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SWEET CORN
TRIALS
VINELAND & SIMCOE
1970

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S.A. Nesathurai, M. Mucalov, E. A. Kerr

During 1970, 47 commercial cultivars, 32 experimental hybrids submitted for trial and 438 experimental hybrids produced at this Institute, were tested. Of the experimental hybrids produced at this Institute, only a few of the most promising are reported here. In addition to the trials reported here, coordinated trials of 25 cultivars were conducted at Vineland and Simcoe. A report on these has been issued separately.

The trial plots were on sandy loam soils both at Vineland and Simcoe. The seed was sown May 13-14 at Vineland and May 12 at Simcoe in rows 3 ft apart. There were 2 replications 20 ft long at both locations. The records given are the average of the two replications. Early weed growth was controlled by sutan, followed by atrazine plus oil. Germination and early growth were satisfactory at both locations, although May and June were cold and wet. Where possible, the seedlings were thinned to stand approximately 9 inches apart. This gave 27 plants per plot. The stand is recorded as poor if less than 25 plants. The data for Vineland and Simcoe are given separately as the evaluators appear to have slightly different standards. Records were taken by Nesathurai at Vineland (Table I) and by Mucalov (Table II) at Simcoe.

The plant height was obtained by measuring several typical plants and striking a rough average. Tillers is the number of side-shoots per plant at ear height at harvest time. Five ears of each cultivar were bagged at Vineland and allowed to mature for records on the dry ears. The remaining marketable ears were harvested, counted, weighed and evaluated for husk characteristics. A ten-ear sample was then husked and examined. In the accompanying table, the number of rows is recorded, the most prevalent being listed first. Husk appearance, tip cover, flavor, tenderness, filling of the ear to the tip, color of internal silks, husked appearance, freezing quality, and general rating, were all given values of 1-5. In each case, the low rating is undesirable and the high desirable. The ratings indicate the writers' opinion of the value of the cultivars for fresh market. Ratings were made without knowledge of the cultivar name. Flavor and tenderness were determined by tasting the raw corn. The general rating is based chiefly on ear and kernel characteristics. It does not include seedling vigor, plant type, or production.



Season of maturity is recorded in available day heat-units to half-silk at Vineland. Half silk was 2 to 4 days earlier at Simcoe than at Vineland. Those hybrids that had 849 heat-units to half-silk, were harvested 80 days after planting. At Simcoe following excessive rain, nitrogen deficiency and poor uniformity was evident on all varieties maturing after early midseason.

Those cultivars which showed promise of having satisfactory freezing quality in past years, or were so recommended by their originators, were frozen by Mrs. F. Cook and staff at the Horticultural Products Laboratory both as whole ear (cob) and as whole kernel (cut). Quality evaluation as determined by a taste panel consisting of Mrs. J. Allison, A.M. Adams, R.F. Crowther, E.A. Kerr, S.A. Nesathurai and R.B. Smith is given in Table III. Cultivars are listed in order of preference of the cut kernel pack.

It should be noted that this report is for the trials in 1970 only and is based on minimum samples from two replications at both locations. The performance of these cultivars should be compared for several years before final conclusions are drawn.

Two new hybrids have been designated VH 701 and VH 702. VH 701 is in Seneca Beauty season and VH 702 in Tastyvee season. A limited amount of seed of the following experimental hybrids is available from H.R.I.O.: VH 635, VH 641, VH 652, VH 691, VH 692, VH 693, VH 695, VH 701, VH 702.

Seed was kindly supplied by the following sources:

<u>Source No.</u>	<u>Source</u>
1.	Asgrow Seed Co., New Haven 2, Connecticut, U.S.A.
2.	Charter Seed Company, P.O. Box Y, Twin Falls, Idaho 83301, U.S.A.
3.	Ferry-Morse Seed Company., Mountain View, California 94040, U.S.A.
4.	Green Giant Co., Agr. Research Dept., Le Sueur, Minnesota, U.S.A.
5.	Jos. Harris Co., Rochester 11, New York, U.S.A.
6.	Horticultural Research Institute of Ontario, Vineland Station, Ont.
7.	University of Minnesota, Horticultural Centre, 3755 Jean Duluth Rd., Duluth, Minnesota 55804, U.S.A.
8.	Dept. of Plant & Soil Science, Univ. of Massachusetts, Amherst, Massachusetts, U.S.A.
9.	Niagara Chemicals, FMC Corp., 2650 San Juan Highway, San Juan Batista, California 95045, U.S.A.
10.	Northrup King & Co., Minneapolis 13, Minnesota, U.S.A.
11.	O & G Seed Co., Box 787, Caldwell, Idaho 83605, U.S.A.
12.	Robson Seed Farms, Hall, New York, U.S.A.
13.	Rogers Brothers Co., P.O. Box 2188, Idaho Falls, Idaho 83401, U.S.A.
14.	Stokes Seeds Limited, St. Catharines, Ontario, Canada
15.	U.S.D.A. Vegetable Breeding Laboratory, P.O. Box 3348, Charleston, South Carolina 29407, U.S.A.

