N. Y. S. 2016 PROCESSING SWEET CORN VARIETY REPLICATED AND OBSERVATION (su and supersweet type) TRIAL SUMMARY

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The trial was located at the Vegetable Research Farm in Geneva, NY. The objective was to harvest su gene type at 72-75% moisture and the supersweet type at 75-78% moisture. Plot size for the replicated entries was 2 rows, 40 feet in length, and 30 inches between the rows. An early planting of su cultivars was planted on 5/10 and followed by another planting on 5/24. A single planting of the supersweet type (four replications) was planted on 6/13. Yield data were taken from a single harvest of a 20 feet section of each of the two rows (40 row feet total). A subsample of 15 ears was used for ear data.

Observation entry plot size was also 2 rows, 40 feet in length, and 30 inches between the rows. There were two plots of each cultivar at each planting. Planting dates were the same as the replicated plots. All plantings were sowed with a Monosem vacuum planter with double disc openers. The fertilizer used was a 15-5-10 (with Mn and Zn) at a rate of 350 lbs. per acre. Fertilizer was banded two inches below and two inches to the side of the seeds at planting. Bicep Lite (at the labeled rate) was applied post emergence for weed control. Desired population was 19,000 plants per acre (11 inches in row spacing). One cultivation was made to enhance weed control and to sidedress N (was done roughly 30 days from planting (400 pounds of 22-0-0 per acre)). The varieties GH4927 and GH6462 from Syngenta Seeds were used as standards for the su type. Overland, from Syngenta Seeds, was used as the supersweet standard.

Spring and summer rainfall were well below average. The su plantings were planted into drier soil conditions and emergence was not as uniform as I would have liked. The supersweet planting was planted into irrigated soil and emergence was good. **It was very dry growing season 2016 and all plots were irrigated three times each with an overhead gun. The su and white ss were planted into a gravelly field that showed more stress. The yellow ss were planted in a higher organic field that retained water better.** Heat units over the entire growing season were average to higher than average. See Weather Summary table. The bacterial disease Stewarts Wilt was minimal to nonexistent. Common Smut was minimal considering how dry it was. Common Rust infection was evident late in the season especially in the white supersweets. NCLB was again evident although it probably did not affect yield. This disease seems to be more common and a bit more severe the past few years. **A separate planting of all cultivars was planted on 7/25 for a disease rating of NCLB and common rust. It was rated middle of October with good disease symptoms. Comments are in tables 5 & 9.**

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Table 1. Cultivar List

Su Type	Seed Source
CSUYP13-616	Crookham
SC 1263	Seminis
HMX3347	HM
Cash	Crites
GH 4927 std	Syngenta
CSUYP13-728	Crookham
GH 9394	Syngenta
GH 3333	Syngenta
ZUY 2110	Crites
GH 6462 std	Syngenta
Producer (1377)	HM
Generator (HMX 0398)	Harris Moran
CSUWP13-621 (white)	Crookham

Supersweet Yellow cont:	Seed Source
ACX3580MR	A&C
3590MR	A&C
SV 1514 SK	Seminis
CSAYP13-664	Crookham
Hardi	Crookham
SVSK0722	Seminis
SV 1339 SK	Seminis
GSS3951	Syngenta
3780MR	A&C
Workhorse (0372)	Harris Moran
CSHYP13-677	Crookham
CSHYP10-403	Crookham
Overland std	Syngenta
GSS1453 std	Syngenta
ZHY 1455	Crites

Supersweet (yellow)

Early Riser	A&C
1470XR	IFD
1972XR	IFD
CSHYP10-435	Crookham
SV7538SK	Seminis
SVSK0391	Seminis
Mint	HM
3511R	A&C
XTH1679	IFD
SVSK1712	Seminis
GSS3071	Syngenta
CSHYP13-649	Crookham
Driver (3346)	HM
3081MR	A&C
1879XR	IFD
1680XR	IFD
Aubade	GV
Moonshine	GV
1980XR	IFD
Bullion (0376)	HM
HMX4360YS	HM
CSHP12-580	Crookham

White Supersweet

7401 Imp.	A&C
XTH3174	IFD
Placer	Harris Moran
Glacial	A&C
Ice Queen	Harris Moran
GVS0210	GV
1580SC	Seminis
CSHWP9-371	Crookham
3879XR	IFD
Devotion std	Seminis
Snogum	Crites
CSHWP11-456	Crookham
WSS 3681 std	Syngenta

Bicolor

Cumberland	HM
08B2084	GV
CSABP12-534	Crookham
ZHB 1060	Crites
CSHBP13-672	Crookham

Table 2. Esu (early su) planting date 5/10

Cultivar	Days to silk	Heat Units to Silk	Days to Harv.	Heat Units to Harvest	Moist. %	*Seed Source Maturity*
CSUYP13-616	67	1025	na	na	na	72
SC 1263	69	1064	na	na	na	73
HMX3347	69	1064	na	na	na	74
Cash	70	1088	na	na	na	74
GH 4927 std	69	1064	na	na	na	75
CSUYP13-728	71	1107	na	na	na	77
GH 9394	71	1107	na	na	na	79
GH 3333	71	1107	na	na	na	80

Table 2A. Msu (mainseason su) planting date 5/24

Cultivar	Days to Silk	Heat Units to Silk	Days to Harv.	Heat Units to Harvest	Moist. %	*Seed Source Maturity*
CSUYP13-616	56	1026	na	na	na	72
SC 1263	58	1063	83	1664	74.0	73
HMX3347	58	1080	83	1664	71.8	74
Cash	59	1104	83	1664	75.0	74
GH 4927 std	60	1104	na	na	na	75
CSUYP13-728	63	1182	84	1686	74.0	77
GH 9394	62	1157	85	1708	73.4	79
GH 3333	65	1227	87	1756	71.1	80
ZUY 2110	67	1275	90	1829	67.3	83
GH 6462 std	67	1275	90	1829	70.6	83
Producer	67	1275	90	1829	73.6	83
Generator	66	1252	87	1756	75.3	85
CSUWP13-621	64	1206	87	1756	72.3	84

Days to silk - The number of days from planting until plots had 50% of plants showing silks.

Heat Units to Silk -Growing Degree Day Units Base 50 Degrees F. - The accumulation of degree day units from planting until silk.

Days to harvest - The number of days from planting until harvest.

Heat Units to Harvest - Growing Degree Day Units Base 50 Degrees F. The accumulation of degree day units from planting until harvest.

% Moisture at Harvest - Percent Moisture of the harvest sample - A slurry of cut kernels was dried to determine the percent moisture.

Seed Source Maturity - Maturity in days provided by the seed source.

The early su planting was destroyed by raccoons prior to harvest.

Table 3. Ear and Kernel Ratings Main Su planting date 5/24

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel size Rating	Kernel Depth (mm)	Kernel Depth Rating	Kernel Row Range	Pericarp Rating	Flavor Rating
SC1263	F-G	SL T	R-SL O	ST-SL I	M	NA	M	14-20	S	G
HMX3347	F-G	SL T	R	SL I	M	10	M	14 - 18	OK-T	OK
Cash	G-VG	CY-SL T	R	ST	M	11	M-D	18-20	OK-T	OK-G
GH 4927	na	na	na	na	na	na	na	na	na	na
CSUYP13-728	na	na	na	na	na	na	na	na	na	na
GH 9394	VG	SL T	R	ST	M	11	M	14-18	OK	OK
GH 3333	G	SL T	R	ST	M	10	SH-M	14-18	OK-T	BL-OK
ZUY 2110	G-VG	T	R	ST	M	10	M	14-18	OK-T	BL
GH 6462	G-VG	CY	R	ST	M	12	M-D	14-18	OK-T	OK
Producer	G-VG	CY	R	ST	S-M	9	SH-M	14-18	OK	OK-G
Generator	G-VG	CY	R	ST	S-M	10	SH-M	14-18	OK-T	BL
CSUWP13-621	G-VG	CY	R	ST	S	12	D	20-24	OK	OK

Ear Uniformity (Rating) – Ex=excellent (entire sample was the same length, diameter and uniform tip fill); VG=very good; G=good; F=fair; P=poor

Ear Shape Rating - CY=cylindrical; Sl T=slightly tapered; T=tapered.

Oval/round (Rating) – R=round; Sl O=slightly oval; O=oval.

