



SUMMARY
of
VEGETABLE VARIETY TRIALS
FAIRBANKS, ALASKA
1979

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SUMMARY OF VEGETABLE VARIETY TRIALS FAIRBANKS, ALASKA, 1979

Introduction

This report summarizes the vegetable variety evaluations of the Horticulture Department of the University of Alaska, Fairbanks, 1979. Variety trials were conducted at the Agricultural Experiment Station's research farm.

The objective of this research is to select varieties of vegetables that are adapted to this environment. It also identifies types whose adaptability may be improved through development of cultural techniques. The selection effort is directed at finding varieties useful to commercial and home garden growers.

Varieties are chosen for inclusion in the variety tests on the basis of their description, their latitude of origin, and the record of the plant-breeding program for producing kinds that have previously been found adapted. Standard recommended varieties are included for comparison.

In the past, the vegetable variety evaluation program has been responsible for a continuous improvement in yields, quality, and dependability for many vegetable crops. Our philosophy is to depend upon the many existing plant-breeding programs instead of investing in an expensive, on-site, plant-breeding program. Progress can be made more rapidly by selection than by breeding.

Growing-Season Summary

The 1979 growing season was similar to the 1978 growing season. These two seasons were quite different from the nine previous seasons. Snow left the ground early and we were able to start planting early, although soil temperatures and growing conditions were not better than normal. Air temperatures for May and June were lower than normal and better during July and August. The months of May and June were very cloudy.

July was a good month for crop growth and as a result, most cool season crops matured near their usual time. The near normal to above normal temperatures during July and August caused good growth of warm-season crops.

Rainfall was again low for the growing season and as a result soil moisture deficiencies were apparent throughout the growing season (Table 1). The soil moisture level was also exceptionally low due to previous dry seasons and growth was less for horticultural crops without irrigation. The lower yields of broccoli and other crucifer crops are indicative of this low soil moisture due to our limited irrigation potential.

Table 1. Rainfall by Month
During the 1979 Growing Season

Month	Inches
May	.35
June	.81
July	2.36
August	1.45
September	.21
Total	5.18

The soil temperatures of the various plots appeared to be near normal for most of the growing season. As usual, crop growth was greatly improved where soil temperature was improved through the use of clear polyethylene mulches or other methods.

The rate of fertilization was increased over that of previous years for most crops. This rate of fertilization is nearer to that used by commercial growers. Since boron and molybdenum deficiency symptoms have been previously noted in certain crops, these nutrients were applied at the rates of 1.5 lb. boron/A and 1.2 lb. molybdenum/A prior to planting these crops.

The following tables show our results including yields, maturity dates, and other useful characteristics and observations.

Table 2. Broccoli Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Terminal \bar{x} wt (g)	Yield (lbs/100')		Comments
						Terminals	Laterals	
3605	Romanesco	T&M	15" x 3'	8-2	589	104	—	novelty, light green color, good flavor
3793	Clipper ^b	RS	"	7-27	425	75	19	
3792	Coaster ^b	RS	"	7-23	404	71	32	
1765	Green Umbrella	D	"	7-17	372	66	35	
3791	Corvet ^b	RS	"	7-27	356	63	39	
1856	Dandy No. 5	S	"	7-19	300	53	24	
1854	Green Dwarf	S	12" x 3'	7-17	298	66	26	
2199	Green Duke	NK	15" x 3'	7-17	294	52	67	
1792	Gem	As	"	7-17	294	52	59	
3322	Green Hornet	St	"	7-17	257	45	65	
1202	Green Comet	St	"	7-19	227	40	102	
3582	Packer	Pe	"	7-17	215	38	35	
3206	Blue Ocean	K	"	7-17	187	33	39	

^aSee seed sources list.

^bPlants 12 days old transplanted May 29.

