



**Pennsylvania Department of Agriculture  
Bureau of Plant Industry  
2022 Fiscal Year Seed Report  
Pennsylvania Seed Act**

**August 2024**

## Overview

The Pennsylvania Department of Agriculture Bureau of Plant Industry Seed Division performs analyses on seed samples drawn under the authority of the Pennsylvania Seed Act (amended 2005). The act provides consumers with truthful and accurate information to help make seed purchasing decisions.

The division is responsible for (1) administration and enforcement of the Pennsylvania Seed Act; (2) administration of the Seed Certification Act; (3) operation of the State Seed Laboratory; and (4) maintenance of the seed herbarium.

This report is a summary of official seed inspection and laboratory analyses performed by the seed division from **July 1, 2022 to June 30, 2023**.

## Regulatory Requirements

The Seed act, from which the division derives its authority, requires proper labeling for all seeds distributed in Pennsylvania. Information must appear on a tag or label attached in a conspicuous place on the exterior of the seed container. Seed not properly labeled are subject to a "Stop Sale" order, which prohibits their sale/distribution until relabeled to be in compliance with the law. Additionally, the person whose name appears on the seed analysis label must obtain an annual seed license at a cost of \$25.

During the fiscal year of 2022 there were **503** licensed Seed Dealers. The Department collected a total of **\$12,575.00** for Seed Dealers license fees.

The Pennsylvania Code Chapter 111 lists additional requirements for labeling seeds, including:

- Labeling of flower seed mixtures
- Labeling of lawn seed mixtures
- Labeling of treated seeds
- Labeling of seeds for sprouting
- Germination standards for vegetable and flower seeds
- List of prohibited noxious weed seeds
- List of restricted noxious weed seeds including undesirable grass seed in lawn and turf seeds

## Seed Certification

Seed certification helps maintain, and make available to the public, sources of high quality seeds and propagating materials of superior varieties grown and distributed to ensure genetic identity. Only after passing rigid field and seed standards can seed be labeled as a class of certified seed. For a summary of crop, variety and acres inspected see Table V.

During the fiscal year the Department collected, **\$12,289.82** in fees for field inspection, tags, labels and other services.

The Pennsylvania Department of Agriculture is an active member of the Association of Official Seed Certifying Agencies.

## Seed Laboratory

The Seed Laboratory provides technical information and performs a range of tests and analyses on seed samples from various sources. All seed samples are prepared and tested according to the "AOSA Rules for Testing Seeds" as approved and published by the Association of Official Seed Analysts (AOSA).

During the reporting period, the laboratory received a total of **5,047** samples that required **7531** separate tests (See Table I). Plant Industry Inspectors submitted **1,808** regulatory seed samples for enforcement of the Seed Act, and **1** regulatory sample to test for viable weed seed to aid in the enforcement of the PA Feed Act. In addition, Plant Industry Inspectors issued **97** Seed Stop Sale Notices for labeling violations directly at retail and wholesale locations representing **2418** containers.

Farmers, wholesale seedsmen and retail outlets submitted **2,887** service samples for labeling purposes and guidance in planting. The seed certification program and various other state agencies submitted **351** samples to determine if the seed met their standards or specifications. The Department collected a total of **\$85,337.82** in fees for these services

The Pennsylvania Seed Act provides the Department the authority to fix, adjust, assess and collect fees for the certification inspection services and requested seed tests. The fees shall be enough to meet reasonable expenses incurred by the Department in making such inspections for certification and conducting seed tests. The current fee structure for seed service samples and certification services are available on the Department website at [www.agriculture.pa.gov](http://www.agriculture.pa.gov). The Secretary may adjust the fees by sending notice to licensees and publishing a notice in the Pennsylvania Bulletin. The fees, derived from these services and seed dealer licensing fees, help support the Seed Program.

The Seed Analysts also identifies and tests seeds for the Pennsylvania Department of Transportation, other various State agencies, the State Police Crime Laboratory and the public.

The Seed Laboratory is an active member of Association of Official Seed Analysts (AOSA) and cooperates in work of various committees. Staff members attend the annual meeting of AOSA to vote on rule changes, discuss other items of business and attend committee meetings. Currently, Seed Program Supervisor Johnny Zook is the President of the AOSA and represents the Association at affiliate meetings. Seed Laboratory Supervisor Nishit Patel is the current AOSA CO-chair of the joint Purity Subcommittee. Staff members also participated in online seed training; notably the USDA and AOSA webinars.

The department is also an active member of the Association of American Seed Control Officials (AASCO). Seed Program Supervisor Johnny Zook attends the annual meeting and represents the Association at affiliate meetings.

Each year the Seed Analysts assist the small grain judge at the Pennsylvania Farm Show by examining each individual exhibit for noxious and common weed seeds, other crop seeds and foreign material.

**Table I**

Classification of samples by kind and numbers of tests involved.

| <b>Number of Samples</b> | <b>Kinds</b>                    | <b>Purity</b> | <b>Noxious Weed Examinations</b> | <b>Germinations*</b> |
|--------------------------|---------------------------------|---------------|----------------------------------|----------------------|
| 1,588                    | Vegetable                       | 38            | 4                                | 1,564                |
| 2,513                    | Agricultural                    | 840           | 959                              | 2,301                |
| 506                      | Flower                          | 2             | 1                                | 467                  |
| 1                        | Tree                            | 0             | 0                                | 0                    |
| 1                        | Feed                            | 0             | 1                                | 0                    |
| 0                        | Sprouting Seed                  | 0             | 0                                | 0                    |
| 82                       | Pasture Mix or Blend            | 22            | 33                               | 65                   |
| 1                        | Flower Mix or Blend             | 0             | 0                                | 0                    |
| 1                        | Vegetable Mix or Blend          | 0             | 0                                | 1                    |
| 69                       | Conservation Mix or Blend       | 2             | 2                                | 5                    |
| 0                        | Vegetable Kit                   | 0             | 0                                | 0                    |
| 261                      | CSLT Grass Mix or Blend         | 125           | 147                              | 123                  |
| 0                        | Native Warm Season Mix or Blend | 0             | 0                                | 0                    |
| 24                       | CSLT Grass Single Kind          | 14            | 24                               | 14                   |
| <b>5,047</b>             | <b>Totals</b>                   | <b>1,043</b>  | <b>1,171</b>                     | <b>4,540</b>         |

| <b>Other Tests</b>           |              |
|------------------------------|--------------|
| Interstate Noxious Weed Test | 146          |
| Treated Germination Test     | 0            |
| Cold Test                    | 151          |
| Sand Test                    | 3            |
| Roundup® Ready Test          | 3            |
| Tetrazolium Test             | 5            |
| Endophyte Test               | 0            |
| Ryegrass Fluorescence Test   | 174          |
| Oats Fluorescence Test       | 83           |
| 400 Seed Count Test          | 86           |
| Miscellaneous Test           | 3            |
| Canada Noxious Weed Test     | 79           |
| Seed Count Test              | 44           |
| <b>Total Tests</b>           | <b>7,531</b> |

\* Includes preliminary and final seedling counts.

