

1998 Pennsylvania Soybean Performance Report

Soybean tests are conducted annually to provide interested persons with information regarding the performance of soybeans grown in Pennsylvania. This report summarizes performance results for 1998.

The shorter season varieties (Group I, II, and early III) were tested at the Russell E. Larson Agricultural Research Center at Rock Springs in Centre County. The longer maturing varieties (Groups III and IV) were tested at the Southeast Agricultural Research and Extension Center situated in Lancaster County. A trial planted after small grains harvest was also conducted in Lancaster County.

Herbicide tolerant varieties (glyphosate RR and sulfonyleurea STS) were tested in separate trials.

Procedures. The private seed company entries in this test were those chosen by the companies for testing. The public varieties were chosen based upon previous tests results.

The plots in Centre County had 5 rows, each 12 feet long. Rows were spaced 7 inches apart. Each plot was trimmed to 9 feet, and all 5 rows were harvested. The Centre County trials were planted on June 2.

In Lancaster County, the full-season and double-crop trial plots had four rows with 24-inch-row spacing, and each was 20 feet long. Plots were trimmed to 18 feet, and two center rows were harvested. The Lancaster County full-season trials were planted June 20. All double crop trials were seeded July 7.

Seeding rates of the Centre and Lancaster county full-season trials were adjusted to obtain approximately 150,000 plants per acre. Each cultivar was replicated four times in all trials. In the double-crop trial, the seeding rate was adjusted to obtain approximately 200,000 plants per acre.

The following observations were made for some or all of the tests (Tables 1-6):

Yield was calculated after all the seed weights were adjusted to 13 percent moisture.

Maturity is the date when approximately 95 percent of pods were ripe.

Height is the average length of plants from the ground to the tip of the main stem.

Lodging was rated in all tests as follows:

- 1 = almost all plants erect.
- 2 = all plants leaning slightly or a few plants down.
- 3 = all plants leaning moderately, or 25-50 percent of the plants down.
- 4 = all plants leaning considerably, or 50-80 percent of the plants down.
- 5 = almost all plants down.

Seed quality was rated according to the following scale:

- 1 = very good
- 2 = good
- 3 = fair
- 4 = poor
- 5 = very poor

Seed size gives the approximate number of seeds in one pound.

Interpretation of results

Variety performance differences are caused partially by genetic differences and partially by soil variation and other environmental variations which cannot be adequately controlled. Thus, small differences in performance may have no significance. Multiple-year averages are a more valid indication of the performance of a specific variety than are data for a single year. Statistical procedures have been used for the most important characteristics to allow meaningful comparisons of variety averages at a particular location. A standard least significant difference (LSD) value is provided for comparing varieties. Any difference between two variety averages that exceeds the LSD value is considered significant and not simply a result of uncontrolled environmental variation.

The value of coefficient of variation (CV) is a measure of relative variation useful in evaluating the precision achieved in an experiment. In grain and forage trials, for example, the CV value for yield is often between 5 and 15 percent. Confidence in the reliability of the experimental results declines as the CV value increases.

Uncontrollable or unmeasurable variations in soil fertility, soil drainage, and other environmental factors contribute to increased CV values.

Growing conditions

Unlike the cooler than normal growing conditions in 1997, the 1998 growing season was above normal for temperature; and a killing frost did not occur until late October. The dry soil conditions the second-half of May and early June delayed planting at both locations. The rest of the growing season had periods of adequate precipitation followed by extended dry periods.

