Local checks and explanatory notes, 1998 Regional Germplasm Observation Nursery

Russian Wheat Aphid (RWA); ARS, OK; Seedling RWA ratings from SS (super-susceptible) to HR (highly resistant).

Local checks: 1) STARS 9302; 2) PI372129; 3) STARS 3-8. Data provided by David Porter and Cheryl Baker, USDA-ARS, Stillwater, OK.

Greenbug; ARS, OK; Seedling Greenbug ratings (biotype 'E') from SS (super-susceptible to HR (highly resistant).

Local checks: 1) Amigo; 2) Largo; 3) GRS1201. Data provided by David Porter and Cheryl Baker, USDA-ARS, Stillwater, OK.

Leaf rust; OSU, OK; Seedling ratings from R to S . 1997 Race composite with avir./vir. formula: 9, 17, 19, 26, SXL / 1, 2a, 2c, 3, 3ka, 11, 16, 24, 30, DNE, CTY.

Local checks: 1) Danne ; 2) Siouxland ; 3) Thatcher-Lr19 . Data provided by Bob Hunger and John Sherwood, Oklahoma State University, Stillwater.

Leaf rust; ARS, KS; Seedling ratings from 0 (highly resistant) to 9 (highly susceptible).

Local Checks: 1) Jagger; 2) 2137; and 3) KS93U206. Data provided by Merle Eversmeyer and Gina Brown-Guedira, USDA-ARS, Manhattan, KS.

Stem rust; ARS, MN; Seedling ratings (reaction type) to races TPMK, HKCJ, RKRQ, RTQQ, QTHJ, RTQS, and QFCQ. Data provided by Don McVey, USDA-ARS, St. Paul, MN.

Set I: Sr5, Sr21, Sr9e, Sr7b; Set II: Sr11, Sr6, Sr8, Sr9g; Set III: Sr36, Sr9b, Sr30, Sr13-17; Set IV: Sr9a, Sr9d, Sr10, Tmp.

Acid Soil Tolerance; OSU, OK; Field visual ratings of 1 (resistant) to 9 (susceptible) to soil pH 4.5 (+30% Al saturation) on 12/16/97 and 3/31/98.

Local checks: 1) OK91P648-41 (acid-soil tolerant); 2) 2174 (intermediate response); and 3) 2137 (tolerant). Data provided by Brett Carver, Oklahoma State Univ.

SBMV / WSSMV; KSU, St. John; Field visual ratings (Resistant to Susceptible) to combined infection of soilborne wheat mosaic and wheat spindle streak viruses.

Local checks: 1) Jagger; 2) 2137; and 3) KS93U206. Data provided by Rollie Sears and Joe Martin, Kansas State University.

Winter survival, Williston, North Dakota, field visual ratings, data provided by Jim Berg and Phil Bruckner, Montana State University.

Local checks: 1) CDC Kestrel 2) Rampart and 3) Erhardt.

Drought tolerance, Bushland, Texas, field visual ratings, provided by Mark Lazar, Texas A&M.

Local checks: 1) Sturdy 2) TAM300 and 3) TAM301, Hdt = Heading date in days after January 1, b=Drought tolerance rating on 0 to 4 scale, visual plot average: 0=fully flat, green youngest fully-expanded leaf; 1=flat leaf with tip necrosis; 2=leaf curled, less than half necrotic; 3=more than half necrotic; 4=dead leaf.

Entry	Sel. No.	Pedigree	Origin
1	TAM-107	PI495594	Check
2	KARL 92	PI564245	Check
3	ARAPAHOE	PI518591	Check
4	LOCAL CHECK-1	See Intro.	Check
5	LOCAL CHECK-2	See Intro.	Check
6	LOCAL CHECK-3	See Intro.	Check
7	TX95D8124	Payne/Mit//Pioneer 2165/3/Pioneer 2548 (=WX87D056-17-54)	Marshall, TX A&M, Dallas
8	TX95D8553	TX91D6991/TX91D6824 (=WX91D016-10)	"
9	TX95D8827	TX90D9377/TX91D6991 (=WX91D005-1)	"
10	TX95D8902	Wrangler*2/TA749 (=TX93D2940-38) (U1634-X9)	"
11	TX96D1072	TX88D1310/Kavkaz//TX86D1308 (=WX87D144-10-99-12-8)	"
12	TX96D1246	Caldwell/McNair 1003//TAM-200 (=WX87D054-1-135-12)	"
13	TX96D1392	TX88D3495/TXGH1026 (=WX89D007-1)	"
14	TX96D1624	Adder//TX84U4408/Pavon 76 (=WX88D057-130)	"
15	TX96D1626	Adder//TX84U4408/Pavon 76 (=WX88D057-136)	"
16	TX96D1735	Adder//TX84U4408/Pavon 76 (=WX88D057-562)	"
17	TX96D2240	Wheaton/Sturdy/4/TXGH10563B/3/Len/Oslo//Mit (=WX90D033-8-14-36)	"
18	TX96D2281	CI13227/4/PI429155/3/Collin/Mit//TXGH12588 (=WX90D062-1-47-10)	"
19	TX96D2370	Kitt/Caldwell//TAM-300/TX88D3385 (=WX90D178-4-12-21)	"
20	TX96D2547	Sturdy/P2157//TX86D1320 (=WX88D002-4-1-2-38-12)	"
21	TX96D2845	T200*HBY242H/AOE*HBY242H (=TX92D6697-1-5-1-49) (HBK0279)	"
22	M1107/94	HUQ/ALS's'/3/ANA/Maya's'//B 412a	Romig, Trigen Seeds
23	R824-23	Olesen/Bison//Siouxland	"
24	TX97A0022	Karl//TAM-105/Veery	Lazar, TX A&M Bushland
25	TX97A0027	Karl92/TX88V4505	"
26	TX97A0070	TX78V2430-2/TX86V1540//KS89H50-4	"
27	TX97A0071	TX78V2430-2/TX86V1540//KS89H50-4	"
28	TX97A0076	TAM200/TX85V1326//Karl92	"
29	TX97A0077	U1254-4-3-8/TXGH12588	"
30	TX97A0099	Coker 9766/3/TAM200//Agatha/Payne/4/Karl92	"
31	TX97A0120	TAM202/TX38949-2//Karl92	"
32	TX97A0122	TX88V4328/TX87V1613//TX87V1233-1	"
33	TX97A0130	TX90V7528/TAM202//NE88595	"
34	TX97A0151	TAM200*2/TA2460*2//TAM202	"
35	TX97A0153	TAM200*2/TA2460//TX85V1225R/3/Karl	"
36	TX97A0165	TAM105*4/Amigo*5//Largo/3/TX88V5431	"
37	TX97A0171	TAM108*4/Amigo*4//Largo/3/TX88V5431	"
38	TX97A0180	TAM105*4/Amigo*5//Largo/3/TX88V5440	"
39	TX97A0181	TAM105*4/Amigo*5//Largo/3/TX88V5440	"
40	TX97A0217	TAM108*4/Amigo*4//Largo/3/NE86582	"
41	TX97A0235	TAM105*4/Amigo*5//Largo/3/NE87615	"
42	TX97A0282	KS8010*-72/TAM200	"
43	TX97A0286	KS8010*-72//TX78V2408/TAM107	"
44	TX97A0320	Karl/TX84V1307	"
45	TX97A0324	Larned/TAM200	"
46	TX97A0339	TAM107/Karl	"
47	TX97A0342	TAM107/Karl	"
48	TX97A0345	TAM107/Karl	"
49	TX97A0350	TX87V1316/Karl	"
50	TX97A0377	KS93U69/KS92WGRC16	"

Entry	Sel. No.	Pedigree	Origin
51	TX97A0383	KS90WGRC10*2//U1275-1-11-1-8/TA2455	"
52	TX97A0384	KS90WGRC10*2//U1275-1-11-1-8/TA2455	"
53	TAM-107	PI495594	Check
54	KARL 92	PI564245	Check
55	ARAPAHOE	PI518591	Check
56	LOCAL CHECK-1	See Intro.	Check
57	LOCAL CHECK-2	See Intro.	Check
58	LOCAL CHECK-3	See Intro.	Check
59	HBG0358	W3445*XW161/4W162)X244	Worrall, TX A&M, Vernon
60	TX93V4315	TAM-200/Fundulea	"
61	TX93V5717	TAM-200/TX82D5668	"
62	TX94V2327	NE83407/3/FLN/ACL//ANA	"
63	TX94V2906	TAM-200/Fundulea	"
64	TX94V3329	Composite cross	"
65	TX94V4524	U1254-4-9-8-V25	"
66	TX94V4730	TX86V1540/TAM-202	"
67	TX94V4930	TAM-200/Fundulea	"
68	TX94V5922	U1254-1-8-1-1/TAM-202	"
69	TX95V2512	KS8010-71*HBZ285A/2163	"
70	TX95V4336	TX88V5124/TAM-202	"
71	TX95V4339	TX88V5435/Yantar	"
72	TX95V4538	TX88A6848/TX87A6763	"
73	TX95V4926	Rio Blanco/Bai Quan 3039	"
74	TX95V4933	NE83407/TX88V4834	"
75	TX95V5124	TX86V1540/Abilene	"
76	TX95V5125	TX86V1540/Karl	"
77	TX95V5332	TX88V4914/NE83407	"
78	TX95V5539	HBY262F*HBZ308B*TAM-200	"
79	TX95V6427	TX86V1540/Karl	"
80	TX95V6428	TX86V1540/Karl	"
81	TX95V6509	TX88V4317/Mesa	"
82	TX95V6608	KS86WGRC2*HBY261B/2163	"
83	TX95V6620	TAM-200/Fundulea	"
84	TX95V6627	TAM-200/Fundulea	"
85	TX96V2317	NE83407/TX88V5005	"
86	TX96V2321	TX86V1540/Abilene	"
87	TX96V2324	TX86V1540/Abilene	"
88	TX96V2332	TX86V1540/TX81V6607-2	"
89	TX96V2406	TX86V1540/TX84V1317	"
90	TX96V2425	TX87V1235/Karl	"
91	TAM-107	TAM-107 Check	"
92	TX96V2845	GK-Kalaka/TAM-107(F1)//NE78697/TX78V2154	"
93	TX96V2857	1254-1-8-1-1/TX80GH3006	"
94	TX96V2859	1254-1-8-1-1//TAM-108/PYN	"
95	TX96V2865	1254-7-9-2-1/MIT	"
96	TX96V2889	TX86V1540/Abilene	"
97	TX96V2893	TX86V1540/Abilene	"
98	OK97402	Prostor/ABI//2163	Smith, OSU, Stillwater
99	OK97411	P8-5/Kvz//2*2180	"
100	OK97432	OK89421/Karl//2180	"

Entry	Sel. No.	Pedigree	Origin
101	OK97434	OK89421/Karl//2180	"
102	OK97467	Brigantina/ABI//Karl	"
103	OK97496	CTY*3/TA2460//Karl	"
104	OK97499	CTY*3/TA2460//Karl	"
105	OK97508	HBZ374C/CRR	"
106	OK97535	VBF0553A/Longhorn	"
107	OK97538	HBC302E/OK88767	"
108	OK97561	HBB036J/OK88767	"
109	OK97585	AIV Cross 206/CTY seln	"
110	OK97589	TX84V1317/HBZ308B//2163 seln	"
111	OK97591	TX84V1317/HBZ308B//2163 seln	"
112	TAM-107	PI495594	Check
113	KARL 92	PI564245	Check
114	ARAPAHOE	PI518591	Check
115	LOCAL CHECK-1	See Intro.	Check
116	LOCAL CHECK-2	See Intro.	Check
117	LOCAL CHECK-3	See Intro.	Check
118	OK98G501	Karl92*2/Century awnless	Carver, OSU, Stilllwater
119	OK98G502W	KS91HW29/KSSB369-7	"
120	OK98G503	KS91HW29/KSSB369-7	"
121	OK98G504W	KS91HW491/KS90HW53	"
122	OK98G505W	KS90HW53/90IWWSN-88	"
123	OK98G506W	KS90HW53/90IWWSN-88	"
124	OK98G507W	KS90HW53/90IWWSN-88	"
125	OK98G508W	Rio Blanco/KSWGRC10	"
126	OK98G509W	Rio Blanco/KSWGRC10	"
127	OK98G510W	KSSB369-7/TAM 200	"
128	RMH-01/98	CSM/IWWRN#82//TBD	Hunger, OSU, Stillwater
129	RMH-02/98	"	"
130	RMH-03/98	"	"
131	RMH-04/98	"	"
132	RMH-05/98	"	"
133	RMH-07/98	"	"
134	RMH-08/98	"	"
135	RMH-10-98	MESA/IWWRN#82	"
136	RMH-11/98	"	"
137	RMH-12/98	"	"
138	RMH-13/98	"	"
139	RMH-14-98	MESA/IWWRN#271	"
140	RMH-16-98	TAM108/IWWRN#189	"
141	RMH-17/98	"	"
142	RMH-18/98	"	"
143	RMH-19/98	"	"
144	RMH-21/98	"	"
145	RMH-22/98	"	"
146	RMH-23/98	"	"
147	RMH-24/98	"	"
148	RMH-28/98	IWWRN#189/CSM	"
149	RMH-30/98	KS90WGRC10/KRL	"
150	RMH-31/98	KS90WGRC10/TNK	"

Entry	Sel. No.	Pedigree	Origin
151	RMH-32/98	KS90WGRC10/KRL	"
152	RMH-33/98	KS90WGRC10/ABLN	"
153	TAM-107	PI495594	Check
154	KARL 92	PI564245	Check
155	ARAPAHOE	PI518591	Check
156	LOCAL CHECK-1	See Intro.	Check
157	LOCAL CHECK-2	See Intro.	Check
158	LOCAL CHECK-3	See Intro.	Check
159	KS93U10	KARL*3//PI266844/PI355520	Brown-Guedira, ARS, KS
160	KS93U50	CENTURY*3/TA2450	"
161	KS93U76-3	TAM107*3/TA2460	"
162	KS93U104	TAM107*2//KS8010-1-4-1/TA359	"
163	KS93U109	TAM107*2//KS811163-4/TA2470	"
164	KS93U139	KARL*2//PI355520/PI265008/3/CENTURY*3/TA2460	"
165	KS93U141	TAM200*3/TA2460	"
166	KS94U275	KS93U69/KS92WGRC16	"
167	KS94U290	KARL*3/PI355520//KS90WGRC10 `S'	"
168	KS94U328	KS90WGRC10*2/TA2397	"
169	KS94U331-101	KS90WGRC10*2/TA2397	"
170	KS94U336	KS90WGRC10 SIB*2/TA2455	"
171	KS94U338-6	KS90WGRC10 SIB*2/TA2455	"
172	KS94U370	KS90WGRC10//KS93U69/TA2397	"
173	KS94U375	KS90WGRC10//KS93U69/TA2397	"
174	KS94U391-2-1	KS90WGRC10//KS93U69/TA2397	"
175	KS94U408	KS90WGRC10//U1275-1-11-8/TA2455/KS93U69	"
176	KS94U409	KS90WGRC10//U1275-1-11-8/TA2455/KS93U69	"
177	KS94U415	KS90WGRC10//U1275-1-11-8/TA2455/KS93U69	"
178	KS94U448-2	KS90WGRC10/KS92WGRC16	"
179	KS94U522	KS90WGRC10//KS93U69*2/TA2397	"
180	KS94U528	KS90WGRC10//KS93U69*2/TA2397	"
181	KS95U571-2	KS90WGRC10/3/U1275-1-11-1-8/TA2394//KS93U69	"
182	KS95U589-5	KS91WGRC12-1-9/VICTORY(1)	"
183	KS95U600-3	KS90WGRC10/3/KARL*3//PI266844/PI355520	"
184	N96L9932	Redland/GRS1201 (non-1RS)	Graybosch, ARS, NE
185	N96L9934	Redland/GRS1201 (non-1RS)	"
186	N96L9938	Redland/GRS1201 (1AL.1RS from GRS1201)	"
187	N96L9941	Redland/GRS1201 (hetero 1AL.1RS)	"
188	N96L9954	GRS1201/TAM202 (1AL.1RS from Amigo)	"
189	N96L9955	GRS1201/TAM202 (1AL.1RS from Amigo)	"
190	N96L9961	GRS1201/TAM202 (1AL.1RS from GRS1201)	"
191	N96L9965	GRS1201/TAM202 (1AL.1RS from GRS1201)	"
192	N96L9968	GRS1201/TAM202 (1AL.1RS from GRS1201)	"
193	N96L9970	GRS1201/TAM202 (1AL.1RS from GRS1201)	"
194	KS91W049-1-5-1	KSSB146/PVI66-86//Arlin/KS83328C-1	Sears, KSU, Manhattan
195	KS91048-L-2-1	KSSB124-11-2/KSSB124-7//Karl	"
196	KS89180B-2-1-2	KS8010-73/KS8010-1-4-2//107349/KS811252/Karl	"
197	KS89180B-2-2-1	KS8010-73/KS8010-1-4-2//107349/KS811252/Karl	"
198	KS89180B-2-1-1	KS8010-73/KS8010-1-4-2//107349/KS811252/Karl	"
199	KS97P1064-5-1-1	Karl/HBY385D/2163	"
200	KS91012-D-1-1	KS84170E-8/KS87809-14//Auburn/2157//2165	"

