



**pennsylvania**  
DEPARTMENT OF AGRICULTURE

**Pennsylvania Department of Agriculture  
Bureau of Plant Industry  
2017 Fiscal year Seed Report  
Pennsylvania Seed Act**

**December 2018**

## 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, 2017 to June 30, 2018.

## 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 2017 there were **450** licensed Seed Dealers. The Department collected a total of **\$11,225.00** 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 reporting period the Department collected, **\$16,277.39** 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 “Rules for Testing Seeds” as approved and published by the Association of Official Seed Analysts (AOSA).

During the reporting period, the laboratory received **7,409** samples that required **9,462** separate tests (See Table I). Plant Industry Inspectors submitted **2,598** regulatory seed samples for enforcement of the Seed Act, and **9** regulatory samples to test for viable weed seed to aid in the enforcement of the PA Feed Act. In addition, Plant Industry Inspectors issued **161** Seed Stop Sale Notices for labeling violations directly at retail and wholesale locations representing **1204** containers.

Farmers, wholesale seedsmen and retail outlets submitted **4,536** service samples for labeling purposes and guidance in planting. The seed certification program and various other state agencies submitted **266** samples to determine if the seed met their standards or specifications. The Department collected a total of **\$108,395.00** 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 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 a member of the AOSA executive board. Staff members also attended seed training schools; notably the Iowa State University Seed Short Course and the USDA Seed Regulation and Testing Division Federal Seed School.

The department is also an active member of the Association of American Seed Control Officials (AASCO). Seed Program Supervisor Johnny Zook is the president of AASCO and attends the annual meeting and represents the Association at affiliate meetings. Johnny Zook also represents AASCO on the Policy and Procedures Advisory Board (PPAB) to the National Seed Health System (NSHS).

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>
3,246	Vegetable	10	10	3,284
2,486	Agricultural	532	814	2,301
969	Flower	0	0	1,002
0	Tree	0	0	0
9	Feed	0	9	0
6	Health Food	0	0	6
131	Pasture Mix	18	19	109
5	Flower Mix	0	0	2
40	Vegetable Mix	0	0	30
136	Conservation Mix	8	12	17
0	Vegetable Kit	0	0	0
381	Lawn Mix	211	226	188
0	Unidentified	0	0	0
<b>7,409</b>	<b>Totals</b>	<b>779</b>	<b>1,090</b>	<b>6,939</b>

<b>Other Tests</b>	
Interstate Noxious Weed Test	1
Treated Germination Test	0
Cold Test	79
Sand Test	3
Roundup® Ready Test	3
Tetrazolium Test	16
Endophyte Test	0
Ryegrass Fluorescence Test	294
Oats Fluorescence Test	51
400 Seed Count Test	146
Miscellaneous Test	10
Canada Noxious Weed Test	42
Seed Count Test	9
<b>Total Tests</b>	<b>9,462</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 2,598 seed samples. A total of 142 lots or 5.47 % of these samples were found to be in violation of the Act, of which 140 (4,823 containers) were placed under 'Stop Sale' at 44 locations. The other 2 were either technical or minor violations not requiring a Stop Sale Order. 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		
		7/1/2017 - 6/30/2018	7/1/2016 - 6/30/2017	7/1/2015 - 6/30/2016
Vegetable	1,258	3.42 %	2.17 %	6.83 %
Agricultural	468	4.91 %	12.60 %	11.58 %
Flower	474	2.95 %	4.20 %	7.80 %
Health Food	6	0.00 %	33.33 %	0.00 %
Pasture Mix	37	40.54 %	20.00 %	44.44 %
Flower Mix	5	20.00 %	0.00 %	0.00 %
Vegetable Mix	36	5.56 %	8.33 %	0.00 %
Conservation Mix	25	28.00 %	66.67 %	0.00 %
Lawn Mix	289	12.80 %	46.15 %	18.38 %
Unidentified	0	0.00 %	0.00 %	0.00 %
<b>Totals</b>	<b>2,598</b>	<b>5.47 %</b>	<b>5.39 %</b>	<b>9.41 %</b>

