

Seed Germination and Purity Analysis 2024

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A total of 347 vegetable, crop, and pasture seed samples were collected by inspectors from the Bureau of Regulatory Services of the Connecticut Department of Agriculture for testing in 2024. As an 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 Rules for Testing Seeds.

Among 341 vegetable seed samples, only 328 samples were tested for seed germination rates because the other 13 samples did not have enough seeds for the test (Table 1). Among the 328 tested samples, two hundred ninety-five samples passed the standard germination test, but the other 33 samples did not meet their label claims and the Federal standard (Table 1). Summarized by seed sources, all tested samples from the Back to the Roots and The Page Seed Company passed the standard germination test, but one or more tested samples from the other seven companies failed the test (Table 2). Among 58 tested vegetable species, all samples in 38 species passed the standard germination test; but one or more samples failed the test in the other 20 species (Table 3). Poor germination rates were found in artichoke, rhubarb, soybean, and New Zealand spinach samples (Table 3). Seed samples were examined for prohibited noxious weed seeds, but no noxious weed contaminants were found in the tested samples.

A total of six crop and pasture seed samples were received and tested for purity and germination rates. Because some mixed seed samples were labeled with several varieties within a species or several species within a genus, purity and germination rates were tested in the combination of a genus and reported as the sums for the purity test and means for the germination test. The test result showed that three samples, Touch-up Tri-rye, Crimson Clover, and Hazelet Rye Grain, passed both purity and germination tests, but one ingredient in each of the other three samples failed the label claim for germination rate or purity test (Table 4).

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 the label claims.

Plant	Cultivar	Seed Company	Germination (%)	
			Claimed	Found ^a
Anise	Anise	The Chas. C. Hart Seed Co.	50	42***
Anise	Anise (Non-GMO)	New England Seed Co.	50	51
Artichoke	Romanesco	La Semiorto Sementi	60	9*
Asparagus	Mary Washington	New England Seed Co.	70	94
Basil	Sweet	The Chas. C. Hart Seed Co.	70	92
Basil	Lemon	The Chas. C. Hart Seed Co.	70	72
Basil	Sweet	Livingston - Green Garden Products	70	67***
Basil	Compact	Livingston - Green Garden Products	70	76
Basil	Genovese	Livingston - Green Garden Products	70	85
Basil	Lemon	Livingston - Green Garden Products	70	83
Basil	Opal	Livingston - Green Garden Products	70	69***
Basil	Tulsi	Botanical Interests, INC.	70	92
Basil	Italian Genovese	Botanical Interests, INC.	70	78
Basil	Purple Petra	Botanical Interests, INC.	70	92
Basil	Sweet Italian	(Ferry Morse) Green Garden Products	70	69***
Basil	Sweet	Back to the Roots	70	69***
Basil	Sweet	Burpee Garden Products Co.	70	70
Basil	Italian Long Leaf	New England Seed Co.	70	94
Basil	Lettuce Leaves	New England Seed Co.	70	88
Basil	Lemon	The Page Seed Company	70	96
Basil	Fine Verde	La Semiorto Sementi	70	81
Bean	Bush Bean Tendergreen Improved	The Chas. C. Hart Seed Co.	75	93
Bean	Pencil Pod Wax Bush	The Chas. C. Hart Seed Co.	75	88
Bean	Bush Bean Provider	The Chas. C. Hart Seed Co.	75	91
Bean	Bush Bean Blue Lake	The Chas. C. Hart Seed Co.	75	83
Bean	Garden - Blue Lake	(Ferry Morse) Green Garden Products	75	78
Bean	Kentucky Wonder	(Ferry Morse) Green Garden Products	75	77
Bean	Petite Filet	New England Seed Co.	75	88
Bean	Cherokee Wax	New England Seed Co.	75	94
Bean	Pole Blue Lake	New England Seed Co.	75	80
Bean	Cherokee Wax	New England Seed Co.	75	95
Bean	Roma II	New England Seed Co.	75	93
Bean	Tendergreen Improved	New England Seed Co.	75	96
Bean	Bush Blue Lake 274 (Org)	New England Seed Co.	75	45*
Bean	Lima Fordhook (Non-GMO)	New England Seed Co.	75	55*
Beet	Detroit Dark Red	The Chas. C. Hart Seed Co.	65	92
Beet	Chioggia	Livingston - Green Garden Products	65	65
Beet	Early Wonder Tall Top	Livingston - Green Garden Products	65	78
Beet	Ruby Queen	Livingston - Green Garden Products	65	82
Beet	Cylindra	Livingston - Green Garden Products	65	27*

