

**N. Y. S. 2014 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. A single planting of su cultivars was planted on 5/27. A single planting of the supersweet type (four replications) was planted on 6/16. Yield data were taken from a single harvest of a 20 foot section of each of the two rows (40 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. All plantings were sowed with a Monosem vacuum planter with double disc openers. The fertilizer used was a 15-5-10 (with Mn and Zn) at a rate of 350 lbs. per acre. Fertilizer was banded two inches below and two inches to the side of the seeds at planting. Bicep Lite (at the labeled rate) was applied post emergence for weed control. Desired population was 19,000 plants per acre (11 inches in row spacing). One cultivation was made to enhance weed control and to sidedress N (was done roughly 30 days from planting (400 pounds of 22-0-0 per acre)). The varieties GH4927 and GH9597 from Syngenta Seeds were used as standards for the su type. Overland, from Syngenta Seeds, was used as the supersweet standard.

Spring and summer rainfall were above average disrupting my planting schedule. Temperatures were a bit below average other than a hot period the middle of July. The su planting was planted into good soil conditions and emergence was uniform. The supersweet planting was planted into optimum soil and emergence was also good. **Late July, six inches of rain fell during a six day period (3 inches in a 24 hour period). July 31, a localized hail storm hit shredding the corn plantings. The su planting had already tasseled. The supersweet planting was roughly two weeks from tassel. Days from silk or days to harvest from the hail storm are in tables 4 and 8. This seemed to affect the uniformity of ear maturity. Maturity varied within the plot for some varieties and among the replications for most.** Heat units over the entire growing season were about average. See Weather Summary table. The bacterial disease Stewarts Wilt was minimal to nonexistent. Common Smut and Common Rust infection were minimal. NCLB was again evident although it probably did not affect yield. This disease seems to be more common and a bit more severe the past few years.

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 Wilma Kean, Paula Fox, Wayne Hansen, Mary Lou Hessney, Sean Murphy, Kathleen DePillo, Allison Mahoney and Karen Luong for their assistance in day to day operations. Please address any questions to me at the address below.

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Table 1. Cultivar List

Su Type	Seed Source	Trial type
GH4927 (std)	Syngenta	rep
SC1263	Seminis	rep
ZUY26730Q	Crites	rep
HMX3347	HM	rep
DYNAMO	HM	rep
8-339	Crookham	ob
KOKANEE	HM	rep
TURBO	HM	rep
Tamarack	Crookham	rep
GH9394	Syngenta	rep
HM2390 (STD)	HM	rep
GH3333	Syngenta	rep
Salyna	Crookham	ob
Rocker	Syngenta	rep
GH6462	Syngenta	rep
GH9597 19K	Syngenta	rep
Bonus	Syngenta	rep
White		
WH1428P	Syngenta	ob
CSUWP13-623-13P7702	Crookham	ob
STUD (83258)	Crookham	ob
Supersweet Yellow		
HMX3344YS	HM	rep
10-435	Crookham	ob
H11-1062	IFSI	ob
H11-1084	IFSI	ob
H11-1066	IFSI	ob
XTH1679	IFSI	rep
HMX0372S	HM	rep
XTH1079	IFSI	rep
1972 XR	IFSI	rep
Protégé	Syngenta	rep
VAR. 3552 R	A&C	rep
GVS1590	Galletin Valley	rep
HMX3346YS	HM	rep
W1 12 9023	A&C	ob
GSS5652P	Syngenta	rep
4078 MXR	IFSI	rep
Mint (HMX0375S)	HM	rep
1980 XR	IFSI	rep

Supersweet Yellow cont:	Seed Source	Trial type
Rana	Crookham	rep
W11-3034	IFSI	ob
H11-3253	IFSI	ob
1880XR (H11-3235)	IFSI	ob
HMX0376S	HM	rep
VAR. 3083	A&C	rep
HMX9390S	HM	rep
GSS3071(new)	Syngenta	rep
ACX3590MR	A&C	rep
HMX9389S	HM	rep
SV5541SK	Seminis	rep
GSS1453	Syngenta	rep
VAR. 3081	A&C	rep
GSS1477	Syngenta	rep
GSS13951	Syngenta	rep
Overland (std)	Syngenta	rep
W1 12 9026	A&C	rep
SV5365SK	Seminis	rep
SV1514SK	Seminis	rep
SV1365SK	Seminis	rep
SV1339SK	Seminis	rep
Hardi	Crookham	rep
10-403	Crookham	ob
Fortitude	Crookham	ob
Samurai	Crookham	ob
Bicolor		
BSS8040	Syngenta	rep
BSS5362	Syngenta	rep
White		
WSS3681	Syngenta	rep
XTH3174	IFSI	rep
ICE QUEEN	HM	rep
GVS0210	Galletin Valley	rep
Snogum	Crites	rep
VAR. 7401 Imp.	A&C	rep
Glacial (ACR1743)	A&C	rep
XTH3379	IFSI	rep
Devotion	Seminis	rep
9-371	Crookham	rep

Table 2. Mainseason Su planting date 5/27

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	Days after hail until harv	% Moist. At Harv.	Seed Source Maturity
GH4927 19K	55	963	83	1435	18	72.6	75
GH4927 21K	55	963	84	1449	19	72.4	75
GH4927 23K	55	963	84	1449	19	71.9	75
SC1263	57	1006	85	1458	20	73.1	73
ZUY2673OQ	57	1006	85	1458	20	72.0	74
HMX3347	57	1006	85	1458	20	72.1	74
DYNAMO	59	1053	87	1493	22	71.0	78
8-339	59	1053	87	1493	22	72.3	81
KOKANEE	61	1080	90	1548	25	71.5	79
TURBO	57	1006	90	1548	25	73.3	79
Tamarack	59	1053	90	1548	25	72.0	84
GH9394	62	1101	91	1565	26	72.4	79
HM2390 (STD)	63	1119	92	1583	27	71.1	78
GH3333	61	1080	91	1565	26	74.1	80
Salyna	62	1101	91	1565	26	73.8	83
Rocker	61	1080	92	1583	27	71.0	85
GH6462	61	1080	90	1548	25	74.2	83
GH9597 19K	63	1119	93	1603	28	71.8	83
GH9597 21K	63	1119	93	1603	28	71.9	83
GH9597 23K	63	1119	93	1603	28	71.3	83
Bonus	64	1128	93	1603	28	73.0	83
White							
1428P	68	1185	94	1619	29	74.3	84
CSUWP13-623	59	1053	91	1564	26	75.5	na
Stud (83258)	63	1119	94	1619	29	76.8	84

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

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

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

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

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

Days after hail until harvest - The number of days from hail date until harvest.

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

Table 3. Ear and Kernel Ratings Main Su planting date 5/27

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel size Rating	Kernel Depth (mm)	Kernel Depth Rating	Row #	Pericarp Rating	Flavor Rating
GH4927 19K	VG	CY-SL T	R	ST- SL I	M	12	M-D	16 to 20	OK-T	OK
GH4927 21K	VG	CY-SL T	R	ST- SL I	M	11	M-D	14 to 20	OK-T	OK
GH4927 23K	VG	CY-SL T	R	ST- SL I	M	11	M-D	16 to 18	OK-T	OK
SC1263	VG	SL T	R- SL O	ST- SL I	M	13	M-D	16 to 20	S	OK-G
ZUY2673OQ	G-VG	CY-SL T	R- SL O	ST- SL I	S-M	13	M-D	16 to 20	OK-T	OK-G
HMX3347	G-VG	CY-SL T	R	ST- SL I	M	12	M-D	14 to 18	T	BL
DYNAMO	VG-EX	T	R- SL O	ST- SL I	M	12	M	16 to 20	OK-T	BL
8-339	VG-EX	CY	R	ST	M	12	M	16 to 20	OK	OK-G
KOKANEE	VG	CY-SL T	R	ST- SL I	S-M	12	M	18 to 22	OK-T	OK
TURBO	VG-EX	CY-SL T	R	ST- SL I	M	15	M-D	16 to 20	T	BL
Tamarack	G-VG	CY-SL T	R	ST	S-M	11	SH-M	16 to 20	T	OK
GH9394	VG-EX	CY-SL T	R	ST- SL I	M	13	M	14 to 18	OK	OK
HM2390 (STD)	VG-EX	CY-SL T	R	ST- SL I	S-M	12	M-D	16 to 22	OK-T	BL-OK
GH3333	G-VG	SL T	R	ST- SL I	M	11	M	18 to 20	OK-T	OK-G
Salyna	G-VG	CY-SL T	R	ST	M	11	SH-M	16 to 20	OK-T	OK-G
Rocker	G-VG	CY	R	ST	M	11	M	14 to 18	OK-T	OK
GH6462	VG-EX	CY-SL T	R	ST	M	12	M	16 to 22	OK	OK-G
GH9597 19K	VG	CY	R	ST- SL I	S-M	12	M	16 to 20	OK-T	OK-G
GH9597 21K	VG	CY	R	ST- SL I	S-M	12	M	18 to 20	OK-T	OK
GH9597 23K	VG-EX	CY	R	ST- SL I	M	12	M	18 to 20	OK-T	OK
White										
1428P	VG	CY	R	ST- SL I	S	12	D	18 to 20	OK-T	OK
CSUWP13-623	G-VG	CY-SL T	R	SL IRR	S-M	11	SH-M	18 to 20	OK	OK
STUD (83258)	VG	SL T	R	ST	S-M	12	M-D	16 to 18	S-OK	G

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 breaking five ears in two and measuring the kernel depth.)