TABLE 1

SWEET CORN TRIALS - VINELAND, 1970

Cultivar & Lot	Seed Source	Heat Units to half-silk	Height, Plant inches	Tillers/plant	Row Number			Kernel size (mm X 10)			Tip Cover 1-5	Husk Color 1-5	Color internal silk 1-5	Ear length, ins.	Ear filling, 1-5	Husked appearance 1-5	Flavor 1-5	Tenderness 1-5	Ear/plant	Wt./ear (lb)	Dozen/acre	General Rating	Remarks
								Deep	Wide	Thick													
								Polarvee 62-4-10-10	14	730													
Polarvee VH 691	7	755	47.5	0.7	12	10	8	101	97	41	3.0	3.1	3.6	6.3	2.0	2.0	2.5	3.1	0.7	0.48	1378	2.3	
Buttervee	6	755	50.5	0.5	12	10	-	94	93	48	3.6	3.1	3.0	6.8	3.5	2.0	3.0	2.1	0.8	0.56	1512	2.5	
Buttervee	6	833	59.5	0.3	12	-	-	102	94	44	3.0	3.0	3.5	7.1	3.5	3.0	3.5	3.0	0.9	0.73	1613	3.0	Long Shank
Buttervee	14	833	62.0	0.8	12	14	8	106	96	58	2.3	3.1	4.0	7.2	3.6	3.0	3.0	4.0	0.9	0.66	1680	2.6	Pale Kernels
Buttervee	6	841	59.0	0.8	12	10	14	99	97	53	2.7	3.1	4.0	7.3	3.6	3.1	3.0	4.0	0.9	0.70	1580	3.0	Pale Kernels
Seneca Explorer Seneca 60-11 1146	12	849	64.0	1.6	12	10	14	103	89	44	3.1	3.6	4.0	7.1	3.1	3.0	3.3	3.0	1.1	0.72	1949	3.1	Long Shank, lodging
Royal Crest	10	849	74.0	0.7	12	14	-	99	95	47	2.6	3.3	3.0	7.0	3.3	2.1	3.0	3.0	1.1	0.72	1982	2.1	Pink Kernels, Seg. Dark silk
Garden Treat 6101	14	870	59.0	1.0	12	8	10	99	97	44	1.6	2.6	3.6	7.4	2.6	2.6	3.0	3.0	0.9	0.61	1412	2.5	Bird Damage
Spring Gold 3219	5	884	68.5	1.4	12	14	16	100	92	44	3.6	3.3	3.3	7.1	3.7	3.0	3.6	3.0	0.9	0.66	1613	3.0	
Butterfinger 90702-13217	3	898	59.5	1.6	12	8	14	114	106	41	3.1	3.0	4.0	6.8	3.1	2.8	3.0	3.0	1.0	0.57	1748	2.1	
Morning Sun 354N38	10	907	73.0	1.4	12	14	16	124	97	46	2.5	3.2	2.8	8.0	3.0	2.1	3.0	3.0	1.0	0.82	1815	2.3	Severe Bird damage
Seneca Beauty Earlibelle 3271	5	916	76.0	1.4	14	12	16	110	82	42	1.5	2.8	3.0	7.8	3.1	2.6	2.6	2.1	1.3	0.72	2386	2.0	Bird damage, curved ear
Table Delight 1904	11	927	68.0	1.3	12	14	-	99	93	47	2.0	3.1	3.8	8.8	2.6	2.5	3.1	3.8	1.3	0.78	2185	2.8	lodging
imperial 346/N4	10	927	82.0	0.5	14	12	16	114	88	44	3.1	3.0	4.0	8.6	3.3	3.1	3.0	3.0	1.0	0.76	1647	2.8	tapered ear
Queen Anne 363	10	927	78.0	0.8	12	14	16	129	94	39	2.0	2.6	3.6	7.9	3.5	2.3	2.1	2.8	1.0	0.74	1680	2.1	Bird damage
Bravo 63534-F40	1	938	73.5	0.8	16	18	20	103	94	46	3.6	2.0	3.6	7.8	2.6	2.5	2.5	2.6	0.9	0.81	1647	2.0	lodging
VH 701	6	956	84.0	1.8	14	16	12	106	102	44	3.1	3.3	4.0	7.9	3.5	2.8	3.5	3.0	0.9	0.81	1546	3.0	
Summer Treat 6107	14	956	73.5	1.7	12	14	-	102	99	45	2.8	2.8	4.0	7.9	4.0	3.3	3.0	3.6	1.0	0.76	1815	3.0	lodging
Golden Earlipak 98007 R	13	956	67.5	1.1	12	14	10	105	100	46	2.8	2.8	4.0	8.1	3.1	2.1	2.1	2.0	1.0	0.86	1613	2.0	Side ears, bird damage
Northern Belle 3266	5	964	79.0	0.9	14	16	12	122	97	44	3.0	2.8	3.3	7.6	3.5	2.8	2.8	2.5	1.2	0.82	2218	2.7	
VH641	6	964	79.5	1.6	12	14	-	104	92	43	2.6	2.3	3.3	7.8	3.6	3.1	3.3	3.6	1.0	0.62	1781	3.0	lodging
Yukon 374/N3	10	981	81.5	0.6	12	16	14	125	79	46	2.6	3.0	4.0	9.0	3.3	2.8	2.6	3.0	1.0	0.92	1714	2.6	Bird damage, curved ear
Sweet Goldilock	8	990	75.0	1.8	12	14	10	114	102	44	3.0	2.8	3.8	7.5	3.7	3.3	3.6	3.6	1.4	0.61	2084	3.1	lodging, bird damage
VH 692	6	996	78.0	1.6	12	-	-	103	93	45	3.3	3.1	3.8	7.9	3.3	3.0	3.0	3.8	0.9	0.71	1210	3.0	Poor stand, bird damage