NOTE: Greenhouse grown plants 25 days old transplanted into field May 25, except as noted. Fertilizer application: 1545 lb/A 10-20-20 plus 1.5 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 3. Cabbage Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Head \bar{x} wt (g)	Yield (lbs/100')	Average Core Length Rating ^b	Average Density Rating ^c	Comments
3581	Super Green	Pe	15" x 3'	9-11	2,924	516	3.0	5.0	
3490	Blue Boy	A&C	"	8-8	2,215	391	3.1	3.0	very good flavor, sweet
3489	A&C No. 5	A&C	"	8-16	2,205	389	3.3	4.4	
3491	Moneymaker	A&C	"	8-8	2,137	377	3.0	2.4	
3580	Shamrock	Pe	"	7-27	2,134	376	2.2	3.2	
2032	Hybrid 15	H	"	8-16	1,902	335	2.3	4.4	
3492	Supermarket	A&C	"	8-2	1,822	321	2.8	3.8	sweet flavor
3488	Savoy Prince	A&C	"	8-8	1,638	289	2.5	1.2	nicest savoy
3762	Earlibird	McF	"	7-27	1,546	273	3.5	2.6	good flavor
3568	Mini-Cole	T&M	"	8-2	1,496	264	2.0	3.8	
3241	Ruby Ball	Ge	"	8-2	1,472	260	2.5	5.0	red, good flavor
3214	Green Delight	K	"	7-27	1,373	242	3.1	3.9	strong flavor
2142	Savoy Ace	AAS	"	8-2	1,360	240	3.0	4.4	savoy
1570	Tastie	Hb	"	7-27	1,344	237	2.0	5.0	good flavor
1642	Earliana	'Bu	12" x 3'	7-27	1,088	192	3.1	4.0	good flavor
2037	Meteor	NK	15" x 3'	8-2	952	168	2.3	4.6	red
3294	U-Neck Savoy	Ag	"	8-2	943	166	3.4	2.8	
1818	Baby Early	S&G	"	8-2	902	159	2.3	5.0	red, thick ribs
3797	Vela	RS	"	7-27	885	156	2.7	4.0	
1735	Red Debut	V	"	8-1	853	150	2.1	5.0	red

^aSee seed sources list.

^bCore length is rated from 1 to 5, with 1 the shortest, most desirable and 5 being the longest.

^cDensity is rated from 1 to 5, with 1 the least dense and 5 the most dense and most desirable.

NOTE: Greenhouse grown plants 25 days old were transplanted into the field May 25, with the exception of Vela which was 17 days old and transplanted May 29. Fertilizer application: 1545 lb/A 10-20-20 plus 1.5 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 4. Carrot Variety Trials, Bottomland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	Harvest	Average Size Carrot (g)	Marketable Yield (lb/100')
3588	Early Cross	Al	1/2-1" x 2'	9-1	72	283
1761	Spartan Premium	C	"	"	70	282
3579	Danvers 126	Pe	"	"	71	268
1208	Spartan Bonus	St	"	"	70	262
3086	Xp. Crookham Hyb. W202	C	"	"	61	261
3087	Xp. Crookham Hyb. W279	C	"	"	69	249
1763	Spartan Classic	C	"	"	80	242
1881	Royal Chantenay	St	"	"	43	242
1209	Klondike Nantes	St	"	"	87	238
1323	Des Dan	D	"	"	80	238
3681	Nantes Scarlet X-large	Pe	"	"	59	237
3084	Spartan Winner	C	"	"	82	222
3089	Xp. Crookham Hyb. W197	C	"	"	62	218
1159	Tip Top	S&G	"	"	61	218
1693	Gold King	NK	"	"	64	210
3085	Xp. Crookham Hyb. W241	C	"	"	60	202
3088	Xp. Crookham Hyb. 284	C	"	"	56	202
1206	Special Long Nantes	St	"	"	107	190
1762	Spartan Delux	C	"	"	59	172
1205	Coreless Amsterdam	St	"	"	56	132
1716	Zino	T&M	"	"	50	120
1160	Caramba	S&G	"	"	43	55
3610	Hyb. Imperator	NK	"	"	72	52

^aSee seed sources list.

NOTE: Carrots were seeded May 22. Fertilizer application: 1545 lb/A 10-20-20.

Table 5. Cauliflower Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Head \bar{x} Wt (g)	Yield (lb/100')	Comments
3523	Dwarf Erfurt	WD	15" x 3'	7-24	1,022	180	
1899	Dominant	St	"	7-30	990	174	nice curd, impressive good quality
1108	Snow Crown	Bu	"	7-27	920	162	
3795	Nimba Meda ^b	RS	"	8-7	868	153	
3493	Starlight	A&C	"	8-2	792	140	nice curd
3794	Alpha Palomar ^b	RS	"	7-27	769	136	
3215	Winner Osena ^b	K	"	7-24	698	123	
3611	Early Snowball	NK	"	7-24	657	116	
3009	Grandessa	J	"	7-27	587	104	
1293	Super Snowball	HS	"	7-27	576	102	
3324	Extra Early Snowball	St	"	7-27	570	100	
3796	Dok Elgon	RS	"	8-9	555	98	
3521	Purple Giant	WD	"	7-19	553	98	novelty
3522	Le Cerf	WD	"	7-30	552	97	

^aSee seed sources list.

^bPlants 17 days old transplanted May 29.

