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# SRPN: location of replicated yield trials and regional production zones.

- North central plains
- Central plains
- ⬡ Northern high plains
- ▲ Southern high plains
- ⊕ Southern plains
- ★ Intermountain
- unassigned

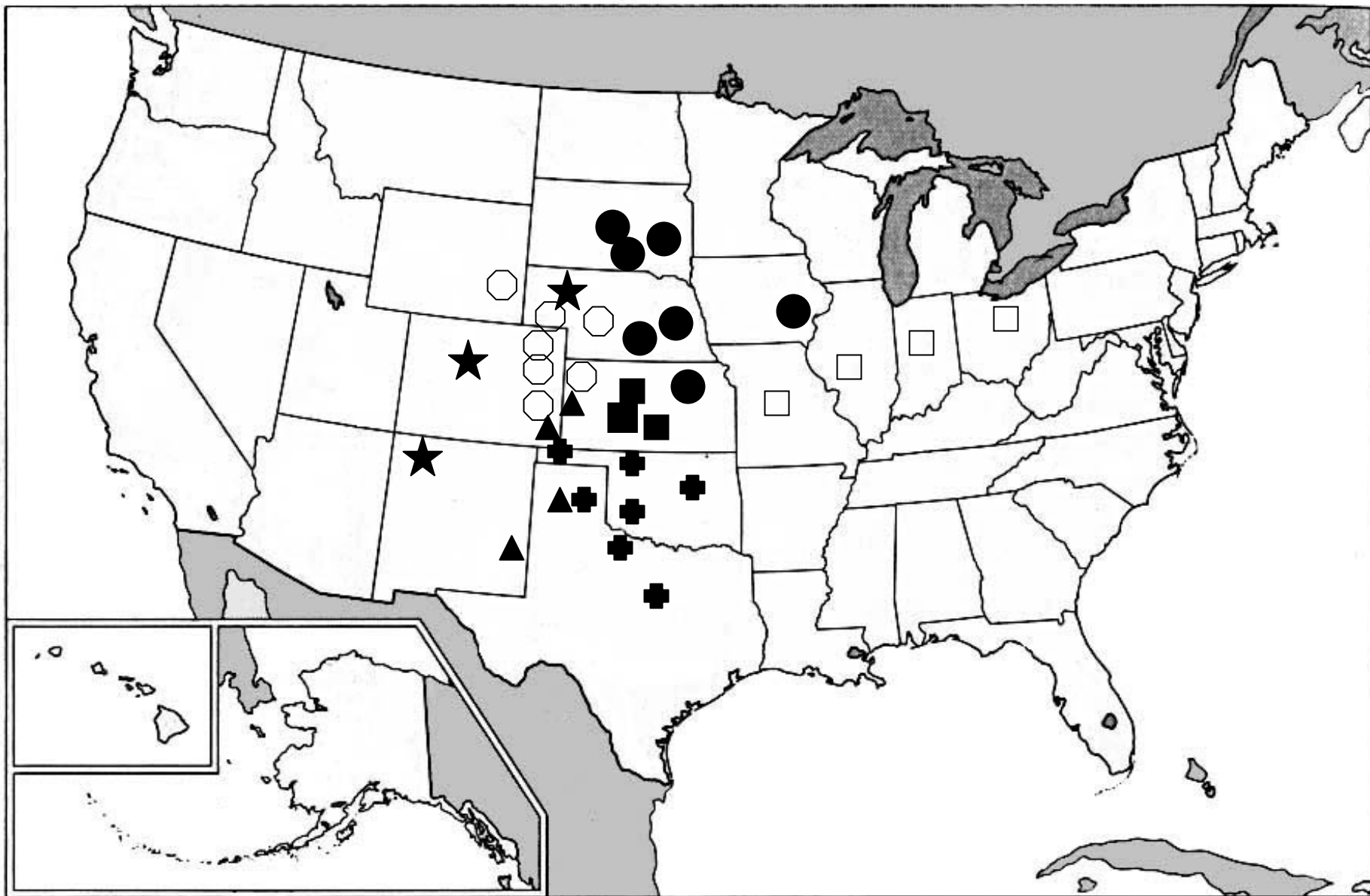


Table 1. Location notes, 2005 SRPN.

Location	Notes
Clovis, NM dryland	Planted 10-4-04, seeding rate 30 lb/ac, previous crop fallow; harvested 06-14-05; seasonal precipitation 18.3 in; fertilization (season): N 88 lb/ac; P 20 lb/ac; S 10 lb/ac; B 0.1 lb/ac; Fe 1 lb/ac; Mn 0.6 lb/ac; Zn 2 lb/ac. Herbicides: Express 1/4 oz/ac; 2,4,-D 1/2 pt/ac, spring application.
Clovis, NM irrigated	Planted 10-19-04, seeding rate 90 lb/ac, previous crop fallow; harvested 6-23-05; seasonal precipitation = 18.3 in + 13.0 in irrigation; fertilization (season): N 128 lb/ac; P 40 lb/ac; S 20 lb/ac; B 0.1 lb/ac; Fe 1 lb/ac; Mn 0.6 lb/ac; Zn 2 lb/ac. Herbicides: Express 1/4 oz/ac; 2,4,-D 1/2 pt/ac, spring application.
Farmington, NM irrigated	Planted 10-06-04, seeding rate 100 lbs/ac; harvested 07-19-2005; irrigation 22.75 in, seasonal precipitation = 6.6 in; total fertilizer = 136-52-30 N-P2O5-K2O lbs/acre; herbicide: 1/2 pint/acre 2, 4-D Lo Vol 6 Ester, and 1/8 pint/acre Clarity, April 1, 2005; insecticide = 1 pint Lorsban applied Apr 1, 2005.
Prosper, TX	Moderate stripe and leaf rust.
Chillicothe, TX	Moderate stripe and leaf rust.
Bushland, TX dryland	Lost, severe stripe rust and hail.
Bushland, TX irrigated	Lost, severe stripe rust and hail.
Ft. Cobb, OK	New location this year; replacement for Altus, OK. Sandy soils at Ft. Cobb conducive to drought stress, but also allow timely harvest. 2005 crop drought-ripened with very limited moisture in April-May. Moderate infection of stripe rust, followed by late and light infection of leaf rust. Early maturity highly favored in 2005.
Lahoma, OK	Hot spot for disease in 2004-2005. Significant yield losses expected for genotypes susceptible to either wheat spindle-streak mosaic or wheat soilborne mosaic virus. Prolonged and severe infection by stripe rust also reduced yields. BYD present in late April. Leaf rust also present in late April throughout May. Drought-accelerated maturity. Shattering occurred, but light. Lodging in the form of brackling.
Stillwater, OK	Very little disease, and planted extremely late (early December). Rain-delayed harvest, but no shattering.
Goodwell, OK irrigated	Stripe rust the main event in 2005. Prolonged and severe. Spotty indications of powdery mildew and leaf rust. Late freeze not believed to be a factor. Some wind-shattering. Highest yields 15 bu below normal. Stripe rust reduced irrigated yields of highly susceptible genotypes by up to 50 bu/ac.
Manhattan, KS	Lost, late season freeze damage.
Wichita, KS	Fall water damage, some cold damage after heading, severe soilborne mosaic virus.
Hutchinson, KS	
Hays, KS	Some shattering of heads.
Salina, KS	Late infection of leaf rust did affect test weight of susceptible later maturing selections.
Winfield, KS	Disease pressure from wheat spindle streak mosaic virus and stripe rust.
Colby, KS	Planted 9/21/04, fertilizer 60-0-0 (NPK), harvest 6/27/05
Garden City, KS	
Akron, CO	Planted September 27 2004, harvested July 14 2005 - excellent stands and fall growth, adequate winter and early spring moisture, very high yield potential in early April, very dry late April and early May, very severe drought stress by early May, high temperatures and hot dry winds the third week of May did severe damage (though a bit less than at Burlington), good early June rains were too late, very high temperatures late in grain filling. Two rains delayed harvest. Moderate levels of stripe rust. Heavy late spring RWA infestation while wheat was trying to extend from the boot.
Burlington, CO	Planted September 13 2004, harvested June 29 2005 - excellent stands and fall growth, adequate winter and early spring moisture, very high yield potential in early April, very dry late April and early May, very severe drought stress by mid-May, high temperatures and hot dry winds the third week of May did severe damage, good early June rains were too late, very high temperatures late in grain filling. Very low levels of stripe rust. Heavy late spring RWA infestation while wheat was trying to extend from the boot.

Table 1. Location notes, 2005 SRPN.

Location	Notes
Fort Collins, CO	Fort Collins (irrigated) (planted September 17 2004, July 20 2005) - high temperatures throughout the growing season limited yields and reduced test weights, though moisture was plentiful from June rains and irrigation. Severe stripe rust infection. Low levels of early spring RWA infestation.
Julesburg, CO	Planted September 15 2004, harvested July 11 2005 - excellent stands and fall growth, adequate winter and early spring moisture, high yield potential in early April, very dry late April and early May, drought stress by early May (not as severe as further south), high temperatures and hot dry winds did not do damage as further south, very high temperatures late in grain filling. Rains delayed harvest and lowered test weights. Moderate levels of stripe rust.
Walsh, CO	Planted September 29 2004, harvested June 28 2005 - excellent stands and fall growth, decent winter and early spring moisture, adequate moisture in April and May to sustain lush growth, good early June rains. Severe stripe rust infection before heading of most entries. Minor freeze damage due to April 28-29 low temperatures. Largely escaped drought and high temperatures in May as well as high temperatures late in grain filling.
Lincoln, NE	Infected with soilborne mosaic virus.
Clay Center, NE	Fairly heavy stripe rust infection.
North Platte, NE	
Alliance, NE	Infected with tanspot.
Sidney, NE	
Winner, SD	
Dakota Lakes, SD	
Brookings, SD	
St. Paul, MN (field rusts)	
Flora, IL	Fungal disease control by application of Tilt.
Lafayette, IN	Single replication, observation only.
Archer, WY	Typical rough going at WY.
Columbia, MO	Planted 10-07-04, harvested 06-29-05; wet winter conditions.
Wooster, OH	
Bozeman, MT	Single replication, observation only.
Crawfordsville, IA	

Table 2. Entries in the 2005 Southern Regional Performance Nursery.

Entry	Line	putative market class	pedigree	Source
1	Kharkof	HRW	Kharkof	check
2	Scout 66	HRW	Scout 66	check
3	TAM-107	HRW	TAM-107	check
4	Trego	HWW	Trego	check
5	T140		93WGRC27/T811	Trio
6	T141		T441/T13	Trio
7	T138		KS90WGRC 10/Jagger	Trio
8	T149		T118//T812*2/Karl	Trio
9	KS02HW34 = Danby	HWW	TREGO/JGR 8W	KSU-HAYS
10	KS02HW35-5	HWW	TREGO/JGR 8W	KSU-HAYS
11	KS03HW158	HWW	TREGO/CO960293	KSU-HAYS
12	OK93P656H3299-2C04	HRW	WO405D/HGF112//W7469C/HCF012	OSU
13	OK00421	HRW	Tonkawa/GK50	OSU
14	OK01817	HRW	OK94P549/Custer	OSU
15	OK01307	HRW	OK94406/Jagger	OSU
16	OK98G508W-4C04	HWW	Rio Blanco/KSWGRC10	OSU
17	TX00D1390	HRW	TX89D1253*2//TTCC404 (=WX93D208-9-1-17-13)	TAMU
18	TX01D3232	HRW	TX92U3060/TX91D6564 (=X95U104-P66)	TAMU
19	TX01V5314	HRW	TX89V4132/704 L I-2221	TAMU
20	TX01V5719	HRW	U1254-4-7-3//OGALLALA	TAMU
21	TX01V6008	HRW	TX90V8410/KS84063-9-39-3	TAMU
22	TX01U2598	HRW	TAM 201/COKER 9134//TAM 201	TAMU
23	CO00016	HRW	CO940606/TAM107R-2	CSU
24	CO00554	HRW	TAM 302/Akron//Halt	CSU
25	CO00739	HRW	CO931111//CO910239//Halt	CSU
26	CO00796	HRW	Transvaal/Arlin/2//CO910424/Halt	CSU
27	NE00403	HRW	PRONGHORN/ARLIN//ABILENE	UNL
28	NE01481	HRW	NE92458 (=OK83201/REDLAND)/IKE	UNL
29	NE01533	HRW	HBC059E/HBK0935W-24//2137	UNL
30	NI03418	HRW	W91-248/NE95544 (=MCVEY 78015/NE88521)//Thunderbird	UNL
31	HV9W98-926W	HWW	95CGT-96WD (bulk screen)	WESTBRED
32	HV9W99-558	HRW	FREEDOM/TOMAHAWK//JAGGER	WESTBRED
33	HV9W00-143R	HRW	D8869/KARL92//GSR2500	WESTBRED
34	HV9W00-1784R	HRW	SOLOMON/HALT	WESTBRED
35	HV9W00-993W	HWW	TX92V2519//OROBLANCA//BETTY	WESTBRED

Table 2. Entries in the 2005 Southern Regional Performance Nursery.

Entry	Line	putative market class	pedigree	Source
36	OK00514 = OK Bullet	HRW	KS96WGRC39/Jagger	OSU
37	OK00618W = Guymon	HWW	Intrada/Platte	OSU
38	OK00611W	HWW	KS96WGRC39/Jagger	OSU
39	SD02068	HRW	Crimson/SD97W606	SDSU
40	Neosho	HRW	OLA/KSU94U261//Jagger	Agripro North
41	W04-417	HRW	bulk population	Agripro North
42	BC97-ROM50W	HWW	JaggerxRomanian bulk	Agripro North
43	AP01T1112 = Fannin	HRW	TAM 105/3/NE70654/BBY//BOW"S"/4/Century*3/TA2450	AgriPro South
44	AP01T1114	HRW	TAM 105/3/NE70654/BBY//BOW"S"/4/Century*3/TA2450	AgriPro South
45	AP02T4342	HRW	Coronado//1174-27-46/X960210.	AgriPro South
46	AP03T7412	HRW	Rowdy//KS90061-7/X960060	AgriPro South
47	97x0850-16	HRW	W94-320xW96-422	Agripro North
48	N02Y5106	HRW	YUMA/T-57/3/CO850034/4/4*YUMA/5/KS91H184/ARLIN S /KS91HW29//NE89526)	ARS-LNK

Table 3. Agronomic summary of 48 hard winter wheats entered in the 2005 SRPN.

Entry	Line/selection	Grain yield, kg/ha		Volume	Days from	Plant
		mean	rank	weight, kg/hl	1/1 to heading	height, cm
1	Kharkof	2530	48	76.2	99	141
2	Scout 66	2873	47	77.0	93	132
3	TAM-107	3045	46	75.7	76	129
4	Trego	3284	43	77.4	77	131
5	T140	3479	31	75.4	82	131
6	T141	3304	41	75.4	82	132
7	T138	3562	26	75.2	80	131
8	T149	3452	33	76.6	79	130
9	KS02HW34 = Danby	3565	25	78.7	79	132
10	KS02HW35-5	3762	12	77.8	78	132
11	KS03HW158	3639	18	77.6	77	132
12	OK93P656H3299-2C04	4102	1	77.3	79	132
13	OK00421	3350	38	77.2	82	133
14	OK01817	3413	35	77.2	78	131
15	OK01307	3889	6	76.7	80	131
16	OK98G508W-4C04	3630	20	76.7	74	130
17	TX00D1390	3957	4	77.8	79	131
18	TX01D3232	3829	11	75.0	75	130
19	TX01V5314	3987	3	74.5	79	131
20	TX01V5719	3515	29	77.0	76	131
21	TX01V6008	3856	9	77.6	77	130
22	TX01U2598	3440	34	75.5	72	129
23	CO00016	3247	44	74.1	77	131
24	CO00554	3652	17	76.6	81	132
25	CO00739	3481	30	74.9	82	132
26	CO00796	3321	40	75.6	88	132
27	NE00403	3627	21	76.5	74	131
28	NE01481	3634	19	76.0	84	132
29	NE01533	3623	23	77.6	80	132
30	NI03418	3551	27	76.2	79	131
31	HV9W98-926W	3369	36	76.2	79	131
32	HV9W99-558	3877	7	76.2	77	130
33	HV9W00-143R	3290	42	77.3	72	130
34	HV9W00-1784R	3869	8	75.7	77	130
35	HV9W00-993W	3624	22	75.3	75	132
36	OK00514 = OK Bullet	3911	5	78.5	85	131
37	OK00618W = Guymon	3544	28	78.8	77	132
38	OK00611W	3848	10	77.0	81	131
39	SD02068	3202	45	75.0	83	132
40	Neosho	3478	32	77.0	79	130
41	W04-417	3596	24	76.9	77	131
42	BC97-ROM50W	4073	2	74.4	76	132
43	AP01T1112 = Fannin	3759	13	78.4	82	131
44	AP01T1114	3704	15	78.5	78	131
45	AP02T4342	3675	16	78.7	82	130
46	AP03T7412	3358	37	77.0	83	130
47	97x0850-16	3716	14	74.7	80	131
48	N02Y5106	3333	39	76.1	77	132
	mean	3559		76.6	80	131
	cv (%)	12.7				
	l.s.d. (0.05)	273				
	n	95				



Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Prosper, TX		Chilicothe, TX	
		mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	1827	47	2242	46
2	Scout 66	2873	47	2932	39	3092	25
3	TAM-107	3045	46	2764	43	2211	47
4	Trego	3284	43	3553	28	2381	45
5	T140	3479	31	3560	27	2848	35
6	T141	3304	41	3170	36	2971	32
7	T138	3562	26	3360	31	3130	24
8	T149	3452	33	3060	37	2908	34
9	KS02HW34 = Danby	3565	25	3979	14	3090	26
10	KS02HW35-5	3762	12	4589	1	3775	4
11	KS03HW158	3639	18	4082	12	3269	19
12	OK93P656H3299-2C04	4102	1	4512	2	3037	30
13	OK00421	3350	38	4154	11	3005	31
14	OK01817	3413	35	3015	38	2690	40
15	OK01307	3889	6	4333	5	3721	5
16	OK98G508W-4C04	3630	20	3259	33	2697	39
17	TX00D1390	3957	4	3923	16	3180	23
18	TX01D3232	3829	11	4241	9	3490	12
19	TX01V5314	3987	3	4324	6	3793	3
20	TX01V5719	3515	29	3802	21	3067	27
21	TX01V6008	3856	9	4304	8	3714	7
22	TX01U2598	3440	34	3921	17	3494	11
23	CO00016	3247	44	2098	46	2077	48
24	CO00554	3652	17	2793	41	3285	18
25	CO00739	3481	30	2921	40	3415	15
26	CO00796	3321	40	2309	45	2740	37
27	NE00403	3627	21	3602	24	2940	33
28	NE01481	3634	19	3605	23	2441	44
29	NE01533	3623	23	3484	29	3062	28
30	NI03418	3551	27	3856	18	3332	17
31	HV9W98-926W	3369	36	3237	35	2618	41
32	HV9W99-558	3877	7	4320	7	3899	2
33	HV9W00-143R	3290	42	2777	42	2734	38
34	HV9W00-1784R	3869	8	4004	13	3397	16
35	HV9W00-993W	3624	22	3575	26	3194	22
36	OK00514 = OK Bullet	3911	5	3822	20	3695	8
37	OK00618W = Guymon	3544	28	3593	25	2745	36
38	OK00611W	3848	10	3634	22	3668	9
39	SD02068	3202	45	3246	34	3043	29
40	Neosho	3478	32	2721	44	3522	10
41	W04-417	3596	24	4490	4	3206	21
42	BC97-ROM50W	4073	2	3434	30	4121	1
43	AP01T1112 = Fannin	3759	13	3961	15	3238	20
44	AP01T1114	3704	15	3833	19	3446	14
45	AP02T4342	3675	16	4161	10	3460	13
46	AP03T7412	3358	37	4510	3	3715	6
47	97x0850-16	3716	14	1800	48	2497	42
48	N02Y5106	3333	39	3309	32	2494	43
mean		3559		3537		3121	
cv (%)		12.7		11.4		11.4	
l.s.d. (0.05)		273		662		585	
n		95		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Clovis, NM, dryland		Clovis, NM, irr.		Farmington, NM, irr.	
		mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2630	48	3417	48	4039	47
2	Scout 66	2873	47	3219	45	3446	47	4141	46
3	TAM-107	3045	46	3668	34	6155	18	5362	25
4	Trego	3284	43	2982	46	5028	36	5508	20
5	T140	3479	31	3673	33	4931	38	4359	44
6	T141	3304	41	3425	40	5730	26	5288	28
7	T138	3562	26	3878	23	6628	10	5791	15
8	T149	3452	33	3738	30	4830	43	5963	13
9	KS02HW34 = Danby	3565	25	3899	21	4611	45	5700	18
10	KS02HW35-5	3762	12	3816	26	6039	22	5458	21
11	KS03HW158	3639	18	3651	35	4842	42	5355	26
12	OK93P656H3299-2C04	4102	1	4190	10	5545	27	6380	6
13	OK00421	3350	38	3240	44	5943	23	6063	10
14	OK01817	3413	35	3758	28	5156	34	6088	9
15	OK01307	3889	6	4294	6	3989	46	5700	18
16	OK98G508W-4C04	3630	20	3744	29	6082	21	5166	32
17	TX00D1390	3957	4	4232	8	5021	37	6544	3
18	TX01D3232	3829	11	4021	16	6937	5	6282	7
19	TX01V5314	3987	3	4316	5	4905	39	5060	35
20	TX01V5719	3515	29	3424	41	6318	15	5315	27
21	TX01V6008	3856	9	4176	11	5197	31	5385	24
22	TX01U2598	3440	34	3318	43	5540	28	5003	36
23	CO00016	3247	44	3946	19	6445	12	5912	14
24	CO00554	3652	17	4345	2	4824	44	6062	11
25	CO00739	3481	30	4326	4	5185	33	6402	5
26	CO00796	3321	40	3989	17	5799	25	7076	1
27	NE00403	3627	21	3673	32	6276	16	5755	16
28	NE01481	3634	19	3589	37	5186	32	4558	42
29	NE01533	3623	23	3355	42	6730	7	5274	29
30	NI03418	3551	27	4214	9	5238	30	4394	43
31	HV9W98-926W	3369	36	3866	25	6147	19	5421	23
32	HV9W99-558	3877	7	4249	7	7242	3	5109	34
33	HV9W00-143R	3290	42	3622	36	4888	40	4957	38
34	HV9W00-1784R	3869	8	4071	15	4861	41	4985	37
35	HV9W00-993W	3624	22	3870	24	6668	8	5119	33
36	OK00514 = OK Bullet	3911	5	3946	18	7102	4	5423	22
37	OK00618W = Guymon	3544	28	3427	39	6122	20	5265	30
38	OK00611W	3848	10	4086	13	6636	9	5190	31
39	SD02068	3202	45	3519	38	6157	17	4195	45
40	Neosho	3478	32	3709	31	6507	11	4846	39
41	W04-417	3596	24	4335	3	6388	13	3817	48
42	BC97-ROM50W	4073	2	4477	1	7671	1	6169	8
43	AP01T1112 = Fannin	3759	13	3881	22	5511	29	6602	2
44	AP01T1114	3704	15	4086	14	5052	35	4810	40
45	AP02T4342	3675	16	3791	27	5935	24	5732	17
46	AP03T7412	3358	37	3900	20	6746	6	4634	41
47	97x0850-16	3716	14	4171	12	7272	2	6409	4
48	N02Y5106	3333	39	2911	47	6332	14	6049	12
	mean	3559		3805		5734		5419	
	cv (%)	12.7		10.2		13.4		15.6	
	l.s.d. (0.05)	273		634		1251		1192	
	n	95		3		3		4	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Ft. Cobb, OK		Lahoma, OK		Goodwell, OK, irr.		Stillwater, OK	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2410	49	1645	50	2670	46	1372	50
2	Scout 66	2873	47	3015	40	1845	48	2867	45	2266	37
3	TAM-107	3045	46	3280	32	1870	47	3468	32	1814	49
4	Trego	3284	43	3367	29	2840	36	2374	50	2443	26
5	T140	3479	31	3452	24	3176	24	4111	21	2679	10
6	T141	3304	41	3098	38	3519	13	3865	26	1852	48
7	T138	3562	26	3519	20	3461	16	4120	19	2358	29
8	T149	3452	33	3647	17	3517	14	3262	39	2150	41
9	KS02HW34 = Danby	3565	25	3360	30	2358	45	4199	18	2493	21
10	KS02HW35-5	3762	12	3844	10	2381	44	4288	13	3024	2
11	KS03HW158	3639	18	3302	31	3228	22	4239	14	2302	34
12	OK93P656H3299-2C04	4102	1	3858	8	4138	3	4214	16	2916	3
13	OK00421	3350	38	2946	45	2928	32	4203	17	2143	43
14	OK01817	3413	35	3369	28	2524	42	3315	38	2672	11
15	OK01307	3889	6	3847	9	3932	7	4566	10	2822	5
16	OK98G508W-4C04	3630	20	3499	21	3150	25	2636	47	2549	17
17	TX00D1390	3957	4	3699	15	3954	6	3459	34	2629	15
18	TX01D3232	3829	11	3979	5	3468	15	3972	25	2686	9
19	TX01V5314	3987	3	4320	2	3674	10	4779	9	2455	24
20	TX01V5719	3515	29	3230	35	3073	27	4506	11	2033	45
21	TX01V6008	3856	9	3759	14	3259	20	5449	1	2517	19
22	TX01U2598	3440	34	3578	18	2993	28	3033	43	2304	33
23	CO00016	3247	44	2484	48	2596	41	2448	49	1928	47
24	CO00554	3652	17	3262	33	3125	26	3387	36	2526	18
25	CO00739	3481	30	2955	44	2968	30	3387	36	2150	41
26	CO00796	3321	40	2502	47	2163	46	3071	40	1986	46
27	NE00403	3627	21	3768	12	2934	31	3463	33	2455	24
28	NE01481	3634	19	3436	26	2986	29	3759	29	2744	6
29	NE01533	3623	23	3681	16	3255	21	3773	28	2466	23
30	NI03418	3551	27	3443	25	2786	37	3661	30	2647	12
31	HV9W98-926W	3369	36	3102	37	3593	11	4232	15	2360	28
32	HV9W99-558	3877	7	4252	3	4412	1	4842	6	2719	7
33	HV9W00-143R	3290	42	3457	23	3311	17	2952	44	2822	4
34	HV9W00-1784R	3869	8	4416	1	3181	23	4113	20	3033	1
35	HV9W00-993W	3624	22	3011	41	2869	34	3396	35	2269	36
36	OK00514 = OK Bullet	3911	5	4071	4	3306	18	5183	2	2688	8
37	OK00618W = Guymon	3544	28	2921	46	3266	19	3058	41	2284	35
38	OK00611W	3848	10	3549	19	3847	9	4994	3	2190	39
39	SD02068	3202	45	2975	42	1827	49	3035	42	2156	40
40	Neosho	3478	32	3831	11	3555	12	4015	23	2479	22
41	W04-417	3596	24	3230	35	2914	33	4851	5	2641	14
42	BC97-ROM50W	4073	2	3071	39	3894	8	4436	12	2233	38
43	AP01T1112 = Fannin	3759	13	3889	7	4223	2	4042	22	2647	12
44	AP01T1114	3704	15	3262	33	4055	4	3779	27	2596	16
45	AP02T4342	3675	16	3764	13	2598	40	4992	4	2139	44
46	AP03T7412	3358	37	3396	27	2654	38	4806	8	2313	31
47	97x0850-16	3716	14	2013	50	2647	39	2591	48	2421	27
48	N02Y5106	3333	39	2968	43	2446	43	3625	31	2504	20
	mean	3559		3398		3091		3823		2414	
	cv (%)	12.7		12.6		10.5		13.5		12.7	
	l.s.d. (0.05)	273		700		534		847		499	
	n	95		3		3		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Akron, CO		Fort Collins, CO, irr.		Walsh, CO		Julesburg, CO	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	1414	13	3811	42	3394	34	1553	19
2	Scout 66	2873	47	1260	23	4793	30	3501	28	1448	26
3	TAM-107	3045	46	1522	12	4373	39	2488	50	1852	6
4	Trego	3284	43	917	40	4672	33	2981	45	935	40
5	T140	3479	31	1318	18	3551	44	4535	5	697	45
6	T141	3304	41	818	44	3374	47	3049	44	1562	18
7	T138	3562	26	1101	32	4696	31	3311	37	1545	21
8	T149	3452	33	1836	6	4584	36	3647	24	1356	27
9	KS02HW34 = Danby	3565	25	908	41	5781	7	4230	8	1002	37
10	KS02HW35-5	3762	12	1213	26	5479	12	3750	18	1199	32
11	KS03HW158	3639	18	1341	17	4582	37	3735	19	1078	35
12	OK93P656H3299-2C04	4102	1	780	45	6205	3	3916	15	1731	10
13	OK00421	3350	38	1051	34	5707	9	2670	49	975	38
14	OK01817	3413	35	944	36	4911	25	2968	46	1529	22
15	OK01307	3889	6	1578	10	5010	20	4295	7	1513	24
16	OK98G508W-4C04	3630	20	1235	25	5467	15	3526	26	1760	8
17	TX00D1390	3957	4	1363	16	5842	5	3445	30	2062	2
18	TX01D3232	3829	11	1316	21	5485	11	3515	27	755	44
19	TX01V5314	3987	3	1910	5	6290	1	4555	3	1796	7
20	TX01V5719	3515	29	1607	9	5629	10	3143	43	1150	34
21	TX01V6008	3856	9	1195	28	5163	19	4423	6	1551	20
22	TX01U2598	3440	34	1394	14	5476	13	3282	38	935	40
23	CO00016	3247	44	2248	2	3526	45	3439	32	1715	12
24	CO00554	3652	17	1244	24	5918	4	4542	4	1527	23
25	CO00739	3481	30	2302	1	5754	8	4788	1	1876	3
26	CO00796	3321	40	1206	27	4622	35	3371	35	1636	16
27	NE00403	3627	21	760	46	4952	23	3185	41	1861	5
28	NE01481	3634	19	1184	29	4974	22	3405	33	1060	36
29	NE01533	3623	23	563	49	5418	16	3728	20	937	39
30	NI03418	3551	27	921	39	3407	46	3923	13	1601	17
31	HV9W98-926W	3369	36	832	43	4340	40	3367	36	666	47
32	HV9W99-558	3877	7	1556	11	4797	29	3479	29	1260	29
33	HV9W00-143R	3290	42	1020	35	4118	41	2930	47	605	49
34	HV9W00-1784R	3869	8	937	37	4938	24	3981	12	773	43
35	HV9W00-993W	3624	22	1130	30	5472	14	3683	21	1713	13
36	OK00514 = OK Bullet	3911	5	1318	18	5288	17	3986	11	1863	4
37	OK00618W = Guymon	3544	28	1820	7	4909	26	3210	39	1643	15
38	OK00611W	3848	10	1130	30	4997	21	4075	10	1491	25
39	SD02068	3202	45	677	47	2999	49	3181	42	690	46
40	Neosho	3478	32	854	42	3620	43	3865	17	1354	28
41	W04-417	3596	24	1388	15	3226	48	3914	16	607	48
42	BC97-ROM50W	4073	2	933	38	5180	18	3681	22	1724	11
43	AP01T1112 = Fannin	3759	13	482	50	4625	34	3663	23	836	42
44	AP01T1114	3704	15	1975	3	4873	27	4084	9	1742	9
45	AP02T4342	3675	16	1816	8	4694	32	3918	14	2067	1
46	AP03T7412	3358	37	574	48	2730	50	2771	48	563	50
47	97x0850-16	3716	14	1944	4	6216	2	3445	31	1202	31
48	N02Y5106	3333	39	1056	33	4862	28	3618	25	1233	30
mean		3559		1248		4820		3617		1338	
cv (%)		12.7				14.5		10.5		18.8	
l.s.d. (0.05)		273		n.s.		1146		623		411	
n		95		3		3		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Garden City, KS		Hays, KS		Hutchinson, KS	
		mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2939	31	2712	48	1881	48
2	Scout 66	2873	47	3100	26	3183	47	3094	34
3	TAM-107	3045	46	2067	48	3542	41	2677	43
4	Trego	3284	43	2865	37	4035	24	2914	40
5	T140	3479	31	3295	17	3856	31	3033	38
6	T141	3304	41	2717	44	3385	43	2656	44
7	T138	3562	26	2894	32	3968	28	3477	21
8	T149	3452	33	2573	45	3856	31	3094	34
9	KS02HW34 = Danby	3565	25	3856	5	3609	38	3634	17
10	KS02HW35-5	3762	12	3553	10	4416	10	3885	7
11	KS03HW158	3639	18	3737	8	4708	4	3410	23
12	OK93P656H3299-2C04	4102	1	3201	22	4932	1	4073	5
13	OK00421	3350	38	2833	38	3318	45	3519	20
14	OK01817	3413	35	2450	47	4730	3	3293	29
15	OK01307	3889	6	3927	2	4640	5	3717	14
16	OK98G508W-4C04	3630	20	2730	43	4416	10	3055	36
17	TX00D1390	3957	4	3201	21	4349	16	3862	8
18	TX01D3232	3829	11	3125	25	4416	10	4306	2
19	TX01V5314	3987	3	3788	6	4416	10	3564	18
20	TX01V5719	3515	29	3416	13	3721	36	3342	26
21	TX01V6008	3856	9	3914	3	3856	31	3840	9
22	TX01U2598	3440	34	3134	24	4551	7	3553	19
23	CO00016	3247	44	2876	36	4528	9	2078	47
24	CO00554	3652	17	3493	11	4282	18	2757	42
25	CO00739	3481	30	3883	4	4304	17	2080	46
26	CO00796	3321	40	3073	29	4102	23	2847	41
27	NE00403	3627	21	2827	39	4259	19	3289	30
28	NE01481	3634	19	3302	16	4573	6	3376	25
29	NE01533	3623	23	3078	27	3564	39	3667	15
30	NI03418	3551	27	3732	9	3990	26	3468	22
31	HV9W98-926W	3369	36	2733	42	3475	42	3315	27
32	HV9W99-558	3877	7	2878	34	4013	25	4270	3
33	HV9W00-143R	3290	42	2479	46	3990	26	3277	32
34	HV9W00-1784R	3869	8	3770	7	3744	35	4210	4
35	HV9W00-993W	3624	22	2786	40	4259	19	3392	24
36	OK00514 = OK Bullet	3911	5	3392	14	4371	15	3835	10
37	OK00618W = Guymon	3544	28	3078	28	3721	36	3286	31
38	OK00611W	3848	10	2883	33	4551	7	4001	6
39	SD02068	3202	45	2751	41	4192	22	3179	33
40	Neosho	347	32	3262	18	3901	29	2988	39
41	W04-417	3596	24	3351	15	3833	34	4542	1
42	BC97-ROM50W	4073	2	4028	1	4775	2	3313	28
43	AP01T1112 = Fannin	3759	13	3477	12	3206	46	3636	16
44	AP01T1114	3704	15	3150	23	4259	19	3753	13
45	AP02T4342	3675	16	3230	20	3878	30	3813	11
46	AP03T7412	3358	37	2878	34	3564	39	3795	12
47	97x0850-16	3716	14	3069	30	4416	10	2504	45
48	N02Y5106	3333	39	3237	19	3363	44	3053	37
	mean	3559		3167		4036		3367	
	cv (%)	12.7		7.1		6.8		11	
	l.s.d. (0.05)	273		365		450		606	
	n	95		3		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Colby, KS		Salina, KS		Wichita, KS		Winfield, KS	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	3085	48	2700	48	820	45	1901	48
2	Scout 66	2873	47	3946	34	3795	42	588	47	2468	43
3	TAM-107	3045	46	3448	44	4626	11	253	48	1928	47
4	Trego	3284	43	4104	27	4370	27	2616	28	3170	31
5	T140	3479	31	4019	31	4404	24	3255	17	3822	14
6	T141	3304	41	3408	45	3673	44	2609	29	3618	20
7	T138	3562	26	3890	35	4266	30	3832	10	3618	20
8	T149	3452	33	3332	47	4256	32	4238	5	3506	23
9	KS02HW34 = Danby	3565	25	4658	7	4391	25	784	46	1964	46
10	KS02HW35-5	3762	12	4331	17	4547	14	1002	42	2524	41
11	KS03HW158	3639	18	4754	4	4039	40	3488	15	3201	29
12	OK93P656H3299-2C04	4102	1	4763	3	4309	28	4776	1	4205	5
13	OK00421	3350	38	3963	32	3439	46	2285	34	3208	28
14	OK01817	3413	35	4288	20	4292	29	1475	39	2551	39
15	OK01307	3889	6	4442	10	4522	15	3523	14	4512	4
16	OK98G508W-4C04	3630	20	4819	1	4469	19	2668	26	3708	19
17	TX00D1390	3957	4	4295	18	4563	13	4348	3	4113	6
18	TX01D3232	3829	11	4423	12	4437	21	3847	9	3744	16
19	TX01V5314	3987	3	4575	8	4186	36	3119	20	3941	10
20	TX01V5719	3515	29	4095	28	4438	20	2967	23	3479	25
21	TX01V6008	3856	9	4334	16	4516	16	2360	33	3712	18
22	TX01U2598	3440	34	3632	42	4843	7	4233	6	4017	8
23	CO00016	3247	44	4126	26	4763	9	2691	25	2701	37
24	CO00554	3652	17	4744	6	4913	5	2625	27	3080	33
25	CO00739	3481	30	4404	13	4233	33	1800	38	2912	36
26	CO00796	3321	40	3950	33	4166	37	1397	40	2466	44
27	NE00403	3627	21	4039	30	4385	26	2389	32	3253	27
28	NE01481	3634	19	4361	14	4617	12	3580	13	2966	35
29	NE01533	3623	23	3680	40	4152	38	3106	21	3809	15
30	NI03418	3551	27	3647	41	4263	31	1843	36	2490	42
31	HV9W98-926W	3369	36	3610	43	3677	43	2492	31	3600	22
32	HV9W99-558	3877	7	4065	29	4848	6	4307	4	3896	13
33	HV9W00-143R	3290	42	3743	37	4220	34	2981	22	3896	12
34	HV9W00-1784R	3869	8	4429	11	5045	1	1903	35	2524	40
35	HV9W00-993W	3624	22	3711	39	4938	3	2589	30	3028	34
36	OK00514 = OK Bullet	3911	5	4462	9	4408	22	3420	16	4663	3
37	OK00618W = Guymon	3544	28	3734	38	4198	35	3221	18	3338	26
38	OK00611W	3848	10	4221	23	5026	2	3728	12	4066	7
39	SD02068	3202	45	4206	24	3530	45	981	43	2618	38
40	Neosho	3478	32	4343	15	4933	4	2753	24	3977	9
41	W04-417	3596	24	4250	22	4043	39	3783	11	3939	11
42	BC97-ROM50W	4073	2	4812	2	4406	23	3927	8	4712	1
43	AP01T1112 = Fannin	3759	13	3803	36	4485	17	4165	7	4676	2
44	AP01T1114	3704	15	4200	25	4485	17	4420	2	3723	17
45	AP02T4342	3675	16	4293	19	4629	10	947	44	3165	32
46	AP03T7412	3358	37	3386	46	3887	41	1832	37	3174	30
47	97x0850-16	3716	14	4747	5	4795	8	3213	19	3493	24
48	N02Y5106	3333	39	4280	21	3332	47	1188	41	2439	45
	mean	3559		4122		4322		2716		3365	
	cv (%)	12.7		6.8		8.1		16.6		8.8	
	l.s.d. (0.05)	273		455		574		903		485	
	n	95		3		3		2		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Lincoln, NE		Clay Center, NE	
		mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2488	47	3206	47
2	Scout 66	2873	47	2163	48	2724	50
3	TAM-107	3045	46	2858	46	2735	49
4	Trego	3284	43	4752	24	4080	41
5	T140	3479	31	4360	31	4988	25
6	T141	3304	41	5089	13	4539	31
7	T138	3562	26	4708	25	4450	35
8	T149	3452	33	4293	34	4282	38
9	KS02HW34 = Danby	3565	25	4147	38	5728	5
10	KS02HW35-5	3762	12	4539	28	6333	1
11	KS03HW158	3639	18	5122	12	5223	18
12	OK93P656H3299-2C04	4102	1	6434	2	5358	11
13	OK00421	3350	38	4909	17	3889	42
14	OK01817	3413	35	3351	44	4136	40
15	OK01307	3889	6	4853	20	5245	15
16	OK98G508W-4C04	3630	20	4876	18	4494	33
17	TX00D1390	3957	4	5470	6	5649	6
18	TX01D3232	3829	11	4775	23	5134	21
19	TX01V5314	3987	3	5055	14	5492	9
20	TX01V5719	3515	29	5290	7	4315	37
21	TX01V6008	3856	9	4595	27	5268	13
22	TX01U2598	3440	34	4237	36	3788	43
23	CO00016	3247	44	4977	15	3016	48
24	CO00554	3652	17	4797	22	4551	30
25	CO00739	3481	30	4338	32	3474	45
26	CO00796	3321	40	3867	41	3654	44
27	NE00403	3627	21	5257	9	5234	16
28	NE01481	3634	19	6120	4	5268	14
29	NE01533	3623	23	4696	26	5638	7
30	NI03418	3551	27	4326	33	5212	19
31	HV9W98-926W	3369	36	5167	10	4282	38
32	HV9W99-558	3877	7	4864	19	5033	23
33	HV9W00-143R	3290	42	4001	39	4674	28
34	HV9W00-1784R	3869	8	4472	30	6176	2
35	HV9W00-993W	3624	22	5907	5	4360	36
36	OK00514 = OK Bullet	3911	5	4842	21	5817	4
37	OK00618W = Guymon	3544	28	5279	8	4685	27
38	OK00611W	3848	10	5167	10	5631	8
39	SD02068	3202	45	3777	42	5010	24
40	Neosho	3478	32	4270	35	4741	26
41	W04-417	3596	24	3531	43	4640	29
42	BC97-ROM50W	4073	2	7185	1	6042	3
43	AP01T1112 = Fannin	3759	13	4943	16	5380	10
44	AP01T1114	3704	15	4528	29	5301	12
45	AP02T4342	3675	16	3295	45	4472	34
46	AP03T7412	3358	37	4170	37	5055	22
47	97x0850-16	3716	14	6389	3	3419	46
48	N02Y5106	3333	39	3912	40	4506	32
mean		3559		4634		4715	
cv (%)		12.7		13.0		8.5	
l.s.d. (0.05)		273		981		658	
n		95		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		North Platte, NE		Sidney, NE		Alliance, NE	
		mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2041	42	2970	22	4035	47
2	Scout 66	2873	47	2078	41	2578	39	4237	46
3	TAM-107	3045	46	1853	47	2791	31	5402	20
4	Trego	3284	43	2512	34	3183	14	5940	8
5	T140	3479	31	3234	17	2600	38	4887	32
6	T141	3304	41	2904	25	2477	41	4483	43
7	T138	3562	26	2185	40	2858	26	4663	39
8	T149	3452	33	1867	46	2802	30	5268	26
9	KS02HW34 = Danby	3565	25	3624	8	3531	4	5380	21
10	KS02HW35-5	3762	12	3496	11	3385	6	5940	8
11	KS03HW158	3639	18	3053	22	2937	23	5571	16
12	OK93P656H3299-2C04	4102	1	3116	20	3306	11	5985	6
13	OK00421	3350	38	1966	44	3295	12	4820	34
14	OK01817	3413	35	2823	26	3138	17	5055	28
15	OK01307	3889	6	3338	13	2679	34	5436	19
16	OK98G508W-4C04	3630	20	2485	36	3351	8	6041	4
17	TX00D1390	3957	4	2642	32	3508	5	5940	8
18	TX01D3232	3829	11	3062	21	2925	25	4999	30
19	TX01V5314	3987	3	3843	3	3363	7	5683	15
20	TX01V5719	3515	29	2807	27	2757	32	4797	36
21	TX01V6008	3856	9	3702	6	2645	36	5302	23
22	TX01U2598	3440	34	2980	23	1289	48	3407	48
23	CO00016	3247	44	1352	48	2511	40	4282	45
24	CO00554	3652	17	2766	28	2735	33	5716	13
25	CO00739	3481	30	2338	38	2645	36	4618	40
26	CO00796	3321	40	2019	43	2937	23	5705	14
27	NE00403	3627	21	2657	30	3632	2	6422	1
28	NE01481	3634	19	2925	24	3015	21	5335	22
29	NE01533	3623	23	3261	16	2858	26	5279	24
30	NI03418	3551	27	3729	4	3161	15	5571	16
31	HV9W98-926W	3369	36	2655	31	2455	42	5279	24
32	HV9W99-558	3877	7	3190	18	2230	45	4584	42
33	HV9W00-143R	3290	42	2207	39	2847	28	4909	31
34	HV9W00-1784R	3869	8	4010	2	3620	3	5985	6
35	HV9W00-993W	3624	22	2508	35	3811	1	6086	3
36	OK00514 = OK Bullet	3911	5	3331	14	3037	20	4842	33
37	OK00618W = Guymon	3544	28	2748	29	3318	9	5492	18
38	OK00611W	3848	10	3268	15	2197	46	4808	35
39	SD02068	3202	45	1904	45	3060	19	6019	5
40	Neosho	3478	32	2586	33	2813	29	4394	44
41	W04-417	3596	24	4022	1	3318	9	5817	11
42	BC97-ROM50W	4073	2	3532	9	2668	35	4786	37
43	AP01T1112 = Fannin	3759	13	3711	5	2376	44	5021	29
44	AP01T1114	3704	15	3664	7	2410	43	4618	40
45	AP02T4342	3675	16	3514	10	3284	13	5761	12
46	AP03T7412	3358	37	3340	12	1905	47	4719	38
47	97x0850-16	3716	14	2451	37	3150	16	6288	2
48	N02Y5106	3333	39	3151	19	3127	18	5189	27
mean		3559		2884		2906		5225	
cv (%)		12.7		10.3		9.3		8.9	
l.s.d. (0.05)		273		483		438		755	
n		95		3		3		3	



Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Brookings, SD		Dakota Lakes, SD		Winner, SD		Lingle, WY	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2545	24	2191	48	2371	44	1500	6
2	Scout 66	2873	47	2442	27	3445	47	2664	38	1325	16
3	TAM-107	3045	46	1869	42	4084	38	3254	11	957	43
4	Trego	3284	43	1650	47	4204	31	3336	8	1305	17
5	T140	3479	31	2868	14	4422	24	2810	30	1033	37
6	T141	3304	41	3224	6	4016	42	3032	24	814	46
7	T138	3562	26	2161	36	4178	33	2991	25	1031	38
8	T149	3452	33	2314	32	4467	20	2731	35	1354	15
9	KS02HW34 = Danby	3565	25	1793	44	4572	15	3490	3	1195	24
10	KS02HW35-5	3762	12	1713	45	4907	6	3209	13	648	48
11	KS03HW158	3639	18	2071	39	4662	13	3307	9	1175	26
12	OK93P656H3299-2C04	4102	1	2104	37	4463	21	2551	41	1645	2
13	OK00421	3350	38	2802	16	4092	37	2281	47	872	45
14	OK01817	3413	35	2465	26	4362	25	3100	19	1202	23
15	OK01307	3889	6	2965	10	4824	8	3370	6	1038	35
16	OK98G508W-4C04	3630	20	2434	28	4565	16	3561	2	1114	32
17	TX00D1390	3957	4	3028	8	4952	5	3156	16	1036	36
18	TX01D3232	3829	11	2417	30	4234	29	2378	43	1385	13
19	TX01V5314	3987	3	3369	3	5113	2	2784	32	1392	11
20	TX01V5719	3515	29	2046	41	3870	44	2292	46	930	44
21	TX01V6008	3856	9	2630	18	5079	3	2991	25	1390	12
22	TX01U2598	3440	34	2479	25	3641	46	1987	48	1112	33
23	CO00016	3247	44	2051	40	4024	41	2829	28	1145	29
24	CO00554	3652	17	2246	34	4031	40	3175	14	1531	4
25	CO00739	3481	30	1646	48	4032	39	3175	14	1753	1
26	CO00796	3321	40	2577	23	4151	34	2829	28	1408	9
27	NE00403	3627	21	2221	35	4328	26	3460	4	1130	31
28	NE01481	3634	19	3426	2	4685	12	2803	31	1610	3
29	NE01533	3623	23	2830	15	4324	27	3133	17	1291	19
30	NI03418	3551	27	3248	5	4441	23	3085	21	1473	7
31	HV9W98-926W	3369	36	2424	29	4193	32	3610	1	1302	18
32	HV9W99-558	3877	7	2677	17	3915	43	2634	39	1177	25
33	HV9W00-143R	3290	42	2629	19	4527	19	3385	5	989	41
34	HV9W00-1784R	3869	8	3344	4	5365	1	2897	27	1399	10
35	HV9W00-993W	3624	22	1801	43	4279	28	3212	12	1219	21
36	OK00514 = OK Bullet	3911	5	2958	11	4862	7	3036	23	1007	39
37	OK00618W = Guymon	3544	28	2084	38	4730	10	3074	22	1527	5
38	OK00611W	3848	10	2991	9	4230	30	2724	36	740	47
39	SD02068	3202	45	3033	7	5046	4	3306	10	1051	34
40	Neosho	3478	32	1711	46	4141	35	2713	37	991	40
41	W04-417	3596	24	2940	12	4707	11	2769	33	962	42
42	BC97-ROM50W	4073	2	2379	31	4445	22	2514	42	1437	8
43	AP01T1112 = Fannin	3759	13	2599	20	3806	45	2340	45	1217	22
44	AP01T1114	3704	15	2590	21	4118	36	2739	34	1379	14
45	AP02T4342	3675	16	2900	13	4534	18	3340	7	1172	27
46	AP03T7412	3358	37	3542	1	4535	17	3100	19	1143	30
47	97x0850-16	3716	14	2249	33	4595	14	3115	18	1244	20
48	N02Y5106	3333	39	2587	22	4772	9	2570	40	1170	28
	mean	3559		2522		4357		2942		1207	
	cv (%)	12.7		11.5		8		11.4		23.4	
	l.s.d. (0.05)	273		472		569		549		463	
	n	95		3		3		3		3	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Crawfordsville, IA		Columbia, MO		Flora, IL	
		mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2569	47	3616	48	4237	45
2	Scout 66	2873	47	3379	43	4102	45	4102	47
3	TAM-107	3045	46	3312	44	5272	15	5313	22
4	Trego	3284	43	4089	38	4223	42	4876	37
5	T140	3479	31	4694	30	5104	24	5481	15
6	T141	3304	41	4741	29	4842	30	4741	38
7	T138	3562	26	4627	31	5261	17	4909	34
8	T149	3452	33	3884	39	5057	27	5683	9
9	KS02HW34 = Danby	3565	25	5834	11	4539	36	4741	38
10	KS02HW35-5	3762	12	5921	9	5324	13	5077	28
11	KS03HW158	3639	18	4489	32	4876	29	5044	30
12	OK93P656H3299-2C04	4102	1	7445	1	5156	21	5784	7
13	OK00421	3350	38	3850	40	4031	46	4472	42
14	OK01817	3413	35	6143	5	4625	34	5246	24
15	OK01307	3889	6	5336	18	5288	14	5010	31
16	OK98G508W-4C04	3630	20	4479	34	5362	10	5985	3
17	TX00D1390	3957	4	6328	4	5349	11	5111	27
18	TX01D3232	3829	11	5777	12	5147	22	5246	24
19	TX01V5314	3987	3	5864	10	4542	35	4977	32
20	TX01V5719	3515	29	5158	21	3795	47	4909	34
21	TX01V6008	3856	9	6567	3	4775	31	5279	23
22	TX01U2598	3440	34	5360	16	5268	16	5447	16
23	CO00016	3247	44	2861	46	5985	2	5918	4
24	CO00554	3652	17	4297	36	5546	7	5380	20
25	CO00739	3481	30	1890	48	5597	6	5548	12
26	CO00796	3321	40	3204	45	5331	12	5548	12
27	NE00403	3627	21	3830	41	5223	18	5582	11
28	NE01481	3634	19	4096	37	5721	3	5515	14
29	NE01533	3623	23	6066	6	4539	36	4977	32
30	NI03418	3551	27	5242	19	5167	19	6153	2
31	HV9W98-926W	3369	36	3803	42	4362	39	4439	43
32	HV9W99-558	3877	7	5592	14	5692	5	5380	20
33	HV9W00-143R	3290	42	5192	20	4311	41	4371	44
34	HV9W00-1784R	3869	8	7068	2	5544	8	5750	8
35	HV9W00-993W	3624	22	4479	34	5100	25	5683	9
36	OK00514 = OK Bullet	3911	5	4852	26	4708	32	4674	41
37	OK00618W = Guymon	3544	28	5040	23	5012	28	5077	28
38	OK00611W	3848	10	5662	13	5160	20	5918	4
39	SD02068	3202	45	4829	27	4687	33	5145	26
40	Neosho	3478	32	4896	25	5080	26	5414	17
41	W04-417	3596	24	4482	33	4432	38	4170	46
42	BC97-ROM50W	4073	2	6002	7	5503	9	5414	17
43	AP01T1112 = Fannin	3759	13	5999	8	5718	4	5851	6
44	AP01T1114	3704	15	5108	22	5118	23	5414	17
45	AP02T4342	3675	16	4953	24	4125	44	4741	38
46	AP03T7412	3358	37	5400	15	4134	43	3800	48
47	97x0850-16	3716	14	5346	17	6364	1	6422	1
48	N02Y5106	3333	39	4744	28	4322	40	4909	34
	mean	3559		4891		4959		5185	
	cv (%)	12.7		11.6		9.7		6.6	
	l.s.d. (0.05)	273		1130		786		685	
	n	95		2		3		2	

Table 4. Mean grain yield (kg/ha) of 48 entries at individual locations of the 2005 SRPN.

entry	Line/selection	region		Lafayette, IN		Bozeman, MT	
		mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	3452	48	4808	47
2	Scout 66	2873	47	4306	44	5009	45
3	TAM-107	3045	46	4581	40	5415	44
4	Trego	3284	43	4622	38	6864	27
5	T140	3479	31	4984	31	5944	42
6	T141	3304	41	5324	17	5584	43
7	T138	3562	26	5167	24	6770	29
8	T149	3452	33	5136	27	6829	28
9	KS02HW34 = Danby	3565	25	5021	29	8239	2
10	KS02HW35-5	3762	12	5712	6	8105	5
11	KS03HW158	3639	18	5537	11	7479	14
12	OK93P656H3299-2C04	4102	1	6914	1	7393	18
13	OK00421	3350	38	5318	19	7559	12
14	OK01817	3413	35	5358	15	6530	34
15	OK01307	3889	6	5322	18	7157	21
16	OK98G508W-4C04	3630	20	4463	41	6898	25
17	TX00D1390	3957	4	5675	10	8028	6
18	TX01D3232	3829	11	5720	5	6995	24
19	TX01V5314	3987	3	5443	14	9184	1
20	TX01V5719	3515	29	4137	47	6103	40
21	TX01V6008	3856	9	4436	42	8146	4
22	TX01U2598	3440	34	4265	45	6696	31
23	CO00016	3247	44	4796	36	7984	7
24	CO00554	3652	17	4735	37	7683	10
25	CO00739	3481	30	5287	20	7788	9
26	CO00796	3321	40	4905	33	7554	13
27	NE00403	3627	21	4866	35	7321	19
28	NE01481	3634	19	5683	7	7613	11
29	NE01533	3623	23	5680	9	7063	23
30	NI03418	3551	27	5537	12	7080	22
31	HV9W98-926W	3369	36	5683	8	7255	20
32	HV9W99-558	3877	7	4613	39	6868	26
33	HV9W00-143R	3290	42	4877	34	6482	36
34	HV9W00-1784R	3869	8	6028	4	7433	16
35	HV9W00-993W	3624	22	4995	30	6561	33
36	OK00514 = OK Bullet	3911	5	5142	26	6716	30
37	OK00618W = Guymon	3544	28	5189	23	6394	39
38	OK00611W	3848	10	5154	25	8226	3
39	SD02068	3202	45	5214	21	7964	8
40	Neosho	3478	32	4427	43	6061	41
41	W04-417	3596	24	4933	32	4884	46
42	BC97-ROM50W	4073	2	6382	3	7459	15
43	AP01T1112 = Fannin	3759	13	5487	13	7399	17
44	AP01T1114	3704	15	5207	22	6405	38
45	AP02T4342	3675	16	5346	16	6511	35
46	AP03T7412	3358	37	4255	46	4765	48
47	97x0850-16	3716	14	6420	2	6683	32
48	N02Y5106	3333	39	5120	28	6480	37
mean		3559		5143		6924	
cv (%)		12.7		Single rep observation only. Excluded from regional means.			
l.s.d. (0.05)		273					
n		95		1		1	

Table 5. Summary of region-wide and state-wide mean grain yields (kg/ha) of entries in the 2005 SRPN.

entry	Line/selection	region		NM State		TX State		OK State		CO State		KS State		NE State		SD State	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	3430	48	2034	48	2024	48	2156	37	2365	48	2948	47	2394	48
2	Scout 66	2873	47	3656	47	3012	36	2498	44	2420	21	2997	46	2756	48	2792	43
3	TAM-107	3045	46	5092	24	2488	45	2608	42	2246	31	2768	47	3128	46	2897	39
4	Trego	3284	43	4607	41	2967	39	2756	41	1966	41	3480	33	4094	26	2861	41
5	T140	3479	31	4325	46	3204	28	3355	19	2132	38	3690	23	4014	28	3295	17
6	T141	3304	41	4861	32	3070	33	3083	31	1869	45	3180	43	3898	34	3395	13
7	T138	3562	26	5468	9	3245	27	3365	18	2301	27	3700	22	3773	37	2974	35
8	T149	3452	33	4956	31	2984	37	3144	27	2477	17	3516	32	3702	40	3048	30
9	KS02HW34 = Danby	3565	25	4833	33	3534	22	3102	30	2459	19	3395	37	4482	10	3072	27
10	KS02HW35-5	3762	12	5140	21	4182	1	3384	16	2411	22	3589	26	4739	4	3053	29
11	KS03HW158	3639	18	4690	37	3676	15	3268	23	2260	29	3926	13	4381	12	3164	24
12	OK93P656H3299-2C04	4102	1	5472	8	3775	11	3782	5	2744	6	4300	1	4840	3	2906	38
13	OK00421	3350	38	5180	18	3579	20	3055	33	2254	30	3271	41	3776	36	3022	31
14	OK01817	3413	35	5109	23	2852	42	2970	35	2305	26	3388	38	3701	41	3188	21
15	OK01307	3889	6	4765	35	4027	5	3792	4	2546	15	4216	3	4310	16	3612	6
16	OK98G508W-4C04	3630	20	5014	27	2978	38	2958	36	2582	12	3746	21	4249	21	3365	15
17	TX00D1390	3957	4	5394	12	3551	21	3435	12	2708	7	4092	5	4642	6	3614	5
18	TX01D3232	3829	11	5800	3	3866	7	3526	10	2291	28	4052	7	4179	23	2925	36
19	TX01V5314	3987	3	4790	34	4059	4	3807	3	3032	2	3983	10	4687	5	3700	3
20	TX01V5719	3515	29	5049	25	3435	23	3211	25	2549	14	3670	24	3993	29	2637	47
21	TX01V6008	3856	9	4966	30	4009	6	3746	6	2642	9	3862	15	4302	18	3433	11
22	TX01U2598	3440	34	4658	40	3707	13	2977	34	2405	24	3983	9	3140	45	2670	46
23	CO00016	3247	44	5482	7	2088	47	2364	47	2460	18	3430	35	3227	44	2837	42
24	CO00554	3652	17	5175	19	3039	34	3075	32	2769	5	3753	19	4113	24	3021	32
25	CO00739	3481	30	5414	11	3168	30	2865	40	3039	1	3452	34	3483	43	2764	44
26	CO00796	3321	40	5767	4	2524	44	2431	45	2329	25	3230	42	3636	42	3099	26
27	NE00403	3627	21	5287	14	3271	26	3155	26	2236	33	3547	28	4640	7	3177	22
28	NE01481	3634	19	4456	45	3023	35	3231	24	2172	36	3837	16	4533	9	3608	7
29	NE01533	3623	23	5135	22	3273	25	3294	21	2231	34	3603	25	4346	14	3343	16
30	NI03418	3551	27	4593	42	3594	19	3134	29	2021	39	3423	36	4400	11	3542	8
31	HV9W98-926W	3369	36	5172	20	2927	40	3322	20	1924	44	3311	39	3968	32	3268	19
32	HV9W99-558	3877	7	5491	5	4109	3	4056	1	2408	23	4026	8	3980	30	3018	33
33	HV9W00-143R	3290	42	4536	44	2756	43	3136	28	1840	46	3539	30	3728	39	3387	14
34	HV9W00-1784R	3869	8	4674	38	3700	14	3686	8	2242	32	3749	20	4853	1	3793	1
35	HV9W00-993W	3624	22	5209	16	3385	24	2886	37	2538	16	3576	27	4534	8	2912	37
36	OK00514 = OK Bullet	3911	5	5484	6	3758	12	3812	2	2648	8	4112	4	4374	13	3524	9

