

LeBeuf

Vegetable Research Program 1999

RIDGETOWN COLLEGE

UNIVERSITY
of GUELPH

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FRESH MARKET SWEET CORN CULTIVAR TRIALS 1999

MARCH, 2000

TABLE OF CONTENTS

Introduction	iv.
Acknowledgements	iv.
Seed Sources	iv.
Monthly Meteorological Summary	v.-X.
General Plot Methodology	xi.
Data Collection	xi.-xiii.
SE Cultivar Data	
Table 1. Plant stand of sugar enhanced and sweet breed fresh market sweet corn cultivars	14
Table 2. Corn heat units, days to maturity of sugar enhanced and sweet breed fresh market sweet corn cultivars	15
Table 3. Extended leaf height, plant height of sugar enhanced and sweet breed fresh market sweet corn cultivars	16
Table 4. Cob height, smut incidence of sugar enhanced and sweet breed fresh market sweet corn cultivars	17
Table 5. Tillers/plant, tip cover of sugar enhanced and sweet breed fresh market sweet corn cultivars	18
Table 6. Husk tightness, flag leaf appearance of sugar enhanced and sweet breed fresh market sweet corn cultivars	19
Table 7. Husk colour, shank length of sugar enhanced and sweet breed fresh market sweet corn cultivars	20
Table 8. Ease of snap, cob appearance of sugar enhanced and sweet breed fresh market sweet corn cultivars	21
Table 9. Row uniformity, colour contrast of sugar enhanced and sweet breed fresh market sweet corn cultivars	22
Table 10. Ear fill, roadside rating of sugar enhanced and sweet breed fresh market sweet corn cultivars	23
Table 11. Cob Length, cob width of sugar enhanced and sweet breed fresh market sweet corn cultivars	24

Table 12. Cob weight (husk on), cob weight (husk off) of sugar enhanced and sweet breed fresh market sweet corn cultivars	25
Table 13. Yield of sugar enhanced and sweet breed fresh market sweet corn cultivars	26

SH, Cultivar Data

Table 14. Percent plant stand of fresh market supersweet sweet corn cultivars	27
Table 15. Corn heat units, days to maturity of fresh market supersweet sweet corn cultivars	28
Table 16. Extended leaf height, plant height of fresh market supersweet sweet corn cultivars	29
Table 17. Cob height, common smut of fresh market supersweet sweet corn cultivars	30
Table 18. Tillers per plant, tip cover of fresh market supersweet sweet corn cultivars	31
Table 19. Husk tightness, flag leaf appearance of fresh market supersweet sweet corn cultivars	32
Table 20. Husk colour, shank length of fresh market supersweet sweet corn cultivars	33
Table 21. Ease of snap, cob appearance of fresh market supersweet sweet corn cultivars	34
Table 22. Row uniformity, colour contrast of fresh market supersweet sweet corn cultivars	35
Table 23. Ear fill, roadside rating of fresh market supersweet sweet corn cultivars	36
Table 24. Cob length, cob width of fresh market supersweet sweet corn cultivars	37
Table 25. Cob weight of fresh market supersweet sweet corn cultivars	38
Table 26. Yield of fresh market supersweet sweet corn cultivars	39

INTRODUCTION

The information contained in this report is a compilation of the fresh market sweet corn cultivar trials conducted at Kemptville College, Ridgetown College, and the Department of Plant Agriculture at Simcoe. The goal of this report is to present practical and complete information on new and old sweet corn cultivars. Repeating this trial in three different locations in southern Ontario allows growers to compare growth and yield of each cultivar under different growing conditions.

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SEED SOURCES

Asgrow Seed Co., 220 Pony Dr., Unit#1, Newmarket, Ontario L3Y 7B6, Canada
Tel: 905-895-7333

Harris Moran Seed of Canada, 250 South Canal Bank Rd., Kettleby Ontario LOG 1J0, Canada
Tel: 905-775-9696

Seedway, 1225 Zeager Road, Elizabethtown, PA 17022, U.S.A.
Tel: 800-952-7333

Stokes Seed Ltd., 39 James St., Box 10, St.Catherines, Ontario L2R 6R6, Canada
Tel: 905-688-4300

MONTHLY METEOROLOGICAL SUMMARY, Simcoe Campus, Simcoe ON

SIMCOE - MAY 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	21.6	5.7	0.0	14.9
2	23.7	9.7	0.0	19.9
3	24.2	9.6	0.0	20.0
4	23.7	8.6	0.0	18.8
5	27.1	10.4	0.0	21.8
6	26.8	11.7	0.2	22.9
7	23.6	10.4	0.0	20.5
8	20.3	11.2	4.8	19.1
9	13.9	3.9	0.2	5.3
10	18.8	1.6	0.0	8.7
11	18.1	6.4	0.0	12.6
12	16.5	5.7	0.2	10.2
13	16.2	5.0	0.0	9.2
14	19.7	6.4	0.0	14.1
15	23.2	10.2	0.0	20.1
16	22.8	9.1	0.0	18.8
17	27.3	13.5	0.0	24.7
18	25.9	14.2	12.6	25.0
19	18.0	7.2	0.6	13.2
20	18.7	4.1	0.0	10.9
21	22.2	6.6	0.0	16.1
22	17.9	12.3	15.0	17.9
23	19.4	13.2	2.0	20.2
24	15.9	8.1	15.2	11.7
25	11.5	6.6	4.0	4.4
26	13.0	6.6	0.0	6.7
27	21.9	5.8	0.2	15.1
28	26.1	10.6	0.0	21.8
29	26.6	11.2	0.0	22.4
30	29.9	12.1	0.0	23.7
31	24.7	14.4	0.2	24.8
Mean	21.3	8.8	Sum 55.2	
Normal	18.5	6.7	73.8	

SIMCOE - JUNE 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	23.3	17.4	4.6	26.8
2	22.6	16.8	36.6	25.9
3	16.8	9.8	0.2	14.4
4	19.9	8.1	0.0	15.8
5	24.9	10.7	0.0	21.4
6	29.7	16.0	0.0	27.3
7	30.3	21.4	0.0	32.4
8	29.2	19.0	0.0	30.2
9	26.1	14.6	0.0	25.5
10	30.3	18.7	0.0	29.9
11	28.8	18.1	0.0	29.3
12	29.3	18.4	0.0	29.6
13	27.7	18.4	0.0	29.4
14	22.7	12.9	11.6	22.3
15	18.0	7.7	0.0	13.8
16	17.7	6.0	0.0	11.7
17	18.7	8.4	13.8	15.1
18	20.5	7.2	0.2	15.4
19	22.8	10.7	0.0	20.3
20	24.6	12.9	0.0	23.3
21	25.9	11.5	0.0	22.5
22	27.2	12.9	0.0	24.1
23	27.9	15.3	0.0	26.6
24	26.0	17.6	1.0	28.2
25	28.9	18.9	0.2	30.0
26	29.7	15.5	0.0	26.9
27	27.6	20.2	3.2	31.1
28	30.2	21.3	0.8	32.4
29	22.0	10.6	6.4	19.8
30	22.6	9.0	0.0	18.6
Mean	25.1	14.2	Sum 78.6	
Normal	23.7	11.9	81.6	