Kernel Rowing (Rating) – (The straightness of the rows of kernels.) St=straight; SL I=slightly irregular; IRR=quite irregular.

Kernel Size Rating – S=small, M=medium, L=large

Kernel Depth - The measurement of how deep the kernel was in millimeters.

Kernel Depth (Rating) – S=shallow, M=moderate, D=deep

Row # - The number of rows around an ear listed as a range.

Pericarp (Rating) – S=soft, OK=acceptable, T=tough

Flavor (Rating) – Bl=Blah, OK=acceptable, Good=better than acceptable, SW=sweet

GH4927 and 728 were totally destroyed by raccoons.

Table 4. Ear and Yield Data - Msu planting date 5/24

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Unfill Tip (in)	Ave. Wt. Per Ear Unhusked	(Sample) Unhusked Wt. Per Ear	(Sample) Husked Ear Wt.	Kernel Weight Per Ear	Plants per acre (1000)	Ears per Plt.	Moist. %	Tons Per Acre	Rec. %	Overall ear eval.
SC1263	0.3	7.2	1.8	0.5	na	0.64	0.47	0.26	na	na	74	na	41	2.5
HMX3347	0.7	7.8	1.7	0.8	na	0.70	0.49	0.27	na	na	71.8	na	38	2.5
Cash	0.8	7.8	1.9	0.7	na	0.75	0.56	0.32	na	na	75	na	43	3
GH 4927	na	na	na	na	na	na	na	na	na	na	na	na	na	na
CSUYP13-728	1.3	7.8	1.9	0.8	na	0.75	0.51	0.26	na	na	74	na	35	?
GH 9394	0.9	7.9	1.8	0.2	0.70	0.76	0.53	0.31	17.7	0.97	73.4	6.1	41	3.9
GH 3333	-0.1	7.8	1.9	0.5	0.72	0.76	0.61	0.34	15.8	0.91	71.1	5.1	45	3.4
ZUY 2110	0.8	8.5	1.8	0.8	0.84	0.86	0.60	0.27	18.3	0.92	67.3	7.1	32	3.7
GH 6462	0.1	7.9	1.9	0.3	0.86	0.82	0.63	0.37	16.8	0.96	70.6	6.9	45	3.6
Producer	0.6	8.0	1.8	0.4	0.85	0.83	0.60	0.34	17.5	0.98	73.6	7.3	41	3.6
Generator	0.6	8.2	1.8	0.3	0.75	0.78	0.58	0.33	18.5	0.93	75.3	6.5	42	3.6
CSUWP13-621	3.2	7.0	2.0	0.2	0.90	0.94	0.67	0.43	19.4	0.93	72.3	8.2	46	3.8

The reason some cultivars have an na is that only a sample of ears were obtained rather than a full harvest of 40 ft.

A sample of 728 was pulled from the field day planting.

Headings explained on page 8

Column Descriptions for Tables 4 and 8.

Husk Extension - The measurement in inches of the distance from the tip of the cob to where the husk opens. A negative measurement indicates exposed kernels. Exposed kernels can make the ear more susceptible to insect or bird feeding.

Ear Length - The measurement in inches of the husked ear butt to tip.

Ear Diameter - The measurement in inches of the diameter of the middle of the ear.

Kernel Row Range – The range of the number of rows counted on the ear sample.

Unfilled Tip - The measurement in inches of the tip of the ear that had not formed kernels.

Weight. per Unhusked Ear - The weight in pounds of an unhusked ear. (Total yield weight divided by total number of ears harvested.) Comparing (weight per unhusked ear from total harvest) to the sample unhusked weight per ear indicates how valid the sampling technique is.

Sample Wt. per Unhusked Ear - The weight in pounds of an unhusked ear based on the sample 15 ears brought in from the field.

Sample Husked ear weight – The weight in pounds of a husked ear based on the sample.

Sample Kernel Weight per ear – The weight in pounds of the kernels cut from the ear.

Plants per acre – Plant Population per acre of the harvested plot (multiply number in the column by 1000). Harvest plot was two rows by 20 ft per replication.

Ears per plant – The number of ears harvested divided by the number of plants in the harvest area.

Moisture percentage – Percent Moisture of the harvest sample - A slurry of cut kernels was dried to determine the percent moisture.

Tons per Acre - The extrapolated yield of the plot listed as tons per acre. Harvest plot was two rows by 20 ft (40 row feet) per replication.

Table 5. Plant Characteristics su type

Cultivar	Plt. Ht.[1] (in)	Ear Ht.[1] (in)	Plt. Ht.[2] (in)	Ear Ht.[2] (in)	Plant Uniformity	Rust Rating (7/25 planting)	NCLB Rating (7/25 planting)
CSUYP13-616	55	11	55	12	na	SL	SL
SC1263	51	13	57	15	G	N	SL
HMX3347	54	12	57	14	VG	SL	SL
Cash	54	13	60	17	G	MOD	SL
GH4927	56	12	58	13	VG	SL-MOD	MOD
CSUYP13-728	59	12	62	15	G	N	SL
GH 9394	59	14	68	19	VG	N	SL
GH 3333	61	16	63	17	G	N	SL-MOD
ZUY 2110	na	na	64	19	VG	N	SL
GH 6462	na	na	61	17	VG	N	SL
Producer	na	na	63	21	VG	VSL	SL
Generator	na	na	56	17	VG	SL	SL
CSUWP13-621	na	na	73	17	VG	N	MOD

[1] planting date 5/10

[2] planting date 5/24

Plant Heights – The measurement of the plant in inches from the base of the stalk to the top of the tassel. Ten plants were measured from each plot.

Ear Heights – The measurement from the base of the stalk to the node at the base of the primary ear. Ten plants were measured from each plot.

Plant Uniformity 5/24 planting date - VG - very good, G - Good, F - Fair

Plant tillars rating - 0=clean with no suckers, 5=most plants have large suckers

A late planting of all entries was planted on 7/25 and evaluated late October.
Rust - V SL - Very Slight, Sl - slight, M - moderate, Sev - Severe
NCLB - V SL - Very Slight, Sl - slight, M - moderate, Sev - Severe

Additional comments su type

CSUYP13-616 – Early, large ear for the maturity, not much data due to animal damage, ears may be too close to the ground, a bit of rust and NCLB in the disease planting.

SC1263 – Early, shorter ear, minimal husk extension, deep kernels and soft pericarp. Can have a hint of oval in some ears, no rust seen and only a slight rating for NCLB in the disease planting. Not a large sample of ears for overall evaluation.

HMX3347 – Early season, uniform plant, slender ears that did not fill, a slight rating for NCLB and common rust in the disease planting. Not a large sample of ears for over all evaluation.

Cash – Early to midseason, deeper kernels with good recovery, moderate rust rating and only a slight rating for NCLB in the disease planting. Not a large sample of ears for evaluation.

GH4927 – No comments available, all plots destroyed in both plantings by raccoons, slight to moderate rust rating and a moderate NCLB rating in the late disease planting.

CSUYP13-728 – Early to midseason, good husk extension, ears not filled, recovery % low, a slight rating for NCLB, but no common rust symptoms seen in the disease planting. Not a large sample of ears for over all evaluation.

GH9394 – Early to midseason, good husk extension and unfilled tip, slender, uniform ears with a small cob, decent yield for the conditions, no rust seen and only slight NCLB rating in the late disease planting, 3.9 overall ear evaluation.

GH3333 – Early to midseason, exposed ear tips, lower plant stand which affected yield, higher recovery %, no rust seen but slight to moderate NCLB rating in the late disease planting, 3.4 overall ear rating (ear uniformity hurt overall score).

ZUY 2110 – Mid to main season, long ear with good husk extension, harvested quite mature, decent yield, lower recovery % (would have been higher but two replications did not cut properly in the corn cutter), salmon colored kernels, no rust seen and only a slight rating for NCLB in late disease planting, 3.7 overall ear rating.

GH6462 – Mid to main season, minimal husk extension, good tip fill, good recovery %, decent yield (hurt a bit by lower than optimum plant stand), smaller cob, no rust seen and only a slight rating for NCLB in late disease planting, 3.6 overall ear evaluation.

Producer – Mid to main season, longer, slender, blunt tipped ears with good recovery %, a few rust pustules seen and only a slight rating for NCLB in late disease planting, 3.6 overall ear rating.

Generator - Mid to main season, longer, slender ears with good recovery %**,** a slight rating for NCLB and common rust in late disease planting, 3.6 overall ear rating.

