2011 Sweet Corn Variety Report

Robert J. Precheur Horticulture and Crop Sciences The Ohio State University, Columbus, OH 43210

Introduction:

These are the results of evaluating some relatively new se and sh2 varieties in an on farm situation to determine their suitability for roadside-farm markets. Sweet corn was evaluated at 2 vegetable roadside markets in the Columbus metropolitan area. The predominate crop in each market is sweet corn. The objectives are to determine, yield, appearance, eating quality and plant vigor especially for early plantings depending on genetype.

Methods:

Plots are a minimum of 4 rows wide and usually 500 or 800 to 1,000 ft in length depending on location. Plots were planted using grower's equipment. In New Albany, a John Deere no-till corn planter was used to plant at a spacing of 30 inches between rows, 11 inches in the row. In Canal Winchester, a Monosem vacuum planter was used to plant at a spacing of 30 inches between rows, 9 inches in the row.

At both locations, small quantities of seed from HM (see table for source) were planted by hand using a push planter, 4 rows in rows 60 to 80 ft. long. There was only enough seed for 1 replication.

Early vigor and plant stand was recorded 3-5 weeks after planting.

At harvest, yield, quality and ear characteristics were determined from 4 randomly selected 25 foot sections in the middle 2 rows of each plot.

In the hand planted plots, there was only enough space for one sample or replication.

Results:

See Tables 1 and 2 below followed by pictures of each variety.

Table 1. Yield, ear size, quality, and plant characteristics of SE and Sh2 corn in 2011. New Albany, OH

		,	, - <i>j</i>	, -								· <i>J</i>	<u>, </u>			
ID#	Cultivar	Color/ Genetype/ Source	Predicted Maturity	% Plant Stand	Early Plant Vigor ³	Marketable Doz./A	Average Ear length	Average Ear width	Tip Cover ⁴	Tip Fill ⁵	Husk Tightness ⁶	Shank length	Flag leaves ⁷	Ht from ground to 1 st ear	Harvest Ease ⁸	Raw Eating quality ⁹
1	CSYBF7-263	Bi se CR	75	85	G	1052	7.5	1.9	5	5	2	2.4	М	20	Е	G
2	Pay Dirt	Bi se CR	75	86	P-M	1034	6.8	1.8	3.8	5	2	3.7	М	13.5	E	G
3	BC0822	Bi se S	77	97	G	1161	7.4	1.8	5	3	2.3	2.5	S	26	E	G
5	Primus	Bi se S	81	79	M-G	1052	7.5	1.8	5	3	2.5	2.6	S	24	E	G
8	Silver Duchess	W se CR	82	72	M-G	1089	6.8	1.7	4.9	3.7	2.5	2.6	М	24	E	G
	LSD 0.05%			18	-	183	-	-	-	-	-	-	-		-	
10	HMX 9352 BS	BI SH2 HM	75	63	VG	1161	7.8	2	3	4	2	3.5	М	23	E	G
11	7112	BI SH2 AC	75	63	G	1742	7.5	1.9	5	4	2	3	М	22	E	G
12	7935	BI SH2 AC	76	58	M-G	1742	8	1.9	4.7	4	2	3	М	24	E	M-G
14	ACX SSW7938BC	BI SH2 AC	79	66	М	1089	8.1	1.8	3.5	4	2	4.7	L	20	E	VG
15	BSS 8040	BI SH2 S	80	60	M-G	798	7.0	1.8	2.9	4	2	2.5	S	23	E	VG
16	HMX 0361	W sh2 HM	70	77	M-G	1270	8	2	2.5	4	2	2	М	20	E	G-VG
17	2001MR	W sh2 AC	73	72	М	1234	7.8	1.8	1.5	4	2	2.2	L	13	E	G-VG
18	7401	W sh2 AC	74	66	М	1379	8.4	2	3	4	2	3	М	24	E	VG
19	ACR SSW9004W	W sh2 AC	75	81	P-M	1597	6.5	1.7	2.7	4	2	2.5	S	25	E	G-VG
20	Munition	W sh2 S	78	70	P-M	1252	7.7	1.9	3	4	2	3.4	S	20	E	VG
	LSD 0.05%			19		165	-	-	-	-	-	-	-	-	-	