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

Row # - 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

Table 4. Ear and Yield Data - su planting date 5/27

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	Unfill. Tip (in)	Wt. Per Ear Unhusk. (lbs)	(Sample) Unhusk. Wt. Per Ear (lb)	(Sample) Husked Ear Wt. Per Ear	Sample Kernel Weight Per Ear	Plants Per Acre (1000)	Ears Per Plant	% Moist	Tons Per Acre	Recov. (%)	Over. Ear Rating (Sample)
GH4927 19K	0.5	8.2	2.0	0.0	0.90	0.95	0.68	0.39	18.9	1.02	72.6	8.7	41	4.3
GH4927 21K	0.2	8.2	1.9	0.0	0.91	0.95	0.69	0.42	19.4	1.00	72.4	8.8	44	4.3
GH4927 23K	0.6	8.2	2.0	0.1	0.90	0.92	0.67	0.42	20.9	0.97	71.9	9.2	45	4.1
SC1263	0.5	8.0	2.2	0.4	1.02	1.04	0.78	0.52	19.2	0.96	73.1	9.3	50	3.9
ZUY26730Q	1.3	7.9	2.1	0.2	0.95	0.95	0.70	0.46	19.2	0.98	72.0	8.9	48	4.0
HMX3347	1.3	8.3	2.1	0.9	0.94	0.94	0.69	0.45	19.6	0.94	72.1	8.7	47	3.5
DYNAMO	2.0	8.7	2.0	0.3	0.96	0.99	0.70	0.46	19.6	0.98	75.1	9.2	47	4.1
8-339	2.2	7.2	2.0	0.1	0.92	0.88	0.63	0.40	19.8	1.00	72.3	9.1	45	4.0
KOKANEE	1.7	8.4	2.0	0.1	1.08	0.99	0.70	0.45	18.5	0.98	71.5	9.7	45	3.8
TURBO	0.5	8.6	2.2	0.3	1.09	1.11	0.83	0.60	19.1	0.93	73.3	9.7	54	4.3
Tamarack	2.3	8.7	2.1	0.3	1.09	1.06	0.76	0.47	19.5	0.98	72.0	10.5	44	3.9
GH9394	1.1	8.5	2.0	0.3	0.85	0.90	0.64	0.42	18.9	1.10	72.4	8.9	47	4.1
HM2390 (STD)	0.9	8.3	2.0	0.1	0.92	0.93	0.70	0.44	19.5	0.97	71.1	8.6	48	4.1
GH3333	0.6	8.2	2.1	0.4	0.98	0.94	0.68	0.42	18.4	1.09	74.1	9.8	45	3.7
Salyna	1.6	8.7	2.0	0.5	0.92	0.93	0.67	0.40	19.4	0.96	73.8	8.5	43	3.5
Rocker	3.1	8.1	2.0	0.5	0.97	0.97	0.63	0.39	18.7	0.92	71.0	8.4	40	3.8
GH6462	2.1	8.3	2.1	0.1	1.05	1.03	0.75	0.49	18.7	0.95	74.2	9.4	47	4.5
GH9597 19K	1.5	7.9	2.0	0.1	0.86	0.84	0.67	0.43	18.7	1.02	71.8	8.3	51	4.1
GH9597 21K	1.5	7.9	2.0	0.1	0.87	0.87	0.69	0.44	18.8	1.00	71.9	8.2	51	4.3
GH9597 23K	1.3	7.9	2.0	0.1	0.87	0.86	0.68	0.43	21.7	0.99	71.3	9.4	50	4.1
Bonus					0.88	0.94		0.43	19.9	1.02	73.0	8.9	46	
1428P	1.0	8.7	2.0	1.0	0.83	0.88	0.65	0.40	19.2	0.89	74.3	7.2	45	4.0
CSUWP13-623	4.1	7.3	2.0	0.5	0.95	0.94	0.61	0.38	19.8	0.94	75.5	8.9	40	3.5
STUD (83258)	2.6	9.1	1.7	1.0	0.95	0.96	0.64	0.33	19.2	0.94	76.8	8.6	35	4.0

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 5. Plant Characteristics su type (based on the 5/27 planting)

Cultivar	Plt. Unif. Rating	Tillars Rating	Lodging	Ear Position	Rust Rating	NCLB Rating	Plt. Ht. (in.)	Ear Ht. (in.)
GH4927 19K			N			MOD	81	24
GH4927 21K			N			MOD	81	24
GH4927 23K			N			MOD	81	24
SC1263			N				82	23
ZUY26730Q			N				85	28
HMX3347			N				81	20
DYNAMO			N				82	26
8-339			N				80	22
KOKANEE			N				86	27
TURBO			N				74	22
Tamarack			N				89	27
GH9394			N				92	31
HM2390 (STD)			N				88	28
GH3333			N				93	28
Salyna			N				91	30
Rocker			N				106	33
GH6462			N				96	29
GH9597 19K			N				86	29
GH9597 21K			N				87	28
GH9597 23K			N				87	29
Bonus			N				87	29
1428P			N				103	40
CSUWP13-623			N				84	26
STUD (83258)			N				95	35

Due to hail damage, other plant ratings were not taken

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, M=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; 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 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

***GH4927** – early season, very nice ear fill, ear uniformity small cob with good kernel depth, moderate NCLB symptoms, a very solid 4 for overall rating. 4.3

SC1263 – early season, large cob, hint of oval that hurts overall ear rating, not completely filled but uniformly so, very good recovery, soft pericarp, overall rating 3.9.

***ZUY2673OQ** – early season, kernels a bit smaller than others, nice rowing, good fill on most, a bit better ear uniformity would have resulted in higher overall score, overall rating 4.

HMX3347 – early season, small ears, ear uniformity hurts overall score, overall score 3.5.

***Dynamo** – early season, small cob, very good to excellent ear uniformity and tip fill, long ears, a hint of oval, overall score 4.1

***8-339** – early season, shorter, small ears, very good to excellent ear uniformity, good yield, good quality, overall score 4.0.

Kokanee – mid season, one sided to very slight curve (might be an issue in dry conditions), excellent fill, kernels cut very cleanly from cob, higher row count, overall score 3.8

***Turbo** – mid season, small cob with deep kernels, excellent fill, very good to excellent ear uniformity, long ears with larger ear diameter, very good recovery, overall score 4.3.

Tamarack – mid season, kernels a bit shallow, good rowing, ear uniformity varied among replications, high yield, overall score 3.9.

***GH9394** – mid season, very good to excellent ear uniformity with excellent tip fill, some lodging but raccoon damage might have caused it, a number of second ears, small cob, overall score 4.1

***HM2390** – mid season, very good to excellent ear fill and ear uniformity, darker yellow, small kernels (higher row count), small cob with good kernel depth so it should recover well, overall score 4.1

GH3333 – mid season, ear uniformity could be better, tip fill was variable along with maturity differences that might have been caused by the hail storm, overall score 3.7

Salyna – long, slender ears that were not quite filled, kernel depth a bit shallow, ear uniformity could have been better, overall score 3.5.

Rocker – kernels cut from cob well, recovery percentage on the low side, ear uniformity could be better, overall score 3.8.

