

**N. Y. S. 2012 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. Four replications of early su type cultivars (11) were planted on 5/15. These early su cultivars were planted again along with mainseason su cultivars on 5/29. A single planting of the supersweet type (four replications) was planted on 6/16. Yield data were taken from a single harvest of a 15 feet section of each of the two rows (30 row feet total). A subsample of 15 ears was used for ear data.

Observation plot size was 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. Yield data were taken from a single harvest of a 20 feet section of the two rows of each plot. A subsample of 15 ears was used for ear data. All plantings were sowed with a Monosem vacuum planter with double disc openers. The fertilizer used was a 10-5-10 (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. Lumax (at the labeled rate) was applied preemergence for weed control. Desired population was 20,900 plants per acre (10 inches in row spacing). One cultivation was done and 400 pounds of 22-0-0 per acre were sidedressed. The varieties GH9597 and GH4927 from Syngenta Seeds were used as standards for the su type. Overland from Syngenta Seeds was used as the supersweet standard.

Early May was cool and wet, but the rest of May and June were below average for rainfall and above average for temperatures. The early su planting was planted into good soil conditions and emergence was good. The second su planting also went into good soil and emerged well. June was very warm and dry. Plots were decent although raccoons destroyed three cultivars. Irrigation was begun in June and continued July. The supersweet planting was planted into ground that had to be irrigated prior to planting. Heat units over the growing season were above normal. Fortunately, rain began again mid August and combined with warm temperatures, made a good crop. See Weather Summary table. The bacterial disease Stewarts Wilt was minimal to nonexistent. Common Smut was minimal. Common Rust infection was minimal. We saw some NCLB symptoms again this year but not as bad as 2011. See comments and tables 8 and 12.

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**Table 1. Cultivar List**

<b>Su Type</b>	<b>Seed Source</b>	<b>Trial type</b>
GH 4927	Syngenta	rep
Rocket	Crites	rep
Prelude	Crites	rep
SC1263	Seminis	rep
SEY6RH1264	Seminis	rep
GH 2171	Syngenta	rep
GH3333	Syngenta	rep
GH19394	Syngenta	rep
CSUYP 8-339	Crookham	rep
HMX2390	Harris Moran	rep
Genesis	Harris Moran	rep
ZUY24090Q	Crites	rep
CSUYP10-437	Crookham	ob
Tamarack	Crookham	rep
Bonus	Syngenta	rep
GH 9597	Syngenta	rep
HMX0398	Harris Moran	rep
HMX1377	Harris Moran	rep
203	General Mills	rep
449	General Mills	rep
<b>Supersweet Bicolor</b>		
7112R	Abbott&Cobb	rep
C741 std	General Mills	rep
CSHBP9-368	Crookham	ob
<b>Supersweet White</b>		
CSHWP9-371	Crookham	ob

<b>Supersweet Yellow</b>	<b>Seed Source</b>	<b>Trial type</b>
Rising Sun	Crites	rep
Owattona (HMX9386)	Harris Moran	rep
CSHYP8-312	Crookham	ob
Protégé (std)	Syngenta	rep
ACR 7287Y	Abbott&Cobb	ob
HMX0375S	Harris Moran	rep
007Y	Abbott&Cobb	ob
HMX9394	Harris Moran	rep
XTH1079	IFSI	rep
XTH1679	IFSI	rep
Marvel Edge	Crookham	rep
HMX0376S	Harris Moran	rep
Yosemite (HMX0397)	Harris Moran	rep
Klondike (HMX9388)	Harris Moran	rep
CSHYP9-363	Crookham	rep
CSHYP10-403	Crookham	rep
QHY6RH1077	Seminis	rep
SHY6RH1365	Seminis	rep
SHY6RH1339	Seminis	rep
GSS1453	Syngenta	rep
ACR 7933RY	Abbott&Cobb	ob
ACXMS3001	Abbott&Cobb	ob
Overland (std)	Syngenta	rep
06G2300	W. Whitwood	rep
Galaxy	Crites	rep
ZHY27860Q	Crites	rep
GSS2259P	Syngenta	rep

IFSI - Illinois Foundation Seed, rep - replicated, ob - observation (not processed)

**Table 2. Maturity -Early Su planting date 5/15**

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist. At Harv.
Genesis	57	1048	79	1571	69.5
GH4927	57	1048	78	1545	70.5
Prelude	59	1088	80	1592	71.1
GH2171	57	1048	83	1677	69.5
CSUYP 8-339	60	1114	84	1701	68.9
GH3333	62	1173	85	1722	70.4
GH19394	62	1173	85	1722	69.8
HMX2390	62	1173	86	1738	70.0

**Mainseason Su planting date 5/29**

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist. At Harv.	Seed Source Maturity	Seed Source Heat Units
Rocket	55	1108	77	1624	68.8	71	
SEY6RH1264	55	1108	77	1624	69.9	73	1530
Genesis	54	1086	77	1624	68.4	74	
SC1263	54	1086	76	1600	73.1	73	1530
GH2171	55	1108	78	1640	72.9	74	
GH4927 (std)	55	1108	78	1629	70.8	75	
2409	59	1211	83	1727	67.8	79	
Prelude	57	1172	82	1714	70.1	78	
CSUYP8-339	56	1135	83	1727	68.9	76	
HMX 2390	57	1167	83	1727	70.3	78	
Tamarack	57	1167	83	1727	69.5	83	
GH19394	57	1167	83	1727	71.4	79	
GH3333	60	1234	84	1741	71.9	80	
203	60	1234	85	1754	69.9	full season	1950
449	61	1254	85	1754	70.4	full season	1920
HMX 0398	61	1254	86	1770	70.9	85	
HMX 1377	61	1254	86	1770	71.1	85	
CSUYP10-437	62	1275	87	1788	68.8	83	
GH 9597 (std)	63	1294	87	1788	69.5	83	
Bonus (std)	63	1294	87	1788	70.1	83	

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

**Table 3. Ear and Kernel Ratings Main Su planting date 5/15**

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel size Rating	Kernel Depth (mm)	Kernel Depth Rating	Pericarp Rating	Flavor Rating	Market Use Rating
Genesis	VG	CY-SL T	R	ST	M	11	M	OK-T	OK	C
GH4927	G-VG	CY-SL T	R	ST- SL I	M	11	M	OK-T	OK-G	B
Prelude	VG-EX	SL T	R	ST-SL I	S-M	11	M	OK-T	OK-G	B
GH2171	VG	CY-SL T	R	ST-SL I	M	11	M-D	T	OK	B
CSUYP 8-339	VG	CY-SL T	R	ST	S-M	11	M	OK-T	OK-G	B
GH3333	VG	SL T	R	ST-SL I	M	11	M	S-OK	OK-G	C
GH19394	VG	SL T-T	R	ST	M	11	M	S-OK	BL-OK	C
HMX2390	G-VG	CY-SL T	R	SL I	S-M	12	M	OK-T	OK	B