NOTE: Greenhouse grown plants 25 days old transplanted into field May 25, except as noted. Fertilizer application: 1545 lb/A 10-20-20 plus 1.5 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 6. Cucumber Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Yield (g/plant)	Yield (lb/100')	Average Fruit Size (g)	Comments
3515	Saladin	AAS	2.5' x 5'	7-13	11,858	1,046	191	all purpose
3761	Charger	McF	"	7-17	11,440	1,009	172	slicer
3614	Early Surecrop	NK	"	7-17	11,290	996	323	slicer
3613	Burpless Hybrid	NK	"	7-17	11,245	992	371	slicer
3524	Factum	WD	"	7-23	10,773	950	355	European type
3495	A&C Hybrid	A&C	"	7-17	10,490	925	184	slicer
3330	Dublin	St	"	7-13	10,097	890	263	slicer
3367	Park's Whopper	P	"	7-13	9,618	848	289	slicer
3527	Hokus	WD	"	7-17	9,501	838	185	pickler
3612	Chicago Pickling	NK	"	7-17	8,685	766	187	pickler
3437	Pickleriffic	Go	"	7-17	7,483	660	187	pickler
3193	Peppi	Ba	"	7-17	6,235	550	229	pickler
3474	Northern Pickling	J	"	7-17	6,192	546	145	pickler
3526	Venloer Export	WD	"	7-23	5,692	502	192	pickler
1344	Femdan	As	"	7-23	5,675	500	334	European type
3589	Morden Early	Al	"	7-17	5,507	486	75	pickler
1886	Liberty	St	"	7-23	5,242	462	177	pickler
3615	Bush Crop	NK	"	7-17	4,473	394	240	slicer
3590	Green Knight	Al	"	8-1	4,088	360	361	slicer

^aSee seed sources list.

NOTE: Greenhouse grown plants 24 days old transplanted into the field May 31. Plants were grown in "tunnels" with plastic mulch, both made of 1.5 mil. clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 7. Green Pea Variety Trials, 1979.

A.E.S. Accession No.	Variety	Location	Source ^a	Block Size	First Harvest	Yield/plot Wt (g)	Yield (in shell) (see footnotes)	Comments
3452	Sparkle	Upland	RB	6' x 9'	7-31	16,030	65.4*	
3458	Fr. 70-091	"	RB	"	8-7	11,350	46.3*	
3451	Early Frosty	"	RB	"	7-31	10,855	44.3*	
3450	Perf. Fr. 400	"	RB	"	8-7	10,550	43.0*	
3599	Miragreen	"	FM	"	8-7	9,805	40.0*	
3453	Fr. 68-178	"	RB	"	8-3	9,580	39.1*	
3454	Freezonian	"	RB	"	7-31	9,475	38.6*	
3457	Sugar Snap	"	RB	"	8-7	9,260	37.8*	AAS selection, edible pods, can be used at any stage, excellent quality
3601	Morses No. 60	"	FM	"	8-14	8,060	32.9*	
3204	Beagle	"	K	"	7-31	7,025	28.7*	poor quality
3455	Knight	"	RB	"	8-14	6,950	28.3*	
3456	Fr. 72-244	"	RB	"	8-7	6,865	28.0*	
3502	Melting Sugar	"	FM	"	8-3	6,240	25.4*	edible pod
3767	Stratagem	"	McF	"	8-14	5,595	22.8*	
3600	Morses No. 9	"	FM	"	8-14	5,590	22.8*	
3466	Giant Stride	"	BS	"	8-14	4,450	18.1*	
3519	New Giant Dwarf Sugar	"	WD	"	8-14	3,970	16.2*	edible pod
3520	Norli	"	WD	"	—	—	—	edible pods, not harvested, very small
3040	Green Arrow	Bottomland	St	4' x 10'	8-10	12,240	67.5*	
3451	Early Frosty	"	RB	"	8-10	11,895	65.6*	
3452	Sparkle	"	RB	"	8-10	11,245	62.0*	
3457	Sugar Snap	"	RB	1' x 20'	8-10	11,685	129**	
3454	Freezonian	"	RB	"	8-10	9,170	101**	

^aSee seed sources list.

NOTE: Peas were seeded in upland plot May 29 and in bottomland plot May 26. Fertilizer application: 1545 lb/A 10-20-20.

*Yields in lbs. per 100 sq. ft. (bulk planting).