Table 5. Summary of region-wide and state-wide mean grain yields (kg/ha) of entries in the 2005 SRPN.

entry	Line/selection	region		NM State		TX State		OK State		CO State		KS State		NE State		SD State	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
37	OK00618W = Guymon	3544	28	4970	29	3169	29	2882	39	2438	20	3525	31	4304	17	3123	25
38	OK00611W	3848	10	5293	13	3651	16	3645	9	2558	13	4085	6	4214	22	3268	18
39	SD02068	3202	45	4581	43	3144	31	2498	43	1599	47	3169	44	3954	33	3749	2
40	Neosho	3478	32	5003	28	3122	32	3470	11	2016	40	3786	17	3761	38	3691	45
41	W04-417	3596	24	4744	36	3848	8	3409	14	1965	42	3972	12	4265	20	3396	12
42	BC97-ROM50W	4073	2	6112	1	3778	10	3408	15	2596	11	4300	2	4842	2	3008	34
43	AP01T1112 = Fannin	3759	13	5458	10	3599	18	3700	7	1964	43	3909	14	4286	19	2870	40
44	AP01T1114	3704	15	4665	39	3640	17	3423	13	2615	10	3977	11	4104	25	3069	28
45	AP02T4342	3675	16	5210	15	3810	9	3373	17	2801	4	3546	29	4065	27	3493	10
46	AP03T7412	3358	37	5047	26	4113	2	3292	22	1396	48	3286	40	3838	35	3699	4
47	97x0850-16	3716	14	5997	2	2148	46	2418	46	2805	3	3775	18	4339	15	3167	23
48	N02Y5106	3333	39	5192	17	2902	41	2886	38	2218	35	3074	45	3977	31	3206	20
	mean	3559		5029		3329		3181		2345		3628		4073		3168	
	cv (%)	12.7		14.3		11.5		13		21.4		8.8		10.4		10.0	
	l.s.d. (0.05)	273		1067		760		627		612		560		778		574	
	n	95		10		6		12		15		20		15		7	

Table 6. Mean grain yields (kg/ha) of entries in the 2005 SRPN for regional production zones (after Peterson, 1992, Crop Science 32: 907).  
Irrigated trials = Clovis and Farmington, NM, Goodland, OK and Ft. Collins, CO.

entry	Line/selection	region		Southern Plains		Southern High Plains		Central Plains	
		mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2028	48	3095	48	2087	48
2	Scout 66	2873	47	2670	43	3317	47	2771	47
3	TAM-107	3045	46	2568	44	3594	43	2773	46
4	Trego	3284	43	2826	41	3464	46	3478	31
5	T140	3479	31	3304	21	4108	25	3704	24
6	T141	3304	41	3079	32	3730	40	3230	39
7	T138	3562	26	3325	20	4178	19	3832	15
8	T149	3452	33	3091	31	3697	41	3758	18
9	KS02HW34 = Danby	3565	25	3246	25	4149	22	3026	44
10	KS02HW35-5	3762	12	3650	9	4289	13	3437	33
11	KS03HW158	3639	18	3404	18	3991	33	3789	16
12	OK93P656H3299-2C04	4102	1	3779	6	4213	18	4436	1
13	OK00421	3350	38	3230	26	3672	42	3216	40
14	OK01817	3413	35	2931	39	3583	44	3396	35
15	OK01307	3889	6	3870	3	4126	24	4230	7
16	OK98G508W-4C04	3630	20	2965	38	4020	32	3734	20
17	TX00D1390	3957	4	3474	17	3975	35	4240	5
18	TX01D3232	3829	11	3639	11	4399	9	4172	9
19	TX01V5314	3987	3	3891	2	4391	10	3897	13
20	TX01V5719	3515	29	3285	24	4075	27	3634	26
21	TX01V6008	3856	9	3834	4	4428	7	3749	19
22	TX01U2598	3440	34	3220	27	3818	39	4240	6
23	CO00016	3247	44	2272	47	4176	20	3399	34
24	CO00554	3652	17	3063	33	4301	12	3596	28
25	CO00739	3481	30	2966	37	4545	3	3156	41
26	CO00796	3321	40	2462	45	4058	29	3110	42
27	NE00403	3627	21	3194	28	3990	34	3595	29
28	NE01481	3634	19	3162	30	3871	38	3840	14
29	NE01533	3623	23	3287	23	4223	16	3699	25
30	NI03418	3551	27	3288	22	4277	14	3309	38
31	HV9W98-926W	3369	36	3191	29	4028	30	3371	36
32	HV9W99-558	3877	7	4074	1	4462	6	4264	3
33	HV9W00-143R	3290	42	3009	35	3480	45	3722	21
34	HV9W00-1784R	3869	8	3691	7	4171	21	3598	27
35	HV9W00-993W	3624	22	3052	34	4252	15	3716	23
36	OK00514 = OK Bullet	3911	5	3794	5	4606	2	4191	8
37	OK00618W = Guymon	3544	28	2978	36	3959	36	3576	30
38	OK00611W	3848	10	3647	10	4420	8	4314	2
39	SD02068	3202	45	2714	42	3902	37	3037	43
40	Neosho	3478	32	3354	19	4336	11	3779	17
41	W04-417	3596	24	3555	13	4497	4	4045	11
42	BC97-ROM50W	4073	2	3532	14	4964	1	4248	4
43	AP01T1112 = Fannin	3759	13	3667	8	4133	23	4024	12
44	AP01T1114	3704	15	3495	16	4093	26	4107	10
45	AP02T4342	3675	16	3519	15	4219	17	3454	32
46	AP03T7412	3358	37	3566	12	4074	28	3352	37
47	97x0850-16	3716	14	2328	46	4489	5	3718	22
48	N02Y5106	3333	39	2891	40	4024	31	2781	45
	mean	3559		3230		4081		3621	
	cv (%)	12.7		12.2		11.8		9.5	
	l.s.d. (0.05)	273		479		830		698	
	n	95		18		12		14	

Table 6. Mean grain yields (kg/ha) of entries in the 2005 SRPN for regional production zones (after Peterson, 1992, Crop Science 32: 907).  
Irrigated trials = Clovis and Farmington, NM, Goodland, OK and Ft. Collins, CO.

entry	Line/selection	region		North-central Plains		Northern High Plains		Intermountain		Irrigated trials	
		mean	rank	mean	rank	mean	rank	mean	rank	mean	rank
1	Kharkof	2530	48	2598	48	1881	39	3969	48	3527	48
2	Scout 66	2873	47	2731	47	1962	32	4365	43	3837	47
3	TAM-107	3045	46	2912	46	1916	36	5078	31	4880	28
4	Trego	3284	43	3647	41	1897	38	5387	21	4481	42
5	T140	3479	31	4033	27	1923	35	4275	45	4247	44
6	T141	3304	41	4142	20	1789	43	4472	40	4620	39
7	T138	3562	26	3836	34	1923	34	5124	30	5346	11
8	T149	3452	33	3655	40	1930	33	5341	22	4760	33
9	KS02HW34 = Danby	3565	25	4186	16	2184	14	5628	9	5121	24
10	KS02HW35-5	3762	12	4389	12	2098	22	5609	11	5327	12
11	KS03HW158	3639	18	4144	19	2129	19	5188	29	4801	31
12	OK93P656H3299-2C04	4102	1	4707	4	2347	4	6209	2	5647	5
13	OK00421	3350	38	3683	39	1855	41	5583	12	5524	6
14	OK01817	3413	35	3804	37	2157	17	5425	19	4962	26
15	OK01307	3889	6	4417	11	2131	18	5414	20	4884	27
16	OK98G508W-4C04	3630	20	4042	26	2241	12	5519	14	4863	30
17	TX00D1390	3957	4	4754	3	2248	10	6152	3	5319	13
18	TX01D3232	3829	11	4117	23	2035	29	5658	8	5716	3
19	TX01V5314	3987	3	4618	5	2498	2	5616	10	5243	20
20	TX01V5719	3515	29	3840	33	2080	23	5254	26	5432	9
21	TX01V6008	3856	9	4450	7	2242	11	5293	24	5305	14
22	TX01U2598	3440	34	3566	42	1754	44	4666	39	4781	32
23	CO00016	3247	44	3304	44	2067	25	4707	37	4685	37
24	CO00554	3652	17	3853	31	2166	16	5915	5	5126	23
25	CO00739	3481	30	3104	45	2256	7	5672	7	5276	19
26	CO00796	3321	40	3378	43	1995	31	5929	4	5291	17
27	NE00403	3627	21	4092	24	2072	24	5714	6	5161	21
28	NE01481	3634	19	4507	6	2056	27	4916	34	4615	40
29	NE01533	3623	23	4436	9	1872	40	5319	23	5297	16
30	NI03418	3551	27	4260	14	2112	20	4451	41	4192	45
31	HV9W98-926W	3369	36	3922	30	1705	47	5054	32	5065	25
32	HV9W99-558	3877	7	4134	21	2061	26	4858	35	5468	7
33	HV9W00-143R	3290	42	4008	29	1706	46	4691	38	4285	43
34	HV9W00-1784R	3869	8	4842	2	2250	9	5271	25	4745	35
35	HV9W00-993W	3624	22	4009	28	2112	21	5515	15	5160	22
36	OK00514 = OK Bullet	3911	5	4423	10	2258	6	5208	28	5724	2
37	OK00618W = Guymon	3544	28	4122	22	2200	13	5226	27	4871	29
38	OK00611W	3848	10	4440	8	2020	30	5018	33	5434	8
39	SD02068	3202	45	4180	17	1719	45	4384	42	4104	46
40	Neosho	3478	32	3711	38	1904	37	4342	44	4755	34
41	W04-417	3596	24	3817	35	2177	15	4240	46	4513	41
42	BC97-ROM50W	4073	2	4849	1	2367	3	5457	16	5888	1
43	AP01T1112 = Fannin	3759	13	4204	15	1806	42	5534	13	5303	15
44	AP01T1114	3704	15	4079	25	2253	8	4771	36	4642	38
45	AP02T4342	3675	16	3844	32	2522	1	5429	18	5368	10
46	AP03T7412	3358	37	4291	13	1607	48	4088	47	4722	36
47	97x0850-16	3716	14	4152	18	2279	5	6315	1	5683	4
48	N02Y5106	3333	39	3812	36	2048	28	5435	17	5281	18
	mean	3559		4001		2059		5181		4985	
	cv (%)	12.7		11.1		17.7		13.7		14.7	
	l.s.d. (0.05)	273		754		451		993		1070	
	n	95		15		21		10		13	

Table 7. Summary of mean volume weights (kg/hl) of 48 entries in the 2005 SRPN.

entry	Line/selection	region	Clovis, NM, irr.	Clovis, NM, dryland	Farmington, NM, irr.	Chillicothe, TX
1	Kharkof	76.2	74.9	74.9	80.1	68.9
2	Scout 66	77.0	77.6	72.8	80.0	79.2
3	TAM-107	75.7	77.0	78.0	79.5	79.2
4	Trego	77.4	77.2	80.4	81.9	82.5
5	T140	75.4	77.8	79.4	79.7	79.6
6	T141	75.4	75.1	76.4	78.6	79.2
7	T138	75.2	77.8	77.3	79.2	79.9
8	T149	76.6	74.8	78.3	80.5	81.3
9	KS02HW34 = Danby	78.7	78.0	77.4	81.9	83.5
10	KS02HW35-5	77.8	75.9	78.8	81.4	83.3
11	KS03HW158	77.6	77.9	79.2	80.5	82.5
12	OK93P656H3299-2C04	77.3	79.5	79.7	80.9	81.3
13	OK00421	77.2	78.1	79.6	79.9	81.1
14	OK01817	77.2	78.3	80.7	79.6	82.3
15	OK01307	76.7	76.3	79.1	81.0	81.7
16	OK98G508W-4C04	76.7	75.1	78.1	79.9	80.5
17	TX00D1390	77.8	78.4	77.8	81.9	82.5
18	TX01D3232	75.0	77.9	77.7	79.7	81.9
19	TX01V5314	74.5	76.4	76.6	78.2	80.5
20	TX01V5719	77.0	78.9	77.5	81.7	83.1
21	TX01V6008	77.6	78.8	79.9	81.4	82.5
22	TX01U2598	75.5	74.9	77.3	78.6	81.3
23	CO00016	74.1	74.5	72.7	79.8	79.2
24	CO00554	76.6	74.2	77.9	80.1	81.1
25	CO00739	74.9	71.7	77.9	80.7	80.5
26	CO00796	75.6	75.6	78.0	79.7	79.2
27	NE00403	76.5	76.8	79.3	80.2	81.7
28	NE01481	76.0	75.8	78.0	79.6	78.6
29	NE01533	77.6	78.9	79.6	80.7	82.3
30	NI03418	76.2	78.1	75.3	80.2	81.7
31	HV9W98-926W	76.2	77.5	80.2	79.7	82.5
32	HV9W99-558	76.2	77.5	78.6	80.3	81.3
33	HV9W00-143R	77.3	77.1	80.3	79.8	81.3
34	HV9W00-1784R	75.7	77.4	79.2	78.2	80.7
35	HV9W00-993W	75.3	76.6	79.3	78.4	81.7
36	OK00514 = OK Bullet	78.5	79.6	81.1	81.2	82.1
37	OK00618W = Guymon	78.8	79.2	81.1	82.4	82.5
38	OK00611W	77.0	78.6	79.3	79.9	81.3
39	SD02068	75.0	74.1	78.6	78.4	77.8
40	Neosho	77.0	79.9	78.1	78.7	81.3
41	W04-417	76.9	78.8	81.3	79.1	81.5
42	BC97-ROM50W	74.4	76.5	76.6	79.7	76.2
43	AP01T1112 = Fannin	78.4	75.3	79.7	81.9	82.9
44	AP01T1114	78.5	76.9	80.5	81.8	82.7
45	AP02T4342	78.7	80.8	80.2	80.7	83.3
46	AP03T7412	77.0	80.0	80.5	79.8	81.3
47	97x0850-16	74.7	74.9	74.3	80.6	80.9
48	N02Y5106	76.1	76.7	79.7	80.6	81.3
	mean	76.6	77.1	78.4	80.2	80.9



Table 7. Summary of mean volume weights (kg/hl) of 48 entries in the 2005 SRPN.

entry	Line/selection	region	Hutchinson,				Garden City, KS
			Prosper, TX	KS	Hays, KS	Colby, KS	
1	Kharkof	76.2	74.4	77.3	77.8	77.0	76.9
2	Scout 66	77.0	78.2	75.2	76.6	78.5	81.1
3	TAM-107	75.7	74.4	71.7	76.0	77.8	77.7
4	Trego	77.4	79.7	74.8	78.9	80.3	77.9
5	T140	75.4	74.9	71.3	74.2	77.5	80.0
6	T141	75.4	75.2	69.7	74.9	76.8	76.9
7	T138	75.2	76.8	70.7	75.4	76.9	78.1
8	T149	76.6	77.9	73.9	77.4	77.7	79.8
9	KS02HW34 = Danby	78.7	81.0	75.7	80.2	82.0	81.4
10	KS02HW35-5	77.8	80.8	75.6	80.3	81.2	79.6
11	KS03HW158	77.6	80.2	72.8	78.4	81.5	82.6
12	OK93P656H3299-2C04	77.3	78.9	75.1	78.7	78.8	82.0
13	OK00421	77.2	78.6	74.8	78.6	78.4	78.0
14	OK01817	77.2	78.6	72.1	78.2	78.9	80.4
15	OK01307	76.7	78.8	73.3	78.1	77.1	79.4
16	OK98G508W-4C04	76.7	76.6	73.7	78.3	78.8	80.1
17	TX00D1390	77.8	78.3	72.6	77.5	80.2	81.4
18	TX01D3232	75.0	74.8	70.8	75.5	75.9	80.3
19	TX01V5314	74.5	75.9	70.4	73.7	73.1	78.3
20	TX01V5719	77.0	78.6	73.9	79.6	78.5	81.9
21	TX01V6008	77.6	78.6	74.2	77.1	78.2	81.7
22	TX01U2598	75.5	77.4	69.7	76.5	76.4	79.8
23	CO00016	74.1	72.1	67.0	75.4	76.5	77.1
24	CO00554	76.6	76.2	72.1	77.1	79.1	78.0
25	CO00739	74.9	74.4	68.8	77.5	76.8	75.8
26	CO00796	75.6	74.9	73.5	77.4	76.8	79.6
27	NE00403	76.5	76.9	71.1	76.9	78.5	81.0
28	NE01481	76.0	75.3	71.2	77.1	77.5	78.9
29	NE01533	77.6	77.4	73.9	77.1	78.9	79.6
30	NI03418	76.2	74.9	72.2	76.8	76.0	79.9
31	HV9W98-926W	76.2	78.9	73.9	76.7	77.7	80.9
32	HV9W99-558	76.2	77.3	73.0	76.2	76.9	78.6
33	HV9W00-143R	77.3	76.2	75.7	78.2	77.6	80.9
34	HV9W00-1784R	75.7	75.9	72.6	75.0	74.6	79.8
35	HV9W00-993W	75.3	76.1	70.3	75.6	76.8	80.0
36	OK00514 = OK Bullet	78.5	79.1	76.4	79.2	80.2	81.3
37	OK00618W = Guymon	78.8	78.7	73.1	78.9	79.7	83.4
38	OK00611W	77.0	76.2	74.0	77.3	79.3	79.6
39	SD02068	75.0	74.7	72.4	75.1	76.7	77.8
40	Neosho	77.0	77.1	75.5	78.7	78.5	81.0
41	W04-417	76.9	76.2	74.7	76.9	78.0	80.2
42	BC97-ROM50W	74.4	72.2	68.9	73.8	75.5	77.9
43	AP01T1112 = Fannin	78.4	79.5	75.3	78.3	78.6	81.5
44	AP01T1114	78.5	79.6	76.1	79.4	79.2	81.3
45	AP02T4342	78.7	80.0	77.4	80.2	80.5	79.7
46	AP03T7412	77.0	77.3	73.3	75.4	76.2	79.8
47	97x0850-16	74.7	74.2	66.6	74.4	77.4	78.2
48	N02Y5106	76.1	75.2	71.9	75.6	75.3	81.3
	mean	76.6	77.0	72.9	77.1	77.9	79.8

Table 7. Summary of mean volume weights (kg/hl) of 48 entries in the 2005 SRPN.