**5/29 su planting**

Rocket	G-VG	CY	R	ST	M	11	S-M	OK	OK	B
SEY6RH1264	VG	CY-SL T	R	ST-SL I	M	12	M	S	OK-G	B
Genesis	G	CY-SL T	R	ST	M-L	11	SH-M	T	OK-G	C
SC1263	G-VG	SL T	SL O	SL I	M	11	M	S	OK-G	C
GH2171	VG	CY-SL T	R	ST-SL I	M	12	M	OK	OK	C
GH4927 (std)	VG	CY	R	ST- SL I	M	11	M	OK-T	OK	B
2409	VG-EX	V CY	R	ST	M	11	SH-M	OK	OK	B
Prelude	VG	CY-SL T	R	ST-SL I	M	12	M-D	OK	OK	B
CSUYP8-339	VG-EX	CY-SL T	R	ST-SL I	M	12	M	OK-T	OK	B
HMX 2390	VG-EX	SL T	R	SL I	S	12	M-D	OK-T	OK	C
Tamarack	VG	CY-SL T	R	ST	M	12	M	OK-T	BL-OK	C
GH19394	VG-EX	CY-SL T	R	ST	M	12	M-D	OK	OK	B
GH3333	VG-EX	CY-SL T	R	ST	M	12	M	OK	OK-G	B
203	VG-EX	CY	R	ST	S-M	13	M-D	OK	OK	C
449	VG	SL T	R	ST	M	13	M	OK-T	OK	C
HMX 0398	VG-EX	CY	R	ST- SL I	S-M	12	M	OK-T	OK	C
HMX 1377	VG	CY	R	ST- SL I	S-M	11	M	OK-T	BL-OK	B
CSUYP10-437	VG	CY	R	ST	M	12	M	OK-T	BL-OK	C
GH 9597 (std)	VG-EX	CY	R	ST- SL I	S-M	12	M	OK-T	BL-OK	B
Bonus (std)	VG-EX	C	R	ST- SL I	S-M	12	M	OK-T	BL-OK	B

**Ear Uniformity (Rating)** - Ex=excellent (entire sample was the same length, diameter and uniform 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 (determined from five ears in two and measuring the kernel depth.)

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

**Row Number** - The number of rows around an ear listed as a range. Row number and ear diameter are an indication of the kernel size.

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

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

**Market Use (Rating)** - Cut=cut kernel, Cob= cobbette, Both=could be used for either.

## 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 one row 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 15 ft (30 row feet) per replication.

**Table 4. Ear and Yield Data - Main su planting date 5/15**

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Kernel Row Range	Unfill. Tip (in)	Wt. Per Ear Unhusk. (lbs)	(Sample) Unhusk. Wt. Per Ear (lb)	(Sample) Husked Ear Wt. Per Ear (lb)	Sample Kernel Weight Per Ear (lb)	Plants Per Acre (1000 )	Ears Per Plant	% Moist	Tons Per Acre	Recov. (%)	Over. Ear Rating (Sample)
Genesis	0.3	8.5	2.0	14-20	0.1	0.98	1.00	0.72	0.34	21.9	0.98	69.5	10.6	34	4
GH4927	0.3	7.8	1.9	14-20	0.2	0.83	0.84	0.66	0.25	21.5	0.98	70.5	8.69	30	3.7
Prelude	0.4	7.7	2.0	16-22	0.0	0.83	0.86	0.63	0.32	21.5	1.00	71.1	8.88	37	4.1
GH2171	0.5	7.7	2.1	16-22	0.2	0.94	0.90	0.73	0.39	21.3	0.99	69.5	9.89	43	4
CSUYP 8-339	1.2	7.1	2.0	16-22	0.1	0.85	0.89	0.64	0.30	22.4	0.99	68.9	9.4	34	3.8
GH3333	0.0	8.0	2.0	16-22	0.2	0.88	0.91	0.67	0.34	20.5	1.01	70.4	9.08	38	4
GH19394	1.2	7.8	1.9	14-20	0.3	0.84	0.84	0.60	0.30	21.5	0.92	69.8	8.32	36	3.8
HMX2390	0.7	8.4	1.9	16-24	0.2	0.88	0.90	0.68	0.31	21.6	1.01	70	9.62	34	3.8

**PLANTING DATE 5/29**

Rocket	0.9	7.9	1.9	14-20	0.2	0.77	0.80	0.58	0.28	21.9	0.95	68.8	8.0	35	3.8
SEY6RH1264	0.0	8.2	1.9	16-22	0.1	0.90	0.90	0.67	0.32	21.3	0.94	69.9	9.0	35	4
Genesis	0.1	8.0	1.9	14-20	0.3	0.79	0.81	0.59	0.31	22.2	0.93	68.4	8.2	37	3
SC1263	-0.8	8.3	2.0	16-22	0.3	0.89	0.93	0.70	0.37	21.6	0.95	73.1	9.2	40	2.2
GH2171	0.4	8.1	2.2	14-22	0.8	0.93	0.96	0.75	0.41	22.8	0.96	72.9	10.1	42	4
GH4927 (std)	-0.2	8.1	1.8	14-20	0.1	0.81	0.84	0.62	0.30	21.5	0.97	70.8	8.5	35	4
2409	-0.3	9.0	1.8	16-20	0.5	0.81	0.83	0.62	0.26	22.8	0.96	67.8	8.9	31	4.1
Prelude	0.4	7.9	2.0	16-22	0.1	0.85	0.85	0.67	0.28	22.1	0.96	70.1	9.0	32	3.9
CSUYP8-339	0.7	7.4	2.0	16-22	0.0	0.92	0.93	0.67	0.35	22.2	1.00	67.4	10.2	37	4.1
HMX 2390	0.2	8.5	2.0	16-24	0.3	0.88	0.88	0.69	0.33	21.6	0.96	70.3	9.2	38	3.9
Tamarack	1.0	8.6	2.0	14-22	0.4	0.95	0.98	0.75	0.38	22.4	0.97	69.5	10.3	38	4.1
GH19394	0.4	8.4	1.9	14-20	0.1	0.85	0.88	0.65	0.32	21.3	0.96	71.4	8.7	36	4.2
GH3333	0.5	8.3	1.9	16-22	0.2	0.84	0.85	0.62	0.30	21.1	0.90	71.9	8.0	36	4.3
203	0.2	8.9	2.0	14-22	0.8	0.95	0.97	0.79	0.40	21.8	0.92	69.9	9.5	41	4.2
449	-0.4	10.3	2.0	14-22	0.7	1.05	1.06	0.86	0.44	21.8	0.97	70.4	11.1	41	3.8
HMX 0398	0.5	8.9	2.0	16-22	0.4	0.89	0.91	0.70	0.38	21.8	1.01	70.9	9.9	41	4.1
HMX 1377	0.9	8.3	2.0	16-22	0.2	0.93	0.96	0.72	0.39	22.1	0.98	71.1	10.1	41	4
CSUYP10-437	1.5	8.5	1.9	14-20	0.1	0.85	0.87	0.69	0.33	21.8	1.03	68.8	9.6	38	3.9
GH 9597 (std)	0.5	7.7	2.0	14-22	0.4	0.77	0.81	0.63	0.31	21.6	0.99	69.5	8.3	39	4
Bonus (std)	1.4	7.7	1.9	16-20	0.5	0.76	0.80	0.61	0.32	21.8	1.02	70.1	8.4	40	4.1

Heading descriptions on page 6

**Table 5. Plant Characteristics su type (based on the 5/29 planting)**

Cultivar	Plt. Unif. Rating	Tillars Rating	Ear Position Rating	Lodging	Rust Rating	NCLB Rating	Plt. Ht. (in.)	Ear Ht. (in.)
Rocket	VG	F-L	30	N	N	N	69	18
SEY6RH1264	VG	N	30	N	N	N	72	19
Genesis	G-VG	F-L	45	N	SL	?	74	19
SC1263	G-VG	N	45	N	N	N	66	19
GH2171	VG	N	30	N	N	N	73	19
GH4927 (std)	G-VG	S-L	45	N	N	N	68	18
2409	VG	N	45	N	N	N	85	22
Prelude	G-VG	F-L	30	N	N	N	72	19
CSUYP8-339	VG	N-S	45	N	N	N	73	19
HMX 2390	VG	N-S	45	N	N	N	75	23
Tamarack	VG	N-S	45-60	SL	N	N	75	20
GH19394	VG	N	45	N	N	N	78	20
GH3333	G-VG	N	45	N	N	N	81	21
203	G-VG	N-S	30	N	N	N	88	21
449	G-VG	F-L	45	N	N	N	81	21
HMX 0398	VG	S-L	30	N	N	N	76	22
HMX 1377	VG	N-S	45	N	N	N	85	22
CSUYP10-437	G-VG	N	45	N	N	N	76	19
GH 9597 (std)	VG	F-L	30	N	N	N	76	19
Bonus (std)	VG	F-L	45	N	N	N	75	19