MONTHLY METEOROLOGICAL SUMMARY, Simcoe Campus, Simcoe ON

SIMCOE - JULY 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	26.6	12.6	2.4	23.8
2	27.4	17.9	0.0	29.0
3	30.8	17.3	0.0	28.5
4	32.2	24.8	0.0	35.4
5	34.0	24.3	0.0	34.4
6	30.6	18.3	3.2	29.5
7	27.2	14.7	0.0	25.8
8	26.5	14.4	0.0	25.4
9	28.1	15.9	2.4	27.1
10	23.2	12.1	1.0	21.9
11	23.7	9.7	0.0	19.9
12	26.6	11.1	0.0	22.3
13	26.1	15.1	0.0	25.9
14	29.3	15.0	0.0	26.4
15	29.5	18.2	0.0	29.5
16	31.6	19.9	0.0	30.9
17	32.4	22.2	0.0	33.0
18	32.6	19.6	0.0	30.5
19	25.7	17.9	1.2	28.5
20	27.5	15.9	0.2	27.0
21	26.5	17.9	0.0	28.7
22	31.6	19.9	0.0	30.9
23	32.1	17.0	0.0	28.1
24	33.4	18.0	8.2	28.7
25	30.4	18.2	0.2	29.4
26	31.2	16.8	0.0	28.0
27	32.4	19.7	0.0	30.5
28	30.5	15.7	1.2	27.1
29	31.5	16.6	0.2	27.9
30	34.6	21.7	0.0	31.8
31	34.2	19.8	15.0	30.2
Mean	29.5	17.3	Sum 20.2	
Normal	26.3	14.5	76.7	

SIMCOE - AUGUST 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	28.0	16.5	0.2	27.7
2	25.5	13.8	0.0	24.5
3	25.6	13.0	0.0	24.5
4	25.7	16.1	2.6	23.8
5	25.0	13.6	0.2	23.8
6	25.7	12.0	0.0	26.8
7	24.3	9.3	13.6	24.1
8	24.8	12.0	0.8	22.9
9	22.9	9.7	0.0	19.8
10	22.8	14.5	4.2	22.6
11	25.7	14.3	0.2	19.4
12	27.3	16.7	0.0	23.9
13	27.2	20.9	2.0	25.0
14	21.9	13.8	0.2	27.8
15	25.2	12.1	0.0	31.7
16	25.4	12.4	0.0	22.6
17	29.3	18.0	0.0	22.9
18	23.4	14.4	0.0	23.2
19	23.4	13.6	2.0	29.3
20	21.8	15.4	2.2	24.1
21	23.4	13.6	0.0	23.3
22	26.5	11.7	0.0	24.1
23	27.0	12.1	0.0	23.4
24	29.2	18.8	6.8	22.9
25	21.4	19.2	2.6	23.3
26	20.4	18.1	106.8	30.0
27	27.2	17.7	0.2	27.4
28	28.4	17.8	0.0	25.6
29	21.7	11.0	0.0	28.7
30	19.6	8.8	0.0	29.0
31	23.2	10.1	0.0	19.9
Mean	24.8	14.2	Sum 144.6	
Normal	25.2	13.8	80.1	

MONTHLY METEOROLOGICAL SUMMARY, Simcoe Campus, Simcoe ON

SIMCOE - SEPTEMBER 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	26.6	10.7	0.0	21.9
2	28.7	10.4	0.0	22.1
3	28.6	12.1	0.0	23.6
4	29.3	16.8	0.0	28.1
5	28.0	19.6	0.0	30.7
6	27.5	19.9	79.8	30.8
7	25.0	18.7	8.6	29.0
8	25.1	17.1	0.0	27.5
9	25.0	14.8	9.4	25.3
10	19.7	12.5	0.0	19.8
11	22.0	12.8	0.0	21.8
12	26.3	11.2	0.0	22.3
13	22.4	16.4	4.2	25.4
14	20.6	10.6	0.0	18.8
15	21.2	7.9	0.0	16.7
16	19.7	10.9	0.0	18.2
17	21.2	8.8	0.0	17.5
18	21.4	7.1	0.0	16.0
19	23.7	8.4	0.0	18.7
20	19.7	9.0	1.4	16.5
21	14.6	4.1	0.0	6.4
22	17.1	1.6	0.0	7.0
23	21.8	9.4	0.0	18.5
24	18.8	10.1	17.0	16.7
25	18.0	5.7	0.0	11.8
26	23.4	8.3	0.0	18.4
27	25.0	17.1	0.0	27.5
28	25.5	17.1	0.0	27.6
29	20.7	11.3	51.8	19.5
30	15.7	9.4	1.2	12.8
Mean	22.7	11.7	Sum 173.4	
Normal	21.0	10.0	88.8	

SIMCOE - OCTOBER 1999

Date	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	16.6	7.3	0.0	11.8
2	17.5	6.9	0.2	12.5
3	13.2	5.0	10.0	5.5
4	8.0	3.0	4.6	
5	13.6	1.7	0.4	2.8
6	12.3	-0.5	0.0	
7	9.0	-2.4	0.0	
8	17.0	1.8	10.2	7.1
9	18.8	13.6	0.6	20.0
10	19.2	13.6	0.4	20.4
11	18.3	4.4	0.2	10.9
12	14.4	2.6	0.0	4.9
13	20.7	4.5	47.8	13.1
14	11.7	2.6	0.0	0.9
15	15.7	4.1	0.0	7.8
16	22.3	12.8	0.0	21.9
17	18.8	7.4	9.0	14.1
18	10.9	3.1	0.0	0.2
19	12.2	3.9	0.0	2.9
20	12.7	5.9	0.0	5.6
21	12.3	1.2	0.0	0.6
22	12.6	5.0	5.6	4.6
23	6.9	3.4	2.0	
24	8.0	1.9	0.0	
25	12.4	3.2	0.0	2.6
26	15.1	4.5	0.0	7.4
27	8.9	0.5	0.0	
28	16.8	-0.3	0.0	4.9
29	17.6	6.2	0.0	11.9
30	22.5	7.0	0.0	16.7
31	18.2	5.4	2.4	11.7
Mean	14.6	4.5	Sum 93.4	
Normal	14.5	4.6	73.2	

MONTHLY METEOROLOGICAL SUMMARY, Ridgetown College, Ridgetown ON

RIDGETOWN - MAY 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	22.5	1.5	0.0	
2	23.9	3.3	0.0	
3	24.3	6.7	0.0	
4	23.6	4.0	0.0	
5	25.5	11.3	0.0	
6	25.7	12.2	0.0	
7	24.1	10.4	0.2	
8	20.6	10.9	3.4	
9	16.8	8.1	0.0	
10	19.5	3.0	0.0	
11	21.2	4.5	0.0	13.5
12	17.0	9.0	0.0	13.7
13	18.6	9.0	0.0	15.3
14	18.7	10.4	0.0	16.6
15	22.1	11.8	0.0	20.5
16	23.5	12.5	0.0	22.1
17	29.8	15.8	0.0	26.7
18	23.6	15.3	0.0	24.6
19	19.6	6.8	0.2	14.3
20	20.1	3.2	0.0	12.6
21	25.4	9.0	0.0	19.8
22	17.3	11.7	9.8	16.5
23	21.0	10.0	0.4	18.2
24	15.2	7.9	2.0	10.6
25	13.2	7.0	4.6	7.1
26	17.8	5.2	0.0	11.2
27	24.3	1.8	0.0	15.2
28	28.1	9.1	0.0	20.5
29	30.4	11.4	0.0	22.8
30	31.8	15.3	0.0	26.1
31	21.5	17.9	4.2	25.7

