

Evaluation of Soybean Varieties Resistant to Soybean Cyst Nematode in Iowa—2006



Aerial view of SCN-resistant soybean variety trial in central Iowa

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... and justice for all

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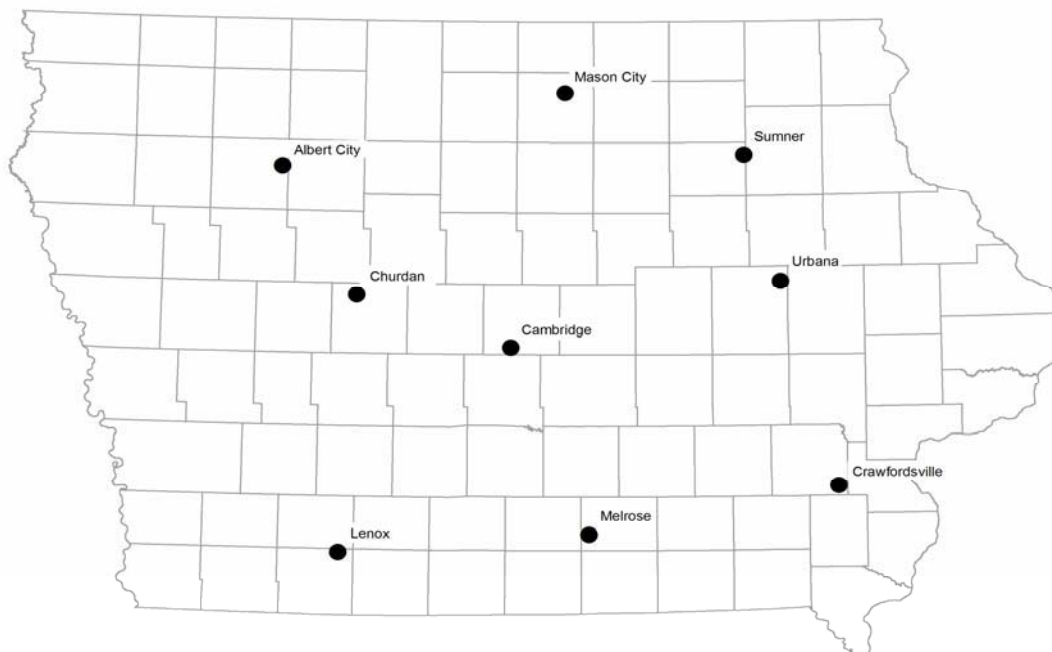
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Introduction

Use of resistant soybean varieties is a very effective strategy for managing soybean cyst nematode (SCN), and numerous SCN-resistant soybean varieties are available for Iowa soybean growers. Each year, public and private SCN-resistant soybean varieties are evaluated in SCN-infested fields throughout Iowa by Iowa State University personnel. The research described in this report was performed to assess the agronomic performance of maturity group (MG) I, II, and III SCN-resistant soybean varieties and to determine the effects of the varieties on SCN numbers or population densities.

Materials and Methods

In the northern Iowa district, six conventional and 47 Roundup Ready[®], SCN-resistant soybean varieties were evaluated in SCN-infested fields near Albert City (northwest Iowa), Mason City (north central Iowa), and Sumner (northeast Iowa). In the central Iowa district, six conventional and 34 Roundup Ready[®], SCN-resistant soybean varieties were evaluated in SCN-infested fields near Churdan (west central Iowa), Cambridge (central Iowa), and Urbana (east central Iowa). In the southern Iowa district, seven conventional and 39 Roundup Ready[®], SCN-resistant soybean varieties were evaluated in SCN-infested fields near Lenox (southwest Iowa), Melrose (south central Iowa), and Crawfordsville (southeast Iowa).



At all locations, four SCN-susceptible varieties also were planted in the experiments. Plots were four 17-foot-long rows spaced 30 inches apart and were planted at 10 seeds per foot, with four replications per variety. Preplant herbicide was applied to each location. Conventional post-emergent herbicides were

applied to the conventional varieties and Roundup[®] herbicide was applied to the Roundup Ready[®] varieties. The Lenox and Crawfordsville locations were planted using “no-till” methods; at all other locations, the seed bed was tilled prior to planting.

Plant emergence (number of plants per foot) was assessed in each plot 35 to 40 days after planting. All plots were end trimmed to a length of 14 feet during the first three weeks of September. Maturity notes were taken at one location in each district (northern, central, and southern), but for reference purposes are listed in the tables for all three locations in the same district. Maturity was recorded as the number of days after August 31st that a variety was considered mature. A variety was considered mature when 95 percent of the pods had turned brown. For all locations, just prior to harvest, average plant height and lodging (1=all plants fully erect, 5=all plants flat) were assessed in each plot. For each location, the center two rows of each four-row plot were harvested with a plot combine, total seed weight per plot and seed moisture were determined, and total plot seed weights subsequently were converted to bushels per acre. Resistant varieties and susceptible check varieties are grouped separately and are listed in the report in order of descending yield.

At the beginning of the growing season, plots were sampled for the presence of SCN. Soil samples, consisting of ten 1-inch-diameter, 6- to 8-inch-deep soil cores, were collected from the center 14 feet of the center two rows of each plot immediately after planting. SCN cysts were extracted from each soil sample, and SCN eggs were extracted from the cysts and counted. SCN egg population densities also were determined for each plot at the end of the growing season in an identical manner.

Conventional varieties and Roundup Ready[®] varieties were grouped and results were analyzed separately for each location in each district.

Because of the consistent relationship between higher soil pH and SCN population densities, all varieties were field tested for tolerance to iron deficiency chlorosis (IDC). Each variety was planted in a hill plot consisting of five seeds per hill, with two replications per variety, at two high pH field locations. Locations were chosen by identifying IDC symptoms on soybeans growing in each field at the end of June. One field was located near Ames (central Iowa) and the other was located near Polk City (central Iowa). Prior to planting the experiments, the soybeans growing at each location were removed. The IDC evaluation plots near Ames were planted on June 27th and the plots near Polk city were planted on June 28th. Notes were taken for IDC symptoms at each location approximately four weeks after planting and again at five weeks after planting. Varieties were rated on a scale of “1” to “5” with a “1” indicating no symptoms of IDC present and a “5” indicating plant death due to IDC. The scores from each location then were averaged together and an overall rating was assigned to each variety. One variety highly resistant to IDC and one variety highly susceptible to IDC also were included in the experiments as checks. The highly resistant variety scored an average of 1.0 and the highly susceptible variety scored an average of 2.9. The scores from these IDC field tests are listed in each location table in the report for reference.

Location-specific details.

Location	Initial SCN Population (eggs / 100 cc soil)	HG Type ¹	Planting Date	Harvest Date
Albert City (NW)	3,007	7	May 15	October 6
Mason City (NC)	2,500	7	May 22	October 23
Sumner (NE)	2,173	2.7	May 8	October 5
Churdan (WC)	3,983	2.5.7	May 9	October 3
Cambridge (C)	1,219	2.5.7	May 4	October 4
Urbana (EC)	3,773	7	May 19	October 20
Lenox (SW)	1,286	7	May 12	October 25
Melrose (SC)	1,390	7	May 10	October 12
Crawfordsville (SE)	1,271	2.7	May 18	October 13

¹ In the SCN type test results, the number “2” indicates > 10% reproduction on PI 88788, “5” indicates > 10% reproduction on PI 209332, and “7” indicates > 10% reproduction on PI 548316.

Changes in Data Presentation for 2006

In the report this year, soybean yield and SCN reproductive trends are displayed graphically in addition to the traditional tables. In the new charts, yield is shown by the bar lengths and corresponds to the scale at the bottom of the chart. SCN reproduction is shown by the color and pattern of the bars, and is arrived at using arbitrary threshold values of a calculated reproductive factor (RF). RF is calculated by dividing the average final SCN population by the average initial SCN population for each plot. What this means is that if a variety has an RF value of 5.0, the SCN population for those plots is 5 times greater at harvest than it was at planting. Conversely, an RF value of 0.5 means the SCN population for those plots at harvest is $\frac{1}{2}$ the population at planting. It is important to remember that this number is location specific, and may be quite different under different environmental conditions, soil types, and nematode populations. Arbitrary values were used in recognition of the variability of nematode counts from soil. Our thresholds were: RF 0 – RF 0.7 (green; SCN numbers reduced), RF 0.8 – RF 1.2 (yellow; no change from spring to fall), RF > 1.2 (red; SCN numbers increased).

Summary

The results of the experiments convincingly illustrate the benefits of utilizing SCN-resistant soybean varieties for management of this important soybean pest. Throughout the experiments, most of the soybean varieties with SCN resistance had greater yields than susceptible varieties, although some resistant varieties had greater yields than others. End-of-season SCN population densities were significantly greater in plots where susceptible varieties were grown relative to plots planted with resistant varieties. Nematode control is an extremely important aspect of growing SCN-resistant soybean varieties that must be considered when selecting soybean varieties. **Growing soybean varieties in SCN-infested fields in an attempt to maximize soybean yields in the short term without any consideration of the effect of the varieties on SCN population densities will seriously reduce the long-term soybean productivity of the land.**

The results of these experiments illustrate that SCN-resistant varieties can suppress SCN reproduction and provide increased soybean yields relative to using susceptible varieties. Currently, there are three main genetic sources for SCN resistance genes in commercial soybean varieties, namely PI 88788, Peking, and PI 437654 (also known as Hartwig and PUSCN14 resistance, the latter also known as CystX[®] resistance). Each of these sources of SCN resistance contains several genes that confer resistance to the nematode. Consequently, soybean varieties developed from the various sources of resistance may not all contain the same genes in the same combinations. All of these sources of SCN resistance allow limited reproduction of only a few soybean cyst nematodes. Resistant varieties must be used in an integrated management program, along with the use of nonhost crops and scouting for early detection of SCN, to maximize yields and minimize reproduction of the pest on a long-term basis.

The data presented in this report are from a limited number of locations and should be used only as a beginning point for developing a SCN management program for any specific field. Performance of individual SCN-resistant soybean varieties in SCN-infested fields will vary among locations and years. **Growers are encouraged to evaluate several SCN-resistant soybean varieties at their own locations to determine the best varieties for their local conditions.**

Acknowledgments

This research was supported, in part, by Iowa soybean checkoff funds administered through the Iowa Soybean Association. Additionally, the individual seed companies were assessed a fee to enter varieties into these experiments. Appreciation is expressed to Kevin VanDee and the staff of the Iowa State University Southeast Research and Demonstration Farm, and to Kent Berns, the Superintendent of the Central Research Farms. Gratitude also is expressed to Mick Sundblad of Albert City, Randy Lutz of Mason City, Mike Dillon of Sumner, Mitch Stream of Churdan, Mark Longnecker of Cambridge, Tom Judge of Ames, Asa Moeckly of Polk City, Ed McKinley of Urbana, Scott Trost of Lenox, and Mike Ryan of Melrose for use of land for some of the experiments. In remembrance of Jack Fehring; Lenox cooperator 2001-2004.

