

Table 1. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group I soybean varieties in an SCN-infested field (Kanawha) and a noninfested field (LuVerne) in 1999.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
DeKalb	CX160c	PI 88788	5.3	30.0	1.1	51.1	6	450	9.2	38.0	1.8	59.8	4
Latham	352CN Brand	PI 88788	6.5	38.2	1.8	50.4	7	1,188	8.9	43.5	2.6	59.0	5
Novartis	S18-11	PI 88788	8.1	33.4	1.4	54.5	3	713	7.0	35.5	1.7	54.0	12
Prairie Brand	PB-190N	PI 88788	6.6	33.2	1.2	54.1	4	475	9.5	38.5	2.3	62.2	1
Public	Archer (S) ²	---	6.4	34.9	1.4	40.5	15	6,675	6.2	41.0	1.8	52.1	13
Public	Bell	PI 88788	4.9	32.3	1.2	47.9	9	1,263	7.4	38.8	2.3	57.5	8
Public	BSR101 (S) ²	---	7.5	35.7	1.3	47.8	11	4,700	7.9	40.0	1.5	57.4	9
Public	Freeborn	PI 88788	5.7	32.9	1.5	47.2	12	613	7.0	37.3	1.7	58.5	6
Public	Hardin 91 (S) ²	---	7.8	41.0	2.3	45.0	14	4,975	8.3	42.3	3.8	50.5	15
Public	IA1006 (S) ²	---	6.6	38.0	1.4	47.9	9	4,500	7.8	40.3	2.3	55.4	11
Public	IA1008	PI 88788	8.7	35.8	1.2	54.7	2	2,038	8.0	43.5	2.0	56.9	10
Public	Parker (S) ²	---	9.3	41.4	2.7	46.2	13	9,375	7.8	38.5	3.8	51.3	14
Sand Seed	SOI 188N	Not given	8.2	33.7	1.8	49.9	8	1,450	8.6	38.0	2.1	59.9	3
Stine	1882-1	PI 88788	10.8	43.2	2.3	51.4	5	1,475	10.1	43.0	2.4	58.4	7
Stine	1892-2	PI 88788	5.5	30.7	1.2	58.6	1	1,988	7.9	39.0	2.0	61.4	2
LSD ³			1.9	3.7	0.5	4.5	---	3,245	1.9	2.7	0.6	4.8	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 27 May 1999 and harvested on 12 October 1999. Noninfested plots were planted on 28 May 1999 and harvested on 7 October 1999.

Entries are listed in alphabetical order by brand, then alphabetical and ascending numerical order by variety.

¹Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 288 eggs per 100 cc soil; field infested with race 1 SCN.

²Susceptible check variety.

³Least significant difference: values are from Fisher's least-significant-difference test.

