## Report to the Oregon Processed Vegetable Commission 1996-1997

1. <u>Title</u>: Sweet Corn Variety Evaluation

2. Project Leaders: J. R. Stang, Horticulture

Brian Yorgey, Food Science and Technology

3. Project Status: Terminating June 30, 1997

4. Project Funding: \$5,000 field trials

**\$4,875** processing

\$9,875

Funds were used for research farm expenses and labor for harvesting, processing, and evaluation of corn samples.

5. Objectives:

To determine the production and processing potential of new introductions of sweet corn.

# 6. Report of Progress:

A. Replicated plot trials of standard sugary (su) and SE (sugary enhanced) corn varieties were planted on June 3, and supersweet (sh) varieties were planted in a separate field on June 10. In each case, there were four single-row replications, each 30 feet long in rows three feet apart. Replications were arranged in randomized blocks. The plots received 450 lbs/A of 12-29-10 fertilizer banded at planting, and a sidedress of 100 lbs N as urea on 22 July. In the June 3 planting, the SE varieties were separated from the su varieties by a block of SE rows to minimize the effect of the su on SE varieties. Yellow and white varieties were grown together. Additional varieties of each type of corn were planted in non-replicated plots for observation and yield estimates.

In each planting, plots were overseeded and thinned to stand about 9" apart, for a population of 19,000 per acre. Harvests were made at about 73% moisture for su and SE varieties and about 78% for supersweet varieties, as determined by vacuum oven method. Factors observed are shown in the tables. Except for descriptive observations (Tables 3 and 6), and for the observation plots, all data were obtained separately for each replication.

Varieties which appeared to have promise for processing were canned and frozen at the Food Science and Technology pilot plant. Objective data and panel evaluations of processed corn samples will be reported at a later date.

B. Varieties which were noted to have sufficient merit to justify further trial are listed below. All these varieties were processed.

#### **SE Varieties:**

GH 1887 - refined, attractive ears, good cylindrical shape, good yield (7.7 T/A), tender, sweet, but variable, some ears are curved

GH 2684 - very good cylindrical shape, refined ears, fair yield (7.3 T/A), tender, sweet

Empire - refined ears, nice shape, very good yield (9.6 T/A), good flavor, tender

GH 2757 - attractive, uniform, refined ears, good yield (8.6 T/A), tender

### Sugary (su) Varieties:

DMC 2038 - fairly uniform, attractive but poor tip fill, good yield (7.8 T/A), tough

HMX 5371 - uniform, refined, cylindrical ears, fair yield (6.7 T/A), tender, deep kernels

Sequel - attractive large ears with even kernels, uniform, good yield (8.0 T/A), deep kernels, tender

Jubilee - very uniform, nice looking ears, deep kernels, fair yield (7.1 T/A), good flavor

XPH 3125 - yielded very well (8.4 T/A), but poor ear uniformity was a problem.

## Supersweet (sh<sub>2</sub>) Varieties:

Crisp 'n Sweet 710A - uniform, fair yield (6.5 T/A), attractive; neat ears, but fairly tough and kernels somewhat coarse

Victor - large ears, very good yield (9.4 T/A), deep kernels, but tough, and ears are oval

Supersweet Jubilee - very uniform, refined, attractive ears, fair yield (7.2 T/A), very good flavor

Krispy King - fat ears, very uniform, very good tip fill, good yield (7.9 T/A), good flavor but tough

Bandit - good yield (8.7 T/A), deep kernels, uniform, but somewhat coarse kernels

FMX 416 - yielded very well (9.6 T/A) but had coarse kernels and misshapen ears

# 7. <u>Summary</u>:

Twenty-two SE and sugary (su) varieties and 29 supersweet varieties of corn were tested in replicated or observation plots. Four SE, four sweet, and five supersweet varieties were considered to be of interest and candidates for further testing. Fourteen varieties were canned and frozen for objective evaluations and industry panel evaluations.