Entry	Sel. No.	Pedigree	Origin
201	KS91W052-1-2-1	KSSB146/PVI124-79//KSSB192-10/Karl	"
202	KS97P0771-9-3-1	HBK588B/Karl//2163	"
203	KS91077-A-2-1	THB/Karl//2163/W9532A	"
204	KS91022-A-7-1	KS84273BB-10/KSSB110-9//KS831374-141B/YE1110	"
205	KS91W009-6-1-2	KS82W428/Vee'S'//VIC/BOW/3/PVI124-79	"
206	KS97P0948-2-1-3	2172/HBZ356A/HBZ621A	"
207	KS91005-B-9-1	KS83364-D-6/Karl//KS82W418/Stephens	"
208	KS91112-A-2-3	NE87403/Karl//WX9280/Arkan//W8447	"
209	KS90175-1-2	KS8010-72/KS811252	"
210	KS90175-1-1	KS8010-72/KS811252	"
211	KS91112A-2-2	NE87403/Karl//WX9280/Arkan//W8447	"
212	KS90175-3-1	KS8010-72/KS811252	"
213	KS91005-B-4-1	KS83364-D-6/Karl//KS82W418/Stephens	"
214	KS91112-A-6-2	NE87403/Karl//WX9280/Arkan//W8447	"
215	KS91082-C-7-1	TX87V1316/ARP//NE86606/Karl	"
216	KS91082-C-7-2	TX87V1316/ARP//NE86606/Karl	"
217	KS91134-D-1-1	ABI86-55/Mesa//3/T200/Karl/Karl	"
218	KS91012-D-8-2	KS84170E-8/Karl//Auburn/2157//2165	"
219	KS91113-B-1-1	NE87403/Karl//W2413/SXL	"
220	TAM-107	PI495594	Check
221	KARL 92	PI564245	Check
222	ARAPAHOE	PI518591	Check
223	LOCAL CHECK-1	See Intro.	Check
224	LOCAL CHECK-2	See Intro.	Check
225	LOCAL CHECK-3	See Intro.	Check
226	KS95H179-4	87H63/3/PI220350/87H57//T200/87H66	Martin, KSU, Hays
227	KS96HW10-1	KS91HW29//RB/KS91H184	"
228	KS96HW10-3	KS91HW29//RB/KS91H184	"
229	KS96HW91	Arlin/KS89H20	"
230	KS96HW94	Arlin/KS89H20	"
231	KS96HW100-1	Arlin/KS89H19	"
232	KS96HW100-5	Arlin/KS89H19	"
233	KS96HW100-6	Arlin/KS89H19	"
234	KS96HW114	Arlin/KS89H130	"
235	KS96HW115	Arlin/KS89H130	"
236	KS96H216	PI220350/87H57//T200/87H66/3/87H325/4/T107	"
237	KS97HW3	Arlin/3/KS91HW29//RB/KS91H184	"
238	KS97HW4	Arlin/3/KS91HW29//RB/KS91H184	"
239	KS97HW7	85W663-11-6-1/3/KS91HW29//RB/KS91H174	"
240	KS97HW16	85W663-11-6-1/3/KS91HW29//RB/KS91H174	"
241	KS97HW19	85W663-11-6-1/3/KS91HW29//RB/KS91H174	"
242	KS97HW33	KS89H19/KS89H163-1P2	"
243	KS97H37	KS91HW29//RB/KS91H174	"
244	KS97H45	KS91H163 (T107//HF5761/T105)//BBRM/T107	"
245	KS97H51	KS91H163 (T107//HF5761/T105)//T107/WGRC10	"
246	KS97H63	BBRM/T107//Tomahawk	"
247	KS97H66	BBRM/T107//Tomahawk	"
248	KS97H79	KS87H6//TX81V6607-2/KS87H66-2	"
249	KS97H82	KS87H6//TX81V6607-2/KS87H66-2	"
250	KS97H97	T107/KS89H20//Mesa	"

Entry	Sel. No.	Pedigree	Origin
251	KS97H99	T107/KS89H20//Mesa	"
252	KS97H115	KS89H48/VBE133E	"
253	KS97H116	KS89H48/VBE133E	"
254	KS97H125	Vista/KS89H163-1 (P2)	"
255	KS97H127	Vista/KS89H163-1 (P2)	"
256	G96-044	B223W/83R2//TX81V6180	Goertzen Seeds, KS
257	G96-080	Haven/English Haven//G2500	"
258	G96-092	Sturdy/Plainsman 5//G2500	"
259	G96-047	B223W/Abilene	"
260	G96-081	Haven/English Haven//G2500	"
261	G96-134	Abilene/G1113/3/Karl92//Bezostaya/Plainsman V	"
262	G96-135	Abilene/G1113//2*Karl92	"
263	G96-142	PlainsmanV/3/Agrotriticum 7010//PlainsmanV/CIMMYT Dwarf	"
264	G96-146	Agrotriticum 7010//PlainsmanV/CIMMYT Dwarf/3/G2500	"
265	G96-154	G2500//Bezostaya/PlainsmanV	"
266	G96-155	G2500//Bezostaya/PlainsmanV	"
267	TAM-107	PI495594	Check
268	KARL 92	PI564245	Check
269	ARAPAHOE	PI518591	Check
270	LOCAL CHECK-1	See Intro.	Check
271	LOCAL CHECK-2	See Intro.	Check
272	LOCAL CHECK-3	See Intro.	Check
273	H3-1	Quantum hybrid wheat	HybriTech Seeds, CO
274	H3-2	"	"
275	H3-3	"	"
276	H3-4	"	"
277	H3-5	"	"
278	H3-6	"	"
279	H3-7	"	"
280	H3-8	"	"
281	H3-9	"	"
282	H3-10	"	"
283	H3-11	"	"
284	H3-12	"	"
285	H3-13	"	"
286	H3-14	"	"
287	H3-15	"	"
288	H3-16	"	"
289	H3-17	"	"
290	H3-18	"	"
291	H3-19	"	"
292	H3-20	"	"
293	H3-21	"	"
294	H3-22	"	"
295	H3-23	"	"
296	H3-24	"	"
297	H3-25	"	"
298	H3-26	"	"
299	H3-27	"	"
300	H3-28	"	"

Entry	Sel. No.	Pedigree	Origin
301	H3-29	"	"
302	H3-30	"	"
303	W95-301	KS85W663-2-4/W87-085	Agripro Seeds, CO
304	W95-221	WI89-282/Arlin	"
305	W95-385	WI90-425/WI89-483	"
306	W95-089	KS85W663-2-4/W87-085	"
307	W95-091	KS85W663-2-4/W87-085	"
308	W95-392	WI90-425/WI89-483	"
309	W95-222	WI89-282/Arlin	"
310	W94-232	W87-085/TAM-200	"
311	W96-016	Pecos/WI88-112	"
312	W96-037	WI90-288/W91-098	"
313	W96-075	WI90-162/2180	"
314	W96-218	W91-071/Pecos	"
315	W96-355	WI90-008/W91-040	"
316	W96-358	WI90-008/W91-040	"
317	W96-359	WI90-008/W91-040	"
318	W96-398	WI89-107/CORWA-1	"
319	W96-401	WI89-107/CORWA-1	"
320	W96-410	87PYI140-100/87F27515	"
321	W96-427	Arlin/WI90-431	"
322	W96-446	91x0826/Ogallala	"
323	W96-447	Robinof/Karl	"
324	W97-189	WI88-052-13/Ogallala	"
325	W97-234	Jagger/WI89-189-14	"
326	TAM-107	PI495594	Check
327	KARL 92	PI564245	Check
328	ARAPAHOE	PI518591	Check
329	LOCAL CHECK-1	See Intro.	Check
330	LOCAL CHECK-2	See Intro.	Check
331	LOCAL CHECK-3	See Intro.	Check
332	CO940024	XW161/TAM200	Quick, CSU, Ft. Collins
333	CO940128	Res F1/2*TAM-107	"
334	CO940287	TAM200/PI781243//TAM107	"
335	CO940595	KS196/RB//HBY762A	"
336	CO940607	PI220127/P5//TAM200/3/KS87H6	"
337	CO940610	KS87H22/MW 09	"
338	CO940611	KS87H325-2-1/RB	"
339	CO940615	KS87H325-2-1/MW 22	"
340	N97S139	KSSB-192-3/NE89529	Peterson, ARS, NE
341	N97S142	"	"
342	N97S144	"	"
343	N97S146	"	"
344	N97S151	"	"
345	N97S152	"	"
346	N97S154	"	"
347	N97S084	KM602-90/NE89657//Arlin	"
348	N97S311	"	"
349	N97S319	"	"
350	N97S320	"	"

Entry	Sel. No.	Pedigree	Origin
351	N97S322	"	"
352	N97S116	N91L122/Arlin	"
353	N97S117	"	"
354	N97S343	"	"
355	N97S347	"	"
356	N97S077	Arlin/NE88584	"
357	N97S078	"	"
358	N97S120	"	"
359	N97S277	NE88584/Arlin	"
360	N97S278	"	"
361	N97S156	KS87809-10/Arapahoe	"
362	N97S158	"	"
363	N97S159	"	"
364	N97S160	"	"
365	N97S186	"	"
366	N97S191	"	"
367	N97S192	"	"
368	N97S195	"	"
369	N97S196	"	"
370	TAM-107	PI495594	Check
371	KARL 92	PI564245	Check
372	ARAPAHOE	PI518591	Check
373	LOCAL CHECK-1	See Intro.	Check
374	LOCAL CHECK-2	See Intro.	Check
375	LOCAL CHECK-3	See Intro.	Check
376	NE96435	NE86501/Brigantina	Baenziger, UN-L, Lincoln
377	NE96461	Nekota selection	"
378	NE96515	Vista/KS87H6	"
379	NE96573	Arapahoe/Niobrara sib	"
380	NE96579	NE83404/SB-360-??	"
381	NE96580	NE83404/SB-360-??	"
382	NE96584	KS88H12/NE83407	"
383	NE96585	KS88H12/NE83407	"
384	NE96605	Arapahoe/Rawhide	"
385	NE96607	Nekota selection	"
386	NE96618	TX86V1405/TAM200//NE83404	"
387	NE96622	Victory//Colt/Cody/3/Arapahoe	"
388	NE96623	Victory//Colt/Cody/3/Arapahoe	"
389	NE96625	Victory//Colt/Cody/3/Arapahoe	"
390	NE96628	NE87613/SB-360-??	"
391	NE96630	NE83404/SB-360-??	"
392	NE96632	NE89584/NE88528	"
393	NE96638	TAM200/Pliska//NE86606	"
394	NE96641	Stozher/Centura//NE86606	"
395	NE96644	Odesskaya P./Cody	"
396	NE96649	Arapahoe/Niobrara sib	"
397	NE96652	NE83404/SB-360-??	"
398	NE96654	NE87408/NE86606	"
399	NE96676	NE88668/NE83404	"
400	NE96677	NE88668/NE83404	"

Entry	Sel. No.	Pedigree	Origin
401	NE96690	Arapahoe/Rawhide	"
402	NE96737	N95L421 (N87V106/NE88582)	"
403	NE96744	N95L516 (Brigantina/Arapahoe)	"
404	NE96747	N95L549 (Mironovskaya 40/Arapahoe)	"
405	NE91518	NE82702 purple/TAM-108	"
406	SD92107	Brule//Bennett/Chisholm/3/Arapahoe	Haley, SDSU, Brookings
407	SD93267	SD8026/Roughrider//SD76598-7/Agassiz	"
408	SD93380	TX80A-5901-1/NE78488	"
409	SD93195	Rose//Agassiz/Thunderbird	"
410	SD93338	MT8030/TX81V-6180	"
411	SD93528	Arapahoe/3/Brule//Hiplains/Newton	"
412	SD94149	Abilene/OK85347	"
413	SD94210	Rose/Abilene//Abilene/TAM 107	"
414	SD94227	ND8212/Abilene	"
415	SD94241	NE82562/Rose	"
416	SD94134W	ND8212/OK85310	"
417	SD94139W	ND8212/OK85310	"
418	SD94217W	ND8212/OK85310	"
419	SD95129	Rose//Arapahoe/Abilene	"
420	SD95139	NE86501/SD89119	"
421	SD95146	NE86503/SD88148	"
422	SD95174	SD88253/NE86503	"
423	SD95203	SD89119/NE86503	"
424	SD95210	SD89338/SD88191	"
425	SD95218	SD89245/ND8215	"
426	ND8955-A	Seward/SD76705	"
427	ND9421	ND8215/TXGH13622	"
428	ND9454	ND85105/KARL	"
429	ND9512	ND8530/SD82114	"
430	ND9515	ND85114/ND84581	"
431	ND9516	ND85137/SD82114	"
432	ND9535	ND8585/NE84557	"
433	ND9536	ND85137/NE83407	"
434	ND9537	ND85137/NE83407	"
435	ND9542	ND85137/OK86215	"
436	ND9560	ND8536/REDLAND	"
437	ND9579	ND8215//ND85105/ND640	"
438	ND9581	ND8407//ND8286/ND640	"
439	IDO477	Complex Pedigree	Souza, Univ. of Idaho
440	IDO498	Turcikum 57/3*Manning	"
441	IDO501	IDO390/TAM 200	"
442	IDO509	Turcikum 57/3*Manning	"
443	IDO514	Blizzard/TAM 200	"
444	IDO519	IDO390/Tam200	"
445	TAM-107	PI495594	Check
446	KARL 92	PI564245	Check
447	ARAPAHOE	PI518591	Check
448	LOCAL CHECK-1	See Intro.	Check
449	LOCAL CHECK-2	See Intro.	Check
450	LOCAL CHECK-3	See Intro.	Check

Reaction of the 1998 Regional Germplasm Observation Nursery to Leaf Rust (seedling) and Soilborne Wheat Mosaic Virus (SBWMV)

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Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
Nursery checks				
001	TAM-107	S	2	–
002	KARL 92	S	2	–
003	ARAPAHOE	MS	1	–
004	DANNE	S	---	--------
005	SIOUXLAND	MR	---	--------
006	THATCHER-*LR 19*	R	---	--------
004	VONA	------	1	–
005	HAWK	------	1	–
006	SIERRA	------	2	–
Marshall - Texas A&M				
007	TX95D8124	S	1	–
008	TX95D8553	R	3	+
009	TX95D8827	S	3	+
010	TX95D8902	MR	3	–
011	TX96D1072	MS	3	+
012	TX96D1246	R	3	+
013	TX96D1392	R	2	–
014	TX96D1624	R	3	+
015	TX96D1626	R	3	+
016	TX96D1735	R (1 seedling S)	3	±
017	TX96D2240	R	4	+
018	TX96D2281	MR	3	+
019	TX96D2370	R	3	±
020	TX96D2547	MR	3	+
021	TX96D2845	MS	3	–
Romig, Trigen Seeds				
022	M1107/94	MR	3	–
023	R824-23	MR	1	+
Lazar, TX A&M Bushland				
024	TX97A0022	S	2	–
025	TX97A0027	S	1	+
026	TX97A0070	S	1	–
027	TX97A0071	S	2	–

Entry/Seln. No.	Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA

028	TX97A0076	S	1	–
029	TX97A0077	S	1	–
030	TX97A0099	S	1	–
031	TX97A0120	S	1	+
032	TX97A0122	S	1	–
033	TX97A0130	S	2	–
034	TX97A0151	R (2 seedlings S)	2	+
035	TX97A0153	S	1	–
036	TX97A0165	S	2	–
037	TX97A0171	S	1	–
038	TX97A0180	S	1	–
039	TX97a0181	S	1	–
040	TX97A0217	S	1	±
041	TX97A0235	MS	2	–
042	TX97A0282	S	3	+
043	TX97A0286	MR	2	+
044	TX97A0320	S	1	–
045	TX97A0324	S	2	+
046	TX97A0339	S	2	–
047	TX97A0342	S	1	–
048	TX97A0345	S	1	–
049	TX97A0350	S	1	–
050	TX97A0377	R	2	–
051	TX97A0383	R (2 seedlings S)	2	+
052	TX97A0384	R	2	–

Nursery Checks

053	TAM-107	S	2	+
054	KARL 92	S	1	–
055	ARAPHOE	MS	2	+
056	DANNE	S	---	--------
057	SIOUXLAND	MR	---	--------
058	THATCHER-*LR 19*	R	---	--------
056	VONA	------	2	–
057	HAWK	------	1	–
058	SIERRA	------	2	–

Worrall, TX A&M, Vernon

059	HBG0358	S	2	–
060	TX93V4315	R	2	–
061	TX93V5717	R (1 seedling S)	2	+
062	TX94V2327	R (1 seedling S)	2	+

Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
063	TX94V2906	MR	2	–
064	TX94V3329	S	2	–
065	TX94V4524	R (1 seedling S)	1	–
066	TX94V4730	R	2	+
067	TX94V4930	MR	2	+
068	TX94V5922	Seg-R	1	+
069	TX95V2512	S	1	+
070	TX95V4336	R	1	+
071	TX95V4339	R	2	–
072	TX95V4538	S	1	–
073	TX95V4926	S	1	+
074	TX95V4933	S	1	±
075	TX95V5124	R	2	+
076	TX95V5125	R	2	–
077	TX95V5332	S	2	+
078	TX95V5539	S	2	–
079	TX95V6427	R (1 seedlin S)	3	+
080	TX95V6428	R	3	+
081	TX95V6509	MS	2	–
082	TX95V6608	MS	1	–
083	TX95V6620	MR	3	+
084	TX95V6627	MR	3	+
085	TX96V2317	R	3	+
086	TX96V2321	R	2	+
087	TX96V2324	R	2	±
088	TX96V2332	R	2	+
089	TX96V2406	R	2	–
090	TX96V2425	R	2	+
091	T-107	S	2	–
092	TX96V2845	MR	2	+
093	TX96V2857	R	2	+
094	TX96V2859	R	2	–
095	TX96V2865	R	2	–
096	TX96V2889	R	3	+
097	TX96V2893	R (2 seedlings S)	2	–
Smith, OSU, Stillwater				
098	OK97402	S	1	–
099	OK97411	MR	2	–
100	OK97432	MR	2	–
101	OK97434	MS	1	–
102	OK97467	S	1	–
103	OK97496	R	1	–
104	OK97499	R	1	–
105	OK97508	S	1	–

SBWMV[Y]

Entry/Seln. No.		Leaf rust[Z]	Visual 1-4	ELISA
106	OK97535	S	2	–
107	OK97538	MR	2	–
108	OK97561	MR	1	–
109	OK97585	R	2	–
110	OK97589	S	1	–
111	OK97591	S	1	–
Nursery Checks				
112	TAM-107	S	2	–
113	KARL 92	S	2	–
114	ARAPHOE	MS	2	+
115	DANNE	S	---	--------
116	SIOUXLAND	MR	---	--------
117	THATCHER-*LR 19*	R	---	--------
115	VONA	------	2	–
116	HAWK	------	2	–
117	SIERRA	------	3	–
Carver, OSU, Stillwater				
118	OK98G501	S	2	–
119	OK98G502W	Seg-S	2	–
120	OK98G503	MS	2	–
121	OK98G504W	------	3	+
122	OK98G505W	S	2	+
123	OK98G506W	MR	2	–
124	OK98G507W	S	2	–
125	OK98G508W	R	2	–
126	OK98G509W	R	2	–
127	OK98G510W	S	2	–
Hunger, OSU, Stillwater				
128	RMH-01/98	MR	2	–
129	RMH-02/98	S	1	–
130	RMH-03/98	MR	1	–
131	RMH-04/98	MR	1	–
132	RMH-05/98	MR	2	–
133	RMH-07/98	MR	2	–
134	RMH-08/98	MR	2	–
135	RMH-10-98	S	2	–
136	RMH-11/98	S	2	–
137	RMH-12/98	S	2	–
138	RMH-13/98	S	2	–
139	RMH-14/98	S	2	–

