

SWEET CORN HYBRID DISEASE NURSERY – 2001

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Common rust, northern leaf blight (NLB), Stewart's bacterial wilt, southern leaf blight (SLB) and gray leaf spot (GLS) can reduce yields of susceptible and moderately susceptible sweet corn hybrids. These diseases can be managed more efficiently if reactions of hybrids are known.

Resistance and susceptibility are the two extremes of a continuum of host reactions to diseases. Resistance is a measure of the ability of the host to reduce the growth, reproduction, and/or disease-producing abilities of the pathogen, thus resulting in less severe symptoms of disease. Major genes for resistance, such as *Rp*, *Ht*, or *rhm*, can prevent or substantially limit disease development if specific virulence is not present in pathogen populations. Hybrids with major gene resistance usually have clearly distinguishable phenotypes. Major gene resistance may be ineffective when specific virulence occurs.

In the absence of effective major gene resistance, disease reactions often range from partially resistant to susceptible. Hybrids can be grouped into broad classes such as: resistant (R), moderately resistant (MR), moderate (M), moderately susceptible (MS), and susceptible (S) based on severity of disease symptoms. This procedure produces statistically “overlapping” groups without clear-cut differences between classes (e.g., the hybrid with least severe symptoms in the MR class does not differ significantly from the hybrid with the most severe symptoms in the R class). Nevertheless, a consistent response over several trials produces a reasonable estimate of the disease reaction of a hybrid relative to the response of other hybrids. These reactions can be used to assess the potential for diseases to become severe and affect yield (3).

This report summarizes the reactions of 314 sweet corn hybrids to common rust, NLB, Stewart's wilt, SLB and GLS based on performance in the 2001 University of Illinois sweet corn disease nursery.

Materials and Methods

Hybrids: Three hundred and fourteen hybrids were evaluated in 2001. This included 145 *sh2* hybrids, 95 *se* hybrids and 74 *su* hybrids. Hybrids with multiple endosperm mutations or heterozygous reactions were placed in the most appropriate of these three categories. Standard hybrids with relatively consistent reactions to rust, Stewart's wilt and NLB (Table 2) were included to compare the results from the 2001 nursery to those from previous nurseries.

Experimental design and procedures: Each disease was a separate trial with three replicates of hybrids arranged in randomized complete blocks. Each trial was split into two main blocks of *sh2* and *su* and *se* hybrids. Each experimental unit was one or two 12-ft. rows with about 10 to 18 plants per row. The Stewart's wilt, rust (*Rp1-D*-avirulent race) and NLB trials had two-row experimental units. Four trials (Stewart's wilt, rust-avirulent, NLB and SLB) were planted May 9 at Champaign, IL. The *Rp1D*-virulent rust trial was planted May 16 at Urbana, IL. The GLS trial was planted July 6 near Havana, IL.

Table 1. Summary statistics for Stewart's wilt, common rust, NLB, SLB, and GLS ratings.

Disease	n	mean	std. dev.	Range	BLSD
Stewart's wilt (1 to 9 ratings)	314	4.0	1.17	1.9 - 7.3	0.88
<i>Rp1-D</i> avirulent rust (% leaf area infected) 175*	29 %*	9.6 %*	7 - 60 %*	5.8 %	
<i>Rp1-D</i> virulent rust (% leaf area infected)	314	33 %	9.8 %	0 - 62 %	5.9 %
NLB (% leaf area infected)	314	30 %	11.7 %	2 - 64 %	6.4 %
SLB (% leaf area infected)	314	23 %	9.6 %	4 - 59 %	6.3 %
GLS (% leaf area infected)	312	72 %	12.5 %	30 - 100 %	13.6 %

* not including *Rp1-D* resistant hybrids (mean = 17% and s.d. = 15.8% with *Rp*-hybrids included).

Inoculation and disease assessment: The four trials planted May 9 were inoculated with: *Erwinia stewartii* (Stewart's wilt), Rpl-D-avirulent isolates of *Puccinia sorghi* (i.e., the "old race" of rust), *Exserohilum turcicum* (NLB), or *Bipolaris maydis* (SLB). Plants were inoculated with *E. stewartii* on June 11 and 21 by wounding leaves in the whorl and introducing bacteria into wounds. Suspensions of Rpl-D-avirulent *P. sorghi* urediniospores were sprayed into plant whorls June 11, 14, 19, 25 and 28. A mixture of conidia of races 0 and 1 of *E. turcicum* were sprayed into plant whorls on June 8, 13, 20, and 27. Conidial suspensions of *B. maydis* were sprayed into whorls on June 15, 21, 26 and 28. In the rust trial planted May 16, suspensions of Rpl-D-virulent *P. sorghi* urediniospores (i.e., the "new race" of rust) were sprayed into plant whorls June 18, 22, 26 and July 2. Plants were infected naturally by *Cercospora zea-maydis* in the GLS trial planted July 6.

Disease symptoms were rated on a plot basis. Stewart's wilt was rated on July 26-27 using a scale from 1 (*E. stewartii* within 2 cm of inoculation wounds) to 9 (severe systemic infection or dead plants). The percentage of the leaf area infected by common rust was rated from 0 to 100% on July 30-31 (Rpl-D-avirulent trial) and August 6 (Rpl-D-virulent trial). Leaf area infected by NLB was rated from 0 to 100% on July 31 and August 1. Leaf area infected by SLB was rated on August 2-3. Leaf area infected by GLS was rated on September 20.

Data analysis: Disease ratings were analyzed by ANOVA. Hybrid reactions were classified according to standard deviations from the mean (z-scores), Bayesian least significant difference (BLSD) separations (k=100), and the FASTCLUS procedure of SAS using various groupings of 6 to 12 clusters.

Results and Discussion

Hybrid reactions ranged from very little disease to severe symptoms (Table 1). Reactions of standard hybrids to Stewart's wilt, rust, NLB, SLB, and GLS were generally within expected ranges (Table 2). The criteria for classifying hybrid reactions are listed in Table 3. Table 4 includes reactions and actual ratings of the 314 hybrids **based solely on the 2001** trial. This is the only data we have for some of these hybrids. For hybrids that have been evaluated in previous years, a more complete assessment of disease reactions is presented in another report, "Reactions of sweet corn hybrids to prevalent diseases - 2001".

Stewart's wilt: Stewart's wilt ratings ranged from 1.9 to 7.3. Yield is affected minimally if infection is non-systemic, i.e., ratings ≤ 3 (1). Twenty-nine hybrids with ratings 2.5 or below were not different from four hybrids (Green Giant 27, Green Giant 62, HMX 0356 WS and HMX 8343 BS) with the lowest rating (1.9). These hybrids were classified as resistant. Forty hybrids with ratings from 2.5 to 3 were classified between resistant and moderately resistant, i.e., R/MR. Fifty-eight hybrids with ratings from 3 to 3.6 were classified as moderately resistant. Stewart's wilt was rated 5 or above for 63 hybrids classified from moderately susceptible to susceptible.

