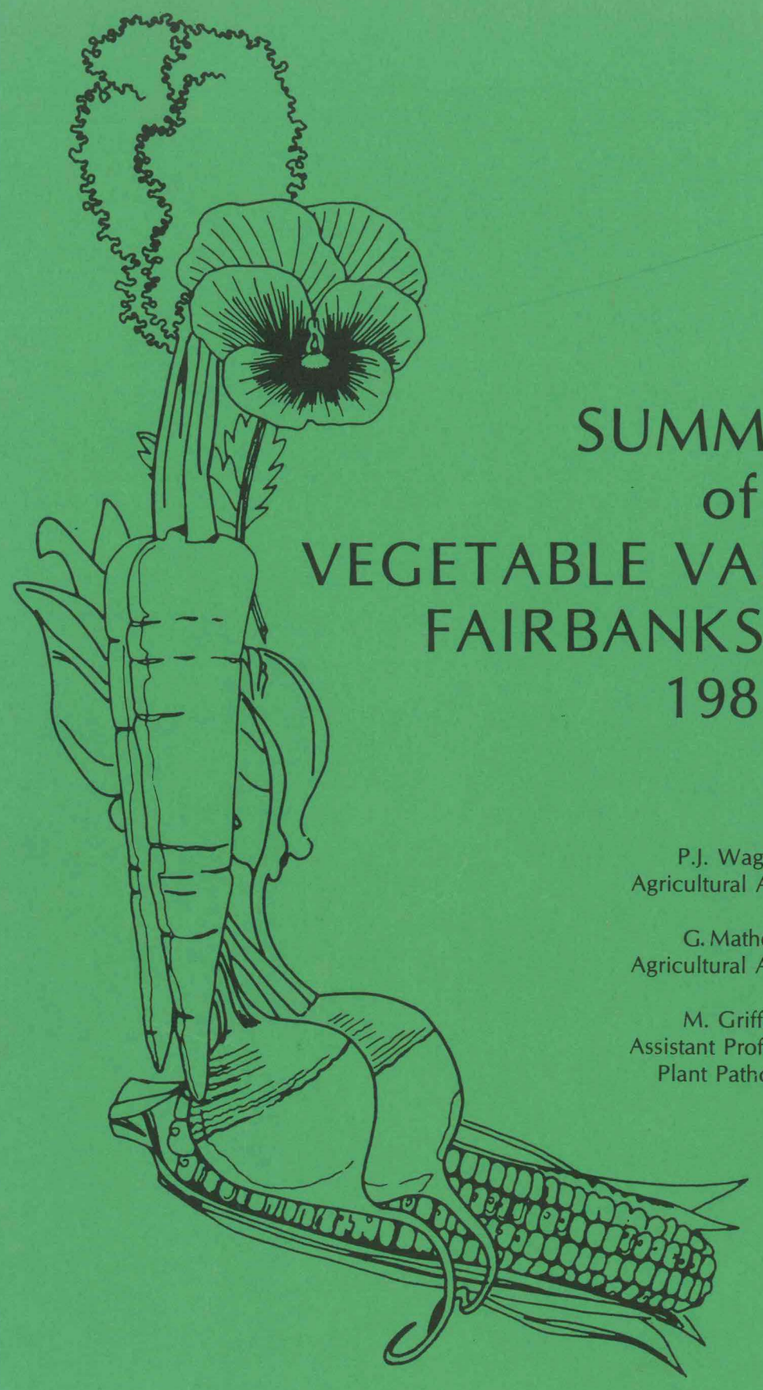

SUMMARY of VEGETABLE VARIETY TRIALS FAIRBANKS, ALASKA 1985

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Table of Contents

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SUMMARY OF VEGETABLE VARIETY TRIALS
FAIRBANKS, ALASKA, 1985

Introduction

This report summarizes evaluations of vegetable varieties conducted by the Horticultural Research Program of the University of Alaska-Fairbanks. The objective of this research is to select varieties of vegetables that are adapted to the environment of interior Alaska. Vegetable crops whose adaptability may be improved through development of improved cultural techniques are also identified. The selection effort is directed at finding varieties useful to both commercial growers and home gardeners. Varieties are chosen for inclusion in the variety tests on the basis of their description, the latitude of origin, and the record of the plant-breeding programs for producing kinds that have previously been found adapted. Standard recommended varieties are included in the trials for comparison.

The vegetable variety evaluation program has been responsible for a continuous improvement in yields, quality, and dependability for many vegetable crops grown in Alaska. Our philosophy is to depend upon the many existing plant-breeding programs, rather than investing in an expensive, on-site, plant-breeding effort. Progress can be made more rapidly by variety selection at this time.

Variety trials for cabbage, snapbeans and pickling cucumbers were not conducted in 1985 as the Horticultural Research Program began to implement a rotating schedule for testing of vegetable crops. All variety trials were conducted at the Agricultural and Forestry Experiment Station's research farm at Fairbanks.

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

Weather Summary—1985

The 1985 growing season (see climate and weather data, Table 1 and Fig. 1.) began with a late snowmelt and cool temperatures, which resulted in planting dates up to 10 days later than usual for some crops. Temperatures remained below average in June, with precipitation above average so that crops grew slowly. Mid-July began a record-breaking sequence of 28 consecutive days with maximum temperatures 70 °F or above. Many crops matured rapidly during this period and, as a result, differences in maturation time for some varieties were condensed. August temperatures were 1.5 degrees below normal with measurable precipitation on 19 days. Production was delayed in crops which normally mature in mid- to late August, and the incidence of disease was high for many varieties. Although a hard frost did not occur until mid-September, harvest of peppers, tomatoes, eggplant, cucumbers, and summer squash was discontinued one week earlier due to poor fruit quality.

