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1985

SWEET CORN CULTIVAR EVALUATION

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639
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1985 SWEET CORN CULTIVAR EVALUATION

COLUMBUS:

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FREMONT:

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This is a summary of our work evaluating several sweet corn cultivars. The same cultivars were evaluated at both Fremont and Columbus in 1985.

Trial Design At both locations, twenty-six cultivars were grown in a randomized complete block design with 4 replications and 18 lines were evaluated in single observation, non-replicated plots. Spacing was 36 inches between rows and 8-10 inches between plants within rows. There were 45 seeds per plot.

FREMONT

Cultural Practices: Seed was sown on May 11, 1985. Guard rows were planted to the north and south sides of rows running east and west at Fremont. All plots were planted with hand jabbers at a plant spacing as mentioned above. One thousand pounds/A 15-15-15 were broadcast and worked in after plowing. One hundred fifty pounds of 6-24-12 fertilizer was placed in bands at planting. The corn was sidedressed with ammonium nitrate at a rate of 50 lbs N/A. Three quarts of Lasso per acre were used for weed control. Insecticides were applied on a regular spray schedule.

Weather Data Vegetable Research Branch - Fremont

Month	Precipitation Rain(inches)
May	0.96
June	3.63
July	1.96
August	2.69

COLUMBUS

Cultural Practices: Corn was seeded on May 9, 1985. Plot size and spacing were as mentioned above. Guard rows were planted to the east and west sides of rows running north and south with guard hills across the north and south ends of the entire planting. In addition to the other guard rows, 4 rows of an early maturing and a late maturing cultivar were planted on both the east and west sides of the entire planting of plots to enhance pollination. All plots were planted by hand jabber.

Prior to plowing, 15-15-15 fertilizer was applied broadcast at a rate of 1000 lbs per acre. There was also 250 pounds 6-24-12 placed 2 inches to the side and 2 inches below the seed at planting time. Ramrod herbicide was applied immediately after planting at the rate of 5 lbs active ingredient per acre. Brominal was applied postemergence when the corn was 6 inches high at the rate of 3/8 lb ai/A. Sevin was sprayed 2 times. Most lots of seed had been treated with a fungicide and/or insecticide. Irrigation was used throughout the season as needed. Irrigations were applied as needed during the season.

Weather Data University Weather Station - Columbus

Month	Max	Mean Temperature (F)		Precipitation Rain(inches)
		Min.	Avg.	
May	75.2	49.4	62.3	4.97
June	77.3	53.7	65.5	1.76
July	82.4	57.7	70.0	3.31
August	81.4	60.0	70.7	2.91
Septem.	79.8	49.9	64.9	2.25

All publications of the Ohio Agricultural Research and Development Center are available to all on a nondiscriminatory basis without regard to race, color, national origin,sex, or religious affiliation.

Table OF Seed Sources

Table Codes		
1.	ac	Abbott & Cobb, Inc., Box 307, Feasterville, PA 19047
2.	ar	Arco Seed Co.
3.	fm	Ferry-Morse Seed Co., P.O. Box 100, Mountain View, CA 95037
4.	h	Joseph Harris Co., Moreton Farm, 3670 Buffalo Rd., Rochester, N.Y. 14624
5.	l	Liberty Seed Co., P.O. Box 806, New Philadelphia, OH 44663
6.	p	Peto Seed Co., Inc., Greenwood, SC 29647
7.	r	Rogers Bros. Co., Idaho Falls, ID 83401
8.	s	J. Schlessman & Sons, Inc. Avery, OH
9.	su	Sun Seeds, Eden Prairie, MN 55344

