

Seed Germination and Purity Analysis 2021

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A total of 323 vegetable, crop, and pasture seed samples were collected by inspectors from the Bureau of Regulation and Inspection of the Connecticut Department of Agriculture for testing in 2021. As the official seed testing laboratory, The Connecticut Agricultural Experiment Station performed germination and purity analyses of the seed samples for compliance with the Connecticut Seed Law Regulations and the Federal Seed Act. Seed tests and analyses were conducted by following the Association of Official Seed Analysts (AOSA) Rules for Testing Seeds.

Among 317 vegetable seed samples, only 314 samples were tested for seed germination rates because the other three samples did not have enough seeds for the test (Table 1). Among the tested vegetable seed samples, two hundred forty-nine samples passed the germination test, but the other 65 samples did not meet their label claims and the Federal standard (Table 1). The spread of fungal mold from contaminated seeds had significant impacts on germination rates in some seed samples that failed seed germination testing. Summarized by seed sources, one or more vegetable seed samples from all companies, except Back to the Roots and La Semiorto Sementi, where the samples were collected failed germination rate tests (Table 2). Grouped by vegetable species, bean, beet, cantaloupe, cilantro, okra, pea, pumpkin, and squash consisted of more samples that did not meet the claims than the other species (Table 3). Seed samples were examined for prohibited noxious weed seeds and no vegetable samples contained noxious weed contaminants.

All five received crop samples passed purity and germination rate tests by meeting the label claims and passing the tests with acceptable tolerances (Table 4).

One pasture mixture sample was received and tested for purity and germination rates. The result showed that the sample passed purity and germination tests for all ingredients by meeting the label claims or passing the tests within acceptable tolerances, but the purity of Gallant Red in the mix failed to meet the claim (Table 5).

Official seed samples were collected by Kate Nelson at the Connecticut Department of Agriculture. The Seed Law is administered by the Seed Control Official for the Commissioner of the Department of Agriculture.

Table 1. Results of germination rates of vegetable seed samples in comparison to label claims.

Plant	Cultivar	Seed Company	Germination (%)	
			Claimed	Found ^z
Basil	Dark Opal	The Chas. C. Hart Seed Co.	70	67****
Basil	Lettuce Leaved	New England Seed Company	70	64****
Basil	Italian Large Leaf	New England Seed Company	70	70
Basil	Valentino	La Semiorto Sementi	70	70
Basil	Sweet	Plantation Products	70	84
Basil	Genovese	Plantation Products	70	59****
Basil	Italian Large Leaf	Seedway LLC	70	93
Basil	Cinnamon	Seedway LLC	70	93
Basil	Lettuce Leaf	Botanical Interests, Inc.	70	93
Basil	Sweet	Plantation Products LLC	70	78
Basil	Sweet	Burpee Garden Products Co.	70	79
Basil	Greek Miniature	Burpee Green Products Co.	70	90
Basil	Genovese	Seeds of Change	70	79
Bean	Stringless Green Pod	The Chas. C. Hart Seed Co.	75	0**
Bean	Tendergreen	The Chas. C. Hart Seed Co.	75	1**
Bean	Painted Lady	The Chas. C. Hart Seed Co.	75	0**
Bean	Henderson Lima	The Chas. C. Hart Seed Co.	70	0**
Bean	Navy	The Chas. C. Hart Seed Co.	70	8**
Bean	Cherokee Wax	New England Seed Company	75	0**
Bean	Jade	New England Seed Company	75	12**
Bean	Contender	Seedway LLC	75	0**
Bean	Golden Butterwax	Seedway LLC	75	0**
Bean	Long Tendergreen	Seedway LLC	75	0**
Bean	Fordhook 242	Seedway LLC	70	0**
Bean	Blue Lake 156	Plantation Products LLC	75	0**
Beet	Red Ace Hyb.	The Chas. C. Hart Seed Co.	65	61****
Beet	Chiogga	The Chas. C. Hart Seed Co.	65	10**
Beet	Cylindra	New England Seed Company	65	54**
Beet	Early Wonder G.T.	New England Seed Company	65	17**
Beet	Early Wonder Tall Top	New England Seed Company	65	87
Beet	Golden Detroit	New England Seed Company	65	23**
Beet	Early Wonder	Plantation Products	65	66
Beet	Detroit Dark Red	Plantation Products	65	57****
Beet	Early Wonder Wall Top	Seedway LLC	65	36**
Beet	Chioggia Guardsmark	Seedway LLC	65	3**
Beet	Chioggia Guardsmark	Seedway LLC - Agway	65	2**
Beet	Golden Boy	Botanical Interests, Inc.	65	48**
Beet	Tall Top Early Wonder	Plantation Products LLC	65	4**
Beet	Tall Top Early Wonder	Plantation Products LLC	65	11**
Beet	Mono Round Red	Burpee Garden Products Co.	65	1**
Beet	Detroit Dark Red	Plantation Products LLC	65	3**
Bok Choy	Rosette	Botanical Interests, Inc.	75	89
Bok Choy	Toy Choy	Botanical Interests, Inc.	75	N/A****