Table 1. Climatic Data for the Fairbanks Growing Season: 1984, 1985, and the Long-Term Average

	Average Temperature (°F)			
	Daily max.	Daily min.	Daily mean	Precip. (in.)
May				
1985	58.7	33.4	46.1	0.45
1984	60.7	36.6	48.6	1.06
39-year average	60.2	33.7	46.9	0.75
June				
1985	69.3	47.4	58.3	2.42
1984	74.3	48.6	61.4	0.85
39-year average	71.6	44.2	57.9	1.52
July				
1985	73.7	49.8	61.8	1.08
1984	70.0	51.5	60.8	1.94
39-year average	72.6	47.2	59.9	2.12
August				
1985	65.5	45.0	55.3	1.91
1984	64.1	43.9	54.0	1.30
39-year average	67.0	43.0	55.1	2.37
September				
1985	50.9	35.3	43.1	3.10
1984	59.8	33.1	46.4	0.25
39-year average	55.3	33.6	44.6	1.42

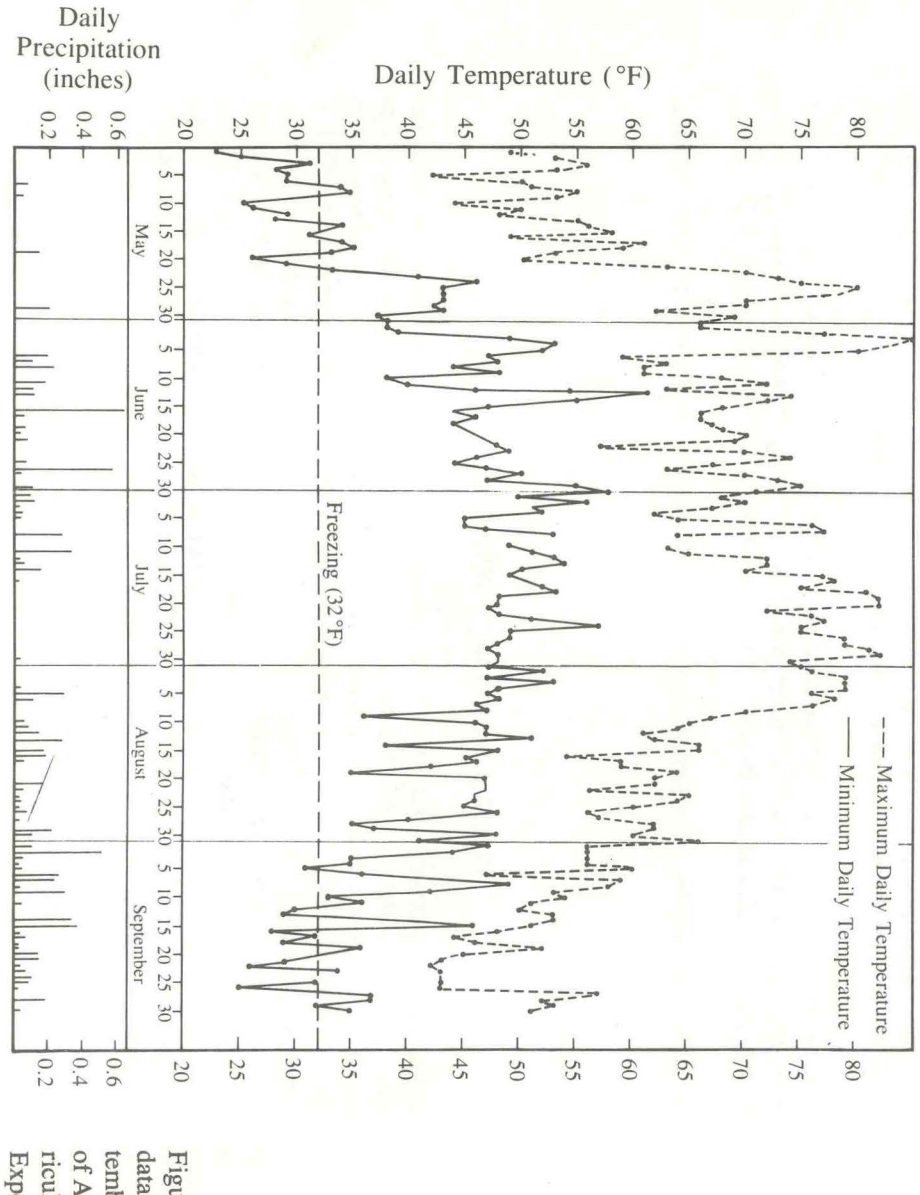

Figure 1. Daily weather data, May through September, 1985, University of Alaska-Fairbanks, Agricultural and Forestry Experiment Station.

Table 2. Artichoke Variety Trial, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100') terminals	Yield (lb/100') laterals	Comments
5067	Green Globe	Bu	2'	5'	8-5	163	18.0	27.5	good quality

[1] See seed source list.
Note: Greenhouse-grown plants, 48 days old, were transplanted into the field on June 5, 1985. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at the rate of 2.5 oz/100 ft² on July 16, 1985.

Table 3. Carrot Variety Trials, Bottomland, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing row	Harvest date	Yield (lb/100')	Average wt. (gm)	Comments
6691	Royal Danvers	Ag	3'	9-11	292.9	130	consistent high yields
7318	Spartan Bonus	St	3'	9-11	287.5	66	
6771	Touchon Deluxe	St	3'	9-11	279.2	88	consistent high yields
7447	Royal Chantenay	Ag	3'	9-11	279.2	89	good flavor
7954	Scarlet Nantes	St	3'	9-11	250.0	101	good flavor
7710	Early Cross	Al	3'	9-11	250.0	106	

[1] See seed source list.
Note: Carrots were seeded May 30, 1985, with a Planet Jr. Seeder, using hole No. 7, and were not thinned. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling.