Beet	Detroit Dark Red	Livingston - Green Garden Products	65	81
Beet	Detroit Dark Red	Botanical Interests, INC.	65	82
Beet	Tall Top Early Wonder	(Ferry Morse) Green Garden Products	65	78
Beet	Detroit Dark Red (Org)	(Ferry Morse) Green Garden Products	65	77
Beet	Detroit Dark Red, Medium Top	Burpee Garden Products Co.	65	76
Beet	Early Wonder Tall Top (Org)	New England Seed Co.	65	78
Beet	Bulls Blood	The Page Seed Company	65	74
Broccoli	Calabrese Italian Green	The Chas. C. Hart Seed Co.	75	88
Broccoli	Green Sprouting Calabrese	Livingston - Green Garden Products	75	78
Broccoli	Waltham 29	Botanical Interests, INC.	75	73***
Broccoli	Chinese Kailaan	Botanical Interests, INC.	75	91
Broccoli	De Cicco	(Ferry Morse) Green Garden Products	75	92
Broccoli	Waltham	(Ferry Morse) Green Garden Products	75	45*
Broccoli	Waltham 29	Burpee Garden Products Co.	75	91
Broccoli	De Cicco (Org)	Burpee Garden Products Co.	75	82
Broccoli	Waltham 29	New England Seed Co.	75	91
Broccoli Raab	(Fall) Rapini	The Chas. C. Hart Seed Co.	75	87
Broccoli Raab	Rapini	Botanical Interests, INC.	75	89
Brussels Sprouts	Long Island Improved	The Chas. C. Hart Seed Co.	70	76
Brussels Sprouts	Long island Improved	Livingston - Green Garden Products	70	88
Brussels Sprouts	Long island Improved	Botanical Interests, INC.	70	90
Brussels Sprouts	Catskill	(Ferry Morse) Green Garden Products	70	44*
Brussels Sprouts	Long island Improved	New England Seed Co.	70	83
Brussels Sprouts	Long island Improved (Non-GMO)	New England Seed Co.	70	90
Bunching Onion	Evergreen Bunching	Livingston - Green Garden Products	70	81
Bunching Onion	Tokyo Long White	Botanical Interests, INC.	70	70
Bunching Onion	Flavor King	Burpee Garden Products Co.	70	88
Cabbage	Red Acre	The Chas. C. Hart Seed Co.	75	88
Cabbage	Savor Perfection	The Chas. C. Hart Seed Co.	75	85
Cabbage	Premium Flat Dutch Late	Livingston - Green Garden Products	75	95
Cabbage	Copenhagen Market	Botanical Interests, INC.	75	96
Cabbage	Red Acre	Botanical Interests, INC.	75	86
Cabbage	Ferry's Round Dutch	(Ferry Morse) Green Garden Products	75	98
Cabbage	Early Golden Acre (Org)	(Ferry Morse) Green Garden Products	75	97
Cabbage	All Seasons (Org)	Burpee Garden Products Co.	75	93
Cabbage	Late Flat Dutch (Non-GMO)	New England Seed Co.	75	98
Cabbage	Green Express	The Page Seed Company	75	88
Cabbage	Red Express	The Page Seed Company	75	94
Cantaloupe	Delicious 51	New England Seed Co.	75	90
Cantaloupe	Hale's Best Jumbo (Non-GMO)	New England Seed Co.	75	91
Cantaloupe	Minnesota Midget	The Page Seed Company	75	87
Carrot	Rainbow Blend (Org)	The Chas. C. Hart Seed Co.	55	85
Carrot	Danvers 1871	The Chas. C. Hart Seed Co.	55	76
Carrot	Danvers Half Long	Livingston - Green Garden Products	55	73

