



pennsylvania
DEPARTMENT OF AGRICULTURE

**Pennsylvania Department of Agriculture
Bureau of Plant Industry
2016 Seed Report
Pennsylvania Seed Act**

Jan. 2017

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 helps ensure consumers are provided with truthful, accurate information upon which to make seed purchase decisions.

The division is responsible for (1) administering and enforcing the Pennsylvania Seed Act; (2) administering the Seed Certification Act; (3) operating the State Seed Laboratory; and (4) maintaining the seed herbarium.

This report is a summary of the seed division's official seed inspection and laboratory analyses from July 1, 2015 to June 30, 2016.

Regulatory Requirements

The Seed Act, from which the division derives its authority, requires all seeds to be labeled properly before being distributed in Pennsylvania. Information must appear on a tag or label attached in a conspicuous place on the exterior of the seed container. Seeds not properly labeled are subject to a "Stop Sale" order, which prohibits its sale/distribution until relabeled 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 2015 there were **433** licensed seed dealers. A total of **\$10,825.00** was collected for seed dealers license fees.

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

- Flower seed mixtures
- Lawn seed mixtures
- Treated seeds
- Seeds for sprouting
- Germination standards for vegetable and flower seeds
- Prohibited noxious weed seeds
- 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, **\$1,853.19** in fees was charged for field inspection, tags, labels and other services.

The Pennsylvania Department of Agriculture is an active member of the Association of Official Seed Certification 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 **6,595** samples that required **7,967** separate tests (See Table I). Plant Industry Inspectors submitted **1750** regulatory seed samples for enforcement of the Seed Act, and **16** regulatory samples to test for viable weed seed to aid in the enforcement of the PA Feed Act. In addition, Plant Industry Inspectors issued **292** Seed Stop Sale Notices for labeling violations directly at retail and wholesale locations representing **2,529** containers.

Farmers, wholesale seedsmen and retail outlets submitted **4,654** service samples for labeling purposes and guidance in planting. The seed certification program and various other state agencies submitted **191** samples to determine if the seed met their standards or specifications. A total of **\$52,013.37** in fees was collected for these services.

The seed analysts also identify and test seeds for the Pennsylvania Department of Transportation, the State Police Crime Laboratory, other state agencies, and the public.

As part of the cooperative agreement between the Pennsylvania Department of Agriculture and the Federal Seed Regulatory and Testing Division, **23** seed mixture samples were sent to the Federal Seed Laboratory for regulatory testing. This was done as a temporary aid to the Pennsylvania Seed Program to help maintain a strong regulatory presence during a transitional stage of employee turnover and training.

The Seed Laboratory is an active member of AOSA and cooperates in work of various committees. A staff member attends the annual meeting of AOSA to vote on rule changes, discuss other items of business and attend committee meetings. Staff members also attended seed training schools; notably the Iowa State University Seed Short Course and the Federal Seed School in Gastonia, NC.

The department is also an active member of the Association of Seed Control Officials of the Northeastern States and the Association of American Seed Control Officials. A staff member attends the annual meeting of each organization.

Each year, 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.

