

# Trial Report: Supersweet Corn Variety Evaluation Spring 2014

Conducted by:

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## Methods

Location: Attapulgus, GA

Planting Date: March 24, 2014, 30 varieties included (1 non-commercial variety excluded from report).

Plant Spacing: 30" between rows, 8" within row (Pop. 26136 per acre)

Plot size: 62 seeds per plot, 2-row plots (20.7 feet long each) with 6 foot alleys between adjacent plots

Fertility: UGA recommendations (250 lbs/N acre total, 1/3 preplant)

Herbicide: Atrazine + Prowl

Pest Control: Fungicide as needed, Insecticide (coragen, pyrethroids, lannate) 3x week

Germination rating conducted: 11-April 2014

Vigor rating conducted: 22-April 2014 (1-9 scale: 1=poor vigor, <6" tall; 4-5=average vigor, 9=strong growth >24 tall")

Tiller rating: 6-June 2014 (all tillers counted in a plot/divided by no. plants in plot)

Harvest dates: 10, 13, 18 June 2014. Plots harvested 1 time. All marketable ears harvested and counted.

Quality evaluation conducted on 10 ears from each plot.

Average length and width based on aligning 5 shucked ears end to end and side to side from each plot. Tip coverage determined by measuring 5 ears per plot and averaging. Flag ratings were visual: none, small, med, and large. Tip fill based on a percent of ear filled 0-100%.

Subjective observations made during harvest (ease of harvest, shank size, etcetera.)

Climate conditions: cool and wet after planting, warm and dry at harvest (Appendix A).

Abbott and Cobb	Crookham	Harris Moran	Illinois Foundation Seed	Seminis	Syngenta
3182 MR	Bright White	Ranier	Awesome XR	Obsession	BSS 0977
7932 MR	CSABF12-551		Stellar XR	Passion	Battalion
2760 MR	CAPBF10-411		2974 MXR	EX08737143	Protector
3188 MR	CSAYF9-345		2977 XR	QHW6RH1229	
SS2742	AP 426		2979 XR	SC1336	
7902 R			XTH1876	SV1580SC	
ACX SS7403RY				Obsession II	

## Results

The following varieties were harvested on the listed dates:

**10 June** (78 days): SS2742, CCAPBF10-411, 7932 MR, Rainier, Stellar XR, AP 426, 2974 MXR, Awesome XR

**13 June** (81 days): CSABF12-551, ACX SS7403, SC1336, Passion, CSAYF9-345, EX08737143, Bright White, 2577 XR, 3182 MR, 7902 R

**18 June** (86 days): QHW6RH1229, SV1580SC, Obsession, Obsession II, 3188 MR, 2760 MR, XTH1876, 2979 XR, Protector, BSS 0977, Battalion.

Tip fill was typically >95% and was not different among varieties trialed and is not presented in results tables.

Variety	Germination %	
XTH1876	97.6	a
BSS 0977	97.2	ab
CSABF12-551	97.2	ab
EX08737143	97.2	ab
ACX SS7403RY	96.4	abc
Rainier	96.0	abc
2979 XR	95.6	abc
Awesome XR	95.6	abc
2577 XR	95.2	abc
CSAYF9-345	94.8	a-d
3188 MR	94.8	a-d
Passion	94.0	a-d
SS2742	94.0	a-d
QHW6RH1229	93.6	a-e
7932 MR	92.7	a-e
SV1580SC	92.7	a-e
2974 MXR	91.9	a-e
Bright White	91.9	a-e
CAPBF10-411	91.5	a-e
Battalion	91.1	a-e
AP 426	91.1	a-e
Obsession	90.3	b-e
2760 MR	90.0	cde
Stellar XR	90.0	cde
7902 R	87.9	de
SC 1336	86.7	ef
Protector	81.9	fg
3182 MR	78.2	g
Obsession II	42.3	h

Variety	Vigor (1-9)	
2974 MXR	7.25	a
BSS 0977	6.50	ab
Stellar XR	6.25	ab
2979 XR	5.75	ab
2577 XR	5.75	bc
Awesome XR	5.50	bc
CAPBF10-411	5.00	bcd
Protector	5.25	b-e
CSAYF9-345	5.25	b-e
XTH1876	5.25	b-e
SS2742	4.75	c-f
3188MR	4.25	def
CSAPBF125	4.25	d-g
Rainier	4.25	d-g
7932MR	4.25	d-g
AP 426	4.00	e-h
QHW6RH1229	4.00	e-h
ACX SS7403RY	4.00	e-h
Battalion	4.00	e-h
7902 R	4.00	e-h
EX08737143	3.75	fgh
Bright White	3.75	f-i
Passion	3.75	f-i
SC1336	3.00	ghi
Obsession	3.00	ghi
2760 MR	2.75	hi
SV1580SC	2.50	i
3182 MR	2.50	i
Obsession II	1.0	j