Mean Temp = 15.5
 Max Temp = 31.8
 Total precip = 24.8

RIDGETOWN - JUNE 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	24.5	18.3	4.0	27.7
2	24.7	16.7	3.6	26.4
3	16.7	6.8	0.0	11.4
4	21.4	4.2	0.0	13.5
5	25.9	13.9	0.0	24.4
6	33.4	21.1	0.0	31.0
7	32.9	20.7	0.0	30.8
8	31.6	18.6	0.0	29.1
9	30.3	12.7	0.0	23.9
10	32.7	18.9	0.0	29.2
11	31.0	20.3	0.0	30.7
12	31.8	21.1	0.0	31.4
13	29.5	19.6	0.0	30.1
14	24.2	13.5	22.6	23.3
15	17.0	7.0	0.0	11.9
16	18.3	6.2	0.0	12.5
17	18.5	8.9	0.0	15.1
18	22.1	3.7	0.0	14.0
19	23.6	8.2	0.0	18.2
20	25.3	14.6	0.0	24.8
21	26.8	12.5	0.0	23.3
22	28.6	12.0	0.0	23.3
23	29.4	18.1	0.0	28.8
24	30.6	20.7	3.4	31.1
25	30.4	17.1	0.0	27.9
26	30.9	14.2	0.0	25.3
27	29.7	21.6	3.0	31.9
28	30.6	21.4	0.2	31.8
29	24.1	12.9	13.6	22.7
30	22.5	11.4	0.0	20.5

Mean Temp=20.6
 Max Temp=33.4
 Total precip=50.4

MONTHLY METEOROLOGICAL SUMMARY, Ridgetown College, Ridgetown ON

RIDGETOWN - JULY 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	27.0	13.7	2.2	24.4
2	28.8	17.5	0.0	28.2
3	32.9	21.0	0.0	31.0
4	34.9	25.0	0.0	33.9
5	35.0	23.0	0.0	32.1
6	31.8	18.7	0.2	29.2
7	29.1	12.4	0.0	23.6
8	27.1	11.3	0.0	22.4
9	29.8	20.2	4.0	30.6
10	22.9	10.3	0.0	19.8
11	24.1	7.0	0.0	17.4
12	26.6	9.6	0.0	20.7
13	27.1	17.3	0.0	27.7
14	30.2	18.8	0.0	29.4
15	31.8	20.0	0.0	30.4
16	32.1	19.2	0.0	29.6
17	22.2	19.8	0.0	29.8
18	32.0	17.0	0.0	27.6
19	28.0	20.0	0.0	30.3
20	27.4	17.7	0.0	28.1
21	28.3	18.4	0.0	28.9
22	31.8	19.0	0.0	29.4
23	31.7	14.5	1.8	25.4
24	33.2	19.4	8.0	29.5
25	31.6	17.9	0.2	28.5
26	29.4	14.4	0.0	25.4
27	32.1	16.3	0.0	27.0
28	32.6	15.5	10.2	26.1
29	30.8	18.0	2.0	28.7
30	32.7	21.8	0.0	31.8
31	33.0	22.2	10.0	32.1
Mean Temp	=	23.7		
Max Temp	=	35.0		
Total precip	=	38.6		

RIDGETOWN - AUGUST 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	28	15	0	26
2	25	13	0	23
3	27	10	0	21
4	26	15	12	25
5	25	13	3	23
6	26	11	0	22
7	27	12	11	23
8	22	11	0	20
9	22	8	0	18
10	24	16	1	26
11	27	17	0	27
12	28	15	0	26
13	29	21	1	31
14	22	14	0	22
15	26	7	0	19
16	26	10	0	21
17	31	19	0	29
18	23	13	0	22
19	21	13	5	21
20	26	13	0	23
21	23	11	0	20
22	26	10	0	21
23	26	12	0	23
24	28	18	0	28
25	23	18	6	27
26	25	17	8	26
27	27	16	0	26
28	31	18	0	28
29	23	10	0	19
30	22	8	0	16
31	25	8	0	18
Mean Temp	=	19.3		
Max Temp	=	31.2		
Total precip	=	48.6		

MONTHLY METEOROLOGICAL SUMMARY, Ridgetown College, Ridgetown ON

RIDGETOWN - SEPTEMBER 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	28.0	8.8	0.0	20.3
2	28.7	10.6	0.0	22.0
3	31.1	8.4	0.0	20.0
4	30.4	11.0	0.0	22.4
5	27.6	18.3	0.0	28.8
6	26.8	19.9	35.0	30.0
7	25.5	15.7	1.0	25.8
8	26.4	14.0	0.0	24.6
9	25.9	11.3	0.0	22.0
10	19.6	7.5	0.0	14.8
11	23.6	10.5	0.0	20.3
12	28.8	11.8	0.0	23.1
13	25.1	13.6	4.4	23.8
14	20.4	7.1	0.0	15.2
15	22.3	5.9	0.0	15.4
16	21.5	5.9	0.0	14.9
17	22.3	7.2	0.0	16.5
18	23.6	4.2	0.0	14.9
19	25.4	9.2	0.0	19.9
20	19.5	10.2	0.0	17.1
21	16.5	3.2	0.0	9.0
22	18.1	-1.8	0.0	10.7
23	24.7	9.6	0.0	20.0
24	20.6	9.1	0.0	17.1
25	18.7	1.9	0.0	11.3
26	27.8	14.2	0.0	25.1
27	28.6	18.7	0.0	29.3
28	27.8	19.6	0.0	30.0
29	22.3	10.4	27.4	19.5
30	17.3	8.1	0.8	13.2
Mean Temp	=	17.1		
Max Temp	=	31.1		
Total precip	-	76.6		

RIDGETOWN - OCTOBER 1999

Day	Temperature (°C)		Precipitation (mm)	CHU
	Maximum	Minimum		
1	16.8	6.4	0.0	11.1
2	18.1	5.6	0.0	11.8
3	14.0	1.7	12.6	5.9
4	10.7	0.3	3.2	1.2
5	14.5	-0.5	0.2	6.6
6	12.j	-0.9	0.0	3.9
7	12.3	-2.8	0.0	3.6
8	17.6	11.0	8.6	
9	18.9	12.6	0.0	
10	20.5	13.4	0.2	
11	18.2	4.0	0.0	
12	17.3	3.7	0.0	
13	21.1	6.8	22.8	
14	12.7	1.4	0.6	
15	17.1	4.4	0.0	
16	23.4	15.1	0.6	
17	17.3	4.1	8.4	
18	12.1	0.9	0.0	
19	13.2	2.2	0.8	
20	12.2	1.1	0.2	
21	13.5	-1.0	0.0	
22	13.9	5.7	1.2	
23	6.5	2.3	1.0	
24	6.7	0.0	1.4	
25	13.0	1.0	0.0	
26	15.0	3.5	0.0	
27	11.8	-1.6	0.0	
28	17.3	-0.6	0.0	
29	22.3	5.3	0.0	
30	21.9	13.3	0.0	
31	20.1	8.0	0.2	
Mean Temp	=	9.8		
Max Temp	=	23.4		
Total precip	=	62.0		