Table 2. Reactions of sweet corn hybrids included as standards in the 2001 disease nursery

Hybrid	Stewart's wilt			Common rust			NLB			SLB			GLS					
	Prior	01	Rating	avirulent	virulent	Rating	Prior	01	Rating	Prior	01	Rating	Prior	01	Rating			
Bonus	1	1	2.1	0	0	0%	2	4	29%	5	5	27%	6	6	32%	8	6	62%
Day Star	4	2	2.6	6	5	27%	6	5	32%	1	1	2%	2	1	9%	2	5	48%
Eliminator	2	2	2.8	0	0	1%	5	6	37%	6	5	32%	6	6	34%	6	6	69%
Green Giant 27	2	1	1.9	3	1	9%	3	2	14%	3	4	20%	5	3	17%	3	5	53%
Jubilee	9	7	5.6	5	6	33%	5	6	37%	8	8	49%	4	3	20%	.	6	72%
Miracle	1	1	2.3	2	3	17%	2	4	24%	3	4	21%	4	3	21%	4	8	83%
Phenomenal	5	5	4.0	6	5	30%	6	7	39%	5	5	30%	5	4	24%	4	6	63%
Prime Plus	3	1	2.0	0	0	1%	3	6	36%	2	2	11%	6	7	37%	4	6	67%
Snow White	7	8	6.0	9	9	56%	9	9	50%	7	7	42%	3	1	10%	6	8	81%
Sum. Sweet 7630	2	2	3.0	6	5	30%	6	6	34.5	2	2	12%	2	2	12.5	4	6	65%
Ultimate	2	1	2.1	6	5	27%	6	6	35%	2	3	14%	2	1	6%	4	5	46%

Prior - reaction in previous years (1984-2000).

01 - reaction in 2001: 1 - resistant, 3 - moderately resistant, 5 - moderate, 7 - moderately susceptible, 9 - susceptible.

Rating - mean rating in 2001: 1 to 9 for Stewart's wilt; 0 to 100% for severity of rust, NLB, SLB and GLS.

Table 3. Criteria for classifying hybrid reactions to diseases in the 2001 nursery

	Classification of reaction									
	Rp 0	Resistant 1	Moderately resistant 2	3	Moderate 4	5	Moderately susceptible 6	7	8	Susceptible 9
Stewart's wilt		≤2.5	≤3	≤3.6	< 4	≤4.5	≤5	< 5.6	≤6.5	> 6.5
Rust -avirulent (%)	≤5	≤10	≤15	≤21	≤25	≤31	< 38	≤45	< 50	≥50
Rust -virulent (%)	0		< 18	< 24	≤30	≤33	< 38	< 44	< 50	≥50
NLB (%)		≤6	< 12	< 19	< 26	< 33	< 40	< 46	< 53	> 53
SLB (%)		≤10	≤16	≤22	≤26	≤29	≤35	≤41		> 41
GLS (%)				< 40		< 60	< 73	< 80	< 88	≥88

Classification: 0 - Rp-resistance, 1 - resistant, 3 - moderately resistant, 5 - moderate, 7 - moderately susceptible, 9 - susceptible.

Common rust: Rust severity ranged from about 0 to 60% in both trials (*Rp1-D*-avirulent and *Rp1-D*-virulent trials). Yield usually decreases about 0.5% for each 1% leaf area infected by rust, i.e., rust severity (2). In the trial inoculated with *Rp1-D*-avirulent isolates, 139 hybrids were Rp-resistant. Rust severity was 1% or less on 120 Rp-resistant hybrids and between 1% and 5% on 19 Rp-resistant hybrids. In the trial inoculated with *Rp1-D*-virulent isolates, severity was 0% (pustules were not observed) on 9 hybrids (BSS 0977, GH 1829, GH 2042, GH 2298, GH 2303, GH 2385, GH 5703, GSS 0966 VP and GSS 0978 VP). Apparently, rust resistance in these nine hybrids is conveyed by an Rp gene other than *Rp1-D*. Only two hybrids (BSS 0977 and GH 5703) were Rp-resistant in both trials. For 137 of the 139 hybrids that were Rp-resistant in the *Rp1-D*-avirulent trial, rust severity ranged from 17% to 56% in the *Rp1-D*-virulent trial. Five of these hybrids (Green Giant 62, Green Giant 82, Green Giant 94, SVR 08302418 and SVR 08705760) had less than 20% rust in the *Rp1-D*-virulent trial. For 7 of the 9 hybrids that were Rp-resistant in the *Rp1-D*-virulent trial, rust severity ranged from 10% to 23% in the *Rp1-D*-avirulent trial. Four hybrids (Green Giant 27, Green Giant 74, Green Giant 75, and PX 9314639) had less than 18% rust in both trials but did not have an Rp-reaction in either trial. These hybrids have partial resistance to rust. Nine hybrids (BSS 8142, Encore, Esteem, EX 8414247, GH 0934, Green Giant 6, Lancelot, Merlin, and Tuxedo) with 10% to 23% rust in both trials were classified as moderately resistant. In each trial, hybrids with more than 38% rust were classified as moderately susceptible or worse. Rust severity on hybrids that did not have Rp-resistance was similar between the two trials, $r = 0.90$ (Fig. 1).

Northern leaf blight: NLB severity ranged from 2 to 64%. Usually, NLB does not affect yield substantially unless severity is 20% or higher (4). About 60% of the NLB lesions were due to race 0 and about 40% were due to race 1. Infection of hybrids with the *Ht1* gene (i.e., chlorotic-lesion resistance to race 0) probably was less severe than if race 1 was more frequent. Severity of NLB averaged 19% for 85 hybrids with the *Ht1* or *HtN* genes and 34% for 229 hybrids without Ht-resistance (Fig. 2). Seven hybrids with less than 6% leaf area infected were considered resistant. These included: Day Star, GH 3054, HMX 0356 WS, HMX 0394 S, HMX 8343 BS, Morning Star and Twin Star. Fifteen hybrids with *Ht1*-reactions had less than 12% leaf area infected. These hybrids were classified between resistant and moderately resistant (R/MR), and included: BSS 0977, BSS 8142, Crisp n Sweet 710 A, Crisp n Sweet 710 A RR, Crisp n Sweet 710 RR, Green Giant 62, GSS 0966 VP, GSS 3381, HB 1800 NG, Prime Plus, Summer Sweet 7630, Summer Sweet 7631, WSS 9870, Xtra Tender 282A, and Xtra Tender 382A. Thirty-one hybrids with less than 19% leaf area infected were classified moderately resistant. Twenty-two of these 31 hybrids had *Ht1*-resistance. Nine moderately resistant hybrids that were not Ht-resistant included: 97-6449, BSS 1690, Mystique, PX 9362439, Seneca Nation, Silver Dollar, Summer Sweet 781 Ultra, SVR 8492909, and Tuxedo. Sixty-four hybrids with more than 35% leaf area infected were classified from moderately susceptible to susceptible. Only three of these hybrids, ACX 909, ACX 934 and Lumina, had Ht-1 chlorotic-lesion reactions.