**Yields in lbs. per 100' (row).

Table 8. Lettuce Variety Trials, Bottomland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Head \bar{x} wt (g)	Yield (lbs/100')	Average Core Length Rating ^b	Average Density Rating ^c	Comments
HEAD LETTUCE									
1944	Calmaria	H	1' x 2'	8-7	826	182	1.0	3.1	watery
3210	Gustoverde	K	"	8-7	745	164	1.1	2.6	slightly bitter
1333	Pennlake	D	"	8-7	628	138	1.1	2.6	
2025	Fairton	H	"	8-16	613	135	1.0	3.7	bitter
3328	Minilake	St	"	7-31	564	124	1.0	3.3	good lettuce
3783	Green Lake	Ka	"	8-7	556	123	1.0	3.6	
2022	Ithaca	H	"	8-7	540	119	1.1	2.6	good lettuce
3700	GL 188	D	"	8-7	525	116	1.0	2.8	
3209	Picoverde	K	"	8-7	430	95	1.0	2.3	
3782	Montello	Ka	"	7-31	423	93	1.0	3.2	good flavor
2023	Minetto	H	"	7-31	407	90	1.2	3.1	slightly bitter
3574	Summer Long	T&H	"	8-7	200	45	—	—	
3211	GL R200-95	K	"	—	—	—	—	—	bolted
3212	Bellaverde	K	"	—	—	—	—	—	bolted
1330	GL Dessert Gem	D	"	—	—	—	—	—	bolted
BUTTER LETTUCE									
3471	Kagran Summer	J	8" x 2'	7-31	351	116			flavor very good when young
3697	Kagraner Summer	D	"	8-7	303	100			
3698	Wayahead	D	"	7-31	268	89			
3693	Mignonette	D	"	8-7	220	73			
3696	Tom Thumb	D	"	8-7	156	52			
3694	May Queen	D	"	—	—	—			bad bolter
3699	Batavian Blond a' Bord Rouge	D	"	—	—	—			red-tipped
LEAF LETTUCE									
3618	Ruby	NK	8" x 2'	7-31	175	58			
COS LETTUCE									
3573	Crisp Mint	T&M	8" x 2'	7-31	626	207			nice flavor, slightly buttery
3689	Dark Green Cos	D	"	—	—	—			tipburn
3470	Cosmo	J	"	—	—	—			bad tipburn

^aSee seed sources list.^bCore length is rated from 1 to 5, with 1 the shortest, most desirable, and 5 being the longest.^cDensity is rated from 1 to 5, with 1 the least dense and 5 the most dense and most desirable.

NOTE: Lettuce was seeded May 22. Fertilizer application: 1545 lb/A 10-20-20.

Table 9. Pepper Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Yield (g/plant)	Yield (lb/100')	Comments
1825	Candice	S&G	18" x 18" ^b	8-3	922	271	nice, blocky
1564	Ace	G	"	7-31	761	223	
1875	Superset No. 19	Sa	"	8-24	698	205	
3438	Early Prolific	Go	"	8-3	696	204	nice, turns red early
3373	Park's Whopper	P	"	8-3	665	195	
3295	Italian Sweet	Ag	"	8-3	641	188	
2065	Bell Boy	NK	"	8-21	625	184	
3501	Allbig	FM	"	8-24	595	175	
3500	Miss Belle	FM	"	8-21	507	149	
3339	Burpee's Early Pimento	Bu	"	9-4	481	141	
1986	Fordhook Sweet	Bu	"	8-24	452	133	
2146	Dutch Treat	AAS	"	7-11	445	131	pointed, yellow
3190	Yellow Belle	Ba	"	8-15	218	64	
3338	Burpee's Sunnybrook	Bu	"	8-24	93	27	

^aSee seed sources list.

^bStaggered spacing in 3' wide plastic.

NOTE: Greenhouse grown plants 59 days old were transplanted into ground May 31. Plants were grown through 1.5 mil clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 10. Potato Variety Trials, Bottomland, 1979

Variety	Soil	Spacing (plant x row)	Harvested	US No. 1 Yield (T/A)	US No. 1 Yield (lb/100')	Comments
Green Mountain	Peat	1' x 3.3'	9-10	19.8	295	
Green Mountain	Silt	"	9-10	14.0	209	
Rote Erstling	Peat	"	9-10	31.8	475	
Rote Erstling	Silt	"	9-10	7.8	116	
Kennebec	Peat	"	9-10	19.6	293	hollow heart reduced yield by 90 lb/100'
Kennebec	Silt	"	9-10	12.6	188	
Swedish	Peat	"	9-10	7.8	116	
Swedish	Silt	"	9-10	5.1	76	
Bake King	Peat	"	9-10	11.8	176	
Bake King	Silt	"	9-10	8.1	121	
Emmet	Peat	"	9-10	16.8	250	
Emmet	Silt	"	9-10	13.9	208	

NOTE: Potatoes were planted May 22. Fertilizer application: 1545 lb/A 10-20-20 for both soils. The peat soil had approximately 1,000 yd³/A peat applied to the plots and thoroughly rototilled into the existing soil. The pH of the peat-amended soil was 5.4 while the unamended soil was 6.7. Severe potassium deficiency was noted for plants grown on silt.

Table 11. Pumpkin Variety Trials, Upland, 1979.