Figure 1. Albert City (NW Iowa) Roundup®

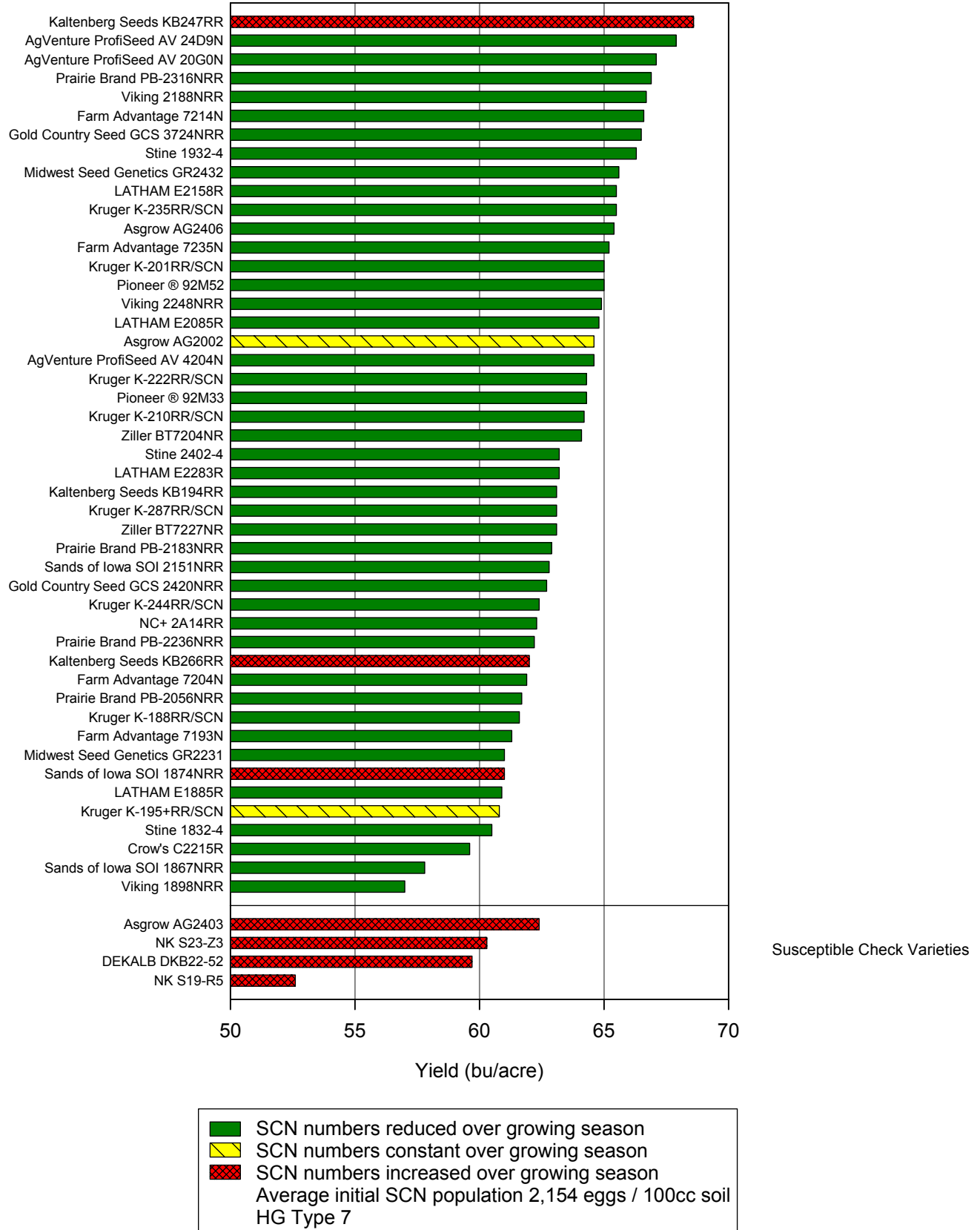


Table 1. Albert City (NW Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Kaltenberg Seeds	KB247RR	2.4	PI 88788	2.9	29	8.6	34.0	2.0	68.6	1	1,075	1.3
AgVenture ProfiSeed	AV 24D9N	2.4	PI 88788	2.7	30	7.9	34.5	2.0	67.9	2	1,150	0.5
AgVenture ProfiSeed	AV 20G0N	2.0	PI 88788	2.8	26	8.0	35.5	2.0	67.1	3	625	0.4
Prairie Brand	PB-2316NRR	2.3	PI 88788	2.8	28	8.0	33.5	1.3	66.9	4	650	0.3
Viking	2188NRR	2.1	PI 88788	3.3	27	7.3	32.8	1.8	66.7	5	325	0.3
Farm Advantage	7214N	2.1	PI 88788	3.4	27	8.3	33.0	1.5	66.6	6	475	0.3
Gold Country Seed	GCS 3724NRR	2.4	PI 88788	2.8	28	8.8	36.5	2.0	66.5	7	750	0.6
Stine	1932-4	1.9	PI 88788	2.7	26	8.9	33.5	1.8	66.3	8	475	0.2
Midwest Seed Genetics	GR2432	2.4	PI 88788	2.7	29	8.1	36.3	1.5	65.6	9	575	0.4
LATHAM	E2158R	2.1	PI 88788	2.9	27	7.8	33.3	1.8	65.5	10	925	0.4
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	30	7.8	34.5	2.0	65.5	10	900	0.5
Asgrow	AG2406	2.4	PI 88788	3.2	28	8.6	35.0	1.3	65.4	12	650	0.3
Farm Advantage	7235N	2.3	PI 88788	3.1	29	7.9	37.0	1.8	65.2	13	1,475	0.7
Kruger	K-201RR/SCN	2.7	PI 88788	2.9	25	8.8	33.3	2.0	65.0	14	700	0.5
Pioneer®	92M52	2.5	Peking	2.4	28	9.5	36.5	2.0	65.0	14	400	0.1
Viking	2248NRR	2.2	PI 88788	2.5	29	7.4	30.3	1.5	64.9	16	475	0.2
LATHAM	E2085R	2.0	PI 88788	2.6	27	7.3	34.5	2.0	64.8	17	375	0.3
Asgrow	AG2002	2.0	PI 88788	2.9	27	7.8	35.5	1.3	64.6	18	1,575	0.8
AgVenture ProfiSeed	AV 4204N	2.0	PI 88788	2.4	25	9.3	31.3	1.5	64.6	18	550	0.3
Kruger	K-222RR/SCN	2.2	PI 88788	2.4	30	7.8	30.5	1.5	64.3	20	800	0.4
Pioneer®	92M33	2.3	PI 88788	2.9	27	9.8	37.3	1.8	64.3	20	425	0.2
Kruger	K-210RR/SCN	2.1	PI 88788	2.8	27	8.8	32.5	1.8	64.2	22	600	0.5
Ziller	BT 7204NR	2.0	PI 88788	3.1	25	8.6	32.0	1.3	64.1	23	800	0.4
Stine	2402-4	2.4	PI 88788	3.4	29	7.8	39.3	2.0	63.2	24	450	0.5
LATHAM	E2283R	2.2	PI 88788	2.7	28	8.6	29.0	1.3	63.2	24	650	0.4
Kaltenberg Seeds	KB194RR	1.9	PI 88788	2.8	23	9.3	32.3	1.3	63.1	26	850	0.4
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	32	7.3	38.8	2.0	63.1	26	575	0.5
Ziller	BT 7227NR	2.2	PI 88788	2.6	29	8.1	29.8	1.8	63.1	26	750	0.6
Prairie Brand	PB-2183NRR	2.0	PI 88788	2.9	25	9.0	32.5	1.5	62.9	29	375	0.2
Sands of Iowa	SOI 2151NRR	2.1	PI 88788	2.7	23	8.8	33.3	1.8	62.8	30	800	0.5
Gold Country Seed	GCS 2420NRR	2.0	PI 88788	2.3	25	10.1	31.0	1.5	62.7	31	450	0.4
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	31	8.7	38.0	2.0	62.4	32	475	0.4
NC+	2A14RR	2.2	PI 88788	2.8	24	8.6	33.0	1.0	62.3	34	733	0.5
Prairie Brand	PB-2236NRR	2.2	PI 88788	2.6	29	9.3	29.0	1.8	62.2	35	700	0.7
Kaltenberg Seeds	KB266RR	2.6	PI 88788	2.9	34	6.9	37.5	2.3	62.0	36	4,550	2.8
Farm Advantage	7204N	2.0	PI 88788	2.4	26	8.6	32.3	1.8	61.9	37	975	0.2
Prairie Brand	PB-2056NRR	2.0	PI 88788	2.6	26	8.0	33.5	1.8	61.7	38	400	0.2
Kruger	K-188RR/SCN	1.7	PI 88788	2.4	20	8.9	30.5	1.5	61.6	38	775	0.3
Farm Advantage	7193N	1.9	PI 88788	2.8	26	9.2	34.5	2.0	61.3	40	775	0.5
Midwest Seed Genetics	GR2231	2.2	PI 88788	2.6	30	8.9	31.0	2.0	61.0	41	400	0.2
Sands of Iowa	SOI 1874NRR	1.8	PI 88788	2.6	21	10.0	31.5	1.3	61.0	41	900	1.5
LATHAM	E1885R	1.8	PI 88788	2.3	27	8.9	33.3	2.0	60.9	43	500	0.4
Kruger	K-195+RR/SCN	2.0	PI 88788	2.8	25	8.8	31.8	1.3	60.8	44	450	1.0
Stine	1832-4	1.8	PI 88788	2.4	20	7.9	31.5	1.5	60.5	45	775	0.4
Crow's	C2215R	2.2	PI 88788	2.4	31	7.7	30.0	1.3	59.6	48	675	0.3
Sands of Iowa	SOI 1867NRR	1.8	PI 88788	2.5	23	7.7	32.5	2.3	57.8	49	550	0.2
Viking	1898NRR	1.8	Hartwig/PI 88788	2.3	25	8.2	34.8	1.8	57.0	50	750	0.3
	Average	2.2	---	2.7	27	8.4	33.5	1.7	63.6	---	767	0.5
	LSD ³	---	---	---	---	NS	3.3	0.6	5.7	---	958	0.8
<i>Asgrow</i>	<i>AG2403</i>	<i>2.4</i>	<i>None (S)</i>	<i>2.2</i>	<i>26</i>	<i>9.3</i>	<i>29.5</i>	<i>1.0</i>	<i>62.4</i>	<i>32</i>	<i>15,400</i>	<i>10.4</i>
<i>NK</i>	<i>S23-Z3</i>	<i>2.3</i>	<i>None (S)</i>	<i>3.6</i>	<i>27</i>	<i>8.0</i>	<i>34.0</i>	<i>2.0</i>	<i>60.3</i>	<i>46</i>	<i>13,750</i>	<i>11.8</i>
<i>DEKALB</i>	<i>DKB22-52</i>	<i>2.6</i>	<i>None (S)</i>	<i>2.4</i>	<i>27</i>	<i>8.2</i>	<i>27.5</i>	<i>1.3</i>	<i>59.7</i>	<i>47</i>	<i>6,825</i>	<i>3.7</i>
<i>NK</i>	<i>S19-R5</i>	<i>1.9</i>	<i>None (S)</i>	<i>3.1</i>	<i>23</i>	<i>9.6</i>	<i>32.5</i>	<i>1.3</i>	<i>52.6</i>	<i>51</i>	<i>8,550</i>	<i>5.5</i>
	Average	2.3	---	2.8	26	8.8	30.9	1.4	58.7	---	11,131	7.8
	LSD ³	---	---	---	---	NS	3.0	0.5	NS	---	4,859	7.8

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,154 eggs per 100 cc soil; HG Type 7

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 2. Albert City (NW Iowa) Conventional

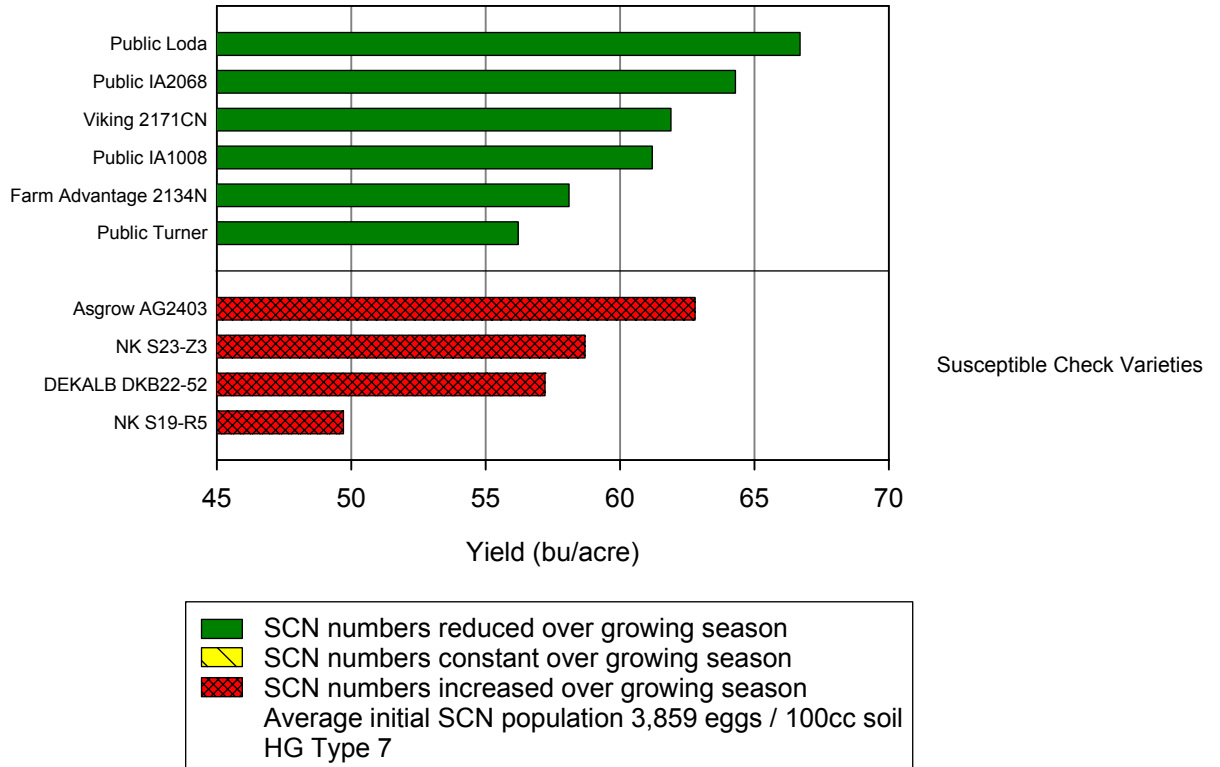


Table 2. Albert City (NW Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	28	5.8	33.0	2.0	66.7	1	675	0.2
Public	IA2068	2.5	PI 88788	2.3	28	4.9	33.3	2.0	64.3	2	1,000	0.4
Viking	2171CN	2.1	Peking	2.6	28	8.1	31.0	2.0	61.9	4	875	0.6
Public	IA1008	1.8	PI 88788	2.9	26	8.3	36.5	2.0	61.2	5	825	0.3
Farm Advantage	2134N	2.1	Peking	2.1	28	7.9	30.5	2.0	58.1	8	850	0.3
Public	Turner	2.3	PI 88788	2.4	29	9.6	37.5	2.0	56.2	9	725	0.2
	Average	2.1	---	2.6	28	7.4	33.6	2.0	61.4	---	825	0.4
	LSD ³	---	---	---	---	1.6	3.1	NS	5.2	---	NS	NS
<i>Asgrow</i>	<i>AG2403</i>	2.4	<i>None (S)</i>	2.2	26	8.9	30.3	1.0	62.8	3	8,100	3.4
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	27	9.8	34.3	1.8	58.7	6	8,025	5.3
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	27	7.7	26.5	1.0	57.2	7	8,300	1.9
<i>NK</i>	<i>SI9-R5</i>	1.9	<i>None (S)</i>	3.1	23	10.3	31.5	1.0	49.7	10	6,175	1.9
	Average	2.3	---	2.8	26	9.2	30.6	1.2	57.1	---	7,650	3.1
	LSD ³	---	---	---	---	1.8	3.6	0.4	6.0	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 3,859 eggs per 100 cc soil; HG Type 7

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 3. Mason City (NC Iowa) Roundup®

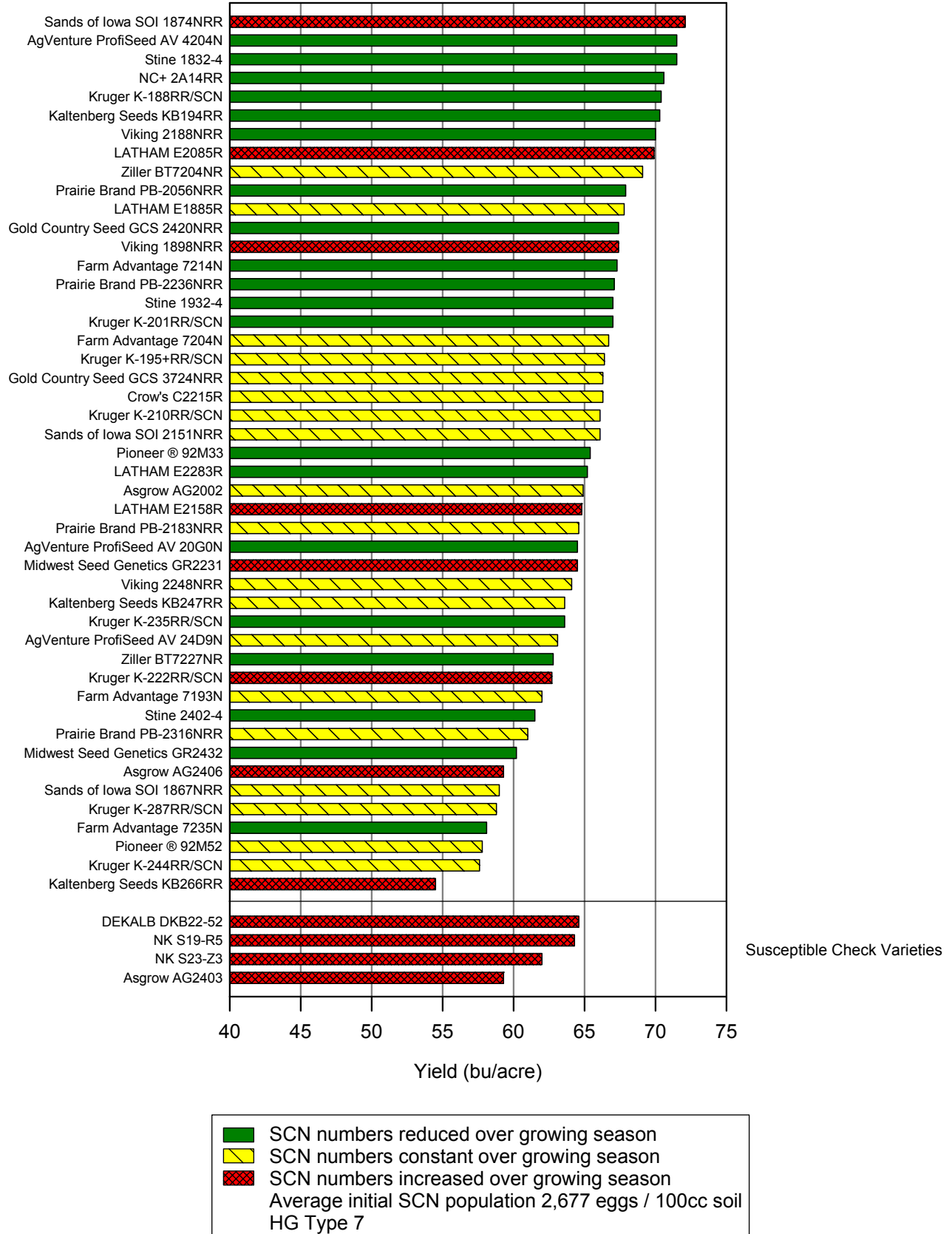


Table 3. Mason City (NC Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Sands of Iowa	SOI 1874NRR	1.8	PI 88788	2.6	21	10.2	34.5	2.1	72.1	1	2,175	1.4
Stine	1832-4	1.8	PI 88788	2.4	20	8.8	37.3	1.5	71.5	2	1,125	0.3
AgVenture ProfiSeed	AV 4204N	2.0	PI 88788	2.4	25	9.0	38.8	1.9	71.5	2	1,450	0.7
NC+	2A14RR	2.2	PI 88788	2.8	24	8.3	38.3	1.8	70.6	4	925	0.6
Kruger	K-188RR/SCN	1.7	PI 88788	2.4	20	8.3	39.0	1.6	70.4	5	2,200	0.6
Kaltenberg Seeds	KB194RR	1.9	PI 88788	2.8	23	9.1	38.8	1.8	70.3	6	1,425	0.7
Viking	2188NRR	2.1	PI 88788	3.3	27	9.4	39.0	1.9	70.0	7	1,700	0.7
LATHAM	E2085R	2.0	PI 88788	2.6	27	7.8	41.0	2.5	69.9	8	1,700	2.2
Ziller	BT 7204NR	2.0	PI 88788	3.1	25	9.2	39.3	2.0	69.1	9	2,675	0.9
Prairie Brand	PB-2056NRR	2.0	PI 88788	2.6	26	9.8	40.5	2.5	67.9	10	1,675	0.4
LATHAM	E1885R	1.8	PI 88788	2.3	27	8.5	40.0	2.8	67.8	11	2,650	1.0
Gold Country Seed	GCS 2420NRR	2.0	PI 88788	2.3	25	9.3	37.8	1.5	67.4	12	1,100	0.5
Viking	1898NRR	1.8	Hartwig/PI 88788	2.3	25	10.0	41.0	2.6	67.4	12	2,975	1.4
Farm Advantage	7214N	2.1	PI 88788	3.4	27	8.3	40.0	2.0	67.3	14	1,350	0.3
Prairie Brand	PB-2236NRR	2.2	PI 88788	2.6	29	8.0	37.8	2.1	67.1	15	1,400	0.5
Stine	1932-4	1.9	PI 88788	2.7	26	9.6	39.3	2.3	67.0	16	1,850	0.7
Kruger	K-201RR/SCN	2.7	PI 88788	2.9	25	8.6	41.0	2.2	67.0	16	833	0.7
Farm Advantage	7204N	2.0	PI 88788	2.4	26	8.0	37.5	1.8	66.7	18	2,350	1.2
Kruger	K-195+RR/SCN	2.0	PI 88788	2.8	25	8.5	39.8	1.8	66.4	19	2,125	1.2
Gold Country Seed	GCS 3724NRR	2.4	PI 88788	2.8	28	9.1	39.3	2.4	66.3	20	2,675	1.2
Crow's	C2215R	2.2	PI 88788	2.4	31	8.1	38.8	2.6	66.3	20	1,200	1.1
Kruger	K-210RR/SCN	2.1	PI 88788	2.8	27	9.4	39.0	2.1	66.1	22	2,225	0.9
Sands of Iowa	SOI 2151NRR	2.1	PI 88788	2.7	23	8.0	38.0	1.5	66.1	22	1,850	1.0
Pioneer®	92M33	2.3	PI 88788	2.9	27	8.6	43.8	2.3	65.4	24	1,025	0.3
LATHAM	E2283R	2.2	PI 88788	2.7	28	8.7	35.8	2.1	65.2	25	1,425	0.5
Asgrow	AG2002	2.0	PI 88788	2.9	27	8.7	41.3	2.5	64.9	26	1,575	0.9
LATHAM	E2158R	2.1	PI 88788	2.9	27	8.4	38.3	2.1	64.8	27	2,675	1.5
Prairie Brand	PB-2183NRR	2.0	PI 88788	2.9	25	8.9	38.8	1.6	64.6	28	1,800	0.8
Midwest Seed Genetics	GR2231	2.2	PI 88788	2.6	30	8.9	39.0	2.4	64.5	30	2,300	1.3
AgVenture ProfiSeed	AV 20G0N	2.0	PI 88788	2.8	26	9.2	41.8	2.4	64.5	30	2,475	0.7
Viking	2248NRR	2.2	PI 88788	2.5	29	7.9	37.5	2.4	64.1	33	1,400	1.1
Kaltenberg Seeds	KB247RR	2.4	PI 88788	2.9	29	8.2	38.5	2.3	63.6	34	1,550	1.0
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	30	8.8	38.8	2.1	63.6	35	3,300	0.7
AgVenture ProfiSeed	AV 24D9N	2.4	PI 88788	2.7	30	8.4	39.5	2.3	63.1	36	2,475	0.8
Ziller	BT 7227NR	2.2	PI 88788	2.6	29	8.9	37.8	2.5	62.8	37	975	0.4
Kruger	K-222RR/SCN	2.2	PI 88788	2.4	30	9.9	39.3	2.3	62.7	38	3,400	1.3
Farm Advantage	7193N	1.9	PI 88788	2.8	26	8.4	40.0	2.9	62.0	39	2,775	0.8
Stine	2402-4	2.4	PI 88788	3.4	29	9.9	44.8	2.9	61.5	41	850	0.5
Prairie Brand	PB-2316NRR	2.3	PI 88788	2.8	28	8.7	39.5	2.0	61.0	42	1,475	1.2
Midwest Seed Genetics	GR2432	2.4	PI 88788	2.7	29	8.4	42.0	2.8	60.2	43	1,075	0.7
Asgrow	AG2406	2.4	PI 88788	3.2	28	8.8	43.0	2.3	59.3	44	2,725	1.3
Sands of Iowa	SOI 1867NRR	1.8	PI 88788	2.5	23	8.6	38.0	2.8	59.0	46	1,500	0.8
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	32	7.3	42.0	3.3	58.8	47	1,825	1.0
Farm Advantage	7235N	2.3	PI 88788	3.1	29	8.9	42.0	2.4	58.1	48	700	0.2
Pioneer®	92M52	2.5	Peking	2.4	28	8.9	43.5	3.4	57.8	49	2,025	0.9
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	31	9.5	47.8	3.0	57.6	50	3,025	1.1
Kaltenberg Seeds	KB266RR	2.6	PI 88788	2.9	34	9.4	42.3	3.3	54.5	51	4,300	2.2
	Average	2.2	---	2.7	27	8.8	39.8	2.3	65.0	---	1,927	0.9
	LSD ³	---	---	---	---	1.6	3.3	0.6	4.6	---	NS	1.0
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	27	9.3	34.8	1.6	64.6	28	9,100	4.0
<i>NK</i>	<i>S19-R5</i>	1.9	<i>None (S)</i>	3.1	23	9.8	37.8	1.9	64.3	32	15,625	9.4
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	27	9.3	41.5	2.5	62.0	39	18,125	9.4
<i>Asgrow</i>	<i>AG2403</i>	2.4	<i>None (S)</i>	2.2	26	9.3	34.8	1.4	59.3	44	12,250	7.2
	Average	2.3	---	2.8	26	9.4	37.2	1.8	62.5	---	13,775	7.5
	LSD ³	---	---	---	---	NS	NS	0.7	NS	---	7,203	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities.; initial SCN population 2,677 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 4. Mason City (NC Iowa) Conventional