Table 2. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group II soybean varieties in an SCN-infested field (Kanawha) and a noninfested field (LuVerne) in 1999.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
AgriPro	AP 2121	PI 88788	6.1	35.1	1.2	47.2	30	1,875	8.0	40.3	2.3	53.3	32
AgriPro	AP 2601	PI 88788	8.4	31.9	1.1	51.8	14	400	8.4	35.8	1.6	55.4	27
AgriPro	AP 2761	PI 88788	8.4	33.2	1.1	50.5	22	1,300	9.2	39.0	1.8	56.7	22
Asgrow	AG2201	PI 88788	8.1	33.3	1.6	50.3	23	2,113	9.7	39.5	1.8	57.5	16
Asgrow	AG2101 (S) ²	---	4.7	29.1	1.2	41.7	33	3,850	7.5	38.3	1.2	53.1	33
Croplan	L2102CN	PI 88788	9.4	33.8	1.3	51.8	14	988	9.8	40.0	1.4	57.5	16
DeKalb	CX207c	PI 88788	6.6	32.4	1.2	47.8	29	1,825	7.2	39.5	1.8	58.6	9
DeKalb	CX232 (S) ²	---	10.5	31.3	1.2	52.3	8	7,375	7.5	35.8	1.3	56.8	21
Garst	D259N	PI 88788	6.7	35.1	1.4	53.1	5	1,488	10.3	38.0	1.9	57.7	15
Golden Harvest	H-2272	PI 88788	9.1	41.2	2.0	51.6	18	550	8.1	44.0	3.0	55.7	25
Golden Harvest	X 92348RR	PI 88788	10.8	33.6	1.4	50.0	25	2,900	9.2	39.5	2.0	55.0	29
Jacobsen Hybrid	J770CN	Not given	8.4	40.9	1.9	50.2	24	2,025	9.2	43.3	3.1	54.0	31
KSC/Challenger	KSC 2220N	PI 88788	8.7	31.1	1.1	55.7	1	1,138	9.0	38.3	1.5	61.2	2
Latham	527RRN Brand	PI 88788	8.9	34.3	1.5	49.9	27	2,900	7.8	38.8	2.0	58.4	10
Latham	732CN Brand	PI 88788	6.6	34.8	1.1	48.7	28	3,650	7.1	39.0	1.3	59.0	7
Mark Seed	97CN22	PI 88788	5.9	38.9	1.6	52.1	11	1,788	9.1	44.5	2.7	57.0	19
Mark Seed	97CN22-CTB	Not given	9.4	39.4	2.0	52.2	10	1,063	8.5	44.0	2.6	58.1	12
Mark Seed	9821-CTA	Not given	4.9	40.8	1.6	52.6	7	1,463	8.6	42.8	2.2	58.8	8
Mark Seed	9821	Not given	4.6	32.1	1.4	51.9	13	7,125	7.1	36.3	1.5	61.3	1
Mycogen	5212N	PI 88788	7.4	33.7	1.2	55.0	2	1,750	9.4	39.3	1.4	59.6	5
Pioneer	9233 (S) ²	---	10.0	36.4	1.6	51.5	19	4,400	10.2	40.3	2.1	60.4	3
Prairie Brand	PB-222N	PI 88788	7.4	35.6	1.3	52.7	6	2,725	10.4	40.3	1.4	57.5	16
Prairie Brand	PB-2309NRR	PI 88788	9.5	36.7	2.1	52.3	8	2,275	10.0	40.5	1.8	58.4	10
ProfiSeed	PS423CNRR	PI 88788	8.3	32.7	1.4	52.1	11	3,625	9.8	39.3	2.0	58.1	12
Public	IA2021 (S) ²	---	6.2	34.6	1.6	51.8	14	4,875	9.5	36.3	2.1	57.8	14
Public	IA2036	PI 88788	3.8	42.7	1.9	46.7	31	875	6.4	44.5	3.4	56.7	22
Public	Kenwood 94 (S) ²	---	5.8	36.0	1.7	46.1	32	4,663	9.3	39.5	2.1	54.5	30
Public	Newton	Peking	4.2	43.5	1.5	41.3	34	713	6.1	46.3	2.9	50.0	34

Table 2. continued.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
Ramy International	R2200CN	PI 88788	7.0	34.8	1.4	54.7	3	5,075	8.7	38.5	1.4	60.3	4
Ramy International	R2340RRCN	PI 88788	9.2	34.5	1.5	51.7	17	5,075	10.9	38.8	1.8	57.0	19
Sand Seed	SOI 201N	PI 88788	8.2	44.2	2.7	50.0	25	1,175	8.8	44.3	2.8	55.7	25
Thompson Seeds	T-3196CN	PI 88788	7.3	33.3	1.7	53.5	4	1,625	9.5	36.8	2.4	59.3	6
Thompson Seeds	T-3236CN	PI 88788	7.5	40.7	2.0	51.5	19	750	7.5	44.8	3.2	55.4	27
Wilson Genetics	E9230RR/SCN	PI 88788	9.4	33.5	1.4	50.6	21	8,750	8.4	40.0	1.7	56.3	24
LSD ³			2.1	3.5	0.4	4.5	---	2,925	2.1	2.1	0.4	3.4	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 27 May 1999 and harvested on 12 October 1999. Noninfested plots were planted on 28 May 1999 and harvested on 7 October 1999.