A.E.S. Accession No.	Variety	Source ^a	Spacing	First Harvest	Average Size (kg)	Yield (kg/plant)	Yield (lb/100')	Comments
3448	Connecticut Field	Ho	6'	9-4	9.62	41.7	1,532	good quality
3482	Spirit	A&C	"	"	4.89	29.3	1,077	
3483	Sir Jack	A&C	"	"	4.26	24.1	886	
3296	Little Boo	Ag	"	"	3.58	22.7	834	white, good meat
3344	Triple Treat	Bu	"	"	3.09	21.6	794	
3476	Cheyenne Bush	F	4'	"	9.71	19.4	1,069	not typical of variety
3625	Early Sugar	NK	6'	"	1.72	18.3	672	

^aSee seed sources list.

NOTE: Greenhouse grown plants 31 days old were transplanted into ground June 7. Plants were grown through 1.5 mil clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 12. Snapbean Variety Trials, 1979.

A.E.S. Accession No.	Variety	Location	Source ^a	First Harvest	Yield (lb/100')
3461	Oregon 1604	Upland	RB	8-13	147
3801	Oregon 1604	"	OSU	8-14	109
3462	Rogers 76-102	"	RB	8-13	108
3460	Wondergreen	"	RB	8-13	99
3459	Greenpak	"	RB	8-13	92
1918	Contender	"	St	8-13	91
9745	Provider	"	H	8-13	91
3603	Rainier	"	FM	8-14	84
1969	Checkmate	"	A	8-13	82
1356	Harvester	"	A	8-14	81
3650	Spartan Arrow	"	NK	8-13	78
1972	BBL 47	"	A	8-14	73
3648	White Half Runner	"	NK	8-13	68
1971	Eagle	"	A	8-14	64
3602	Avalanche	"	FM	8-14	62
1976	Roma	"	Bu	8-13	60
3314	Honey Gold	"	St	8-13	58
1363	Stretch	"	A	8-14	57
3649	Sungold	"	NK	8-13	54
1360	XPB-74	"	A	8-17	48
1357	BBL-290	"	A	8-17	30
9745	Provider	Bottomland	H	8-14	43
1918	Contender	"	St	8-14	40
3314	Honey Gold	"	St	8-14	34
3801	Oregon 1604	"	OSU	8-14	20

^aSee seed sources list.

NOTE: Upland varieties were seeded May 29 in single rows 20' long. Lowland varieties were seeded May 26 in blocks of various lengths, with only the inside rows harvested for yield data. Fertilizer application: 1545 lb/A 10-20-20.

Table 13. Squash, Summer Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing	First Harvest	Yield (g/plant)	Yield (lb/100')	Comments
3506	Hyzini	FM	3'	7-23	23,650	1,738	high quality
3507	Greenzini	FM	"	7-27	17,138	1,259	high quality
3511	Gold Rush	AAS	"	7-18	16,309	1,199	high quality, pleasing appearance
3371	Park's Green Whopper	P	"	7-23	15,612	1,147	
3494	A&C Improved	A&C	"	7-27	15,495	1,139	
3504	Summer Sun ^b	FM	"	7-23	15,090	1,109	
1439	President	Ho	"	7-23	13,892	1,021	
3508	Zucco	FM	"	7-27	13,662	1,004	
2078	Black Eagle	NK	"	7-27	12,490	918	
3435	Gourmet Globe	Go	"	7-27	11,742	863	round, novelty
2004	Sundance	Ho	"	7-30	10,480	770	
3567	Blondy	T&M	"	7-23	9,460	695	
3632	Golden Eagle ^b	NK	"	7-27	8,368	615	
3505	Gold Strike	FM	"	7-27	6,555	482	

^aSee seed sources list.

^bSome plants were not true to type and their fruits were not counted in the yield, reducing yields.

NOTE: Greenhouse grown plants 27 days old were transplanted into ground June 7. Plants were grown through 1.5 mil clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 14. Squash, Winter Variety Trials, Upland, 1979.

A.E.S. Accession No.	Variety	Source ^a	Spacing	First Harvest	Average Size (kg)	Yield (kg/plant)	Yield (lb/100')
3443	Pink Banana	Ho	6'	9-4	6.93	25.4	933
3325	Golden Hubbard	St	"	"	3.96	18.5	680
3445	Baby Green Hubbard	Ho	"	"	4.35	17.3	636
3678	Moregold	O	"	"	2.53	16.9	621
1678	Boston Marrow	H	"	"	9.48	15.8	580
3478	Bush Buttercup	V	4'	"	2.57	12.9	711
793	Hybrid R	F	6'	"	2.30	11.5	422
3512	Sweet Mamma	AAS	"	"	2.48	10.7	393
3535	New Buttercup	SS	"	"	2.36	9.5	349
3444	Baby Blue	Ho	"	"	1.83	7.3	268

^aSee seed sources list.

NOTE: Greenhouse grown plants 31 days old were transplanted into ground June 7. Plants were grown through 1.5 clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 15. Sweet Corn Variety Trials, Upland, 1979.