***GH6462** – very good to excellent ear uniformity, excellent tip fill, small, medium to deep kernels, one of the higher ranked cultivars in the su trial, harvested a couple days too early, overall score 4.5.

***GH9597** – commercial standard, very good ear uniformity, vg to excellent tip fill, very good recovery, overall score 4.1.

White

***1428P** – late season, very nice plant type, long ears high on the plant, small cob and recovered best of the three although it had the lowest yield, should have harvested a day or two later, overall rating of 4.

CSUWP13-623 - mainseason, should have been harvested a couple days later, shorter ears that were not quite filled, yielded well, good recovery, overall score 3.5.

***Stud** – late season, harvested too early, long, slender, tapered ears that were not quite filled, small cob, nice ear uniformity, kernels cut well from the cob, softer pericarp, recovery lower than other two, but harvested too young, an overall rating of 4.

Cultivar Descriptions Provided by the Seed Source (Su type)

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

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

ZUY2673 – Crites, midearly su yellow processor, 74 days to maturity, 7.8 inch ear length, 2.2 inch cob width, average row number 18, plant and ear height both medium, IR for common rust, SU for NCLB, IR for SW and Southern Leaf Blight, tolerant to Accent herbicide, high quality petite kernels.

HMX 3347 – Harris Moran; 74 days to maturity

Dynamo (HMX5372) – Harris Moran; yellow heterozygous se; 78 days to maturity (Jubilee – 2); 6.75' plant height; 2.5' ear height; 16-18 row count; 8.7" ear length; 1.9" ear diameter; 7.9 mm kernel width; 10.9 mm kernel depth; resistant to common rust; MS to NCLB; MR to MDM; M to Stewart's wilt; M to common smut; M to anthracnose leaf blight.

CSUY8-339 – Crookham; 81 days to maturity; a first early which will work well later in the season if needed. It will compete with Cahill and 2171; excellent seed quality; it has the new "upgraded" rust package.

Kokanee (HMX 0395) – Harris Moran; 79 day su processing corn hybrid in the Jubilee class; features improved plant type, yield and recovery.

Turbo (HMX 1382) – Harris Moran; 79 day early su processing hybrid in the Dynamo class; features plant and quality improvements; IR for Et, MDMV, Stewart's Wilt and common smut; Hr for common rust – Rp1D allele for rust resistance.

Tamarack – Crookham, 84 days to maturity (1428 heat units); yellow su type; 8.7" ear length; 2" ear diameter; 30" ear height; 89" plant height; 20-22 rows; IR for Stewarts Wilt; Rplg gene for rust resistance; HR to MDMV.

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

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.

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

Salyna – Crookham; old & new rust resistance, MDMV resistance; good plant health; maturity similar to GH 9597.

Rocker – Syngenta, su type, 85 days to maturity (1793) heat units, 8.5 ft. plant height, 38 inch ear height, 8.25 inch ear length, 1.85 inch ear diameter, 18-20 rows, 11mm average kernal depthRp1-d & g genes for rust resistance, tolerant to maize dwarf mosaic virus. Poast herbicide tolerance.

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

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 (GH 9056) – Syngenta; 83 day (main season processor) (1750 heat units) normal su type; 7.5' plant height; 36" ear height; 18-22 row count; 8" ear length; 1.8" diameter; 11mm kernel depth; produces ears with exceptional uniformity of size, shape and style which promotes efficient processing; petite kernel and golden yellow color give it a gourmet appearance; excellent husk length minimizes potential for bird damage; sturdy clean plant that harvests easily; resistant to common rust (RP1d gene); tolerant to MDMV, Stewart's wilt and NCLB.

WH1428P – Syngenta, 84 days to maturity; white su with poast tolerance.

CSUWP13-623-13P7702 – Crookham; maturity still unknown, white su

STUD (83258) – Crookham; 84 days to maturity, white su

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.	# Days to Silk after hail	% Moist	Seed Company Maturity
HMX3344YS	52	973	78	1382	7	76.9	74
10-435	53	989	78	1382	8	77.0	na
H11-1062	54	1004	78	1382	9	79.5	72
H11-1084	52	973	80	1430	7	78.8	70
H11-1066	53	989	80	1430	8	77.5	73
XTH1679	55	1018	80	1430	10	78.8	79
HMX0372S	55	1018	80	1430	10	78.0	83
XTH1079	54	1004	81	1449	9	76.8	79
1972 XR	53	989	81	1449	8	77.9	73
Protégé	55	1018	84	1512	10	79.5	77
VAR. 3552 R	55	1018	84	1512	10	78.5	77
GVS1590	55	1018	84	1512	10	79.4	78
HMX3346YS	55	1018	84	1512	10	78.3	79
W1 12 9023	55	1018	84	1512	10	77.3	79
GSS5652P	58	1075	85	1521	13	76.9	78
4078 MXR	58	1075	85	1521	13	76.5	78
Mint	53	989	85	1521	8	77.6	77
1980 XR	58	1075	85	1521	13	76.4	79
Rana	53	989	85	1521	8	75.6	82
W11-3034	57	1055	85	1521	12	75.5	78
H11-3253	60	1107	86	1533	15	76.3	79
1880XR	57	1055	86	1533	12	76.0	80
HMX0376S	57	1055	86	1533	12	78.0	80
VAR. 3083	57	1055	86	1533	12	77.2	83
HMX9390S	57	1055	86	1533	12	76.3	83
GSS3071	57	1055	86	1533	12	78.7	79
ACX3590MR	57	1055	86	1533	12	77.2	82
HMX9389S	58	1075	87	1547	13	78.2	81
SV5541SK	57	1055	87	1547	12	79.3	77
GSS1453	59	1093	87	1547	14	77.7	84
VAR. 3081	59	1093	87	1547	14	76.2	79

Table 6 continued:

Cultivar	Days To Silk	Heat units to silk	Days to Harv.	Heat units to harv.	# Days to Silk after hail	% Moist	Seed Company Maturity
GSS1477	59	1093	87	1547	14	76.0	79
GSS13951	57	1055	87	1547	12	76.8	82
Overland	60	1107	88	1565	15	78.5	84
W1 12 9026	60	1107	88	1565	15	77.7	79
SV5365SK	59	1093	88	1565	14	76.5	83
SV1514SK	60	1107	91	1579	15	79.7	81
SV1365SK	59	1093	91	1579	14	79.0	80
SV1339SK	61	1117	91	1579	16	76.2	83
Hardi	61	1117	91	1579	16	75.7	88
10-403	63	1144	92	1581	18	75.0	na
Fortitude	66	1183	93	1590	21	75.3	na
Samurai	66	1183	93	1590	21	76.3	na

Bicolor

BSS8040	63	1144	88	1565	18	74.8	81
BSS5362	63	1144	92	1581	18	74.8	83

White

WSS3681	62	1129	88	1565	17	74.5	83
XTH3174	63	1144	91	1579	18	74.7	75
ICE QUEEN	62	1129	91	1579	17	74.2	77
GVS0210	64	1158	91	1579	19	77.7	78
Snogum	63	1144	92	1581	18	76.7	82
VAR. 7401	63	1144	92	1581	18	74.7	76
Glacial	62	1129	92	1581	17	73.8	78
XTH3379	65	1167	93	1590	20	75.7	79
Devotion	65	1167	93	1590	20	74.8	82
9-371	63	1144	93	1590	18	77.7	83

See Table 2 for heading descriptions.