Entries are listed in alphabetical order by brand, then alphabetical and ascending numerical order by variety.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 342 eggs per 100 cc soil; field infested with race 1 SCN.

² Susceptible check variety.

³ Least significant difference: values are from Fisher's least-significant-difference test.

Table 3. Average soybean cyst nematode (SCN) reproduction and agronomic performance of SCN-resistant and susceptible maturity group I and II soybean varieties in an SCN-infested field (Kanawha) and a noninfested field (LuVerne) in northern Iowa in 1999.

	Yield - SCN-Infested Field (bu/acre)			Final SCN Population Densities (eggs per 100 cc soil)			Yield - Noninfested Field (bu/acre)		
	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹
Maturity Group I	52.4	45.5	2.4	1,157	6,045	1,244	58.6	53.3	2.0
Maturity Group II	50.4	48.7	NS	2,316	5,033	1,188	56.2	56.5	NS

Infested plots were planted on 27 May 1999 and harvested on 12 October 1999. Noninfested plots were planted on 28 May 1999 and harvested on 7 October 1999.

¹ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant differences among the varieties.

Table 4. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group II soybean varieties in an SCN-infested field (Ames) and a noninfested field (Boxholm) in 1999.

Brand	Variety	Resistance Source	----- SCN-Infested Field -----						----- Noninfested Field -----				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
AgriPro	AP 2343RR	PI 88788	8.3	30.7	1.5	38.7	25	5,775	7.4	32.5	1.2	54.5	15
AgriPro	AP 2601	PI 88788	8.4	28.2	1.3	42.9	5	2,313	8.9	30.8	1.1	51.1	37
AgriPro	AP 2949RR	PI 88788	8.9	36.5	1.3	43.3	4	1,913	10.9	35.0	1.4	51.0	38
Asgrow	AG2601	PI 88788	7.5	28.5	1.2	40.1	19	3,075	9.9	32.5	1.2	52.9	26
Asgrow	AG2701 (S) ²	---	8.3	39.3	1.8	33.5	45	10,075	9.6	38.5	1.5	55.8	4
Asgrow	AG2903	PI 88788	9.3	33.3	1.2	34.3	43	1,763	10.2	37.0	1.3	51.7	36
Croplan	RC2929	PI 88788	8.1	33.7	1.2	39.7	22	1,525	9.2	36.8	1.4	54.5	15
Dairyland	DSR-275	PI 88788	8.3	35.4	1.2	41.5	12	2,113	9.5	34.8	1.2	51.9	34
DeKalb	CX284c	PI 88788	8.2	38.9	1.3	44.8	2	2,550	10.9	37.3	1.4	54.9	11
Dennis Ewing Farm Seed	DeSoy 27 RR/SCN	PI 88788	7.8	30.1	1.2	36.5	33	1,713	10.4	33.0	1.2	52.6	29
Dennis Ewing Farm Seed	DeSoy 29 RR/SCN	PI 88788	7.9	36.0	1.3	42.9	5	1,413	9.6	37.3	1.7	50.2	43
Garst	D259N	PI 88788	9.3	29.3	1.7	42.2	8	1,550	9.1	31.8	1.3	53.6	23
Garst	D294RRN	PI 88788	6.5	36.3	1.3	40.4	18	2,413	9.5	35.0	1.4	50.5	42
Golden Harvest	H-2930RR	PI 88788	9.9	31.2	1.3	39.6	23	2,350	8.6	33.5	1.3	51.0	38
Golden Harvest	X 92348RR	PI 88788	10.7	31.0	1.5	41.9	9	3,375	9.6	31.3	1.2	54.7	12
Growmark	HS 2681	PI 88788	6.4	33.6	1.3	42.4	7	1,600	7.5	35.8	1.6	53.5	24
Growmark	RT 2786	PI 88788	8.2	31.8	1.3	34.9	42	7,825	9.8	36.5	1.4	54.1	18
Jacobsen Hybrid	J898CNRR	Not given	8.8	31.0	1.2	36.7	32	1,133	9.6	32.8	1.2	54.6	14
Kruger	K-299 RR/SCN	PI 88788	9.8	34.3	1.3	41.1	16	1,975	9.5	37.0	1.4	49.9	45
Latham	527RRN Brand	PI 88788	7.2	31.8	1.6	41.2	14	3,263	8.6	32.3	1.2	53.7	21
Latham	732CN Brand	PI 88788	8.5	29.9	1.3	35.1	40	2,388	7.8	33.5	1.2	55.6	5
Latham	827RRN Brand	PI 88788	7.9	36.7	1.5	41.4	13	1,625	10.2	35.3	1.3	52.7	28
Mark Seed	97CN29	PI 88788	6.3	32.7	1.5	40.1	19	2,175	6.8	33.8	1.3	49.4	46
Mark Seed	97CN29 CTB	Not given	6.1	35.3	1.5	37.8	28	4,313	8.6	35.3	1.3	54.2	17
Mark Seed	9829	Not given	7.2	28.5	1.2	36.1	36	6,825	8.2	32.3	1.3	54.1	18
Mark Seed	9829-CTA	Not given	6.1	31.3	1.2	35.5	38	2,038	7.6	32.3	1.2	52.1	33
Merschman	Cherokee IXRR	PI 88788	8.5	30.1	1.3	38.5	27	2,200	11.4	34.0	1.4	53.7	21
Merschman	Osage IV	PI 88788	8.1	30.7	1.3	41.7	10	1,450	9.8	31.8	1.4	52.9	26
Merschman	Shawnee VIIRR	PI 88788	6.3	33.0	1.3	37.4	30	1,150	7.3	35.3	1.3	51.8	35