## SEED ACT ENFORCEMENT

In the enforcement of the Seed Act, Plant Industry Inspectors visit wholesale and retail firms to inspect seed labeling and obtain samples for testing. The inspectors collected 1,808 seed samples. A total of 154 lots or 8.52% of these samples were found to be in violation of the Act, of which 131 (5,329 containers) were placed under 'Stop Sale' at 51 locations. These 'Stop Sales' are released when the owner or custodian of the seed follows the recommended procedure to have it relabeled in compliance with the law or otherwise disposed.

The tables on the following pages summarize the Seed Act Activities.

Table II is a comparison of the percentage of all violations for the past three years for all classes of seeds.

Table III summarizes the kinds of agriculture, vegetable and flower seeds tested with the number and percentage violation of each.

Table IV summarizes the inspection record of individual wholesale distributors giving total samples and number correctly labeled or in violation.

Table V represents a summary of crops, varieties and acres inspected by the seed certification program.

**Table II**

A comparison of violations of seed samples taken by seed inspectors.

| Kinds                           | Number of Samples* | % Violations         |                      |                      |
|---------------------------------|--------------------|----------------------|----------------------|----------------------|
|                                 |                    | 7/1/2022 - 6/30/2023 | 7/1/2021 - 6/30/2022 | 7/1/2020 - 6/30/2021 |
| Vegetable                       | 881                | 5.56%                | 5.63%                | 3.13%                |
| Agricultural                    | 338                | 17.75%               | 15.63%               | 5.40%                |
| Flower                          | 339                | 3.54%                | 5.17%                | 9.20%                |
| Sprouting Seed                  | 0                  | 0.00%                | 100.00%              | 0.00%                |
| Pasture Mix or Blend            | 32                 | 28.13%               | 29.17%               | 20.93%               |
| Vegetable Mix or Blend          | 1                  | 0.00%                | 8.00%                | 0.00%                |
| Conservation Mix or Blend       | 0                  | 0.00%                | 0.00%                | 80.00%               |
| Vegetable Kit                   | 0                  | 0.00%                | 100.00%              | 0.00%                |
| CSLT Grass Mix or Blend         | 192                | 10.94%               | 11.25%               | 15.67%               |
| Native Warm Season Mix or Blend | 0                  | 0.00%                | 0.00%                | 0.00%                |
| CSLT Grass Single Kind          | 24                 | 12.50%               | 9.09%                | 0.00%                |
| <b>Totals</b>                   | <b>1,807</b>       | <b>8.52%</b>         | <b>8.04%</b>         | <b>6.88%</b>         |

\* Samples collected by seed inspectors 7/1/2022 - 6/30/2023

## Explanation of abbreviations used in tables.

- CL – Correctly labeled.  
 SV – Serious violation, discrepancy exceeds double the tolerance.  
 MV – Minor violation, discrepancy exceeds regular tolerance.  
 TV – Technical violation, label does not bear all required information.  
 #VIOL – Number of violations.  
 %VIOL – Percentage of violations.

**Table III**

Total of each kind tested, number and percentage of violations.

| Seed Kind Tested                | Vegetable Seeds |    |    |    |    |       |         |
|---------------------------------|-----------------|----|----|----|----|-------|---------|
|                                 | Total           | CL | SV | TV | MV | #VIOL | %VIOL   |
| .                               | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Alfalfa                         | 1               | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Artichoke                       | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Arugula                         | 9               | 9  | 0  | 0  | 0  | 0     | 0.00%   |
| Asparagus                       | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Asparagus Bean (Yardlong)       | 2               | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Basil                           | 21              | 21 | 0  | 0  | 0  | 0     | 0.00%   |
| Bean, Garden                    | 39              | 36 | 3  | 0  | 0  | 3     | 7.69%   |
| Bean, Snap                      | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Beet                            | 22              | 20 | 2  | 0  | 0  | 2     | 9.09%   |
| Beet, Sugar                     | 2               | 0  | 2  | 0  | 0  | 2     | 100.00% |
| Borage, Common                  | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Broccoli                        | 15              | 15 | 0  | 0  | 0  | 0     | 0.00%   |
| Broccoli Raab (Turnip Broccoli) | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Brome, Smooth                   | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Brussels-Sprouts                | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Cabbage                         | 9               | 9  | 0  | 0  | 0  | 0     | 0.00%   |
| Cantaloupe                      | 11              | 11 | 0  | 0  | 0  | 0     | 0.00%   |
| Carrot                          | 34              | 31 | 2  | 0  | 1  | 3     | 8.82%   |
| Catnip                          | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cauliflower                     | 10              | 10 | 0  | 0  | 0  | 0     | 0.00%   |
| Celeriac                        | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Celery                          | 4               | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Chamomile, Bodegold             | 1               | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Chervil                         | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Chives                          | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Cilantro                        | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Collards                        | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Corn, Hybrid Field              | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Corn, Sweet                     | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Cornsalad                       | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |

| Seed Kind Tested          | Vegetable Seeds |    |    |    |    |       |         |
|---------------------------|-----------------|----|----|----|----|-------|---------|
|                           | Total           | CL | SV | TV | MV | #VIOL | %VIOL   |
| Cowpea                    | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Cress                     | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cress, Water              | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Cucumber                  | 36              | 35 | 1  | 0  | 0  | 1     | 2.78%   |
| Dill                      | 8               | 8  | 0  | 0  | 0  | 0     | 0.00%   |
| Eggplant                  | 16              | 16 | 0  | 0  | 0  | 0     | 0.00%   |
| Endive                    | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Escarole                  | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Fennel                    | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Fennel, Florence(Sweet)   | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Gourd, Bottle             | 1               | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Gourds, Luffa (Dishcloth) | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Honey Dew                 | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Kale                      | 19              | 18 | 1  | 0  | 0  | 1     | 5.26%   |
| Kale, Ornamental          | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Kohlrabi                  | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Leek                      | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Lemon Balm                | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| lemongrass                | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Lettuce                   | 57              | 52 | 5  | 0  | 0  | 5     | 8.77%   |
| Lima Bean                 | 7               | 4  | 2  | 0  | 1  | 3     | 42.86%  |
| Mache (Corn salad)        | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Malabar Spinach           | 2               | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Marjoram                  | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Melon, Chinese            | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Melons                    | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Mint                      | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Mung Bean                 | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Mustard                   | 10              | 10 | 0  | 0  | 0  | 0     | 0.00%   |
| New Zealand Spinach       | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Oat                       | 1               | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Okra                      | 5               | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Onion                     | 11              | 10 | 1  | 0  | 0  | 1     | 9.09%   |
| Oregano                   | 3               | 2  | 1  | 0  | 0  | 1     | 33.33%  |
| Pakchoi                   | 3               | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Parsley                   | 13              | 13 | 0  | 0  | 0  | 0     | 0.00%   |
| Parsnip                   | 2               | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Pea, Garden               | 35              | 33 | 2  | 0  | 0  | 2     | 5.71%   |
| Pepper                    | 39              | 37 | 2  | 0  | 0  | 2     | 5.13%   |
| Pepper, Hot               | 36              | 36 | 0  | 0  | 0  | 0     | 0.00%   |
| Perilla                   | 1               | 1  | 0  | 0  | 0  | 0     | 0.00%   |

