

2018 SCN PRELIMINARY TEST IV

Strain	FPhlm	Parentage	Gen.	SCN res	Traits
			Comp.	source	
1 LD06-7620	PLtbl	IA3023 x LD00-3309	F5	PI 88788	
2 LD07-3395bf	WGbf	Syngenta WW115926 x LD00-2817	F5	PI 88788, 437654	
3 LD00-2817P	PGibl	Ina x Dwight	F5	PI 88788, 437654	
4 JTN-4118	PTbr	5002T x PI 494182	F9	PI 494182	new res source
5 JTN-4218	WTy	5002T x PI 494182	F9	PI 494182	new res source
6 JTN-4318	WTbr	5002T x PI 494182	F9	PI 494182	new res source
7 K16-1390	WLtbl	K07-1633 x S08-17361	F5	PI 88788	
8 K16-1403	WTbl	K07-1633 x S08-17361	F5	PI 88788	
9 K16-1430	WTbl	S08-17361 x K10-8556	F5	PI 88788	
10 K16-1444	PLtbl	S08-17361 x K10-8556	F5	PI 88788	
11 K16-1445	WTbl	S08-17361 x K10-8556	F5	PI 88788	
12 K16-1543	WGbf	S08-17361 x LS07-3125	F5	PI 88788	
13 LD15-3818	PLtbl	LD09-3913 x BN09002129	F5	PI 88788	
14 LD15-8589	PGibl	LS07-3131 x LD09-30454	F5	PI 88788, 468916	2 G. soja QTL
15 LD15-9214	PTbr	(LD00-3309(5) x IA3023) x (LD00-3309(2) x PI 567516C)	F4	PI 88788, 567516C	
16 LD16-2955	PLtbl	LD07-3395 x LD10-10219	F5	PI 88788, 437654	
17 LD16-8745	WLtbl	LG10-2695 x LD10-9434	F5	PI 88788	
18 LD16-8753	WLtbl	LG10-2695 x LD10-9434	F5	PI 88788	

Entry	IL SCN screening									
	cyst counts			HG 0		cyst counts			HG 2.5.7	
	rep1	rep2	rep3	FI	rating	rep1	rep2	rep3	FI	rating
1 LD06-7620	38	28	46	12	R	143	174	178	81	NR
2 LD07-3395bf	5	4	6	2	HR	1	3	2	1	HR
3 LD00-2817P	3	3	3	1	HR	3	4	2	1	HR
4 JTN-4118	138	103	173	46	LR	115	114	148	62	NR
5 JTN-4218	1	1	1	0	HR	5	3	2	2	HR
6 JTN-4318	34	50	32	28	MR	59	137	122	52	LR
7 K16-1390	2	3	5	2	HR	163	149	156	55	LR
8 K16-1403	29	26	33	10	R	52	141	136	54	LR
9 K16-1430	6	5	5	2	HR	69	104	97	44	LR
10 K16-1444	30	44	46	13	R	39	118	108	44	LR
11 K16-1445	13	11	4	3	HR	72	53	46	28	MR
12 K16-1543	48	24	10	9	HR	186	104	106	65	NR
13 LD15-3818	78	57	42	20	R	130	122	128	62	NR
14 LD15-8589	19	3	4	3	HR	100	110	117	54	LR
15 LD15-9214	2	2	0	0	HR	42	52	70	27	MR
16 LD16-2955	58	52	11	13	R	127	181	172	79	NR
17 LD16-8745	28	39	47	13	R	131	158	173	76	NR
18 LD16-8753	64	47	36	16	R	87	69	57	35	MR