Number of Samples per Year

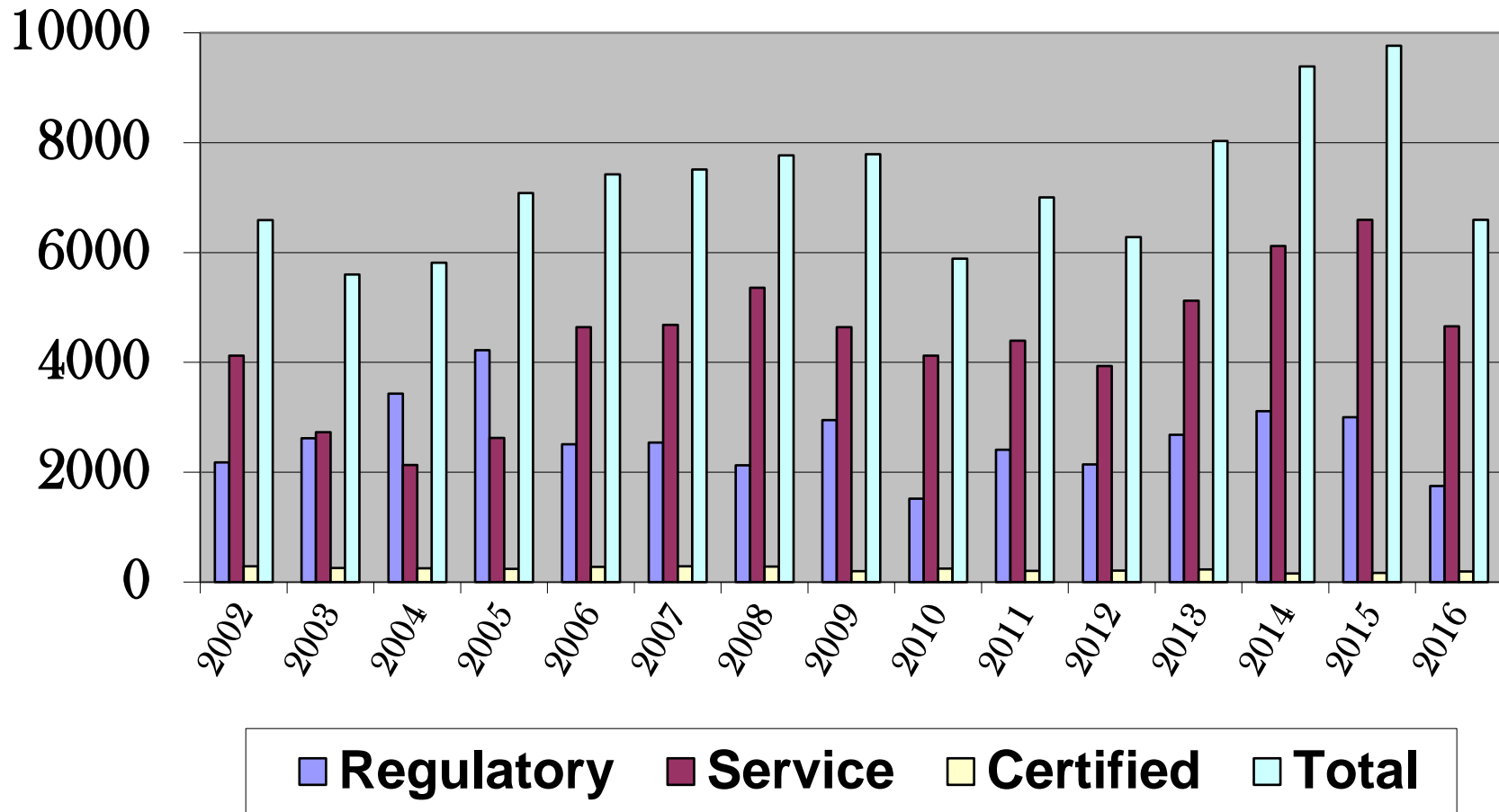


Table I

Classification of samples by kind and numbers of tests involved.

Number of Samples	Kinds	Purity	Noxious Weed Examinations	Germinations*
3,292	Vegetable	11	2	3,351
1,560	Agricultural	450	675	1,359
1,337	Flower	0	0	1,355
7	Tree	0	0	0
16	Feed	0	16	2
0	Health Food	0	0	0
84	Pasture Mix	12	12	74
18	Flower Mix	0	0	13
10	Vegetable Mix	0	0	10
72	Conservation Mix	1	1	3
2	Vegetable Kit	0	0	1
196	Lawn Mix	49	49	48
0	Unidentified	0	0	0
6,594	Totals	523	755	6,216

Other Tests	
Interstate Noxious Weed Test	4
Treated Germination Test	0
Cold Test	85
Sand Test	18
Roundup® Ready Test	9
Tetrazolium Test	12
Endophyte Test	0
Ryegrass Fluorescence Test	124
Oats Fluorescence Test	83
Identification Test	3
400 Seed Count Test	64
Miscellaneous Test	37
Canada Noxious Weed Test	30
Seed Count Test	4
Total Tests	7,967

* 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 1,734 seed samples. A total of 160 or 9.23 % of these samples were found to be in violation of the Act. The inspectors also placed 146 lots of seed (6,054 containers) under 'Stop Sale' at 39 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		
		7/1/2015 - 6/30/2016	7/1/2014 - 6/30/2015	7/1/2013 - 6/30/2014
Vegetable	864	6.83 %	4.85 %	5.52 %
Agricultural	423	11.58 %	5.29 %	10.00 %
Flower	282	7.80 %	4.20 %	7.40 %
Tree	0	0.00 %	100.00 %	0.00 %
Health Food	0	0.00 %	46.67 %	66.67 %
Pasture Mix	18	44.44 %	23.81 %	22.73 %
Flower Mix	5	0.00 %	14.29 %	37.50 %
Vegetable Mix	3	0.00 %	4.00 %	2.86 %
Conservation Mix	2	0.00 %	0.00 %	50.00 %
Vegetable Kit	1	0.00 %	3.85 %	0.00 %
Lawn Mix	136	16.18 %	35.48 %	16.35 %
Unidentified	0	0.00 %	0.00 %	0.00 %
Totals	1,734	9.23 %	6.50 %	7.44 %