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Table 1. Soybean variety performance in Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, inches	Lodging	Seed Quality	Size, Seeds/lb
Agway	APK 361	55.0	09-30	28	2.0	2.0	2838
Public	Defiance	54.7	10-01	30	2.2	2.0	2428
Wilken	3414	57.9	10-02	29	2.0	2.0	2873
Public	Iroquois	51.6	10-02	31	2.0	2.0	3088
Wilken	3406	56.9	10-03	29	2.0	2.0	2967
Public	Thorne	53.4	10-03	28	2.0	2.0	2785
Public	Resnik	54.0	10-04	30	2.0	2.0	2948
Agway	APK 362	60.6	10-05	32	2.0	2.0	2655
Hoffman	7353	57.5	10-06	30	2.0	2.0	2967
Public	Pana	56.2	10-06	37	2.5	2.5	3466
Public	Probst	55.2	10-06	30	2.2	2.0	3027
Wilken	3418	59.4	10-07	30	2.0	2.0	2415
Schlessman	SSC 349	57.7	10-08	28	2.2	2.0	3243
Terra	TS364T	60.2	10-09	29	2.0	2.0	2565
Agway	APK 364	57.2	10-09	31	2.0	2.0	2967
Public	General	61.8	10-10	28	2.0	2.0	2441
Agway	APK 363	60.4	10-10	30	2.0	2.0	2910
Wilken	3468	60.0	10-10	32	2.2	2.0	2719
Chemgro	3859	58.0	10-10	34	2.2	2.0	2702
NC+	3A44	50.8	10-10	26	2.0	2.0	2551
DeKalb	CX393C	58.2	10-11	32	2.0	1.0	2768
Golden Harvest	H-1362	57.6	10-11	34	2.0	2.0	2671
Hyttest	Hanover	57.4	10-11	33	2.0	2.0	2802
Wilken	3472	64.2	10-12	32	2.2	2.0	2671
Pioneer	93B82	61.5	10-12	32	2.2	2.0	2454
Chemgro	4039	60.4	10-13	31	2.2	2.0	2640
Wilken	4031N	59.6	10-13	34	2.5	2.0	2702
Public	Williams 82	55.2	10-13	35	2.8	2.0	2671
Agway	APK 392	61.8	10-14	30	2.0	2.0	3153
DeKalb	CX399	59.8	10-14	34	2.2	2.0	2802
Dynagro	3395	65.5	10-15	32	2.0	2.0	3068
NC+	3A67	62.2	10-15	27	2.0	1.0	2551
Rohrer	4007	62.0	10-15	36	2.0	2.0	2495
Agway	APK 408	61.9	10-15	36	2.5	2.0	2686
Agway	APK 401	59.4	10-15	34	2.2	2.0	2702
Hoffman	3396	59.2	10-15	33	2.0	2.5	3068
Terra	E394	58.8	10-15	38	2.2	2.0	2609
Agway	APK 406N	57.4	10-15	32	2.0	2.0	3027
Wilken	3494	68.7	10-16	34	2.0	2.0	3027
DeKalb	CX400	64.8	10-16	33	2.0	2.0	2671
Rohrer	4005	64.6	10-16	32	2.2	2.0	3027
Public	Stressland	64.0	10-16	37	2.8	2.0	2855
Wilken	4034	63.3	10-16	36	2.2	2.0	2768
Golden Harvest	H-1383	62.2	10-16	30	2.0	2.0	3197
Public	Cisne	62.0	10-16	31	2.8	2.0	2102
Hyttest	HTX3805	60.6	10-16	31	2.0	2.0	2838

Terra	TS415	60.4	10-16	33	2.8	2.5	3110
NC+	4A10	60.3	10-16	32	2.0	2.0	2655
Chemgro	4199 STS	59.7	10-16	34	2.0	2.0	2352
Public	Omaha	59.4	10-16	30	2.0	2.0	2719
Terra	E438	60.5	10-17	34	2.8	2.0	2820
Dynagro	3444N	55.1	10-17	36	2.0	2.0	2929
Wilken	4009	65.9	10-18	37	3.0	2.0	2454
Agway	APK 435	61.5	10-18	37	2.5	2.5	2752
Terra	TS474	54.9	10-22	36	3.8	2.0	2162
Mean		59.4					
LSD (.05)		05.4					
CV %		09.1					