Carrot	Imperator 58	Livingston - Green Garden Products	55	93
Carrot	Little Finger	Livingston - Green Garden Products	55	65
Carrot	Mixed Colors	Livingston - Green Garden Products	55	75
Carrot	Nantes	Livingston - Green Garden Products	55	79
Carrot	Shin Kuroda	Botanical Interests, INC.	55	92
Carrot	Danvers 126	Botanical Interests, INC.	55	75
Carrot	Long Imperator #58	(Ferry Morse) Green Garden Products	55	91
Carrot	Danvers 126	Burpee Garden Products Co.	55	88
Carrot	Parisian	The Page Seed Company	55	78
Cauliflower	Early Snowball	The Chas. C. Hart Seed Co.	75	92
Cauliflower	Snowball Y	Botanical Interests, INC.	75	90
Cauliflower	Early Snowball	New England Seed Co.	75	88
Cauliflower	Self Blanche (Non-GMO)	New England Seed Co.	75	79
Celery	Tall Utah (Org)	The Chas. C. Hart Seed Co.	55	73
Celery	Tall Utah	Livingston - Green Garden Products	55	N/A**
Celery	Utah	Botanical Interests, INC.	55	76
Celery	Tall Utah	New England Seed Co.	55	79
Chervil	Chervil	The Chas. C. Hart Seed Co.	65	58***
Chervil	Chervil (Non-GMO)	New England Seed Co.	65	58***
Chicory	Verona Red Radicchio (Non-GMO)	New England Seed Co.	65	84
Chicory	Di Cicorie E Radicchio	La Semiorto Sementi	65	61***
Chives	Chives	The Page Seed Company	50	49***
Collards	Georgia Green	The Chas. C. Hart Seed Co.	80	86
Collards	Vates	The Chas. C. Hart Seed Co.	80	49*
Collards	Georgia Southern	Livingston - Green Garden Products	80	76***
Collards	Georgia Sweet Creole	(Ferry Morse) Green Garden Products	80	80
Collards	Hyb. Flash (Non-GMO)	New England Seed Co.	80	95
Coriander	Coriander	The Chas. C. Hart Seed Co.	70	75
Coriander	Long Standing Santo	Botanical Interests, INC.	70	61***
Coriander	Moroccan	Botanical Interests, INC.	70	80
Coriander	Slow Bolting	Back to the Roots	70	84
Coriander	Cilantro Santo (Non-GMO)	New England Seed Co.	70	67***
Coriander	Cilantro Santo (Non-GMO)	The Page Seed Company	70	81
Corn	Golden Bantam (Org)	New England Seed Co.	75	97
Corn	Kandy Korn	New England Seed Co.	75	89
Corn	Ambrosia Hyb.	New England Seed Co.	75	99
Corn	Honey and Cream Hyb.	New England Seed Co.	75	95
Corn	Early Sunglow Hyb.	New England Seed Co.	75	93
Corn	Popcorn Red Strawberry (Non-GMO)	New England Seed Co.	75	95
Mache	Big Seeded	Botanical Interests, INC.	70	92
Cress	Upland	Livingston - Green Garden Products	60	93
Cress	Pepper Grass	The Page Seed Company	75	94
Cucumber	SMR 58 Pickling	The Chas. C. Hart Seed Co.	80	92
Cucumber	Straight Eight	The Chas. C. Hart Seed Co.	80	96