\* Samples collected by seed inspectors 7/1/2017 - 6/30/2018

**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
Artichoke	1	1	0	0	0	0	0.00 %
Arugula	7	6	0	1	0	1	14.29 %
Asparagus	4	3	1	0	0	1	25.00 %
Asparagus Bean (Yardlong)	2	2	0	0	0	0	0.00 %
Basil	25	24	1	0	0	1	4.00 %
Bean, Garden	69	60	9	0	0	9	13.04 %
Bean, Red Kidney	1	1	0	0	0	0	0.00 %
Beet	24	23	1	0	0	1	4.17 %
Borage, Common	3	3	0	0	0	0	0.00 %
Brassica	1	1	0	0	0	0	0.00 %
Broccoli	18	18	0	0	0	0	0.00 %
Broccoli Raab (Turnip Broccoli)	2	2	0	0	0	0	0.00 %
Brokali	1	1	0	0	0	0	0.00 %
Brussels-Sprouts	7	7	0	0	0	0	0.00 %
Cabbage	16	16	0	0	0	0	0.00 %
Cabbage, Chinese	1	1	0	0	0	0	0.00 %
Cantaloupe	15	15	0	0	0	0	0.00 %
Carrot	36	36	0	0	0	0	0.00 %
Catnip	4	4	0	0	0	0	0.00 %
Cauliflower	11	11	0	0	0	0	0.00 %
Celeriac	1	1	0	0	0	0	0.00 %
Celery	5	5	0	0	0	0	0.00 %
Chamomile, Bodegold	1	1	0	0	0	0	0.00 %
Chervil	2	1	1	0	0	1	50.00 %
Chicory	1	0	0	1	0	1	100.00 %
Chives	7	7	0	0	0	0	0.00 %
Chives, Garlic	2	2	0	0	0	0	0.00 %
Cilantro	9	8	1	0	0	1	11.11 %
Collards	4	4	0	0	0	0	0.00 %
Corn, Sweet	49	48	1	0	0	1	2.04 %
Cornsalad	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Vegetable Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Cowpea	2	1	1	0	0	1	50.00 %
Cress	1	1	0	0	0	0	0.00 %
Cress, Upland	1	1	0	0	0	0	0.00 %
Cucumber	54	54	0	0	0	0	0.00 %
Daisy, African	1	1	0	0	0	0	0.00 %
Dandelion	1	0	1	0	0	1	100.00 %
Dill	9	9	0	0	0	0	0.00 %
Eggplant	15	14	1	0	0	1	6.67 %
Endive	4	2	1	1	0	2	50.00 %
Escarole	1	1	0	0	0	0	0.00 %
Fava Bean	2	2	0	0	0	0	0.00 %
Fennel	3	3	0	0	0	0	0.00 %
Garden Bean	3	3	0	0	0	0	0.00 %
Gourd, Bottle	1	0	1	0	0	1	100.00 %
Gourd, Small-Seeded	2	2	0	0	0	0	0.00 %
Gourds, Large-Seeded	1	1	0	0	0	0	0.00 %
Groundcherry	1	1	0	0	0	0	0.00 %
Honey Dew	1	1	0	0	0	0	0.00 %
Kale	17	16	0	1	0	1	5.88 %
Kohlrabi	8	8	0	0	0	0	0.00 %
Leek	5	4	1	0	0	1	20.00 %
Lemon Balm	1	1	0	0	0	0	0.00 %
Lemon Basil	1	1	0	0	0	0	0.00 %
lemongrass	2	1	0	1	0	1	50.00 %
Lettuce	60	55	2	3	0	5	8.33 %
Lima Bean	9	8	1	0	0	1	11.11 %
Mache (Cornsalad)	1	1	0	0	0	0	0.00 %
Malabar Spinach	1	0	1	0	0	1	100.00 %
Marjoram	2	2	0	0	0	0	0.00 %
Melons	23	23	0	0	0	0	0.00 %
Mesclun	3	3	0	0	0	0	0.00 %
Mint	1	0	0	1	0	1	100.00 %
Mustard	20	20	0	0	0	0	0.00 %
New Zealand Spinach	1	1	0	0	0	0	0.00 %
Okra	8	8	0	0	0	0	0.00 %
Onion	20	18	2	0	0	2	10.00 %
Oregano	6	4	2	0	0	2	33.33 %
Pakchoi	4	4	0	0	0	0	0.00 %
Parsley	17	16	1	0	0	1	5.88 %
Parsnip	1	1	0	0	0	0	0.00 %
Pea, Garden	54	53	1	0	0	1	1.85 %

Seed Kind Tested	Vegetable Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Peanut	1	1	0	0	0	0	0.00 %
Pepper	86	86	0	0	0	0	0.00 %
Pepper, Hot	55	54	1	0	0	1	1.82 %
Pole Bean	2	2	0	0	0	0	0.00 %
Popcorn	1	1	0	0	0	0	0.00 %
Pumpkin	41	39	2	0	0	2	4.88 %
Purslane	1	1	0	0	0	0	0.00 %
Radicchio	3	2	0	1	0	1	33.33 %
Radish	51	51	0	0	0	0	0.00 %
Rosemary	1	1	0	0	0	0	0.00 %
Rutabaga	3	3	0	0	0	0	0.00 %
Rye	1	1	0	0	0	0	0.00 %
Sage	3	3	0	0	0	0	0.00 %
Salsify	1	0	1	0	0	1	100.00 %
Saltwort	1	1	0	0	0	0	0.00 %
Savory, Summer	2	2	0	0	0	0	0.00 %
Sesame	1	1	0	0	0	0	0.00 %
Shallot	2	2	0	0	0	0	0.00 %
Soybean	1	1	0	0	0	0	0.00 %
Soybean	1	0	1	0	0	1	100.00 %
Spearmint	1	1	0	0	0	0	0.00 %
Spinach	19	19	0	0	0	0	0.00 %
Squash	61	61	0	0	0	0	0.00 %
Stevia	2	1	1	0	0	1	50.00 %
Strawberry	1	1	0	0	0	0	0.00 %
Sweet Corn	7	7	0	0	0	0	0.00 %
Swiss Chard	19	19	0	0	0	0	0.00 %
Tarragon	1	1	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	167	167	0	0	0	0	0.00 %
Turnip	10	10	0	0	0	0	0.00 %
Watercress	1	0	0	1	0	1	100.00 %
Watermelon	21	21	0	0	0	0	0.00 %
Wheat	1	0	1	0	0	1	100.00 %
<b>Total</b>	<b>1,274</b>	<b>1,225</b>	<b>38</b>	<b>11</b>	<b>0</b>	<b>49</b>	<b>3.85 %</b>



