



Ontario

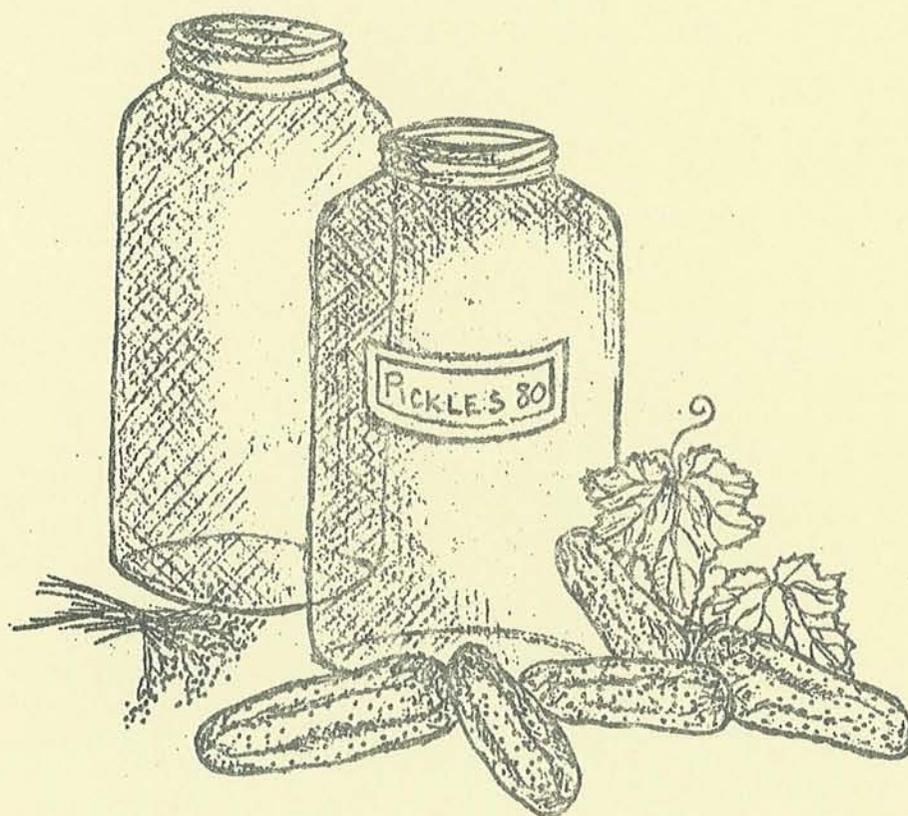
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Horticultural Experiment Station  
Ontario Ministry of Agriculture & Food  
Simcoe Ontario

# RESEARCH REPORT NO. 48

HORTICULTURAL EXPERIMENT STATION

SIMCOE, ONTARIO, CANADA



## ONTARIO PICKLING CUCUMBER CULTIVAR TRIALS-1980

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### INTRODUCTION

Pickling cucumber cultivar trials were conducted at the Horticultural Experiment Station, Simcoe and the Agriculture Canada Research Station, Harrow, in 1980. Trials at both locations were on sandy loam soils with irrigation available as required. Varieties were evaluated as to their suitability for multiple hand-harvesting and once-over mechanical harvesting. Advanced Variety Trials had 4 replications while the Northern Co-operative Trial (2 reps.) and Observation Trials had 1 or 2 replications at each location. Varieties in the Northern Co-op Trial were also evaluated at 4 other locations: Ohio, Michigan, Wisconsin and Colorado.

### CULTURAL INFORMATION

The cucumber varieties grown for "once-over" destructive harvest were grown in 4-row beds with 2.1 m (7 ft.) centers. Rows in the beds were 50 cm (20") apart and the plants were 10 cm (4") apart in the row giving a population of approximately 185,000 plants/ha (75,000/acre). Varieties grown for multiple hand-harvest were grown at a population of 55,555 plants/ha (22,222 plants/acre). Plots were 7.6 m (25 ft.) long in all cases. Prefar plus Alanap was used for weed control. Irrigation (all at 25 mm) was done on July 2 at Harrow and July 21 at Simcoe. Crops at both locations were relatively free of insects and diseases.

Varieties grown for "once-over" harvest were harvested by machine at Simcoe. Once-over harvest was carried out by hand at Harrow by stripping all of the fruit from the plants. Only 6 m (20 ft.) from the centre of each plot was taken for harvest at both locations. Fruit was graded by size, counted, weighed, fresh quality was evaluated and a sample of each cultivar was placed in brine.

Brining of fruit from the Simcoe trials was carried out in 5-gallon pails with N purging. Brined fruits were rated by a panel of 4 judges.

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- 1- Assistance from Bick's and H. J. Heinz Co. with the brining is gratefully acknowledged. We are also indebted to the seed companies and others who provided samples of the pickling cucumber lines.
  - 2- The following personnel also assisted:  
L. A. Reynolds, Horticultural Experiment Station, Simcoe  
V. W. Nuttall, W. T. Sturkenboom and W. R. Balkwill, Agriculture Canada, Research Station, Harrow.

