PERFORMANCE OF

VEGETABLE VARIETIES IN KENTUCKY

1959 - 1960 - 1961

By D. E. Knavel

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UNIVERSITY OF KENTUCKY

AGRICULTURAL EXPERIMENT STATION

DEPARTMENT OF HORTICULTURE

Lexington

PERFORMANCE OF VEGETABLE VARIETIES IN KENTUCKY - 1959, 1960, 1961

D. E. Knavel

Vegetable variety trials are conducted each year by the Department of Horticulture at the University of Kentucky experimental farms to evaluate varieties and breeding lines best adapted to Kentucky climate and soils. The varieties and breeding lines are evaluated in respect to yield and fruit and plant characteristics.

The trials are of either a replicated or observational type, and data are obtained on the varieties' potentiality for recommendation to commercial and home garden growers. If the varieties and breeding lines show favorably in the observational trials, they are given thorough testing in replicated trials for several years before being recommended, as was true for some varieties in the trials reported here. Many of the entries are breeding lines; henceforth, they are listed as numbers rather than variety names. If the breeding line is not named as a variety, as some have been during the three years' trials, seed of the line has not been released for increase and, therefore is not available to growers.

The vegetables tested in 1959, 1960, and 1961 were field and greenhouse tomatoes, snap beans, pole beans, sweet corn, Irish potatoes, and slicing and pickle cucumbers. All replicated plots were conducted at Lexington and were in triplicates. Replicated and observational plots for sweet corn, snap beans, and cucumbers were 50 feet long. The tomato replicated plots consisted of 8 plants per plot; and 10 plants were in each plot in the observational trials. The pole bean plots were 100 feet long, and the potato plots were 75 feet per replication. The replicated yields presented in the tables are the yields obtained at Lexington, and the L. S. D. (least significant deviation) applies only to yields marked as replicated. The observational yields were averaged where more than one trial was conducted the same year.

Following is the source of seed for the varieties and breeding lines used in the trials:

1. * Seed Research Specialist, Modesto, Calif.
2. Corneli Seed Company, St. Louis, Mo.
3. Ferry-Morse Seed Co., Detroit, Mich.
4. Associated Seed Growers, Milford, Conn.
5. Joseph Harris Co., Inc., Rochester, N. Y.
6. Crookham Co., Caldwell, Idaho
7. Robson Seed Farm, Hall, N. Y.
8. Northrup-King and Co., Minneaplis, Minn.
9. Rodgers Bros. Co., Caldwell, Idaho
10. Southeastern Cooperative Vegetable Trials, Southeastern States, U. S.
11. W. Atlee Burpee Co., Philadelphia, Pa.
12. Michael-Leonard Co., Sioux City, Iowa
13. Charter Seed Co.,
14. Southern States, Richmond, Va.
15. S. T. E. P. trials, Southeastern U. S. Tomato Exchange Program

* These numbers are used in the tables which follow.

16. Peto Seed Co., Saticoy, Calif.
17. Alpha Seeds, Lompoc, Calif.
18. Grand Rapids Growers, Grand Rapids, Mich.
19. Dept. of Horticulture, Univ. of Del., Newark, Del.
20. USDA, Beltsville, Md.
21. Dept. of Horticulture, Mich. State Univ., East Lansing, Mich.
22. Clemson Truck Experiment Station, Charleston, S. C.
23. Dept. of Horticulture, Univ. of Arkansas, Fayetteville, Ark.
24. Dobson-Hicks Co., Nashville, Tenn.
25. Sawan, Inc., Columbus, Miss.
26. Pine Tree Nurseries, Par, Caldwell, England
27. Glecker's Seedmen, Metamora, Ohio

Table 1 - Yields, average weight per ear, number of days to maturity, and percentage of ears harvested at main harvest for 1960 and 1961 early* sweet corn

Variety	Source**	Dry marketable ears/A 1960	Dry marketable ears/A 1961	Average wt/ear (lb)	Average No. days to maturity	% uniformity at main harvest
Seneca Brave (LM-5)	7	2,360	--	0.44	104	51
Northern Belle	5	2,328	1,597	0.47	91	66
Seneca Brave (LM-5C)	7	1,892	--	0.60	100	72
Seneca M-10	7	1,576	--	0.58	94	65
Seneca Dawn	7	1,445	1,016	0.50	91	75
Gold Rush	2	1,397	--	0.58	87	70
Carmelcross	4	1,268	1,379	0.57	88	81
Seneca Sunbeam	7	1,261	1,041	0.66	86	68
North Star	5	1,132	1,065	0.53	86	80
Sun-Up	5	1,091	1,307	0.44	83	79
Gold Crest	3	735***	--	0.45	84	55
Golden Beauty	4	582***	1,258	0.48	87	82
Seneca Daybreak	7	444***	--	0.46	83	90
Early Sunglow	14	--	1,428	0.40	89	98
Seneca Beauty	7	--	1,137	0.46	88	80
Seneca - 60	7	--	726	0.30	88	100
Earliking	5	--	1,476	0.37	86	71
Northern Cross	5	--	1,210	0.48	90	100
Barbecue	5	--	1,258	0.41	90	88
White Cross Bantam	6	--	1,041	0.54	92	91
Gold Cup	5	--	1,404	0.54	98	100
LSD 5% =		607	426			
1% =		821	574			

* Planted April 13 in 1960 and April 20 in 1961.

** See list of those supplying seed on pages 2 and 3.

*** Yields reduced because of woodchuck damage to ears.

Table 2 - Yields, average weight per ear, number of days to maturity, and percentage of ears mature at the main harvest for mid-season* sweet corn varieties

Variety	Source	Doz market ear/A 1959	1960	1961	Av Yield	Av wt/ear	Days to maturity	% of ears mature at main harvest
Aristogold Bantam Evergreen	1	1,266(4)T**	1,649(4)T	1,740(2)T	1,363	0.63	81	80
Golden Security	4	1,920(4)T	1,811(3)T	1,950(2)T	1,595	0.60	82	70
Florigold-107	3	1,387(4)T	1,633(2)T	1,950(1)T	1,619	0.52	80	83
R-8	9	1,603(3)T	---	---	1,200	0.54	80	--
NK-1304	8	1,287(3)T	---	---	1,054	0.55	81	--
Sure crop	5	1,488(3)T	1,698(1)	---	1,593	0.57	82	--
25778	6	1,746(3)T	---	---	1,472	0.57	82	--
25776	6	1,443(2)T	1,730(2)T	---	1,390	0.56	82	73
27802	6	1,503(3)T	1,665(2)T	2,040(1)T	1,575	0.57	81	85
Floriglade	1	1,176(2)T	1,188(1)	720(1)	993	0.63	80	75
Golden Hybrid-2057	4	1,171(2)T	1,237(2)T	---	1,138	0.67	80	51
Asgrow Golden-22	4	1,055(2)T	---	---	820	0.50	75	--
Asgrow Golden-50	4	1,008(1)T	---	---	--	0.60	78	--
Gold crest	3	1,095(1)T	---	---	--	0.37	65	--
Golden Beauty	4	991(1)T	---	---	--	0.35	64	--
Golden Hybrid-2668	4	1,526(1)T	---	---	--	0.60	81	--
Huron	4	1,365(1)T	---	---	--	0.51	81	--
Calumet	4	1,456(1)T	---	---	--	0.41	81	--
56-2061	9	1,356(1)T	---	---	--	0.50	81	--
Goldcup	5	1,863(2)T	2,102(2)T	---	1,451	0.53	73	62
Golden Cross-127	4	1,326(1)T	---	---	--	0.42	81	--
131-Northern Belle	5	1,326(1)T	1,407(1)T	---	1,367	0.46	73	55
58-2887	9	1,222(1)T	---	---	--	0.59	81	--
Carmelcross	4	889(2)T	---	---	965	0.40	69	--
North Star	5	1,075(2)T	---	---	1,099	0.50	68	--
Dominator	9	1,330(1)T	1,099(1)	---	1,215	0.60	82	--
Evertender-C	1	1,553(3)T	2,037(3)T	---	1,795	0.58	80	--
Sixty pak	4	1,677(2)T	---	---	1,685	0.48	85	--