Bok Choy	White Stem	Back to the Roots	75	94
Bok Choy	N/A	Seeds of Change	75	95
Broccoli	Calabrese Grn. Sprouting	The Chas. C. Hart Seed Co.	75	91
Broccoli	Waltham 29	New England Seed Company	75	95
Broccoli	Raab Early Pugliesi	New England Seed Company	75	95
Broccoli	Riccio Di Sarno	La Semiorto Sementi	75	84
Broccoli	Green Sprouting Calabrese	Plantation Products	75	84
Broccoli	Waltham 29	Botanical Interests, Inc.	75	85
Broccoli	De Cicco	Plantation Products LLC	75	82
Broccoli	Sun King Hybrid	Burpee Garden Products Co.	75	95
Broccoli	Early Green	Seeds of Change	75	52**
Brussels Sprouts	Long Island Improved	The Chas. C. Hart Seed Co.	70	99
Brussels Sprouts	Long Island Improved	New England Seed Company	70	82
Brussels Sprouts	Long Island Improved	Plantation Products	70	76
Brussels Sprouts	Long Island Improved	Seedway LLC	70	87
Brussels Sprouts	Catskill	Plantation Products LLC	70	100
Cabbage	Danish Ball Head	The Chas. C. Hart Seed Co.	75	47**
Cabbage	Chinese Pak Choi	The Chas. C. Hart Seed Co.	75	98
Cabbage	Chieftain	New England Seed Company	75	89
Cabbage	Golden Acre	New England Seed Company	75	83
Cabbage	White Mist	New England Seed Company	75	95
Cabbage	Cavolo Verza Di Napoli Tardivo	La Semiorto Sementi	75	79
Cabbage	Premium Flat Dutch Late	Plantation Products	75	100
Cabbage	Red Acre	Seedway LLC	75	98
Cabbage	Stonehead Hybrid	Seedway LLC	75	100
Cabbage	Stonehead Hybrid	Seedway LLC - Agway	75	99
Cabbage	Copenhagen Market	Botanical Interests, Inc.	75	98
Cabbage	All Seasons	Burpee Green Products Co.	75	98
Cantaloupe	Delicious 57	New England Seed Company	75	4**
Cantaloupe	Hale's Best Jumbo	Plantation Products	75	8**
Cantaloupe	Iroquois	Plantation Products LLC	75	22**
Carrot	Little Finger	The Chas. C. Hart Seed Co.	55	81
Carrot	Imperator 58	New England Seed Company	55	83
Carrot	Red Core Chantenay	New England Seed Company	55	79
Carrot	Nantes	Plantation Products	55	54****
Carrot	Little Finger	Plantation Products	55	63
Carrot	Chantenay Red Core	Seedway LLC	55	85
Carrot	Yellowstone	Seedway LLC - Agway	55	77
Carrot	Cosmic Pruple	Botanical Interests, Inc.	55	79
Carrot	Scarlet Nantes	Plantation Products LLC	55	94
Cauliflower	Early Snowball	The Chas. C. Hart Seed Co.	75	59**
Cauliflower	Snowball Y	Botanical Interests, Inc.	75	83
Cauliflower	Snowball Y	Back to the Roots	75	88
Celery	Tall Utah	New England Seed Company	55	81
Celery	Utah	Botanical Interests, Inc.	55	80
Celery	Utah	Seeds of Change	55	77
Chicory	Radicchio Verona Red	New England Seed Company	65	87
Cilantro	N/A	The Chas. C. Hart Seed Co.	70	20**