Seed Kind Tested	Agricultural Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Alfalfa	19	19	0	0	0	0	0.00 %
Barley	9	9	0	0	0	0	0.00 %
Bean, Garden	1	1	0	0	0	0	0.00 %
Bentgrass	1	1	0	0	0	0	0.00 %
Bentgrass,Creeping	1	1	0	0	0	0	0.00 %
Birdsfoot Trefoil	9	9	0	0	0	0	0.00 %
Brome, Smooth	2	1	1	0	0	1	50.00 %
Buckwheat	3	3	0	0	0	0	0.00 %
Canarygrass	1	1	0	0	0	0	0.00 %
Chewings Fescue	1	1	0	0	0	0	0.00 %
Chicory	1	0	1	0	0	1	100.00 %
Clover	1	1	0	0	0	0	0.00 %
Clover, Alsike	3	3	0	0	0	0	0.00 %
Clover, Crimson	8	8	0	0	0	0	0.00 %
Clover, Red	13	13	0	0	0	0	0.00 %
Clover, Sweet	1	1	0	0	0	0	0.00 %
Clover, White	5	5	0	0	0	0	0.00 %
Corn, Hybrid Field	15	14	1	0	0	1	6.67 %
Corn, Sweet	2	2	0	0	0	0	0.00 %
Crabgrass	1	0	1	0	0	1	100.00 %
Crownvetch	3	1	2	0	0	2	66.67 %
Evening Primrose	1	1	0	0	0	0	0.00 %
Festulolium	2	2	0	0	0	0	0.00 %
Hairy Vetch	2	2	0	0	0	0	0.00 %
Hard Fescue	23	23	0	0	0	0	0.00 %
Kentucky Bluegrass	39	35	3	0	1	4	10.26 %
Meadow Fescue	2	2	0	0	0	0	0.00 %
Millet	2	2	0	0	0	0	0.00 %
Millet, Pearl	2	2	0	0	0	0	0.00 %
Mustard, White	2	2	0	0	0	0	0.00 %
Oat	5	5	0	0	0	0	0.00 %
Orchardgrass	9	8	1	0	0	1	11.11 %
Pea, Field	7	6	1	0	0	1	14.29 %
Peanut	1	1	0	0	0	0	0.00 %
Radish	5	5	0	0	0	0	0.00 %
Radish, Forage	5	4	1	0	0	1	20.00 %
Rape	3	3	0	0	0	0	0.00 %
Red Fescue	31	31	0	0	0	0	0.00 %
Redtop	1	1	0	0	0	0	0.00 %
Reed Canarygrass	2	2	0	0	0	0	0.00 %
Rye	9	9	0	0	0	0	0.00 %

Seed Kind Tested	Agricultural Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Ryegrass, Annual	52	49	2	1	0	3	5.77 %
Ryegrass, Intermediate	1	1	0	0	0	0	0.00 %
Ryegrass, Perennial	49	45	2	2	0	4	8.16 %
Sorghum	3	3	0	0	0	0	0.00 %
Sorghum-Sudangrass Hybrid	1	1	0	0	0	0	0.00 %
Soybean	20	20	0	0	0	0	0.00 %
Sudangrass	1	1	0	0	0	0	0.00 %
Sunflower	1	0	1	0	0	1	100.00 %
Tall Fescue	40	39	1	0	0	1	2.50 %
Teff	2	2	0	0	0	0	0.00 %
Timothy	24	23	1	0	0	1	4.17 %
Triticale	2	2	0	0	0	0	0.00 %
Turnip	3	3	0	0	0	0	0.00 %
Vetch	1	1	0	0	0	0	0.00 %
Wheat	17	17	0	0	0	0	0.00 %
<b>Total</b>	<b>470</b>	<b>447</b>	<b>19</b>	<b>3</b>	<b>1</b>	<b>23</b>	<b>4.89 %</b>