SOURCES OF CULTIVARS FOR 1980 ONTARIO CULTIVAR TRIALS

<u>Cultivar</u>	<u>Source</u>	<u>Spine</u>	<u>Lot No.</u>
Calico	North Carolina State University	W	-
Harrow 77.01	V. W. Nuttall	W	-
Bonus (H78.05)	V. W. Nuttall	W	-
1606 x 1589	USDA	W	-
Pioneer	Abbott & Cobb	B	904041T
Carolina	Abbott & Cobb	W	919039T
Castlex 2003	Castle	W	3800-27
MSU 41 x 581	Castle	W	3797-16
MSU 41 x 669	Castle	W	9061
Beit Alpha	Dessert	B	13-3P
DEXP 153P	Dessert	W	15-3P
Liberty Bell	Dessert	W	15-4P
4JC2	Harris	W	PW6249
Carolina	Harris	W	1407-953B
4J73	Harris	W	PW6029
C573	Harris	W	PW6009
Carolina	Northrup King	W	-
Earlypik 14	Northrup King	W	37630-20403
EXP2000	Northrup King	W	37559-23100
Pioneer	Northrup King	B	37559-22900
Stemo 033	Van Der Ploeg	W	6-0255/80
79-30	Van Der Ploeg	W	6-10327/80
79-29	Van Der Ploeg	W	6-10326/80
Femcap	Van Der Ploeg	W	6-10356/80
Triplepak ,	FMC	W	46617-6207-P
NCX 5014	FMC	W	2014
Pioneer	FMC	B	46794-5208-P
Carolina	FMC	W	46601-1274P
Spear-It	FM	W	97900-13829
Panorama	FM	W	97900-13756
FX 4153	FM	W	7913583
Carolina	FM	W	97200-13812
Pioneer	FM	B	97910-13752

<u>Cultivar</u>	<u>Source</u>	<u>Spine</u>	<u>Lot No.</u>
Premier	Asgrow	W	97228-4
XPH 1225	Asgrow	W	VGR7071
Pioneer	Asgrow	B	VGL8015
Carolina	Asgrow	W	-
Bounty	Asgrow	W	VGK 6019
Gynamite	Asgrow	W	UGL 8049
Triplemech	Peto	W	3651023
PSR 1479	Peto	W	-
Pioneer	Peto	B	3121007
Carolina	Peto	W	3431016
Salvo	Peto	W	3981002
Target	Peto	W	4001002
Commander	Peto	W	3801002
PSR 377	Peto	W	-
Multipick	Peto	W	3761004
Chemset	Peto	W	1331000
EXP 2604	Keystone	W	-
Pioneer	Keystone	B	-
Spiffy	Keystone	B	-
EXP 2602	Keystone	W	-
EXP 2603	Keystone	W	-
EXP 2605	Keystone	W	-
EXP 2606	Keystone	W	-
EXP 2607	Keystone	B	-
EXP 2608	Keystone	W	-

PART I

CULTIVARS GROWN AT 185,000 PLANTS PER HECTARE

FOR ONCE - OVER HARVEST

SECTION 1      Yield Data (\$/HA and Tonnes/HA)

The grades and dollar values are listed below:

<u>Grade</u>	<u>Size in Diameter</u>	<u>Price Per Tonne</u>
1	up to 2.54 cm (up to 1")	436.60 (396.00/ton)
2	2.54 cm to 3.18 cm (1" to 1 1/4")	314.22 (285.00/ton)
3	3.18 cm to 4.13 cm (1 1/4" to 1 5/8")	176.41 (160.00/ton)
4	4.13 cm to 5.08 cm (1 5/8" to 2")	76.07 (69.00/ton)
5	over 5.08 cm (>2")	48.51 (44.00/ton)

TABLE 1 Yield of Cucumbers from Advanced Cultivar Trial  
(Once-over harvest) - Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
Bonus	18.0 a*	2308 a	1.2 a	39.3 b
Triplemech	16.4 a	2290 a	1.2 a	46.5 ab
H. 77.07	18.5 a	2119 a	1.2 ab	29.3 c
H. 77.11	13.6 b	2058 a	1.1 ab	49.3 a
H. 77.01	11.6 bc	1726 b	1.0 bc	51.8 a
H. 78.03	10.2 c	1495 b	0.8 c	47.3 ab

Soil Type : Fox Sandy Loam

Fertilizer : 550 kg/ha 20-5-10 + 44.8 kg/ha N (sidedress July 4)

Herbicide : Naptalam + Bensulide

Seed Sown : May 22

Harvest : July 16

Plant Population: 185,000 plants/ha

\* Mean separation in column's by Duncan's Multiple Range Test, 5% level

Table 2 Yield of Cucumbers from Advanced Cultivar Trial  
(Once-over harvest machine)

Simcoe, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>% in grades 1,2,3</u>
Triplemech	21.8 b *	3021 a	47.0 b
Carolina	25.6 a	2666 b	26.5 d
Spear It	15.7 d	2525 bc	57.7 a
Earlypik 14	19.3 c	2502 bc	44.0 b
Panorama	21.6 b	2443 c	31.8 c
Triplepak	15.8 d	1999 d	36.8 c

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Soil Type: Caledon Sandy Loam

Fertilizer: 672 kg/ha of 10-10-10

Herbicide: Naptalam+Bensulide

Seed Sown: June 2

Harvest: July 29

Plant Population: 185,000 plants/ha

Irrigation: July 15

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

TABLE 3 Yield of Cucumbers from the Northern Co-operative Trial  
(Once-over harvest) - Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
Castlex 2003	19.4 a-c*	3119 a	1.6 a	50.0 b-d
XPH 1225	17.2 bc	3118 a	1.5 a	65.5 ab
FX4153	21.4 ab	3005 a	1.5 a	45.0 cd
Calico	18.8 a-c	2967 a	1.5 a	52.0 bc
Pioneer	21.1 ab	2798 a	1.5 a	42.0 cd
Exp 2000	17.4 a-c	2759 a	1.3 a	57.0 a-c
PSR 1479	14.1 c	2744 a	1.2 a	70.5 a
Exp 4JC2	22.8 a	2726 a	1.5 a	33.5
NCX 5014	19.4 a-c	2701 a	1.5 a	48.0 cd
Beit Alpha	16.7 bc	2699 a	1.4 a	49.5 b-d
Harrow 77.01	16.6 bc	2428 a	1.2 a	45.5 cd
Carolina	17.9 a-c	2311 a	1.1 a	41.0 cd