White

CSUWP13-621 – Main season, short, large diameter ears with very good husk extension, tip fill very good, deep kernels, very good yield and recovery aided by good plant stand, no rust symptoms seen but moderate NCLB rating in the late disease planting, overall rating 3.8

Cultivar Descriptions Provided by the Seed Source (Su type)

CSUYP13-616 - *Crookham, 72 days to maturity, IR for NCLB.*

SC1263 *– Seminis, yellow se, early season maturity (73 days or 1530 heat units), 74 inch plant height, 22 inch ear height, 8.0 inch ear length, 2.0 inch ear diameter, average row count is 18, HR for common rust (RpD+RpG), IR MDMV, commercially available.*

HMX 3347 – *Harris Moran; 74 days to maturity, excellent kernel color, HR for MDMV, IR for Et.*

Cash – *Crites, 74 day maturity, su yellow processor, 7.8 inch ear, 2.2 inch cob, average row number 18, plant and ear height medium, IR for common rust, Su for NCLB, IR for SW and Southern Leaf Blight, tolerant to Accent herbicide, high quality petite kernels.*

GH4927 – *Syngenta, 75 days to maturity, stout plant, Rpli gene for rust resistance, Poast herbicide tolerance.*

CSUYP13-728 – *Crookham, 77 days to maturity, IR for NCLB and old rust.*

GH 9394 – *Syngenta; 79 days to maturity; similar to GH3333 but a few days earlier.*

GH3333 *– Syngenta, 80 days to maturity,d & i gene for rust, HR for Et, high quality.*

ZUY 2110 – Crites, 83 days to maturity,

GH6462 *– Syngenta; 83 days to maturity; double rust genes d, g – some NCLB, SCLB, MDMV and Stewarts tolerance; great % recovery and good finished quality and color.*

Producer (1377) *– Harris Moran, 83 days to maturity, exceptional yield, strong agronomic package, high quality sugary 1, IR for both Et and Ps*

Generator (0398) *– Harris Moran, 85 days to maturity, great yield, HR for MDMV, IR for Et.*

White
CSUWP13-621 *– Crookham, 84 days to maturity.*

Table 6. Maturity (Supersweet gene type planting date 6/13 - yell., 6/16 whites)

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist	*Seed Company Maturity*
Yellow						
Early Riser	48	966	72	1530	77.0	69
1470XR	49	985	72	1530	77.7	70
1972XR	49	985	72	1530	78.5	73
CSHYP10-435	48	966	72	1530	76.0	75
SV7538SK	52	1050	77	1652	76.1	75
SVSK0391	52	1050	77	1652	79.8	76
Mint	53	1073	77	1652	77.0	77
3511R	54	1101	78	1679	77.5	77
XTH1679	51	1026	77	1652	76.6	78
SVSK1712	55	1130	78	1679	78.7	78
GSS3071	57	1173	81	1732	78.2	78
CSHYP13-649	53	1073	77	1652	77.5	79
Driver (3346)	53	1073	77	1652	78.8	79
3081MR	52	1050	77	1652	77.3	79
1879XR	55	1130	78	1679	75.0	79
1680XR	55	1130	78	1679	78.0	80
Aubade	53	1073	78	1679	78.0	80
Moonshine	56	1153	79	1695	77.7	78
1980XR	55	1130	78	1679	77.7	80
Bullion	55	1130	79	1695	75.0	80
HMX4360YS	57	1173	81	1732	77.3	80
CSHP12-580	56	1153	80	1713	75.7	80
ACX3580MR	55	1130	79	1695	77.5	80
3590MR	56	1153	80	1713	76.3	84
SV 1514 SK	55	1130	78	1679	79.3	81
CSAYP13-664	55	1130	79	1695	75.5	81
Hardi	55	1130	79	1695	76.8	82
SVSK0722	54	1101	78	1679	79.0	82
SV 1339 SK	57	1173	81	1732	76.8	82
GSS3951	57	1173	81	1732	77.0	82

Table 6. Maturity continued:

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist	*Seed Company Maturity*
3780MR	57	1173	81	1732	76.2	82
Workhorse (0372)	53	1073	78	1679	75.5	79
CSHYP13-677	56	1153	80	1713	75.8	83
CSHYP10-403	56	1153	80	1713	74.8	83
Overland std	58	1192	85	1783	78.5	84
GSS1453 std	58	1192	85	1783	78.8	84
ZHY 1455	58	1192	86	1803	78.5	84-85
White						
7401 Imp.	56	1198	77	1694	75.4	76
XTH3174	51	1082	75	1633	76.4	76
Placer	54	1154	77	1679	75.6	76
Glacial	51	1082	75	1633	76.5	76
Ice Queen	54	1154	77	1694	75.1	77
GVS0210	52	1111	76	1676	77.0	78
1580SC	53	1134	77	1694	76.6	79
CSHWP9-371	55	1173	78	1713	76.5	80
3879XR	53	1134	77	1694	76.4	81
Devotion	57	1227	82	1764	76.8	82
Snogum	56	1198	78	1713	77.5	82
CSHWP11-456	56	1198	77	1694	76.3	82
WSS 3681 std	56	1198	78	1713	75.8	83
Bicolor						
Cumberland	50	1054	74	1633	76.5	77
08B2084	54	1154	77	1694	77.9	79
CSABP12-534	55	1173	78	1713	76.3	81
ZHB 1060	57	1227	82	1764	77.5	83
CSHBP13-672	55	1173	78	1713	76.8	*na*

See Table 2 for heading descriptions.

Table 7. Ear and Kernel Ratings

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel Size Rating	Kernel Depth Rating	Pericarp Rating	Flavor Rating	Kernel Depth (mm)	Kernel Row Range
Early Riser	VG	CY	R	ST	M-L	SH-M	OK	SW	12	12 to 14
1470XR	VG	CY	R	ST	M	M	S-OK	G-SW	11	12 to 20
1972XR	G	CY	R	ST	M	M	OK	G-SW	12	12 to 20
CSHYP10-435	G	CY-SL T	R	ST	M-L	M	OK	G-SW	12	12 to 18
SV7538SK	VG	CY	R	ST	M	M	OK-T	G	12	12 to 18
SVSK0391	VG-EX	CY-SL T	R	ST	M	M-D	OK-T	G	13	14 - 20
Mint	VG	CY	R	ST	S-M	M-D	OK-T	G	13	14 - 20
3511R	VG	CY	R	ST	M	M	S-OK	G	12	14-20
XTH1679	VG	CY	R	ST-SL IRR	M	M	OK	G	12	12 to 20
SVSK1712	VG-EX	T	R	SL IRR	M	M-D	S-OK	G	12	14-22
GSS3071	VG-EX	CY	R	ST-SL IRR	M	M	OK	OK-G	11	14-18
CSHYP13-649	VG	SL T	R	ST	M	M	OK	G-SW	12	14-18
Driver (3346)	VG	CY-SL T	R	ST	M	M	OK	G	12	16-22
3081MR	G-VG	CY	R	ST	M	M-D	OK	G	13	16-22
1879XR	G	VCY	R	ST	M	M	OK	G	12	14-18
1680XR	VG	CY	R	ST	M	M	OK-T	OK-G	12	14-18
Aubade	VG	SL T	R	ST	M	M	S-OK	G-SW	12	16-20
Moonshine	VG-EX	CY	R	ST	M	M-D	OK	G	12	12 to 20
1980XR	VG	CY	R	ST	M	SH-M	OK	G	11	14-18
Bullion	G-VG	CY	R	ST-SL IRR	M	M-D	OK-T	G	13	14-18
HMX4360YS	VG	CY	R	ST	S-M	M-D	OK-T	G	14	16-20
CSHP12-580	G-VG	CY	R	ST	M-L	M	OK-T	OK	11	12 to 18
ACX3580MR	VG	VCY	R	ST	M	M	OK-T	G	12	16-20
3590MR	VG	CY	R	ST	M	M-D	OK	G	13	16-20
SV 1514 SK	VG-EX	T	R	ST	S-M	D	OK	OK	13	16-24
CSAYP13-664	VG	CY	R	ST-SL IRR	M	M	OK	G-SW	12	14-18
Hardi	VG	SL T	R	ST	S-M	M	OK-T	G	12	16-20
SVSK0722	VG-EX	T	R	ST	S-M	M-D	OK-T	G	12	14-20
SV 1339 SK	VG-EX	CY-SL T	R	ST	S-M	M	OK-T	OK	12	16-20