Table 2. RR Soybean variety performance in Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, Inches	Lodging	Seed Quality	Size, Seeds/lb
Schlessman	AGRA 5935RR	49.4	30-Sep	28	2	1	2967
Agway	APK 361RR	48.2	30-Sep	28	2	2	3243
Wilken	3406RR	49.6	1-Oct	27	2	2	3220
Mid-Atlantic	MA3500 RR	46.4	2-Oct	28	2	2	3153
DeKalb	CX367CRR	50.4	6-Oct	29	1.8	1	2655
Agway	APK 394NRR	49.9	6-Oct	31	2	2	3547
Wilken	3468RR	49.1	6-Oct	29	1.5	2	3243
Dynagro	UAPX246RR	47	6-Oct	30	2	2	3492
Hyttest	RT346RR	52.5	7-Oct	30	1	2	2929
NK	R366	54.9	8-Oct	30	2	2	2948
Agway	APK 364RR	53	8-Oct	31	1.5	1	2910
Golden Harvest	H1357RR	49.1	8-Oct	28	2	2	3088
Dynagro	3368RR	54.2	9-Oct	30	1.8	2	2892
Mid-Atlantic	MA3800 RR	51.2	9-Oct	32	2	2	3388
Agway	APK 388RR	53.4	10-Oct	31	2	2	2892
Mid-Atlantic	MA3801 RR	53.2	10-Oct	28	1.5	2	2752
Mid-Atlantic	MA4000 RR	56.7	12-Oct	37	2.8	1	3243
Wilken	3474RR	55.8	12-Oct	31	2	2	2820
NK	S39-D9	48.3	12-Oct	28	1.8	2	3068
Terra	TS396RR	56.6	14-Oct	33	1	2	3175
DeKalb	CX392RR	57.4	15-Oct	36	2	2	3088
Hyttest	HTS4000RR	59.5	16-Oct	35	2.2	2	2671
Agway	APK 399RR	57.4	16-Oct	32	2.2	2	3047
Hyttest	HTS4301RR	57.3	16-Oct	39	2	2	2551
NK	S42-K2	56.7	16-Oct	34	2.2	2	2820
Wilken	4022RR	56.6	16-Oct	32	2	2	3266
Pioneer	94B41	54.3	16-Oct	32	2	1	3131
Terra	E4280RR	54.3	16-Oct	32	1	2	3519
Chemgro	4399RR	52.2	16-Oct	34	2	2	2640
Dynagro	3398RR	52	16-Oct	31	2	2	3197

DeKalb	CX419RR	51.2	16-Oct	36	2	2	2910
Terra	TS466RR	49	19-Oct	40	2.8	2	3153
Mean		52.7					
LSD (.05)		5.5					
CV %		9.5					

Table 3. STS Soybean variety performance in Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, Inches	Lodging	Seed Quality	Size, Seeds/lb
Agway	APK 389STS	52.4	30-Sep	28	2	2	2838
Hyttest	HTS3500STS	51.2	30-Sep	28	2	2	2655
Terra	E359STS	56.8	1-Oct	28	1.2	1	2624
Wilken	3481STS	53	6-Oct	34	2	2	2735
Terra	E388STS	55	7-Oct	33	2	1	2873
Hoffman	7376STS	59.6	10-Oct	31	2.5	2	2522
Wilken	3479STS	54.1	12-Oct	30	2	2	3007
Dynagro	3383STS	57.8	13-Oct	30	2	2	2987
Agway	APK 386STS	54.8	14-Oct	32	2	2	2752
Pioneer	9421	60.1	15-Oct	32	2	2	2594
Agway	APK 414STS	61.4	16-Oct	32	2	2	2752
Wilken	4019STS	59.1	16-Oct	31	2	2	2702
Hyttest	HTS4110STS	58.3	16-Oct	31	2	2	2719
Chemgro	4199STS	57.9	16-Oct	32	2	2	2565
Mean		56.5					
LSD (.05)		3.9					
CV %		7					

