

2020 SCN PRELIMINARY III

Strain	FPhm	Parentage	Gen.		SCN Resistance source
			Comp.	Traits	
1 LD11-2170 (SCN)	PLtbr	Syngenta 03JR313108 x LD05-3171	F5		PI 88788
2 U15-606207	PGbf	LD07-3419 x U09-105007	F5	Rps	PI 88788,437654
3 LD07-3395bf (SCN)	WGbf	Syngenta WW115926 x LD00-2817	F5		PI 88788,437654
4 U14-910097 (SCN)	PGbf	U09-105007 x LD07-3419	F5		PI 88788,437654
5 CR14-6131	WTbl	LD06-7596 x LS05-3229	F5	ACC, SCN x SCN	
6 CR14-8383	PTbr	LD07-3395 x AR09-391017	F5	ACC, SCN x SCN	
7 CR17-1724	PTbl	LD00-3309 x L65-1274	F5	nod NILS x SCN	
8 CR17-1905	PTbl	LD00-3309 x L65-1274	F5	nod NILS x SCN	
9 LD17-2946a	WLtbl	U11-614119 x LD09-30224	F5	Rag 1	PI 88788
10 LD17-4327a	PGbf	AR10-205011 x LD08-12435a	F5		PI 88788
11 LD17-8668	PGy	E11128T x U09-105007	F5		PI 88788
12 LD17-9766	PLtbr	U11-616086 x LDX11-319-7-108	F5		PI 88788
13 LD17-9906	PGbf	LD11-7311 x LDX11-319-7-134	F5		PI 88788, soja
14 LD17-9973	PT+Ltbr	LD11-7311 x LDX11-319-7-134	F5		PI 88788
15 LD17-10244	PLtbl	LD07-3395bf x U11-920017	F5		PI 88788,437654
16 LD17-10579	PLtbl	LD12-10534 x U11-920017	F5		PI 88788, soja
17 LD17-10640	WLtbl	LD12-10534 x LD10-9168	F5		PI 88788, soja
18 LD17-10786	WLtbr	LD12-10534 x LD11-7311	F5		PI 88788, soja
19 U17-303104	PLtbl	LD09-30224 x U13-905029	F5		
20 U17-304114	PLtbl	U11-614093 x LD09-30224	F5	Expected Rps Resistance	
21 U17-306115	PGibl	LD09-30224 x U13-905029	F5	Expected Rps Resistance	
22 U18-617270	PLtbl	LD12-3903 x U11-917032	F5	Expected Rps Resistance	PI 88788
23 U18-913029	PLtbl	LD10-10198 x U11-911079	F5	Expected Rps Resistance	PI 88788
24 U18-925025	PLtbl	LD12-3903 x U11-911079	F5	Expected Rps Resistance	PI 88788
25 U18-932054	PLtbl	LD12-3903 x U11-917032	F5		PI 88788

2020 SCN PRELIMINARY III

Entry	IL SCN screening										NE
	cyst counts			HG 0		cyst counts			HG 2.5.7		Gall Midge
	rep1	rep2	rep3	FI	rating	rep1	rep2	rep3	FI	rating	score
1 LD11-2170 (SCN)	40	51	29	27	MR	125	101	129	80	NR	1.0
2 U15-606207	10	6	8	5	HR	2	2	1	1	HR	2.5
3 LD07-3395bf (SCN)	22	17	35	17	R	11	26	16	12	R	0.0
4 U14-910097 (SCN)	4	1	4	2	HR	3	6	2	2	HR	1.0
5 CR14-6131	40	31	31	23	R	88	49	102	38	LR	1.0
6 CR14-8383	4	2	10	4	HR	70	64	58	43	LR	0.0
7 CR17-1724	13	9	15	8	HR	131	143	136	65	NR	0.0
8 CR17-1905	12	15	14	9	HR	99	112	88	67	NR	0.0
9 LD17-2946a	2	5	2	2	HR	128	82	134	77	LR	0.0
10 LD17-4327a	16	11	25	12	R	80	87	85	57	LR	2.5
11 LD17-8668	64	50	77	43	LR	70	78	76	50	LR	1.0
12 LD17-9766	15	18	7	9	HR	36	42	41	27	MR	1.0
13 LD17-9906	16	11	11	9	HR	90	86	96	61	NR	1.0
14 LD17-9973	4	3	8	3	HR	54	69	48	38	MR	0.0
15 LD17-10244	8	10	11	7	HR	16	23	19	13	R	1.0
16 LD17-10579	92	56	64	48	LR	28	37	34	22	R	2.0
17 LD17-10640	35	31	38	23	R	110	92	93	66	LR	1.0
18 LD17-10786	22	25	14	14	R	45	58	58	36	MR	1.0
19 U17-303104	30	23	24	17	R	168	176	164	114	NR	1.5
20 U17-304114	15	29	37	18	R	139	141	126	91	NR	1.0
21 U17-306115	18	22	13	12	R	138	124	112	84	NR	2.0
22 U18-617270	39	21	13	16	R	39	49	48	31	MR	1.0
23 U18-913029	13	1	10	5	HR	96	62	59	49	LR	0.0
24 U18-925025	7	9	2	4	HR	72	96	66	53	LR	1.0
25 U18-932054	45	51	38	30	MR	109	121	94	73	NR	1.5

