# N. Y. S. 2011 PROCESSING SWEET CORN VARIETY REPLICATED AND OBSERVATION (su and supersweet type) TRIAL SUMMARY

James Ballerstein - Research Support Specialist, Horticultural Sciences New York State Agricultural Experiment Station - Cornell University, Geneva, New York

Stephen Reiners - Associate Professor, Horticultural Sciences New York State Agricultural Experiment Station - Cornell University, Geneva, New York

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 (7) were planted on 5/12. This trial was completely destroyed by raccoons shortly before harvest. These early su cultivars were planted again along with mainseason su cultivars on 6/3. A single planting of the supersweet type (four replications) was planted on 6/17. 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.

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 post emergence 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.

May was cool and very wet. The early su planting was planted into marginal ground and although emergence was good, plants were shorter than normal prior to raccoon damage. Rainfall was below normal after mid June and irrigation was begun in early July. The supersweet planting was planted into ground that was a bit on the dry side and emergence was less uniform than I would have liked. Heat units over the growing season were above normal. Fortunately, rain begain 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 evident in some of the cultivars. Common Rust infection was almost non existent. We did see NCLB symptoms again this year. We did see some lesions that were suspected to be Vosses wilt but samples were tested and the pathogen could not be found. See comments and tables 8 and 12.

We wish to thank the NYS Vegetable Research Association, Ontario Processing Vegetable Growers and cooperating seed companies for their financial support of this project. We also wish to thank Mr. Michael Gardinier of FarmFreshFirst for his assistance in planning the trials. Special thanks to Mrs. Wilma Kean, Ms. Patty Gibbs, Mr. Russ Harris, Mike Rosato, Katie Reiners, Sean Murphy, Nick Schessl, and Anna Ballerstein for their assistance in day to day operations. Please address any questions to me at the address below.

Jim Ballerstein

315-787-2223

jwb2@cornell.edu

#### TABLE OF CONTENTS

Page 1 Title page

Page 2 Table of Contents

Page 3 Table 1. Cultivar List

# Su Type

Page 4 Table 2. Maturity Data

Page 5 Table 3. Ear and Kernel Ratings

Page 6 Column explanations for Tables 4 &8.

Page 7 Table 4. Ear and Yield Data

Page 8 Table 5. Plant Characteristics

Pages 9&10 Additional Comments.

Pages 10 Cultivar Descriptions from the Seed Source.

# Supersweet Type

Page 11 Table 6. Maturity Data

Page 12 **Table 7**. Ear and Kernel Ratings

Pages 13 &14 Table 8. Ear and Yield Data

Page 15 Table 9. Plant Characteristics

Pages 16 -18 Additional Comments

Pages 18&19 Cultivar Descriptions from the Seed Source

Pages 20-22 **Table 10**. Weather Summary

Table 1. Cultivar List

Table I.	Cultival Lis	
	Seed	Trial
Su Type	Source	type
GH 4927	Syngenta	rep
G72381	НМ	rep
124	G. Mills	rep
CSUYP 8-339	Crookham	ob
GH 2171	Syngenta	rep
SEY6RH1263	Seminis	rep
GH3333	Syngenta	rep
SEY6RH1264	Seminis	rep
CSUYP 8-340	Crookham	ob
GH 9597	Syngenta	rep
HMX0399	H. Moran	rep
HMX1377	H. Moran	rep
HMX0398	H. Moran	rep
203	G. Mills	rep
402	G. Mills	rep
450	G. Mills	rep
Bonus	Syngenta	rep
SUY6RH1176	Seminis	rep
Superswe	et Bicolor	
HMX0365BS	H. Moran	rep
CSHBP9-351	Crookham	ob
C741 std	General Mills	rep
BSS5362 (st	Syngenta	rep
CSHBP9- 368	Crookham	ob
BSS 8040	Syngenta	rep
Crossfire	Crites	rep

Supersweet		Trial
Yellow	Seed Source	type
SS7300R	Abb.&Cobb	ob
ACX7473 RY	Abb.&Cobb	ob
ACR7901 RY	Abb.&Cobb	ob
ACR 7902 MRY	Abb.&Cobb	ob
HMX 0370	H. Moran	rep
Protégé	Syngenta	rep
HMX 0375S	H. Moran	rep
SS Jubilee std	Syngenta	rep
HMX 9388S	Harris Moran	rep
SS007R (7132)	Abb.&Cobb	rep
HMX 9386S	H. Moran	rep
HMX 9394	H. Moran	rep
06G2300	Sen. Veg Res.	rep
ACR7242MRY	Abb.&Cobb	rep
ACR 7287Y	Abb.&Cobb	ob
ACXSS7403	Abb.&Cobb	ob
CSHYP9-363	Crookham	ob
GSS3071	Syngenta	rep
Overland	Syngenta	rep
GSS2259P	Syngenta	rep
Galaxy	Crites	rep
GSS1453	Syngenta	rep

#### **Supersweet**

#### White

Ice Queen	Harris Moran	rep
Devotion	Seminis	rep

G. Mill = General Mills, Syngenta = Syngenta-Rogers Brand, Crites = Crites Seeds,Seminis = Seminis Vegetable Seeds - Processor Division,

H. Moran = Harris Moran, Crookham = Crookham Co., A&C = Abbott and Cobb

Table 2. Maturity - Main Su planting date 6/3

Table 2. IVI	acarrey	1 14111 Ou	Pidireiri	y date of			
	Days To	Heat units	Days to	Heat units	% Moist.	Seed Source	Seed Source
	Silk	to silk	Harv.	to harv.	At Harv.	Maturity	Heat Units
Cultivar						_	
GH 4927	53	1096	82	1700	71.8	75 days	
G72381	53	1096	82	1700	69.0	72 day	
124	54	1118	82	1700	71.8	early	1630
CSUYP 8-339	55	1140	84	1737	69.8	first early	
GH 2171	55	1140	84	1737	72.1	74 days	
SEY6RH1263	55	1140	84	1737	73.1	early	
GH3333	55	1140	86	1765	76.0	80 days	
SEY6RH1264	58	1207	87	1793	69.8	early	
CSUYP 8-340	63	1325	89	1815	70.3	main season	
GH 9597	61	1325	89	1815	71.4	83 days	
HMX0399	61	1325	90	1849	71.1	86 day	
HMX1377	63	1325	91	1849	70.9	83 day	
HMX0398	63	1325	91	1849	72.3	85 day	
203	63	1325	91	1849	71.4	full season	1950
402	64	1345	92	1871	69.9	full season	1900
450	64	1345	92	1871	71.4	full season	1920
Bonus	64	1345	94	1923	68.6	83 days	
SUY6RH1176	64	1345	94	1923	70.6	full season	