Table 7 continued:

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel Size Rating	Kernel Depth Rating	Pericarp Rating	Flavor Rating	Kernel Depth (mm)	Kernel Row Range
GSS3951	VG-EX	CY-SL T	R	ST	S-M	M-D	OK-T	OK-G	12	16-22
3780MR	VG	CY-SL T	R	ST	M	M-D	OK-T	OK-G	12	16-20
Workhorse	VG	CY	R	ST	M	SH-M	OK-T	OK-G	10	16-20
CSHYP13-677	G-VG	CY	R	ST	S-M	M-D	OK	OK	12	12 to 22
CSHYP10-403	G-VG	CY	R	ST	S-M	M-D	OK	OK	12	16-20
Overland std	VG	CY	R	ST	S-M	M-D	OK	G	13	16-20
GSS1453 std	VG-EX	CY	R	ST	M	D	OK-T	G	14	16 - 22
ZHY 1455	VG	CY	R	ST	M	M-D	OK	G	13	18 - 22
White										
7401 Imp.	VG	SL T	R	ST	M	SH	OK	G	11	14-20
XTH3174	VG	CY	R	ST	M	SH	OK	G	10	14-18
Placer	VG	SL T	R	ST	M-L	SH-M	OK	G	11	12 to 18
Glacial	G	SL T	R	ST	M	SH-M	OK	G	10	14-22
Ice Queen	G-VG	CY	R-SL O	ST	M-L	SH-M	OK-T	OK-G	11	12 to 16
GVS0210	VG	CY-SL T	R	ST	M	M	S	G-SW	12	14-20
1580SC	VG	CY	R	ST	M	SH-M	OK	G	10	12 to 20
CSHWP9-371	G-VG	CY-SL T	R	ST	M	M	OK	OK	10	12 to 18
3879XR	G	CY-SL T	R	ST	M	SH-M	OK-T	OK-G	11	14-22
Devotion	G-VG	SL T	R	ST	S-M	M-D	OK	G	13	14-22
Snogum	G-VG	CY-SL T	R	ST	M	SH-M	OK	G	10	14-18
CSHWP11-456	VG	CY	R	ST	M	SH-M	OK	G	11	14-18
WSS 3681 std	VG	CY	R	ST	M	SH-M	OK	G	11	14-18
Bicolor										
Cumberland	VG	CY-SL T	R	ST	M	SH-M	S	G	11	12 to 18
08B2084	VG-EX	SL T	R	ST	S-M	M	OK	G	12	14-22
CSABP12-534	G-VG	CY	R	ST	M	SH	OK	G	10	14-18
ZHB 1060	VG	VCY	R	ST	M	M	OK-T	G	13	14-20
CSHBP13-672	G-VG	CY	R	ST	M	M	S-OK	G	11	14-20

See Table 3 for heading explanations.

Table 8. Ear and Yield Data (supersweet gene type)

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Unfill. Tip (in)	Unhusked Wt. Per Ear (lbs)	Sample unhusked wt per ear (lb.)	husked wt per ear (lb.)	Sample kernel wt per ear (lb.)	Plants Per Acre (1000)	% Moist	Tons per acre	Recov. %	Overall Ear Eval.
Yellow													
Early Riser	0.9	8.2	1.8	0.1	0.79	0.73	0.60	0.34	18.6	77.0	6.9	47.0	4.0
1470XR	1.3	7.9	2.0	0.1	0.81	0.82	0.49	0.41	18.6	77.7	7.4	49.3	3.8
1972XR	0.5	8.3	2.0	0.3	0.90	0.89	0.70	0.42	20.1	78.5	8.7	47.3	3.5
CSHYP10-435	-0.4	8.5	2.1	1.0	0.91	0.94	0.75	0.47	19.8	76.0	8.8	50.1	3.3
SV7538SK	-0.2	9.2	1.9	0.3	0.95	0.99	0.71	0.43	18.9	76.1	9.0	43.2	3.8
SVSK0391	1.0	8.0	2.1	0.1	0.93	0.94	0.75	0.50	19.7	79.8	8.8	53.2	4.1
Mint	-0.2	8.3	2.0	0.3	0.88	0.91	0.68	0.41	19.8	77.0	8.3	45.3	3.9
3511R	0.5	8.3	1.9	0.0	0.83	0.82	0.64	0.42	19.7	77.5	7.4	50.9	4.2
XTH1679	0.4	8.2	2.0	0.2	0.90	0.89	0.71	0.44	19.4	76.6	6.9	49.7	3.9
SVSK1712	1.4	7.7	2.1	0.3	0.95	0.96	0.72	0.46	18.3	78.7	8.2	47.7	4.1
GSS3071	0.9	8.0	1.9	0.1	0.87	0.91	0.72	0.46	19.3	78.2	9.5	51.0	4.3
CSHYP13-649	0.6	9.0	1.9	0.3	0.92	0.94	0.71	0.41	15.0	77.5	6.8	43.8	3.8
Driver	-0.3	9.3	2.0	0.8	1.02	0.99	0.76	0.48	19.9	78.8	9.9	48.5	3.8
3081MR	0.1	8.2	2.0	0.0	0.82	0.85	0.71	0.41	20.4	77.3	8.2	48.9	3.7
1879XR	-0.6	9.5	1.9	0.5	0.99	0.95	0.75	0.45	18.7	75.0	8.8	47.5	3.2
1680XR	0.3	8.6	2.0	0.1	0.80	0.98	0.77	0.48	17.5	78.0	6.7	48.5	3.5
Aubade	1.3	8.3	1.9	0.5	0.83	0.82	0.62	0.40	20.2	78.0	7.5	48.4	3.7
Moonshine	1.1	8.1	2.0	0.0	0.88	0.88	0.69	0.44	19.7	77.7	8.6	50.3	4.4
1980XR	0.0	9.4	1.9	0.4	0.91	0.95	0.74	0.40	19.2	77.7	7.9	42.5	3.4
Bullion	0.5	8.0	2.0	0.3	0.85	0.85	0.67	0.41	20.9	75.0	8.9	48.8	3.5
HMX4360YS	-0.3	8.3	1.9	0.2	0.92	0.89	0.72	0.43	19.0	77.3	8.4	48.4	3.8
CSHP12-580	-1.0	10.1	2.4	0.8	1.00	1.00	0.82	0.49	15.7	75.7	7.6	49.4	3.3
ACX3580MR	-0.2	9.4	2.0	0.3	1.03	1.00	0.75	0.46	18.1	77.5	8.9	46.0	3.9
3590MR	-0.4	9.1	2.0	0.2	1.00	0.99	0.81	0.48	19.3	76.3	9.2	48.7	3.8
SV 1514 SK	2.4	10.6	2.1	0.2	1.01	1.06	0.76	0.50	18.6	79.3	9.9	46.8	4.4
CSAYP13-664	0.6	9.0	2.8	0.8	0.91	0.97	0.74	0.47	19.2	75.5	8.5	48.2	3.8
Hardi	0.8	8.9	2.5	0.6	0.93	0.96	0.68	0.42	18.9	76.8	8.6	44.5	3.7
SVSK0722	0.8	8.3	2.0	0.3	0.93	0.95	0.65	0.41	18.1	79.0	8.0	43.0	4.3