Southern leaf blight: SLB ratings ranged from 4% to 59% with a mean of 23%. Overall, SLB was slightly less severe on sh2-hybrids than on su or se-hybrids. SLB severity averaged 19% for sh2-hybrids and 26% for su/se-hybrids (Fig. 3). Twenty-eight hybrids with SLB ratings 10% or below were classified as resistant. Twenty-three of these 28 resistant hybrids were shrunken-2. The five SLB-resistant su/se-hybrids included: Climax, EX 8415137, Green Giant 82, Kandy Plus, and Merlin. Fifty-nine hybrids with ratings from 10% to 16% were classified as R/MR of which 43 were sh2-hybrids. Thirty-six hybrids with more than 35% leaf area infected were classified as moderately susceptible to susceptible. These included 9 sh2-hybrids: ACX 908, GSS 5771, GSS 0966 VP, Mirai 003, Mirai 005, Prime Plus, Primetime, Xtra Tender 175A, and Xtra Tender 273A.

Gray leaf spot: Naturally-occurring gray leaf spot was very severe in the trial planted July 6 near Havana, IL. Severity of GLS ranged from 30 to 100% with a mean of 72%. Four hybrids with less than 40% leaf area infected were classified as moderately resistant, including: BSS 8142, GH 3054, GSS 3381, and HMX 0356 WS. Twenty-seven hybrids with GLS severity between 40% and 60% GLS were classified as moderate. Forty-two hybrids with GLS severity > 88% were classified as susceptible.

References

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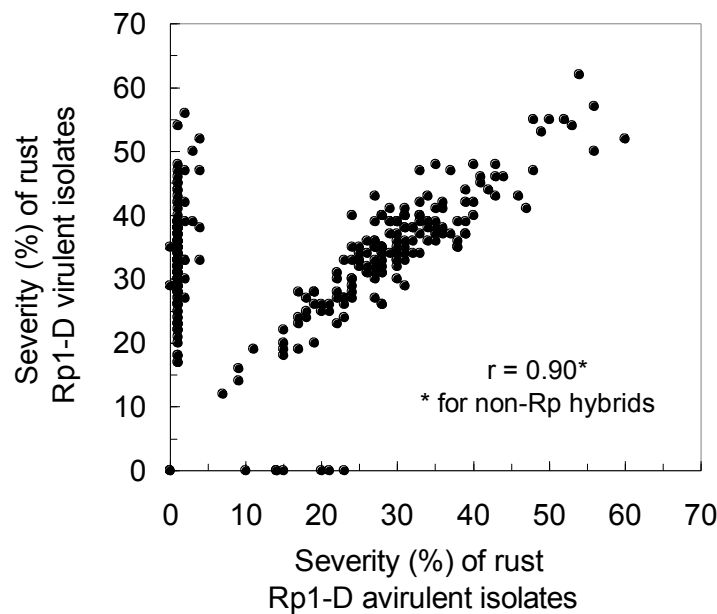


Fig. 1. Reactions of sweet corn hybrids to common rust in two separate trials of the University of Illinois disease nursery in 2001. Hybrids inoculated with *Puccinia sorghi*-avirulent against the *Rp1-D* gene in one trial and with *P. sorghi*-virulent against the *Rp1-D* gene in the other trial.

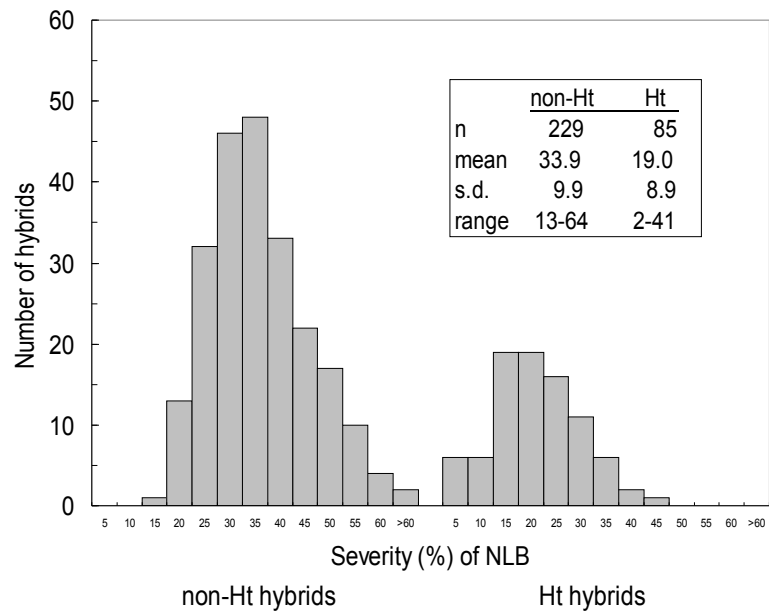


Fig. 2. Distributions of severity of northern leaf blight on Ht-resistant sweet corn hybrids and hybrids without Ht-resistance following inoculation with a mixture of race 0 and race 1 of *Exserohilum turcicum* in the University of Illinois disease nursery in 2001.

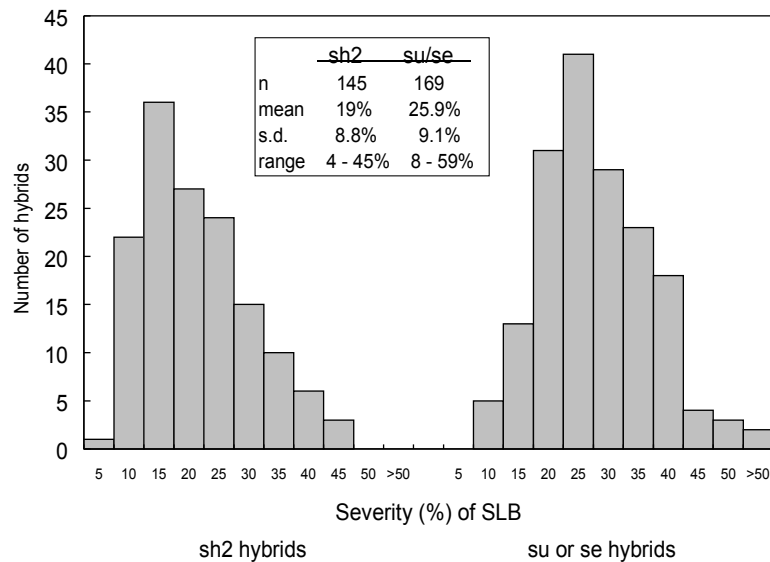


Fig. 3. Distributions of severity of southern leaf blight on sh2 sweet corn hybrids and su or se hybrids following inoculation with *Bipolaris maydis* in the University of Illinois disease nursery in 2001.