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Soil Type : Fox Sandly Loam  
Fertilizer : 550 kg/ha of 20-5-10 + 44.8 kg/ha N (sidedress July 4)  
Herbicide : Naptalam + Bensulide  
Seed Sown : May 22  
Harvest : July 16  
Plant Population : 185,000

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

Table 4

## Yield of Cucumbers from the

## Northern Co-operative Trial (Once-over harvest-machine)

Simcoe, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>% in grades 1,2,3</u>
FX 4153	15.2 ab *	2887 a	72.7
XPH 1225	16.2 a	2205 b	50.3
Calico	12.3 a-c	2100 bc	60.3
Premier	15.3 ab	2087 bc	51.2
Pioneer	14.0 a-c	2077 bc	59.7
Castlex 2003	11.3 a-d	2063 bc	73.4
4JC2	13.8 a-c	2049 bc	58.6
Beit Alpha	10.5 a-d	1995 b-d	78.1
Carolina	12.2 a-c	1874 b-d	53.1
NCX 5014	10.6 a-d	1858 b-d	66.7
Harrow 77.01	8.4 c-d	1686 b-d	70.5
Exp 2604	9.8 b-d	1628 b-e	63.4
1606 X 1589	11.9 a-d	1559 c-e	43.6
PSR 1479	8.0 c-d	1418 de	68.4
Exp 2000	6.3 d	1070 e	76.7

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<u>Soil Type:</u>	Caledon Sandy Loam
<u>Fertilizer:</u>	225 kg/ha of 10-20-20 + 225 kg/ha of 34-0-0
<u>Herbicide:</u>	Naptalam+Bensulide
<u>Seed Sown:</u>	June 18
<u>Harvest:</u>	July 29, 30, 31
<u>Plant Population:</u>	92,223 plants/ha
<u>Irrigation:</u>	July 18, 21

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

TABLE 5 Yield of Cucumbers from Observation Variety Trial  
(Once-over harvest, 2 replications) - Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in Grades 1,2,3</u>
Harrow 80.06	20.1 a*	2955 a	1.4 a	46.0 b c
Harrow 80.08	15.2 ab	2855 a	1.6 a	69.0 ab
Triplemech	17.3 ab	2616 ab	1.3 a	51.0 a-c
Harrow 78.02	11.3 b	2331 ab	1.3 a	74.0 a
Harrow 79.02	15.7 ab	2030 b	1.2 a	40.0 c

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Soil Type : Fox Sandy Loam  
 Fertilizer : 550 kg/ha of 20-5-10 + 44.8 kg/ha N (sidedress July 4)  
 Herbicide : Naptalam + Bensulide  
 Seed Sown : May 22  
 Harvest : July 16  
 Plant Population : 185,000

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

TABLE 6 Yield of Cucumbers from Observation Variety Trial  
(Once-over Harvest - 1 replication) - Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
Harrow 80.05	24.4	2834	1.3	31
Harrow 80.07	20.8	2593	1.3	36
Harrow 80.02	19.0	2410	1.3	39
Harrow 80.03	16.9	2090	1.0	39
Harrow 79.04	13.5	2083	1.2	51
Harrow 79.06	17.3	2036	1.4	32
Harrow 80.04	13.8	1886	1.1	52
Harrow 80.01	8.0	1754	1.0	88
Harrow 79.05	12.3	1735	0.8	50

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Soil Type : Fox Sandy Loam

Fertilizer : 550 kg/ha of 20-5-10 + 44.8 kg/ha N (sidedress July 4)

Herbicide : Naptalam + Bensulide

Seed Sown : May 22

Harvest : July 16

Plant Population : 185,000

Table 7 Effect of Curbiset (chlorflurenol) on Yield  
of Cucumber Varieties (Once-over harvest machine)

Simcoe, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
MSU 41 X 669	10.8 a *	2514 a	2.8 a	99.4
79-29	9.9 b	2042 b	2.1 c	95.4
MSU 41 X 581	7.6 c	1906 b	2.4 b	100.0
79-30	7.8 c	1730 c	1.7 d	98.4
Stemo - 033	7.9 c	1683 c	1.7 d	93.9
Chemset	6.2 d	1604 c	2.0 c	97.7
Pemcap	4.3 e	1087 d	1.5 e	98.3

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Soil Type: Berrien Sandy Loam  
Fertilizer: 672 kg/ha of 10-10-10  
Herbicide: Naptalam+Bensulide  
Seed Sown: June 17  
Harvest: August 7,8  
Plant Population: 92,250 plants/ha  
Irrigation: July 21  
Curbiset rate: 2L/ha

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level



Table 8

Location: Harrow, OntarioTrial: Once-over Advance

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
Harrow 77.01	3	8	2.4:1	2	2	1	3	3	3	3	10	W	L	2	1	1	1	1
Harrow 77.07	3	3-10	2.9:1	2	3	1	1	3	3	2	10	W	E	2	1	1	1	1
Harrow 77.11	3	9	2.5:1	2	2	2	1	2	2	2	10	W	M	2	1	1	1	1
Harrow 78.03	2	10	2.5:1	2	2	2	2	3	2	1	10	W	M	2	1	1	1	1
Bonus (78.05)	3	9	2.8:1	2	2	2	2	2	3	2	10	W	E	2	1	1	1	1
Peto Triplemech	2	10	2.8:1	2	2	3	3	1	1	2	9	W	E	2	1	1	1	1

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection

Location: SIMCOE

Trial: Once-over Advanced

Table 9

EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season 1/	Disease 2/			
														ALS	SCAB	CMV	Anthraxnose
Carolina	2.3	7.7	3.0:1	1	2	1	2	1	1	1	4	W	E				
Triplemex	2.0	8.0	2.8:1	3	1	2	2	3	2	1	0	W	M				
Earlypick 14	2.0	8.8	3.0:1	2	2	1	2	2	2	1	1	W	M				
Spear-it	2.0	6.4	3.1:1	1	1	1	2	3	1	1	0	W	L				
Panorama	2.3	7.2	3.0:1	1	1	2	2	1	1	1	3	W	R				
Triumphak	2.3	5.9	2.9:1	2	2	1	2	1	1	1	3	W	E				

