

Pennsylvania Department of Agriculture Bureau of Plant Industry 2019 Fiscal Year Seed Report Pennsylvania Seed Act

December 2020

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, 2019 to June 30, 2020.

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 2019 there were **561** licensed Seed Dealers. The Department collected a total of **\$14,025.00** 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, **\$6,980.43** 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 **5,355** samples that required **7,189** separate tests (See Table I). Plant Industry Inspectors submitted **1,823** regulatory seed samples for enforcement of the Seed Act, and **5** regulatory samples to test for viable weed seed to aid in the enforcement of the PA Feed Act. In addition, Plant Industry Inspectors issued **53** Seed Stop Sale Notices for labeling violations directly at retail and wholesale locations representing **1143** containers.

Farmers, wholesale seedsmen and retail outlets submitted **3,384** service samples for labeling purposes and guidance in planting. The seed certification program and various other state agencies submitted **149** samples to determine if the seed met their standards or specifications. The Department collected a total of **\$81,450.43** in fees for these services. (Due to COVID 19 mitigation efforts, the Seed Program ran at reduced capacity and saw a decrease in regulatory and service seed samples this fiscal year.)

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. 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 the Vice President of the AOSA. Seed Laboratory Supervisor Nishit Patel is the current AOSA CO-chair of the joint Purity Committee. Staff members also attended seed training schools; notably the USDA Seed Regulation and Testing Division Federal Seed School, and the Northeast Seed Analyst Workshop, hosted by the PDA Seed Program.

The department is also an active member of the Association of American Seed Control Officials (AASCO). Seed Program Supervisor Johnny Zook is a member of the AASCO executive board 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.

Classification of samples by kind and numbers of tests involved.

Number of Samples	Kinds	Purity	Noxious Weed Examinations	Germinations*
2,367	Vegetable	0	0	2,364
1,884	Agricultural	576	698	1,812
745	Flower	0	0	743
28	Tree	0	0	10
5	Feed	0	5	1
0	Health Food	0	0	0
70	Pasture Mix	19	20	68
1	Flower Mix	0	0	1
26	Vegetable Mix	5	5	23
63	Conservation Mix	6	7	12
0	Vegetable Kit	0	0	0
167	Lawn Mix	84	104	87
0	Unidentified	0	0	0
0	Native Warm Season Mix	0	0	0
5,356	Totals	690	839	5,121

Table I

Other Tests	
	2
Interstate Noxious Weed Test	2
Treated Germination Test	0
Cold Test	157
Sand Test	8
Roundup® Ready Test	4
Tetrazolium Test	32
Endophyte Test	0
Ryegrass Fluorescence Test	159
Oats Fluorescence Test	62
400 Seed Count Test	70
Miscellaneous Test	6
Canada Noxious Weed Test	4
Seed Count Test	35
Total Tests	7,189

^{*} 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 1,818 seed samples. A total of 101 lots or 5.56 % of these samples were found to be in violation of the Act, of which 109 (3,424 containers) were placed under 'Stop Sale' at 40 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.

			% Violations	
Kinds	Number of Samples*	7/1/2019 - 6/30/2020	7/1/2018 - 6/30/2019	7/1/2017 - 6/30/2018
Vegetable	996	2.51 %	5.47 %	3.42 %
Agricultural	224	11.16 %	16.82 %	4.91 %
Flower	448	4.91 %	13.84 %	2.95 %
Pasture Mix	19	26.32 %	37.93 %	40.54 %
Flower Mix	0	0.00 %	100.00 %	20.00 %
Vegetable Mix	21	0.00 %	66.67 %	5.56 %
Conservation Mix	5	60.00 %	66.67 %	28.00 %
Vegetable Kit	0	0.00 %	50.00 %	0.00 %
Lawn Mix	105	20.00 %	12.70 %	12.80 %
Unidentified	0	0.00 %	0.00 %	0.00 %
Native Warm Season Mix	0	0.00 %	0.00 %	0.00 %
Totals	1,818	5.56 %	10.38 %	5.48 %

^{*} Samples collected by seed inspectors 7/1/2019 - 6/30/2020

Explanation of abbreviations used in tables.

CL- Correctly labeled.

SV - Serious violation, discrepancy exceeds double the tolerance.

MV

Minor violation, discrepancy exceeds regular tolerance.
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.