Entry/Seln. No.		Leaf rust[Z]	Visual 1-4	SBWMV[Y] ELISA

140	RMH-16/98	MR	2	–
141	RMH-17/98	S	2	–
142	RMH-18/98	MR	1	–
143	RMH-19/98	S	1	+
144	RMH-21/98	S	1	–
145	RMH-22/98	MR	1	–
146	RMH-23/98	S	2	–
147	RMH-24/98	MR	1	–
148	RMH-28/98	MR	1	+
149	RMH-30/98	R	2	–
150	RMH-31/98	R (3 seedlings S)	2	+
151	RMH-32/98	R (2 seedlings S)	2	–
152	RMH-33/98	R	2	–
Nursery Checks				
153	TAM-107	S	2	–
154	Karl 92	MS	2	+
155	ARAPHOE	MS	1	–
156	DANNE	S	---	--------
157	SIOUXLAND	MR	---	--------
158	THATCHER-*LR 19*	R	---	--------
156	VONA	------	2	–
157	HAWK	------	1	–
158	SIERRA	------	---	--------
Brown-Guedira, ARS, KS				
159	KS93U10	R	2	–
160	KS93U50	MS	1	+
161	KS93U76-3	R	1	–
162	KS93U104	MS	1	–
163	KS93U109	R	1	–
164	KS93U139	R	2	–
165	KS93U141	S	1	–
166	KS94U275	R	1	–
167	KS94U290	Seg-R	1	–
168	KS94U328	Seg-R	1	–
169	KS94U331-101	R	2	–
170	KS94U336	R	2	–
171	KS94U338-6	R	2	–
172	KS94U370	R	2	+
173	KS94U375	Seg-R	2	–
174	KS94U391-2-1	R	2	+
175	KS94U408	R	2	–
176	KS94U409	R	2	+

			SBWMV[Y]	
Entry/seln. no.		Leaf rust[Z]	Visual 1-4	ELISA
177	KS94U415	R	2	+
178	KS94U448-2	R	1	–

179	KS94U522	R (2 seedlings S)	1	–
180	KS94U528	Seg-R	2	–
181	KS95U571-2	R	2	+
182	KS95U589-5	S	2	–
183	KS95U600-3	S	2	–

Graybosch, ARS, NE

184	N96J9932	S	1	+
185	N96L9934	S	2	–
186	N96L9938	S	2	+
187	N96L9941	S	2	+
188	N96L9954	S	2	–
189	N96L9955	S	2	+
190	N96L9961	S	2	+
191	N96L9965	S	2	+
192	N96L9968	S	1	+
193	N96L9970	S	1	–

Sears, KSU, Manhattan

194	KS91W049-1-5-1	S	1	–
195	KS91048-L-2-1	MR	2	–
196	KS89180B-2-1-2	MR	1	–
197	KS89180B	MR	1	–
198	KS898180B-2-1-1	MR (1 sedling S)	1	–
199	KS97P1064-5-1-1	S	2	–
200	KS91012-D-1-1	S	1	–
201	KS91W052	S	1	–
202	KS97P0771-9-3-1	S	1	–
203	KS91077-A-2-1	MS	1	–
204	KS91022-A-7-1	MR	1	–
205	KS91W009-6-1-2	MR	1	–
206	KS97P0948-2-1-3	S	1	–
207	KS91005-B-9-1	S	1	–
208	KS91112-A-2-3	S	1	–
209	KS90175-1-2	MR	2	–
210	KS90175-1-1	MR	2	–
211	KS90175-1-1	S	1	–
212	KS90175-3-1	MR	1	–
213	KS91005-B-4-1	S	1	–
214	KS91112-A-6-2	S	1	–
215	KS91082-C-7-1	S	1	–

Entry/Seln. No.		Leaf rust[Z]	Visual 1-4	SBWMV[Y] ELISA
216	KS91082-C-7-2	S	1	–
217	KS91134-D-1-1	S	1	–
218	KS91012-D-8-2	S	1	–
219	KS91113-B-1-1	S	1	–
Nursery Checks				
220	TAM-107	S	1	±
221	Karl 92	S	2	–
222	ARAPHOE	MS	2	–
223	DANNE	S	---	--------
224	SIOUXLAND	MR	---	--------
225	THATCHER-*LR 19*	R	---	--------
223	VONA	------	2	–
224	HAWK	------	1	–
225	SIERRA	------	1	–
Martin, KSU, Hays				
226	KS95H179-4	MR	1	+
227	KS96HW10-1	S	1	–
228	KS96HW10-3	S	1	–
229	KS96HW91	S	1	–
230	KS96HW94	S	1	–
231	KS96HW100-1	MS (1 seedling S)	1	–
232	KS96HW100-5	MS	1	–
233	KS96HW100-6	MS	2	–
234	KS96HW114	S	2	–
235	KS96HW115	S	1	–
236	KS96H216	MR	2	–
237	KS97HW3	S	1	+
238	KS97HW4	S	1	–
239	KS97HW7	Seg-S	1	–
240	KS97HW16	S	1	–
241	KS97HW19	S	1	–
242	KS97HW33	S	1	–
243	KS97H37	MR	2	–
244	KS97H45	R	1	+
245	KS97H51	S	1	–
246	KS97H63	MR	1	+
247	KS97H66	S	1	–
248	KS97H79	MS	2	–
249	KS97H82	MS	1	–
250	KS97H97	S	1	+
251	KS97H99	S	1	–
252	KS97H115	S	1	–

SBWMV[Y]

Entry/Seln. No.		Leaf rust[Z]	Visual 1-4	ELISA
253	KS97H116	S	2	+
254	KS97H125	MS	2	–
255	KS97H127	MS	2	–
256	G96-044	S	2	–
257	G96-080	MS	2	–
258	G96-092	MR	1	–
259	G96-047	S	1	–
260	G96-081	MS	1	–
261	G96-134	S	1	–
262	G96-135	S	1	–
263	G96-142	S	1	+
264	G96-146	S	2	–
265	G96-154	MS	2	–
266	G96-155	S	2	–
Nursery Checks				
267	TAM-107	S	2	–
268	Karl 92	S	1	–
269	ARAPHOE	MS	1	–
270	DANNE	S	---	--------
271	SIOUXLAND	MR	---	--------
272	THATCHER-*LR 19*	R	---	--------
270	VONA	------	2	–
271	HAWK	------	1	–
272	SIERRA	------	2	+
HybriTech Seeds, CO				
273	H3-1	MR (2 seedlings S)	2	–
274	H3-2	S	2	–
275	H3-3	S	2	–
276	H3-4	S	2	–
277	H3-5	S	1	–
278	H3-6	MS	1	–
279	H3-7	R	1	–
280	H3-8	R (1 seedling S)	1	±
281	H3-9	Seg-R	1	–
282	H3-10	R (3 seedlings S)	1	–
283	H3-11	MR	1	–
284	H3-12	MR	1	–
285	H3-13	R	1	–
286	H3-14	R	1	–
287	H3-15	R	1	–
288	H3-16	R	1	–
289	H3-17	R	1	–
			Visual	SBWMV[Y]

Entry/Seln. No.		Leaf rust[z]	1-4	ELISA
290	H3-18	S	1	–
291	H3-19	MR	2	–
292	H3-20	MR	2	–
293	H3-21	R	1	+
294	H3-22	S	1	+
295	H3-23	MR	1	+
296	H3-24	MR	2	–
297	H3-25	MS	2	–
298	H3-26	S	1	–
299	H3-27	MS	1	–
300	H3-28	MR	2	–
301	H3-29	R	2	–
302	H3-30	MR	2	–
Agripro Seeds, CO				
303	W95-301	S	2	–
304	W95-221	S	2	–
305	W95-385	MS	2	–
306	W95-089	S	2	+
307	W95-091	MS	2	–
308	W95-392	MS	2	–
309	W95-222	S	2	–
310	W95-232	S	2	–
311	W96-016	MR	2	–
312	W96-037	MS	1	±
313	W96-075	MR	2	±
314	W96-218	MS	2	±
315	W96-355	S	2	–
316	W96-358	S	2	–
317	W96-359	MS	1	–
318	W96-398	S	1	+
319	W96-401	S	2	+
320	W96-410	S	2	–
321	W96-427	S	1	+
322	W96-446	S	1	–
323	W96-447	R	2	–
324	W97-189	S	2	+
325	W97-234	S	2	–
326	TAM-107	S	2	–
327	Karl 92	S	2	–
328	ARAPHOE	MS	2	+
329	DANNE	S	---	--------
330	SIOUXLAND	MR	---	--------
331	THATCHER-*LR 19*	R	---	--------

Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
Nursery Checks				
329	VONA	------	2	–
330	HAWK	------	1	–
331	SIERRA	------	3	–
Quick, CSU, Ft. Collins				
332	CO940024	S	1	–
333	CO940128	S	1	–
334	CO940287	S	1	–
335	CO940595	S	1	+
336	CO940607	MR	2	–
337	CO940610	MR	2	–
338	CO940611	MR	2	–
339	CO940615	MS	2	+
Peterson, ARS, NE				
340	N97S139	MR	1	–
341	N97S142	MR (1 seedling S)	1	–
342	N97S144	R	1	–
343	N97S146	MR	1	–
344	N97S151	MR (1 seedling S)	1	–
345	N97S152	R	1	–
346	N97S154	MR	2	–
347	N97S084	S	1	+
348	N97S311	S	2	–
349	N97S319	S	1	+
350	N97S320	MR	1	+
351	N97S322	MR	1	+
352	N97S116	MS	1	–
353	N97S117	S	2	+
354	N97S343	S	2	–
355	N97S347	MS	2	–
356	N97S077	MS	2	–
357	N97S078	S	1	–
358	N97S120	MR	1	–
359	N97S277	S	1	+
360	N97S278	S	2	+
361	N97S156	MS	1	–
362	N97S158	MS	1	+
363	N97S159	MS	1	+
364	N97S160	MS	2	–
365	N97S186	MS	2	–
366	N97S191	MS	2	–
367	N97S192	MS	1	–
368	N97S195	MS	1	–

Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
369	N97S196	S	1	–
Nursery Checks				
370	TAM-107	S	1	+
371	Karl 92	S	1	–
372	ARAPHOE	MS	1	–
373	DANNE	S	---	--------
374	SIOUXLAND	MR	---	--------
375	THATCHER-*LR 19*	R	---	--------
373	VONA	------	2	–
374	HAWK	------	1	–
375	SIERRA	------	2	–
Baenziger, UN-L, Lincoln				
376	NE96435	MS	1	–
377	NE96461	R (1 seedling S)	1	+
378	NE96515	MR	1	±
379	NE96573	MS	1	±
380	NE96579	MR	1	–
381	NE96580	S	1	–
382	NE96584	S	1	+
383	NE96585	S	1	–
384	NE96605	MS	2	–
385	NE96607	S	1	–
386	NE96618	MR	1	–
387	NE96622	MR	1	–
388	NE96623	MR (2 seedlings S)	2	+
389	NE96625	MR	1	–
390	NE96628	MR	1	–
391	NE96630	S	2	–
392	NE96632	S	1	+
393	NE96638	S	2	+
394	NE96641	S	1	+
395	NE96644	MS	1	–
396	NE96649	MS	1	+
397	NE96652	S	1	–
398	NE96654	S	2	+
399	NE96676	MS	1	–
400	NE96677	Seg-S	2	+
401	NE96690	R	2	+
402	NE96737	S	2	+
403	NE96744	S	2	–
404	NE96747	S	1	–
405	NE91518	S	2	–

Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
Haley, SDSU, Brookings				
406	SD92107	MS	1	–
407	SD92167	S	1	+
408	SD93380	S	1	+
409	SD93195	S	1	–
410	SD93338	S	1	+
411	SD93528	MS	2	–
412	SD94149	S	1	+
413	SD94210	S	1	+
414	SD94227	S	1	+
415	SD94241	MS	1	–
416	SD94134W	S	1	+
417	SD94139W	S	1	+
418	SD94217W	S	1	+
419	SD95129	MS	1	–
420	SD95139	S	2	–
421	SD95146	S	1	–
422	SD95174	S	1	+
423	SD95203	S	1	–
424	SD95210	S	1	+
425	SD95218	S	1	+
426	ND8955-A	R	1	–
427	ND9421	S	2	+
428	ND9454	S	1	+
429	ND9512	S	2	+
430	ND9515	S	2	–
431	ND9516	S	1	+
432	ND9535	S (3 seedlings MR)	1	–
433	ND9536	S	1	+
434	ND9537	S	1	+
435	ND9542	MR	1	+
436	ND9560	S	1	–
437	ND9579	MS	1	+
438	ND9581	MS	1	–
439	IDO477	S	1	–
440	IDO498	R (1 seedling S)	1	–
441	IDO501	S	2	+
442	IDO509	S	1	+
443	IDO514	S	1	–
444	IDO519	S	2	+
Nursery Checks				
445	TAM-107	S	2	–
446	Karl 92	S	1	–
447	ARAPHOE	S	1	–

Entry/Seln. No.		Leaf rust[Z]	SBWMV[Y] Visual 1-4	SBWMV[Y] ELISA
448	DANNE	MS	---	--------
449	SIOUXLAND	MR	---	--------
450	THATCHER-*LR 19*	R	---	--------
448	VONA	------	2	–
449	HAWK	------	2	–
450	SIERRA	------	4	–

[Y]One, 1-ft row of each entry was rated for SBWMV symptoms on 23 March 98, where:
1=no mosaic, no stunting; 3=moderate mosaic and/or moderate stunting;
2=slight mosaic and/or slight stunting; 4=severe mosaic and/or severe stunting.
ELISA=enzyme linked immunosorbent assay. Values from ELISA are indicative of the presence or absence of virus in tissue, but should not be used exclusively to determine reaction (i.e., resistance or susceptibility) to SBWMV. For additional explanation regarding the use of ELISA in evaluating reaction to SBWMV, see Hunger et al. 1991. Crop Science 31:900-905. For SBWMV, values from ELISA are the average of three wells per entry, whereere – = no virus detected, ± = little virus detected, and + = virus detected.

[Z]Reaction to leaf rust was determined on seedlings inoculated with a mixture of *Puccinia recondita* f. sp. *tritici* races collected in Oklahoma during spring, 1996. The avirulence/virulence formula of this mixture of races on a set of single-gene differentials plus selected cultivars was: 9 17 19 26 SXL / 1 2a 2c 3 3ka 11 16 24 30 DNE CTY. Reactions were obtained using Stakeman's rating system (USDA Bull. #E617, 1962, 53 pp) and translated for reporting to the following scale:
S=susceptible (Stakeman's 3 3- 3+ 4 3+c)
MS=moderately susceptible (Stakeman's X3; 3= 3=c 3-c 3-n 3c 3n)
MR=moderately resistant (Stakeman's X;3= X;3- X;3=c X;3-n X;3-c 3=n)
R=resistant (Stakeman's 0 ; 1 X;3=n X;1).

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
		OSU, OK	OSU, OK	Williston, ND	Bushland, TX			
		12/16/97	3/31/98	%	Hdt	dt[b]	dt[b]	dt[b]
		1 to 9	1 to 9	4/23/98		4/24	5/7	5/18
1	TAM-107	8	8	80	122	1.0	1.5	2.0
2	KARL 92	7	7	60	123	1.0	1.5	2.0
3	ARAPAHOE	6	6	100	127	0.5	1.5	2.0
4	LOCAL CHECK-1	1	1	100	125	1.0	1.0	2.0
5	LOCAL CHECK-2	5	5	75	124	0.5	1.5	2.0
6	LOCAL CHECK-3	2	2	80	122	1.0	1.5	2.0
7	TX95D8124	7	6	60	125	0.0	0.5	1.5
8	TX95D8553	6	5	50	121	1.0	1.5	2.0
9	TX95D8827	4	5	90	120	1.0	1.5	2.5
10	TX95D8902	7	7	95	125	1.0	1.5	3.0
11	TX96D1072	5	5	100	126	0.5	1.0	2.0
12	TX96D1246	4	4	100	127	0.5	2.0	3.0
13	TX96D1392	8	8	100	127	0.5	0.5	2.0
14	TX96D1624	5	4	90	125	0.0	0.5	1.5
15	TX96D1626	6	6	100	124	0.5	0.5	1.5
16	TX96D1735	7	8	100	121	1.0	1.0	1.5
17	TX96D2240	7	7	100	125	1.0	1.0	2.0
18	TX96D2281	6	7	100	125	0.5	0.5	2.0
19	TX96D2370	2	1	100	128	0.5	0.5	1.5
20	TX96D2547	2	2	100	121	0.0	0.0	2.5
21	TX96D2845	8	8	100	122	1.0	1.5	1.5
22	M1107/94	7	8	60	121	0.5	1.5	2.0
23	R824-23	8	9	100	127	1.0	1.5	1.5
24	TX97A0022	9	9	100	125	1.0	1.0	1.5
25	TX97A0027	8	8	100	125	0.5	1.0	1.5
26	TX97A0070	8	8	100	124	0.5	1.0	2.5
27	TX97A0071	8	7	100	125	1.0	1.0	1.5
28	TX97A0076	7	8	100	125	0.5	1.0	2.0
29	TX97A0077	9	9	100	124	1.0	1.0	1.0
30	TX97A0099	8	7	100	127	0.0	1.0	1.5
31	TX97A0120	9	9	100	126	1.0	1.0	1.5
32	TX97A0122	9	9	100	127	0.0	0.5	2.0
33	TX97A0130	2	2	100	124	1.0	1.0	2.0
34	TX97A0151	2	2	100	125	0.5	1.5	2.5
35	TX97A0153	8	8	100	127	0.0	1.0	2.5
36	TX97A0165	8	8	100	127	0.5	1.0	1.5
37	TX97A0171	9	9	100	126	0.0	0.5	1.5
38	TX97A0180	9	9	100	127	0.5	0.5	1.5
39	TX97A0181	6	6	100	128	0.5	1.0	2.0
40	TX97A0217	6	4	100	126	0.5	1.5	2.0
41	TX97A0235	5	5	100	126	0.0	0.0	2.0
42	TX97A0282	3	3	100	126	0.5	1.0	2.5
43	TX97A0286	7	7	100	125	1.0	1.0	3.0
44	TX97A0320	7	6	100	124	1.0	1.0	3.0
45	TX97A0324	3	4	100	125	0.5	1.5	3.0
46	TX97A0339	9	9	100	121	0.5	1.5	2.5
47	TX97A0342	9	9	100	122	1.0	1.5	2.5
48	TX97A0345	9	9	100	128	0.0	1.0	3.0
49	TX97A0350	8	9	100	127	0.0	0.5	2.0
50	TX97A0377	9	9	100	125	1.0	1.0	2.0
51	TX97A0383	8	9	100	124	1.0	1.5	2.5
52	TX97A0384	9	9	100	124	1.0	1.0	2.0
53	TAM-107	9	9	100	121	1.0	1.5	2.0
54	KARL 92	8	8	100	125	1.0	1.5	2.5
55	ARAPAHOE	7	7	100	128	0.5	1.5	2.0
56	LOCAL CHECK-1	2	2	100	126	1.0	1.5	2.0
57	LOCAL CHECK-2	5	4	100	124	0.0	0.5	2.0
58	LOCAL CHECK-3	1	2	100	121	1.0	1.5	2.0