| Seed Kind Tested      | Vegetable Seeds |            |           |          |          |           |              |
|-----------------------|-----------------|------------|-----------|----------|----------|-----------|--------------|
|                       | Total           | CL         | SV        | TV       | MV       | #VIOL     | %VIOL        |
| Pole Bean             | 4               | 3          | 1         | 0        | 0        | 1         | 25.00%       |
| Popcorn               | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Pumpkin               | 26              | 24         | 2         | 0        | 0        | 2         | 7.69%        |
| Purslane              | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Radicchio             | 4               | 4          | 0         | 0        | 0        | 0         | 0.00%        |
| Radish                | 36              | 35         | 1         | 0        | 0        | 1         | 2.78%        |
| Rosemary              | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Runner Bean           | 3               | 2          | 1         | 0        | 0        | 1         | 33.33%       |
| Rutabaga              | 2               | 2          | 0         | 0        | 0        | 0         | 0.00%        |
| Sage                  | 3               | 2          | 1         | 0        | 0        | 1         | 33.33%       |
| Savory, Summer        | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Scarlet Runner Bean   | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Senposai              | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Sesame                | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Shallot               | 3               | 3          | 0         | 0        | 0        | 0         | 0.00%        |
| Soybean               | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Spinach               | 14              | 13         | 1         | 0        | 0        | 1         | 7.14%        |
| Squash                | 29              | 26         | 3         | 0        | 0        | 3         | 10.34%       |
| Squash, Autumn-Winter | 18              | 15         | 3         | 0        | 0        | 3         | 16.67%       |
| Stevia                | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Stevia, sweet         | 1               | 0          | 1         | 0        | 0        | 1         | 100.00%      |
| Strawberry            | 1               | 0          | 1         | 0        | 0        | 1         | 100.00%      |
| Strawberry, Alpine    | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Sweet Corn            | 29              | 29         | 0         | 0        | 0        | 0         | 0.00%        |
| Swiss Chard           | 7               | 7          | 0         | 0        | 0        | 0         | 0.00%        |
| Thyme                 | 4               | 4          | 0         | 0        | 0        | 0         | 0.00%        |
| Tomatillo             | 3               | 3          | 0         | 0        | 0        | 0         | 0.00%        |
| Tomato                | 121             | 120        | 1         | 0        | 0        | 1         | 0.83%        |
| Turnip                | 9               | 9          | 0         | 0        | 0        | 0         | 0.00%        |
| Watermelon            | 17              | 16         | 1         | 0        | 0        | 1         | 5.88%        |
| Wheat                 | 1               | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| <b>Total</b>          | <b>908</b>      | <b>859</b> | <b>47</b> | <b>0</b> | <b>2</b> | <b>49</b> | <b>5.40%</b> |

| Seed Kind Tested  | Agricultural Seeds |    |    |    |    |       |        |
|-------------------|--------------------|----|----|----|----|-------|--------|
|                   | Total              | CL | SV | TV | MV | #VIOL | %VIOL  |
| Alfalfa           | 27                 | 19 | 6  | 2  | 0  | 8     | 29.63% |
| Barley            | 5                  | 5  | 0  | 0  | 0  | 0     | 0.00%  |
| Bean, Hyacinth    | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%  |
| Birdsfoot Trefoil | 2                  | 2  | 0  | 0  | 0  | 0     | 0.00%  |



| Seed Kind Tested          | Agricultural Seeds |    |    |    |    |       |         |
|---------------------------|--------------------|----|----|----|----|-------|---------|
|                           | Total              | CL | SV | TV | MV | #VIOL | %VIOL   |
| Brome, Meadow             | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Brome, Smooth             | 3                  | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Buckwheat                 | 5                  | 4  | 1  | 0  | 0  | 1     | 20.00%  |
| Chewings Fescue           | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Chicory                   | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Clover, Balansa           | 1                  | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Clover, Berseem           | 2                  | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Clover, Crimson           | 7                  | 7  | 0  | 0  | 0  | 0     | 0.00%   |
| Clover, Ladino White      | 3                  | 2  | 1  | 0  | 0  | 1     | 33.33%  |
| Clover, Red               | 16                 | 11 | 4  | 1  | 0  | 5     | 31.25%  |
| Clover, White             | 5                  | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Corn, Hybrid Field        | 30                 | 15 | 4  | 11 | 0  | 15    | 50.00%  |
| Corn, Ornamental          | 1                  | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Corn, Refuge              | 1                  | 0  | 0  | 1  | 0  | 1     | 100.00% |
| Crownvetch                | 2                  | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Festulolium, tetraploid   | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Flax                      | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Hairy Vetch               | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Hard Fescue               | 10                 | 10 | 0  | 0  | 0  | 0     | 0.00%   |
| Japanese Millet           | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Kentucky Bluegrass        | 14                 | 11 | 0  | 0  | 3  | 3     | 21.43%  |
| Meadow Fescue             | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Millet, Pearl             | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Mustard, White            | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Oat                       | 15                 | 12 | 3  | 0  | 0  | 3     | 20.00%  |
| Orchardgrass              | 18                 | 14 | 3  | 1  | 0  | 4     | 22.22%  |
| Radish                    | 5                  | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Radish, Forage            | 5                  | 4  | 1  | 0  | 0  | 1     | 20.00%  |
| Rape, Annual              | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Red Fescue                | 10                 | 10 | 0  | 0  | 0  | 0     | 0.00%   |
| Redtop                    | 3                  | 1  | 2  | 0  | 0  | 2     | 66.67%  |
| Rye                       | 15                 | 12 | 3  | 0  | 0  | 3     | 20.00%  |
| Ryegrass, Annual          | 31                 | 25 | 6  | 0  | 0  | 6     | 19.35%  |
| Ryegrass, Perennial       | 19                 | 17 | 2  | 0  | 0  | 2     | 10.53%  |
| Sorghum                   | 4                  | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Sorghum-Sudangrass Hybrid | 6                  | 6  | 0  | 0  | 0  | 0     | 0.00%   |
| Soybean                   | 16                 | 15 | 0  | 0  | 1  | 1     | 6.25%   |
| Spelt                     | 1                  | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Sudangrass                | 3                  | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Sunflower                 | 1                  | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Sunn Hemp                 | 1                  | 0  | 1  | 0  | 0  | 1     | 100.00% |