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Abutilon/Indian Mallow	1	1	0	0	0	0	0.00 %
Agastache	3	3	0	0	0	0	0.00 %
Ageratum	1	1	0	0	0	0	0.00 %
Alyssum, Sweet	7	7	0	0	0	0	0.00 %
Amaranthus	5	5	0	0	0	0	0.00 %
Angelonia	1	1	0	0	0	0	0.00 %
Aquilegia	1	1	0	0	0	0	0.00 %
Asclepias (Butterfly Weed)	3	3	0	0	0	0	0.00 %
Asclepias (Milkweed)	1	1	0	0	0	0	0.00 %
Aster, Alpine	1	1	0	0	0	0	0.00 %
Asters	5	5	0	0	0	0	0.00 %
Baby's Breath	4	4	0	0	0	0	0.00 %
Bachelor's Button	3	3	0	0	0	0	0.00 %
Balsam	1	1	0	0	0	0	0.00 %
Begonia	3	2	1	0	0	1	33.33 %
Bells of Ireland	3	3	0	0	0	0	0.00 %
Bidens	1	1	0	0	0	0	0.00 %
Bishop's Flower	1	1	0	0	0	0	0.00 %
Broomcorn	1	1	0	0	0	0	0.00 %
Browallia	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Butterfly-Bush	1	1	0	0	0	0	0.00 %
Calendula	4	4	0	0	0	0	0.00 %
California Poppy	1	1	0	0	0	0	0.00 %
Candytuft, Gibraltar	1	1	0	0	0	0	0.00 %
Carnation	1	1	0	0	0	0	0.00 %
Cat Grass	1	1	0	0	0	0	0.00 %
Celosia	13	13	0	0	0	0	0.00 %
Celosia	1	1	0	0	0	0	0.00 %
Chamomile, Roman	1	1	0	0	0	0	0.00 %
Cheiranthus(Wallflower)	1	1	0	0	0	0	0.00 %
Chinese Lanterns	1	1	0	0	0	0	0.00 %
Chrysanthemum	2	2	0	0	0	0	0.00 %
Cineraria	1	1	0	0	0	0	0.00 %
Cleome	3	2	1	0	0	1	33.33 %
Coleus	8	7	1	0	0	1	12.50 %
Columbine	7	6	1	0	0	1	14.29 %
Coreopsis, Lance-leaf	1	1	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 %
Corn, Sweet	1	1	0	0	0	0	0.00 %
Cornflower	3	3	0	0	0	0	0.00 %
Cosmos	16	16	0	0	0	0	0.00 %
Cuphea	1	1	0	0	0	0	0.00 %
Cypress Vine	3	3	0	0	0	0	0.00 %
Dahlia	3	3	0	0	0	0	0.00 %
Daisy, African	3	3	0	0	0	0	0.00 %
Daisy, Gloriosa	1	1	0	0	0	0	0.00 %
Daisy, Shasta	4	3	1	0	0	1	25.00 %
Delphinium (Pacific Giants)	4	4	0	0	0	0	0.00 %
Dianthus	7	7	0	0	0	0	0.00 %
Dusty Miller	1	1	0	0	0	0	0.00 %
Echinacea	3	3	0	0	0	0	0.00 %
Echium (Vipers Bugloss)	1	1	0	0	0	0	0.00 %
Eucalyptus Baby	1	1	0	0	0	0	0.00 %
Forget-Me-Not	2	2	0	0	0	0	0.00 %
Four O'clock	4	4	0	0	0	0	0.00 %
Foxglove	2	1	1	0	0	1	50.00 %
Gaillardia	4	4	0	0	0	0	0.00 %
Gazania	2	2	0	0	0	0	0.00 %
Geranium	3	3	0	0	0	0	0.00 %
Gerbera (Transvaal Daisy)	3	3	0	0	0	0	0.00 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Gloriosa Daisy	1	1	0	0	0	0	0.00 %
Gomphrena	4	4	0	0	0	0	0.00 %
Gourd, Small-Seeded	2	2	0	0	0	0	0.00 %
Gourds, Large-Seeded	4	4	0	0	0	0	0.00 %
Gypsophila	2	2	0	0	0	0	0.00 %
Gypsophila	1	1	0	0	0	0	0.00 %
Hibiscus	1	1	0	0	0	0	0.00 %
Hollyhock	2	1	1	0	0	1	50.00 %
Hypoestes	1	1	0	0	0	0	0.00 %
Iberis	2	2	0	0	0	0	0.00 %
Ice Plant	1	1	0	0	0	0	0.00 %
Impatiens	6	6	0	0	0	0	0.00 %
Ipomopsis (Scarlet Gilia)	1	1	0	0	0	0	0.00 %
Juncus Spp.(NIR)	1	1	0	0	0	0	0.00 %
Kale, Ornamental	1	1	0	0	0	0	0.00 %
Larkspur	2	2	0	0	0	0	0.00 %
Lavender	6	6	0	0	0	0	0.00 %
Lavender	1	1	0	0	0	0	0.00 %
Lewisia	1	1	0	0	0	0	0.00 %
Lobelia	6	6	0	0	0	0	0.00 %
Lunaria	1	1	0	0	0	0	0.00 %
Lupine, Russell	1	1	0	0	0	0	0.00 %
Lupinus	2	2	0	0	0	0	0.00 %
Marigold, Sweet	1	1	0	0	0	0	0.00 %
Marigolds	29	28	1	0	0	1	3.45 %
Melampodium	3	2	1	0	0	1	33.33 %
Monarda	1	1	0	0	0	0	0.00 %
Moonflower	1	1	0	0	0	0	0.00 %
Morning Glory	12	12	0	0	0	0	0.00 %
Nasturtium	16	15	1	0	0	1	6.25 %
Nemophila	1	1	0	0	0	0	0.00 %
Nicotiana	2	2	0	0	0	0	0.00 %
Ornamental Grass Pony Tails	1	1	0	0	0	0	0.00 %
Painted Daisy	1	1	0	0	0	0	0.00 %
Pansy, Common	5	5	0	0	0	0	0.00 %
Pea, Garden	1	1	0	0	0	0	0.00 %
Penstemon	2	2	0	0	0	0	0.00 %
Pentas	1	1	0	0	0	0	0.00 %
Petunias	10	10	0	0	0	0	0.00 %
Phacelia	1	1	0	0	0	0	0.00 %
Phlox	4	4	0	0	0	0	0.00 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pincushion Flower	1	1	0	0	0	0	0.00 %
Poppy	3	3	0	0	0	0	0.00 %
Poppy, California	2	2	0	0	0	0	0.00 %
Poppy, Oriental	2	2	0	0	0	0	0.00 %
Portulaca	6	6	0	0	0	0	0.00 %
Radicchio	1	1	0	0	0	0	0.00 %
Ranunculus	1	1	0	0	0	0	0.00 %
Rudbeckia	2	2	0	0	0	0	0.00 %
Salad Burnet	1	1	0	0	0	0	0.00 %
Salvia	7	6	1	0	0	1	14.29 %
Scabiosa (annual) /Mourning-bride	1	1	0	0	0	0	0.00 %
Snapdragon	8	8	0	0	0	0	0.00 %
Statice	3	3	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	4	4	0	0	0	0	0.00 %
Sunflower	39	39	0	0	0	0	0.00 %
Sweet Pea, annual	9	8	1	0	0	1	11.11 %
Thunbergia	1	1	0	0	0	0	0.00 %
Tithonia	1	1	0	0	0	0	0.00 %
Torenia (Wishbone Flower)	1	0	1	0	0	1	100.00 %
Tritoma	1	1	0	0	0	0	0.00 %
Verbascum	2	2	0	0	0	0	0.00 %
Verbena	2	2	0	0	0	0	0.00 %
Verbena	1	1	0	0	0	0	0.00 %
Verbena, Moss	1	1	0	0	0	0	0.00 %
Vinca	8	8	0	0	0	0	0.00 %
Viola	5	5	0	0	0	0	0.00 %
Wallflower	1	1	0	0	0	0	0.00 %
Zinnia	45	44	1	0	0	1	2.22 %
<b>Total</b>	<b>474</b>	<b>460</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>2.95 %</b>