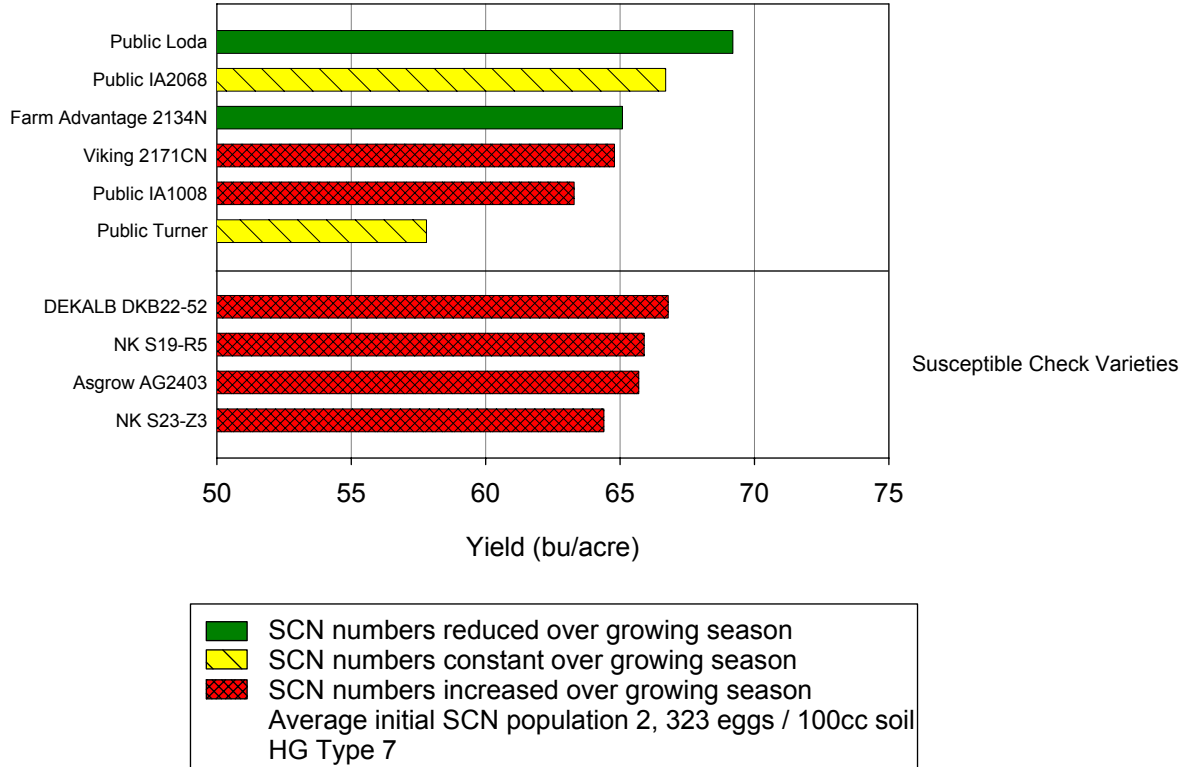


Table 4. Mason City (NC Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	28	8.3	39.5	2.5	69.2	1	900	0.6
Public	IA2068	2.5	PI 88788	2.3	28	8.3	36.3	2.5	66.7	3	1,650	1.1
Farm Advantage	2134N	2.1	Peking	2.1	28	10.3	37.0	2.9	65.1	6	700	0.2
Viking	2171CN	2.1	Peking	2.6	28	9.2	38.0	2.6	64.8	7	1,925	1.6
Public	IA1008	1.8	PI 88788	2.9	26	8.3	43.3	2.5	63.3	9	2,075	1.5
Public	Turner	2.3	PI 88788	2.4	29	8.5	44.3	3.3	57.8	10	2,350	0.9
	Average	2.1	---	2.6	27	8.7	39.6	2.6	64.6	---	1,629	0.9
	LSD ³	---	---	---	---	NS	2.1	0.5	4.7	---	NS	NS
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	27	10.2	31.3	1.6	66.8	2	7,275	2.8
<i>NK</i>	<i>S19-R5</i>	1.9	<i>None (S)</i>	3.1	23	10.0	35.3	1.6	65.9	4	10,025	5.1
<i>Asgrow</i>	<i>AG2403</i>	2.4	<i>None (S)</i>	2.2	26	9.6	34.3	1.3	65.7	5	5,125	2.9
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	27	8.6	40.0	2.4	64.4	8	9,725	7.2
	Average	2.3	---	2.8	26	9.6	35.2	1.7	65.7	---	8,038	4.5
	LSD ³	---	---	---	---	NS	4.7	0.5	5.6	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,323 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 5. Sumner (NE Iowa) Roundup®

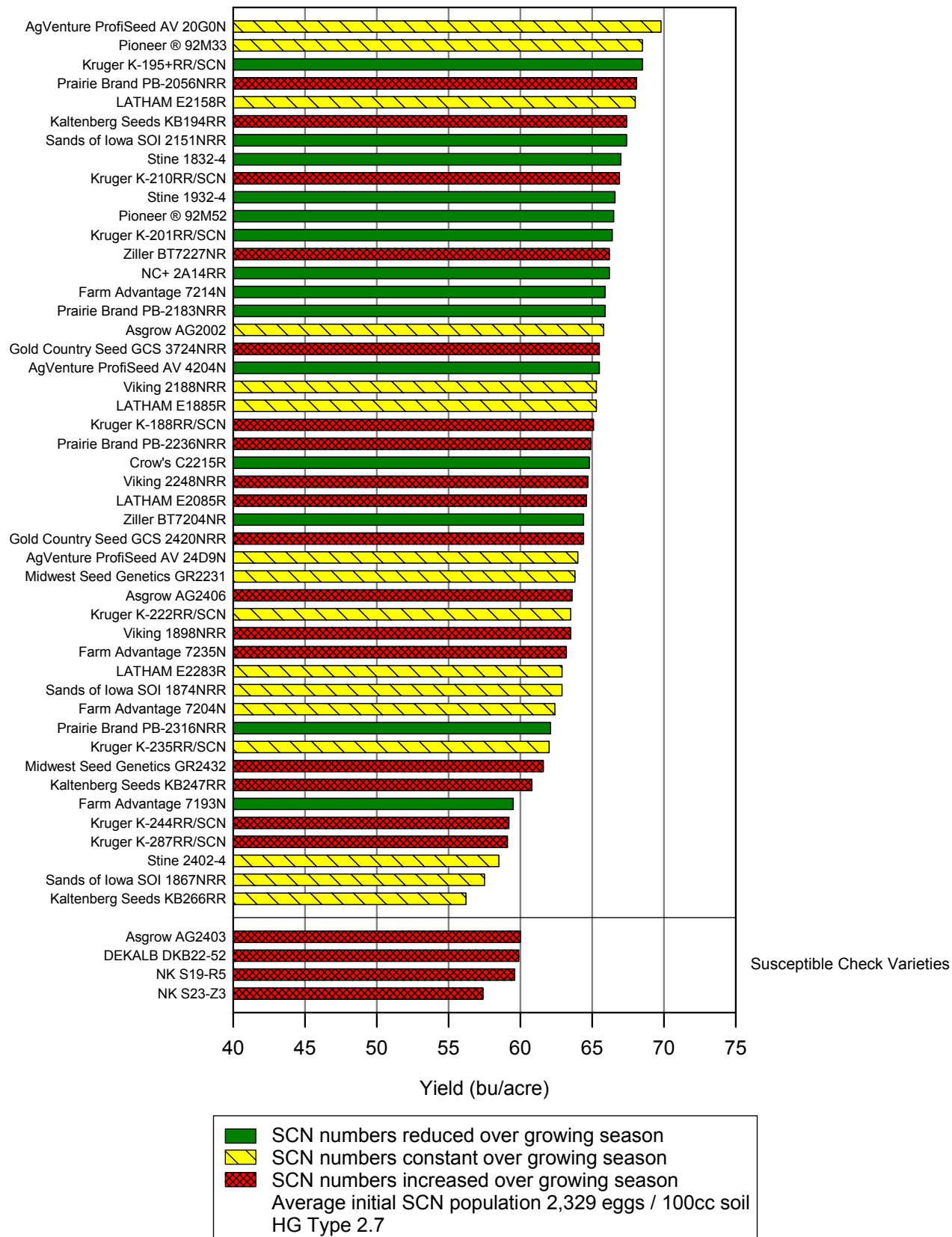


Table 5. Summer (NE Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (100cc)	RF ²
AgVenture ProfiSeed	AV 20G0N	2.0	PI 88788	2.8	26	9.4	39.5	1.3	69.8	1	1,825	1.2
Kruger	K-195+RR/SCN	2.0	PI 88788	2.8	25	9.4	37.3	1.0	68.5	2	850	0.6
Pioneer®	92M33	2.3	PI 88788	2.9	27	9.1	41.3	1.0	68.5	2	1,350	0.9
Prairie Brand	PB-2056NRR	2.0	PI 88788	2.6	26	9.6	40.0	1.8	68.1	4	1,275	4.5
LATHAM	E2158R	2.1	PI 88788	2.9	27	7.7	37.8	2.0	68.0	5	1,400	0.9
Sands of Iowa	SOI 2151NRR	2.1	PI 88788	2.7	23	8.3	38.8	1.3	67.4	6	1,050	0.6
Kaltenberg Seeds	KB194RR	1.9	PI 88788	2.8	23	9.9	37.3	1.0	67.4	6	2,550	1.8
Stine	1832-4	1.8	PI 88788	2.4	20	9.7	37.0	1.3	67.0	8	1,300	0.4
Kruger	K-210RR/SCN	2.1	PI 88788	2.8	27	8.9	38.0	1.5	66.9	9	2,200	1.8
Stine	1932-4	1.9	PI 88788	2.7	26	7.9	40.3	1.5	66.6	10	1,350	0.6
Pioneer®	92M52	2.5	Peking	2.4	28	8.7	41.5	2.0	66.5	11	1,075	0.5
Kruger	K-201RR/SCN	2.7	PI 88788	2.9	25	8.6	40.0	1.5	66.4	12	625	0.4
NC+	2A14RR	2.2	PI 88788	2.8	24	8.9	38.0	1.5	66.2	13	1,850	0.5
Ziller	BT 7227NR	2.2	PI 88788	2.6	29	9.5	36.3	2.0	66.2	13	1,925	1.3
Farm Advantage	7214N	2.1	PI 88788	3.4	27	7.8	39.0	1.5	65.9	15	1,100	0.5
Prairie Brand	PB-2183NRR	2.0	PI 88788	2.9	25	9.0	37.3	1.5	65.9	15	1,250	0.3
Asgrow	AG2002	2.0	PI 88788	2.9	27	8.4	41.8	1.8	65.8	17	1,650	1.1
Gold Country Seed	GCS 3724NRR	2.4	PI 88788	2.8	28	8.2	39.8	1.8	65.5	18	1,575	1.9
AgVenture ProfiSeed	AV 4204N	2.0	PI 88788	2.4	25	8.4	38.5	1.0	65.5	18	1,000	0.7
Viking	2188NRR	2.1	PI 88788	3.3	27	7.8	37.5	1.5	65.3	20	2,075	1.0
LATHAM	E1885R	1.8	PI 88788	2.3	27	9.6	39.8	2.0	65.3	20	2,000	1.1
Kruger	K-188RR/SCN	1.7	PI 88788	2.4	20	10.1	35.8	1.3	65.1	22	1,250	1.9
Prairie Brand	PB-2236NRR	2.2	PI 88788	2.6	29	9.0	37.0	1.8	64.9	23	2,125	1.7
Crow's	C2215R	2.2	PI 88788	2.4	31	9.7	37.5	1.5	64.8	24	1,175	0.4
Viking	2248NRR	2.2	PI 88788	2.5	29	7.9	37.5	2.0	64.7	25	1,875	2.4
LATHAM	E2085R	2.0	PI 88788	2.6	27	7.7	39.5	1.5	64.6	26	2,500	1.6
Gold Country Seed	GCS 2420NRR	2.0	PI 88788	2.3	25	8.6	36.5	1.0	64.4	27	1,475	4.6
Ziller	BT 7204NR	2.0	PI 88788	3.1	25	8.8	36.0	1.3	64.4	27	675	0.3
AgVenture ProfiSeed	AV 24D9N	2.4	PI 88788	2.7	30	9.6	40.3	1.8	64.0	29	1,225	0.8
Midwest Seed Genetics	GR2231	2.2	PI 88788	2.6	30	8.8	35.5	1.8	63.8	30	2,575	1.0
Asgrow	AG2406	2.4	PI 88788	3.2	28	9.0	43.8	1.3	63.6	31	3,250	8.3
Viking	1898NRR	1.8	Hartwig/PI 88788	2.3	25	9.3	39.5	1.8	63.5	32	2,750	2.2
Kruger	K-222RR/SCN	2.2	PI 88788	2.4	30	7.3	37.0	1.8	63.5	32	1,425	1.2
Farm Advantage	7235N	2.3	PI 88788	3.1	29	7.9	41.0	2.0	63.2	34	1,750	1.6
Sands of Iowa	SOI 1874NRR	1.8	PI 88788	2.6	21	10.4	34.8	1.5	62.9	35	1,325	0.9
LATHAM	E2283R	2.2	PI 88788	2.7	28	10.6	37.0	1.5	62.9	35	2,400	1.1
Farm Advantage	7204N	2.0	PI 88788	2.4	26	7.8	37.3	1.0	62.4	37	1,625	1.0
Prairie Brand	PB-2316NRR	2.3	PI 88788	2.8	28	9.6	40.5	1.5	62.1	38	675	0.4
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	30	8.6	39.3	1.8	62.0	39	2,000	0.8
Midwest Seed Genetics	GR2432	2.4	PI 88788	2.7	29	8.7	42.5	1.8	61.6	40	1,875	1.4
Kaltenberg Seeds	KB247RR	2.4	PI 88788	2.9	29	9.5	38.3	1.5	60.8	41	3,125	2.6
Farm Advantage	7193N	1.9	PI 88788	2.8	26	9.9	41.0	1.8	59.5	45	1,125	0.3
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	31	7.9	44.8	2.3	59.2	46	1,625	1.6
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	32	8.2	43.5	2.3	59.1	47	1,800	1.4
Stine	2402-4	2.4	PI 88788	3.4	29	8.6	43.0	1.8	58.5	48	1,725	1.1
Sands of Iowa	SOI 1867NRR	1.8	PI 88788	2.5	23	9.0	37.5	2.0	57.5	49	1,225	1.2
Kaltenberg Seeds	KB266RR	2.6	PI 88788	2.9	34	8.1	39.5	2.0	56.2	51	2,450	0.9
	Average	2.2	---	2.7	27	8.8	39.0	1.6	64.3	---	1,666	1.4
	LSD ³	---	---	---	---	NS	2.2	0.6	4.5	---	NS	NS
<i>Asgrow</i>	<i>AG2403</i>	2.4	<i>None (S)</i>	2.2	26	8.8	34.0	1.0	60.0	42	7,775	2.4
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	27	9.7	32.8	1.3	59.9	43	5,900	3.1
<i>NK</i>	<i>S19-R5</i>	1.9	<i>None (S)</i>	3.1	23	10.3	37.8	1.3	59.6	44	9,500	5.3
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	27	7.9	39.8	2.0	57.4	50	15,325	6.7
	Average	2.3	---	2.8	26	9.2	36.1	1.4	59.2	---	9,625	4.4
	LSD ³	---	---	---	---	NS	1.9	0.6	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,329 eggs per 100 cc soil; HG Type 2.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 6. Sumner (NE Iowa) Conventional