entry	Line/selection	region	Fort				
			Winfield, KS	Salina, KS	Collins, CO	Walsh, CO	Julesburg, CO
1	Kharkof	76.2	77.3	72.5	77.6	78.3	72.2
2	Scout 66	77.0	76.0	74.2	78.9	77.8	75.5
3	TAM-107	75.7	71.2	74.8	76.9	74.3	74.0
4	Trego	77.4	75.6	77.0	79.3	76.8	76.9
5	T140	75.4	75.6	73.4	77.0	77.1	73.1
6	T141	75.4	73.9	72.6	76.4	75.9	73.1
7	T138	75.2	74.3	74.3	77.1	74.9	72.5
8	T149	76.6	75.6	73.4	78.1	77.4	73.9
9	KS02HW34 = Danby	78.7	78.7	77.7	80.4	80.1	75.8
10	KS02HW35-5	77.8	78.0	77.3	79.0	78.8	77.6
11	KS03HW158	77.6	74.3	74.6	79.2	79.2	75.2
12	OK93P656H3299-2C04	77.3	77.0	74.5	78.7	78.8	74.3
13	OK00421	77.2	77.7	72.5	77.6	77.4	73.3
14	OK01817	77.2	74.9	74.8	77.9	77.1	74.3
15	OK01307	76.7	76.2	73.9	77.0	78.1	73.0
16	OK98G508W-4C04	76.7	75.6	75.0	78.4	76.5	75.3
17	TX00D1390	77.8	76.0	75.1	79.0	78.3	75.9
18	TX01D3232	75.0	74.3	71.5	77.7	77.4	70.6
19	TX01V5314	74.5	71.9	69.1	75.8	76.5	70.3
20	TX01V5719	77.0	73.5	70.0	79.4	78.8	74.2
21	TX01V6008	77.6	76.2	74.5	79.1	79.0	72.9
22	TX01U2598	75.5	74.3	71.9	77.2	75.9	75.5
23	CO00016	74.1	73.9	74.4	76.0	74.3	71.9
24	CO00554	76.6	74.9	75.7	78.9	77.1	74.5
25	CO00739	74.9	74.9	75.4	77.9	76.6	73.3
26	CO00796	75.6	73.5	74.6	77.3	75.7	73.0
27	NE00403	76.5	76.2	76.0	76.8	75.9	73.1
28	NE01481	76.0	76.2	75.2	76.2	76.0	72.3
29	NE01533	77.6	75.2	74.6	79.2	79.2	75.8
30	NI03418	76.2	73.5	72.6	77.6	76.9	71.7
31	HV9W98-926W	76.2	73.9	73.5	77.1	77.4	73.3
32	HV9W99-558	76.2	77.1	73.6	76.2	77.0	71.0
33	HV9W00-143R	77.3	76.2	72.2	77.1	76.7	72.6
34	HV9W00-1784R	75.7	74.3	71.7	76.6	75.8	71.6
35	HV9W00-993W	75.3	71.2	71.6	78.3	76.8	73.7
36	OK00514 = OK Bullet	78.5	78.0	76.8	77.8	79.3	74.8
37	OK00618W = Guymon	78.8	74.6	74.6	80.4	79.6	76.2
38	OK00611W	77.0	74.3	75.4	76.9	77.9	72.7
39	SD02068	75.0	75.6	71.5	74.3	74.8	71.4
40	Neosho	77.0	77.3	75.2	78.6	77.9	76.2
41	W04-417	76.9	75.2	71.4	77.0	77.2	74.0
42	BC97-ROM50W	74.4	73.3	71.4	77.1	75.9	71.6
43	AP01T1112 = Fannin	78.4	77.7	76.1	79.3	79.6	74.0
44	AP01T1114	78.5	77.0	74.9	78.6	79.7	75.5
45	AP02T4342	78.7	78.3	76.8	78.0	79.7	75.2
46	AP03T7412	77.0	76.2	74.2	76.7	75.7	75.1
47	97x0850-16	74.7	74.6	72.0	77.8	75.4	73.8
48	N02Y5106	76.1	74.6	67.0	77.3	77.2	72.9
	mean	76.6	75.3	73.8	77.8	77.3	73.8

Table 7. Summary of mean volume weights (kg/hl) of 48 entries in the 2005 SRPN.

entry	Line/selection	region	Brookings, SD	Dakota Lakes, SD	Winner, SD	Flora, IL	Crawfords- ville, IA
1	Kharkof	76.2	69.7	76.4	75.5	76.1	80.8
2	Scout 66	77.0	65.3	80.9	79.5	80.6	72.8
3	TAM-107	75.7	61.4	76.0	76.9	79.3	73.6
4	Trego	77.4	56.5	77.0	80.9	81.3	72.3
5	T140	75.4	61.8	76.0	76.3	81.9	56.2
6	T141	75.4	68.8	77.7	77.8	78.7	68.2
7	T138	75.2	56.9	75.7	76.9	79.3	70.2
8	T149	76.6	62.9	79.3	77.1	82.6	70.7
9	KS02HW34 = Danby	78.7	58.3	81.9	82.6	81.3	76.0
10	KS02HW35-5	77.8	53.3	80.0	81.5	81.9	74.2
11	KS03HW158	77.6	57.7	79.9	80.8	80.6	72.9
12	OK93P656H3299-2C04	77.3	58.3	76.6	74.6	83.2	74.9
13	OK00421	77.2	67.9	78.7	77.5	81.9	73.7
14	OK01817	77.2	62.7	78.2	78.5	81.9	74.9
15	OK01307	76.7	63.3	76.9	78.9	81.9	70.9
16	OK98G508W-4C04	76.7	61.1	77.5	78.4	83.2	70.6
17	TX00D1390	77.8	67.4	77.6	74.5	82.6	73.1
18	TX01D3232	75.0	57.8	72.4	70.1	81.9	67.7
19	TX01V5314	74.5	64.4	76.6	73.7	79.3	71.3
20	TX01V5719	77.0	59.0	78.2	75.4	80.0	75.9
21	TX01V6008	77.6	62.9	79.2	78.9	82.6	73.5
22	TX01U2598	75.5	62.4	76.6	71.1	79.3	72.8
23	CO00016	74.1	60.8	73.3	71.2	79.3	65.4
24	CO00554	76.6	65.0	77.3	79.3	81.3	70.0
25	CO00739	74.9	53.1	75.1	78.1	80.0	66.0
26	CO00796	75.6	61.5	73.8	74.2	80.0	70.7
27	NE00403	76.5	59.0	77.0	78.0	83.9	68.2
28	NE01481	76.0	67.1	77.7	75.9	80.0	67.3
29	NE01533	77.6	65.2	77.1	77.9	81.3	73.9
30	NI03418	76.2	67.7	78.0	76.2	81.3	69.9
31	HV9W98-926W	76.2	59.6	75.5	77.4	80.6	70.6
32	HV9W99-558	76.2	62.9	77.5	77.7	81.3	72.3
33	HV9W00-143R	77.3	70.8	80.2	80.0	80.0	74.0
34	HV9W00-1784R	75.7	67.9	77.0	75.7	81.3	71.9
35	HV9W00-993W	75.3	56.7	73.1	78.9	81.3	69.0
36	OK00514 = OK Bullet	78.5	67.5	79.1	80.5	81.9	73.8
37	OK00618W = Guymon	78.8	62.9	81.5	81.5	85.1	73.9
38	OK00611W	77.0	64.9	78.2	78.0	81.9	72.6
39	SD02068	75.0	65.5	75.7	77.5	80.0	70.1
40	Neosho	77.0	61.3	75.8	73.9	80.6	72.8
41	W04-417	76.9	68.6	77.9	77.1	79.3	72.9
42	BC97-ROM50W	74.4	56.3	76.0	73.7	80.0	69.0
43	AP01T1112 = Fannin	78.4	69.4	78.6	79.5	83.9	74.9
44	AP01T1114	78.5	68.5	78.2	79.7	84.5	74.0
45	AP02T4342	78.7	66.1	79.3	80.6	82.6	76.1
46	AP03T7412	77.0	69.1	80.8	79.5	75.5	74.8
47	97x0850-16	74.7	57.5	75.3	74.9	77.4	71.0
48	N02Y5106	76.1	64.2	79.5	75.8	81.9	71.3
	mean	76.6	62.9	77.5	77.3	81.0	71.7

Table 7. Summary of mean volume weights (kg/hl) of 48 entries in the 2005 SRPN.

entry	Line/selection	region	Columbia, MO
1	Kharkof	76.2	80.6
2	Scout 66	77.0	80.5
3	TAM-107	75.7	79.7
4	Trego	77.4	82.3
5	T140	75.4	80.2
6	T141	75.4	79.4
7	T138	75.2	79.3
8	T149	76.6	81.0
9	KS02HW34 = Danby	78.7	83.9
10	KS02HW35-5	77.8	83.4
11	KS03HW158	77.6	81.8
12	OK93P656H3299-2C04	77.3	81.5
13	OK00421	77.2	80.4
14	OK01817	77.2	80.1
15	OK01307	76.7	80.8
16	OK98G508W-4C04	76.7	81.1
17	TX00D1390	77.8	81.5
18	TX01D3232	75.0	80.6
19	TX01V5314	74.5	77.7
20	TX01V5719	77.0	81.6
21	TX01V6008	77.6	81.8
22	TX01U2598	75.5	79.9
23	CO00016	74.1	79.9
24	CO00554	76.6	80.9
25	CO00739	74.9	80.7
26	CO00796	75.6	80.5
27	NE00403	76.5	82.0
28	NE01481	76.0	79.7
29	NE01533	77.6	81.4
30	NI03418	76.2	81.5
31	HV9W98-926W	76.2	79.3
32	HV9W99-558	76.2	80.7
33	HV9W00-143R	77.3	80.7
34	HV9W00-1784R	75.7	78.3
35	HV9W00-993W	75.3	79.2
36	OK00514 = OK Bullet	78.5	80.9
37	OK00618W = Guymon	78.8	83.6
38	OK00611W	77.0	79.6
39	SD02068	75.0	78.6
40	Neosho	77.0	81.3
41	W04-417	76.9	79.9
42	BC97-ROM50W	74.4	79.5
43	AP01T1112 = Fannin	78.4	82.2
44	AP01T1114	78.5	82.7
45	AP02T4342	78.7	82.1
46	AP03T7412	77.0	79.4
47	97x0850-16	74.7	79.7
48	N02Y5106	76.1	81.1
	mean	76.6	80.7

Table 8. Summary of plant heights (cm) of entries grown in the 2005 SRPN.

entry	Line/selection	region	Clovis,				Goodwell, OK
			NM, dryland.	Clovis, NM, irr.	Farmington, NM, irr.		
1	Kharkof	99	91	107	84	108	
2	Scout 66	94	90	101	85	107	
3	TAM-107	76	80	94	72	93	
4	Trego	77	73	94	77	87	
5	T140	83	83	100	76	103	
6	T141	83	80	94	79	109	
7	T138	80	87	96	76	106	
8	T149	80	79	91	76	99	
9	KS02HW34 = Danby	79	85	95	77	97	
10	KS02HW35-5	78	76	93	72	100	
11	KS03HW158	77	78	94	72	95	
12	OK93P656H3299-2C04	80	81	92	72	101	
13	OK00421	82	84	100	78	104	
14	OK01817	79	77	96	78	101	
15	OK01307	80	83	97	68	97	
16	OK98G508W-4C04	74	75	88	67	89	
17	TX00D1390	79	79	92	76	95	
18	TX01D3232	75	73	96	67	95	
19	TX01V5314	79	79	96	76	103	
20	TX01V5719	76	76	94	72	95	
21	TX01V6008	77	81	85	69	94	
22	TX01U2598	72	72	86	69	92	
23	CO00016	77	80	88	70	95	
24	CO00554	81	78	95	75	105	
25	CO00739	82	80	95	82	101	
26	CO00796	88	89	105	88	102	
27	NE00403	74	74	93	66	89	
28	NE01481	84	78	99	77	102	
29	NE01533	81	75	97	74	104	
30	NI03418	79	83	95	71	96	
31	HV9W98-926W	79	81	95	71	98	
32	HV9W99-558	78	81	93	69	109	
33	HV9W00-143R	73	71	92	66	93	
34	HV9W00-1784R	77	79	93	71	97	
35	HV9W00-993W	75	77	90	66	96	
36	OK00514 = OK Bullet	85	84	101	77	107	
37	OK00618W = Guymon	77	74	94	69	96	
38	OK00611W	82	76	94	80	103	
39	SD02068	83	77	95	81	98	
40	Neosho	80	81	98	72	97	
41	W04-417	77	73	92	73	96	
42	BC97-ROM50W	76	78	92	70	99	
43	AP01T1112 = Fannin	83	81	91	77	101	
44	AP01T1114	78	78	86	72	99	
45	AP02T4342	83	82	96	74	106	
46	AP03T7412	85	85	102	76	111	
47	97x0850-16	80	88	98	69	94	
48	N02Y5106	77	77	98	69	97	
	mean	80	80	95	74	99	

Table 8. Summary of plant heights (cm) of entries grown in the 2005 SRPN.

entry	Line/selection	region	Lahoma, OK	Hays, KS	Colby, KS	Walsh, CO	Akron, CO	Julesburg, CO	Clay Center, NE
1	Kharkof	99	95	108	105	110	52	69	112
2	Scout 66	94	84	107	102	94	50	58	104
3	TAM-107	76	69	86	75	69	42	47	87
4	Trego	77	79	84	75	74	41	41	89
5	T140	83	95	91	85	85	42	46	96
6	T141	83	100	91	81	80	43	47	99
7	T138	80	86	89	78	79	41	47	92
8	T149	80	92	93	75	79	39	46	97
9	KS02HW34 = Danby	79	72	86	75	80	42	46	93
10	KS02HW35-5	78	73	90	71	80	44	46	91
11	KS03HW158	77	73	82	75	76	37	47	93
12	OK93P656H3299-2C04	80	88	87	75	77	43	46	91
13	OK00421	82	87	90	78	80	44	50	91
14	OK01817	79	79	90	78	75	44	46	89
15	OK01307	80	90	93	83	88	43	47	92
16	OK98G508W-4C04	74	82	80	75	74	37	41	89
17	TX00D1390	79	90	89	78	80	42	44	94
18	TX01D3232	75	77	85	76	70	39	45	86
19	TX01V5314	79	85	88	76	81	48	48	91
20	TX01V5719	76	80	83	78	77	47	46	87
21	TX01V6008	77	79	85	80	81	42	48	87
22	TX01U2598	72	80	83	68	70	42	45	84
23	CO00016	77	84	89	73	74	47	47	88
24	CO00554	81	95	92	83	81	43	45	93
25	CO00739	82	89	92	80	85	46	45	95
26	CO00796	88	78	97	88	84	48	51	96
27	NE00403	74	76	78	71	69	41	44	86
28	NE01481	84	86	93	81	80	46	50	97
29	NE01533	81	89	92	73	80	43	48	91
30	NI03418	79	75	90	80	79	43	52	90
31	HV9W98-926W	79	91	91	73	76	43	49	92
32	HV9W99-558	78	97	91	75	79	48	50	87
33	HV9W00-143R	73	79	82	69	70	38	43	85
34	HV9W00-1784R	77	79	89	73	80	43	45	90
35	HV9W00-993W	75	83	82	68	74	44	48	87
36	OK00514 = OK Bullet	85	95	99	85	89	50	52	96
37	OK00618W = Guymon	77	95	80	68	77	43	44	89
38	OK00611W	82	99	97	78	83	50	44	97
39	SD02068	83	69	86	83	83	46	51	97
40	Neosho	80	91	94	71	86	48	51	90
41	W04-417	77	79	83	73	79	44	46	89
42	BC97-ROM50W	76	89	85	73	76	42	49	89
43	AP01T1112 = Fannin	83	96	96	86	86	47	49	94
44	AP01T1114	78	89	91	78	80	41	48	91
45	AP02T4342	83	81	97	86	89	48	52	97
46	AP03T7412	85	87	98	83	89	48	52	96
47	97x0850-16	80	84	91	80	74	44	47	91
48	N02Y5106	77	73	83	76	72	46	48	90
	mean	80	84	89	78	80	44	48	92

Table 8. Summary of plant heights (cm) of entries grown in the 2005 SRPN.

entry	Line/selection	region	North Platte,		Alliance,	Dakota
			NE	Sidney, NE	NE	Lakes, SD
1	Kharkof	99	109	104	102	104
2	Scout 66	94	97	97	102	102
3	TAM-107	76	81	71	90	86
4	Trego	77	86	71	84	91
5	T140	83	84	74	93	89
6	T141	83	89	76	88	97
7	T138	80	79	74	83	94
8	T149	80	69	79	81	89
9	KS02HW34 = Danby	79	79	76	88	97
10	KS02HW35-5	78	81	74	83	89
11	KS03HW158	77	81	74	90	89
12	OK93P656H3299-2C04	80	84	76	91	94
13	OK00421	82	86	84	95	89
14	OK01817	79	79	71	84	89
15	OK01307	80	79	69	95	81
16	OK98G508W-4C04	74	76	74	93	79
17	TX00D1390	79	89	74	91	89
18	TX01D3232	75	81	64	89	79
19	TX01V5314	79	84	69	89	81
20	TX01V5719	76	84	71	86	74
21	TX01V6008	77	81	74	93	74
22	TX01U2598	72	79	69	77	69
23	CO00016	77	79	76	84	79
24	CO00554	81	81	71	88	89
25	CO00739	82	84	76	80	91
26	CO00796	88	97	89	94	107
27	NE00403	74	84	74	90	86
28	NE01481	84	91	89	83	99
29	NE01533	81	89	74	95	86
30	NI03418	79	81	76	95	79
31	HV9W98-926W	79	79	76	79	89
32	HV9W99-558	78	79	74	81	74
33	HV9W00-143R	73	76	71	79	71
34	HV9W00-1784R	77	79	71	86	84
35	HV9W00-993W	75	76	79	90	91
36	OK00514 = OK Bullet	85	86	81	91	97
37	OK00618W = Guymon	77	81	81	95	94
38	OK00611W	82	89	71	81	86
39	SD02068	83	94	84	99	99
40	Neosho	80	79	69	84	89
41	W04-417	77	81	74	90	84
42	BC97-ROM50W	76	74	64	71	76
43	AP01T1112 = Fannin	83	86	76	95	81
44	AP01T1114	78	84	69	88	81
45	AP02T4342	83	86	79	95	94
46	AP03T7412	85	84	74	89	84
47	97x0850-16	80	89	76	89	81
48	N02Y5106	77	86	79	81	91
	mean	80	84	76	88	87

Table 8. Summary of plant heights (cm) of entries grown in the 2005 SRPN.

entry	Line/selection	region	Crawfords- ville, IA	Flora, IL	Columbia, MO	Lingle, WY
1	Kharkof	99	113	130	130	73
2	Scout 66	94	115	130	123	55
3	TAM-107	76	97	91	95	41
4	Trego	77	100	95	94	45
5	T140	83	101	102	104	47
6	T141	83	102	99	103	36
7	T138	80	98	97	100	44
8	T149	80	96	97	102	45
9	KS02HW34 = Danby	79	102	95	97	43
10	KS02HW35-5	78	99	95	97	44
11	KS03HW158	77	99	90	94	41
12	OK93P656H3299-2C04	80	92	95	94	54
13	OK00421	82	97	91	103	50
14	OK01817	79	96	95	94	45
15	OK01307	80	93	91	93	49
16	OK98G508W-4C04	74	91	89	90	42
17	TX00D1390	79	95	94	94	41
18	TX01D3232	75	92	88	91	44
19	TX01V5314	79	92	94	92	48
20	TX01V5719	76	89	89	89	41
21	TX01V6008	77	94	88	91	46
22	TX01U2598	72	85	86	91	40
23	CO00016	77	95	93	96	44
24	CO00554	81	97	94	99	52
25	CO00739	82	94	103	103	54
26	CO00796	88	107	103	109	55
27	NE00403	74	92	88	91	41
28	NE01481	84	108	102	107	54
29	NE01533	81	98	98	97	50
30	NI03418	79	94	90	91	46
31	HV9W98-926W	79	95	95	98	50
32	HV9W99-558	78	87	88	94	46
33	HV9W00-143R	73	88	85	90	41
34	HV9W00-1784R	77	93	89	93	47
35	HV9W00-993W	75	89	86	88	47
36	OK00514 = OK Bullet	85	106	98	99	50
37	OK00618W = Guymon	77	98	90	93	46
38	OK00611W	82	100	99	102	46
39	SD02068	83	108	102	104	51
40	Neosho	80	90	100	100	40
41	W04-417	77	94	90	93	44
42	BC97-ROM50W	76	92	90	93	44
43	AP01T1112 = Fannin	83	98	97	99	47
44	AP01T1114	78	92	91	95	47
45	AP02T4342	83	90	103	95	47
46	AP03T7412	85	103	99	102	51
47	97x0850-16	80	92	94	100	44
48	N02Y5106	77	95	89	91	45
	mean	80	96	95	98	47