8.	Signatures:	
	Project Leader:	Redacted for Privacy
	Project Leader:	Privacy Redacted for Privacy
	·	Redacted for Privacy
	Department Head:	
	Department Head:	Redacted for Privacy

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Table 1. Yield and ear measurements, sugary enhancer (se) and sweet (su<sub>1</sub>) corn replicated trial, Coryallis, 1996.<sup>2</sup>

			Silk	Days to	%			Good E		Cu1		Lbs/	Ear Length	Ear Diam.	Kernel Depth	Pericarp
Variety	Sourcey	Typex	Date	Harvest	H <sub>2</sub> O <sup>w</sup>	Stand	1000/A	T/A	No/Plant	1000/A	T/A	Ear	(in.)	(in.)	(mm)	Toughness*
GH 1861	1	su	7/31	88	73.5*	26	19.4	6.8	1.0	2.4	0.4	0.70	8.5	1.96	12.3	130
Chase	2	se	8/3	88	73.9*	26	20.1	6.7	1.1	1.6	0.4	0.67	8.8	1.93	10.4	112
DMC 2004	3	su	8/2	88	72.5*	28	23.1	6.7	1.2	3.8	0.7	0.59	8.3	1.81	11.1	139
XPH 3125	2	su	8/6	91	72.1*	27	27.6	8.4	1.4	3.6	0.7	0.62	8.1	1.93	10.6	145
GH 1887	1	se	8/6	93	69.8	29	26.1	7.7	1.3	5.1	0.9	0.60	8.2	1.94	11.5	110
Fantasia	2	se	8/7	93	72.9*	27	28.9	7.9	1.5	6.0	0.9	0.55	7.9	1.86	10.4	93
GH 2684	1	se	8/8	94	72.0	28	22.9	7.3	1.1	2.0	0.4	0.64	8.8	1.92	11.9	92
Jubilee ,	1	su	8/8	95	72.8*	27	24.7	7.1	1.3	1.6	0.4	0.58	8.1	1.93	12.8	92
HMX 5371	3	su	8/8	96	75.0	27	21.2	6.7	1.1	2.4	0.4	0.64	8.4	1.91	12.1	76
DMC 2038	3	su	8/9	98	74.2	27	21.6	7.8	1.1	4.5	0.9	0.72	8.9	2.04	12.3	130
Sequel	2	su	8/8	98	74.5	27	20.1	8.0	1.0	1.6	0.4	0.80	8.6	2.10	12.5	89
Empire	1	se	8/11	99	73.6	28	29.4	9.6	1.4	3.3	0.5	0.66	8.5	1.94	12.1	78
GH 2757	1	se	8/10	100	73.3*	27	26.1	8.6	1.3	4.4	0.8	0.66	8.2	2.01	13.3	97
LSD at 5%							4.2	1.3	0.2	1.9	0.4	0.03	0.2	0.06	0.8	12

<sup>&</sup>lt;sup>2</sup>Planted June 3 in rows 36" apart, thinned to 9" between plants. All values shown are means of 4 replications arranged in randomized complete blocks. All data except cull no. and T/A were obtained from typical husked good ears. For ear length, ear diameter, and tenderness, the value shown is the average of 10 individual ear measurements.

<sup>&</sup>lt;sup>y</sup>Sources: 1 = Rogers, 2 = Asgrow, 3 = Harris-Moran. <sup>x</sup>Endosperm type: su = sweet, se = sugary enhancer.

<sup>&</sup>quot;Varieties marked with \* had no data on % moisture at harvest. Numbers shown are estimates based on sampling percents and assuming a 1% drop every two days.

Tenderness determined by a spring-operated puncture gauge; lower numbers indicate more tender pericarp.

Table 2. Yield and ear measurements, sugary enhancer (se) and sweet (su<sub>1</sub>) corn observation trial, Corvallis, 1996.<sup>2</sup>

Variety	Source	Typex	Silk Date	Days to Harvest	Stand	1000/A	Good E T/A	ars No/Plant	Cul 1000/A	ils T/A	Lbs/ Ear	Ear Length (in.)	Ear Diam. (in.)	Kernel Depth (mm)	Pericarp Toughness*
Silver King	1	se	8/11	99.	26	28.3	7.9	1.5	2.2	0.4	0.56	7.7	1.9	11.5	97
HMX 5373 recip.	2	su	8/10	99	23	29.0	8.1	1:.7	3.6	0.7	0.56	7.6	1.9	10.5	87
Splendor	3	su	8/10	99	27	18.2	8.2	0.9	0.7	0.1	0.91	8.8	2.1	12.5	133
Eliminator	3	su	8/9	99	29	24.0	9.7	1.1	0	0	0.82	9.0	2.1	10	205
Swis 13	4	se	8/11	100	28	31.2	7.7	1.5	0.7	0.1	0.50	7.4	1.8	12	98
GH 7080	1	se	8/13	102	27	25.4	9.9	1.3	4.4	0.8	0.78	9.0	2.1	13	93
Swis 271	4	se	8/15	105	27	31.2	9.3	1.6	3.6	1.0	0.60	7.8	1.9	11	
HMX 5374 recip.	2	su	8/16	105	32	21.1	7.0	0.9	1.5	0.3	0.67	7.7	2.1	13	71