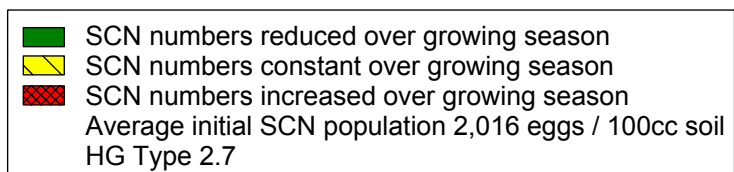
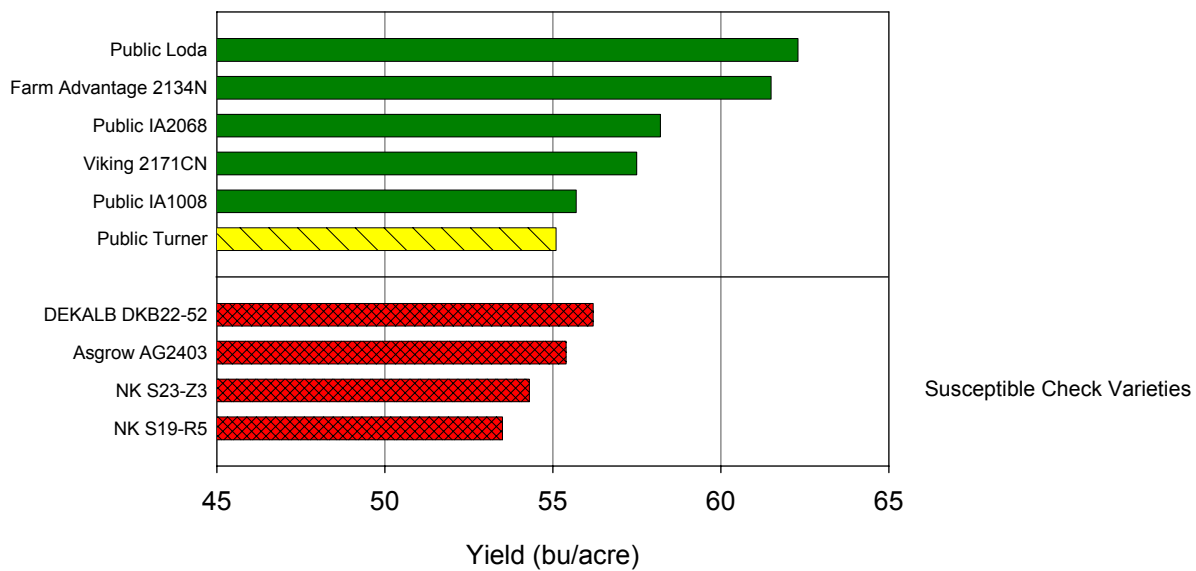


Table 6. Sumner (NE Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	28	8.3	37.8	2.0	62.3	1	375	0.3
Farm Advantage	2134N	2.1	Peking	2.1	28	10.3	36.3	1.8	61.5	2	1,075	0.6
Public	IA2068	2.5	PI 88788	2.3	28	5.6	37.5	2.0	58.2	3	525	0.2
Viking	2171CN	2.1	Peking	2.6	28	9.0	35.0	2.0	57.5	4	650	0.6
Public	IA1008	1.8	PI 88788	2.9	26	8.4	39.3	2.0	55.7	6	1,025	0.5
Public	Turner	2.3	PI 88788	2.4	29	9.3	40.5	3.3	55.1	8	2,775	1.1
	Average	2.1	---	2.6	27	8.5	37.8	2.1	58.3	---	1,004	0.5
	LSD ³	---	---	---	---	1.9	NS	0.4	3.9	---	NS	NS
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	27	8.9	32.5	1.5	56.2	5	6,275	7.1
<i>Asgrow</i>	<i>AG2403</i>	2.4	<i>None (S)</i>	2.2	26	9.3	33.3	1.3	55.4	7	12,950	40.0
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	27	8.5	40.5	2.0	54.3	9	11,650	3.3
<i>NK</i>	<i>S19-R5</i>	1.9	<i>None (S)</i>	3.1	23	10.8	36.5	1.0	53.5	10	15,375	9.4
	Average	2.3	---	2.8	26	9.4	35.7	1.4	54.9	---	11,563	15.0
	LSD ³	---	---	---	---	NS	3.1	0.5	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,016 eggs per 100 cc soil; HG Type 2.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 7. Churdan (WC Iowa) Roundup ®

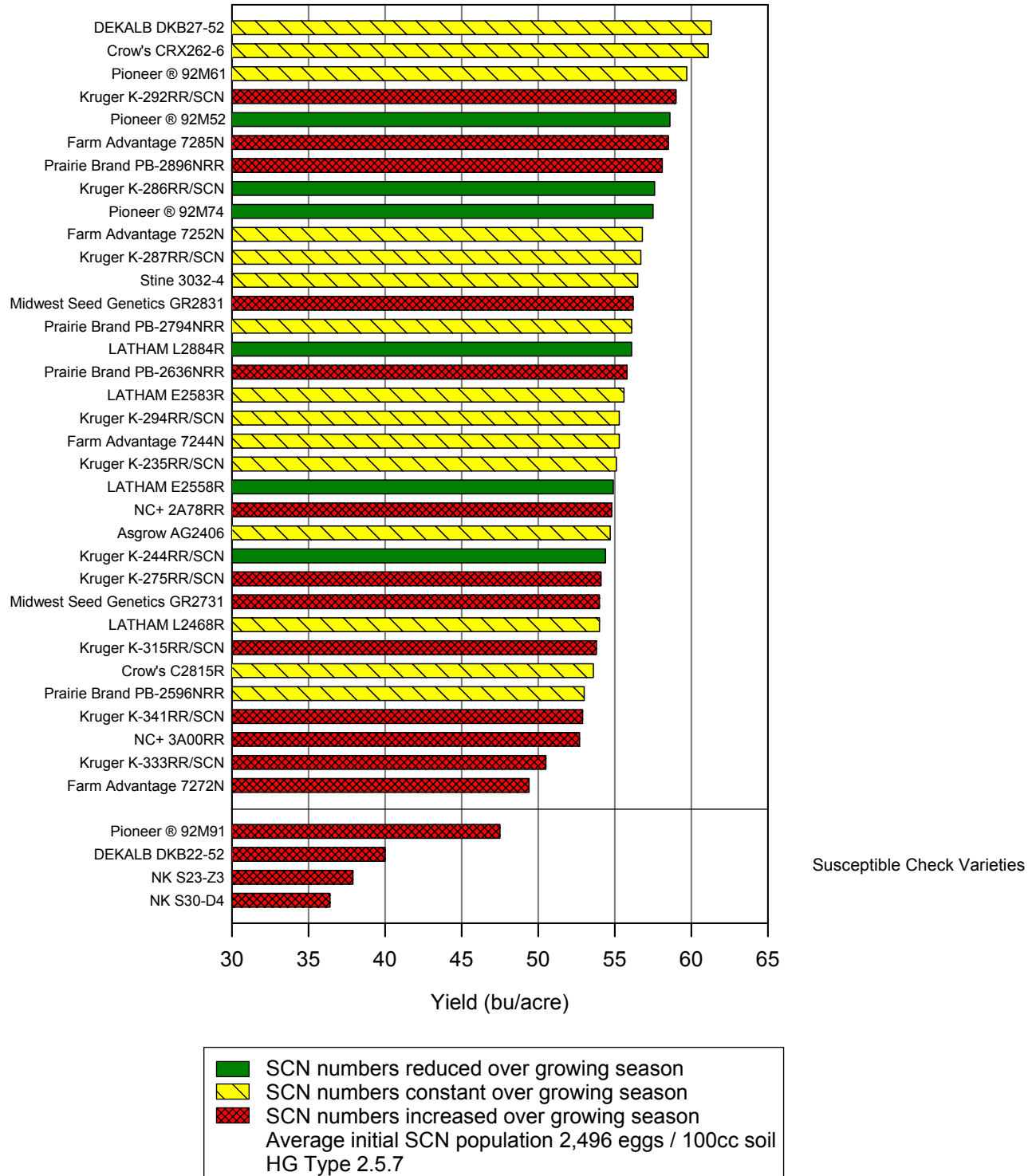


Table 7. Churdan (WC Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
DEKALB	DKB27-52	2.7	PI 88788	2.8	23	9.5	32.8	1.0	61.3	1	1,800	1.2
Crow's	CRX262-6	2.6	PI 88788	2.7	20	7.6	32.5	1.8	61.1	2	2,400	1.1
Pioneer®	92M61	2.6	PI 88788	2.1	20	10.3	35.5	1.8	59.7	3	1,600	0.9
Kruger	K-292RR/SCN	2.9	PI 88788	3.2	24	8.9	37.0	1.8	59.0	4	1,700	1.3
Pioneer®	92M52	2.5	Peking	2.4	18	7.7	34.8	2.0	58.6	5	1,175	0.7
Farm Advantage	7285N	2.8	PI 88788	3.0	25	8.6	37.0	2.0	58.5	6	2,325	1.4
Prairie Brand	PB-2896NRR	2.8	PI 88788	2.9	26	8.0	36.3	1.8	58.1	7	1,800	1.3
Kruger	K-286RR/SCN	2.8	PI 88788	3.1	26	9.0	36.5	1.8	57.6	8	1,250	0.7
Pioneer®	92M74	2.7	PI 88788	3.4	23	9.0	34.8	2.0	57.5	9	1,475	0.7
Farm Advantage	7252N	2.5	PI 88788	2.6	19	9.5	39.0	1.5	56.8	10	1,550	0.9
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	25	8.0	38.5	2.0	56.7	11	1,950	0.8
Stine	3032-4	3.0	PI 88788	2.3	24	9.2	34.8	1.5	56.5	12	1,650	1.1
Midwest Seed Genetics	GR2831	2.8	PI 88788	2.5	26	8.2	38.0	2.0	56.2	13	1,750	2.0
Prairie Brand	PB-2794NRR	2.7	PI 88788	2.3	24	8.9	37.3	2.0	56.1	14	1,450	0.9
LATHAM	L2884R	2.8	PI 88788	2.4	25	9.0	35.8	2.0	56.1	14	1,800	0.7
Prairie Brand	PB-2636NRR	2.6	PI 88788	2.6	24	7.3	39.5	2.0	55.8	16	4,150	2.6
LATHAM	E2583R	2.5	PI 88788	2.1	19	8.5	35.3	1.8	55.6	17	1,600	0.8
Kruger	K-294RR/SCN	2.9	Peking	1.7	25	7.0	39.3	1.8	55.3	18	850	1.0
Farm Advantage	7244N	2.4	PI 88788	3.1	18	9.0	33.0	1.8	55.3	18	2,150	0.8
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	20	8.6	33.3	1.5	55.1	20	3,275	1.2
LATHAM	E2558R	2.5	PI 88788	2.0	17	9.4	34.3	1.8	54.9	21	1,425	0.5
NC+	2A78RR	2.7	PI 88788	2.0	24	8.0	39.8	1.5	54.8	22	4,325	2.0
Asgrow	AG2406	2.4	PI 88788	3.2	16	7.8	35.0	1.5	54.7	23	2,475	1.1
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	19	7.8	37.3	2.0	54.4	24	1,300	0.7
Kruger	K-275RR/SCN	2.7	PI 88788	2.4	22	8.3	38.8	2.0	54.1	25	3,850	2.2
Midwest Seed Genetics	GR2731	2.7	PI 88788	2.4	24	6.3	35.8	1.8	54.0	26	3,850	1.6
LATHAM	L2468R	2.4	PI 88788	2.9	17	9.5	32.8	2.0	54.0	26	1,500	0.9
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	26	8.0	39.5	2.0	53.8	28	1,075	1.3
Crow's	C2815R	2.8	PI 88788	2.2	25	6.5	40.3	2.0	53.6	29	1,450	0.8
Prairie Brand	PB-2596NRR	2.5	PI 88788	2.5	21	9.5	37.3	1.8	53.0	30	1,475	0.8
Kruger	K-341RR/SCN	2.8	PI 88788	3.0	27	8.3	37.8	2.0	52.9	31	2,675	1.5
NC+	3A00RR	3.0	PI 88788	2.8	24	9.5	33.8	1.5	52.7	32	2,400	1.4
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	29	6.2	37.8	2.0	50.5	33	3,125	1.3
Farm Advantage	7272N	2.7	PI 88788	2.8	23	7.3	35.8	2.0	49.4	34	15,000	7.8
Average		2.7	---	2.6	23	8.4	36.4	1.8	55.7	---	2,460	1.4
LSD ³		---	---	---	---	2.0	3.3	0.5	5.1	---	2,484	1.6
<i>Pioneer®</i>	<i>92M91</i>	<i>2.9</i>	<i>None (S)</i>	<i>2.9</i>	<i>22</i>	<i>8.5</i>	<i>34.0</i>	<i>1.3</i>	<i>47.5</i>	<i>35</i>	<i>20,375</i>	<i>16.3</i>
<i>DEKALB</i>	<i>DKB22-52</i>	<i>2.6</i>	<i>None (S)</i>	<i>2.4</i>	<i>20</i>	<i>8.3</i>	<i>25.0</i>	<i>1.3</i>	<i>40.0</i>	<i>36</i>	<i>21,225</i>	<i>8.0</i>
<i>NK</i>	<i>S23-Z3</i>	<i>2.3</i>	<i>None (S)</i>	<i>3.6</i>	<i>9</i>	<i>8.1</i>	<i>35.0</i>	<i>1.8</i>	<i>37.9</i>	<i>37</i>	<i>12,425</i>	<i>5.8</i>
<i>NK</i>	<i>S30-D4</i>	<i>3.0</i>	<i>None (S)</i>	<i>3.3</i>	<i>22</i>	<i>8.6</i>	<i>32.3</i>	<i>1.5</i>	<i>36.4</i>	<i>38</i>	<i>24,350</i>	<i>9.2</i>
Average		2.7	---	3.1	18	8.4	31.6	1.4	40.5	---	19,594	9.8
LSD ³		---	---	---	---	NS	4.1	NS	4.5	---	14,125	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,496 eggs per 100 cc soil; HG Type 2.5.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 8. Churdan (WC Iowa) Conventional

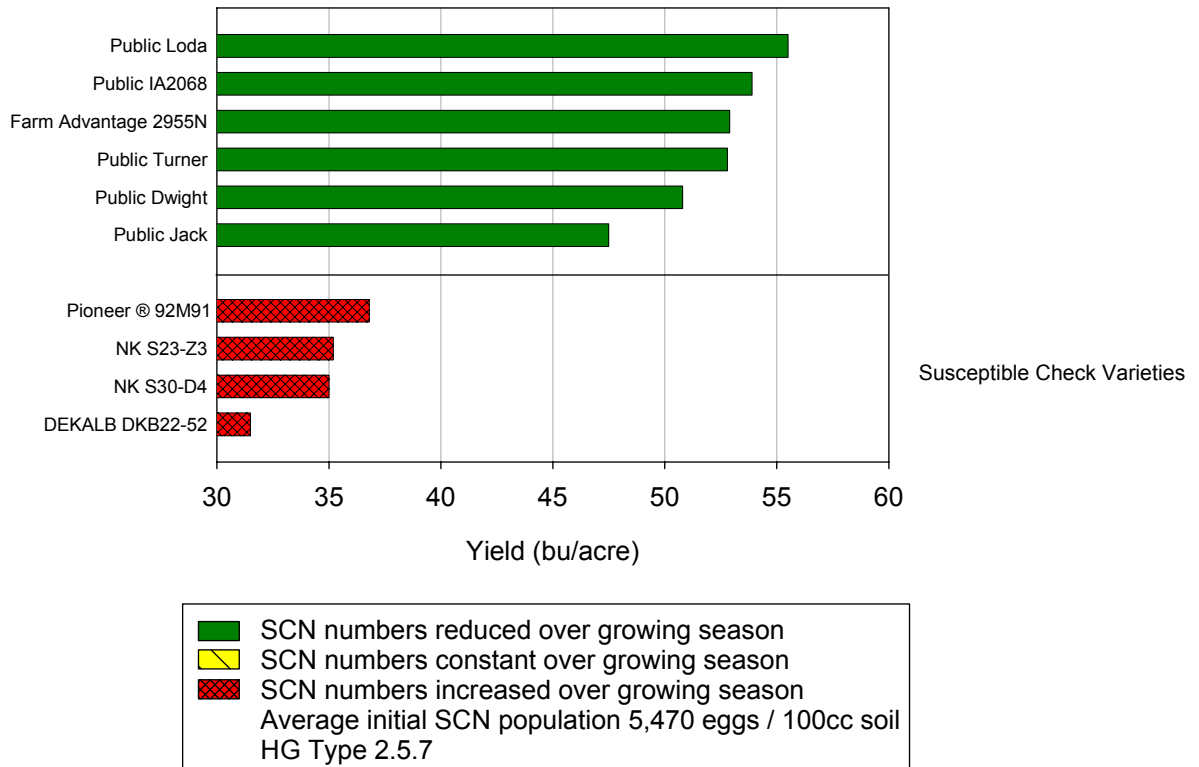


Table 8. Churdan (WC Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	20	9.2	31.0	1.8	55.5	1	875	0.3
Public	IA2068	2.5	PI 88788	2.3	19	6.5	29.8	2.0	53.9	2	1,250	0.3
Farm Advantage	2955N	2.9	PI 88788	3.3	25	9.3	36.0	2.0	52.9	3	1,450	0.3
Public	Turner	2.3	PI 88788	2.4	19	8.8	38.0	2.0	52.8	3	2,725	0.7
Public	Dwight	2.9	PI 88788	2.9	23	7.0	34.0	1.8	50.8	5	1,625	0.3
Public	Jack	2.9	PI 88788	2.8	26	7.3	44.8	2.3	47.5	6	1,850	0.5
	Average	2.6	---	2.8	22	8.0	35.6	2.0	52.2	---	1,629	0.4
	LSD ³	---	---	---	---	1.5	2.3	NS	NS	---	NS	NS
<i>Pioneer</i> ®	<i>92M91</i>	2.9	<i>None (S)</i>	2.9	22	9.4	32.0	1.0	36.8	7	27,450	4.9
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	9	8.9	31.8	1.0	35.2	8	20,725	5.3
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	22	9.2	30.8	1.0	35.0	9	29,875	6.7
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	20	8.6	22.3	1.0	31.5	10	12,225	3.8
	Average	2.7	---	3.1	18	9.0	29.2	1.0	34.6	---	22,568	5.2
	LSD ³	---	---	---	---	NS	3.3	NS	NS	---	12,469	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 5,470 eggs per 100 cc soil; HG Type 2.5.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 9. Cambridge (C Iowa) Roundup ®