Table 9. Summary of days (from 1/1) to heading for entries in the 2005 SRPN.

entry	Line/selection	region	Farmington,	Goodwell,	Lahoma,	Hays,	Colby,	Salina,
			NM	OK	OK	KS	KS	KS
1	Kharkof	147	160	134	149	134	140	137
2	Scout 66	140	130	127	148	131	136	131
3	TAM-107	137	131	124	142	128	134	123
4	Trego	140	131	130	141	130	138	128
5	T140	138	130	125	141	130	134	128
6	T141	139	131	127	140	131	136	128
7	T138	138	131	125	136	128	135	126
8	T149	137	131	124	134	127	135	124
9	KS02HW34 = Danby	140	131	130	144	130	137	127
10	KS02HW35-5	140	132	130	143	130	137	127
11	KS03HW158	139	131	127	141	130	137	127
12	OK93P656H3299-2C04	140	132	127	140	130	137	127
13	OK00421	140	131	130	141	130	137	128
14	OK01817	139	130	127	140	129	136	124
15	OK01307	138	132	127	137	129	135	126
16	OK98G508W-4C04	138	130	126	140	129	135	127
17	TX00D1390	138	130	126	140	129	135	127
18	TX01D3232	138	131	127	140	128	134	127
19	TX01V5314	138	130	126	138	129	135	127
20	TX01V5719	139	131	127	140	129	136	127
21	TX01V6008	138	132	126	140	129	135	126
22	TX01U2598	137	131	125	135	126	133	123
23	CO00016	139	130	125	141	131	135	126
24	CO00554	139	131	128	141	131	136	127
25	CO00739	140	132	129	141	130	137	127
26	CO00796	140	131	130	141	131	137	129
27	NE00403	140	131	129	142	130	136	128
28	NE01481	140	132	128	142	130	137	129
29	NE01533	140	131	128	140	129	136	128
30	NI03418	139	131	127	140	129	137	128
31	HV9W98-926W	139	131	127	138	129	136	128
32	HV9W99-558	137	131	124	133	125	133	125
33	HV9W00-143R	139	131	126	141	128	135	126
34	HV9W00-1784R	139	130	126	139	128	134	126
35	HV9W00-993W	141	133	127	140	130	138	128
36	OK00514 = OK Bullet	139	131	128	140	128	135	125
37	OK00618W = Guymon	141	134	129	141	131	137	128
38	OK00611W	139	131	125	138	128	135	125
39	SD02068	141	132	128	145	132	137	131
40	Neosho	138	130	124	140	127	134	126
41	W04-417	138	131	126	139	129	135	127
42	BC97-ROM50W	140	131	128	143	131	136	129
43	AP01T1112 = Fannin	138	132	127	138	128	135	127
44	AP01T1114	138	132	126	138	128	134	126
45	AP02T4342	138	130	125	140	127	134	125
46	AP03T7412	137	130	125	138	126	133	123
47	97x0850-16	139	130	127	142	129	135	128
48	N02Y5106	140	134	129	141	131	137	128
	mean	139	132	127	140	129	136	127

Table 9. Summary of days (from 1/1) to heading for entries in the 2005 SRPN.

entry	Line/selection	region	Lincoln,	Ft. Collins,	Akron,	Brookings,	Dakota	Winner,
			NE	CO	CO	SD	Lakes, SD	SD
1	Kharkof	147	143	150	145	160	157	156
2	Scout 66	140	141	143	140	156	148	147
3	TAM-107	137	138	142	140	155	147	146
4	Trego	140	140	146	143	155	148	148
5	T140	138	136	143	141	154	148	148
6	T141	139	138	143	142	154	149	146
7	T138	138	135	143	141	155	148	146
8	T149	137	135	143	141	155	147	146
9	KS02HW34 = Danby	140	141	145	143	156	149	148
10	KS02HW35-5	140	141	146	143	156	151	148
11	KS03HW158	139	137	146	143	155	150	148
12	OK93P656H3299-2C04	140	139	146	143	156	149	150
13	OK00421	140	138	148	143	155	152	152
14	OK01817	139	138	145	141	155	149	148
15	OK01307	138	137	146	142	154	148	147
16	OK98G508W-4C04	138	137	144	142	154	149	148
17	TX00D1390	138	137	145	141	154	149	148
18	TX01D3232	138	138	143	141	154	149	149
19	TX01V5314	138	136	145	141	155	148	149
20	TX01V5719	139	137	145	141	155	148	150
21	TX01V6008	138	136	143	141	155	148	148
22	TX01U2598	137	135	143	141	156	146	149
23	CO00016	139	138	143	140	156	149	146
24	CO00554	139	136	145	141	156	149	149
25	CO00739	140	138	147	142	156	150	148
26	CO00796	140	141	146	143	154	152	148
27	NE00403	140	143	146	142	155	152	147
28	NE01481	140	144	145	142	154	149	150
29	NE01533	140	144	147	142	156	150	151
30	NI03418	139	143	144	142	154	149	150
31	HV9W98-926W	139	144	145	141	155	150	149
32	HV9W99-558	137	142	143	141	155	148	149
33	HV9W00-143R	139	143	144	142	154	148	150
34	HV9W00-1784R	139	141	145	142	154	148	149
35	HV9W00-993W	141	144	147	142	155	151	152
36	OK00514 = OK Bullet	139	144	144	141	155	149	150
37	OK00618W = Guymon	141	145	145	143	155	152	149
38	OK00611W	139	144	144	141	156	148	150
39	SD02068	141	147	146	142	156	150	148
40	Neosho	138	134	143	141	156	149	148
41	W04-417	138	137	145	142	154	149	149
42	BC97-ROM50W	140	140	143	141	158	151	153
43	AP01T1112 = Fannin	138	134	144	141	156	150	149
44	AP01T1114	138	135	143	141	155	149	152
45	AP02T4342	138	136	143	140	154	149	148
46	AP03T7412	137	134	142	140	157	148	150
47	97x0850-16	139	138	144	141	157	149	149
48	N02Y5106	140	139	145	142	155	152	149
	mean	139		145	142	155	149	149

Table 9. Summary of days (from 1/1) to heading for entries in the 2005 SRPN.

entry	Line/selection	region	Lingle, WY	Columbia, MO
1	Kharkof	147	150	141
2	Scout 66	140	146	131
3	TAM-107	137	146	127
4	Trego	140	147	131
5	T140	138	148	130
6	T141	139	149	131
7	T138	138	148	127
8	T149	137	147	127
9	KS02HW34 = Danby	140	146	131
10	KS02HW35-5	140	146	131
11	KS03HW158	139	147	131
12	OK93P656H3299-2C04	140	147	132
13	OK00421	140	147	131
14	OK01817	139	148	130
15	OK01307	138	147	128
16	OK98G508W-4C04	138	147	130
17	TX00D1390	138	146	130
18	TX01D3232	138	147	128
19	TX01V5314	138	147	131
20	TX01V5719	139	146	130
21	TX01V6008	138	146	129
22	TX01U2598	137	147	128
23	CO00016	139	148	133
24	CO00554	139	146	131
25	CO00739	140	146	131
26	CO00796	140	148	132
27	NE00403	140	149	132
28	NE01481	140	148	133
29	NE01533	140	148	131
30	NI03418	139	148	131
31	HV9W98-926W	139	147	130
32	HV9W99-558	137	146	127
33	HV9W00-143R	139	148	130
34	HV9W00-1784R	139	149	129
35	HV9W00-993W	141	149	131
36	OK00514 = OK Bullet	139	147	130
37	OK00618W = Guymon	141	148	131
38	OK00611W	139	149	129
39	SD02068	141	147	132
40	Neosho	138	147	130
41	W04-417	138	146	129
42	BC97-ROM50W	140	146	134
43	AP01T1112 = Fannin	138	147	128
44	AP01T1114	138	148	128
45	AP02T4342	138	147	127
46	AP03T7412	137	148	128
47	97x0850-16	139	147	134
48	N02Y5106	140	147	132
	mean	139	147	130

Table 10. Grain yield and volume weight stability analyses of wheats grown in the 2005 SPRN.

Entry	Line or selection	grain yield			volume weight		
		regional average (kg/ha)	regression coef. (b)	r <sup>2</sup>	regional average (kg/hl)	regression coef. (b)	r <sup>2</sup>
1	Kharkof	2530	0.58	0.66	76.2	0.26	0.11
2	Scout 66	2873	0.64	0.67	77.0	0.81	0.80
3	TAM-107	3045	0.96	0.73	75.7	0.94	0.90
4	Trego	3284	0.99	0.90	77.4	1.27	0.88
5	T140	3479	0.92	0.88	75.4	1.27	0.72
6	T141	3304	0.94	0.90	75.4	0.71	0.79
7	T138	3562	1.00	0.93	75.2	1.20	0.96
8	T149	3452	0.90	0.84	76.6	1.04	0.96
9	KS02HW34 = Danby	3565	1.09	0.81	78.7	1.22	0.86
10	KS02HW35-5	3762	1.19	0.87	77.8	1.40	0.85
11	KS03HW158	3639	0.99	0.92	77.6	1.30	0.93
12	OK93P656H3299-2C04	4102	1.15	0.84	77.3	1.20	0.91
13	OK00421	3350	0.98	0.86	77.2	0.76	0.90
14	OK01817	3413	1.00	0.85	77.2	1.01	0.95
15	OK01307	3889	0.95	0.86	76.7	1.03	0.96
16	OK98G508W-4C04	3630	1.05	0.91	76.7	1.09	0.95
17	TX00D1390	3957	1.06	0.88	77.8	0.86	0.89
18	TX01D3232	3829	1.14	0.93	75.0	1.32	0.90
19	TX01V5314	3987	0.95	0.86	74.5	0.89	0.85
20	TX01V5719	3515	0.99	0.90	77.0	1.20	0.87
21	TX01V6008	3856	1.02	0.88	77.6	1.08	0.98
22	TX01U2598	3440	0.93	0.77	75.5	0.96	0.85
23	CO00016	3247	0.93	0.68	74.1	1.08	0.83
24	CO00554	3652	1.04	0.89	76.6	0.92	0.90
25	CO00739	3481	0.90	0.66	74.9	1.44	0.89
26	CO00796	3321	1.04	0.81	75.6	0.99	0.93
27	NE00403	3627	1.11	0.92	76.5	1.30	0.96
28	NE01481	3634	1.01	0.87	76.0	0.81	0.84
29	NE01533	3623	1.10	0.92	77.6	0.90	0.96
30	NI03418	3551	0.96	0.84	76.2	0.86	0.83
31	HV9W98-926W	3369	0.99	0.91	76.2	1.16	0.95
32	HV9W99-558	3877	1.02	0.84	76.2	0.99	0.95
33	HV9W00-143R	3290	0.92	0.89	77.3	0.65	0.74
34	HV9W00-1784R	3869	1.11	0.82	75.7	0.75	0.83
35	HV9W00-993W	3624	1.11	0.91	75.3	1.32	0.93
36	OK00514 = OK Bullet	3911	1.01	0.89	78.5	0.81	0.95
37	OK00618W = Guymon	3544	0.98	0.93	78.8	1.19	0.95
38	OK00611W	3848	1.09	0.90	77.0	0.90	0.95
39	SD02068	3202	1.05	0.82	75.0	0.80	0.89
40	Neosho	3478	1.02	0.89	77.0	0.99	0.87
41	W04-417	3596	0.86	0.72	76.9	0.73	0.84
42	BC97-ROM50W	4073	1.16	0.84	74.4	1.23	0.94
43	AP01T1112 = Fannin	3759	1.13	0.85	78.4	0.78	0.87
44	AP01T1114	3704	0.87	0.86	78.5	0.84	0.92
45	AP02T4342	3675	0.89	0.80	78.7	0.84	0.91
46	AP03T7412	3358	0.99	0.74	77.0	0.60	0.65
47	97x0850-16	3716	1.24	0.79	74.7	1.19	0.90
48	N02Y5106	3333	1.05	0.89	76.1	1.06	0.84
	mean	3559			76.6		

Table 11. Reactions of wheats grown in the 2005 SRPN to various viral pests.

Entry	Line	BYDV - Urbana, IL: fall inoculation with PAV-IL	SBMV		SBMV/WSSMV			
		Mean (n=2) % dwarfing	Urbana, IL (mean, n=2), 1-9, 1=res.	Wichita, KS, 1-9, 1=res.	Stillwater, OK, 1(res.) -4	Lahoma, OK, 1 (res.) - 4	Winfield, KS 1 (res.) - 5	
					03/08/05	03/18/05		
1	Kharkof	36	7	9	3	4	3	5
2	Scout 66	31	9	9	3	4	4	5
3	TAM-107	23	8	9	3	4	4	5
4	Trego	20	2	2	2	2	3	3
5	T140	20	1	1	1	1	2	2
6	T141	7	3	1	1	1	1	1
7	T138	23	4	1	1	1	1	1
8	T149	25	3	2	1	1	1	1
9	KS02HW34 = Danby	18	6	9	4	4	4	5
10	KS02HW35-5	16	5	9	4	4	4	5
11	KS03HW158	22	3	2	2	2	2	3
12	OK93P656H3299-2C04	24	1	1	1	2	1	1
13	OK00421	14	5	4	3	3	3	3
14	OK01817	16	9	5	3	3	2.5	4
15	OK01307	10	9	2	1	1	1	1
16	OK98G508W-4C04	16	7	2	1	1	2	1
17	TX00D1390	26	1	2	2	2	2	1
18	TX01D3232	21	6	2	3	3	1.5	2
19	TX01V5314	18	9	1	2	2	1.5	1
20	TX01V5719	27	9	8	1	2	3	3
21	TX01V6008	14	6	5	3	3	2	3
22	TX01U2598	12	6	1	2	2	1	1
23	CO00016	23	9	3	2	3	2.5	2
24	CO00554	19	4	2	1	2	2	2
25	CO00739	24	9	2	3	4	1	1
26	CO00796	17	8	9	3	4	2.5	4
27	NE00403	22	1	3	2	3	2	1
28	NE01481	15	1	2	1	1	2	3
29	NE01533	16	1	1	2	1	1	1
30	NI03418	14	6	5	3	2	2.5	5
31	HV9W98-926W	34	4	1	1	1	1	1
32	HV9W99-558	23	9	1	1	1	1	1
33	HV9W00-143R	23	1	2	2	3	1	1
34	HV9W00-1784R	11	9	7	3	3	1.5	4
35	HV9W00-993W	31	9	2	1	1	2.5	2
36	OK00514 = OK Bullet	21	8	2	2	3	2	1
37	OK00618W = Guymon	26	4	2	1	1	1.5	1
38	OK00611W	18	6	1	2	1	1	1
39	SD02068	21	5	8	3	4	4	5
40	Neosho	21	9	2	3	2	2	2
41	W04-417	14	1	1	2	2	1	1
42	BC97-ROM50W	15	2	1	1	2	1	1
43	AP01T1112 = Fannin	11	9	1	1	1	1	1
44	AP01T1114	26	8	1	1	1	1	1
45	AP02T4342	26	2	5	3	3	3	1
46	AP03T7412	23	7	4	3	4	2	3
47	97x0850-16	9	5	2	1	1	1	1
48	N02Y5106	22	5	7	3	4	2.5	4

Table 12. Reactions of entries in the 2005 SRPN to selected isolates of stem rust.

Entry	Line/selection	Seedling reactions - greenhouse					Field response, St. Paul, MN <sup>1</sup>	
		stem rust isolates					Severity	Infection response
		TPMK 74-MN-1409	QFCS 03ND76C	TTTT 01 MN 84 A-1	RCRS 77 ND 82A	RKQQ 99KS76A-1		
1	Kharkof	S	S	S	S	S	30	S
2	Scout 66	S	2+/S	S	S	S low IF	50	MS-S
3	TAM-107	2	1	2	1	0;	5	R-MR/MS
4	Trego	;	;	2	;	2	5	R
5	T140	2/S	2/S	S	S	S/2/;	60	MS-S
6	T141	2	1+	2	2	1	5	R-MR/S
7	T138	S/2	1/2+	S	S	0	5	R-MR/MS
8	T149	2	;1	0/S	1	0	10	MR-MS
9	KS02HW34 = Danby	0	;	1+	0;	;	0	
10	KS02HW35-5	;	;	;12-	;	0;	0	
11	KS03HW158	2	2		2	0/2	5	R
12	OK93P656H3299-2C04	3-?	2-	S	S	S	30	S
13	OK00421	S	S	S	S	S	70	S
14	OK01817	S	S/;	S	S	S	70	S
15	OK01307	;1-	0	0;	0	;	0	
16	OK98G508W-4C04	S	2+/S	S	S	S	70	MS
17	TX00D1390	S	S	S	S	;	60	S
18	TX01D3232	2	2	S	S	S	60	S
19	TX01V5314	;	;	0;	0	;	0	
20	TX01V5719	2	2	2	2	3	5	R-MR
21	TX01V6008	0/S	;S	S low IF	;3+	;	20	S
22	TX01U2598	0/S(1pl)	;	;2/S	0;	S/2	0	
23	CO00016	S	2+	S	2	2+	20	MR-MS
24	CO00554	2	;	02 low IF	0;1	1-	0	
25	CO00739	S/;1	;	S	S	;1-	10	S
26	CO00796	S	S/2	3+,2	S	2	20	MS-S
27	NE00403	2	;	2	1	;1	0	
28	NE01481	;	;	S	;	S	4	MS-S
29	NE01533	2	2-	S	2/S	S	50	S
30	NI03418	0	;	S	;	S	40	S
31	HV9W98-926W	S	S	S	S	S	40	S
32	HV9W99-558	0;	0	0	0;	0;	0	
33	HV9W00-143R	;	;/S	2+3-	0;	2/S	30	MS/S
34	HV9W00-1784R	S	2	2,3	2+	S	40	MS-S/TR
35	HV9W00-993W	2	2-	2	1	2	0	
36	OK00514 = OK Bullet	S	;3	2+3-	S/;S	;	30	S
37	OK00618W = Guymon	2	1	2	1	2-	0	
38	OK00611W	S	;12	;	;2S/S	;23-	5	S
39	SD02068	-	;	1+	0	-	0	
40	Neosho	2	0	1+2-	0;	;	0	0/MS
41	W04-417	;1-	0	0;	0	0	0	
42	BC97-ROM50W	S	;	2+3-;/1	0,;3-	0,3-	TS	
43	AP01T1112 = Fannin	0	0	0	0	0	-	
44	AP01T1114	0	0	0	0	0	20	MS
45	AP02T4342	0	0	0	0	0	0	/S
46	AP03T7412	;1-	0	;1-	0	0	0	
47	97x0850-16	S	0	S	S	S	30	MS
48	N02Y5106	2	0	2	0;	0;	TMR	

<sup>1</sup>"/" indicates a mixture of plants, predominant type listed first. "S" indicate susceptible, including infection types 3 or 4. Bulk of races for field inoculation: MCCF, QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT.

Table 13. Seedling reactions of entries in the 2005 SRPN to selected isolates of leaf rust.