Cilantro	Coriander	New England Seed Company	70	14**
Cilantro	Coriander	Plantation Products	70	9**
Collards	Vates	The Chas. C. Hart Seed Co.	80	87
Collards	Georgia	New England Seed Company	80	91
Collards	Georgia Southern	Botanical Interests, Inc.	80	96
Corn	Honey Select	The Chas. C. Hart Seed Co.	75	100
Corn	Golden Cross Bantam	The Chas. C. Hart Seed Co.	75	59**
Corn	Kandy Korn	The Chas. C. Hart Seed Co.	75	99
Corn	Early Sunglow	New England Seed Company	75	80
Corn	Red Strawberry	New England Seed Company	75	96
Corn	Butter and Sugar (Hybrid)	Seedway LLC	75	95
Corn	Bi-Licious Hybrid	Burpee Garden Products Co.	75	80
Cucumber	Wisconsin Pickling	The Chas. C. Hart Seed Co.	80	97
Cucumber	Improved Long Green	The Chas. C. Hart Seed Co.	80	35**
Cucumber	Marketmore 76	New England Seed Company	85	9**
Cucumber	Straight Eight	New England Seed Company	85	87
Cucumber	Marketmore 76	New England Seed Company	85	91
Cucumber	Calypso Hybrid	New England Seed Company	85	21**
Cucumber	Muncher Burpless	Plantation Products	80	92
Cucumber	Spacemaster Bush	Plantation Products	80	98
Cucumber	Wisconsin SMR-58	Seedway LLC - Agway	80	93
Cucumber	Straight Eight	Burpee Garden Products Co.	80	63**
Dill	Dill Bouquet	New England Seed Company	60	70
Dill	Dill Bouquet	New England Seed Company	60	90
Dill	Bouquet	Plantation Products	60	73
Dill	Mammoth	Plantation Products	60	85
Dill	Bouquet	Seedway LLC	60	89
Dill	Dukat	Seedway LLC - Agway	60	88
Dill	Long Island Mammoth	Plantation Products LLC	60	91
Dill	Mammoth	Back to the Roots	60	80
Dill	Eneldo	Seeds of Change	60	86
Eggplant	Long Purple	The Chas. C. Hart Seed Co.	60	76
Eggplant	Black Beauty	New England Seed Company	60	77
Eggplant	Casper	New England Seed Company	60	92
Eggplant	Lunga Di Napoli	La Semiorto Sementi	60	91
Eggplant	Black Beauty	Plantation Products	60	94
Endive	Escarole Broadleaf	The Chas. C. Hart Seed Co.	70	96
Endive	Batavian Full Heart	New England Seed Company	70	95
Endive	Salad King	New England Seed Company	70	73
Endive	Full Heart	Seedway LLC - Agway	70	76
Endive	Green Ruffic	Seedway LLC - Agway	70	95
Endive	Green Curled	Burpee Garden Products Co.	70	94
Fennel	Bronze Fennel	The Chas. C. Hart Seed Co.	50	85
Fennel	Florence	New England Seed Company	60	83
Kale	Red Russian	The Chas. C. Hart Seed Co.	75	92
Kale	Lacinato	New England Seed Company	75	94
Kale	Red Russian	New England Seed Company	75	92
Kale	Lacinato	New England Seed Company	75	91