			V	egetable See	ds		
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Allium Vineale	1	1	0	0	0	0	0.00 %
Anise	1	1	0	0	0	0	0.00 %
Artichoke	1	1	0	0	0	0	0.00 %
Arugula	7	7	0	0	0	0	0.00 %
Asparagus	4	4	0	0	0	0	0.00 %
Asparagus Bean (Yardlong)	1	1	0	0	0	0	0.00 %
Basil	32	32	0	0	0	0	0.00 %
Bean, 'Great Northern'	1	1	0	0	0	0	0.00 %
Bean, Garden	34	25	9	0	0	9	26.47 %
Beet	19	19	0	0	0	0	0.00 %
Bok Choy	1	1	0	0	0	0	0.00 %
Borage, Common	1	1	0	0	0	0	0.00 %
Brassica	3	3	0	0	0	0	0.00 %
Broccoli	17	17	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	8	8	0	0	0	0	0.00 %
Cabbage	14	14	0	0	0	0	0.00 %
Cantaloupe	14	14	0	0	0	0	0.00 %
Caraway	1	1	0	0	0	0	0.00 %
Carrot	34	34	0	0	0	0	0.00 %
Catnip	4	4	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 %
Celosia	2	2	0	0	0	0	0.00 %
Chamomile, Annual	4	4	0	0	0	0	0.00 %
Chervil	3	3	0	0	0	0	0.00 %
Chives	7	5	2	0	0	2	28.57 %
Chives, Garlic	3	1	2	0	0	2	66.67 %
Cilantro	7	7	0	0	0	0	0.00 %

Collards Coriander Corn, Hybrid Field Corn, Sweet Corn, Sweet Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean Gourd, Bottle	-4-1	Vegetable Seeds					
Coriander Corn, Hybrid Field Corn, Hybrid Sweet Corn, Sweet Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	otai	CL	SV	TV	MV	#VIOL	%VIOL
Corn, Hybrid Field Corn, Hybrid Sweet Corn, Sweet Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	6	6	0	0	0	0	0.00 %
Corn, Hybrid Sweet Corn, Sweet Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Corn, Sweet Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	3	3	0	0	0	0	0.00 %
Cornsalad Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Cowpea Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Cucumber Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	2	2	0	0	0	0	0.00 %
Cumin Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Dill Eggplant Endive Escarole Fava Bean Fennel Garden Bean	42	42	0	0	0	0	0.00 %
Eggplant Endive Escarole Fava Bean Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Endive Escarole Fava Bean Fennel Garden Bean	9	9	0	0	0	0	0.00 %
Escarole Fava Bean Fennel Garden Bean	14	14	0	0	0	0	0.00 %
Fava Bean Fennel Garden Bean	4	4	0	0	0	0	0.00 %
Fennel Garden Bean	1	1	0	0	0	0	0.00 %
Garden Bean	1	1	0	0	0	0	0.00 %
	2	2	0	0	0	0	0.00 %
Gourd Bottle	4	3	1	0	0	1	25.00 %
Coura, Douic	1	1	0	0	0	0	0.00 %
Gourds, Luffa (Dishcloth)	1	1	0	0	0	0	0.00 %
Honey Dew	2	2	0	0	0	0	0.00 %
Kale	19	19	0	0	0	0	0.00 %
Kale, Ornamental	1	1	0	0	0	0	0.00 %
Kohlrabi	8	8	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 %
Lettuce	51	50	1	0	0	1	1.96 %
Lima Bean	4	3	1	0	0	1	25.00 %
Marjoram	2	2	0	0	0	0	0.00 %
Melons	7	7	0	0	0	0	0.00 %
Mesclun	5	5	0	0	0	0	0.00 %
Mung Bean	1	1	0	0	0	0	0.00 %
Mustard	14	14	0	0	0	0	0.00 %
New Zealand Spinach	1	1	0	0	0	0	0.00 %
Okra	6	6	0	0	0	0	0.00 %
Onion	20	20	0	0	0	0	0.00 %
Oregano	7	7	0	0	0	0	0.00 %
Pakchoi	3	3	0	0	0	0	0.00 %
Parsley	17	17	0	0	0	0	0.00 %
Parsnip	3	3	0	0	0	0	0.00 %
Pea, Field	7	7	0	0	0	0	0.00 %
Pea, Garden	1	1	0	0	0	0	0.00 %
Pepper	- 1						