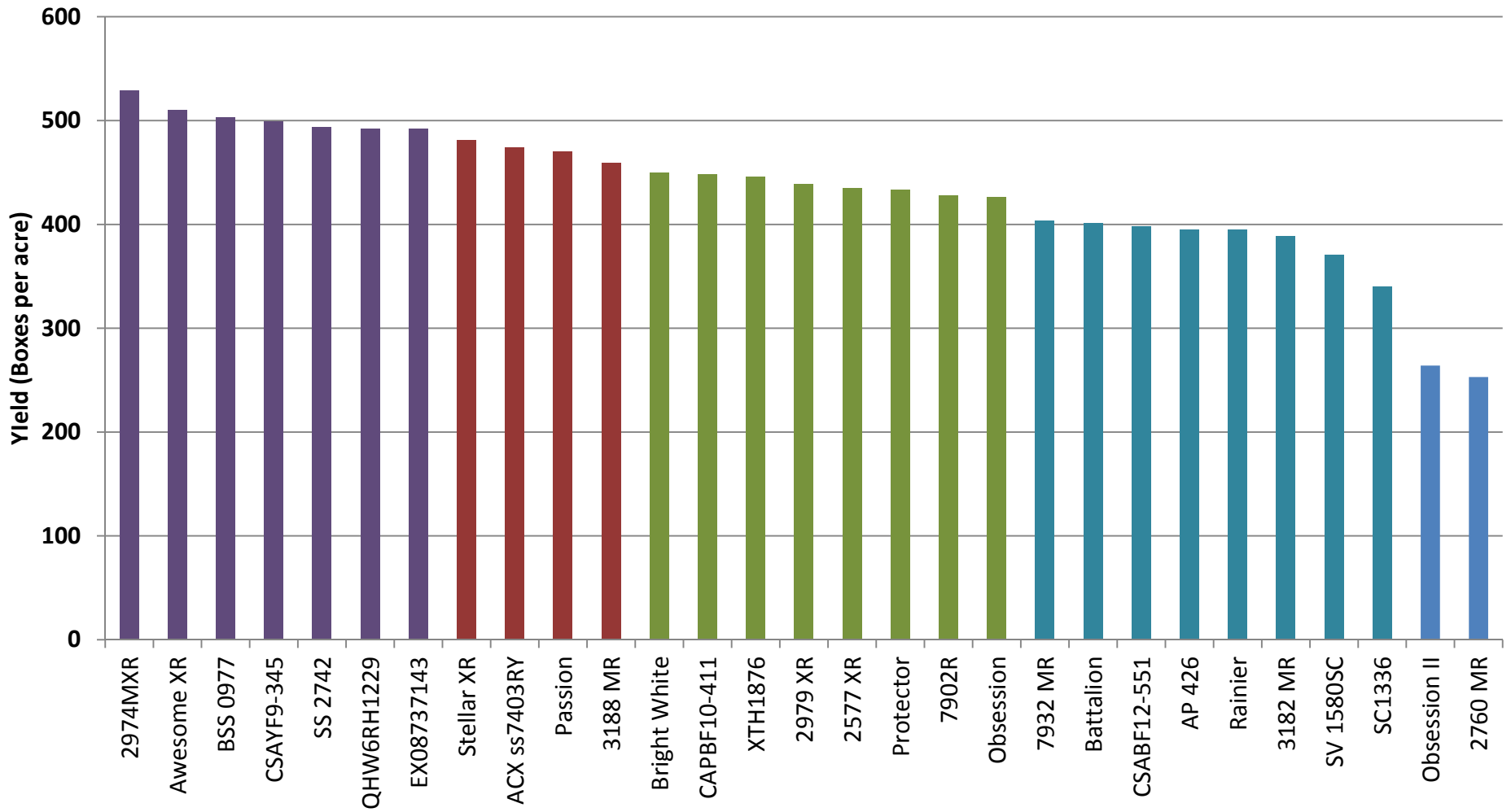
**Table 3. Yield and quality**

Variety	Yield A*		Yield B*		Avg. Ear Length		Avg. Ear Width	
	Boxes (4 dz) per acre				Inches			
2974MXR	529	a	576	a	8.0	b-e	2.0	ab
Awesome XR	510	ab	533	ab	7.8	d-j	1.9	abc
BSS 0977	503	abc	518	abc	7.2	k	1.8	e-i
CSAYF9-345	499	a-d	526	ab	7.9	c-g	1.8	f-i
SS 2742	494	a-d	527	ab	7.9	d-h	1.6	ij
QHW6RH1229	492	a-d	525	ab	7.8	d-i	1.9	a-d
EX08737143	492	a-d	506	a-d	7.9	c-f	1.9	b-e
Stellar XR	481	a-e	535	ab	8.3	abc	2.0	ab
ACX ss7403RY	474	a-e	490	a-e	7.7	d-j	1.9	b-g
Passion	470	a-e	498	a-e	7.9	d-h	1.9	b-e
3188 MR	459	a-e	483	a-e	8.5	a	1.9	b-e
Bright White	450	a-f	490	a-e	7.8	d-j	1.8	b-h
CAPBF10-411	448	a-f	491	a-e	7.7	d-k	1.9	a-d
XTH1876	446	a-f	458	b-e	8.4	ab	1.9	a-d
2979 XR	439	a-f	459	b-e	8.3	abc	1.9	b-f
2577 XR	435	a-f	457	b-e	8.0	b-e	1.8	d-h
Protector	433	a-f	512	abc	7.5	f-k	1.8	c-h
7902R	428	a-f	489	a-e	7.6	g-k	1.9	a-e
Obsession	426	a-f	472	b-e	7.7	d-j	2.0	a
7932 MR	404	b-f	435	b-e	7.7	d-k	1.6	j
Battalion	401	b-f	436	b-e	7.5	g-k	1.9	abc
CSABF12-551	398	c-f	409	c-e	8.1	b-e	1.7	ghi
AP 426	395	c-f	432	b-e	7.6	e-k	1.7	hi
Rainier	395	c-f	412	c-e	7.5	h-k	1.9	b-e
3182 MR	389	def	479	a-e	8.1	bcd	1.7	g-i
SV 1580SC	371	ef	400	de	7.4	jk	1.9	b-e
SC1336	340	fg	391	e	7.8	d-j	1.9	b-g
Obsession II	264	g	501	a-e	7.4	ijk	1.9	b-f
2760 MR	253	g	282	f	7.7	d-j	1.7	ij

\*Yield A is yield harvested per plot based on population of seeds planted (62 per plot) this is what a grower would have expected per acre.