**Plant Uniformity** – Ex=excellent, VG=very good, G=good

**Tillars** – N-S=none to small, F-L=few large ones, S-L=some large tillars, M-L=many large tillars

**Ear Position** – (This may influence mechanical harvest) 30=30 degree from stalk, 45=45 degree from stalk and so on

**Lodging** – N= none, Sl=slight goosenecking at base of plant

**Common Rust Rating** – N= no symptoms seen, Sl=only a few rust pustules noted, moderate level of rust infection, SEV=severe amount of rust infection (30% or higher of leaf surface had rust pustules)

**NCLB Rating** – N=None; Sl=minor lesions, MOD=moderate level of infection SEV=severe

(.5-1 % decrease in yield for each 1% leaf area infected (starts with base of 15% leaf area infection) true for both rust and NCLB

**Plant Heights** – The measurement of the plant in inches from the base of the stalk to the top of 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.



## **Additional comments su type** (plant type comments based on 5/29 planting)

**Rocket** – (plots from 5/15 planting were destroyed by raccoons), Early, clean plant, ears close to the ground; very good husk extension and tip fill; good yield; overall ear rating very good.

**SEY6RH1264** – (plots from 5/15 planting were destroyed by raccoons), Early, clean, solid plant; minimal husk extension; very good to excellent tip fill; curved tips on a few ears, a hint of ovalness; very good yield; overall ear rating very good.

**Genesis** – Early season; thin stalk but seems to hold ear up ok; a few lesions on plant that could have been NCLB or SW; **5/15 planting** – long, uniform ears with very good tip fill; nice color; good quality; excellent yield; overall ear rating very good ; **5/29 planting** – some silk girdling; ear uniformity, tip fill and yield not nearly as good in this later planting; overall ear rating barely acceptable.

**SC1263** – (plots from 5/15 planting were destroyed by raccoons), Early season; plant on the short side, exposed ear tips; a number of ears were curved or had curved tips (15/40); some ears were quite oval; very good yield and recovery; overall ear rating unacceptable. This cultivar may have done much better in the earlier planting.

**GH 2171** – Early to midseason; good, solid plant; large diameter ears; **5/15 planting** – excellent tip fill and nice ear uniformity; deep kernels; **5/29 planting** – ears not filled but uniformly so; good ear uniformity; large cob; good kernel color; overall ear rating very good for both plantings; consistent very good yield in both plantings.

**GH 4927** – Early to midseason, solid plant; **5/15 planting** – good tip fill and decent ear uniformity; **5/29 planting**– good tip fill and ear uniformity; consistent good yield and very good overall ear rating both plantings; recovery not as good as some years.

**2409** – Early to midseason; tall, solid, clean plant; marginal husk extension; long, slender, uniform, cylindrical ears; not filled but uniformly so; nice rowing; nice plant/ear package (except for husk cover); very good overall ear rating; good yield; recovery on the low side.

**Prelude** – Early to midseason, clean plant; **5/15 planting** – very good to excellent tip fill and ear uniformity; **5/29 planting** – good tip fill and ear uniformity; small cob; overall ear rating very good in both plantings; very consistent 9 ton yield in both plantings.

**CSUYP8-339** – Early to midseason; solid, clean plant; good husk extension; **5/15 planting** – short, blunt ears with good tip fill and rowing; small kernels; **5/29 planting** – short, uniform ears with good tip fill; very good yield in both plantings; overall ear ratings very good for both plantings.

**HMX2390** – Midseason; solid plant; **5/15 planting** – minimal husk extension; long, slender, slightly tapered ears with very good tip fill; golden yellow, small kernels; a few curved ears; **5/29 planting** - long, slender ears with golden yellow kernels, small cob; a few curved ears; many one sided; very good yield and overall ear rating in both plantings.

**Tamarack** – Midseason; large ears were causing plants to lean over a bit; long, uniform ears; not filled but uniformly so; small cob; excellent yield; very good overall ear rating; good recovery.

**GH19394** – Midseason; clean, solid plant; **5/15 planting** – very good husk cover; slender, uniform, tapered ears that were not quite filled; a few barren plants per replication; **5/29 planting** – long (.6 inch longer in second planting), uniform ears with excellent tip fill; small cob; overall ear rating very good in both plantings; good yield; timing of irrigation may have been a factor in extra length of ear in second planting.

## Additional comments su type continued:

**GH3333** – Midseason; tall, solid, clean plant; **5/15 planting** – uniform, slender, slightly tapered ears with very good tip fill; **5/29 planting** – minimal husk extension; nice ear uniformity and tip fill; nice rowing; small cob; a little better ear uniformity in the second planting; drop in yield in second planting due to lower ears per plant; some barren plants; overall ear rating very good; good recovery.

**203** – Mid to mainseason; tall, clean plant; minimal husk extension; long ears that were not filled but uniformly so; glossy kernels; straight rows; over all ear rating very good; very good yield and recovery.

**449** – Mid to mainseason; good plant; exposed ear tips; very long ears with straight rows; not filled but uniformly so; excellent yield and recovery; very good overall ear rating.

**HMX0398** – Mid to mainseason; bushy, solid plant; long, uniform ears with small kernels and good tip fill; very good yield, recovery and overall ear rating.

**HMX1377** – Mid to mainseason; tall, good plant; good husk extension; large, heavy ears with good tip fill; small, golden yellow kernels; good tip fill; big cob; very good yield, recovery and overall ear rating.

**CSUYP10-437** – Mid to mainseason; solid, clean plant; excellent husk cover; long, slender ears with excellent tip fill and nice rowing; small kernels; small cob; very good yield and overall ear rating; good recovery.

**GH 9597** – Mainseason; industry standard; very good to excellent ear uniformity; good, solid plant; shorter ears with good tip fill; good yield; very good overall ear rating and recovery

**Bonus** – Mainseason; good, solid plant; very good to excellent ear uniformity; very similar ear type as 9597; better husk protection; good yield; very good overall ear rating and recovery.

## ***Cultivar Descriptions Provided by the Seed Source (Su type)***

**Rocket** – *Crites, early maturity (71 days), 7.8 inch cob length, 2.0 inch cob width, 16 rows average, HR for old rust and IR for new D virulent rust.*

**SEY6RH1264** – *Seminis, yellow se, early season maturity (73 days or 1530 heat units), plant height 76 inches, ear height 22 inches, 8.0 inch ear length, 2.0 inch ear diameter, average row count is 18.*

**Genesis** – *Harris Moran, 74 days to maturity, yellow su type, plant height 80 inches, ear height 24 inches, 8.3 inch ear length, 14-16 row count, excellent kernel color.*

**SEY6RH1263** – *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, SCMV.*

**GH 2171** – *Syngenta, 74 days to maturity (1550 hu), 8 inch ear length, 1.9 inch ear diameter, 18 is average row count, 12 mm kernel depth, Rp1g gene for rust resistance, some NCLB and Stewarts Wilt tolerance, Poast herb. tolerance. (similar to Cahill)*

**GH4927** – *Syngenta, 75 days to maturity, stout plant, Rp1i gene for rust resistance, Poast herbicide tolerance.*

**ZUY24090Q** – *Crites, 79 days to maturity, 7.8 in cob length, 2.1 inch cob width, average row number is 20, Plant and cob height rated medium, IR for rust (three races), SU for NCLB and MDMV, IR For SW, Southern Leaf blight and Gosses wilt; tolerant to callisto, accent and laudis; can be planted the entire season; high quality, petite kernel.*