Ave of 2 reps.
 1-9 visual scale.
 1=10% infection
 2=20% infection
 Etc.

(*)=small root, (.)=missing sample, (**)=rep data too variable to rate

2020 SCN PRELIMINARY III

Yield (bu/a)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	82.4	86.7	71.5	64.1	71.4	72.8
2 U15-606207	73.9	88.9	73.7	60.0	75.6	50.5
3 LD07-3395bf (SCN)	74.0	82.6	76.7	68.0	83.1	63.5
4 U14-910097 (SCN)	83.6	79.3	73.4	72.0	75.2	73.0
5 CR14-6131	73.0	80.1	63.8	48.6	57.8	56.5
6 CR14-8383	71.2	67.2	67.2	59.9	76.2	70.5
7 CR17-1724	67.9	77.6	76.6	53.1	57.3	74.7
8 CR17-1905	70.4	76.5	74.6	50.3	67.7	76.3
9 LD17-2946a	75.0	78.5	63.1	67.0	79.5	76.1
10 LD17-4327a	82.3	73.6	72.9	61.1	76.5	54.5
11 LD17-8668	77.0	77.7	66.4	44.2	65.8	56.1
12 LD17-9766	69.5	84.6	71.4	60.2	72.8	69.4
13 LD17-9906	67.1	74.7	67.1	53.4	62.7	68.0
14 LD17-9973	64.3	80.7	73.0	61.8	55.8	66.0
15 LD17-10244	64.1	90.4	68.3	60.2	70.2	52.0
16 LD17-10579	72.5	87.6	65.7	54.7	73.0	58.1
17 LD17-10640	58.2	91.4	69.8	64.8	67.7	64.9
18 LD17-10786	85.0	86.7	68.2	55.0	72.7	61.9
19 U17-303104	70.0	77.6	73.0	53.3	65.3	62.2
20 U17-304114	70.7	69.1	71.3	52.0	79.8	71.9
21 U17-306115	63.4	76.2	73.0	66.6	72.9	56.2
22 U18-617270	74.6	85.9	67.6	60.8	65.2	69.9
23 U18-913029	76.1	73.0	65.3	55.3	76.8	72.7
24 U18-925025	65.9	81.4	64.4	67.3	68.5	61.1
25 U18-932054	73.2	63.0	68.0	60.1	60.5	60.2
Average	72.2	79.7	69.8	58.9	70.0	64.8
LSD(2-sided,.05)	16.3	12.1	3.4	10.4	16.9	13.1
C.V. %	10.9	7.4	2.3	8.5	11.6	9.8
Replications	2	2	2	2	2	2
Row spacing (in.)	30	30	30	30	30	30

2020 SCN PRELIMINARY III

Yield (rank)