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2018 Summary

Entry	Locations	Yield						Maturity date	Lodging score	Height in.	Seed			
		All bu/a	rank	Infested bu/a	rank	Non-infested bu/a	rank				quality score	weight g/100	protein @13%	oil @13%
1	LD06-7620	60.0	1	63.0	1	44.9	10	9/22	1.9	34	2.1	13.8	34.0	17.3
2	LD07-3395bf	55.8	8	57.7	7	46.7	8	-3	1.9	33	2.4	14.5	32.9	18.5
3	LD00-2817P	56.7	6	57.1	9	54.7	1	3	1.9	40	2.3	13.1	33.4	17.5
4	JTN-4118	39.7	17	39.8	17	39.4	16	7	2.5	31	1.6	11.5	35.1	17.4
5	JTN-4218	40.6	16	40.2	16	42.6	12	9	3.1	42	2.4	12.0	36.8	16.7
6	JTN-4318	37.4	18	36.3	18	42.5	14	9	3.2	44	2.5	9.2	35.9	16.1
7	K16-1390	52.3	13	52.9	13	49.1	5	6	2.0	41	2.1	13.4	35.1	16.7
8	K16-1403	54.4	11	54.7	11	53.1	2	11	2.5	44	1.9	12.7	33.0	17.3
9	K16-1430	55.8	8	56.7	10	51.7	3	6	2.5	40	1.6	13.4	34.3	16.8
10	K16-1444	48.8	14	50.2	14	41.7	15	8	2.3	38	2.3	14.0	33.9	16.7
11	K16-1445	56.4	7	57.6	8	50.6	4	9	2.6	39	2.0	14.4	33.8	17.3
12	K16-1543	52.4	12	53.8	12	45.3	9	9	1.7	42	1.9	13.9	35.3	17.1
13	LD15-3818	60.0	1	62.4	2	48.0	6	0	1.7	35	2.0	14.3	34.4	18.4
14	LD15-8589	57.2	4	60.1	4	42.6	12	2	1.5	35	2.0	14.2	33.5	18.0
15	LD15-9214	45.4	15	45.7	15	43.4	11	5	2.7	39	2.3	10.9	34.7	16.0
16	LD16-2955	57.5	3	59.7	5	46.9	7	1	1.3	30	2.0	15.8	33.0	19.0
17	LD16-8745	56.8	5	60.4	3	38.7	17	0	1.6	39	2.1	11.9	33.6	17.7
18	LD16-8753	54.7	10	58.5	6	35.9	18	-1	1.7	37	1.9	12.3	34.0	17.6
Mean		52.3		53.7		45.4		26.5	2.1	37.9	2.1	13.1	34.3	17.3
LSD(2-sided,.05)		4.3		4.4		14.0		1.8	0.3	1.8				
C.V. %		10.0		9.2		14.6		9.1	20.8	6.2				
Replications		12		10		2		14	14	14				

* Ottawa, KS yield data not included in means

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Yield (bu/a)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
SCN HG Type	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
Strain							
1 LD06-7620	79.6	79.7	50.5	34.9	70.4	33.9	44.9
2 LD07-3395bf	76.3	74.6	40.0	32.3	65.1	33.9	46.7
3 LD00-2817P	73.0	79.5	32.4	33.6	67.1	37.0	54.7
4 JTN-4118	34.0	54.8	24.9	33.7	51.5	39.1	39.4
5 JTN-4218	49.8	54.0	21.5	30.0	45.7	38.0	42.6
6 JTN-4318	26.7	41.5	24.9	40.3	48.3	47.2	42.5
7 K16-1390	68.2	72.1	30.8	36.4	57.2	44.1	49.1
8 K16-1403	69.6	70.3	28.1	32.8	72.5	43.7	53.1
9 K16-1430	68.6	65.3	40.8	40.6	68.1	43.4	51.7
10 K16-1444	56.5	67.2	34.6	37.8	54.7	17.5	41.7
11 K16-1445	68.2	74.4	33.0	39.6	72.9	42.2	50.6
12 K16-1543	62.7	75.4	24.0	33.8	73.0	45.6	45.3
13 LD15-3818	68.1	84.4	45.1	33.1	81.3	38.3	48.0
14 LD15-8589	69.6	79.4	32.1	38.7	80.9	35.9	42.6
15 LD15-9214	61.3	51.4	34.1	30.8	51.1	34.9	43.4
16 LD16-2955	70.2	78.0	41.0	34.0	75.1	34.2	46.9
17 LD16-8745	65.6	75.6	46.3	32.2	82.4	23.7	38.7
18 LD16-8753	62.9	71.6	48.2	36.9	72.8	40.2	35.9
Average	62.8	69.4	35.3	35.1	66.1	38.2	45.4
LSD(2-sided,.05)	13.2	8.8	4.7	5.6	15.4	0.0	14.0
C.V. %	9.9	6.0	6.3	7.5	11.1	19.2	14.6
Replications	2	2	2	2	2	2*	2
Row spacing (in.)	30	30	30	30	30	30	30

*Only one rep of yield data collected

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Yield (rank)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL 2.5.7	IL 2.5.7	KS Inf	KS Inf	MO 2.5.7	KS NI	TN NI
Strain							
1 LD06-7620	1	2	1	8	9	15	10
2 LD07-3395bf	2	8	7	15	12	15	8
3 LD00-2817P	3	3	11	12	11	11	1
4 JTN-4118	17	15	15	11	15	8	16
5 JTN-4218	16	16	18	18	18	10	12
6 JTN-4318	18	18	15	2	17	1	14
7 K16-1390	8	10	13	7	13	3	5
8 K16-1403	5	12	14	14	8	4	2
9 K16-1430	7	14	6	1	10	5	3
10 K16-1444	15	13	8	5	14	18	15
11 K16-1445	8	9	10	3	6	6	4
12 K16-1543	13	7	17	10	5	2	9
13 LD15-3818	10	1	4	13	2	9	6
14 LD15-8589	5	4	12	4	3	12	12
15 LD15-9214	14	17	9	17	16	13	11
16 LD16-2955	4	5	5	9	4	14	7
17 LD16-8745	11	6	3	16	1	17	17
18 LD16-8753	12	11	2	6	7	7	18