Tastyvee	1230	12	1002	83.5	2.1	12	14	-	122	116	44	2.3	2.7	3.3	7.3	3.1	2.7	3.1	3.1	1.1	0.43	1849	2.8	lodging
Seneca 225	1247	12	1010	83.5	0.2	16	18	20	120	82	44	1.5	2.5	3.5	7.8	3.3	2.3	2.8	2.3	0.9	0.87	1714	2.0	Bird damage
VH 693		6	1018	86.0	2.0	12	10	14	126	102	40	3.1	3.0	3.8	8.5	3.3	3.0	3.1	4.1	1.0	0.79	1546	3.1	Poor stand, long shank
66-2006	98071 R	13	1018	95.5	0.9	16	18	20	131	85	43	2.0	2.8	3.8	7.1	3.5	2.5	2.5	2.0	1.0	0.92	1781	2.0	Severe bird damage
R69-H185		12	1024	102.0	1.4	16	14	12	126	95	45	2.0	2.1	3.8	7.6	3.5	2.7	3.0	3.3	1.2	0.74	1647	2.3	Poor stand, severe bird dam.
R70-H283		12	1024	91.5	1.1	18	20	16	122	80	37	3.8	2.7	4.0	6.0	4.6	4.0	2.5	2.5	0.9	0.87	1714	2.3	
VH 652		6	1041	90.5	1.1	14	16	-	118	103	49	3.8	3.1	3.8	7.6	3.0	2.6	3.0	3.6	1.1	0.73	1983	2.6	
R69-H191		12	1041	94.5	0.2	16	18	20	116	77	39	2.0	2.7	3.7	7.9	3.1	3.0	3.5	2.6	1.0	0.75	1748	2.5	Bird damage
VH 695		6	1041	80.5	0.9	16	14	18	113	85	42	3.1	2.3	3.7	8.0	2.6	2.0	2.8	3.0	0.9	0.73	1680	2.1	Spiral rows
Marketvee	6112	14	1041	95.5	0.9	16	14	18	117	97	43	2.1	2.8	4.0	9.0	3.8	3.0	2.8	2.3	0.8	0.85	1277	2.1	Poor stand
R70-H335		12	1051	90.5	0.4	16	14	18	123	79	38	2.0	3.1	4.0	8.0	3.5	2.6	2.8	2.1	1.0	0.85	1781	2.1	Severe bird damage, Golden kernel, drop row
GG 919		4	1051	93.5	0.7	14	16	12	133	95	38	1.0	2.8	3.5	9.3	2.0	2.0	2.5	2.8	1.2	0.71	2117	2.0	Severe Bird damage, long shank, lodging
Exp. 6619	353/87	10	1064	86.0	0.6	18	20	22	139	76	45	2.5	3.0	3.7	8.6	2.3	2.0	2.8	2.7	1.0	0.96	1815	2.3	drop rows, some lodging, bird damage
Polka Dot	3357	5	1064	96.5	1.4	16	18	20	123	81	38	1.0	2.8	3.5	8.4	3.8	2.5	2.5	2.1	1.0	0.81	1815	2.0	severe bird damage, some white kernels, curved ears
Experiment 110	1319	12	1064	85.0	0.6	14	16	12	116	78	41	2.5	2.7	4.0	8.5	4.1	3.0	3.1	3.1	0.9	0.70	1680	3.0	Tight husk, long shank