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 5/28

	Ear Unif. Rating	Ear Shape Rating	Oval / Round	Kernel Rowing	Kernel size	Kernel Depth	Kernel Depth	Pericarp Rating	Flavor Rating	Market Use
Cultivar			Rating	Rating	Rating	(mm)	Rating			Rating
GH 4927	G-VG	CY	R	ST-SL I	М	12	M-D	OK	OK-G	BOTH
G72381	G	CY	R	ST-SL I	М	12	SH-M	OK	OK-G	CUT
124	G-VG	SL T	R	ST	M-L	10	SH	S	OK-G	CUT
339	VG	CY	R	ST	М	12	M-D	OK-T	OK	BOTH
GH 2171	G-VG	CY	R	ST-SL I	М	12	М	OK-T	OK	CUT
1263	VG-E	CY	R	ST	М	12	М	S	OK	вотн
GH3333	VG-E	CY-SL T	R	ST	М	11	M-D	OK	OK	вотн
1264	VG	CY	R	ST-SL I	М	13	M-D	S	BL-OK	BOTH
340	VG-E	CY	R	ST	М	13	M-D	OK	OK	вотн
GH 9597	VG	CY	R	ST	S-M	11	М	Т	BL	вотн
HMX0399	VG	CY	R	ST	S-M	11	М	OK-T	OK	CUT
HMX1377	VG	CY	R	ST	S-M	12	М	OK	OK	CUT
HMX0398	VG-E	CY-SL T	R	ST	S-M	11	М	OK	OK	CUT
203	G-VG	CY	R	ST	S-M	13	M-D	OK-T	OK-G	CUT
402	VG	SL T	R	ST	М	12	M-D	OK-T	OK	CUT
450	VG-E	SL T	R	ST	S-M	13	M-D	OK-T	BL-OK	CUT
Bonus	VG	CY-SL T	R	ST-SL I	S-M	13	М	OK-T	BL-OK	вотн
1176	VG-E	CY	R	ST-SL I	S-M	13	M-D	OK-T	BL-OK	вотн

**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; SI T=slightly tapered; T=tapered.

**Oval/round (Rating)** - R=round; SI 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 breaking five earsin 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) - BI=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 one row by 20 ft per replication.

Table 4. Ear and Yield Data - Main su planting date 5/28

Table 1. La	<u>un</u>		Date		• • •	Jianting	, uacc .								
	Husk	Ear	Ear	Kernel	Unfill.	Wt. Per	(Sample)	(Sample)	Sample	Plants	Ears	%	Tons	Recov.	Over. Ear
	Ext.	Length	Diam.	Row	Tip (in)	Ear	Unhusk.	Husked	Kernel	Per Acre	Per	Moist	Per	(%)	Rating
	(in)	(in)	(in)	Range		Unhusk.	Wt. Per	Ear Wt.	Weight	(1000)	Plant		Acre		(Sample)
						(lbs)	Ear (lb)	Per Ear	Per Ear						
Cultivar								(lb)	(lb)						
GH 4927	0.5	8.1	1.9	14-18	0.2	0.81	0.88	0.63	0.27	20.7	0.91	71.8	7.6	31	3.8
G72381	0.7	7.8	1.9	16-20	0.8	0.80	0.84	0.60	0.30	20.7	1.00	69.0	8.3	36	2.5
124	0.2	8.8	1.9	12-18	0.8	0.81	0.82	0.63	0.32	19.2	0.83	71.8	6.4	38	3.5
339	1.3	7.2	2.0	16-20	0.2	0.87	0.92	0.67	0.37	18.7	1	69.8	8.2	40	4.3
GH 2171	-0.2	8.0	2.1	16-22	1.0	0.80	0.88	0.68	0.39	19.6	0.98	72.1	7.7	44	3.5
1263	-0.1	8.1	2.0	16-20	0.4	0.77	0.87	0.69	0.40	19.8	0.97	73.1	7.4	46	3.5
GH3333	0.1	8.1	2.0	16-20	0.2	0.86	0.89	0.65	0.36	18.5	0.94	76.0	7.5	40	4.3
1264	-0.4	7.8	2.0	16-22	0.3	0.84	0.90	0.69	0.39	20.7	0.98	69.8	8.6	43	4
340	0.8	8.2	2.0	16-20	0.0	1.01	1.04	0.74	0.38	19.6	1.04	70.3	10.4	37	4.5
GH 9597	0.2	7.9	1.9	18-22	0.3	0.77	0.83	0.64	0.29	20.3	0.98	71.4	7.6	35	4.3
HMX0399	0.0	8.8	1.9	18-22	0.5	0.85	0.88	0.65	0.29	20.0	0.97	71.1	8.2	32	3.6
HMX1377	-0.1	8.7	2.0	16-22	0.3	0.87	0.93	0.70	0.38	20.7	0.99	70.9	8.9	41	4
HMX0398	-0.1	9.1	2.0	16-20	0.3	0.88	0.95	0.72	0.33	19.8	1.04	72.3	9.1	34	4
203	-0.8	9.0	2.1	14-20	1.2	0.93	0.95	0.78	0.44	20.5	0.99	71.4	9.4	46	3.8
402	1.0	8.5	2.1	16-22	0.5	0.90	0.91	0.72	0.39	20.3	0.94	69.9	8.5	43	3.8
450	0.9	9.4	2.1	16-22	1.0	0.96	1.00	0.79	0.43	19.8	0.99	71.4	9.4	43	4.2
Bonus	0.5	7.9	2.0	18-20	0.3	0.86	0.89	0.67	0.33	20.3	1.00	68.6	8.7	37	4
1176	-0.5	8.7	2.1	16-22	0.1	0.88	0.95	0.76	0.37	20.5	1.00	70.6	9.0	39	4.2

Heading descriptions on page 6

**Table 5.** Plant Characteristics su type (based on the 6/3 planting)

				<del></del>				··· <i>9</i> /
Cultivar	Plt. Unif. Rating	Tillars Rating	Ear Position Rating	Lodging	Rust Rating	NCLB Rating	Plt. Ht. (in.)	Ear Ht. (in.)
GH 4927	G-VG	N-S	30	N	N	SL	69	18
G72381	G-VG	N-S	30	N	SL	SL	70	15
124	G	N-S	30	N	N	N	69	13
CSUYP 8-339	G-VG	F-L	45	SL	N	N	64	15
GH 2171	VG	N-S	30-45	N	N	SL	69	18
SEY6RH1263	VG	N-S	30	N	N	N	67	17
GH3333	VG	N-S	30	SL	N	SL	81	20
SEY6RH1264	VG	N-S	45	N	N	N	71	17
CSUYP 8-340	VG	N-S	30	N	N	SL	82	21
GH 9597	VG	F-L	30	N	N	N	74	20
HMX0399	VG	N-S	30	N	N	N	79	21
HMX1377	VG	F-L	45	N	N	N	84	22
HMX0398	VG	N-S	30	N	N	N	78	21
203	VG	N-S	30	SL	N	N	84	19
402	G-VG	N-S	45	N	N	N	84	21
450	VG	N-S	45	N	N	N	85	19
Bonus	VG-E	F-L	45	N	N	N	76	19
SUY6RH1176	VG	F-L	45	N	N	N	89	20

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, SI=slight goosenecking at base of plant

Common Rust Rating - N= no symptoms seen, SI=only a few rust pustules noted,

MOD=moderate level of rust infection, SEV=severe amount of rust infection (30% or higher of leaf surface had rust pustules

NCLB Rating – N=None; SI-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 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.