Table 4. Soybean variety performance in Lancaster County, 1998, 1997, 1996

Brand	Entry	Yield, bu/A			2-yr av 97, 98	3-yr av 96, 97, 98
		1998	1997	1996		
Agway	APK 361	55	55.4	66.7	55.2	59
Agway	APK 362	60.6	54.6	62.2	57.6	59.1
Agway	APK 364	57.2	52.1	61.1	54.7	56.8
Agway	APK 392	61.8	54.6	61.2	58.2	59.2
Agway	APK 401	59.4	55.6	61.1	57.5	58.7
Chemgro	3859	58	54.8	63.2	56.4	58.7
Chemgro	4039	60.4	54	63.6	57.2	59.3
DeKalb	CX399	59.8	53.8	62.1	56.8	58.6
Dynagro	3395	65.5	60.2	57.8	62.9	61.2
Hoffman	7353	57.5	55.2	64.6	56.4	59.1

Hoffman	3396	59.2	53.2	66.1	56.2	59.5
Public	Iroquois	51.6	49.4		50.5	
Public	Probst	55.2	48.6	64	51.9	55.9
Public	Thorne	53.4	52	58.8	52.7	54.7
Public	Resnik	54	44.9	57.4	49.5	52.1
Public	General	61.8	54.3		58.1	
Public	Williams 82	55.2	50	54.2	52.6	53.1
Public	Pana	56.2	57.1		56.7	
Public	Omaha	59.4	57		58.2	
Public	Cisne	62	50.4		56.2	
Public	Stressland	64	56.6	62.3	60.3	61
Rohrer	4005	64.6	64.2		64.4	
Terra	TS364T	60.2	55.4	59.6	57.8	58.4
Terra	TS415	60.4	61.3	60.9	60.9	60.9
Terra	TS474	54.9	58.2	68.3	56.6	60.5
Wilken	3406	56.9	52.2	60.2	54.6	56.4
Wilken	3414	57.9	52.3		55.1	
Wilken	3418	59.4	53.6	62.6	56.5	58.5
Wilken	3468	60	52.9	61.8	56.5	58.2
Wilken	3494	68.7	60.1	61.5	64.4	63.4

Table 5. RR Soybean variety performance in Lancaster County, 1997, 1998.

Brand	Entry	-----Yield, bu/A-----		
		1998	1997	2-yr av 97-98
Agway	APK 361RR	48.2	48	48.1
Agway	APK 364RR	53	53.5	53.3
NK	S39-D9	48.3	54.4	51.4
NK	R366	54.9	57	56
NK	S42-K2	56.7	55.5	56.1
Wilken	3406RR	49.6	51.6	50.6
Wilken	3468RR	49.1	56.3	52.7

Table 6. STS Soybean variety performance in Lancaster County, 1997, 1998.

Brand	Entry	-----Yield, bu/A-----		
		1998	1997	2-yr av 97-98
Agway	APK 386STS	54.8	50.1	52.5
Hoffman	7376STS	59.6	48.9	54.3
Pioneer	9421	60.1	50.6	55.4
Wilken	3479STS	54.1	49	51.6

