



SUMMARY of VEGETABLE VARIETY TRIALS FAIRBANKS, ALASKA 1980

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SUMMARY OF VEGETABLE VARIETY TRIALS FAIRBANKS, ALASKA, 1980

Introduction

This report summarizes the vegetable variety evaluations of the Horticulture Department of the University of Alaska, Fairbanks, 1980. Variety trials were conducted at the Agricultural Experiment Station's research farm. Additional potato variety trials were conducted at Delta Junction, Alaska.

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 climatic data in Table 1 shows that the 1980 growing season at Fairbanks was cooler than the 34-year average mean temperature. Growth and maturity of most crops were delayed. In addition the very hard frosts that occurred on September 1 and 2 caused a slightly shorter growing season for most crops. As a consequence of this cool, short season, fewer warm-season crops matured than in any of the previous twelve growing seasons.

Rainfall at Fairbanks was slightly above normal but soil moisture was low and irrigation was used on all crops in the Fairbanks trials.

Climatic data for the Delta Junction growing season is summarized in Table 2. The data show that the temperatures of the 1980 growing season were quite similar to the 24-year mean. There was a lower-than-normal rainfall which resulted in drier soils and, since irrigation could not be used, the yields were probably lower than normal.

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

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

Table 1. Climatic Data for the Fairbanks Growing Season, 1979, 1980,
and the Long-Term Average.

| | Temp. (°F) | | | Precip. (in.) |
|-------------|------------|-------------------|------------|---------------|
| | daily max. | daily min. | daily mean | |
| | | --- May --- | | |
| 1980 | 65.2 | 35.6 | 50.4 | 0.11 |
| 1979 | 66.8 | 33.9 | 50.4 | 0.35 |
| 34-year av. | 60.2 | 33.6 | 46.9 | 0.80 |
| | | --- June --- | | |
| 1980 | 69.1 | 49.1 | 56.6 | 2.26 |
| 1979 | 69.3 | 44.7 | 57.0 | 0.81 |
| 34-year av. | 71.7 | 44.1 | 57.9 | 1.48 |
| | | --- July --- | | |
| 1980 | 72.9 | 47.9 | 60.4 | 3.35 |
| 1979 | 73.4 | 47.4 | 60.4 | 2.36 |
| 34-year av. | 72.7 | 46.8 | 59.8 | 2.10 |
| | | --- August --- | | |
| 1980 | 65.6 | 40.4 | 53.0 | 2.00 |
| 1979 | 73.7 | 47.1 | 60.4 | 1.45 |
| 34-year av. | 67.3 | 43.0 | 55.2 | 2.44 |
| | | --- September --- | | |
| 1980 | 52.4 | 29.6 | 41.0 | 0.93 |
| 1979 | 60.6 | 32.3 | 46.5 | 0.21 |
| 34-year av. | 55.4 | 33.6 | 44.5 | 1.36 |

Table 2. Climatic Data for the Delta Growing Season; 1979, 1980 and 24-Year Average.

| | Temp. (°F) | | | Precip (in.) |
|-------------|------------|-------------------|------------|--------------|
| | daily max. | daily min. | daily mean | |
| | | --- May --- | | |
| 1980 | 64.9 | 43.2 | 53.6 | 0.80 |
| 1979 | 62.5 | 40.0 | 51.3 | 0.10 |
| 24-year av. | 57.1 | 36.9 | 47.0 | 0.86 |
| | | --- June --- | | |
| 1980 | 66.6 | 48.8 | 57.7 | 1.98 |
| 1979 | 65.4 | 47.8 | 56.6 | 2.97 |
| 24-year av. | 67.1 | 47.1 | 57.1 | 2.26 |
| | | --- July --- | | |
| 1980 | 70.9 | 52.2 | 61.6 | 1.32 |
| 1979 | 70.5 | 52.0 | 61.3 | 3.55 |
| 24-year av. | 69.1 | 50.1 | 59.6 | 2.68 |
| | | --- August --- | | |
| 1980 | 65.3 | 46.4 | 55.8 | 2.44 |
| 1979 | 68.9 | 52.1 | 60.5 | 2.08 |
| 24-year av. | 64.0 | 45.6 | 54.8 | 2.00 |
| | | --- September --- | | |
| 1980 | 51.4 | 34.9 | 43.2 | 0.86 |
| 1979 | 57.9 | 38.7 | 48.3 | 0.51 |
| 24-year av. | 51.8 | 35.3 | 43.6 | 1.24 |

Table 3. Broccoli Variety Trials, Upland, 1980

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Terminal \bar{x} wt (g) | Yield (lbs/100') | | Comments |
|---------------------------|----------------|---------------------|---------|-----|------------------|------------------------------|------------------|----------|-------------------------------------|
| | | | plant | row | | | terminals | laterals | |
| 4560 | Romanesco | T&M | 16" | 3' | 8-28 | 1620 | 268 | — | only one head matured |
| 4626 | Emperor | NK | " | " | 7-23 | 351 | 58 | 467 | |
| 3816 | Green Duke | P | " | " | 7-16 | 279 | 46 | 638 | nice, large heads |
| 4240 | Green Hornet | St | " | " | 7-11 | 235 | 38 | 747 | good quality |
| 4241 | Green Dwarf | St | " | " | 7-11 | 232 | 38 | 700 | nice, compact heads, large laterals |
| 3792 | Coaster | RS | " | " | 7-11 | 227 | 38 | 754 | consistent high yields |
| 3793 | Clipper | RS | " | " | 7-14 | 224 | 37 | 763 | consistent high yields |
| 1765 | Green Umbrella | D | " | " | 7-14 | 209 | 35 | 594 | |
| 4305 | Southern Comet | Ag | " | " | 7-11 | 190 | 31 | 622 | |
| 4463 | Futura | A | " | " | 7-11 | 168 | 28 | 659 | |
| 4375 | Crusader | J&P | " | " | 7-14 | 92 | 15 | 503 | |
| 4242 | Cleopatra | St | " | " | 7-11 | 81 | 13 | 598 | |
| 4306 | Waltham No. 29 | Ag | " | " | 7-11 | 66 | 11 | 571 | |

^aSee seed-source list.