## **Cultivar Descriptions Provided by the Seed Source continued (su type):**

**Prelude** – Crites, 3 days later than Bliss; is an extremely high yielding medium early processing hybrid. Its exceptional quality is unique for its maturity. It is suitable as an early and midseason variety. Prelude has performed well across the USA in the early to mid planting slots. 2-3 days earlier than Jubilee, very sweet with an excellent flavor. Eats like an se type. Field holding ability and hence harvest window is excellent. Cob size is moderate but very consistent. High recovery, Moderated to good stalk strength with reasonable tolerance to stalk rots, can be grown right throughout the season, although is only slightly stronger in the stalk than Jubilee, tolerant to the chemicals Accent and Callisto, moderate multigenic tolerance to rust, moderately susceptible to NLB, MDMV, SW, SLB and Grey Leaf Spot, Worth trialing where you want Jubilee type quality or you need it in an earlier variety, where you want good establishment across a wide range of conditions with improved Smut tolerance and stalk strength, do not plant into high disease pressure times or areas of severe storm activity

**CSUY8-339** – Crookham Co., a first early which will work well later in the season if needed. It will compete with Cahill and 2171. It has old and new rust immunity.

**HMX 2390** – Harris Moran, 78 days to maturity, 84 inch plant height, 30 inch ear height, 8.3 inch ear length, 1.8 inch ear diameter, 18-20 rows, yellow su, high yielding, improved disease resistance (fusarium), intermediate resistance to Common rust, susceptible to both MDMV and NCLB, intermediate resistance to Stewarts wilt and Common Smut, medium kernel style developed for processor market.

**Tamarack** – Crookham, 83 day main season SU, competes with 9597, double rust

**GH 19394** – Syngenta, similar to GH3333 but a few days earlier.

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

**203** – General Mills, full season (1950heat units), Rp1-g & l genes for rust.

**449** – General Mills, full season (1920 heat units), Rp1-g & l genes for rust.

**HMX0398** – Harris Moran, 85 days to maturity, 8.7 inch ear length, 2.0 inch ear diameter, 18-20 row count, R for NCLB and MDMV.

**HMX1377** – Harris Moran, 85 days to maturity, 8.7 inch ear length, 2.1 inch ear diameter, 18-22 row count, R for NCLB and IR for common rust.

**CSUY10-437**- Crookham, 83 day SU, competes with Rocker, double rust, good NCLB, long ear and good cut off

**GH9597** – Syngenta, yellow su, 83 days to maturity (1750 Heat units F.), 1.8 inch average ear diameter, 8 inch average ear length, 18-22 row count, 7.5 ft plant height, 36 inch ear height, 11 mm average kernel depth, Rp1-d,g genes for rust resistance, tolerance to NCLB,MDMV and Stewarts wilt, consistent performer late season.

**Bonus** - - Syngenta, 83 day (1750 heat units), 7.5 ft. plant ht., 36 in. ear ht., 18-22 row count, 8.0 in. ear length, 1.8 in. diameter, 11 mm kernel depth, ears with exceptional uniformity of size, shape and style; petite kernel and golden yellow color; excellent husk length, sturdy clean plant that harvests easily, resistant to common rust (RP1d gene); tolerant to MDMV, Stewart's wilt and NCLB.

**Table 6. Maturity (Supersweet gene type planting date 6/16)**

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist	Seed Company Maturity
Rising Sun	46	1060	72	1596	75.1	72 day
CSHYP8-312	47	1086	72	1596	77.0	76 day
XTH1079	50	1159	73	1621	76.6	79 day
XTH1679	50	1159	73	1621	76.5	79 day
Owattona	49	1131	73	1621	77.1	74 day
ACR 7933RY	50	1159	74	1646	77.5	77 day
Protégé (std)	51	1191	75	1662	78.6	77 day (1615hu)
CSHYP10-403	51	1191	76	1674	76.3	84 day
QHY6RH1077	52	1216	76	1674	76.6	81 d (1700hu)
Marvel Edge	49	1131	80	1758	74.8	80 day
ACR 7287Y	52	1216	80	1758	75.8	77 day
007Y	52	1216	80	1758	75.2	78 day
HMX0375S	52	1216	81	1780	76.5	77 day
HMX9394	53	1232	81	1780	76.4	79 day
HMX0376S	51	1191	81	1780	75.3	80 day
ACXMS3001	51	1191	81	1780	77.3	79 day
Yosemite	53	1232	82	1798	75.0	82 day
Klondike	53	1232	82	1804	74.3	83 day
06G2300	51	1191	82	1804	77.6	mainseason
CSHYP9-363	55	1278	83	1826	77.3	84 day
SHY6RH1339	54	1253	83	1826	76.9	83d (1740hu)
Overland (std)	55	1278	83	1826	77.0	84 day
Galaxy	56	1302	83	1826	77.8	88 day
SHY6RH1365	52	1216	81	1780	80.3	80d (1680hu)
GSS1453	57	1323	86	1888	76.1	84 day
2786	56	1302	86	1888	76.5	86 days
GSS2259P	56	1302	86	1888	77.5	mainseason

**Bicolors**

7112R	52	1216	82	1804	74.2	75 day
CSHBP9-368	55	1278	83	1826	76.0	83 day
C741 (std)	54	1253	86	1888	76.0	1870

**Whites**

CSHWP9-371	52	1216	86	1888	77.0	83 day
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See Table 2.

**Table 7. Ear and Kernel Ratings (Supersweet planting date 6/16)**

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel Size Rating	Kernel Depth (mm)	Kernel Depth Rating	Pericarp Rating	Flavor Rating	Mark. Use
Rising Sun	G	SL T	R	ST	M-L	12	SH-M	OK	SW	C
CSHYP8-312	F-G	SL T	R	ST	L	10	SH	OK	G-SW	C
XTH1079	VG	CY	R-SL O	ST	S-M	11	SH-M	OK	SW	B
XTH1679	G-VG	CY	R-SL O	ST-SL I	S-M	11	SH-M	S-OK	SW	B
Owattona	G-VG	CY	R	ST-SL I	M	11	SH-M	S-OK	G	C
ACR 7933RY	VG	CY	SL O	ST	S-M	12	SH-M	S	SW	B
Protégé (std)	VG	SL T	R-SL O	ST-SL I	S-M	12	M	OK	SW	B
CSHYP10-403	G-VG	SL T	R-SL O	ST	M	11	M	OK-T	G	C
QHY6RH1077	VG-EX	CY	R	ST	S-M	11	SH-M	OK	G-SW	B
Marvel Edge	G-VG	CY	R	ST-SL I	M	missed	M	OK-T	G	C
ACR 7287Y	VG	CY	R	ST-SL I	M	12	M-D	S	G-SW	C
007Y	VG-EX	CY	R	ST	M	13	M-D	OK-T	SW	B
HMX0375S	G-VG	CY	R	ST-SL I	M	13	M-D	T	OK-G	B
HMX9394	VG-EX	CY	R	ST-SL I	M	12	M-D	T	G	C
HMX0376S	VG-EX	V CY	R	SL I	M	13	M-D	OK-T	G	B
ACXMS3001	VG	CY	R-SL O	ST-SL I	M	12	M	S	G-SW	C
Yosemite	VG	CY-SL T	R	ST	M	13	M-D	OK-T	G-SW	C
Klondike	VG	CY	R	ST	M	12	M	OK-T	G-SW	C
06G2300	VG-EX	CY	R	ST-SL I	M	12	M	OK	G-SW	C
CSHYP9-363	VG	CY-SL T	R	ST	M	12	M-D	OK-T	G-SW	C
SHY6RH1339	VG-EX	CY-SL T	R	SL I	M	12	M-D	OK-T	G-SW	C
Overland (std)	VG	CY-SL T	R-SL O	ST-SL I	M	12	M-D	OK-T	G	B
Galaxy	VG	CY-SL T	R	ST-SL I	M	12	M-D	OK	G	B
SHY6RH1365	G-VG	CY-SL T	R	ST-SL I	S-M	13	D	S	OK	C
GSS1453	VG	CY-SL T	R	ST-SL I	M	13	M-D	OK-T	G	B
2786	G-VG	CY	R	ST-SL I	M	13	M-D	OK-T	G	C
GSS2259P	VG-EX	CY-SL T	R	ST-SL I	M	13	M-D	OK-T	G	C
<b>Bicolors</b>										
7112R	VG	V CY	R	ST	M	12	M	S	SW	C
CSHBP9-368	VG-EX	T	R	SL I	M	12	M	OK-T	G-SW	C
C741 (std)	G-VG	CY-SL T	R	ST-SL I	M	14	M-D	OK-T	G	C
<b>Whites</b>										
CSHWP9-371	G-VG	SL T	R	ST-SL I	M	14	M-D	OK	G-SW	C

