

Sweet Corn Cultivar Trial - 2003

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Twenty-four bicolor sweet corn cultivars were planted in a replicated trial on May 13. The plot area was a sandy loam soil and irrigation was supplied with a center pivot system. Growing conditions started cool and wet but soon turned warm and sunny for the remainder of the season. Winds gusts of 45 mph on July 20 caused quite a bit of plant lodging just before harvest. This didn't hurt yield but did make harvesting more difficult. Notes on severity of lodging were taken July 26 and presented in Table 1. Cultivars are arranged by maturity, early-to-late, in the tables. Considering all characteristics the best *se* performers were *Temptation*, *Renaissance (HMX 0351)*, *Absolute*, *Precious Gem* and *Providence* (best in trial!). Choosing the top *sh2* cultivars is more difficult. Best overall performers when putting strong emphasis on lodging resistance were *BSS 1690*, *Polaris* and *ACX 950*. While almost all of the entries in this year's trial produced good eating corn I thought *Providence*, *276A*, *277A*, *Obsession* and *ACX 816* were outstanding for having exceptionally sweet and tender kernels. Unfortunately, these hybrids, with the exception of *Providence*, tended to show problems with lodging or some other production characteristic.

Table 1. Sweet corn cultivar plant characteristics.

Cultivar	Seed		DTH	Growth Vigor	Ear Ht. inch	Lodging Score
	Source	Type				
Temptation	SM	se	72	E	30	1.5
Renaissance	HM	syn	72	E	28	1.0
Punctuality	MM	se	72	G	24	2.0
Sweet Chorus	HM	SB	72	G	26	2.0
Seneca Spring	SM	se	72	--	24	2.0
Bon Appetit	MM	se	73	F	28	3.5
Luscious	MM	se	74	F-G	33	3.5
Brocade	MM	se	78	E	41	2.5
Accord	MM	se	79	E	32	1.0
Absolute	SM	se	82	--	31	1.5
Precious Gem	MM	se	83	G	34	1.0
Providence	RG	syn	84	G	30	.5
272A	ST	sh2	72	G	29	3.0
ACX 725 BC	AC	sh2	72	G-E	30	3.5
BSS 1690	RG	sh2	74	G-E	34	1.0
Fortune	ST	sh2	78	F	35	3.0
276A	ST	sh2	79	G	30	3.0
277A	ST	sh2	79	G-E	29	3.5
Obsession	ST	sh2	81	E	36	3.5
Polaris	ST	sh2	81	G	39	1.0
ACX 950	AC	sh2	81	G	36	1.5
Camas	RG	sh2	81	G	36	1.0
BSS 0977	RG	sh2	81	E	37	2.5
ACX 816	AC	sh2	81	P	30	2.5

Table 2. Sugar-enhanced (se) sweet corn marketable yields and ear characteristics.

Cultivar	Dozen Ears/Acre	Yield CWT/Acre	Avg Wt 10 Ears Husked	Ear Length h inches	Ear Diamete r inches	Husk Cove r	Ear Tip Fill
Temptation	1250	119.1	5.0	7.8	1.8	G	G
Renaissance	1156	113.5	4.7	8.0	1.8	G	G
Punctuality	943	84.3	5.2	8.1	1.8	F	G
Sweet Chorus	873	80.1	5.1	8.1	1.8	G	G
Seneca Spring	637	46.5	4.4	8.0	1.7	G	G
Bon Appetit	991	99.6	5.2	7.8	1.9	G	G
Luscious	1014	97.1	5.2	7.7	1.9	G	G
Brocade	1061	102.4	6.0	8.3	1.9	G	F-G
Accord	1226	115.2	5.4	8.5	1.8	F-G	G
Absolute	1012	116.0	7.1	8.5	2.1	G	G
Precious Gem	991	107.0	7.1	8.5	2.1	G	G
Providence	1368	154.8	6.3	8.5	1.9	G	G
272A	1226	107.5	5.3	8.1	1.9	F	G
ACX 725 BC	1142	92.3	4.6	8.0	1.7	F	G
BSS 1690	1061	96.8	4.6	8.6	1.7	G	G
Fortune	1092	100.5	5.3	8.2	1.8	G	G
276A	1082	103.0	6.5	8.3	2.0	G	G
277A	896	80.1	6.2	8.0	1.9	F	G
Obsession	1344	134.1	5.8	8.4	1.9	G	G
Polaris	1108	112.1	6.0	8.3	1.9	G	G
ACX 950	1136	111.2	5.6	7.6	1.9	G-F	G
Camas	1008	105.3	5.4	8.2	1.9	G	G
BSS 0977	1314	104.7	4.9	7.5	1.8	G	G
ACX 816	778	83.2	6.3	8.7	1.9	G	G
<i>Trial Average</i>	<i>1092</i>	<i>105.2</i>	<i>5.6</i>	<i>8.2</i>	<i>1.86</i>		
<i>LSD 5%</i>	<i>206</i>	<i>20.2</i>	<i>.3</i>				

Husk Cover: G = good, husk covers ear tip tightly; F = fair; P = poor, exposed ear tip and loose husk.

Ear Tip Fill: G = good, less than 1/2" of unfilled kernels at ear tip; F = fair, between 1/2 and 1" of unfilled ear tip; P = poor, more than 1" of unfilled ear tip.

Type: se=sugary enhanced, syn=synergistic, SB=Sweet Breed brand, sh2=shrunken-2.

Early Growth Vigor: Ex = excellent, G = good, F = fair, P = poor, determined by plant growth measurements approximately 3 weeks after planting.

Lodging Score: 1=slight, 2=moderate, 3=bad (stalks goosenecked & ears almost on ground), 4=severe.

Materials and Methods

Planting: May 13, 2003, sandy loam soil type.

Plot Design: RCB, 2 reps. Plot = two rows 22' long, each row thinned to 30 plants 9" apart after emergence. Rows 42" apart. Plant population/acre = 17,000.

Irrigation: Overhead sprinklers, applied as needed.

Fertility: Split application of nutrients - preplant incorporated and one sidedressing. Fertilizer rates determined by soil test and growing conditions.

Pesticides: Dual 8E, Atrazine 4L herbicide; Warrior insecticide.