Note: Greenhouse-grown plants, 28 days old, were transplanted into the field May 28, 1980. Fertilizer application was 1500 lbs/A 10-20-20 plus 1.0 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 4. Cabbage Variety Trials, Upland, 1980

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Head \bar{x} wt (g) | Yield (lb/100') | Av. Core Length Rating ^b | Av. Density Rating ^b | Comments |
|---------------------------|---------------------|---------------------|---------|-----|------------------|--------------------------|--------------------|---|---------------------------------------|---|
| | | | plant | row | | | | | | |
| 4511 | Hinova | Se | 16" | 3' | 8-19 | 3527 | 583 | 3.1 | 4.0 | nice, dense, large heads, large ribs |
| 6467 | Alaska 6467 | AK | " | " | 8-26 | 3171 | 524 | — | — | good storage type |
| 4512 | Predena | Se | " | " | 8-19 | 2973 | 492 | 2.7 | 3.8 | nice, dense, large heads |
| 2187 | Erin | Al | " | " | 7-28 | 2701 | 447 | 2.1 | 2.5 | excellent flavor |
| 4243 | Quick Green Storage | St | " | " | 9-1 | 2469 | 408 | 2.8 | 1.9 | |
| 4074 | Savoy Chieftain | NK | " | " | 8-12 | 2373 | 392 | 3.3 | 1.0 | |
| 4244 | Prime Pak | St | " | " | 7-30 | 2198 | 363 | 2.8 | 1.2 | |
| 844 | Hybrid 15 | H | " | " | 7-23 | 2072 | 343 | 3.1 | 2.9 | excellent flavor |
| 4345 | Baby Red Early | WD | " | " | 8-4 | 1874 | 310 | 2.0 | 3.4 | red |
| 4317 | Ruby Perfection | Tw | " | " | 8-12 | 1792 | 296 | 2.7 | 4.8 | red |
| 4042 | Red Acre | Bu | " | " | 7-30 | 1724 | 285 | 2.2 | 4.6 | red |
| 4374 | Ice Prince | St | " | " | 8-25 | 1703 | 282 | 3.0 | 2.7 | savoy |
| 4245 | Tastie | St | " | " | 7-14 | 1519 | 251 | 1.8 | 4.0 | nice, dense head |
| 4402 | Badger Baby Head | Gu | " | " | 7-16 | 1302 | 215 | 2.4 | 1.8 | |
| 4552 | Greyhound | U | " | " | 7-14 | 833 | 138 | 2.2 | 2.5 | |
| 4043 | Earliana | Bu | " | " | 7-11 | 783 | 129 | 1.8 | 3.9 | nice, early, small head |
| 4384 | Widi L.D. | J | " | " | 7-11 | 612 | 101 | 2.0 | 3.0 | pointed head |

^aSee seed-sources list.

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

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

Note: Greenhouse-grown plants, 28 days old, were transplanted into the field May 28, 1980. Fertilizer application was 1500 lb/A 10-20-20 plus a 1.0 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 5. Carrot Variety Trials, Bottomland, 1980

| A. E. S. Accession No. | Variety | Source ^a | Spacing ^b (row) | Harvest | Average Size (g) | Marketable Yield (lb/100') | Comments |
|---------------------------|------------------------------|---------------------|-------------------------------|---------|---------------------|-------------------------------|------------------|
| 3588 | Early Cross | Al | 2' | 9-5 | 51.4 | 186.7 | excellent flavor |
| 4247 | Special Long Type Nantes | St | " | " | 70.2 | 165.0 | good flavor |
| 4520 | Supreme Long Chantenay | St | " | " | 49.9 | 140.0 | excellent flavor |
| 4554 | Nantes Express | U | " | " | 30.0 | 115.0 | excellent flavor |
| 4249 | Spartan Bonus | St | " | " | 48.0 | 101.7 | |
| 3084 | Spartan Winner | C | " | " | 51.4 | 98.3 | |
| 1761 | Spartan Premium | C | " | " | 42.5 | 90.0 | |
| 4250 | Super Nantes | St | " | " | 44.0 | 75.0 | good flavor |
| 4557 | Juwarot | T&M | " | " | 41.8 | 75.0 | |
| 4553 | Amsterdam Forcing Sweetheart | U | " | " | 29.6 | 73.3 | |
| 4179 | Scarlet Nantes | Hb | " | " | 45.4 | 63.3 | |
| 4248 | Spartan Fancy | St | " | " | 42.5 | 50.0 | good flavor |

^a See seed-sources list.

^b Carrots were seeded with a Planet Junior seeder, using hole No. 8, and were not thinned.

Note: Carrots were seeded May 13, 1980. Fertilizer application was 1320 lb/A 10-20-20.

Table 6. Cauliflower Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Head \bar{x} wt. (g) | Yield (lb/100') | Comments |
|---------------------------|----------------------|---------------------|---------|-----|------------------|---------------------------|--------------------|---|
| | | | plant | row | | | | |
| 4255 | Dominant | St | 16" | 3' | 7-28 | 982 | 162 | nice curd, large head, consistent high yield |
| 4591 | Nevada | RZ | " | " | 7-28 | 794 | 131 | |
| 4558 | Self Wrap | T&M | " | " | 7-18 | 748 | 124 | tying necessary |
| 4254 | Delira | St | " | " | 7-21 | 735 | 122 | tended to be self blanching – good wrapper leaves |
| 4590 | Starlight | RZ | " | " | 7-30 | 729 | 120 | nice curd, somewhat self blanching |
| 3611 | Early Snowball | NK | " | " | 7-25 | 698 | 115 | |
| 4251 | Snow Crown | St | " | " | 7-14 | 653 | 108 | |
| 4532 | White Mountain | S | " | " | 7-18 | 643 | 106 | poor quality |
| 4339 | Dwarf Erfurt | WD | " | " | 7-16 | 621 | 103 | |
| 4533 | Snowball Y | S | " | " | 7-21 | 608 | 100 | |
| 4595 | Early Dominant | V | " | " | 7-16 | 596 | 99 | |
| 4368 | Burpeeana | Bu | " | " | 7-16 | 510 | 84 | |
| 4252 | Snowbird | St | " | " | 7-14 | 506 | 84 | |
| 4075 | Super Snowball | NK | " | " | 7-14 | 481 | 80 | |
| 4232 | Alert | St | " | " | 7-16 | 476 | 79 | |
| 3810 | Early Super Snowball | P | " | " | 7-11 | 469 | 78 | |
| 4253 | Raket | St | " | " | 7-21 | 448 | 74 | |

^aSee seed-sources list.