<sup>&</sup>lt;sup>2</sup>Planted June 3 in rows 36" apart, thinned to 9" between plants. Yield estimates are from a single 20' plot. All data except cull no. and T/A were obtained from typical husked good ears. For ear length, ear diameter, and tenderness, the value shown is the average of 10 individual ear measurements.

<sup>y</sup>Sources: 1 = Rogers, 2 = Harris-Moran, 3 = Crookham, 4 = Galilee.

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<sup>\*</sup>Endosperm type: su = sweet, se = sugary enhancer.

<sup>&</sup>quot;Tenderness determined by a spring-operated puncture gauge; lower numbers indicate more tender pericarp.

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Table 3. Descriptive observations, sugary enhancer (se) and sweet (su<sub>1</sub>) corn variety trial, Corvallis, 1996.<sup>2</sup>

Variety	Sourcey	Kernel Refine- ment	Row Straight- ness	Tip Fill	Cylind. Shape	Ear Unif.	Mat. Unif.	Kernel Unif.	Flavor	Overall Score	Row #	Notes
GH 1861	1	3	2	5	3.5	4	4	2.5	3	2.5	18	Most ears very curved, light color, good flavor but not sweet, early
Chase	2	3	3	2.5	4	2.5	4	4	3	3	14-16	Good color, many curved ears, slightly sweet, long ears, shallow kernels, early
DMC 2004	3	3	2	4	2	2.5	4	2.5	2	2.5	18	Very pointed ears, good color, tough
XPH 3125	2	3.5	2	3.5-5	4	1.5	2.5	2	4	2	16	Highly variable, uneven kernels, curved ears, pale color, tough, good yield, shallow kernels
GH 1887	1	4	2	3	3	3.5	3.5	2.5	4	3.5	18-20	Most ears are neat and uniform but significant number are below standard and rough
Fantasia	, 2	3.5	3	5	4.5	2	2.5	3.5	5	2.5	18	White, quite variable but some very nice ears, very good flavor, small ears, shallow kernels, tender
GH 2864	1	4.5	3	3	4.5	3	3	4	4.5	4	16	Good looking ears, good flavor, tender
Jubilee	1	4	3.5	4	4	3	2.5	4	4.5	4	16	May have been picked too earlyyield is down and there are many immature ears
HMX 5371	3	4.5	2.5	3	4	3	4.5	3	3.5	3.5	16-20	Very tender, low yield
DMC 2038	3	4.5	3	2.5	3.5	3	3.5	3.5	3.5	3	16-20	Very nice looking large ears, worst fault is poor tip fill, tough, some ears with slight curve
Sequ <b>e</b> l	2	3	4	4	4	4	4.5	4.5	2.5	3.5	16-20	Attractive large ears, even kernels, most have slight curve, tender
Empire	1	4	3.5	3	4	3	2	2.5	4	3.5	16	Very good yield, generally refined ears, tender
GH 2757	1	3.5	4	3.5	4	. 3	4	3.5	3.5	4	18	Good yield, very deep kernels, tender

Table 3. Descriptive observations, sugary enhancer (se) and sweet (su<sub>1</sub>) corn variety trial, Corvallis, 1996 (cont.).<sup>2</sup>