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
59	HBG0358	1	1	100	124	0.0	0.5	3.0
60	TX93V4315	3	3	100	125	0.5	1.0	2.0
61	TX93V5717	3	3	100	127	0.5	2.0	3.0
62	TX94V2327	7	7	100	127	0.5	1.5	3.5
63	TX94V2906	2	3	100	130	1.0	1.5	3.0
64	TX94V3329	3	2	100	125	1.0	1.0	2.0
65	TX94V4524	3	3	90	126	0.0	1.5	2.0
66	TX94V4730	4	4	60	126	1.0	1.5	2.5
67	TX94V4930	5	4	70	127	0.5	1.0	2.5
68	TX94V5922	2	1	80	124	0.0	1.0	2.0
69	TX95V2512	7	8	100	128	0.0	1.5	3.0
70	TX95V4336	8	7	90	124	1.0	2.0	3.0
71	TX95V4339	7	7	95	128	0.0	1.5	2.5
72	TX95V4538	6	5	100	125	0.5	1.0	2.5
73	TX95V4926	8	8	100	127	0.5	1.5	2.0
74	TX95V4933	8	8	100	127	0.5	1.5	2.0
75	TX95V5124	7	7	90	128	0.5	2.0	3.5
76	TX95V5125	4	3	100	127	1.0	1.5	3.0
77	TX95V5332	8	8	100	131	0.5	1.5	3.0
78	TX95V5539	3	3	100	123	1.0	1.5	2.0
79	TX95V6427	6	5	100	121	0.5	1.0	2.5
80	TX95V6428	5	4	100	125	0.0	2.0	3.0
81	TX95V6509	7	7	100	124	1.0	1.5	1.5
82	TX95V6608	1	1	100	125	0.5	1.5	3.0
83	TX95V6620	5	5	100	127	0.0	1.5	3.0
84	TX95V6627	4	3	100	133	0.0	0.5	3.0
85	TX96V2317	6	5	100	130	0.5	1.5	3.0
86	TX96V2321	7	7	100	126	0.5	1.0	3.0
87	TX96V2324	6	7	100	128	1.0	1.5	2.5
88	TX96V2332	3	3	100	128	1.0	1.5	1.5
89	TX96V2406	3	3	100	125	1.0	1.5	2.5
90	TX96V2425	6	6	100	128	0.5	1.5	2.0
91	TAM-107	9	8	100				
92	TX96V2845	8	7	100	127	0.0	1.5	3.0
93	TX96V2857	6	6	100	128	0.5	1.5	2.0
94	TX96V2859	3	3	100	129	1.5	2.0	2.0
95	TX96V2865	7	7	100	130	0.5	1.5	2.0
96	TX96V2889	5	4	100	127	1.0	1.5	3.0
97	TX96V2893	6	5	100	126	1.0	1.5	3.0
98	OK97402	5	5	100	125	0.5	1.5	2.0
99	OK97411	2	1	100	124	0.5	0.5	2.5
100	OK97432	6	7	100	126	0.5	1.0	2.5
101	OK97434	2	3	100	127	1.0	1.0	2.5
102	OK97467	6	6	100	126	0.5	1.5	2.0
103	OK97496	5	5	100	128	1.0	1.5	3.0
104	OK97499	7	6	100	126	1.0	1.0	2.0
105	OK97508	5	6	100	127	0.5	1.0	1.5
106	OK97535	1	1	100	127	0.5	1.5	2.5
107	OK97538	8	8	100	127	0.0	0.5	2.0
108	OK97561	7	6	100	125	0.5	1.0	1.5
109	OK97585	5	5	100	128	1.0	1.5	2.0
110	OK97589	2	4	100	128	0.5	1.0	2.5
111	OK97591	3	3	100	128	0.5	1.5	3.0
112	TAM-107	8	8	100	121	1.0	1.5	2.0
113	KARL 92	6	7	100	123	1.0	1.0	2.5
114	ARAPAHOE	7	6	100	127	0.5	1.5	2.5
115	LOCAL CHECK-1	1	1	100	126	1.0	1.5	2.0
116	LOCAL CHECK-2	4	5	100	125	0.0	0.5	2.5
117	LOCAL CHECK-3	2	2	100	122	1.0	1.5	2.0
118	OK98G501	6	7	100	125	1.0	1.0	2.5
119	OK98G502W	4	5	95	125	0.5	0.5	2.5
120	OK98G503	6	6	60	122	0.5	0.5	2.0

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
121	OK98G504W	6	6	30	121	0.5	0.5	3.0
122	OK98G505W	2	3	100	128	0.5	1.0	2.5
123	OK98G506W	5	4	90	126	1.0	1.5	3.0
124	OK98G507W	3	3	90	127	1.0	1.5	2.5
125	OK98G508W	6	6	100	123	0.0	1.5	2.0
126	OK98G509W	6	6	100	124	0.5	1.5	3.0
127	OK98G510W	5	3	100	127	0.5	1.5	2.0
128	RMH-01/98	6	7	100	124	0.5	0.5	2.0
129	RMH-02/98	6	7	100	126	0.5	1.5	2.5
130	RMH-03/98	5	7	70	126	1.0	1.0	2.5
131	RMH-04/98	7	7	100	125	1.0	1.5	2.0
132	RMH-05/98	6	7	100	124	0.5	1.5	2.5
133	RMH-07/98	7	7	100	124	0.5	0.5	2.0
134	RMH-08/98	7	7	100	125	1.0	1.5	2.5
135	RMH-10-98	7	7	100	128	1.0	1.5	1.5
136	RMH-11/98	6	7	100	127	0.5	1.5	2.0
137	RMH-12/98	7	7	100	128	1.0	1.5	1.0
138	RMH-13/98	6	7	100	126	1.0	1.5	1.0
139	RMH-14-98	6	6	85	124	1.0	1.5	3.0
140	RMH-16-98	6	6	100	128	0.5	1.5	2.0
141	RMH-17/98	6	6	90	126	1.0	1.5	2.0
142	RMH-18/98	7	6	90	128	0.5	1.0	2.0
143	RMH-19/98	8	8	100	131	0.0	1.0	1.5
144	RMH-21/98	7	7	100	128	0.0	1.5	2.5
145	RMH-22/98	7	7	100	128	0.5	1.0	2.0
146	RMH-23/98	8	8	100	133	0.0	2.0	1.5
147	RMH-24/98	7	7	100	128	0.5	1.0	2.0
148	RMH-28/98	8	8	100	126	0.5	1.0	2.0
149	RMH-30/98	8	8	100	122	1.0	1.0	2.5
150	RMH-31/98	7	8	100	123	1.0	1.0	2.0
151	RMH-32/98	8	8	100	123	1.0	1.0	2.0
152	RMH-33/98	8	7	100	125	1.0	1.0	1.5
153	TAM-107	9	9	85	122	1.0	1.5	2.0
154	KARL 92	8	7	100	128	0.5	1.0	2.0
155	ARAPAHOE	8	8	100	128	0.5	1.5	2.0
156	LOCAL CHECK-1	2	2	100	125	1.0	1.5	2.0
157	LOCAL CHECK-2	6	5	100	125	0.5	0.5	2.0
158	LOCAL CHECK-3	2	2	100	122	1.0	1.0	2.0
159	KS93U10	8	8	100	125	0.5	1.0	2.5
160	KS93U50	7	5	100	127	1.0	1.0	1.5
161	KS93U76-3	9	9	100	122	1.0	1.0	2.0
162	KS93U104	3	3	100	126	0.0	1.5	2.0
163	KS93U109	9	9	100	122	1.0	1.5	1.5
164	KS93U139	8	6	100	124	1.0	1.5	2.0
165	KS93U141	5	4	100	125	1.0	1.0	2.5
166	KS94U275	8	8	100	125	0.5	1.0	2.0
167	KS94U290	8	7	100	124	1.0	1.5	3.0
168	KS94U328	7	6	100	121	0.5	1.5	2.5
169	KS94U331-101	9	9	100	123	1.0	1.5	2.0
170	KS94U336	9	9	100	123	1.0	1.0	1.0
171	KS94U338-6	8	8	100	123	0.5	1.5	2.0
172	KS94U370	9	8	100	124	1.0	1.0	2.0
173	KS94U375	7	6	100	124	1.0	1.5	1.5
174	KS94U391-2-1	7	7	100	123	1.0	1.0	2.0
175	KS94U408	8	8	100	123	1.0	1.5	2.0
176	KS94U409	9	8	100	124	1.0	1.5	2.0
177	KS94U415	6	7	100	125	0.5	1.5	2.0
178	KS94U448-2	8	8	100	125	0.5	1.0	1.5
179	KS94U522	8	7	100	123	0.0	1.5	2.0
180	KS94U528	8	6	100	122	0.5	1.0	2.0
181	KS95U571-2	8	8	100	124	0.5	1.5	2.5
182	KS95U589-5	7	7	100	124	1.0	1.5	3.0

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
183	KS95U600-3	7	8	100	125	1.0	1.5	2.0
184	N96L9932	6	5	100	126	0.5	1.5	2.0
185	N96L9934	5	5	100	129	0.5	2.0	2.5
186	N96L9938	6	6	100	131	1.0	1.5	2.5
187	N96L9941	6	5	100	129	1.5	1.5	2.0
188	N96L9954	3	2	100	127	1.0	1.5	3.0
189	N96L9955	3	2	100	123	1.0	1.5	3.0
190	N96L9961	3	2	100	124	1.0	2.0	2.5
191	N96L9965	3	2	100	124	0.5	1.5	3.0
192	N96L9968	3	2	100	126	1.0	1.5	2.5
193	N96L9970	4	3	85	126	1.0	1.5	2.0
194	KS91W049-1-5-1	7	7	75	125	0.5	1.0	1.5
195	KS91048-L-2-1	6	6	100	127	0.0	1.0	3.0
196	KS89180B-2-1-2	3	2	100	127	0.5	1.0	2.0
197	KS89180B-2-2-1	5	3	100	128	0.5	0.5	2.0
198	KS89180B-2-1-1	6	4	100	128	0.5	1.0	1.0
199	KS97P1064-5-1-1	2	2	100	126	1.0	1.0	2.0
200	KS91012-D-1-1	8	7	100	127	1.0	1.0	2.0
201	KS91W052-1-2-1	7	7	85	125	0.5	1.0	2.5
202	KS97P0771-9-3-1	7	6	100	123	0.5	1.0	1.5
203	KS91077-A-2-1	3	3	100	127	1.0	1.0	2.0
204	KS91022-A-7-1	8	8	100	127	1.0	1.5	2.5
205	KS91W009-6-1-2	2	2	100	127	0.5	1.0	2.0
206	KS97P0948-2-1-3	6	6	100	125	0.5	1.5	2.0
207	KS91005-B-9-1	1	2	100	124	1.0	1.0	1.5
208	KS91112-A-2-3	7	6	100	127	0.5	1.5	2.5
209	KS90175-1-2	6	4	100	128	0.5	1.0	3.0
210	KS90175-1-1	6	5	100	128	0.5	1.0	2.0
211	KS91112A-2-2	7	7	100	125	0.5	1.0	2.5
212	KS90175-3-1	8	8	100	127	1.0	1.0	2.0
213	KS91005-B-4-1	2	1	100	122	1.0	1.0	2.0
214	KS91112-A-6-2	7	8	100	126	1.5	1.5	2.0
215	KS91082-C-7-1	7	5	100	126	1.5	1.5	3.0
216	KS91082-C-7-2	6	4	100	126	1.0	1.5	3.0
217	KS91134-D-1-1	4	5	100	127	0.5	1.5	2.5
218	KS91012-D-8-2	8	9	100	128	0.5	1.0	2.0
219	KS91113-B-1-1	7	5	100	127	1.0	1.5	3.0
220	TAM-107	9	9	90	121	1.0	1.5	1.5
221	KARL 92	8	8	100	123	1.0	1.5	2.0
222	ARAPAHOE	7	7	100	128	0.5	1.5	2.0
223	LOCAL CHECK-1	2	1	100	125	1.0	1.5	1.5
224	LOCAL CHECK-2	5	4	100	124	0.0	0.5	2.0
225	LOCAL CHECK-3	2	2	100	122	1.0	1.5	2.0
226	KS95H179-4	4	4	100	127	1.0	1.0	2.0
227	KS96HW10-1	7	6	100	127	0.5	0.5	2.0
228	KS96HW10-3	6	6	100	127	0.5	1.0	2.0
229	KS96HW91	7	7	100	128	0.5	1.5	3.0
230	KS96HW94	6	5	100	128	0.5	1.5	2.0
231	KS96HW100-1	3	2	100	127	0.5	1.0	2.0
232	KS96HW100-5	3	2	100	127	0.5	1.0	2.5
233	KS96HW100-6	3	2	100	127	0.5	1.0	2.0
234	KS96HW114	5	4	100	124	1.0	1.0	3.0
235	KS96HW115	4	3	100	126	1.0	1.0	2.0
236	KS96H216	8	8	100	124	1.0	1.5	2.0
237	KS97HW3	4	3	100	125	0.5	1.0	2.5
238	KS97HW4	6	4	100	125	0.5	0.5	2.0
239	KS97HW7	8	8	100	126	1.0	1.0	1.5
240	KS97HW16	8	8	100	126	1.0	1.0	1.5
241	KS97HW19	2	4	100	125	1.0	1.5	2.0
242	KS97HW33	9	9	100	127	0.5	0.5	2.0
243	KS97H37	7	6	100	124	0.5	1.0	2.0
244	KS97H45	9	9	100	126	1.0	1.5	1.5

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
245	KS97H51	9	9	100	125	1.0	1.5	1.5
246	KS97H63	8	9	100	127	1.5	1.5	2.0
247	KS97H66	8	9	100	126	1.5	1.5	2.0
248	KS97H79	6	5	100	126	1.0	1.5	2.0
249	KS97H82	7	6	100	125	1.0	1.0	2.0
250	KS97H97	5	4	100	126	0.0	1.5	2.5
251	KS97H99	5	5	100	127	0.0	1.5	3.0
252	KS97H115	5	4	100	124	0.5	1.5	2.5
253	KS97H116	6	4	100	125	0.5	1.5	2.5
254	KS97H125	8	8	100	123	1.0	1.5	3.0
255	KS97H127	8	9	100	126	1.0	1.5	3.0
256	G96-044	8	9	80	121	1.0	1.5	2.5
257	G96-080	8	8	100	122	1.0	1.0	2.5
258	G96-092	5	5	100	126	1.0	1.0	2.5
259	G96-047	8	8	100	122	0.5	1.5	3.0
260	G96-081	8	8	100	124	1.0	1.0	2.0
261	G96-134	7	8	100	125	1.0	1.5	2.0
262	G96-135	7	7	100	125	0.5	1.0	2.5
263	G96-142	3	1	90	122	0.5	1.0	2.5
264	G96-146	6	6	100	127	0.5	1.0	3.0
265	G96-154	4	3	100	127	1.0	1.0	2.0
266	G96-155	1	1	100	128	0.0	1.0	2.0
267	TAM-107	7	8	100	121	1.0	1.0	2.0
268	KARL 92	7	7	90	123	1.0	1.5	2.5
269	ARAPAHOE	7	7	100	128	0.0	1.5	2.0
270	LOCAL CHECK-1	1	2	100	126	1.0	1.5	2.0
271	LOCAL CHECK-2	6	6	100	125	0.5	0.5	2.0
272	LOCAL CHECK-3	2	2	100	122	1.0	1.5	2.0
273	H3-1	2	1	100	125	1.0	1.5	2.0
274	H3-2	5	3	100	124	0.5	1.5	2.0
275	H3-3	3	1	100	121	0.5	1.0	1.5
276	H3-4	3	1	100	121	0.0	1.0	2.0
277	H3-5	4	3	100	124	0.0	0.0	1.0
278	H3-6	7	7	100	123	0.0	1.0	1.5
279	H3-7	1	1	100	122	1.0	1.0	2.0
280	H3-8	7	7	100	124	1.0	1.5	1.5
281	H3-9	7	6	100	125	0.5	1.5	1.5
282	H3-10	3	3	100	125	0.0	0.5	2.0
283	H3-11	3	2	100	124	0.0	1.5	2.0
284	H3-12	4	4	80	122	0.5	1.0	2.5
285	H3-13	3	3	100	125	0.5	1.0	2.5
286	H3-14	3	2	100	125	0.5	1.0	2.0
287	H3-15	3	5	100	127	0.0	1.5	3.0
288	H3-16	5	5	100	125	1.0	1.0	2.0
289	H3-17	2	4	100	124	1.0	1.0	2.0
290	H3-18	4	4	100	127	0.5	1.0	2.5
291	H3-19	2	2	100	126	0.5	1.0	3.0
292	H3-20	3	6	100	123	1.0	1.0	2.5
293	H3-21	2	1	100	122	0.5	1.0	2.0
294	H3-22	6	7	100	125	0.5	1.5	2.0
295	H3-23	6	7	100	125	0.5	1.0	2.0
296	H3-24	6	7	100	121	0.5	1.5	2.0
297	H3-25	3	2	100	124	0.5	1.0	2.0
298	H3-26	1	2	100	124	1.0	1.0	2.0
299	H3-27	1	2	100	124	0.0	0.0	1.0
300	H3-28	4	2	100	126	0.5	0.5	2.0
301	H3-29	3	4	100	122	1.0	1.5	2.0
302	H3-30	1	1	100	122	0.5	1.5	2.0
303	W95-301	8	9	100	125	0.5	1.5	2.0
304	W95-221	2	1	100	130	0.5	1.5	3.0
305	W95-385	9	9	100	125	0.5	1.5	2.0
306	W95-089	1	2	100	126	0.0	1.5	2.5