Table 4. Celery Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Comments
6979	Green Giant	J	8''	18''	9-4	939	310.6	excellent flavor, consistent high yields
3802	Transgreen	FM	8''	18''	9-4	939	308.5	excellent flavor, consistent high yields
6787	Stokes Impr. Utah 52-70	St	8''	18''	9-4	924	305.6	good flavor
7257	Florida #683	G	8''	18''	9-4	923	305.1	good flavor

[1] See seed source list.
Note: Greenhouse-grown plants, 64 days old, were transplanted into the field on May 29, 1985. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. One half pound of 20-20-20 (soluble)/100 ft² was applied on July 25, 1985.

Table 5. Eggplant Variety Trials, 1984.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	Harvest date	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Comments
3487	Dusky	A&C	16''	5'	8-9	366	60.6	77	oval shape, early and productive
7611	Satin Beauty	B	16''	5'	8-19	324	53.5	130	egg shape
7970	Epic	Tw	16''	5'	8-12	106	17.6	85	long teardrop shape
6094	Imperial	A&C	16''	5'	7-19	100	16.5	67	long slender fruit

[1] See seed source list.
Note: Greenhouse-grown plants 71 days old were transplanted into the field June 5, 1984. Plants were grown through 1.5-mil clear polyethylene and covered with clear polyethylene tunnel row covers until early July. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5 oz/100 ft² on July 16, 1985. Eggplant is a very marginal crop in interior Alaska.

Table 6. Broccoli Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Peak cut date	Peak cut % cut	Yield (lb/100') terminals	Yield (lb/100') laterals	Average wt. (gm)	Comments
7878	Shogun	A&C	16''	3'	7-26	7-31	39	158.8	6.2	960	late, consistent high yields, large heads
8000	Green Valiant	J	16''	3'	7-22	7-24	54	99.0	42.6	599	midseason to late, consistent yields, nice laterals
6805	Emperor	NK	16''	3'	7-19	7-22	63	84.3	45.8	510	midseason, consistent high yields
7198	Green Duke	Tw	16''	3'	7-19	7-19	100	57.9	39.9	350	midseason, consistent high yields
7627	Laser	RS	16''	3'	7-17	7-19	49	53.2	32.2	322	
8044	Green Dwarf	P	12''	3'	7-5	7-22	73	49.6	32.9	225	nice compact heads, large laterals
7707	Packman	L	16''	3'	7-12	7-17	42	42.9	42.4	259	early, good quality
7949	Goliath	St	16''	3'	7-10	7-17	39	42.5	41.8	257	early, good quality

[1] See seed source list.
Note: Greenhouse-grown plants, 32 days old, were transplanted into the field on May 24, 1985. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at the rate of 2.5 oz/100 ft² on June 24, 1985.

Table 7. Brussels Sprouts Variety Trials, 1984.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Comments
7657	Early Crop	H	2'	3'	8-9	954	105.2	earliest, sprouts do not hold well
4064	Jade Cross E	NK	2'	3'	8-9	754	83.1	early
4424	Earli-Jade	A&C	2'	3'	8-9	646	71.2	early, good quality
5911	Prince Marvel	Tw	2'	3'	8-9	574	63.3	good quality

[1] See seed source list.
Note: Greenhouse-grown plants, 59 days old, were transplanted into the field on May 24, 1985. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at the rate of 2.5 oz/100 ft² on June 24, 1985.

Table 8. Cauliflower Variety Trials, 1984.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Peak cut date	Peak cut % cut	Yield (lb/100')	Average wt. (gm)	Comments
6784	White Top	St	16''	3'	7-22	7-29	42	130.7	790	late, highest yield last three seasons
6978	Andes	J	16''	3'	7-29	7-29	54	128.0	774	late, consistent high yields
7325	White Rock	St	16''	3'	7-29	8-5	39	118.1	715	late
6980	White Fox	St	16''	3'	7-26	7-31	46	115.8	701	late, consistent high yields
7410	Formana	Se	16''	3'	7-24	7-29	35	114.0	690	late
7661	Snowball 123	H	16''	3'	7-19	7-29	86	95.8	580	mid-late
8002	Snowball 741	J	16''	3'	7-15	7-29	45	91.3	552	mid-late
6777	Delira	St	16''	3'	7-22	8-2	62	80.4	486	late
6778	Dominant	St	16''	3'	7-22	7-29	50	80.3	485	late
6639	Alpha Fortados	RS	16''	3'	7-17	7-19	42	60.1	363	early to midseason
7639	Alpha Paloma	RS	16''	3'	7-15	7-22	46	59.5	360	early to mid, best quality in early variety
7326	Alert	St	16''	3'	7-12	7-15	78	45.0	272	early, fuzzy curds
4976	Snow Crown	G	16''	3'	7-12	7-19	30	43.1	261	early
4591	Nevada	RZ	16''	3'	7-24	7-24	24	42.7	258	midseason
7644	Vernon	RS	16''	3'	—	—	—	—	—	no harvest, stunted by flooding

[1] See seed source list.
Note: Greenhouse-grown plants, 32 days old, were transplanted into the field on May 24, 1985. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at the rate of 2.5 oz/100 ft² on June 24, 1985.

Table 9. Crisphead Lettuce Variety Trials, Bottomland, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (lb/100')	Average wt. (gm)	Average core[2]	Average density[3]	Comments
7960	Ithaca	St	1'	3'	8-8	191.8	870	1.1	3.2	excellent flavor, most heads free from tipburn
8047	Mission	P	1'	3'	8-6	141.6	642	0.7	3.6	
6661	Montello	St	1'	3'	8-6	139.4	633	1.4	4.0	slight bitterness
7831	Malika	S&G	1'	3'	8-6	107.0	701	1.1	2.9	good flavor, 30% of heads not marketable, rot[4]
7827	Van Mor	H	1'	3'	8-14	102.1	1235	0.8	3.7	62% of heads not marketable, rot
7961	Minilake	St	1'	3'	8-6	81.4	789	0.6	3.2	good flavor, 36% of heads not marketable, rot
7395	Great Lakes WS	P	1'	3'	8-19	62.9	790	0.9	3.1	71% of heads not marketable, rot
7826	Sea Green	H	1'	3'	8-19	46.4	1053	1.0	1.7	66% of heads not marketable, rot
7824	Delmar	H	1'	3'	—	0	0	0	0	did not head

[1] See seed source list.
[2] Core length is noted from 1 to 5, with 1 being the shortest, most desirable, and 5 the longest.
[3] Density is noted from 1 to 5, with 1 the least dense and 5 the densest and most desirable.
[4] Fungal rot was promoted by cool, wet weather; it might have been reduced with use of appropriate fungicide.
Note: Lettuce was seeded by hand in bottomland plots on May 30, 1985. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling.