SCN HG Type	Arthur IL	Romney IN	Manhattan KS	Columbia MO	Holdrege NE	Lincoln NE
Strain	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
1 LD11-2170 (SCN)	3	5	10	7	13	5
2 U15-606207	10	3	4	14	7	25
3 LD07-3395bf (SCN)	9	9	1	2	1	14
4 U14-910097 (SCN)	2	13	5	1	8	4
5 CR14-6131	12	12	24	24	23	20
6 CR14-8383	14	24	18	15	6	8
7 CR17-1724	19	16	2	21	24	3
8 CR17-1905	16	18	3	23	16	1
9 LD17-2946a	7	14	25	4	3	2
10 LD17-4327a	4	21	9	9	5	23
11 LD17-8668	5	15	20	25	18	22
12 LD17-9766	18	8	11	12	11	10
13 LD17-9906	20	20	19	19	21	11
14 LD17-9973	22	11	6	8	25	12
15 LD17-10244	23	2	14	11	14	24
16 LD17-10579	13	4	21	18	9	19
17 LD17-10640	25	1	13	6	17	13
18 LD17-10786	1	5	15	17	12	16
19 U17-303104	17	16	6	20	19	15
20 U17-304114	15	23	12	22	2	7
21 U17-306115	24	19	6	5	10	21
22 U18-617270	8	7	17	10	20	9
23 U18-913029	6	22	22	16	4	6
24 U18-925025	21	10	23	3	15	17
25 U18-932054	11	25	16	13	22	18

2020 SCN PRELIMINARY III

Maturity

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	9/22	9/25	9/24	9/24		10/02
2 U15-606207	2	2	0	2		3
3 LD07-3395bf (SCN)	4	3	5	5		7
4 U14-910097 (SCN)	2	1	0	1		-1
5 CR14-6131	4	3	0	1		3
6 CR14-8383	3	3	0	2		4
7 CR17-1724	5	4	4	3		7
8 CR17-1905	5	3	0	2		7
9 LD17-2946a	-4	-5	0	-1		1
10 LD17-4327a	2	2	0	2		1
11 LD17-8668	-2	-2	0	-2		3
12 LD17-9766	4	3	0	1		3
13 LD17-9906	2	3	0	-3		3
14 LD17-9973	2	3	2	2		5
15 LD17-10244	3	2	0	2		5
16 LD17-10579	0	1	2	-2		1
17 LD17-10640	5	5	4	3		7
18 LD17-10786	3	4	0	2		5
19 U17-303104	-1	-1	0	-1		1
20 U17-304114	1	2	0	-1		1
21 U17-306115	1	-1	0	0		3
22 U18-617270	3	2	2	3		6
23 U18-913029	-6	-2	0	-3		-1
24 U18-925025	-6	-4	0	-3		0
25 U18-932054	-1	-3	0	1		1
Planted	5/12	5/27	6/08	6/01	6/19	6/09

2020 SCN PRELIMINARY III

Lodging (score)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	1.0	1.0	1.0	2.0		1.0
2 U15-606207	1.5	1.0	1.0	1.8		1.0
3 LD07-3395bf (SCN)	1.8	1.5	1.0	1.8		1.0
4 U14-910097 (SCN)	2.3	2.0	2.0	2.8		2.0
5 CR14-6131	2.0	1.0	1.0	1.5		1.0
6 CR14-8383	2.3	2.0	1.0	2.1		1.0
7 CR17-1724	2.0	1.0	1.0	1.5		1.0
8 CR17-1905	1.3	1.0	1.0	1.3		1.0
9 LD17-2946a	2.0	2.0	1.0	2.0		1.0
10 LD17-4327a	1.5	1.0	1.5	1.8		1.5
11 LD17-8668	2.0	1.0	1.0	2.0		2.0
12 LD17-9766	1.8	1.0	1.0	1.8		1.0
13 LD17-9906	1.8	2.0	1.0	1.8		1.0
14 LD17-9973	2.3	1.0	1.0	1.8		1.0
15 LD17-10244	1.0	1.0	1.0	1.5		1.0
16 LD17-10579	1.5	1.0	1.0	1.8		2.5
17 LD17-10640	2.3	1.0	1.5	2.3		1.5
18 LD17-10786	1.5	1.0	1.0	1.5		1.0
19 U17-303104	1.5	1.5	1.0	2.0		2.0
20 U17-304114	1.5	2.0	1.0	1.5		1.0
21 U17-306115	1.0	1.5	1.0	1.8		1.0
22 U18-617270	1.5	1.0	1.0	1.5		1.0
23 U18-913029	1.3	1.0	1.5	1.5		1.0
24 U18-925025	1.0	1.0	1.0	1.5		1.0
25 U18-932054	1.0	1.0	1.0	1.5		1.0