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

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				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
<i>Sugary hybrids</i>																
su	Y	Rog	Bonus	1	2.1	0	0	4	29	5	27	Ht	6	32	6	62
su	Y	Cr	Conquest	3	3.4	0	1	5	33	6	33		6	30	7	78
su	Y	DM	DMC 20-04	6	4.7	0	1	7	43	7	43		4	25	9	100
su	Y	DM	DMC 20-38	8	6.4	0	1	5	32	9	57		3	22	7	77
su	Y	HM	Dynamo	4	3.9	0	1	4	27	7	42		5	27	6	68
su	Y	Cr	Earlivee	9	7	6	35	7	41	7	41		4	26	7	78
su	Y	Cr	Eliminator	2	2.8	0	1	6	37	5	32		6	34	6	69
su	Y	Sem	Esquire	5	4	0	1	4	25	7	43		3	19	6	68
su	Y	HM	Esteem	4	3.8	2	15	3	22	5	31		2	11	6	70
su	Y	HM	Excalibur	5	4.4	0	1	5	33	8	50		6	34	6	66
su	Y	HM	FMX 516	5	4.3	0	1	3	23	8	47		4	23	6	68
su	Y	GG	Green Giant Code 6	1	2	2	11	3	19	4	25	Ht	2	15	6	72
su	Y	GG	Green Giant Code 27	1	1.9	1	9	2	14	4	20		3	17	5	53
su	Y	GG	Green Giant Code 62	1	1.9	0	1	2	17	2	10	Ht	3	21	5	52
su	Y	GG	Green Giant Code 67	1	2.4	0	2	4	27	5	31		6	33	8	85
su	Y	GG	Green Giant Code 71	9	6.8	0	1	6	36	8	48		2	12	9	95
su	Y	GG	Green Giant Code 74	1	2.2	1	7	2	12	4	23		3	22	5	55
su	Y	GG	Green Giant Code 75	1	2.3	1	9	2	16	5	27		2	16	6	63
su	Y	GG	Green Giant Code 76	3	3.3	0	1	4	28	8	50		3	22	9	88
su	Y	GG	Green Giant Code 77	3	3.4	0	1	4	30	8	48		2	12	8	84
su	Y	GG	Green Giant Code 81	7	5	4	22	5	31	5	30		3	21	6	67
su	Y	GG	Green Giant Code 82	2	2.9	0	1	2	18	4	24		1	9	8	83
su	Y	GG	Green Giant Code 83	4	3.8	0	1	5	31	8	51		7	37	8	83
su	Y	GG	Green Giant Code 84	5	4.1	0	1	6	35	8	49		3	22	9	92
su	Y	GG	Green Giant Code 85	5	4.1	0	1	5	31	9	53		6	34	9	90
su	Y	GG	Green Giant Code 87	5	4.1	0	4	7	38	7	43		6	35	9	88
su	Y	GG	Green Giant Code 88	9	7.3	5	28	7	40	9	53		3	17	9	100
su	Y	GG	Green Giant Code 89	2	2.7	0	1	4	28	4	22		4	23	7	76
su	Y	GG	Green Giant Code 90	2	3	0	1	4	28	5	28		3	20	6	72
su	Y	GG	Green Giant Code 92	2	2.8	3	18	4	25	5	31		2	12	6	66

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

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				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
su	Y	GG	Green Giant Code 93	2	3	0	1	3	23	5	30		2	12	6	66
su	Y	GG	Green Giant Code 94	2	2.7	0	1	3	20	5	27		3	17	5	52
su	Y	GG	Green Giant Code 95	3	3.4	0	1	3	23	4	24		3	17	6	69
su	Y	GG	Green Giant Code 96	1	2.2	0	1	4	28	5	29		4	24	5	58
su	Y	Rog	GH 0934	4	3.7	3	18	3	24	4	20	Ht	5	28	5	48
su	Y	Rog	GH 0937	2	2.9	0	1	4	30	4	24	Ht	6	33	5	59
su	Y	Rog	GH 2042	7	5.6	3	20	0	0	9	62		3	17	7	79
su	Y	Rog	GH 2298	3	3.3	4	23	0	0	4	24	Ht	2	15	6	60
su	Y	Rog	GH 2303	8	6.1	3	21	0	0	7	41		3	17	6	72
su	Y	Rog	GH 2385	6	4.6	2	15	0	0	4	25	Ht	3	22	5	47
su	Y	Rog	GH 2783	2	2.8	3	20	4	26	5	27	Ht	5	27	5	58
su	Y	Rog	GH 3054	3	3.4	4	24	4	28	1	4	Ht	3	20	3	30
su	Y	Rog	GH 5703	8	5.7	0	0	0	0	8	46		3	21	6	71
su	Y	Rog	GH 7749	2	3	0	5			5	29		2	14	6	73
su	Y	HM	HMX 0395	5	4.4	0	1	4	25	7	44		4	25	6	63
su	Y	HM	HMX 0396	4	3.7	0	1	5	31	6	39		4	23	6	60
su	Y	HM	HMX 7384	9	6.6	0	1	4	29	8	46		5	28	6	65
su	Y	HM	HMX 8389	1	2.2	0	1	3	22	3	17	Ht	4	23	6	60
su	Y	HM	Insignia	2	3	0	1	5	32	8	51		6	35	6	69
su	Y	Cr	Intrigue	4	3.9	0	1	4	29	6	39		8	41	6	71
su	Y	Rog	Jubilee	7	5.6	6	33	6	37	8	49		3	20	6	72
su	Y	HM	Legacy	5	4.2	0	1	5	33	8	48		6	33	6	70
su	Y	HM	Lumina	7	5.6	0	1	5	33	7	41	Ht	5	27	7	77
su	Y	Sem	RSR 8482458	3	3.1	0	1	4	26	5	27		6	32	6	71
su	Y	Sem	RX 8490549	1	2.2	0	1	6	37	4	20		7	37	7	75
su	Y	HM	Style Pak	3	3.6	5	31	6	35	7	45		5	29	6	69
su	Y	Sem	SVR 08302418	2	2.9	0	1	2	17	4	21	Ht	6	30	6	66
su	Y	Sem	SVR 08705760	5	4.1	0	1	2	18	7	40		3	17	6	66
su	Y	Sem	SVR 8436247	5	4.3	0	2	7	39	5	31		3	20	6	65
su	Y	Sem	SVR 8479238	3	3.2	0	1	3	23	4	23		6	31	6	63