Table 4. Continued.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
Pioneer	9234	Peking	5.9	32.0	1.7	47.4	1	1,188	9.8	31.5	1.2	52.4	31
Pioneer	9294 (S) ²	---	6.8	33.1	1.3	35.3	39	10,838	9.3	33.0	1.2	50.8	40
Pioneer	92B71 (S) ²	---	9.4	30.3	1.6	37.1	31	13,250	8.8	32.3	1.3	56.1	3
Pioneer	92B91	PI 88788	7.4	43.0	2.9	44.4	3	1,625	7.7	37.5	2.1	54.7	12
Prairie Brand	PB-234N	PI 88788	8.2	29.1	1.3	37.6	29	2,213	9.2	32.0	1.2	56.9	2
Prairie Brand	PB-290N	PI 88788	9.5	33.8	1.7	36.5	33	14,950	10.3	35.0	1.5	55.0	9
Prairie Brand	PB-2932NRR	PI 88788	6.2	35.8	1.2	39.8	21	1,788	9.2	36.0	1.4	52.2	32
Public	Dwight	PI 88788	7.3	34.9	1.5	41.6	11	3,050	8.1	32.5	1.4	54.0	20
Public	IA2021 (S) ²	---	7.0	28.8	1.5	29.6	46	8,250	8.6	32.3	1.6	57.5	1
Public	IA2036	PI 88788	6.4	38.0	2.3	39.5	24	1,238	6.7	38.0	2.4	52.5	30
Public	Kenwood 94 (S) ²	---	8.7	28.3	1.3	22.9	47	15,075	8.7	34.8	1.7	55.4	6
Public	Newton	Peking	5.5	40.6	2.7	38.6	26	375	6.4	38.0	1.9	47.8	47
Stine	2402-2	PI 88788	7.8	29.5	1.3	41.2	14	1,350	10.4	31.8	1.4	53.2	25
Stine	2506-4 (S) ²	---	9.3	31.7	1.2	35.1	40	5,738	11.2	33.0	1.1	55.3	7
Stine	2890-2	PI 88788	5.7	33.4	1.5	36.2	35	9,875	6.0	34.5	1.6	55.3	7
Stine	2892-2	PI 88788	9.4	31.0	1.3	34.2	44	14,600	7.3	35.8	1.4	50.1	44
Stine	2892-4	PI 88788	6.8	33.5	1.3	41.1	16	1,800	8.8	34.3	1.4	55.0	9
Stine	2972-2	PI 88788	7.3	28.9	1.4	35.7	37	2,063	9.2	34.3	1.3	50.8	40
LSD ³			2.3	3.9	0.4	7.2	---	5,508	2.0	1.8	0.2	3.2	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 28 May 1999 and harvested on 11 October 1999. Noninfested plots were planted on 29 May 1999 and harvested on 7 October 1999.