(continued)

Table 2 - (Continued)

Variety	Source	Doz market ear/A 1959	1960	1961	Av Yield	Av wt/ear	Days to maturity	% of ears mature at main harvest
Victory Golden	4	1,016(1)T	---	---	--	0.56	84	--
Staygold	1	1,553(2)T	1,908(2)T	1,920(1)T	1,691	0.59	84	64
Golden Market	1	1,150(2)T	1,164(1)	1,650(1)	1,385	0.58	77	63
Valleygold	1	1,301(1)T	1,552(2)T	1,830(1)	1,520	0.46	79	77
South Chief	12	1,256(1)T	1,392(1)	---	1,324	0.58	78	54
Goldtwin	12	1,186(1)T	---	---	--	0.50	77	--
Golden Jewel	12	1,180(1)T	---	---	--	0.51	75	--
Golden Sensation	1	1,387(2)T	1,479(2)T	---	1,163	0.59	80	51
Golden Regent	1	843(1)T	---	---	--	0.79	78	--
Tendermost-C	1	1,307(1)T	---	---	--	0.49	75	--
Lake State	12	1,099(1)T	---	---	--	0.62	75	--
Goldenyield	12	1,230(1)T	---	---	--	0.56	75	--
Deligold	1	1,004(1)T	---	---	--	0.48	71	--
Golden Cross Bantam	1	1,150(1)T	---	---	--	0.60	74	--
Seneca Wanpum	7	833(1)T	---	---	--	0.70	76	--
Seneca Chief	7	1,109(1)T	1,365(1)	---	1,237	0.51	77	--
Seneca LM-5	7	1,543(2)T	1,819(1)	1,650(1)	1,642	0.57	79	86
Iochief	4	1,105(1)T	1,552(3)T	---	1,130	0.53	77	74
Treasure Gold	3	1,216(1)T	1,593(1)	---	1,405	0.57	74	--
Hybrid-102	3	1,502(1)T	---	---	--	0.61	74	--
Hybrid-103	3	1,105(1)T	---	---	--	0.58	68	--
Longold	12	1,210(1)	---	---	--	0.57	83	--
Golden Prolific	2	1,331(1)	1,843(1)	---	1,587	0.58	80	51
Hyrbid-105	3	1,129(1)	1,552(1)	1,500(1)	1,394	0.55	77	68
Hybrid-106	3	766(1)	---	---	--	0.49	80	--
26830-9	6	1,089(1)	1,390(2)T	---	1,163	0.66	80	76
Xp-175	4	1,250(1)	---	---	--	0.59	80	--
Seneca LV-7	7	1,210(1)	1,681(2)T	1,890(1)T	1,524	0.58	80	81
Xp-177	4	1,573(1)	1,116(1)	---	1,345	0.56	82	80

(continued)

Table 2 - (Continued)

Variety	Source	Doz market ear/A 1959	1960	1961	Av Yield	Av wt/ear	Days to maturity	% of ears mature at main harvest
KVF 57-93	2	1,371(1)	1,043(1)	---	1,207	0.65	77	72
28327	6	1,533(1)	1,827(2)T	---	1,535	0.58	80	87
NK-81	8	887(1)	---	---	--	0.58	78	--
KVF 58-10	2	1,694(1)	1,795(1)	1,920(2)T	1,743	0.59	77	85
28325	6	1,129(1)	---	---	--	0.49	83	--
KVF 57-92	2	1,371(1)	1,382(1)	---	1,377	0.61	78	84
NK-1985	8	1,291(1)	---	---	--	0.66	83	--
R-289	9	1,129(1)	---	1,340(1)	1,235	0.68	75	67
R-301	9	1,089(1)	---	1,710(1)	1,400	0.63	77	56
C68-XC-88	10	1,492(1)	---	---	--	0.61	83	--
471-U6 X 81-1	10	726(1)	1,259(1)	1,410(1)	1,132	0.58	93	47
E 101 X T115	10	565(1)	---	---	--	0.75	88	--
C 68 X T225	10	1,129(1)	---	---	--	0.46	83	--
T 205 X T225	10	686(1)	---	---	--	0.65	92	--
HIOG 3 X T205	10	605(1)	994(1)	1,440(1)	1,013	0.70	89	70
TX-1327 (Tex Sweet)	10	726(1)	1,504(1)	1,710(1)	1,313	0.64	84	52
Seneca Beauty	7	---	1,535(1)	---	--	--	80	--
Xp-204	4	---	1,876(2)T	---	1,500	0.51	84	81
Xp-1060 (Merit)	4	---	1,188(1)	1,740(1)T	1,464	0.63	78	91
(HIOG3 X T205) X C68	10	---	1,296(1)	1,590(1)	1,443	0.59	82	57
(T 245 X T265) X C68	10	---	1,285(1)	---	--	0.56	80	74
KVF 57-83B	2	---	1,358(1)	1,350(1)	1,354	0.68	78	61
Cr 955-1	6	---	1,116(1)	1,440(1)T	1,278	0.59	82	86
Cr 955-4	6	---	1,876(1)	---	--	0.52	76	74
Cr 955-5	6	---	1,552(1)	2,010(1)	1,731	0.51	76	77
Tenderfine	1	---	752(1)	1,410(1)	1,081	0.45	77	60
Albertogold	1	---	1,188(1)	---	--	0.54	72	63
M4-954-R	10	---	1,164(1)	---	--	0.51	86	56
NK-87	8	1,250(1)	1,280(1)	1,620(1)	1,383	0.61	79	54
63328	8	---	1,285(1)	---	--	0.62	76	85

(continued)

Table 2 - (Continued)