Table 10. Green Pea Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Plot size	First harvest	Yield[2] (gm/plot[3])	Yield[2] (lb/100')	shelled weight (% of weight) in shell	Comments
Shelled Peas								
7459	Mayfair	Ag	3' × 10'	8-5	11911	262.6	30.3	
7594	Lincoln	VB	3' × 10'	8-5	10379	228.8	31.7	good flavor
7979	Greater Progress	Tw	3' × 10'	7-31	9499	209.4	35.5	good flavor
7339	Novella	St	3' × 10'	8-2	9422	207.7	40.6	semileafless, easy to pick
7592	Almoto	VB	3' × 10'	8-5	9070	200.0	35.6	
8014	Olympia	Se	3' × 10'	7-29	8919	196.6	35.1	
5934	Green Arrow	Tw	3' × 10'	8-2	7738	170.6	33.1	good flavor
Snap Peas								
7963	Sugar Snap	St	3' × 10'	8-5	10234	225.6		
6135	Early Snap	Ag	3' × 10'	7-29	9491	209.2		
7421	Sugar Rae	J	3' × 10'	8-2	8590	189.4		
8048	Sugar Daddy	P	3' × 10'	8-2	5559	122.6		poor germination[4] stringless pods, not as sweet
7596	Sugar Ann	VB	3' × 10'	7-26	3870	85.3		poor germination[4]
Edible Podded Peas								
7598	Oregon Sugar Pod	VB	3' × 10'	7-29	6910	152.3		
7420	Snowflake	J	3' × 10'	7-29	4873	107.4		large pod size

[1] See seed source list.
[2] Weight including shell.
[3] Plot = 3' × 10' block with five evenly spaced rows.
[4] Seeded May 29, 1985, when wet soil conditions prevented seeder from operating correctly.
Note: Peas were seeded on May 30, 1985, except as noted. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling.

Table 11. Pepper Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Comments
8008	Ringer	J	9''	5'	7-24	543	159.4	83	bell, new variety
7973	Hy Fry	Tw	9''	5'	7-19	413	121.2	51	sweet frying type, new variety
5737	Gypsy	AAS	9''	5'	7-22	400	117.5	53	yellow sweet, consistent high yields
6136	Italian Sweet	Ag	9''	5'	7-22	399	117.3	40	Italian sweet type
7971	Early Prolific	Tw	9''	5'	7-26	391	114.9	71	bell
7502	Eastern Rocket	V	9''	5'	7-29	371	109.0	45	yellow to red, mild to hot
7258	Early Bountiful	G	9''	5'	7-31	346	101.6	61	bell
7875	Golden Summer	A&C	9''	5'	8-21	323	94.8	129	yellow bell
7262	Early Thickset	P	9''	5'	7-22	323	94.8	67	bell
7877	Top Banana	A&C	9''	5'	7-29	288	84.5	22	yellow sweet
6042	Karlo	J	9''	5'	7-29	268	78.9	26	yellow semi-sweet Romanian type
7870	Jupiter	NK	9''	5'	7-22	253	74.4	61	bell
5564	Hot Portugal	H	9''	5'	7-19	202	59.3	21	hot to very hot, red
7211	Golden Bell	Tw	9''	5'	7-26	193	56.8	116	yellow bell
7210	Ma Belle	Tw	9''	5'	7-22	191	56.1	88	bell
7885	Blockbuster	PA	9''	5'	7-26	187	54.9	70	bell
5882	Hungarian Yellow Wax	NK	9''	5'	7-19	185	54.4	17	hot to very hot
7672	Super Shepherd	St	9''	5'	8-12	129	38.0	70	Italian sweet type
7876	Jalapa	A&C	9''	5'	8-7	98	28.9	12	mild to hot jalapeno type
7874	Bell Captain	A&C	9''	5'	7-22	97	28.4	97	bell

[1] See seed source list.

Note: Greenhouse-grown plants, 62 days old, were transplanted into the field on June 5, 1985. Plants were grown through 1.5 mil clear polyethylene and covered with clear-polyethylene tunnel row covers until early July. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5 oz/100 ft² on July 16, 1985.

Table 12. Potato Variety Trials, Bottomland, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield U.S. #1 (lb/100')	Yield U.S. #1 (ton/acre)	Yield U.S. #2 (ton/acre)	%U.S. # 1	Comments
—	Green Mountain	AK	1'	3.3'	9-5	353	23.3	2.8	86.3	high quality baking potato
—	Butte	Gu	1'	3.3'	9-5	326	21.5	2.8	86.0	russet, first year in trials
—	Norland	F	1'	3.3'	9-5	323	21.3	4.1	81.2	red skin
—	Kennebec	Gu	1'	3.3'	9-5	323	21.3	2.2	89.1	seed not true to variety
—	Superior	F	1'	3.3'	9-5	287	18.9	2.0	90.0	early, should be harvested mid- to late August
—	83-13	D	1'	3.3'	9-5	287	18.9	1.8	90.1	
—	Bake King	AK	1'	3.3'	9-5	281	18.5	3.2	81.4	high-quality, good baking potato
—	Alaska Red	D	1'	3.3'	9-5	261	17.2	4.1	78.1	red skin
—	Norgold Russet	P&S	1'	3.3'	9-5	240	15.8	4.2	75.2	russet
—	Rote Erstling	AK	1'	3.3'	9-5	233	15.4	5.2	71.0	red skin, yellow flesh
—	Swedish	AK	1'	3.3'	9-5	204	13.5[2]	8.1[2]	—	yellow skin, buttery flavor
—	Alaska 114	AK	1'	3.3'	9-5	184	12.1	3.2	77.3	

[1] See seed source list.

