

2019 SCN UNIFORM I

Strain	FPhlm	Parentage	Previous testing	Gen. Comp.	Traits	SCN Resistance source
1 MN1410	WGbf	Unknown	13	F5		None
2 ND Stutsman	PGy	Sheyenne x LaMoure	1	F4		None
3 U11-917032 (SCN)	PTbl	LD02-4485 x U03-100612	4	F6		PI 88788
4 U14-103015	PLtbl	LG07-2249 x LG07-6944	18 UT I	F5	Diversity	None
5 AR17-179015	PGbf	AR09-192019 x AR09-291011	1	F4		PI 507354, Peking,88788
6 E15338	PGibl	E09088 x E12901	1	F5		PI 88788
7 M12-373033	PGy	AR09-191003 x M06-388016	1	F5		PI 88788
8 M12-386029	PGy	M06-289192 x M06-386029	1	F5		PI 88788
9 MCH13-104087	PGbf	M06-288181 x M06-358188	1	F5		PI 88788
10 MCH13-104091	PGbf	M06-288181 x M06-358188	1	F5		PI 88788

Entry	IL SCN screening										MN
	cyst counts			HG 0		cyst counts			HG 2.5.7		IDC
	rep1	rep2	rep3	FI	rating	rep1	rep2	rep3	FI	rating	score
1 MN1410	141	116	122	57	LR	284	195	296	94	NR	2.8
2 ND Stutsman	69	73	78	33	MR	247	259	248	92	NR	2.3
3 U11-917032 (SCN)	16	12	19	7	HR	199	206	218	76	NR	3.2
4 U14-103015	104	83	113	45	LR	278	193	281	92	NR	3.5
5 AR17-179015	4	1	7	2	HR	15	10	19	5	HR	1.8
6 E15338	8	10	51	10	R	239	217	199	80	NR	1.8
7 M12-373033	39	29	38	16	R	151	140	163	55	LR	2.3
8 M12-386029	53	41	62	44	LR	208	23*	218	78	NR	2.5
9 MCH13-104087	23	18	22	9	HR	131	164	127	51	LR	2.7
10 MCH13-104091	14	9	18	6	HR	176	136	145	56	LR	2.3

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

2019 SCN UNIFORM I

2019 Summary

Entry	Locations	Yield						Maturity date	Lodging score	Height in.	Seed			
		All		Infested		Non-infested					weight g/100	quality score	protein @13%	oil @13%
		bu/a	rank	bu/a	rank	bu/a	rank							
	Locations	5		4*		1		6	7	6	6	5	6	6
1	MN1410	48.2	7	45.4	9	59.0	2	9/22	1.3	31	16.2	1.3	35.5	17.4
2	ND Stutsman	45.7	10	44.5	10	49.0	7	-2	1.0	28	15.8	1.8	35.0	17.5
3	U11-917032 (SCN)	54.5	1	54.5	1	53.4	4	6	1.0	29	15.4	1.6	33.5	18.2
4	U14-103015	49.6	5	47.3	6	57.4	3	6	1.0	30	16.0	1.4	35.4	17.8
5	AR17-179015	48.6	6	48.5	5	48.7	8	7	1.0	29	16.0	1.6	33.8	17.9
6	E15338	54.0	2	52.0	3	60.9	1	5	1.1	31	16.1	1.6	33.8	17.2
7	M12-373033	50.1	4	49.2	4	52.2	6	5	1.4	30	16.5	1.4	32.9	18.4
8	M12-386029	47.4	8	47.2	7	46.8	9	-4	1.0	30	16.0	1.8	36.5	17.0
9	MCH13-104087	52.6	3	52.3	2	52.8	5	1	1.1	32	14.5	1.5	34.6	17.5
10	MCH13-104091	47.1	9	47.2	8	45.6	10	2	1.0	31	17.0	1.8	34.9	18.3
	Mean	49.8		48.8		52.6			1.1	30	16.0	1.6	34.6	17.7
	LSD(.05)	4.6		4.6		8.7								
	C.V. %	12.8		11.5		9.6								
	Replications	14		11		3								