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Yield (lb/100')	Comments
3114	Cr 7801	C	1' x 4'	8-24	283 (355 ears)	excellent quality
3765	J-6 Cross	McF	"	8-21	280 (430 ears)	
3226	CM 71276	MR	"	8-21	272 (387 ears)	excellent quality
3431	Earligem	St	"	8-24	244 (355 ears)	
3227	CM 71112	MR	"	8-16	222 (337 ears)	excellent quality
3479	Morning Star	V	"	8-21	220 (330 ears)	excellent quality
3411	Golden Earlipak	RB	"	8-20	213 (262 ears)	
3409	75-1637	RB	"	8-21	211 (290 ears)	excellent quality
3654	Earliking	NK	"	8-24	209 (282 ears)	
3465	Early Sunglow	BS	"	8-24	195 (295 ears)	
3408	Beacon	RB	"	8-24	193 (278 ears)	excellent quality
3334	Earlivee	St	"	8-13	193 (325 ears)	good early corn
3764	New Dorinny	McF	"	8-21	191 (182 ears)	
3336	Northern Vee	St	"	8-13	190 (355 ears)	
3333	Garden Treat	St	"	8-21	188 (352 ears)	
3335	Golden Miniature	St	"	8-16	168 (347 ears)	
3225	Alta Gold	MR	"	8-21	145 (282 ears)	
3113	Starbrite	C	"	8-28	130 (160 ears)	
3077	Amazing Early Alberta	Al	"	8-13	43 (65 ears)	flint corn, matured

^aSee seed sources list.

NOTE: Sweetcorn was seeded May 10 and covered with 1.5 mil clear polyethylene. After the plants were approximately 4" tall, slits were made to allow them to emerge from the plastic. Fertilizer application: 1530 lb/A 10-20-20.

Table 16. Tomato Variety Trials, Upland, 1979

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Yield (g/plant)	Yield (lb/100')	Average Fruit Size (g)	Comments
3770	T 5-4-3	OSU	2.5' x 5'	8-3	1,963	173	17	pink fruit, poor flavor
3769	Severianin	OSU	"	8-24	1,207	106	120	
3773	T 11-2	OSU	"	8-20	783	69	18	
3576	Outdoor Girl	T&M	"	7-31	403	36	33	
3772	Oregon Cherry	OSU	"	8-24	237	21	14	
1810	Sleaford Abundance	Sh	"	8-15	228	20	28	
3583	Springset	J&P	"	8-24	180	16	86	
3577	Super Marmande	T&M	"	8-15	173	15	40	
3187	Sweet-n-Early	Ba	"	8-24	155	14	42	
3183	Toy Boy	Pe	"	8-15	154	14	18	
1811	Hardicross	Sh	"	8-28	70	6	42	
3188	Early Girl	Ba	"	8-28	55	5	56	
3473	Nova	J	"	8-3	48	4	33	paste tomato
3239	Early Salad	Ge	"	8-28	47	4	16	flavor good, skin tends to be tough
3189	Early Cascade	Ba	"	8-28	40	34	41	
3221	Manitoba	Pi	"	8-28	25	2	68	
3414	Jolly Spring Giant ^b	Hb	"	—	—	—	94	ripened satisfactorily
3771	Willamette ^b	OSU	"	—	—	—	100	good flavor
3748	Delicious Extra Large ^b	Mo	"	—	—	—	117	ribbed fruit, many cat-faced
3498	Big Johnny ^b	A&C	"	—	—	—	94	good flavor
3584	Super Star ^b	J&P	"	—	—	—	102	fair flavor
3575	Super Roma ^b	T&M	"	—	—	—	39	paste tomato
2151	Floramerica ^b	AAS	"	—	—	—	114	flavor excellent, fruits ripen well indoors
3240	Fireball	Ge	"	—	—	—	—	did not produce mature fruit

^aSee seed sources list.

^bDid not ripen fruit in the field. Mature green fruit were harvested and ripened under controlled conditions.

NOTE: Greenhouse grown plants 53 days old transplanted into field May 31. Plants were grown in "tunnels" with plastic mulch, both made of 1.5 mil clear polyethylene. Fertilizer application: 1545 lb/A 10-20-20.

Table 17. Tomato Variety Trials Without Plastic Mulch, Upland, 1979.

A.E.S. Accession No.	Variety	Source ^a	Spacing (plant x row)	First Harvest	Yield (g/plant)	Yield (lb/100')	Average Fruit Size (g)
3463	Sub Arctic 25	JH	2' x 3'	8-6	1,055	116	37
1184	Sub Arctic Plenty	L	"	8-10	463	51	26
3475	Tanana	FM	"	8-20	392	43	44

^aSee seed sources list.