## Additional comments su type

As mentioned in the title page, the early planting was wiped out by raccoons. These notes are mainly from the second planting on 6/3.

**GH 4927** – Early season standard, decent plant, slight level of NCLB symptoms, had a few smutted ears in each plot, good tip fill and decent husk extension, a few curved ears, good yield, good to very good overall ear rating.

**G72381** – Early season, excellent early plant vigor, slight gooseneck on some plants at harvest, it was overmature at harvest and dried kernels were found at the base of the ear on some ears, tip fill was poor on some ears, ear uniformity rating was chief reason for an unacceptable overall ear rating, very good yield, may have had better ear type on the earlier planting.

**124** – Early season, ears were low on the plant, a few smutted ears were found in each plot at harvest, long ears, not filled but uniformly so, nice rowing, small internal cob probably helps recovery, shallow kernels with soft pericarp, decent yield, good to very good overall ear rating.

**CSUYP 8-339** – Observation trial, early season, short plant (a few with slight gooseneck), short, uniform ears with good husk extension, good tip fill, good kernel color, pericarp a bit tough, very good yield and recovery, very good to excellent overall ear rating, should be looked at in larger yield trials.

**GH 2171** – Early to midseason, a few NCLB lesions found on leaves at harvest, good ear size but poor husk cover, large diameter ears that were not filled, small cob, pericarp a bit tough, good yield and recovery, good to very good overall ear rating.

**SEY6RH1263** – Early to midseason, very good to excellent plant uniformity, short plants, minimal to poor husk extension, soft pericarp, good yield and recovery, good to very good overall ear rating (a few curved ears hurt this rating).

**GH3333** – Early to midseason, very good to excellent plant uniformity, a few plants with slight gooseneck, a few NCLB lesions found, minimal husk extension, good tip fill, good yield and recovery, very good to excellent ear uniformity, very good to excellent overall ear rating.

**SEY6RH1264** – Midseason maturity, good, stout plant, poor husk extension, very cylindrical, uniform ears with good tip fill, soft pericarp, very good yield and recovery, very good overall ear rating.

**CSUYP 8-340** – Observation trial, main season maturity, tall, stout plant, a few NCLB lesions at harvest, heavy ears with good husk cover and excellent tip fill, small cob, very good to excellent ear uniformity, nice rowing, excellent yield, very good to excellent overall ear rating. Should be advanced to larger yield trials. **GH 9597** – Mainseason industry standard here in NY, good plant, minimal husk extension, good tip fill, small to medium size kernels, tough pericarp, minimal flavor, good yield, very good overall ear rating.

**HMX0399** – Main season maturity, good, stout plant, minimal to poor husk cover, very cylindrical, long ears with straight rows, small to medium size kernels, small cob, slight taper at the butt end, some ears were one sided to slightly curved, some ears had dried kernels at the butt end of the ear, very good yield, good to very good overall ear rating.

**HMX1377** – Main season maturity, tall, stout plant, poor husk extension, long, uniform, cylindrical ears with good tip fill, a few slightly curved ears, very good to excellent yield and recovery, very good overall ear rating.

**HMX0398** - Main season maturity, very good to excellent plant uniformity, plant was strong but tops curled across the row, poor husk extension, long, uniform, slightly tapered ears with good tip fill, enough slightly curved ears to warrant watching for this (a very few were quite curved) very good to excellent yield, very good overall ear rating (curved ears would normally hurt the rating but other characteristics were superior enough to offset that concern).

**203** - Main season maturity, tall plant with a few plants having slight gooseneck, very poor husk extension (ears were exposed), long, large diameter ears that were not filled, very good to excellent yield and recovery, ear uniformity hurt the overall ear rating which was still good to very good.

- **402** Main season maturity, tall plants, long, large diameter, slightly tapered ears with good husk extension; a few smutted ears, a few ears had some silk balling, very good yield and recovery, good to very good overall ear rating.
- **450** Main season maturity, very long, uniform, slightly tapered, large diameter ears with good husk extension; ears were not filled, small, deep kernels, very good to excellent and recovery, very good to excellent overall ear rating.

**Bonus** - Main season maturity, very good to excellent plant uniformity, good plant, cylindrical to slightly tapered ears with decent husk extension and good tip fill, very good yield and overall ear rating. **SUY6RH1176** - Main season maturity, tall, uniform, slender plants with some of the tips curling over, very good to excellent ear uniformity, poor husk extension, long, large diameter ears with very good tip fill, one flat tip ear, small, deep kernels, very good to excellent yield and overall ear rating.

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

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

G72381 - Harris Moran, 72 days to maturity

124 - General Mills, early maturity (1633 heat units), Rp1-d gene for rust.

**CSUYP8-339** – Crookham Co., a first early which will work well later in the season if needed. It will compete with Cahill with better yield potential and much better ear uniformity. It has old and new rust immunity.

**GH 2171 –** Syngenta, 74 days to maturity, Rp1g gene for rust resistance, some NCLB and Stewarts Wilt tolerance, Poast herb. tolerance. (similar to Cahill)

SEY6RH1263 - Seminis, early season maturity

GH3333 - Syngenta, 80 days to maturity, i gene for rust, HR for Et, high quality. SEY6RH1264 -Seminis. early season maturity

**CSUYP8-340** - Crookham Co., a main season that competes with 9597. It also has double rust. Yield potential and case recovery are high and this variety has a nice refined kernel style.

**GH9597** – Rogers, 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.

**HMX0399** – Harris Moran, 86 days to maturity, 8.7 inch ear length, 2.0 inch ear diameter, 20-22 row count, R for Northern Corn Leaf Blight, MDMV and common rust.

**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.

**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.

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

C402 - General Mills, yellow su type, full season (1900 heat units, Rp1-g & i

C450 - General Mills, yellow su type, full season (1900 heat units), Rp1-g & i

**Bonus -** - Rogers, 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. **SUY6RH1176** - Seminis, full season maturity.