Note: Greenhouse-grown plants, 28 days old, were transplanted into the field May 28, 1980. Fertilizer application was 1500 lb/A 10-20-20 plus 1.0 lb/A boron and 1.2 lb/A molybdenum applied prior to rototilling.

Table 7. Cucumber Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Yield | | Average Fruit Size (g) | Comments |
|---------------------------|-------------------|---------------------|---------|-----|------------------|------------|-----------|---------------------------|--|
| | | | plant | row | | (g)/plant) | (lb/100') | | |
| 4421 | Dasher | Tw | 3' | 5' | 7-28 | 4478 | 329 | 206 | slicer, attractive |
| 4376 | Supercuke | J&P | " | " | 7-25 | 4146 | 305 | 263 | slicer |
| 4386 | Suyo Long | J | " | " | 8-4 | 3614 | 266 | 380 | slicer, long shape with ridges, good flavor |
| 4420 | Triple Mech | Tw | " | " | 7-25 | 3478 | 256 | 102 | pickler |
| 3495 | A & C Hybrid | A&C | " | " | 8-1 | 3082 | 227 | 123 | slicer |
| 4492 | Spiffy | McF | " | " | 7-25 | 2296 | 169 | 81 | pickler |
| 4217 | Tiny Dill | P | " | " | 7-25 | 1951 | 143 | 59 | pickler |
| 4504 | Femcap | H | " | " | 7-28 | 1911 | 140 | 90 | pickler |
| 4491 | Early Mincu | McF | " | " | 7-25 | 1824 | 134 | 49 | pickler |
| 4490 | Alouette | McF | " | " | 7-25 | 1731 | 127 | 39 | pickler |
| 4363 | W. Indian Gherkin | Bu | " | " | 8-6 | 59 | 4 | 10 | very small, round |

^aSee seed-sources list.

Note: Greenhouse-grown plants, 30 days old, were transplanted into the field June 6, 1980. Plants were grown through 1.5-mil, clear polyethylene mulch on soil fertilized with 1500 lb/A 10-20-20.

Table 8. Green Pea Variety Trials, Bottomland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Block Size | First Harvest | Yield (in shell) (lb/100 ft ²) | Comments |
|---------------------------|--------------|---------------------|------------|------------------|---|---|
| 3450 | Perf Fr. 400 | RB | 6' x 15' | 8-5 | 64.3 | consistent high yield |
| 3452 | Sparkle | RB | " " | 7-29 | 57.3 | consistent high yield |
| 4041 | Maestro | Bu | " " | 8-5 | 54.3 | |
| 1974 | Early Frosty | Bu | " " | 8-5 | 49.3 | |
| 3458 | Fr. 70-091 | RB | " " | 8-14 | 44.3 | |
| 3273 | Sugar Snap | Bu | " " | 8-14 | 40.0 | edible pod |
| 4358 | Snowbird | Bu | 3' x 15' | 7-24 | 31.7 | edible pod, very early, but became over-mature rapidly |
| 4040 | Green Arrow | Bu | 6' x 15' | 8-14 | 28.4 | |
| 4395 | Snowbiz | J | " " | | | edible pod, very large size, not harvested as stand was mixture of edible & nonedible pod types |

^aSee seed-sources list.

Note: Peas were seeded in bottomland plots May 20, 1980. The fertilizer application was 1320 lb/A 10-20-20.

Table 9. Crisphead Lettuce Variety Trials, Bottomland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Head \bar{x} wt (g) | Yield (lb/100') | Av. Core Length Rating ^b | Av. Density Rating ^c | Comments |
|---------------------------|-----------------|---------------------|---------|-----|---------------|--------------------------|--------------------|---|---------------------------------------|---|
| | | | plant | row | | | | | | |
| 4323 | Montello | Tw | 1' | 2' | 7-24 | 553 | 122 | 1 | 3.0 | flavor good, slight bitterness |
| 4322 | Green Lake | Tw | " | " | " | 534 | 118 | 1 | 2.6 | flavor okay |
| 3918 | Ithaca | G | " | " | " | 425 | 94 | 1 | 2.3 | flavor good, slight bitterness |
| 4268 | Capitan | St | " | " | | | | | | did not form usable heads (either tip burn or bolting) |
| 4509 | Commander | K | " | " | | | | | | " |
| 4398 | Conquest Cross | Q | " | " | | | | | | " |
| 4407 | Crisp as Ice | G | " | " | | | | | | " |
| 4397 | Frontier Cross | Q | " | " | | | | | | " |
| 4399 | Grand Duke | Q | " | " | | | | | | " |
| 4390 | Great Lakes 118 | J | " | " | | | | | | " |
| 4551 | Irma | U | " | " | | | | | | " |
| 4255 | Minilake | St | " | " | | | | | | " |
| 4180 | Minneto | Hb | " | " | | | | | | " |
| 3806 | Super 59 | FM | " | " | | | | | | " |

^aSee seed-sources list.

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

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

Note: Lettuce was seeded May 13, 1980. Fertilizer application was 1320 lb/A 10-20-20. Dry conditions early in summer resulted in tip burn and reduced yields.

Table 10. Pepper Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Yield | | Average Size (g) | Comments |
|---------------------------|----------------------|---------------------|---------|------------------|------------------|-----------|-----------|---------------------|------------------------|
| | | | plant | row ^b | | (g/plant) | (lb/100') | | |
| 3920 | Early Prolific | G | 18" | 18" | 8-1 | 425.0 | 124.9 | 59.3 | turns red early |
| 4274 | Earliest Red Sweet | St | " | " | 9-1 | 152.5 | 44.8 | 67.8 | |
| 1875 | Super Set No. 19 | Sa | " | " | 8-19 | 126.7 | 37.2 | 95.0 | |
| 3373 | Park's Whopper | P | " | " | 8-8 | 125.8 | 37.0 | 75.5 | |
| 4273 | Stoke's Early | St | " | " | 8-19 | 91.7 | 26.9 | 68.8 | |
| 1825 | Cadice | S&G | " | " | 8-15 | 76.7 | 22.5 | 57.5 | nice, blocky |
| 4181 | Romanian Hot | Hb | " | " | 8-15 | 61.7 | 18.1 | 28.5 | hot |
| 3469 | Karlo | J | " | " | 8-25 | 55.0 | 16.2 | 47.1 | hot |
| 4072 | Hungarian Yellow Wax | NK | " | " | 8-8 | 41.7 | 12.2 | 15.6 | hot |
| 4340 | Early Calwonder | WD | " | " | 9-1 | 39.2 | 11.5 | 47.0 | |
| 4275 | Vinedale | St | " | " | 9-1 | 17.5 | 5.1 | 21.0 | |
| 4105 | Dutch Treat | AAS | " | " | 8-1 | 5.8 | 1.7 | 11.7 | pointed, yellow, sweet |
| 4272 | Crimson Hot | St | " | " | | | | | peppers did not mature |
| 4182 | Peter Piper | Hb | " | " | | | | | peppers did not mature |
| 4046 | Large Cherry | Bu | " | " | | | | | peppers did not mature |

^aSee seed-sources list.

