

## 2008 Soybean Cyst Nematode Demonstration Plots

Variety	Genetics	Maturity Group	West Point <sup>1</sup>	Goehner <sup>2</sup>	Falls City <sup>3</sup>	Minden <sup>4</sup>	Yield (bu/Acre)	
							Non-Infested Sites	
							SCAL <sup>5</sup>	Mead <sup>6</sup>
Asgrow 3005	Susceptible	3.0	7.14	61.44	20.04	45.34	79.19	56.52
Asgrow 3006	PI88788	3.0	21.92	66.39	44.41	54.25	75.53	52.35
Pioneer 93m11	Susceptible	3.1	6.69	61.66	38.46	53.76	77.31	60.96
Pioneer 93m13	PI88788	3.1	11.50	69.59	48.21	58.51	74.31	55.51
NK S28-B4	Susceptible	2.8	0.07	62.24	28.38	63.11	78.45	56.61
NK S27-C4	PI88788	2.7	14.39	64.05	39.21	60.98	68.87	55.66
Pioneer 92m75	Peking	2.7	4.75	78.27	47.56	63.95	74.38	54.15
Latham 2620	Cyst-X	2.6	18.36	61.68	33.13	56.53	67.97	47.21
LSD ( $\alpha=0.05$ )			9.46	7.02	4.72	12.03	4.69	5.99
<b>Average of All Susceptible Varieties</b>			4.63	61.78	30.22	54.07	78.32	58.03
<b>Average of All Resistant Varieties</b>			13.23	68.08	42.50	58.84	72.21	52.98
<b>Average of PI88788 Resistant Varieties</b>			15.94	66.82	43.94	57.91	72.90	54.50
<b>Peking Resistant Variety</b>			4.75	78.27	47.56	63.95	74.38	54.15
<b>Cyst-X Resistant Variety</b>			18.36	61.68	33.13	56.53	67.97	47.21
<b>Average of the Four SCN Susceptible Varieties Across All Infested Sites</b>								37.68
<b>Average of the Four SCN Resistant Varieties Across All Infested Sites</b>								45.66
<b>Average of the Three PI88788 Varieties Across All Infested Sites</b>								46.15
<b>Average of the Peking Variety Across All Infested Sites</b>								48.63
<b>Average of the Cyst-X Variety Across All Infested Sites</b>								42.43
<b>Average of All SCN Susceptible Varieties Across Both Non-Infested Sites</b>								68.18
<b>Average of All SCN Resistant Varieties Across Both Non-Infested Sites</b>								62.60
<b>Average of the Three PI88788 Varieties Across Both Non-Infested Sites</b>								63.70
<b>Average of the Peking Variety Across Both Non-Infested Sites</b>								63.77
<b>Average of the Cyst-X Variety Across Both Non-Infested Sites</b>								57.44

<sup>1</sup> Center pivot irrigated field location. The average spring SCN population was 12,214 eggs per 100cc of soil.

<sup>2</sup> Center pivot irrigated field location. The average spring SCN population was 3,906 eggs per 100cc of soil

<sup>3</sup> Rain fed field location. The average spring SCN population was 1,930 eggs per 100 cc of soil.

<sup>4</sup> Center pivot irrigated field location. The average spring SCN population was 771 eggs per 100cc of soil

<sup>5</sup> Center pivot irrigated field location. This was a SCN non-infested field location.

<sup>6</sup> Rain fed field location. This was a SCN non-infested field location.

<b>Average Egg Counts for the Four Infested Sites</b>				
	Spring <sup>1</sup>	Fall <sup>1</sup>	Change	Rf <sup>2</sup>
<b>Average of All Susceptible Varieties</b>	4,173	6,848	+64.1%	1.64
<b>Average of All Resistant Varieties</b>	5,237	2,681	-48.8%	0.51
<b>Average of PI88788 Varieties</b>	5,573	2,288	-58.9%	0.41
<b>Average of Peking Variety</b>	5,165	3,783	-26.8%	0.73
<b>Average of Cyst-X Variety</b>	4,300	2,475	-42.4%	0.58

<sup>1</sup> Number of eggs per 100cc of soil.

<sup>2</sup> Nematode reproduction factor (Rf) = (Pf + 1) / (Pi + 1) where Pf is the number of eggs per 100 cc of soil at fall (final) sampling, and Pi is the number eggs per 100 cc of soil at spring (initial) sampling.

## 2008 Falls City Soybean Cyst Nematode Demonstration Plot

Variety	Genetics	Maturity Group	Spring SCN Population <sup>1</sup>	Fall SCN Population <sup>1</sup>	Change	Nematode Reproductive Factor <sup>2</sup>
Asgrow 3005	Susceptible	3.0	2160	1580	-26.9%	0.882
Asgrow 3006	PI88788	3.0	2810	680	-75.8%	0.234
Pioneer 93m11	Susceptible	3.1	2250	2500	+11.1%	1.557
Pioneer 93m13	PI88788	3.1	2520	870	-65.5%	0.637
NK S28-B4	Susceptible	2.8	1370	4150	+202.9%	3.806
NK S27-C4	PI88788	2.7	1430	580	-59.4%	0.809
Pioneer 92m75	Peking	2.7	1760	330	-81.3%	0.215
Latham 2620	Cyst-X	2.6	1140	1380	+21.1%	1.239
LSD ( $\alpha=0.05$ )			1887.51	1325.04		1.820
<b>Average of All Susceptible Varieties</b>			1927	2743	+42.4%	2.082
<b>Average of All Resistant Varieties</b>			1932	768	-60.3%	0.627

<sup>1</sup> Number of eggs per 100cc of soil.