Entry	Line/selection	Leaf rust isolates								Postulated Genes
		KDBG	MCDS	TCTD	MFBJ	THBJ	MBBJ	TNRJ	Bulk	
1	Kharkof	3;	3	3;	3+	3+	3+	3	3	0
2	Scout 66	;1c3	3	3	3+	3+	4	3	3;	14a
3	TAM-107	3	3	3-;	3+	3+	4	3;	3	0
4	Trego	;1c	;	;	0;	;	0;	;	;	+
5	T140	;3	3	3	3+	3+	3+	3	3;	14a
6	T141	;3	3	;1c2	3+	3+	3+	;1c2	;1c3	+
7	T138	;3	3	;1c	3+	4	3+;/1-	3;	;3	10
8	T149	3-;	3	3	3+	3+	2+3+	3	3;	0
9	KS02HW34 = Danby	3	;	;	;1-	;	;1-	;1c	;3	+
10	KS02HW35-5	;1c2	;	;	;	;	;1-	;1c	;	+
11	KS03HW158	;3	;	0;	0;	;	0;	;1c	;1c	+
12	OK93P656H3299-2C04	;	;1c	;	0;	;	0;	;2c-3	;1c	41
13	OK00421	;1c3	;2c3	3;	;	;1-	;	3	;3	+
14	OK01817	;3	;2c3	;	3	2+	;	2c;	;3	+
15	OK01307	;	;	;	;1-	;	;1-	;	;	+
16	OK98G508W-4C04	;	;	;	0;	0;	0;	3-;	;3	41
17	TX00D1390	0;	0;	0;	0;	0;	0;	;	;	+
18	TX01D3232	;	;	;	;1-	;	3	;1c	;3	16,24
19	TX01V5314	0;	;	;	0;	0;	0;	;	;	+
20	TX01V5719	;	;	;	0;	0;	0;	;1c	;	+
21	TX01V6008	;1c3	;	;	;	;	;	;	;1c	+
22	TX01U2598	;	;	;	;	;	;	;	;	+
23	CO00016	3	;3	3	;1-	;1-	;1-	3	3;	+
24	CO00554	;	3;	;	3+	3+	3+	3;	3;	10,14a
25	CO00739	3	3	;1c	;1	;1	;12-	;1c	;3	+
26	CO00796	;1c3	3	3	3+	3+	3+	3	3	14a
27	NE00403	;3	;	;	3+	;	3+	3	3;	24
28	NE01481	;3	;	;	;	;12-	3+	;1c	;1c3	16,24
29	NE01533	;	3;	;	3+	32+	32;	;1c	3;	10,26
30	NI03418	;1c	;1c2	;1c	;	2+	3+	;1c	;1c2	16
31	HV9W98-926W	;1c	3	;1c	3+	;	0;	3;	;3	+
32	HV9W99-558	;	;	;	;	0;	0;	;	;	+
33	HV9W00-143R	;1c	;1c2	;1c	;2-	;1-	;	;1c2	;3	+
34	HV9W00-1784R	31c	;	;1c	;	3+	0;	;1c3	3;	2a,10,26
35	HV9W00-993W	;31c	;	;	3	;	32;	;1c-3	;3	24
36	OK00514 = OK Bullet	;	;	;	;	0;	0;	;1c2	;1c	+
37	OK00618W = Guymon	3;	;	;	3+	;	;2	;1c2	;3	24,26
38	OK00611W	;	;	;	0;	0;	0;	;1c1	31c;	+
39	SD02068	;	;	;	;	;	3+	;1c2	;	16,24
40	Neosho	3;	;	;	3+	;	4	3;	;3	24
41	W04-417	;1c-3	;	;	;1-	;	12+	;1c	;3	+
42	BC97-ROM50W	;	;	;	;	;	;	;	;1c	+
43	AP01T1112 = Fannin	;	;	;	0;	0;	0;	;	;	+
44	AP01T1114	;	;	;	0;	0;	0;	;	;	+
45	AP02T4342	;	;	;	;	0;	0;	;	;	+
46	AP03T7412	;	;	;	;1-	0;	0;	;	;	+
47	97x0850-16	3-;	;1c	;	;	;1-	;	;1c2	;1c3	+
48	N02Y5106	;	3	3	3+	3+	3+	;	3;	+

Table 14. Field and greenhouse reactions to leaf rust, 2005 SPRN.

Entry No.	Line/selection	Castroville, TX	Stillwater, OK: seedling, Stakeman scores	St. Paul, MN incidence	St. Paul, MN reaction type	Brookings, SD, IT	Brookings, SD, Severity
1	Kharkof	failed to vernalize	3+	40	S	10S	2
2	Scout 66	60MS	3+	20	S	45S	5
3	TAM-107	100S	4	70	S	50S	5
4	Trego	80S	X;3-	70	S	.	.
5	T140	60MS	3+	50	MS	60S	6
6	T141	40MR	3+	40	MS	10MS	2
7	T138	80S	3+	5	R/ 50 S	35S	4
8	T149	40MSMR	3+	20	R-MR	15S	2
9	KS02HW34 = Danby	40MR	X;3	30	MR-MS	15MS	2
10	KS02HW35-5	40MR	X;3	30	MR-MS	25MS	3
11	KS03HW158	40MSMR	-	30	S	25MS	3
12	OK93P656H3299-2C04	30RMR	-	TR		0R	1
13	OK00421	failed to vernalize	-	30	MS	5MR	1
14	OK01817	40MR	-	10	R-MR	0R	1
15	OK01307	100S	-	30	MS	20S	3
16	OK98G508W-4C04	60MS	-	30	MS	5S	1
17	TX00D1390	20R	;	10	R-MR	0R	1
18	TX01D3232	20MR;	3+	10	R	0R	1
19	TX01V5314	Tr	X;3-	TR		0R	1
20	TX01V5719	Tr	X;3=	5	R	0R	1
21	TX01V6008	10R	3-	TR		10MR	1
22	TX01U2598	Tr	X;3-	-		0R	1
23	CO00016	failed to vernalize	3+	70	S	.	.
24	CO00554	60MS	3+	70	S	45S	5
25	CO00739	100S	3	-		.	.
26	CO00796	40MS	4	70	S	.	.
27	NE00403	80S	3	70	S	.	.
28	NE01481	40R	3	20	R	5MR	1
29	NE01533	60MS	3+	5	R	TMR	1
30	NI03418	60MS	3-	40	MS	10MS	2
31	HV9W98-926W	60MS	3+	30	MR-MS	TMR	1
32	HV9W99-558	40MRR	;3P3	5	R	10MS	2
33	HV9W00-143R	60S	3+	5	MR	TMR	1
34	HV9W00-1784R	failed to vernalize	3+	30	MR-MS	5MR	1
35	HV9W00-993W	100S	3-	40	MS	50S	5
36	OK00514 = OK Bullet	30MS	3-	10	MS	TS	1
37	OK00618W = Guymon	80S	3	70	S	10S	2
38	OK00611W	60S	3	10	MS	TS	1
39	SD02068	60MS	X;3-	10	MR	10MR	1
40	Neosho	100S	3-	10	MR	75S	7
41	W04-417	100S	3	10	R-MR	5MS	1
42	BC97-ROM50W	40MRMS	3	20	MR	5MS	1
43	AP01T1112 = Fannin	60MS	X;3-	-		0R	1
44	AP01T1114	40MSMR	;	TR		0R	1
45	AP02T4342	20R	X;3	TR		0R	1
46	AP03T7412	10R	3	TR		0R	1
47	97x0850-16	10R	3	5	R-MR	10S	2
48	N02Y5106	60S	3+	10	MR	15MS	2



Table 14. Field and greenhouse reactions to leaf rust, 2005 SPRN.

Entry No.	Line/selection	Lr DNA markers - allele, primers, detected band size					
		Lr34/Yr18	Lr34/Yr18	Lr37/SR38/Yr17	Lr39/Lr41	Lr50	Lr50
		BARC352 T264,265	GWM295 T273	VENTRIUP-LN2 259	GDM35 T184	GDM87 T120-125	GWM382 T131-156
1	Kharkof	+	-	-	-	?	-
2	Scout 66	+	-	-	-	+	-
3	TAM-107	-	-	-	-	+	-
4	Trego	-	-	-	-	+	-
5	T140	+	-	-	-	+	-
6	T141	+	-	-	-	+	-
7	T138	+	-	-	-	+	-
8	T149	-	-	-	-	-	+
9	KS02HW34 = Danby	-	-	+	-	-	-
10	KS02HW35-5	-	-	+	-	-	-
11	KS03HW158	-	-	-	-	-	-
12	OK93P656H3299-2C04	-	-	-	-	+	-
13	OK00421	-	-	-	-	+	+
14	OK01817	+	-	-	-	-	+
15	OK01307	+	-	+	-	-	-
16	OK98G508W-4C04	+	-	-	-	+	-
17	TX00D1390	-	-	-	-	-	-
18	TX01D3232	-	-	-	-	-	-
19	TX01V5314	+	+	+	-	-	-
20	TX01V5719	-	-	-	-	+	-
21	TX01V6008	+	-	+	-	+	-
22	TX01U2598	+	+	-	-	-	-
23	CO00016	+	-	-	-	-	-
24	CO00554	+	-	-	-	+	-
25	CO00739	?	?	+	-	-	-
26	CO00796	+	-	-	-	-	-
27	NE00403	-	-	-	-	+	-
28	NE01481	+	-	-	-	+	-
29	NE01533	-	-	-	-	-	-
30	NI03418	+	-	-	-	+	+
31	HV9W98-926W	-	-	-	-	-	+
32	HV9W99-558	+	+	+	-	+	-
33	HV9W00-143R	-	-	-	-	-	+
34	HV9W00-1784R	-	-	-	-	+	+
35	HV9W00-993W	-	-	-	-	-	+
36	OK00514 = OK Bullet	+	-	-	-	+	-
37	OK00618W = Guymon	-	-	-	-	-	-
38	OK00611W	+	+	+	-	+	-
39	SD02068	+	-	-	-	+	-
40	Neosho	-	-	+	-	+	+
41	W04-417	-	-	+	-	+	-
42	BC97-ROM50W	-	-	+	-	-	+
43	AP01T1112 = Fannin	+	-	-	-	-	-
44	AP01T1114	+	-	+	-	-	-
45	AP02T4342	-	-	+	-	-	+
46	AP03T7412	+	+	+	-	-	-
47	97x0850-16	-	-	-	-	-	-
48	N02Y5106	+	-	-	-	+	+

Table 15. Field reactions to stripe rust, 2005 SPRN.

Entry No.	Line/selection	Bushland, TX,	Bushland,	Ft. Collins,	Winfield,	Brookings,	Clay Center,	Pullman,		Mt. Vernon, WA			
		irrigated	TX, dryland	CO	KS	SD	NE	WA		WA			
		IT	IT	1-9 1=res.	0-5 0=res.	IT	0-10 0=res.	6/16/05 Flowering IT* %	4/22/05 Stem elong. IT %	5/23/01 Heading IT %			
1	Kharkof	TR	20MRMS	4	3	OR	1	2	20	2	10	2	2
2	Scout 66	80MS	60MSS	8	4	OR	3	8	100	2	10	2	2
3	TAM-107	100S	100S	9	5	20S	9	8	100	8	80	8	100
4	Trego	100S	100S	6	4	20MR	8	5	40	8	100	8	100
5	T140	20MRR/60S	30MSMR	6	3	OR	3	8	5	2	10	2	5
6	T141	80S	60S/20MS	6	3	OR	6	8	100	8	60	8	80
7	T138	TR/100S	60S/TR	6	3	20MS	6	8	100	8	80	8	90
8	T149	80S	80S	8	4	20MS	7	8	100	8	80	8	100
9	KS02HW34 = Danby	40MSS	40S	3	2	OR	2	8	60	8	40	8	70
10	KS02HW35-5	80SMS	60S	4	3	OR	2	8	100	8	30	8	70
11	KS03HW158	60MS/S	60S	7	2	10R	3	8	50	8	40	8	50
12	OK93P656H3299-2C04	80S	80S	8	3	15MS	3	8	100	8	30	8	80
13	OK00421	40SMS/10RMR	20MSMR	4	3	OR	3	8	100	5	40	8	50
14	OK01817	100S	80S	8	4	15MS	5	8	100	8	60	8	90
15	OK01307	20RMR	20MS/TR	2	1	OR	1	8	100	8	60	8	90
16	OK98G508W-4C04	100S	100S	9	4	20MR	5	5	30	8	60	8	80
17	TX00D1390	80SMS	60MSS	8	4	20MR	4	8	100	8	40	8	90
18	TX01D3232	100S	80SMS	8	5	10MR	4	8	100	5	30	5	60
19	TX01V5314	10RMR	TR	4	1	OR	2	8	100	8	60	8	90
20	TX01V5719	60MRMS	;60MS	5	4	OR	3	8	80	5	30	5	50
21	TX01V6008	20MR	10RMR	3	2	20MS	3	8	100	8	60	8	90
22	TX01U2598	80MSS	;60MSS	6	5	OR	3	8	100	5	40	8	70
23	CO00016	100S	100S	9	5	10MR	7	8	100	8	80	8	100
24	CO00554	60MSMR	100S	9	4	20MS	5	8	100	5	10	8	60
25	CO00739	20RMR	40MSS	7	2	10R	3	8	100	8	100	8	100
26	CO00796	100S	100S	9	5	OR	3	8	20	8	100	8	100
27	NE00403	100S	100S	8	2	20MR	4	8	100	8	80	8	100
28	NE01481	60S/20RMR	100S	9	3	20MS	3	**	-	5	60	8	70
29	NE01533	100S	60S	6	3	5MS	3	-	-	8	100	8	100
30	NI03418	30MSS/TR	30MSS	3	4	OR	2	-	-	5	60	5	50
31	HV9W98-926W	100S	100S	6	3	5MS	3	-	-	8	80	8	100
32	HV9W99-558	TR	TR	2	1	OR	2	-	-	5	60	8	70
33	HV9W00-143R	100S	100S	9	4	20MS	5	8	30	8	100	8	100
34	HV9W00-1784R	60MS	60MSS	2	3	10MS	3	8	100	8	80	8	100
35	HV9W00-993W	80S	100S	9	4	20MS	5	-	-	5	60	8	50
36	OK00514 = OK Bullet	40MSS	60SMS	2	1	OR	2	-	-	5	40	5,8	20
37	OK00618W = Guymon	100S	100S	9	5	20R	5	-	-	5	40	8	80
38	OK00611W	60SMS/TR	60S/20MR	2	2	OR	3	-	-	5	50	8	60
39	SD02068	100S	100S	9	4	10MS	3	-	-	8	80	8	100
40	Neosho	20MRMS/30S	20MR/40S	6	1	OR	2	-	-	8	80	8	100
41	W04-417	TR/30SMS	TR	4	1	OR	2	-	-	8	60	8	70
42	BC97-ROM50W	30MSS	30MSMR	4	1	OR	1	-	-	8	80	8	90
43	AP01T1112 = Fannin	10RMR	20R	2	2	OR	1	-	-	2	10	2	10
44	AP01T1114	40MSMR	20MRR	2	3	OR	2	-	-	2	10	2	2
45	AP02T4342	10RMR	10RMR	2	1	OR	4	-	-	2	10	2	2
46	AP03T7412	60S	40S	3	1	0MR	2	-	-	2	10	2	1
47	97x0850-16	100S	100S	7	4	10MR	4	-	-	8	80	8	100
48	N02Y5106	60S	100S	5	4	20S	4	-	-	8	80	8	80

\*Stripe rust percent (%) and infection type (T) under natural infestation. IT: 0=no visible symptoms; 1=necrotic &/or chlorotic flecks; no sporulation; 2=necrotic and/or chlorotic blotches or stripes; no sporulation; 3=necrotic &/or chlorotic blotches or stripes; no sporulation; 4=necrotic &/or chlorotic blotches or stripes, trace sporulation; 5=necrotic &/or chlorotic blotches or stripes, intermediate sporulation; 6=necrotic &/or chlorotic blotches or stripes; moderate sporulation; necrotic &/or chlorotic blotches or stripes; abundant sporulation; 8=chlorosis behind sporulating area; abundant sporulation; 9=no necrosis of chlorosis; abundant sporulation. From Xianming Chen, USDA-ARS.

\*\* Plants were incidentally killed by herbicide.

Table 16. Field reactions of entries in the 2005 Fusarium head blight.

Entry	Line/selection	Brookings, SD <sup>1</sup>		
		Incidence	Severity	Disease Index
1	Kharkof	100	62	62
2	Scout 66	100	63.8	63.8
3	TAM-107	100	47.5	47.5
4	Trego	100	56.2	56.2
5	T140	100	43.8	43.8
6	T141	100	56.2	56.2
7	T138	100	57.2	57.2
8	T149	100	42.8	42.8
9	KS02HW34 = Danby	100	74	74
10	KS02HW35-5	100	72.5	72.5
11	KS03HW158	100	65.8	65.8
12	OK93P656H3299-2C04	100	58.2	58.2
13	OK00421	100	47.8	47.8
14	OK01817	100	51.2	51.2
15	OK01307	100	58.2	58.2
16	OK98G508W-4C04	100	49.8	49.8
17	TX00D1390	100	47.5	47.5
18	TX01D3232	100	56.2	56.2
19	TX01V5314	100	61.2	61.2
20	TX01V5719	100	68.7	68.7
21	TX01V6008	100	50	50
22	TX01U2598	100	44	44
23	CO00016	100	68.7	68.7
24	CO00554	100	36.3	36.3
25	CO00739	100	66.5	66.5
26	CO00796	100	49.3	49.3
27	NE00403	100	55.2	55.2
28	NE01481	100	65.5	65.5
29	NE01533	100	67	67
30	NI03418	100	50.8	50.8
31	HV9W98-926W	100	59.5	59.5
32	HV9W99-558	100	57	57
33	HV9W00-143R	100	42	42
34	HV9W00-1784R	100	34	34
35	HV9W00-993W	100	78.3	78.3
36	OK00514 = OK Bullet	100	60.7	60.7
37	OK00618W = Guymon	100	67.8	67.8
38	OK00611W	100	67.3	67.3
39	SD02068	100	40.2	40.2
40	Neosho	100	67.5	67.5
41	W04-417	100	36.2	36.2
42	BC97-ROM50W	100	81.5	81.5
43	AP01T1112 = Fannin	100	29.2	29.2
44	AP01T1114	100	46.8	46.8
45	AP02T4342	100	55.2	55.2
46	AP03T7412	100	24.8	24.8
47	97x0850-16	100	73.3	73.3
48	N02Y5106	100	65.5	65.5
	c.v.			14.5
	l.s.d.(0.05)			13

<sup>1</sup>From Amir Ibrahim, South Dakota State, FHB ratings are based on a 0-9 scale. Incidence is the number of infected ears. Severity is the average of the scab ratings \* 10. Disease Index is incidence \* severity/100.

Table 17. Acid soil reactions of entries in the 2005 SRPN.

Entry	Line or Selection	Acid soil tolerance, Enid, OK*		
		MAR 19	APRIL 14	MAY 18
1	Kharkof	5	5	5
2	Scout 66	5	5	5
3	TAM-107	5	5	5
4	Trego	3	3	3
5	T140	5	5	4
6	T141	4	4	4
7	T138	3	2	3
8	T149	4	3	3
9	KS02HW34 = Danby	5	4	5
10	KS02HW35-5	4	4	3
11	KS03HW158	5	5	5
12	OK93P656H3299-2C04	1	2	1
13	OK00421	4	3	3
14	OK01817	3	2	2
15	OK01307	3	3	3
16	OK98G508W-4C04	2	2	3
17	TX00D1390	2	2	3
18	TX01D3232	1	1	2
19	TX01V5314	4	5	5
20	TX01V5719	3	2	3
21	TX01V6008	3	3	3
22	TX01U2598	2	3	2
23	CO00016	5	5	5
24	CO00554	5	5	5
25	CO00739	3	3	3
26	CO00796	5	5	5
27	NE00403	3	3	3
28	NE01481	5	5	5
29	NE01533	3	2	2
30	NI03418	4	3	3
31	HV9W98-926W	4	4	4
32	HV9W99-558	3	3	3
33	HV9W00-143R	5	5	5
34	HV9W00-1784R	3	3	2
35	HV9W00-993W	4	4	4
36	OK00514 = OK Bullet	3	3	3
37	OK00618W = Guymon	3	3	4
38	OK00611W	2	3	2
39	SD02068	5	4	5
40	Neosho	3	3	4
41	W04-417	4	3	3
42	BC97-ROM50W	5	5	5
43	AP01T1112 = Fannin	1	1	1
44	AP01T1114	3	2	3
45	AP02T4342	2	3	3
46	AP03T7412	3	3	3
47	97x0850-16	3	3	4
48	N02Y5106	5	5	5

\*Readings taken at Enid, OK (pH = 4.6, 70 ppm Al, and Al saturation = 11%). Scale of 1 (highly tolerant) to 5 (highly susceptible), in which Jagger = 2. First reading could be biased by winter dormancy pattern; second reading could be biased by extreme differences in growth habit; third reading yielded greatest confidence.