Cucumber	Muncher Burpless	Livingston - Green Garden Products	80	74***
Cucumber	Spacemaster Bush	Livingston - Green Garden Products	80	73***
Cucumber	Straight Eight	Livingston - Green Garden Products	80	93
Cucumber	Spacemaster 80	Botanical Interests, INC.	80	93
Cucumber	Straight Eight	New England Seed Co.	80	95
Cucumber	Sunter (Org)	New England Seed Co.	80	90
Cucumber	Homemade Pickles (Non-GMO)	New England Seed Co.	80	90
Cucumber	Long Green IMP (Non-GMO)	New England Seed Co.	80	95
Cucumber	Pick a Bushel F1	The Page Seed Company	80	90
Cucumber	Armenian	Livingston - Green Garden Products	80	N/A**
Cucumber	Boston Pickling	Livingston - Green Garden Products	80	N/A**
Cucumber	Burpless Bush	Livingston - Green Garden Products	80	N/A**
Cucumber	Green Dragon Burpless	Livingston - Green Garden Products	80	N/A**
Cucumber	Homemade Pickles	Livingston - Green Garden Products	80	N/A**
Cucumber	Improved Long Green	Livingston - Green Garden Products	80	N/A**
Dill	Bouquet	The Chas. C. Hart Seed Co.	60	59*
Dill	Bouquet	Livingston - Green Garden Products	60	90
Dill	Mammoth	Livingston - Green Garden Products	60	83
Dill	Tetra	Botanical Interests, INC.	60	81
Dill	Elephant	(Ferry Morse) Green Garden Products	60	85
Dill	Compatto Dwarf	(Ferry Morse) Green Garden Products	60	81
Dill	Mammoth	Back to the Roots	60	75
Eggplant	Black Beauty	New England Seed Co.	60	68
Eggplant	Long Purple	New England Seed Co.	60	87
Eggplant	Ping Tung (Non-GMO)	New England Seed Co.	60	84
Eggplant	Romanesca	La Semiorto Sementi	60	78
Endive	Olesh Tres Fire	Botanical Interests, INC.	70	91
Fennel	Finocchio - Sweet Florance	The Chas. C. Hart Seed Co.	60	41*
Fennel	Florence	Livingston - Green Garden Products	60	39*
Fennel	Finocchio	Botanical Interests, INC.	60	67
Kale	Red Russian	The Chas. C. Hart Seed Co.	75	68***
Kale	Dwarf Blue Curled Scotch	The Chas. C. Hart Seed Co.	75	98
Kale	Blue Scotch Curled	Livingston - Green Garden Products	75	81
Kale	Siberian Improved	Livingston - Green Garden Products	75	80
Kale	Dinosaur	Botanical Interests, INC.	75	96
Kale	Red Russian	Botanical Interests, INC.	75	96
Kale	Dwarf Blue Curled	(Ferry Morse) Green Garden Products	75	7*
Kale	Red Russian (Org)	(Ferry Morse) Green Garden Products	75	18*
Kale	Dwarf Blue Curled (Org)	(Ferry Morse) Green Garden Products	75	22*
Kale	Lacinato (Org)	New England Seed Co.	75	19*
Kale	Lacinato (Org)	The Page Seed Company	75	77
Kohlrabi	Purple and White Vienna	The Chas. C. Hart Seed Co.	75	76
Kohlrabi	Early White Vienna	Livingston - Green Garden Products	75	81
Kohlrabi	Purple Vienna	Botanical Interests, INC.	75	70***