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Unfill. Tip (in)	Unhusked Wt. Per Ear (lbs)	Sample unhusked wt per ear (lb.)	husked wt per ear (lb.)	Sample kernel wt per ear (lb.)	Plants Per Acre (1000)	% Moist	Tons per acre	Recov. %	Overall Ear Eval.
SV 1339 SK	-0.7	8.6	2.0	0.5	0.93	0.94	0.77	0.46	20.5	76.8	8.9	49.0	4.2
GSS3951	0.2	9.1	2.0	0.2	0.97	1.00	0.77	0.48	19.7	77.0	8.9	48.5	4.4
3780MR	-1.0	9.2	2.1	0.3	1.02	1.03	0.83	0.51	19.6	76.2	9.8	49.5	3.9
Workhorse	-0.9	8.9	1.9	0.2	0.89	0.89	0.69	0.41	18.7	75.5	7.8	46.6	3.7
CSHYP13-677	-0.7	9.3	1.9	0.7	0.85	0.93	0.75	0.45	19.8	75.8	8.1	48.6	3.5
CSHYP10-403	-0.3	8.3	2.0	1.1	0.81	0.81	0.62	0.42	19.8	74.8	7.9	52.1	3.5
Overland std	-1.1	8.6	2.0	0.4	0.93	0.91	0.78	0.50	20.0	78.5	9.3	55.4	4.2
GSS1453 std	-1.7	8.5	2.0	0.2	0.92	0.94	0.79	0.52	19.2	78.8	9.0	55.2	4.3
ZHY 1455	-0.6	8.8	2.0	0.3	0.92	0.97	0.82	0.55	20.0	78.5	9.0	56.5	3.9
White													
7401 Imp.	0.4	8.4	1.9	0.2	0.84	0.87	0.64	0.35	18.5	75.4	7.4	40.2	3.6
XTH3174	0.6	8.1	1.8	0.1	0.89	0.75	0.56	0.29	18.9	76.4	6.2	38.9	3.8
Placer	0.6	7.8	1.9	0.1	0.88	0.87	0.64	0.38	20.5	75.6	8.4	43.8	3.4
Glacial	0.0	8.2	1.9	0.1	0.86	0.85	0.60	0.32	19.3	76.5	7.8	37.9	3.4
Ice Queen	0.2	8.0	1.8	0.2	0.78	0.79	0.60	0.34	19.3	75.1	7.1	42.5	3.1
GVS0210	0.1	7.6	1.8	0.0	0.8	0.76	0.54	0.33	17.4	77.0	7	43.1	3.8
1580SC	0.0	7.8	1.7	0.1	0.77	0.74	0.52	0.29	20.0	76.6	7.4	39.2	3.5
CSHWP9-371	-0.2	8.5	1.7	1.2	0.85	0.76	0.55	0.26	13.1	76.5	5.7	33.8	2.8
3879XR	0.8	7.7	1.8	0.2	0.77	0.73	0.56	0.32	19.7	76.4	7.0	43.3	3.3
Devotion	-0.2	8.0	1.9	0.0	0.78	0.82	0.62	0.38	19.7	76.8	7.1	46.8	3.6
Snogum	0.7	8.6	1.8	0.3	0.89	0.82	0.56	0.29	18.7	77.5	7.9	35.9	3.6
CSHWP11-456	-0.1	8.9	1.9	0.5	0.91	0.89	0.66	0.35	17.7	76.3	7.5	39.5	3.5
WSS 3681 std	-1.0	8.6	1.7	0.1	0.81	0.76	0.58	0.33	17.0	75.8	6.8	43.9	3.5
Bicolor													
Cumberland	0.2	7.9	1.9	0.0	0.76	0.75	0.57	0.33	20.7	76.5	7.5	44.6	3.6
08B2084	0.9	7.3	1.9	0.0	0.81	0.81	0.59	0.36	19.8	77.9	7.6	44.1	4.1
CSABP12-534	0.0	8.7	1.9	0.7	0.83	0.89	0.68	0.40	16.5	76.3	6.7	44.7	3.3
ZHB 1060	-0.2	8.6	1.8	0.0	0.81	0.78	0.58	0.31	19.6	77.5	6.8	39.6	3.3
CSHBP13-672	0.4	9.4	2.0	0.5	1.04	1.00	0.79	0.48	19.4	76.8	9.3	48.1	3.6

Column Descriptions page 6.

Table 9. Plant Characteristics (Supersweet gene type)

Cultivar	Plt Ht (in)	Ear ht. (in)	Plt. Unif. Rating	Tillars Rating	Rust Rating (6/13 Planting)	Rust Rating (7/25 planting)	NCLB Rating (7/25 planting)
Yellow							
Early Riser	72	13	VG	2	V SL	SEV	SL-MOD
1470XR	68	14	VG	2	N	N	SL
1972XR	74	13	VG	2	N	N	SL-MOD
CSHYP10-435	77	17	G	2	SL	MOD	SL-MOD
SV7538SK	80	17	VG	2	N	N	SL
SVSK0391	82	21	VG	2	N	N	SL
Mint	72	16	VG	3	SL	SL	SL
3511R	73	17	VG	3	N	SL	SL
XTH1679	69	16	VG	2	N	N	SL
SVSK1712	69	16	VG	3	N	N	VSL
GSS3071	77	19	VG	2	N	VSL	SL
CSHYP13-649	79	19	G	2	N	NA	NA
Driver	73	16	VG	2	N	N	SL
3081MR	71	18	VG	3	N	N	SL-MOD
1879XR	75	18	VG-EX	2	N	SL	SL
1680XR	80	22	VG	2	N	VSL	SL
Aubade	77	18	VG	0	SL-MOD	MOD	SL
Moonshine	79	20	VG	2	SL	SL-MOD	SL
1980XR	73	22	VG	2	N	N	SL
Bullion	77	22	VG	0	N	N	VSL
HMX4360YS	73	18	VG-EX	2	N	VSL	SL
CSHP12-580	92	23	VG	2	N	SL-MOD	SL
ACX3580MR	78	18	G-VG	2	MOD	SL-MOD	VSL
3590MR	69	18	VG	0	N	N	SL
SV 1514 SK	73	18	VG-EX	2	N	N	SL
CSAYP13-664	86	23	VG	3	SL	N	SL
Hardi	84	22	VG	2	SL	SL	VSL
SVSK0722	75	17	VG	2	SL	N	N
SV 1339 SK	80	24	VG	3	N	N	SL
GSS3951	78	20	VG	2	SL	N	VSL
3780MR	73	18	VG	2	SL	SL-MOD	SL
Workhorse	81	19	VG	0	SL	MOD	SL
CSHYP13-677	81	23	VG	2	N	N	SL

Table 9. continued:

Cultivar	Plt Ht (in)	Ear ht. (in)	Plt. Unif. Rating	Tillars Rating	Rust Rating (6/13 Planting)	Rust Rating (7/25 planting)	NCLB Rating (7/25 planting)
CSHYP10-403	81	20	VG	3	N	SL	SL
Overland std	79	22	VG	2	N	VSL	VSL
GSS1453 std	78	22	VG	2	N	N	SL
ZHY 1455	82	23	VG	2	N	N	N
White							
7401 Imp.	60	11	VG	2	MOD-SEV	MOD	SL-MOD
XTH3174	63	14	VG	0	MOD-SEV	MOD	SL
Placer	58	13	VG	2	SEV	MOD-SEV	SL
Glacial	57	13	G	2	MOD-SEV	SL-MOD	SL
Ice Queen	61	17	VG	2	MOD-SEV	MOD	SL
GVS0210	56	14	VG	2	MOD-SEV	SL-MOD	SL
1580SC	60	16	VG	2	N	N	SL
CSHWP9-371	62	17	G	2	MOD-SEV	NA	NA
3879XR	64	19	VG	2	SL	N	SL-MOD
Devotion	65	19	VG	2	SL - MOD	SL	SL
Snogum	62	11	VG	2	SL	SL	SL
CSHWP11-456	67	16	VG	2	SL	NA	NA
WSS 3681 std	65	12	G	3	SEV	MOD	MOD-SEV
Bicolor							
Cumberland	56	14	VG	2	SL	N	SL-MOD
08B2084	69	20	VG	2	MOD	MOD	MOD
CSABP12-534	67	18	VG	2	N	N	N
ZHB 1060	71	18	VG	2	SL- MOD	SL-MOD	SL
CSHBP13-672	70	15	VG	3	N	N	SL

See Table 5 for heading explanations.

Additional Comments ss type Yellow (disease ratings all based on late planting)

***Early Riser –** Early maturity, good husk extension, larger kernels that were a bit shallow, smaller cob, severe rust rating, overall ear evaluation 4.0.

1470XR – Early maturity, some goosenecked plants, good husk extension, very good recovery, nice quality, over-all ear evaluation 3.8.

1972 XR – Early maturity, a few slightly goosenecked plants, vg to ex yield, over-all ear evaluation 3.5.

CSHYP10-435 – Early to midseason, exposed ear tips, long ears, vg to ex yield, very good recovery, moderate rust rating, over-all ear evaluation 3.3.

SV7538SK – Early to midseason, exposed ear tips, long ears, a few slightly curved ears, vg to ex yield, over-all ear evaluation 3.8.