Yield B is yield calculated based on the number of plants that germinated, therefore a variety with lower germination would have a much higher Yield B than Yield A. Yield B is relevant for research purposes as it shows yield potential regardless of germination. For those with a high germination percentage the difference would be minimal

Average Yield (Yield A) for Spring 2014 Sweet Corn Trial



<b>Table 4. Frequency of tillers, tip coverage, flags, and kernel rows.</b>				
	Tillers	Tip Coverage	Kernel Rows (range)	Flags
Variety (Alphabetical order)	(%)	Inches	no.	(subjective rating)
2577 XR	5.9	1.8	14-20	medium
2760 MR	6.7	2.4	14-16	medium-large
2974MXR	4.9	2.0	14-18	medium
2979 XR	1.7	1.6	14-20	large
3182 MR	7.6	1.8	14-18	medium-large
3188 MR	3.4	2.1	14-16	medium
7902R	11.7	2.5	14-20	small
7932 MR	8.2	2.4	14-16	medium
ACX ss7403RY	16.7	2.4	14-18	none-small
AP 426	13.2	2.6	14-18	large
Awesome XR	5.5	1.9	14-16	large
Battalion	4.4	1.9	14-16	small
Bright White	7.0	1.8	14-18	none-small
BSS 0977	4.2	1.3	12-18	medium
CAPBF10-411	1.0	1.6	14-16	small
CSABF12-551	0.4	2.0	14-16	medium
CSAYF9-345	2.1	1.8	14-16	none-small
EX08737143	4.6	1.4	16-18	small-medium
Obsession	9.2	0.8	16-18	small
Obsession II	40.7	1.1	14-18	small
Passion	8.1	1.9	16-18	small-medium
Protector	17.5	1.4	12-16	none-small
QHW6RH1229	5.5	1.7	14-16	small-medium
Rainier	4.6	2.0	14-16	small
SC1336	16.4	1.4	16-20	none-small
SS 2742	17.2	2.9	14-16	medium-large
Stellar XR	5.5	1.7	14-16	large
SV 1580SC	11.4	1.5	14-18	small-medium
XTH1876	0.0	1.8	14-20	small-medium