* Samples collected by seed inspectors 7/1/2015 - 6/30/2016

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	10	10	0	0	0	0	0.00 %
Asparagus	1	0	1	0	0	1	100.00 %
Asparagus Bean (Yardlong)	1	1	0	0	0	0	0.00 %
Basil	20	20	0	0	0	0	0.00 %
Bean, Garden	42	32	10	0	0	10	23.81 %
Bean, Red Kidney	1	1	0	0	0	0	0.00 %
Beet	19	16	3	0	0	3	15.79 %
Black-seeded Lettuce	7	7	0	0	0	0	0.00 %
Borage, Common	1	1	0	0	0	0	0.00 %
Broccoli	11	11	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	5	4	1	0	0	1	20.00 %
Cabbage	14	13	1	0	0	1	7.14 %
Cantaloupe	8	8	0	0	0	0	0.00 %
Caraway	1	1	0	0	0	0	0.00 %
Carrot	21	20	1	0	0	1	4.76 %
Cat Grass	2	2	0	0	0	0	0.00 %
Catnip	2	2	0	0	0	0	0.00 %
Cauliflower	3	3	0	0	0	0	0.00 %
Celeriac	1	1	0	0	0	0	0.00 %
Celery	3	3	0	0	0	0	0.00 %
Chamomile, Roman	1	1	0	0	0	0	0.00 %
Chervil	2	2	0	0	0	0	0.00 %
Chicory	3	3	0	0	0	0	0.00 %
Chives	6	6	0	0	0	0	0.00 %
Chives, Garlic	3	2	1	0	0	1	33.33 %
Cilantro	7	7	0	0	0	0	0.00 %
Collards	8	8	0	0	0	0	0.00 %
Coriander	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Vegetable Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Corn, Sweet	40	39	1	0	0	1	2.50 %
Cornsalad	3	3	0	0	0	0	0.00 %
Cowpea	1	1	0	0	0	0	0.00 %
Cress	1	1	0	0	0	0	0.00 %
Cucumber	27	27	0	0	0	0	0.00 %
Dahlia	1	1	0	0	0	0	0.00 %
Dandelion	1	0	1	0	0	1	100.00 %
Dill	9	8	1	0	0	1	11.11 %
Eggplant	11	11	0	0	0	0	0.00 %
Endive	6	6	0	0	0	0	0.00 %
Escarole	1	1	0	0	0	0	0.00 %
Eucalyptus Baby	1	1	0	0	0	0	0.00 %
Fennel	1	1	0	0	0	0	0.00 %
Fennel, Florence(Sweet)	1	1	0	0	0	0	0.00 %
Garden Bean	2	1	1	0	0	1	50.00 %
Gourd, Bottle	1	0	1	0	0	1	100.00 %
Gourd, Small-Seeded	4	3	1	0	0	1	25.00 %
Kale	13	10	2	1	0	3	23.08 %
Kohlrabi	4	4	0	0	0	0	0.00 %
Leek	3	3	0	0	0	0	0.00 %
Lemon Balm	1	1	0	0	0	0	0.00 %
lemongrass	1	0	1	0	0	1	100.00 %
Lettuce	58	54	2	2	0	4	6.90 %
Lima Bean	9	9	0	0	0	0	0.00 %
Marjoram	1	1	0	0	0	0	0.00 %
Melons	11	11	0	0	0	0	0.00 %
Mizuna, Mustard Greens	2	2	0	0	0	0	0.00 %
Morning Glory	1	1	0	0	0	0	0.00 %
Mung Bean	1	1	0	0	0	0	0.00 %
Mustard	12	12	0	0	0	0	0.00 %
New Zealand Spinach	1	1	0	0	0	0	0.00 %
Okra	7	7	0	0	0	0	0.00 %
Onion	16	13	3	0	0	3	18.75 %
Oregano	5	4	1	0	0	1	20.00 %
Pakchoi	3	3	0	0	0	0	0.00 %
Parsley	11	11	0	0	0	0	0.00 %
Parsnip	2	1	1	0	0	1	50.00 %
Pea, Garden	43	38	5	0	0	5	11.63 %
Peanut	1	1	0	0	0	0	0.00 %
Pepper	52	50	2	0	0	2	3.85 %
Pepper, Habanero	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Vegetable Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pepper, Hot	24	23	1	0	0	1	4.17 %
Pole Bean	14	11	3	0	0	3	21.43 %
Popcorn	1	1	0	0	0	0	0.00 %
Pumpkin	15	14	1	0	0	1	6.67 %
Purslane	1	1	0	0	0	0	0.00 %
Radicchio	2	2	0	0	0	0	0.00 %
Radish	31	31	0	0	0	0	0.00 %
Rosemary	1	1	0	0	0	0	0.00 %
Rue	1	1	0	0	0	0	0.00 %
Rutabaga	2	2	0	0	0	0	0.00 %
Sage	2	2	0	0	0	0	0.00 %
Salad Greens	1	1	0	0	0	0	0.00 %
SALTWORT(NIR)	1	1	0	0	0	0	0.00 %
Salvia	2	2	0	0	0	0	0.00 %
Savory, Summer	1	1	0	0	0	0	0.00 %
Shallot	1	1	0	0	0	0	0.00 %
Soybean	3	2	1	0	0	1	33.33 %
Spinach	18	18	0	0	0	0	0.00 %
Squash	32	28	4	0	0	4	12.50 %
Squash, Autum-Winter	4	3	1	0	0	1	25.00 %
Strawberry	1	1	0	0	0	0	0.00 %
Sweet Basil	1	1	0	0	0	0	0.00 %
Swiss Chard	12	12	0	0	0	0	0.00 %
Thyme	5	5	0	0	0	0	0.00 %
Tomatillo	5	5	0	0	0	0	0.00 %
Tomato	98	95	3	0	0	3	3.06 %
Turnip	18	18	0	0	0	0	0.00 %
Watercress	1	1	0	0	0	0	0.00 %
Watermelon	11	10	1	0	0	1	9.09 %
White-seeded Lettuce	5	5	0	0	0	0	0.00 %
Total	892	833	56	3	0	59	6.61 %