Variety	Source	Doz market ear/A 1959	1960	1961	Av Yield	Av wt/ear	Days to maturity	% of ears mature at main harvest
2350	8	---	1,116(1)	1,500(1)	1,308	0.71	76	72
Honeycross	13	---	1,455(2)T	---	1,088	0.65	76	77
Wonderful	5	---	1,601(1)	---	--	0.53	76	80
Cr955-23	6	---	1,358(1)	1,260(1)	1,309	0.56	77	76
Cr988-57	6	---	1,868(1)	---	--	0.57	78	91
Gold Eagle	5	---	1,528(1)	1,890(1)T	1,709	0.51	73	92
Ioana	4	---	1,431(2)T	---	1,100	0.56	76	88
Jubilee	24	---	1,576(2)T	1,140(1)T	1,358	0.60	75	86
58-2633	9	---	1,552(1)	---	--	0.59	78	78
58-2668	9	---	1,164(1)	---	--	0.72	78	90
Sweetangold	2	---	922(1)	---	--	0.75	78	66
Silverliner	2	---	970(1)	---	--	0.60	78	83
Tempo	2	---	1,382(1)	---	--	0.59	78	63
NK-199	8	---	1,164(1)	1,560(1)	1,362	0.64	73	85
RH	9	---	828(1)	---	--	--	76	--
85-1	6	---	793(1)	1,260(1)T	1,027	0.55	71	62
White Cross Bantam	6	---	849(1)	---	--	--	72	--
Cheddar Cross	6	---	832(1)	1,740(1)T	1,286	0.64	79	81
Regal Bantam	6	---	832(1)	---	--	--	84	--
Royal Gold	25	---	2,069(3)T	1,680(1)T	1,875	0.54	77	46
Golden Pirate - A	3	---	1,846(2)	---	1,676	0.62	80	87
20 X 409	10	---	---	2,280(1)	--	0.56	81	70
SRS-2031	1	---	---	1,530(1)	--	0.77	77	86
Exp-75140	8	---	---	1,350(1)	--	0.72	77	86
Exp-63330A	8	---	---	1,230(1)	--	0.62	78	73
322 X ILL. 330a	10	---	---	1,020(1)	--	0.79	78	100
Cr. 045-21	6	---	---	1,470(1)	--	0.62	77	92
Cr. 045-18	6	---	---	1,200(1)	--	0.56	78	70
Cr. 053-3	6	---	---	1,080(1)	--	0.69	82	64
M 5161 R	10	---	---	1,110(1)	--	0.88	84	86

(continued)

Table 2 - (Continued)

Variety	Source	Doz market ear/A 1959	1960	1961	Av Yield	Av wt/ear	Days to maturity	% of ears mature at main harvest
M 5161 BR	10	---	---	2,250(1)	--	0.69	82	53
M 5162 R	10	---	---	1,950(1)	--	0.64	82	46
M 5246 R	10	---	---	840(1)	--	0.59	82	75
Blandy	13	---	---	990(1)	--	0.85	84	67
Xp-195	4	---	---	1,170(1)	--	0.64	82	100
Xp-244	4	---	---	1,860(1)	--	0.59	81	58
R-302	9	---	---	1,380(1)	--	0.65	71	54
R-303	9	---	---	1,590(1)	--	0.49	75	72
R-474	9	---	---	1,560(1)	--	0.58	71	50
(H 2.39 X H2.39) X (T205)	10	---	---	1,800(1)	--	0.56	86	73
Silvercross-16	1	---	---	1,800(1)	--	0.58	75	82
Tendermost HV2	1	---	---	1,260(1)	--	0.68	75	64
Table Topper	1	---	---	1,440(1)	--	0.65	75	88
KVF 57-83	2	---	---	2,490(1)	--	0.47	71	67
KVF 60-24	2	---	---	1,560(1)	--	0.45	71	58
KVF 60-28	2	---	---	1,590(1)	--	0.59	71	79
70696	8	---	---	1,680(1)	--	0.68	71	63
Silverqueen	24	---	---	1,740(1)	--	0.69	77	83
63360	8	---	---	1,350(1)	--	0.61	71	56
Multigold	24	---	---	1,860(1)	--	0.63	77	90
Cr. 045-22	6	---	---	1,440(1)	--	0.57	77	100
SRS-2034	1	---	---	1,230(1)	--	0.77	77	76
FM-Cross	3	---	---	1,260(1)	--	0.46	71	100
LSD 5%		----278						
1%		----378	---NS	---NS				

* Midseason refers to plantings made in mid-May.

** Data within parentheses refer to number of trials entered for the year.

T In replicated trials.

Table 3 - Ratings (1-5)* for ear length, husk extension over tip of ear, general appearance of ears, and amount of earworm resistance for sweet corn varieties

Variety	Ear length	Husk covering	General appearance		Earworm resistance
			Husked	Unhusked	
Aristogold Bantam Evergreen	3(3)**	3(3)	3(3)	4(4)	4(5)
LM-5	3(3)	4(3)	2(3)	3(2)	4(5)
Floriglade	4(4)	4(3)	3(3)	2(4)	4(5)
Golden Market	4(4)	3(3)	2(2)	4(4)	2(5)
XP-177	3--	4 -	2 -	3 -	4 -
471-46 X 81-1	4(4)	4(4)	1(1)	3(4)	2(5)
KVF 58-10	3(3)	4(3)	3(4)	4(4)	4(5)
Northern Belle	3(3)	3(3)	3(4)	3(3)	1(3)
GH-2057	4 -	4 -	3 -	4 -	4 -
HI-OG3 X T-20S	3(3)	4(4)	3(2)	3(3)	4(2)
XP-204	2 -	3 -	2 -	3 -	3 -
XP-1060 (Merit)	3(2)	4(4)	5(4)	3(3)	2(5)
(HI-OG3 X T-20S) XC-68	3(3)	4(4)	3(2)	4(3)	5(5)
(T-24S X T-26S) XC-68	3 -	4 -	2 -	3 -	4 -
KVF-57-83B	2(3)	4(4)	3(2)	3(2)	5(5)
Cr-955-1	3(3)	4(4)	3(3)	3(2)	5(5)
Cr-955-4	2 -	4 -	3 -	4 -	4 -
Cr-955-5	2(3)	4(3)	3(4)	3(3)	5(5)
Tenderfine	2(3)	4(3)	4(2)	3(2)	2(5)
Albertagold	3 -	3 -	2 -	3 -	3 -
M-4954-R	3 -	4 -	2 -	4 -	5 -
Code-87 (NK87)	2(3)	4(3)	4(4)	3(4)	4(5)
63328	3 -	3 -	4 -	3 -	2 -
2350	3(3)	4(4)	3(3)	3(5)	4(5)
Golden Pirate-A	2 -	4 -	2 -	2 -	1 -
Hybrid-105	3(4)	4(4)	3(4)	3(4)	4(5)
Royal Gold	3(3)	4(4)	3(3)	4(4)	5(5)
25776	3 -	3 -	3 -	4 -	4 -
27802	3(4)	3(5)	3(3)	5(4)	4(5)
26830-9	3 -	3 -	3 -	1 -	2 -
LV-7	3(3)	3(4)	3(4)	3(5)	4(5)
Staygold	3(4)	3(4)	3(4)	2(5)	4(5)
28327	3 -	3 -	3 -	2 -	4 -
Hybrid-107 (Florigold)	3(3)	3(4)	4(3)	5(4)	2(5)
Golden Security	3(3)	3(4)	3(3)	4(4)	4(5)
Honeycross	3 -	4 -	3 -	3 -	5 -
Gold Cup	3(3)	4(4)	4(4)	4(4)	2(4)
Iochief	3 -	4 -	4 -	2 -	2 -
Wonderful	3 -	4 -	2 -	3 -	2 -
Cr-955-23	3(3)	4(4)	3(4)	4(4)	5(5)