GENERAL PLOT METHODOLOGY

Six standard, sugar enhanced (SE), five sweetbreed (SB), and eight supersweet (SH,) fresh market sweet corn cultivars were planted in a randomized complete block design with four replicates. Plots consisted of: Ridgetown, 2 rows, 8 m in length with 75 cm between the rows; Simcoe, 1 row, 10 m in length with 75 cm between the row; Kemptville, 2 rows, 6.6 m in length with 75 cm between the row. Planting dates/densities were: Ridgetown, May 25/100,000 seeds/ha; Simcoe, June 1/133,333 seeds/ha; Kemptville, SE-SB May 21, SH, June 4/121,212 seeds/ha. After percent stand was recorded plots were thinned to the following densities: Ridgetown, 45,000 plants/ha; Simcoe, 66,667 plants/ha; Kemptville, 68,687 plants/ha. Soil types were: Ridgetown, Brookston clay loam sand spot phase soil; Simcoe, SE-SB Bookton sand, SH2 Wilsonville sand; Kemptville, Grenville sandy loam. Weeds were controlled with: Ridgetown, metolachlor /atrazine (2.9 kg/ha) preplant incorporated, bentazon (1.08 kg/ha) postemergence; Simcoe, atrazine (1.0 kg/ha) + metolachlor/benoxacor (1.87 kg/ha) preplant incorporated, atrazine (0.81 kg/ha) + pyridate (0.45 kg/ha) postemergence; Kemptville, metolachlor /atrazine (2.9 kg/ha) preplant incorporated, bentazon (1.08 kg/ha) postemergence. Weed escapes were controlled with cultivation and hoeing. Nitrogen fertilizer was applied as: Ridgetown, urea broadcast 90 kg N/ha; Simcoe, 61 kg N/ha as urea broadcast, 30 kg N/ha as urea sidedress; Kemptville, urea broadcast 90 kg N/ha. Phosphorous and potassium applications were based on soil analysis. Insect control followed recommended practices. Plots were irrigated in Simcoe (1 ½") on: SE varieties - July 19, Aug. 19, SH, varieties - July 5, July 21, Aug. 19. Irrigation was not available at Ridgetown or Kemptville.

DATA COLLECTION

Four weeks after seeding, the number of plants per plot were counted to determine the percent plant stand, and at Ridgetown, ten plants were measured for extended leaf height. Disease ratings were completed at Ridgetown and Simcoe just prior to harvest. Leaf rust was assessed on a percentage of the leaf area infected but was not reported in 1999 due to low incidence. Maturity was determined by physical examination at Simcoe and Kemptville. At Ridgetown, the sweet corn was harvested 15 days after 80% silking which was determined daily by counting the cobs with silks emerged.

At harvest the following data was collected using the methodology described:

Maturity

Corn heat units: the number of corn heat units from planting to harvest

Days to harvest: the number of days from planting to harvest

Vegetative Growth (taken at harvest)

Plant height - average height (m) of 5 plants measured to the top of the tassel

Cob height - average height (m) of 5 plants measured to the base of cob

Tillers per plant - the average number of tillers taller than 30 cm per plant

Percent lodged - the percent of lodged plants per row (30 degrees from ground)

- not reported in 1999 due to low incidence

Ease of snapping - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = difficult to snap (the stalk comes with the ear)
- 3 = moderate (second tug to get off)
- 5 = easy (one yank and it's off)

Diseases (taken at harvest)

Common smut: number of plants with common smut per row

Rust: percent of leaf area infected - **not reported in 1999 due to low incidence**

Cob characteristics (husk on)

Tip cover - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = exposed
- 2 = just covered
- 3 = ear up to 2.5 cm away from tip of leaves
- 4 = ear is 2.5-5.0 cm away from tip
- 5 = ear greater than 5.0 cm away from tip

Shank length - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = 0 - 2.5 cm
- 2 = 2.5 - 5.0 cm
- 3 = 5.0 - 7.5 cm
- 4 = 7.5 - 10.0 cm
- 5 = greater than 10 cm

Husk tightness - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = loose
- 5 = tight

Husk colour - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = very light green
- 5 = very dark green

Flag leaf appearance - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = too long or too short
- 5 = moderate size

Cob appearance - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = short and fat
- 5 = long and slender

Cob characteristics (husk off)

Ear fill - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = 5 cm from the tip is not filled
- 3 = 2.5 cm from the tip is not filled
- 5 = perfectly filled

Row uniformity - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = ½ of the rows do not go to the tip
- 5 = all row go to the tip

Colour contrast - mean of 5 cobs evaluated on a scale of 1-5 where:

- 1 = white kernels are pale yellow
- 5 = white kernels are pure white

Roadside rating - this is an average of tip cover, husk tightness, flag leaf appearance, cob appearance, ear fill divided by five:

- 1 = poor
- 5 = good

Cob length (cm): mean of 10 cobs

Cob width (cm): mean of 10 cobs

Yield

Cob weight (husk on) (g): mean of 10 cobs.

Cob weight (husks off) (g): mean of 10 cobs.

Yield (dozens/hectare, dozens/acre)

The data was statistically analysed using analysis of variance for a randomized complete block design. A protected LSD was used to separate the treatments with significant differences.

Table 1. Plant stand of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Endosperm	Source	Percent Plant Stand (week 4)			
			RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	SB	Harris Moran	84	83	89	85
HMX 7366 BES	SB	Harris Moran	80	92	78	83
HMX 8342 BES	SB	Harris Moran	86	82	72	80
HMX 6357 BSB	SB	Harris Moran	81	73	94	83
Sweet Riser	SB	Harris Moran	77	90	89	85
Double Choice	SE	Harris Moran	88	90	92	90
HMX 5346 E	SE	Harris Moran	82	90	80	84
Temptation	SE	Stokes	90	97	58	82
Ecstace II	SE	Seedway	71	64	77	71
Twilight	SE	Seedway	66	73	89	76
Table Treat	SE	Seedway	81	89	89	86
Sweet Scarlet*	SE	Seedway	-	92	81	87
P value			0.0001	0.0001	0.0001	
CV			5.28	10.33	6.49	
LSD (.05)			6	13	8	

*Sweet Scarlet is a red/white bicolour cultivar

Table 2. Corn heat units, days to maturity of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Corn Heat Units ^z				Days to Maturity			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	2093	2258	2275	2209	84	83	87	85
HMX 7366 BES	HM	2019	2164	2211	2131	81	79	84	81
HMX 8342 BES	HM	1974	2019	2211	2068	79	73	84	79
HMX 6357 BSB	HM	1960	1911	2132	2001	79	69	80	76
Sweet Riser	HM	1821	1802	1897	1840	73	64	68	68
Double Choice	HM	1832	1911	2075	1939	73	69	76	73
HMX 5346 E	HM	1802	1802	1790	1798	72	64	67	68
Temptation	ST	1854	1911	1897	1887	74	69	70	71
Ecstace II	SW	1843	1802	2429	2025	74	64	80	73
Twilight	SW	2039	2258	2429	2242	82	83	81	82
Table Treat	SW	2047	2258	2530	2278	82	83	82	82
Sweet Scarlet	SW	-	2164	2211	2188	-	79	70	75
P value		0.0001	-	-		0.0001	-	-	
CV		1.6	-	-		1.74	-	-	
LSD (.05)		45	-	-		2	-	-	

^zCorn Heat Unit data at Ridgetown, Simcoe from on site weather stations. Kemptville data from OMAFRA website.