Kohlrabi	Purple Vienna (Org)	Burpee Garden Products Co.	75	84
Kohlrabi	Purple Vienna (Non-GMO)	New England Seed Co.	75	91
Leek	American Broad Flag	New England Seed Co.	60	98
Leeks	American Flag	The Chas. C. Hart Seed Co.	60	96
Leeks	American Flag	Livingston - Green Garden Products	60	87
Leeks	King Richard	Botanical Interests, INC.	60	93
Lettuce	Merveille Des Quatre	The Chas. C. Hart Seed Co.	80	82
Lettuce	Amish Deer Tongue	The Chas. C. Hart Seed Co.	80	94
Lettuce	Buttercrunch	The Chas. C. Hart Seed Co.	80	34*
Lettuce	Baby Romaine	Livingston - Green Garden Products	75	93
Lettuce	Black Seeded Simpson	Livingston - Green Garden Products	75	60*
Lettuce	Buttercrunch	Livingston - Green Garden Products	60	84
Lettuce	Grand Rapids	Livingston - Green Garden Products	80	1*
Lettuce	Iceberg	Livingston - Green Garden Products	80	97
Lettuce	Parris Island Romaine	Livingston - Green Garden Products	80	84
Lettuce	Prizehead	Livingston - Green Garden Products	80	80
Lettuce	Red Romaine	Livingston - Green Garden Products	80	99
Lettuce	Royal Red	Livingston - Green Garden Products	75	98
Lettuce	Simpson Elite	Livingston - Green Garden Products	75	77
Lettuce	Buttercrunch	Botanical Interests, INC.	80	93
Lettuce	Marvel of Four Seasons	Botanical Interests, INC.	80	91
Lettuce	New Red Fire	Botanical Interests, INC.	80	98
Lettuce	Black Seeded Simpson	Botanical Interests, INC.	75	96
Lettuce	Sandy	(Ferry Morse) Green Garden Products	80	22*
Lettuce	Lollo Bionda	(Ferry Morse) Green Garden Products	80	96
Lettuce	Bibb	(Ferry Morse) Green Garden Products	80	79***
Lettuce	Parris Island Cos (Romaine) (Org)	(Ferry Morse) Green Garden Products	80	93
Lettuce	Black Seeded Simpson	Burpee Garden Products Co.	80	98
Lettuce	Cavolo Dr Napoli	La Semiorto Sementi	80	93
Marjoram	Sweet Marjoram (Non-GMO)	New England Seed Co.	50	72
Mustard	Red Streaked Mizuna (Non-GMO)	New England Seed Co.	75	86
Mustard	Green Wave	The Page Seed Company	75	78
Okra	Long Green	The Chas. C. Hart Seed Co.	50	44***
Okra	Emerald	The Chas. C. Hart Seed Co.	50	53
Okra	Clemson Spineless	The Chas. C. Hart Seed Co.	50	84
Okra	Clemson Spineless	New England Seed Co.	50	50
Okra	Red Burgundy (Non-GMO)	New England Seed Co.	50	34*
Okra	Hyb. Jambalaya (Non-GMO)	New England Seed Co.	50	66
Onion	Purplette	The Chas. C. Hart Seed Co.	70	89
Onion	Wethersfield Large Red	The Chas. C. Hart Seed Co.	70	88
Onion	Walla Walla	Livingston - Green Garden Products	70	11*
Onion	White Lisbon	Botanical Interests, INC.	70	96
Onion	Italian Red of Florence	Botanical Interests, INC.	70	90
Onion	Texas Grano	(Ferry Morse) Green Garden Products	70	84