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				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
su	Y	Sem	SVR 8481728	3	3.4	0	1	4	29	5	28		6	33	6	73
su	Y	Sem	SVR 8481768	2	2.9	0	1	5	33	5	28		7	36	6	72
su	Y	Sem	SVR 8482598	2	3	0	1	4	30	5	27		7	37	6	69
su	Y	Sem	SVR 8492229	1	2.2	0	1	5	31	5	31	Ht	6	35	6	64
su	Y	Sem	SVR 8492259	1	2.2	0	1	5	32	5	30	Ht	7	36	6	63
su	Y	Sem	SVR 8492909	4	3.8	3	19	4	28	3	18		3	17	6	65
su	Y	HM	Topacio	2	2.9	0	1	3	21	4	25	Ht	5	27	5	59
su	Y	SnR	VY 2503 NG	7	5	4	25	5	33	6	36		4	25	6	71
su	Y	SnR	VY 2536 NG	5	4.4	0	1	6	38	5	31		3	20	6	63
su	BC	Rog	BC 4315	5	4.1	5	30	6	36	4	21		6	30	9	94
su	BC	Cr	Honey & Cream	8	5.9	6	33	8	47	5	32		6	35	8	83
su	BC	Cr	Quickie	8	6.3	9	50	9	55	9	56		7	36	8	80
su	W	Sem	Snow Belle	8	6	5	28	7	40	6	39		3	19	7	76
su	W	Sem	Viva	5	4	6	35	8	48	6	36		4	26	7	78
<i>Sugary enhancer hybrids</i>																
sesyn	Y	Cr	Blaze	3	3.2	5	28	6	34	5	27		7	36	9	90
se	Y	Cr	Bodacious	4	3.9	5	26	5	31	6	35		5	28	8	82
se	Y	Cr	Bodacious Rust	4	3.8	0	1	5	33	6	33		4	26	6	72
sesu	Y	Sem	Cinch	8	6	7	39	6	37	4	22		3	22	7	78
sesu	Y	Sem	Climax	4	3.9	0	1	4	29	7	41		1	8	6	71
sesu	Y	Sem	El Toro	3	3.6	0	2	5	33	6	34		3	19	6	63
se	Y	Sem	EX 8413067	3	3.4	5	28	6	35	6	35		4	23	9	94
se	Y	Sem	EX 8414247	3	3.3	3	19	3	20	4	25		4	23	9	90
se	Y	Sem	EX 8414907	5	4	6	37	6	37	7	40		8	43	9	89
sesu	Y	Sem	EX 8441107	5	4	0	2	8	47	7	45		3	19	8	85
sesu	Y	Sem	EX 8452067	3	3.6	0	1	4	26	8	48		7	37	6	73
se	Y	Sem	EX 8471538	3	3.2	0	1	4	24	5	28		3	19	6	71
sesu	Y	Sem	EX 8473488	5	4.1	6	36	7	41	6	35		8	41	9	98
se	Y	Rog	GH 1665	8	5.9	0	1	7	41	6	38		3	17	6	71
se	Y	Rog	GH 1829	4	3.7	2	14	0	0	6	33		7	37	6	68
se	Y	Rog	GH 4809	8	5.9	0	1	5	31	5	30	Ht	6	30	5	59
se	Y	Cr	Incredible	4	3.7	5	27	4	27	6	33		4	23	6	64

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
se	Y	Cr	Incredible Rust	5	4	0	1	4	29	6	33		4	24	6	73
se	Y	Rog	Kandy Plus	4	3.8	0	1	5	32	6	33		1	9		
se	Y	Mesa	Merlin	2	2.8	3	17	3	19	4	23		1	9	6	65
se	Y	Cr	Miracle	1	2.3	3	17	4	24	4	21		3	21	8	83
se	Y	Sem	PX 9363019	8	6.3	5	30	5	33	6	37		3	22	9	99
se	Y	Sem	PX 9370068	7	5.4	7	40	7	42	7	45		7	40	7	78
se	Y	Cr	Sugar Buns	7	5.2	6	34	7	43	5	30		4	24	9	88
se	Y	Sem	SVR 8414797	8	5.8	6	38	6	35	8	46		9	46	9	94
sesu	Y	Sem	SVR 8450257	4	3.7	6	35	6	36	8	49		7	38	9	91
sesu	Y	Sem	SVR 8482478	2	3	0	1	3	22	6	34		4	23	6	69
se	Y	HM	Sweet Cheeks	7	5.6	9	60	9	52	9	54		7	39	9	95
se	Y	Mesa	Tuxedo	6	4.7	2	15	3	20	3	17		3	22	6	71
se	Y	Mesa	Welcome	8	5.8	7	40	7	40	4	21		5	29	8	86
se	BC	Mesa	Accord	3	3.6	5	30	4	30	4	21	Ht	3	21	6	70
se	BC	Cr	Ambrosia	3	3.6	5	30	5	32	5	30		6	30	7	78
susesh2	BC	Rog	BC 4806	7	5.2	0	1	4	30	5	29		2	15	6	68
sesyn	BC	Cr	Bojangles	4	3.9	5	28	5	31	4	25		4	24	9	88
se	BC	Mesa	Bon Appetit	8	6.4	6	35	7	39	5	29		4	25	7	78
sesyn	BC	Cr	Bravado	3	3.3	4	25	5	32	5	32		3	17	9	88
se	BC	Mesa	Buckeye	1	2.4	4	23	4	27	4	23		6	31	6	63
se	BC	Cr	Delectable	6	4.6	4	23	4	27	4	26		2	16	8	86
se	BC	HM	Double Choice	7	5.3	5	30	6	37	9	53		9	49	9	99
se	BC	Cr	Early Ambrosia	7	5.4	6	36	7	42	9	53		7	36	8	83
se	BC	Mesa	Encore	3	3.1	2	15	3	19	5	32		3	22	6	66
se	BC	Sem	EX 8410297	5	4.4	0	1	5	33	7	44		7	40	6	64
se	BC	Sem	EX 8414777	6	4.9	3	19	4	26	6	37		6	33	6	65
se	BC	Sem	Ex 8415097	2	2.8	3	18	4	27	4	21		5	28	6	64
se	BC	Sem	EX 8415137	6	4.6	3	21	4	25	7	43		1	8	7	77
se	BC	Cr	Fleet	9	6.8	7	39	6	37	7	45		5	28	9	88
suse	BC	HM	HMX 0351 BES	8	6.2	8	48	8	47	9	57		6	31	9	94