| Seed Kind Tested | Agricultural Seeds |            |           |           |          |           |               |
|------------------|--------------------|------------|-----------|-----------|----------|-----------|---------------|
|                  | Total              | CL         | SV        | TV        | MV       | #VIOL     | %VIOL         |
| Tall Fescue      | 19                 | 17         | 2         | 0         | 0        | 2         | 10.53%        |
| Timothy          | 17                 | 12         | 4         | 0         | 1        | 5         | 29.41%        |
| Triticale        | 5                  | 4          | 1         | 0         | 0        | 1         | 20.00%        |
| Turnip           | 2                  | 2          | 0         | 0         | 0        | 0         | 0.00%         |
| Wheat            | 17                 | 15         | 2         | 0         | 0        | 2         | 11.76%        |
| <b>Total</b>     | <b>359</b>         | <b>288</b> | <b>50</b> | <b>16</b> | <b>5</b> | <b>71</b> | <b>19.78%</b> |

| Seed Kind Tested           | Flower Seeds |    |    |    |    |       |         |
|----------------------------|--------------|----|----|----|----|-------|---------|
|                            | Total        | CL | SV | TV | MV | #VIOL | %VIOL   |
| Alyssum montanum           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Alyssum, Sweet             | 6            | 6  | 0  | 0  | 0  | 0     | 0.00%   |
| Amaranth, Globe            | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Amaranthus                 | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Asclepias (Butterfly Weed) | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Asclepias (Milkweed)       | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Aster, Alpine              | 2            | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Asters                     | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Baby's Breath, Annual      | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Baby's-Breath, perennial   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Bachelor's Button          | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Balsam                     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Begonia                    | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Bells of Ireland           | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Bullwort                   | 1            | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Butterfly Flower           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Butterfly-Bush             | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Calendula                  | 3            | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| California Poppy           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Carnation                  | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Carpet Of Snow             | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Carrot                     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cat Grass                  | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Celosia                    | 8            | 8  | 0  | 0  | 0  | 0     | 0.00%   |
| Celosia                    | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Chamomile, Roman           | 1            | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Chinese Lanterns           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Chrysanthemum              | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cleome                     | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Coleus                     | 7            | 7  | 0  | 0  | 0  | 0     | 0.00%   |

| Seed Kind Tested            | Flower Seeds |    |    |    |    |       |         |
|-----------------------------|--------------|----|----|----|----|-------|---------|
|                             | Total        | CL | SV | TV | MV | #VIOL | %VIOL   |
| Columbine                   | 4            | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Columbine (long spur)       | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Coreopsis, Lance-leaf       | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Coreopsis, Large Flower     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Corn, Ornamental            | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cornflower                  | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Cornflower, Tall            | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| COSMIDIUM                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cosmidium                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cosmos                      | 14           | 14 | 0  | 0  | 0  | 0     | 0.00%   |
| Craspedia                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cup & Saucer Vine           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cuphea                      | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Cypress Vine                | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Dahlia                      | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Daisy, Gloriosa             | 1            | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Daisy, Painted Tricolor     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Daisy, Shasta               | 3            | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Delphinium (Pacific Giants) | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Delphinium belladonna       | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Dianthus                    | 4            | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Dusty Miller                | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Echinacea                   | 4            | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Four O'clock                | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Foxglove                    | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Gaillardia (Perennial)      | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Geranium                    | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Gerbera (Transvaal Daisy)   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Gomphrena                   | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Gourd, Mixed                | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Gourd, Small-Seeded         | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Helichrysum                 | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Hibiscus                    | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Hollyhock                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Hyacinth Bean               | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Ice Plant                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Impatiens                   | 4            | 4  | 0  | 0  | 0  | 0     | 0.00%   |
| Johnny Jump Up              | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Larkspur, Rocket (annual)   | 1            | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Lavender                    | 6            | 6  | 0  | 0  | 0  | 0     | 0.00%   |
| Lewisia                     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |

| Seed Kind Tested                  | Flower Seeds |    |    |    |    |       |         |
|-----------------------------------|--------------|----|----|----|----|-------|---------|
|                                   | Total        | CL | SV | TV | MV | #VIOL | %VIOL   |
| Lobelia                           | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Lunaria                           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Lupine, Russell hybrids           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Marigold, African                 | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Marigold, French                  | 7            | 7  | 0  | 0  | 0  | 0     | 0.00%   |
| Marigold, Sweet                   | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Marigolds                         | 8            | 8  | 0  | 0  | 0  | 0     | 0.00%   |
| Melampodium                       | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Monarda                           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Moonflower                        | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Morning Glory                     | 9            | 9  | 0  | 0  | 0  | 0     | 0.00%   |
| Nasturtium                        | 13           | 13 | 0  | 0  | 0  | 0     | 0.00%   |
| Nicotiana                         | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Nigella                           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Ornamental Grass                  | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Pansy, Common                     | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Pentas                            | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Petunias                          | 19           | 19 | 0  | 0  | 0  | 0     | 0.00%   |
| Phacelia                          | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Phlox                             | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Phlox, Annual                     | 2            | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Poppy, California                 | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Poppy, Corn                       | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Poppy, Oriental                   | 2            | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Portulaca                         | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Rudbeckia                         | 2            | 1  | 1  | 0  | 0  | 1     | 50.00%  |
| Salvia                            | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Salvia                            | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Scabiosa (annual) /Mourning-bride | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Snapdragon                        | 5            | 5  | 0  | 0  | 0  | 0     | 0.00%   |
| Spilanthes                        | 1            | 0  | 1  | 0  | 0  | 1     | 100.00% |
| Statice                           | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Stock                             | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Strawflower                       | 2            | 2  | 0  | 0  | 0  | 0     | 0.00%   |
| Sunflower                         | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Sunflower                         | 36           | 35 | 1  | 0  | 0  | 1     | 2.78%   |
| Sweet Pea, annual                 | 3            | 3  | 0  | 0  | 0  | 0     | 0.00%   |
| Sweet William                     | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Tarragon                          | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Thunbergia                        | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |
| Tithonia                          | 1            | 1  | 0  | 0  | 0  | 0     | 0.00%   |

| Seed Kind Tested | Flower Seeds |            |           |          |          |           |              |
|------------------|--------------|------------|-----------|----------|----------|-----------|--------------|
|                  | Total        | CL         | SV        | TV       | MV       | #VIOL     | %VIOL        |
| Tritoma          | 1            | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Verbascum        | 2            | 2          | 0         | 0        | 0        | 0         | 0.00%        |
| Verbena          | 1            | 1          | 0         | 0        | 0        | 0         | 0.00%        |
| Vinca            | 3            | 3          | 0         | 0        | 0        | 0         | 0.00%        |
| Viola            | 2            | 2          | 0         | 0        | 0        | 0         | 0.00%        |
| Wallflower       | 1            | 0          | 1         | 0        | 0        | 1         | 100.00%      |
| Zinnia           | 45           | 44         | 1         | 0        | 0        | 1         | 2.22%        |
| <b>Total</b>     | <b>339</b>   | <b>327</b> | <b>12</b> | <b>0</b> | <b>0</b> | <b>12</b> | <b>3.54%</b> |