Variety	Source	Kernel Refine- ment	Row Straight- ness	Tip Fill	Cylind. Shape	Ear Unif.	Mat. Unif.	Kernel Unif.	Flavor	Overall Score	Row #	Notes
Silver King	1	4.5	4	4.5	4	3.5	4.5	4	4.5	4	18-20	White, some off-type ears with serious gaps in butt end, otherwise very uniform, small ears, good flavor, tender
HMX 5373 Recip.	3	4	3	4	4	3.5	4.5	3	4	3.5	18-20	White, small, refined ears, shallow kernels, tender
Splendor	4	3	1.5	3.5	3	2	4	2	3.5	2.5	20-22	Very uneven rows, some ears have slight bulge in middle, some curved, large ears
Eliminator	4	2.5	4	2.5	3.5	2.5	4	3.5	3	3 .	18-20	Very tough, somewhat coarse looking ears
Swis 13	5	4	4	3.5	3.5	2.5	4	4	3	2.5	16-18	Very hard to pick, ears are very small, many curved, poor yield
GH 7080	, 1	4	3	1-4	2.5	2.5	3	4	3.5	3	18-22	Some curved ears, most with very poor tip fill, pale color, tender, very good yield, deep kernels
Swis 271	5	4.5	3.5	1-4	2.5	3	4	4	3.5	3	18-20	Variable, best are very nice small ears but many are curved with poor tip fill, some oval, good yield
HMX 5374 Recip.	3	5	4	1	2-4	4	3.5	4	3	2.5	16-18	Variable shape, poor tip fill, poor yield, very nice small deep kernels

Planted June 3. Scores 1-5 scale, 5 = best. Overall score, related to general characteristics of harvested ears, is based on processing potential and does not necessarily reflect home garden potential.

<sup>&#</sup>x27;Sources: 1 = Rogers, 2 = Asgrow, 3 = Harris-Moran, 4 = Crookham, 5 = Galilee.

Table 4. Yield and ear measurements, supersweet (sh<sub>2</sub>) corn replicated trial, Corvallis, 1996.\*

Variety	Source	Silk Date	Days to Harvest	% H₂O×	Stand	1000/A	Good Ea	nrs No/Plant	Cul	lls T/A	Lbs/ Ear	Ear Length (in.)	Ear Diam. (in.)	Kernel Depth (mm)	Pericarp Toughness*
Krispy King	1	8/12	-91	78.9	27	22.1	8.0	1.1	0.7	0.1	0.73	7.8	2.03	12.3	
Shaker	2	8/13	92	78.0	27	19.6	5.7	1.0	2.9	0.6	0.58	8.9	1.76		148
Marvel	3	8/12	92	77.5*	26	23.1	7.5	1.2	2.7	0.4	0.66	8.4		10.4	114
710A	3	8/12	93	78.9	27	21.4	6.6	1.1	2.5	0.5	0.62		1.96	11.9	111
GSS 9299	1	8/12	93	77.7*	26	20.9	6.2	1.1	2.5			8.4	1.95	11.0	135
Supersweet Jubilee	1	8/15	95	77.7	25	24.7	7.2		1	0.4	0.60	8.0	1.93	11.8	129
Missouri	3	8/13	95	77.5*	25	19.4	6.9	1.4	0.7	0.2	0.59	8.4	1.89	12.4	101
Victor	4	8/14	98	77.3	28	22.3		1.1	2.4	0.5	0.72	9.0	1.98	11.6	141
Trigger	3	8/16	98	77.9	28		9.4	1.1	1.8	0.4	0.85	8.4	2.14	12.3	143
Bandit	5					20.0	7.5	1.0	1.1	0.2	0.76	8.5	2.08	13.3	150
		8/15	98	78.0	27	24.9	8.7	1.3	1.8	0.4	0.71	7.8	2.03	13.1	149
FMX 416	4	8/15	99	77.5*	28	24.0	9.6	1.2	4.0	0.7	0.81	8.1	2.25	12.3	132
LSD at 5%						2.7	1.0	0.2	1.8	0.3	0.06	0.2	0.09	0.7	· 12

<sup>&</sup>lt;sup>2</sup>Planted May 17 in rows 36" apart, thinned to 9" between plants. All values shown are means of 4 replications arranged in randomized complete blocks. All data except cull no. and T/A were obtained from typical husked good ears. For ear length, ear diameter, and tenderness, the value used for each replication was the average of 10 individual ear measurements. All varieties are yellow.

<sup>&</sup>lt;sup>y</sup>Sources: 1 = Rogers, 2 = Asgrow, 3 = Crookham, 4 = Ferry-Morse, 5 = Harris-Moran.

<sup>\*</sup>Varieties marked with \* had no data on % moisture at harvest. Numbers shown are estimates based on sampling percents and assuming a 1% drop every 2 days.

<sup>&</sup>quot;Tenderness determined by a spring-operated puncture gauge; lower numbers indicate more tender pericarp.