NCX 226	9999-0000	9	1064	92.5	0.9	18	20	16	135	68	45	2.0	2.0	4.0	7.6	4.1	3.3	2.3	3.3	1.0	0.91	1849	2.1	Pink kernels
Early Dominator	98005	13	1076	88.0	0.7	14	12	16	120	89	42	2.5	2.5	3.8	8.3	3.7	2.5	3.0	2.6	1.0	0.96	1815	2.3	Bird damage
Continental 90005-	13230	3	1076	95.0	0.7	16	18	14	126	85	36	1.8	2.7	4.0	8.0	3.7	2.3	2.3	2.7	0.9	0.88	1647	2.3	
GG 923		4	1076	93.5	1.1	16	18	20	129	85	39	3.0	2.8	4.0	7.9	3.8	3.0	3.0	4.0	1.2	0.92	2218	2.8	long shanks, severe bird dam.
64-2454	98075	13	1090	87.0	1.1	16	18	14	108	84	41	2.6	2.8	3.7	8.1	3.3	3.0	3.1	3.1	1.4	0.76	1849	3.0	lodging, bird damage
NCX 229	9983-9984	9	1090	103.0	1.3	22	20	18	128	75	38	1.8	2.6	4.0	8.3	2.3	2.3	2.6	2.5	1.2	0.93	2050	2.1	Pale kernels, lodging
NCX 230	9957-9958	9	1090	99.5	1.0	18	16	20	131	80	42	2.3	2.8	3.7	8.0	4.0	3.0	2.3	2.8	1.0	0.92	1815	2.0	Drop row, lodging
R69H383		12	1103	91.5	0.3	18	16	20	114	83	39	2.3	2.8	4.0	7.8	3.3	2.6	3.0	3.0	1.0	0.83	1882	2.5	tapered ears, lodging
Super Gold	1913	11	1103	93.5	1.2	16	18	14	117	92	35	1.5	2.8	3.7	7.5	4.0	3.5	3.3	3.6	1.0	0.82	1849	2.8	
EXP.424	353/81	10	1103	103.0	0.7	20	22	18	134	76	38	3.0	2.5	3.1	7.5	2.8	2.5	2.1	2.7	1.0	0.90	1815	2.0	Severe bird damage, very long shanks
NK 199	359/13	10	1103	99.0	1.1	20	18	16	137	79	37	1.6	2.8	3.3	7.5	3.5	2.8	2.8	2.5	1.0	0.99	1714	2.0	Bird damage
GG 918		4	1103	98.0	0.8	16	18	14	130	86	42	3.0	2.7	4.0	7.9	3.8	3.1	3.3	4.0	0.9	0.98	1647	3.0	some pink kernels
58-1804C	98720	13	1117	101.5	1.3	16	14	-	132	84	38	3.0	2.8	4.0	7.8	3.3	3.0	3.0	3.1	1.6	0.72	2588	2.8	side ears, lodging
XP 1279	F69-150F	1	1117	96.0	0.4	16	14	18	110	90	43	2.3	2.5	4.0	8.1	4.3	3.3	3.0	3.6	0.9	0.76	1680	2.8	severe lodging
GG 914		4	1117	96.0	1.2	16	18	20	126	92	37	2.5	3.0	3.3	7.5	3.3	3.0	3.3	3.0	0.9	1.04	1647	2.8	long shanks, bird damage
2018 Eagle L	3210	5	1130	95.0	0.9	16	14	18	122	77	40	2.5	2.5	4.0	7.8	3.8	3.3	2.6	2.0	1.0	0.83	1748	2.0	