*Urbana, IL and Rosemount, MN yield data not included in means

2 Year Summary

Entry	Locations	Yield						Maturity date	Lodging score	Height in.	Seed			
		All		Infested		Non-infested					weight g/100	quality score	protein @13%	oil @13%
		bu/a	rank	bu/a	rank	bu/a	rank							
	Locations	15		14		1		14	16	15	15	14	15	15
1	MN1410	48.7	7	47.9	7	59.0	2	9/16	1.6	32	16.4	1.3	36.1	17.9
2	ND Stutsman	42.2	9	41.6	9	49.0	6	-3	1.4	28	16.2	2.3	35.2	18.5
3	U11-917032 (SCN)	56.1	3	56.2	3	53.4	3	7	1.6	30	16.2	1.6	33.6	18.9
5	AR17-179015	56.9	2	57.5	2	48.7	7	8	1.4	30	16.8	1.3	34.5	18.1
6	E15338	58.8	1	58.6	1	60.9	1	5	1.5	33	16.7	1.4	34.1	17.8
7	M12-373033	54.8	4	54.9	4	52.2	5	4	1.6	32	16.9	1.6	33.3	19.3
8	M12-386029	47.5	8	47.4	8	46.8	8	-3	1.4	31	17.1	1.9	37.3	17.8
9	MCH13-104087	54.3	5	54.3	5	52.8	4	1	1.3	34	15.6	1.6	34.8	18.1
10	MCH13-104091	52.8	6	53.2	6	45.6	9	2	1.3	33	17.8	1.8	35.2	18.9

2019 SCN UNIFORM I

Yield (bu/a)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	30.4	35.0	63.6	50.8	14.6	35.2	59.0
2 ND Stutsman	30.7	30.2	61.0	45.7	16.1	43.0	49.0
3 U11-917032 (SCN)	42.6	39.8	63.2	57.5	17.8	59.2	53.4
4 U14-103015	44.6	36.7	58.5	54.2	13.7	41.8	57.4
5 AR17-179015	26.8	38.3	63.3	39.7	23.2	54.1	48.7
6 E15338	48.1	41.5	60.3	53.9	34.7	54.0	60.9
7 M12-373033	34.3	40.1	61.9	49.9	24.2	46.9	52.2
8 M12-386029	21.0	33.4	57.6	51.1	21.5	48.6	46.8
9 MCH13-104087	31.0	38.1	62.2	58.5	23.4	52.3	52.8
10 MCH13-104091	27.7	35.5	56.4	49.0	16.1	49.6	45.6
Average	33.7	36.9	61.1	53.0	19.6	48.4	52.6
LSD(2-sided,.05)	11.7	7.8	8.9	12.0	11.4	8.3	8.7
C.V. %	15.3	10.1	8.7	13.7	35.1	7.9	9.6
Replications	2	3	3	3	3	2	3
Row spacing (in.)	30	30	30	30	30	17	14.0

2019 SCN UNIFORM I

Yield (rank)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	7	8	1	6	9	10	2
2 ND Stutsman	6	10	6	9	8	8	7
3 U11-917032 (SCN)	3	3	3	2	6	1	4
4 U14-103015	2	6	8	3	10	9	3
5 AR17-179015	9	4	2	10	4	2	8
6 E15338	1	1	7	4	1	3	1
7 M12-373033	4	2	5	7	2	7	6
8 M12-386029	10	9	9	5	5	6	9
9 MCH13-104087	5	5	4	1	3	4	5
10 MCH13-104091	8	7	10	8	7	5	10

Maturity

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	9/11		9/26	9/25	9/22	9/19	9/29
2 ND Stutsman	1		-1	-3	-6	0	-5
3 U11-917032 (SCN)	6		2	5	10	4	9
4 U14-103015	7		3	3	10	3	10
5 AR17-179015	7		6	6	11	4	11
6 E15338	7		3	2	9	2	4
7 M12-373033	6		3	2	9	4	9
8 M12-386029	-4		-6	-6	-1	0	-6
9 MCH13-104087	1		0	1	4	1	0
10 MCH13-104091	4		1	1	5	1	1
Planted	6/5	5/11	5/28	6/3	6/7	6/7	6/9

