

## Sweet Corn Trial of Bicolor Sugar Enhanced (se) Cultivars

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Twenty-one bicolor sugar-enhanced (se) cultivars were evaluated at the Muscatine Island Research Farm in 2002. The trial was planted on May 4 and the growing season started slowly with cool temperatures and frequent rain. However, June and July provided drier conditions and above normal growing temperatures resulting in good yields and quality at harvest. Plots were handpicked in an once-over harvest when the majority of ears were filled-out and judged to be at optimum maturity for marketing. Cultivars in Tables 1 and 2 are arranged by maturity - early to late. All entries showed merit, the following were picked for their exceptionally good plant growth, yield and ear quality:

**Best in trial: Temptation, PS 7404, Buckeye, EXP 10820, Precious Gem, Providence.**

Table 1. Sugar-enhanced (se) sweet corn plant characteristics.

Cultivar	Seed Source	DTH	Growth Vigor	Ear Ht. inch	Plant Ht. inch
Seneca Spring	SM	72	G	15	55
Temptation	SM	74	E	22	70
Punctuality	MM	74	G-E	19	57
Sweet Chorus	HM	74	E	19	59
Native Gem	MM	74	E	19	57
EXP 10525	MM	74	F-G	20	59
Bon Appetit	MM	75	F	27	73
Luscious	MM	76	G	18	66
Friendship	MM	78	F-G	21	61
PS 7404	SM	79	G-E	26	80
Brocade	MM	79	E	25	65
Rapport	MM	79	G	20	65
Double Gem	MM	79	G	22	64
EXP 10820	MM	79	G	21	75
Colonial	RG	79	E	21	62
Buckeye	MM	80	G	25	71
BC 0801	RG	82	G-E	24	68
Accord	MM	82	G	25	70
Precious Gem	MM	82	G-E	23	65
Sunset	SM	83	E	24	85
Providence	RG	84	E	24	70

Early Growth Vigor: Ex = excellent, G = good, F = fair, P = poor, determined by plant growth measurements 21 days after planting.

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

	Dozen Ears/	Yield CWT/	Avg Wt	Ear Lengt	Ear Diamete	Ear Husk	Ear Tip
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Cultivar	Acre	Acre	10 Ears Husked	h inches	r inches	Cove r	Fill
Seneca Spring	1120	77.9	3.96	7.3	1.8	G	G
Temptation	1203	102.2	4.52	7.6	1.7	G	G
Punctuality	1163	94.8	4.45	7.8	1.7	F	G
Sweet Chorus	1147	93.6	4.27	7.5	1.8	G	G
Native Gem	944	68.0	3.85	7.4	1.6	F-G	G
EXP 10525	802	68.5	4.46	7.4	1.8	G	G
Bon Appetit	968	90.8	4.41	7.4	1.8	G	G
Luscious	1053	102.4	4.76	7.6	1.8	G	G
Friendship	1183	110.7	5.36	7.9	1.8	G	F-G
PS 7404	1463	152.8	5.57	8.4	1.8	G	G
Brocade	1156	120.6	5.28	7.7	1.9	G	F-G
Rapport	1086	101.9	5.05	7.4	1.9	G	F-G
Double Gem	1062	96.2	5.29	7.6	1.9	F-G	G
EXP 10820	1015	106.4	5.15	7.3	1.9	G	G
Colonial	991	89.7	4.40	8.3	1.7	G	F
Buckeye	1251	109.8	5.05	7.8	1.8	G	G
BC 0801	1297	129.2	5.25	8.3	1.7	G	F
Accord	1086	96.5	5.15	8.0	1.8	F-G	F-G
Precious Gem	1038	90.8	4.95	8.0	1.8	G	G
Sunset	1155	106.7	5.35	8.7	1.7	G	G
Providence	1156	114.6	4.85	8.8	1.7	G	G
<i>Trial Average</i>	<i>1111</i>	<i>101.1</i>	<i>4.8</i>	<i>7.8</i>	<i>1.8</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.

## Materials and Methods

Planting: May 4, 2002, loamy sand soil type.

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

Irrigation: Overhead sprinklers, water applied according to tensiometer readings.

Fertility: Split application of nutrients - preplant incorporated and two sidedressings.

Fertilizer rates determined by soil test and growing conditions.

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