^bStaggered spacing on 3-ft.-wide, clear, polyethylene mulch.

Note: Greenhouse-grown plants, 65 days old, were transplanted into the field June 6, 1980. Plants were grown through 1.5-mil, clear polyethylene in tents constructed from clear polyethylene. Fertilizer application was 1320 lb/A 10-20-20.

Table 11. Potato Variety Trials, Mile 1408 Alaska Highway, Delta Jct., 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | Harvest Date | U.S. No. 1 Yield | | Comments |
|---------------------------|------------------|---------------------|---------|------|-----------------|------------------|-----------|---|
| | | | plant | row | | (ton/acre) | (lb/100') | |
| 227 | 83-13 | CD | 1' | 3.5' | 8-29 | 11.5 | 173 | nice potato, slight tendency to second growth |
| 245 | 31-3 | " | " | " | " | 11.4 | 172 | tendency for shatter cracks |
| 237 | 10-1 | " | " | " | " | 11.3 | 170 | tendency for shatter cracks |
| 232 | Alaska Frostless | " | " | " | " | 11.0 | 166 | unattractive, poor potato |
| 243 | 8-13 | " | " | " | " | 10.7 | 162 | tendency for growth cracks |
| 235 | 2-5 | " | " | " | " | 10.1 | 153 | tendency for growth and shatter cracks |
| 233 | Alaska Red | " | " | " | " | 10.1 | 152 | nice potato |
| 247 | 13-10 | " | " | " | " | 10.1 | 152 | tendency for growth and shatter cracks |
| 229 | Highlat | " | " | " | " | 9.2 | 138 | skin cracks off and growth cracks |
| 228 | Snowchip | " | " | " | " | 8.5 | 128 | slight tendency for shatter cracks |
| 239 | 87-8 | " | " | " | " | 8.3 | 125 | |
| 234 | Denali | " | " | " | " | 7.5 | 113 | tendency for shatter cracks |
| 231 | 24-3 | " | " | " | " | 7.4 | 112 | tendency for shatter cracks & dumbbell shape |
| 241 | Allagash | " | " | " | " | 7.3 | 110 | severe K deficiency evident on foliage |
| 240 | 28-8 | " | " | " | " | 7.1 | 107 | |
| 236 | 21-6 | " | " | " | " | 7.1 | 107 | severe shatter cracks |
| 242 | 14-1 | " | " | " | " | 7.0 | 105 | severe shatter cracks |
| 238 | 27-2 | " | " | " | " | 6.1 | 92 | severe shatter cracks |
| 244 | 82-11 | " | " | " | " | 5.8 | 87 | some K deficiency on foliage |

^aSee seed-sources list.

Note: These potatoes were planted May 15, 1980, on newly cleared land. The fertilizer application was 1500 lb/A 10-20-20. Approximately 1.5-oz. seed pieces were planted 1 ft. apart in rows spaced 42 inches apart.

Table 12. Potato Variety Trials, Fett's Farm, Delta Jct., 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | % Frosted ^b 8/2/80 | Harvest Date | U.S. No. 1 Yield | | Comments |
|---------------------------|------------------|---------------------|---------|------|----------------------------------|-----------------|------------------|-----------|--|
| | | | plant | row | | | (ton/acre) | (lb/100') | |
| 241 | Allagash | CD | 1' | 3.5' | 20 | 8-29 | 7.3 | 110 | tendency for growth and shatter cracks |
| 237 | 10-1 | " | " | " | 30 | " | 6.8 | 102 | |
| 233 | Alaska Red | " | " | " | 25 | " | 6.5 | 97 | |
| 229 | Highlat | " | " | " | 20 | " | 6.1 | 92 | |
| 245 | 31-3 | " | " | " | 35 | " | 5.8 | 88 | |
| 242 | 14-1 | " | " | " | 50 | " | 5.8 | 87 | |
| 244 | 82-11 | " | " | " | 15 | " | 5.1 | 77 | shatter cracks |
| 236 | 21-6 | " | " | " | 45 | " | 4.8 | 73 | |
| 238 | 27-2 | " | " | " | 35 | " | 4.5 | 68 | |
| 235 | 2-5 | " | " | " | 35 | " | 4.5 | 68 | blackleg |
| 247 | 13-10 | " | " | " | 40 | " | 4.3 | 65 | growth cracks severe |
| 228 | Snowchip | " | " | " | 50 | " | 4.0 | 60 | |
| 232 | Alaska Frostless | " | " | " | 10 | " | 3.8 | 54 | poor potato |
| 227 | 83-13 | " | " | " | 35 | " | 3.2 | 48 | shatter cracks severe |
| 243 | 8-13 | " | " | " | 30 | " | 3.2 | 48 | |
| 234 | Denali | " | " | " | 50 | " | 2.8 | 43 | |
| 240 | 28-8 | " | " | " | 30 | " | 2.5 | 37 | blackleg, shatter cracks |
| 231 | 24-3 | " | " | " | 25 | " | 2.0 | 30 | shatter cracks |

^a See seed-sources list.

^b Percent foliage killed by severe frost that occurred August 2, 1980.

Note: These potatoes were planted May 15, 1980 on previously farmed ground. The fertilizer application 1500 lb/A 10-20-20. Approximately 1.5-oz. seed pieces were planted 1 ft. apart in rows spaced 42 inches apart.