Seneca
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Cultivar and Lot	Seed Source	Heat Units to half-silk	Height, Plant inches	Tillers/plant	Row Number			Kernel size (mm x 10)			Tip Cover 1-5	Husk Color 1-5	Color internal silk 1-5	Ear length, ins.	Ear filling, 1-5	Husked appearance 1-5	Flavor 1-5	Tenderness 1-5	Ear/plant	Wt./ear (lb)	Dozen/acre	General Rating	Remarks
								Deep	Wide	Thick													
Gold Cup 3346	5	1130	88.0	0.7	16	14	12	122	80	43	2.0	3.0	3.3	7.8	3.5	2.5	2.8	2.7	1.2	0.72	1916	2.1	Curved ear
Seneca Scout 1118	12	1130	92.5	0.5	18	20	16	130	84	41	3.1	3.0	4.0	8.0	3.5	3.1	3.0	3.0	1.0	0.85	1781	2.6	
Golden Chief 1-9768	2	1130	102.0	0.9	16	18	14	110	79	41	2.8	2.5	3.8	7.6	3.3	3.1	3.0	3.1	1.0	0.68	1714	2.3	Curved tapered ear
Golden Sampson 1-9767	2	1130	104.5	1.2	16	20	18	135	79	37	3.1	2.6	4.0	8.1	3.6	3.3	3.0	3.1	0.9	0.90	1647	2.8	gold kernel color, fasciated, lodging
Wonder Gold 376N3	10	1130	92.0	0.7	20	22	18	133	74	33	1.5	2.5	4.0	7.5	2.5	2.1	2.7	2.6	1.0	0.71	1647	2.0	severe bird damage
Jubilee 98014	13	1130	89.5	1.1	18	16	14	120	83	35	1.0	2.8	4.0	8.3	3.8	3.1	3.0	3.1	1.0	1.00	1882	2.8	long shanks, tight husks
63-1986 ST98069	13	1130	91.5	0.8	18	20	16	133	79	31	1.0	2.5	3.6	7.8	3.3	2.6	3.1	3.1	1.1	0.72	1949	2.1	Curved tapered ear, severe bird damage, spiral rows
Merit 66422-F40	1	1130	97.0	1.3	20	18	16	135	93	37	1.1	2.7	3.7	8.0	3.7	3.1	3.0	2.5	1.0	0.95	1849	2.0	severe bird damage
Bonanza H65	3	1130	97.5	0.4	16	18	14	131	84	33	3.0	3.0	3.7	8.4	4.0	3.0	2.8	2.8	0.9	0.76	1647	2.5	
Ever Young 1950 F	11	1130	95.0	0.6	16	18	14	139	77	43	1.5	2.6	4.0	7.9	3.3	2.6	3.0	3.0	1.2	0.77	1613	2.3	Bird damage
Tender Choice 1923	11	1130	93.0	0.9	20	18	16	124	74	37	2.7	2.8	4.0	7.9	3.7	3.0	3.0	3.0	1.3	0.80	1714	2.5	Bright yellow kernel, Bird damage
Fancy Fresh 1951F	11	1130	99.5	1.4	18	16	20	121	79	35	1.5	2.8	4.0	8.8	2.6	2.5	3.0	3.1	1.1	0.78	2017	2.3	Bird damage
GG 20 MS	4	1130	97.5	0.6	14	16	12	118	83	38	3.1	2.8	3.7	7.9	3.7	3.3	3.0	3.1	1.2	0.81	2185	2.6	lodging
GG 909	4	1130	97.5	0.7	16	18	14	122	89	37	2.5	2.3	3.8	7.8	2.8	2.5	3.0	3.0	1.2	0.64	1983	2.1	Pointed tip
Seneca Chief 1388	12	1145	86.5	1.4	12	16	14	113	85	44	2.1	2.8	4.0	8.4	2.6	2.5	3.0	3.0	1.2	0.68	2151	2.7	lodging, side of ears not filled
Style Pak 90003-13219	3	1145	89.0	0.8	20	22	18	127	78	37	2.5	2.7	4.0	8.0	3.7	2.6	2.7	2.7	0.7	0.85	1311	2.1	
Exp. 6646 353-6646	10	1145	94.0	1.3	14	16	12	128	88	35	2.5	2.5	3.8	8.4	3.5	3.1	2.5	2.1	0.9	0.81	1580	2.0	
Exp. 435 353-85	10	1145	93.0	0.9	18	16	20	136	79	37	1.5	2.7	4.0	8.8	3.5	3.3	2.8	2.3	0.9	0.84	1580	2.5	
GGC-20	4	1145	94.0	0.6	14	16	12	118	80	40	2.3	2.6	4.0	7.8	3.1	2.8	3.0	3.0	1.0	0.83	1815	2.0	lodging, starchy
GG 48	4	1145	95.0	0.3	16	18	14	118	77	39	1.0	2.3	3.6	8.9	2.8	2.8	3.1	3.1	0.9	0.81	1647	2.5	lodging, bird damage

