421	S		S		R-
310	310	NE97426	S		S		H
311	311	NE97465	S		S		R
312	312	NE97489	S		S		R
313	313	NE97518	S		S		H
314	314	NE97553	S		S		S
315	315	NE97558	S		S		H
316	316	NE97612	S		S		S
317	317	NE97638	S		S		R
318	318	NE97669	S		S		S
319	319	NE97670	S		S		R-
320	320	NE97675	S		S		S
321	321	NE97689	S		S		R-
322	322	NE97693	S		S		R-
323	323	NE97716	S		S		H
324	324	NI97423	S		S		S
325	325	TAM-107	S		S		S
326	326	Karl 92	S		S		S
327	327	Arapahoe	S		S		R
328	328	Local Check 1	R	STARS 9302	S	Amigo	

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
329	329	Local Check 2	R	PI372129	R	Largo	
330	330	Local Check 3	R	STARS 3-8	R	GRS1201	
331	331	CO960002	S		S		S
332	332	CO960004	Seg		S		S
333	333	CO960006	S		S		S
334	334	CO960020	S		S		S
335	335	CO960026	Seg		S		S
336	336	CO960037	Seg		S		S
337	337	CO960047	Seg		S		S
338	338	CO960053	Seg		S		S
339	339	CO960065	Seg		S		S
340	340	CO960091	Seg		S		S
341	341	CO960102	M	w/ heavy chlorosis	S		H
342	342	CO960211	M-Seg	w/streaks	S		S
343	343	CO960223	R		S		S
344	344	CO960230	Seg		S		H
345	345	CO960255	Seg		S		S
346	346	CO960293	R		S		S
347	347	CO960315	R /1S	w/1 susc	S		S
348	348	CO960326	R /1S	w/1 susc	S		S
349	349	CO960329	R		S		S
350	350	CO960333	R w/	w/specks	S		S
251	351	CO960551	S		S		S
352	352	CO960603	S		S		S
353	353	CO960686	R /1S	w/1 susc	S		S
354	354	CO960689	Seg		S		H
355	355	CO960691	M-Seg		S		H
356	356	W95-188-134	S		S		S
357	357	W95-188-08	S		S		S
358	358	W95-385	S		S		S
359	359	W95-392	S		S		S
360	360	W95-091	S		S		H
361	361	W94-244-132	S		S		H
362	362	W94-480W	S		S		H
363	363	W95-610W	S		S		S
364	364	W96-359	S		S		S
365	365	W96-410	S		S		S
366	366	W96-392	S		S		S
367	367	W96-078	S		S		S
368	368	W96-300	S		S		S
369	369	W96-332	S		S		R
370	370	W97-234	S		S		S
371	371	W97-075	S		S		S
372	372	W97-169	S		S		S
373	373	W97-231	S		S		H
374	374	W97-276	S		S		H
375	375	W97-283	S		S		H
376	376	W97-371	S		S		S
377	377	W97-430	S		S		S

Table 5. Reaction to Russian wheat aphid (RWA) greenbug biotype E (GBE) and Hessian Fly Great Plains biotype (HF).

Entry No.	Entry	Line	RWA Rating	RWA Notes	GBE Rating	GBE Notes	HF reaction
378	378	W97-435	S		S		H
379	379	TAM-107	S		S		S
380	380	Karl 92	S		S		S
381	381	Arapahoe	S		S		R
382	382	Local Check 1	R	STARS 9302	S	Amigo	
383	383	Local Check 2	R	PI372129	R	Largo	
384	384	Local Check 3	R	STARS 3-8	R	GRS1201	
385	385	X920232-8-1	S		S		S
386	386	X920232-26-1	S		S		S
387	387	X920232-5	S		S		S
388	388	X920618-C-4-1	S		S		S
389	389	KS920639-B-3-1	S		S		S
390	390	KS920656-B-8-1	S		S		S
391	391	X920663-B-14-1	S		S		S
392	392	KS920676-D-12-1	S		S		S
393	393	X920709-B-5-2	S		S		S
394	394	KS920709-B-6-1	S		S		S
395	395	X920750-A-13-1	S		S		S
396	396	X920750-A-11-2	S		S		S
397	397	X920879-C-15-1	S		S		R
398	398	X920879-C-15-3	S		S		R-
399	399	X920946-B-15-1	S		S		S
400	400	KS920946-B-15-2	S		S		S
401	401	X921025-A-3-2	S		S		S
402	402	X921043-A-3	S		S		S
403	403	X921054-D-13	S		S		S
404	404	X921054-E-15	S		S		S
405	405	KS921084-C-5-1	S		S		S
406	406	X930332-4-1	S		S		R-
407	407	TAM-107	S		S		S
408	408	Karl 92	S		S		S
409	409	Arapahoe	S		S		R-
410	410	Local Check 1	R	STARS 9302	S	Amigo	
411	411	Local Check 2	R	PI372129	R	Largo	
412	412	Local Check 3	R	STARS 3-8	R	GRS1201	