- 1. Seed Source: AC=Abbott & Cobb; CR=Crookham; HM=Harris Moran; S= Syngenta
- 2. DAP = Days after planting
- 3. Early Plant Vigor, 2 to 4 weeks after emergence: P=poor, M=medium, G=good, VG=very good.
- 4. Tip Cover 1=exposed, 2=<0.75in covered, 3=0.75-1.25 in, 4= 1.25-2 in covered, 5=2+in covered.
- 5. Tip Fill: 1=2" or+ unfilled, 2=>1" unfilled, 3=1/2-1" unfilled, 4=<0.5 filled to tip, 5=filled to tip.
- 6. Husk Tightness: 1=loose, 2=firm, 3= tight.
- 7. Flag leaves: S=<4", M=4-8", L=8-12", >12".
- 8. Harvest Ease: E=easy, M=medium, H=hard, VH=very hard.
- 9. Raw Eating Quality: P=poor, M=medium, G=good, VG=very good, E=excellent, STP=slightly tough pericarp.

Table 2. Yield, ear size, quality, and plant characteristics of SE and Sh2 corn in 2011. Canal Winchester, OH

ID#	Cultivar	Color/ Genetype/ Source	Predicted Maturity	% Plant Stand	Early Plant Vigor ³	Marketable Doz./A	Average Ear length	Average Ear width	Tip Cover ⁴	Tip Fill ⁵	Husk Tightness ⁶	Shank length	Flag leaves ⁷	Ht from ground to 1 st ear	Harvest Ease ⁸	Raw Eating quality ⁹
1	CSYBF7-263	Bi se CR	75	85	G	1869	7.5	1.9	4.2	5	1.8	4.2	S	22	E	G
2	Pay Dirt	Bi se CR	75	86	P-M	1216	6.8	1.8	3.5	4.2	2	3.7	S	16	E	M-G
4	Primus	Bi se S	81	72	М	1760	8.3	1.8	3.6	4.6	1.7	4.2	М	28	E	G
5	Silver Duchess	W se CR	82	100	VG	1760	8.4	1.9	4	5	2	3.0	М	26	E	G
	LSD 0.05%			11	-	255	-	-	-	-	-	-	-	-	-	-
6	HMX 0365 BS	BI SH2 HM	75	100	G	1742	7.6	1.7	3.2	4.5	2	2.7	S	26	E	M-G
7	HMX 8343 BS	BI SH2 HM		100	M-G	1452	8.2	1.7	2.5	4.8	2.5	2.6	L	22	E	G
8	7112	BI SH2 AC	75	100	VG	1742	7	1.6	5	5	2	3.5	М	24	Е	G
9	7935	BI SH2 AC	76	93	M-G	1724	8	1.9	3.3	5	2	3.7	М	28	E	G
10	ACX SSW7938BC	BI SH2 AC	79	100	VG	1379	7.4	1.9	3.3	4.8	3	2.7	L	26	Е	G
12	BSS 8040	BI SH2 S	80	87	G	1542	7.6	2	3.5	4.5	2.5	3.5	М	26	E	G
13	2001MR	W sh2 AC	73	93	G	2032	7.2	1.7	3	5	2	3.7	L	29	E-M	VG
14	7401	W sh2 AC	74	95	M-G	1778	8	1.8	3.5	4.2	2	4.7	L	24	E	VG
15	ACR SSW9004W	W sh2 AC	75	100	G	1887	7	1.8	2.9	4.3	2.1	2.5	S	29	E	VG
16	Munition	W sh2 S	78	81	P-M	1524	6.3	1.8	4.7	5	2	5.5	М	34	М	G-VG
	LSD 0.05%			24	-	288	-	-	-	-	-	-	-	-	-	-

- 1. Seed Source: AC=Abbott & Cobb; C= Centest; CR=Crookham; HM=Harris Moran; S= Syngenta
- 2. DAP = Days after planting
- 3. Early Plant Vigor, 2 to 4 weeks after emergence: P=poor, M=medium, G=good, VG=very good.
- 4. Tip Cover 1=exposed, 2=<0.75in covered, 3=0.75-1.25 in, 4= 1.25-2 in covered, 5=2+in covered.
- 5. Tip Fill: 1=2" or+ unfilled, 2=>1" unfilled, 3=1/2-1" unfilled, 4=<0.5 filled to tip, 5=filled to tip.
- 6. Husk Tightness: 1=loose, 2=firm, 3= tight.
- 7. Flag leaves: S=<4", M=4-8", L=8-12", >12".
- 8. Harvest Ease: E=easy, M=medium, H=hard, VH=very hard.
- 9. Raw Eating Quality: P=poor, M=medium, G=good, VG=very good, E=excellent, STP=slightly tough pericarp.

Note: Bad lodging on varieties #8, 9, & 10.