***SVSK0391 –** Early to midseason, good husk extension, vg-excellent ear uniformity, medium to deep kernels, vg to ex yield, small cob, very good recovery, over-all ear evaluation 4.1.

Mint – Early to midseason, bushy plant, exposed ear tips, smaller, medium to deep kernels, small cob, over-all ear evaluation 3.9.

***3511R –** Early to midseason, very good recovery, excellent tip fill, small cob, over-all ear evaluation 4.2.

XTH 1679 – Early to midseason, very good recovery, nice color, over-all ear evaluation 3.9.

***SVSK1712 –** Early to midseason, good husk extension, shorter, large diameter ears, vg-excellent ear uniformity, medium to deep kernels, over-all ear evaluation 4.1.

***GSS3071** - Early to midseason, good husk extension, vg-excellent ear uniformity and yield, small cob and excellent tip fill, very good recovery, over-all ear evaluation 4.3.

CSHYP13-649 – Early to midseason, long ears, a few slightly curved ears, small cob, over-all ear evaluation 3.8.

Driver – Early to midseason, exposed ear tips, long ear, ear not filled, vg to ex yield, nice color, small cob, over-all ear evaluation 3.8.

ACR 3081MR – Early to midseason, medium to deep kernels, excellent tip fill, a few slightly curved ears, over-all ear evaluation 3.7.

1879XR – Early to midseason, exposed ear tips, long ears, vg to ex yield, a few curved ears and lack of ear uniformity, over-all ear evaluation 3.2.

1680XR – Midseason, long ears, excellent tip fill, a few slightly curved ears, over-all ear evaluation 3.5.

Aubade – Midseason, moderate rust rating, smaller cob, tapered butt end, one rep was quite poor and other two very good, this affected overall ear evaluation, over-all ear evaluation 3.7.

***Moonshine –** Early to midseason, good husk extension, vg-excellent ear uniformity and yield, medium to deep kernels, small cob, very good recovery, excellent tip fill, over-all ear evaluation 4.4.

1980 XR – Midseason, long ears, kernels a bit shallow, bigger cob, some curved ears, over-all ear evaluation 3.4.

Bullion (0376) – Midseason, medium to deep kernels, vg to ex yield, small cob, a few slightly curved ears, over-all ear evaluation 3.5.

HMX4360YS – Midseason, exposed ear tips, smaller, medium to deep kernels, small cob, over-all ear evaluation 3.8.

CSHP12-580 – Midseason, exposed ear tips, long ears, ear not filled, very good recovery, lack of good ear uniformity, a few slightly curved ears, over-all ear evaluation 3.3.

ACX3580MR – Midseason, exposed ear tips, long ears, vg to ex yield, small cob, a hint of oval, nice color, over-all ear evaluation 3.9.

Continued Comments Yellow supersweets:

3590MR – Mainseason, exposed ear tips, long ears, medium to deep kernels, vg to ex yield, small cob, nice color, over-all ear evaluation 3.8.

***SV1514SK –** Midseason, good husk extension, vg-excellent ear uniformity, long ears, smaller, deep kernels, vg to ex yield, minimal sugar, small cob, over-all ear evaluation 4.4.

CSAYP13-664 – Midseason, a few goosenecked plants, long ears, ear not filled, vg to ex yield, small cob, over-all ear evaluation 3.8.

Hardi – Midseason, good husk extension, long ear, smaller kernels, vg to ex yield, over-all ear evaluation 3.7.

***SVSK0722 –** Midseason, good husk extension, vg-excellent ear uniformity, smaller, medium to deep kernels, no NCLB symptoms visible, small cob, minimal sugars, over-all ear evaluation 4.3.

***SV1339SK** – Midseason, vg-excellent ear uniformity, exposed ear tips, long ears, smaller kernels, vg to ex yield, very good recovery, bigger cob, green tip of ear, over-all ear evaluation 4.2.

***GSS3951** – Midseason, vg-excellent ear uniformity, long ears, smaller, excellent tip fill, medium to deep kernels, vg to ex yield, small cob, very little if any NCLB symptoms visible, over-all ear evaluation 4.4.

3780MR – Midseason, exposed ear tips, long ears, medium to deep kernels, vg to ex yield, nice color, excellent fill, small cob, green tip, over-all ear evaluation 3.9.

Workhorse – Early to midseason, exposed ear tips, long ears, kernels a bit on the shallow side, very good recovery, moderate rust rating, excellent tip fill, a few curved ears, over-all ear evaluation 3.7.

CSHYP13-677 – Mainseason, exposed ear tips, long ears, a few curved ears (at tip), small cob, smaller, medium to deep kernels, over-all ear evaluation 3.5.

CSHYP10-403 – Mainseason, exposed ear tips, smaller, medium to deep kernels, ear not filled, small cob, minimal sugar, very good recovery, over-all ear evaluation 3.5.

***Overland** – Mainseason, exposed ear tips, long ears, very good tip fill, smaller, medium to deep kernels, vg to ex yield, small cob, very good recovery, very few NCLB symptoms visible, over-all ear evaluation 4.2.

***GSS1453 –** Mainseason, exposed ear tips, vg-excellent ear uniformity, long ears, excellent tip fill, small cob, deep kernels, vg to ex yield, very good recovery, over-all ear evaluation 4.3.

ZHY 1455 – Mainseason, exposed ear tips, long ears, medium to deep kernels, a few slightly curved ears, vg to ex yield, small cob, very good recovery, no NCLB symptoms were visible, over-all ear evaluation 3.9.

White Supersweet

Var. 7401 Imp – Early to midseason, very good to excellent tip fill, green tip, bigger cob, kernels on the shallow side, moderate rust rating, over-all ear evaluation 3.6.

XTH3174 – Early to midseason, some raccoon damage, bigger cob, green tip, kernels on the shallow side, moderate rust rating, over-all ear evaluation 3.8.

Placer – Early to midseason, excellent tip fill, bigger cob, a few slightly curved ears, kernels on the shallow side, moderate to severe rust rating, over-all ear evaluation 3.4.

Glacial – Early to midseason, bigger cob, kernels on the shallow side, over-all ear evaluation 3.4.

Ice Queen - Early to midseason, a few ears slightly curved, a hint of oval, kernels on the shallow side, moderate rust rating, over-all ear evaluation 3.1.

GVS0210 – Early to midseason, two replications destroyed by raccoons, not as many ears to evaluate as would have liked to have seen, small cob, over-all ear evaluation 3.8.

1580SC – Early to midseason, excellent tip fill, slender ears, kernels on the shallow side, over-all ear evaluation 3.5.

CSHWP9–371 – Midseason, one rep (only two replications as it was an observation) at the poorer end of the field not properly irrigated, exposed ear tips, small cob, long ears, ear not filled, over-all ear evaluation 2.8.

Continued comments white supersweets:

3879XR – Midseason, small ears, good husk extension, vg to ex tip fill, kernels on the shallow side, over-all ear evaluation 3.3.

Devotion – Midseason, exposed ear tips, excellent tip fill, smaller, medium to deep kernels, over-all ear evaluation 3.6 (ear uniformity hurt score).

Snogum – Midseason, small cob, kernels on the shallow side, long ears, stress resulted in pollination gaps on ear, over-all ear evaluation 3.6.

CSHWP11-456 – Mid to mainseason, a few goosenecked plants, exposed ear tips, long, large ears, bigger cob, kernels on the shallow side, over-all ear evaluation 3.5.

WSS 3681- Mid to mainseason, exposed ear tips, slender, very cylindrical ears, kernels on the shallow side, moderate rust rating and moderate to severe NCLB rating, over-all ear evaluation 3.5.

Bicolor

Cumberland – Early to midseason, excellent fill, nice texture, kernels on the shallow side, over-all ear evaluation 3.6.

***08B2084** – Early to midseason, good husk extension, VG-Excellent ear uniformity and tip fill, small cob, shorter ears, smaller kernels, moderate rust and NCLB rating, over-all ear evaluation 4.1 (two reps given 4.5 rating).

CSABP12-534 – Midseason, A bit of plant goosenecking, long ears, a few slightly curved ears, kernels on the shallow side, overall ear, no NCLB symptoms visible, over-all ear evaluation 3.3.

ZHB1060 – Mainseason, strong plant, exposed ear tips, long, slender, very cylindrical ears, a few slightly curved ears, small cob, over-all ear evaluation 3.3.