Table 6. Maturity (Supersweet gene type planting date 6/17)

Table 6. Matu						Cand
	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	% Moist	Seed Company
Cultivar	Jiik	to sinc	riai vi	to narvi		Maturity
SS7300R	53	1192	82	1746	75.3	78 days
ACX7473 RY	53	1192	82	1746	77.5	75 days
ACR7901 RY	53	1192	82	1746	77.3	79 days
ACR 7902 MRY	55	1238	84	1766	78.0	78 days
HMX 0370	54	1209.75	84	1766	78.3	80 days
Protégé	56	1251.5	84	1766	82.0	77 days
HMX 0375S	54	1225	84	1766	77.6	77 days
SS Jubilee	56	1247	87	1808	77.3	83 days
HMX 9388S	56	1247	87	1808	76.9	83 days
SS007R	55	1235.5	87	1808	76.6	78 days
HMX 9386S	55	1236.5	88	1819	75.5	74 days
HMX 9394	56	1256	88	1819	75.5	79 days
06G2300	56	1251.5	89	1831	79.0	full season
ACR7242MRY	56	1256	89	1831	76.6	79 days
ACR 7287Y	57	1265	89	1831	78.0	77 days
ACXSS7403	57	1265	89	1831	75.0	75 days
CSHYP9-363	58	1288	90	1847	78.0	
GSS3071	57	1265	90	1847	78.1	79 days
Overland	57	1274	90	1847	77.8	84 days
GSS2259P	59	1308	90	1847	78.4	Mainseason
Galaxy	59	1308	91	1866	78.0	88 days
GSS1453	59	1308	91	1866	77.6	84 days
Bicolors						
HMX0365BS	51	1146	82	1746	74.3	73 day
CSHBP9-351	50	1127	82	1746	75.3	
C741 (std)	53	1182	83	1756	77.9	full season
BSS5362 std	54	1217	83	1756	75.6	83 days
CSHBP9-368	52	1172	83	1756	77.0	
BSS 8040	55	1238	87	1808	75.9	80 day
Crossfire	56	1256	89	1831	77.3	83 days
Whites						
Ice Queen	51	1146	82	1746	74.1	77 days
Devotion	52	1172	83	1756	76.3	82 days

See Table 2.

Table 7. Ear and Kernel Ratings (Supersweet planting date 6/17)

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
SS7300R	VG	CY	R	ST	М	12	M	ОК	G	вотн
ACX7473 RY	VG	CY	R	ST	М	13	М	S	G	вотн
ACR7901 RY	VG-E	CY	R	ST	М	12	М	ОК	G	вотн
ACR 7902 MRY	VG-E	CY	R	ST	М	12	М	S	G	вотн
HMX 0370	VG	CY	R	ST	М	13	M-D	ОК-Т	OK-G	CUT
Protégé	VG	CY	R	ST	М	13	М	ок	OK-G	вотн
HMX 0375S	VG	CY	R	ST	М	14	M-D	Т	OK-G	вотн
SS Jubilee	VG	CY	R	ST-SL I	M-L	13	М	ок-т	G	CUT
HMX 9388S	VG-E	CY-SL T	R	ST	М	12	М	ок-т	G	CUT
SS007R	VG	CY	R	ST-SL I	M-L	13	M-D	S-OK	G	CUT
HMX 9386S	G	CY	R	SL I	L	12	S-M	S-OK	OK-G	CUT
HMX 9394	E	CY	R	ST-SL I	М	12	М	ок-т	G	вотн
06G2300	VG	CY	R	ST	М	13	М	ОК	G-SW	вотн
ACR7242MRY	VG	CY	R	ST	М	13	М	S-OK	SW	вотн
ACR 7287Y	G-VG	CY	R	ST-SL I	M-L	13	M-D	S	G-SW	CUT
ACXSS7403	G	CY	R	ST-SL I	М	13	М	ок	SW	CUT
CSHYP9-363	VG	CY-SL T	R	ST	S-M	12	М	OK-T	G	вотн
GSS3071	VG-E	CY	R	ST-SL I	М	13	M-D	ОК-Т	OK-G	вотн
Overland	VG-E	CY	R	ST-SL I	М	14	M-D	OK-T	OK-G	вотн
GSS2259P	VG-E	SL T	R	ST	М	13	М	ОК-Т	OK-G	вотн
Galaxy	VG-E	CY	R	ST	S-M	14	M-D	ОК	G	вотн
GSS1453 <b>Bicolors</b>	VG-E	CY-SL T	R	ST	М	14	M-D	ОК-Т	OK-G	В
HMX0365BS	VG-E	CY	R	ST-SL I	M-L	13	M-D	S	G	вотн
CSHBP9-351	VG	CY	R	ST	M-L	14	M-D	ОК	G	вотн
C741 (std)	VG	CY	R	ST-SL I	М	14	M-D	ОК	SW	CUT
BSS5362 std	VG	CY	R	ST-SL I	М	13	M-D	ОК	G-SW	CUT
CSHBP9-368	VG-E	SL T-T	R	ST-SL I	М	13	M-D	ОК	SW	CUT
BSS 8040	VG-E	CY-SL T	R	ST-SL I	М	13	M-D	ОК	SW	CUT
Crossfire Whites	G-VG	CY	R	ST-SL I	М	14	M-D	ОК	G	CUT
Ice Queen	VG	CY	R	ST	М	12	М	Т	G	вотн
Devotion	VG-E	CY-SL T		ST	М	13	М	ОК	SW	вотн