NOTE: Greenhouse grown plants 49 days old were transplanted into the field June 8. Fertilizer application: 1300 lb/A 10-20-20.

Miscellaneous Vegetables Tested

Crop	Source	Comment	
Beets			
No. 3345	Cylindra	Bu	Excellent quality, non-bolting
No. 1739	Formanova	V	Excellent quality, non-bolting
No. 1981	Burpees Golden	Bu	Novelty, non-bolting
No. 3606	Ruby Queen	N-K	Non-bolting
No. 1908	Little Egypt	St	Non-bolting
No. 853	Boltardy	S&G	Non-bolting
Brussels Sprouts			
No. 3205*	Green Gem	K	Average yield 919 g/plant, nice flavor
No. 2035	Jade Cross	N-K	Average yield 767 g/plant
No. 3218	Improved Half Dwarf	Pi	Very small plants, thus low yield
No. 3570	British Allrounder	T&M	No usable sprouts formed
Celery			
No. 1895	Utah 52-70	St	Standard variety, good quality
No. 3503	Transgreen	FM	Slightly larger, quality good
Chinese Cabbage			
No. 1770	Wong Bok	D	Slow to bolt, good
Eggplant			
No. 3486	Black Mark	A&C	Highest production, fruit averaged 100g
No. 3487	Dusky	A&C	Ripened only a few fruits, average size 250 g
No. 1561	Moneymaker	G	Ripened only a few fruits
No. 3677	Ichiban	O	No fruits ripened
No. 3571	Aubergine Oriental	T&M	No fruits ripened
No. 3682	Early Black Egg	J	No fruits ripened
No. 3191	Satin Beauty	Ba	No fruits ripened
Green Onion			
No. 1778	He-Shi-Ko	D	Can be seeded, or transplanted for earlier harvest

*Numbers preceding varieties are AES accession numbers.

Miscellaneous Vegetables Tested—Continued

Crop		Source	Comment
Herbs			
No. 3297	Tuве dill	Ag	Satisfactory
—	Bouquet dill	P	Compact plants
No. 2055	Summer Savory	NK	Satisfactory
No. 2057	Thyme	NK	Satisfactory
No. 2054	Sage	NK	Satisfactory
No. 2050	Basil	NK	Marginal
No. 3480	Decorator parsley	A&C	Best
—	Plain Leaf parsley	J	Tends to bolt late in season
No. 3622	Dark Green Moss parsley	NK	Good
No. 2051	Caraway	NK	Did not mature seed heads
No. 3788	Rosemary	P	Very nice
No. 2056	Sweet Marjoram	NK	Satisfactory
No. 536	Oregano	NK	Low leaf production, high flower production, marginal
—	Mentha crispa (curled mint)	P	Spreading habit, nice flower
Kale			
No. 1428	Dwarf Blue	NK	Excellent
Kohlrabi			
No. 2145	Grand Duke	AAS	Early, good quality
No. 1983	Prima	Bu	Good quality
No. 1980	Early Purple Vienna	Bu	Good quality
No. 1979	Early White Vienna	Bu	Good quality
Leeks			
No. 1800	Titan	OE	Standard variety, good quality
No. 3472	King Richard	J	Higher yield, very long neck, nice
Parsnip			
No. 3332	Hollow Crown	St	Good quality, highest yield
No. 3763	Short Thick	McF	Largest size
No. 3219	Guernsey	Pi	Smallest roots

Miscellaneous Vegetables Tested—Continued

Crop	Source	Comment	
Radish			
No. 3533	White Icicle	SS	Earliest white radish, nice
No. 3030	Cherry Belle	St	Good quality
No. 3627	French Breakfast	NK	Poor quality, early bolter
No. 3343	All Seasons White	Bu	Long white
No. 1643	Burpee White	Bu	Round white
No. 3532	White Strasburg	SS	Long white
No. 3628	Giant White Globe	N-K	Reaches large size without pithiness
No. 3569	Red Prince	T&M	Earliest radish, good quality
No. 3531	Long Black Spanish	SS	Winter radish, bolted
No. 3626	China Rose	N-K	Winter radish, bolted
No. 3534	Sakurajima Winter	SS	Winter radish, bolted
Rutabagas			
No. 3217	Altasweet	Pi	Best
No. 2014	Red Chief	F	Bolted
Spinach			
No. 1982	Melody	Bu	Resistant to bolting, high quality
No. 3789	Snappy	McF	Quicker to bolt
Swiss Chard			
No. 1984	Lucullus	Bu	Okay
No. 1798	Rex	OE	Best
Turnip			
No. 1849	Tokyo Top	Sa	Better than Tokyo cross, best
No. 3591	Canadian Gem	Al	
No. 3496	Royal Globe	A&C	
No. 8594	Petrowski	OE	Slightly resistant to root maggots, poorer quality, yellow color