Entries are listed in alphabetical order by brand, then in alphabetical and ascending numerical order by variety.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 6,318 eggs per 100 cc soil; field infested with race 1 SCN.

² Susceptible check variety.

³ Least significant difference: values are from Fisher's least-significant-difference test.

Table 5. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group III soybean varieties in an SCN-infested field (Ames) and a noninfested field (Boxholm) in 1999.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
Asgrow	A3244 (S) ²	---	9.3	39.2	1.2	43.9	1	7,650	10.2	36.8	1.2	55.7	1
Dairyland	DSR-325	PI 88788	7.0	33.9	1.6	37.4	9	1,488	7.7	36.3	1.4	51.0	8
Dairyland	DSR-327/RR	PI 88788	7.9	37.1	1.4	36.3	10	2,088	8.7	36.5	1.3	50.0	11
Dairyland	DSR-338/STS	PI 88788	6.6	37.0	1.8	40.9	6	2,138	7.4	36.5	1.4	49.4	13
Golden Harvest	H-3007RR	PI 88788	8.4	38.0	1.4	42.5	2	2,713	10.6	35.3	1.3	50.6	10
Growmark	RT 316	PI 88788	8.4	40.2	1.5	42.1	4	2,300	10.8	38.5	1.5	47.6	19
Novartis	S33-N1	PI 88788	8.4	41.2	1.6	39.5	7	1,463	10.6	38.0	1.5	48.4	17
Pioneer	9333 (S) ²	---	6.3	30.9	1.3	32.7	13	13,338	10.7	34.5	1.3	53.0	3
Pioneer	93B51 (S) ²	---	7.8	32.8	1.2	35.1	12	5,850	9.1	35.3	1.4	53.3	2
Public	IA3005	PI 88788	8.6	33.2	1.8	38.3	8	1,338	9.6	35.5	1.6	48.4	17
Public	Iroquois (S) ²	---	7.6	33.6	1.1	27.8	18	23,000	10.4	38.5	1.7	52.2	6
Public	Jack	PI 88788	6.2	46.3	2.7	42.4	3	1,388	11.2	39.3	2.3	52.4	5
Public	Linford	PI 88788	8.6	40.6	2.2	31.8	16	1,700	9.7	38.0	1.9	42.9	20
Public	Macon (S) ²	---	8.7	34.3	1.4	32.6	14	12,525	9.9	35.5	1.5	48.8	15
Public	Pana	PI 88788	8.9	43.0	2.1	32.6	14	1,975	9.5	41.8	1.8	49.5	12
Public	Probst (S) ²	---	8.9	32.9	1.2	26.2	19	11,850	9.0	37.5	1.5	48.5	16
Public	Resnik (S) ²	---	9.3	31.7	1.2	30.3	17	11,275	10.2	34.5	1.3	48.9	14
Public	Sturdy (S) ²	---	6.3	26.3	1.1	22.9	20	11,150	6.4	32.3	1.1	51.0	8
Stine	3700-4 (S) ²	---	9.2	34.7	1.5	35.8	11	11,325	9.8	36.3	1.3	52.6	4
Wilson Genetics	3111 RR/SCN	PI 88788	7.5	38.4	1.5	41.8	5	1,125	8.9	35.8	1.3	51.1	7
LSD ³			NS	3.9	0.3	6.7	---	8,366	1.8	2.2	0.2	3.4	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 28 May 1999 and harvested on 11 October 1999. Noninfested plots were planted on 29 May 1999 and harvested on 7 October 1999.

Entries are listed in alphabetical order by brand, then in alphabetical and ascending numerical order by variety.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 6,056 eggs per 100 cc soil; field infested with race 1 SCN.