			V	egetable See	ds		
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pepper, Hot	39	39	0	0	0	0	0.00 %
Pole Bean	15	13	2	0	0	2	13.33 %
Popcorn	1	1	0	0	0	0	0.00 %
Portulaca	1	1	0	0	0	0	0.00 %
Pumpkin	17	17	0	0	0	0	0.00 %
Radicchio	2	2	0	0	0	0	0.00 %
Radish	35	35	0	0	0	0	0.00 %
Rosemary	2	2	0	0	0	0	0.00 %
Rutabaga	4	4	0	0	0	0	0.00 %
Sage	5	3	2	0	0	2	40.00 %
Salsify	1	1	0	0	0	0	0.00 %
Savory, Summer	1	1	0	0	0	0	0.00 %
Savory, Winter	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	2	2	0	0	0	0	0.00 %
Sorrel	1	1	0	0	0	0	0.00 %
Soybean	1	1	0	0	0	0	0.00 %
Spearmint	2	2	0	0	0	0	0.00 %
Spinach	21	21	0	0	0	0	0.00 %
Squash	32	31	1	0	0	1	3.13 %
Squash, Autum-Winter	11	10	1	0	0	1	9.09 %
Squash, Hubbard	1	1	0	0	0	0	0.00 %
Stevia	1	1	0	0	0	0	0.00 %
Stevia, sweet	1	1	0	0	0	0	0.00 %
Strawberry	1	1	0	0	0	0	0.00 %
Sunflower	1	1	0	0	0	0	0.00 %
Sweet Corn	30	28	2	0	0	2	6.67 %
Sweet Marjoram	1	1	0	0	0	0	0.00 %
Swiss Chard	9	9	0	0	0	0	0.00 %
Tarragon	1	1	0	0	0	0	0.00 %
Thyme	6	5	1	0	0	1	16.67 %
Thymus, Creeping Thyme	1	1	0	0	0	0	0.00 %
Tomatillo	3	3	0	0	0	0	0.00 %
Tomato	147	147	0	0	0	0	0.00 %
Turnip	9	9	0	0	0	0	0.00 %
Watercress	1	1	0	0	0	0	0.00 %
Watermelon	21	21	0	0	0	0	0.00 %
Total	996	971	25	0	0	25	2.51 %

			Agı	ricultural Se	eds		
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Alfalfa	2	2	0	0	0	0	0.00 %
Alkaligrass, Weeping	2	2	0	0	0	0	0.00 %
Barley	4	4	0	0	0	0	0.00 %
Birdsfoot Trefoil	4	3	0	0	1	1	25.00 %
Blue Fescue	2	1	1	0	0	1	50.00 %
Buckwheat	1	1	0	0	0	0	0.00 %
Clover, Crimson	2	1	0	0	1	1	50.00 %
Clover, Ladino White	2	1	1	0	0	1	50.00 %
Clover, Red	1	1	0	0	0	0	0.00 %
Hairy Vetch	1	1	0	0	0	0	0.00 %
Hard Fescue	13	13	0	0	0	0	0.00 %
Japanese Millet	1	1	0	0	0	0	0.00 %
Kentucky Bluegrass	24	19	3	0	2	5	20.83 %
Orchardgrass	8	4	3	0	1	4	50.00 %
Pea, Field	28	28	0	0	0	0	0.00 %
Peanut	1	1	0	0	0	0	0.00 %
Red Fescue	15	15	0	0	0	0	0.00 %
Redtop	4	3	1	0	0	1	25.00 %
Rye	12	8	4	0	0	4	33.33 %
Ryegrass, Annual	35	34	1	0	0	1	2.86 %
Ryegrass, Italian	1	0	1	0	0	1	100.00 %
Ryegrass, Perennial	27	25	2	0	0	2	7.41 %
Soybean	6	6	0	0	0	0	0.00 %
Tall Fescue	21	19	2	0	0	2	9.52 %
Timothy	4	4	0	0	0	0	0.00 %
Triticale	1	1	0	0	0	0	0.00 %
Turnip	1	1	0	0	0	0	0.00 %
Wheat	8	7	0	1	0	1	12.50 %
Total	231	206	19	1	5	25	10.82 %

	Flower Seeds						
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Alyssum, Sweet	8	8	0	0	0	0	0.00 %
Amaranthus	4	4	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 %
Aster, New England	1	1	0	0	0	0	0.00 %
Asters	2	2	0	0	0	0	0.00 %