Madame

Gold Trophy L.3343	5	1160	102.0	0.7	18	16	20	124	81	36	2.7	3.0	3.8	8.3	3.7	2.8	2.5	1.5	1.1	0.88	2017	2.0	lodging
GG 41 MS	4	1160	90.0	0.9	14	16	18	136	82	39	1.3	2.8	4.0	8.3	3.1	3.3	3.3	3.3	1.0	0.79	1748	3.0	
Exp. 6623 330N1	10	1174	85.0	0.6	16	18	14	123	79	42	2.1	3.0	4.0	8.4	3.0	3.0	3.0	3.0	0.9	0.91	1512	2.3	lodging
Defender 325-N7	10	1174	96.0	0.6	18	20	16	135	79	38	3.3	2.3	4.0	8.3	2.8	2.5	2.6	2.3	1.0	0.85	1849	2.1	
GG 908	4	1187	97.5	0.6	16	18	20	111	85	42	1.8	2.1	4.0	8.8	3.0	2.7	3.3	3.1	1.0	0.89	1815	2.1	Poor seedling vigor
M6212A	15	1200	98.5	1.1	14	12	-	125	93	39	1.3	2.5	3.8	7.1	2.1	2.0	2.0	3.0	1.1	0.64	1815	1.8	Tight husk, drop row
GGC-41	4	1200	90.5	0.7	16	14	18	118	83	38	1.8	3.0	4.0	8.8	2.3	2.5	3.3	3.3	0.8	0.84	1479	2.5	lodging
Silver Beauty 2958	11	1228	93.5	1.4	14	16	12	116	96	35	2.8	2.8	4.0	7.0	2.5	2.8	3.3	3.8	1.1	0.67	1949	3.0	White kernels
Golden Queen 98009	13	1258	109.5	0.9	14	16	12	128	90	34	1.0	3.0	3.6	8.4	3.1	3.0	3.1	3.5	1.1	0.79	1916	2.5	lodging
M6210B	15	1272	115.5	0.6	16	18	14	129	85	40	4.6	2.8	3.8	7.5	2.0	2.0	2.0	3.8	0.8	0.70	1412	2.0	side ears

TABLE 11

SWEET CORN TRIALS - SIMCOE - 1970

Cultivar and Lot	Seed Source	Row Number	Tip Cover 1 - 5	Husk Color 1 - 5	Color Internal Silk 1 - 5	Ear Length inches	Ear Filling 1 - 5	Husk Appearance 1 - 5	Flavour 1 - 5	Tenderness 1 - 5	Ears / plant	Wt./ear (lbs)	Dozen/Acre	General Rating	Remarks
Polarvee	14	12 14 10	3.5	2.0	2.0	6.1	1.8	1.8	3.0	3.0	0.8	0.41	1301	3.2	sunscald
VH 691	6	12 10 -	3.2	3.3	4.0	7.1	2.5	2.6	4.2	3.8	0.9	0.53	1392	3.9	
Buttervee	14	12 14 10	2.2	3.0	5.0	6.4	2.0	2.2	3.2	3.3	0.7	0.44	1150	2.5	
Seneca 60-11 1146	12	12 10 14	4.0	4.2	5.0	6.8	2.8	2.9	2.8	2.6	0.8	0.51	1270	3.0	irregular rows
Garden Treat 6101	14	12 10 14	2.2	3.2	3.5	6.6	3.5	3.0	2.8	2.5	0.8	0.57	1361	2.6	
Royalcrest	10	12 14 16	3.0	3.1	1.5	6.9	3.1	3.0	2.9	3.1	0.9	0.64	1392	3.0	sunscald
Spring Gold 3219	5	12 14 16	3.0	3.6	4.0	7.1	3.1	3.2	3.1	2.3	0.9	0.56	1452	2.9	
Butterfingers 90702-13217	3	12 10 14	3.0	3.2	4.0	7.0	3.0	2.8	3.1	2.6	0.9	0.52	1331	2.8	
Table Delight 1904	11	12 8 -	3.3	3.6	5.0	9.0	3.3	3.5	3.2	3.2	0.9	0.64	1573	3.5	long shank
Morning Sun 354N38	10	12 14 10	2.4	2.7	1.0	7.6	4.0	3.7	3.8	2.9	0.9	0.68	1482	3.4	Sunscald
Earlibelle 3271	5	16 14 12	2.2	3.6	1.0	8.0	3.7	3.3	3.4	3.0	0.8	0.64	1361	3.0	
Imperial 346/N4	10	12 14 16	3.1	3.0	5.0	8.2	3.1	3.3	3.9	3.5	0.9	0.58	1452	3.5	Sunscald
Bravo 63534-F40	1	16 18 14	3.5	2.2	4.5	7.4	3.1	2.8	3.6	3.1	0.9	0.61	1422	3.2	Sunscald
Queen Anne 363	10	12 14 16	2.7	3.0	5.0	7.0	3.1	3.2	3.5	2.9	0.8	0.53	1059	3.1	
VH 701	6	14 12 16	4.5	3.5	4.0	7.5	3.3	3.3	3.6	3.3	1.0	0.65	1573	3.6	
Summertreat 6107	14	12 10 14	3.3	3.1	5.0	8.0	1.0	1.9	3.3	3.3	0.8	0.61	1270	3.0	
Yukon 374/N3	10	16 14 12	2.5	3.0	5.0	8.6	2.9	3.1	3.3	3.3	0.8	0.66	1301	3.2	
Seneca 225 1247	12	16 18 -	2.6	2.8	4.0	7.3	2.7	3.0	3.5	3.2	1.0	0.61	1573	3.2	
Polkadot 3357	5	16 18 14	2.6	3.0	1.5	7.5	2.1	1.5	3.5	2.6	0.8	0.57	1361	2.5	some white kernels, very hard to snap
Gold Cup 3346	5	16 14 18	3.3	2.1	1.0	7.5	2.5	2.6	3.2	2.9	0.9	0.51	1482	2.9	Sunscald
Merit 66422-F40	1	20 18 16	2.7	2.2	2.0	8.1	1.9	2.4	3.1	2.9	0.9	0.71	1331	2.0	
Everyyoung 1950F	11	20 18 22	2.7	2.3	5.0	7.3	2.5	2.8	3.5	3.6	0.8	0.61	1301	3.1	tapered ears
Golden Chief 1-9768	2	16 14 18	3.5	2.6	5.0	7.4	2.2	2.7	3.0	3.0	0.7	0.58	1089	3.0	
Fancy Fresh 1951-F	11	16 18 20	1.7	2.3	5.0	8.4	1.0	2.0	3.0	3.1	0.6	0.61	1059	2.5	tapered ears
Golden Queen 98009	13	14 16 12	2.5	3.0	3.0	7.0	2.5	2.6	3.2	3.2	0.7	0.65	1119	2.4	some white kernels