Seed Kind Tested	Feed						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Feed	9	9	0	0	0	0	0.00 %

Seed Kind Tested	Pasture Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pasture Mix	37	22	12	1	2	15	40.54 %

Seed Kind Tested	Flower Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Flower Mix	5	4	1	0	0	1	20.00 %

Seed Kind Tested	Lawn Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Lawn Mix	289	252	33	1	3	37	12.80 %

Table IV

Vegetable Seeds Wholesale Distributors			Vegetable Seeds			
			CL	SV	TV	MV
ABBOTT & COBB INC	TREVOSE	PA	76	0	0	0
HENRY F MICHELL, CO.	KING OF PRUSSIA	PA	35	10	0	0
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	3	0	0	0
OUTSTANDING SEED CO, LLC	MONACA	PA	4	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	67	3	2	0
PLANTATION PRODUCTS, LLC	NORTON	MA	12	2	0	0
SEEDS OF CHANGE	COMPTON	CA	2	0	0	0
SEEDWAY LLC	HALL	NY	74	1	1	0
SEEDWAY LLC	ELIZABETHTOWN	PA	9	0	0	0
SHIRK'S ANIMAL HEALTH SUPPLY, LLC	NARVON	PA	8	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	925	22	2	0
		<b>Total</b>	<b>1,215</b>	<b>38</b>	<b>5</b>	<b>0</b>