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

Table 10

Location: HARROWTrial: Northern Co-operative

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
Calico	1	8	2.7:1	2	2	3	4	2	1	1	5	W	M	2	1	1	1	1
NCX 5014	3	8	2.7:1	2	2	3	2	1	2	2	7	W	E	2	1	1	1	1
PSR 1479	4	10	2.7:1	1	1	3	3	1	1	1	4	W	M	2	1	1	1	1
Beit Alpha	4	10	3.1:1	3	3	1	5	3	1	3	7	B	M	3	1	1	1	1
Harrow 77.01	4	9	2.4:1	2	1	1	3	2	2	3	8	W	M	2	1	1	1	1
Castlex 2003	4	10	3.0:1	2	2	2	3	1	1	1	6	W	E	3	1	1	1	1
Pioneer	2	9	2.8:1	1	1	2	2	2	1	1	6	B	E	3	1	1	1	1
Exp 2000	2	10	2.8:1	2	1	3	3	2	1	2	6	W	M	2	1	1	1	1
FX 4153	2	10	3.0:1	2	2	2	3	1	1	1	7	W	M	2	1	1	1	1

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season 1/	Disease 2/				
														ALS	SCAB	CMV	Anthraco	Mildew
Carolina	3	9	2.7:1	1	2	2	2	1	1	1	7	W	M	2	1	1	1	1
XPH 1225	4	10	2.6:1	2	2	2	3	1	1	2	4	W	M	2	1	1	1	1
Exp 4JC2	2	9	2.5:1	1	2	2	3	1	1	1	8	W	E	2	1	1	1	1

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

Table 11

Location: SIMCOETrial: Northern Co-operative

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
FX 4153		9.8	3.2:1	2.5	2.0	2	3	1	1	1	0	W	M	2				
NCX 5014		8.8	2.9:1	1.0	2.0	2.5	2.5	2	1	1.5	2	W	M	1.5				
Calico		7.1	2.7:1	1.5	1.5	3	3	2	1	1	1	W	M	2.5				
FSR 1479		9.9	2.8:1	1.0	1.0	2	3	1	1	1	0	W	L	2.5				
Castlex 2003		5.5	2.7:1	2.0	2.0	2	3	3	1	1	0	W	M	2.5				
H. 77.01		8.7	2.8:1	1.0	2.0	2	1	3	1.5	2.0	0	W	M	1.5				
Beit Alpha		9.0	3.4:1	4.0	4.0	5	5	3	1.5	2.0	4	B	L	3.0				
Premier		7.8	2.7:1	1.5	2.0	2	1	2	1.5	1.0	1	W	M	2.5				
XPH 1225		10.0	3.0:1	1.0	2.0	2	1.5	2	1.0	1.5	0	W	M	2.0				

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
4JC2		9.3	2.9:1	1.0	2.0	2.5	2	1	1	2	0	W	M	3.5				
EXP 2000		10.0	3.1:1	1.0	1.0	2.0	2	1	1.5	1	0	W	L	2.5				
Pioneer		9.7	2.9:1	1.5	1.5	1.0	1	3	1.5	1	0	B	M	4.0				
Carolina		9.5	2.9:1	1.5	3.0	2.5	2	2	1	1	0	W	E	2.5				
EXP 2604		8.9	3.0:1	1.0	1.0	2.5	1.5	2	1.5	1	1	W	M	3.0				
1606-1589		10.0	3.0:1	1.5	4.0	4.0	2	1	1	1	0	W	E	3.0				

1/Season: E=early, M=mid, L=late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
*Harrow 78.02	2	8	2.4:1	2	2	1	2	1	1	2	10	W	E	2	1	1	1	1
*Harrow 79.02	2	9	2.3:1	2	2	1	3	2	1	1	8	W	E	2	1	1	1	1
Harrow 79.04	2	6-10	2.4:1	1	1	1	2	1	1	2	9	W	E	2	1*	1	1	1
Harrow 79.05	3	7	2.5:1	1	1	3	3	2	1	2	7	W	E	2	1	1	1	1
Harrow 79.06	2	10	2.5:1	2	2	3	3	2	2	2	6	W	E	2	1	1	1	1
Harrow 80.01	3	9	2.5:1	1	1	2	1	2	1	2	7	W	L	2	1	1	1	1
Harrow 80.02	2	9	2.4:1	2	2	2	1	2	1	2	8	W	E	2	1	1	1	1
Harrow 80.03	1	10	2.9:1	3	3	3	3	2	3	2	10	W	E	2	1	1	1	1
Harrow 80.04	1	10	2.4:1	1	1	1	2	1	1	2	9	W	M	2	1	1	1	1

1/Season: E=early, M=mid, L=Late \* 2 replications, those not starred have 1 replication.

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthracnose	Mildew
Harrow 80.05	3	8	2.8:1	1	2	2	1	2	1	1	10	W	E	2	1	1	1	1
*Harrow 80.06	3	8	2.7:1	1	2	2	1	3	2	1	8	W	M	2	1	1	1	1
Harrow 80.07	2	8	2.5:1	1	2	2	1	3	2	2	9	W	M	2	1*	1	1	1
*Harrow 80.08	3	9	2.4:1	2	1	2	1	1	2	2	8	W	M	2	1	1	1	1
*Peto Triplemech	3	10	3.0:1	2	3	3	3	1	1	1	6	W	E	2	1	1	1	1

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
MSU 41 x 581			2.9:1	3	2	2	1	3			0	W	E					
MSU 41 x 669			3.2:1	3	2	2	3	2			0	W	E					
Chemset			2.9:1	3	2	3	2	1			0	W	E					
Femcap			2.9:1	3	2	2	2	1			0	W	M					
79-29			3.3:1	2	3	3	2	2			0	W	M					
79-30			3.2:1	2	2	2	2	1			0	W	M					
Stemo 033			3.0:1	2	2	2	2	1			0	W	M					