| Seed Kind Tested | Feed  |    |    |    |    |       |       |
|------------------|-------|----|----|----|----|-------|-------|
|                  | Total | CL | SV | TV | MV | #VIOL | %VIOL |
| Feed             | 1     | 1  | 0  | 0  | 0  | 0     | 0.00% |

| Seed Kind Tested     | Pasture Mix or Blend |    |    |    |    |       |        |
|----------------------|----------------------|----|----|----|----|-------|--------|
|                      | Total                | CL | SV | TV | MV | #VIOL | %VIOL  |
| Pasture Mix or Blend | 32                   | 23 | 5  | 3  | 1  | 9     | 28.13% |

| Seed Kind Tested    | Flower Mix or Blend |    |    |    |    |       |       |
|---------------------|---------------------|----|----|----|----|-------|-------|
|                     | Total               | CL | SV | TV | MV | #VIOL | %VIOL |
| Flower Mix or Blend | 1                   | 1  | 0  | 0  | 0  | 0     | 0.00% |

| Seed Kind Tested        | CSLT Grass Mix or Blend |     |    |    |    |       |        |
|-------------------------|-------------------------|-----|----|----|----|-------|--------|
|                         | Total                   | CL  | SV | TV | MV | #VIOL | %VIOL  |
| CSLT Grass Mix or Blend | 192                     | 171 | 20 | 1  | 0  | 21    | 10.94% |

Table IV

| Vegetable Seeds Wholesale Distributors |               |              | Vegetable Seeds |           |          |          |
|--|---------------|--------------|-----------------|-----------|----------|----------|
|  |               |              | CL              | SV        | TV       | MV       |
| AMERICAN SEED CO INC                   | SPRING GROVE  | PA           | 2               | 1         | 0        | 1        |
| BACK TO THE ROOTS, INC                 | OAKLAND       | CA           | 2               | 0         | 0        | 0        |
| BENTLEY SEEDS, INC.                    | CAMBRIDGE     | NY           | 1               | 0         | 0        | 0        |
| BOTANICAL INTERESTS INC                | BROOMFIELD    | CO           | 3               | 0         | 0        | 0        |
| BURPEE GARDEN PRODUCTS                 | WARMINSTER    | PA           | 702             | 37        | 0        | 0        |
| FISHERS GREENHOUSE & GARDEN CENTER LLC | STRASBURG     | PA           | 7               | 0         | 0        | 0        |
| GREEN GARDEN PRODUCTS                  | NORTON        | MA           | 13              | 1         | 0        | 0        |
| HAKES FARM & SEED SERVICE              | RED LION      | PA           | 3               | 0         | 0        | 0        |
| HEIRLOOM SEED PROJECT                  | LANCASTER     | PA           | 4               | 0         | 0        | 0        |
| HYBRID SEED COMPANY INC                | GETTYSBURG    | PA           | 2               | 2         | 0        | 0        |
| MARTINS PRODUCE SUPPLIES               | SHIPPENSBURG  | PA           | 4               | 0         | 0        | 0        |
| NESEED                                 | EAST HARTFORD | CT           | 0               | 1         | 0        | 0        |
| NOLTS PRODUCE SUPPLIES, LLC            | LEOLA         | PA           | 6               | 0         | 0        | 0        |
| P L ROHRER & BRO, INC.                 | LANCASTER     | PA           | 65              | 2         | 0        | 0        |
| PLANTATION PRODUCTS, LLC               | NORTON        | MA           | 1               | 1         | 0        | 0        |
| ROHRER SEEDS                           | LANCASTER     | PA           | 1               | 0         | 0        | 0        |
| SEEDWAY, LLC                           | HALL          | NY           | 1               | 0         | 0        | 0        |
| SINGING SPRING SEEDS                   | STRASBURG     | PA           | 7               | 1         | 0        | 1        |
| SPANGLERS HOME CENTER INC              | DOVER         | PA           | 3               | 0         | 0        | 0        |
| THE MILL OF BEL AIR                    | BEL AIR       | MD           | 3               | 1         | 0        | 0        |
| ZIMMEY'S GREENHOUSE                    | MYERSTOWN,    | PA           | 2               | 0         | 0        | 0        |
|  |               | <b>Total</b> | <b>832</b>      | <b>47</b> | <b>0</b> | <b>2</b> |

| Agricultural Seeds Wholesale Distributors |                        |    | Agricultural Seeds |    |    |    |
|---|------------------------|----|--------------------|----|----|----|
|   |                        |    | CL                 | SV | TV | MV |
| ADVANTA US                                | HEREFORD               | TX | 1                  | 0  | 0  | 0  |
| ADVANTA US, INC.                          | HEREFORD               | TX | 1                  | 0  | 0  | 0  |
| AG SEED CLEANING, INC.                    | MYERSTOWN              | PA | 1                  | 0  | 0  | 0  |
| ALBERT LEA SEED HOUSE                     | ALBERT LEA             | MN | 1                  | 0  | 0  | 0  |
| ALFOREX SEEDS LLC                         | WOODLAND               | CA | 1                  | 0  | 0  | 0  |
| ANDRE & SON, INC.                         | MONTROSE               | PA | 1                  | 0  | 0  | 0  |
| ANGELINA SEED COMPANY, LLC                | VIDALIA                | LA | 0                  | 1  | 0  | 0  |
| BARENBRUG USA                             | TANGENT                | OR | 2                  | 0  | 0  | 0  |
| BASF CORPORATION                          | RESEARCH TRIANGLE PARK | NC | 1                  | 0  | 0  | 0  |
| BAYER CROPSCIENCE LP                      | SAINT LOUIS            | MO | 4                  | 1  | 0  | 0  |
| BAYER CROPSCIENCE LP DBA HUBNER SEED      | ST. LOUIS              | MO | 2                  | 0  | 0  | 0  |
| BFG SUPPLY DBA WETSEL                     | CHESWICK               | PA | 46                 | 7  | 1  | 3  |