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

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Kernel Row Range	Unfill. Tip (in)	Wt. Per Ear Unhusk. (lbs)	Sample Unhusk. Wt. Per Ear (lb)	Samp. Husk Wt. Per Ear (lb)	Kern. Wt. Per Ear (lb)	Plants Per Acre (1000)	Ears Per Plant	% Moist	Tons Per Acre	Recov (%)	Over. Ear Rating Sample
Rising Sun	0.0	8.5	2.0	12 to 18	0.8	0.81	0.85	0.67	0.32	21.3	0.91	75.1	7.84	37	2.5
CSHYP8-312	0.5	8.0	1.8	12 to 16	1.0	0.74	0.75	0.53	0.22	23.2	0.94	72.3	8.0	30	2.5
XTH1079	1.3	7.7	1.9	14-22	0.0	0.81	0.85	0.57	0.28	21.3	0.92	76.6	8.0	33	4.0
XTH1679	1.1	7.6	1.9	16-22	0.2	0.80	0.84	0.60	0.28	21.8	0.95	76.5	8.32	34	3.5
Owattona	-0.4	8.3	2.0	12 to 20	1.2	0.78	0.81	0.62	0.30	22.1	0.97	77.1	8.33	37	3.0
ACR 7933RY	2.0	8.0	1.9	14-20	0.0	0.77	0.78	0.57	0.30	20.3	0.77	77.5	6.0	39	3.3
Protégé (std)	-0.1	7.8	1.9	16-22	0.5	0.76	0.78	0.58	0.29	21.8	0.97	78.6	8.08	37	3.4
CSHYP10-403	-0.5	8.3	2.0	14-22	0.7	0.77	0.81	0.63	0.32	19.6	0.87	76.3	6.6	39	3.3
QHY6RH1077	0.3	7.9	1.8	14-20	0.1	0.76	0.77	0.56	0.26	22.9	0.96	76.6	8.45	34	4.2
Marvel Edge	0.7	8.1	2.1	14-20	0.6	0.84	0.85	0.69	0.38	21.5	0.94	74.8	8.54	44	3.6
ACR 7287Y	0.2	8.6	2.04	16-22	0.2	0.87	0.91	0.72	0.40	19.7	1.00	75.8	8.6	44	3.8
007Y	1.0	8.7	2.1	16-20	0.0	1.09	0.94	0.74	0.44	21.2	0.82	73.8	9.1	47	4.1
HMX0375S	-0.1	8.1	2.1	16-22	0.5	0.85	0.89	0.68	0.35	21.3	0.99	76.5	9.0	39	3.7
HMX9394	-0.2	8.1	2.0	14-20	0.1	0.76	0.79	0.64	0.32	20.5	1.03	76.4	8.06	40	3.7
HMX0376S	-0.3	7.8	1.9	14-18	0.2	0.80	0.81	0.62	0.31	21.5	0.96	75.3	8.22	39	3.9
ACXMS3001	0.7	7.7	2.1	14-20	0.2	0.84	0.87	0.65	0.37	21.2	0.96	77.3	8.5	42	3.7
Yosemite	0.1	8.4	2.1	14-20	0.0	1.02	1.03	0.74	0.36	20.6	0.99	75.0	10.3	35	3.9
Klondike	-0.1	8.1	2.0	12 to 18	0.2	0.77	0.77	0.62	0.31	21.2	0.96	74.3	7.85	40	3.8

**Table 8. Ear and Yield Data continued:**

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Kernel Row Range	Unfill. Tip (in)	Wt. Per Ear Unhusk. (lbs)	Sample Unhusk. Wt. Per Ear (lb)	Samp. Husk Wt. Per Ear (lb)	Kern. Wt. Per Ear (lb)	Plants Per Acre (1000)	Ears Per Plant	% Moist	Tons Per Acre	Recov (%)	Over. Ear Rating Sample
06G2300	0.4	8.2	2.0	14-20	0.1	0.87	0.88	0.67	0.35	22.2	0.98	77.6	9.42	40	3.9
CSHYP9-363	-0.4	8.2	2.0	14-22	0.4	0.79	0.82	0.65	0.33	21.6	0.96	77.3	8.24	40	3.6
SHY6RH1339	0.2	8.5	2.2	16-24	0.5	0.96	0.97	0.80	0.42	21.1	1.01	76.9	10.2	43	4.1
Overland (std)	-0.8	8.5	2.1	16-24	0.3	0.88	0.90	0.73	0.38	21.2	0.97	77.0	9.0	42	4.0
Galaxy	0.0	7.9	2.0	16-22	0.1	0.80	0.83	0.66	0.34	20.6	0.95	77.8	7.83	41	4.0
SHY6RH1365	0.5	7.8	2.1	16-24	0.1	0.90	0.93	0.71	0.41	21.5	0.98	80.3	9.49	44	4.0
GSS1453	-0.9	8.5	2.1	16-22	0.3	0.84	0.87	0.73	0.37	21.6	0.97	76.1	8.86	43	3.9
2786	-0.8	9.1	2.1	14-22	0.3	0.93	0.96	0.84	0.45	20.9	0.92	76.5	8.95	46	3.9
GSS2259P	0.3	8.5	2.1	14-20	0.0	0.87	0.88	0.73	0.36	21.8	1.04	77.5	9.8	41	4.4
<b>Bicolor</b>															
7112R	0.9	7.7	1.9	14-18	0.1	0.75	0.75	0.59	0.33	21.6	0.93	73.9	7.52	43	3.8
CSHBP9-368	0.7	7.6	2.1	14-22	0.0	0.80	0.82	0.61	0.31	22.4	0.97	76.0	8.7	38	4.0
C741 (std)	-1.6	8.3	2.2	14-24	0.5	0.92	0.72	0.78	0.46	21.5	0.96	76.0	9.54	49	3.3
<b>White</b>															
CSHWP9-371	0.1	8.4	2.005	14-16	0.3	0.87	0.92	0.70	0.36	23.2	0.98	77.0	9.9	39	3.6