Table 3. Extended leaf height, plant height of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Extended Leaf Height (cm) (week 4)		Plant Height (m)	
		RIDGE	RIDGE	SIMCOE	MEAN
HMX 5348 BES	HM	42	2.2	1.7	2.0
HMX 7366 BES	HM	48	2.0	1.6	1.8
HMX 8342 BES	MM	42	1.9	1.5	1.7
HMX 6357 BSB	HM	36	1.9	1.6	1.8
Sweet Riser	HM	55	1.7	1.7	1.7
Double Choice	HM	57	1.8	1.6	1.7
HMX 5346 E	HM	49	1.6	1.6	1.6
Temptation	ST	50	1.8	1.7	1.8
Ecstace II	SW	41	1.7	1.5	1.6
Twilight	SW	41	1.9	1.5	1.7
Table Treat	SW	34	2.0	1.5	1.8
Sweet Scarlet	SW	-	-	1.8	1.8
P value		0.0001	0.0001	0.0006	
CV		13	3.93	5.61	
LSD (.05)		8	0.1	0.1	

Table 4. Cob height, common smut of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College: Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Height (cm)			Common Smut/Plot		
		RIDGE	SIMCOE	MEAN	RIDGE ^z	SIMCOE ^y	MEAN
HMX 5348 BES	HM	47	55	51	0	0	0
HMX 7366 BES	HM	40	49	45	0	0	0
HMX 8342 BES	HM	52	52	52	0	0	0
HMX 6357 BSB	HM	38	47	43	0	0	0
Sweet Riser	HM	25	49	37	1	0	1
Double Choice	HM	24	38	31	1	1	1
HMX 5346 E	HM	24	37	31	2	0	1
Temptation	ST	33	47	40	0	0	0
Ecstace II	SW	30	40	35	2	0	1
Twilight	SW	40	45	43	0	0	0
Table Treat	SW	41	44	43	0	0	0
Sweet Scarlet	SW	-	57	57	-	1	1
P value		0.0001	0.0001		N.S.	N.S.	
CV		20.92	8.39		193.6	249.25	
LSD (.05)		11	5.6				

^z34 plants per plot

^y40 plants per plot

Table 5. Tillers/plant, tip cover of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Tillers/Plant			Tip Cover (1-5)			
		RIDGE	SIMCOE	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	0.3	0.3	0.3	5.0	4.1	2.7	3.9
HMX 7366 BES	HM	0.3	0.9	0.6	3.2	2.8	3.6	3.2
HMX 8342 BES	HM	0.3	0.7	0.5	3.4	3.8	3.0	3.4
HMX 6357 BSB	HM	0.3	0.3	0.3	2.6	3.7	2.4	2.9
Sweet Riser	HM	0.2	0.3	0.3	5.0	4.5	2.7	4.1
Double Choice	HM	0.3	0.5	0.4	4.9	2.6	2.5	3.3
HMX 5346 E	HM	0.2	0.3	0.3	3.8	3.9	2.6	3.4
Temptation	ST	0.2	0.1	0.2	4.6	3.5	3.7	3.9
Ecstace II	SW	0.2	0.4	0.3	2.7	2.3	2.7	2.6
Twilight	SW	0.3	0.0	0.2	3.5	3.3	2.9	3.2
Table Treat	SW	0.2	0.3	0.3	1.4	1.2	3.1	1.9
Sweet Scarlet	SW		0.4	0.4	-	5.0	2.3	3.7
P value		N.S.	0.0002		0.0001	0.0001	0.0051	
CV		26.48	54.31		16.86	15.15	17.7	
LSD (.05)			0.3		0.9	0.7	0.7	

Table 6. Husk tightness. flag leaf appearance of, sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Husk Tightness (1-5)				Flag Leaf Appearance (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	3.5	4.9	3.3	3.9	2.5	3.8	3.7	3.3
I-IMX 7366 BES	HM	3.0	4.9	3.1	3.7	3.3	4.5	3.0	3.6
HMX 8342 BES	HM	2.5	4.9	3.5	3.6	2.8	3.5	3.0	3.1
HMX 6357 BSB	HM	2.0	4.5	3.1	3.2	1.8	3.7	2.6	2.7
Sweet Riser	HM	3.8	3.2	2.5	3.2	2.8	4.7	2.4	3.3
Double Choice	HM	3.3	4.7	3.1	3.7	2.0	5.0	3.2	3.4
HMX 5346 E	HM	4.0	4.0	3.7	3.9	2.0	4.6	2.9	3.2
Temptation	ST	2.3	4.1	3.7	3.4	2.3	4.3	3.6	3.4
Ecstace II	SW	2.5	4.3	3.3	3.4	3.3	4.6	3.4	3.8
Twilight	SW	3.5	4.1	3.9	3.8	2.3	4.3	4.0	3.5
Table Treat	SW	1.5	4.4	3.8	3.2	2.0	4.0	3.5	3.2
Sweet Scarlet	SW		4.7	3.1	3.9		4.3	3.1	3.7
P value		N.S.	0.001	0.0001		N.S.	N.S.	0.0041	
CV		38.2	8.01	9.84		48.2	15.50	16.02	
LSD (.05)			0.5	0.5		-	0.9	0.7	

Table 7. Husk colour, shank length of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Husk Colour (1-5)			Shank Length (1-5)			
		RIDGE	SIMCOE	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	3.3	2.7	3.0	4.1	3.9	2.0	3.3
I-MX 7366 BES	HM	3.5	3.7	3.6	4.0	3.5	3.7	3.7
I-MX 8342 BES	HM	3.5	3.3	3.4	3.7	3.5	3.0	3.4
HMX 6357 BSB	HM	4.0	3.3	3.7	3.2	3.0	2.5	2.9
Sweet Riser	HM	2.0	4.1	3.1	4.2	4.4	1.7	3.4
Double Choice	HM	1.8	2.9	2.4	3.6	3.9	3.5	3.7
HMX 5346 E	HM	3.0	3.9	3.5	4.2	3.5	2.5	3.4
Temptation	ST	2.0	3.0	2.5	2.8	2.8	3.0	2.9
Ecstace II	SW	1.5	3.3	2.4	3.2	3.3	4.3	3.6
Twilight	SW	2.8	3.5	3.2	4.5	3.0	3.3	3.6
Table Treat	SW	4.5	2.9	3.7	4.3	2.9	3.7	3.6
Sweet Scarlet	SW	-	3.3	3.3	-	2.7	2.3	2.5
P value		0.0004	0.0012		0.0061	0.0001	0.0001	
CV		30.09	13.27		15.97	13.19	20.87	
LSD (.05)		14.1	0.6		0.9	0.6	0.9	