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	Kernel Row Range	Pericarp Rating	Flavor Rating
HMX3344YS	G-VG	SL T	R	ST	M	10	SH	14 to 18	OK	G
10-435	F-G	SL T	R	ST-SL IRR	M-L	11	SH	12 to 18	OK	G
H11-1062	F-G	SL T	R	ST	M	11	SH-M	16 to 20	OK	G-SW
H11-1084	F-G	CY-SL T	R	ST-SL IRR	M	11	SH-M	12 to 18	OK	OK-G
H11-1066	F	SL T	R	ST	M	12	SH-M	16 to 22	OK	SW
XTH1679	G-VG	CY-SL T	R	ST-SL IRR	S-M	11	SH-M	16 to 20	OK	SW
HMX0372S	G-VG	CY-SL T	R	ST-SL IRR	M	11	SH-M	16 to 20	OK	G-SW
XTH1079	VG	CY-SL T	SL O	ST-SL IRR	M	12	M	16 to 20	OK	G
1972 XR	F-G	CY-SL T	SL O	ST	M	11	M	14 to 20	OK	G-SW
Protégé	VG	CY	R-SL O	ST-SL IRR	M	12	M	14 to 20	OK-T	G
VAR. 3552 R	VG	SL T	R-SL O	ST	M	12	M	16 to 20	S	G
GVS1590	G-VG	CY-SL T	R	ST	M	12	M	16 to 20	S	G-SW
HMX3346YS	VG	SL T	R	ST-SL IRR	M	12	M	18 to 22	OK-T	G
W1 12 9023	G-VG	CY	R-SL O	ST	M	11	M	16 to 22	OK-T	OK-G
GSS5652P	G-VG	CY-SL T	R	ST-SL IRR	M	11	SH-M	16 to 20	OK	G
4078 MXR	VG	CY-SL T	R	ST-SL IRR	M	11	SH-M	14 to 18	OK	G-SW
Mint	F-G	SL T	SL O	ST-SL IRR	M	13	M-D	16 to 22	T	OK
1980 XR	VG	CY	R	ST-SL IRR	M	11	SH-M	14 to 20	OK	G-SW
Rana	VG	CY	R	ST-SL IRR	M	12	M	14 to 20	OK-T	OK-G
W11-3034	G	CY	R-SL O	ST-SL IRR	M	12	SH-M	14 to 18	OK-T	G
H11-3253	G	CY	R-SL O	ST-SL IRR	M	13	M	14 to 20	OK	G
1880XR	G-VG	SL T	R	ST-SL IRR	S-M	12	SH-M	14 to 20	OK	G
HMX0376S	VG	CY	R	ST-SL IRR	M	11	SH-M	14 to 20	OK-T	G
VAR. 3083	VG	SL T	R	ST-SL IRR	M	12	M	16 to 22	OK-T	G
HMX9390S	VG	CY-SL T	R	ST-SL IRR	M	12	M	14 to 20	OK-T	G
GSS3071	VG	CY	R	ST-SL IRR	M	11	M	16 to 20	OK	G
ACX3590MR	G-VG	SL T	R	ST-SL IRR	S-M	13	M-D	18 to 22	OK-T	G
HMX9389S	VG-EX	CY	R	ST-SL IRR	S-M	13	M-D	18 to 20	OK-T	G-SW

Table 7. Ear and Kernel Ratings continued:

Cultivar	Ear Unif. Rating	Ear Shape Rating	Oval / Round Rating	Kernel Rowing Rating	Kernel Size Rating	Kernel Depth (mm)	Kernel Depth Rating	Kernel Row Range	Pericarp Rating	Flavor Rating
SV5541SK	G	T	R	ST-SL IRR	S-M	13	M-D	16 to 22	OK	OK-G
GSS1453	VG	SL T	R	ST-SL IRR	S-M	12	M	16 to 22	OK-T	G
VAR. 3081	VG	CY-SL T	R	ST-SL IRR	M	13	M-D	18 to 22	OK-T	G
GSS1477	VG	CY	R	ST-SL IRR	M	13	M-D	14 to 22	OK-T	G
GSS13951	VG	CY-SL T	R	ST-SL IRR	S-M	12	M-D	18 to 22	OK-T	G-SW
Overland	VG	SL T	R	ST-SL IRR	S-M	11	M	16 to 22	OK-T	OK
W1 12 9026	VG	CY	SL O	ST-SL IRR	M	11	SH-M	18 to 22	OK	G-SW
SV5365SK	VG	T	R-SL O	ST-SL IRR	S-M	13	M-D	20 to 26	OK	G
SV1514SK	VG-EX	T	R	ST-SL IRR	M	12	M-D	18 to 22	OK-T	OK
SV1365SK	VG	CY-SL T	R	ST-SL IRR	M	14	M-D	16 to 20	OK	G
SV1339SK	G-VG	CY	R	ST-SL IRR	M	13	M-D	18 to 22	OK-T	G
Hardi	VG	SL T	R-SL O	ST-SL IRR	S-M	11	SH-M	18 to 22	OK-T	G
10-403	VG	CY-SL T	R-SL O	ST-SL IRR	S-M	12	M	16 to 20	T	G
Fortitude	VG	CY-SL T	R	ST	M	11	SH-M	14 to 20	OK	G
Samurai	VG	SL T	R	ST-SL IRR	M	11	SH-M	14 to 20	OK	G-SW

Bicolor

BSS8040	G-VG	CY	R	ST-SL IRR	M	12	M	16 to 20	OK	G-SW
BSS5362	G-VG	C	R	ST-SL IRR	M	12	M	16 to 18	OK	G-SW

White

WSS3681	G-VG	CY	R	ST-SL IRR	M	13	M-D	14 to 20	OK	G-SW
XTH3174	VG	CY	R	ST	M	11	SH-M	14 to 18	OK	G
ICE QUEEN	VG	CY	R-SL O	ST-SL IRR	M	13	M	14 to 20	OK-T	OK-G
GVS0210	VG	CY	R	ST-SL IRR	M	11	SH-M	16 to 18	OK	G-SW
Snogum	G-VG	SL T	R	ST	M	11	M	16 to 20	OK	G-SW
VAR. 7401 Imp.	G-VG	CY	R	ST-SL IRR	M	11	M	16 to 20	S-OK	G-SW
Glacial	VG	CY	R	ST-SL IRR	M	11	M	16 to 20	S-OK	SW
XTH3379	VG	CY	R	ST-SL IRR	M	11	M	16 to 20	OK	G
Devotion	G-VG	CY-SL T	R	ST-SL IRR	M	13	M-D	18 to 22	OK	G
9-371	VG	SL T	R	ST-SL IRR	M	14	M-D	14 to 18	OK-T	G

Column heading descriptions on page 5

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

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	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
HMX3344YS	0.9	8.2	1.8	1.0	0.72	0.74	0.49	0.24	19.2	0.92	76.9	6.4	32	3.0
10-435	1.4	8.1	2.0	0.9	0.87	0.84	0.60	0.35	19.8	0.88	77.0	7.6	42	2.6
H11-1062	2.5	7.7	2.0	0.9	0.79	0.89	0.60	0.36	20.0	0.93	79.5	7.3	40	2.3
H11-1084	2.4	7.8	2.0	0.7	0.89	0.91	0.59	0.38	18.5	0.71	78.8	5.8	42	2.7
H11-1066	2.6	7.6	2.1	1.0	0.90	0.92	0.61	0.40	19.6	0.88	77.5	7.7	43	2.3
XTH1679	2.4	7.7	1.9	0.5	0.77	0.79	0.55	0.29	19.6	0.82	78.8	6.2	36	3.3
HMX0372S	0.9	8.2	1.8	0.5	0.80	0.84	0.57	0.28	19.1	0.91	78.0	6.9	33	3.5
XTH1079	2.2	8.0	2.0	0.4	0.81	0.87	0.63	0.38	20.1	0.90	76.8	7.4	44	3.1
1972 XR	2.0	7.5	2.0	0.8	0.86	0.88	0.60	0.38	19.5	0.83	77.9	7.0	43	2.2
Protégé	0.6	7.6	1.9	0.3	0.78	0.79	0.56	0.36	19.8	0.90	79.5	6.9	45	3.7
VAR. 3552 R	0.6	8.5	2.1	0.5	0.99	1.01	0.77	0.50	19.8	0.94	78.5	9.2	50	3.7
GVS1590	3.1	7.8	2.0	0.2	0.91	0.91	0.63	0.41	19.8	0.93	79.4	8.4	45	3.8
HMX3346YS	1.1	8.6	2.0	0.6	0.97	1.00	0.71	0.47	19.4	0.93	78.3	8.8	47	4
W1 12 9023	2.7	7.6	2.1	0.7	0.86	0.86	0.64	0.40	19.2	0.95	77.3	7.9	46	3.3
GSS5652P	1.1	7.6	1.9	0.4	0.81	0.81	0.56	0.32	18.4	0.92	76.9	6.8	40	3.8
4078 MXR	2.4	7.8	1.9	0.2	0.82	0.85	0.60	0.35	18.7	0.89	76.5	6.8	41	3.8
Mint	1.5	7.6	2.0	0.4	0.87	0.85	0.60	0.36	19.5	0.94	77.6	8.0	42	3
1980 XR	1.6	8.5	2.1	0.5	0.91	1.00	0.76	0.47	20.1	0.96	76.4	8.8	47	3.8
Rana	2.1	7.2	2.0	0.4	0.85	0.84	0.59	0.37	19.6	0.89	75.6	7.5	44	3.6