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
suse	BC	HM	HMX 0352 BES	3	3.6	5	28	4	26	6	35		6	35	9	95
suse	BC	HM	HMX 0353 BEB	3	3.2	0	1	6	35	6	36		7	36		
suse	BC	HM	HMX 5348 BES	4	3.9	5	28	5	31	6	36		3	18	5	58
suse	BC	HM	HMX 6357 BSB	5	4	5	28	6	35	6	36		3	18	6	72
suse	BC	HM	HMX 7366 BES	3	3.3	6	38	6	35	5	31		3	20	8	85
se	BC	Mesa	Lancelot	3	3.4	4	22	3	23	4	24		3	22	6	66
se	BC	Mesa	Luscious	8	6	5	31	7	41	5	31		3	22	7	79
se	BC	Cr	Mystique	4	3.8	6	37	8	47	3	13		5	28	7	78
sesyn	BC	Sem	PX 9314639	3	3.4	2	15	2	18	4	20	Ht	7	37	8	81
sesyn	BC	Sem	PX 9330109	7	5.1	5	27	7	39	5	29		6	34	6	67
se	BC	Sem	PX 9367069	5	4.1	5	29	7	41	7	42		6	35	9	94
se	BC	Sem	PX 9368038	5	4.4	4	22	4	27	6	38		3	21	6	70
sesu	BC	Sem	PX 9368048	6	4.7	3	20	4	25	4	21		6	35	9	95
se	BC	Sem	PX 9374048	3	3.1	5	27	5	31	5	28		4	25	6	70
se	BC	Mesa	Rapport	8	5.7	5	31	5	33	5	28		5	27	8	86
se	BC	Sem	Seneca Nation	1	2.4	4	23	3	24	3	17		4	25	6	68
se	BC	Sem	Seneca Spring	6	4.8	5	27	6	36	5	27		6	33	7	79
se	BC	Sem	Sensor	5	4.3	3	21	4	26	4	26		2	14	6	65
se	BC	HS	Sir Prise	8	6.4	7	42	7	44	5	32		3	21	8	84
sesu	BC	Sem	SVR 08705482	6	4.7	0	4	8	47	6	34		9	59	9	93
se	BC	Sem	SVR 08705488	5	4	0	1	7	44	6	33		9	52	9	91
se	BC	Sem	SVR 8471748	7	5.1	3	17	4	28	5	30		9	46	9	92
suse	BC	HM	Sweet Chorus	7	5.2	7	44	8	46	8	49		8	42	9	94
se	BC	HM	Sweet Rhythm	4	3.7	7	40	8	48	6	33		3	19	6	73
se	BC	HM	Sweet Symphony	6	4.7	9	53	9	54	8	46		3	19	8	81
se	BC	Cr	Trinity	7	5.1	7	43	7	43	6	38		5	27	9	95
se	BC	Sem	Wizard	7	5.6	5	27	6	35	7	40		5	27	6	71
se	W	Sdw	97 6448	2	2.7	5	27	7	43	4	25		3	18	9	92
se	W	Sdw	97 6449	1	2.3	4	24	5	33	3	18		2	11	9	89
sesyn	W	Cr	Alexis	4	3.8	5	26	5	31	4	25		3	17	7	77
se	W	Cr	Argent	3	3.6	5	30	6	35	4	22		3	20	6	73

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
se	W	HM	Brilliance	3	3.2	5	28	4	26	4	26		3	21	9	88
se	W	Mesa	Cloud Nine	4	3.7	5	31	6	34	5	27		5	28	8	82
se	W	Sdw	Faith	5	4.2	4	24	6	35	5	28		5	27	7	77
se	W	Cr	Frosty	6	4.7	7	38	7	39	7	40		4	26	8	81
se	W	HM	HMX 0350 WE	5	4	6	35	6	37	5	28		5	27	7	74
se	W	Mesa	MM 10502	3	3.3	6	33	6	34	4	23		4	25	7	79
se	W	Mesa	MM 10820	6	4.7	6	36	7	38	4	24		3	19	6	66
se	W	Mesa	MM 20183	6	4.6	6	32	6	34	4	22		4	25	6	73
se	W	Mesa	MM 20250	3	3.3	5	30	5	33	5	29		7	38	8	86
se	W	Mesa	MM 20424	4	3.9	5	29	6	34	4	23		7	37	8	80
se	W	Mesa	MM 20425	3	3.3	5	28	6	35	4	23		6	30	6	69
se	W	Sem	Seneca Sensation	3	3.6	4	24	4	27	4	25		2	12	9	89
se	W	Rog	Silver Knight	8	6.4	5	28	6	34	9	58		4	24	9	98
se	W	HM	Silverado	2	2.8	5	28	6	35	6	34		5	29	7	76
se	W	Mesa	Sugar Snow II	8	6.2	6	32	6	36	5	27		6	34	9	94
se	W	HM	Sweet Ice	6	4.6	8	49	9	53	6	34		3	21	9	94
se	W	HM	Sweet Satin	2	2.8	8	46	7	43	4	20		2	15	5	53
<i>shrunken-2 hybrids</i>																
sh2	Y	AC	ACX 427 (610)	8	6.1	0	1	7	42	6	36		5	29	7	78
sh2	Y	AC	ACX 908	7	5.4	0	3	7	39	5	32	Ht	8	42	7	74
sh2	Y	AC	ACX 909	6	4.8	0	1	7	39	6	38	Ht	3	18	6	63
sh2	Y	AC	ACX 933	7	5.1	0	1	7	40	5	29	Ht	6	32	8	80
sh2	Y	AC	ACX 934	7	5.6	0	1	6	36	7	40	Ht	4	26	7	76
sh2	Y	AC	ACX 945	7	5.3	0	1	8	46	6	34	Ht	5	27	6	73
sh2	Y	Cr	Assure	6	4.8	0	1	7	39	4	25	Ht	2	12	6	64
sh2	Y	HM	Bandit	5	4.2	0	1	7	38	7	40		1	10	7	74
sh2	Y	Sem	Brigadier	7	5.4	5	27	6	36	3	15	Ht	3	17	6	63
sh2	Y	Sem	Brut	3	3.6	3	19	4	28	3	16	Ht	2	15	6	68
sh2	Y	Cr	Contender	9	6.7	0	1	7	42	5	31		3	17	8	83
sh2	Y	Cr	Crisp n Sweet 710	4	3.9	5	29	6	37	3	19	Ht	1	9	7	78
sh2	Y	Cr	Crisp n Sweet 710 A	4	3.7	5	26	6	34	2	11	Ht	1	4	6	67

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
sh2	Y	Cr	Crisp n Sweet 710 RR	2	3	0	4	5	33	2	11	Ht	2	11	6	62
sh2	Y	Cr	Crisp n Sweet 710 ARR	2	2.7	0	1	5	33	2	11	Ht	1	7	6	61
sh2	Y	HM	Day Star	2	2.6	5	27	5	32	1	2	Ht	1	9	5	48
sh2	Y	Sem	Diva	3	3.6	0	1	5	31	5	27		2	16	6	67
sh2	Y	Sem	EX 8410057	5	4.1	0	1	6	35	3	18	Ht	1	9	6	65
sh2	Y	Sem	EX 8415037	3	3.6	0	1	7	39	3	16	Ht	1	8	6	60
sh2	Y	Sem	EX 8415257	5	4	0	1	7	39	4	20		2	16	6	69
sh2	Y	Sem	EX 8462518	2	2.9	5	27	5	33	4	24	Ht	2	13	6	60
sh2	Y	Sem	EX 8492829	3	3.4	0	1	7	39	5	32		2	15	7	77
sh2	Y	Sdw	Flagship II	3	3.6	0	0	6	35	4	20	Ht	2	11	6	60
sh2	Y	Cr	Gallant	4	3.7	5	30	7	39	5	31		2	13	6	73
sh2	Y	GG	Green Giant Code 107	3	3.1	0	1	6	36	4	21		3	21	6	73
sh2	Y	GG	Green Giant Code 109	5	4.1	0	1	3	22	5	28		2	11	7	75
sh2	Y	Rog	GSS 0966 VP	1	2.3	2	14	0	0	2	12	Ht	8	43	6	61
sh2	Y	Rog	GSS 0978 VP	4	3.9	1	10	0	0	4	23	Ht	6	33	6	68
sh2	Y	Rog	GSS 3381	2	2.7	0	1	4	25	1	7	Ht	2	13	3	37
sh2	Y	Rog	GSS 4644	4	3.9	4	24	4	29	3	19	Ht	2	14	5	59
sh2	Y	Rog	GSS 5771	6	4.9	0	1	4	28	3	14	Ht	7	36	5	58
sh2	Y	Rog	GSS 5865	9	6.6	0	1	5	31	5	27	Ht	2	15	6	66
sh2	Y	Rog	GSS 8357	2	2.9	0	1	5	31	3	16	Ht	2	13	6	63
sh2	Y	HM	HM 2384 S	5	4	0	1	6	34	6	36		2	14	5	51
sh2	Y	HM	HMX 0355 S	4	3.7	0	1	7	39	5	29		1	9	6	68
sh2	Y	HM	HMX 0393 S	6	4.9	0	1	4	28	6	33		3	17		
sh2	Y	HM	HMX 0394 S	5	4.3	0	1	5	31	1	6	Ht	3	22	6	63
sh2	Y	HM	HMX 8392 S	2	2.6	0	1	7	38	5	27		2	14	6	62
sh2	Y	SnR	HY 1558 NG	3	3.4	0	1	5	32	5	28		6	31	8	81
sh2	Y	SnR	HY 1734 NG	2	3	0	1	5	33	4	20		3	19	6	68
sh2	Y	Rog	Impulse	8	5.7	5	31	7	40	9	53		2	12	9	91
sh2	Y	Cr	Marvel	7	5.3	0	1	7	39	5	28		3	19	9	91
sh2	Y	Cnt	Mirai 001	4	3.8	4	23	4	26	6	33		3	22	7	74
sh2	Y	Cnt	Mirai 002	4	3.8	4	25	4	25	6	34		4	24	7	78