Table 8. Ease of snap, cob appearance of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Ease of Snap (1-5)				Cob Appearance (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	3.5	3.9	3.7	3.7	5.0	5.0	3.5	4.5
HMX 7366 BES	HM	3.2	3.5	3.3	3.3	3.0	3.9	3.5	3.5
HMX 8342 BES	HM	4.0	3.6	3.5	3.7	3.3	5.0	2.9	3.7
HMX 6357 BSB	HM	3.2	3.1	3.0	3.1	4.3	5.0	3.5	4.3
Sweet Riser	HM	2.9	4.1	3.1	3.4	3.3	4.3	2.6	3.4
Double Choice	HM	2.3	3.7	3.0	3.0	3.0	5.0	3.4	3.8
HMX 5346 E	HM	3.6	4.3	3.1	3.7	3.0	4.9	3.4	3.8
Temptation	ST	3.2	2.9	3.6	3.2	1.8	3.8	3.7	3.1
Ecstace II	SW	3.5	4.5	3.5	3.8	1.0	3.7	3.5	2.7
Twilight	SW	4.3	3.8	3.1	3.7	3.8	4.5	3.1	3.8
Table Treat	SW	4.3	4.7	3.6	4.2	3.8	4.7	3.9	4.1
Sweet Scarlet	SW	-	4.3	3.2	3.8	-	5.0	3.3	4.2
P value		0.0014	0.0003	0.0010		0.0001	0.0001	0.0042	
CV		16.85	13.28	7.67		23.88	7.55	11.6	
LSD (.05)		0.8	0.7	0.4		1.1	0.5	0.5	

Table 9. Row uniformity, colour contrast of sugar enhanced and sweet breed fresh market sweet corn cultivars, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Row uniformity (1-5)			Colour contrast (1-5)		
		SIMCOE	KEMPT	MEAN	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	3.4	2.7	3.1	3.7	3.9	3.8
HMX 7366 BES	HM	2.5	3.6	3.1	4.1	3.0	3.6
HMX 8342 BES	HM	3.8	3.9	3.9	4.0	3.5	3.8
HMX 6357 BSB	HM	4.0	2.2	3.1	3.2	3.4	3.3
Sweet Riser	HM	2.6	3.3	3.0	1.0	3.0	2.0
Double Choice	HM	3.5	2.9	3.2	4.5	3.0	3.8
HMX 5346 E	HM	2.3	3.5	2.9	1.0	3.6	2.3
Temptation	ST	4.0	3.3	3.7	4.5	3.7	4.1
Ecstace II	SW	4.6	2.7	3.7	3.5	3.3	3.4
Twilight	SW	2.4	3.4	2.9	3.7	3.7	3.7
Table Treat	SW	3.3	3.5	3.4	3.7	3.3	3.5
Sweet Scarlet	SW	2.9	2.7	2.8	1.5	3.7	2.6
p value		0.0001	0.0001		0.0001	0.0190	
CV		14.29	11.00		15.92	12.06	
SD (.05)		0.7	0.5		0.7	0.6	

Table 10. Ear fill, roadside rating of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Ear Fill (1-5)				Roadside Rating (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	4.8	4.5	3.5	4.3	4.2	4.5	3.4	4.0
HMX 7366 BES	HM	4.8	4.4	3.3	4.2	3.4	4.1	3.9	3.8
HMX 8342 BES	HM	4.5	4.9	3.7	4.4	3.3	4.4	3.7	3.8
HMX 6357 BSB	HM	4.3	4.7	3.1	4.0	3.0	4.3	3.1	3.5
Sweet Riser	HM	4.8	4.4	3.0	4.1	3.9	4.2	2.8	3.6
Double Choice	HM	4.0	4.9	2.3	3.7	3.5	4.4	3.5	3.8
HMX 5346 E	HM	1.0	3.5	3.4	2.6	2.8	4.2	3.5	3.5
Temptation	ST	5.0	4.5	3.1	4.2	3.2	4.0	3.9	3.7
Ecstace II	SW	3.7	4.4	3.5	3.9	2.7	3.9	4.0	3.5
Twilight	SW	5.0	4.8	4.0	4.6	3.6	4.2	4.0	3.9
Table Treat	SW	4.3	4.4	3.5	4.1	2.6	3.7	4.0	3.4
Sweet Scarlet	SW	-	4.0	3.6	3.8	-	4.6	3.1	3.9
P value		0.0001	0.0184	N.S.		0.0001	0.0009	0.0147	
CV		17.55	10.75	21.88		11.5	5.84	11.06	
LSD (.05)		1.1	0.7	0.9		0.5	0.3	0.5	

Table 11. Cob Length, cob width of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Length (cm)				Cob Width (cm)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	21.3	20.8	18.5	20.2	4.4	4.1	4.1	4.2
HMX 7366 BES	HM	20.9	20.2	16.3	19.1	4.5	4.4	4.2	4.4
HMX 8342 BES	HM	19.9	18.4	14.8	17.7	4.3	4.1	4.4	4.3
HMX 6357 BSB	HM	20.4	19.3	17.3	19.0	4.5	4.0	3.6	4.0
Sweet Riser	HM	18.0	17.2	14.9	16.7	4.6	3.9	3.9	4.1
Double Choice	HM	19.4	20.6	18.7	19.6	4.4	4.0	3.7	4.0
HMX 5346 E	HM	19.1	17.6	18.5	18.4	4.1	3.7	4.0	3.9
Temptation	ST	19.4	17.9	18.6	18.6	4.5	4.2	4.1	4.3
Ecstace II	SW	18.2	17.2	17.5	17.6	4.1	3.6	3.5	3.7
Twilight	SW	19.8	18.4	17.9	18.7	4.8	4.4	4.1	4.4
Table Treat	SW	21.8	20.9	18.0	20.2	4.7	4.5	4.5	4.6
Sweet Scarlet	SW	-	18.2	16.7	17.5	-	3.8	4.0	3.9
P value		0.0001	0.0001	0.0001		0.0001	0.0001	0.0096	
CV		3.88	3.52	5.37		4.27	4.40	8.77	
LSD (.05)		1.1	0.9	1.3		0.3	0.3	0.5	

Table 12. Cob weight (husk on), cob weight (husk off) of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgely College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Weight Husk on (g)				Cob Weight Husk off (g)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	384	340	379	368	227	207	260	231
HMX 7366 BES	HM	402	390	259	350	234	226	162	207
HMX 8342 BES	HM	327	302	310	313	205	177	202	195
HMX 6357 BSB	HM	326	260	261	282	230	166	175	190
Sweet Riser	HM	299	250	279	276	200	152	191	181
Double Choice	HM	281	274	308	288	188	184	210	194
HMX 5346 E	HIM	-	215	310	262	-	131	225	178
Temptation	ST	327	274	339	313	218	189	216	208
Ecstace II	SW	267	205	284	252	180	130	180	163
Twilight	SW	396	314	294	335	251	219	185	218
Table Treat	SW	398	315	360	358	254	239	255	249
Sweet Scarlet	SW	-	272	256	264	-	155	202	179
P value		0.0001	0.0001	0.0001		0.0356	0.0001	0.0001	
CV		9.02	12.73	10.26		15.89	12.6	10.81	
LSD(.05)		42	52	45		47	33	32	