Agricultural Seeds Wholesale Distributors			Agricultural Seeds			
			CL	SV	TV	MV
ADVANTA US	HEREFORD	TX	1	0	0	0
AGRICULTURAL COMMODITIES, INC.	GETTYSBURG	PA	1	0	0	0
AGRIGOLD	SAINT FRANCISVILLE	IL	1	0	0	0
ALLIANCE SEED INC	BROOKLYN	NY	6	2	0	0
AMERICA'S ALFALFA	NAMPA	ID	2	0	0	0
AMERICAN SEED CO INC	SPRING GROVE	PA	5	0	0	0
BARENBRUG USA	TANGENT	OR	7	2	0	0
BEDFORD FARM BUREAU COOP	BEDFORD	PA	1	0	0	0
BFG SUPPLY CO.	BURTON	OH	2	0	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	84	3	0	0
BYRON SEEDS LLC	ROCKVILLE	IN	2	2	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	2	0	0	0
CENTRAL GARDEN DISTRIBUTION	EASTON	PA	2	0	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	6	1	0	0
DLF PICKSEED	HALSEY	OR	4	0	0	0
DOEBLER'S PENNSYLVANIA HYBRIDS INC	WILLIAMSPORT	PA	2	0	0	0
EDDIE MERCER AGRI SERVICES INC	FREDERICK	MD	1	0	0	0
ERNST CONSERVATION SEED	MEADVILLE	PA	4	2	0	0
FM BROWN'S SONS, INC.	SINKING SPRING	PA	17	0	0	0
GROWMARK	MILFORD	DE	2	0	0	0
GROWMARK FS LLC	BELLEFONTE	PA	1	0	0	0
GROWMARK FS LLC	MILFORD	DE	11	0	0	0
GROWMARK FS LLC	YORK	PA	56	0	1	0
GROWMARK FS, LLC	MILFORD	DE	4	0	0	0
HADLEY SEED FARM	HADLEY	PA	3	0	0	0

Agricultural Seeds Wholesale Distributors			Agricultural Seeds			
			CL	SV	TV	MV
HISTANDS SUPPLY	WYCOMBE	PA	12	0	0	0
HORST SEEDS	CHAMBERSBURG	PA	3	0	0	0
JMD COMPANY	BETHEL PARK	PA	3	0	0	0
KING'S AGRI SEEDS, INC.	LANCASTER	PA	23	1	0	0
LAKEVIEW FERTILIZER	SANDY LAKE	PA	1	0	0	0
LEABROOK AG	LANCASTER	PA	13	1	1	0
LEBANON SEABOARD CORP	LEBANON	PA	0	1	0	0
LESCO, INC.	CLEVELAND	OH	2	0	0	0
LOVELAND PRODUCTS, INC.	GREELEY	CO	2	0	0	0
MASTERS CHOICE INC	ANNA	IL	2	0	0	0
MID-ATLANTIC SEEDS, INC.	YORK	PA	20	1	0	0
MONSANTO COMPANY	ST LOUIS	MO	10	0	0	0
NORTHAMPTON COUNTY SEED, CO.	NAZARETH	PA	13	1	0	1
P L ROHRER & BRO INC	SMOKETOWN	PA	18	0	0	0
PENNINGTON SEED	LEBANON	OR	5	0	0	0
PENNINGTON SEED	EASTON	PA	1	0	0	0
PENNINGTON SEEDS, INC.	KENBRIDGE	VA	0	1	0	0
POND SEED COMPANY	SCOTT	OH	1	0	0	0
PREFERRED SEED COMPANY INC	BUFFALO	NY	7	0	0	0
SEEDWAY LLC	HALL	NY	64	1	1	0
SHIRK'S ANIMAL HEALTH SUPPLY, LLC	NARVON	PA	4	0	0	0
SOUTHERN STATES COOP, INC.	RICHMOND	VA	2	0	0	0
SYNGENTA SEEDS INC	MINNEAPOLIS	MN	1	0	0	0
TEE-2-GREEN CORP	HUBBARD	OR	1	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	4	0	0	0
W I MILLER & SONS	FARMDALE	OH	2	0	0	0
W-L RESEARCH	NAMPA	ID	1	0	0	0
WINFIELD SOLUTIONS, LLC	ST PAUL	MN	3	0	0	0
		<b>Total</b>	<b>445</b>	<b>19</b>	<b>3</b>	<b>1</b>

Flower Seeds Wholesale Distributors			Flower Seeds			
			CL	SV	TV	MV
HENRY F MICHELL, CO.	KING OF PRUSSIA	PA	92	5	0	0
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	1	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	16	0	0	0
PLANTATION PRODUCTS, LLC	NORTON	MA	5	0	0	0
SEEDWAY LLC	HALL	NY	26	1	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	320	8	0	0
		<b>Total</b>	<b>460</b>	<b>14</b>	<b>0</b>	<b>0</b>