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

SECTION III

SALT STOCK EVALUATION OF PICKLING CUCUMBERS

Table 14. Brine Stock Rating of Cucumbers from Once-over Advanced Trial - Harrow, 1980

Excellent = 1    Good = 2    Fair = 3    Poor = 4    Not Acceptable = 5

Sample	Sample Size	External Color 1 to 5	Internal color 1 to 5	Cure 1 to 5	BLOATERS					% Non-Bloaters ∴ 10	Number in sample			Firmness/ Crispness	Overall	
					Number in sample				Total		Center	Attach- ment	Total			
					Balloon	Lens	Honey comb	Total								
Harrow 77.01	50	2	2	1	0/25	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	3	2
Harrow 77.07	50	1	1	1	0/25	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	4	3
Harrow 77.11	50	3	2	1	0/25	0/25	0/25	0/25	0/25	10.0	1/25	0/25	1/25	9.6	1	3
Harrow 78.03	50	2	2	1	0/25	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	2	2
Bonus	50	2	2	1	0/25	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	4	3
Peto Triplemech	50	3	2	1	0/25	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	2	3

\* Samples with a uniform light green color rated best.

Table 15 Brine Stock Rating of Cucumbers from Advanced Trial (Once-over Machine) - Simcoe, 1980

Variety	Shape	Ridges&Spines	Exterior Color	Crispness	Firmness	Placenta Size	Seed Size	Mean Quality*	Overall Quality**	BLOATERS									% Non Bloaters
										Balloon			Lens			Honeycomb			
										Extreme	Moderate	Slight	Extreme	Moderate	Slight	Extreme	Moderate	Slight	
Carolina	2.9	2.4	2.6	2.8	2.6	2.8	2.2	2.6	2.6	1	1	3	1	1	1	1	1	5	68
Triplemech	2.7	2.3	2.1	2.1	2.7	2.2	2.3	2.9	2.1	1	1	1	1	1	1	4	1	64	
Earlypik 14	2.9	2.7	2.5	2.9	2.9	2.9	2.1	2.8	2.8	1	1	1	1	1	1	9	0	60	
Spear-It	2.5	2.4	2.9	2.4	2.5	2.0	2.9	2.9	2.1	1	1	1	1	1	2	1	2	80	
Panorama	2.6	2.6	2.4	2.8	2.9	2.7	2.3	2.6	2.5	1	1	1	1	1	1	2	2	88	
Triplepak	2.0	2.5	2.4	2.1	2.7	2.9	2.6	2.7	2.0	1	1	1	1	1	1	2	2	84	

\* Includes shape, ridges & spines, exterior color, crispness, firmness, placenta size, seed size.

\*\* Is a general overall rating.

Numbers are out of a sample size of 25.

1 = most acceptable; 5 = least acceptable.

Table 16. Brine Stock Rating of Cucumbers from Northern Co-operative (Once-over) Trial - Harrow, 1980.

Excellent = 1 Good = 2 Fair = 3 Poor = 4 Not Acceptable = 5

Sample	Sample Size	External Color 1 to 5	Internal color 1 to 5	Cure 1 to 5	BLOATERS					% Non-Bloaters : 10	Number in sample			% Non-Bloaters : 10	Firmness/ Crispness	Overall
					Number in sample				Total		Center	Attach- ment	Total			
					Balloon	Lens	Honey comb	Total								
Calico	50	3	2	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	1	3	
NCK 5014	50	4	3	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	1	3	
PSR 1479	50	4	3	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	1	3	
Beit Alpha	50	4	2	2	0/25	2/25	0/25	0/25	9.2	0/25	0/25	0/25	10.0	5	5	
Harrow 77-01	50	2	2	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	2	2	
Castlex 2003	50	3	2	1	0/25	0/25	0/25	0/25	10.0	1/25	0/25	1/25	9.6	1	3	
Pioneer	50	2	2	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	2	2	
EXP 2000	50	3	2	1	0/25	1/25	0/25	1/25	9.6	1/25	0/25	1/25	9.6	1	3	
FX 4153	50	3	2	1	0/25	1/25	0/25	1/25	9.6	0/25	0/25	0/25	10.0	2	3	
Carolina	50	2	2	1	0/25	0/25	0/25	0/25	10.0	0/25	1/25	1/25	9.6	1	2	
XPH 1225	50	3	1	1	0/25	0/25	0/25	0/25	10.0	0/25	3/25	3/25	8.8	2	3	
EXP 4J12	50	3	2	1	0/25	0/25	0/25	0/25	10.0	0/25	0/25	0/25	10.0	2	3	

\* Samples with a uniform light green color rated best.

Table 17 Brine Stock Rating of Cucumbers from Northern Co-op Trial (Machine Harvest) - Simcoe, 1980