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
sh2	Y	Cnt	Mirai 003	3	3.2	5	30	6	37	6	33		5	27	6	63
sh2	Y	Cnt	Mirai 005	5	4.5	4	22	4	28	5	28		7	36	6	61
sh2	Y	Cr	Missouri	3	3.6	5	31	7	38	4	26		3	17	6	72
sh2	Y	HM	Morning Star	3	3.6	0	1	6	34	1	4	Ht	1	7	5	47
sh2	Y	Sem	Oh So Sweet	4	3.9	7	39	7	44	7	44		2	14	7	77
sh2	Y	Rog	Prime Plus	1	2	0	1	6	36	2	11	Ht	7	37	6	67
sh2	Y	Rog	Primetime	2	2.7	6	35	6	37	3	13	Ht	8	45	6	64
sh2	Y	Sem	Punch Line	4	3.8	6	34	7	39	3	16	Ht	2	13	6	63
sh2	Y	Sem	PX 9362379	3	3.3	4	25	5	33	4	20	Ht	1	10	6	71
sh2	Y	Sem	PX 9381169	2	3	0	1	4	27	3	18	Ht	2	16	6	71
sh2	Y	Sem	PX 9381178	5	4.4	4	24	4	30	3	19	Ht	1	8	6	73
sh2	Y	HM	Rustler	2	2.9	0	1	6	37	5	30		1	10	5	50
sh2	Y	Cr	Samson	6	4.8	0	4	9	52	6	36		4	23	8	83
sh2	Y	Sem	Stetson	1	2.4	0	1	7	39	4	25		1	10	6	70
sh2	Y	AC	Summer Sweet 7630	2	3	5	30	6	34	2	12	Ht	2	12	6	65
sh2	Y	HM	Sun Volt	5	4.3	0	1	6	36	6	38		2	11	6	70
sh2	Y	Rog	Supersweet Jubilee Plus	7	5.1	0	2	5	33	7	41		3	17	6	69
sh2	Y	HM	Sure Gold	3	3.2	0	1	6	34	5	28		2	14	5	47
sh2	Y	Sem	SVR 08705746	5	4.4	5	29	7	39	5	31		2	14	7	76
sh2	Y	Sem	SVR 08705797	4	3.9	0	2	9	56	8	47		5	28	7	77
sh2	Y	Sem	SVR 08705809	6	4.7	0	1	9	54	7	40		4	26	9	88
sh2	Y	Sem	SVR 08709059	1	2.2	0	1	4	28	4	25	Ht	1	8	5	48
sh2	Y	Sem	SVR 8415217	6	4.7	0	1	6	35	3	18	Ht	2	13	7	78
sh2	Y	Sem	SVR 8460758	7	5.1	0	1	6	35	3	17	Ht	3	17	6	68
sh2	Y	Sem	SVR 8460768	4	3.9	0	1	4	30	4	21	Ht	5	28	6	63
sh2	Y	Sem	SVR 8461358	9	6.7	0	1	6	34	4	25		1	8	6	62
sh2	Y	HM	Ultimate	1	2.1	5	27	6	35	3	14	Ht	1	6	5	46
sh2	Y	Sem	XP 8414737	3	3.3	0	1	6	38	4	21		3	17	6	69
sh2	Y	IFS	XTH 90570	3	3.4	7	39	7	39	7	43		5	28	9	91
sh2	Y	IFS	Xtra Tender 171A	3	3.4	0	1	6	38	4	25		3	17	7	78

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
sh2	Y	IFS	Xtra Tender 175A	4	3.8	5	31	7	38	6	39		7	40	8	83
sh2	Y	IFS	Xtra Tender 176A	6	4.6	6	35	6	38	6	38		5	27	7	78
sh2	Y	IFS	Xtra Tender 177A	2	2.6	5	27	6	35	6	33		3	21	6	73
sh2	Y	IFS	Xtra Tender 178A	5	4.4	6	33	7	40	5	29	Ht	5	28	6	66
sh2	Y	IFS	Xtra Tender 179A	1	2.1	4	23	5	33	5	29		5	28	6	66
sh2	Y	HM	Zenith	1	2.4	6	33	7	40	4	26		1	9	6	62
sh2	BC	AC	ACX 946	6	4.9	0	3	9	50	5	31	Ht	4	25	6	73
sh2	BC	AC	ACX 950	3	3.3	5	31	6	36	6	33		3	22	7	76
sh2	BC	Sem	Broadway	5	4.2	0	1	8	45	4	22	Ht	2	15	6	66
sh2	BC	Rog	BSS 0977	4	3.7	0	0	0	0	2	9	Ht	6	31	5	55
sh2	BC	Rog	BSS 1690	7	5	4	22	4	30	3	17		1	9	6	73
sh2	BC	Rog	BSS 8142	5	4.3	3	17	3	23	2	10	Ht	2	12	3	36
sh2	BC	HM	Candy Corner	4	3.9	0	1	8	48	6	39		3	22	8	82
sh2	BC	HM	Candy Store	3	3.3	4	25	6	35	5	31		3	17	6	73
sh2	BC	HM	Confection	6	4.9	8	48	9	55	9	64		3	22	9	90
sh2	BC	Sem	EX 8415277	3	3.3	0	1	6	35	4	21		4	24	6	63
sh2	BC	HM	Fantasy	9	7.2	7	43	8	48	8	51		6	33	9	98
sh2	BC	SnR	HB 1800 NG	2	2.9	0	1	6	36	2	12	Ht	5	29	6	69
sh2	BC	HM	HMX 8343 BS	1	1.9	0	1	5	32	1	2	Ht	1	9	5	49
sh2	BC	HM	HMX 8344 BS	2	2.8	0	1	7	44	6	38		3	17	6	64
sh2	BC	HM	HMX 9348 BS	7	5	9	54	9	62	9	53		3	21	9	91
sh2	BC	Sem	Hollywood	4	3.7	0	1	6	38	5	29		4	25	6	65
sh2	BC	Cr	Phenomenal	5	4	5	30	7	39	5	30		4	24	6	63
sh2	BC	Sem	PX 9362439	7	5.6	4	23	4	27	3	19		3	19	6	66
sh2sy	BC	Sem	PX 9364169	6	4.7	0	1	4	26	3	15	Ht	3	17	6	72
sh2	BC	Sem	PX 9380029	7	5.2	6	34	7	38	5	28	Ht	2	13	7	78
sh2	BC	Sem	PX 9382019	4	3.8	0	1	6	34	2	12	Ht	2	16	6	60
sh2	BC	IFS	Sch 15001	3	3.2	5	30	7	39	5	32		3	22	6	68
sh2	BC	IFS	Sch 15003	6	4.6	6	33	7	39	5	32	Ht	6	33	9	92
sh2	BC	AC	Summer Sweet 8102	4	3.7	4	25	6	34	3	15	Ht	1	6	6	65
sh2	BC	Sem	SVR 08705788	5	4.4	0	2	7	42	5	31		5	27	6	69