Table 7. Soybean variety performance in Centre County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, inches	Lodging	Seed Quality	Size Seeds/lb
Golden Harvest	H-1174	55	20-Sep	22	1	2	2495
Public	Dwight	57.1	25-Sep	27	1	2	3492
Golden Harvest	H-1282	61.3	26-Sep	26	1	2	3338
DeKalb	CX253	60.8	26-Sep	26	1	2	3519
Terra	E248	60	26-Sep	26	1	2	3266
Pioneer	9305	59.6	26-Sep	24	1.1	2	3007
Dynagro	3304	57.9	28-Sep	26	1	2	3519
Public	Flint	57.2	28-Sep	27	1.1	2	3175
Terra	TS317	61.2	29-Sep	27	1.5	2	3414
Public	Defiance	60.8	29-Sep	30	1	2	2752
Agway	APK 362	70.2	30-Sep	30	1	1	2735
Golden Harvest	H-1316	62.8	30-Sep	27	1.5	2	3388
Public	Iroquois	62.5	30-Sep	31	1.1	2	3414
Wilken	3414	62.3	30-Sep	28	1	2	3131
Public	Resnik	60.7	30-Sep	29	1	2	3243
Agway	APK 361	57.8	30-Sep	28	1	2	3220
Wilken	3418	66.7	1-Oct	30	1	1	2892
Agway	APK 338	66	1-Oct	27	1.1	2	2929
DeKalb	CX339C	63.4	1-Oct	30	1	1	2967
Wilken	3472	66.5	2-Oct	29	1	2	2892
Terra	TS364T	66.4	2-Oct	29	1	3	2802
Terra	E348	66.3	2-Oct	31	1	2	3110
Chemgro	3555	66	2-Oct	29	1	2	3007
Hoffman	7353	65	2-Oct	30	1	1	3110
Public	Thorne	64.9	2-Oct	29	1	2	2967
Public	General	63.4	2-Oct	28	1.1	2	2802
Public	Probst	61.4	2-Oct	30	1.1	2	3266
Agway	APK 364	63.6	3-Oct	30	1	3.5	3088
Dynagro	3368	65.4	4-Oct	29	1.1	2	3047
Wilken	3468	63.4	4-Oct	31	1	2	2873
Public	Pana	70	5-Oct	36	2	2	3363
Wilken	3494	69	6-Oct	31	1	2	3363
Hyttest	HTX3805	65.9	7-Oct	30	1.1	2	3131
DeKalb	CX393C	60.2	7-Oct	30	1	2	3290
Wilken	4009	76.8	8-Oct	36	2	2.5	2855
Hoffman	3396	68.2	9-Oct	34	1.1	2.5	3088
MEAN		63.5					
LSD (.05)		7.6					
CV %		13.3					

Table 8. RR Soybean variety performance in Centre County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, inches	Lodging	Seed quality	Size, seed/lb
Golden Harvest	X217 RR	57	23-Sep	26	1	2.5	3175
Golden Harvest	X301 RR	61.6	28-Sep	27	1	2	3547
Dynagro	3303RR	56.8	29-Sep	29	1	2	3439
Terra	E3080RR	55.8	29-Sep	26	1	2	3783
NK	S30-K3	62.4	30-Sep	31	1	2	3110
Agway	APK 361RR	60.8	30-Sep	30	1	2	3131
Terra	E2880RR	58.3	30-Sep	30	1	2	3721
Agway	APK 354RR	69.5	1-Oct	30	1	2	3047
Wilken	3406RR	58.2	1-Oct	29	1	2	3314
Pioneer	93B51	61.8	2-Oct	30	1	2	3519
DeKalb	CX359RR	59.5	4-Oct	31	1	2	3314
DeKalb	CX343CRR	59.4	4-Oct	36	1	2	3492
Dynagro	3368RR	63.4	5-Oct	29	1	2	3363
DeKalb	CX367CRR	61.2	5-Oct	28	1	2	2910
Terra	TS356RR	68	6-Oct	30	1	2	2987
NK	R366	64.6	6-Oct	29	1	2	3175
Wilken	3468RR	70.8	8-Oct	29	1	2	2967
Agway	APK 388RR	70.8	9-Oct	32	1	2	2752
Hyttest	RT346	70.6	9-Oct	31	1	2	2855
NK	S39-D9	65.5	10-Oct	32	1	2	3047
Mean		62.8					
LSD (.05)		9.4					
CV %		12.5					

Table 9. STS Soybean variety performance in Centre County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, inches	Lodging	Seed Quality	Size, Seeds/lb
Terra	TS327STS	63.5	29-Sep	29	1.2	2	3243
Terra	E298STS	63.5	1-Oct	28	1	2	3266
Agway	APK 323STS	67.8	2-Oct	30	1.2	2	3363
Agway	APK 389STS	64.6	2-Oct	30	1.2	2	2838
Hyttest	HTS3500STS	64.2	2-Oct	29	1	2	2802
Golden Harvest	X-315STS	61.8	2-Oct	28	1	2	3220
Hoffman	7376STS	70.9	5-Oct	31	1	2	2752
Pioneer	93B81	64.6	6-Oct	32	1	2	3153
Dynagro	3383STS	68.8	8-Oct	32	1.8	2	2768
Wilken	4019STS	77	10-Oct	32	1	2	2609
Mean		66.7					
LSD (.05)		5.9					
CV %		11					

Table 10. Soybean variety performance in Centre County, 1998, 1997, 1996.