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
307	W95-091	3	1	100	125	1.0	1.5	2.0
308	W95-392	6	8	100	123	0.0	1.0	1.5
309	W95-222	2	2	100	129	0.0	1.0	2.5
310	W94-232	8	8	100	125	1.0	1.5	2.5
311	W96-016	6	5	100	127	0.5	1.0	2.0
312	W96-037	5	6	100	127	0.5	1.0	2.0
313	W96-075	3	4	100	125	0.0	0.5	2.0
314	W96-218	4	4	100	121	0.5	1.5	3.0
315	W96-355	7	7	100	128	0.0	1.5	2.0
316	W96-358	6	6	100	127	0.0	1.5	1.5
317	W96-359	7	6	100	126	0.0	1.5	2.0
318	W96-398	1	1	100	124	1.0	1.5	2.5
319	W96-401	4	4	100	126	1.0	1.5	2.5
320	W96-410	1	1	100	124	0.5	1.5	2.0
321	W96-427	4	3	100	127	0.5	1.0	2.5
322	W96-446	7	8	100	126	1.0	1.5	2.0
323	W96-447	8	8	100	123	1.0	1.5	2.0
324	W97-189	4	3	100	127	0.5	1.0	2.0
325	W97-234	4	3	100	125	0.0	1.0	2.0
326	TAM-107	8	8	100	122	1.0	1.5	2.0
327	KARL 92	8	8	100	123	1.0	1.5	2.5
328	ARAPAHOE	6	6	100	129	0.5	1.5	2.0
329	LOCAL CHECK-1	2	1	100	126	1.0	1.0	2.0
330	LOCAL CHECK-2	4	5	100	124	0.0	0.5	2.0
331	LOCAL CHECK-3	2	2	100	122	1.0	1.5	2.0
332	CO940024	2	1	100	127	0.5	1.5	2.0
333	CO940128	7	8	100	123	1.0	1.5	2.0
334	CO940287	5	6	100	125	0.5	1.5	3.0
335	CO940595	6	6	100	124	0.5	1.0	2.0
336	CO940607	7	7	100	125	0.5	0.5	2.0
337	CO940610	7	8	100	125	1.0	1.5	2.0
338	CO940611	5	5	100	126	0.0	1.5	1.5
339	CO940615	7	8	100	123	0.5	1.5	2.0
340	N97S139	4	2	100	127	0.5	0.5	2.0
341	N97S142	3	1	100	127	0.5	1.5	1.5
342	N97S144	4	3	100	126	0.5	0.5	2.0
343	N97S146	2	2	100	126	1.0	1.0	2.0
344	N97S151	2	2	100	127	1.0	1.0	2.5
345	N97S152	2	2	100	127	0.5	1.0	2.0
346	N97S154	2	2	100	127	1.0	1.5	2.0
347	N97S084	2	2	100	122	1.0	1.5	2.0
348	N97S311	6	6	100	122	1.0	1.5	3.0
349	N97S319	2	2	100	124	1.0	1.5	2.5
350	N97S320	7	6	100	124	1.5	1.5	2.5
351	N97S322	5	5	100	126	0.5	1.0	2.0
352	N97S116	3	4	100	127	0.5	0.5	3.0
353	N97S117	3	3	100	125	1.0	1.0	3.0
354	N97S343	6	5	100	127	1.0	1.0	2.5
355	N97S347	4	4	100	127	1.0	1.5	2.0
356	N97S077	3	3	100	121	0.5	1.5	3.5
357	N97S078	3	2	100	125	1.0	1.0	2.5
358	N97S120	2	2	100	126	1.0	1.0	2.0
359	N97S277	4	3	100	128	0.5	1.0	2.5
360	N97S278	4	4	100	127	1.0	1.0	2.5
361	N97S156	4	4	100	125	1.0	1.5	2.0
362	N97S158	3	3	100	123	1.0	1.5	2.5
363	N97S159	6	7	100	133	0.0	1.5	2.0
364	N97S160	4	4	100	122	0.5	1.5	2.0
365	N97S186	6	7	100	124	1.0	1.5	2.5
366	N97S191	3	3	100	124	1.0	1.5	3.0
367	N97S192	4	4	100	127	0.5	1.5	2.0
368	N97S195	4	3	100	127	1.0	1.0	2.5

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
369	N97S196	4	4	100	126	1.0	1.5	3.0
370	TAM-107	7	7	100	122	1.0	1.0	2.5
371	KARL 92	7	7	100	123	1.0	1.0	3.0
372	ARAPAHOE	6	5	100	129	0.5	1.5	2.5
373	LOCAL CHECK-1	2	2	100	126	1.0	1.0	2.0
374	LOCAL CHECK-2	3	4	100	125	0.5	1.0	2.5
375	LOCAL CHECK-3	2	2	100	123	1.0	1.5	2.5
376	NE96435	7	8	100	130	0.0	1.0	3.0
377	NE96461	7	7	100	123	1.0	1.0	2.0
378	NE96515	7	8	100	128	0.5	1.5	3.0
379	NE96573	5	6	100	129	0.5	1.0	1.5
380	NE96579	6	8	100	129	0.0	1.0	2.0
381	NE96580	6	8	100	131	0.5	1.0	2.0
382	NE96584	7	8	100	128	1.0	1.5	2.5
383	NE96585	7	8	100	130	0.0	1.5	2.0
384	NE96605	7	7	100	127	0.5	1.5	3.0
385	NE96607	7	8	100	127	1.0	1.5	2.0
386	NE96618	6	7	100	128	0.0	1.5	2.0
387	NE96622	6	7	90	128	0.5	0.5	2.0
388	NE96623	6	8	50	127	0.5	0.5	2.0
389	NE96625	6	8	100	128	0.5	1.0	2.0
390	NE96628	6	8	100	129	0.5	1.0	2.5
391	NE96630	6	7	100	130	0.0	1.5	2.0
392	NE96632	5	6	100	129	0.5	1.5	2.5
393	NE96638	2	2	100	128	1.0	1.0	2.0
394	NE96641	1	2	100	130	0.0	1.5	3.0
395	NE96644	2	1	100	129	0.0	0.5	1.5
396	NE96649	4	6	100	129	0.5	1.0	1.5
397	NE96652	6	8	100	130	0.5	1.0	1.5
398	NE96654	3	3	100	130	0.0	1.5	2.0
399	NE96676	4	5	100	131	0.0	1.0	2.0
400	NE96677	6	7	100	134	0.5	1.5	1.5
401	NE96690	6	7	100	129	0.5	1.5	2.0
402	NE96737	4	5	100	126	1.0	1.0	2.0
403	NE96744	6	5	100	128	0.0	1.0	2.5
404	NE96747	6	6	95	128	0.0	1.5	2.0
405	NE91518	5	6	100	127	0.5	1.0	2.5
406	SD92107	5	6	100	132	0.0	1.5	2.5
407	SD93267	3	2	100	131	0.0	0.5	3.0
408	SD93380	4	4	100	128	1.0	1.5	2.0
409	SD93195	6	8	100	131	0.0	1.5	2.0
410	SD93338	4	3	100	128	0.5	1.5	2.0
411	SD93528	6	5	100	130	0.5	1.5	2.0
412	SD94149	6	7	100	130	0.0	1.5	2.5
413	SD94210	5	6	100	127	0.5	0.5	2.0
414	SD94227	6	7	100	132	0.0	1.0	3.0
415	SD94241	6	7	100	131	0.0	1.5	2.0
416	SD94134W	7	7	100		0.5	1.5	3.0
417	SD94139W	4	5	90	133	1.0	1.5	2.0
418	SD94217W	7	6	100	126	1.0	1.0	2.0
419	SD95129	5	5	100	132	0.0	1.5	3.0
420	SD95139	6	6	100	130	0.5	1.5	2.5
421	SD95146	4	4	100	131	0.0	0.5	3.0
422	SD95174	3	3	100	131	0.5	1.5	2.5
423	SD95203	3	3	100	128	0.5	1.5	2.5
424	SD95210	6	8	100	130	0.5	1.0	3.0
425	SD95218	6	7	100	130	0.0	0.5	3.0
426	ND8955-A	4	4	100	135	0.5	1.0	3.0
427	ND9421	7	7	100	127	0.0	1.0	2.5
428	ND9454	6	7	100	132	0.5	1.0	2.0
429	ND9512	7	7	100	131	0.5	1.5	2.0
430	ND9515	6	7	100	132	0.5	1.5	2.5

Entry	Sel. No.	Acid Soil Tolerance	Acid Soil Tolerance	Winter Survival	Drought tolerance			
431	ND9516	5	5	100	128	0.5	1.5	2.0
432	ND9535	6	6	100	133	0.5	2.0	3.5
433	ND9536	6	7	100	130	0.5	1.5	2.5
434	ND9537	5	7	100	133	0.0	1.5	2.0
435	ND9542	5	6	100	133	0.5	2.0	2.0
436	ND9560	6	7	85	131	0.5	1.5	3.0
437	ND9579	7	7	100	134	0.0	1.5	2.0
438	ND9581	7	7	100	134	0.5	1.5	3.0
439	IDO477	8	8	100	132	0.0	1.5	2.0
440	IDO498	7	7	100	128	0.0	1.0	2.5
441	IDO501	3	2	100	125	1.0	1.0	1.5
442	IDO509	7	7	100	127	0.5	1.5	2.0
443	IDO514	7	8	100	131	0.0	1.5	2.0
444	IDO519	3	2	100	124	1.0	1.0	2.0
445	TAM-107	7	7	100	122	1.0	1.5	2.0
446	KARL 92	7	7	100	123	1.0	1.5	2.5
447	ARAPAHOE	7	6	100	129	0.5	1.5	2.0
448	LOCAL CHECK-1	1	1	100	126	1.0	1.5	2.0
449	LOCAL CHECK-2	5	4	100	124	0.0	0.5	2.0
450	LOCAL CHECK-3	2	2	100	122	1.0	1.5	2.0

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
1	TAM-107	2	2-	;1	;1	2	2=	1
2	KARL 92	S	2	S	--	S	S	S
3	ARAPAHOE	;	2=	2	;	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	TX95D8124	S	--	;	1-	1	2-	;
8	TX95D8553	S	S	S	S	2-	S	S
9	TX95D8827	0	0	S	2CN	S	S	1N
10	TX95D8902	2=	2=	2=	2=	2=	2=	1
11	TX96D1072	S	S	S	S	S	S	S
12	TX96D1246	2=	2=	1	1	2=	2=	2=
13	TX96D1392	S	S	S	S	S, 2=	S	S
14	TX96D1624	S	0;	S	;	0	S	;
15	TX96D1626	S	1	S	1	2=	S	1
16	TX96D1735	S	S	S	S	S	S	S
17	TX96D2240	S	0;	S	;1,S	2=	S	2=
18	TX96D2281	2=	2-	--	;	S	S	1
19	TX96D2370	0	0;	2-	1CN	0, S	S	1N
20	TX96D2547	0;	0;	0	;1	2=	2=	1N
21	TX96D2845	2=	0	0	;	2=	;1-	1N
22	M1107/94	1	1	;	;1	2=	1	;
23	R824-23	1	2=	0	1-	2=	2=	1N
24	TX97A0022	S	2-	2-	2=	2-	2-	2
25	TX97A0027	2-	2-	2-	2=	2=	2-	2-
26	TX97A0070	S	S	S	;1-	S	2	2
27	TX97A0071	S	0,S	S	2=	2-	2+	S
28	TX97A0076	2=	S	S	;	S	S	S
29	TX97A0077	2	0	1	;1-CN	--	2=	;
30	TX97A0099	2=	S	S	1	S	S	S
31	TX97A0120	2=	0	2=	1	2=	2=	2-
32	TX97A0122	S	0	2-, S	1	0, S	2, S	2
33	TX97A0130	S	S	2+	2-	--	2	2
34	TX97A0151	2=	0;	2=	2=	2=,S	2-	2-
35	TX97A0153	S	0;	S	S	2-	2,2+	2
36	TX97A0165	2-	2-	2=	1	2-	2-	2-
37	TX97A0171	2=,S	S	;, S	0	S	S	12-CN
38	TX97A0180	S	S	XN	2=	1	2, 2+	2-
39	TX97A0181	S	S	S	S	2	S	S
40	TX97A0217	;	S	2-	1-	2	2	0
41	TX97A0235	S	;1-	2=	;	0	2	;
42	TX97A0282	2=	0;	2=	2=	2-	2-	2=
43	TX97A0286	2=	2=	2=	2=	2-	2=	2=
44	TX97A0320	2=	2=, S	2-	2-	S, 2-	S, 2-	2=
45	TX97A0324	2, S	2-, S	2=	S, 2=	2-	2-, 2	2=
46	TX97A0339	S, 2=	2=	2=	2=	2-	1	2=
47	TX97A0342	S	S,2	2-,S	2-	2-	2	2-
48	TX97A0345	0,S	2	2-	1	2=	2	0
49	TX97A0350	2-	0	S	2-	S	S	S

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
50	TX97A0377	2,S	0,S	S,2-	2=	2=,S	S	2
51	TX97A0383	2=	2=	;1C	1-	1	1	;1
52	TX97A0384	2=	2=	2=	2=	;	1	2-
53	TAM-107	2-	2-	;1C	;1CN	1	1	2=
54	KARL 92	S	0	2,S	2	2-	2	2
55	ARAPAHOE	;	2-	2	;	;1	2	;
56	LOCAL CHECK-1	S	S	S	S	;	S	S
57	LOCAL CHECK-2	S	S	S	S	2	2	S
58	LOCAL CHECK-3	S	S	S	S	2	S	S
59	HBG0358	0;	2-	2	2	2	2	;
60	TX93V4315	S	0	S	S	0	S	S
61	TX93V5717	2-	;,2-	2=	1	;1	2=	2=
62	TX94V2327	0;	0	1	;1-	2	2=	;
63	TX94V2906	S	S	S	;1-	S	S	S
64	TX94V3329	2=	0	1	2=	2=	;1	2=
65	TX94V4524	S	S	2-,S	-	2	2-	S,2-
66	TX94V4730	2=	0	2	2=	S	2-	S,2-
67	TX94V4930	2-	2=	2=	1	2-	2=	2=
68	TX94V5922	2,S	0	S	2-	S,2-	2=,S	2,S
69	TX95V2512	2=	2-,S	S	S	S	S	2-
70	TX95V4336	2=	0	0;	;1	2=	;	;1
71	TX95V4339	0;	2=	0	;1	2-	12C	;1-
72	TX95V4538	S	S,2	S	;	2	S	S
73	TX95V4926	0;	;1-	2-	2=	;	2-	;
74	TX95V4933	0	2-	2=	;	;	2=	;
75	TX95V5124	2-	2-	2-	2=	2=	2-	2-
76	TX95V5125	S	0	S	S	S	S	S
77	TX95V5332	0;	2=	2=	;	2=	2-	;1-
78	TX95V5539	2=	2=	1	;	2=	1	2=
79	TX95V6427	S	0	S	S	S	S	S
80	TX95V6428	2	S	S	S	S	S	S
81	TX95V6509	2	;1-	2=	;	;1	2=	2-
82	TX95V6608	2	2	S	S	S	S	2
83	TX95V6620	2	0	2	;,2=	2=	2	2
84	TX95V6627	2-	0	2=	2=	;	2-	2=
85	TX96V2317	S	0	S	S	S	S	S
86	TX96V2321	S	S	S	S	S	S	S
87	TX96V2324	2-	2=	2-	2=	2-	2-	2
88	TX96V2332	2=	;1-	2-	;1-	2=	2=	2-
89	TX96V2406	S	0	S	S	S	S	S
90	TX96V2425	0;	2+	2	2	2	2	;
91	TAM-107	2-	2-	;1N	;1-	2-	2=	2=
92	TX96V2845	S,2=	2-	2	;1-	2-	2	2-
93	TX96V2857	S	S	S	;	-	S	S
94	TX96V2859	S	S	S	S	S	S	S
95	TX96V2865	2	0	2-	;	2=	2-	2-
96	TX96V2889	S	S	S	S	S	S	S
97	TX96V2893	S	S	S	S	-	S	S
98	OK97402	S	2	2-	2=	;	2	2

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
99	OK97411	1	2+	2-	2-	0	2	2-
100	OK97432	S	0	23	2-	;	S	2
101	OK97434	2	2-	2-	;,2-	1	2-	2
102	OK97467	S,2	S	s	S	;	S	2-
103	OK97496	0	2-	2-	2	1	2=	2=
104	OK97499	2-	2-	;'2-	2=	1	2=	2=
105	OK97508	2	;1-	;1N	;1	;1	1	;1
106	OK97535	S,2=	0	S,2=	1CN	;	S;2=	2=
107	OK97538	2=	2=	2-	2=	2=	2=	2=
108	OK97561	2=	2=	2=	2=	2=	2=	2=
109	OK97585	2-	2-	1	2=	2=	2=	2-
110	OK97589	2-	2=	2-	2CN	S	S	2-
111	OK97591	0;	2=	2+	2	S	S	;
112	TAM-107	2-	2-	2=	;1-	2-	2=	2=
113	KARL 92	S	2+	S	2	2-,S	S	S
114	ARAPAHOE	0;	2-	2-	;1	2=	2-	;
115	LOCAL CHECK-1	S	S	S	S	2+	S	S
116	LOCAL CHECK-2	S	S	S	S	2+	S	S
117	LOCAL CHECK-3	S	S	S	S	2+	S	S
118	OK98G501	2=,S	2-	2	2=	2	2=,S	S
119	OK98G502W	2=,S	0	2=	1	2=	2=	2=
120	OK98G503	-	-	-	-	-	-	-
121	OK98G504W	-	-	-	-	-	-	-
122	OK98G505W	S	0,S	S	S	S	S	S
123	OK98G506W	2=	0	2=	0	;	1	2=
124	OK98G507W	S	0,S	S	S	0	S	S
125	OK98G508W	S	2,S	2=	1	;1	2-,S	2=,S
126	OK98G509W	2,S	0	2-,S	S,2-	;	S,2-	2,S
127	OK98G510W	S	0	S,2	2=	;	S,2-	2,S
128	RMH-01/98	2=	0	2=	2=	;	2=	2=
129	RMH-02/98	2	0	2-	2=	2=	2=	2
130	RMH-03/98	2=	0	2=	2=	2=	2=	2=
131	RMH-04/98	2=	0	2=	2=	2=	2=	2=
132	RMH-05/98	2=	0	2=	1-	2-	2=	2=
133	RMH-07/98	2=	0	2=	2=	2-	1	2=
134	RMH-08/98	2=	0	2=	2=	2=	2=	2=
135	RMH-10-98	2=	2-	2-	1-	2=	2=	2-
136	RMH-11/98	2-	2-	2=	2=	;	2-	2-
137	RMH-12/98	2-	2=	2-	;	2=	2=	2=
138	RMH-13/98	2	2-	2-	0	2=	2-	2-
139	RMH-14-98	2-	0	2=	0	2=	2-	2
140	RMH-16-98	0;	2=	;+C	;1-	2=	;1-	0;
141	RMH-17/98	0;	2=	;+C	;	2-	;1-	0;
142	RMH-18/98	0;	2=	;+C	;	2=	;	0;
143	RMH-19/98	2	2-	2	;	2=	2-	2-
144	RMH-21/98	0;	S	32CN	2=	S	S	0;
145	RMH-22/98	0;	2=	0;	0	2=	;	0;
146	RMH-23/98	2-	2=	2=	;	2=	2=	2=
147	RMH-24/98	0	2=	;+	;	2=	2=	0;