Table 8 continued:

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	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
W11-3034	1.9	8.6	2.1	0.9	0.94	1.00	0.75	0.46	18.7	0.95	75.5	8.4	46	3.0
H11-3253	1.4	8.2	2.0	0.4	0.89	0.89	0.66	0.40	18.9	0.94	76.3	7.9	44	3.0
1880XR	0.6	8.4	2.0	0.3	0.89	0.95	0.71	0.41	18.7	0.92	76.0	7.7	43	3.5
HMX0376S	1.3	7.4	1.9	0.1	0.79	0.79	0.58	0.34	18.3	0.94	78.0	6.8	42	3.8
VAR. 3083	-0.7	8.3	2.1	0.2	0.89	0.91	0.71	0.44	20.5	0.97	77.2	8.8	48	4
HMX9390S	1.7	8.1	2.0	0.3	0.84	0.86	0.64	0.35	18.0	0.86	76.3	6.6	41	3.7
GSS3071	1.3	8.2	2.0	0.2	0.84	0.88	0.65	0.43	18.4	1.06	78.7	8.2	50	4
ACX3590MR	0.5	8.6	2.1	0.4	0.92	0.95	0.74	0.46	19.6	0.94	77.2	8.5	48	3.9
HMX9389S	1.8	7.2	2.0	0.0	0.81	0.77	0.55	0.40	17.6	0.96	78.2	6.8	53	4.3
SV5541SK	1.8	8.0	2.3	0.4	1.01	1.03	0.79	0.54	19.3	0.84	79.3	8.2	52	3.4
GSS1453	0.5	7.7	1.9	0.1	0.75	0.77	0.58	0.35	19.3	0.95	77.7	6.9	46	4
VAR. 3081	0.8	7.9	2.0	0.2	0.84	0.87	0.68	0.46	20.3	0.84	76.2	7.2	53	4
GSS1477	1.0	8.4	2.1	0.5	0.89	0.94	0.75	0.48	17.7	0.86	76.0	6.8	51	4
GSS13951	2.1	7.8	2.0	0.1	0.89	0.89	0.64	0.41	19.3	0.94	76.8	8.1	45	3.8
Overland	0.6	8.0	2.0	0.1	0.83	0.84	0.63	0.39	18.4	0.89	78.5	6.8	46	4
W1 12 9026	0.9	8.5	2.0	0.5	0.96	0.96	0.69	0.42	17.7	0.90	77.7	7.7	43	3.7
SV5365SK	0.5	8.1	2.3	0.5	1.00	1.02	0.78	0.52	19.6	0.97	76.5	9.5	51	3.8
SV1514SK	2.5	7.5	2.2	0.2	0.89	0.96	0.70	0.46	18.6	0.97	79.7	8.1	48	4
SV1365SK	2.3	7.3	2.1	0.1	0.86	0.90	0.70	0.46	19.6	0.92	79.0	7.7	51	4.3

Table 8 continued:

Cultivar	Husk Ext. (in)	Ear Length (in)	Ear Diam. (in)	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
SV1339SK	2.1	7.9	2.2	0.7	0.96	0.94	0.76	0.51	20.3	0.96	76.2	9.3	54	3.6
Hardi	1.9	8.4	2.0	0.3	0.84	0.90	0.68	0.43	18.9	0.72	75.7	5.9	47	3.8
10-403	1.0	7.9	2.0	0.7	0.85	0.80	0.62	0.40	19.6	0.94	75.0	7.8	50	3.6
Fortitude	1.5	7.9	2.0	0.6	0.87	0.89	0.62	0.40	19.2	0.83	75.3	6.9	45	3.9
Samurai	0.7	7.6	2.0	0.2	0.77	0.80	0.61	0.38	18.9	0.97	76.3	7.1	48	3.8

Bicolor

BSS8040	1.8	7.5	2.0	0.1	0.86	0.86	0.63	0.40	20.3	0.84	74.8	7.4	47	3.7
BSS5362	0.5	7.4	2.0	0.3	0.80	0.79	0.61	0.39	18.9	0.91	74.8	6.8	49	3.5

White

WSS3681	-0.3	7.7	2.0	0.1	0.76	0.78	0.61	0.39	20.0	0.86	74.5	6.6	50	3.4
XTH3174	2.0	7.7	2.1	0.1	0.81	0.81	0.64	0.38	19.7	0.99	74.7	8.0	46	3.7
ICE QUEEN	0.9	7.8	2.0	0.0	0.87	0.86	0.65	0.42	20.5	0.97	74.2	8.7	48	3.7
GVS0210	1.1	7.6	1.9	0.0	0.84	0.87	0.61	0.41	18.0	0.97	77.7	7.4	47	3.8
Snogum	1.5	7.7	1.9	0.7	0.84	0.81	0.58	0.37	19.3	0.96	76.7	7.9	45	3.2
VAR. 7401	0.5	7.7	2.0	0.8	0.80	0.79	0.62	0.40	19.6	0.86	74.7	6.7	50	3.7
Glacial	1.3	8.1	2.0	0.4	0.93	0.96	0.71	0.45	20.2	0.93	73.8	8.9	47	3.8
XTH3379	1.1	7.6	2.1	0.2	0.89	0.89	0.68	0.42	20.3	1.01	75.7	9.1	47	4.2
Devotion	1.3	7.5	2.1	0.1	0.87	0.90	0.66	0.42	20.3	0.94	74.8	8.3	46	3.8
9-371	0.5	8.1	2.0	0.3	0.91	0.90	0.67	0.42	19.9	0.94	77.7	8.5	46	3.7

Table 9. Plant Characteristics (Supersweet gene type)

Cultivar	NCLB Rating	Tillars Rating	Rust Rating	Lodging	Plt Ht (in)	Ear ht. (in)
HMX3344YS	*	small	M-MOD	none	73	19
10-435	*	small	*	none	72	20
H11-1062	*	none	*	M-MOD	67	16
H11-1084	MOD	small	N	M-MOD	68	16
H11-1066	*	small	*	M-MOD	72	16
XTH1679	*	none	N	none	71	18
HMX0372S	Slight	none	M	none	85	25
XTH1079	Slight	none	N	none	74	19
1972 XR	*	none	*	none	72	18
Protégé	*	none	N	none	75	22
VAR. 3552 R	*	none	MOD	none	81	20
GVS1590	*	none	MOD - SEV	none	82	21
HMX3346YS	*	none	*	none	84	21
W1 12 9023	Slight	none	M	M	76	18
GSS5652P	*	none	N	none	76	19
4078 MXR	*	none	N	M	79	22
Mint	*	none	MOD	none	78	21
1980 XR	Slight	none	N	none	76	25
Rana	SI - MOD	large	MOD	none	72	18
W11-3034	Slight	none	N	M	78	20
H11-3253	Slight	none	N	none	78	21
1880XR	Slight	none	N	none	75	21
HMX0376S	Slight	small	N	none	79	25
VAR. 3083	MOD	none	M-MOD	none	80	25
HMX9390S	Slight	none	N	none	88	25
GSS3071	*	small	N	none	83	22
ACX3590MR	Slight	small	N	M	76	21
HMX9389S	Slight	small	N	none	78	22
SV5541SK	Slight	none	M-MOD	none	81	21
GSS1453	Slight	small	N	none	81	27
VAR. 3081	Slight	small	N	M	76	20

Table 9. Plant Characteristics continued:

Cultivar	NCLB Rating	Tillars Rating	Rust Rating	Lodging	Plt Ht (in)	Ear ht. (in)
GSS1477	Slight	small	N	M	80	22
GSS13951	Slight	none	N	none	85	23
Overland	Slight	small	N	L	78	24
W1 12 9026	Slight	small	M	M	81	20
SV5365SK	Slight	none	N	none	86	25
SV1514SK	Slight	small	N	none	75	22
SV1365SK	Slight	small	N	none	83	24
SV1339SK	Slight	none	N	none	88	27
Hardi	Slight	small	N	none	82	26
10-403	SI-MOD	large	N	none	81	24
Fortitude	Slight	none	M	none	73	19
Samurai	MOD	small	N	none	80	25
Bicolor						
BSS8040	Slight	small	N	none	84	24
BSS5362	MOD-SEV	large	M	none	88	25
White						
WSS3681	MOD-SEV	large	N	M-MOD	89	23
XTH3174	SI-MOD	none	MOD	M	79	21
ICE QUEEN	Slight	small	MOD	M	75	21
GVS0210	Slight	none	MOD	M	77	18
Snogum	Slight	large	N	none	78	18
VAR. 7401 Imp.	Slight	none	M	M	72	15
Glacial	Slight	small	M-MOD	none	70	19
XTH3379	Slight	small	M	none	77	24
Devotion	SI-MOD	none	MOD	none	84	25
9-371	Slight	none	N	M	93	28

* - indicates that I could not take evaluations (I waited too long and early cultivars were too old)
 Column descriptions same as Table 5

Additional Comments ss type (Many of these were 10-15 days before silk when hail storm hit. Typically two of the three replications would be at good harvest maturity and third might be quite young. This skewed the average moisture on some to look like it had been harvested quite young.