2020 SCN PRELIMINARY III

Height (inches)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	38		36	30		34
2 U15-606207	38		38	31		35
3 LD07-3395bf (SCN)	38		38	32		31
4 U14-910097 (SCN)	38		36	32		28
5 CR14-6131	43		41	31		34
6 CR14-8383	42		38	34		33
7 CR17-1724	40		40	31		35
8 CR17-1905	42		40	31		37
9 LD17-2946a	40		39	32		34
10 LD17-4327a	37		39	35		35
11 LD17-8668	42		39	31		32
12 LD17-9766	41		38	32		35
13 LD17-9906	43		42	33		38
14 LD17-9973	40		39	37		38
15 LD17-10244	36		37	31		31
16 LD17-10579	42		40	33		38
17 LD17-10640	41		43	39		38
18 LD17-10786	44		40	32		34
19 U17-303104	37		38	32		37
20 U17-304114	38		38	32		34
21 U17-306115	34		36	30		32
22 U18-617270	36		37	30		33
23 U18-913029	42		37	34		33
24 U18-925025	40		40	33		34
25 U18-932054	38		36	32		32

2020 SCN PRELIMINARY III

Seed Weight (g/100)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	16.0		14.0	14.0		16.0
2 U15-606207	14.2		14.0	14.5		15.4
3 LD07-3395bf (SCN)	15.4		15.0	15.0		15.0
4 U14-910097 (SCN)	14.6		14.0	14.1		14.0
5 CR14-6131	13.1		13.0	11.8		13.1
6 CR14-8383	13.2		12.0	11.6		12.8
7 CR17-1724	12.9		13.0	11.9		13.1
8 CR17-1905	13.0		12.0	11.8		12.6
9 LD17-2946a	15.0		15.0	15.3		14.9
10 LD17-4327a	16.3		16.0	16.6		15.4
11 LD17-8668	19.2		20.0	17.3		19.7
12 LD17-9766	13.7		14.0	12.5		13.3
13 LD17-9906	14.5		15.0	12.7		14.5
14 LD17-9973	13.8		14.0	13.4		14.5
15 LD17-10244	14.0		16.0	15.0		15.6
16 LD17-10579	18.7		19.0	15.6		18.2
17 LD17-10640	15.5		15.0	14.2		14.8
18 LD17-10786	18.0		17.0	15.3		16.8
19 U17-303104	15.8		15.0	16.3		17.1
20 U17-304114	14.9		16.0	16.1		15.2
21 U17-306115	14.6		15.0	15.0		16.5
22 U18-617270	16.5		17.0	16.1		16.7
23 U18-913029	12.9		14.0	12.2		13.5
24 U18-925025	12.2		13.0	12.9		13.2
25 U18-932054	17.8		18.0	17.3		18.7

2020 SCN PRELIMINARY III

Seed Quality (score)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	2.0		2.0	1.0		1.0
2 U15-606207	2.0		2.0	1.0		1.0
3 LD07-3395bf (SCN)	2.0		2.0	1.0		1.0
4 U14-910097 (SCN)	2.0		1.0	1.0		1.0
5 CR14-6131	2.0		2.0	1.5		1.0
6 CR14-8383	2.0		2.0	1.0		1.0
7 CR17-1724	2.0		2.0	1.5		1.0
8 CR17-1905	1.0		2.0	1.0		1.0
9 LD17-2946a	2.0		2.0	1.0		1.0
10 LD17-4327a	2.0		2.0	1.0		1.0
11 LD17-8668	2.0		1.0	1.0		1.0
12 LD17-9766	2.0		2.0	1.0		1.0
13 LD17-9906	2.0		2.0	1.0		1.0
14 LD17-9973	2.0		2.0	1.0		1.0
15 LD17-10244	2.0		2.0	1.0		1.0
16 LD17-10579	2.0		2.0	2.0		1.0
17 LD17-10640	2.0		2.0	1.0		1.0
18 LD17-10786	1.0		2.0	1.0		1.0
19 U17-303104	2.0		2.0	2.0		1.0
20 U17-304114	2.0		2.0	1.5		1.0
21 U17-306115	2.0		2.0	2.0		1.0
22 U18-617270	2.0		2.0	1.0		1.0
23 U18-913029	2.0		1.0	1.0		1.0
24 U18-925025	2.0		2.0	1.0		1.0
25 U18-932054	2.0		2.0	1.5		1.0