[2] U.S. # 1 size standards not applied. 13.5 ton/acre ≥ 1½'' diameter (short axis), 8.1 ton/acre < 1½'' diameter.

Note: Potatoes were planted May 30, 1985, in bottomland soils which were amended in 1975 with 1000 yd³/A peat obtained from the College peat bogs. The pH of the amended soil was ca 5.5. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling.

Table 13. Cucumber (Slicing) Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Comments
7062	Sweet Success	G	3'	5'	7-29	7500	550.6	317	consistent high yields, good flavor
7448	Slicemaster	Ag	3'	5'	8-5	4785	351.3	184	consistent high yields, good flavor
7020	Early Pride	Bu	3'	5'	8-5	4640	340.6	176	consistent high yields, good flavor
7958	Ultraslice	St	3'	5'	8-2	4235	310.9	182	
7500	Raider	V	3'	5'	8-5	4200	308.3	183	
7392	Euro-American	P	3'	5'	7-31	4118	302.3	229	spineless, good flavor
7675	Amira	T&T	3'	5'	8-2	1298	95.3	126	spineless
6896	Park's Commanche	P	3'	5'	8-5	1208	88.6	151	

[1]See seed source list.

Note: Greenhouse-grown plants 29 days old were transplanted into the field June 5, 1985. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5 oz/100 ft² on July 16, 1985. Plants were covered with slitted plastic row covers from June 21 to July 8 because of cool, cloudy weather.

Table 14. Summer Squash Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Comments
6205	Zucchini Elite	H	3'	5'	7-24	12285	901.9	424	zucchini, consistent high yields
7095	Green Magic	VB	3'	5'	7-17	10115	742.6	311	zucchini, tends to be stubby
7441	Buccaneer	J	3'	5'	7-26	8513	624.9	362	zucchini, consistent high yields
8015	Senator	Se	3'	5'	7-22	8285	608.2	353	zucchini, consistent high yields
5665	Gold Rush	Hb	3'	5'	7-26	6285	461.4	262	gold zucchini
7976	Goldbar	Tw	3'	5'	7-29	6085	446.7	277	yellow straight neck
7333	Greyzini	St	3'	5'	7-26	5625	412.9	256	zucchini
6669	Sundance	Tw	3'	5'	7-22	5428	398.4	190	yellow crook neck
6605	Seneca Prolific	NK	3'	5'	7-29	5275	387.3	185	yellow straight neck
5108	Smoothie	Tw	3'	5'	7-21	3908	286.9	230	yellow straight neck

[1] See seed source list.

Note: Greenhouse-grown plants 29 days old were transplanted into the field June 5, 1985. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5 oz/100ft² on July 16, 1985. Plants were covered with a slitted plastic row cover from June 21 to July 8 because of cool, cloudy weather.

Table 15. Sweet Corn Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Days to harvest	Yield (gm/hill)	Yield (lb/100')	Average wt. (gm)	Comments
7340	Polar Vee	St	1'	5'	8-9	81	659.6	145.3	238	uniform ears, very early
7967	Earlivee	St	1'	5'	8-26	98	338.1	74.5	286	high quality, early
	Yukon Chief	AK	1'	5'	8-6	78	185.6	40.9	112	germination was very poor due to old seed
7819	MTD 484	EAK	1'	5'	9-13	116	182.3	40.2	304	
7966	Butter Vee	St	1'	5'	9-5	108	91.6	20.1	323	
7499	Morning Star	V	1'	5'	8-30	102	58.0	12.8	268	
6112	Sugar & Gold	F	1'	5'	9-13	116	44.1	10.0	221	
7817	MTD 481	EAK	1'	5'	9-5	108	43.0	9.5	322	
7133	Spring White	H	1'	5'	9-13	116	11.0	2.4	325	
7818	MTD 483	EAK	1'	5'	9-13	116	9.7	2.1	290	
7662	Blitz	H	1'	5'	—					no mature ears produced
8034	Classic Touch	V	1'	5'	—					no mature ears produced
7655	Early Golden	F	1'	5'	—					no mature ears produced
7656	Golden Beauty	F	1'	5'	—					no mature ears produced
5164	Golden Vee	St	1'	5'	—					no mature ears produced
7816	Marcross	Gu	1'	5'	—					no mature ears produced
7817	MTD 482	EAK	1'	5'	—					no mature ears produced
7820	MTD 485	EAK	1'	5'	—					no mature ears produced
7821	MTD 487	EAK	1'	5'	—					no mature ears produced
7822	MTD 488	EAK	1'	5'	—					no mature ears produced
7823	MTD 489	EAK	1'	5'	—					no mature ears produced
5427	Onthyb 741	Si	1'	5'	—					no mature ears produced
5424	Onthyb 804	Si	1'	5'	—					no mature ears produced
7412	Spring Crystal	Se	1'	5'	—					no mature ears produced

[1] See seed source list.

Note: Sweet corn was seeded on May 20, 1985, and covered with 1.5-mil clear polyethylene. After plants were approximately 4'' tall, slits were made to allow plants to emerge from beneath the plastic. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. 88 lb/A 25-10-10 (soluble) were applied July 3, 1985.