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001																
				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
sh2	BC	Cr	Tango	3	3.4	4	24	4	30	5	27		2	13	6	72
sh2	BC	HM	Twin Star	1	2.1	0	1	6	38	1	3	Ht	2	13	6	66
sh2	BC	IFS	Xtra Tender 270 A	6	4.6	7	41	8	46	7	45		3	21	8	83
sh2	BC	IFS	Xtra Tender 271A	3	3.2	5	31	7	40	6	39		4	24	8	81
sh2	BC	IFS	Xtra Tender 272A	4	3.9	7	43	8	46	8	47		3	20	8	84
sh2	BC	IFS	Xtra Tender 273A	6	4.7	4	24	7	40	7	42		7	36	6	72
sh2	BC	IFS	Xtra Tender 275A	6	4.9	7	39	7	42	6	34	Ht	6	30	7	79
sh2	BC	IFS	Xtra Tender 276A	6	4.7	7	38	6	36	6	34		3	17	8	80
sh2	BC	IFS	Xtra Tender 277A	2	3	4	25	5	33	5	32		2	15	6	70
sh2	BC	IFS	Xtra Tender 278A	3	3.3	5	26	5	32	4	21	Ht	2	13	6	71
sh2	BC	IFS	Xtra Tender 282A	2	2.9	0	1	4	29	2	11	Ht	2	11	6	65
sh2	BC	Sak	Yumeno Corn	6	4.8	0	1	6	37	4	24	Ht	3	19	8	80
sh2	W	Sem	Dreamer	7	5.1	5	31	4	29	6	34		3	22	6	71
sh2	W	HM	FMX 413	6	4.8	0	1	7	39	5	31		2	12	6	68
sh2	W	Sem	Frontier	6	4.9	6	32	6	38	5	27	Ht	6	32	6	65
sh2	W	HM	HMX 0356 W5	1	1.9	0	1	5	32	1	3	Ht	2	13	3	33
sh2	W	Cr	How Sweet It Is	5	4	5	31	7	40	5	32		3	22	6	63
sh2	W	SnR	HW 1287 NF	5	4.3	6	34	7	39	6	38		3	20	5	51
sh2	W	SnR	HW 1292 NF	7	5.1	6	32	7	38	5	32		4	24	5	58
sh2	W	HM	Ice Queen	6	4.7	0	1	8	47	6	36		4	23	6	67
sh2	W	Sak	Millenium	1	2.2	0	1	6	35	3	18	Ht	1	7	6	62
sh2	W	Sem	PX 9375029	7	5.2	5	27	4	30	5	29	Ht	6	33	6	70
sh2	W	Sem	PX 9380039	6	4.8	6	34	6	36	5	29	Ht	2	15	6	73
sh2	W	HM	Silver Dollar	3	3.6	7	41	8	45	3	17		5	27	7	75
sh2	W	HM	Snow White	8	6	9	56	9	50	7	42		1	10	8	81
sh2	W	Sem	Sugar Bowl	6	4.8	5	28	5	33	4	21		2	11	6	65
sh2	W	AC	Summer Sweet 7631	1	2.1	5	29	7	39	2	12	Ht	1	10	6	67
sh2	W	AC	Summer Sweet 781 Ultra	1	2.3	6	33	7	42	3	19		2	15	7	74
sh2	W	Sem	SVR 08705770	5	4.2	0	1	6	35	5	27		6	31	6	64
sh2	W	Sem	SVR 08705771	3	3.6	0	2	4	30	3	17	Ht	3	22	6	64

Table 4. Reactions of sweet corn hybrids in the University of Illinois disease nursery in 2001

				Common rust												
				Stewart's wilt		Old race*		New race**		Northern leaf blight			Southern leaf blight		Gray leaf spot	
Type	KC	Seed source	Hybrid	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Rxn	Rate (1-9)	Ht gene	Rxn	Rate (1-9)	Rxn	Rate (1-9)
sh2	W	Sem	SVR 08705779	4	3.7	0	1	4	28	3	16	Ht	3	19	6	62
sh2	W	HM	Sweet Magic	5	4.2	9	56	9	57	6	38		4	26	9	96
sh2	W	Rog	WSS 1921	6	4.6	0	1	6	37	3	14	Ht	2	16	5	56
sh2	W	Rog	WSS 9870	3	3.2	0	1	8	45	2	11	Ht	6	32	6	63
sh2	W	IFS	Xtra Tender 372A	3	3.1	8	47	7	41	6	35		2	16	8	84
sh2	W	IFS	Xtra Tender 374A	6	4.6	5	28	6	35	6	38		3	22	6	72
sh2	W	IFS	Xtra Tender 376A	7	5.1	6	36	6	37	7	40		4	23	6	71
sh2	W	IFS	Xtra Tender 378A	2	2.6	5	26	6	36	4	22	Ht	2	12	6	69
sh2	W	IFS	Xtra Tender 382A	2	3	0	1	5	32	2	12	Ht	2	11	6	69
sh2	M	HM	Indian Summer	9	6.7	9	52	9	55	7	45		3	19	8	86
			BLSD k=100		0.88		5.8		5.9		6.4			6.3		13.6
			Mean		4		29.3*		33.4		29.8			22.6		72.4
			SD		1.17		9.6*		9.8		11.7			9.6		12.5
			Minimum		1.9		0		0		2			4		30
			1st Quartile		3.2		1		29		22			15		65
			Median		3.9		18		34		29			22		71
			3rd Quartile		4.8		30		39		38			29		80
			Maximum		7.3		60		62		64			59		100