| Agricultural Seeds Wholesale Distributors |                 |    | Agricultural Seeds |    |    |    |
|---|-----------------|----|--------------------|----|----|----|
|   |                 |    | CL                 | SV | TV | MV |
| BURPEE GARDEN PRODUCTS                    | WARMINSTER      | PA | 1                  | 1  | 0  | 0  |
| BYRON SEEDS LLC                           | ROCKVILLE       | IN | 2                  | 0  | 1  | 0  |
| CENTRAL FARM AND GARDEN                   | WOOSTER         | OH | 3                  | 0  | 0  | 0  |
| CHANNEL BIO LLC                           | SAINT LOUIS     | MO | 2                  | 1  | 0  | 0  |
| CHEMGRO SEEDS                             | EAST PETERSBURG | PA | 7                  | 4  | 2  | 0  |
| DAIRYLAND SEEDS                           | WOODLAND        | CA | 1                  | 0  | 0  | 0  |
| DLF PICKSEED                              | HALSEY          | OR | 5                  | 0  | 0  | 0  |
| FISHER'S FARM SEEDS                       | ELIZABETHVILLE  | PA | 1                  | 0  | 0  | 0  |
| FM BROWN'S SONS, INC.                     | SINKING SPRING  | PA | 9                  | 1  | 0  | 0  |
| GREENWAY ANIMAL NUTRITION                 | CLINTON         | ON | 1                  | 1  | 0  | 0  |
| GROWMARK                                  | TOWANDA         | PA | 0                  | 0  | 1  | 0  |
| GROWMARK FS LLC                           | MILFORD         | DE | 1                  | 0  | 0  | 0  |
| GROWMARK INC                              | BLOOMINGTON     | IL | 42                 | 3  | 0  | 1  |
| HADLEY SEED FARM                          | HADLEY          | PA | 1                  | 0  | 0  | 0  |
| HAKES FARM & SEED SERVICE                 | RED LION        | PA | 0                  | 1  | 0  | 0  |
| HEIRLOOM SEED PROJECT                     | LANCASTER       | PA | 1                  | 0  | 0  | 0  |
| HELENA AGRI-ENTERPRISES, LLC              | FREDERICK       | MD | 1                  | 0  | 0  | 0  |
| HOMESTEAD NUTRITION, INC.                 | NEW HOLLAND     | PA | 0                  | 1  | 0  | 0  |
| HORST HYBRID SEEDS                        | CHAMBERSBURG    | PA | 4                  | 0  | 2  | 0  |
| HORSTDALE FARM SUPPLY LLC                 | GREENCASTLE     | PA | 1                  | 0  | 0  | 0  |
| KING'S AGRI SEEDS, INC.                   | LANCASTER       | PA | 30                 | 2  | 0  | 0  |
| LEABROOK AG                               | LANCASTER       | PA | 8                  | 0  | 0  | 0  |
| LEBANON VALLEY AG PRODUCTS                | MYERSTOWN       | PA | 4                  | 0  | 0  | 0  |
| LOCAL SEED COMPANY, LLC.                  | MEMPHIS         | TN | 5                  | 1  | 0  | 0  |
| LOVELAND PRODUCTS, INC                    | GREELEY         | CO | 4                  | 0  | 0  | 0  |
| MID-ATLANTIC SEEDS, INC.                  | YORK            | PA | 3                  | 0  | 3  | 1  |
| NEXGROW GENETICS                          | NAMPA           | ID | 0                  | 1  | 0  | 0  |
| NOLTS PRODUCE SUPPLIES, LLC               | LEOLA           | PA | 0                  | 1  | 0  | 0  |
| P L ROHRER & BRO, INC.                    | LANCASTER       | PA | 1                  | 0  | 0  | 0  |
| PARTNERS BRAND SEED CO, LLC               | HOWE            | IN | 0                  | 0  | 1  | 0  |
| PENNINGTON SEED, INC.                     | GREENFIELD      | MO | 1                  | 0  | 0  | 0  |
| PINE CREEK SEED FARM, LLC                 | JERSEY SHORE    | PA | 4                  | 1  | 0  | 0  |
| PREFERRED SEED COMPANY, INC.              | BUFFALO         | NY | 5                  | 3  | 0  | 0  |
| REVERE SEED                               | MEMPHIS         | TN | 3                  | 4  | 0  | 0  |
| RURAL KING                                | MATTOON         | IL | 0                  | 1  | 0  | 0  |
| SADDLE BUTTE AG, INC.                     | SHEDD           | OR | 3                  | 0  | 0  | 0  |
| SCHLESSMAN SEED CO.                       | MILAN           | OH | 1                  | 0  | 1  | 0  |
| SEEDWAY, LLC                              | HALL            | NY | 54                 | 5  | 0  | 0  |
| SEMICAN INTERNATIONAL INC                 | PLESSISVILLE    | QC | 2                  | 0  | 0  | 0  |
| SYNERGY AG LLC                            | TIFFIN          | OH | 2                  | 0  | 0  | 0  |
| SYNGENTA SEEDS LLC                        | MINNEAPOLIS     | MN | 1                  | 0  | 1  | 0  |
| VIRGINIA SEED COMPANY                     | UNIONVILLE      | VA | 0                  | 1  | 0  | 0  |

| Agricultural Seeds Wholesale Distributors |            |              | Agricultural Seeds |           |           |          |
|---|------------|--------------|--------------------|-----------|-----------|----------|
|   |            |              | CL                 | SV        | TV        | MV       |
| W-L RESEARCH                              | NAMPA      | ID           | 1                  | 0         | 0         | 0        |
| WAL MART SUPERCENTER #2023                | LEBANON    | PA           | 1                  | 0         | 0         | 0        |
| WINFIELD SOLUTIONS, LLC                   | SAINT PAUL | MN           | 1                  | 0         | 0         | 0        |
|   |            | <b>Total</b> | <b>278</b>         | <b>42</b> | <b>13</b> | <b>5</b> |

| Flower Seeds Wholesale Distributors |              |              | Flower Seeds |           |          |          |
|-------------------------------------|--------------|--------------|--------------|-----------|----------|----------|
|                                     |              |              | CL           | SV        | TV       | MV       |
| AMERICAN SEED CO INC                | SPRING GROVE | PA           | 1            | 0         | 0        | 0        |
| BURPEE GARDEN PRODUCTS              | WARMINSTER   | PA           | 295          | 10        | 0        | 0        |
| GREEN GARDEN PRODUCTS               | NORTON       | MA           | 5            | 1         | 0        | 0        |
| HAKES FARM & SEED SERVICE           | RED LION     | PA           | 1            | 0         | 0        | 0        |
| P L ROHRER & BRO, INC.              | LANCASTER    | PA           | 24           | 1         | 0        | 0        |
| THE MILL OF BEL AIR                 | BEL AIR      | MD           | 1            | 0         | 0        | 0        |
|                                     |              | <b>Total</b> | <b>327</b>   | <b>12</b> | <b>0</b> | <b>0</b> |

| Feed Wholesale Distributors |        |              | Feed     |          |          |          |
|-----------------------------|--------|--------------|----------|----------|----------|----------|
|                             |        |              | CL       | SV       | TV       | MV       |
| HADLEY SEED FARM            | HADLEY | PA           | 1        | 0        | 0        | 0        |
|                             |        | <b>Total</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>0</b> |