Seed Kind Tested	Agricultural Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Alfalfa	16	12	3	1	0	4	25.00 %
Arugula	1	1	0	0	0	0	0.00 %
Barley	3	3	0	0	0	0	0.00 %
Birdsfoot Trefoil	13	11	0	0	2	2	15.38 %
Black Locust	1	0	0	1	0	1	100.00 %

Seed Kind Tested	Agricultural Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Brome, Meadow	1	1	0	0	0	0	0.00 %
Brome, Smooth	6	4	2	0	0	2	33.33 %
Buckwheat	3	3	0	0	0	0	0.00 %
Chewings Fescue	2	2	0	0	0	0	0.00 %
Chicory	1	1	0	0	0	0	0.00 %
Clover, Alsike	4	4	0	0	0	0	0.00 %
Clover, Crimson	3	2	0	1	0	1	33.33 %
Clover, Ladino White	2	2	0	0	0	0	0.00 %
Clover, Red	12	12	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, Ornamental	1	1	0	0	0	0	0.00 %
Crownvetch	3	3	0	0	0	0	0.00 %
Festulolium	1	1	0	0	0	0	0.00 %
Hairy Vetch	2	2	0	0	0	0	0.00 %
Hard Fescue	17	17	0	0	0	0	0.00 %
Hemp	1	1	0	0	0	0	0.00 %
Kentucky Bluegrass	43	33	5	0	5	10	23.26 %
Lespedeza, Korean	1	1	0	0	0	0	0.00 %
Lettuce	1	1	0	0	0	0	0.00 %
Millet, Pearl	2	2	0	0	0	0	0.00 %
Oat	12	8	4	0	0	4	33.33 %
Orchardgrass	18	18	0	0	0	0	0.00 %
Poa Trivialis	1	0	1	0	0	1	100.00 %
Radish	1	1	0	0	0	0	0.00 %
Radish, Forage	1	1	0	0	0	0	0.00 %
Rape	4	3	1	0	0	1	25.00 %
Red Fescue	27	27	0	0	0	0	0.00 %
Redtop	6	4	1	0	1	2	33.33 %
Rye	11	7	3	0	1	4	36.36 %
Ryegrass	2	2	0	0	0	0	0.00 %
Ryegrass, Annual	45	39	2	0	4	6	13.33 %
Ryegrass, Intermediate	1	1	0	0	0	0	0.00 %
Ryegrass, Perennial	34	34	0	0	0	0	0.00 %
Sheep Fescue	1	0	1	0	0	1	100.00 %
Sorghum	2	1	1	0	0	1	50.00 %
Sorghum-Sudangrass Hybrid	4	4	0	0	0	0	0.00 %
Soybean	19	19	0	0	0	0	0.00 %
Spelt	2	2	0	0	0	0	0.00 %
Sudangrass	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Agricultural Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Switchgrass	1	1	0	0	0	0	0.00 %
Tall Fescue	33	28	5	0	0	5	15.15 %
Timothy	21	19	1	0	1	2	9.52 %
Triticale	6	5	1	0	0	1	16.67 %
Turnip	2	2	0	0	0	0	0.00 %
Wheat	12	12	0	0	0	0	0.00 %
Total	428	379	32	3	14	49	11.45 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Agastache – Giant Hyssop	2	2	0	0	0	0	0.00 %
Ageratum	2	2	0	0	0	0	0.00 %
Alyssum, Sweet	6	6	0	0	0	0	0.00 %
Amaranthus	4	4	0	0	0	0	0.00 %
Asclepias (Butterfly Weed)	2	2	0	0	0	0	0.00 %
Asparagus	1	1	0	0	0	0	0.00 %
Aster, New England	3	3	0	0	0	0	0.00 %
Asters	1	1	0	0	0	0	0.00 %
Baby's Breath	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	1	0	1	0	0	1	100.00 %
Bishop's Flower	1	1	0	0	0	0	0.00 %
Black-Eyed Susan	1	1	0	0	0	0	0.00 %
Blue Fescue	1	1	0	0	0	0	0.00 %
Bur-Marigold	1	1	0	0	0	0	0.00 %
Butterfly-Bush	1	1	0	0	0	0	0.00 %
Calendula	4	2	2	0	0	2	50.00 %
Canterbury Bells	1	1	0	0	0	0	0.00 %
Carnation	1	1	0	0	0	0	0.00 %
Celosia	4	4	0	0	0	0	0.00 %
Chamomile, Annual	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 Maritima	1	0	1	0	0	1	100.00 %
Cleome	2	2	0	0	0	0	0.00 %
Coleus	1	1	0	0	0	0	0.00 %
Columbine	6	5	1	0	0	1	16.67 %