**Table 9. Plant Characteristics (Supersweet gene type)**

Cultivar	Plt. Unif. Rating	Tillars Rating	Ear Position Rating	* Lodging	Rust Rating	NCLB Rating	Plt Ht (in)	Ear ht. (in)
Rising Sun	VG	S - L	45	N	N	N	82	20
CSHYP8-312	VG	S - L	30	N	N	N	65	17
XTH1079	VG	N-S	45	SL	N	N	75	19
XTH1679	G-VG	S - L	45	SL	N	N	77	20
Owattona	VG	S - L	45	SL	N	N	83	20
ACR 7933RY	G-VG	N-S	45	SL	N	N	78	20
Protégé (std)	VG	N-S	45	N	N	N	75	21
CSHYP10-403	VG	N-S	45	SL-MOD	N	N	83	26
QHY6RH1077	G-VG	N-S	45	SL	N	N	83	21
Marvel Edge	VG	S - L	45	SL-MOD	N	N	83	23
ACR 7287Y	G-VG	N-S	45	SL	SL	N	81	21
007Y	VG	S - L	30	SL-MOD	N	N	84	21
HMX0375S	VG-EX	S - L	45	N	N	N	75	21
HMX9394	VG	S - L	45	SL	N	N	83	26
HMX0376S	VG	N-S	30	SL-MOD	N	N	82	25
ACXMS3001	G	F- L	45	MOD-SEV	MOD	N	75	20
Yosemite	G-VG	F- L	45	SL-MOD	N	SL	86	23
Klondike	G-VG	S - L	45	MOD	N	N	86	26
06G2300	G-VG	N-S	30	N	SL	N	86	23
CSHYP9-363	VG	N-S	45	SL-MOD	N	N	86	25
SHY6RH1339	VG	N-S	30	SL-MOD	N	N	89	26
Overland (std)	VG	N-S	90	N	N	N	80	26
Galaxy	VG	S - L	45	N	SL	N	85	25
SHY6RH1365	G-VG	S - L	30	SL	N	N	89	26
GSS1453	VG	S - L	90	SL	N	N	85	26
2786	G-VG	S - L	45	SL	N	N	88	25
GSS2259P	VG	N-S	60-90	N	N	N	99	44
<b>Bicolor</b>								
7112R	G	N-S	30	SL	N	MOD	78	23
CSHBP9-368	G	N-S	30	MOD-SEV	N	N	93	33
C741 (std)	G	N-S	45	MOD-SEV	N	N	88	34
<b>White</b>								
CSHWP9-371	G	N-S	30	MOD-SEV	N	N	97	31

Column descriptions same as Table 5

\* Strong winds from remnants of hurricane caused some lodging.



## Additional Comments Supersweet Type (Yellow)

Plant type for lodging was tested due to remnants of a hurricane that came through about mid harvest.

**Rising Sun** – Early, good plant; marginal husk extension; long ears that didn't fill; many curved ears (22/40); large cob; straight rows; overall ear rating unacceptable.

**CSHYP8-312** – Early, short plants; slender ears that were not filled and not very uniform; big cob; overall ear rating unacceptable.

**XTH1079** – Early to midseason; a few plants leaning over; good husk extension; shorter, uniform, nicely filled ears; a hint of ovalness on some ears; overall ear rating very good; good yield, lower recovery.

**XTH1679** – Early to midseason; a few plants leaning over; similar to 1079 but uniformity not as good; overall ear rating good to very good.

**Owattona** – Early to midseason; slender stalks that had a few a few plants leaning over; exposed ear tips; poorly filled ears with medium to large kernels; large cob; barely acceptable ear rating; good yield.

**ACR7933RY** – Early to midseason; slender plants with minor lodging; low ear per plant ratio cut yield; cylindrical ears with excellent fill and straight rows; ears were a bit oval (this resulted in overall ear rating being only good); low yield but good recovery.

**Protégé** – Early to midseason, good, clean plant; exposed ear tips; good ear uniformity; 9/40 flat tip ears; overall ear rating is good; good yield.

**CSHYP10-403** – Early to midseason; minor to moderate plant lodging (20-25%); exposed ear tips; some curved ears; ovalness is a concern; small cob; did not yield; overall ear rating a bare acceptable.

**QHY6RH1077** – Early to midseason, minor plant lodging (10-15%); marginal husk protection; very uniform, slender ears with good tip fill and nice rowing; overall ear rating very good to ex.; good yield.

**Marvel Edge** – Early to midseason; minor to moderate lodging (broken plants); good husk protection; ears a bit coarse looking (some ears lose a row at the tip end); large diameter ears that did not fill; good yield with very good recovery; good to very good overall ear rating.

**ACR 7287Y** – Early to midseason; some minor lodging; slight trace of some rust pustules; marginal husk protection; long, cylindrical ears with very good tip fill; small cob; plant population down a bit which would have negatively affected yield; excellent recovery; very good overall ear rating; deserves a look in replicated trial.

**007Y** – Early to midseason, minor to moderate plant lodging; good husk protection; long, large diameter, cylindrical ears with excellent tip fill; small cob; very good yield and excellent recovery; nice ear type but concerns about plant type.

**HMX0375S** – Early to midseason; bushy, decent plant; exposed ear tips; large diameter ears that did not fill; tough pericarp; small cob; overall ear rating good to very good; good yield and recovery.

**HMX9394** – Midseason; a few plants leaning over; exposed ear tips; slender ears with excellent fill and golden yellow kernels; small cob; 10/40 curved ears; ear uniformity varied from exceptional to good; overall ear rating good to very good; good yield and very good recovery.

**HMX0376S** – Midseason; minor plant lodging with both broken plants and plants leaning over; exposed ear tips; shorter, very uniform, cylindrical ears with excellent tip fill; small cob; some slightly curved ears (8/40); overall ear rating very good; good yield and very good recovery.

## **Additional Comments Supersweet Type (Yellow) continued:**

**ACXMS3001** – Midseason; moderate to severe lodging; moderate rust infection; good husk protection; short, large diameter ears with large kernels and excellent tip fill; large cob; overall ear rating good to very good; good yield and excellent recovery.

**Yosemite** – Midseason; minor plant lodging; a few NCLB lesions; marginal husk extension; long, large diameter ears with very good tip fill; very good to excellent ear uniformity; 10/40 slightly curved ears hurt overall ear rating but still very good; excellent yield in each replication (best yield in the trial); decent recovery.

**Klondike** – Midseason; moderate plant lodging (20-30% plants down); exposed ear tips; ears had good tip fill and good kernel color; straight rows; a few curved ears; good to very good overall ear rating; decent yield but very good recovery.

**06G2300** – Midseason; good plant type; minor rust infection; very good ear uniformity; very good tip fill; overall ear rating is very good; very good yield and recovery.

**CSHYP9-363** – Midseason; minor to moderate plant lodging (15-20%); exposed ear tips; a few curved ears; overall ear rating good to very good; small cob; decent yield and very good recovery.

**SHY6RH1339** – mid to mainseason; tall plants with roughly 10-20% leaning over; marginal husk extension; very good to excellent ear uniformity; large diameter ears with good fill; medium to large cob; excellent yield and recovery; overall ear rating very good; decent quality; should be tried commercially.

**Overland** – Mainseason; stout, bushy plants; exposed ear tips; long, large diameter ears not quite filled but uniformly so; overall ear rating very good; very good yield and recovery.

**Galaxy** – Mainseason; solid, bushy plants; slight amount of rust infection; marginal husk protection; very good ear uniformity and tip fill; overall ear rating very good; decent yield but very good recovery.

**SHY6RH1365** – Mainseason, minor plant lodging (10%); decent husk protection; shorter, large diameter, well filled ears with deep kernels; small cob; very good overall ear rating; very good yield and recovery; moisture was not a good indication of maturity on this one. This one should be tried commercially.

**GSS1453** – Mainseason; a few plants leaning over; exposed ear tips; long, large diameter ears; overall ear rating very good; very good yield and recovery.

**2786** – Mainseason; bushy plant; minor plant lodging (a few plants leaning over); exposed ear tips; very long, large diameter, cylindrical ears with good fill; good to very good overall ear rating; very good yield and excellent recovery.