| Pasture Mix or Blend Wholesale Distributors |                 |              | Pasture Mix or Blend |          |          |          |
|---|-----------------|--------------|----------------------|----------|----------|----------|
|   |                 |              | CL                   | SV       | TV       | MV       |
| BARENBRUG USA                               | TANGENT         | OR           | 2                    | 1        | 0        | 0        |
| BEDFORD FARM BUREAU COOP                    | BEDFORD         | PA           | 1                    | 0        | 0        | 0        |
| BFG SUPPLY DBA WETSEL                       | CHESWICK        | PA           | 2                    | 0        | 0        | 0        |
| BIOLOGIC, LLC                               | WEST POINT      | MS           | 1                    | 0        | 0        | 0        |
| CHEMGRO SEEDS                               | EAST PETERSBURG | PA           | 2                    | 0        | 1        | 1        |
| DLF PICKSEED                                | HALSEY          | OR           | 2                    | 0        | 0        | 0        |
| GREEN PARK SEEDS                            | LOYSVILLE       | PA           | 2                    | 0        | 0        | 0        |
| GROWMARK INC                                | BLOOMINGTON     | IL           | 1                    | 0        | 0        | 0        |
| KING'S AGRI SEEDS, INC.                     | LANCASTER       | PA           | 7                    | 3        | 0        | 0        |
| LOCAL SEED COMPANY, LLC.                    | MEMPHIS         | TN           | 1                    | 0        | 0        | 0        |
| ROHRER SEEDS                                | LANCASTER       | PA           | 0                    | 0        | 1        | 0        |
| SEEDWAY, LLC                                | HALL            | NY           | 2                    | 1        | 0        | 0        |
| THE MILL OF BEL AIR                         | BEL AIR         | MD           | 0                    | 0        | 1        | 0        |
|   |                 | <b>Total</b> | <b>23</b>            | <b>5</b> | <b>3</b> | <b>1</b> |



| Flower Mix or Blend Wholesale Distributors |           |              | Flower Mix or Blend |          |          |          |
|--|-----------|--------------|---------------------|----------|----------|----------|
|  |           |              | CL                  | SV       | TV       | MV       |
| SKYLINE ENCAP HOLDINGS LLC DBA ENCAP       | GREEN BAY | WI           | 1                   | 0        | 0        | 0        |
|  |           | <b>Total</b> | <b>1</b>            | <b>0</b> | <b>0</b> | <b>0</b> |

| Vegetable Mix or Blend Wholesale Distributors |        |              | Vegetable Mix or Blend |          |          |          |
|---|--------|--------------|------------------------|----------|----------|----------|
|   |        |              | CL                     | SV       | TV       | MV       |
| GREEN GARDEN PRODUCTS                         | NORTON | MA           | 1                      | 0        | 0        | 0        |
|   |        | <b>Total</b> | <b>1</b>               | <b>0</b> | <b>0</b> | <b>0</b> |

| CSLT Grass Mix or Blend Wholesale Distributors |                 |    | CSLT Grass Mix or Blend |    |    |    |
|--|-----------------|----|-------------------------|----|----|----|
|  |                 |    | CL                      | SV | TV | MV |
| AMERICAN SEED CO INC                           | SPRING GROVE    | PA | 2                       | 1  | 0  | 0  |
| AMTURF ENTERPRISES, LLC                        | JEFFERSON       | OR | 2                       | 0  | 0  | 0  |
| ANDRE & SON, INC.                              | MONTROSE        | PA | 7                       | 0  | 0  | 0  |
| AQUARIUS SUPPLY, INC                           | HAWTHORNE       | NJ | 1                       | 0  | 0  | 0  |
| BARENBRUG USA                                  | TANGENT         | OR | 11                      | 2  | 0  | 0  |
| BFG SUPPLY DBA WETSEL                          | CHESWICK        | PA | 5                       | 2  | 0  | 0  |
| CDI LAWN EQUIPMENT                             | COLLEGEVILLE    | PA | 1                       | 0  | 0  | 0  |
| CHEMGRO SEEDS                                  | EAST PETERSBURG | PA | 2                       | 1  | 0  | 0  |
| CONSERVATION RESOURCES, LLC                    | PIPERSVILLE     | PA | 1                       | 0  | 0  | 0  |
| CROP PRODUCTION SERVICES                       | LOVELAND        | CO | 0                       | 1  | 0  | 0  |
| DLF PICKSEED                                   | HALSEY          | OR | 8                       | 1  | 0  | 0  |
| E M HERR FARM & HOME CENTER                    | WILLOW STREET   | PA | 1                       | 0  | 0  | 0  |
| FM BROWN'S SONS, INC.                          | SINKING SPRING  | PA | 5                       | 0  | 0  | 0  |
| GENESIS TURFGRASS INC                          | GLEN ROCK       | PA | 8                       | 1  | 0  | 0  |
| GREEN PARK SEEDS                               | LOYSVILLE       | PA | 0                       | 1  | 0  | 0  |
| GROWMARK INC                                   | BLOOMINGTON     | IL | 2                       | 0  | 0  | 0  |
| GROWMARK, INC                                  | BLOOMINGTON     | IL | 1                       | 0  | 0  | 0  |
| HAKES FARM & SEED SERVICE                      | RED LION        | PA | 1                       | 0  | 0  | 0  |
| HOME DEPOT 4116, THE                           | PITTSBURGH      | PA | 1                       | 0  | 0  | 0  |
| HOME DEPOT 4126                                | GREENSBURG      | PA | 1                       | 0  | 0  | 0  |
| HOME DEPOT 4131                                | LANCASTER       | PA | 1                       | 0  | 0  | 0  |
| HORSTDALE FARM SUPPLY LLC                      | GREENCASTLE     | PA | 0                       | 1  | 0  | 0  |
| JERSEY SEED INC.                               | NEW BRUNSWICK   | NJ | 2                       | 0  | 0  | 0  |
| JONATHAN GREEN, INC.                           | FARMINGDALE     | NJ | 8                       | 0  | 0  | 0  |
| LEBANON SEABOARD CORP                          | LEBANON         | PA | 16                      | 1  | 0  | 0  |
| LESCO, INC.                                    | CLEVELAND       | OH | 5                       | 1  | 0  | 0  |
| LIFETIME SEED, CO.                             | EAST PEORIA     | IL | 4                       | 0  | 0  | 0  |
| LOWES -HANOVER                                 | HANOVER         | PA | 1                       | 0  | 0  | 0  |
| LOWES HOME CENTERS LLC #2409                   | YORK            | PA | 1                       | 0  | 0  | 0  |
| MID-ATLANTIC SEEDS, INC.                       | YORK            | PA | 0                       | 2  | 0  | 0  |