Coreopsis, Lance-leaf	2	2	0	0	0	0	0.00 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
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 %
Cosmos	11	9	2	0	0	2	18.18 %
Cypress Vine	1	1	0	0	0	0	0.00 %
Dahlia	2	2	0	0	0	0	0.00 %
Daisy, African	1	1	0	0	0	0	0.00 %
Daisy, Shasta	2	1	1	0	0	1	50.00 %
Delphinium (Pacific Giants)	2	1	1	0	0	1	50.00 %
Dianthus	4	4	0	0	0	0	0.00 %
Dusty Miller	1	1	0	0	0	0	0.00 %
Echinacea	1	1	0	0	0	0	0.00 %
Forget-Me-Not	1	1	0	0	0	0	0.00 %
Four O'clock	3	3	0	0	0	0	0.00 %
Foxglove	2	2	0	0	0	0	0.00 %
Gaillardia (Annual)	1	1	0	0	0	0	0.00 %
Gaillardia (Perennial)	1	1	0	0	0	0	0.00 %
Gazania	3	3	0	0	0	0	0.00 %
Geranium	2	2	0	0	0	0	0.00 %
Gloriosa Daisy	1	1	0	0	0	0	0.00 %
Goldeneye, Showy	1	1	0	0	0	0	0.00 %
Gomphrena	2	2	0	0	0	0	0.00 %
Hollyhock	2	2	0	0	0	0	0.00 %
Hypoestes	1	1	0	0	0	0	0.00 %
Ice Plant	1	1	0	0	0	0	0.00 %
Impatiens	3	2	1	0	0	1	33.33 %
Ipomopsis (Scarlet Gilia)	1	1	0	0	0	0	0.00 %
Larkspur	2	1	1	0	0	1	50.00 %
Lavender	3	3	0	0	0	0	0.00 %
Lettuce	1	1	0	0	0	0	0.00 %
Lobelia	3	2	1	0	0	1	33.33 %
Lunaria	1	1	0	0	0	0	0.00 %
Lupine, Russell hybrids	1	1	0	0	0	0	0.00 %
Lychnis	1	1	0	0	0	0	0.00 %
Marigold, Sweet	2	2	0	0	0	0	0.00 %
Marigolds	20	16	4	0	0	4	20.00 %
Mimulus (Monkeyflower)	1	1	0	0	0	0	0.00 %
Moonflower	1	1	0	0	0	0	0.00 %
Morning Glory	6	6	0	0	0	0	0.00 %
Nasturtium	10	10	0	0	0	0	0.00 %
Nemophila	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Flower Seeds						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Nicotiana	1	0	1	0	0	1	100.00 %
Nicotiana	1	1	0	0	0	0	0.00 %
Onion	1	1	0	0	0	0	0.00 %
Painted Daisy	1	1	0	0	0	0	0.00 %
Pansy, Common	4	4	0	0	0	0	0.00 %
Penstemon	1	1	0	0	0	0	0.00 %
Pentas	1	0	1	0	0	1	100.00 %
Petunias	7	6	1	0	0	1	14.29 %
Phlox	3	3	0	0	0	0	0.00 %
Poppy	1	1	0	0	0	0	0.00 %
Poppy, California	3	3	0	0	0	0	0.00 %
Poppy, Oriental	2	2	0	0	0	0	0.00 %
Poppy, Shirley	1	1	0	0	0	0	0.00 %
Portulaca	4	4	0	0	0	0	0.00 %
Rudbeckia	3	2	1	0	0	1	33.33 %
Salpiglossis	1	1	0	0	0	0	0.00 %
Salvia	5	5	0	0	0	0	0.00 %
Scabiosa (annual) /Mourning-bride	1	1	0	0	0	0	0.00 %
Scabiosa (perennial)	1	1	0	0	0	0	0.00 %
Snapdragon	9	8	1	0	0	1	11.11 %
St John's Wort	1	1	0	0	0	0	0.00 %
Statice	1	1	0	0	0	0	0.00 %
Stock	2	2	0	0	0	0	0.00 %
Strawflower	1	1	0	0	0	0	0.00 %
Sunflower	12	12	0	0	0	0	0.00 %
Sweet Pea, annual	8	7	1	0	0	1	12.50 %
Thunbergia	1	1	0	0	0	0	0.00 %
Tithonia	1	1	0	0	0	0	0.00 %
Toothpick Plant	1	1	0	0	0	0	0.00 %
Torenia (Wishbone Flower)	1	1	0	0	0	0	0.00 %
Tritoma	1	1	0	0	0	0	0.00 %
Verbena	3	3	0	0	0	0	0.00 %
Verbena	1	1	0	0	0	0	0.00 %
Vinca	4	4	0	0	0	0	0.00 %
Viola	1	1	0	0	0	0	0.00 %
Wallflower	1	1	0	0	0	0	0.00 %
Zinnia	27	27	0	0	0	0	0.00 %
Total	282	260	22	0	0	22	7.80 %

Seed Kind Tested	Feed						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Feed	16	16	0	0	0	0	0.00 %

Seed Kind Tested	Pasture Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pasture Mix	17	9	7	1	0	8	47.06 %