(continued)

Table 3 - (Continued)

Variety	Ear length	Husk covering	General appearance Husked	General appearance Unhusked	Earworm resistance
Cr-988-57	3 -	3 -	4 -	3 -	3 -
Golden Eagle	3(2)	3(4)	4(3)	3(4)	1(3)
KVF-57-92	3 -	3 -	4 -	3 -	1 -
Golden Prolific	3 -	3 -	3 -	2 -	4 -
KVF-57-93	3 -	3 -	2 -	3 -	1 -
Ioana	3 -	4 -	3 -	2 -	2 -
Jubilee	3(3)	3(3)	4(4)	3(4)	1(5)
58-2633	3 -	3 -	4 -	3 -	2 -
58-2668	3 -	3 -	2 -	3 -	2 -
Sweetangold	3 -	3 -	3 -	3 -	5 -
Silverliner	3 -	3 -	2 -	4 -	3 -
Tempo	3 -	4 -	4 -	3 -	3 -
Golden Sensation	4 -	4 -	3 -	4 -	4 -
South Chief	3 -	4 -	4 -	3 -	4 -
NK-199	3(3)	3(3)	4(3)	2(4)	2(3)
Texas-1327	3(3)	4(3)	2(3)	3(4)	4(5)
Valleygold	-(4)	-(3)	-(2)	-(4)	-(5)
20 X 409	-(3)	-(4)	-(3)	-(4)	-(5)
SRS-2031	-(4)	-(4)	-(4)	-(5)	-(5)
Exp. 75140	-(4)	-(1)	-(3)	-(5)	-(5)
Exp. 63330A	-(4)	-(4)	-(3)	-(4)	-(5)
322 XILL. 330a	-(4)	-(4)	-(3)	-(5)	-(5)
Cr-045-21	-(3)	-(4)	-(4)	-(5)	-(5)
Cr-053-18	-(3)	-(4)	-(3)	-(2)	-(5)
Cr-053-3	-(4)	-(4)	-(4)	-(5)	-(5)
M 5161 R	-(4)	-(4)	-(4)	-(5)	-(5)
M 5161 BR	-(4)	-(4)	-(2)	-(5)	-(5)
M 5162 R	-(3)	-(3)	-(3)	-(4)	-(5)
M 5246 R	-(3)	-(3)	-(3)	-(4)	-(5)
Blandy	-(4)	-(2)	-(2)	-(5)	-(2)
Xp 195	-(4)	-(2)	-(2)	-(4)	-(2)
Xp 244	-(4)	-(2)	-(2)	-(4)	-(1)
R 289	-(4)	-(4)	-(2)	-(5)	-(2)
R 301	-(3)	-(4)	-(4)	-(5)	-(5)
R 302	-(4)	-(4)	-(3)	-(4)	-(5)
R 303	-(3)	-(3)	-(3)	-(2)	-(5)
R 474	-(3)	-(3)	-(3)	-(4)	-(5)
(H2. 39 X H2. 39) X T205	-(3)	-(4)	-(3)	-(5)	-(5)
Silvercross 16	-(3)	-(3)	-(3)	-(5)	-(5)
Tendermost HV2	-(4)	-(3)	-(2)	-(5)	-(5)
Table Topper	-(4)	-(4)	-(4)	-(5)	-(3)
Seneca LV-74	-(4)	-(3)	-(4)	-(4)	-(2)
KVF 57-83	-(3)	-(4)	-(2)	-(3)	-(5)

(continued)

Table 3 - (Continued)

Variety	Ear length	Husk covering	General appearance		Earworm resistance
			Husked	Unhusked	
KVF 60-24	-(3)	-(4)	-(2)	-(3)	-(5)
KVF 60-28	-(3)	-(4)	-(4)	-(5)	-(5)
70696	-(4)	-(3)	-(4)	-(5)	-(4)
Silverqueen	-(3)	-(4)	-(5)	-(5)	-(5)
85-1	-(3)	-(4)	-(3)	-(4)	-(5)
63360	-(3)	-(3)	-(3)	-(4)	-(3)
Multigold	-(3)	-(4)	-(3)	-(4)	-(5)
Cro. 45-22	-(3)	-(3)	-(3)	-(4)	-(5)
SRS-2034	-(4)	-(4)	-(3)	-(4)	-(4)
Fm-Cross	-(4)	-(4)	-(4)	-(5)	-(5)
Early Sunglow	-(1)	-(4)	-(3)	-(4)	-(3)
Seneca Dawn	-(2)	-(3)	-(4)	-(5)	-(3)
Seneca Beauty	-(3)	-(3)	-(3)	-(4)	-(3)
Seneca Sunbeam	-(2)	-(3)	-(3)	-(4)	-(4)
Seneca-60	-(1)	-(4)	-(2)	-(3)	-(2)
Sun-up	-(1)	-(4)	-(3)	-(3)	-(2)
Carmelcross	-(3)	-(4)	-(2)	-(3)	-(3)
Earliking	-(1)	-(3)	-(3)	-(4)	-(2)
Northern Cross	-(2)	-(4)	-(3)	-(4)	-(4)
Golden Beauty	-(2)	-(3)	-(3)	-(4)	-(4)
Barbecue	-(3)	-(3)	-(3)	-(4)	-(4)
North Star	-(2)	-(3)	-(2)	-(3)	-(4)
White Cross Bantam	-(3)	-(3)	-(3)	-(4)	-(3)

* 1 = poor; 5 = good

** Data within parentheses pertain to 1961; other to 1960.

Table 4 - Yields and percentage of pods mature the first harvest for snap bean varieties