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

Table 6. Ear and Tield Data (Supersweet gene type)															
	Husk	Ear	Ear	Kernel	Unfill.	Wt. Per	Sample	Samp.	Kern.	Plants	Ears	% Maiat	Tons	Recov	Over. Ear
	Ext. (in)	Length (in)	ומום. (in)	Row Range	Tip (in)	Ear Unhusk.	Unhusk. Wt. Per	Husk	Wt. Per Ear (lb)	Per Acre	Per Plant	Moist	Per Acre	(%)	Rating
Cultivar	(111)	(111)	(111)	Range		(lbs)	Ear (lb)	Ear (lb)	Lai (ID)	(1000)	Fiant		ACIE		Sample
						, ,	, ,	, ,		,					
SS7300R	1.4	7.8	1.9	14-16	0.0	0.71	0.73	0.58	0.29	19.6	0.93	75.3	6.5	39	4.3
ACX7473 RY	1.9	7.8	2.0	16-20	0.0	0.88	0.93	0.66	0.37	18.7	0.98	77.5	8.0	39	4.3
ACR7901 RY	1.4	7.9	1.9	16-18	0.0	0.76	0.80	0.61	0.30	20.5	0.96	77.3	7.5	38	4.3
ACR 7902	1.7	7.7	2.1	14-20	0.0	0.91	0.95	0.68	0.38	18.7	1.00	78.0	8.5	40	4.3
HMX 0370	-1.1	8.9	2.0	16-18	0.5	0.91	0.96	0.76	0.33	20.0	0.99	78.3	9.0	35	3.3
Protégé	-0.3	7.9	2.0	14-20	0.7	0.84	0.85	0.65	0.32	20.7	0.97	82.0	8.4	37	3.6
HMX 0375S	-0.2	8.1	2.1	16-20	0.8	0.82	0.84	0.67	0.32	21.1	0.96	77.6	8.3	38	3.6
SS Jubilee	-0.6	8.2	2.1	14-16	0.2	0.82	0.89	0.73	0.42	19.2	0.96	77.3	7.7	47	3.8
HMX 9388S	0.1	8.4	2.0	14-16	0.7	0.81	0.83	0.63	0.33	20.5	0.96	76.9	7.9	40	3.9
SS007R	1.2	8.1	2.1	14-18	0.3	0.85	0.90	0.70	0.43	19.8	0.97	76.6	8.2	47	3.8
HMX 9386S	-0.3	8.1	2.0	12-18	1.3	0.74	0.79	0.65	0.38	19.2	0.99	75.5	7.0	47	2.7
HMX 9394	0.2	7.8	2.0	14-20	0.1	0.76	0.81	0.66	0.33	21.1	0.98	75.5	7.9	41	4.4
06G2300	1.5	8.0	2.0	14-18	0.4	0.80	0.83	0.68	0.38	21.1	0.97	79.0	8.2	46	4
ACR7242	0.9	7.8	2.1	16-20	0.2	0.84	0.89	0.69	0.41	18.5	0.95	76.6	7.4	46	4.2
ACR 7287Y	0.4	8.4	2.2	14-18	0.3	0.97	1.02	0.82	0.49	20.5	1.00	78.0	9.9	48	3.5
ACXSS7403	0.8	7.6	2.0	14-20	0.2	0.76	0.77	0.62	0.36	21.3	0.88	75.0	7.1	47	3.3
CSHYP9-363	0.4	8.0	2.1	16-18	0.8	0.78	0.83	0.63	0.37	21.3	0.98	78.0	8.2	44	3.6
GSS3071	0.6	8.0	2.1	14-18	0.3	0.87	0.91	0.72	0.36	19.6	1.03	78.1	8.7	40	4.1
Table 8 contin	nued or	next pa	age.												

Table 8 Co	Table 8 Continued. Ear and Yield Data (supersweet gene type)						e)								
	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Kernel Row Range	Unfill. Tip (in)	Wt. Per Ear Unhusk.	Sample Unhusk. Wt. Per	Samp. Husk Wt. Per	Kern. Wt. Per Ear (lb)	Plants Per Acre	Ears Per Plant	% Moist	Tons Per Acre	Recov (%)	Over. Ear Rating
Cultivar						(lbs)	Ear (lb)	Ear (lb)		(1000)					Sample
Overland	-0.4	8.4	2.1	14-20	0.7	0.92	0.93	0.75	0.45	20.7	1.00	77.8	9.5	48	4.2
GSS2259P	0.2	8.5	2.1	16-18	0.2	0.86	0.90	0.72	0.38	20.7	0.98	78.4	8.8	42	4.5
Galaxy	-0.3	7.7	2.1	16-20	0.2	0.91	0.87	0.71	0.44	21.6	0.97	78.0	9.5	51	4.2
GSS1453	-1.0	8.4	2.2	14-20	0.6	0.92	0.93	0.76	0.46	21.1	0.99	77.6	9.6	49	4.3
Bicolors															
HMX0365BS	1.1	7.4	2.1	14-16	0.2	0.77	0.85	0.64	0.34	20.3	0.99	74.3	7.7	41	3.5
CSHBP9-351	1.2	8.2	2.1	14-18	0.6	0.89	0.91	0.73	0.37	20.0	0.96	75.3	8.6	41	3.8
C741 (std)	-1.4	8.0	2.2	16-20	0.5	0.86	0.91	0.73	0.37	20.5	0.98	77.9	8.6	41	3.3
BSS5362	-0.7	8.3	1.9	12-16	0.2	0.79	0.82	0.63	0.29	20.0	1.01	75.6	8.0	35	3.8
CSHBP9-368	0.9	7.5	2.1	16-20	0.2	0.81	0.84	0.33	0.31	21.8	0.98	77.0	8.7	36	4
BSS 8040	0.6	8.3	2.1	16-20	0.2	0.96	0.99	0.75	0.42	20.7	0.98	75.9	9.8	42	4
Crossfire	-0.7	8.7	2.2	16-22	0.5	0.93	0.98	0.82	0.49	20.9	0.98	77.3	9.5	50	3.8
Whites															
Ice Queen	0.1	8.1	1.9	12-16	0.0	0.79	0.83	0.64	0.26	20.9	0.99	74.1	8.2	31	3.5
Devotion	1.5	7.3	2.0	16-20	0.1	0.80	0.86	0.63	0.30	21.6	0.96	76.3	8.2	35	4.1

Column Descriptions page ?

Table 9. Plant Characteristics (Supersweet gene type)

Table 9. Pla	TIL CHAI	acteris		ibei 344	cet gei	ie type)		
	Plt. Unif.	Tillars	Ear Position		Rust	NCLB	Plt Ht (in)	Ear ht. (in)
Cultivar	Rating	Rating	Rating	Lodging	Rating	Rating	("")	("")
SS7300R	G-VG	N-S	45	SL	N	SL	67	16
ACX7473 RY	VG	FL	45	SL	N	N	65	13
ACR7901 RY	VG	FL	30	SL	N	N	68	14
ACR 7902	G-VG	SL	45	SL	N	N	70	14
HMX 0370	G-VG	FL	45	N	N	N	69	17
Protégé	VG	N-S	45	N	N	N	68	16
HMX 0375S	VG	N-S	30	N	N	N	66	16
SS Jubilee	G-VG	FL	45-60	N	N	MOD	78	19
HMX 9388S	VG	N-S	45	SL	N	N	80	23
SS007R	G-VG	N-S	30	MOD-SEV	N	N	73	19
HMX 9386S	VG	N	45	SL	N	N	74	18
HMX 9394	G-VG	S	45	SL	N	N	75	19
06G2300	G-VG	N-S	45	SL	N	N	75	18
ACR7242	G	N-S	45	SL-MOD	N	N	75	20
ACR 7287Y	G-VG	N-S	45	N	N	N	76	18
ACXSS7403	G-VG	N-S	45	N	N	N	66	15
CSHYP9-363	VG-E	N-S	45-60	N	N	N	76	19
GSS3071	VG	N-S	45	N	N	N	77	21
Overland	VG	N-S	60-90	N	N	N	70	21
GSS2259P	VG	N-S	60	N	N	N	91	34
Galaxy	VG	N-S	30	N	N	N	72	20
GSS1453	VG	N-S	45	N	N	N	77	22
Bicolors								
HMX0365BS	VG	S	45	MOD-SEV	N	N	62	13
CSHBP9-351	VG	FL	45	SL	N	N	69	17
C741 (std)	VG	N-S	45	N	N	N	75	22
BSS5362	G-VG	FL	45	SL	N	MOD	79	20
CSHBP9-368	VG	N-S	45	SL	N	N	81	22
BSS 8040	G-VG	N-S	45	SL	N	N	72	14
Crossfire	VG	N-S	60	N	N	N	75	18
Whites								
Ice Queen	VG	N-S	45	N	N	N	74	18
Devotion	VG-E	N-S	45	N	N	N	78	20