Variety	Shape	Ridges&Spines	Exterior Color	Crispness	Firmness	Placenta Size	Seed Size	Mean Quality*	Overall Quality**	BLOATERS									% Non Bloaters
										Balloon			Lens			Honeycomb			
										Extreme	Moderate	Slight	Extreme	Moderate	Slight	Extreme	Moderate	Slight	
FX 4153	2.6	2.4	2.2	2.9	2.0	2.2	2.3	2.4	2.3	-	-	3	-	-	1	-	1	3	68
NCX 5014	2.6	2.5	3.1	2.1	2.0	2.1	2.3	2.4	2.6	-	-	1	-	-	-	-	-	3	84
Calico	2.5	2.4	3.2	2.0	2.8	2.0	2.4	2.5	2.3	2	3	-	-	-	-	-	4	-	64
PSR 1479	2.1	2.5	3.4	2.3	2.3	2.1	2.5	2.5	2.9	1	-	1	-	-	2	1	-	3	68
Castlex 2003	2.4	2.4	2.4	2.7	2.8	2.1	2.5	2.5	2.4	-	-	1	-	-	1	-	2	4	68
Harrow 77.01	2.4	2.5	2.7	2.3	2.7	2.5	2.9	2.6	2.1	-	1	-	-	2	-	1	1	3	68
Premier	2.5	2.2	2.3	2.5	2.4	2.6	2.0	2.4	2.7	-	-	1	-	-	-	-	-	4	80
XPH 1225	2.8	2.7	2.6	2.2	2.3	2.7	2.8	2.6	2.9	-	3	1	-	-	2	-	-	2	68
4JC2	2.6	2.5	2.6	2.2	2.1	2.6	2.1	2.4	2.3	-	-	2	-	-	-	-	-	4	76
EXP 2000	2.5	2.5	3.5	2.4	2.9	2.9	2.2	2.7	2.3	-	-	-	-	-	-	-	-	3	88
Pioneer	2.1	2.6	2.5	2.5	2.7	3.0	2.6	2.6	2.8	-	-	1	-	-	-	-	-	-	96
Carolina	2.3	2.3	2.8	2.1	2.0	2.3	2.4	2.3	2.8	-	-	-	-	-	1	-	-	2	88
EXP 2604	2.2	2.9	2.8	2.8	2.4	2.6	2.3	2.6	2.1	-	-	1	-	-	1	-	1	2	80
1606 x 1589	3.1	3.2	3.0	2.6	2.8	2.2	2.9	2.8	3.6	-	2	1	-	-	-	-	-	7	60

\* Includes shape, ridges & spines, exterior color, crispness, firmness, placenta size, seed size.

\*\* Is a general overall rating  
Numbers are out of a sample size of 25.

1 = most acceptable; 5 = least acceptable



PART II

CULTIVARS GROWN AT LOW DENSITY FOR MULTIPLE  
HAND-HARVEST

Table 19 Brine Stock Ratings of Cucumbers from Curbiset Treated Varieties, - Simcoe 1980

Variety	Shape	Ridges&Spines	Exterior Color	Crispness	Firmness	Placenta Size	Seed Size	Mean Quality*	Overall Quality**	BLOATERS									% Non Bloaters
										Balloon			Lens			Honeycomb			
										Extreme	Moderate	Slight	Extreme	Moderate	Slight	Extreme	Moderate	Slight	
41 x 581	2.8	2.6	2.9	2.0	2.4	2.3	2.1	2.4	2.7	-	-	-	-	-	-	-	-	-	92
41 x 669	2.5	2.8	3.1	2.2	2.0	2.4	2.2	2.5	2.8	-	2	-	-	-	4	-	-	-	76
Chemset	2.3	2.1	2.8	2.1	2.9	2.4	1.6	2.3	3.0	-	1	-	-	-	-	1	-	-	92
Femcap	2.5	2.7	2.1	2.9	2.8	2.8	1.6	2.5	2.5	-	-	1	-	-	-	1	-	-	92
79-29	2.1	2.6	2.7	2.0	2.1	2.7	1.2	2.2	2.6	1	2	1	-	-	1	-	-	-	80
79-30	2.3	2.7	2.9	2.8	2.6	2.6	1.7	2.5	2.2	-	-	1	-	-	-	-	-	-	96
Stemo 033	2.1	2.8	3.3	2.3	2.2	2.5	2.4	2.5	2.6	-	-	-	2	-	-	-	-	2	84

\* Includes shape, ridges & spines, exterior color, crispness, firmness, Placenta size, seed size.

\*\* Is a general overall rating.  
Numbers are out of a sample size of 25.

1 = most acceptable; 5 = least acceptable.

TABLE 20 Yield of Cucumbers from Advanced Multipick Trial - Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
Tiplemech	27.9a*	7286 a	15.4 a	80.1 a
H 78.03	26.9 ab	7268 a	16.5 a	78.8 a
Bonus	28.0 a	6876 a	14.0 ab	75.5 a
H 77.07	25.1 ab	6731 a	15.5 a	79.3 a
Multipick	24.0 ab	6276 ab	12.4 bc	79.3 a
H 77.01	21.5 b	5170 bc	10.8 cd	77.3 a
H 77.11	29.6 a	5016 bc	9.9 cd	49.3 b
H 79.11	23.5 ab	4294 c	8.6 d	58.5 b

Soil Type : Fox Sandy Loam

Fertilizer : 550 kg/ha of 20-5-10 + 44.8 kg/ha N (sidedress July 4)

Herbicide : Naptalam + Bensulide

Seed Sown : June 20

Harvest : July 21 - August 25 (8 at 3 1/2 day intervals)

Plant Population : 55,555

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

TABLE 21 Effect of Source of Carolina on Yield

Simcoe, 1980

<u>Variety</u>	<u>Seed Source</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>% in grades</u>		<u>***</u> <u>ALS</u>
				<u>1,2,3</u>	<u>*Femaleness</u>	
Earlypik 14	Northrup King	40.4 a **	8971 a	78.0	9.0	1.7
Bounty	Asgrow	33.5 b	7726 b	81.9	8.9	2.2
Carolina	Ferry Morse	32.9 b	7342 b	79.7	8.6	2.2
Carolina	Northrup King	32.4 b	7123 b	75.9	8.1	1.7
Carolina	Peto	32.9 b	6925 b	72.4	7.1	2.0
Carolina	Abbott & Cobb	30.6 b	6805 C	76.7	8.1	2.2
Carolina	Asgrow	32.2 b	6778 b	75.1	8.0	1.7
Carolina	Harris	30.7 b	6775 b	78.5	8.0	1.5
Carolina	FMC	27.7 c	5657 c	69.7	5.9	1.7

\* Number of female nodes in first 10 nodes

Soil Type : Caledon Sandy Loam

Fertilizer : 225 kg/ha of 10-10-10 + 225 kg/ha of 34-0-0

Irrigation : July 15

Herbicide : Naptalam + Bensulide

Seed Sown : June 17

Harvest: : July 25, 31; August 5, 11, 15, 20, 25

Plant Population : 61,507 plants/ha

\*\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

\*\*\* 1 = resistant (tolerant), 2 = trace, 3 = moderately susceptible,  
4 = strongly susceptible, 5 = severe infection.