**GSS2259P** – Mainseason; ears high on the plant; strong, stout plant; long, large diameter ears with very good to excellent ear uniformity and tip fill; excellent yield and very good recovery; very good to excellent overall ear rating; probably the best overall variety in the trial. Has proved itself commercially.

### **Bicolor**

**7112R** – Midseason; minor lodging (10-15%); moderate level of NCLB infection; good husk extension; shorter, slender, cylindrical, uniform ears with very good tip fill; good to very good overall ear rating; yield did not compare to other two but it has good recovery.

**CSHBP9-368** – Midseason; moderate to severe plant lodging (up to 50%); short, tapered ears with excellent fill; small cob; many of the broken plants had corn borer injury which might indicate that it is a bit more susceptible to corn borer; very good yield; good color contrast; overall ear rating very good; might be worth trying on a small commercial level with a good spray program.

## **Additional Comments Supersweet Type (Yellow) continued:**

**C741** – Mainseason; moderate to severe lodging (up to 60%); exposed ear tips with plenty of insect injury; large diameter ears that didn't fill; very good yield with excellent recovery; overall ear rating is good.

### **White**

**CSHWP9-371** – Mainseason; moderate to severe lodging (40%); marginal husk protection; a few curved ears; a bit coarse looking (large kernels); long ears with good tip fill; small cob; overall ear rating good to very good; excellent yield with decent recovery.

## ***Descriptions Provided by the Seed Source (Supersweets)***

***Rising Sun (HY 1691)*** - early season (same maturity as Sheba) high quality processing supersweet which has good vigor and exceptional eating quality, has a large cob for its maturity, competes in the Sheba class as a start up or catch up processing supersweet, very good cool condition growing ability, very good bright clean yellow, cooks bright yellow, good kernel style, long 20 cm 14-16 row cob, good tolerance to Rp1d rust and moderate tolerance to the D virulent strain, moderately susceptible to NLB and SW, susceptible to MDMV, tolerant to the chemicals Accent and Callisto, has shown some tendency to bend when over mature, trial anywhere Sheba is grown, use where you want improved establishment under cool conditions, an improved taller and stronger plant style, has outyielded Sheba in trials.

**CSHYP8-312** – Crookham, very early SH2, 76 days, high yield for maturity.

**XTH1079** – Illinois Foundation Seeds, 79 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, 16-22 average kernel rows, bright yellow kernel color, good tip fill, productive and strong hybrid with excellent resistance to MDMV and new rust (Gl alleles).

**XTH 1679** – Illinois Foundation Seeds, 79 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 (Gl alleles).

**Owattona** - Harris Moran, 74 days, 8.5 inch ear length, 16-18 row count, good disease package.

**ACR7933RY** – Abbott & Cobb, 77 days; 8.5 inch ear length; 18-20 row count; excellent kernel color and shape; (HR) Rp1G, Rp1I: (IR) NCLB, SCLB and SW.

**Protégé** – Syngenta, 77 days to maturity (1615 heat units), similar to GSS 9299 with newer I gene for rust resistance and better ear uniformity.

**CSHYP10-403** – Crookham, 84 day SH2, double rust, nice kernel style and good cut off.

**QHY6RH1077** – Seminis, yellow sh2, 81 days (1700hu), 82 inch plant height, 24 inch ear height, 8.0 inch ear length, 1.9 inch ear diameter, 16-18 average row count.

**Marvel Edge** – Crookham, 80 day SH2, double rust, good NCLB, maintain quality in large harvest window, responds to high populations

**ACR7287Y** – Abbott & Cobb, 77 days to maturity. High glow yellow; excellent eating quality; 20 row count; 9.0 inch ear length.

**SS007Y** – Abbott & Cobb, 78 days to maturity; 8.5 inch ear length; 18-20 row count; RR-Rp1D, NCLB.

**HMX0375S** – Harris Moran, 77 days to maturity, 8 inch ear length, 2 inch ear diameter, 16-18 row count, IR for NCLB, MDMV and common rust.

## **Descriptions Provided by the Seed Source (Supersweets) continued:**

**HMX9394** – Harris Moran, 79 days to maturity, 8 inch ear length, 2 inch ear diameter, 18-20 row count, R for NCLB and MDMV, IR for common rust.

**HMX0376S** – Harris Moran, yellow sh2, 80 days to maturity, 8 inch ear length and 2.0 inch ear diameter, 16-18 average row count, IR for NCLB, MDMV and common rust.

**ACXMS3001** – Abbott & Cobb; 79 days; 8.5 inch ear length; 18-20 row count; HR for NCLB

**Yosemite** – Harris Moran, 82 days to maturity, strong plant (84 inches tall), cylindrical, attractive ear (8 inch length and 2.0 inch ear diameter, bright yellow kernel color, average row count 16-18, IR for NCLB (Et), MDMV and Common rust.

**Klondike** – Harris Moran, 83 days to maturity, 84 inch plant height, 30 inch ear height, 8.3 inch ear length, 2.0 inch ear diameter, 16-20 row average, IR for rust and NCLB.

**06G2300** – Seneca Vegetable Research, full season maturity.

**CSHYP9-363** – Crookham, 84 day SH2, double rust.

**SHY6RH1339** – Seminis, yellow sh2, 83 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.

**Overland** – (GSS 3287) – Rogers, 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.

**Galaxy** – Crites, 88 days to maturity, 8.2 inch ear length, 2.0 inch cob width, 20 rows average, M plant and ear height, HR for old race of rust and Susc to new race of common rust, IR for NCLB and Stewarts wilt, Susc to MDMV, tolerant to Callisto and Accent.

**SHY6RH1365** – Seminis, yellow sh2, 80 days (1680hu), 75 inch plant height, 24 inch ear height, 8.0 inch ear length, 2.0 inch ear diameter, 18-20 average row count.

**GSS1453** – Syngenta, new Overland with three rust genes (dgi)

**ZHY27860Q** – Crites, 86 days to maturity, 8.2 inch ear length, 2.0 inch ear diameter, 18 is average row count, HR for three races of rust, IR for NCLB and SW, SU for MDMV, tolerant to accent, tall, strong plant with cylindrical cobs, good color, good for freezing and canning.

**GSS2259P** – Syngenta, has Poast herbicide tolerance, strong emergence, very strong plant, high yield and case recovery, best disease package of any Sh2 varieties in Syngenta sweet corn program, g gene for rust, HR for MDMV, smut tolerance, very good tolerance to Fusarium/root rot, able to withstand higher plant populations.