Yellow

HMX3344YS – early season, nice plant, slender, tapered ears that were not filled, kernels on the shallow side – low recovery, yield not the best, has some rust, overall rating of 3.0.

10-435 – early season, clean plant, green ear tips with some exposed ears, shallow kernels, mishappen ears possibly caused by hail, poor ear uniformity, ears not filled, big cob, overall rating of 2.6.

H11-1062 – early season, very short plants with some minor lodging, poor ear uniformity, misshapen ears possibly caused by hail damage, harvested a bit young, overall rating of 2.3.

H11-1084 – very short, poor plant type, some broken stalks, moderate NCLB symptoms, poor ear uniformity, kernels a bit large, considerably lower ears per plant, overall rating of 2.7.

H11-1066 – poor plant type, some broken stalks possibly due to raccoon damage, poor ear uniformity, short ears, overall rating of 2.3.

XTH1679 – 1 ear smut in sample (one rep), variable tip fill, lower ears per plant than most othersear uniformity needed to be better, overall rating of 3.3.

HMX0372S – long, slender, cylindrical ears with good tip fill, ear uniformity could have been a bit better, overall rating of 3.5

XTH 1079 – slightly oval (hurt overall rating), ear uniformity decent, overall rating of 3.1.

1972XR – clean plants, ears close to the ground, ear uniformity only fair on most, gaps on many ears due to pollination problems (probably related to hail storm), lower ears per plant, poor tip fill, overall rating of 2.2.

Protégé – short ears that were not quite filled but uniformly so, small cob, good kernel depth, overall rating of 3.7.

VAR3552R – long, heavy, tapered ears, high yield and recovery, soft pericarp and good flavor, good kernel depth, moderate rust, overall rating of 3.7.

GVS1590 – slender, well filled ears, soft pericarp, a bit better ear uniformity would have helped increase overall rating, harvested a bit young, moderate to severe rust, overall rating of 3.8.

***HMX3346YS** – long, slender ears not quite filled, small cob, yielded very well in two replications (one replication was immature at harvest – hail storm result??), overall rating of 4.0.

W1129023 – very clean plant although a few broken stalks, shorter, cylindrical ears, similar to 3253 in that both replications were considerably different (one good and one poor), overall rating of 3.3, would need to look at again to properly evaluate it.

GSS5652P – short, uniform ears, kernel depth a bit shallow, minimal sugar, overall rating of 3.8.

4078 MXR – a few broken plants, low ears, plants quite uniform and clean, one rep was harvested quite immature (will hurt overall recovery for the cultivar), very good tip fill, kernel depth a bit shallow, overall rating of 3.8.

Mint – short, cylindrical ears, ear uniformity not as good as it needs to be, a hint of oval, kernels quite tough, moderate rust, overall rating of 3.0.

1980XR – long, large ears, high yield but kernel depth a bit shallow, a few curved ears found, kernels appearance a bit coarse, overall rating of 3.8.

Rana – large suckers, moderate rust, slight to moderate NCLB, short, uniform, well filled ears, overall rating of 3.6.

W11-3034 – clean plants but had a couple broken plants, few curved ears, long ears that were not filled, ear uniformity needs to be better, a hint of oval, overall rating of 3.0.

H11-3253 – clean, uniform plants, two replications were quite different – one poor and one quite good, poorer rep had many ears with pollination gaps possibly due to hail storm, overall rating of 3.0, would need to look at again to properly evaluate it.

Additional comments continued:

1880XR – some exposed tips, long, heavy ears, decent ear uniformity, kernels a bit shallow, overall rating of 3.5.

HMX0376S – very good ear uniformity and tip fill, kernel depth a bit shallow, (three replications varied from overall rating of 3 to 4.5), overall rating average of 3.8.

***VAR3083** – good plant type, exposed tips, very good ear uniformity and tip fill, a bit one sided, moderate NCLB and minor to moderate rust, overall rating of 4.0

HMX9390S – clean plant type, a few broken plants, very good ear uniformity, good tip fill, a hint of oval in one rep, a few plants did not have marketable ears (variable maturity possibly caused by hail storm), overall rating of 3.7.

***GSS3071** – slender, well filled ears, VG ear uniformity, one rep had a number of second ears that were marketable (resulted in a highest ears per plant), good kernel depth and yield, high recovery, small cob, overall rating of 4.0.

ACX3590MR – long, tapered ears with good fill on most, good kernel depth, variable ear maturity possibly caused by hail storm, overall rating of 3.9.

***HMX9389S** – very good to excellent ear uniformity and tip fill, blunt tip, cylindrical ears, small cob, yield was not huge but deep kernels resulted in high recovery, overall rating of 4.3.

SV5541SK – some stalk smut, very large diameter ears resulting in huge yield, high recovery, did not cut very well on my machine (chopped instead of cut cleanly), large cob, minimal flavor, ear uniformity hurt the overall rating, some rust symptoms, overall rating of 3.4.

***GSS1453** – very good ear uniformity, small cob, very good tip fill, smaller kernels, overall rating of 4.0.

***VAR3081** – a few broken plants, nice ear uniformity, very good tip fill, good kernel depth, high recovery, NCLB might be a concern, ears a bit one sided, overall rating of 4.0.

GSS1477 – a few broken plants, long, uniform ears, not filled but uniformly so, good kernel color and kernel depth, high recovery, overall rating of 4.0.

GSS13951 – very good good tip fill, small cob, nice kernel style, good kernel depth, ear uniformity a bit variable and this hurt the overall rating, overall rating of 3.8.

***Overland** – large diameter, nicely filled ears, ear uniformity good, one rep had many yellow plants and small ears (possibly a wet area), yield not typical of other years although harvested a bit young, overall rating of 4.0.

W1 12 9026 – large ears pulling a few plants partially over, long, cylindrical ears that were not quite filled, good ear uniformity but a bit oval, nice gloss to the kernels, overall rating of 3.7.

SV5365SK – good, uniform plant type, very good ear uniformity, large diameter, tapered ears that had deep kernels and were not quite filled, high yield and recovery, big cob, a hint of oval on some ears (slight curve), did not cut well in my cutter, overall rating of 3.8.

***SV1514K** – very strong plant, large diameter ears, very nice ear uniformity, excellent tip fill, deep kernels and small cob, minimal flavor, my cutter did not cut it very well, overall rating of 4.

***SV1365K** – large diameter ears, very good ear uniformity, small cob, nice tip fill, deep kernel depth, a few plants each rep that did not have a marketable ear, overall rating of 4.3.

SV1339SK – stout plant but large diameter ears were pulling a few plants over, few broken plants, ears not completely filled, big cob, ear uniformity could have been a bit better, a hint of oval on some ears, good kernel depth, high yield and recovery, overall rating of 3.6.

Hardi – a few broken plants, long, slightly tapered ears, overall ear rating of 3.8 but many small unmarketable ears lowered yield in two replications.

10-403 – some broken plants, large suckers, slight to moderate NCLBslightly tapered ears not quite filled, hint of oval, very good ear uniformity, one sided, overall rating of 3.6

Fortitude – solid plant, very good ear uniformity, decent tip fill, kernel depth a bit shallow, overall rating of 3.9.

Samurai – moderate NCLB symptoms, shorter, uniform ears, most had very good tip fill, kernel depth a bit shallow, overall rating of 3.8.

Additional comments continued:

Bicolor

BSS8040 – much better plant type than 5362, shorter, slightly tapered ears with good fill, small cob, ear uniformity could be a bit better, overall rating of 3.7.