Brand	Entry	-----Yield, bu/A-----				
		1998	1997	1996	2-yr av 97-98	3-yr av 96-98
Agway	APK 361	57.8	61	56.5	59.4	58.4
Agway	APK 362	70.2	64.7	58.8	67.5	64.6
Agway	APK 364	63.6	67.4	56.2	65.5	62.4
Chemgro	3555	66	65.1		65.6	
DeKalb	CX339C	63.4	57.3		60.4	
Dynagro	3368	65.4	60	46.5	62.7	57.3
Hoffman	7353	65	62.3	58.6	63.7	62
Hoffman	3396	68.2	67.3		67.8	
Public	Dwight	57.1	48.5		52.8	
Public	Iroquois	62.5	53.6		58.1	
Public	Probst	61.4	61	52.9	61.2	58.4
Public	Resnik	60.7	56.4	58.9	58.6	58.7
Public	General	63.4	61.5		62.5	
Public	Thorne	64.9	60.4	60.2	62.7	61.8
Public	Pana	70	64.6		67.3	
Terra	TS317	61.2	53.8		57.5	
Wilken	3414	62.3	56.2		59.3	
Wilken	3418	66.7	63.7	58.5	65.2	63
Wilken	3468	63.4	65.2	48.2	64.3	58.9

Table 11. RR Soybean variety performance in Centre County, 1997, 1998.

Brand	Entry	-----Yield, bu/A-----		
		1998	1997	2-yr av 97-98
Agway	APK 361RR	60.8	59	59.9
NK	S30-K3	62.4	66.7	64.6
NK	R366	64.6	64.7	64.7
Wilken	3406RR	58.2	68	63.1
Wilken	3468RR	70.8	65.7	68.3

Table 12. Soybean variety performance after small grain, Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, Inches	Lodging	Seed Quality	Size, Seeds/lb
Public	Flint	41.4	19-Oct	22	2	2	2785
Public	Dwight	40.9	19-Oct	22	2	2	2495
Public	Resnik	41.1	20-Oct	24	2	2	2785
Public	Thorne	48.2	22-Oct	22	2	2	2365
Public	Probst	46.5	22-Oct	24	2	2	2719
Public	Iroquois	45.6	22-Oct	24	2	2	2536
Wilken	3414	43.2	23-Oct	22	2	2	2671
Agway	APK 362	42.6	23-Oct	22	1.8	2.5	2162
Wilken	3418	46.4	24-Oct	25	2	2	2204
Public	Defiance	45.8	24-Oct	25	2	2	2183
Chemgro	4039	41.6	24-Oct	24	2	2	2481
Public	General	46.3	25-Oct	22	2	2	2365
Public	Pana	46.2	25-Oct	29	2.2	2	2855
Wilken	3468	52	26-Oct	26	2	2	2580
Dynagro	3368	51.3	26-Oct	25	2	2	2316
Agway	APK 364	49	26-Oct	24	2	2	2495
Pioneer	93B82	46.9	26-Oct	23	1.8	2	2522
Hoffman	7353	46.4	26-Oct	24	2	2	2522
Public	Omaha	42.7	26-Oct	23	1.8	2	2609
Rohrer	4005	48	27-Oct	23	2	2	2785
Rohrer	4007	53.7	28-Oct	30	2	2	2536
Terra	E394	52.9	28-Oct	29	2.2	1	2536
Dynagro	3395	48.9	28-Oct	24	2	2	2768
Agway	APK 392	48.8	28-Oct	23	2	2	2702
Wilken	3472	48.4	28-Oct	26	2	2	2454
Hyttest	Admiral	47.9	28-Oct	30	2.2	2	2640
Chemgro	3859	46	28-Oct	28	2	2	2580
Public	Williams 82	44.7	28-Oct	27	2.2	2	2402
Terra	TS415	42.9	28-Oct	26	2	2	3110
Agway	APK 406N	42.6	28-Oct	25	2	2	2735
Public	Cisne	46.5	30-Oct	23	2	2	2018
Hoffman	3396	54.2	1-Nov	27	2	2	2719
Public	Stressland	51.9	2-Nov	32	2.5	2	2752
NK	S42-60	48.8	2-Nov	26	2	2	2551
Terra	TS474	55.2	5-Nov	30	3.5	2	2441
Mean		46.9					
LSD 5%		7.9					
CV%		13.6					