Onion	Red Burgundy	(Ferry Morse) Green Garden Products	70	81
Onion	Sweet Spanish	New England Seed Co.	70	96
Pak Choi	Chinese Cabbage - Pac Choi	The Chas. C. Hart Seed Co.	75	88
Pak Choi	Rosette (Bok Choi Chinese Cabbage)	Botanical Interests, INC.	75	94
Pak Choi	Pechay	Burpee Garden Products Co.	75	93
Parsley	Italian Large Leaf	The Chas. C. Hart Seed Co.	60	84
Parsley	Moss Curled	The Chas. C. Hart Seed Co.	60	75
Parsley	Flat Leaf	Botanical Interests, INC.	60	84
Parsley	Moss Curled	Botanical Interests, INC.	60	88
Parsley	Plain or Single	(Ferry Morse) Green Garden Products	60	38*
Parsley	Italian Dark Green	(Ferry Morse) Green Garden Products	60	61
Parsley	Flat Italian (Org)	(Ferry Morse) Green Garden Products	60	27*
Parsley	Dark Green Italian	The Page Seed Company	60	89
Parsnip	Hollow Crown	The Chas. C. Hart Seed Co.	60	84
Parsnip	Hollow Crown	Livingston - Green Garden Products	60	13*
Parsnip	All American	Botanical Interests, INC.	60	88
Parsnip	All American	(Ferry Morse) Green Garden Products	60	21*
Peas	Laxton's Progress #9	The Chas. C. Hart Seed Co.	80	83
Peas	Snap Pea Sugar Snap Pole	The Chas. C. Hart Seed Co.	80	93
Pea (Snap)	Sugar Daddy	Botanical Interests, INC.	80	68*
Peas	Green Arrow	New England Seed Co.	80	68*
Peas	Dwarf Grey Sugar	New England Seed Co.	80	97
Peas	Laxton's Progress #9	New England Seed Co.	80	87
Pepper	Cayenne	The Chas. C. Hart Seed Co.	55	58
Pepper	California Wonder	The Chas. C. Hart Seed Co.	55	81
Pepper	Calwonder	New England Seed Co.	55	77
Pepper	Cubanelle Sweet Fryer	New England Seed Co.	55	82
Pepper	Sweet Banana	New England Seed Co.	55	77
Pepper	California Wonder (Org)	New England Seed Co.	55	90
Pepper	Early Jalapeno (Org)	New England Seed Co.	55	97
Pepper	Pepperoncini Greek Golden (Non-GMO)	New England Seed Co.	55	79
Pepper	Portugal (Non-GMO)	New England Seed Co.	55	45***
Pepper	Friariello	La Semiorto Sementi	55	79
Pepper	Jalapeno Tam	The Page Seed Company	55	83
Pepper	Patio Fire and Ice	The Page Seed Company	55	89
Pepper (Hot)	Serrano Chili	(Ferry Morse) Green Garden Products	55	90
Pepper (Sweet)	Sweet Yello Habanero (Non-GMO)	New England Seed Co.	55	8*
Pumpkin	Small Sugar	The Chas. C. Hart Seed Co.	75	82
Pumpkin	Jack O'Lantern (Non-GMO)	New England Seed Co.	75	90
Pumpkin	Howden Original Strain (Non-GMO)	New England Seed Co.	75	92
Pumpkin	Small Sugar (Non-GMO)	New England Seed Co.	75	92
Radish	Red Arrow Daikon	The Chas. C. Hart Seed Co.	75	94
Radish	Cherry Belle	The Chas. C. Hart Seed Co.	75	86

Radish	Cherry Belle	Livingston - Green Garden Products	75	93
Radish	Crimson Giant	Livingston - Green Garden Products	75	92
Radish	Early Scarlet Globe	Livingston - Green Garden Products	75	90
Radish	French Breakfast	Livingston - Green Garden Products	75	95
Radish	Sparkler White Tip	Livingston - Green Garden Products	75	97
Radish	Watermelon	Livingston - Green Garden Products	75	63*
Radish	White Globe	Livingston - Green Garden Products	75	93
Radish	White Icicle	Livingston - Green Garden Products	75	95
Radish	Cherry Belle	Botanical Interests, INC.	75	97
Radish	Easter Egg Blend	Botanical Interests, INC.	75	91
Radish	Crimson Giant	Botanical Interests, INC.	75	89
Radish	Crimson Giant	(Ferry Morse) Green Garden Products	75	96
Radish	French Dressing	Burpee Garden Products Co.	75	58*
Radish	Confetti Blend	The Page Seed Company	75	91
Radish	Halloween Blend	The Page Seed Company	75	88
Rhubarb	Glaskins Perpetual (Non-GMO)	New England Seed Co.	60	11*
Rosemary (Herb)	N/A	Botanical Interests, INC.	30	N/A**
Rutabaga	American Purple Top Yellow	The Chas. C. Hart Seed Co.	75	98
Rutabaga	American Purple Top	Livingston - Green Garden Products	75	N/A**
Rutabaga	Purple Top Yellow Improved (Non-GMO)	New England Seed Co.	75	91
Soybean	Midori Giant (Non-GMO)	New England Seed Co.	75	0*
Spinach	Malabar Climbing Red Stem	The Chas. C. Hart Seed Co.	60	N/A**
Spinach	Bloomsdale Long Standing	The Chas. C. Hart Seed Co.	60	85
Spinach	Savoyed Leaf Bloomsdale	The Chas. C. Hart Seed Co.	60	92
Spinach	Bloomsdale Long Standing	Livingston - Green Garden Products	60	90
Spinach	Bloomsdale	Botanical Interests, INC.	60	99
Spinach	Matador	Botanical Interests, INC.	60	94
Spinach	Lavewa	Botanical Interests, INC.	60	93
Spinach	Bloomsdale Long Standing	(Ferry Morse) Green Garden Products	60	94
Spinach	Giant Noble	(Ferry Morse) Green Garden Products	60	93
Spinach	Giant Noble (Org)	(Ferry Morse) Green Garden Products	60	95
Spinach	Bloomsdale Long Standing (Org)	Burpee Garden Products Co.	60	91
Spinach (Mustard)	Tendergreen	Botanical Interests, INC.	75	99
Spinach	New Zealand	The Chas. C. Hart Seed Co.	60	48*
Spinach	New Zealand (Non-GMO)	New England Seed Co.	40	17*
Squash	Dark Green Zucchini	The Chas. C. Hart Seed Co.	75	97
Squash	Early Yellow Straightneck	The Chas. C. Hart Seed Co.	75	91
Squash	Waltham Butternut	The Chas. C. Hart Seed Co.	75	92
Squash	Early Summer Crookneck	The Chas. C. Hart Seed Co.	75	91
Squash	Table King	The Chas. C. Hart Seed Co.	75	94
Squash	Vegetable Spaghetti	The Chas. C. Hart Seed Co.	75	97
Squash	Table Queen Acorn	The Chas. C. Hart Seed Co.	75	84
Squash	Cocozelle	New England Seed Co.	75	82
Squash	Early Summer Crookneck	New England Seed Co.	75	90