Seed Sources

- A Asgrow Seed Co., Subsidiary of the Upjohn Co., Kalamazoo, MI 49001
- AAS All-America Selections, 4546 El Camino Real, Suite A, Los Alto, CA 94022
- AC Alf Christianson Seed Co., Mt. Vernon, WA 98273
- A&C Abbot and Cobb, Inc., P.O. Box 307, Feasterville, PA 19124
- Ag Agway Inc., Seed Division, Box 4933, Syracuse, NY 13221
- Al Alberta Nurseries & Seeds, Ltd., Bowden, Alberta T0M 0K0, Canada
- Am American Vegetable Grower, Willoughby, OH 44094
- As Asmer Seeds, Asmer House, Ash Street, Leicester, England LE5 0DD
- Ba George Ball Pacific, Inc., Box 9055, Sunnyvale, CA 94088
- Bo Bodger Seeds Export, Ltd., Box 5090, El Monte, CA 91734
- Br Bruinsma Seed Co., 6346 Avon Belden Rd., North Ridgeville, OH 44039
- BS Burrell Seed Growers Co., P.O. Box 150, Rocky Ford, CO 81067
- Bu W. Atlee Burpee Co., 6350 Rutland Ave., Box 748, Riverside, CA 92502
- C Crookham Co., P.O. Box 520, Caldwell, ID 83605
- D Dessert Seed Co., P.O. Box 181, El Centro, CA 92243
- E Environmental Seed Producers
- F Farmer Seed & Nursery Co., Faribault, MN 55021
- FM Ferry-Morse Seed Co., P.O. Box 100, Mountain View, CA 94042
- G H. G. German Seeds, Inc., Box N, Smethport, PA 16749
- Ge Germania Seed Co., 5952 N. Milwaukee Ave., Chicago, IL 60646
- Go Goldsmith Seeds, P.O. Box 1349, Gilroy, CA 94020
- Gu Gurney Seed and Nursery Co., Yankton, S.D. 57079
- H Joseph Harris Co., Inc., Moreton Farm, Rochester, N.Y. 14624
- Hb Herbst Brothers Seedsmen, Inc., 1000 N. Main St., Brewster, NY 10509
- Ho Hollar & Company, Inc., P.O. Box 106, Rocky Ford, CO 81067
- HS R. L. Holmes Seed Co., 2125-46 St., N.W. Canton, OH 44709
- J Johnny's Selected Seeds, Albion, ME 04910
- JH John Holm, Fairbanks, AK
- J&P Jackson & Perkins Co., Medford, OR 97501
- K Keystone Seed Co., P.O. Box 1438, Hollister, CA 95023
- Ka Arvo Kallio, Horticulture Center, Duluth, MN 55804
- L Edward Lowden, Lowden's Better Plants & Seeds, Box 10, Ancaster, Ontario L9G 3L3
- McF McFayden Seed Co., Ltd., Box 1600, 30-19th St., Brandon, Manitoba R7A 6A6, Canada
- M Henry F. Michell Co., Church Road, King of Prussia, PA 19406
- Mo Carl Mock, Fairbanks, AK
- MR Morden Research Station, P.O. Box 3001, Morden, Manitoba R0G 1J0, Canada
- NK Northrup King & Co., 1500 Jackson St., N.E., Minneapolis, MN 55413
- O L. L. Olds Seed Co., P.O. Box 7790, Madison WI 53707
- OE Ohlsens-Enke, NY Munkegaard, Copenhagen-Toastrup, Denmark
- OSU Dept. of Horticulture, Oregon State University, Corvallis OR 97331

Seed Sources

P George W. Park Seed Co., Box 31, Greenwood, SC 29647
Pe Petoseed Co., Inc., P.O. Box 4206, Saticoy, CA 93003
Pi Pike and Co., Ltd., 10552-114 St., Edmonton, Alberta T5H 3J7, Canada
RB Rogers Brothers Co., P.O. Box 1674, Idaho Falls, ID 83401
RS Royal Sluis Inc., 1293 Harking Rd., Salinas, CA 93907
Sa Sakata Seed Co., 2 Kiribatake, Kanagawa-KV, Yokohama, Japan
S&G Sluis & Groot of America, 124A Griffin St., Salinas, CA 93907
Sh Charles Sharpe, Sleaford, Lincolnshire, England
SS R. H. Shumway, Seedsman, Rockford, IL 61101
St Stokes Seeds, Inc., 5008 Stokes Bldg., Buffalo, N.Y. 14240
T&M Thompson & Morgan, Inc., Box 100, Farmingdale, NJ 07727
V Vesey's Seeds, Ltd., York, Prince Edward Is., Canada
WD William Dam Seeds, P.O. West Flamboro, Ontario, Canada L0R 2K0