BSS5362 – moderate to severe stalk smut, moderate to severe NCLB, trashy plant with broken stalks, short, cylindrical ears that were not quite filled, good kernel color (glossy) and contrast, small cob, overall rating of 3.5.

White

WSS3681 – trashy plant, moderate to severe NCLB symptoms, good kernel depth with small cob, exposed ear tips, very good tip fill, high recovery, decent ear uniformity, overall rating of 3.4.

XTH3174 – some minor plant goose necks, slight to moderate NCLB and moderate rust symptoms, very good ear uniformity, nice rowing, kernels a bit shallow, very good tip fill, hint of oval on a few ears, overall rating of 3.7.

Ice Queen – some minor plant goose necks, moderate rust, slender, cylindrical ears with very good tip fill and ear uniformity, some ears that were slightly oval in one rep, overall rating of 3.7.

GVS0210 – very clean plant, moderate rust, shorter, slender, uniform ears with good kernel depth, excellent tip fill, overall rating of 3.8.

Snogum – short, tapered ears that were not quite filled, small cob, two reps good yield and third lower, ear uniformity could have been better, overall rating of 3.2.

VAR7401 Imp. – some minor plant goose necks, moderate NCLB symptoms, decent ear uniformity, high recovery, not quite filled, overall rating of 3.7.

Glacial – a few broken plants, minor to moderate rust, slender, cylindrical ears with good fill, two (of three) reps had excellent yield, very good ear uniformity, hint of oval in one rep, overall rating of 3.8.

***XTH3379** – good plant, cylindrical, uniform ears with very good tip fill, overall rating of 4.2, best overall ear and plant package of the whites.

Devotion – moderate rust, ear uniformity could be a bit better, very good tip fill, good kernel depth and small cob, overall rating of 3.8.

9-371 – some minor plant goose necks, short, slender, slightly tapered ears with good fill, good yield in two of three reps, good kernel depth, overall rating of 3.7.

Descriptions Provided by the Seed Source (Supersweets)

HMX3344YS (A80504R) – Harris Moran; 74 days to maturity; status 2; IR for MDMV

10-435 – Crookham; pending

H11-1062 – IFSI; 72 days to maturity;

H11- 1084 – IFSI; 70 days to maturity;

H11-1066 – IFSI; 73 days to maturity;

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 (GI alleles).

HMX 0372S – Harris Moran, 83 day to maturity, 16-18 row count, 8.25 inch ear length, 2 inch ear width, IR for NCLB

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 (GI alleles).

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

Protégé (GSS-7164)– Syngenta; 77 days to maturity (1615 heat units); 1.85" ear diameter; 8" ear length; 18 row count; 7' plant height; similar to GSS 9299 with newer I gene for rust resistance and better ear uniformity.

Descriptions Provided by the Seed Source (Supersweets) continued:

Var. 3552R – Abbott & Cobb; color yellow; 77 days to maturity; 18-20 row count; 9-9.5" ear length; HR for MDMV

GVS1590 – Gallatin Valley; 78 day maturity; color yellow; should have rust resistance and NCLB, Stewarts wilt tol.

HMX3346YS (A90313) – Harris Moran; 79 days to maturity; HR for MDMV and Ps; IR for Et; e for Allele Rp1.

W1 12 9023 – Abbott & Cobb; color yellow; 79 days to maturity; 18 row count; 8" ear length; Ps/Rp1D+Rp1Gl;Et/Hr

GSS5652P – Syngenta; 78 days to maturity; rust tolerance - g gene in a Protégé type with Poast tolerance; good tolerance to NCLB and expected tolerance to Pst.

4078 MXR – IFSI; 78 days to maturity

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

1980 XR – IFSI; 79 days to maturity

Rana R – Crookham, 82 days to maturity; extremely consistent; intermediate/moderate resistance to Rp1D, Stewart's Wilt, High/Standard resistance to Northern Corn Leaf Blight.

W11-3034 – IFSI; 78 days to maturity;

H11-3253 – IFSI; 79 days to maturity

1880XR (H11-3235) – IFSI; 80 days to maturity

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

ACR 3083RD – Abbott & Cobb; 83 days to maturity; 16-18 row count; 8.5" ear length; medium plant height; HR for Ps, Et, MDMV, Pst.

HMX9390S (A60814) – Harris Moran; 83 days to maturity; status 2; 16-18 row count; 22 cm. ear length; 5 cm ear diameter; HR for MDMV and Ps; IR for Et; gjf for Allele Rp1.

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

3590MR – Abb. & Cobb; 82 day maturity; 18-20 row count; 8.5" ear length; M plant size; HR for Ps, Et, MDVM, Pst.

HMX 9389S – Harris Moran, 81 day to maturity, 18-20 row count, 7.9 inch ear length, 1.9 inch ear width, HR for MDMV, NCLB and Rust (gjf).

SV5541SK – Seminis; 77 days to maturity; color yellow; Heata units 1620; avg. plant height 80"; ear height 30"; ear length 8 – 8.5"; ear diameter 2.1"; avg. row count 16-18; disease resistance: HR for RpG+Rp1l.

GSS1453 – Syngenta; 84 days to maturity; color yellow; strong yielding variety that offers long, quality supersweet ears; full season; 8.5" ear length; 2" ear diameter; 18 row count; disease resistance: HR for Et/Ps (Rp1-i)/Pst; IR for Bm/Ps.

ACR 3081MR – Abbott & Cobb; 79 days to maturity; color yellow; 18 row count; 8" ear length; plant size – medium/short; HR Common Rust (Rp1G and Rp1l) and NCLB.

GSS1477 – Syngenta; 79 days to maturity; color yellow; leads the industry for yield and recovery; excellent emergence; finishes strong late in season relative to other hybrids; 8.5" ear length; 1.9" ear diameter; 16-18 row count; disease resistance: HR for Bm/Et/Ps: (Rp1-d); IR for MDMV: A/Ps/Pst.

GSS13951 – Syngenta; 82 days to maturity; d and l rust genes; good tolerance to NCLB and expected tol. to Pst.

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

Descriptions Provided by the Seed Source (Supersweets) continued:

WI12 9026 – Abbott & Cobb, 79 days to maturity, 18-20 row count, Rp1d gene, Et/IR(Ht1).

SV5365SK – Seminis; 83 days to maturity; color yellow; heat units 174i0; avg. plant height 85"; ear height 30"; ear length 8 – 8.5"; ear diameter 2.2"; avg. row count 20-22; disease resistance: HR for RpG5JC.

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

SV1365SK – Seminis, SH2 yellow, 80 day RM, 1680 heat units, AVG plant ht. 75 inches, Avg ear ht. 24 inches, Avg ear length 8 inches, avg ear diameter 2 inches, Avg row count 18-20, Anticipated Highly Resistant: Rust (RpG). SV1365SK is being sold commercially for the processor market.

SV1339SK – 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, Anticipated Highly Resistant: Rust Rp1I; Intermediate Resistant: MDMV and Northern Corn Leaf Blight rot. This hybrid will continue to be trialed.

Hardi – Crookham; 88 days to maturity; old rust resistance; moderate MDMV resistance; good kernel.

10-403 – Crookham; good Northern Corn Leaf Blight Tolerance, G&D Rust Resistance, nice rowing and recovery.

Fortitude – Crookham; staying power in the field = large harvest window time frame; Intermediate/Moderate Resistance to Common Rust (Rp1D), Stewart's Wilt, and High/Standard Resistance to Northern Corn Leaf Blight.

Samurai – Crookham; new and old rust, MDMV resistance, Stewart's Wilt resistance, NCLB Resistance.

Bicolor

BSS8040 – Syngenta; 81 days to maturity; bicolor; 8" ear length; 1.9" ear diameter; 16-18 row count; disease resistance: HR for Bm/Ps: (Rp1-d)/Pst – IR for Et

BSS5362 – Syngenta, 83 days to maturity, 8.5 inch ear length, 1.8 inch ear diameter, 18-20 row count, rust resistant.

White

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

XTH3174 – IFSI; 75 days to maturity

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.

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

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

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

Glacial (ACR1743) – Abbott & Cobb; color white; 78 days to maturity; 16-18 row count; 8" ear length.