Maturity

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL 2.5.7	IL 2.5.7	KS Inf	KS Inf	MO 2.5.7	KS NI	TN NI
Strain							
1 LD06-7620	9/21	9/23	10/03	9/22	10/03	9/19	9/01
2 LD07-3395bf	-5	-6	-2	-1	-9	0	1
3 LD00-2817P	1	1	0	4	3	6	4
4 JTN-4118	0	7	8	14	8	9	7
5 JTN-4218	5	9	11	13	8	9	7
6 JTN-4318	4	9	10	13	9	11	7
7 K16-1390	2	4	10	5	7	8	5
8 K16-1403	5	4	16	16	8	14	12
9 K16-1430	5	5	4	8	7	7	6
10 K16-1444	4	7	11	9	9	6	10
11 K16-1445	4	7	12	15	8	14	6
12 K16-1543	5	8	15	12	8	8	8
13 LD15-3818	-4	-4	-1	2	4	1	1
14 LD15-8589	-3	-3	9	0	-1	7	3
15 LD15-9214	3	-2	9	8	7	7	4
16 LD16-2955	-6	-2	8	7	-8	3	3
17 LD16-8745	-5	-4	-1	6	0	4	1
18 LD16-8753	-7	-6	-1	0	0	3	0
Planted	5/11	5/08	5/18	5/11	5/22	5/15	5/15

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Lodging (score)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
SCN HG Type	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
Strain							
1 LD06-7620	3.3	1.0	2.0	1.0	4.0	1.0	1.0
2 LD07-3395bf	3.5	2.0	2.0	1.0	3.0	1.0	1.0
3 LD00-2817P	3.0	1.0	2.0	1.0	3.5	1.0	1.5
4 JTN-4118	3.5	2.5	2.5	1.5	5.0	1.0	1.5
5 JTN-4218	3.8	2.0	4.0	2.5	5.0	3.0	1.5
6 JTN-4318	3.5	3.5	3.5	3.0	5.0	2.5	1.5
7 K16-1390	3.0	2.0	2.0	1.5	3.5	1.0	1.0
8 K16-1403	3.3	2.0	2.5	2.0	4.0	1.0	2.5
9 K16-1430	3.8	2.5	2.0	2.0	4.3	1.0	2.0
10 K16-1444	3.5	2.5	2.0	1.5	4.3	1.0	1.5
11 K16-1445	3.5	2.0	2.5	3.1	4.3	1.0	2.0
12 K16-1543	3.0	1.0	2.0	1.0	2.8	1.0	1.0
13 LD15-3818	2.3	1.0	2.0	1.0	3.3	1.0	1.0
14 LD15-8589	2.8	1.0	1.0	1.0	2.5	1.0	1.0
15 LD15-9214	4.3	3.5	2.0	2.0	4.8	1.0	1.0
16 LD16-2955	1.3	1.0	2.0	1.0	1.5	1.0	1.0
17 LD16-8745	2.5	1.0	2.0	1.0	2.0	1.0	1.5
18 LD16-8753	2.5	2.0	2.0	1.0	2.5	1.0	1.0

Height (inches)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
SCN HG Type	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
Strain							
1 LD06-7620	43	38	36	29	44	23	28
2 LD07-3395bf	39	36	36	27	44	24	27
3 LD00-2817P	47	43	41	34	53	28	34
4 JTN-4118	34	31	33	29	39	27	22
5 JTN-4218	44	42	44	40	57	38	30
6 JTN-4318	53	37	50	38	60	38	31
7 K16-1390	46	41	44	37	53	33	34
8 K16-1403	49	45	48	36	58	32	40
9 K16-1430	46	42	42	35	53	26	35
10 K16-1444	41	42	40	33	51	28	33
11 K16-1445	42	40	40	35	49	29	36
12 K16-1543	50	46	43	36	52	30	37
13 LD15-3818	38	37	38	32	44	26	32
14 LD15-8589	42	38	36	29	45	26	27
15 LD15-9214	43	44	41	32	52	29	35
16 LD16-2955	36	35	30	25	41	20	28
17 LD16-8745	47	42	43	32	50	28	32
18 LD16-8753	45	41	40	33	45	27	31