Table 16. Mulched Tomato Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Comments
7834	Subarctic 25	JH	2.3'	5'	8-5	998	94.6	37	
7835	Alpha	JH	2.3'	5'	7-29	813	77.1	39	
7736	#18	NDS	2.3'	5'	8-9	692	65.6	35	consistent high yields
6013	Santa	NDS	2.3'	5'	7-26	688	65.3	36	consistent high yields
7760	#39	NDS	2.3'	5'	8-9	677	64.1	28	
7800	#73	NDS	2.3'	5'	8-16	557	52.8	45	
8080	Santiam	OSU	2.3'	5'	8-14	547	51.8	149	promising new variety
6995	Subarctic Plenty	J	2.3'	5'	8-2	483	45.8	35	
7748	#24	NDS	2.3'	5'	8-12	483	45.8	34	
8012	Gem State	J	2.3'	5'	7-29	480	45.5	25	
7833	Superarctic F_2	JH	2.3'	5'	8-12	437	41.4	60	
6045	Sprint	J	2.3'	5'	8-5	432	40.9	37	
7759	#38	NDS	2.3'	5'	8-12	328	31.1	38	
7722	#4	NDS	2.3'	5'	8-12	298	28.3	31	
7792	#68	NDS	2.3'	5'	8-12	270	25.6	28	
8040	Siberia	Sib	2.3'	5'	8-5	230	21.8	53	
5503	Bonner	M	2.3'	5'	8-12	217	20.5	41	
5502	Latah	M	2.3'	5'	8-5	207	19.6	34	
7073	Early Temptation	V	2.3'	5'	8-7	147	13.9	40	
8039	Glacier	Sib	2.3'	5'	8-7	143	13.6	48	
5501	Shoshone	M	2.3'	5'	8-2	110	10.4	19	
7784	#63	NDS	2.3'	5'	8-23	97	9.2	48	
8079	Oregon Spring	OSU	2.3'	5'	8-30	67	6.3	200	

[1] See seed source list.

Note: Greenhouse-grown plants 48 days old were transplanted into the field June 5, 1985. Plants were grown through 1.5-mil clear polyethylene and covered with clear polyethylene tunnel row covers until early July. Fertilized application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at the rate of 2.5 oz/100ft² on July 16, 1985. Weather conditions promoted vegetative growth, consequently, fruit production began very late.

Table 17. Unmulched Tomato Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	First harvest	Yield (gm/plant)	Yield (lb/100')	Average wt. (gm)	Yield prior to 8-29 (lb/100')	Yield prior to 8-29 rank	Early yield prior to 8-12 (lb/100')	Early yield prior to 8-12 rank	Comments
7834	Subarctic 25	JH	2.3'	3'	7-15	1350	127.9	27	118.3	1	34.5	1	Cool wet conditions in August resulted in a high percentage of cracked fruit for all varieties.
7833	Superarctic F_2	JH	2.3'	3'	7-22	1255	118.9	60	102.0	3	31.1	4	
7835	Alpha	JH	2.3'	3'	7-15	1159	109.9	41	106.7	2	32.5	3	
8040	Siberia	Sib	2.3'	3'	7-19	1127	106.8	65	101.3	4	34.4	2	
7800	#73	NDS	2.3'	3'	7-17	1045	99.1	34	81.4	5	30.2	5	
8039	Glacier	Sib	2.3'	3'	7-22	897	85.1	55	76.5	7	22.5	7	
7722	#4	NDS	2.3'	3'	7-15	850	80.5	30	80.5	6	24.2	6	

[1] See seed source list.

Note: Greenhouse-grown plants 56 days old were transplanted into the field June 6, 1985. Fertilized application was 1500 lb/A 10-20-20 prior to rototilling. Excess foliage and blossoms were pruned at the end of July.

Table 18. Container Tomato Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	First harvest	Yield (gm/plant)	Average wt. (gm)	Comments
8049	Goldie	P	7-15	2102	25	small fruited gold tomato
6222	Basket King	Bu	7-1	1989	31	consistent high yields
4778	Pixie	G	7-12	1742	42	consistent high yields
8050	Better Bush	P	7-31	1398	175	
6698	Toy Boy	Ag	7-12	1387	30	excellent flavor

[1] See seed source list.

Note: Greenhouse-grown plants were seeded March 26, 1985 (Goldie & Better Bush were seeded April 2, 1985 due to late arrival of seed) and transplanted into 8½'' x 8½'' No. 2 nursery containers on May 3, 1985. 30 gms of 14-14-14 Osmocote® was placed in the container at transplanting. Plants were held in the greenhouse until May 28, 1985. Plants were fertilized weekly with 20-20-20 soluble fertilizer applied at a rate of 1 tablespoon per gallon of water.

Table 19. Winter Squash Variety Trials, 1985.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	Harvest date	Yield (kg/plant)	Yield (lb/100')	Average wt. (kg)	Comments
7964	Hungarian Mammoth	St	8'	8'	9-4	49	1362.5	16	green, large fruits
7334	Baby Hubbard	St	8'	8'	9-4	19	533.3	3	orange hubbard
6611	Sweet Meat	NK	8'	8'	9-4	18	496.9	5	blue-green, good flavor
5178	Sweet Mama	St	8'	8'	9-4	16	443.7	2	dark green, buttercup type, high quality
7977	Green Hubbard	Tw	8'	8'	9-4	14	390.6	6	
5180	Golden Hubbard	St	8'	8'	9-4	9	246.9	3	orange hubbard, good quality
5894	Pink Banana	NK	8'	8'	9-4	8	209.4	4	pink/orange, large fruits, usually has higher yields
7455	Buttercup	Ag	8'	8'	9-4	4	100.0	1	turk's turban, dark green, high quality

[1] See seed source list.

Note: Greenhouse-grown plants 34 days old were transplanted into the field June 5, 1985. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5oz/100ft² on July 16, 1985. Plants were covered with slitted plastic row covers from June 21 to July 8 because of cool, cloudy weather.

Table 20. Pumpkin Variety Trials, 1984.