XTH3379 – IFSI; 79 days to maturity

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

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

Northern Corn Leaf Blight – Et or NCLB, (*Exserohilum turcicum*)

Maize dwarf mosaic –MDMV (Maize dwarf mosaic virus)

Common Rust – Ps (*Puccinia sorghi*)

Stewarts wilt – Pst (*Pantoea stewartii* (ex. *Erwinia stewartii*))

Southern corn leaf blight – Bm (*Bipolaris maydis*(=*Helminthosporium maydis*))

Table 10. Weather Summary 2014

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
5/27/14	82	62	72	0	0	22	22
5/28/14	83	53	68	0	0	18	40
5/29/14	57	51	54	0	0	4	44
5/30/14	66	47	56.5	0	0	6.5	50.5
5/31/14	74	50	62	0	0	12	62.5
6/1/14	70	44	57	0	0	7	69.5
6/2/14	79	56	67.5	0	0	17.5	87
6/3/14	87	62	74.5	0.33	0.33	24.5	111.5
6/4/14	82	52	67	0.05	0.38	17	128.5
6/5/14	72	52	62	0	0.38	12	140.5
6/6/14	64	53	58.5	0	0.38	8.5	149
6/7/14	71	52	61.5	0	0.38	11.5	160.5
6/8/14	78	52	65	0	0.38	15	175.5
6/9/14	82	60	71	0.57	0.95	21	196.5
6/10/14	72	60	66	0	0.95	16	212.5
6/11/14	75	62	68.5	0.02	0.97	18.5	231
6/12/14	77	63	70	0.13	1.1	20	251
6/13/14	69	64	66.5	0.23	1.33	16.5	267.5
6/14/14	81	50	65.5	0.1	1.43	15.5	283
6/15/14	64	52	58	0	1.43	8	291
6/16/14	71	52	61.5	0	1.43	11.5	302.5
6/17/14	84	56	70	0	1.43	20	322.5
6/18/14	88	65	76.5	0.71	2.14	26.5	349
6/19/14	75	62	68.5	0.05	2.19	18.5	367.5
6/20/14	72	51	61.5	0	2.19	11.5	379
6/21/14	70	47	58.5	0	2.19	8.5	387.5
6/22/14	73	52	62.5	0	2.19	12.5	400
6/23/14	77	53	65	0	2.19	15	415
6/24/14	83	59	71	0	2.19	21	436
6/25/14	85	66	75.5	1.12	3.31	25.5	461.5
6/26/14	75	64	69.5	0.55	3.86	19.5	481
6/27/14	77	58	67.5	0	3.86	17.5	498.5
6/28/14	82	60	71	0	3.86	21	519.5
6/29/14	85	66	75.5	0	3.86	25.5	545
6/30/14	86	69	77.5	0	3.86	27.5	572.5
7/1/14	88	70	79	0	3.86	29	601.5
7/2/14	89	69	79	0.15	4.01	29	630.5
7/3/14	86	68	77	0	4.01	27	657.5
7/4/14	76	58	67	0.1	4.11	17	674.5
7/5/14	71	56	63.5	0	4.11	13.5	688

Table 10 continued:

Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
7/6/14	78	57	67.5	0	4.11	17.5	705.5
7/7/14	82	62	72	0	4.11	22	727.5
7/8/14	78	65	71.5	0.1	4.21	21.5	749
7/9/14	86	59	72.5	0.1	4.31	22.5	771.5
7/10/14	76	53	64.5	0.32	4.63	14.5	786
7/11/14	74	52	63	0	4.63	13	799
7/12/14	78	54	66	0	4.63	16	815
7/13/14	84	66	75	0	4.63	25	840
7/14/14	77	64	70.5	0.2	4.83	20.5	860.5
7/15/14	80	65	72.5	1.04	5.87	22.5	883
7/16/14	79	54	66.5	0.15	6.02	16.5	899.5
7/17/14	72	55	63.5	0	6.02	13.5	913
7/18/14	73	55	64	0	6.02	14	927
7/19/14	78	57	67.5	0	6.02	17.5	944.5
7/20/14	76	61	68.5	0.15	6.17	18.5	963
7/21/14	78	62	70	0	6.17	20	983
7/22/14	83	63	73	0	6.17	23	1006
7/23/14	87	65	76	0	6.17	26	1032
7/24/14	84	58	71	0.13	6.3	21	1053
7/25/14	69	54	61.5	0	6.3	11.5	1064.5
7/26/14	77	54	65.5	0	6.3	15.5	1080
7/27/14	83	59	71	0	6.3	21	1101
7/28/14	82	54	68	1.1	7.4	18	1119
7/29/14	64	54	59	2.82	10.22	9	1128
7/30/14	68	54	61	0.01	10.23	11	1139
7/31/14	73	52	62.5	0.84	11.07	12.5	1151.5
Hail storm							
8/1/14	76	51	63.5	0	11.07	13.5	1165
8/2/14	81	58	69.5	0	11.07	19.5	1184.5
8/3/14	83	62	72.5	0.14	11.21	22.5	1207
8/4/14	75	62	68.5	0.97	12.18	18.5	1225.5
8/5/14	79	60	69.5	0.05	12.23	19.5	1245
8/6/14	76	61	68.5	0.1	12.33	18.5	1263.5
8/7/14	74	58	66	0	12.33	16	1279.5
8/8/14	74	56	65	0	12.33	15	1294.5
8/9/14	75	54	64.5	0	12.33	14.5	1309
8/10/14	79	55	67	0	12.33	17	1326
8/11/14	80	59	69.5	0	12.33	19.5	1345.5
8/12/14	82	59	70.5	0.21	12.54	20.5	1366

Table 10 continued:							
Day	Max. Temp.	Min. Temp.	Mean Temp.	Precip.	Acc Precip.	Degree Days Base 50	acc dd units base 50
8/13/14	73	63	68	0.24	12.78	18	1384
8/14/14	73	54	63.5	0.05	12.83	13.5	1397.5
8/15/14	68	53	60.5	0.07	12.9	10.5	1408
8/16/14	70	54	62	0	12.9	12	1420
8/17/14	71	59	65	0.17	13.07	15	1435
8/18/14	71	56	63.5	0	13.07	13.5	1448.5
8/19/14	70	49	59.5	0.03	13.1	9.5	1458
8/20/14	78	53	65.5	0.02	13.12	15.5	1473.5
8/21/14	75	64	69.5	0.18	13.3	19.5	1493
8/22/14	78	63	70.5	0.62	13.92	20.5	1513.5
8/23/14	78	63	70.5	0.24	14.16	20.5	1534
8/24/14	71	57	64	0	14.16	14	1548
8/25/14	77	56	66.5	0	14.16	16.5	1564.5
8/26/14	79	57	68	0	14.16	18	1582.5
8/27/14	82	58	70	0	14.16	20	1602.5
8/28/14	77	55	66	0	14.16	16	1618.5
8/29/14	67	52	59.5	0	14.16	9.5	1628
8/30/14	72	52	62	0	14.16	12	1640
8/31/14	82	60	71	0.48	14.64	21	1661
9/1/14	75	48	61.5	0	14.64	11.5	1672.5
9/2/14	82	69	75.5	0	14.64	25.5	1698
9/3/14	83	63	73	0.28	14.92	23	1721
9/4/14	78	59	68.5	0	14.92	18.5	1739.5
9/5/14	84	60	72	0	14.92	22	1761.5
9/6/14	89	66	77.5	0.1	15.02	27.5	1789
9/7/14	74	54	64	0	15.02	14	1803
9/8/14	71	46	58.5	0	15.02	8.5	1811.5
9/9/14	75	49	62	0	15.02	12	1823.5
9/10/14	74	55	64.5	0	15.02	14.5	1838
9/11/14	75	60	67.5	0.05	15.07	17.5	1855.5
9/12/14	71	49	60	0.1	15.17	10	1865.5
9/13/14	59	41	50	0	15.17	0	1865.5
9/14/14	66	42	54	0.28	15.45	4	1869.5
9/15/14	60	45	52.5	0	15.45	2.5	1872
9/16/14	68	50	59	0.26	15.71	9	1881
9/17/14	65	46	55.5	0.01	15.72	5.5	1886.5
9/18/14	67	47	57	0	15.72	7	1893.5
9/19/14	61	36	48.5	0	15.72	0	1893.5
9/20/14	60	35	47.5	0	15.72	0	1893.5
9/21/14	75	59	67	0	15.72	17	1910.5