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Kale	Blue Scotch Curled	Plantation Products	75	91
Kale	Dwarf Blue Curled Vates	Seedway LLC	75	98
Kale	Red Russian	Seedway LLC	75	95
Kale	Blue Scotch Curled	Seedway LLC - Agway	75	95
Kale	Dwarf Blue Curled Vates	Botanical Interests, Inc.	75	68****
Kale	Red Russian	Plantation Products LLC	75	97
Kale	Premier	Burpee Green Products Co.	75	91
Kale	Dinosaur	Seeds of Change	75	81
Kohlrabi	Rabi White Vienna	The Chas. C. Hart Seed Co.	75	97
Kohlrabi	Early White Vienna	Plantation Products	75	94
Kohlrabi	Purple Vienna	Seedway LLC	75	78
Kohlrabi	Kossak	Seedway LLC - Agway	75	100
Kohlrabi	White Vienna	Seedway LLC - Agway	75	91
Leek	American Broad Flag	New England Seed Company	60	95
Leek	King Richard	Botanical Interests, Inc.	60	97
Lettuce	Bibb	The Chas. C. Hart Seed Co.	80	92
Lettuce	Red Sails	New England Seed Company	80	99
Lettuce	Great Lakes	New England Seed Company	80	95
Lettuce	Buttercrunch	New England Seed Company	80	94
Lettuce	Black Seeded Simpson	New England Seed Company	80	84
Lettuce	Lattuga Quattro Stagioni	La Semiorto Sementi	80	85
Lettuce	Baby Romaine	Plantation Products	80	96
Lettuce	Black Seeded Simpson	Plantation Products	80	94
Lettuce	Buttercrunch	Plantation Products	80	95
Lettuce	Pomegranate Crunch	Seedway LLC	80	100
Lettuce	Ruby	Seedway LLC	80	97
Lettuce	Summer Bibb	Seedway LLC	80	81
Lettuce	Dear Tongue Red	Seedway LLC	80	90
Lettuce	Oakleaf	Seedway LLC - Agway	80	95
Lettuce	Sangria	Seedway LLC - Agway	80	98
Lettuce	Red Sails	Botanical Interests, Inc.	80	97
Lettuce	Iceberg	Plantation Products LLC	80	98
Lettuce	Parris Island Cos	Plantation Products LLC	80	96
Lettuce	Bibb Butterhead	Back to the Roots	80	97
Lettuce	Romaine 'Paris Isle Cos'	Back to the Roots	80	90
Lettuce	Green Romaine	Seeds of Change	80	90
Lettuce	Outredgeous	Seeds of Change	80	99
Mache	Big Seeded	Botanical Interests, Inc.	70	88
Marjoram	Origanum Majorana	Botanical Interests, Inc.	50	47****
Okra	Clemson Spineless	New England Seed Company	50	0**
Okra	Red Burgundy	New England Seed Company	50	0**
Okra	Clemson Spineless	Burpee Garden Products Co.	50	0**
Onion	Red Bunching	New England Seed Company	70	97
Onion	Evergreen Bunching	Plantation Products	70	10**
Onion	Yellow Sweet Spanish	Seedway LLC	70	93
Onion	Long White Bunching	Seedway LLC - Agway	70	88
Onion	Sweet Spanish	Seedway LLC - Agway	70	93
Onion	White Lisbon	Botanical Interests, Inc.	70	94