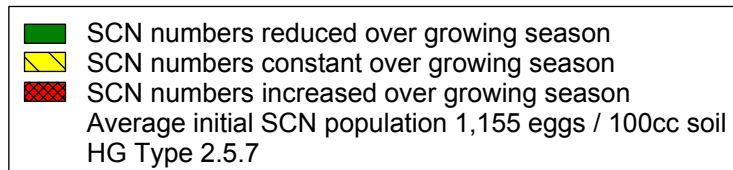
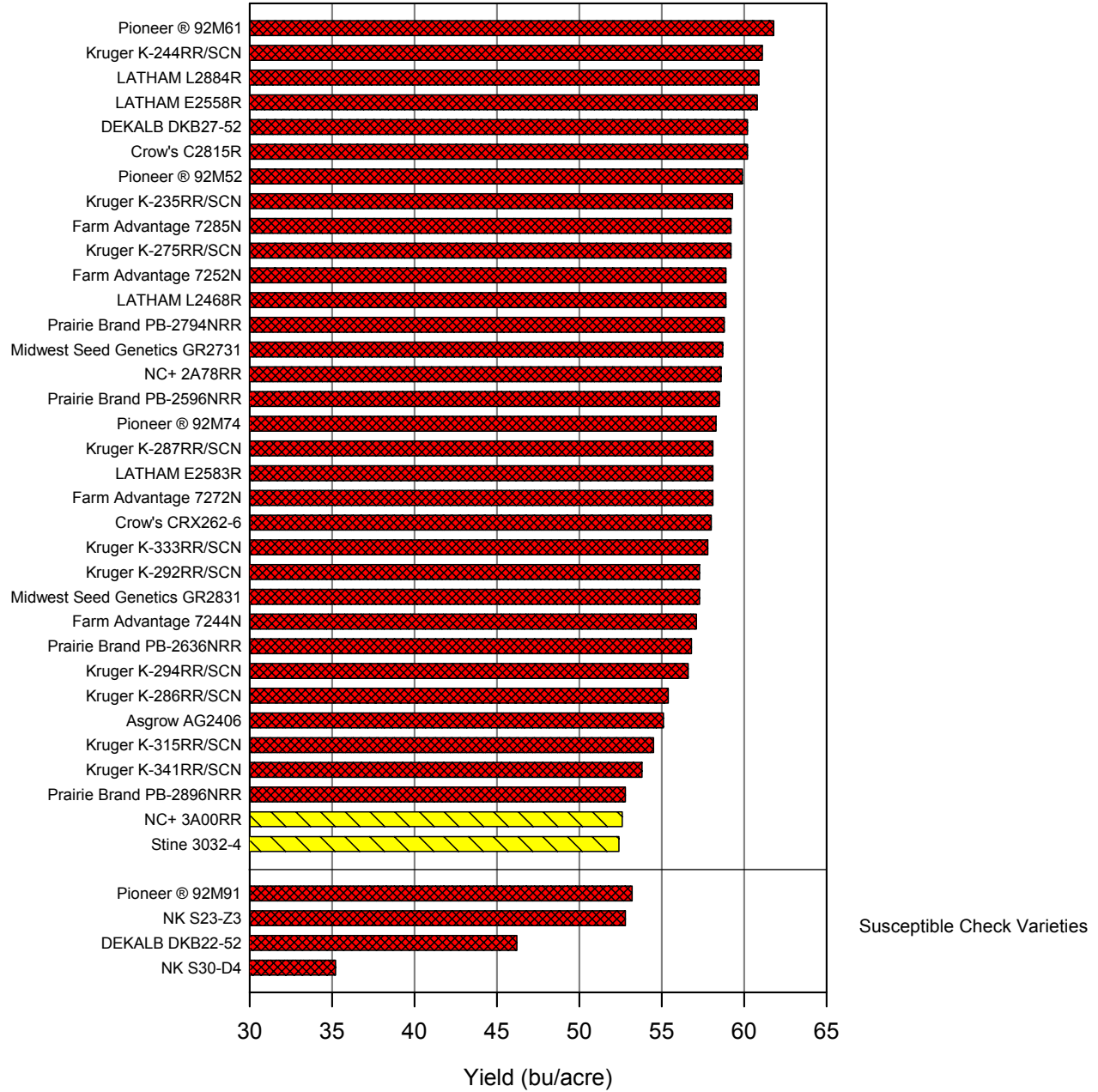


Table 9. Cambridge (C Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Pioneer®	92M61	2.6	PI 88788	2.1	20	8.6	32.8	2.0	61.8	1	1,075	1.3
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	19	7.4	38.0	1.9	61.1	2	1,775	2.4
LATHAM	L2884R	2.8	PI 88788	2.4	25	8.2	39.5	1.9	60.9	3	2,450	2.2
LATHAM	E2558R	2.5	PI 88788	2.0	17	7.2	37.0	2.1	60.8	4	3,525	7.1
Crow's	C2815R	2.8	PI 88788	2.2	25	7.8	39.0	2.1	60.2	5	1,925	4.7
DEKALB	DKB27-52	2.7	PI 88788	2.8	23	7.1	33.3	1.5	60.2	5	1,800	1.8
Pioneer®	92M52	2.5	Peking	2.4	18	7.1	34.3	2.1	59.9	7	925	1.4
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	20	6.9	33.0	1.5	59.3	8	1,650	2.2
Kruger	K-275RR/SCN	2.7	PI 88788	2.4	22	7.0	39.0	1.8	59.2	9	3,575	5.3
Farm Advantage	7285N	2.8	PI 88788	3.0	25	8.2	38.5	1.6	59.2	9	1,750	7.8
Farm Advantage	7252N	2.5	PI 88788	2.6	19	7.5	38.3	1.6	58.9	11	1,400	1.9
LATHAM	L2468R	2.4	PI 88788	2.9	17	8.7	35.3	2.0	58.9	11	1,900	3.9
Prairie Brand	PB-2794NRR	2.7	PI 88788	2.3	24	8.7	38.3	2.0	58.8	13	2,425	2.4
Midwest Seed Genetics	GR2731	2.7	PI 88788	2.4	24	5.8	41.5	1.8	58.7	14	5,000	4.9
NC+	2A78RR	2.7	PI 88788	2.0	24	7.5	40.3	1.9	58.6	15	2,875	3.4
Prairie Brand	PB-2596NRR	2.5	PI 88788	2.5	21	7.8	38.5	1.9	58.5	16	1,650	2.8
Pioneer®	92M74	2.7	PI 88788	3.4	23	5.5	35.8	1.9	58.3	17	2,000	1.3
LATHAM	E2583R	2.5	PI 88788	2.1	19	6.2	39.5	1.8	58.1	18	2,075	3.2
Farm Advantage	7272N	2.7	PI 88788	2.8	23	7.3	34.8	1.6	58.1	18	7,675	12.3
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	25	7.0	37.8	2.0	58.1	18	2,400	1.6
Crow's	CRX262-6	2.6	PI 88788	2.7	20	7.4	31.0	1.6	58.0	21	2,000	2.9
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	29	6.2	38.3	1.9	57.8	22	4,567	2.9
Midwest Seed Genetics	GR2831	2.8	PI 88788	2.5	26	7.3	38.5	2.0	57.3	23	1,750	2.3
Kruger	K-292RR/SCN	2.9	PI 88788	3.2	24	8.5	38.5	1.5	57.3	23	3,800	6.4
Farm Advantage	7244N	2.4	PI 88788	3.1	18	8.1	34.3	1.5	57.1	25	2,625	5.3
Prairie Brand	PB-2636NRR	2.6	PI 88788	2.6	24	7.8	39.0	1.8	56.8	26	8,150	4.2
Kruger	K-294RR/SCN	2.9	Peking	1.7	25	5.8	38.3	1.5	56.6	27	3,425	3.2
Kruger	K-286RR/SCN	2.8	PI 88788	3.1	26	8.9	38.3	1.5	55.4	28	3,575	4.3
Asgrow	AG2406	2.4	PI 88788	3.2	16	7.8	34.8	1.9	55.1	29	1,850	3.0
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	26	7.3	39.0	1.8	54.5	30	2,225	1.7
Kruger	K-341RR/SCN	2.8	PI 88788	3.0	27	7.2	37.3	2.0	53.8	31	3,400	2.9
Prairie Brand	PB-2896NRR	2.8	PI 88788	2.9	26	8.9	37.5	1.5	52.8	33	3,250	2.7
NC+	3A00RR	3.0	PI 88788	2.8	24	9.8	35.5	1.6	52.6	35	1,725	0.9
Stine	3032-4	3.0	PI 88788	2.3	24	8.9	35.3	1.5	52.4	36	1,300	1.2
	Average	2.7	---	2.6	23	7.6	37.0	1.8	57.8	---	2,736	3.5
	LSD ³	---	---	---	---	NS	3.0	0.3	6.4	---	NS	NS
<i>Pioneer®</i>	<i>92M91</i>	<i>2.9</i>	<i>None (S)</i>	<i>2.9</i>	<i>22</i>	<i>7.5</i>	<i>35.0</i>	<i>1.5</i>	<i>53.2</i>	<i>32</i>	<i>16,675</i>	<i>53.5</i>
<i>NK</i>	<i>S23-Z3</i>	<i>2.3</i>	<i>None (S)</i>	<i>3.6</i>	<i>9</i>	<i>7.6</i>	<i>33.8</i>	<i>1.9</i>	<i>52.8</i>	<i>33</i>	<i>11,150</i>	<i>14.8</i>
<i>DEKALB</i>	<i>DKB22-52</i>	<i>2.6</i>	<i>None (S)</i>	<i>2.4</i>	<i>20</i>	<i>8.0</i>	<i>24.0</i>	<i>1.8</i>	<i>46.2</i>	<i>37</i>	<i>5,300</i>	<i>7.1</i>
<i>NK</i>	<i>S30-D4</i>	<i>3.0</i>	<i>None (S)</i>	<i>3.3</i>	<i>22</i>	<i>8.2</i>	<i>36.3</i>	<i>1.5</i>	<i>35.2</i>	<i>38</i>	<i>28,075</i>	<i>32.0</i>
	Average	2.7	---	3.1	18	7.8	32.3	1.7	46.8	---	15,300	26.8
	LSD ³	---	---	---	---	NS	2.8	NS	13.2	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,155 eggs per 100 cc soil; HG Type 2.5.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 10. Cambridge (C Iowa) Conventional

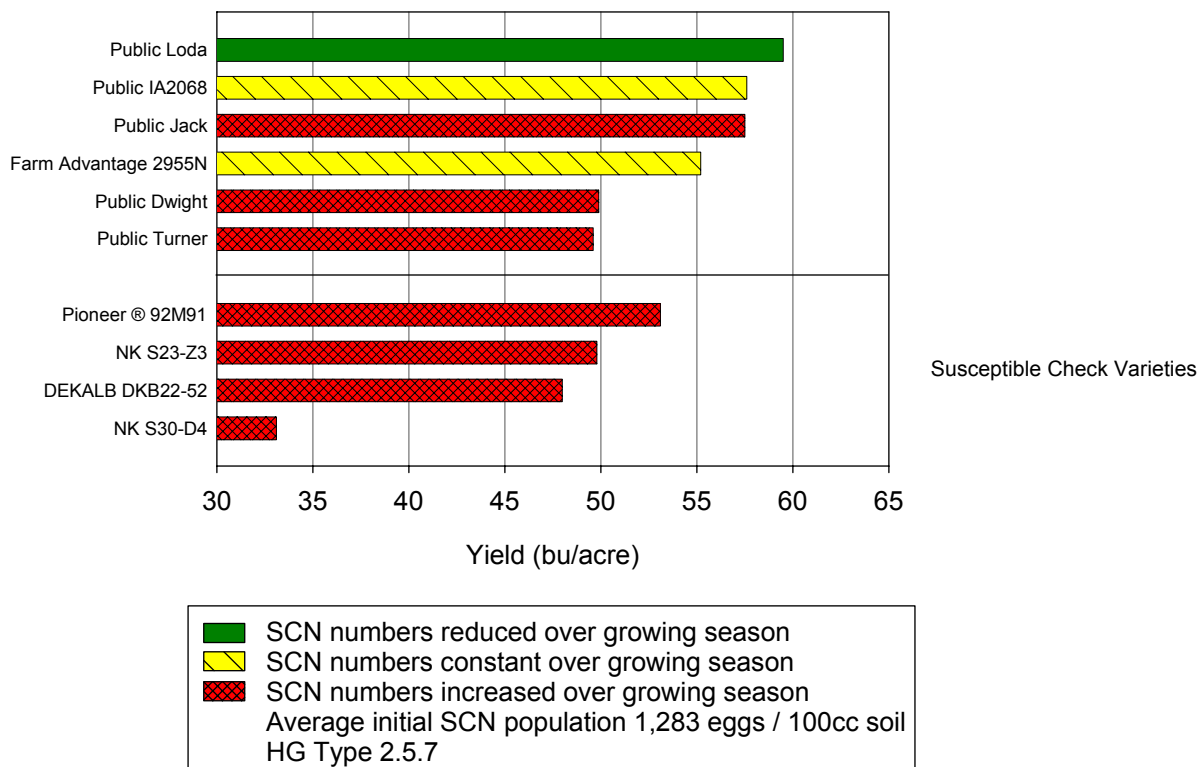


Table 10. Cambridge (C Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	20	7.7	31.3	2.1	59.5	1	650	0.5
Public	IA2068	2.5	PI 88788	2.3	19	5.5	30.3	2.1	57.6	2	800	0.9
Public	Jack	2.9	PI 88788	2.8	26	6.8	46.5	3.0	57.5	3	1,175	2.2
Farm Advantage	2955N	2.9	PI 88788	3.3	25	7.9	37.5	2.0	55.2	4	875	0.8
Public	Dwight	2.9	PI 88788	2.9	23	6.5	34.3	1.9	49.9	6	925	1.8
Public	Turner	2.3	PI 88788	2.4	19	7.8	34.0	2.5	49.6	8	1,950	2.0
	Average	2.6	---	2.8	22	7.0	35.6	2.3	54.9	---	1,063	1.3
	LSD ³	---	---	---	---	1.5	2.0	0.3	NS	---	NS	NS
<i>Pioneer</i> ®	<i>92M91</i>	2.9	<i>None (S)</i>	2.9	22	6.8	35.8	1.5	53.1	5	15,775	15.3
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	9	6.0	32.8	1.8	49.8	7	13,775	12.4
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	20	6.8	24.3	1.6	48.0	9	12,125	5.1
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	22	7.0	34.5	1.6	33.1	10	15,950	19.2
	Average	2.7	---	3.1	18	6.7	31.8	1.6	46.0	---	14,406	13.0
	LSD ³	---	---	---	---	NS	2.8	NS	5.2	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,283 eggs per 100 cc soil; HG Type 2.5.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 11. Urbana (EC Iowa) Roundup ®