Table 13. Potato Variety Trials, Fairbanks, Bottomland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Soil | Spacing | | Harvest Date | U.S. No. 1 Yield | | Comments |
|---------------------------|----------------|---------------------|------|---------|------|-----------------|------------------|-----------|---|
| | | | | plant | row | | (tons/acre) | (lb/100') | |
| 233 | Alaska Red | CD | Peat | 1' | 3.3' | 9-3, 4 | 20.1 | 300 | tendency for shatter crack, nice |
| | | | Silt | " | " | | " | 21.4 | 320 |
| 228 | Snowchip | CD | Peat | " | " | " | 21.2 | 316 | |
| | | | Silt | " | " | | " | 17.5 | 262 |
| 239 | 87-8 | CD | Peat | " | " | " | 19.6 | 292 | |
| | | | Silt | " | " | | " | 16.8 | 251 |
| — | Green Mountain | AK | Peat | " | " | " | 19.3 | 289 | |
| | | | Silt | " | " | | " | 16.7 | 250 |
| 244 | 82-11 | CD | Peat | " | " | " | 15.7 | 234 | tendency to shatter crack |
| | | | Silt | " | " | | " | 18.9 | 283 |
| 248 | Red Lasoda | P&S | Peat | " | " | " | 16.9 | 252 | tendency for hollow heart and second growth |
| 235 | 2-5 | CD | Peat | " | " | " | 16.5 | 246 | |
| | | | Silt | " | " | | " | 17.2 | 257 |
| 227 | 83-13 | CD | Peat | " | " | " | 17.2 | 257 | nice shape |
| | | | Silt | " | " | | " | 15.9 | 238 |
| — | Alaska 114 | AK | Peat | " | " | " | 15.7 | 235 | nice potato |
| | | | Silt | " | " | | " | 17.4 | 260 |
| 243 | 8-13 | CD | Peat | " | " | " | 16.3 | 244 | slight tendency to second growth |
| | | | Silt | " | " | | " | 16.1 | 240 |
| 237 | 10-1 | CD | Peat | " | " | " | 17.5 | 261 | slight tendency for hollow heart |
| | | | Silt | " | " | | " | 14.8 | 221 |
| — | Emmet | AK | Peat | " | " | " | 17.7 | 264 | nice shape |
| | | | Silt | " | " | | " | 14.2 | 212 |
| 229 | Highlat | CD | Peat | " | " | " | 14.2 | 212 | severe hollow heart, immature skin |
| | | | Silt | " | " | | " | 16.5 | 246 |
| 241 | Allagash | CD | Peat | " | " | " | 15.8 | 236 | severe hollow heart |
| | | | Silt | " | " | | " | 14.6 | 218 |
| 234 | Denali | CD | Peat | " | " | " | 16.3 | 244 | severe growth and shatter crack |
| | | | Silt | " | " | | " | 14.1 | 210 |

| | | | | | | | | | |
|-----|------------------|-----|------|---|---|---|------|-----|--|
| — | Rote-Erstling | AK | Peat | " | " | " | 12.9 | 194 | nice shape, mature skin, yellow flesh |
| | | | Silt | " | " | " | 16.2 | 242 | " |
| 231 | 24-3 | CD | Peat | " | " | " | 12.5 | 187 | nice shape |
| | | | Silt | " | " | " | 16.6 | 248 | " |
| 247 | 13-10 | CD | Peat | " | " | " | 11.8 | 176 | severe hollow heart |
| | | | Silt | " | " | " | 15.0 | 224 | " |
| 242 | 14-1 | CD | Peat | " | " | " | 14.4 | 215 | tendency for shatter cracks and hollow heart |
| | | | Silt | " | " | " | 12.3 | 184 | " |
| 245 | 31-3 | CD | Peat | " | " | " | 12.5 | 186 | severe hollow heart and second growth |
| | | | Silt | " | " | " | 14.2 | 212 | " |
| 232 | Alaska Frostless | CD | Peat | " | " | " | 11.8 | 176 | not attractive, poor shape |
| | | | Silt | " | " | " | 14.2 | 212 | " |
| 240 | 28-8 | CD | Peat | " | " | " | 10.8 | 161 | severe hollow heart and growth cracks |
| | | | Silt | " | " | " | 15.1 | 225 | " |
| 249 | Norgold Russet | P&S | Peat | " | " | " | 12.4 | 185 | slight hollow heart tendency |
| | | | Silt | " | " | " | 10.5 | 156 | " |
| — | Bakeking | AK | Peat | " | " | " | 12.2 | 182 | nice shape, slight tendency to hollow heart |
| | | | Silt | " | " | " | 11.2 | 168 | " |
| 236 | 21-6 | CD | Peat | " | " | " | 11.0 | 164 | severe shatter cracks and second growth |
| | | | Silt | " | " | " | 12.2 | 182 | " |
| — | Swedish | AK | Peat | " | " | " | 10.2 | 152 | many small tubers, yellow flesh |
| | | | Silt | " | " | " | 14.1 | 210 | " |
| 238 | 27-2 | CD | Peat | " | " | " | 10.4 | 156 | severe shatter cracks and second growth |
| | | | Silt | " | " | " | 10.8 | 160 | " |
| — | Kennebec | AK | Peat | " | " | " | 9.2 | 138 | severe hollow heart and oversize |
| | | | Silt | " | " | " | 11.2 | 168 | " |

^aSee seed-sources list.

Note: These potatoes were planted May 16, 1980 in bottomland soils at Fairbanks. Peat plots were amended with approximately 1000 yd³/A peat which was acquired from the College Peat bogs. The pH of the peat-amended soils was 5.4 while the unamended soil was 6.7. Fertilizer was applied to both soils at a rate of 1320 lb/A of 10-20-20.

Table 14. Pumpkin Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | Harvest Date | Average Size (Kg) | Yield (Kg/plant) (lb/100') | | Comments |
|---------------------------|-------------------|---------------------|---------|-----------------|----------------------|-------------------------------|-----|---|
| 4279 | Connecticut Field | St | 8' | 9-1 | 10.43 | 17.39 | 479 | |
| 4325 | Big Moon | Tw | " | 9-1 | 23.59 | 15.72 | 433 | |
| 4307 | Little Boo | Ag | 5' | 9-1 | 4.08 | 9.52 | 420 | interesting white-fleshed pumpkin not mature 9-1 |
| 3015 | Spirit | St | " | | | | | |

^aSee seed-sources list.

Note: Greenhouse-grown plants, 30 days old, were transplanted into the ground June 6, 1980. Plants were grown through 1.5-mil, clear polyethylene. Fertilizer application was 1320 lb/A 10-20-20.