Feed Wholesale Distributors			Feed			
			CL	SV	TV	MV
AJ FEEDS	NORTHERN CAMBRIA	PA	2	0	0	0
CRESSON FEED MILL, INC.	CRESSON	PA	1	0	0	0
CURWENSVILLE FEED STORE, INC.	CURWENSVILLE	PA	1	0	0	0
MASTER FEED & GRAIN INC	CONNEAUTVILLE	PA	2	0	0	0
NORTH STAR FARM & AG	SHIPPENVILLE	PA	1	0	0	0
SEREDAY'S TRUE VALUE	WEST MIDDLESEX	PA	2	0	0	0
		<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>

Health Food Wholesale Distributors			Health Food			
			CL	SV	TV	MV
W ATLEE BURPEE CO	WARMINSTER	PA	6	0	0	0
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>

Pasture Mix Wholesale Distributors			Pasture Mix			
			CL	SV	TV	MV
AMERICAN SEED CO INC	SPRING GROVE	PA	1	0	0	0
BARENBRUG USA	TANGENT	OR	2	0	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	1	0	0	1
CENTRAL FARM AND GARDEN	WOOSTER	OH	0	1	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	2	1	0	0
FISHER & SON COMPANY, INC.	EXTON	PA	1	1	0	0
GROWMARK FS LLC	YORK	PA	1	1	0	0
KING'S AGRI SEEDS, INC.	LANCASTER	PA	9	5	1	0
LEABROOK AG	LANCASTER	PA	1	0	0	0
LOCAL SEED COMPANY, LLC.	MEMPHIS	TN	0	1	0	0
MID-ATLANTIC SEEDS, INC.	YORK	PA	0	0	0	1
PREFERRED SEED COMPANY INC	BUFFALO	NY	2	0	0	0
SEEDWAY LLC	HALL	NY	2	1	0	0
SOUTHERN STATES-WESTFIELD	WESTFIELD	MA	0	1	0	0
		<b>Total</b>	<b>22</b>	<b>12</b>	<b>1</b>	<b>2</b>

Flower Mix Wholesale Distributors			Flower Mix			
			CL	SV	TV	MV
PLANTATION PRODUCTS, LLC	NORTON	MA	2	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	2	1	0	0
		<b>Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>

Vegetable Mix Wholesale Distributors			Vegetable Mix			
			CL	SV	TV	MV
GROWMARK FS LLC	MILFORD	DE	3	0	0	0
HENRY F MICHELL, CO.	KING OF PRUSSIA	PA	0	1	0	0
MID-ATLANTIC SEEDS, INC.	YORK	PA	2	0	0	0
MONSANTO COMPANY	ST LOUIS	MO	2	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	27	0	1	0
		<b>Total</b>	<b>34</b>	<b>1</b>	<b>1</b>	<b>0</b>

Conservation Mix Wholesale Distributors			Conservation Mix			
			CL	SV	TV	MV
BARENBRUG USA	TANGENT	OR	1	0	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	2	0	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	2	1	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	1	0	0	0
CONSERVATION RESOURCES, LLC	PIPERSVILLE	PA	2	0	0	0
ERNST CONSERVATION SEED	MEADVILLE	PA	4	1	0	0
GREENLEAF TURF SOLUTIONS INC.	NEWARK	DE	1	0	0	0
GROWMARK FS LLC	YORK	PA	1	0	0	0
KING'S AGRI SEEDS, INC.	LANCASTER	PA	3	4	0	0
SEEDWAY LLC	HALL	NY	1	0	0	0
SOUTHERN STATES-WESTFIELD	WESTFIELD	MA	0	1	0	0
		<b>Total</b>	<b>18</b>	<b>7</b>	<b>0</b>	<b>0</b>

Lawn Mix Wholesale Distributors			Lawn Mix			
			CL	SV	TV	MV
AGRIGOLD	SAINT FRANCISVILLE	IL	1	0	0	0
AMERICAN SEED CO INC	SPRING GROVE	PA	3	0	0	1
AMTURF ENTERPRISES LLC	JEFFERSON	OR	2	0	0	0
BARENBRUG USA	TANGENT	OR	7	2	0	0
BFG SUPPLY DBA WETSEL	HARRISONBURG	VA	0	1	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	4	1	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	2	1	0	0
CENTRAL TURF & IRRIGATION SUPPLY	ELMSFORD	NY	7	1	0	0
CONSERVATION RESOURCES, LLC	PIPERSVILLE	PA	5	0	0	0
DLF PICKSEED	HALSEY	OR	3	0	0	0
FISHER & SON COMPANY, INC.	EXTON	PA	12	3	0	1
GENESIS TURFGRASS INC	GLEN ROCK	PA	1	0	0	0
GENESIS TURFGRASS, INC.	LANCASTER	PA	2	0	0	0
GREENLEAF TURF SOLUTIONS	NEWARK	DE	2	0	0	0
GREENLEAF TURF SOLUTIONS INC.	NEWARK	DE	1	1	0	0
GROWMARK FS LLC	YORK	PA	7	0	0	0