² Susceptible check variety.

³ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant differences among the varieties.

Table 6. Average soybean cyst nematode (SCN) reproduction and agronomic performance of SCN-resistant and susceptible maturity group II and III soybean varieties in an SCN-infested field (Ames) and a noninfested field (Boxholm) in central Iowa in 1999.

	----- Yield - SCN-Infested Field ----- (bu/acre)			----- Final SCN Population Densities ----- (eggs per 100 cc soil)			----- Yield - Noninfested Field ----- (bu/acre)		
	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹
Maturity Group II	40.0	32.2	2.4	3,212	10,538	1,978	53.0	55.1	1.2
Maturity Group III	39.0	31.9	2.8	1,735	11,996	2,630	49.5	51.6	1.4

Infested plots were planted on 28 May 1999 and harvested on 11 October 1999. Noninfested plots were planted on 29 May 1999 and harvested on 7 October 1999.

¹ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant differences among the varieties.

Table 7. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group II soybean varieties in an SCN-infested field and a noninfested field in Crawfordsville in 1999.

Brand	Variety	Resistance Source	----- SCN-Infested Field -----						----- Noninfested Field -----				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
Asgrow	AG2701 (S) ²	---	8.6	29.5	1.2	30.6	7	13,050	8.8	36.3	1.3	51.1	1
Dairyland	DSR-275	PI 88788	8.7	30.3	1.2	41.8	1	1,775	9.2	35.3	1.4	48.4	6
Latham	752CN Brand	PI 88788	8.8	27.4	1.6	32.1	6	12,350	9.3	33.3	2.2	49.8	3
Latham	827RRN Brand	PI 88788	7.9	31.9	1.6	34.1	3	1,800	8.7	34.2	1.3	47.6	7
Pioneer	9294 (S) ²	---	7.9	28.8	1.2	33.7	4	7,250	9.1	34.0	1.6	48.7	4
Pioneer	92B71 (S) ²	---	9.1	26.9	1.2	33.3	5	6,075	9.4	29.3	1.4	50.7	2
Public	Kenwood 94 (S) ²	---	8.3	24.7	1.5	29.0	9	9,950	9.4	31.3	2.1	47.5	8
Sieben Hybrids	SS2802NRR	PI 88788	8.5	26.9	1.2	37.6	2	1,775	7.8	34.5	1.3	47.4	9
Stine	2506-4 (S) ²	---	9.9	25.7	1.3	29.5	8	5,825	10.9	30.5	1.3	48.5	5
LSD ³			NS	2.9	0.3	NS	---	6,824	NS	2.4	0.3	NS	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 24 May 1999 and harvested on 22 October 1999. Noninfested plots were planted on 10 May 1999 and harvested on 20 October 1999.

Entries are listed in alphabetical order by brand, then in alphabetical and ascending numerical order by variety.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 11,472 eggs per 100 cc soil; field infested with race 1 SCN.

² Susceptible check variety.

³ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant difference among the varieties.