Table 5. Yield and ear measurements, supersweet (sh<sub>2</sub>) corn observation trial, Corvallis, 1996.<sup>2</sup>

Variety	Sourcey	Silk Date	Days to Harvest	Stand	1000/A	Good Ea	nrs No/Plant	<u>Cull</u> 1000/A	s	Lbs/ Ear	Ear Length (in.)	Ear Diam. (in.)	Kernel Depth (mm)	Pericarp Toughness <sup>x</sup>
Sheba	1	8/5	85	30	24.7	6.8	1.1	5.1	0.7	0.56	8.3	1.8	11.5	123
Endeavor	1	8/11	92	29	21.1	6.2	1.0	0	0	0.59	7.7	1.9	9.0	154
ACX 95CN220	2	8/12	93	31	21.1	5.8	0.9	2.9	0.6	0.56	8.3	1.9	10.5	100
HMX 5376S	3	8/14	95	26	29.8	9.3	1.6	1.5	0.2	0.63	8.4	1.9	11.5	160
ACX 95CN208	2	8/14	95	26	26.9	7.6	1.4	0.7	0.1	0.57	8.1	1.9	10.5	96
GS 94	4	8/14	95	20	22.5	5.4	1.5	2.9	2.6	0.48	7.2	1.8	11.0	133
ACX 95CN200	2	8/14	95	27	26.9	9.0	1.4	1.5	0.2	0.68	8.7	2.0	12.0	138
XPH 3129	1	8/14	95	25	16.0	6.7	0.9	0.7	0.1	0.84	9.0	2.1	13.0	155
XPH 3083	1	8/16	99	23	18.2	4.8	1.1	0	0	0.53	7.7	1.9	11.5	85
HMX 5375S	3	8/15	99	23	26.9	7.7	1.6	0	0	0.58	7.8	1.9	13.0	90
XPH 3079	1	8/15	99	22	16.7	5.1	1.0	1.5	0.3	0.62	8.1	1.9	12.0	93
Ultra	2	8/15	99	30	30.5	9.6	1.4	0	0	0.64	8.0	2.0	12.5	94
FMX 435	5	8/15	99	31	24.7	9.2	1.1	0.7	0.1	0.75	8.9	2.1	12.5	113
HMX 5377S	3	8/15	99	28	18.9	5.7	0.9	0.7	0.1	0.61	8.4	1.9	10.0	118
Shis 28	4	8/15	99	27 ·	. 14.5	4.7	0.7	3.6	0.9	0.65	8.1	1.9	11.5	136
Maverick	1	8/17	100	25	17.4	4.7	1.0	2.9	0.6	0.55	8.3	1.9	12.0	110
Месса	1	8/18	100	22	16.0	5.4	1.0	5.8	1.0	0.69	9.1	2.0	13.0	63

Table 5. Yield and ear measurements, supersweet (sh.) corn observation trial, Corvallis, 1996 (cont.).2

Variety	Source	Silk Date	Days to Harvest	Stand	1000/A	Good Ea T/A	ars No/Plant	Cull 1000/A	s	Lbs/ Ear	Ear Length (in.)	Ear Diam. (in.)	Kernel Depth (mm)	Pericarp Toughness <sup>x</sup>
Crystal	1	8/17	100	27	15.2	4.9	0.8	2.2	0.4	0.65	8.0	2.0	12.0	65
HMX 5378S	3	8/18	100	24	17.4	5.9	0.9	1.5	0.1	0.75	8.8	2.0	12.5	105
Shis 111	4	8/18	100	29	24.7	6.9	1.2	3.6	0.7	0.57	7.4	1.9	12.0	83
ACX 95CN207	2	8/19	100	29	20.3	7.9	0.1	1.5	0.4	0.78	8.9	2.0	10.5	113

<sup>z</sup>Planted June 10 in rows 36" apart, thinned to 9" between plants. Yield estimates are from a single 20' plot. All data except cull no. and T/A were obtained from typical husked good ears. For ear length, ear diameter, and tenderness, the value shown is the average of 10 individual ear measurements. All varieties are yellow except Crystal, which is white, and XPH 3129, which is bi-colored.

<sup>&</sup>lt;sup>y</sup>Sources: 1 = Asgrow, 2 = Abbott and Cobb, 3 = Harris-Moran, 4 = Galilee, 5 = Ferry-Morse.

<sup>\*</sup>Comparative scale determined by a spring-operated puncture gauge; lower numbers indicate more tender pericarp.

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Table 6. Descriptive observations, supersweet (sh.) corn trial, Corvallis, 1996.