	Flower Seeds							
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL	
Baby's Breath	1	1	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	4	4	0	0	0	0	0.00 %	
Balsam	1	1	0	0	0	0	0.00 %	
Barley	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 %	
Bidens	1	0	1	0	0	1	100.00 %	
Black-Eye Susan Vine	1	1	0	0	0	0	0.00 %	
Blanket Flower	1	1	0	0	0	0	0.00 %	
Blue dracaena	1	1	0	0	0	0	0.00 %	
Borage, Common	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	3	3	0	0	0	0	0.00 %	
Candytuft, Annual	1	1	0	0	0	0	0.00 %	
Canna	1	1	0	0	0	0	0.00 %	
Cardinal Climber	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 %	
Catnip	1	1	0	0	0	0	0.00 %	
Celosia	3	3	0	0	0	0	0.00 %	
Celosia	7	7	0	0	0	0	0.00 %	
China Aster	1	1	0	0	0	0	0.00 %	
Chinese Lanterns	1	1	0	0	0	0	0.00 %	
Chrysanthemum	1	1	0	0	0	0	0.00 %	
Cleome	5	5	0	0	0	0	0.00 %	
Coleus	7	7	0	0	0	0	0.00 %	
Columbine	4	3	1	0	0	1	25.00 %	
Columbine (long spur)	1	1	0	0	0	0	0.00 %	
Columbine, Colorado Blue	1	1	0	0	0	0	0.00 %	
Coreopsis, Large Flower	1	1	0	0	0	0	0.00 %	
Cornflower	3	3	0	0	0	0	0.00 %	
COSMIDIUM	1	1	0	0	0	0	0.00 %	
Cosmos	19	17	2	0	0	2	10.53 %	
Cosmos, Sulphur	1	1	0	0	0	0	0.00 %	
Cypress Vine	2	2	0	0	0	0	0.00 %	
Dahlia	1	1	0	0	0	0	0.00 %	
Daisy, Gloriosa	1	1	0	0	0	0	0.00 %	
Daisy, Shasta	3	3	0	0	0	0	0.00 %	

	I	Flower Seeds					
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Delphinium (Pacific Giants)	3	2	1	0	0	1	33.33 %
Dianthus	1	1	0	0	0	0	0.00 %
Dusty Miller	2	1	1	0	0	1	50.00 %
Echinacea	2	2	0	0	0	0	0.00 %
Echium (Vipers Bugloss)	1	1	0	0	0	0	0.00 %
Eucalyptus, Foliage	1	1	0	0	0	0	0.00 %
Forget-Me-Not	1	1	0	0	0	0	0.00 %
Forget-me-not, alpine	2	2	0	0	0	0	0.00 %
Four O'clock	4	4	0	0	0	0	0.00 %
Foxglove	3	3	0	0	0	0	0.00 %
Gaillardia (Perennial)	3	3	0	0	0	0	0.00 %
Gazania	2	2	0	0	0	0	0.00 %
Geranium	1	1	0	0	0	0	0.00 %
Gerbera (Transvaal Daisy)	1	1	0	0	0	0	0.00 %
Gloriosa Daisy	2	1	1	0	0	1	50.00 %
Gomphrena	4	4	0	0	0	0	0.00 %
Gourd, Small-Seeded	1	1	0	0	0	0	0.00 %
Gourds, Large-Seeded	3	3	0	0	0	0	0.00 %
Gypsophila	1	1	0	0	0	0	0.00 %
Hollyhock	3	3	0	0	0	0	0.00 %
Hyssop	1	1	0	0	0	0	0.00 %
Ice Plant	1	1	0	0	0	0	0.00 %
Impatiens	5	4	1	0	0	1	20.00 %
Larkspur	5	5	0	0	0	0	0.00 %
Lavender	6	5	1	0	0	1	16.67 %
Lavender	1	1	0	0	0	0	0.00 %
Lewisia	1	0	1	0	0	1	100.00 %
Lobelia	5	5	0	0	0	0	0.00 %
Lunaria	2	1	1	0	0	1	50.00 %
Lupine, Perennial	1	1	0	0	0	0	0.00 %
Lupine, Russell hybrids	1	1	0	0	0	0	0.00 %
Malabar Spinach	2	2	0	0	0	0	0.00 %
Marigold, African	1	1	0	0	0	0	0.00 %
Marigold, French	3	2	1	0	0	1	33.33 %
Marigolds	37	36	1	0	0	1	2.70 %
Melampodium	1	1	0	0	0	0	0.00 %
Mexican Sunflower	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	14	13	1	0	0	1	7.14 %
Nasturtium	15	14	1	0	0	1	6.67 %