Table 8. Soybean cyst nematode (SCN) reproduction and agronomic performance of maturity group III soybean varieties in an SCN-infested field and a noninfested field in Crawfordsville in 1999.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
AgriPro	AP 3358RR	PI 88788	11.0	33.5	1.2	42.8	25	2,550	8.8	37.0	1.3	47.9	31
AgriPro	AP 3611RR	PI 88788	9.4	37.6	1.3	41.3	36	10,000	9.4	39.8	1.4	47.4	34
AgriPro	AP 3792RR	PI 88788	10.5	34.3	1.4	42.8	25	2,200	10.0	38.5	1.4	47.8	33
Asgrow	A3244 (S) ²	---	9.8	29.6	1.2	43.1	22	15,200	8.8	36.0	1.2	57.7	1
Asgrow	AG3303	PI 88788	10.8	29.0	1.1	33.9	48	11,150	9.4	37.3	1.2	51.7	8
Asgrow	AG3701	PI 88788	7.8	33.4	1.2	41.6	34	1,800	9.5	39.8	2.0	39.9	50
Dairyland	DSR-325	PI 88788	6.7	34.0	1.4	42.7	27	1,825	7.1	38.0	1.6	48.0	28
Dairyland	DSR-327/RR	PI 88788	9.5	35.1	1.4	47.4	2	713	8.6	39.8	1.4	48.9	18
Dairyland	DSR-338/STS	PI 88788	7.8	34.0	1.4	47.1	4	1,300	6.3	37.5	1.7	47.0	36
DeKalb	CX302c	PI 88788	7.7	33.1	1.8	45.6	8	1,250	7.8	37.3	1.5	51.5	11
DeKalb	CX339c	PI 88788	8.2	34.3	1.5	49.4	1	2,700	10.4	39.3	1.5	51.8	7
DeKalb	CX343cRR	PI 88788	8.6	34.6	1.2	45.0	12	1,113	9.0	40.8	1.3	43.9	42
Garst	D354RRN	PI 88788	8.9	36.6	1.2	39.3	41	1,050	10.0	41.0	1.3	43.5	43
Garst	D363 STS/N	PI 88788	10.3	38.1	1.7	43.9	16	3,450	8.7	41.0	2.2	42.9	45
Growmark	RT 316	PI 88788	10.1	36.3	1.3	40.0	39	1,700	11.3	40.0	2.5	42.1	48
Growmark	RT 3885	PI 88788	8.5	37.5	1.4	42.5	30	1,663	9.3	39.8	1.8	42.7	46
Kruger	K-363 RR/SCN	PI 88788	9.9	35.3	1.3	42.5	30	4,425	9.8	40.3	1.3	40.4	49
Kruger	K-3444 SCN	PI 88788	8.9	34.9	1.7	38.6	43	2,150	10.0	37.3	2.0	54.0	4
KSC/Challenger	KSC 355 RR/N	PI 88788	10.8	35.2	1.4	42.6	28	7,300	9.6	39.8	1.6	48.2	22
Latham	1127RRN Brand	PI 88788	10.4	34.3	1.3	41.6	34	1,550	9.0	40.0	1.6	48.0	28
Mark Seed	97CN33	PI 88788	9.5	34.1	1.5	43.7	17	3,525	7.8	37.8	1.9	51.6	9
Mark Seed	97CN33 CTB	Not given	9.9	35.6	1.4	44.1	15	3,075	8.5	39.0	1.6	48.5	21
Mark Seed	9833	Not given	9.5	29.6	1.2	36.1	47	11,250	9.0	34.5	1.2	57.2	2
Mark Seed	9833 CTA	Not given	8.5	32.3	1.3	43.4	19	5,525	9.9	38.0	1.8	55.5	3
Merschman	Grant RR	PI 88788	9.4	37.1	1.4	46.0	7	988	7.9	39.3	1.5	48.2	22
Merschman	Kennedy VRR	PI 88788	9.9	35.3	1.2	43.3	20	1,550	8.9	38.0	1.5	48.2	22
Merschman	Madison III	PI 88788	9.3	33.3	1.6	43.6	18	1,288	9.8	37.5	2.0	51.6	9
Merschman	McKinley IVRR	PI 88788	9.3	33.5	1.3	42.9	23	1,225	9.7	39.8	1.3	48.2	22

Table 8. continued.