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
148	RMH-28/98	1	2=	;1	;1	2=	1	1
149	RMH-30/98	2+	S	2-2C	2	S	1	2=
150	RMH-31/98	2-	2-	1	;	2=	;	2=
151	RMH-32/98	2	2=	2=C	;1	2=	2-	2=
152	RMH-33/98	2	2=	2=	2=	2=	;1	2=
153	TAM-107	2-	2=	2=	;1	2=	2=	2=
154	KARL 92	;	2-	2	2-	2=	2	;1
155	ARAPAHOE	0;	2-	2-	;1	2=	2	;
156	LOCAL CHECK-1	S	S	S	S	2	S	S
157	LOCAL CHECK-2	S	S	S	S	2	S	S
158	LOCAL CHECK-3	S	-	S	S	2	S	S
159	KS93U10	2=	;,2-,S	2-,S	2-	2=,S	S,2-	-
160	KS93U50	0	2-	2=	2=	2=	2=	2=
161	KS93U76-3	2-	2	12-N	1CN	2=	2=	2=
162	KS93U104	S	2	2-	2-	0,2-	2	2
163	KS93U109	1	2	;+C,2	;1	2=	;1-	2=
164	KS93U139	1	-	1	1	2-	;1	1
165	KS93U141	S	2=	2=	0	S,2	2=	2=
166	KS94U275	S	0,S	2=,S	2-,S	S,2	2=,S	S,2=
167	KS94U290	0	2	;1	;1	2=	;1	2=
168	KS94U328	2=	0,2	;	;1CN	2=	;1	2=
169	KS94U331-101	0	2=	;	;	;	;1	;
170	KS94U336	2=	0	;	;	;1	;1-	;1-
171	KS94U338-6	1	2=	;	;1CN	-	1	1
172	KS94U370	0	1	;1-	;1CN	;	1	2=
173	KS94U375	2=	2=	;1	2=	0	1	2=
174	KS94U391-2-1	0	2-	;1C	;1CN,S	;	2=	2=
175	KS94U408	0	2-	;1	;	;	;1-	0;,2=
176	KS94U409	0	2=	;1	1	2=	;1-	2=
177	KS94U415	2=	2-	2=	2=	2=	2=	2=
178	KS94U448-2	S	S	12CN	;1CN	S	XCN	;1CN
179	KS94U522	2=	2-	;1	1CN	;	12-	1CN
180	KS94U528	S	S	S	;1,S	S	S	S
181	KS95U571-2	1	2-	2=	;	2=	;1-	;1-
182	KS95U589-5	2-	2-,S	S	2,S	S	S	2
183	KS95U600-3	2-	2=	;1C	;	2=	;1	;1
184	N96L9932	2	2	2	;	2=	2	2
185	N96L9934	0;	0	;1-N	1CN	S	S	11+N
186	N96L9938	0;	0	0	0	S	S	;1N
187	N96L9941	S	0,2,S	1N,S	;	2	;1,2	0,S
188	N96L9954	2=	0	1	;	2-	;1	2=
189	N96L9955	0;,2=	0	1	;	2-	;	1
190	N96L9961	0;,S	0,2	2	;	2	2	0;,1,S
191	N96L9965	1,S	0,2	;,S	0	S	2	2-,S
192	N96L9968	0;,S	0;	;	;	2	S	S
193	N96L9970	0;,S	0	0,S	0	S,2	;	2
194	KS91W049-1-5-1	0	0	22+CN	;	S	0	2
195	KS91048-L-2-1	2=	2=	1	0	2=	1	2
196	KS89180B-2-1-2	0	0	0	0	2=	0	0;

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
197	KS89180B-2-2-1	0	0	1	0	2=	0	2-
198	KS89180B-2-1-1	1	0	1	0	2=	0	0
199	KS97P1064-5-1-1	2-	0,2=	2-	2=	2=	1	2-
200	KS91012-D-1-1	1-	S	S	1-CN	S	0	1N
201	KS91W052-1-2-1	2	2=	S, ; ,2	0	S	S	2,S
202	KS97P0771-9-3-1	2-	2=	S	2	S	S	2
203	KS91077-A-2-1	S	0;	;	0	;	;1-CN	;
204	KS91022-A-7-1	2-	0;	2=	2=	2=	2=	1
205	KS91W009-6-1-2	2,;1	0	;	0	2-	;1	1N
206	KS97P0948-2-1-3	2=	2=	;1	0	S	S	2=
207	KS91005-B-9-1	2+	0,2+	;1	;	;	;1-	0
208	KS91112-A-2-3	2-	0	2=	;1-	2=	2=	2-
209	KS90175-1-2	2-,0;	2=	2=	1-	2-	2=	;1-
210	KS90175-1-1	;1-	1	1	0	2=	2=	;1-
211	KS91112A-2-2	2-	2=	0	0	2=	2=	2=
212	KS90175-3-1	0;,2=	2=	2=	0	2=	2=	;1-
213	KS91005-B-4-1	2-	S,2	;,S	1	;1	S,;1	2,S
214	KS91112-A-6-2	2-	2=	;	;	2=	2-	2=
215	KS91082-C-7-1	2	2,S	S	;	S	S	2
216	KS91082-C-7-2	2	2	S	1-	S,2	S	2
217	KS91134-D-1-1	2-	2-	2-	0	1	2=	2
218	KS91012-D-8-2	0	S,2	2+	2-,S	S	S	0
219	KS91113-B-1-1	0;	2=	2	;	S, ;	S	0
220	TAM-107	2-	2=	2=	;1	;	;1	2=
221	KARL 92	S	2=	S	1	2-	S	-
222	ARAPAHOE	0;	2-	2-	;	;	2-	0
223	LOCAL CHECK-1	S	S	S	S	2	S	S
224	LOCAL CHECK-2	S	S	S	S	2	S	S
225	LOCAL CHECK-3	S	S	S	-	2	S	-
226	KS95H179-4	2-	2=	;1	;	2=	2-	2=
227	KS96HW10-1	2-	1	;1	;1	2=	2-	1
228	KS96HW10-3	2-	1-	;1	;	2=	2=	2=
229	KS96HW91	S	2	;1CN	;	2	2-	S
230	KS96HW94	S	S	S	S	S	2	2
231	KS96HW100-1	S	S	S	2CN	S	S	S
232	KS96HW100-5	S	S	S	2CN	S	S	S
233	KS96HW100-6	S	S	S	;	S	S	S
234	KS96HW114	S	S	S	;	2	2	S
235	KS96HW115	S	S	S	0	2	S	S
236	KS96H216	2-	2=	;	;1	2-	;12=	2=
237	KS97HW3	S	S	0	;	S	S,2=	S
238	KS97HW4	2-	2,S	2,S	;	2=	2-,S	S,2
239	KS97HW7	;1-,2-	;1	2=	2=	2-	1	2-
240	KS97HW16	2=	;1	2=	2=	2=	2=	2=
241	KS97HW19	2-	2-	2-	2=	-	2=	2-
242	KS97HW33	2-	2-	S	S	-	S	2
243	KS97H37	1	;	;	1	-	1	0
244	KS97H45	2-	0,2	2=	1	-	12=	2=
245	KS97H51	0;	2-	;1	12=CN	-	1C	1C

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
246	KS97H63	0	1	2=	2=	-	2=	0
247	KS97H66	2-	2=	2=	;12=	-	2=	2=
248	KS97H79	0	0	2-	;1-	-	2-	0
249	KS97H82	2-	2=	2-	2=	2-CN	2-	2CN
250	KS97H97	S	S	S	1CN,S	2,S	S	S
251	KS97H99	S	S	S	2,1CN	2-	2=,S	S
252	KS97H115	S	2+	2	2	2-	2	2
253	KS97H116	S	2	2	2-	2	2	S
254	KS97H125	S	2	1N	2=	2CN	2-	2-
255	KS97H127	S,2	2-	;1N	2=	2-CN	2-	2
256	G96-044	2=	0	2-	2=	;1	2=	;
257	G96-080	;1,S	S	S	S	S	S	S
258	G96-092	S	S	S	S	S	S	S
259	G96-047	2,S	2	2	2	2=	S,2	2
260	G96-081	2-	2	S	S	S	S	S
261	G96-134	2	2-	-	S,2-	2-	2	2
262	G96-135	2	2-	2	2	-	2	2
263	G96-142	2	2	1N	2-23C	2	21CN	21CN
264	G96-146	S	S	S	S	S	S	S
265	G96-154	2+	S	S	S	;1	S	2
266	G96-155	0;	S	S	S	;,S	S	0;
267	TAM-107	2-	2=	2=	2=	-	2=	-
268	KARL 92	S	S	23	2	-	2	-
269	ARAPAHOE	0;	2-	2-	;	;	2	;
270	LOCAL CHECK-1	S	S	S	S	S	S	S
271	LOCAL CHECK-2	S	S	S	S	S	S	S
272	LOCAL CHECK-3	S	S	S	S	S	S	S
273	H3-1	0	0	2=	2=	2	2=,S	2=
274	H3-2	0	2=	2	2-	;1	22+	2=
275	H3-3	S	S	S	S	S	2-,S	2
276	H3-4	2=	2-	2=	;1	1	2=	2-
277	H3-5	2=	2-	2-	2	;1	2	2
278	H3-6	S	0	2	2=	0	2	2
279	H3-7	2=	0	2	1	2	2-	2
280	H3-8	2=	0	2=	2=	2-	2-	2=
281	H3-9	0	2=	2-	;	2=	2-	0;,2=
282	H3-10	S	2=	2	2	2=	2-	2+
283	H3-11	2=	0;,2=	2=	1	2-	2=	2=
284	H3-12	2=	0;	2=	;1	1	2=	2=
285	H3-13	1	1	2=	1	2-	2=	2
286	H3-14	2=	2=	2=	1	2-	2=	2=
287	H3-15	2	2-	2	2-	2	2+	2+
288	H3-16	2=	2-,S	2=	1	1	;1	2-
289	H3-17	2=	2=	2=	0	-	2=	2=
290	H3-18	2	2=	S	0	-	S	2
291	H3-19	0;	0;,2=	2=	0	-	2=	;1,2=
292	H3-20	0;	2=	2=	0	-	2=	;
293	H3-21	2=	2=	2=	;	;	2=	2=
294	H3-22	S,2=	S,2=	S	-	;	2-,X	XCN,S

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
295	H3-23	1	1	2=	0	;	2=	2=
296	H3-24	2=,0;	1	2=	0	;	2=	1
297	H3-25	2-,S	2-,S	2=,S	2=	2,S	2=,2	S,2=
298	H3-26	0;,2=	2=	;	;	;1	;1CN	;1
299	H3-27	2-	2=	2-	2=	2-	2-	2
300	H3-28	2=	0	2=	0	2=	2=	2-
301	H3-29	0;	0;	2=	;	2-	2=	;
302	H3-30	2-	2=	2-	1	2-	2=	2=
303	W95-301	S	2-,S	2CN, ;	2CN	S	S,2-	S
304	W95-221	S	S	S	;1	S	S	S
305	W95-385	0	0	S	1,S	2-	S	;1
306	W95-089	0	0	;	;	;1CN	XCN	S, ;
307	W95-091	S	0	;	;1	;	;1-CN	;1N
308	W95-392	0	0	S	S	2	S	;1
309	W95-222	0	0	2-	0	2-	2-	S,2
310	W94-232	1	1	;1	;	1	1	2=
311	W96-016	0	2=	2=	;1	2=	2=	2=
312	W96-037	S,2=	S	S	S	S	S	S
313	W96-075	2-	2-	;1,2-	0	-	2-	2=
314	W96-218	S	2-	2-	;	-	2-	2CN
315	W96-355	2=,S	0	0;	0	-	;	0
316	W96-358	2=	0	0	;	-	;1CN	0;
317	W96-359	2C,2=	0	0;	;	-	;11+CN	0;
318	W96-398	1	2=	2=	;1	-	2=	2=
319	W96-401	2=	0	2=	2=	-	2=	2=
320	W96-410	0;	2=	2=	;	-	2=	;1-
321	W96-427	2-	0;,S	S,2=	0	2-	2	S,2=
322	W96-446	2-,S	0	2-,S	21CN	S	S	S,2
323	W96-447	2-	0,2	2=	2=	1	2-	2=
324	W97-189	2=	0	;	;	2=	2=	2=
325	W97-234	2-	0	2=	;	;1	;1	;
326	TAM-107	2-	2-	2C	;1CN	2-	1	2=
327	KARL 92	S	2+	2	2	2-	2	S
328	ARAPAHOE	0;	2-	2-	;	2=	2	;
329	LOCAL CHECK-1	S	S	S	S	2	S	S
330	LOCAL CHECK-2	S	S	S	S	2-	S	S
331	LOCAL CHECK-3	S	S	S	S	2	S	S
332	CO940024	0	0	2+	0	S	S	S
333	CO940128	2-	2-,0	2=	2=	2-	2=	2=
334	CO940287	S,2	S	S	2CN	S	S	S
335	CO940595	S,2	0	1	0	2-	22+	1
336	CO940607	2	0,2	2=	2=	2	2=	2-
337	CO940610	0;,2=	2=	1	1	2-	2=	0;
338	CO940611	S	2	2-	S	S	S	S
339	CO940615	0;,2=	0	2	2	2=	2	;1-N
340	N97S139	2=,0;	0	2=	;1	2=	2=	2=,S
341	N97S142	2=	2=	1	;	2=	2=	2-
342	N97S144	2=	1	;1	;1	2=	2=	2=
343	N97S146	2-	12=	;1	;	;	2=	1

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
344	N97S151	0;,2-	;1	;1	;	;	2=	1
345	N97S152	2-	0	1	;	2-	2=	2=
346	N97S154	0;	0	2=	2=	2=	2=	;1-,2=
347	N97S084	0,S	2=,S	1,S	;	2=,S	2=,S	S,1
348	N97S311	S	S	S	;1CN	S	S	S
349	N97S319	2=	0	S	1	S	S,2=	2=,S
350	N97S320	0;,2=,S	0,2	;, S	1	1,S	S	2=,S
351	N97S322	2-,S	S,0	S, ;1	;,S	1,S	2=,S	2=,S
352	N97S116	S	S	S	1	S	S	S
353	N97S117	0	0	S	1	2-	2	2
354	N97S343	0	0	2-	;	2	2,S	2+
355	N97S347	0	0	2	;,2	2,S	2+	2+,S
356	N97S077	0	0	2	;,S	S	S	S
357	N97S078	0	0	S	S	S	S	S
358	N97S120	0	0	;1-	;	2=	2=	;1
359	N97S277	0	0	S	;	S	S	XN
360	N97S278	0	-	S	;	S	S	XN
361	N97S156	S,0;	1	2=	;1	;	1	1
362	N97S158	S	SCN	S	1	1	S	S
363	N97S159	S	S	S	S	S	S	S
364	N97S160	S	SCN	S	S	-	2	S
365	N97S186	;,2	2	S	0	1	S	;1-
366	N97S191	S	0;,SCN	S	;	S	XCN	S
367	N97S192	2CN,0;	SCN	2=,S	2=	S	22+	XN
368	N97S195	;1-,S	1	2=	1CN	1	X	XN
369	N97S196	0;,S	1,SCN	2=,S	;	2	S	S, ;
370	TAM-107	2-	2=	12=C	;1-	2-	2=	2=
371	KARL 92	S	S	S	2	2	22+	S
372	ARAPAHOE	;	2-	2-	;	2-	2	;1
373	LOCAL CHECK-1	S	S	S	S	2+	S	S
374	LOCAL CHECK-2	S	S	S	S	2+	S	S
375	LOCAL CHECK-3	S	S	S	S	2	S	S
376	NE96435	2-,0;	0	2-	S, ;	S	S,2-	2=
377	NE96461	0	2=	0	2=	2=	2-	2=
378	NE96515	0;	2	2 -2	;, 2	2C	2	2-
379	NE96573	0;	2=	2-	0	2-C	2	1
380	NE96579	0	2=	0;	;	2-	2-	0;
381	NE96580	0	2=	2=	2	2-	2-	2=
382	NE96584	0	2=	0	;	2=	2-	2=
383	NE96585	0	1	;1	;	2-	;1	;
384	NE96605	0	2=	2=	;	2-	2-	2=
385	NE96607	0;	0,2	;1-	;1	1	0	;
386	NE96618	0;,S	2-	2=	;1	;	0	0,2=
387	NE96622	0,2=	0	;1	;1	;	;	;
388	NE96623	2=	0	1	;1	;	;	0
389	NE96625	2=	2=	1	;1	2=	0	2=
390	NE96628	2=	2=	1	;1	2=	0	2=
391	NE96630	0	0	2-	2=	;	1	0;
392	NE96632	;	0	2=	2=	2=	2=	0;