Flower Seeds							
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Nemesia	1	1	0	0	0	0	0.00 %
Nemophila	1	1	0	0	0	0	0.00 %
Nicotiana	1	1	0	0	0	0	0.00 %
Nigella	1	1	0	0	0	0	0.00 %
Oat	1	0	0	1	0	1	100.00 %
Painted Daisy	1	1	0	0	0	0	0.00 %
Pansy, Common	2	2	0	0	0	0	0.00 %
Penstemon	1	1	0	0	0	0	0.00 %
Petunias	6	6	0	0	0	0	0.00 %
Phacelia	1	1	0	0	0	0	0.00 %
Phlox, Annual	4	3	1	0	0	1	25.00 %
Рорру	2	2	0	0	0	0	0.00 %
Poppy, Opium	1	0	1	0	0	1	100.00 %
Poppy, Oriental	2	2	0	0	0	0	0.00 %
Portulaca	9	9	0	0	0	0	0.00 %
Queen Anne's Lace	1	1	0	0	0	0	0.00 %
Rudbeckia	4	3	1	0	0	1	25.00 %
Salvia	7	7	0	0	0	0	0.00 %
Salvia	1	1	0	0	0	0	0.00 %
Scabiosa (annual) /Mourning-bride	1	1	0	0	0	0	0.00 %
Scarlet Runner Bean	1	1	0	0	0	0	0.00 %
Snapdragon	9	9	0	0	0	0	0.00 %
Spilanthes	1	1	0	0	0	0	0.00 %
St John's Wort	1	1	0	0	0	0	0.00 %
Statice	3	3	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	2	2	0	0	0	0	0.00 %
Sunflower	2	2	0	0	0	0	0.00 %
Sunflower	41	41	0	0	0	0	0.00 %
Sweet Pea, annual	6	6	0	0	0	0	0.00 %
Sweet Pea, perennial	1	1	0	0	0	0	0.00 %
Sweet William	1	1	0	0	0	0	0.00 %
Thunbergia	1	1	0	0	0	0	0.00 %
Tithonia	1	0	1	0	0	1	100.00 %
Tritoma	1	1	0	0	0	0	0.00 %
Umbrella Sedge	1	1	0	0	0	0	0.00 %
Verbascum	1	1	0	0	0	0	0.00 %
Verbena	1	0	1	0	0	1	100.00 %
Verbena, Rigid	1	1	0	0	0	0	0.00 %
Vinca	8	8	0	0	0	0	0.00 %

		Flower Seeds					
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Viola	3	3	0	0	0	0	0.00 %
Wallflower	1	1	0	0	0	0	0.00 %
Zinnia	51	50	1	0	0	1	1.96 %
Total	448	426	21	1	0	22	4.91 %

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

		Pasture Mix					
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL
Pasture Mix	19	14	5	0	0	5	26.32 %

		Lawn Mix						
Seed Kind Tested	Total	CL	SV	TV	MV	#VIOL	%VIOL	
Lawn Mix	105	84	15	4	2	21	20.00 %	

Table IV

			Vegetable Seeds			
Vegetable Seeds Whol	esale Distributors		CL	SV	TV	MV
BURPEE GARDEN PRODUCTS	WARMINSTER	PA	663	25	0	0
HENRY F MICHELL, CO.	KING OF PRUSSIA	PA	88	0	0	0
LAKE VALLEY SEED COMPANY, INC.	BOULDER	CO	1	0	0	0
P L ROHRER & BRO, INC.	SMOKETOWN	PA	104	0	0	0
PLANTATION PRODUCTS, LLC	NORTON	MA	11	0	0	0
SEEDS OF CHANGE	COMPTON	CA	1	0	0	0
SEEDWAY LLC	ELIZABETHTOWN	PA	91	0	0	0
SEEDWAY, LLC	HALL	NY	12	0	0	0
		Total	971	25	0	0