Variety	Source	Bushels per acre 1959	1960	1961	Average	% of pods mature at first harvest
Stringless Black Valentine	2	236(7)* +	345(1)	--	289	37
Wade	9	262(7)+	254(3)+	355(2)+	314	41
Wadex	9	212(5)+	183(1)+	313(1)+	241	31
EXtender	2	247(5)+	331(2)+	243(1)+	263	40
Imp. Supergreen	9	203(5)+	--	--	227	12
Longval	10	243(5)+	187(1)+	--	207	24
Xp-233	4	209(5)+	--	--	203	29
B-3370	10	219(5)+	397(1)+	296(1)+	346	38
B-3125-X-5-2	10	209(5)+	281(1)+	257(1)+	254	30
Valentine type #942	10	252(5)+	156(1)+	--	192	32
B-3034-1-1	10	202(5)+	--	--	234	29
Topcrop	4	256(3)+	277(1)+	--	249	36
Seminole	4	300(1)	--	--	--	33
Contender	4	265(1)	--	--	--	51
Bountiful	4	182(2)	--	--	182	46
Tenderlong-15	4	255(2)+	219(2)+	201(1)+	194	29
Tendergreen	4	243(2)+	--	--	162	35
Tendercrop	1	79(1)	281(1)+	302(1)+	221	56
Asgrow Resistant Valentine	4	272(2)	250(2)+	273(2)+	275	46
Harvester	4	253(2)	229(2)+	235(1)+	249	25
Xp-210	4	290(2)	--	--	290	48
Xp-225	4	299(2)	--	--	299	24
5CM-2	10	323(2)	168(1)+	--	246	28
Wadecross	9	288(2)	--	--	288	14
White Seeded Greenpod	9	229(2)	--	--	229	24
Valentine type #950	10	380(2)	260(1)+	182(1)+	274	30
Valentine type #965	10	255(2)	--	--	255	37
B-2971-1-1	10	291(2)	484(1)	--	388	7
Tenderwhite	9	--	163(1)+	--	--	33
Improved Tendergreen	5	--	239(2)+	--	251	25
Corneli #14	2	--	148(2)+	80(1)+	155	29
Resistant Cherokee	4	--	415(2)	--	380	13
Cherokee Wax	4	--	420(1)	--	--	30
Xp-235	4	--	355(1)	--	--	18
Harris Shipper	5	--	331(1)	160(1)+	246	27
NK-108	8	--	428(1)	261(1)	345	33
Slender White	9	--	318(1)	179(1)+	249	46
Florida #101-B	10	--	323(1)	--	--	24
2910-3	10	--	330(1)	252(1)	291	48

(continued)

Table 4 - (Continued)

Variety	Source	Bushels per acre 1959	1960	1961	Average	% of pods mature at first harvest
5330-18	10	--	323(1)	--	--	22
B-3477	10	--	208(1)	--	--	9
B-3489	10	--	356(1)	309(1)	333	21
Mountaineer	2	--	409(1)	--	--	29
Green Cluster	3	--	301(1)	288(1)	295	15
Earligreen	9	--	451(1)	--	--	18
B-3125-2-3-1	10	--	442(1)	--	--	25
Processor	3	--	--	123(1)+	--	30
Xp-250	4	--	--	252(1)	--	21
Xp-260	4	--	--	367(1)	--	26
Tendergreen Long M. R.	13	--	--	330(1)	--	38
B-3482	10	--	--	305(1)	--	65
B-3490	10	--	--	288(1)	--	43
B3494	10	--	--	270(1)	--	17
B-3496	10	--	--	411(1)	--	29
B-3509	10	--	--	360(1)	--	51
FM 187-C	3	--	--	219(1)	--	37
Tenderbest	3	--	--	298(1)	--	29
LSD 5%		NS	62	45		
1%			82	60		

* Figure within parentheses refer to number of trials entered for that year.

+ in replicated trials.

Table 5 - Days to maturity, pod shape, pod straightness, pod length, pod color, pod roughness and seed coat color for snap bean varieties

Variety	Days to maturity	Pod shape	Pod straightness	Pod length (inches)	Pod color	Pod roughness	Seed coat color
Res. Asgrow Val.	56	Oval	S.*curved	5.8	Light	Smooth	Black
Wade	56	Round	S. curved	4.8	Dark	S.*rough	Purple
Harvester	64	Heart	S. curved	5.0	Medium	Smooth	White
EXtender	56	Heart	S. curved	5.5	Medium	Smooth	Black
Wadex	56	Heart	S. curved	4.8	Dark	S. rough	Purple
Longval	59	Oval	V.*curved	6.1	Medium	V. rough	White
5- CM-2	59	Oval	curved	6.9	Medium	S. rough	White
Val. type-942	56	Oval	S. curved	5.8	Light	Smooth	Black
Val. type-950	56	Oval	V. curved	6.3	Light	Smooth	Black
B-3370	56	Heart	S. curved	4.8	Dark	Smooth	Purple
Cherokee Wax	53	Flat	S. curved	5.4	Yellow	Smooth	Black
Asgrow St. Bl. Val.	56	Flat	S. curved	5.5	Medium	Smooth	Black
Res. Cherokee	56	Flat	S. curved	5.6	Yellow	S. rough	Black
Xp-235	56	Round	S. curved	4.6	Medium	Smooth	White
Corneli #14	56	Oval	S. curved	5.3	Medium	S. rough	White
NK-108	56	Round	S. curved	5.2	Light	Smooth	White
Slenderwhite	56	Heart	S. curved	5.6	Dark	Smooth	White
Fla. 101-B	56	Flat	S. curved	6.0	Yellow	Smooth	Brown
2910-3	56	Heart	S. curved	5.4	Medium	Smooth	White
5330-18	56	Heart	S. curved	5.8	Medium	Smooth	White
B-2971-1-1	56	Round	S. curved	5.2	Dark	Smooth	Purple
B-3125-2-3-1	56	Heart	S. curved	4.8	Medium	Smooth	White
B-3125-X-5-2	56	Heart	S. curved	5.0	Medium	Smooth	White
B-3477	59	Heart	S. curved	4.8	Medium	Smooth	White
B-3489	56	Heart	S. curved	4.3	Dark	Smooth	White
Mountaineer	56	Flat	S. curved	3.8	Light	Smooth	White
Green Cluster	61	Oval	S. curved	4.7	Medium	Smooth	White
Earliwax	53	Heart	S. curved	4.8	Yellow	Smooth	White
Earligreen	56	Heart	S. curved	4.7	Light	Smooth	White

(continued)

Table 5 - (Continued)

Variety	Days to maturity	Pod shape	Pod straightness	Pod length (inches)	Pod color	Pod roughness	Seed coat color
Hygrade	56	Round	S. curved	5.3	Light	Smooth	White
Tenderwhite	59	Heart	S. curved	4.7	Light	Smooth	White
Tenderlong-15	56	Round	S. curved	5.1	Medium	S. rough	Speckled
Improved Tendergreen	56	Round	S. curved	5.1	Medium	Smooth	Speckled
Xp-250	59	Round	S. curved	5.2	Dark	Smooth	
Xp-260	56	Round	S. curved	4.9	Medium	S. rough	
Tendergreen Long M. R.	56	Round	S. curved	5.5	Medium	S. rough	
B-3482	53	Round	S. curved	4.1	Dark	Smooth	
B-3490	56	Round	S. curved	4.5	Dark	S. rough	
B-3494	56	Round	S. curved	4.5	Dark	S. rough	
B-3496	56	Round	S. curved	4.5	Medium	S. rough	
B-3509	53	Round	S. curved	4.9	Medium	S. rough	
FM-187-C	59	Heart	S. curved	5.2	Medium	S. rough	
Tenderbest	59	Heart	S. curved	5.1	Light	S. rough	
Processor	56	Heart	S. curved	5.6	Medium	S. rough	