Table 1. Yield, and Other Characteristics of Sweet Corn Cultivars, Fremont-1985

Cultivar	Seed Source	Days to First Harvest	Marketable Yield/A			Ear Length Husked (in)	Ear Width Husked (in)	Ear Damage (Number / 4 reps)						
			Dozen Ears	Wt (tons/A)	Mkt %			Ear Worms	Smut	Bird Damage	Raccoon Damage	Tip Cover	Tip Fill	Husk Tightness
Bi-COLOR														
1. Pride & Joy	l	79	1562.9	4.81	82	7.6	1.5	-	2	-	-	2	-	2
2. Honeymoon	l	85	1623.4	6.50	72	7.1	1.8	-	-	-	-	3	1	2
3. Calypso	r	90	1381.4	6.27	81	7.8	1.9	1	-	-	-	1	1	2
4. Cornfetti (su)	fm	90	1623.4	7.73	85	7.8	1.9	-	-	-	-	3	1	2
5. Sweet Chex	fm	85	1270.5	4.27	83	7.6	1.6	-	-	-	-	3	1	2
WHITE														
6. Platinum Lady	l	81	796.6	2.40	81	7.3	1.5	-	7	-	-	2	-	2
7. Silver Streak	h	86	2198.2	7.32	65	7.3	1.7	-	2	-	-	2	1	2
8. Silver Pac	l	94	1169.7	6.26	67	8.6	1.9	-	-	-	-	2	2	2
9. Silver Bullet (su)	fm	79	1169.7	3.78	72	7.5	1.7	4	6	-	-	2	-	2
10. Silver Queen	r	93	1371.3	6.12	83	8.1	1.7	-	-	-	-	2	1	1
Yellow														
11. Spirit	r	77	1331.0	5.03	73	6.4	1.9	-	1	-	-	3	-	2
12. Horizon	l	77	1119.2	4.82	72	7.6	1.8	-	-	-	-	3	-	2
13. Intrepid	l	83	1341.1	6.35	83	8.2	1.9	-	1	-	-	3	1	1
14. Debut	r	79	1290.7	5.03	74	7.3	1.8	-	-	-	-	3	-	2
15. Bellringer	h	86	1230.2	5.23	87	7.4	1.7	-	-	-	-	3	1	2
16. Excellency (su)	fm	93	1603.2	5.94	90	8.1	1.8	-	-	-	-	2	1	1
17. Golden Glade (su)	fm	91	1714.2	8.03	78	8.8	1.7	-	-	-	-	3	1	3
18. Seneca Pinto	l	94	907.5	4.13	77	8.6	1.7	-	-	-	-	2	-	3
19. Senca Star	l	75	1482.2	5.96	80	7.4	1.7	-	4	-	-	3	-	2
20. Seneca Paleface	l	93	957.9	3.84	79	8.0	1.6	-	-	-	-	2	1	2
21. Seneca Sentry	l	94	1381.4	6.15	70	8.6	1.7	-	-	-	-	3	1	3
22. Gold Ring	h	91	1593.2	7.28	81	7.8	1.8	2	-	-	-	3	1	2
23. Summer Delicious(su)	l	94	715.9	3.24	54	7.0	1.2	-	-	-	-	2	-	2
24. Sunbeam	h	87	1290.7	6.36	84	7.5	1.8	-	-	-	-	3	1	1
25. Peppin	s	91	836.9	4.24	80	7.9	1.9	-	3	-	-	3	2	1
26. Achiever	s	93	1048.7	5.92	68	7.5	2.1	-	-	-	-	3	1	2
LSD (0.05)			277.28	1.57										

EAR SIZE: based on total length, diameter of 10 husked ears per cultivar.

EAR DAMAGE: based on total number of ears from 4 plots.

>> Tip Cover, Husk Tightness, and Tip Fill: based on average rating of 10 ears per plot.

TIP COVER: 1 = exposed; 3 = 2 inches covered.

TIP FILL: 1 = filled; 2 = unfilled 1 inch or less; 3 = unfilled greater than 1 inch.

HUSK TIGHTNESS: 1 = loose; 2 = firm; 3 = tight.

Table 2. SINGLE OBSERVATION PLOTS: Yield, and Other Characteristics of Sweet Corn Cultivars, Fremont-1985