Seed Kind Tested	Flower Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Flower Mix	5	5	0	0	0	0	0.00 %

Seed Kind Tested	Vegetable Kit						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Vegetable Kit	1	1	0	0	0	0	0.00 %

Seed Kind Tested	Lawn Mix						
	Total	CL	SV	TV	MV	#VIOL	%VIOL
Lawn Mix	123	101	19	0	3	22	17.89 %

Table IV

Vegetable Seeds Wholesale Distributors			Vegetable Seeds			
			CL	SV	TV	MV
ABBOTT & COBB INC	TREVOSE	PA	65	5	0	0
AMERICAN SEED CO INC	SPRING GROVE	PA	1	0	0	0
BOTANICAL INTERESTS INC	BROOMFIELD	CO	1	0	0	0
CROSMAN SEED CORP	EAST ROCHESTER	NY	1	0	0	0
HIGH MOWING SEED CO	WOLCOTT	VT	1	0	0	0
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	2	0	0	0
MICHELL CO, HENRY F	KING OF PRUSSIA	PA	34	7	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	20	1	0	0
PLANTATION PRODUCTS	NORTON	MA	18	0	0	0
SEEDS FROM ITALY	LAWRENCE	KS	1	0	0	0
SEEDS OF CHANGE	COMPTON	CA	1	0	0	0
SEEDWAY LLC	ELIZABETHTOWN	PA	26	1	0	0
SHIRK'S ANIMAL HEALTH SUPPLY, LLC	EAST EARL	PA	5	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	629	42	3	0
		Total	805	56	3	0

Agricultural Seeds Wholesale Distributors			Agricultural Seeds			
			CL	SV	TV	MV
ADVANTA US	AMARILLO	TX	1	0	0	0
AGRIGOLD	SAINT FRANCISVILLE	IL	4	0	0	0
ALLIANCE SEEDS INC	BROOKLYN	NY	18	1	0	0
BARENBRUG USA	TANGENT	OR	1	0	0	0
BAYER ADVANCED ,B.U. OF BAYER CROPSCIENCE LP	RESEARCH TRIANGLE PARK	NC	3	0	0	0
BFG SUPPLY CO.	BURTON	OH	72	3	1	5
BFG SUPPLY DBA WETSEL INC	CHESWICK	PA	1	0	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	6	0	0	0
CHANNEL BIO LLC	SAINT LOUIS	MO	1	0	0	0
CHEMGRO SEEDS	REEDSVILLE	PA	1	0	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	19	3	0	1
CHESAPEAKE VALLEY SEED, INC.	SAVAGE	MD	1	0	0	0
DAIRYLAND SEED	WOODLAND	CA	0	1	0	0
DISCOUNT SEEDS INC	WATERTOWN	SD	1	0	0	0
DLF INTERNATIONAL SEEDS	HALSEY	OR	4	4	0	0
DOEBLER'S PENNSYLVANIA HYBRIDS INC	JERSEY SHORE	PA	2	0	0	0
EDDIE MERCER AGRI SERVICES INC	FREDERICK	MD	1	0	0	0
ERNST CONSERVATION SEED	MEADVILLE	PA	3	0	1	0
F M BROWN'S SONS, INC	SINKING SPRING	PA	2	0	0	0
F M BROWNS SONS INC	SINKING SPRING	PA	12	0	0	0
GROWMARK FS LLC	MILFORD	DE	2	1	0	0

Agricultural Seeds Wholesale Distributors			Agricultural Seeds			
			CL	SV	TV	MV
GROWMARK FS LLC	YORK	PA	42	3	1	0
HADLEY SEED FARM	HADLEY	PA	4	1	0	0
HISTANDS SUPPLY	WYCOMBE	PA	4	2	0	0
HORST SEEDS	CHAMBERSBURG	PA	2	0	0	0
JERSEY SEED INC.	NEW BRUNSWICK	NJ	1	1	0	0
KING'S AGRI SEEDS INC	RONKS	PA	3	0	0	1
LA CROSSE FORAGE & TURF SEED LLC DBA LA CROSSE SEE	LA CROSSE	WI	4	0	0	0
LACROSSE FORAGE & TURF SEED, LLC DBA LA CROSSE SEE	MADISON	WI	1	0	0	0
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	1	0	0	0
LOVELAND PRODUCTS INC	GREELEY	CO	7	0	0	0
MONSANTO COMPANY	ST LOUIS	MO	4	0	0	0
NORTHAMPTON COUNTY SEED CO	NAZARETH	PA	11	0	0	1
ONTARIO SPECIALTY GRAINS	TILLSONBURG	ON	2	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	2	0	0	0
PENNINGTON SEED INC	GREENFIELD	MO	0	2	0	0
PREFERRED SEED COMPANY INC	BUFFALO	NY	10	0	0	1
RAGAN & MASSEY INC	PONCHATOULA	LA	1	0	0	0
SCHLESSMAN SEED CO	MILAN	OH	1	0	0	0
SEED LAB	HARRISBURG	PA	1	0	0	0
SEEDWAY LLC	HALL	NY	95	9	0	4
SHIRK'S ANIMAL HEALTH SUPPLY, LLC	EAST EARL	PA	1	0	0	0
SOUTHERN STATES COOP INC	RICHMOND	VA	1	0	0	0
STEYER SEEDS LLC	OLD FORT	OH	2	0	0	0
SYNGENTA SEEDS INC	MINNEAPOLIS	MN	2	0	0	0
T A SEEDS LLC	JERSEY SHORE	PA	4	0	0	1
THE CISCO COMPANIES	INDIANAPOLIS	IN	1	0	0	0
TURF TRADE	LANCASTER	PA	0	1	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	3	0	0	0
W-L RESEARCH	NAMPA	ID	3	0	0	0
WENSINK FARM SEEDS INC.	MONROEVILLE	OH	2	0	0	0
WINFIELD SOLUTIONS LLC	ST PAUL	MN	4	0	0	0
		Total	374	32	3	14