2019 SCN UNIFORM I

Lodging (score)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	1.0	1.0	3.0	1.0	1.0	1.0	1.2
2 ND Stutsman	1.0	1.0	1.0	1.0	1.0	1.0	1.0
3 U11-917032 (SCN)	1.0	1.3	1.0	1.0	1.0	1.0	1.0
4 U14-103015	1.0	1.0	1.0	1.0	1.0	1.0	1.0
5 AR17-179015	1.0	1.0	1.0	1.0	1.0	1.0	1.2
6 E15338	1.0	2.0	1.0	1.0	1.0	1.0	1.0
7 M12-373033	1.0	1.3	3.0	1.0	1.0	1.0	1.2
8 M12-386029	1.0	1.3	1.0	1.0	1.0	1.0	1.0
9 MCH13-104087	1.0	1.3	1.0	1.0	1.0	1.0	1.2
10 MCH13-104091	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Height (inches)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	24	30	42	32		26	32
2 ND Stutsman	22	30	38	28		24	29
3 U11-917032 (SCN)	24	28	34	29		30	27
4 U14-103015	24	29	38	31		29	30
5 AR17-179015	19	28	35	28		32	29
6 E15338	23	30	36	32		32	30
7 M12-373033	22	29	40	31		30	31
8 M12-386029	19	27	40	29		31	31
9 MCH13-104087	22	29	43	35		31	31
10 MCH13-104091	21	29	44	31		31	29

2019 SCN UNIFORM I

Seed Weight (g/100)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	15.5		16.6	16.6	13.1	15.3	20.3
2 ND Stutsman	16.3		15.8	16.3	12.2	15.7	18.4
3 U11-917032 (SCN)	13.9		16.3	16.4	12.4	15.0	18.7
4 U14-103015	16.2		16.7	16.7	13.0	14.1	19.4
5 AR17-179015	15.1		.	16.1	14.7	13.9	20.4
6 E15338	15.4		16.0	16.3	14.2	15.9	18.8
7 M12-373033	15.9		17.3	17.0	13.1	14.8	21.1
8 M12-386029	13.7		16.8	16.9	14.5	15.8	18.3
9 MCH13-104087	13.6		14.5	15.2	12.1	14.2	17.4
10 MCH13-104091	15.6		17.2	17.4	14.2	16.8	20.6

Seed Quality (score)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	2.0		1.0	1.0	1.0		1.5
2 ND Stutsman	3.0		1.0	1.0	2.0		2.0
3 U11-917032 (SCN)	2.0		1.0	2.0	1.0		2.0
4 U14-103015	2.0		1.0	1.0	1.0		2.0
5 AR17-179015	2.0		.	2.0	1.0		1.5
6 E15338	2.0		1.0	1.0	2.0		2.0
7 M12-373033	2.0		1.0	1.0	1.0		2.0
8 M12-386029	2.0		1.0	3.0	1.0		2.0
9 MCH13-104087	2.0		1.0	2.0	1.0		1.5
10 MCH13-104091	2.0		2.0	2.0	1.0		2.0

2019 SCN UNIFORM I

Protein (%)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	35.1		34.5	33.8	39.5	34.4	35.6
2 ND Stutsman	35.1		35.0	34.3	37.5	34.1	34.1
3 U11-917032 (SCN)	31.2		35.5	32.6	35.6	32.3	33.5
4 U14-103015	34.0		36.1	34.5	37.4	35.0	35.1
5 AR17-179015	33.2		33.6	33.6	35.6	32.8	34.1
6 E15338	33.0		33.9	33.0	37.0	32.1	34.0
7 M12-373033	33.0		32.3	31.7	36.8	30.2	33.4
8 M12-386029	34.9		35.6	36.4	39.2	36.3	36.5
9 MCH13-104087	33.2		34.4	33.7	38.6	33.1	34.5
10 MCH13-104091	33.0		34.2	33.9	38.5	33.5	36.0

Oil (%)

	Urbana	Decatur	Danvers	Fairfax	Rosemount	Ridgetown	St. Pauls
	IL	MI	MN	MN	MN	ON	ON
SCN HG Type	2.5.7	Inf	1.2.5.7	2.5.7	2.5.7	2.5.7	NI
Strain							
1 MN1410	17.8		18.3	17.2	15.8	17.6	17.8
2 ND Stutsman	18.3		16.8	17.4	16.8	18.5	17.3
3 U11-917032 (SCN)	19.9		17.0	17.9	17.7	18.3	18.2
4 U14-103015	18.8		18.0	17.5	16.9	17.8	17.8
5 AR17-179015	18.6		19.2	17.0	17.6	17.4	17.9
6 E15338	18.2		17.2	16.3	16.0	18.5	17.0
7 M12-373033	19.9		19.1	18.3	16.1	19.5	17.8
8 M12-386029	18.0		17.8	16.8	15.6	17.6	16.4
9 MCH13-104087	18.1		18.3	17.5	16.0	18.1	17.0
10 MCH13-104091	19.3		18.8	17.9	16.4	19.1	18.0