TABLE III

FREEZING TRIALS

CUT KERNELS

ON - THE - COB

Variety	Appearance 1 - 5	Color 1 - 5	Texture 1 - 5	Flavor 1 - 5	Total 1 - 20	Variety	Appearance 1 - 5	Color 1 - 5	Texture 1 - 5	Flavor 1 - 5	Total 1 - 20
VH 694	4.0	3.6	3.4	4.0	15.0	VH 693A	3.8	3.8	3.8	3.6	15.0
VH 691	3.6	3.8	3.4	3.4	14.2	VH 694	3.4	3.4	4.0	4.2	15.0
VH 652A*	3.6	3.4	3.6	3.6	14.2	VH 693B	3.4	3.4	3.6	3.4	13.8
VH 652B*	3.6	3.4	3.6	3.6	14.2	VH 702	3.4	3.8	3.2	3.2	13.6
VH 652C*	3.6	3.2	3.4	3.8	14.0	Butterfingers	3.4	3.4	3.0	3.6	13.4
Seneca Chief A	3.6	3.8	3.4	3.2	14.0	Tastyvee B	2.8	3.0	3.4	4.0	13.2
VH 693A	4.0	3.6	3.2	3.0	13.8	VH 652A	2.8	3.4	3.2	3.6	13.0
VH 695A	3.4	4.4	3.0	3.0	13.8	Tastyvee A	3.0	3.0	3.2	3.4	12.6
VH 701	3.4	3.2	3.6	3.2	13.4	VH 692 B	3.2	3.4	3.2	2.8	12.6
Seneca 260	3.8	4.0	2.8	2.8	13.4	VH 692A	2.8	3.2	3.0	3.4	12.4
VH 702	3.6	3.4	3.2	3.0	13.2	Seneca 260	3.4	3.6	2.6	2.8	12.4
VH 695B	3.4	3.6	3.2	3.0	13.2	Table Delight	3.2	3.2	2.8	3.0	12.2
Marketvee A	3.0	3.8	3.2	3.2	13.2	Jubilee	4.0	3.6	2.4	2.2	12.2
Jubilee A	3.4	4.0	3.0	2.8	13.2	VH 652B	2.6	3.2	3.2	3.2	12.2
VH 693B	3.4	3.6	3.0	2.8	12.8	Seneca Scout	3.0	3.2	3.0	2.8	12.0
Seneca 110	3.6	3.0	3.0	3.2	12.8	VH 652C	2.6	2.8	3.4	3.2	12.0
Tenderchoice	3.4	3.8	2.8	2.6	12.6	Tenderchoice	2.8	3.0	3.4	2.8	12.0
Gold Winner	4.0	4.0	1.8	2.8	12.6	Marketvee B	3.6	3.4	2.6	2.2	11.8
Midway	3.6	3.2	2.6	2.8	12.2	Summertreat	2.4	2.8	3.0	3.2	11.4
Defender	3.4	3.6	2.6	2.6	12.2	Midway	3.4	3.6	2.4	2.0	11.4
Butterfingers	2.6	2.8	3.2	3.4	12.0	Early Dominator	3.2	3.2	2.6	2.4	11.4
Summertreat	3.0	3.6	2.6	2.8	12.0	VH 695A	2.6	3.2	3.4	2.2	11.4
Seneca Chief B	3.4	3.4	2.8	2.4	12.0	Marketvee A	3.0	2.8	2.6	3.0	11.4
Seneca Scout	3.4	3.8	2.6	2.2	12.0	VH 641	1.8	2.2	3.6	3.6	11.2
Golden Chief	3.0	3.2	3.2	2.6	12.0	Jubilee A	3.2	3.2	2.6	2.2	11.2