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Seed Quality (score)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
SCN HG Type	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
Strain							
1 LD06-7620	2.0	2.0			2.0		2.5
2 LD07-3395bf	2.0	2.0			2.5		3.0
3 LD00-2817P	3.0	2.0			2.0		2.0
4 JTN-4118	2.0	1.0			1.5		2.0
5 JTN-4218	2.0	3.0			2.0		2.5
6 JTN-4318	3.0	3.0			1.5		2.5
7 K16-1390	2.0	2.0			2.5		2.0
8 K16-1403	2.0	2.0			1.5		2.0
9 K16-1430	2.0	1.0			1.5		2.0
10 K16-1444	3.0	2.0			1.5		2.5
11 K16-1445	2.0	2.0			2.0		2.0
12 K16-1543	2.0	2.0			1.5		2.0
13 LD15-3818	2.0	2.0			1.5		2.5
14 LD15-8589	2.0	2.0			1.5		2.5
15 LD15-9214	2.0	2.0			3.0		2.0
16 LD16-2955	1.0	2.0			2.5		2.5
17 LD16-8745	2.0	2.0			1.5		3.0
18 LD16-8753	1.0	1.0			2.0		3.5

Seed Weight (g/100)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
SCN HG Type	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
Strain							
1 LD06-7620	13.4	14.2			14.6		12.8
2 LD07-3395bf	15.0	13.8			15.5		13.8
3 LD00-2817P	13.7	13.3			13.8		11.6
4 JTN-4118	10.5	11.1			13.0		11.4
5 JTN-4218	11.9	11.2			13.5		11.3
6 JTN-4318	8.1	8.5			10.7		9.4
7 K16-1390	13.5	13.1			14.0		12.8
8 K16-1403	12.8	12.0			14.3		11.8
9 K16-1430	13.7	13.6			14.7		11.5
10 K16-1444	13.7	14.6			15.8		11.9
11 K16-1445	14.3	14.2			16.6		12.6
12 K16-1543	12.8	14.2			16.3		12.2
13 LD15-3818	13.2	14.7			16.6		12.5
14 LD15-8589	13.6	14.9			16.0		12.1
15 LD15-9214	10.7	10.6			12.3		10.1
16 LD16-2955	14.7	16.3			17.3		14.7
17 LD16-8745	10.4	12.0			14.0		11.0
18 LD16-8753	11.0	12.2			14.0		11.8

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Protein (%)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
Strain	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
1 LD06-7620	34.5	33.8			34.2		33.3
2 LD07-3395bf	33.9	31.4			33.2		33.0
3 LD00-2817P	34.2	32.1			34.5		32.8
4 JTN-4118	36.2	33.5			34.8		35.7
5 JTN-4218	37.2	36.1			37.5		36.5
6 JTN-4318	36.8	35.1			35.4		36.1
7 K16-1390	36.1	34.4			36.8		33.1
8 K16-1403	34.1	32.2			33.7		32.0
9 K16-1430	35.7	33.7			34.5		33.3
10 K16-1444	34.6	33.3			34.4		33.1
11 K16-1445	34.0	33.8			33.9		33.5
12 K16-1543	35.8	35.6			35.7		34.1
13 LD15-3818	36.4	33.7			35.7		31.7
14 LD15-8589	35.1	32.2			34.6		32.1
15 LD15-9214	36.0	34.4			34.9		33.5
16 LD16-2955	34.3	32.1			33.9		31.7
17 LD16-8745	35.4	33.0			34.2		32.0
18 LD16-8753	36.1	32.9			35.1		31.9

Oil (%)

SCN HG Type	Neoga	Urbana	Manhattan	Onaga	Rock Port	Ottawa	Jackson
	IL	IL	KS	KS	MO	KS	TN
Strain	2.5.7	2.5.7	Inf	Inf	2.5.7	NI	NI
1 LD06-7620	16.8	16.8			17.7		18.1
2 LD07-3395bf	18.1	18.2			19.4		18.3
3 LD00-2817P	16.9	17.1			17.9		17.9
4 JTN-4118	16.6	17.3			18.2		17.3
5 JTN-4218	16.6	16.3			17.1		16.6
6 JTN-4318	15.1	16.2			16.8		16.4
7 K16-1390	16.2	16.0			16.8		18.0
8 K16-1403	16.5	17.1			17.8		17.7
9 K16-1430	15.7	16.1			17.9		17.4
10 K16-1444	16.2	15.8			17.8		17.1
11 K16-1445	16.9	16.4			18.4		17.7
12 K16-1543	16.9	15.7			17.6		18.1
13 LD15-3818	17.2	18.1			18.4		19.9
14 LD15-8589	17.1	17.4			18.6		18.9
15 LD15-9214	15.0	15.2			17.3		16.6
16 LD16-2955	18.4	18.3			19.3		20.1
17 LD16-8745	16.5	17.2			18.8		18.3
18 LD16-8753	16.1	16.9			18.2		19.3