Table 15. Snapbean Variety Trials, Bottomland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | First Harvest | Yield (lb/100') | Comments |
|---------------------------|----------------------------|---------------------|------------------|--------------------|-------------------------|
| 4396 | Beurre de Rocquencourt Wax | J | 8-15 | 97.1 | |
| 3461 | Oregon 1604 | RB | 8-15 | 81.9 | consistent high yield |
| 3462 | Rogers 76-102 | RB | 8-15 | 77.2 | consistent high yield |
| 4237 | Honey Gold | St | 8-15 | 73.4 | |
| 4236 | Contender | St | 8-15 | 58.1 | |
| 4302 | Provider | Ag | 8-12 | 51.5 | |
| 4316 | Roma | Tw | 8-15 | 44.5 | flat bean, high quality |
| 4347 | Dutch Stringless | WD | 8-15 | 33.7 | |
| 4235 | Spring Green | St | 8-15 | 33.1 | |
| 4556 | Gitana Dwarf French | U | 8-20 | 9.3 | |
| 4400 | Moongold Wax | Gu | 8-15 | 3.4 | |
| 4565 | Selka Improved Runner | T&M | | | no mature beans |

^aSee seed-sources list.

Note: Beans were seeded into bottomland plots May 20, 1980. The fertilizer application was 1320 lb/A 10-20-20.

Table 16. Squash, Summer, Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | First Harvest | Yield | | Comments |
|---------------------------|----------------|---------------------|---------|------------------|-----------|------------------------|------------------------------------|
| | | | | | (g/plant) | (lb/100 ³) | |
| 3507 | Greenzini | FM | 3' | 7-21 | 11570 | 850 | consistent high yield and quality |
| 4310 | Black Beauty | Ag | " | 7-19 | 11358 | 835 | |
| 4311 | Milano | Ag | " | 7-19 | 11350 | 834 | some plants produced striped fruit |
| 4534 | Black Jack | S | " | 7-19 | 11142 | 819 | |
| 4223 | Clarita | P | " | 7-19 | 9118 | 670 | stubby shape, light green |
| 3506 | Hyzini | FM | " | 7-19 | 8935 | 657 | |
| 4326 | Aristocrat | Tw | " | 7-19 | 8142 | 598 | |
| 4100 | Gold Rush | AAS | " | 7-19 | 7655 | 563 | attractive golden yellow |
| 4535 | White Zucchini | S | " | 7-19 | 7092 | 521 | stubby shape, cream color |
| 3186 | Sundance | Pe | " | 7-19 | 3990 | 293 | crook neck, good quality |
| 4415 | Cracker | Tw | 8' | 7-23 | 5632 | 155 | poor quality |

^aSee seed-sources list.

Note: Greenhouse-grown plants, 25 days old, were transplanted into the field June 6, 1980. Plants were grown through 1.5-mil clear polyethylene. Fertilizer application was 1320 lb/A 10-20-20.

Table 17. Squash, Winter, Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | First Spacing | First Harvest | Average Size (Kg) | Yield (Kg/plant) (lb/100') | | Comments |
|---------------------------|---------------------|---------------------|---------------|---------------|-------------------|-------------------------------|-----|--|
| 2018 | Hybrid R | F | 5' | 9-1 | 3.80 | 15.20 | 670 | good quality |
| 4417 | Boston Marrow | Tw | 8' | 9-1 | 11.96 | 15.95 | 440 | |
| 3443 | Pink Banana | Ho | 8' | 9-1 | 5.14 | 10.28 | 283 | |
| 4186 | Turk's Turban | Hb | 5' | 9-1 | 2.46 | 5.75 | 253 | |
| 4278 | Golden Hubbard | St | 8' | 9-1 | 2.91 | 5.82 | 160 | |
| 4394 | Green Hokkaido | J | 5' | 9-1 | 2.44 | 3.25 | 143 | |
| 4276 | Burpee's Butterbush | St | 4' | | | | | did not mature because fruit set very late |
| 4224 | Tahitian | P | 8' | | | | | " |
| 4231 | Golden Turban | F | 5' | | | | | " |
| 4416 | Table Gold | Tw | 5' | | | | | bush type, set fruit very late |

^aSee seed-sources list.

Note: Greenhouse-grown plants, 30 days old, were transplanted into the field June 6, 1980. Plants were grown through 1.5-mil, clear polyethylene. Fertilizer application was 1320 lb/A 10-20-20.

Table 18. Sweet Corn Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Yield (lb/100 ft) | Comments |
|---------------------------|---------------------|---------------------|---------|-----|---------------|-------------------|----------------|
| | | | plant | row | | | |
| 4259 | Polar Vee | St | 1' | 4' | 8-17 | 135 (215 ears) | |
| 4260 | Earlivee | St | " | " | 8-25 | 99 (130 ears) | |
| 4261 | Northern Vee | St | " | " | 8-25 | 79 (120 ears) | |
| | Yukon Chief | AK | " | " | 8-25 | 47 (130 ears) | |
| 4594 | Aztec | V | " | " | | | did not mature |
| 4258 | Butter Vee | St | " | " | | | " |
| 4528 | Candidawn | S | " | " | | | " |
| 4483 | Dawn | Al | " | " | | | " |
| 4067 | Earliking | NK | " | " | | | " |
| 4263 | Early Gold & Silver | St | " | " | | | " |
| 4320 | Explorer | Tw | " | " | | | " |
| 4227 | Faribo Sugar & Gold | F | " | " | | | " |
| 4527 | Gold Crest | S | " | " | | | " |
| 4501 | Northern Sweet | St | " | " | | | " |
| 4513 | Peaches & Cream | Bg | " | " | | | " |
| 4494 | Royal Crest | McF | " | " | | | " |
| 4493 | Seneca Pathfinder | McF | " | " | | | " |
| 4500 | Sunny Vee | St | " | " | | | " |
| 4262 | White Sunglow | St | " | " | | | " |

^a See seed-sources list.

Note: Sweet corn was seeded May 7, 1980, 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. The fertilizer application was 1500 lb/A 10-20-20.