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Onion	Red Burgundy	Plantation Products LLC	70	80
Onion	Evergreen Bunching	Plantation Products LLC	70	80
Onion	Blushing Bunch	Burpee Garden Products Co.	70	91
Onion	Flavor King	Burpee Garden Products Co.	70	78
Onion	Yellow Sweet Spanish Utah	Back to the Roots	70	60****
Pak Choi	N/A	Seedway LLC - Agway	75	92
Pak Choi	Pechay	Burpee Garden Products Co.	75	87
Parsley	Moss Curled	New England Seed Company	60	36**
Parsley	Triple/Curled	Plantation Products	60	63
Parsley	Italian/Single	Plantation Products	60	44**
Parsley	Extra Triple Curled	Seedway LLC	60	89
Parsley	Extra Triple Curled	Plantation Products LLC	60	77
Parsley	Gigante D'Italia	Burpee Green Products Co.	60	83
Parsnip	Hollow Crown	The Chas. C. Hart Seed Co.	60	85
Parsnip	All American	New England Seed Company	60	87
Parsnip	Hollow Crown	Plantation Products	60	84
Parsnip	All American	Seedway LLC - Agway	60	87
Parsnip	All American	Botanical Interests, Inc.	60	87
Parsnip	All American	Plantation Products LLC	60	83
Pea	Laxton's Progress	The Chas. C. Hart Seed Co.	80	21**
Pea	Green Arrow	The Chas. C. Hart Seed Co.	80	40**
Pea	Oregon Sugar Pod II	The Chas. C. Hart Seed Co.	80	76****
Pea	Lincoln	New England Seed Company	80	49**
Pea	Little Marvel 18	New England Seed Company	80	79****
Pea	Cascadia Sugar Snap	Plantation Products LLC	80	35**
Pea	Sugar Snap	Burpee Garden Products Co.	80	84
Pea	Progress #9	Burpee Green Products Co.	80	55**
Pepper	Cubanelle	The Chas. C. Hart Seed Co.	55	90
Pepper	Long Red Cayenne	New England Seed Company	55	71
Pepper	Cubanelle Sweet Fryer	New England Seed Company	55	78
Pepper	Alma Paprika	New England Seed Company	55	73
Pepper	Ciliegia Piccante	La Semiorto Sementi	55	87
Pepper	Nocera Rosso	La Semiorto Sementi	55	49****
Pepper	California Wonder	Plantation Products	55	83
Pepper	Hungarian Yellow Wax	Plantation Products	55	80
Pepper	Jalapeno	Plantation Products	55	98
Pepper	Sweet Banana	Seedway LLC - Agway	55	86
Pepper	Jalapeno M	Plantation Products LLC	55	87
Pepper	California Wonder 300 TMR	Plantation Products LLC	55	56
Pepper	California Wonder 300 TMR	Plantation Products LLC	55	81
Pepper	Corno di Toro	Burpee Garden Products Co.	55	91
Pepper	Jalapeno Early	Burpee Garden Products Co.	55	91
Pumpkin	Small Sugar	The Chas. C. Hart Seed Co.	75	28**
Pumpkin	Jack Be Little	The Chas. C. Hart Seed Co.	75	54**
Pumpkin	Salem	New England Seed Company	75	17**
Pumpkin	Casperita	New England Seed Company	75	30**
Radish	White Tip Scarlet	The Chas. C. Hart Seed Co.	75	70****
Radish	Early Scarlet Globe	The Chas. C. Hart Seed Co.	75	85

Radish	White Icicle	New England Seed Company	75	98
Radish	Cherry Belle	New England Seed Company	75	98
Radish	Cherry Belle	New England Seed Company	75	83
Radish	Cherry Belle	Plantation Products	75	85
Radish	French Breakfast	Plantation Products	75	86
Radish	Watermelon	Plantation Products	75	96
Radish	Cherry Belle	Seedway LLC	75	98
Radish	German Giant	Seedway LLC	75	100
Radish	Champion	Seedway LLC - Agway	75	100
Radish	Chinese White Winter	Seedway LLC - Agway	75	91
Radish	White Icicle	Seedway LLC - Agway	75	97
Radish	Cherry Belle	Botanical Interests, Inc.	75	95
Radish	Sparkler	Plantation Products LLC	75	82
Radish	Cherry Belle	Plantation Products LLC	75	94
Radish	French Dressing	Burpee Garden Products Co.	75	47**
Radish	White Icicle	Burpee Garden Products Co.	75	96
Radish	German Giant	Burpee Green Products Co.	75	93
Radish	Black Spanish	Plantation Products LLC	75	63**
Radish	Cherry Belle	Seeds of Change	75	99
Rhubarb	Glaskins Perpetual	New England Seed Company	60	84
Rutabaga	American Purple Top	The Chas. C. Hart Seed Co.	75	79
Rutabaga	Improved Purple Top Yellow	New England Seed Company	75	81
Rutabaga	American Purple Top	Seedway LLC - Agway	75	82
Rutabaga	American Purple Top	Plantation Products LLC	75	94
Savory	Summer Savory Herb	New England Seed Company	55	69
Savory	Summer	Botanical Interests, Inc.	55	58
Spinach	New Zealand	The Chas. C. Hart Seed Co.	40	80
Spinach	New Zealand	New England Seed Company	60	N/A***
Spinach	Bloomsdale Savoy	New England Seed Company	60	86
Spinach	Bloomsdale	New England Seed Company	60	90
Spinach	Bloomsdale Long Standing	Plantation Products	60	89
Spinach	Winter Bloomsdale	Seedway LLC - Agway	60	97
Spinach	Anna	Botanical Interests, Inc.	60	98
Spinach	Bloomsdale Long Standing	Plantation Products LLC	60	94
Spinach	Space Hybrid	Burpee Garden Products Co.	60	84
Spinach	Big Ruffles Hybrid	Burpee Garden Products Co.	60	96
Spinach	Bloomsdale Long Standing	Burpee Green Products Co.	60	91
Spinach	Correnta Hybrid	Plantation Products LLC	60	98
Squash	Early Summer Crookneck	The Chas. C. Hart Seed Co.	75	81
Squash	Blue Hubbard	The Chas. C. Hart Seed Co.	75	0**
Squash	Table King	The Chas. C. Hart Seed Co.	75	22**
Squash	Early Yellow Straightneck	The Chas. C. Hart Seed Co.	75	26**
Squash	Early Prolific	New England Seed Company	75	54**
Squash	Geisha Hybrid	New England Seed Company	75	11**
Squash	Sunday	New England Seed Company	75	34**
Squash	Waltham Butternut	Seedway LLC	75	88
Squash	Black Beauty, Zucchini	Seedway LLC	75	72****
Swiss Chard	Rhubarb	The Chas. C. Hart Seed Co.	65	47**