				Agricultu	ral Seeds	
Agricultural Seeds Whol	esale Distributors		CL	SV	TV	MV
ALLIANCE SEED INC	BROOKLYN	NY	3	0	0	0
ANDRE & SON, INC.	MONTROSE	PA	1	2	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	56	0	0	2
BURPEE GARDEN PRODUCTS	WARMINSTER	PA	30	0	1	0
CENTRAL TURF & IRRIGATION SUPPLY	ELMSFORD	NY	1	0	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	4	0	0	0
DLF PICKSEED	HALSEY	OR	2	0	0	0
ERNST CONSERVATION SEED	MEADVILLE	PA	3	3	0	1
F M BROWN'S SONS, INC.	SINKING SPRING	PA	9	0	0	0
FM BROWN'S SONS, INC.	SINKING SPRING	PA	3	0	0	0
GROWMARK FS LLC	YORK	PA	9	1	0	0
GROWMARK FS, LLC	MILFORD	DE	6	0	0	0
HADLEY SEED FARM	HADLEY	PA	1	1	0	0
HISTANDS SUPPLY	WYCOMBE	PA	0	2	0	0
JUDSONS INC	COLUMBIA CROSS ROADS	PA	1	0	0	0
KING'S AGRI SEEDS, INC.	LANCASTER	PA	1	0	0	0
LEBANON SEABOARD CORP	LEBANON	PA	1	0	0	0
LEBANON VALLEY AG PRODUCTS	MYERSTOWN	PA	0	1	0	0
LESCO, INC.	CLEVELAND	ОН	1	0	0	0
LIFETYME SEED, CO.	EAST PEORIA	IL	1	0	0	0
LOCAL SEED COMPANY, LLC.	MEMPHIS	TN	0	1	0	0
LOVELAND PRODUCTS, INC.	GREELEY	СО	1	0	0	0
MONSANTO COMPANY	ST LOUIS	MO	6	0	0	0
NORTHAMPTON COUNTY SEED, CO.	NAZARETH	PA	3	1	0	0
PENNINGTON SEED	LEBANON	OR	5	1	0	1
PLANTATION PRODUCTS, LLC	NORTON	MA	1	0	0	0
PREFERRED SEED COMPANY, INC.	BUFFALO	NY	3	0	0	0
RURAL KING	MATTOON	IL	1	0	0	0

			Agricultural Seeds			
Agricultural Seeds Who	olesale Distributors		CL	SV	TV	MV
SEEDWAY, LLC	HALL	NY	40	4	0	1
THE CISCO COMPANIES	INDIANAPOLIS	IN	2	0	0	0
TRUGREEN	MEMPHIS	TN	0	2	0	0
VALLEY CREEK SEED	SAINT THOMAS	PA	2	0	0	0
W I MILLER & SONS	FARMDALE	ОН	2	0	0	0
		Total	199	19	1	5

			Flower Seeds			
Flower Seeds Wholesale Distributors		CL	SV	TV	MV	
BURPEE GARDEN PRODUCTS	WARMINSTER	PA	268	21	1	0
HENRY F MICHELL, CO.	KING OF PRUSSIA	PA	82	0	0	0
P L ROHRER & BRO, INC.	SMOKETOWN	PA	24	0	0	0
PLANTATION PRODUCTS, LLC	NORTON	MA	1	0	0	0
SEEDWAY LLC	ELIZABETHTOWN	PA	51	0	0	0
		Total	426	21	1	0

			Feed			
Feed Wholesale Distributors			CL	SV	TV	MV
CENTERFIELD SERVICES LLC	STEWARTSTOWN	PA	1	0	0	0
GOLDENFEAST INC	PHOENIXVILLE	PA	2	0	0	0
TURGEON HOLLSOPPLE FEED MILL	HOLLSOPPLE	PA	2	0	0	0
		Total	5	0	0	0

			Pasture Mix			
Pasture Mix Wholesa	ale Distributors		CL	SV	TV	MV
ANTLER KING TROPHY PROD, INC.	BLACK RIVER FALLS	WI	1	1	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	1	0	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	0	1	0	0
GROWMARK FS LLC	YORK	PA	9	1	0	0
LA CROSSE SEED, LLC	LA CROSSE	WI	0	1	0	0
P L ROHRER & BRO, INC.	SMOKETOWN	PA	2	0	0	0
SEEDWAY, LLC	HALL	NY	1	1	0	0
		Total	14	5	0	0

			Vegetable Mix			
Vegetable Mix Wholes	ale Distributors		CL SV TV MV		MV	
BURPEE GARDEN PRODUCTS	WARMINSTER	PA	18	0	0	0
PLANTATION PRODUCTS, LLC	NORTON	MA	2	0	0	0