Cultivar	Kernel Color	Seed Source	Days to First Harvest	Marketable Yield/A			Ear Length Husked (in)	Ear Width Husked (in)	Ear Damage (Number / 4 reps)						
				Dozen Ears	Wt (tons/A)	Mkt %			Ear Worms	Smut	Bird Damage	Raccoon Damage	Tip Cover	Tip Fill	Husk Tightness
27. FMX 153	Y	fm	93	1815.0	9.27	89	8.7	1.8	-	-	-	-	3	1	3
28. Arco 84	W	ar	93	484.0	1.96	55	7.6	1.8	-	1	-	-	2	2	2
29. Arco 424		ar	93	1089.0	4.84	56	7.6	1.8	-	1	-	-	2	1	3
30. Arco 5837	Y	ar	93	1532.7	6.34	63	8.4	1.8	-	-	-	-	2	1	2
31. Arco 5308		ar	89	1492.3	6.58	73	7.9	1.9	-	-	-	-	2	1	2
32. WX 3062	W	h	87	1694.0	6.39	81	7.5	1.7	-	-	-	-	2	1	2
33. HXP 3368	Y	h	86	1653.6	6.95	84	7.9	1.9	-	-	-	-	3	1	2
34. 82-2263	Y	r	81	1532.6	5.98	68	7.3	1.7	-	3	-	-	3	-	2
35. 81-2880	Y	r	86	1371.3	5.74	76	7.5	1.8	-	1	-	-	3	1	2
36. 82-2576	Bi	r	75	1613.3	6.20	89	7.5	1.7	-	1	-	-	2	-	2
37. 81-2808	W	r	93	1911.6	6.32	85	8.2	1.8	-	-	-	-	3	1	2
38. AVX-2540	Y	s	93	1831.0	6.24	72	8.3	1.9	-	-	-	-	2	3	2
39. AVX-5651		s	86	766.3	3.15	76	8.1	1.7	-	-	-	-	3	2	1
40. AVX-2563	Y	s	93	1613.3	6.91	82	7.5	2.0	-	-	-	-	3	2	2
41. MDX 2049	Y	h	94	1855.3	9.20	70	8.4	2.0	-	-	-	-	3	-	2
42. 82-2197	Y	r	86	1290.6	5.47	86	8.1	1.8	-	-	-	-	3	1	1
43. 81-2866	Y	r	87	1290.6	4.96	80	7.5	1.7	-	-	-	-	3	1	2
44. Libexcr		l	94	1129.3	6.46	67	8.0	2.0	-	-	-	-	3	-	2
45. Terrific		-	86	1290.6	5.54	70	7.2	1.8	-	-	-	-	2	2	2
46. Earlivee		-	71	1290.6	4.26	70	6.3	1.6	-	-	-	-	3	-	2
47. Slessman-83W		sl	86	403.3	1.60	71	7.2	1.8	-	-	-	-	2	1	2
48. Slessman-77W		sl	83	2420.0	7.6	58	7.0	1.6	-	-	-	-	2	1	3

EAR SIZE: based on total length, diameter of 10 husked ears per cultivar.

EAR DAMAGE: based on total number of ears from 4 plots.

Tip Cover, Husk Tightness, and Tip Fill: based on average rating of 10 ears per plot.

TIP COVER: 1 = exposed; 3 = 2 inches covered.

TIP FILL: 1 = filled; 2 = unfilled 1 inch or less; 3 = unfilled greater than 1 inch.

HUSK TIGHTNESS: 1 = loose; 2 = firm; 3 = tight.

Table 3. Yield, and Other Characteristics of Sweet Corn Cultivars, Columbus-1985

Cultivar	Seed Source	Days to First Harvest	Marketable Yield/A			Ear Length Husked (in)	Ear Width Husked (in)	Ear Damage (Number / 4 reps)						
			Dozen Ears	Wt (tons/A)	Mkt %			Ear Worms	Smut	Bird Damage	Raccoon Damage	Tip Cover	Tip Fill	Husk Tightness
.....														
Bi-COLOR														
.....														
1. Pride & Joy	l	77	947.8	2.82	58	8.2	1.5	-	-	-	10	3	-	2
2. Honeymoon	l	77	1441.9	5.55	63	7.6	1.5	5	2	-	7	3	-	1
3. Calypso	r	84	625.2	3.06	30	8.1	1.6	16	1	-	8	1	-	1
4. Cornfetti (su)	fm	84	766.3	7.73	41	7.6	1.6	4	2	-	2	3	2	2
5. Sweet Chex	fm	84	1109.2	3.64	46	8.6	1.4	12	-	-	11	3	1	2
.....														
WHITE														
.....														
6. Platinum Lady	L	84	312.6	1.00	33	7.3	1.4	13	2	-	10	2	-	1
7. Silver Streak	h	84	1653.7	5.58	48	7.5	1.5	28	2	-	7	1	-	2
8. Silver Pac	l	88	766.3	3.07	37	8.1	1.6	10	10	-	5	3	-	3
9. Silver Bullet (su)	fm	77	302.5	0.90	32	7.3	1.6	-	8	-	10	3	-	1
10. Silver Queen	r	91	1008.3	3.59	48	7.7	1.5	2	7	-	1	3	-	2
.....														
Yellow														
.....														
11. Spirit	r	74	756.2	2.05	51	7.3	1.7	-	-	-	18	3	-	3
12. Horizon	l	74	584.8	1.66	45	7.9	1.7	-	4	-	9	3	-	2
13. Intrepid	l	80	1139.4	4.99	50	8.6	1.7	28	4	-	16	2	-	2
14. Debut	r	77	373.1	1.46	35	6.9	1.5	1	3	-	30	2	-	2
15. Bellringer	h	88	968.0	4.18	57	7.8	1.8	9	1	-	8	3	-	3
16. Excellency (su)	fm	88	786.5	3.39	41	8.1	1.7	25	-	-	3	3	-	3
17. Golden Glade (su)	fm	88	1119.2	4.89	53	9.3	1.6	35	2	-	6	3	-	3
18. Seneca Pinto	l	91	705.8	2.47	44	8.7	1.6	4	3	-	3	2	-	3
19. Senca Star	l	74	685.7	2.14	47	7.5	1.6	-	2	-	12	3	-	3
20. Seneca Paleface	l	91	917.6	3.10	57	7.7	1.6	21	2	-	6	3	-	2
21. Seneca Sentry	l	91	1179.7	4.36	52	8.2	1.6	4	2	-	-	3	-	3
22. Gold Ring	h	82	917.6	3.04	41	7.8	1.5	10	4	-	24	3	-	2
23. Summer Delicious (su)	l	95	231.9	0.80	14	9.0	1.7	57	-	-	11	2	-	1
24. Sunbeam	h	84	524.3	2.35	35	8.2	1.6	2	3	-	-	2	-	2
25. Peppin	s	88	695.7	3.21	49	7.8	1.9	12	2	-	20	3	-	3
26. Achiever	s	88	695.7	3.36	40	7.8	1.9	3	4	-	14	3	-	2
LSD (0.05)			415.61 1.66											