* S. = Slightly; V. = Very

Table 6 - Yields, pod length, pod shape, pod color, and pod smoothness for pole bean varieties

Variety	Source	Bu/a 1959	Bu/a 1960	Av pod length	Pod shape	Pod color	Pod smoothness**
Blue Lake No. 231	4	264	336	5.4	R	Dark	S
Kentucky Wonder	4	282	341	7.3	F	Medium	SR
Wh. Kentucky Wonder No. 191	2	190	316	7.1	F	Medium	SR
Florida No. 204	10	270	190	6.1	F	Medium	SR
Florida No. 209	10	292	--	6.4	F	Medium	SR
Blue Lake Stringless	2	--	235	5.5	R	Dark	S
McCaslan No. 42	2	--	322	7.6	F	Medium	SR
Morse's No. 191	3	--	234	8.4	F	Medium	SR
Stringless Blue Lake V. P.	3	--	193	5.7	R	Dark	S
Stringless Blue Lake No. 228	9	--	305	5.7	R	Dark	S

* R = Round; F = Flat

** S = Smooth; SR = Slightly Rough

Table 7 - Yield of fruit, weight per fruit, and rating for earliness and fruit appearance of tomato varieties and breeding lines

Variety	Source	Yield (lb/A) 1959	1960	1961	Weight (lb/fruit)	Earliness**	General** fruit appearance
Rutgers	15	19,516R	18,394R	23,038R	0.352	3	3
Homestead-24	15	26,758R	23,222R	19,638R	0.333	3	2
Homestead-B & L	15	14,144			0.326	4	3
Homestead FM-61	15		18,904		0.313	3	2
STEP* -259	15	21,998R			0.288	3	2
STEP-260	15	31,348R			0.335	3	2
STEP-278	15	27,302R			0.319	3	2
STEP-280 (Marion)	15	19,652R	26,690R	28,560R	0.372	4	4
STEP-281	15	20,876R	21,352R		0.352	3	2
STEP-284	15	10,445	22,413		0.358	4	2
STEP-287	15	16,184	18,170		0.217	3	2
STEP-300	15	15,259			0.318	3	2
STEP-302	15	26,248			0.231	4	2
STEP-305	15	28,900R	25,160R		0.270	3	4
STEP-307 (F_1)	15	20,917			0.219	4	2
STEP-310 (F_1)	15	15,776			0.246	4	2
STEP-311	15	23,426R	19,006R		0.347	3	3
STEP-314 (Manapal)	15	28,900R	23,188R	27,200R	0.350	3	4
STEP-319	15	12,131			0.236	3	2
STEP-320	15	14,906			0.203	4	2
STEP-321	15	9,765			0.201	4	2
STEP-322	15	9,520	16,864	26,078R	0.341	3	3
STEP-323	15	13,954			0.302	3	2
STEP-324	15	14,906	19,448		0.261	4	3
STEP-325	15	17,408			0.209	4	2
STEP-326	15	25,650	28,614		0.259	4	4
STEP-327	15	15,395	13,410		0.243	4	2
STEP-328	15	28,941			0.338	4	2
STEP-329	15	19,258	23,222R	22,957R	0.321	4	2
STEP-330	15	18,387	26,574		0.264	4	3

(continued)

Table 7 - (Continued)

Variety	Source	Yield (lb/A) 1959	1960	1961	Weight (lb/fruit)	Earliness**	General** fruit appearance
STEP-331	15	10,744			0.246	4	2
STEP-332	15	14,525			0.134	3	1
STEP-333	15	13,029			0.186	5	1
STEP-334	15	17,707			0.207	4	1
STEP-335	15	18,387			0.260	4	2
STEP-336	15	15,776			0.134	3	1
STEP-337(F_1)	15	16,159			0.128	5	2
STEP-338(F_1)	15	21,787			0.207	4	2
STEP-339(F_1)	15	23,936			0.268	4	2
STEP-340(F_1)	15	14,498			0.305	4	2
STEP-341(F_1)	15	17,571	29,274R	17,218R	0.316	3	4
STEP-342	15	12,131			0.315	2	2
STEP-343(F_1)	15	16,347		33,402	0.302	4	3
STEP-344	15	8,432	16,157		0.302	3	3
STEP-345	15	21,053	22,304		0.360	3	3
STEP-346	15	20,264	26,724R	28,696R	0.297	3	4
STEP-347	15		23,304	30,056	0.359	4	3
STEP-348	15		20,019	29,267R	0.397	3	3
STEP-349	15		25,976		0.309	3	2
STEP-350	15		37,699	34,109	0.378	4	3
STEP-351(F_1)	15		37,074	49,776	0.396	4	4
STEP-352	15		32,994	41,922R	0.401	3	3
STEP-353	15		27,200		0.307	4	2
STEP-354	15		29,322		0.285	4	2
STEP-355	15		23,120		0.294	4	2
STEP-356	15		27,336	48,906	0.378	3	2
STEP-357	15		17,027		0.287	3	1
STEP-358	15		22,467		0.292	2	2

(continued)

Table 7 - (Continued)

Variety	Source	Yield (lb/A) 1959	1960	1961	Weight (lb/fruit)	Earliness**	General** fruit appearance
STEP-359	15		25,731		0.321	3	3
STEP-360	15		25,024	41,099	0.420	4	3
STEP-361	15		24,752	36,720R	0.372	3	4
STEP-362	15		26,493	17,626	0.352	4	2
STEP-363	15		33,048		0.337	4	2
STEP-364	15		21,325		0.281	4	2
STEP-365	15		22,549		0.298	4	3
STEP-366	15		19,176		0.290	3	2
STEP-367	15		12,947		0.283	3	2
STEP-368	15		17,082		0.305	3	2
STEP-369	15		15,776		0.369	3	1
STEP-370	15			36,040	0.432	4	3
STEP-371	15			29,240	0.371	5	3
STEP-372	15			15,123	0.530	3	3
STEP-373	15			30,981	0.373	4	3
STEP-374	15			23,882	0.485	4	4
STEP-375	15			16,674	0.589	3	3
STEP-376	15			20,563	0.497	3	3
STEP-377	15			31,198	0.310	3	3
STEP-378	15			27,771	0.324	4	3
STEP-379	15			37,373	0.494	4	4
STEP-380	15			41,997	0.493	1	3
STEP-381(F_1)	15			31,389	0.377	5	3
STEP-382(F_1)	15			29,756	0.389	4	3
STEP-383(F_1)	15			29,838	0.453	4	3
STEP-384	15			27,907	0.464	3	3
STEP-385	15			33,918	0.405	4	4
STEP-386	15			16,130	0.353	4	4
STEP-387	15			18,469	0.441	3	3

(continued)

Table 7 - (Continued)