Table 22

## Effect of Source of Pioneer on Yield

Variety	Seed Source	t/ha	\$/ha	% in grades		*** ALS
				1,2,3	*Femaleness	
Earlypik 14	Northrup King	40.4 a**	8971 a	78.0	9.0	1.7
Pioneer	Peto	40.9 a	8933 a	79.7	6.0	2.2
Pioneer	Keystone	39.2 a	8642 a	76.8	7.7	2.0
Pioneer	Northrup King	35.7 b	7917 b	79.2	8.5	2.0
Pioneer	Asgrow	34.9 b	7767 b	79.4	6.5	2.7
Bounty	Asgrow	33.5 bc	7726 b	81.9	8.9	2.2
Pioneer	FMC	30.6 cd	7292 b	83.6	5.9	2.0
Pioneer	Ferry Morse	28.6 d	6485 c	81.0	3.9	1.7
Pioneer	Abbott & Cobb	30.6 cd	6364 c	72.9	4.4	1.7

\* Number of female nodes in first 10 nodes.

Soil type : Caledon Sandy Loam  
 Fertilizer : 225 kg/ha of 10-10-10 + 225 kg/ha of 34-0-0  
 Irrigation : July 15  
 Herbicide : Naptalam + Bensulide  
 Seed Sown : June 17  
 Harvest : July 25, 31; August 5, 11, 15, 20, 25  
 Plant Population : 61,507 plants/ha

\*\* Mean separation in columns of Duncan's Multiple Range Test, 5% level

\*\*\* 1 = resistant (tolerant), 2 = trace, 3 = moderately susceptible,  
 4 = strongly susceptible, 5 = severe infection.

Table 23

## Yield of Cucumbers from Observation Multipick Trial

Harrow, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>Fruit #</u>	<u>% in grades 1,2,3</u>
Triplemech	25.1 ab*	6544 a	13.9 a	77.0 ab
H 80.05	27.3 a	6281 ab	11.7 a-c	70.5 b
Multipick	22.9 a-c	5663 a-c	11.7 a-c	78.0 ab
H 80.04	23.9 ab	5581 a-c	11.3 bc	77.5 ab
H 80.08	22.8 a-c	5304 bc	12.3 a-c	73.5 ab
H 78.02	18.1 c	5130 c	13.0 ab	78.5 ab
H 80.07	20.8 bc	4882 c	10.1 c	75.0 ab
H 79.05	17.9 c	4726 c	10.2 c	82.5 a

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Soil Type : Fox Sandy Loam

Fertilizer : 550 kg/ha of 20-5 -10 + 44.8 kg/ha N (sidedress July 4)

Herbicide : Naptalam + Bensulide

Seed Sown : June 20

Harvest : July 21, August 25 (8 at approximately 3 1/2 day intervals)

Plant Population : 55,555

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

Table 24

## Yield of Cucumbers from Observation

## Multipick Trial

Simcoe, 1980

<u>Variety</u>	<u>t/ha</u>	<u>\$/ha</u>	<u>% in grades 1,2,3</u>
Bonus	33.3 a *	8038 a	80.2
Exp 2605	29.2 bc	6971 b	84.6
C573	32.2 ab	6757 bc	69.8
Exp 2606	26.8 cd	6398 b-d	83.0
Exp 2602	26.6 cd	6264 b-d	80.1
4J73	26.2 cd	6090 c-e	81.1
Exp 2603	25.7 c-e	6079 c-e	86.0
Commander	26.3 cd	5850 de	79.8
PSR 377	25.2 c-f	5810 de	84.8
Salvo	22.6 d-g	5762 de	88.9
Gynamite	21.8 e-g	5336 ef	80.6
Spiffy	20.9 f-h	4793 fg	76.1
DEXP 153P	20.9 f-h	4399 gh	73.3
Exp 2608	16.9 h-j	4364 gh	92.3
Target	16.8 h-j	4248 gh	83.5
Liberty Bell	19.8 g-i	4189 gh	77.3
Exp 2607	15.8 ij	3707 h	76.8
Multipick	14.0 j	3615 h	89.9

Soil Type: Caledon Sandy Loam

Fertilizer: 147 kg/ha of 10-10-10

Irrigation: July 18, 21

Herbicide: Naptalam+Bensulide

Seed Sown: June 10

Harvest: July 29; August 1, 5, 11 plants/ha

Plant Population: 61,507 plants/ha

\* Mean separation in columns by Duncan's Multiple Range Test, 5% level

Table 25

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthracnose	Mildew
Harrow 77.01	1	8	2.9:1	1	1	1	2	3	2	2	10	W	L	2	1	1	3	2
Harrow 77.07	1	4-10	3.1:1	1	2	1	1	2	2	2	7	W	E	2	1	1	3	2
Harrow 77.11	2	10	2.9:1	2	1	2	3	3	3	2	9	W	M	2	1	1	2	4
Harrow 78.03	1	10	2.9:1	1	1	2	1	2	1	1	10	W	M	2	1	1	2	2
Bonus 78.05	2	10	3.1:1	2	2	1	1	2	2	2	9	W	E	2	1	1	3	2
Harrow 79.11	3	10	3.0:1	2	1	3	2	3	2	3	10	W	M	2	1	1	3	2
Peto Triplemeh	3	10	3.3:1	1	2	3	3	3	1	1	9	W	E	2	1	2	3	2
Multipick	1	9	3.3:1	1	2	3	3	2	1	2	8	W	M	2	1	1	2	3