Variety	Source	Kernel Refine- ment	Row Straight- ness	Tip Fill	Cylind. Shape	Ear Unif.	Mat. Unif.	Kernel Unif.	Flavor	Overall Score	Row #	Notes
Krispy King	1	2.5	3	4.5	3	3	3	2	4	3.5	16-20	Picks with shank which is hard to remove, short fat ears, tough, sweet, deep kernels
Shaker	2	4.5	3.5	3	2.5	3.5	3.5	3.5	4	2.5	18	Poor yield, shallow kernels, ears have slight curve
Marvel	3	1.5	2.5	4.5	3	2.5	3.5	3	3.5	2.5	18-20	Some lodging in field, ears have constricted area, coarse kernels
710A	3	2.5	4	4.5	3.5	3.5	4.5	3.5	3.5	3.5	16-18	Uniform, good ears except kernels somewhat coarse
GSS 9299	1	4.5	2.5	2.5	4	3	3.5	2.5	4.5	3	18	Ears short, some very short (6"), 3 spades (out of 25), some curved
Supersweet Jubilee	1	4.5	4	4	4.5	3.5	4	3.5	4.5	4.5	18	Many good second ears, very nice looking, tender, sweet, deep kernels
Missouri	, 3	1.5	3	2-4	3.5	2	3	2	4	2		Variable, many curved ears, too coarse, pale color, long ears
Victor	4	3	3.5	5	2.5	3.5	4	4	4	3.5	18	Good yield, large ears, somewhat coarse, oval ears, tough, deep kernels
Trigger	3	4	2.5	3.5	4	3.5	3	2.5	3	3.5	16-20	Less than 1 good ear per plant, pale color, pointed kernels, tough
Bandit	5	2.5	3.5	4	3	3.5	3	4	3	3.5	16	Good yield, somewhat coarse kernels, short ears, deep kernels, tough
FMX 416	4	1.5	2	4.5	2.5	3	4	4	3.5	2.5	16-20	Some curved ears, very coarse kernels, many misshapen, fat ears, good yield
Sheba	2	2	2	2-5	2	1.5	2	2	3.5	2	14	Very early, highly variable, tapered ears, some curved, sweet, possibly good home garden
Endeavor	2	2.5	3	4	3.5	3	3	3	2.5	2.5	16-18	Coarse looking, pale color, small ears, shallow kernels

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Table 6. Descriptive observations, supersweet (sh<sub>2</sub>) corn trial, Corvallis, 1996 (cont.).<sup>2</sup>

Variety	Sourcey	Kernel Refine- ment	Row Straight- ness	Tip Fill	Cylind. Shape	Ear Unif.	Mat. Unif.	Kernel Unif.	Flavor	Overall Score	Row #	Notes
ACX 95CN220	6	3.5	1.5	3.5	4.5	3	3	2	3.5	2.5	16-18	Small kernels but ears look rough and unrefined because of jumbled rows and uneven kernels
HMX 5376S	5	4	3	3-4	4	2.5	3	3.5	3.5	3.0	16-20	Good yield, many good second ears, some green tips, some curved ears, tough
ACX 95CN208	6	4	2.5	4	3	3.5	3	1.5	3	2.5	18	Uneven kernels make ears look very rough, tender
GS94	7	4	4	3	3	3.5	3.5	3	3	2.5	16	Poor yield, very small ears, tough, pale color
ACX 95CN200	6	2.5	2.5	4.5	2.5	4	4	3	2.5	2.5	20	Ears are curved, some severely, good size and yield, poor flavor, tough
XPH 3129	2	3.5	3	5	2.5	4	4	3.5	2	2.5	20	Bi-color, big ears but some blind plants, no second ears, oval, poor flavor, tough
ХРН 3083	. 2	4	3	4.5	4	2	4	3.5	4	2.5	16	Very poor yield, small ears, only 14 good quality ears from 23 plants, weak plants, very tight husk cover
HMX 5375S	5	3.5	3.5	2-5	3.5	2.5	3	3	4	3	16-18	Variable, some curved ears, deep kernels, tender
XPH 3079	2	3.5	3	4	2	3	4	3.5	4	3	18	Ears too tapered, some oval, pale color, poor yield
Ultra	6	3.5	3	4	4	4	4	3	4.5	4	18-20	Good yield, uniform, very good flavor, tender
FMX 435	4	4	3.5	4	3	2	4	3.5	4.5	3	20-22	Variable, oval, several ears are almost spades, long ears, good yield
HMX 5377S	5	4.5	3.5	4.5	4.5	4	4.5	4	2.5	3	16-18	Less than 1 good ear per plant, shallow kernels, off-flavor
Shis 28	7	3	3	3	2.5	`1.5	4	3.5	4	2.5	18-20	Variable, several curved ears, 1 spade, poor yield
Maverick	2	4	4	3.5	4	4	3	4	4	3	16	Very poor yield but neat, uniform, attractive ears
Mecca	2	3	3.5	2.5	4	3	3.5	3	4	3	16-18	Several curved ears, some severely, deep kernels, very tender