2020 SCN PRELIMINARY III

Protein (%)

	Arthur IL	Romney IN	Manhattan KS	Columbia MO	Holdrege NE	Lincoln NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	34.0		30.6	34.0		32.8
2 U15-606207	30.8		30.7	30.9		30.9
3 LD07-3395bf (SCN)	31.8		30.3	31.0		29.2
4 U14-910097 (SCN)	31.3		31.5	32.8		31.9
5 CR14-6131	31.2		31.5	33.1		32.1
6 CR14-8383	31.4		32.8	32.5		30.3
7 CR17-1724	32.3		30.8	32.4		32.7
8 CR17-1905	32.8		33.2	32.0		30.8
9 LD17-2946a	34.4		35.0	34.8		34.3
10 LD17-4327a	32.0		33.3	34.4		31.1
11 LD17-8668	34.2		36.4	35.0		35.1
12 LD17-9766	31.3		30.3	33.1		32.1
13 LD17-9906	33.5		32.7	32.8		31.6
14 LD17-9973	32.6		30.8	31.8		32.5
15 LD17-10244	30.2		32.5	32.5		30.7
16 LD17-10579	31.0		32.8	32.9		32.5
17 LD17-10640	29.8		31.9	32.4		30.6
18 LD17-10786	33.5		34.0	33.0		32.7
19 U17-303104	33.0		32.1	33.8		32.9
20 U17-304114	32.9		32.8	32.9		32.9
21 U17-306115	32.9		32.0	34.8		32.7
22 U18-617270	33.6		33.3	33.2		31.6
23 U18-913029	31.7		31.9	33.2		33.9
24 U18-925025	32.3		33.2	34.7		32.0
25 U18-932054	34.4		33.6	32.6		33.3

2020 SCN PRELIMINARY III

Oil (%)

	Arthur	Romney	Manhattan	Columbia	Holdrege	Lincoln
	IL	IN	KS	MO	NE	NE
SCN HG Type	2.5.7	2.5.7	Inf	1.2.5.7	Inf	2.5.7
Strain						
1 LD11-2170 (SCN)	19.8		23.0	22.4		20.0
2 U15-606207	20.3		21.3	22.2		20.3
3 LD07-3395bf (SCN)	20.3		21.7	22.6		20.6
4 U14-910097 (SCN)	20.7		22.2	21.7		20.2
5 CR14-6131	20.5		22.1	21.6		19.6
6 CR14-8383	20.8		21.2	21.8		19.9
7 CR17-1724	18.8		21.0	20.6		18.9
8 CR17-1905	19.1		19.4	20.2		19.5
9 LD17-2946a	19.1		21.1	21.0		19.9
10 LD17-4327a	20.7		21.4	21.0		19.9
11 LD17-8668	19.3		20.1	20.3		18.7
12 LD17-9766	19.6		21.2	20.2		19.0
13 LD17-9906	18.9		20.5	20.4		18.5
14 LD17-9973	18.8		21.9	20.5		19.3
15 LD17-10244	21.3		21.5	21.8		19.7
16 LD17-10579	20.4		21.5	21.5		19.7
17 LD17-10640	20.3		21.1	21.2		20.0
18 LD17-10786	19.8		21.1	20.7		18.6
19 U17-303104	20.1		22.1	20.6		19.8
20 U17-304114	19.1		21.6	21.1		19.1
21 U17-306115	18.8		21.3	20.5		19.5
22 U18-617270	19.3		21.7	22.1		19.5
23 U18-913029	19.3		21.9	20.9		19.1
24 U18-925025	21.1		21.5	21.6		20.6
25 U18-932054	19.9		21.7	21.6		19.6