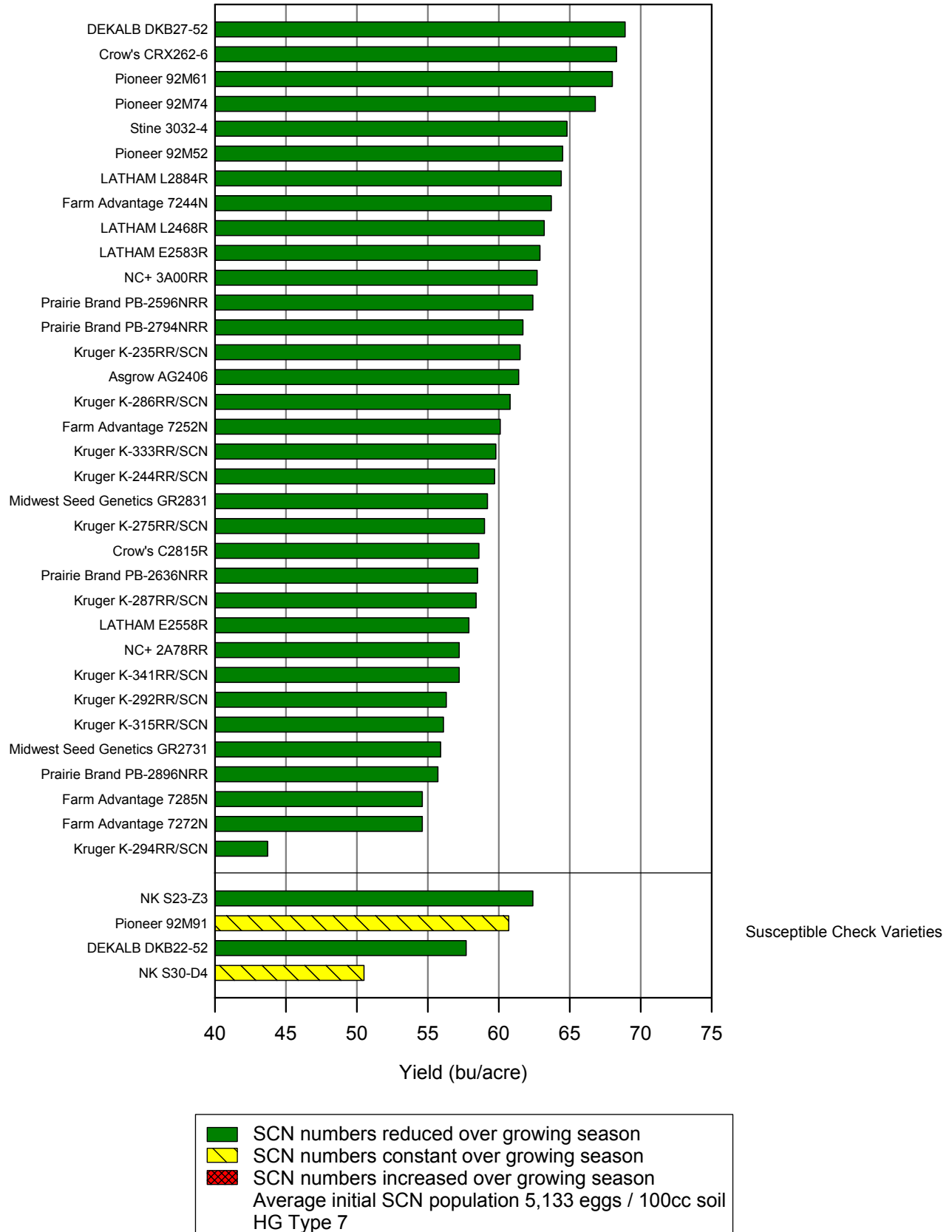


Table 11. Urbana (EC Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
DEKALB	DKB27-52	2.7	PI 88788	2.8	23	7.6	42.8	1.8	68.9	1	850	0.2
Crow's	CRX262-6	2.6	PI 88788	2.7	20	8.4	42.0	1.9	68.3	2	1,350	0.4
Pioneer®	92M61	2.6	PI 88788	2.1	20	9.3	44.3	2.0	68.0	3	1,500	0.3
Pioneer®	92M74	2.7	PI 88788	3.4	23	8.4	44.8	2.0	66.8	4	525	0.1
Stine	3032-4	3.0	PI 88788	2.3	24	8.8	45.0	1.6	64.8	5	1,275	0.3
Pioneer®	92M52	2.5	Peking	2.4	18	8.7	44.3	2.0	64.5	6	1,100	0.2
LATHAM	L2884R	2.8	PI 88788	2.4	25	8.7	46.3	2.0	64.4	7	1,150	0.5
Farm Advantage	7244N	2.4	PI 88788	3.1	18	8.7	43.8	2.0	63.7	8	750	0.1
LATHAM	L2468R	2.4	PI 88788	2.9	17	8.9	44.8	1.9	63.2	9	1,275	0.2
LATHAM	E2583R	2.5	PI 88788	2.1	19	7.4	47.8	1.9	62.9	10	475	0.1
NC+	3A00RR	3.0	PI 88788	2.8	24	9.1	43.3	1.5	62.7	11	850	0.2
Prairie Brand	PB-2596NRR	2.5	PI 88788	2.5	21	7.8	47.5	2.1	62.4	12	975	0.2
Prairie Brand	PB-2794NRR	2.7	PI 88788	2.3	24	8.8	45.0	1.9	61.7	14	725	0.1
Kruger	K-235RR/SCN	2.4	PI 88788	3.3	20	8.3	40.8	1.5	61.5	15	850	0.2
Asgrow	AG2406	2.4	PI 88788	3.2	16	9.2	42.5	1.6	61.4	16	1,475	0.6
Kruger	K-286RR/SCN	2.8	PI 88788	3.1	26	8.6	43.8	1.6	60.8	17	1,175	0.1
Farm Advantage	7252N	2.5	PI 88788	2.6	19	8.4	48.8	2.0	60.1	19	750	0.2
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	29	7.3	43.0	2.0	59.8	20	1,150	0.4
Kruger	K-244RR/SCN	2.5	PI 88788	2.7	19	8.9	48.5	1.8	59.7	21	950	0.4
Midwest Seed Genetics	GR2831	2.8	PI 88788	2.5	26	6.8	45.3	2.0	59.2	22	975	0.3
Kruger	K-275RR/SCN	2.7	PI 88788	2.4	22	8.9	51.3	2.0	59.0	23	2,125	0.3
Crow's	C2815R	2.8	PI 88788	2.2	25	6.8	46.0	2.0	58.6	24	825	0.1
Prairie Brand	PB-2636NRR	2.6	PI 88788	2.6	24	8.3	50.5	2.0	58.5	25	1,175	0.5
Kruger	K-287RR/SCN	2.8	PI 88788	2.2	25	7.6	46.8	2.0	58.4	26	1,075	0.3
LATHAM	E2558R	2.5	PI 88788	2.0	17	10.3	44.8	2.0	57.9	27	925	0.3
NC+	2A78RR	2.7	PI 88788	2.0	24	6.8	50.5	2.0	57.2	29	1,725	0.4
Kruger	K-341RR/SCN	2.8	PI 88788	3.0	27	9.6	46.3	1.9	57.2	29	675	0.2
Kruger	K-292RR/SCN	2.9	PI 88788	3.2	24	8.5	43.3	2.1	56.3	31	775	0.2
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	26	8.2	47.8	1.9	56.1	32	675	0.1
Midwest Seed Genetics	GR2731	2.7	PI 88788	2.4	24	8.0	51.3	2.0	55.9	33	975	0.2
Prairie Brand	PB-2896NRR	2.8	PI 88788	2.9	26	8.5	45.8	1.9	55.7	34	1,000	0.3
Farm Advantage	7272N	2.7	PI 88788	2.8	23	8.0	42.5	2.0	54.6	35	2,825	0.6
Farm Advantage	7285N	2.8	PI 88788	3.0	25	9.1	43.8	1.9	54.6	35	675	0.4
Kruger	K-294RR/SCN	2.9	Peking	1.7	25	6.8	47.0	2.0	43.7	38	400	0.1
Average		2.7	---	2.6	23	8.3	45.6	1.9	60.2	---	1,058	0.3
LSD ³		---	---	---	---	1.7	1.8	0.3	4.8	---	853	0.3
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	9	9.3	42.8	1.9	62.4	12	2,475	0.7
<i>Pioneer®</i>	<i>92M91</i>	2.9	<i>None (S)</i>	2.9	22	8.7	43.3	1.8	60.7	18	5,375	0.8
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	20	8.5	37.0	1.5	57.7	28	2,025	0.3
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	22	8.8	43.5	1.5	50.5	37	3,975	0.9
Average		2.7	---	3.1	18	8.8	41.6	1.7	57.8	---	3,463	0.7
LSD ³		---	---	---	---	NS	3.4	NS	6.5	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

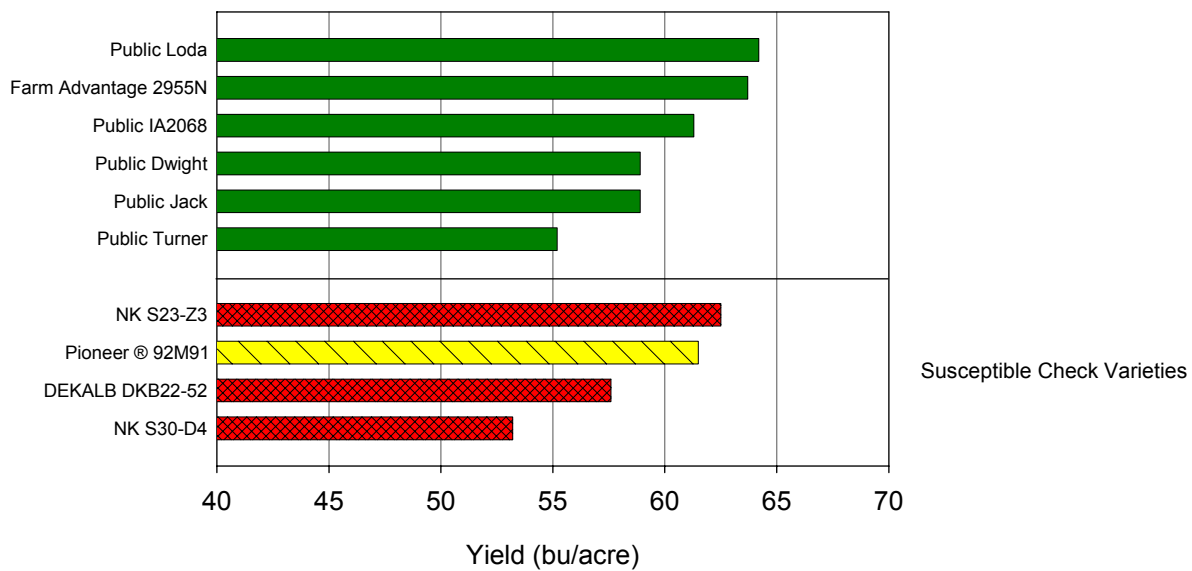
Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 5,133 eggs per 100 cc soil; HG Type 7.

²Final SCN egg population density / initial SCN egg population density.

³Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 12. Urbana (EC Iowa) Conventional



■ SCN numbers reduced over growing season
▨ SCN numbers constant over growing season
▩ SCN numbers increased over growing season
Average initial SCN population 2,413 eggs / 100cc soil
HG Type 7

Table 12. Urbana (EC Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Loda	2.1	PI 88788	3.2	20	8.2	40.5	2.1	64.2	1	400	0.2
Farm Advantage	2955N	2.9	PI 88788	3.3	25	9.3	42.0	2.3	63.7	2	450	0.7
Public	IA2068	2.5	PI 88788	2.3	19	6.3	43.8	2.8	61.3	5	325	0.3
Public	Dwight	2.9	PI 88788	2.9	23	7.3	42.0	2.1	58.9	6	350	0.2
Public	Jack	2.9	PI 88788	2.8	26	8.5	49.0	3.5	58.9	6	375	0.1
Public	Turner	2.3	PI 88788	2.4	19	9.6	43.8	4.0	55.2	9	750	0.5
	Average	2.6	---	2.8	22	8.2	43.5	2.8	60.4	---	442	0.3
	LSD ³	---	---	---	---	1.9	2.5	0.5	4.9	---	NS	NS
<i>NK</i>	<i>S23-Z3</i>	2.3	<i>None (S)</i>	3.6	9	8.7	42.0	2.3	62.5	3	6,275	5.9
<i>Pioneer</i> ®	<i>92M91</i>	2.9	<i>None (S)</i>	2.9	22	9.0	44.8	1.6	61.5	4	2,575	1.1
<i>DEKALB</i>	<i>DKB22-52</i>	2.6	<i>None (S)</i>	2.4	20	8.4	35.3	1.6	57.6	8	4,900	3.7
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	22	9.4	42.5	1.8	53.2	10	7,700	4.7
	Average	2.7	---	3.1	18	8.9	41.1	1.8	58.7	---	5,363	3.8
	LSD ³	---	---	---	---	NS	1.8	NS	5.0	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,413 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 13. Lenox (SW Iowa) Roundup ®

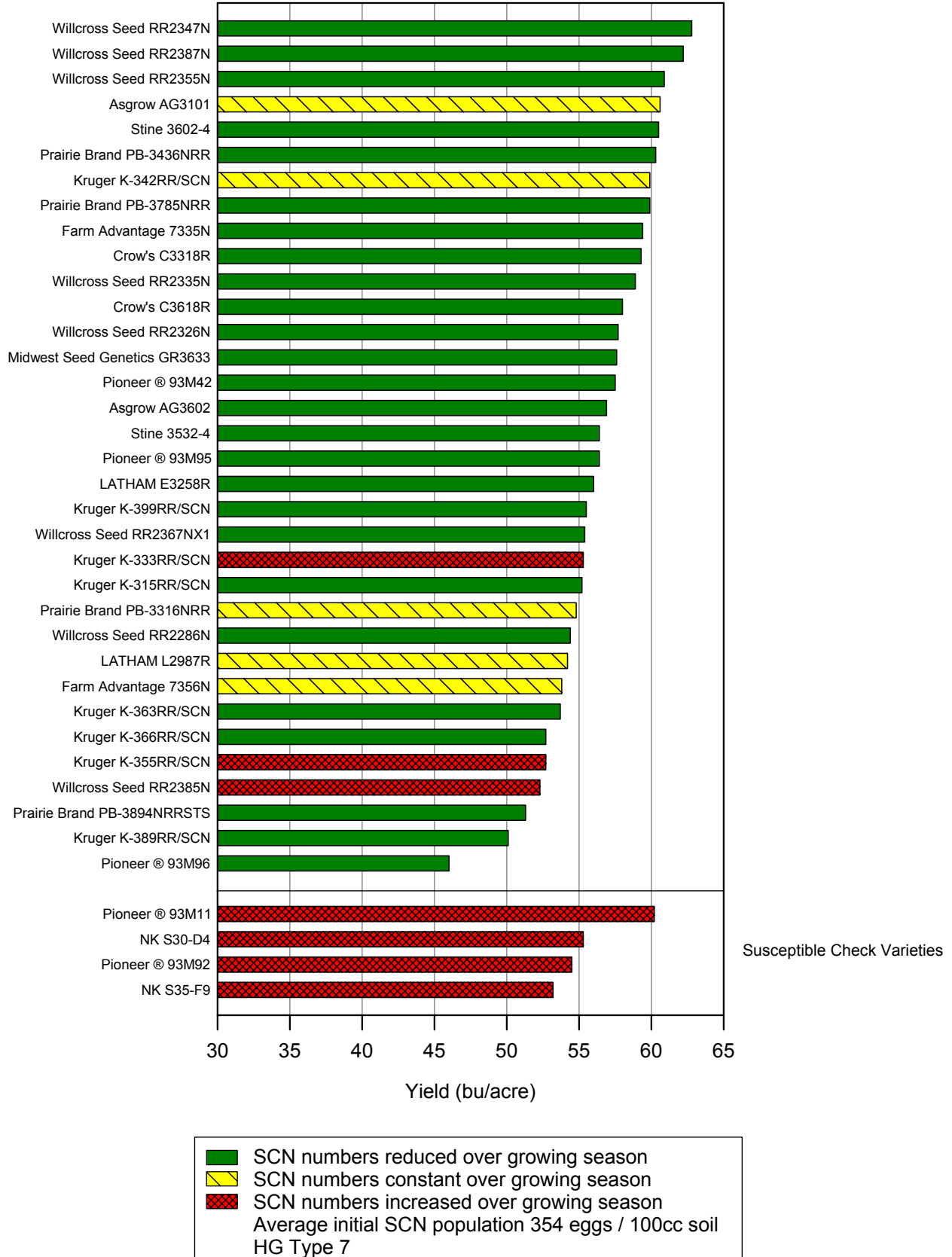


Table 1. Lenox (SW Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Willcross Seed	RR2347N	3.4	PI 88788	3.2	29	9.2	36.0	1.6	62.8	1	150	0.2
Willcross Seed	RR2387N	3.8	PI 88788	2.9	33	9.7	36.3	1.4	62.2	2	200	0.2
Willcross Seed	RR2355N	3.5	PI 88788	3.1	27	9.3	37.3	1.4	60.9	3	125	0.1
Asgrow	AG3101	3.1	PI 88788	3.7	22	9.5	36.5	1.0	60.6	4	50	1.0
Stine	3602-4	3.8	PI 88788	2.3	31	8.8	36.0	1.3	60.5	5	150	0.3
Prairie Brand	PB-3436NRR	3.4	PI 88788	3.1	28	10.4	35.0	1.8	60.3	6	125	0.7
Prairie Brand	PB-3785NRR	3.6	PI 88788	3.5	30	10.8	36.3	1.6	59.9	8	175	0.3
Kruger	K-342RR/SCN	3.4	PI 88788	2.4	24	9.8	35.3	1.5	59.9	8	75	0.8
Farm Advantage	7335N	3.3	PI 88788	3.0	30	7.8	36.0	1.6	59.4	10	25	0.2
Crow's	C3318R	3.3	PI 88788	3.5	28	8.7	38.8	1.6	59.3	11	250	0.5
Willcross Seed	RR2335N	3.3	PI 88788	2.6	26	10.7	39.0	1.8	58.9	12	0	0.0
Crow's	C3618R	3.6	PI 88788	3.1	29	8.7	36.3	1.4	58.0	13	125	0.5
Willcross Seed	RR2326N	3.2	PI 88788	2.6	23	9.8	35.3	1.5	57.7	14	50	0.1
Midwest Seed Genetics	GR3633	3.6	PI 88788	3.3	29	9.1	36.8	1.6	57.6	15	175	0.5
Pioneer®	93M42	3.4	PI 88788	3.4	26	8.8	38.0	2.0	57.5	16	100	0.2
Asgrow	AG3602	3.6	PI 88788	3.3	31	7.4	38.8	1.5	56.9	17	25	0.0
Pioneer®	93M95	3.9	PI 88788	3.3	33	9.1	39.5	2.0	56.4	18	225	0.6
Stine	3532-4	3.5	PI 88788	2.7	33	8.7	33.8	1.8	56.4	18	325	0.7
LATHAM	E3258R	3.2	PI 88788	2.7	32	8.7	33.0	1.5	56.0	20	75	0.3
Kruger	K-399RR/SCN	3.9	PI 88788	3.4	32	9.8	36.8	2.0	55.5	21	150	0.6
Willcross Seed	RR2367NX1	3.6	PI 88788	2.9	28	10.9	36.5	1.1	55.4	22	25	0.0
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	32	8.3	33.3	1.6	55.3	23	125	2.0
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	23	9.4	35.0	1.4	55.2	25	25	0.1
Prairie Brand	PB-3316NRR	3.3	PI 88788	2.9	33	10.0	34.3	1.6	54.8	26	425	1.2
Willcross Seed	RR2286N	2.8	PI 88788	3.3	22	8.8	34.8	1.6	54.4	28	100	0.7
LATHAM	L2987R	2.9	PI 88788	2.6	19	9.8	34.5	1.6	54.2	29	275	0.8
Farm Advantage	7356N	3.5	PI 88788	2.9	29	9.5	35.8	1.3	53.8	30	175	1.0
Kruger	K-363RR/SCN	3.7	PI 88788	2.9	28	10.0	35.8	1.3	53.7	31	375	0.3
Kruger	K-355RR/SCN	3.5	PI 88788	2.8	33	8.1	34.5	1.8	52.7	33	200	1.4
Kruger	K-366RR/SCN	3.8	PI 88788	2.6	30	9.4	35.8	1.4	52.7	33	25	0.1
Willcross Seed	RR2385N	3.8	PI 88788	3.1	33	7.8	36.3	1.5	52.3	35	275	1.5
Prairie Brand	PB-3894NRRSTS	3.8	PI 88788	3.5	31	8.4	36.5	1.5	51.3	36	25	0.0
Kruger	K-389RR/SCN	3.8	PI 88788	3.3	31	8.4	36.0	1.5	50.1	37	75	0.3
Pioneer®	93M96	3.9	PI 88788	3.4	31	8.3	36.5	1.9	46.0	38	25	0.1
	Average	3.5	---	3.0	29	9.2	36.1	1.6	56.4	---	139	0.6
	LSD ³	---	---	---	---	2.1	1.6	0.4	4.9	---	241	NS
<i>Pioneer®</i>	<i>93M11</i>	<i>3.1</i>	<i>None (S)</i>	<i>3.0</i>	<i>25</i>	<i>9.0</i>	<i>33.5</i>	<i>1.5</i>	<i>60.2</i>	<i>7</i>	<i>3,575</i>	<i>6.1</i>
<i>NK</i>	<i>S30-D4</i>	<i>3.0</i>	<i>None (S)</i>	<i>3.3</i>	<i>23</i>	<i>8.8</i>	<i>34.8</i>	<i>1.3</i>	<i>55.3</i>	<i>23</i>	<i>8,225</i>	<i>37.7</i>
<i>Pioneer®</i>	<i>93M92</i>	<i>3.9</i>	<i>None (S)</i>	<i>2.9</i>	<i>32</i>	<i>8.8</i>	<i>37.3</i>	<i>1.9</i>	<i>54.5</i>	<i>27</i>	<i>1,525</i>	<i>3.7</i>
<i>NK</i>	<i>S35-F9</i>	<i>3.5</i>	<i>None (S)</i>	<i>3.5</i>	<i>29</i>	<i>9.0</i>	<i>35.8</i>	<i>1.3</i>	<i>53.2</i>	<i>32</i>	<i>6,175</i>	<i>6.5</i>
	Average	3.4	---	3.2	27	8.9	35.3	1.5	55.8	---	6,355	10.0
	LSD ³	---	---	---	---	NS	2.1	0.4	NS	---	NS	19.3