Variety	Source	Yield (lb/A) 1959	1960	1961	Weight (lb/fruit)	Earliness**	General** fruit appearance
STEP-388	15			10,472	0.326	4	4
STEP-389	15			23,283	0.364	3	3
STEP-390	15			36,611	0.466	4	4
STEP-391	15			14,933	0.422	3	3
STEP-392	15			23,256	0.400	4	3
STEP-393	15			18,088	0.380	3	4
STEP-394	15			15,812	0.370	3	3
U.S. -357	20		21,842	22,168R	0.340	4	3
Wonder Boy	16		7,806	40,936	0.361	4	2
Valiant	5		16,102	19,686R	0.372	4	3
Kolea	16		12,947		0.272	3	2
Loran Blood	3		18,442		0.317	2	2
Ace	17		16,810		0.368	2	2
C. P. C. #1	17		15,687		0.320	2	2
Pearson-XL	16		20,726		0.342	2	3
VF-36	17		19,502		0.338	2	2
Imp. T-2	17		19,421		0.374	2	2
Pearson A-1 Imp.	17		16,918		0.396	2	2
Anohu	16		20,754		0.240	2	2
Epoch	17		15,722		0.230	3	2
Campbell-146	5			29,376R	0.419	3	3
Delaware 14-2	19			29,342R	0.432	3	3
Marglobe	5			19,312R	0.336	3	4
Cardinal Hybrid (F.)	5			22,440R	0.405	3	3
Early Hycross (F_1)	18			29,614R	0.363	4	3
Moreton Hybrid (F_1)	5			22,678R	0.409	4	3
Early Giant (F_1)	16			26,982	0.428	4	2

(continued)

Table 7 - (Continued)

Variety	Source	Yield (lb/A) 1959	1960	1961	Weight (lb/fruit)	Earliness**	General** fruit appearance
Vancross	5			18,061	0.335	5	2
Glamour	5			24,181	0.395	3	4
Geneva-11	5			22,086	0.385	3	2
Carored	16			31,443	0.423	3	2
Early Delicious	16			26,547	0.312	5	2
Alpha-66	17			25,187	0.439	5	2
	LSD 5% =	3,842	5,338	9,452			
	1% =	5,100	7,106	11,356			

* STEP = Southern Tomato Exchange Program

** Earliness and general appearance were rated on a scale of 1-5: 1=late and poor respectively.

R In replicated trial

Table 8 - Yield of marketable* fruit and average wt/fruit for greenhouse-type tomatoes as a spring** crop for 1960 and 1961

Variety	Source	Av lb/plant 1960	Av lb/plant 1961	Av wt/fruit (lb)
Michigan-Ohio (F_1)	5	6.0	5.2	0.256
Michigan State Forcing	27	5.8	--	0.219
Spartan Hybrid (F_1)	18	5.0	--	0.209
Fortuna	26	4.8	--	0.108
Moneymaker	26	5.8	--	0.113
WR-7	27	4.8	--	0.272
WR-3	27	6.0	--	0.262
Valiant	5	--	4.1	0.319
Manalucie	10	--	4.2	0.415
Big Early(F_1)	11	--	4.4	0.350
Spartan Red-8	21	--	3.9	0.293
LSD		NS	NS	

* Marketable included small, well-shaped, non-cracked, and non-diseased fruit.

** Spring plantings consisted of transplants set in mid-February.

Table 9 - Yield, percent of tubers No. 1 grade, specific gravity, and position of stalk for potato varieties

Variety	Yield (cwt/A)	Percent US#1	Sp Gr (at harvest)	Stalk* position
La-1859	100	94	1.071	E
B-991-3	33	84	1.067	SE
B-2858-5	87	87	1.079	E
F-4713	105	91	1.070	SE
Plymouth	94	92	1.071	SE
Tawa	82	86	1.063	SE
Onaway	123	94	1.061	SE
Redburt	145	94	1.063	E
Manota	100	86	1.067	S
Red Warba	138	86	1.062	SE
Kasota	102	78	1.066	SE
I. Cobbler	137	88	1.069	S
Kennebec	126	95	1.071	E
Katahdin	91	93	1.067	SE
Pontiac	102	94	1.061	E
B-3604-1	45	51	1.050	E
B-3696-13	140	89	1.070	E
B-73-3	60	86	1.076	E
B-2187-25	91	93	1.063	E
Rushmore	103	96	1.061	SE
Red Beauty	60	77	1.068	E
B-3309-8	121	87	1.056	SE
10-84-1	81	92	1.063	S
B-2368-13	118	87	1.065	SE
B-3453-2	110	82	1.075	SE
B-4212-1	56	75	1.056	SE
51-1-53-12	95	83	1.058	E
Redbake	53	76	1.068	E
X-1276-185	110	86	1.060	S
LSD 5% =	27			
1% =	35			

* Stalk position: E = Erect; SE = Semi-erect; S = Spreading.

Note: Source of seed was U. S. D. A. cooperative variety testing program.

Table 10 - Yield of fresh market and processing cucumber varieties in 1959

Fresh market varieties	Source	Bu/A
Marketer	4	146
Palomar	4	123
Ashley	4	113
MR-200	4	109
Niagara	4	109
Santee	4	106
LSD		NS
Processing Varieties	Source	Bu/A
MR-17	4	120
SMR-15	4	115
SMR-12	4	100
Yorkstate	4	69
LSD - 5% =		30
1% =		46

Table 11 - Yield, percentage of pickles/grade and brined data, on pickle cucumber varieties in 1960

Variety	Source	Yield (bu/A)	Percent/grade* No. 1	No. 2	No. 3	No. 4	No. 5	Culls
MSU-238	21	337	15.3	24.9	13.1	34.6	6.1	6.0
MSU-270	21	440	8.6	24.7	19.1	34.9	5.7	6.9
MSU-713-5	21	414	13.1	25.8	21.3	29.6	4.7	5.5
MSU-715-5 X MSU-238	21	410	13.2	27.0	16.9	34.6	4.3	4.0
MSU-713-5 X MSU-270	21	518	11.7	29.0	18.2	32.1	5.1	3.9
SMR-18	2	447	10.8	24.8	16.1	34.2	6.5	7.5
SMR-15	2	377	10.4	23.7	13.7	38.9	4.3	9.0
SMR-58	2	383	10.6	24.1	15.5	38.9	5.3	5.6
MR-17	4	450	8.8	27.3	14.9	34.1	8.1	6.8
L. S. D. 5% =		69						
1% =		99						

* Grades: 1 = up to 1 1/4; 2 = 1 1/4 - 1 5/16; 3 = 1 5/16 - 1 1/2; 4 = 1 1/2 - 2; 5 = 2 and up.

Culls = matured and diseased.