Squash	Waltham Butternut	New England Seed Co.	75	89
Squash	Blue Hubbard (Non-GMO)	New England Seed Co.	75	N/A**
Squash	Fordhook Zucchini	The Page Seed Company	75	92
Squash (Winter)	Bush Delicata (Non-GMO)	New England Seed Co.	75	88
Summer Savory	Summer Savory	The Chas. C. Hart Seed Co.	55	44***
Swiss Chard	Lucullus	The Chas. C. Hart Seed Co.	65	84
Swiss Chard	Oriole	The Chas. C. Hart Seed Co.	65	80
Swiss Chard	Five Color Silverbeet	Botanical Interests, INC.	65	78
Swiss Chard	Fordhook Giant (Org)	Burpee Garden Products Co.	65	61***
Swiss Chard	Fordhook Giant (Org)	New England Seed Co.	65	76
Thyme	Thyme	The Chas. C. Hart Seed Co.	50	79
Thyme	Thyme	Livingston - Green Garden Products	50	25*
Thyme	English	Botanical Interests, INC.	50	85
Thyme	English	Back to the Roots	50	73
Tomatillo	Grande Rio Verde	Botanical Interests, INC.	50	81
Tomatillo	Purple	Botanical Interests, INC.	50	N/A**
Tomatillo	Grande Rio Verde	New England Seed Co.	50	92
Tomato	Culinary Blend	The Chas. C. Hart Seed Co.	75	N/A**
Tomato	Beefsteak	(Ferry Morse) Green Garden Products	75	93
Tomato	Rutgers	(Ferry Morse) Green Garden Products	75	72***
Tomato	Roma VF	(Ferry Morse) Green Garden Products	75	86
Tomato	Large Sweet Cherry	New England Seed Co.	75	99
Tomato	Brandy Wine	New England Seed Co.	75	98
Tomato	Giant Belgium Pink (Non-GMO)	New England Seed Co.	75	84
Tomato	Old German (Non-GMO)	New England Seed Co.	75	91
Tomato	Black Zebra (Non-GMO)	New England Seed Co.	75	94
Tomato	Marmande	La Semiorto Sementi	75	93
Tomato	Rio Grande	La Semiorto Sementi	75	73***
Turnip	Purple Top White Globe	The Chas. C. Hart Seed Co.	80	95
Turnip	Market Express	Botanical Interests, INC.	80	98
Turnip	Purple Top White Globe	Botanical Interests, INC.	80	96
Turnip	Purple Top White Globe	(Ferry Morse) Green Garden Products	80	98
Turnip	Purple Top White Globe (Org)	(Ferry Morse) Green Garden Products	80	95
Turnip	Purple Top White Globe (Org)	New England Seed Co.	80	92
Watercress	N/A	Botanical Interests, INC.	40	73
Watercress	True Watercress (Non-GMO)	New England Seed Co.	40	69
Watermelon	Charleston Grey	New England Seed Co.	70	89
Watermelon	Sugar Baby	New England Seed Co.	70	95