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Swiss Chard	Giant Lucullus	New England Seed Company	65	72
Swiss Chard	Fordhook Giant	New England Seed Company	65	59****
Swiss Chard	Fordhook Giant	Plantation Products	65	70
Swiss Chard	Rhubarb	Plantation Products	65	38**
Swiss Chard	Fordhook Giant	Seedway LLC - Agway	65	4**
Swiss Chard	Ruby Red	Seedway LLC - Agway	65	55****
Thyme	Broad Leaf	New England Seed Company	50	90
Thyme	N/A	Plantation Products	50	60
Thyme	N/A	Seedway LLC - Agway	50	89
Tomatillo	Purple	Botanical Interests, Inc.	50	81
Tomatillo	Green	Burpee Green Products Co.	50	84
Tomatillo	Purple	Plantation Products LLC	50	83
Tomato	San Marzano Plum	The Chas. C. Hart Seed Co.	75	95
Tomato	Jet Star Hybrid	The Chas. C. Hart Seed Co.	75	96
Tomato	Brandy Wine	New England Seed Company	75	98
Tomato	Roma VF	New England Seed Company	75	95
Tomato	Bradley	New England Seed Company	75	97
Tomato	Crimson Cushion Beefsteak	Plantation Products	75	89
Tomato	Red Cherry Large	Plantation Products	75	N/A***
Tomato	Roma	Plantation Products	75	95
Tomato	Roma VF	Seedway LLC - Agway	75	94
Tomato	Red Cherry, Large Fruited	Plantation Products LLC	75	98
Tomato	Rutgers	Plantation Products LLC	75	100
Tomato	Roma VF	Burpee Garden Products Co.	75	96
Tomato	Roma	Burpee Green Products Co.	75	94
Tomato	Rio Grande	Plantation Products LLC	75	96
Turnip	Seven Top	The Chas. C. Hart Seed Co.	85	96
Turnip	Purple Top White Globe	New England Seed Company	80	99
Turnip	Purple Top White Globe	New England Seed Company	80	98
Turnip	Purple Top White Globe	Plantation Products	80	98
Turnip	Purple Top White Globe	Seedway LLC	80	99
Turnip	Purple Top White Globe	Plantation Products LLC	80	93
Watermelon	Moon and Stars	The Chas. C. Hart Seed Co.	70	4**
Watermelon	Sugar Baby	The Chas. C. Hart Seed Co.	70	72
Watermelon	Wo-04-61	New England Seed Company	70	70

*: Did not meet the label claim

** : Did not meet the label claim and there were not enough seed for retest

***: Did not have enough seed for the germination test

****: Did not meet the claim, but passed the test within the acceptable tolerance

Table 2. Results of percent vegetable seed samples that met label claims of germination rates by seed source.

Company	Number of Tested Samples	Meeting Label Claims (%)
Back to the Roots	6	100
Botanical Interests, Inc.	21	90
Burpee Green Products Co.	27	81
La Semiorto Sementi	7	100
New England Seed Co.	75	76
Plantation Products LLC	71	82
Seeds of Change	9	89
Seedway LLC	54	85
The Chas. C. Hart Seed Co.	48	58

Table 3. Results of average seed germination rates by tested vegetable crops and percentages of samples that met the claims.