Table 19. Tomato Variety Trials, Upland, 1980.

| A. E. S. Accession No. | Variety | Source ^a | Spacing | | First Harvest | Yield | | Average Fruit size (g) | Comments |
|---------------------------|---------------------------------|---------------------|---------|-----|------------------|-----------|-----------|---------------------------|---|
| | | | plant | row | | (g/plant) | (lb/100') | | |
| 4392 | Earlirouge | J | 3' | 5' | 9-1 | 97 | 7 | 138 | |
| 3475 | Tanana | F | " | " | 8-2 | 78 | 6 | 70 | |
| 1810 | Sleaford Abundance | Sh | " | " | 9-1 | 23 | 2 | 47 | |
| 4499 | Basket Vee ^b | St | " | " | | | | | blossom end typically pointed, many showed cold damage |
| 3182 | Floramerica ^b | Pe | " | " | | | | | |
| 1811 | Hardicross ^b | Sh | " | " | | | | | small size |
| 4229 | Nepal ^b | F | " | " | | | | | |
| 3811 | Park's Extra Early ^b | P | " | " | | | | | |
| 3769 | Severianin ^b | OSU | " | " | | | | | necrosis around stems |

^aSee seed-sources list.

^bProduced mature green fruit, but no ripe fruit in the field. Many varieties received cold injury prior to harvest and consequently did not ripen satisfactorily indoors.

Note: Greenhouse grown plants, 52 days old, were transplanted into field June 6, 1980. Plants were grown through 1.5-mil, clear polyethylene. Fertilizer application was 1320 lb/A 10-20-20.

Miscellaneous Vegetables Tested

| Crop | Source | Comment |
|----------------------------------|--------|---|
| Artichokes | | |
| No. 3412 Green Globe | Hb | yielded 18 lb/100' at 24" spacing |
| No. 4635 Grand Beurre | T&M | yielded 24 lb/100' at 24" spacing |
| Beets | | |
| No. 3606 Ruby Queen | NK | some bolting |
| No. 4226 Sweetheart | F | bolted |
| No. 4418 New Early | Tw | bolted |
| No. 1981 Burpee's Golden | Bu | golden color, good quality |
| No. 1908 Little Egypt | St | good |
| No. 4238 Spring Red | St | good |
| No. 4662 Avonearly | Su | good |
| No. 1739 Formanova | V | long shape, slight tendency to bolt |
| Brussels Sprouts | | |
| No. 3798 Crenel | RS | yielded 73 lb/100' at 24" spacing |
| No. 3799 Craton | RS | yielded 59 lb/100' at 24" spacing |
| No. 3205 Green Gem | K | yielded 88 lb/100' at 24" spacing |
| No. 4424 Earli-Jade | A&C | yielded 101 lb/100' at 24" spacing |
| No. 4064 Jade Cross E | NK | yielded 81 lb/100' at 24" spacing |
| No. 4338 Rubine Red | WD | yielded 10 lb/100' at 24" spacing |
| Celery | | |
| No. 1895 Improved Utah 52-70 | St | average size 928g at 12" x 18" spacing |
| No. 3892 Transgreen | FM | average size 1266g at 12" x 18" spacing |
| No. 4488 Florimart | McF | average size 996g at 12" x 18" spacing, severe blackheart |
| No. 4505 Fordhook Giant | W | average size 1264 at 12" x 18" spacing |
| Chard | | |
| No. 4256 White King | St | nice, did not bolt |
| No. 1798 Rex | OE | large size, did not bolt |
| No. 4360 Perpetual | Bu | bolts if allowed to stand |
| No. 4257 Rhubarb Chard | St | bolts if allowed to stand |
| No. 4377 Large Ribbed Dark Green | J&P | bolts if allowed to stand |
| Chinese Cabbage | | |
| No. 4177 Wong Bok | Hb | bolted |
| No. 4318 Statue | Tw | bolted |
| No. 4385 Spring A-1 | J | bolted |
| No. 4178 Pai Tsai | Hb | bolted |

| Crop | Source | | Comment |
|---------------------------|---------------------|-----|------------------------------|
| Dill | | | |
| No. 4313 | Dukat | Ag | satisfactory |
| No. 4069 | Long Island | NK | satisfactory |
| No. 3297 | Tuve | Ag | uniform plants |
| Greens | | | |
| No. 4387 | Pac Choi | J | nice, slow to bolt |
| No. 981 | Dwarf Blue Kale | G | very nice |
| Herbs | | | |
| No. 4383 | Horehound | J | satisfactory |
| No. 3819 | Sage | P | satisfactory |
| No. 3818 | Spearmint | P | satisfactory |
| No. 3820 | Curled Mint | P | better flavor than spearmint |
| No. 4382 | Coriander | J | matures seed |
| No. 4049 | Anise | Bu | marginal |
| No. 4175 | Oregano | Hb | poor flavor |
| No. 2050 | Basil | NK | marginal |
| No. 2055 | Summer Savory | NK | satisfactory |
| No. 2057 | Thyme | NK | satisfactory |
| No. 4070 | Chervil | NK | satisfactory |
| No. 3821 | Chives | P | satisfactory |
| Kohlrabi | | | |
| No. 3517 | Grand Duke | AAS | earliest, good quality |
| No. 4405 | Prima | Gu | large |
| No. 4218 | Azurstar | P | nice purple color |
| No. 3616 | Early Purple Vienna | NK | very small, late |
| No. 4422 | Grand Master | A&C | good |
| Leaf Lettuce | | | |
| No. 4045 | Green Ice | Bu | good |
| No. 4219 | Red Salad Bowl | P | dark red color, nice |
| No. 4496 | Deep Red | H | good |
| No. 3619 | Salad Bowl | NK | dependable |
| No. 4369 | Royal Oak Leaf | Bu | attractive leaf shape |
| No. 4341 | Dunsel | WD | bolted |
| No. 4220 | Crispy Sweet | P | poor germination |
| Butterhead Lettuce | | | |
| No. 1884 | Ostinata | St | O.K. |
| No. 4342 | Neckarriesen | WD | tip burn |
| No. 4653 | Sigmadeep | Su | not much flavor |
| No. 4654 | Sigball | Su | O.K. |
| No. 4656 | Continuity | Su | red tip |
| No. 4652 | Dandie | Su | bolted |