Lawn Mix Wholesale Distributors			Lawn Mix			
			CL	SV	TV	MV
HELENA CHEMICAL COMPANY	EVANS CITY	PA	3	0	0	0
HILLTOP DISTRIBUTORS CO. INC.	MEDIA	PA	2	0	0	0
HINES FEED STORE	HOLLIDAYSBURG	PA	3	0	0	0
HISTANDS SUPPLY	WYCOMBE	PA	8	0	0	0
J.R. SIMPLOT, DBA JACKLIN SEED	LIBERTY LAKE	WA	1	0	0	1
JERSEY SEED INC.	NEW BRUNSWICK	NJ	8	3	0	0
JMD COMPANY	TYRONE	PA	0	1	0	0
JMD COMPANY	BETHEL PARK	PA	0	1	0	0
JOHN DEERE LANDSCAPE/LESCO INC	CLEVELAND	OH	3	0	0	0
JONATHAN GREEN, INC.	FARMINGDALE	NJ	2	0	0	0
LEBANON SEABOARD CORP	LEBANON	PA	8	2	0	0
LEBANON SEABOARD CORP	LEBANON	PA	3	1	0	0
LESCO, INC.	CLEVELAND	OH	31	2	0	0
MID-ATLANTIC SEEDS, INC.	YORK	PA	3	0	0	0
MT. VIEW SEEDS LTD	SALEM	OR	1	0	0	0
NORTH STAR FARM & AG	SHIPPENVILLE	PA	1	0	0	0
NORTHAMPTON COUNTY SEED, CO.	NAZARETH	PA	6	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	12	1	0	0
PENNINGTON SEED	LAUREL	MD	1	0	0	0
PENNINGTON SEED	LEBANON	OR	12	0	0	0
PENNINGTON SEED	EASTON	PA	4	1	0	0
PENNINGTON SEED, INC.	GREENFIELD	MO	3	2	0	0
PLANTATION PRODUCTS, LLC	NORTON	MA	2	0	0	0
PREFERRED SEED COMPANY INC	BUFFALO	NY	1	0	0	0
REED & PERRINE	TENNENT	NJ	1	0	0	0
SEEDWAY LLC	HALL	NY	20	4	1	0
SEETON TURF WAREHOUSE LLC	MT LAUREL	NJ	11	2	0	0
SOUTHERN STATES COOP, INC.	RICHMOND	VA	3	1	0	0
SOUTHERN STATES-WESTFIELD	WESTFIELD	MA	12	2	0	0
SYNATEK, LP	SOUDERTON	PA	2	0	0	0
THE LAWN DEPOT INC	DOYLESTOWN	PA	2	0	0	0
THE SCOTTS COMPANY	MARYSVILLE	OH	6	0	0	0
TURF TRADE	MULLICA HILL	NJ	1	0	0	0
WALKER SUPPLY	MULLICA HILL	NJ	1	0	0	0
WALKER SUPPLY INC	CORAOPOLIS	PA	2	0	0	0
WALKER SUPPLY, INC.	LANCASTER	PA	4	0	0	0
WINDBER AGWAY	WINDBER	PA	1	0	0	0
WINFIELD SOLUTIONS, LLC	ST PAUL	MN	9	0	0	0
		<b>Total</b>	<b>252</b>	<b>33</b>	<b>1</b>	<b>3</b>

SEED CERTIFICATION  
TABLE V  
SUMMARY OF FIELD INSPECTIONS FOR 2017  
(JULY 1, 2017- JUNE 30, 2018)

CROP	VARIETY	FOUNDATION	REGISTERED	CERTIFIED	Q/A
Barley, Winter	Scala	----	----	----	80.73
Oats, Spring	Armor	----	20.00	189.50	----
Potatoes	Atlantic MT	----	----	0.014	----
	Chieftain	----	----	2.3	----
	Eva	----	----	8.75	----
	NY 141	----	----	0.8	----
	NY 149	----	----	3	----
	LaChipper	----	----	64.06	----
	LAChipperMT	----	----	0.062	
	Lamoka	----	----	32.2	----
	Red LaSoda	----	----	22	----
	Red Lasoda #10	----	----	220.39	----
	Red Lasoda #10 MT	----	----	0.187	----
	Red Maria	----	----	4.65	----
	Snowden	----	----	4	----
	Waneta	----	----	4	----
Rye	Danko	----	----	----	91
Triticale	HyOctane	----	----	----	333.3
	Trical 336	----	----	----	282.43
Wheat, Winter	FS840	----	----	----	197.24
	FS844	----	----	----	126.19
	FS850	----	----	----	145.00
	SW32	----	----	----	126.19
	SW49SR	----	----	----	258.10
	SW52	----	----	----	280.15
	SW550	----	----	----	551.65
	SW59SR	----	----	----	460.55
	SW63SR	----	----	----	419.30
TOTAL ACRES		----	20.00	555.91	3351.83

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>)