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
393	NE96638	0;	0	2=	;1	2=	2=	;
394	NE96641	0;	0	2=,S	;1,S	2=,S	2=	;1-
395	NE96644	2,S	0	S,2	S	S	S,2-	2N
396	NE96649	2	2-	2-	2=	2-C	2	;1N
397	NE96652	1	1	2=	;1-N,2=	2	2=	;1-N
398	NE96654	0;	2=	2-	;1	2	1	;
399	NE96676	;	2=	2=	;1	2	2=	;
400	NE96677	;	0	2-	2=	2-	2=	;1-
401	NE96690	0	2=	2=	;1	2-	2=	;
402	NE96737	0	0,S	2	2=	S	S	0;
403	NE96744	0	2-	2-	2	2-	2	0;
404	NE96747	0	2-	2-	2=	2-	2-	0;,2
405	NE91518	0	2	2	;1	2-	2+	;1-
406	SD92107	0	2=	2-	;1	2-C	2-	;1
407	SD93267	0	2+	22+	2+	2	2	;1N
408	SD93380	0	0;	22+	2-	2-	S	;1N
409	SD93195	0	2	22+	S	;,2	S	;1N
410	SD93338	0;	0	22+	S	;	2C	;1
411	SD93528	0;	0	22+	X	;	22+	12N
412	SD94149	2=	2-	2=	2=	;	2=	2
413	SD94210	S	S	S	S	S	S	S
414	SD94227	S	2=,S	2-,S	X	0, 2	2	S
415	SD94241	;1CN	2CN	22+	;2,S	1	22+	XN
416	SD94134W	2-	0;	2-	2-	;	2	2
417	SD94139W	;1	2-	2=	X,S	2=	2=	2=
418	SD94217W	S	S	S	S	S	S	S
419	SD95129	;1,S	2CN	2	S	2C	2-	XN
420	SD95139	0;	0;	2	2	2=,S	2-2	;1N
421	SD95146	;1-	0	S	;1	S	S	X-N
422	SD95174	0;	;1,2CN	S	2	S	S	XN
423	SD95203	0;	0	S	X	S	2,S	11+N
424	SD95210	S	2-	2	2-	2	2	-
425	SD95218	0;	S	XN	S	2	2	-
426	ND8955-A	0	0	22+	X	S	S	XN
427	ND9421	0	2+	2	S	2-	2	22+
428	ND9454	0	2	;	2	2-	22+	12-N
429	ND9512	0	2	-	;1N	2=	22+	XN
430	ND9515	0	2	2-,S	S	2-	22+	XN
431	ND9516	0	2	2	;1	2-	2	2
432	ND9535	0	2-	2-	2	2-	2	12-N
433	ND9536	0;,S	0	2	2	2+	22+	2
434	ND9537	0;	0,2=	2=	2	0	2=	;
435	ND9542	2-	0	1	2	2	2	1
436	ND9560	-	0,S	S	1	S	S	;1N
437	ND9579	2	0,2=	2=	2	1CN	2-	2-
438	ND9581	;1-	0	2-	XN	;	2	;1
439	IDO477	S	0	S	S	S	S	S
440	IDO498	S	0	2-	2=	S	2	S
441	IDO501	2=	0	2=	;1	2=	2=	2=

1998 Regional Germplasm Observation Nursery

Entry	Sel. No.	Stem rust TPMK	Stem rust HKCJ	Stem rust RKRQ	Stem rust RTQQ	Stem rust QTHJ	Stem rust RTQS	Stem rust QFCQ
		ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN	ARS, MN
		Seedling	Seedling	Seedling	Seedling	Seedling	Seedling	Seedling
		Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type	Rxn type
442	IDO509	S	0,S	2,S	2=	2	2	2
443	IDO514	2=	0	2=	2=	2	2-	2
444	IDO519	2=	0	2=	2=	2-	2=	2-
445	TAM-107	2-	2-	2=	2=	2-	1	1
446	KARL 92	S	S	S	S	2	S	S
447	ARAPAHOE	0;	2-	2-	;	1C	2	;1
448	LOCAL CHECK-1	S	S	S	S	2+	S	S
449	LOCAL CHECK-2	S	S	S	S	2+	S	S
450	LOCAL CHECK-3	S	S	S	S	2+	S	S

Entry	Sel. No.	Leaf Rust	Leaf rust
		OSU, OK	ARS, KS
		Seedling	Seedling
		S-R	0-9
1	TAM-107	S	9
2	KARL 92	S	9
3	ARAPAHOE	MS	3
4	LOCAL CHECK-1	S	7
5	LOCAL CHECK-2	MR	9
6	LOCAL CHECK-3	R	1
7	TX95D8124	S	8
8	TX95D8553	R	1
9	TX95D8827	S	9
10	TX95D8902	MR	4
11	TX96D1072	MS	3
12	TX96D1246	R	1
13	TX96D1392	R	0
14	TX96D1624	R	0
15	TX96D1626	R	0
16	TX96D1735	R (1 = S)	1
17	TX96D2240	R	0
18	TX96D2281	MR	5
19	TX96D2370	R	0
20	TX96D2547	MR	2
21	TX96D2845	MS	6
22	M1107/94	MR	1
23	R824-23	MR	4
24	TX97A0022	S	9
25	TX97A0027	S	9
26	TX97A0070	S	8
27	TX97A0071	S	8
28	TX97A0076	S	9
29	TX97A0077	S	9
30	TX97A0099	S	8
31	TX97A0120	S	9
32	TX97A0122	S	9
33	TX97A0130	S	8
34	TX97A0151	R (2 = S)	0, 1=7
35	TX97A0153	S	9
36	TX97A0165	S	9
37	TX97A0171	S	8
38	TX97A0180	S	9
39	TX97A0181	S	9
40	TX97A0217	S	8
41	TX97A0235	MS	6
42	TX97A0282	S	5
43	TX97A0286	MR	3
44	TX97A0320	S	8
45	TX97A0324	S	6
46	TX97A0339	S	9
47	TX97A0342	S	9

Entry	Sel. No.	Leaf Rust	Leaf rust
48	TX97A0345	S	9
49	TX97A0350	S	9
50	TX97A0377	R	0
51	TX97A0383	R (2 = S)	0
52	TX97A0384	R	1
53	TAM-107	S	
54	KARL 92	S	9
55	ARAPAHOE	MS	4
56	LOCAL CHECK-1	S	4
57	LOCAL CHECK-2	MR	4, 1=8
58	LOCAL CHECK-3	R	9
59	HBG0358	S	9
60	TX93V4315	R	3
61	TX93V5717	R (1 = S)	0
62	TX94V2327	R (1 = S)	2
63	TX94V2906	MR	3
64	TX94V3329	S	6
65	TX94V4524	R (1 = S)	0
66	TX94V4730	R	0
67	TX94V4930	MR	2
68	TX94V5922	Seg-R	0, 2=8
69	TX95V2512	S	8
70	TX95V4336	R	1
71	TX95V4339	R	0
72	TX95V4538	S	8
73	TX95V4926	S	5
74	TX95V4933	S	6
75	TX95V5124	R	0
76	TX95V5125	R	0
77	TX95V5332	S	7
78	TX95V5539	S	8
79	TX95V6427	R (1 = S)	0
80	TX95V6428	R	0
81	TX95V6509	MS	6
82	TX95V6608	MS	3
83	TX95V6620	MR	3
84	TX95V6627	MR	4
85	TX96V2317	R	0
86	TX96V2321	R	0
87	TX96V2324	R	0
88	TX96V2332	R	0
89	TX96V2406	R	0
90	TX96V2425	R	0
91	TAM-107	S	9
92	TX96V2845	MR	4
93	TX96V2857	R	0
94	TX96V2859	R	0
95	TX96V2865	R	0
96	TX96V2889	R	0
97	TX96V2893	R (2 = S)	0

Entry	Sel. No.	Leaf Rust	Leaf rust
98	OK97402	S	8
99	OK97411	MR	8
100	OK97432	MR	8
101	OK97434	MS	0
102	OK97467	S	0
103	OK97496	R	0
104	OK97499	R	0
105	OK97508	S	7
106	OK97535	S	7
107	OK97538	MR	5
108	OK97561	MR	4
109	OK97585	R	6
110	OK97589	S	9
111	OK97591	S	
112	TAM-107	S	9
113	KARL 92	S	9
114	ARAPAHOE	MS	5
115	LOCAL CHECK-1	S	2, 2=7
116	LOCAL CHECK-2	MR	6
117	LOCAL CHECK-3	R	9
118	OK98G501	S	
119	OK98G502W	Seg-S	9
120	OK98G503	MS	9
121	OK98G504W	---	
122	OK98G505W	S	9
123	OK98G506W	MR	4
124	OK98G507W	S	
125	OK98G508W	R	0
126	OK98G509W	R	0
127	OK98G510W	S	9
128	RMH-01/98	MR	7
129	RMH-02/98	S	
130	RMH-03/98	MR	
131	RMH-04/98	MR	0
132	RMH-05/98	MR	6
133	RMH-07/98	MR	5
134	RMH-08/98	MR	5
135	RMH-10-98	S	
136	RMH-11/98	S	0
137	RMH-12/98	S	5
138	RMH-13/98	S	7
139	RMH-14-98	S	0
140	RMH-16-98	MR	0
141	RMH-17/98	S	8, 2=1
142	RMH-18/98	MR	4
143	RMH-19/98	S	7
144	RMH-21/98	S	9
145	RMH-22/98	MR	3
146	RMH-23/98	S	5
147	RMH-24/98	MR	

Entry	Sel. No.	Leaf Rust	Leaf rust
148	RMH-28/98	MR	3
149	RMH-30/98	R	0
150	RMH-31/98	R (3 = S)	0, 1=9
151	RMH-32/98	R (2 = S)	1
152	RMH-33/98	R	0
153	TAM-107	S	9
154	KARL 92	MS	6
155	ARAPAHOE	MS	4
156	LOCAL CHECK-1	S	7
157	LOCAL CHECK-2	MR	9
158	LOCAL CHECK-3	R	2, 2=7
159	KS93U10	R	0
160	KS93U50	MS	7
161	KS93U76-3	R	1
162	KS93U104	MS	3
163	KS93U109	R	0
164	KS93U139	R	0
165	KS93U141	S	
166	KS94U275	R	0
167	KS94U290	Seg-R	0
168	KS94U328	Seg-R	0
169	KS94U331-101	R	1
170	KS94U336	R	0
171	KS94U338-6	R	0
172	KS94U370	R	
173	KS94U375	Seg-R	0
174	KS94U391-2-1	R	1
175	KS94U408	R	
176	KS94U409	R	2
177	KS94U415	R	
178	KS94U448-2	R	2
179	KS94U522	R (2 = S)	
180	KS94U528	Seg-R	0
181	KS95U571-2	R	
182	KS95U589-5	S	5
183	KS95U600-3	R	0
184	N96L9932	S	8
185	N96L9934	S	9
186	N96L9938	S	9
187	N96L9941	S	8
188	N96L9954	S	9
189	N96L9955	S	
190	N96L9961	S	
191	N96L9965	S	0
192	N96L9968	S	
193	N96L9970	S	8
194	KS91W049-1-5-1	S	8
195	KS91048-L-2-1	MR	4
196	KS89180B-2-1-2	MR	0
197	KS89180B-2-2-1	MR	1

Entry	Sel. No.	Leaf Rust	Leaf rust
198	KS89180B-2-1-1	MR (1 = S)	4
199	KS97P1064-5-1-1	S	4
200	KS91012-D-1-1	S	7
201	KS91W052-1-2-1	S	7
202	KS97P0771-9-3-1	S	8
203	KS91077-A-2-1	MS	3
204	KS91022-A-7-1	MR	3
205	KS91W009-6-1-2	MR	3
206	KS97P0948-2-1-3	S	9
207	KS91005-B-9-1	S	7
208	KS91112-A-2-3	S	8
209	KS90175-1-2	MR	3
210	KS90175-1-1	MR	4
211	KS91112A-2-2	S	7
212	KS90175-3-1	MR	3
213	KS91005-B-4-1	S	
214	KS91112-A-6-2	S	7
215	KS91082-C-7-1	S	8
216	KS91082-C-7-2	S	8
217	KS91134-D-1-1	S	6
218	KS91012-D-8-2	S	8
219	KS91113-B-1-1	S	8
220	TAM-107	S	9
221	KARL 92	S	9
222	ARAPAHOE	MS	2
223	LOCAL CHECK-1	S	8
224	LOCAL CHECK-2	MR	9
225	LOCAL CHECK-3	R	0, 1=9
226	KS95H179-4	MR	3
227	KS96HW10-1	S	9
228	KS96HW10-3	S	9
229	KS96HW91	S	8
230	KS96HW94	S	7
231	KS96HW100-1	MS (1 = S)	4
232	KS96HW100-5	MS	5
233	KS96HW100-6	MS	5
234	KS96HW114	S	9
235	KS96HW115	S	9
236	KS96H216	MR	4
237	KS97HW3	S	8
238	KS97HW4	S	4, 2=9
239	KS97HW7	Seg-S	3, 8
240	KS97HW16	S	9
241	KS97HW19	S	9
242	KS97HW33	S	9
243	KS97H37	MR	2
244	KS97H45	R	0
245	KS97H51	S	8, 2=0
246	KS97H63	MR	4
247	KS97H66	S	0

Entry	Sel. No.	Leaf Rust	Leaf rust
248	KS97H79	MS	0
249	KS97H82	MS	2
250	KS97H97	S	9
251	KS97H99	S	9
252	KS97H115	S	8
253	KS97H116	S	7
254	KS97H125	MS	5
255	KS97H127	MS	3
256	G96-044	S	9
257	G96-080	MS	7
258	G96-092	MR	6
259	G96-047	S	7
260	G96-081	MS	7
261	G96-134	S	9
262	G96-135	S	9
263	G96-142	S	9
264	G96-146	S	9
265	G96-154	MS	8
266	G96-155	S	8
267	TAM-107	S	9
268	KARL 92	S	9
269	ARAPAHOE	MS	4
270	LOCAL CHECK-1	S	6
271	LOCAL CHECK-2	MR	9
272	LOCAL CHECK-3	R	2
273	H3-1	MR (2 = S)	2
274	H3-2	S	9
275	H3-3	S	9
276	H3-4	S	9
277	H3-5	S	9
278	H3-6	MS	9
279	H3-7	R	1, 1=9
280	H3-8	R	0
281	H3-9	Seg-R	0, 1=9
282	H3-10	R (3 = S)	
283	H3-11	MR	2
284	H3-12	MR	0
285	H3-13	R	0
286	H3-14	R	0
287	H3-15	R	4
288	H3-16	R	3
289	H3-17	R	4
290	H3-18	S	9
291	H3-19	MR	
292	H3-20	MR	3
293	H3-21	R	2
294	H3-22	S	8
295	H3-23	MR	2
296	H3-24	MR	4
297	H3-25	MS	6

Entry	Sel. No.	Leaf Rust	Leaf rust
298	H3-26	S	9
299	H3-27	MS	7
300	H3-28	MR	3
301	H3-29	R	3
302	H3-30	MR	6
303	W95-301	S	5
304	W95-221	S	8
305	W95-385	MS	6
306	W95-089	S	7
307	W95-091	MS	6
308	W95-392	MS	6
309	W95-222	S	7
310	W94-232	S	9
311	W96-016	MR	4
312	W96-037	MS	5
313	W96-075	MR	8
314	W96-218	MS	6
315	W96-355	S	7
316	W96-358	S	7
317	W96-359	MS	7
318	W96-398	S	6
319	W96-401	S	7
320	W96-410	S	8
321	W96-427	S	
322	W96-446	S	9
323	W96-447	R	4
324	W97-189	S	6
325	W97-234	S	5
326	TAM-107	S	9
327	KARL 92	S	8
328	ARAPAHOE	MS	3
329	LOCAL CHECK-1	S	7
330	LOCAL CHECK-2	MR	8
331	LOCAL CHECK-3	R	1, 1=7
332	CO940024	S	9
333	CO940128	S	9
334	CO940287	S	
335	CO940595	S	9
336	CO940607	MR	7
337	CO940610	MR	2
338	CO940611	MR	2
339	CO940615	MS	6
340	N97S139	MR	3
341	N97S142	MR (1 = S)	
342	N97S144	R	0
343	N97S146	MR	1
344	N97S151	MR (1 = S)	2, 1=9
345	N97S152	R	2
346	N97S154	MR	3
347	N97S084	S	2, 3=8

Entry	Sel. No.	Leaf Rust	Leaf rust
348	N97S311	S	8
349	N97S319	S	9
350	N97S320	MR	1
351	N97S322	MR	2
352	N97S116	MS	8
353	N97S117	S	9
354	N97S343	S	6
355	N97S347	MS	7
356	N97S077	MS	9
357	N97S078	S	9
358	N97S120	MR	3
359	N97S277	S	8
360	N97S278	S	9
361	N97S156	MS	6
362	N97S158	MS	6
363	N97S159	MS	
364	N97S160	MS	7
365	N97S186	MS	6
366	N97S191	MS	7
367	N97S192	MS	7
368	N97S195	MS	7
369	N97S196	S	8
370	TAM-107	S	
371	KARL 92	S	8
372	ARAPAHOE	MS	5
373	LOCAL CHECK-1	S	5
374	LOCAL CHECK-2	MR	9
375	LOCAL CHECK-3	R	0, 2=8
376	NE96435	MS	
377	NE96461	R (1 = S)	3
378	NE96515	MR	6
379	NE96573	MS	4
380	NE96579	MR	2
381	NE96580	S	4
382	NE96584	S	6
383	NE96585	S	4
384	NE96605	MS	4
385	NE96607	S	9
386	NE96618	MR	3
387	NE96622	MR	3
388	NE96623	MR	2
389	NE96625	MR (2 = S)	2
390	NE96628	MR	4
391	NE96630	S	4
392	NE96632	S	9
393	NE96638	S	5
394	NE96641	S	2, 1=8
395	NE96644	MS	8
396	NE96649	MS	7
397	NE96652	S	4