Table 13. Yield of sugar enhanced and sweet breed fresh market sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Yield (doz/ac)				Yield (doz/ha)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
HMX 5348 BES	HM	1347	1730	1608	1562	3368	4325	4019	3904
IIMX 7366 BES	HM	1472	1603	1725	1600	3681	4008	4314	4001
IIMX 8342 BES	HM	1222	1317	1776	1438	3056	3294	4440	3597
HMX 6357 BSB	HM	931	1556	1540	1342	2327	3889	3851	3356
Sweet Riser	HM	1070	1556	1759	1462	2674	3889	4398	3654
Double Choice	HM	1223	1667	1818	1569	3056	4167	4545	3923
IIMX 5346 E	HM	**	1413	1692	1553	**	3532	4230	3881
Temptation	ST	1375	1540	1768	1561	3438	3849	4419	3902
Ecstace II	SW	852***	1079	1608	1180	2129***	2698	4019	2949
Twilight	SW	1389	1825	1742	1652	3472	4563	4356	4130
Table Treat	SW	1292	1333	1768	1464	3229	3333	4419	3660
Sweet Scarlet	SW	-	1349	1793	1571	-	3373	4482	3928
P value		0.0003	0.0307	0.0261		0.0003	0.0307	0.0261	
CV		14.13	18.20	6.54		14.14	18.20	6.54	
LSD (.05)		251	300	161		628	980	404	

** = yields unavailable due to raccoon feeding.

*** = moderately affected by raccoon feeding.

'Sable 14. Percent plant stand of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivsr	Endosperm	Source	Percent Plant Stand (week 4)			
			RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	SH ₂	Harris Moran	90	53	77	73
Fantasy	SH ₂	Harris Moran	80	56	78	71
HMX 6361 BS	SH ₂	Harris Moran	84	74	80	79
A-mazingly Sweet	SH ₂	Harris Moran	86	79	80	82
I-IMX 5352 BS	SH ₂	Harris Moran	84	71	86	80
HMX 6364 BS	SH ₂	Harris Moran	83	73	77	78
Everprime	SH ₂	Stokes	88	59	63	70
EX 8414607	SH ₂	Asgrow	94	77	69	80
P value			0.0207	0.001	N.S.	
CV			5.84	12.54	15.83	
LSD (.05)			7	12	18	

Table 15. Corn heat units, days to maturity of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Corn Heat Units"				Days to Maturity			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	2058	2019	2132	2070	83	73	81	79
Fantasy	HM	1952	2088	1897	1979	78	76	70	75
HMX 6361 BS	HM	1925	1849	2075	1950	77	66	77	73
A-mazingly Sweet	HM	2071	2019	2132	2074	83	73	81	79
HMX 5352 BS	HM	1954	1849	2075	1959	79	66	76	74
HMX 6364 BS	HM	2132	2370	2275	2259	86	87	87	87
Everprime	ST	1876	1849	2075	1933	75	66	75	72
EX 8414607	AS	2033	2088	2075	2065	82	76	75	78
P value		0.0001	-	-		0.0001	-	-	
CV		2.55	-	-		2.73	-	-	
LSD (.05)		3.2				3.2	-	-	

*Corn Heat Unit data at Ridgetown, Simcoe from on site weather stations. Kemptville data from OMAFRA website.

Table 16. Extended leaf height, plant height of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kempierville College 1999.

Cultivar	Source	Extended Leaf Height (cm) (week 4)		Plant Height (m)		
		RIDGE		RIDGE	SIMCOE	MEAN
Double Dots	HM	43		1.7	1.6	1.7
Fantasy	HM	43		1.6	1.4	1.5
HMX 6361 BS	IIM	44		1.7	1.5	1.6
A-mazingly Sweet	IIM	45		1.7	1.6	1.7
HMX 5352 BS	HM	38		1.7	1.6	1.7
HMX 6364 BS	HM	43		1.8	1.5	1.7
Everprime	ST	43		1.7	1.6	1.7
EX 8414607	AS	46		1.7	1.5	1.6
P value		N.S.		0.0067	0.0125	
CV		8.58		3.71	5.34	
LSD (.05)		5		0.1	0.1	

Table 17. Cob height, common smut of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Height (cm)			Common Smut/Plot		
		RIDGE	SIMCOE	MEAN	RIDGE ^z	SIMCOE ^y	MEAN
Double Dots	HM	42.0	48.0	45.0	1	4	3
Fantasy	HM	18.3	33.3	25.8	1	4	3
HMX 6361 BS	HM	28.3	36.5	32.4	1	1	1
A-mazingly Sweet	HM	39.9	48.0	44.0	0	2	1
HMX 5352 BS	HM	33.5	39.0	36.3	1	1	1
HMX 6364 BS	HM	47.5	54.7	51.1	0	0	0
Everprime	ST	29.5	39.5	34.5	1	1	1
EX 8414607	AS	42.8	49.5	46.2	1	5	3
P value		0.0001	0.0001		N.S.	0.0038	
CV		18.75	9.7		146.48	73.32	
LSD (.05)		9.7	6.2		-	2	

^z34 plants per plot

^y40 plants per plot

Table 18. Tillers per plant, tip cover of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Tillers per Plant			Tip Cover (1-5)			
		RIDGE	SIMCOE	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	0.1	0.7	0.4	4.0	4.5	2.6	3.7
Fantasy	HM	0.2	1.0	0.6	2.6	2.3	3.3	2.7
HMX 6361 BS	HM	0.2	0.7	0.5	2.9	2.3	4.1	3.1
A-mazingly Sweet	HM	0.2	0.3	0.3	3.7	2.9	3.3	3.3
HMX 5352 BS	HM	0.2	0.8	0.5	3.3	2.7	3.1	3.0
HMX 6364 BS	HM	0.2	0.2	0.2	4.5	3.4	3.9	3.9
Everprime	ST	0.2	0.8	0.5	3.6	2.5	2.5	2.9
EX 8414607	AS	0.1	0.0	0.1	2.6	2.5	3.6	2.9
P value		N.S.	0.0001		0.0312	0.002	0.0009	
CV		56.8	30.08		24.33	19.02	14.56	
LSD (.05)			0.2		1.2	0.8	0.7	

Table 19. Husk tightness, flag leaf appearance of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Husk Tightness (1-5)				Flag Leaf Appearance (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	3.0	4.4	3.4	3.6	2.3	5.0	2.7	3.3
Fantasy	HM	2.3	4.0	3.7	3.3	2.5	4.3	3.9	3.6
HMX 6361 BS	HM	3.8	4.5	3.7	4.0	2.8	4.9	3.3	3.7
A-mazingiy Sweet	HM	3.0	4.4	3.5	3.6	2.3	4.7	4.0	3.7
HMX 5352 BS	HM	3.0	3.9	3.5	3.5	2.8	4.0	3.7	3.5
HMX 6364 BS	HM	4.5	4.3	3.6	4.1	2.8	4.0	3.0	3.3
Everprime	ST	2.5	4.3	3.3	3.4	3.5	4.6	3.3	3.8
EX 8414607	AS	2.5	4.5	3.7	3.6	2.0	4.2	3.3	3.2
P value		N.S.	N.S.	N.S.		N.S.	N.S.	0.007	
CV		42.08	9.25	9.73		46.39	11.75	13.34	
LSD (.05)			-	-		-	0.8	0.7	