EAR SIZE: based on total length, diameter of 10 husked ears per cultivar.

EAR DAMAGE: based on total number of ears from 4 plots.

>> Tip Cover, Husk Tightness, and Tip Fill: based on average rating of 10 ears per plot.

TIP COVER: 1 = exposed; 3 = 2 inches covered.

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HUSK TIGHTNESS: 1 = loose; 2 = firm; 3 = tight.

Table 4. SINGLE OBSERVATION PLOTS: Yield, and Other Characteristics of Sweet Corn Cultivars, Columbus-1985

Cultivar	Kernal Color	Seed Source	Days to First Harvest	Marketable Yield/A			Ear Length Husked (in)	Ear Width Husked (in)	Ear Damage (Number / 4 reps)				Tip Cover	Tip Fill	Husk Tightness
				Dozen Ears	Wt (tons/A)	Mkt %			Ear Worms	Smut	Bird Damage	Raccoon Damage			
27. FMX 163	Y	fm	82	1532.6	6.05	69	8.3	1.3	-	-	-	4	1	-	2
28. Arco 84	W	ar	84	847.0	2.95	39	8.1	1.6	-	-	-	3	3	-	2
29. Arco 424		ar	88	806.6	3.12	40	8.6	1.7	1	-	-	1	2	-	2
30. Arco 5887	Y	ar	91	1008.3	5.06	38	8.0	1.6	-	1	-	3	3	-	3
31. Arco 5308		ar	88	363.0	1.52	20	8.6	1.8	15	1	-	12	2	-	2
32. WX 9060	W	h	84	685.6	2.44	63	7.9	1.5	-	-	-	7	3	-	2
33. HXP 3368	Y	h	84	564.6	2.11	40	8.2	1.7	-	1	-	6	2	-	3
34. 82-2203	Y	r	77	927.6	3.36	56	7.7	1.5	3	-	-	5	2	-	2
35. 81-2860	Y	r	84	322.6	1.52	33	7.6	1.6	-	2	-	3	3	-	1
36. 82-2676	Bi	r	74	1129.3	2.35	67	8.0	1.6	-	-	-	11	2	-	2
37. 81-2808	W	r	91	80.6	0.12	8	8.2	1.5	3	1	-	12	1	-	2
38. AVX-2540	Y	s	84	443.6	1.84	26	8.7	1.6	5	-	-	7	1	-	1
39. AVX-5651		s	84	524.3	2.20	45	7.2	1.4	-	-	-	6	3	-	3
40. AVX-2563	Y	s	84	887.3	3.92	55	8.1	0.6	-	-	-	4	3	-	3
41. MOX 2049	Y	h	88	1411.6	5.90	49	8.3	1.8	1	-	-	4	2	-	2
42. 82-2197	Y	r	84	887.3	3.92	44	8.2	1.7	1	-	-	7	3	-	3
43. 81-2866	Y	r	80	564.6	2.15	56	8.4	1.5	-	-	-	7	3	-	1
44. Libexcr		l	88	242.0	0.97	32	8.8	1.8	1	1	-	9	3	-	2
45. Comanette		-	82	726.0	2.57	43	7.8	1.3	6	2	-	11	2	-	2
46. White Knight	Bi	-	84	1129.3	4.62	49	8.9	1.7	-	5	-	-	3	-	2
47. Apache	Y	-	88	1694.0	6.46	76	7.8	1.6	4	1	-	-	3	-	3

EAR SIZE: based on total length, diameter of 10 husked ears per cultivar.

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