## **Bicolors**

**7112R** – Abbott & Cobb, 75 day; 8 inch ear length; HR for Ps; IR for Et, Bm, Pst

**CSHBP9-368** – Crookham, 83 day bicolor SH2, competes with 5362, good yield and good color contrast.

**C741** – General Mills, bicolor, full season, Rp1d gene for rust resistance.

## **White**

**CSHWP9-371** – Crookham, 83 day white SH2, competes with 3681 but more consistent.

**Table 10. Weather Summary 2012**

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
5/7/12	66	45	55.5	0	0	5.5	5.5
5/8/12	64	48	56	0.57	0.57	6	11.5
5/9/12	66	52	59	0.31	0.88	9	20.5
5/10/12	67	46	56.5	0.01	0.89	6.5	27
5/11/12	57	42	49.5	0	0.89	0	27
5/12/12	66	47	56.5	0	0.89	6.5	33.5
5/13/12	78	55	66.5	0	0.89	16.5	50
5/14/12	72	55	63.5	0	0.89	13.5	63.5
5/15/12	73	55	64	0	0.89	14	77.5
5/16/12	72	55	63.5	0.04	0.93	13.5	91
5/17/12	77	41	59	0	0.93	9	100
5/18/12	62	38	50	0	0.93	0	100
5/19/12	73	47	60	0	0.93	10	110
5/20/12	83	52	67.5	0	0.93	17.5	127.5
5/21/12	86	60	73	0	0.93	23	150.5
5/22/12	80	59	69.5	0	0.93	19.5	170
5/23/12	78	60	69	0	0.93	19	189
5/24/12	77	57	67	0	0.93	17	206
5/25/12	81	64	72.5	0	0.93	22.5	228.5
5/26/12	87	63	75	0	0.93	25	253.5
5/27/12	81	54	67.5	0	0.93	17.5	271
5/28/12	80	59	69.5	0	0.93	19.5	290.5
5/29/12	90	66	78	0.11	1.04	28	318.5
5/30/12	89	62	75.5	0.41	1.45	25.5	344
5/31/12	74	52	63	0	1.45	13	357
6/1/12	65	48	56.5	0	1.45	6.5	363.5
6/2/12	64	52	58	0.31	1.76	8	371.5
6/3/12	66	54	60	0.01	1.77	10	381.5
6/4/12	64	51	57.5	0.13	1.9	7.5	389
6/5/12	58	49	53.5	0.14	2.04	3.5	392.5
6/6/12	66	47	56.5	0	2.04	6.5	399
6/7/12	73	51	62	0.1	2.14	12	411
6/8/12	76	52	64	0	2.14	14	425
6/9/12	80	60	70	0.22	2.36	20	445
6/10/12	73	60	66.5	0.42	2.78	16.5	461.5
6/11/12	87	64	75.5	0	2.78	25.5	487
6/12/12	89	65	77	0.46	3.24	27	514
6/13/12	76	51	63.5	0.47	3.71	13.5	527.5
6/14/12	67	49	58	0	3.71	8	535.5
6/15/12	75	52	63.5	0	3.71	13.5	549
6/16/12	81	57	69	0.02	3.73	19	568
6/17/12	82	61	71.5	0	3.73	21.5	589.5
6/18/12	83	64	73.5	0	3.73	23.5	613

6/19/12	74	63	68.5	0.2	3.93	18.5	631.5
6/20/12	88	63	75.5	0	3.93	25.5	657
6/21/12	92	68	80	0	3.93	30	687
6/22/12	90	67	78.5	0	3.93	28.5	715.5
6/23/12	80	60	70	0	3.93	20	735.5
6/24/12	80	58	69	0	3.93	19	754.5
6/25/12	81	55	68	0.03	3.96	18	772.5
6/26/12	67	53	60	0.08	4.04	10	782.5
6/27/12	73	58	65.5	0	4.04	15.5	798
6/28/12	78	57	67.5	0	4.04	17.5	815.5
6/29/12	87	64	75.5	0	4.04	25.5	841
6/30/12	88	65	76.5	0	4.04	26.5	867.5
7/1/12	88	67	77.5	0	4.04	27.5	895
7/2/12	84	62	73	0	4.04	23	918
7/3/12	83	61	72	0	4.04	22	940
7/4/12	89	66	77.5	0	4.04	27.5	967.5
7/5/12	92	67	79.5	0	4.04	29.5	997
7/6/12	83	60	71.5	0	4.04	21.5	1018.5
7/7/12	92	68	80	0	4.04	30	1048.5
7/8/12	80	66	73	0.24	4.28	23	1071.5
7/9/12	82	61	71.5	0	5.5	21.5	1093
7/10/12	79	57	68	0	5.5	18	1111
7/11/12	82	56	69		5.5	19	1130
7/12/12	85	57	71		5.5	21	1151
7/13/12	90	62	76		5.5	26	1177
7/14/12	91	67	79		5.5	29	1206
7/15/12	89	72	80.5	0.01	5.51	30.5	1236.5
7/16/12	83	69	76	0.34	5.85	26	1262.5
7/17/12	86	70	78		5.85	28	1290.5
7/18/12	94	72	83		5.85	33	1323.5
7/19/12	82	60	71		5.85	21	1344.5
7/20/12	80	58	69	0.05	5.9	19	1363.5
7/21/12	68	58	63	0.12	6.02	13	1376.5
7/22/12	82	62	72		6.02	22	1398.5
7/23/12	87	66	76.5	0.16	6.18	26.5	1425
7/24/12	92	73	82.5		6.18	32.5	1457.5
7/25/12	83	59	71		6.18	21	1478.5
7/26/12	83	63	73	0.98	7.16	23	1501.5
7/27/12	81	65	73	0.52	7.68	23	1524.5
7/28/12	78	62	70	0.26	7.94	20	1544.5
7/29/12	78	63	70.5	0.12	8.06	20.5	1565
7/30/12	82	57	69.5		8.06	19.5	1584.5
7/31/12	85	63	74		8.06	24	1608.5
8/1/12	88	64	76	0.62	8.68	26	1634.5
8/2/12	81	61	71		8.68	21	1655.5
8/3/12	84	65	74.5		8.68	24.5	1680

8/4/12	87	69	78		8.68	28	1708
8/5/12	91	73	82		8.68	32	1740
8/6/12	88	61	74.5	0.11	8.79	24.5	1764.5
8/7/12	76	56	66		8.79	16	1780.5
8/8/12	84	58	71		8.79	21	1801.5
8/9/12	87	63	75		8.79	25	1826.5
8/10/12	84	65	74.5	0.21	9	24.5	1851
8/11/12	77	64	70.5	0.08	9.08	20.5	1871.5
8/12/12	79	58	68.5		9.08	18.5	1890
8/13/12	76	60	68	0.03	9.11	18	1908
8/14/12	82	63	72.5	0.02	9.13	22.5	1930.5
8/15/12	79	63	71	0.32	9.45	21	1951.5
8/16/12	77	58	67.5		9.45	17.5	1969
8/17/12	82	63	72.5		9.45	22.5	1991.5
8/18/12	76	54	65		9.45	15	2006.5
8/19/12	72	50	61		9.45	11	2017.5
8/20/12	77	50	63.5		9.45	13.5	2031
8/21/12	76	51	63.5	0.08	9.53	13.5	2044.5
8/22/12	77	54	65.5		9.53	15.5	2060
8/23/12	81	55	68		9.53	18	2078
8/24/12	83	57	70		9.53	20	2098
8/25/12	87	60	73.5		9.53	23.5	2121.5
8/26/12	87	60	73.5		9.53	23.5	2145
8/27/12	84	66	75		9.53	25	2170
8/28/12	85	65	75	0.79	10.32	25	2195
8/29/12	78	53	65.5		10.32	15.5	2210.5
8/30/12	73	52	62.5		10.32	12.5	2223
8/31/12	83	56	69.5		10.32	19.5	2242.5
9/1/12	91	61	76		10.32	26	2268.5
9/2/12	82	55	68.5		10.32	18.5	2287
9/3/12	83	57	70		10.32	20	2307
9/4/12	79	65	72		10.32	22	2329
9/5/12	82	65	73.5	0.32	10.64	23.5	2352.5
9/6/12	80	64	72		10.64	22	2374.5
9/7/12	85	61	73		10.64	23	2397.5
9/8/12	82	62	72	0.42	11.06	22	2419.5
9/9/12	82	53	67.5		11.06	17.5	2437
9/10/12	68	50	59		11.06	9	2446
9/11/12	66	48	57		11.06	7	2453
9/12/12	75	51	63		11.06	13	2466
9/13/12	58	42	50	0.02	11.08	0	2466
9/14/12	60	42	51	0.02	11.1	1	2467
9/15/12	65	45	55	0.02	11.12	5	2472
9/16/12	65	49	57	0.33	11.45	7	2479
9/17/12	70	51	60.5	0.02	11.47	10.5	2489.5
9/18/12	76	59	67.5	0.01	11.48	17.5	2507