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 354 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 14. Lenox (SW Iowa) Conventional

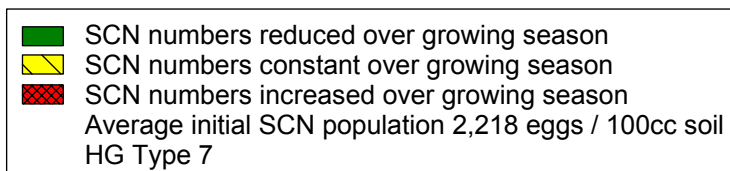
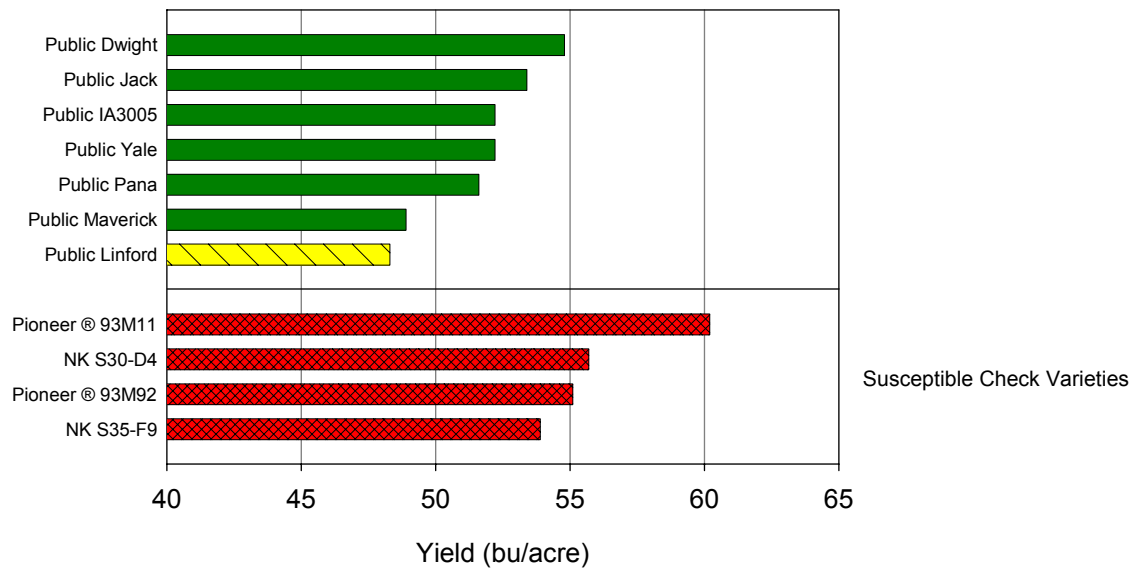


Table 14. Lenox (SW Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Dwight	2.9	PI 88788	2.9	18	8.2	29.3	1.4	54.8	4	325	0.1
Public	Jack	2.9	PI 88788	2.8	21	7.1	39.5	2.9	53.4	6	425	0.2
Public	Yale	3.8	PI 88788	2.7	27	6.4	38.0	1.9	52.2	7	450	0.3
Public	IA3005	3.6	PI 88788	3.3	27	8.1	34.8	2.1	52.2	7	450	0.2
Public	Pana	3.8	PI 88788	3.1	29	5.0	43.8	2.1	51.6	9	450	0.4
Public	Maverick	3.8	PI 88788	3.0	33	8.7	45.0	2.3	48.9	10	400	0.2
Public	Linford	3.8	PI 88788	3.2	28	7.4	39.5	2.6	48.3	11	300	0.9
	Average	3.5	---	3.0	26	7.6	38.5	2.2	51.6	---	400	0.3
	LSD ³	---	---	---	---	2.1	2.2	0.5	NS	---	NS	NS
<i>Pioneer</i> ®	<i>93M11</i>	3.1	<i>None (S)</i>	3.0	25	7.3	32.0	1.4	60.2	1	4,950	3.1
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	23	8.0	33.8	1.3	55.7	2	8,350	10.8
<i>Pioneer</i> ®	<i>93M92</i>	3.9	<i>None (S)</i>	2.9	32	8.2	36.0	1.5	55.1	3	4,975	3.3
<i>NK</i>	<i>S35-F9</i>	3.5	<i>None (S)</i>	3.5	29	8.0	35.5	1.1	53.9	5	8,575	3.4
	Average	3.4	---	3.2	27	7.9	34.3	1.3	56.2	---	6,713	5.3
	LSD ³	---	---	---	---	NS	1.5	NS	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 2,218 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 15. Melrose (SC Iowa) Roundup

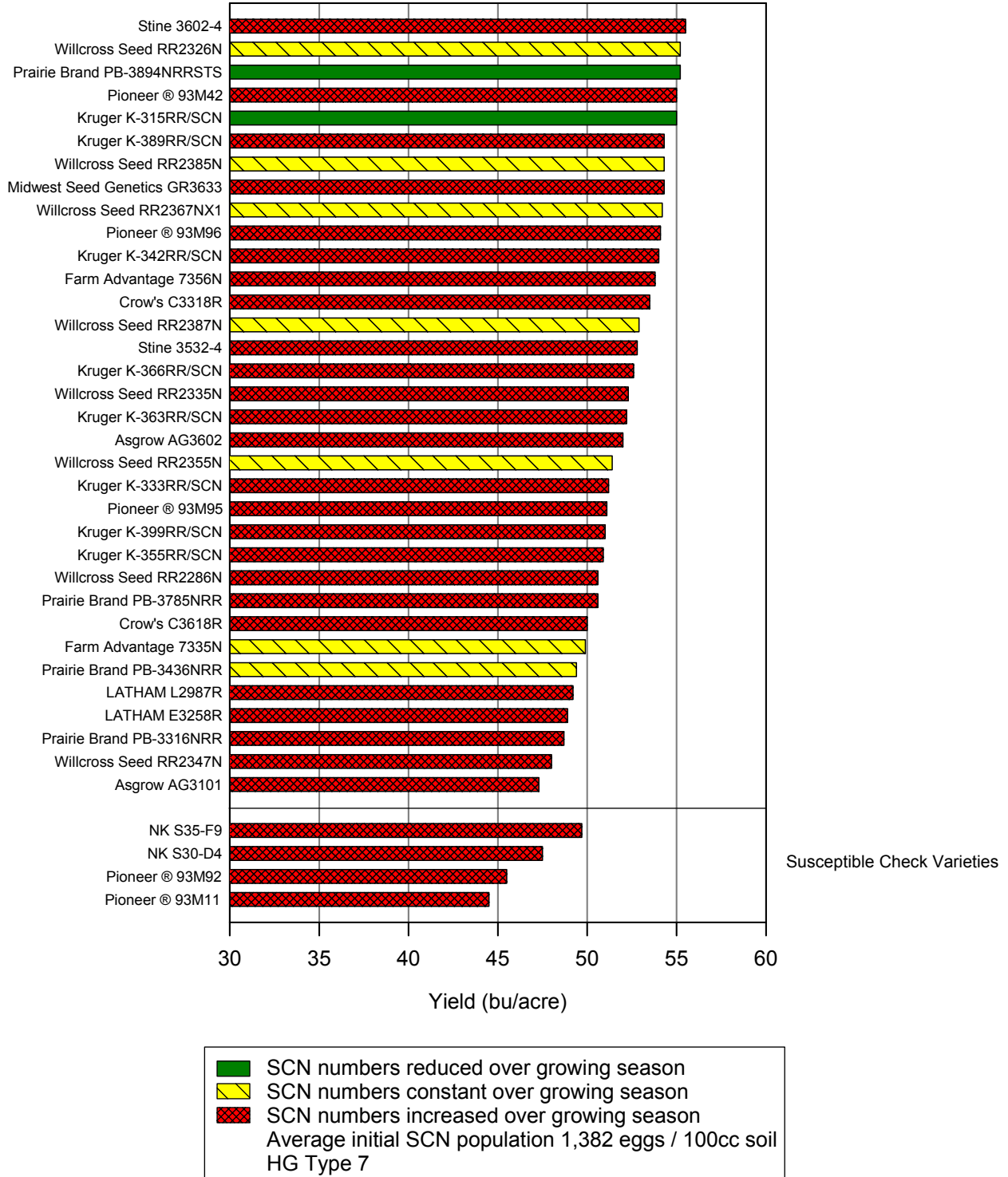


Table 15. Melrose (SC Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Stine	3602-4	3.8	PI 88788	2.3	31	7.7	31.5	1.8	55.5	1	1,525	1.7
Willcross Seed	RR2326N	3.2	PI 88788	2.6	23	6.7	29.0	1.9	55.2	2	1,275	1.1
Prairie Brand	PB-3894NRRSTS	3.8	PI 88788	3.5	31	7.4	29.0	2.0	55.2	2	925	0.6
Pioneer®	93M42	3.4	PI 88788	3.4	26	7.7	34.0	2.0	55.0	4	1,050	3.5
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	23	8.8	30.5	1.6	55.0	4	1,175	0.6
Kruger	K-389RR/SCN	3.8	PI 88788	3.3	31	6.2	29.0	1.9	54.3	6	1,475	1.4
Willcross Seed	RR2385N	3.8	PI 88788	3.1	33	8.5	29.3	1.9	54.3	6	1,025	0.8
Midwest Seed Genetics	GR3633	3.6	PI 88788	3.3	29	8.3	29.0	1.6	54.3	6	2,600	3.8
Willcross Seed	RR2367NX1	3.6	PI 88788	2.9	28	9.1	28.3	1.5	54.2	9	1,375	0.8
Pioneer®	93M96	3.9	PI 88788	3.4	31	5.8	31.3	2.0	54.1	10	1,625	3.9
Kruger	K-342RR/SCN	3.4	PI 88788	2.4	24	8.1	29.8	1.9	54.0	11	1,400	1.8
Farm Advantage	7356N	3.5	PI 88788	2.9	29	8.3	29.3	1.9	53.8	12	975	1.7
Crow's	C3318R	3.3	PI 88788	3.5	28	8.5	32.8	1.5	53.5	13	1,475	2.1
Willcross Seed	RR2387N	3.8	PI 88788	2.9	33	6.6	29.3	1.6	52.9	14	1,050	1.0
Stine	3532-4	3.5	PI 88788	2.7	33	7.3	30.0	1.9	52.8	15	2,850	1.9
Kruger	K-366RR/SCN	3.8	PI 88788	2.6	30	8.1	29.8	1.9	52.6	16	1,150	1.3
Willcross Seed	RR2335N	3.3	PI 88788	2.6	26	7.6	32.5	2.0	52.3	17	2,800	2.4
Kruger	K-363RR/SCN	3.7	PI 88788	2.9	28	6.9	27.8	1.5	52.2	18	1,450	4.8
Asgrow	AG3602	3.6	PI 88788	3.3	31	4.6	30.8	1.8	52.0	19	2,575	3.4
Willcross Seed	RR2355N	3.5	PI 88788	3.1	27	8.9	29.5	1.5	51.4	20	1,100	0.9
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	32	6.2	28.8	2.0	51.2	21	4,425	3.3
Pioneer®	93M95	3.9	PI 88788	3.3	33	4.9	34.8	2.0	51.1	22	1,275	1.5
Kruger	K-399RR/SCN	3.9	PI 88788	3.4	32	5.5	32.3	2.0	51.0	23	1,975	1.3
Kruger	K-355RR/SCN	3.5	PI 88788	2.8	33	6.0	29.3	2.1	50.9	24	3,075	3.9
Willcross Seed	RR2286N	2.8	PI 88788	3.3	22	7.5	29.3	1.8	50.6	25	1,725	1.3
Prairie Brand	PB-3785NRR	3.6	PI 88788	3.5	30	8.8	28.0	1.6	50.6	25	2,600	1.3
Crow's	C3618R	3.6	PI 88788	3.1	29	7.7	29.3	1.8	50.0	27	1,800	1.4
Farm Advantage	7335N	3.3	PI 88788	3.0	30	7.0	28.8	1.9	49.9	28	1,575	1.1
Prairie Brand	PB-3436NRR	3.4	PI 88788	3.1	28	7.3	29.3	2.0	49.4	30	1,150	0.9
LATHAM	L2987R	2.9	PI 88788	2.6	19	8.1	28.8	1.5	49.2	31	1,700	1.9
LATHAM	E3258R	3.2	PI 88788	2.7	32	7.5	29.0	2.0	48.9	32	2,450	2.9
Prairie Brand	PB-3316NRR	3.3	PI 88788	2.9	33	7.7	29.3	2.0	48.7	32	2,167	13.4
Willcross Seed	RR2347N	3.4	PI 88788	3.2	29	7.3	28.8	2.0	48.0	34	1,600	1.3
Asgrow	AG3101	3.1	PI 88788	3.7	22	7.8	28.0	1.5	47.3	36	1,650	1.3
	Average	3.5	---	3.0	29	7.3	29.9	1.8	52.1	---	1,762	2.2
	LSD ³	---	---	---	---	1.9	2.1	0.3	4.7	---	1,653	5.8
<i>NK</i>	<i>S35-F9</i>	3.5	<i>None (S)</i>	3.5	29	9.0	29.3	1.6	49.7	29	14,750	13.7
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	23	8.3	30.5	1.8	47.5	37	14,000	10.8
<i>Pioneer®</i>	<i>93M92</i>	3.9	<i>None (S)</i>	2.9	32	6.8	30.8	1.6	45.5	37	9,575	15.4
<i>Pioneer®</i>	<i>93M11</i>	3.1	<i>None (S)</i>	3.0	25	6.9	28.3	1.5	44.5	38	7,450	5.6
	Average	3.4	---	3.2	27	7.8	29.7	1.6	46.8	---	11,444	11.4
	LSD ³	---	---	---	---	1.8	NS	NS	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,382 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 16. Melrose (SC Iowa) Conventional

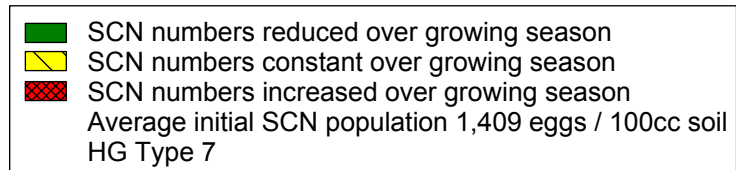
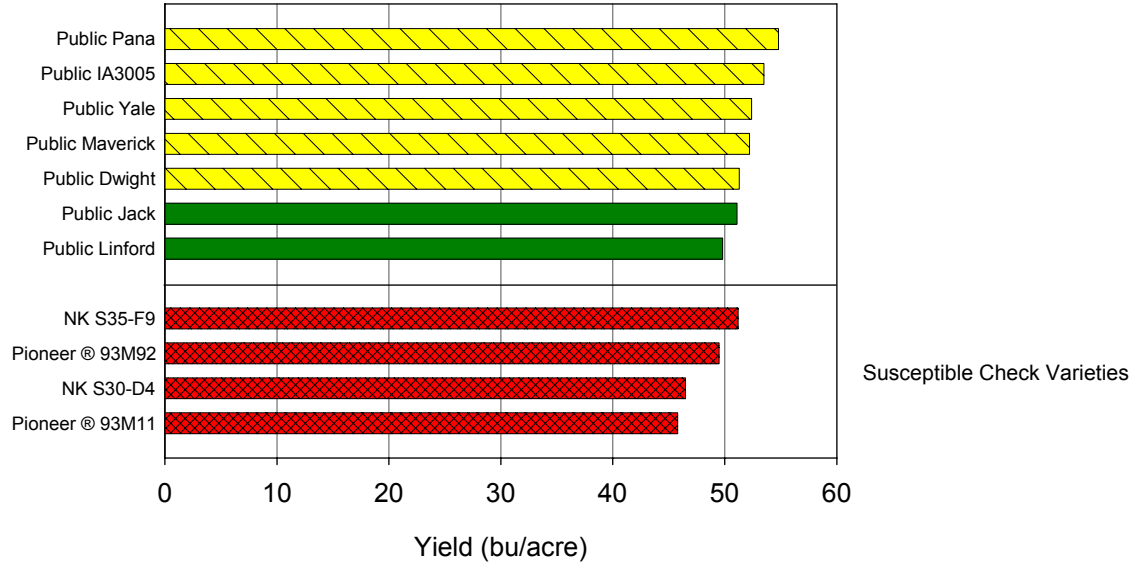