Table Delight	3.4	3.2	2.8	2.4	11.8	Defender	3.2	3.2	2.6	2.0	11.0
Tastyvee A	3.2	2.8	3.0	2.8	11.8	Buttersweet	3.2	2.8	2.8	2.2	11.0
VH 692A	2.4	2.8	3.0	3.6	11.8	VH 695B	3.0	2.8	2.8	2.4	11.0
Supergold	3.4	3.0	3.0	2.4	11.8	Golden Queen	2.6	2.6	2.8	3.0	11.0
Golden Earlipak	2.6	2.6	2.8	3.8	11.8	VH 691	1.8	3.0	2.8	3.2	10.8
Defender	2.8	2.4	3.2	3.2	11.6	Seneca 110	2.8	3.2	2.0	2.8	10.8
Buttersweet	3.0	3.2	2.4	3.0	11.6	Seneca Chief	3.2	2.8	2.6	2.2	10.8
Golden Queen	2.6	2.0	3.4	3.6	11.6	Defender	2.6	3.2	2.6	2.4	10.8
VH 641A	3.2	3.0	2.6	2.6	11.4	Supergold	2.8	2.8	2.4	2.6	10.6
Jubilee B	3.0	3.2	2.6	2.6	11.4	Buttervee	2.4	2.0	3.0	2.8	10.2
Northern Belle	2.6	2.6	3.6	2.6	11.4	VH 641A	2.8	2.6	2.4	2.4	10.2
M 6212A	2.8	2.8	2.8	3.0	11.4	Gold Winner	2.6	2.8	2.0	2.8	10.2
Early Dominator	3.0	3.2	2.6	2.4	11.2	Garden Treat	2.4	2.6	3.0	2.0	10.0
V 692B	2.4	2.8	3.0	3.0	11.2	VH 701	2.2	2.2	3.0	2.6	10.0
Tastyvee A	2.8	3.0	2.8	2.6	11.2	Seneca Chief	3.4	3.0	2.2	1.4	10.0
VH 641	2.4	2.4	3.2	3.2	11.2	Golden Earlipak	1.8	2.6	3.0	2.4	9.8
Garden Treat	3.0	3.0	2.6	2.4	11.0	Golden Chief	2.6	2.6	2.6	2.0	9.8
Marketvee B	2.6	3.2	2.6	2.4	10.8	Northern Belle	2.2	1.8	2.6	2.2	8.8
Valley Market	3.0	3.0	2.2	2.4	10.6	Imp.Carmelcross	2.2	2.4	2.2	1.8	8.6
Buttervee	2.0	2.2	2.8	3.0	10.0	Morning Sun	2.4	2.2	2.2	1.8	8.6
Imp.Carmelcross	2.2	2.2	2.6	3.0	10.0	Valley Market	2.6	2.8	1.6	1.6	8.6
M 6210B	1.8	2.2	2.4	2.6	9.0	M 6212A	2.0	2.0	2.2	2.0	8.2
Morning Sun	2.0	1.4	3.4	1.6	8.4	M 6210B	1.4	1.8	2.0	2.0	7.2

* A = Cultivar grown in Ontario Coordinated Trials

B = Cultivar grown in Vineland Advanced Trials

C = Second replication in Vineland Advanced Trials

Garden & Roadside

- Polarwee - 4-5 days early
- can't ship - poor tip cover
- appearance poor
- flavour good.
- Seneca 60-11 -