<sup>2</sup> Nematode reproduction factor (Rf) =  $(P_f + 1) / (P_i + 1)$  where  $P_f$  is the number of eggs per 100 cc of soil at fall (final) sampling, and  $P_i$  is the number eggs per 100 cc of soil at spring (initial) sampling.

## 2008 Goehner Soybean Cyst Nematode Demonstration Plot

Variety	Genetics	Maturity Group	Spring SCN Population <sup>1</sup>	Fall SCN Population <sup>1</sup>	Change	Nematode Reproductive Factor <sup>2</sup>
Asgrow 3005	Susceptible	3.0	5430	1110	-79.6%	0.94
Asgrow 3006	PI88788	3.0	4360	590	-86.6%	0.16
Pioneer 93m11	Susceptible	3.1	2400	940	-60.8%	0.48
Pioneer 93m13	PI88788	3.1	4850	370	-92.4%	0.11
NK S28-B4	Susceptible	2.8	3450	1020	-70.4%	0.41
NK S27-C4	PI88788	2.7	5400	640	-88.4%	0.16
Pioneer 92m75	Peking	2.7	2240	990	-55.8%	0.48
Latham 2620	Cyst-X	2.6	3410	630	-81.5%	0.23
LSD ( $\alpha=0.05$ )			4307	688		0.85
<b>Average of All Susceptible Varieties</b>			3760	1023	-72.8%	0.61
<b>Average of All Resistant Varieties</b>			4052	644	-84.1%	0.23

<sup>1</sup> Number of eggs per 100cc of soil.

<sup>2</sup> Nematode reproduction factor (Rf) =  $(P_f + 1) / (P_i + 1)$  where  $P_f$  is the number of eggs per 100 cc of soil at fall (final) sampling, and  $P_i$  is the number eggs per 100 cc of soil at spring (initial) sampling.

## 2008 West Point Soybean Cyst Nematode Demonstration Plot

Variety	Genetics	Maturity Group	Spring SCN Population <sup>1</sup>	Fall SCN Population <sup>1</sup>	Change	Nematode Reproductive Factor <sup>2</sup>
Asgrow 3005	Susceptible	3.0	12120	23500	+93.9%	3.12
Asgrow 3006	PI88788	3.0	15370	6230	-59.5%	0.57
Pioneer 93m11	Susceptible	3.1	8660	20690	+135.5%	2.65
Pioneer 93m13	PI88788	3.1	12420	9490	-23.6%	1.36
NK S28-B4	Susceptible	2.8	10470	23750	+126.8%	2.21
NK S27-C4	PI88788	2.7	14670	6970	-52.5%	0.55
Pioneer 92m75	Peking	2.7	16300	13610	-16.5%	0.99
Latham 2620	Cyst-X	2.6	11290	7620	-32.5%	0.67
LSD ( $\alpha=0.05$ )			10413	9886		1.88
<b>Average of All Susceptible Varieties</b>			10417	22647	+117.4%	2.66
<b>Average of All Resistant Varieties</b>			14010	8784	-37.3%	0.82

<sup>1</sup> Number of eggs per 100cc of soil.

<sup>2</sup> Nematode reproduction factor (Rf) = (Pf + 1) / (Pi + 1) where Pf is the number of eggs per 100 cc of soil at fall (final) sampling, and Pi is the number eggs per 100 cc of soil at spring (initial) sampling.

## 2008 Minden Soybean Cyst Nematode Demonstration Plot

Variety	Genetics	Maturity Group	Spring SCN Population <sup>1</sup>	Fall SCN Population <sup>1</sup>	Change	Nematode Reproductive Factor <sup>2</sup>
Asgrow 3005	Susceptible	3.0	570	1360	+138.6%	3.443
Asgrow 3006	PI88788	3.0	1040	250	-76.0%	0.601
Pioneer 93m11	Susceptible	3.1	1000	1306	+30.6%	0.797
Pioneer 93m13	PI88788	3.1	960	613	-36.1%	0.115
NK S28-B4	Susceptible	2.8	190	280	+47.4%	1.531
NK S27-C4	PI88788	2.7	1050	170	-83.8%	0.171
Pioneer 92m75	Peking	2.7	360	200	-44.4%	1.272
Latham 2620	Cyst-X	2.6	1360	270	-80.2%	1.672
LSD ( $\alpha=0.05$ )			2118	1497		1.58
<b>Average of All Susceptible Varieties</b>			587	982	+67.3%	1.924
<b>Average of All Resistant Varieties</b>			954	528	-44.7%	0.766

<sup>1</sup> Number of eggs per 100cc of soil.

<sup>2</sup> Nematode reproduction factor (Rf) = (Pf + 1) / (Pi + 1) where Pf is the number of eggs per 100 cc of soil at fall (final) sampling, and Pi is the number eggs per 100 cc of soil at spring (initial) sampling.