				Vegetable Mix		
Vegetable M	Iix Wholesale Distributors		CL	SV	TV	MV
SEEDS OF CHANGE	COMPTON	CA	1	0	0	0
		Total	21	0	0	0

			Conservation Mix			
Conservation Mix Wholesale Distributors			CL	SV	TV	MV
ANTLER KING TROPHY PROD, INC.	BLACK RIVER FALLS	WI	0	1	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	1	0	0	0
GROWMARK FS LLC	YORK	PA	1	1	0	1
		Total	2	2	0	1

Lawn Mix Wholesale Distributors			Lawn Mix			
			CL	SV	TV	MV
BARENBRUG USA	TANGENT	OR	3	3	0	0
BFG SUPPLY DBA WETSEL	CHESWICK	PA	3	1	0	0
CAPE HORN COUNTRY	YORK	PA	0	1	0	0
CENTRAL FARM AND GARDEN	WOOSTER	ОН	1	0	0	0
CENTRAL TURF & IRRIGATION SUPPLY	ELMSFORD	NY	2	0	0	0
CHEMGRO SEEDS	EAST PETERSBURG	PA	0	0	1	0
DLF PICKSEED	HALSEY	OR	1	1	0	0
FISHER & SON COMPANY, INC.	EXTON	PA	4	0	0	0
GENESIS TURFGRASS INC	GLEN ROCK	PA	3	0	0	0
GROWMARK FS LLC	YORK	PA	3	1	0	0
HAKES FARM & SEED SERVICE	RED LION	PA	1	0	0	0
HELENA AGRI-ENTERPRISES, LLC	EVANS CITY	PA	2	0	0	0
HOME DEPOT 4131	LANCASTER	PA	1	0	0	0
J.R. SIMPLOT, DBA JACKLIN SEED	LIBERTY LAKE	WA	2	3	1	0
JONATHAN GREEN, INC.	FARMINGDALE	NJ	3	0	0	0
KING'S AGRI SEEDS, INC.	LANCASTER	PA	8	1	0	0
LEBANON SEABOARD CORP	LEBANON	PA	6	0	0	2
LEBANON SEABOARD CORP	LEBANON	PA	1	0	0	0
LESCO, INC.	CLEVELAND	ОН	2	0	0	0
LESCO, INC.	CLEVELAND	ОН	9	1	1	0
MID-ATLANTIC SEEDS, INC.	YORK	PA	1	0	0	0
NORTHAMPTON COUNTY SEED, CO.	NAZARETH	PA	1	0	1	0
P L ROHRER & BRO, INC.	SMOKETOWN	PA	2	0	0	0
PENNINGTON SEED	LEBANON	OR	2	0	0	0
PENNINGTON SEED	EASTON	PA	0	1	0	0
PENNINGTON SEED, INC.	GREENFIELD	МО	5	0	0	0
SEEDWAY, LLC	HALL	NY	5	1	0	0

			Lawn Mix			
Lawn Mix Wholesale Distributors			CL	SV	TV	MV
SOUTHERN STATES-WESTFIELD	WESTFIELD	MA	2	0	0	0
THE SCOTTS COMPANY	MARYSVILLE	ОН	6	0	0	0
TRACTOR SUPPLY COMPANY	BRENTWOOD	TN	1	0	0	0
WEST YORK AGWAY	YORK	PA	0	1	0	0
WINFIELD SOLUTIONS LLC	YORK	PA	1	0	0	0
WINFIELD SOLUTIONS, LLC	SAINT PAUL	MN	3	0	0	0
		Total	84	15	4	2

SEED CERTIFICATION TABLE V SUMMARY OF FIELD INSPECTIONS FOR 2019

(JULY 1, 2019- JUNE 30, 2020)

CROP	VARIETY	FOUNDATION	REGISTERED	CERTIFIED	Q/A
Oats, Spring	Armor		32.00	229.70	
	Corral			10.50	
	Hayden		23.25	35.00	
Potatoes	Atlantic			1.30	
	LaChipper			2.38	
	Red Lasoda			274.82	
Triticale	Fredro			93.00	
	HyOctane				
	Short Beard Thunder	344.22		127.80	
	D 61 500				21.00
Wheat, Winter	JM1520				21.00
TOTAL ACRES		344.22	55.25	774.32	21.00
TOTAL ACRES		344.22	33.23	114.32	∠1.00

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 1st - June 30th)