A.F.E.S. Accession No.	Variety	Source[1]	Spacing plant	Spacing row	Harvest date	Yield (kg/plant)	Yield (lb/100')	Average wt. (kg)	Comments
5970	Connecticut Field	St	8'	8'	9-4	39	1078.1	9	consistent high yields
7668	Pankow's Field	H	8'	8'	9-4	34	937.5	8	
6043	New England Pie	J	8'	8'	9-4	18	500.0	2	small fruit, for home use
4307	Little Boo	Ag	8'	8'	9-4	16	431.3	4	white skin, painting pumpkin
7215	Funny Face	Tw	8'	8'	9-4	15	409.4	4	

[1] See seed source list.

Note: Greenhouse-grown plants 34 days old were transplanted into the field June 5, 1985. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1500 lb/A 10-20-20 prior to rototilling. Trace elements (Peters Soluble Trace Element Mix) were applied at a rate of 2.5 oz/100 ft² on July 26, 1985. Plants were covered with a slitted plastic row cover from June 21 to July 8 because of cool, cloudy weather.

The following vegetables were rated excellent (E), very good (VG), good (G), satisfactory (S), fair (F), or poor (P) in overall performance. These evaluations were subjective, based on growth, productivity, and general quality.

Table 21: Miscellaneous Vegetable Trials

Crop		Source	Rating	Comments
Beets				
No. 7197	Pacemaker III	Tw	VG	round shape
No. 6088	Sangria	A&C	G	globe shape
No. 7669	Forono	Da	VG	long shape, straight
No. 7952	Formanova	St	VG	long shape
No. 7317	Little Egypt	St	VG	early, flat shape, uniform
No. 7067	Little Ball	V	G	early, top-shaped
Chinese Vegetables - Cabbage				
No. 6893	Jade Pagoda	P	P	bolted
No. 7969	What-a-Joy	Tw	P	bolted
No. 8001	W-R Green 60	J	P	bolted
Chinese Vegetables - Daikon (Radish)				
No. 4391	Tokinashi	J	G	holds well, root maggot control essential
No. 8010	Summer Cross #3	J	P	bolted
Dill				
No. 7507	Bouquet	V	G	tallest variety
No. 4313	Dukat	Ag	G	
No. 3297	Tuve	Ag	G	
Greens				
No. 7959	Green Curled Scotch Kale	St	G	poor germination
No. 8003	Winterbor Kale	J	F	
No. 6949	Green Lance Chinese Kale	WD	S	stalks, young leaves & buds are all edible
No. 8033	Green Smooth Leaf Chard	WD	VG	slowest to bolt
No. 7327	White King Chard	St	G	large size
No. 7432	Rhubarb Chard	J	S	crimson stalks, bolts readily
Herbs				
No. 6383	Basil, Green Bouquet	Bu	G	small leaf, less compact than Spicy Globe
No. 7408	Basil, Italian	P	S	
No. 3822	Basil, Lettuce Leaf	P	S	large, crinkled leaf
No. 8043	Basil, Minimum	P	S	
No. 8042	Basil, Picollo	P	G	small leaf, larger size plant
No. 7869	Basil, Spicy Globe	NK	VG	small leaf, very compact, uniform
No. 2052	Catnip	NK	VG	
No. 6620	Chervil, Curled	NK	VG	
No. 6983	Chinese Leek (Chives)	J	G	garlic scent
No. 7682	Chives	Ap	VG	
No. 7130	Fennel, Mammoth	H	S	good foliage, did not bulb at base
No. 8031	Lemon Balm	WD	VG	fragrant
No. 7065	Mint, Curled	G	VG	
No. 7261	Oregano	G	F	weak growth
No. 6984	Pennyroyal	J	VG	
No. 6004	Peppermint	G	VG	
No. 8046	Rue	P	S	decorative
No. 6987	Rosemary	J	G	

Table 21, continued

Crop		Source	Rating	Comments
Herbs, continued				
No. 7506	Sage	V	VG	
No. 7908	Sorrel	GM	VG	direct seed, good sour flavor
No. 6986	Spearmint	J	VG	
No. 6623	Summer Savory	NK	VG	
No. 6624	Sweet Marjoram	NK	VG	
No. 6625	Thyme, English	NK	VG	
No. 5664	Thyme, French Narrow Leaf	Hb	VG	slightly milder than English
Kohlrabi				
No. 3340	Prima	Bu	VG	early
No. 6673	Grand Duke	AAS	VG	early
No. 7434	Karla	J	G	
No. 7591	Purple Delicacy	VB	S	late
Leeks				
No. 7205	Leader	Tw	E	yielded 179 lb/100 ft, av. wt. 211 g
No. 4388	King Richard	J	VG	yielded 147 lb/100ft, av. wt. 182 g
Lettuce, Bibb				
No. 6643	Rigoletto	RS	G	matures later, buttery flavor
No. 6989	Kagran Summer	J	G	no tipburn
No. 8004	Patty	J	S	attractive, slight tipburn
No. 7068	Dolly	V	S	attractive, slight tipburn
No. 7645	Oresto	RS	S	grown as transplant, some tipburn
Lettuce, Leaf				
No. 6810	Prizehead	Al	E	red-tipped, buttery flavor, holds well
No. 6594	Ruby	NK	VG	reliable, red-leaved, holds well
No. 6595	Salad Bowl	NK	VG	reliable, standard green-leaved variety
No. 5874	Oak Leaf	NK	VG	attractive cut leaves
No. 7837	Red Sails	AAS	S	red-leaved
No. 8032	Dunsel	WD	P	bolted
Lettuce, Romaine				
No. 6990	Winter Density	J	VG	small heads, excellent flavor
No. 6591	Parris Island	Al	G	large size
No. 7711	Valmaine	NK	G	large size
Onions, Dry (transplants)				
No. 7328	Gringo	St	F	formed a few large bulbs
No. 7451	Sweet Spanish	Ag	F	formed a few large bulbs
No. 7676	Riverside Strain	T&T	P	formed a few bulbs, small size
No. 7329	Riverside Sweet Spanish	J	P	formed a few bulbs, small size
No. 4221	Spano	P	P	formed few bulbs, small size
No. 8007	Copra	J	P	no bulbs formed
No. 8006	Ringmaker	J	P	no bulbs formed
No. 7962	Tarmagon	St	P	no bulbs formed