Column descriptions same as Table 5

# Additional Comments Supersweet Type (Yellow)

**SS7300R** – Observation trial, early season maturity, short plants, a few plants leaning over, slight amount of NCLB lesions, very good husk extension, excellent tip fill, decent yield, uniform ears, very good to excellent overall ear rating.

**ACX7473RY** – Observation trial, early maturity, short plants with ear at marginal height for mechanical harvest, a few gooseneck plants, very good to excessive husk extension, excellent tip fill, soft pericarp, very good yield, very good to excellent overall ear rating.

**ACR7901RY** – Observation trial, early maturity, short plants, a few plants leaning over, a couple ear smuts, very good to excellent ear uniformity, very good to excellent overall ear rating.

**ACR7902MRY** – Observation trial, early maturity, not a strong plant, a few plants leaning over, very good to excessive husk extension, very good to excellent ear uniformity, shorter, large diameter ears with excellent tip fill, soft pericarp, good kernel color, very good to excellent yield and recovery, very good to excellent overall ear rating.

**HMX 0370** – Early to midseason, good plant, poor husk extension, long, very cylindrical ears with decent tip fill, straight rows with deep kernels, blunt tips, small cob, excellent yield, many slightly curved ears hurt overall ear rating to acceptable.

**Protégé** – Early to midseason, not able to judge maturity with percent moisture, poor husk extension, ears not filled, a few flat tip ears found in two replications, small cob, very good yield, good to very good overall ear rating (flat tips hurt this rating).

**HMX0375S** – Early to midseason, short, stout plant, poor husk extension, not filled, deep kernels, very good yield, good to very good overall ear rating (a few curved ears hurt this rating).

**SS Jubilee** – Midseason maturity, old standard, so so plant type, moderate level of NCLB symptoms, poor husk extension, good tip fill, kernels on the large side, good to very good yield and recovery, good to very good overall ear rating.

**HMX9388S** – Midseason maturity, a few plants leaning over, very good to excellent ear uniformity, minimal husk extension, long ears that were not filled, a few curved ears, very good yield and recovery, very good overall ear rating.

**SS007R** – Midseason maturity, severe lodging, very good husk extension, good tip fill, very good yield and excellent recovery (deep kernels), overall ear rating was good to very good.

**HMX9386S** – Midseason maturity, slender stalk with thin leaves, few plants leaning over, ear uniformity was minimally acceptable, poor husk extension, large, shallow kernels, poor fill on many, good to very good yield and excellent recovery, overall ear rating was unacceptable mainly due to ear uniformity, poor fill and exposed tips.

**HMX9394** – Midseason maturity, decent plant type, a few plants leaning a bit, excellent ear uniformity, minimal husk extension, medium sized ear with very good to excellent tip fill, small cob, very good yield and recovery, a few slightly curved ears, very good to excellent overall ear rating.

**06G2300** – Mid to main season maturity, clean plant, a few plants leaning over, excellent husk extension, decent tip fill, nice rowing, good kernel quality, very good yield and recovery and very good overall ear rating.

**ACR7242MRY** – Mid - main season, heavy ears pulling plants over, tops of plant curl over, plant uniformity minimally acceptable, very good husk extension, shorter, larger diameter ears with very good tip fill, good flavor, good to very good yield and excellent recovery (small cob), overall ear rating was very good.

#### Additional comments yellow supersweets continued

**ACR7287Y** – Observation trial, main season maturity, minimal husk extension, long, large diameter ears with very good tip fill, large, deep kernels with soft pericarp, kernel rot found on several ears, excellent yield and recovery, good to very good overall ear rating (ear uniformity hurts score).

**ACXSS7403** – Observation trial, main season maturity, short, slender plant, good husk extension, shorter ears with very good tip fill, good flavor, good to very good yield and excellent recovery, good overall ear rating (ear uniformity hurts score).

**CSHYP9-363** – Observation trial, main season maturity, uniform, solid plants, minimal husk extension, large diameter ears that were not filled, very good yield and recovery, good to very good overall ear rating.

**GSS3071** – Main season maturity, good plant, very good to excellent ear uniformity, decent husk extension, very good tip fill, deep kernels, small cob, very good to excellent yield and good recovery, very good overall ear rating.

**Overland** – Main season standard, good plant, wide leaves, very good to excellent ear uniformity, poor husk extension, long, large diameter ears that were not filled, very good to excellent yield and recovery, very good overall ear rating.

**GSS2259P** – Main season maturity, tall, strong plants with ears high off the ground, very good to excellent ear uniformity, minimal husk extension, long, large diameter ears that were slightly tapered; very good tip fill, very good yield and good recovery, very good to excellent overall ear rating, probably could have been harvested a few days later which may have improved yield and recovery.

**Galaxy** – Main season maturity, lighter green foliage, very good to excellent ear uniformity, poor husk extension, shorter, large diameter ears with very good to excellent tip fill, small, deep kernels, small cob, excellent yield and recovery, very good overall ear rating.

**GSS1453** – Main season maturity, good plant, very good to excellent ear uniformity, poor husk extension, long, large diameter ears that were not filled; ears a bit tapered, excellent yield and recovery, very good to excellent overall ear rating.

# Additional Comments Supersweet Bicolor

**HMX0365BS** – Early maturity, short plants, moderate lodging, short plants with ears marginally high enough for mechanical harvesting, very good to excellent ear uniformity, short, large diameter ears with very good husk extension and tip fill, large, deep kernels with soft pericarp, good to very good yield and overall ear rating.

**CSHBP9-351** – Observation trial, early to midseason maturity, some plants had slight gooseneck, good husk extension, large diameter ears that did not fill, large, deep kernels; very good to excellent yield and recovery, very good overall ear rating.

**C741** – Mid to main season maturity, good plant, exposed ear tips, large diameter ears, deep, sweet kernels, very good yield and recovery, good overall ear rating (a few curved ears and poor husk extension).