Flower Seeds Wholesale Distributors			Flower Seeds			
			CL	SV	TV	MV
CROSMAN SEED CORP	EAST ROCHESTER	NY	0	1	0	0
ERNST CONSERVATION SEED	MEADVILLE	PA	1	0	0	0
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	1	0	0	0
MICHELL CO, HENRY F	KING OF PRUSSIA	PA	53	5	0	0

Flower Seeds Wholesale Distributors			Flower Seeds			
			CL	SV	TV	MV
P L ROHRER & BRO INC	SMOKETOWN	PA	1	0	0	0
PLANTATION PRODUCTS	NORTON	MA	8	0	0	0
SEEDS OF CHANGE	COMPTON	CA	1	0	0	0
SEEDWAY LLC	ELIZABETHTOWN	PA	2	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	193	16	0	0
		Total	260	22	0	0

Feed Wholesale Distributors			Feed			
			CL	SV	TV	MV
BARNETT FARMS	COUDERSPORT	PA	2	0	0	0
CENTERFIELD SERVICES LLC	STEWARTSTOWN	PA	1	0	0	0
HALLMARK FEEDS INC	MIFFLINBURG	PA	1	0	0	0
LIZZIE MAE'S BIRDSEED & DRY GOODS CO.	RITTMAN	OH	1	0	0	0
MASTER FEED & GRAIN INC	CONNEAUTVILLE	PA	3	0	0	0
MCCARTNEY FEED AND HARDWARE	FREDONIA	PA	1	0	0	0
NEIGER MILLING COMPANY, H W	LAKE CITY	PA	2	0	0	0
PET VALU DISTRIBUTION CENTER US	LEVITTOWN	PA	1	0	0	0
THE MILL OF BEL AIR	BEL AIR	MD	1	0	0	0
TRACTOR SUPPLY COMPANY	BRENTWOOD	TN	3	0	0	0
		Total	16	0	0	0

Pasture Mix Wholesale Distributors			Pasture Mix			
			CL	SV	TV	MV
ALFOREX SEEDS LLC	WOODLAND	CA	0	1	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	1	1	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	0	2	0	0
GROWMARK FS LLC	YORK	PA	2	1	1	0
LA CROSSE FORAGE & TURF SEED LLC DBA LA CROSSE SEE	LA CROSSE	WI	1	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	1	0	0	0
PREFERRED SEED COMPANY INC	BUFFALO	NY	1	0	0	0
SEEDWAY LLC	HALL	NY	3	2	0	0
		Total	9	7	1	0

Flower Mix Wholesale Distributors			Flower Mix			
			CL	SV	TV	MV
LAKE VALLEY SEED COMPANY INC	BOULDER	CO	2	0	0	0
PLANTATION PRODUCTS	NORTON	MA	3	0	0	0
		Total	5	0	0	0

Vegetable Mix Wholesale Distributors			Vegetable Mix			
			CL	SV	TV	MV
SEEDWAY LLC	ELIZABETHTOWN	PA	1	0	0	0
W ATLEE BURPEE CO	WARMINSTER	PA	2	0	0	0
		Total	3	0	0	0

Conservation Mix Wholesale Distributors			Conservation Mix			
			CL	SV	TV	MV
CENTRAL FARM AND GARDEN	WOOSTER	OH	1	0	0	0
GROWMARK FS LLC	YORK	PA	1	0	0	0
		Total	2	0	0	0

Vegetable Kit Wholesale Distributors			Vegetable Kit			
			CL	SV	TV	MV
SITEONE LANDSCAPE SUPPLY, DBA LESCO INC	CLEVELAND	OH	1	0	0	0
		Total	1	0	0	0