Table 13. RR Soybean variety performance after small grain, Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, Inches	Lodging	Seed Quality	Size, Seeds/lb
Agway	APK 354 RR	46.2	21-Oct	26	2	2	3290
Agway	APK 361RR	46.8	22-Oct	28	2	2	2640
Wilken	3406RR	46.5	23-Oct	27	2	2	2873
Wilken	3468RR	49.2	26-Oct	26	2	2	2495
Agway	APK 364 RR	45.6	26-Oct	27	2	2	2802
Dynagro	UAPX246RR	43.9	26-Oct	27	2	2	3363
NK	R366	47.2	27-Oct	26	2	2	2551
Dynagro	3368RR	45.3	27-Oct	26	2	2	2702
Hyttest	RT346	49	28-Oct	27	2	2	2495
NK	S39-D9	44	30-Oct	30	2	2	2873
Terra	E4280RR	48.1	1-Nov	28	2	2	3153
Dynagro	3398RR	47.2	1-Nov	29	2	2	2910
Terra	TS396RR	48.6	2-Nov	29	2.2	2	2671
NK	S42-K2	48.8	3-Nov	32	2.8	2	2855
Pioneer	94B01	47.2	3-Nov	34	2.8	2	2719
Terra	TS466RR	41.8	5-Nov	38	2.8	2	3175
Mean		46.6					
LSD (.05)		NS					
CV %		9.2					

Table 14. STS Soybean variety performance after small grain, Lancaster County, 1998.

Brand	Entry	Yield, bu/A	Maturity	Height, inches	Lodging	Seed quality	Size, seed/lb
Agway	APK 323STS	46.4	21-Oct	24	2	2	2640
Wilken	3338STS	48.5	22-Oct	26	2.2	2	2735
Terra	E359STS	50	23-Oct	27	2	2	2402
Terra	E388STS	49.7	27-Oct	31	2	2	2785
Hyttest	HTS3500STS	48.2	27-Oct	26	2	2	2293
Hoffman	7376STS	49.4	28-Oct	29	2.2	2	2441
Dynagro	3383STS	50.6	29-Oct	26	2.8	2	2640
Pioneer	93B81	47.7	1-Nov	25	2.2	2	2752
Chemgro	4199STS	46.7	2-Nov	26	2.5	2	2415
Mean		49.1					
LSD (.05)		NS					
CV %		8.8					

Table 15. Soybean variety performance after small grain, Lancaster County, 1995, 1996, 1998.

Brand	Entry	-----Yield, bu/A-----					
		1998	1996	1995	2-yr 96,98	3-yr 95,96,98	
Chemgro		3859	46	31.4	56.7	38.7	44.7
Hoffman		7353	46.4	32.3	50.8	39.4	43.2
Hoffman		3396	54.2	26.1	52.4	40.2	44.2
Hyttest	Admiral		47.9	32.4	50.7	40.2	43.7
Public	Resnik		41.1	30.2	45.4	35.7	38.9
Public	Probst		46.5	31.8	48.4	39.2	42.2
Public	Thorne		48.2	33.8	41.5	41	41.2
Public	Williams 82		44.7	33.7	50.9	39.2	43.1
Public	Stressland		51.9	22.3	56.1	37.1	43.4
Terra	TS415		42.9	29	51.6	36	41.2
Wilken		3468	52	32.6	51.2	42.3	45.3