Entry	Sel. No.	Leaf Rust	Leaf rust
398	NE96654	S	4
399	NE96676	MS	4
400	NE96677	Seg-S	3
401	NE96690	R	2
402	NE96737	S	9
403	NE96744	S	6
404	NE96747	S	7
405	NE91518	S	8
406	SD92107	MS	
407	SD93267	S	9
408	SD93380	S	9
409	SD93195	S	9
410	SD93338	S	8
411	SD93528	MS	8
412	SD94149	S	7
413	SD94210	S	9
414	SD94227	S	9
415	SD94241	MS	7
416	SD94134W	S	
417	SD94139W	S	7
418	SD94217W	S	9
419	SD95129	MS	6
420	SD95139	S	8
421	SD95146	S	9
422	SD95174	S	8
423	SD95203	S	
424	SD95210	S	8
425	SD95218	S	9
426	ND8955-A	R	0
427	ND9421	S	9
428	ND9454	S	9
429	ND9512	S	
430	ND9515	S	9
431	ND9516	S	8
432	ND9535	S (3 = MR)	9
433	ND9536	S	8
434	ND9537	S	2
435	ND9542	MR	9
436	ND9560	S	
437	ND9579	MS	6
438	ND9581	MS	8
439	IDO477	S	9
440	IDO498	R (1 = S)	9
441	IDO501	S	7
442	IDO509	S	9
443	IDO514	S	8
444	IDO519	S	7
445	TAM-107	S	8
446	KARL 92	S	8
447	ARAPAHOE	S	5

Entry	Sel. No.	Leaf Rust	Leaf rust
448	LOCAL CHECK-1	MS	6
449	LOCAL CHECK-2	MR	8
450	LOCAL CHECK-3	R	2, 1=7

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
		ARS, OK	ARS, OK	KSU, St.John
		Seedling	Seedling	Field rating
		S-R	S-R	Rxn type
1	TAM-107	S	S	S
2	KARL 92	S	S	R
3	ARAPAHOE	S	S	MS
4	LOCAL CHECK-1	R	S	R
5	LOCAL CHECK-2	R	R	MR
6	LOCAL CHECK-3	R	R	R
7	TX95D8124	S	S	MS
8	TX95D8553	S	S	S
9	TX95D8827	S	S	S
10	TX95D8902	S	S	R
11	TX96D1072	S	S	R
12	TX96D1246	S	S	S
13	TX96D1392	S	S	MR
14	TX96D1624	S	S	S
15	TX96D1626	S	S	S
16	TX96D1735	S	S	MS
17	TX96D2240	S	S	S
18	TX96D2281	S	S	S
19	TX96D2370	S	S	MR
20	TX96D2547	S	S	S
21	TX96D2845	S	S	MS
22	M1107/94	S	S	R
23	R824-23	S	S	MS
24	TX97A0022	S	S	MS
25	TX97A0027	S	S	R
26	TX97A0070	S	S	MR
27	TX97A0071	S	S	MS
28	TX97A0076	S	S	MS
29	TX97A0077	S	Seg	MS
30	TX97A0099	S	S	R
31	TX97A0120	S	S	MR
32	TX97A0122	S	S	R
33	TX97A0130	S	S	S
34	TX97A0151	S	S	S
35	TX97A0153	S	S	MS
36	TX97A0165	S	S	R
37	TX97A0171	S	Seg	S
38	TX97A0180	S	Seg	MS
39	TX97A0181	S	R	MS
40	TX97A0217	S	R	S
41	TX97A0235	S	R	S
42	TX97A0282	S	S	S
43	TX97A0286	S	S	S
44	TX97A0320	S	S	MR
45	TX97A0324	S	S	S
46	TX97A0339	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
47	TX97A0342	S	S	S
48	TX97A0345	S	S	S
49	TX97A0350	S	S	MR
50	TX97A0377	S	S	MS
51	TX97A0383	S	Seg	S
52	TX97A0384	S	S	S
53	TAM-107	S	S	S
54	KARL 92	S	S	R
55	ARAPAHOE	S	S	S
56	LOCAL CHECK-1	R	S	R
57	LOCAL CHECK-2	R	R	MR
58	LOCAL CHECK-3	R	R	MR
59	HBG0358	S	S	MR
60	TX93V4315	S	S	S
61	TX93V5717	S	S	S
62	TX94V2327	S	S	MS
63	TX94V2906	S	S	MS
64	TX94V3329	S	S	S
65	TX94V4524	S	S	MR
66	TX94V4730	S	S	S
67	TX94V4930	S	S	MS
68	TX94V5922	S	S	MS
69	TX95V2512	S	S	S
70	TX95V4336	S	S	S
71	TX95V4339	S	S	R
72	TX95V4538	S	S	S
73	TX95V4926	S	S	MR
74	TX95V4933	S	S	MR
75	TX95V5124	S	S	S
76	TX95V5125	S	S	R
77	TX95V5332	S	S	R
78	TX95V5539	S	S	R
79	TX95V6427	S	S	S
80	TX95V6428	S	S	MS
81	TX95V6509	S	S	MR
82	TX95V6608	S	S	MS
83	TX95V6620	S	S	S
84	TX95V6627	S	S	S
85	TX96V2317	S	S	S
86	TX96V2321	S	S	MS
87	TX96V2324	S	S	MS
88	TX96V2332	S	S	S
89	TX96V2406	S	S	MR
90	TX96V2425	S	S	MS
91	TAM-107	S	S	MS
92	TX96V2845	S	S	MS
93	TX96V2857	S	S	R
94	TX96V2859	S	S	MR
95	TX96V2865	S	S	R

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
96	TX96V2889	S	S	MS
97	TX96V2893	S	S	MS
98	OK97402	S	S	MR
99	OK97411	SS	S	MR
100	OK97432	SS	S	S
101	OK97434	SS	S	MR
102	OK97467	S	S	R
103	OK97496	SS	S	MR
104	OK97499	S	S	MR
105	OK97508	S	S	MR
106	OK97535	S	S	S
107	OK97538	S	S	MR
108	OK97561	S	S	MR
109	OK97585	S	S	MR
110	OK97589	S	S	MR
111	OK97591	SS	S	MR
112	TAM-107	S	S	MS
113	KARL 92	SS	S	MR
114	ARAPAHOE	S	S	MS
115	LOCAL CHECK-1	R	S	R
116	LOCAL CHECK-2	R	R	MR
117	LOCAL CHECK-3	R	R	MR
118	OK98G501	S	S	MR
119	OK98G502W	S	S	MS
120	OK98G503	S	S	MS
121	OK98G504W	S	S	MS
122	OK98G505W	S	S	MR
123	OK98G506W	S	S	MS
124	OK98G507W	S	S	MR
125	OK98G508W	S	S	MR
126	OK98G509W	S	S	MR
127	OK98G510W	S	S	MR
128	RMH-01/98	S	S	MR
129	RMH-02/98	S	S	MR
130	RMH-03/98	S	S	MR
131	RMH-04/98	S	S	MR
132	RMH-05/98	S	S	MR
133	RMH-07/98	S	S	MR
134	RMH-08/98	S	S	MR
135	RMH-10-98	S	S	MR
136	RMH-11/98	S	S	MS
137	RMH-12/98	S	S	MS
138	RMH-13/98	S	S	MR
139	RMH-14-98	S	S	MS
140	RMH-16-98	S	S	MR
141	RMH-17/98	S	S	MS
142	RMH-18/98	S	S	MR
143	RMH-19/98	S	S	MR
144	RMH-21/98	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
145	RMH-22/98	S	S	MR
146	RMH-23/98	S	S	MR
147	RMH-24/98	S	S	MR
148	RMH-28/98	S	S	MS
149	RMH-30/98	S	S	MS
150	RMH-31/98	S	S	MR
151	RMH-32/98	S	S	MR
152	RMH-33/98	S	S	MR
153	TAM-107	S	S	S
154	KARL 92	S	S	R
155	ARAPAHOE	S	S	S
156	LOCAL CHECK-1	R	S	MR
157	LOCAL CHECK-2	R	R	MR
158	LOCAL CHECK-3	R	R	MS
159	KS93U10	S	S	MR
160	KS93U50	S	S	MS
161	KS93U76-3	S	S	MR
162	KS93U104	S	S	S
163	KS93U109	S	S	S
164	KS93U139	S	S	MR
165	KS93U141	S	S	MR
166	KS94U275	S	S	MR
167	KS94U290	S	S	MR
168	KS94U328	S	Seg	MR
169	KS94U331-101	S	R	MR
170	KS94U336	S	S	S
171	KS94U338-6	S	Seg	MS
172	KS94U370	S	S	MS
173	KS94U375	S	S	MS
174	KS94U391-2-1	S	S	MR
175	KS94U408	S	Seg	S
176	KS94U409	S	Seg	S
177	KS94U415	S	S	S
178	KS94U448-2	S	Seg	SEG
179	KS94U522	S	S	MS
180	KS94U528	S	S	MS
181	KS95U571-2	S	Seg	MS
182	KS95U589-5	S	S	MR
183	KS95U600-3	S	S	SEG
184	N96L9932	S	S	MS
185	N96L9934	S	S	S
186	N96L9938	S	Seg	S
187	N96L9941	S	S	MS
188	N96L9954	S	S	S
189	N96L9955	S	S	S
190	N96L9961	S	R	S
191	N96L9965	S	R	S
192	N96L9968	S	R	S
193	N96L9970	S	R	S

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
194	KS91W049-1-5-1	S	S	MR
195	KS91048-L-2-1	SS	S	MR
196	KS89180B-2-1-2	S	S	MR
197	KS89180B-2-2-1	S	S	MR
198	KS89180B-2-1-1	S	S	MR
199	KS97P1064-5-1-1	S	S	MR
200	KS91012-D-1-1	S	S	MR
201	KS91W052-1-2-1	S	S	MR
202	KS97P0771-9-3-1	S	S	MR
203	KS91077-A-2-1	S	S	MR
204	KS91022-A-7-1	S	S	R
205	KS91W009-6-1-2	S	S	MS
206	KS97P0948-2-1-3	S	S	MR
207	KS91005-B-9-1	S	S	MR
208	KS91112-A-2-3	S	S	MR
209	KS90175-1-2	S	S	MR
210	KS90175-1-1	S	S	R
211	KS91112A-2-2	S	S	MR
212	KS90175-3-1	S	S	MR
213	KS91005-B-4-1	S	S	MR
214	KS91112-A-6-2	S	S	MR
215	KS91082-C-7-1	S	S	MR
216	KS91082-C-7-2	S	S	MR
217	KS91134-D-1-1	S	S	MR
218	KS91012-D-8-2	S	S	MR
219	KS91113-B-1-1	S	S	MR
220	TAM-107	S	S	S
221	KARL 92	SS	S	MR
222	ARAPAHOE	S	S	MS
223	LOCAL CHECK-1	R	S	R
224	LOCAL CHECK-2	R	R	MR
225	LOCAL CHECK-3	R	R	MR
226	KS95H179-4	R	S	S
227	KS96HW10-1	S	S	MR
228	KS96HW10-3	SS	S	MR
229	KS96HW91	S	S	MR
230	KS96HW94	S	S	MR
231	KS96HW100-1	S	S	MR
232	KS96HW100-5	S	S	MR
233	KS96HW100-6	S	S	MR
234	KS96HW114	S	S	MR
235	KS96HW115	S	S	MR
236	KS96H216	R	S	S
237	KS97HW3	S	S	MR
238	KS97HW4	S	S	MR
239	KS97HW7	S	S	MR
240	KS97HW16	S	S	MR
241	KS97HW19	S	S	MR
242	KS97HW33	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
243	KS97H37	S	S	MR
244	KS97H45	S	S	MS
245	KS97H51	S	R	MS
246	KS97H63	S	S	MS
247	KS97H66	S	S	MR
248	KS97H79	S	S	S
249	KS97H82	S	S	S
250	KS97H97	S	S	MS
251	KS97H99	S	S	MS
252	KS97H115	S	S	MS
253	KS97H116	S	S	S
254	KS97H125	S	S	MR
255	KS97H127	S	S	MR
256	G96-044	S	S	MR
257	G96-080	S	S	MR
258	G96-092	S	S	R
259	G96-047	S	S	MR
260	G96-081	S	S	MS
261	G96-134	S	S	MR
262	G96-135	S	S	MR
263	G96-142	S	S	MS
264	G96-146	S	S	S
265	G96-154	S	S	S
266	G96-155	S	S	S
267	TAM-107	S	S	S
268	KARL 92	S	S	MR
269	ARAPAHOE	S	S	S
270	LOCAL CHECK-1	R	S	MR
271	LOCAL CHECK-2	R	R	MR
272	LOCAL CHECK-3	R	R	MR
273	H3-1	S	S	MR
274	H3-2	S	S	MR
275	H3-3	S	S	MR
276	H3-4	S	S	MR
277	H3-5	S	S	MR
278	H3-6	S	S	MS
279	H3-7	S	S	MS
280	H3-8	S	S	MR
281	H3-9	S	S	MR
282	H3-10	S	S	MR
283	H3-11	S	S	MR
284	H3-12	S	S	MS
285	H3-13	S	S	MS
286	H3-14	S	S	MR
287	H3-15	S	S	MS
288	H3-16	S	S	MR
289	H3-17	S	S	MR
290	H3-18	S	S	MR
291	H3-19	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
292	H3-20	S	S	MR
293	H3-21	S	S	MR
294	H3-22	S	S	MR
295	H3-23	S	S	MR
296	H3-24	S	S	MS
297	H3-25	S	S	S
298	H3-26	S	S	MR
299	H3-27	S	S	MR
300	H3-28	S	S	MR
301	H3-29	S	S	MR
302	H3-30	S	S	MR
303	W95-301	S	S	MR
304	W95-221	S	S	MR
305	W95-385	S	S	S
306	W95-089	S	S	MS
307	W95-091	S	S	MS
308	W95-392	S	S	MR
309	W95-222	S	S	MR
310	W94-232	S	S	MR
311	W96-016	S	S	MS
312	W96-037	S	S	S
313	W96-075	S	S	MS
314	W96-218	S	S	MS
315	W96-355	S	S	MS
316	W96-358	S	S	MS
317	W96-359	S	S	MS
318	W96-398	S	S	S
319	W96-401	S	S	S
320	W96-410	S	S	MR
321	W96-427	S	S	MS
322	W96-446	S	S	MS
323	W96-447	S	S	MS
324	W97-189	S	S	MR
325	W97-234	S	S	MR
326	TAM-107	S	S	S
327	KARL 92	S	S	MR
328	ARAPAHOE	S	S	S
329	LOCAL CHECK-1	R	S	MR
330	LOCAL CHECK-2	R	R	MR
331	LOCAL CHECK-3	R	R	MS
332	CO940024	S	S	S
333	CO940128	Seg	S	MS
334	CO940287	Seg	S	S
335	CO940595	S	S	SEG
336	CO940607	R	S	SEG
337	CO940610	S	S	S
338	CO940611	S	S	S
339	CO940615	S	S	S
340	N97S139	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
341	N97S142	S	S	MR
342	N97S144	S	S	MR
343	N97S146	S	S	MS
344	N97S151	S	S	MS
345	N97S152	S	S	MR
346	N97S154	S	S	MR
347	N97S084	S	S	S
348	N97S311	S	S	S
349	N97S319	S	S	SEG
350	N97S320	S	S	SEG
351	N97S322	S	S	S
352	N97S116	S	S	S
353	N97S117	S	S	S
354	N97S343	S	S	S
355	N97S347	S	S	S
356	N97S077	S	S	S
357	N97S078	S	S	S
358	N97S120	S	S	R
359	N97S277	S	S	S
360	N97S278	S	S	S
361	N97S156	S	S	MS
362	N97S158	S	S	MS
363	N97S159	S	S	MS
364	N97S160	S	S	MS
365	N97S186	S	S	MS
366	N97S191	S	S	MS
367	N97S192	S	S	MR
368	N97S195	S	S	MR
369	N97S196	S	S	MR
370	TAM-107	S	S	MS
371	KARL 92	S	S	MR
372	ARAPAHOE	S	S	S
373	LOCAL CHECK-1	R	S	R
374	LOCAL CHECK-2	R	R	MR
375	LOCAL CHECK-3	R	R	MS
376	NE96435	S	S	SEG
377	NE96461	S	S	S
378	NE96515	S	S	S
379	NE96573	S	S	S
380	NE96579	S	S	S
381	NE96580	S	S	MS
382	NE96584	S	S	S
383	NE96585	S	S	MS
384	NE96605	S	S	S
385	NE96607	S	S	S
386	NE96618	S	S	MR
387	NE96622	S	S	MR
388	NE96623	S	S	S
389	NE96625	S	S	MR

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
390	NE96628	S	S	MR
391	NE96630	S	S	S
392	NE96632	S	S	MS
393	NE96638	S	S	S
394	NE96641	S	S	S
395	NE96644	S	S	MR
396	NE96649	S	S	S
397	NE96652	S	S	MS
398	NE96654	S	S	S
399	NE96676	S	S	S
400	NE96677	S	S	S
401	NE96690	S	S	S
402	NE96737	S	S	S
403	NE96744	S	S	MS
404	NE96747	S	S	S
405	NE91518	S	S	MS
406	SD92107	S	S	S
407	SD93267	S	S	S
408	SD93380	S	S	S
409	SD93195	S	S	S
410	SD93338	S	S	S
411	SD93528	S	S	S
412	SD94149	S	S	S
413	SD94210	S	S	S
414	SD94227	S	S	S
415	SD94241	S	S	MS
416	SD94134W	S	S	S
417	SD94139W	S	S	S
418	SD94217W	S	S	S
419	SD95129	S	S	S
420	SD95139	S	S	S
421	SD95146	S	S	S
422	SD95174	S	S	S
423	SD95203	S	S	S
424	SD95210	S	S	S
425	SD95218	S	S	S
426	ND8955-A	S	S	S
427	ND9421	S	S	S
428	ND9454	S	S	MS
429	ND9512	S	S	S
430	ND9515	S	S	MR
431	ND9516	S	S	S
432	ND9535	S	S	S
433	ND9536	S	S	MS
434	ND9537	S	S	MS
435	ND9542	S	S	S
436	ND9560	S	S	MR
437	ND9579	S	S	S
438	ND9581	S	S	MS

Entry	Sel. No.	RW Aphid	Greenbug	SBMV / WSSMV
439	IDO477	S	S	S
440	IDO498	R	S	S
441	IDO501	S	S	S
442	IDO509	R	S	S
443	IDO514	S	S	S
444	IDO519	S	S	S
445	TAM-107	S	S	S
446	KARL 92	S	S	R
447	ARAPAHOE	S	S	S
448	LOCAL CHECK-1	R	S	R
449	LOCAL CHECK-2	R	R	MR
450	LOCAL CHECK-3	R	R	MS