Table 12 - 1960 data on pickle cucumbers in brine

Variety	Percent bleached	Percent bloaters	Pressure test reading (lb)
MSU-238	43.9	1.2	14.2
MSU-270	24.9	2.5	14.3
MSU-713-5	22.7	0.8	14.4
MSU-713-5 X MSU-238	29.4	2.2	13.1
MSU-713-5 X MSU-270	29.9	0.0	13.7
SMR-18	26.6	2.5	14.9
SMR-15	22.1	1.9	13.5
SMR-58	49.2	1.1	14.4
MR-17	26.5	5.5	14.6
L. S. D.	NS	NS	NS

Table 13 - Yield and plant and fruit characteristics for pickle cucumber varieties in 1961

Variety	Source	Percent of yields/ grade				Total yields	Season			Color			Shape		Vine Vigor		
		1	2	3	4	(bu/A)	Early	Med	Late	Dark	Med	Light	Good	Fair	Ex.	Good	Fair
Spartan-27	21	21	40	18	19	153		X			X			X		X	
Model	4	28	34	22	14	202		X		X				X		X	
SMR-58	2	28	40	17	13	155		X			X		X			X	
MSU-713-5 X MSU-227	21	32	36	18	17	223		X			X			X		X	
MSU-227	21	28	33	20	16	154		X			X			X	X		
MSU-7 X MSU-227	21	26	39	15	18	192		X			X		X			X	
MSU-7 X Spartan-27	21	22	34	17	24	237		X			X		X			X	
Ark. 3	23	21	41	20	16	223		X		X			X			X	
Ark-1 (Southern Pickle)	23	24	36	21	18	176		X			X			X		X	
National	2	22	33	19	22	224		X				X		X	X		
SC8-M	22	21	41	22	15	193		X		X			X		X		
MSU-713-5 X MSU-272	21	25	37	22	15	196	X				X			X		X	
SC8B-3	22	29	34	19	17	200			X	X				X	X		
WR-17	4	25	37	18	19	235		X			X		X		X		
SMR-18	2	22	34	21	22	163		X			X		X			X	
SMR-15	2	20	39	21	18	181		X				X		X		X	
L. S. D.						NS											
Observation Pickle Cucumbers																	
SC85-3	22	19	35	24	21	48			X		X			X		X	
MSU 713-5 X Ark-1	23	9	60	11	20	27		X			X			X		X	
SC8J-6	22	24	36	19	20	102			X	X				X	X		
SC8F-1	22	19	41	21	18	137			X	X				X	X		
Chicago Pickling	4	36	30	17	17	97			X		X			X	X		
Boston Pickling	2	18	37	23	19	128		X				X		X		X	

Table 14 - 1961 data on pickle cucumbers in brine

Variety	Percent uncured	Percent bleached	Percent bloaters	Percent internal yellowing	Average pressure reading
Spartan 27	4.4	13.2	0.0	0.0	18.3
Model	37.9	6.9	0.0	6.8	19.0
SMR-58	15.1	7.5	0.0	3.8	18.2
MSU-713-5 X MSU-227	10.0	12.5	0.0	0.0	17.4
MSU-227	2.7	10.7	0.0	0.0	17.7
MSU-7 X MSU-227	9.2	13.8	0.0	0.0	17.9
MSU-7 X Spartan-27	24.3	13.5	1.4	0.0	16.9
Ark-3	15.1	11.8	0.0	0.0	18.2
Ark-1	23.8	16.3	3.8	0.0	18.4
National	8.7	10.9	0.0	0.0	18.4
SC8-M (Pixie)	29.8	8.5	1.1	6.2	19.4
MSU 713-5 X MSU-272	13.3	10.8	0.0	0.0	17.5
SC8 B-3	45.0	11.0	0.0	0.9	19.8
MR-17	14.8	13.6	0.0	0.0	20.3
SMR-18	20.4	7.4	0.0	0.0	19.3
SMR-15	28.9	6.6	0.0	1.3	17.9
				L. S. D. =	1.2 1.4

DISCUSSION

The interpretation of data presented here should not be based on one-year's results but, instead, one should average the performances of a variety over a period of years. The performance of a variety cannot be predicted prior to planting for any one year because climatic conditions vary for areas within the state from year to year. Rainfall, soil types, and temperatures largely determine the performance of a variety. Therefore, since these climatic conditions vary greatly, the grower should not plant all of one vegetable crop in a newly recommended variety before first trying the variety on a small scale and comparing the new variety with the present variety in his locality for at least one year. Since Kentucky covers an area of 40,395 square miles and the testing of varieties is time-consuming, it is practically impossible to test in various sections of the state in order to evaluate the varieties' adaptation to the various localities.

Rainfall recorded at Lexington from May 1 to August 31 was 12.7 inches in 1959, 21.8 inches in 1960, and 19.9 inches in 1961. The mean temperatures for the same period of time was 74.1°F in 1959, 71.1°F in 1960, and 69.8°F in 1961.

Rainfall may be used as a basis for explaining fluctuations in yields for sweet corn varieties replicated for the three years. Sweet corn varieties yielded alike in 1960 and 1961 (Table 2) when rainfall was sufficient. However, snap bean varietial yields were significantly different in 1960 and 1961 (Table 4). Excessive rainfall may have influenced snap bean variety response. Yields for Corneli No. 14, Processor, Slenderwhite, and Tenderlong-15 snap beans were low in 1961 because of low populations from poor germination.

Generally, yields of most tomato varieties were greater in 1960 and 1961 than in 1959 because of the increased amount of rainfall in the latter two years.

High pickle yields in 1960 compared with 1961 were attributed to improper picking by the picking crew in 1961. Although three pickings were made each week, the crew overlooked small pickles, resulting in an increased weight of No. 4 size pickles.

CONCLUSIONS AND RECOMMENDATIONS FOR KENTUCKY

1. Northern Belle was the highest yellow early yielding sweetcorn variety in 1961. Barbecue did not yield so well as Northern Belle but had ear characteristics equal to those of Northern Belle.

2. Golden Security is a consistently high-yielding mid-season yellow sweetcorn variety with fine ear characteristics. Many other yellow varieties were either equal to or superior to Golden Security in ear appearances and ear worm resistance. These other outstanding yellow varieties which have been tried at least two years are: KVF58-10; 27802; Staygold; Florigold; Gold Cap; Cr 955-23; and Jubilee. Many varieties performed as well as Golden Security in 1961 but will not be recommended until further tested.

3. Wade is still an outstanding snap bean variety in yielding ability, appearance and percentage of yields harvested the first picking. Wade is well adapted to commercial and home garden uses.

4. Kentucky Wonder pole bean is a favorite for Kentucky and is well suited to growing conditions in the state.

5. Manapal and Marion tomatoes are new and have performed well in Kentucky for mid-season to late production. Many of the STEP breeding lines have performed well but cannot be recommended until the lines have been proven and released by the breeder. Early Hycross and U. S. -357 have yielded well and are about a week earlier than Rutgers. Michigan-Ohio is recommended for greenhouse production and is red fruited.

6. Irish cobbler and Kennebec potatoes are recommended for Kentucky. Redburt and Red Warba are red-skinned varieties and yielded well in the 1960 trial.

7. MR-17 is an outstanding pickle cucumber with good processing characteristics. Breeding line SC8-M has recently been named and released as Pixie and is darker green than MR-17.

1.5M-7-62