\*Tillers (%) based on number of tillers counted divided by plant total population in a plot. Tillers recorded on 6/6/14.  
Averages of 4 replications. Tip coverage measured on 5 ears per replication/plot and rows counted on 2 ears per replication/plot.

Variety Documentation (Alphabetical order)



2979 xr



3182 MR



3188MR



7902R



7932MR



acx ss7403







ap426

Awesome xr

Battalion



Bright white

bss 0977

capbf10-411

csaf12-551



csayf9-345



EX08767143



Obsession



Obsession II



Passion



Protector



QHW6RH1229



Rainier



sc1336



ss2742



Stellar XR



sv1580sc



xth1876



Date	Max.	Min.	Rain	Date	Max.	Min.	Rain
	Temp.	Temp.	(in)		Temp.	Temp.	(in)
3/25	65.1	44.6	0	5/7	88.2	53.4	0
3/26	55.9	34.2	0	5/8	87.1	61.2	0
3/27	69.3	38.8	0	5/9	83.3	64.4	0
3/28	65.5	57.4	1.32	5/10	83.5	64	0
3/29	76.3	55	0.36	5/11	86.5	67.8	0.78
3/30	68.9	45.3	0	5/12	85.6	64.6	0.01
3/31	81.7	40.1	0	5/13	88	64.8	0
4/1	83.3	41.5	0	5/14	85.6	65.5	0.53
4/2	82.2	44.1	0	5/15	69.1	53.1	0.74
4/3	84.2	50.4	0	5/16	76.8	48.6	0
4/4	82.2	59.9	0	5/17	81.3	49.8	0
4/5	80.2	61.2	0.08	5/18	84.2	55	0
4/6	73.9	64.6	0.13	5/19	85.5	59.4	0
4/7	75.4	65.5	3.15	5/20	86.7	63	0
4/8	68.2	52.2	0.06	5/21	87.1	62.2	0
4/9	69.4	47.7	0	5/22	89.6	63.1	0
4/10	77.4	42.3	0	5/23	91.9	64.8	0
4/11	77.7	46.2	0	5/24	92.8	66.4	0
4/12	83.1	51.4	0	5/25	93	66.2	0
4/13	81.9	57	0	5/26	89.4	64.2	0
4/14	82.2	59	0	5/27	86.2	64.2	0
4/15	68	43.5	2.77	5/28	86.5	65.5	0.27
4/16	64.8	37.4	0	5/29	86.4	66	0.02
4/17	68.9	48.4	0	5/30	82	65.7	0
4/18	60.4	54.1	3.32	5/31	88.7	65.7	0.27
4/19	60.4	51.6	0.06	6/1	84.9	68	0.24
4/20	59.9	49.8	0	6/2	83.5	66.6	0.01
4/21	77.4	47.1	0	6/3	79.7	65.7	0
4/22	80.6	53.8	0	6/4	87.6	63.7	0
4/23	83.1	58.5	0	6/5	91	64.8	0
4/24	85.3	60.4	0	6/6	93.4	68.7	0.28
4/25	82.6	63	0	6/7	90.5	65.3	0.04
4/26	86.2	59.7	0	6/8	91.8	69.4	0
4/27	81.7	58.8	0	6/9	92.7	68.7	0
4/28	85.6	60.8	0	6/10	91	68.2	0.03
4/29	72	63.9	1.6	6/11	85.6	69.3	0.13
4/30	71.4	63.3	2.63	6/12	88.9	69.1	0
5/1	65.8	55.8	0.54	6/13	87.3	68	0.05
5/2	67.1	55.9	0.03	6/14	89.6	65.8	0
5/3	75.6	53.8	0	6/15	91.8	66.2	0
5/4	84.9	53.2	0	6/16	93.2	67.1	0
5/5	88.9	55	0	6/17	93.6	68.7	0
5/6	87.4	56.5	0	6/18	94.1	69.1	0

**Appendix A:** Weather conditions at research site (Attapulcus, GA). Germination evaluated on 11-April.