Lawn Mix Wholesale Distributors			Lawn Mix			
			CL	SV	TV	MV
AMERICAN SEED CO INC	SPRING GROVE	PA	3	0	0	0
AMTURF ENTERPRISES LLC	JEFFERSON	OR	1	0	0	0
BARENBRUG USA	TANGENT	OR	3	1	0	0
BFG SUPPLY DBA WETSEL	HARRISONBURG	VA	1	0	0	0
BFG SUPPLY DBA WETSEL INC	CHESWICK	PA	1	1	0	0
CENTRAL FARM AND GARDEN	WOOSTER	OH	2	0	0	1
CENTRAL TURF & IRRIGATION SUPPLY	ELMSFORD	NY	0	3	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	1	0	0	0
CONSERVATION RESOURCES LLC	PIPERSVILLE	PA	4	0	0	0
DLF INTERNATIONAL SEEDS	HALSEY	OR	0	1	0	0
EAGLE EYE MARKETING GROUP	BERLIN	CT	0	1	0	0
F M BROWNS SONS INC	SINKING SPRING	PA	1	0	0	0
FISHER & SON COMPANY INC	EXTON	PA	1	2	0	0
GENESIS TURFGRASS INC	YORK	PA	1	0	0	0
GENESIS TURFGRASS INC	GLEN ROCK	PA	2	1	0	0
GENSIS TURF GRASS	YORK	PA	1	0	0	0
GREENLEAF TURF SOLUTIONS	NEWARK	DE	2	1	0	0
GROWMARK FS LLC	YORK	PA	4	0	0	0
HARRELL'S	YORK	PA	1	0	0	0
HARRELL'S LLC	LAKELAND	FL	2	0	0	0
HELENA CHEMICAL COMPANY	HATFIELD	MA	1	0	0	0
HILLTOP DISTRIBUTORS CO INC	MEDIA	PA	4	0	0	0

Lawn Mix Wholesale Distributors			Lawn Mix			
			CL	SV	TV	MV
LEBANON SEABOARD CORP	LEBANON	PA	2	1	0	0
LEBANON SEABOARD CORP	LEBANON	PA	1	0	0	0
LESCO, INC.	CLEVELAND	OH	6	0	0	0
LOVELAND PRODUCTS INC	GREELEY	CO	1	0	0	0
MID-ATLANTIC SEEDS INC	YORK	PA	4	0	0	0
MOUNTAIN VIEW SEEDS LIMITED	SALEM	OR	6	0	0	0
NATIONAL SEED	NEW BRUNSWICK	NJ	2	0	0	0
NORTHAMPTON COUNTY SEED CO	NAZARETH	PA	1	0	0	0
OLIGER SEED CO	AKRON	OH	1	0	0	0
P L ROHRER & BRO INC	SMOKETOWN	PA	1	0	0	0
PENNINGTON SEED	LEBANON	OR	1	0	0	0
PENNINGTON SEED INC	GREENFIELD	MO	3	1	0	0
SEEDWAY LLC	HALL	NY	2	0	0	0
SITEONE LANDSCAPE SUPPLY, DBA LESCO INC	CLEVELAND	OH	7	2	0	1
SOUTHERN STATES COOP INC	RICHMOND	VA	4	0	0	0
SOUTHERN STATES-WESTFIELD	WESTFIELD	MA	6	0	0	0
SYNATEK	SOUDERTON	PA	1	0	0	0
THE CISCO COMPANIES	INDIANAPOLIS	IN	2	2	0	0
THE SCOTTS COMPANY	MARYSVILLE	OH	4	1	0	0
TURF TRADE	MULLICA HILL	NJ	3	1	0	0
WINFIELD SOLUTIONS LLC	ST PAUL	MN	7	0	0	1
		Total	101	19	0	3

SEED CERTIFICATION
TABLE V
SUMMARY OF FIELD INSPECTIONS FOR 2015
(JULY 1, 2015- JUNE 30, 2016)

CROP	VARIETY	FOUNDATION	REGISTERED	CERTIFIED	Q/A
Barley, Winter	Dan	----	----	----	102.1
Oats, Spring	Armor	----	9.1	202.4	----
	Corral	----	----	15.0	----
	Jerry	----	----	----	23.9
	Leggett	----	----	----	19.5
	Leonard	----	----	----	29.5
Potatoes	Atlantic	----	----	0.45	----
	Chieftain	----	----	1.35	----
	Eva	----	----	10.52	----
	LaChipper	----	----	38.74	----
	Lamoka	----	----	20.45	----
	NY141	----	----	1.3	----
	NY149	----	----	1.4	----
	Reba	----	----	10.7	----
	Red La Soda	----	----	147.5	----
	Red Maria	----	----	1.7	----
	Snowden	----	----	38.0	----
	Waneta	----	----	19.1	----
	Yukon Gold	----	----	0.81	----
Rye	VNS				147.9
	Brasetto	----	----	----	150.0
	Danko	----	----	----	65.0
Triticale	VNS				87.5
	HyOctane	----	----	----	832.1
	Traction	----	----	----	200.0
	Trical 336	----	----	----	272.7
	Trical 815	----	----	----	200.0
Wheat, Winter	VNS				427.9
	FS850	----	----	----	307.7
	SW52	----	----	----	903.8
	SW57SR	----	----	----	171.0
	SW59SR	----	----	----	84.0
	SW63SR	----	----	----	97.0
	SW550	----	----	----	494.0
TOTAL ACRES		----	9.1	509.4	4615.6

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.