Table 6. Descriptive observations, supersweet (sh<sub>2</sub>) corn trial, Corvallis, 1996 (cont.).<sup>2</sup>

Variety	Source	Kernel Refine- ment	Row Straight- ness	Tip Fill	Cylind. Shape	Ear Unif.	Mat. Unif.	Kernel Unif.	Flavor	Overall Score	Row #	Notes
Crystal	2	4	1-4	2-5	4	2	4	2	4.5	2.5	14-22	Quite variable, best ears are very refined and attractive, worst have badly jumbled rows, very tender
HMX 5378S	5	3	3.5	2	3	2.5	3.5	3	3.5	2.5	18-20	Very tough shanks are hard to remove, some ears very curved
Shis 111	7	4.5	2	3	1-3	2.5	3.5	2.5	3.5	2.5	20-24	Very small ears, mostly very tapered, tender
ACX 95CN207	6	4	3	3	2.5	3	2	2.5	3	3	20	Large ears, shallow kernels, too tapered, uneven kernels

<sup>&</sup>lt;sup>2</sup>Planted June 10. Scores 1-5 scale, 5 = best. Overall score related to general characteristics of harvested ears, is based on processing potential and does not necessarily reflect home garden potential.

<sup>&#</sup>x27;Sources: 1 = Rogers, 2 = Asgrow, 3 = Crookham, 4 = Ferry-Morse, 5 = Harris-Moran, 6 = Abbott and Cobb, 7 = Galilee.

Table 7. Seedling vigor scores, sugary enhancer (se) and sweet (su<sub>1</sub>) corn trial, Corvallis, 1996.<sup>z</sup>

			Scores		
Variety	Rep 1	Rep 2	Rep 3	Rep 4	AV
GH 1861	2	3	2	2	2.25
Chase	2	3	3	2	2.50
DMC 2004	4	4	4	3	3.75
XPH 3125	2	2	3	2	2.25
GH 1887	3	3	4	3	3.25
Fantasia	3	3	3	2	2.75
GH 2684	3	3	3	3	3.00
Jubilee	3	3	3	2	2.75
HMX 5371	4	3	3	3	3.25
DMC 2038	3	3	2	2	2.50
Sequel	3	3	3	3	3.00
Empire	3	3	3	2	2.75
GH 2757	2	2	3	3	2.50

Planted June 3, scored June 13. Scores 1-5 scale, 5 = most vigorous.

Table 8. Seedling vigor scores, supersweet (sh<sub>2</sub>) corn trial, Corvallis, 1996.<sup>2</sup>

		-APPEN	Scores		
Variety	Rep 1	Rep 2	Rep 3	Rep 4	AV
Krispy King	2	3	4	3	3.0
Shaker	2	3	2	3	2.5
Marvel	1	2	2	2	1.75
710A	4	2	3	3	3.0
GSS 9299	4	3	3	2	3.0
Supersweet Jubilee	1	2	1	1	1.25
Missouri	1	1	1	1	1.0
Victor	3	3	4	4	3.5
Trigger	2	3	3	3	2.75
Bandit	4	3	3	2	3.0
FMX 416	3	4	4	3	3.5
Sheba	4				
Endeavor	4				
ACX 95CN220	4				
HMX 5376S	3			<u> </u>	
ACX 95CN208	4				
GS 94	1				
ACX 95CN200	3				
XPH 3129	1				
XPH 3083	2				
HMX 5375S	3				
XPH 3079	1				
Ultra	3				
FMX 435	1				
HMX 5377S	1				

Table 8. Seedling vigor scores, supersweet (sh<sub>2</sub>) corn trial, Corvallis, 1996 (cont.).<sup>z</sup>

	Scores							
Variety	Rep 1	Rep 2	Rep 3	Rep 4	AV			
Shis 28	2							
Maverick	3							
Mecca	2							
Crystal	2							
HMX 5378S	1							
Shis 111	2							
ACX 95CN207	4							

<sup>&</sup>lt;sup>2</sup>Planted June 10, scored June 18. Scores 1-5 scale, 5 = most vigorous.