continued, next page

Table 21, continued

Crop		Source	Rating	Comments
Herbs, continued				
Onions, Bunching & Pickling (direct seed)				
No. 7547	Crystal Wax Pickling	Bu	F	damaged by root maggots
No. 6794	Hardy White	St	F	damaged by root maggots
No. 7208	Evergreen White	Tw	P	very poor germination
Parsley				
No. 7405	Curlina	P	E	very uniform, fine leaved
No. 3480	Decorator	A&C	E	tightly curled leaves, mild flavor
No. 5088	Delikat Original	J	E	compact, tightly curled leaves
No. 6621	Hardy Italian	NK	E	flat leaf, excellent flavor
No. 5013	Improved Market Gardeners	Tw	E	open leaved, fairly strong flavor
No. 6897	Paramount	P	E	open leaved
No. 7439	Forest Green	J	VG	leaves variable, stronger flavor
Radishes				
No. 5883	Cherry Belle	NK	G	best red
No. 7975	Snowbelle	Tw	G	best white
No. 8009	Ribella	J	S	
No. 5106	Inca	Tw	F	unattractive shape
No. 3343	All Seasons White	Bu	F	matures later, root maggot control a problem
7132	Fancy Red	H	P	bolted
Rutabaga				
No. 3217	Altasweet	Pi	G	
No. 7067	York	V	G	
No. 8011	Pike	J	F	small size, irregular shape
Spinach				
No. 5176	Melody	St	G	holds well
No. 7504	Popeye's Choice	V	G	holds well, less savoyed
Turnip				
No. 7978	Royal Globe II	Tw	G	holds well, less root maggot damage
No. 4380	Tokyo Top	J&P	S	

Seed Sources

AAS	All-America Selections, 4546 El Camino Real, Suite A, Los Altos, CA 94022
A&C	Abbot and Cobb, Inc., P.O. Box 307, Feasterville, PA 19124
Ag	Agway, Inc., Seed Division, Box 4933, Syracuse, NY 13221
AK	Agriculture and Forestry Experiment Station, University of Alaska-Fairbanks, Fairbanks, AK 99775-0080
Al	Alberta Nurseries & Seeds Ltd., Box 20, Bowden, Alberta T0M 0K0, Canada
Ap	Applewood Seed Co., P.O. Box 4000, Golden, CO 80401
B	Geo. Ball Pacific, Inc., Box 9055, Sunnyvale, CA 94088
Bu	W. Atlee Burpee Co., 6350 Rutland Ave., Box 748, Riverside, CA 92502
D	Dearborn Farms, SR A, Box 6124, Palmer, AK 99645
Da	Daehnfeldt, P.O. Box 947, Albany, OR 97321
EAK	Dr. E.A. Kerr, Stokes Seeds Ltd., 39 James St., P.O. Box 10, St. Catherines, Ontario, L2R 6R6 Canada
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
GM	Garden Magic Seed Co., 310 Main St., East Haven, CT 06512
Gu	Gurney Seed and Nursery Co., Yankton, SD 57079
H	Harris Moran Seed Co., 1155 Harkins Rd., Salinas, CA 93901
Hb	Herbst Brothers Seedsmen, Inc., 1000 N. Main St., Brewster, NY 10509
J	Johnny's Selected Seeds, Albion, ME 04910
J&P	Jackson & Perkins Co., Medford, OR 97501
JH	John Holm, Arctic Landscape Contractors, P.O. Box 196, Fairbanks, AK 99707
L	Letherman Seed Co., 1221 Tuscarawas St. E., Canton, OH 44707
M	Mountain Seed & Nursery, Box 271, Rt. 1, Moscow, ID 83843
NDS	A.A. Boe, Chairman, Dept. of Horticulture & Forestry, North Dakota State U., Fargo ND 58105
NK	Northrup King & Co., 1500 Jackson St., N.E., Minneapolis, MN 55413
OSU	Dr. J.R. Baggett, Horticulture Dept., Oregon State University, Corvallis, OR 97331
P	George W. Park Seed Co., Box 31, Greenwood, SC 29647
PA	Pan American Seed Co., P.O. Box 438, West Chicago, IL 60185
Pi	Pike and Co., Ltd., 10552-114 St., Edmonton, Alberta T5H 3J7 Canada
P&S	Pay 'n Save Stores, Fairbanks, AK
RS	Royal Sluis, Inc., 1293 Harking Rd., Salinas, CA 93907
RZ	Rijk Zwaan Zaadteet en Zaadhandel B.V. Burgem. Crezeelaan 40 DeLier (Holland) Postbus 40, 2678 ZG DeLier, The Netherlands
Se	Seedway, Inc., Hall, NY 14463
S&G	Sluis & Groot of America, 124A Griffin St., Salinas, CA 93907
Si	Horticultural Experiment Station, Box 587, Simcoe, Ontario N3Y 4N5, Canada
Sib	Siberia Seeds, P.O. Box 3000, Olds, Alberta T0M 1P0, Canada
St	Stokes Seeds, Inc., 5008 Stokes Bldg., Buffalo, NY 14240
T&T	T&T Seeds, Ltd., Box 1710, Winnipeg, Manitoba R3C 3P6, Canada
Tw	Otis S. Twilley Seed Co., Inc., P.O. Box 65, Trevose, PA 19047
V	Vesey's Seeds, Ltd., York, Prince Edward Is. C0A 1P0, Canada
VB	Vermont Bean Seed Co., Garden Lane, Bomoseen, VT 05732
WD	William Dam Seeds, P.O. West Flamboro, Ontario L0R 2K0, Canada