Table 18. Reactions of entries in the 2005 SRPN to various insects.

Entry	Line or Selection	Russian Wheat Aphid Biotype 1	Greenbug biotype E	Hessian fly
1	Kharkof	S	S	S
2	Scout 66	S	S	S
3	TAM-107	S	S	S
4	Trego	S	S	S
5	T140	S	S	S
6	T141	S	S	S
7	T138	S	S	S
8	T149	S	S	S
9	KS02HW34 = Danby	S	S	S
10	KS02HW35-5	S	S	S
11	KS03HW158	S	S	S
12	OK93P656H3299-2C04	S	S	H
13	OK00421	S	S	S
14	OK01817	S	S	S
15	OK01307	S	S	S
16	OK98G508W-4C04	S	S	S
17	TX00D1390	S	S	S
18	TX01D3232	S	S	S
19	TX01V5314	S	S	S
20	TX01V5719	S	S	S
21	TX01V6008	S	S	S
22	TX01U2598	S	S	S
23	CO00016	24 3's/ 1 '9'	S	S
		25 3's with some rolling	S	S
24	CO00554			
25	CO00739	25 2'S/ 2 8's	S	S
26	CO00796	25 2's	S	S
27	NE00403	S	S	S
28	NE01481	S	S	S
29	NE01533	S	S	H
30	NI03418	S	S	H-
31	HV9W98-926W	S	S	S
32	HV9W99-558	S	S	S
33	HV9W00-143R	S	S	S
34	HV9W00-1784R	S	S	S
35	HV9W00-993W	S	S	S
36	OK00514 = OK Bullet	S	S	S
37	OK00618W = Guymon	S	S	S
38	OK00611W	S	S	S
39	SD02068	S	S	H+
40	Neosho	S	S	S
41	W04-417	S	S	S
42	BC97-ROM50W	S	S	S
43	AP01T1112 = Fannin	S	S	S
44	AP01T1114	S	S	S
45	AP02T4342	S	S	S
46	AP03T7412	S	S	S
47	97x0850-16	S	S	S
48	N02Y5106	S	S	H-

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	Wheat Scab	Wheat Scab	Wheat Scab	Lr34/Yr18	Lr34/Yr18
		QTL 3BS GWM389 T150	QTL 3BS GWM493 T211	QTL 3BS GWM533 T159	BARC352 T264,265	GWM295 T273
1	Kharkof	-	-	-	+	-
2	Scout 66	-	-	-	+	-
3	TAM-107	-	-	-	-	-
4	Trego	-	-	-	-	-
5	T140	-	-	-	+	-
6	T141	-	+	-	+	-
7	T138	-	-	-	+	-
8	T149	-	-	-	-	-
9	KS02HW34 = Danby	-	-	-	-	-
10	KS02HW35-5	-	-	-	-	-
11	KS03HW158	-	-	-	-	-
12	OK93P656H3299-2C04	-	-	-	-	-
13	OK00421	-	-	-	-	-
14	OK01817	-	-	-	+	-
15	OK01307	-	-	-	+	-
16	OK98G508W-4C04	-	-	-	+	-
17	TX00D1390	-	-	-	-	-
18	TX01D3232	-	-	-	-	-
19	TX01V5314	-	-	-	+	+
20	TX01V5719	-	-	-	-	-
21	TX01V6008	-	-	-	+	-
22	TX01U2598	-	+	-	+	+
23	CO00016	-	-	-	+	-
24	CO00554	-	-	-	+	-
25	CO00739	-	-	-	?	?
26	CO00796	+	-	-	+	-
27	NE00403	-	-	-	-	-
28	NE01481	-	-	-	+	-
29	NE01533	-	-	-	-	-
30	NI03418	-	+	-	+	-
31	HV9W98-926W	-	-	-	-	-
32	HV9W99-558	-	-	-	+	+
33	HV9W00-143R	-	-	-	-	-
34	HV9W00-1784R	-	-	-	-	-
35	HV9W00-993W	-	-	-	-	-
36	OK00514 = OK Bullet	-	-	-	+	-
37	OK00618W = Guymon	-	-	-	-	-
38	OK00611W	-	-	-	+	+
39	SD02068	-	-	-	+	-
40	Neosho	-	-	-	-	-
41	W04-417	+	-	-	-	-
42	BC97-ROM50W	-	-	-	-	-
43	AP01T1112	-	-	-	+	-
44	AP01T1114	-	-	-	+	-
45	AP02T4342	-	-	-	-	-
46	AP03T7412	-	-	-	+	+
47	97x0850-16	-	-	-	-	-
48	N02Y5106	-	-	-	+	-

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	Lr37/SR38/Yr17	Lr39/Lr41	Lr50	Lr50	Hessian Fly
		VENTRIUP-LN2 259	GDM35 T184	GDM87 T120-125	GWM382 T131-156	H9 H9 909
1	Kharkof	-	-	?	-	+
2	Scout 66	-	-	+	-	-
3	TAM-107	-	-	+	-	-
4	Trego	-	-	+	-	-
5	T140	-	-	+	-	+
6	T141	-	-	+	-	-
7	T138	-	-	+	-	-
8	T149	-	-	-	+	-
9	KS02HW34 = Danby	+	-	-	-	-
10	KS02HW35-5	+	-	-	-	-
11	KS03HW158	-	-	-	-	-
12	OK93P656H3299-2C04	-	-	+	-	-
13	OK00421	-	-	+	+	-
14	OK01817	-	-	-	+	-
15	OK01307	+	-	-	-	-
16	OK98G508W-4C04	-	-	+	-	-
17	TX00D1390	-	-	-	-	-
18	TX01D3232	-	-	-	-	-
19	TX01V5314	+	-	-	-	-
20	TX01V5719	-	-	+	-	-
21	TX01V6008	+	-	+	-	-
22	TX01U2598	-	-	-	-	-
23	CO00016	-	-	-	-	-
24	CO00554	-	-	+	-	-
25	CO00739	+	-	-	-	-
26	CO00796	-	-	-	-	-
27	NE00403	-	-	+	-	-
28	NE01481	-	-	+	-	-
29	NE01533	-	-	-	-	-
30	NI03418	-	-	+	+	-
31	HV9W98-926W	-	-	-	+	-
32	HV9W99-558	+	-	+	-	-
33	HV9W00-143R	-	-	-	+	-
34	HV9W00-1784R	-	-	+	+	-
35	HV9W00-993W	-	-	-	+	-
36	OK00514 = OK Bullet	-	-	+	-	-
37	OK00618W = Guymon	-	-	-	-	-
38	OK00611W	+	-	+	-	-
39	SD02068	-	-	+	-	-
40	Neosho	+	-	+	+	-
41	W04-417	+	-	+	-	-
42	BC97-ROM50W	+	-	-	+	+
43	AP01T1112	-	-	-	-	-
44	AP01T1114	+	-	-	-	-
45	AP02T4342	+	-	-	+	-
46	AP03T7412	+	-	-	-	-
47	97x0850-16	-	-	-	-	-
48	N02Y5106	-	-	+	+	-

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	RWA	RWA	BYD2	WSM1	WSM1
		Dn4 GWM106 120	DN4 GWM337 T182	ByAgi T564	J15 400	PCR Control G43 700
1	Kharkof	-	-	-	-	+
2	Scout 66	-	-	-	-	+
3	TAM-107	-	-	-	-	+
4	Trego	-	-	-	-	+
5	T140	-	-	-	-	+
6	T141	-	-	-	-	+
7	T138	-	-	-	-	+
8	T149	+	-	-	-	+
9	KS02HW34 = Danby	-	-	-	-	+
10	KS02HW35-5	-	-	-	-	+
11	KS03HW158	+	-	-	-	+
12	OK93P656H3299-2C04	-	-	-	-	+
13	OK00421	+	-	-	-	+
14	OK01817	-	-	-	-	+
15	OK01307	-	-	-	-	+
16	OK98G508W-4C04	-	-	-	-	+
17	TX00D1390	-	-	-	-	+
18	TX01D3232	-	-	-	-	+
19	TX01V5314	-	-	-	-	+
20	TX01V5719	-	-	-	-	+
21	TX01V6008	-	-	-	-	+
22	TX01U2598	-	-	-	-	+
23	CO00016	+	-	-	-	+
24	CO00554	-	-	-	-	+
25	CO00739	+	+	-	-	+
26	CO00796	-	-	-	-	+
27	NE00403	-	-	-	-	+
28	NE01481	-	-	-	-	+
29	NE01533	-	-	-	-	+
30	NI03418	-	-	-	-	+
31	HV9W98-926W	-	-	-	-	+
32	HV9W99-558	-	-	-	-	+
33	HV9W00-143R	-	-	-	-	+
34	HV9W00-1784R	-	-	-	-	+
35	HV9W00-993W	-	-	-	-	+
36	OK00514 = OK Bullet	+	-	-	-	+
37	OK00618W = Guymon	-	-	-	-	+
38	OK00611W	+	-	-	-	+
39	SD02068	-	-	-	-	+
40	Neosho	-	-	-	-	+
41	W04-417	+	-	-	-	+
42	BC97-ROM50W	-	-	-	-	+
43	AP01T1112	-	-	-	-	+
44	AP01T1114	-	-	-	-	+
45	AP02T4342	-	-	-	-	+
46	AP03T7412	-	-	-	-	+
47	97x0850-16	-	-	-	-	+
48	N02Y5106	+	+	-	+	+



Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	1RS Rye	1RS Rye	1RS	Grain Texture	Grain Texture
		Secalin SECA T446	SCM9 T224,T241	SDS-PAGE Grain Storage Proteins	PinA T346	PinB 320
1	Kharkof	-	-	Non.1RS	+	+
2	Scout 66	-	-	Non.1RS	+	-
3	TAM-107	+	+	1AL.1RS	-	-
4	Trego	-	-	Non.1RS	-	-
5	T140	+	-	Non.1RS	-	-
6	T141	+	+	1AL.1RS	-	-
7	T138	-	-	1AL.1RS +/-	-	+
8	T149	+	-	1AL.1RS +/-	-	-
9	KS02HW34 = Danby	-	-	Non.1RS	+	-
10	KS02HW35-5	-	-	Non.1RS	-	+
11	KS03HW158	+	-	Non.1RS	-	+
12	OK93P656H3299-2C04	+	-	Non.1RS	-	+
13	OK00421	-	-	Non.1RS	-	-
14	OK01817	+	-	Non.1RS	-	-
15	OK01307	-	-	Non.1RS	-	-
16	OK98G508W-4C04	-	-	Non.1RS	-	-
17	TX00D1390	-	-	Non.1RS	-	-
18	TX01D3232	-	-	Non.1RS	-	+
19	TX01V5314	-	-	Non.1RS	-	+
20	TX01V5719	-	-	Non.1RS	-	-
21	TX01V6008	-	-	Non.1RS	-	+
22	TX01U2598	-	-	Non.1RS	-	-
23	CO00016	-	-	Non.1RS	-	-
24	CO00554	+	+	1AL.1RS	-	-
25	CO00739	-	-	Non.1RS	?	-
26	CO00796	-	-	1AL.1RS	-	-
27	NE00403	-	-	Non.1RS	-	-
28	NE01481	-	-	Non.1RS	-	-
29	NE01533	-	-	Non.1RS	-	-
30	NI03418	-	-	Non.1RS	-	-
31	HV9W98-926W	-	-	Non.1RS	-	-
32	HV9W99-558	+	+	1BL.1RS	-	-
33	HV9W00-143R	-	-	Non.1RS	+	-
34	HV9W00-1784R	+	-	Non.1RS	?	+
35	HV9W00-993W	-	-	Non.1RS	-	+
36	OK00514 = OK Bullet	-	-	Non.1RS	-	+
37	OK00618W = Guymon	-	-	Non.1RS	-	-
38	OK00611W	-	-	Non.1RS	-	-
39	SD02068	-	-	Non.1RS	-	-
40	Neosho	-	-	Non.1RS	-	-
41	W04-417	-	-	Non.1RS	-	+
42	BC97-ROM50W	+	-	Non.1RS	+	-
43	AP01T1112	+	+	1AL.1RS	-	-
44	AP01T1114	+	-	Non.1RS	-	-
45	AP02T4342	-	-	Non.1RS	-	-
46	AP03T7412	+	+	1BL.1RS	-	+
47	97x0850-16	?	-	Non.1RS	+	+
48	N02Y5106	-	-	Non.1RS	+	-

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	HighMolWt	HighMolWt	HighMolWt	Null Wx-D1	Null Wx-A1	Null Wx-B1
		Glutenins	Glutenins	Glutenins	7DS	7AS	4AL
		HMWAx2*	HMWBx	HMWDx5	Waxy4	Waxy4	Waxy4
		1319	766	478	314	273	243
1	Kharkof	+	+	+	+	+	+
2	Scout 66	+	+	+	+	+	+
3	TAM-107	+	+	+	+	+	+
4	Trego	+	+	+	+	+	-
5	T140	+	+	+	+	+	+
6	T141	+	+	?	+	+	+
7	T138	+	+	+	+	+	+
8	T149	+	+	-	+	+	+
9	KS02HW34 = Danby	+	+	+	+	+	-
10	KS02HW35-5	+	+	+	+	+	-
11	KS03HW158	+	+	+	+	+	+
12	OK93P656H3299-2C04	+	+	+	+	+	-
13	OK00421	+	+	+	+	+	+
14	OK01817	+	+	+	+	+	-
15	OK01307	+	-	+	+	+	+
16	OK98G508W-4C04	+	+	+	+	+	+
17	TX00D1390	+	+	+	+	+	+
18	TX01D3232	+	+	+	+	+	+
19	TX01V5314	+	-	+	+	-	+
20	TX01V5719	+	+	+	+	+	-
21	TX01V6008	-	-	+	+	+	+
22	TX01U2598	+	+	+	+	+	+
23	CO00016	+	+	-	+	+	+
24	CO00554	+	+	+	+	+	+
25	CO00739	+	+	+	+	+	+
26	CO00796	+	+	+	+	+	+
27	NE00403	+	+	+	+	+	+
28	NE01481	+	+	+	+	+	-
29	NE01533	+	+	+	+	+	+
30	NI03418	+	+	+	+	+	+
31	HV9W98-926W	-	+	+	+	+	+
32	HV9W99-558	+	-	+	+	+	+
33	HV9W00-143R	+	+	+	+	+	+
34	HV9W00-1784R	+	+	+	+	-	+
35	HV9W00-993W	-	+	+	+	+	+
36	OK00514 = OK Bullet	+	-	+	+	+	+
37	OK00618W = Guymon	+	+	+	+	+	+
38	OK00611W	-	-	+	+	+	+
39	SD02068	+	+	+	+	+	+
40	Neosho	+	+	+	+	+	+
41	W04-417	+	+	+	+	+	+
42	BC97-ROM50W	+	+	-	+	+	+
43	AP01T1112	+	+	+	+	+	+
44	AP01T1114	+	+	+	+	+	-
45	AP02T4342	-	+	-	+	-	+
46	AP03T7412	+	-	+	+	+	+
47	97x0850-16	+	+	+	+	+	-
48	N02Y5106	-	+	+	+	+	+

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	Aluminum	Height	Height	Height	VRN-A1-Promoter
		Tolerance ALMT1 107	Rht1 Rht1 237	Rht2 Rht2 254	Rht8 GWM261 T207	VRNAIF-VRNA1R 500
1	Kharkof	-	+	-	-	+
2	Scout 66	-	+	-	-	+
3	TAM-107	-	+	-	-	+
4	Trego	+	+	-	-	+
5	T140	-	+	-	-	+
6	T141	-	+	+	-	+
7	T138	-	+	-	-	+
8	T149	-	+	-	-	+
9	KS02HW34 = Danby	+	+	-	-	+
10	KS02HW35-5	+	+	-	-	+
11	KS03HW158	-	+	-	-	+
12	OK93P656H3299-2C04	?	+	+	-	+
13	OK00421	?	+	-	-	+
14	OK01817	-	+	+	-	+
15	OK01307	?	+	-	-	+
16	OK98G508W-4C04	+	+	-	-	+
17	TX00D1390	-	+	-	-	+
18	TX01D3232	-	+	-	-	+
19	TX01V5314	-	+	-	-	+
20	TX01V5719	-	+	-	-	+
21	TX01V6008	-	+	-	+	+
22	TX01U2598	-	+	+	-	+
23	CO00016	-	+	-	-	+
24	CO00554	-	+	-	-	+
25	CO00739	+	+	-	+	+
26	CO00796	-	+	-	-	+
27	NE00403	-	+	-	-	+
28	NE01481	-	+	-	-	+
29	NE01533	-	-	+	+	+
30	NI03418	+	+	-	-	+
31	HV9W98-926W	?	+	-	-	+
32	HV9W99-558	?	+	-	?	+
33	HV9W00-143R	-	+	-	+	+
34	HV9W00-1784R	-	+	-	-	+
35	HV9W00-993W	-	+	-	-	+
36	OK00514 = OK Bullet	+	+	-	-	+
37	OK00618W = Guymon	+	+	-	-	+
38	OK00611W	+	+	-	+	+
39	SD02068	-	+	-	-	+
40	Neosho	+	+	-	-	+
41	W04-417	-	+	+	+	+
42	BC97-ROM50W	-	+	-	-	+
43	AP01T1112	+	+	-	-	+
44	AP01T1114	-	+	-	-	+
45	AP02T4342	+	-	-	-	+
46	AP03T7412	+	+	-	-	+
47	97x0850-16	+	+	-	-	+
48	N02Y5106	-	+	-	-	+

Table 19. DNA marker analyses of entries in the 2005 SRPN.

Entry	Primers Band Size (bp)	Vrn-A1	Vrn-B1	Vrn-D1
		NON-Deletion Intr1/C/F & Intr1/AB/R 1068	NON-Deletion Intr1/B/F & Intr1/B/R4 1149	NON-Deletion Intr1/D/F & Intr1/D/R4 997
1	Kharkof	+	+	+
2	Scout 66	+	+	+
3	TAM-107	+	+	+
4	Trego	+	+	+
5	T140	+	+	+
6	T141	+	+	+
7	T138	+	+	+
8	T149	+	-	-
9	KS02HW34 = Danby	+	+	+
10	KS02HW35-5	+	-	+
11	KS03HW158	+	+	+
12	OK93P656H3299-2C04	+	+	+
13	OK00421	+	+	+
14	OK01817	+	-	+
15	OK01307	+	+	+
16	OK98G508W-4C04	+	+	+
17	TX00D1390	+	+	+
18	TX01D3232	+	+	+
19	TX01V5314	+	+	+
20	TX01V5719	+	+	-
21	TX01V6008	+	+	+
22	TX01U2598	+	+	+
23	CO00016	+	+	+
24	CO00554	+	+	+
25	CO00739	+	+	+
26	CO00796	+	+	+
27	NE00403	+	+	+
28	NE01481	+	+	+
29	NE01533	+	+	+
30	NI03418	+	+	+
31	HV9W98-926W	+	+	+
32	HV9W99-558	+	+	+
33	HV9W00-143R	+	+	+
34	HV9W00-1784R	+	+	+
35	HV9W00-993W	+	+	+
36	OK00514 = OK Bullet	+	+	+
37	OK00618W = Guymon	+	+	+
38	OK00611W	+	+	+
39	SD02068	+	+	+
40	Neosho	+	+	+
41	W04-417	+	+	+
42	BC97-ROM50W	+	+	+
43	AP01T1112	+	+	+
44	AP01T1114	+	+	+
45	AP02T4342	+	+	+
46	AP03T7412	+	+	+
47	97x0850-16	+	+	+
48	N02Y5106	+	+	?