Figure 1. SUGARY & SE CORN YIELD REPLICATED 1996

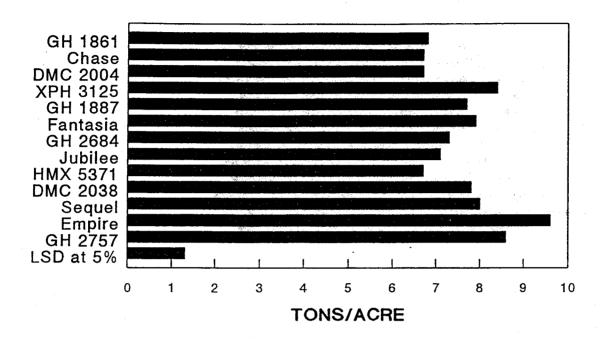
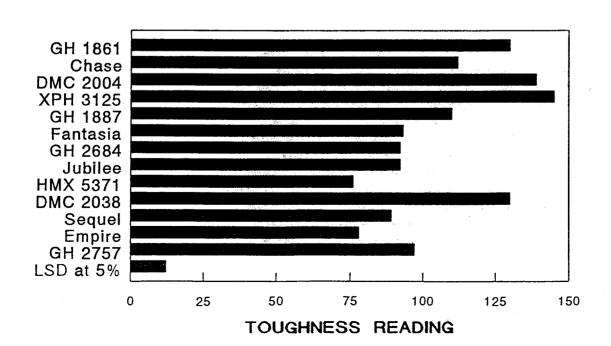


Figure 2. SUGARY & SE CORN TOUGHNESS REPLICATED 1996



SUPERSWEET CORN YIELD REPLICATED 1996

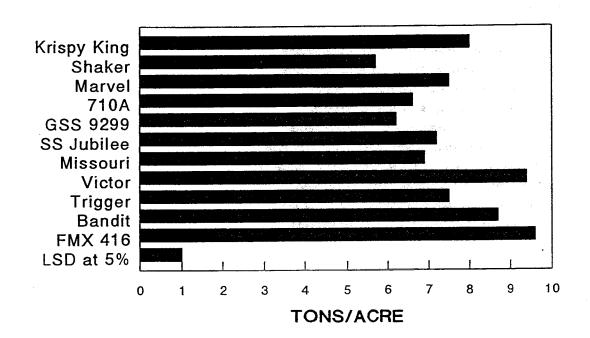
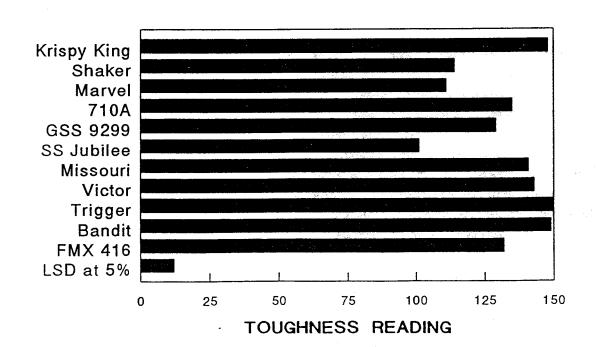
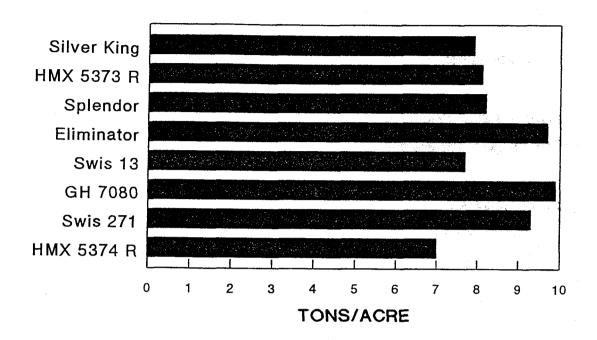


Figure 4. SUPERSWEET CORN TOUGHNESS REPLICATED 1996 .



SUGARY & SE CORN YIELD
OBSERVATION PLOTS 1996



SUPERSWEET CORN YIELD OBSERVATION PLOTS 1996