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthracnose	Mildew
Harrow 78.02	2	10	3.1:1	1	2	1	2	2	1	1	7	W	M	2	1	1	3	2
Harrow 79.02	4	10	2.9:1	3	2	2	3	3	2	2	7	W	E	2	1	1	3	3
Harrow 79.04	3	10	3.2:1	2	1	2	2	3	1	1	8	W	E	2	1	1	3	3
Harrow 79.05	4	6-10	3.1:1	1	2	2	3	2	2	2	7	W	M	2	1	1	4	2
Harrow 80.01	3	10	2.9:1	2	1	1	1	3	2	2	9	W	L	2	1	1	3	2
Harrow 80.02	4	10	3.2:1	1	2	1	2	3	3	2	10	W	M	2	1	1	2	2
Harrow 80.03	4	10	3.0:1	2	2	1	3	3	2	2	10	W	E	2	1	1	2	2
Harrow 80.04	1	10	2.9:1	1	1	1	3	2	2	2	9	W	E	2	1	1	3	2
Harrow 80.05	2	8	3.1:1	1	1	3	2	1	1	1	9	W	E	2	1	1	3	2

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

Table 26 continued

EVALUATION OF PICKLING CUCUMBER CULTIVARS  
1980

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
Harrow 80.07	2	7	2.8:1	2	2	1	2	3	2	2	10	W	M	2	1	1	3	3
Harrow 80.08	2	10	2.5:1	1	1	1	1	1	1	2	10	W	E	2	1	1	3	2
Peto Triplemech	2	10	3.2:1	1	2	2	3	2	1	1	10	W	E	2	1	1	2	2
Multipick	2	10	3.4:1	2	2	3	3	2	1	1	7	W	E	2	1	1	3	3

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

Table 27

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
Gynamite		9.9	3.1:1	1	1.5	2	2	1	1	1	2	W		3.6				
Salvo		5.9	2.7:1	1	1	1	3	1	1.5	1.5	2	W		2.9				
Target		6.9	3.1:1	2	2	1	2.5	2	1	1	4	W		4.1				
Commander		9.0	2.8:1	1	3	2	2	1	1.5	2	0	W		3.0				
PSR 377		7.9	3.0:1	2	1.5	1	2	3	2	1	0	W		3.7				
Multipick		8.0	3.1:1	2	3	1	3	3	2.5	1.5	0	W		4.5				
DEXP 153P		.7	2.9:1	1.5	2	1	2	3	2.5	1.5	0	W		2.6				
Liberty Bell		9.0	2.7:1	3	2	2	2	3	3	1.5	0	W		4.7				
Bonus		8.7	3.0:1	1.5	3	2	1	2	2	2.0	2	W		2.2				

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.

## EVALUATION OF PICKLING CUCUMBER CULTIVARS

Cultivar	Vine Vigour (1-5)	Sex-expression (1-10)	Length:width Ratio	Blossom-end (1-5)	Shoulder (1-5)	Ridging & Spines (1-5)	Color (1-5)	Texture & Firmness (1-5)	Seed Cavity (1-5)	Seed Size (1-5)	Carpel Separation (1-10)	Spine Color	Season <sup>1/</sup>	Disease <sup>2/</sup>				
														ALS	SCAB	CMV	Anthraco	Mildew
4J73		10.0	2.8:1	1	1.5	2	2	2	1.5	1	0	W		3.2				
C573		9.9	2.9:1	1.5	1.5	2	1	2	2	2.5	4	W		2.2				
Spiffy		6.2	2.9:1	3	1.5	1.5	1	2	2	1	4	B		4.0				
EXP 2602		9.1	2.8:1	1.5	2	2	1	1	1.5	1	2	W		3.1				
EXP 2603		10.0	2.5:1	1.5	2	3	2.5	1	1.5	1	2	W		3.0				
EXP 2605		9.7	2.9:1	2	1.5	3	2.5	1	1.5	1	0	W		3.2				
EXP 2606		10.0	2.6:1	2	2	3	3.5	1	2	2	0	W		3.2				
EXP 2607		10.0	2.9:1	2	2	1.5	2.5	2	2	1.5	4	B		5.0				
EXP 2608		10.0	2.9:1	2	2	1.5	2.5	2	2	1.5	0	W		2.0				

1/Season: E=early, M=mid, L=Late

2/Disease: 1=resistant (or tolerant), 2=trace, 3=moderately susceptible, 4=strongly susceptible, 5=severe infection.





WEATHER DATA -- APRIL 1 THROUGH AUGUST 31, 1980

Agriculture Canada Research Station, Harrow, Ontario.

Month	Rainfall (mm)		Hours Sunshine		Temperature (°C)			
	1980	63-yr.av.	1980	63-yr.av.	High	Low	Mean	63-yr.av.
April	70	75	155	164	12	3	8	8
May	81	65	238	234	21	9	15	14
June	123	76	265	250	23	12	18	20
July	158	89	276	282	26	18	22	22
August	176	67	227	253	26	18	22	21

Horticultural Experiment Station, Simcoe, Ontario.

Month	Rainfall (mm)		Base 5°C (Total)		Temperature (°C)			
	1980	10-yr.Mean	1980	10-yr.Mean	Max.	Min.	Mean	10-yr.Mean
April	107.0	82.3	347.9	330.7	11.2	1.5	6.4	6.7
May	57.8	78.2	268.9	231.3	19.5	7.8	13.7	12.3
June	96.4	65.5	326.8	391.7	21.9	9.8	15.9	18.1
July	79.4	72.1	491.4	474.1	26.7	14.9	20.8	20.3
August	67.4	84.1	516.6	444.2	26.3	17.0	21.7	19.4