CSHBP13-672 – Early to midseason, long ears, a couple slight curves, vg to ex yield, over-all ear evaluation 3.6.

Descriptions Provided by the Seed Source (Supersweets)

Early Riser – *A&C, 69 days to maturity*

1470XR – *IFSI, 70 days to maturity,*

1972 XR *– IFSI; 73 days to maturity; early processor with very strong yield and recovery data.*

CSHYP10-435 – *Crookham, 75 days to maturity.*

SV7538SK – *Seminis, 75 days to maturity,*

SVSK0391 – *Seminis, 76 days to maturity,*

Mint (HMX 0375S) *– Harris Moran; 77 days to maturity; 16-18 row count; 8" ear length; 2" ear diameter; kernel color yellow; good disease resistance; good yield; very nice plant; IR for Et, MDMV, and Ps.*

3511R – *A&C, 77 days to maturity,*

XTH 1679 *– Illinois Foundation Seeds, 78 days to maturity (midseason to full season), 85 inch plant height, 29 inch ear height, 8-8.5 inch ear length, 2.0 inch ear diameter, 16-20 average kernel rows, medium to bright yellow kernel color, good tip fill, productive and strong hybrid with excellent resistance to MDMV and new rust (GI alleles).*

SVSK1712 – *Seminis, 78 days to maturity,*

GSS3071 *(new) – Syngenta; 78 – 79 days to maturity; d and I rust genes; good tolerance to NCLB and expected tolerance to Pst.*

CSHYP13-649 – *Crookham, 79 days to maturity.*

Driver (3346) *– Harris Moran; 79 days to maturity; large ear with high yield, HR for MDMV and Ps (e for Allele Rp1).*

Continued descriptions supersweets:

ACR 3081MR – *Abbott & Cobb; 79 days to maturity; color yellow; 18 row count; 8" ear length; plant size – medium/short; HR Common Rust (Rp1G and Rp1I) and NCLB.*

1879XR *– IFSI, 79 days to maturity, rust resistant RpGI, and Moderately Resistant to NCLB*

1680XR – *IFSI, 80 days to maturity, rust resistant RpGI, and Moderately Resistant to NCLB*

Aubade – *Gallatin Valley, 82 day maturity, moderate rust resistance, 8.2 inch ear, high quality.*

Moonshine – *Gallatin Valley, 78 day maturity.*

1980 XR *– IFSI; 80 days to maturity*

Bullion (0376) – *Harris Moran, yellow sh2, 80 days to maturity, 8 inch ear length and 2.0 inch ear diameter, 16-18 average row count, good disease package – good plant, HR for NCLB, MDMV and common rust (Rp1gfj).*

HMX4360YS – *Harris Moran, 80 day maturity, dual use corn on the cob or cut corn, HR for Ps (Rp1-gfi) and MDMV: IR for Et.*

CSHP12-580 – *Crookham, 80 days to maturity.*

ACX3580MR – *A&C, 80 days to maturity,*

3590MR – *Abb.& Cobb; 84 day maturity; 18-20 row count; 8.5" ear length; M plant size; HR for Ps, Et, MDVM, Pst.*

SV1514SK – *Seminis, SH2 yellow, 81 day RM, 1700 heat units, AVG plant ht. 77 inches, AVG ear ht. 27 inches, AVG ear length 8.4 inches, AVG ear diameter 2 inches, AVG row count 18-20, Anticipated Highly Resistant: Rust (RpG5), Intermediate Resistant: MDMV. SV1514SK should have 1st commercial processor sales in 2014.*

CSAYP13-664 – *Crookham, 81 days to maturity.*

Hardi *– Crookham; 82 days to maturity; old rust resistance; moderate MDMV resistance; good kernel.*

SVSK0722 – *Seminis, 82 days to maturity,*

SV1339SK *– Seminis, yellow sh2, 82 days (1740hu), 80 inch plant height, 28 inch ear height, 9-10 inch ear length, 2.1 inch ear diameter, 18-20 average row count, Anticipated Highly Resistant: Rust Rp1I; Intermediate Resistant: MDMV and Northern Corn Leaf Blight rot. This hybrid will continue to be trialed.*

GSS3951 *– Syngenta; 82 days to maturity; 8.3 inch ear with 18-20 rows, bright color when cooked, sturdy plant that has shown to take stress and high populations better than most, d and I rust genes; good tolerance to NCLB and expected tol. to Pst.*

3780MR – *A&C, 82 days to maturity,*

Workhorse (0372) *– Harris Moran, 79 day to maturity, high quality, large ear size, great yield potential, 16-18 row count, 8.25 inch ear length, 2 inch ear width, IR for NCLB and Ps.*

CSHYP13-677 – *Crookham, 83 days to maturity.*

CSHYP10-403 – *Crookham, 83 days to maturity, RpGFJ, some SW and NCLB tolerance.*

Overland *– (GSS 3287) – Syngenta; 84 days to maturity (1768 heat units), 7 ft plant height, 36 inch ear height, 8.5 inch ear length, 1.85 inch ear diameter, 18-20 rows, 12 mm kernel depth, Rp1i gene for rust resistance, resistance to NCLB, tolerance to MDMV and SW.*

GSS1453 – *Syngenta, 84 days to maturity, strong yielding variety with long, quality supersweet ears, 8.5 inch ear length, 2 inch ear diameter, 18 row count, HR for Et/Ps (Rp1-dgi genes) and Pst; IR for Bm/Ps.*

ZHY 1455 – *Crites, 84-85 days to maturity,*

White

Var. 7401 Imp *– Abb. & Cobb; color white; SRG; 76 days to maturity; 16-18 row count; 8" ear length; HR for MDMV.*

Continued descriptions white supersweets:

XTH3174 *– IFSI; 76 days to maturity*

Placer – *Harris Moran, 76 days to maturity, high eating quality, IR for MDMV.*

Glacial (ACR1743) *– Abbott & Cobb; color white; 76 days to maturity; 16-18 row count; 8" ear length.*

Ice Queen - *Harris Moran, 77 days to maturity, strong emergence vigor, 84 inch plant ht., 24 inch ear ht., 7.5 inch ear length, 1.9 inch ear width, slightly tapered, 14-16 row count, attractive ear, widely adapted, beautiful husk, excellent tip fill, IR for NCLB, MDMV and Ps.*

GVS0210 *– Gallatin Valley; 78 day maturity; color yellow; should have rust resistance and NCLB, Stewarts wilt tol.*

1580SC – *Seminis, 79 days to maturity,*

CSHWP9–371 – *Crookham, 80 day white SH2, some NCLB tolerance, competes with 3681 but more consistent.*

3879XR *– IFSI, 81 days to maturity,*

Devotion *– Seminis; white; 82 days to maturity; 8" ear length; 1.7" ear diameter; 16-18 row count; high quality white sh2 with superb eating quality; IR for Pst.*

Snogum *– Crites; color white; 82 days to maturity; 8.2" ear length; 2" ear diameter; 18 row count; plant height – medium; cobb height – medium; HR for (Ps) avir (+D), (Ps) G-vir (=D), Southern Leaf Blight; IR for (Ps) D-vir, Northern Corn Leaf Blight, Stewart's Wilt; SU for MDMV.*

CSHWP11-456 – *Crookham, 82 days to maturity, tolerance to MDMV.*

WSS 3681- Syngenta, white sh2, 83 days to maturity, 8.5 inch ear length, 1.8 inch ear diameter, 18-20 row count, rust resistant, super quality in a white.