Brand	Variety	Resistance Source	SCN-Infested Field						Noninfested Field				
			Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank	SCN # ¹ (100 cc)	Stand (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield Rank
Pioneer	93B11	PI 88788	8.7	29.3	1.9	44.8	13	2,625	8.7	35.5	2.0	52.6	5
Pioneer	93B51(S) ²	---	9.3	30.3	1.2	39.0	42	20,225	9.3	36.5	1.6	49.3	14
Pioneer	93B83	PI 88788	7.9	36.8	1.4	45.4	10	1,775	8.2	39.8	1.4	47.9	31
Pioneer	9333 (S) ²	---	10.1	26.7	1.1	33.4	49	14,225	7.9	33.0	1.3	48.1	27
Prairie Brand	PB-3205NRR	PI 88788	11.0	34.5	1.7	44.7	14	2,175	9.2	38.3	1.6	48.0	28
Prairie Brand	PB-3609NRR	PI 88788	9.2	37.0	1.3	37.7	46	4,700	9.5	40.0	1.4	42.4	47
Prairie Brand	PB-3999NRR	PI 88788	9.2	38.1	1.2	40.9	37	6,475	11.9	41.0	1.6	44.8	40
Public	IA3005	PI 88788	8.0	30.5	1.6	47.2	3	1,475	8.9	35.5	2.4	44.0	41
Public	Jack	PI 88788	8.2	40.3	2.6	46.2	6	1,150	9.7	37.3	3.5	48.2	22
Public	Linford	PI 88788	9.7	36.8	2.1	38.6	43	3,813	9.8	39.5	2.7	43.5	43
Public	Macon (S) ²	---	8.6	34.1	1.3	42.1	32	12,825	8.6	37.8	1.9	45.5	38
Public	Pana	PI 88788	8.8	42.0	2.0	42.9	23	1,113	7.9	41.5	3.2	45.4	39
Public	Probst (S) ²	---	8.4	29.1	1.3	33.1	50	18,025	9.1	38.3	2.2	49.2	16
Public	Resnik (S) ²	---	10.4	28.4	1.3	43.3	20	9,650	9.4	35.3	1.8	48.6	20
Sieben	SS309N	PI 88788	8.5	34.4	1.4	40.4	38	1,300	9.1	37.5	1.4	49.5	13
Stine	3392-4	PI 88788	8.8	36.1	1.3	45.5	9	1,425	9.1	40.3	1.5	49.2	16
Stine	3490-2	PI 88788	7.7	33.0	1.3	45.1	11	1,475	8.9	37.3	2.3	48.9	18
Stine	3502-4	PI 88788	7.2	34.1	1.1	46.6	5	1,425	9.9	38.5	1.4	47.2	35
Stine	3602-2	PI 88788	6.4	30.8	1.3	42.1	32	3,200	7.2	36.5	1.3	49.9	12
Stine	3700-4 (S) ²	---	9.3	28.9	1.1	38.2	45	7,825	8.0	36.3	1.2	53.6	5
Stine	3902-4	PI 88788	7.7	38.0	1.2	42.6	28	2,050	8.5	40.3	1.5	45.9	37
Wilson Genetics	E9360RR/SCN	PI 88788	9.0	31.0	1.3	39.6	40	2,513	9.7	39.3	1.4	49.3	14
LSD ³			1.8	2.6	0.2	6.2	---	4,359	2.0	1.8	0.3	3.7	---

Values presented in table are means; each variety was grown in four replicate plots in each field. Infested plots were planted on 24 May 1999 and harvested on 22 October 1999. Noninfested plots were planted on 10 May 1999 and harvested on 20 October 1999.

Entries are listed in alphabetical order by brand, then in alphabetical and ascending numerical order by variety.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; average initial SCN population 11,810 eggs per 100 cc soil; field infested with race 1 SCN.

² Susceptible check variety.

³ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant difference among the varieties.

Table 9. Average soybean cyst nematode (SCN) reproduction and agronomic performance of SCN-resistant and susceptible maturity group II and III soybean varieties in an SCN-infested field and a noninfested field in Crawfordsville in southern Iowa in 1999.

	----- Yield - SCN-Infested Field ----- (bu/acre)			----- Final SCN Population Densities ----- (eggs per 100 cc soil)			----- Yield - Noninfested Field ----- (bu/acre)		
	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹	Resistant Varieties	Susceptible Varieties	LSD ¹
Maturity Group II	36.4	31.2	4.0	4,425	8,430	3,903	48.3	49.3	NS
Maturity Group III	43.6	38.9	2.1	2,819	13,996	1,509	48.1	50.3	1.8

Infested plots were planted on 24 May 1999 and harvested on 22 October 1999. Noninfested plots were planted on 10 May 1999 and harvested on 20 October 1999.

¹ Least significant difference: values are from Fisher's least-significant-difference test, NS = no significant differences among the varieties.