Plant	Number of Tested Samples	Germination (%)		Samples Meeting the Label Claim (%)
		Label Claim	Average Found	
Basil	13	70	78	100
Bean	12	75	3	0
Beet	16	65	30	25
Bok Choy	3	75	75	100
Broccoli	9	75	85	89
Cabbage	12	75	90	92
Cantaloupe	3	75	11	0
Carrot	9	55	77	100
Cauliflower	3	75	77	67
Celery	3	55	79	100
Chicory	1	65	87	100
Cilantro	3	70	14	0
Collards	3	80	91	100
Corn	7	75	87	86
Cucumber	10	80	69	60
Dill	9	60	83	100
Eggplant	5	60	86	100
Endive	6	70	88	100
Fennel	2	60	84	100
Kale	12	75	90	100
Kohlrabi	5	75	92	100
Leek	2	60	96	100
Lettuce	22	80	94	100
Maiche	1	50	47	100
Okra	3	50	0	0
Onion	11	70	78	91
Pak Choi	2	75	89	100
Parsley	6	60	65	67
Parsnip	6	60	85	100
Pea	8	80	55	38
Pepper	15	55	80	100
Pumpkin	4	75	32	0
Radish	21	75	88	90
Rhubarb	1	60	84	100
Savory	2	55	64	100
Spinach	10	60	92	100

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Spinach, New Zealand	1	40	80	100
Squash	9	75	43	22
Swiss Chard	7	65	49	57
Thyme	3	50	80	100
Tomatillo	3	50	82	100
Tomato	13	75	95	100
Turnip	6	80	97	100
Watermelon	3	70	48	67

Table 4. Results of purity and germination rates of crop samples in comparison to the label claims

Seed Company	Seed Sample and Ingredient	Purity (%)		Germination (%)	
		Claim	Found	Claim	Found ^z
Nutrien Ag Solutions	Rye	99.9	99.96	92	93
Nutrien Ag Solutions	Fall Rye Seed VNS	99	99.99	80	84
Nutrien Ag Solutions	Wheat, erie	99.91	99.99	87	85*
Nutrien Ag Solutions	Orchard Grass variety Crown Royale	93.25	98.17	85	86
Nutrien Ag Solutions	PS 2000 Brand Timothy	99.55	99.86	90	92

^z. *: did not meet the claim but passed the test within the acceptable tolerance.

Table 5. Results of purity and germination rates of a pasture mixture sample in comparison to the label.

Sample Source	Seed and Seed Mixture Sample	Purity (%)		Germination (%)	
		Claim	Found ^z	Claim	Found ^z
Permanent Pasture Mixture					
Nutrient Ag Solutions	Payday Diploid Perennial Ryegrass	19.64	19.55**	90	94
	Greendale Forage Tall Fescue	19.37	19.29**	90	91
	Sunrise 11 Brand Timothy Echelon	12.92	16.17	90	87**
	34% CO VNS Alfalfa	6.58	6.86	80	94
	Gallant Red – P.I 34% CO Clover	6.56	3.68*	85	85
	Jumbo Ladino – OMRI – P/I 34% CO Clover	3.26	6.41	75	95
	Orchardgrass	14.93	13.60**	85	90

^z. *: did not meet the claim.

** : did not meet the claim but passed the test within the acceptable tolerance.

Equal employment opportunity means employment of people without consideration of age, ancestry, color, criminal record (in state employment and licensing), gender identity or expression, genetic information, intellectual disability, learning disability, marital status, mental disability (past or present), national origin, physical disability (including blindness), race, religious creed, retaliation for previously opposed discrimination or coercion, sex (pregnancy or sexual harassment), sexual orientation, veteran status, and workplace hazards to reproductive systems unless the provisions of sec. 46a-80(b) or 46a-81(b) of the Connecticut General Statutes are controlling or there are bona fide occupational qualifications excluding persons in one of the above protected classes. To file a complaint of discrimination, contact Jason White, Director, The Connecticut Agricultural Experiment Station, New Haven, CT 06511, (203) 974-8440 (voice), or Jason.White@ct.gov (e-mail). CAES is an affirmative action/equal opportunity provider and employer. Persons with disabilities who require alternate means of communication of program information should contact the Chief of Services, Michael Last at (203) 974-8442 (voice), (203) 974-8502 (FAX), or Michael.Last@ct.gov (e-mail).