**BSS5362** – Midseason maturity, large ears have plant leaning over, moderate level of NCLB infection, exposed ears, very good tip fill, very good yield, good to very good overall ear rating.

**CSHBP9-368** – Observation trial, midseason maturity, tall plants with a few of them having slight gooseneck, very good to excellent ear uniformity, good husk extension, short, large diameter, tapered ears with very good tip fill; very good to excellent yield, overall ear rating was very good.

#### Additional Comments bicolor supersweets continued

**BSS8040** – Main season maturity, a few plants leaning over, very good to excellent ear uniformity, decent husk extension, ears a bit tapered, long, large diameter ears with very good tip fill; excellent yield and very good recovery, overall ear rating very good.

**Crossfire** – Main season maturity, exposed ear tips, long, large diameter ears with decent tip fill, deep kernels, excellent yield and recovery, very good overall ear rating.

# Additional Comments Supersweet White

**Ice Queen** -Midseason maturity, good plant, minimal husk extension, excellent tip fill, pericarp on the tough side, a number of curved ears which hurt the overall rating, very good yield, overall ear rating good to very good.

**Devotion** – Midseason maturity, uniform, good plants, very good to excellent ear uniformity, ear a bit tapered, very good to excellent husk extension, short ears with very good to excellent tip fill, very good yield and overall ear rating.

# Descriptions Provided by the Seed Source (Supersweets)

SS7300R - Abbott & Cobb, 78 days to maturity.

ACX7473RY - Abbott & Cobb, 75 days to maturity.

ACR7901RY - Abbott & Cobb, 79 days to maturity.

ACR7902MRY - Abbott & Cobb, 78 days to maturity.

**HMX 0370** – Harris Moran, 80 days to maturity, 8.3 inch ear length, 2 inch ear diameter, 18 row count, R for NCLB, MDMV and common rust.

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

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.

**SS** Jubilee – Syngenta, 83 days (1717 heat units), better plant standability than SS Jubilee, 8.5 inch ear length, 1.95 inch ear diameter, 16-20 row count, Rp1-d gene for rust resistance, high quality pack, widely adapted.

**HMX9388S** - Harris Moran, 83 days to maturity, 21 cm ear length, 18 row average, R for rust (multigene - gfi), IR for NCLB

**SS007R** - Abbott & Cobb, 78 days to maturity.

HMX9386S - Harris Moran, 74 days to maturity, 8.5 inch ear length, 16-18 row count, good disease package.

**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.

06G2300 - Seneca Vegetable Research, full season maturity.

ACR7242MRY - Abbott & Cobb, 79 days to maturity,

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

ACR7287Y - Abbott & Cobb, 77 days to maturity.

ACXSS7403 - Abbott & Cobb, 75 days to maturity.

CSHYP9-363 - Crookham,

GSS3071 - Syngenta, 79 days, g gene for rust, IR for Et and HR for MDMV, in the Protégé time slot.

**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.

**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 Fusarioum/root rot, able to withstand higher plant populations.

**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.

GSS1453 - Syngenta, new Overland with three rust genes (dgi), .

#### **Bicolors**

HMX0365BS - Harris Moran, 73 days to maturity

CSHBP9-351 - Crookham,

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

**BSS5362** – Syngenta, 83 days to maturity (1717 heat units), 8.5 inch ear length, 1.9 inch ear width, 18 rows average, 11-12 mm kernel depth, Rp1-d gene for rust resistance,

CSHBP9-368 - Crookham

BSS8040 - Syngenta, 80 days to maturity.

**Crossfire** – Crites Moscow, 83 days to maturity, 8.6 inch ear length, 2.0 inch ear width, 18 rows average, M plant and ear height, HR to old race of common rust and Susc to the D virulent, IR for NCLB, Susc to Stewarts wilt and MDMV, tolerant to Callisto.

#### White

*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, IR for NCLB, MDMV, Common Rust, Stewarts wilt.

**Devotion** - Seminis, white, 82 days to maturity,

Table 10. Weather Summary 2011

Table 10. Weather Summary 2011								
						Degree		
	Max.	Min.	Mean		Acc	Days Base	acc dd units	
Day	Temp.	Temp.	Temp.	Precip.	Precip.	50	base 50	
5/11/11	63	41	52	0	0	2	2	
5/12/11	72	46	59	0	0	9	11	
5/13/11	78	62	70	0	0	20	31	
5/14/11	78	59	68.5	0.02	0.02	18.5	49.5	
5/15/11	68	51	59.5	0.14	0.16	9.5	59	
5/16/11	52	44	48	0.93	1.09	0	59	
5/17/11	49	43	46	0.04	1.13	0	59	
5/18/11	58	43	50.5	0.32	1.45	0.5	59.5	
5/19/11	73	55	64	0.12	1.57	14	73.5	
5/20/11	72	55	63.5	0.13	1.7	13.5	87	
5/21/11	70	55	62.5	0	1.7	12.5	99.5	
5/22/11	76	55	65.5	0.02	1.72	15.5	115	
5/23/11	70	59	64.5	0	1.72	14.5	129.5	
5/24/11	75	62	68.5	0.22	1.94	18.5	148	
5/25/11	76	51	63.5	0.01	1.95	13.5	161.5	
5/26/11	71	52	61.5	0.18	2.13	11.5	173	
5/27/11	85	60	72.5	0.08	2.21	22.5	195.5	
5/28/11	72	53	62.5	0.72	2.93	12.5	208	
5/29/11	78	59	68.5	0	2.93	18.5	226.5	
5/30/11	86	65	75.5	0.23	3.16	25.5	252	
5/31/11	82	63	72.5	0	3.16	22.5	274.5	
6/1/11	91	69	80	0	3.16	30	304.5	
6/2/11	86	53	69.5	0	3.16	19.5	324	
6/3/11	65	48	56.5	0	3.16	6.5	330.5	
6/4/11	69	52	60.5	0	3.16	10.5	341	
6/5/11	66	55	60.5	0.11	3.27	10.5	351.5	
6/6/11	76	53	64.5	0	3.27	14.5	366	
6/7/11	81	58	69.5	0	3.27	19.5	385.5	
6/8/11	84	63	73.5	0	3.27	23.5	409	
6/9/11	92	69	80.5	0.05	3.32	30.5	439.5	
6/10/11	88	58	73	0	3.32	23	462.5	
6/11/11	70	58	64	0.47	3.79	14	476.5	
6/12/11	76	61	68.5	0.2	3.99	18.5	495	
6/13/11	68	55	61.5	0.19	4.18	11.5	506.5	
6/14/11	69	53	61	0.03	4.21	11	517.5	
6/15/11	62	48	55	0.04	4.25	5	522.5	
6/16/11	81	53	67	0	4.25	17	539.5	
6/17/11	82	60	71	0.05	4.3	21	560.5	
6/18/11	76	60	68	0.02	4.32	18	578.5	
6/19/11	80	57	68.5	0	4.32	18.5	597	
6/20/11	72	50	61	0	4.32	11	608	
6/21/11	79	58	68.5	0	4.32	18.5	626.5	
6/22/11	84	59	71.5	0.38	4.7	21.5	648	
6/23/11	80	65	72.5	0.26	4.96	22.5	670.5	
6/24/11	83	66	74.5	0.06	5.02	24.5	695	