^a *: Did not meet the label claim and germination standards

** : 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.

Seed Company	Number of Tested Samples	Meeting Label Claims (%)
Back to the Roots	4	100
Botanical Interests, INC.	50	98
Burpee Garden Products Co.	13	92
(Ferry Morse) Green Garden Products	37	76
La Semiorto Sementi	8	88
Livingston - Green Garden Products	53	85
New England Seed Co.	81	88
The Chas. C. Hart Seed Co.	64	94
The Page Seed Company	18	100

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	
Anise	2	50	56	100
Artichoke	1	60	9	0
Asparagus	1	70	94	100
Basil	17	70	81	100
Bean	14	75	83	80
Beet	12	65	74	92
Broccoli	9	75	81	89
Broccoli Raab	2	75	88	100
Brussels Sprouts	6	70	78	83
Bunching Onion	3	70	80	100
Cabbage	11	75	93	100
Cantaloupe	3	75	89	100
Carrot	12	55	81	100
Cauliflower	4	75	87	100
Celery	3	55	76	100
Chervil	2	65	58	100
Chicory	2	65	73	100
Chives	1	50	49	100
Collards	5	80	77	80
Coriander	6	70	75	100
Corn	6	75	95	100
Cress	2	75	93	100
Cucumber	11	80	89	100
Dill	7	60	79	100
Eggplant	4	60	79	100
Endive	1	70	91	100
Fennel	3	60	49	33
Kale	11	75	60	64
Kohlrabi	5	75	80	100
Leeks	4	60	93	100
Lettuce	23	80	91	83
Mache (Corn Salad)	1	70	92	100
Marjoram	1	50	72	100
Mustard	2	75	82	100
Okra	6	50	55	83
Onion	8	70	79	88

Pak Choi	3	75	92	100
Parsley	8	60	64	70
Parsnip	4	60	55	50
Peas	6	80	83	67
Pepper	14	55	74	93
Pumpkin	4	75	89	100
Radish	17	75	89	88
Rhubarb	1	60	11	0
Rutabaga	2	75	95	100
Soybean	1	75	0	0
Spinach	10	60	92	100
Spinach (Mustard)	1	75	99	100
Spinach (New Zealand)	2	40-60	32	0
Squash	12	75	91	100
Summer Savory	1	55	44	100
Swiss Chard	5	65	76	100
Thyme	4	50	66	75
Tomatillo	2	50	87	100
Tomato	10	75	88	100
Turnip	6	80	96	100
Watercress	2	40	71	100
Watermelon	2	70	92	100

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

Seed Company	Seed Mixture	Purity		Germination (%)	
		Claim	Found ^z	Claim	Found ^z
	Touch-up Tri-Rye				
Jonathan Green Inc	Frontier Perennial Ryegrass	39.3		92	
	Highlife Perennial Ryegrass	29.45		92	
	Singular Perennial Ryegrass	29.45		92	
	Total Perennial Ryegrass	98.20	99.63	92	90**
	Contractors Mix 50#				
Wetsel Seed	Kentucky Bluegrass VNS	8.5	11.48	85	69*
	Creeping Red Fescue VNS	19.6	17.87**	85	91
	Annual Ryegrass VNS	68.6	69.99	90	89**
	Rye				
Mosher's	Rye	99.7	99.88	95	87*
	Peas and Oats Mix (Certified Organic)				
Preferred Seed	Organic Oats VNS	49.9	57.91	90	83**
	Organic Black Forage Peas	49.95	41.36*	90	96
	Crimson Clover				
Quality Seeds L & D	Crimson Clover	99.79	99.92	89	95
	Hazlet Rye Grain				
Millborn Seeds, Inc.	Hazlet Rye Grain	98.5	99.87	85	97

^z *: did not meet the label claim and purity or germination standards.

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

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