Bicolor

Cumberland *– Harris Moran, 77 day main season maturity, great yield, high eating quality, HR for Ps (Rp1-g)*

08B2084 *– Gallatin Valley, 79 days to maturity,*

CSABP12-534 *– Crookham, 81 days to maturity, tolerance to MDMV.*

ZHB1060 *– Crites, 83 days to maturity,*

CSHBP13-672 *- Crookham,*

Northern Corn Leaf Blight – Et or NCLB, (Exserohilum turcicum)
Maize dwarf mosaic –MDMV (Maize dwarf mosaic virusu)
Common Rust – Ps (Puccinia sorghi)
Stewarts wilt – Pst (Pantoea stewartii (ex. Erwinia stewartii)
Southern corn leaf blight – Bm (Bipolaris maydis(=Helminthosporium maydis))

Table 10. Weather Summary 2016

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
5/24/16	76	56	66	0	0	16	16
5/25/16	79	57	68	0	0	18	34
5/26/16	85	56	70.5	0	0	20.5	54.5
5/27/16	84	64	74	0.01	0.01	24	78.5
5/28/16	83	63	73	0	0.01	23	101.5
5/29/16	89	66	77.5	0	0.01	27.5	129
5/30/16	83	62	72.5	0.47	0.48	22.5	151.5
5/31/16	81	55	68	0	0.48	18	169.5
6/1/16	79	49	64	0	0.48	14	183.5
6/2/16	78	52	65	0	0.48	15	198.5
6/3/16	73	59	66	0.05	0.53	16	214.5
6/4/16	79	53	66	0	0.53	16	230.5
6/5/16	80	63	71.5	0.11	0.64	21.5	252
6/6/16	73	60	66.5	0.2	0.84	16.5	268.5
6/7/16	76	54	65	0.05	0.89	15	283.5
6/8/16	70	48	59	0.03	0.92	9	292.5
6/9/16	56	45	50.5	0	0.92	0.5	293
6/10/16	65	48	56.5	0	0.92	6.5	299.5
6/11/16	70	49	59.5	0	0.92	9.5	309
6/12/16	85	56	70.5	0	0.92	20.5	329.5
6/13/16	66	50	58	0	0.92	8	337.5
6/14/16	61	45	53	0	0.92	3	340.5
6/15/16	70	46	58	0	0.92	8	348.5
6/16/16	80	54	67	0.08	1	17	365.5
6/17/16	79	52	65.5	0	1	15.5	381
6/18/16	82	54	68	0	1	18	399
6/19/16	85	56	70.5	0	1	20.5	419.5
6/20/16	83	63	73	0	1	23	442.5
6/21/16	89	59	74	0.1	1.1	24	466.5
6/22/16	76	56	66	0	1.1	16	482.5
6/23/16	73	53	63	0	1.1	13	495.5
6/24/16	77	47	62	0	1.1	12	507.5
6/25/16	80	53	66.5	0	1.1	16.5	524
6/26/16	85	62	73.5	0	1.1	23.5	547.5
6/27/16	89	67	78	0	1.1	28	575.5
6/28/16	87	63	75	0.12	1.22	25	600.5
6/29/16	80	59	69.5	0	1.22	19.5	620
6/30/16	75	53	64	0.1	1.32	14	634
7/1/16	80	53	66.5	0	1.32	16.5	650.5
7/2/16	78	55	66.5	0	1.32	16.5	667
7/3/16	76	58	67	0	1.32	17	684
7/4/16	80	53	66.5	0	1.32	16.5	700.5
7/5/16	84	64	74	0	1.32	24	724.5

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
7/6/16	80	62	71	0	1.32	21	745.5
7/7/16	90	70	80	0	1.32	30	775.5
7/8/16	88	65	76.5	0	1.32	26.5	802
7/9/16	87	71	79	0	1.32	29	831
7/10/16	82	51	66.5	0.05	1.37	16.5	847.5
7/11/16	75	53	64	0.05	1.42	14	861.5
7/12/16	78	57	67.5	0	1.42	17.5	879
7/13/16	89	61	75	0	1.42	25	904
7/14/16	94	71	82.5	0	1.42	32.5	936.5
7/15/16	86	69	77.5	0	1.42	27.5	964
7/16/16	86	58	72	0	1.42	22	986
7/17/16	78	56	67	0.01	1.43	17	1003
7/18/16	83	64	73.5	0.02	1.45	23.5	1026.5
7/19/16	82	58	70	0.69	2.14	20	1046.5
7/20/16	76	56	66	0.01	2.15	16	1062.5
7/21/16	80	54	67	0	2.15	17	1079.5
7/22/16	89	59	74	0	2.15	24	1103.5
7/23/16	90	70	80	0	2.15	30	1133.5
7/24/16	86	61	73.5	0	2.15	23.5	1157
7/25/16	85	65	75	0	2.15	25	1182
7/26/16	81	66	73.5	0.68	2.83	23.5	1205.5
7/27/16	82	60	71	0	2.83	21	1226.5
7/28/16	87	63	75	0	2.83	25	1251.5
7/29/16	83	64	73.5	0	2.83	23.5	1275
7/30/16	82	59	70.5	0	2.83	20.5	1295.5
7/31/16	74	63	68.5	0	2.83	18.5	1314
8/1/16	76	62	69	0	2.83	19	1333
8/2/16	80	65	72.5	0	2.83	22.5	1355.5
8/3/16	83	64	73.5	0	2.83	23.5	1379
8/4/16	83	64	73.5	0	2.83	23.5	1402.5
8/5/16	89	67	78	0	2.83	28	1430.5
8/6/16	89	69	79	0.06	2.89	29	1459.5
8/7/16	82	64	73	0	2.89	23	1482.5
8/8/16	81	58	69.5	0	2.89	19.5	1502
8/9/16	82	57	69.5	0	2.89	19.5	1521.5
8/10/16	89	60	74.5	0.27	3.16	24.5	1546
8/11/16	89	69	79	0.01	3.17	29	1575
8/12/16	90	71	80.5	0	3.17	30.5	1605.5
8/13/16	92	74	83	0	3.17	33	1638.5
8/14/16	86	64	75	0.45	3.62	25	1663.5
8/15/16	80	65	72.5	0.02	3.64	22.5	1686
8/16/16	78	66	72	0.04	3.68	22	1708
8/17/16	88	64	76	0.23	3.91	26	1734
8/18/16	80	64	72	0	3.91	22	1756
8/19/16	81	59	70	0	3.91	20	1776
8/20/16	85	62	73.5	0	3.91	23.5	1799.5

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
8/21/16	89	70	79.5	0.35	4.26	29.5	1829
8/22/16	76	59	67.5	1.01	5.27	17.5	1846.5
8/23/16	71	55	63	0	5.27	13	1859.5
8/24/16	80	56	68	0	5.27	18	1877.5
8/25/16	85	71	78	0	5.27	28	1905.5
8/26/16	85	68	76.5	0.2	5.47	26.5	1932
8/27/16	85	67	76	0	5.47	26	1958
8/28/16	82	65	73.5	0	5.47	23.5	1981.5
8/29/16	90	64	77	0	5.47	27	2008.5
8/30/16	78	54	66	0	5.47	16	2024.5
8/31/16	81	55	68	0	5.47	18	2042.5
9/1/16	77	61	69	0.2	5.67	19	2061.5
9/2/16	72	56	64	0	5.67	14	2075.5
9/3/16	71	47	59	0	5.67	9	2084.5
9/4/16	73	48	60.5	0	5.67	10.5	2095
9/5/16	79	55	67	0	5.67	17	2112
9/6/16	83	57	70	0	5.67	20	2132
9/7/16	85	62	73.5	0	5.67	23.5	2155.5
9/8/16	89	63	76	0.02	5.69	26	2181.5
9/9/16	90	70	80	0.34	6.03	30	2211.5
9/10/16	81	64	72.5	0	6.03	22.5	2234
9/11/16	90	67	78.5	0.11	6.14	28.5	2262.5
9/12/16	72	49	60.5	0	6.14	10.5	2273
9/13/16	76	49	62.5	0	6.14	12.5	2285.5
9/14/16	85	54	69.5	0	6.14	19.5	2305
9/15/16	72	43	57.5	0	6.14	7.5	2312.5
9/16/16	69	44	56.5	0.02	6.16	6.5	2319
9/17/16	77	46	61.5	0	6.16	11.5	2330.5
9/18/16	77	63	70	1.4	7.56	20	2350.5
9/19/16	80	62	71	0.29	7.85	21	2371.5
9/20/16	79	57	68	0.01	7.86	18	2389.5
9/21/16	84	55	69.5	0	7.86	19.5	2409
9/22/16	80	55	67.5	0	7.86	17.5	2426.5
9/23/16	84	55	69.5	0	7.86	19.5	2446
9/24/16	70	46	58	0	7.86	8	2454
9/25/16	63	40	51.5	0	7.86	1.5	2455.5
9/26/16	62	42	52	0	7.86	2	2457.5
9/27/16	72	50	61	0.06	7.92	11	2468.5
9/28/16	70	47	58.5	0	7.92	8.5	2477
9/29/16	73	46	59.5	0.1	8.02	9.5	2486.5
9/30/16	59	52	55.5	0.23	8.25	5.5	2492