Table 20. Husk colour, shank length of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Husk Colour (1-5)			Shank Length (1-5)			
		RIDGE	SIMCOE	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	3.0	3.3	3.2	2.3	3.1	2.5	2.6
Fantasy	HM	2.5	2.7	2.6	2.2	1.9	2.7	2.3
HMX 6361 BS	HM	3.8	3.7	3.8	2.9	4.0	2.7	3.2
A-mazingly Sweet	HM	4.0	3.7	3.9	3.8	3.7	3.5	3.7
HMX 5352 BS	HM	4.5	3.7	4.1	2.1	3.2	3.0	2.8
HMX 6364 BS	HM	3.8	3.3	3.6	3.3	3.8	3.0	3.4
Everprime	ST	3.5	3.2	3.4	2.6	3.6	3.7	3.3
EX 8414607	AS	3.0	3.0	3.0	3.6	4.0	3.5	3.7
P value		N.S.	0.0374		0.0019	0.0001	N.S.	
CV		26.64	13.32		20.94	14.09	20.75	
LSD (.05)		1.4	0.6		0.9	0.7	0.9	

Table 21. Ease of snap, cob appearance of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Ease of Snap (1-5)				Cob Appearance (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	4.3	3.9	3.9	4.0	2.3	3.5	3.0	2.9
Fantasy	HM	3.8	3.5	3.8	3.7	2.0	2.9	3.2	2.7
I-IMX 6361 BS	HM	4.0	3.8	3.0	3.6	2.3	2.9	2.7	2.6
A-mazingly Sweet	HM	4.6	4.0	2.9	3.8	3.0	3.6	3.2	3.3
HMX 5352 BS	HM	4.3	4.5	2.5	3.8	2.8	3.4	2.9	3.0
HMX 6364 BS	HM	4.6	4.9	3.1	4.2	4.3	2.5	3.6	3.5
Everprime	ST	4.4	2.9	2.8	3.4	2.8	4.6	3.0	3.5
EX 8414607	AS	4.6	3.6	2.3	3.5	5.0	3.9	3.1	4.0
P value		N.S.	0.0001	0.0001		0.0007	0.0147	N.S	
CV		10.29	11.43	5.01		28.71	21.57	13.91	
LSD (.05)		0.7	0.7	0.2		1.3	1.1	0.6	

Table 22. Row uniformity, colour contrast of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus. Kemptville College 1999.

Cultivar	Source	Row uniformity (1-5)			Colour contrast (1-5)		
		SIMCOE	KEMPT	MEAN	SIMCOE	KEMPT	MEAN
Double Dots	HM	4.3	2.7	3.5	3.9	3.9	3.9
Fantasy	HM	2.5	3.6	3.1	2.7	3.3	3.0
HMX 6361 BS	HM	1.8	2.6	2.2	3.8	2.5	3.2
A-mazingly Sweet	HM	3.3	3.9	3.6	3.7	3.6	3.7
HMX 5352 BS	HM	2.6	3.2	2.9	3.6	3.4	3.5
HMX 6364 BS	HM	2.3	2.9	2.6	3.3	3.0	3.2
Everprime	ST	3.6	2.9	3.3	2.9	2.9	2.9
EX 8414607	AS	2.5	3.9	3.2	2.0	3.7	2.9
P value		0.0006	0.0001		0.0005	0.0340	
CV		22.80	11.10		16.15	17.31	
LSD (.05)		1.0	0.5		0.8	0.8	

Table 23. Ear fill, roadside rating of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Ear Fill (1-5)				Roadside Rating (1-5)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	4.5	4.3	3.1	4.0	3.2	4.3	3.0	3.5
Fantasy	HM	4.3	4.2	3.9	4.1	2.7	3.5	3.6	3.3
HMX 6361 BS	HM	4.5	4.4	1.5	3.5	3.2	3.8	3.1	3.4
A-mazingly Sweet	HM	3.5	4.5	4.4	4.1	3.1	4.0	3.7	3.6
HMX 5352 BS	HM	4.3	4.0	3.1	3.8	3.2	3.6	3.3	3.4
HMX 6364 BS	HM	4.5	3.4	3.9	3.9	4.1	3.5	3.6	3.7
Everprime	ST	5.0	4.7	3.0	4.2	3.5	4.1	3.0	3.5
EX 8414607	AS	4.8	4.1	3.9	4.3	3.4	3.9	3.5	3.6
P value		N.S.	N.S.	0.0001		0.001	0.0012	0.0006	
CV		16.54	14.23	13.4		10.04	6.58	7.17	
LSD (.05)		-	0.9	0.7		0.5	0.4	0.3	

Table 24. Cob length, cob width of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Length (cm)				Cob Width (cm)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	18.5	18.1	17.1	17.9	4.9	4.5	3.5	4.3
Fantasy	HM	19.6	16.6	18.6	18.3	4.6	4.0	4.0	4.2
HMX 6361 BS	HM	19.5	18.9	15.2	17.9	4.8	4.3	3.3	4.1
A-mazingly Sweet	HM	19.3	18.4	17.6	18.4	5.1	4.6	4.3	4.7
I-MX 5352 BS	HM	20.1	19.7	18.6	19.5	4.7	4.3	3.7	4.2
HMX 6364 BS	HM	20.1	17.1	18.2	18.5	4.5	4.5	3.8	4.3
Everprime	ST	19.5	18.0	16.5	18.0	4.4	3.8	3.7	4.0
EX 8414607	AS	19.3	19.0	18.2	18.8	4.5	4.2	3.2	4.0
P value		0.0006	0.0114	0.02		0.0003	0.0001	0.0004	
CV		2.1	6.08	7.75		3.75	4.36	7.47	
LSD (.05)		0.6	1.6	2		0.3	0.3	0.4	

Table 25. Cob weight of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Cob Weight Husk on (g)				Cob Weight Husk off (g)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	301	368	269	313	219	216	179	205
Fantasy	HM	301	207	326	278	222	158	167	182
HMX 6361 BS	HM	381	323	225	310	260	194	145	200
A-mazingly Sweet	HM	342	359	278	326	249	222	186	219
I-IMX 5352 BS	HM	349	312	246	302	247	200	158	202
MMX 6364 BS	HM	391	326	325	347	241	198	242	227
Everprime	ST	297	244	274	272	210	149	174	178
EX 8414607	AS	298	333	283	305	198	199	173	190
P value		0.0007	0.0001	0.015		N.S.	0.0054	N.S	
CV		9.66	10.18	13.63		12.88	13.2	24.93	
LSD (.05)		47	46	56		-	37	65	

Table 26. Yield of fresh market supersweet sweet corn cultivars, Ridgetown College, Simcoe Campus, Kemptville College 1999.

Cultivar	Source	Yield (doz/ac)				Yield (doz/ha)			
		RIDGE	SIMCOE	KEMPT	MEAN	RIDGE	SIMCOE	KEMPT	MEAN
Double Dots	HM	986	937	1650	1191	2466	2341	4125	2977
Fantasy	HM	1333	190"	1734	1086	3333	476*	4335	2715
HMX 6361 BS	HM	1403	1508	1667	1526	3507	3770	4167	3815
A-mazingly Sweet	HM	1375	1413	1625	1471	3438	3532	4061	3677
HMX 5352 BS	HM	1500	1540	1776	1605	3750	3849	4440	4013
HMX 6364 BS	HM	1222	857	1675	1251	3056	2143	4188	3129
Everprime	ST	1208	1079	1726	1338	3021	2698	4314	3344
EX 8414607	AS	1222	1079	1675	1325	3056	2698	4188	3314
P value		N.S.	0.0001	N.S.		N.S.	0.0001	N.S.	
CV		12.88	18.19	9.01		18.94	18.19	9.01	
LSD (.05)			288	224			719	560	

*Fantasy produced a large number of undersized and undeveloped cobs in Simcoe.