Table 16. Melrose (SC Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	Pana	3.8	PI 88788	3.1	29	4.6	42.5	2.4	54.8	1	600	0.8
Public	IA3005	3.6	PI 88788	3.3	27	6.2	32.3	2.0	53.5	2	1,175	0.9
Public	Yale	3.8	PI 88788	2.7	27	6.8	35.8	1.8	52.4	3	925	1.0
Public	Maverick	3.8	PI 88788	3.0	33	6.2	43.0	2.4	52.2	4	1,225	1.0
Public	Dwight	2.9	PI 88788	2.9	18	5.7	26.8	2.0	51.3	5	1,450	1.2
Public	Jack	2.9	PI 88788	2.8	21	7.0	39.3	2.5	51.1	7	600	0.5
Public	Linford	3.8	PI 88788	3.2	28	6.6	39.0	2.5	49.8	8	575	0.5
	Average	3.5	---	3.0	26	6.1	36.9	2.2	52.2	---	936	0.9
	LSD ³	---	---	---	---	NS	1.2	0.3	NS	---	NS	NS
<i>NK</i>	<i>S35-F9</i>	3.5	<i>None (S)</i>	3.5	29	8.4	31.0	1.6	51.2	6	13,450	8.1
<i>Pioneer</i> ®	<i>93M92</i>	3.9	<i>None (S)</i>	2.9	32	7.8	31.3	1.6	49.5	9	9,775	9.0
<i>NK</i>	<i>S30-D4</i>	3.0	<i>None (S)</i>	3.3	23	9.7	30.3	1.6	46.5	9	19,925	32.9
<i>Pioneer</i> ®	<i>93M11</i>	3.1	<i>None (S)</i>	3.0	25	7.3	28.8	1.5	45.8	11	9,525	9.0
	Average	3.4	---	3.2	27	8.3	30.3	1.6	48.2	---	13,168	14.8
	LSD ³	---	---	---	---	NS	NS	NS	NS	---	7,606	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

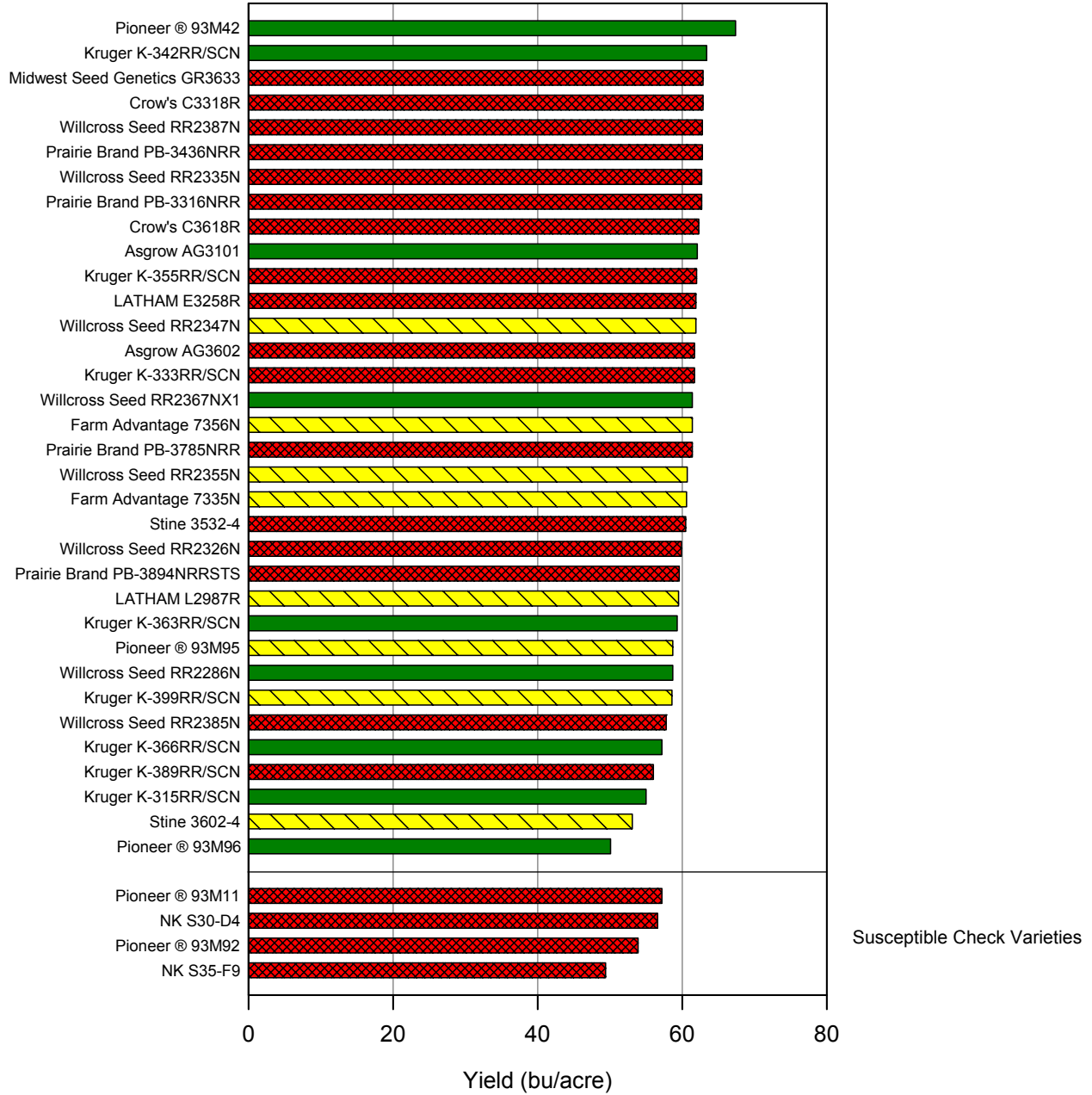
Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,409 eggs per 100 cc soil; HG Type 7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 17. Crawfordsville (SE Iowa) Roundup ®



■ SCN numbers reduced over growing season
▨ SCN numbers constant over growing season
▩ SCN numbers increased over growing season
 Average initial SCN population 1,018 eggs / 100cc soil
 HG Type 2.7

Table 17. Crawfordsville (SE Iowa) Roundup®

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Pioneer®	93M42	3.4	PI 88788	3.4	26	7.5	43.8	2.0	67.4	1	950	0.7
Kruger	K-342RR/SCN	3.4	PI 88788	2.4	24	8.7	39.5	1.5	63.4	2	575	0.6
Crow's	C3318R	3.3	PI 88788	3.5	28	8.0	40.8	1.9	62.9	3	1,075	2.5
Midwest Seed Genetics	GR3633	3.6	PI 88788	3.3	29	9.1	40.8	1.8	62.9	3	2,375	1.5
Willcross Seed	RR2387N	3.8	PI 88788	2.9	33	9.6	38.0	2.1	62.8	5	1,050	2.3
Prairie Brand	PB-3436NRR	3.4	PI 88788	3.1	28	9.5	40.3	1.8	62.8	5	1,150	3.0
Prairie Brand	PB-3316NRR	3.3	PI 88788	2.9	33	7.8	37.0	1.8	62.7	7	3,667	2.7
Willcross Seed	RR2335N	3.3	PI 88788	2.6	26	7.8	42.3	2.1	62.7	7	700	4.0
Crow's	C3618R	3.6	PI 88788	3.1	29	8.3	39.8	1.9	62.3	9	1,025	1.7
Asgrow	AG3101	3.1	PI 88788	3.7	22	8.8	41.5	1.5	62.1	10	350	0.8
Kruger	K-355RR/SCN	3.5	PI 88788	2.8	33	6.6	37.0	1.6	62.0	11	1,300	1.6
Willcross Seed	RR2347N	3.4	PI 88788	3.2	29	8.8	40.0	1.8	61.9	12	600	1.1
LATHAM	E3258R	3.2	PI 88788	2.7	32	8.9	37.3	2.1	61.9	12	1,125	2.7
Kruger	K-333RR/SCN	3.3	PI 88788	2.8	32	5.3	37.8	1.6	61.7	14	900	1.6
Asgrow	AG3602	3.6	PI 88788	3.3	31	6.6	40.0	2.0	61.7	14	575	1.7
Prairie Brand	PB-3785NRR	3.6	PI 88788	3.5	30	9.9	40.5	1.9	61.4	16	1,625	1.5
Willcross Seed	RR2367NX1	3.6	PI 88788	2.9	28	6.3	40.0	1.5	61.4	16	475	0.6
Farm Advantage	7356N	3.5	PI 88788	2.9	29	9.1	40.3	1.6	61.4	16	625	0.9
Willcross Seed	RR2355N	3.5	PI 88788	3.1	27	8.7	40.8	1.6	60.7	19	825	0.8
Farm Advantage	7335N	3.3	PI 88788	3.0	30	8.0	39.5	1.8	60.6	20	450	0.8
Stine	3532-4	3.5	PI 88788	2.7	33	8.1	38.0	1.6	60.5	21	1,300	2.2
Willcross Seed	RR2326N	3.2	PI 88788	2.6	23	8.3	40.0	1.5	59.9	22	625	3.7
Prairie Brand	PB-3894NRRSTS	3.8	PI 88788	3.5	31	8.3	39.8	1.5	59.6	23	2,975	1.4
LATHAM	L2987R	2.9	PI 88788	2.6	19	7.8	38.8	1.6	59.5	24	1,300	1.0
Kruger	K-363RR/SCN	3.7	PI 88788	2.9	28	6.9	40.5	1.8	59.3	25	800	0.5
Pioneer®	93M95	3.9	PI 88788	3.3	33	6.8	46.3	2.4	58.7	26	800	1.4
Willcross Seed	RR2286N	2.8	PI 88788	3.3	22	7.7	37.8	1.9	58.7	26	625	0.3
Kruger	K-399RR/SCN	3.9	PI 88788	3.4	32	7.8	42.5	2.0	58.6	28	1,250	0.9
Willcross Seed	RR2385N	3.8	PI 88788	3.1	33	6.9	39.3	1.6	57.8	29	875	1.8
Kruger	K-366RR/SCN	3.8	PI 88788	2.6	30	8.3	38.5	1.5	57.2	30	400	0.6
Kruger	K-389RR/SCN	3.8	PI 88788	3.3	31	7.3	39.0	1.9	56.0	33	975	2.4
Kruger	K-315RR/SCN	3.1	PI 88788	2.4	23	7.4	40.3	1.5	55.0	33	425	0.4
Stine	3602-4	3.8	PI 88788	2.3	31	6.3	40.5	2.0	53.1	36	675	1.5
Pioneer®	93M96	3.9	PI 88788	3.4	31	5.7	39.5	1.6	50.1	37	450	0.3
	Average	3.5	---	3.0	29	7.8	39.9	1.8	60.3	---	1,007	1.5
	LSD ³	---	---	---	---	NS	2.9	0.3	8.0	---	1,753	2.9
<i>Pioneer®</i>	<i>93M11</i>	<i>3.1</i>	<i>None (S)</i>	<i>3.0</i>	<i>25</i>	<i>9.3</i>	<i>34.8</i>	<i>1.5</i>	<i>57.2</i>	<i>30</i>	<i>3,400</i>	<i>3.9</i>
<i>NK</i>	<i>S30-D4</i>	<i>3.0</i>	<i>None (S)</i>	<i>3.3</i>	<i>23</i>	<i>9.9</i>	<i>40.0</i>	<i>1.6</i>	<i>56.6</i>	<i>32</i>	<i>9,800</i>	<i>16.3</i>
<i>Pioneer®</i>	<i>93M92</i>	<i>3.9</i>	<i>None (S)</i>	<i>2.9</i>	<i>32</i>	<i>8.3</i>	<i>39.3</i>	<i>1.8</i>	<i>53.9</i>	<i>35</i>	<i>4,925</i>	<i>6.8</i>
<i>NK</i>	<i>S35-F9</i>	<i>3.5</i>	<i>None (S)</i>	<i>3.5</i>	<i>29</i>	<i>6.4</i>	<i>38.3</i>	<i>1.5</i>	<i>49.4</i>	<i>38</i>	<i>5,775</i>	<i>14.3</i>
	Average	3.4	---	3.2	27	8.5	38.1	1.6	54.3	---	5,975	10.3
	LSD ³	---	---	---	---	1.9	1.6	NS	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,018 eggs per 100 cc soil; HG Type 2.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Figure 18. Crawfordsville (SE Iowa) Conventional

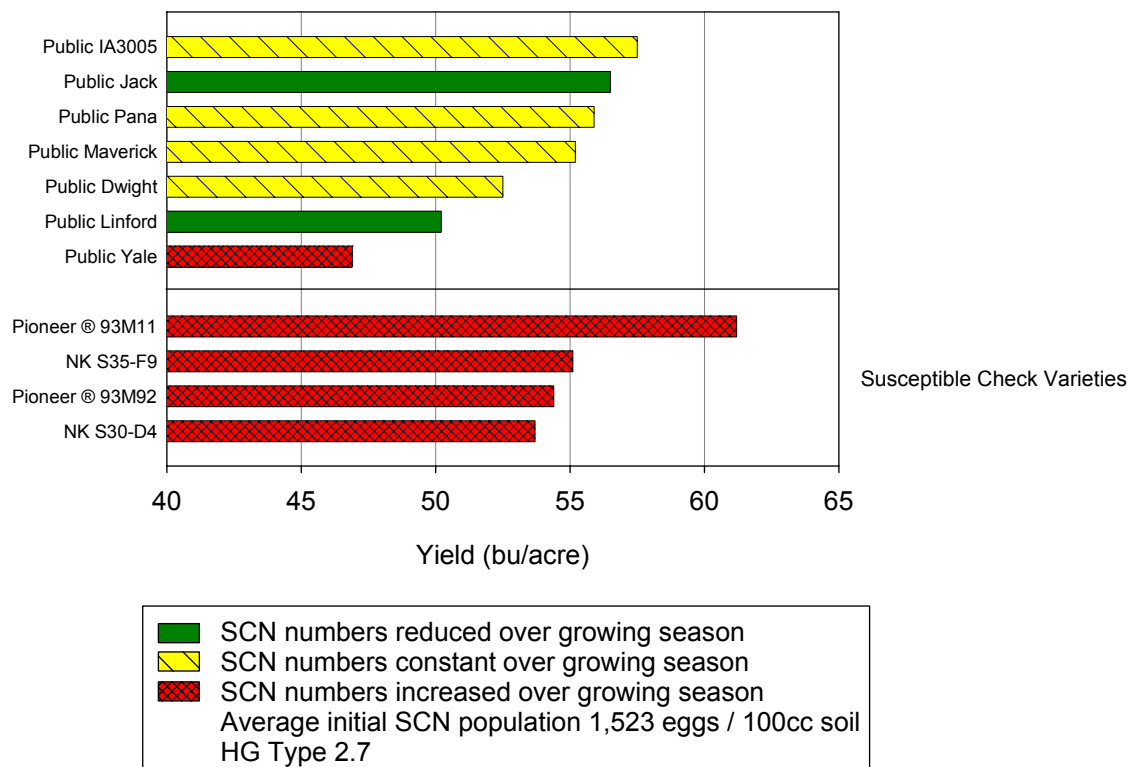


Table 18. Crawfordsville (SE Iowa) Conventional

Brand	Variety	Relative maturity	Resistance	IDC	Maturity date	Emergence (plants/ft)	Height (inches)	Lodging (1-5)	Yield (bu/acre)	Yield rank	SCN # (/100cc) ¹	RF ²
Public	IA3005	3.6	PI 88788	3.3	27	8.3	41.3	2.3	57.5	2	1,375	1.0
Public	Jack	2.9	PI 88788	2.8	21	7.1	44.0	2.5	56.5	3	450	0.3
Public	Pana	3.8	PI 88788	3.1	29	7.4	47.5	2.6	55.9	4	700	0.9
Public	Maverick	3.8	PI 88788	3.0	33	6.8	49.0	2.4	55.2	5	1,300	1.2
Public	Dwight	2.9	PI 88788	2.9	18	5.4	35.0	2.0	52.5	9	900	0.9
Public	Linford	3.8	PI 88788	3.2	28	8.1	42.5	2.5	50.2	10	575	0.3
Public	Yale	3.8	PI 88788	2.7	27	7.1	42.0	1.8	46.9	11	1,150	2.3
	Average	3.5	---	3.0	26	7.2	43.0	2.3	53.4	---	921	1.0
	LSD ³	---	---	---	---	NS	2.6	0.3	8.8	---	NS	NS
<i>Pioneer</i> ®	<i>93M11</i>	<i>3.1</i>	<i>None (S)</i>	<i>3.0</i>	<i>25</i>	<i>7.8</i>	<i>38.0</i>	<i>1.5</i>	<i>61.2</i>	<i>1</i>	<i>4,100</i>	<i>3.3</i>
<i>NK</i>	<i>S35-F9</i>	<i>3.5</i>	<i>None (S)</i>	<i>3.5</i>	<i>29</i>	<i>6.6</i>	<i>39.5</i>	<i>1.5</i>	<i>55.1</i>	<i>6</i>	<i>12,300</i>	<i>6.1</i>
<i>Pioneer</i> ®	<i>93M92</i>	<i>3.9</i>	<i>None (S)</i>	<i>2.9</i>	<i>32</i>	<i>7.5</i>	<i>40.0</i>	<i>1.9</i>	<i>54.4</i>	<i>7</i>	<i>18,675</i>	<i>16.9</i>
<i>NK</i>	<i>S30-D4</i>	<i>3.0</i>	<i>None (S)</i>	<i>3.3</i>	<i>23</i>	<i>8.6</i>	<i>39.5</i>	<i>1.6</i>	<i>53.7</i>	<i>8</i>	<i>8,100</i>	<i>5.7</i>
	Average	3.4	---	3.2	27	7.6	39.3	1.6	56.1	---	10,794	8.0
	LSD ³	---	---	---	---	NS	NS	0.3	NS	---	NS	NS

Values presented in table are means. Entries are listed in decreasing order of yield.

Italicized entries are widely grown SCN-susceptible varieties entered by Iowa State University for comparison purposes.

¹ Final SCN egg population density (eggs per 100 cc soil); there were no significant differences among initial SCN population densities; initial SCN population 1,523 eggs per 100 cc soil; HG Type 2.7.

² Final SCN egg population density / initial SCN egg population density.

³ Least significant difference: values are from Fisher's least-significant difference test (P=0.05), NS = no significant differences among the varieties.

Table 1 – 2006 Test Participants.

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Varieties listed in the tables as brand “Public” were released by public breeding programs and were entered by Iowa State University. For additional information about public varieties, please contact Greg Gebhart at 515-294-5896 or e-mail ggebhart@iastate.edu.