						Degree	
	Max.	Min.	Mean		Acc	Days Base	acc dd units
Day	Temp.	Temp.	Temp.	Precip.	Precip.	50	base 50
6/25/11	79	62	70.5	0.1	5.12	20.5	715.5
6/26/11	71	58	64.5	0.01	5.13	14.5	730
6/27/11	70	58	64	0.03	5.16	14	744
6/28/11	79	64	71.5	0.00	5.16	21.5	765.5
6/29/11	83	62	72.5	0.34	5.5	22.5	788
6/30/11	69	58	63.5	0.54	5.5	13.5	801.5
7/1/11	76	57	66.5	0	5.5	16.5	818
7/2/11	79	55	67	0	5.5	17	835
7/3/11	86	64	75	0	5.5	25	860
7/4/11	86	65	75.5	0	5.5	25.5	885.5
7/5/11	83	62	72.5	0	5.5	22.5	908
7/6/11	84	65	74.5	0	5.5	24.5	932.5
7/7/11	87	63	75	0	5.5	25	957.5
7/8/11	79	60	69.5	0	5.5	19.5	977
7/9/11	81	61	71	0	5.5	21	998
7/10/11	78	58	68	0	5.5	18	1016
7/11/11	87	65	76	0	5.5	26	1042
7/12/11	91	72	81.5	0	5.5	31.5	1073.5
7/13/11	88	66	77		5.5	27	1100.5
7/14/11	78	56	67	Т	5.5	17	1117.5
7/15/11	79	53	66		5.5	16	1133.5
7/16/11	83	56	69.5		5.5	19.5	1153
7/17/11	89	64	76.5		5.5	26.5	1179.5
7/18/11	91	74	82.5		5.5	32.5	1212
7/19/11	88	68	78	0.23	5.73	28	1240
7/20/11	84	64	74	0.20	5.73	24	1264
7/21/11	92	70	81		5.73	31	1295
7/22/11	99	74	86.5		5.73	36.5	1331.5
7/23/11	95	73	84		5.73	34	1365.5
7/24/11	92	70	81	0.09	5.82	31	1396.5
7/25/11	84	62	73	0.100	5.82	23	1419.5
7/26/11	82	63	72.5	0.03	5.85	22.5	1442
7/27/11	81	62	71.5	0.24	6.09	21.5	1463.5
7/28/11	81	61	71		6.09	21	1484.5
7/29/11	76	67	71.5		6.09	21.5	1506
7/30/11	84	66	75	0.13	6.22	25	1531
7/31/11	84	60	72		6.22	22	1553
8/1/11	83	67	75		6.22	25	1578
8/2/11	89	68	78.5		6.22	28.5	1606.5
8/3/11	85	64	74.5		6.22	24.5	1631
8/4/11	72	64	68	0.59	6.81	18	1649
8/5/11	80	59	69.5	0.02	6.83	19.5	1668.5
8/6/11	85	66	75.5		6.83	25.5	1694
8/7/11	74	67	70.5	0.1	6.93	20.5	1714.5
8/8/11	83	67	75	0.2	7.13	25	1739.5
8/9/11	79	62	70.5	0.46	7.59	20.5	1760

						Degree	
	Max.	Min.	Mean		Acc	Days Base	acc dd units
Day	Temp.	Temp.	Temp.	Precip.	Precip.	50	base 50
8/10/11	74	62	68	0.94	8.53	18	1778
8/11/11	79	57	68	0.17	8.7	18	1796
8/12/11	73	56	64.5		8.7	14.5	1810.5
8/13/11	80	59	69.5		8.7	19.5	1830
8/14/11	82	63	72.5	0.08	8.78	22.5	1852.5
8/15/11	74	63	68.5	0.16	8.94	18.5	1871
8/16/11	69	61	65	2.55	11.49	15	1886
8/17/11	80	62	71		11.49	21	1907
8/18/11	83	61	72		11.49	22	1929
8/19/11	83	62	72.5	0.03	11.52	22.5	1951.5
8/20/11	81	60	70.5	0.03	11.55	20.5	1972
8/21/11	84	65	74.5	0.38	11.93	24.5	1996.5
8/22/11	74	57	65.5	0.32	12.25	15.5	2012
8/23/11	70	54	62	0.08	12.33	12	2024
8/24/11	77	57	67		12.33	17	2041
8/25/11	80	60	70	0.71	13.04	20	2061
8/26/11	79	62	70.5		13.04	20.5	2081.5
8/27/11	74	58	66	0.02	13.06	16	2097.5
8/28/11	78	61	69.5		13.06	19.5	2117
8/29/11	67	51	59		13.06	9	2126
8/30/11	74	51	62.5		13.06	12.5	2138.5
8/31/11	78	56	67		13.06	17	2155.5
9/1/11	78	57	67.5	0.03	13.09	17.5	2173
9/2/11	80	63	71.5		13.09	21.5	2194.5
9/3/11	80	66	73		13.09	23	2217.5
9/4/11	89	70	79.5		13.09	29.5	2247
9/5/11	83	60	71.5	0.28	13.37	21.5	2268.5
9/6/11	65	55	60	0.65	14.02	10	2278.5
9/7/11	63	56	59.5	0.22	14.24	9.5	2288
9/8/11	64	58	61	0.94	15.18	11	2299
9/9/11	71	60	65.5		15.18	15.5	2314.5
9/10/11	75	56	65.5	0.01	15.19	15.5	2330
9/11/11	74	48	61	0.02	15.21	11	2341
9/12/11	72	52	62	0.1	15.31	12	2353
9/13/11	76	57	66.5	0.02	15.33	16.5	2369.5
9/14/11	83	55	69		15.33	19	2388.5
9/15/11	71	50	60.5	0.37	15.7	10.5	2399
9/16/11	57	45	51	0.15	15.85	1	2400
9/17/11	58	42	50	0.02	15.87	0	2400
9/18/11	60	42	51	0.02	15.89	1	2401
9/19/11	65	45	55	0.02	15.91	5	2406
9/20/11	65	49	57	0.33	16.24	7	2413
9/21/11	70	51	60.5	0.02	16.26	10.5	2423.5
9/22/11	76	59	67.5	0.01	16.27	17.5	2441