| CSLT Grass Mix or Blend Wholesale Distributors |              |              | CSLT Grass Mix or Blend |           |          |          |
|--|--------------|--------------|-------------------------|-----------|----------|----------|
|  |              |              | CL                      | SV        | TV       | MV       |
| MOUNTAIN VIEW SEEDS LIMITED                    | SALEM        | OR           | 1                       | 0         | 0        | 0        |
| OLIGER SEED CO.                                | AKRON        | OH           | 1                       | 0         | 0        | 0        |
| P L ROHRER & BRO, INC.                         | LANCASTER    | PA           | 4                       | 0         | 0        | 0        |
| PENNINGTON SEED                                | LEBANON      | OR           | 1                       | 1         | 0        | 0        |
| PENNINGTON SEED                                | EASTON       | PA           | 1                       | 0         | 0        | 0        |
| PENNINGTON SEED, INC.                          | GREENFIELD   | MO           | 12                      | 0         | 0        | 0        |
| PINE CREEK SEED FARM, LLC                      | JERSEY SHORE | PA           | 0                       | 1         | 0        | 0        |
| ROHRER SEEDS                                   | LANCASTER    | PA           | 3                       | 0         | 0        | 0        |
| ROSE AGRI-SEED INC D/B/A PURE SEED             | HUBBARD      | OR           | 3                       | 1         | 0        | 0        |
| SAUDERS NURSERY                                | EAST EARL    | PA           | 1                       | 0         | 0        | 0        |
| SEEDWAY, LLC                                   | HALL         | NY           | 20                      | 2         | 0        | 0        |
| SYNATEK, LP                                    | SOUDERTON    | PA           | 2                       | 0         | 0        | 0        |
| THE MILL OF BEL AIR                            | BEL AIR      | MD           | 1                       | 0         | 0        | 0        |
| THE SCOTTS COMPANY                             | MARYSVILLE   | OH           | 9                       | 0         | 0        | 0        |
| THE SCOTTS COMPANY                             | MARYSVILLE   | OH           | 9                       | 0         | 1        | 0        |
| TRACTOR SUPPLY COMPANY                         | BRENTWOOD    | TN           | 2                       | 0         | 0        | 0        |
| WATSON SUPPLY INC                              | HARRISBURG   | PA           | 2                       | 0         | 0        | 0        |
| WEST YORK AGWAY                                | YORK         | PA           | 1                       | 0         | 0        | 0        |
|  |              | <b>Total</b> | <b>171</b>              | <b>20</b> | <b>1</b> | <b>0</b> |

| CSLT Grass Single Kind Wholesale Distributors |                |              | CSLT Grass Single Kind |          |          |          |
|---|----------------|--------------|------------------------|----------|----------|----------|
|   |                |              | CL                     | SV       | TV       | MV       |
| ALLIANCE SEED INC                             | BROOKLYN       | NY           | 2                      | 0        | 0        | 1        |
| AMERICAN SEED CO INC                          | SPRING GROVE   | PA           | 1                      | 0        | 0        | 0        |
| BFG SUPPLY DBA WETSEL                         | CHESWICK       | PA           | 3                      | 1        | 0        | 0        |
| DLF PICKSEED                                  | HALSEY         | OR           | 3                      | 0        | 0        | 0        |
| FM BROWN'S SONS, INC.                         | SINKING SPRING | PA           | 4                      | 0        | 0        | 0        |
| GENESIS TURFGRASS INC                         | GLEN ROCK      | PA           | 1                      | 0        | 0        | 0        |
| GROWMARK INC                                  | BLOOMINGTON    | IL           | 1                      | 0        | 0        | 0        |
| LESCO, INC.                                   | CLEVELAND      | OH           | 1                      | 0        | 0        | 0        |
| MID-ATLANTIC SEEDS, INC.                      | YORK           | PA           | 1                      | 1        | 0        | 0        |
| OLIGER SEED CO.                               | AKRON          | OH           | 1                      | 0        | 0        | 0        |
| PREFERRED SEED COMPANY, INC.                  | BUFFALO        | NY           | 1                      | 0        | 0        | 0        |
| SEEDWAY, LLC                                  | HALL           | NY           | 1                      | 0        | 0        | 0        |
| TRUGREEN                                      | MEMPHIS        | TN           | 1                      | 0        | 0        | 0        |
|   |                | <b>Total</b> | <b>21</b>              | <b>2</b> | <b>0</b> | <b>1</b> |

SEED CERTIFICATION  
TABLE V  
SUMMARY OF FIELD INSPECTIONS FOR 2022  
(JULY 1, 2022- JUNE 30, 2023)

| CROP        | VARIETY             | FOUNDATION | REGISTERED | CERTIFIED | Q/A   |
|-------------|---------------------|------------|------------|-----------|-------|
|             |                     |            |            |           |       |
| Barley      | Hirondella          | ----       | 18         | ----      | ----  |
|             | Secretariat         | ----       | ----       | 99.80     | ----  |
|             | Scala               | ----       | ----       | 15.00     | ----  |
|             |                     |            |            |           |       |
|             |                     |            |            |           |       |
| Oats        | Armor               | ----       | 20.65      | 26.50     | ----  |
|             | Hayden              | ----       | 22.60      | 72.00     | ----  |
|             |                     |            |            |           |       |
|             |                     |            |            |           |       |
| Potato      | Colomba             | ----       | ----       | 64.22     | ----  |
|             | EVA                 | ----       | ----       | 12.35     | ----  |
|             | Lamoka              | ----       | ----       | 36.18     | ----  |
|             | Mackinaw            | ----       | ----       | 0.52      | ----  |
|             | Norwis              | ----       | ----       | 0.26      | ----  |
|             | Reba                | ----       | ----       | 2.38      | ----  |
|             | Red Lasoda #10      | ----       | ----       | 87.45     | ----  |
|             | Red Lasoda #11      | ----       | ----       | 54.90     | ----  |
|             | Red Lasoda NY10     | ----       | ----       | 18.00     | ----  |
|             | Red Lasoda NY11     | ----       | ----       | 22.00     | ----  |
|             | Red Lasoda NY12     | ----       | ----       | 22.00     | ----  |
|             | Red Lasoda NY13     | ----       | ----       | 8.00      | ----  |
|             | Red Lasoda NY14     | ----       | ----       | 10.00     |       |
|             | Red Maria           | ----       | ----       | 6.10      |       |
|             | Sifra               | ----       | ----       | 14.90     |       |
|             | Snowden             | ----       | ----       | 23.20     |       |
|             | Waneta              | ----       | ----       | 76.28     |       |
|             |                     |            |            |           |       |
|             |                     |            |            |           |       |
| Triticale   | Short Beard Thunder | ----       | 20.00      | 450.00    | ----  |
|             |                     |            |            |           |       |
|             |                     |            |            |           |       |
| Wheat       | SR2144              | ----       | ----       | ----      | 30    |
|             |                     |            |            |           |       |
| TOTAL ACRES |                     | 0.00       | 81.25      | 1122.04   | 30.00 |

The above acreage was applied for certification. Seed from acreage that has passed field inspection must also meet mechanical standards in the Seed Lab to complete certification.

# Number of Samples per fiscal Year

(July 1<sup>st</sup> - June 30<sup>th</sup>)