| Crop | Source | Comment |
|---------------------------------|----------------------------|--|
| Leeks | | |
| No. 3472 | King Richard | J satisfactory |
| No. 4343 | Giant Elefant | WD largest size |
| No. 4344 | French Summer | WD many did not reach marketable size |
| No. 1800 | Titan | OE satisfactory |
| Mangels & Sugarbeets | | |
| No. 4304 | Giant Western Sugarbeet | Ag yielded 100lb/100' |
| No. 4303 | Mammoth Long Red Mangel | Ag yielded 302lb/100' |
| Bunching Onions | | |
| No. 1778 | Heshiko | D harvestable 1st week in August |
| No. 4271 | Hardy White Bunching | St harvestable 1st week in August |
| No. 4631 | Eclipse | J pickling onion, poor germination |
| Parsley | | |
| No. 4300 | Curlina | St very attractive |
| No. 4301 | Unicurl | St nice |
| No. 4068 | Dark Green Moss | NK flat leaf—seed packet incorrectly labeled |
| Radish | | |
| No. 3031 | Burpees White | Bu |
| No. 1223 | Cherry Belle | St |
| No. 3628 | Giant White Globe | NK |
| No. 4230 | White Prince | F poor germination, bolted |
| No. 4423 | Rosie | A&C bolted |
| No. 3533 | White Icicle | SS |
| No. 4184 | Scarlet Knight | Hb bolted |
| No. 4309 | Sparkler | Ag bolted |
| No. 4183 | Hailstone | Hb |
| No. 4308 | Early Scarlet Globe | Ag bolted |
| No. 4185 | Red Prince | Hb bolted |
| No. 4391 | Tokinashi | J large, Daikon-type, satisfactory |
| No. 4517 | Sakuajima | Bg large, Daikon-type, bolted |
| Rutabaga | | |
| No. 3326 | Altasweet | St |
| No. 4047 | Purple Top Yellow | Bu poor germination |

| Crop | Source | Comments |
|----------------|-------------------|---|
| Spinach | | |
| No. 3919 | Melody | G slow to bolt |
| No. 4664 | Greenmarket | Su produced useable leaves before bolting |
| No. 4665 | Sigmaleaf | Su bolted |
| No. 4563 | Monnopa | T&M bolted |
| No. 4364 | Malabar | Bu bolted |
| No. 4410 | Northland | Gu bolted |
| No. 4530 | Winter Bloomsdale | S produced useable leaves before bolting |
| No. 4529 | Nores | S bolted |
| No. 4555 | Symphonie | U bolted |
| No. 4642 | Munduro | ARZ bolted |
| Turnips | | |
| No. 3814 | Tokyo Cross | P bolts if left to stand |
| No. 4666 | Golden Ball | Su |
| No. 4393 | Yorii Spring | J |
| No. 1849 | Tokyo Top | Sa |
| No. 4312 | Amber Gold Turnip | Ag |

Seed Sources

| | |
|-----|--|
| A | Asgrow Seed Co., Subsidiary of the Upjohn Co., Kalamazoo, MI 49001 |
| AAS | All-American Selections, 4546 El Camino Real, Suite A, Los Alto, 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 | Alaska Agriculture Experiment Station, Fairbanks, AK 99701 |
| Al | Alberta Nurseries & Seeds, Ltd., Box 20, Bowden, Alberta T0M 0K0, Canada |
| ARZ | A.R. Zwaan en Zoon B.V., Prinses Mariannelaan 296, P. O. Box 992, 2270 AZ Voorburg, The Netherlands |
| Bg | Burgess Seed and Plant Co., 905 Four Seasons Road, Bloomington, IL 61701 |
| Bu | W. Atlee Burpee Co., 6350 Rutland Ave., Box 748, Riverside, CA 92502 |
| C | Crookham Co., P. O. Box 520, Caldwell, ID 83605 |
| CD | Dr. Curtis H. Dearborn, Agricultural Experiment Station, Box AE, Palmer, AK 99645 |
| D | Dessert Seed Co., P. O. Box 181, El Centro, CA 92243 |
| F | Farmer Seed & Nursery Co., Faribault, MN 55021 |
| Fi | Henry Field Seed & Nursery Co., Shenandoah, IA 51602 |
| FM | Ferry-Morse Seed Co., P. O. Box 100, Mountain View, CA 94042 |
| G | H. G. German Seeds, Inc., Box N, Smethport, PA 16749 |
| Gu | Gurney Seed and Nursery Co., Yankton, SD 57079 |
| H | Joseph Harris Co., Inc., Moreton Farm, Rochester, NY 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 |
| J | Johnny's Selected Seeds, Albion, ME 04910 |
| J&P | Jackson & Perkins Co., Medford, OR 97501 |
| K | Keystone Seed Co., P. O. Box 1438, Hollister, CA 95023 |
| McF | McFayden Seed Co., Ltd., Box 1600, 30-19th St., Brandon, Manitoba R7A 6A6, Canada |
| NK | Northrup King & Co., 1500 Jackson St., N.E., Minneapolis, MN 55413 |
| OE | Ohlesens-Enke, NY Munkegaard, Copenhagen-Toastrup, Denmark |
| OSU | Dept. of Horticulture, Oregon State University, Corvallis, OR 97331 |
| P | George W. Park Seed Co., Box 31, Greenwood, SC 29647 |
| Pe | Petoseed Co., Inc., P. O. Box 4206, Saticoy, CA 93003 |
| P&S | Pay 'n Save Stores, Fairbanks, AK |
| Q | Quali-Sel Seeds, 11 W. Laurel Dr., Suite 125, Salinas, CA 93906 |
| RB | Rogers Brothers Co., P. O. Box 1674, Idaho Falls, ID 83401 |
| RS | Royal Sluis Inc., 1293 Harking Rd., Salinas, CA 93907 |
| RZ | Rijk Zwaan Zaadteet en Zaadhandel B. V., 6, Chapel Hill Road, Pocklington, York, Y04 2JQ, England |
| S | Siegers Seed Co., 7245 Imlay City Rd., Imlay City, MI 48444 |
| Sa | Sakata Seed Co., 2 Kiribatake, Kanagawa-KV, Yokohama, Japan |
| Se | Seedway, Inc., Hall, NY 14463 |
| 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, NY 14240 |
| Su | Sutton Seeds, Hele Road, Torquay, Devon TQ2 7QJ, England |
| T&M | Thompson & Morgan, Inc., Box 100, Farmingdale, NJ 07727 |
| Tw | Otis S. Twilley Seed Co., Inc., P. O. Box 65, Trevoise, PA 19047 |
| U | W. J. Unwin, Ltd., P. O. Box 9, Farmingdale, NJ 07727 |
| V | Vesey's Seeds, Ltd., York, Prince Edward Is. C0A 1P0, Canada |
| W | Willhite Melon Seed Farms, P. O. Box 85, Weatherford, TX 76085 |
| WD | William Dam Seeds, P. O. West Flamboro, Ontario L0R 2K0, Canada |