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Seed Germination
and Purity
Analysis 1998

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Official samples of 347 vegetable and 15 lawn seed were collected by inspectors from the Bureau of Regulation and Inspection of the Connecticut Department of Agriculture for testing in 1998. As the official seed testing laboratory, The Connecticut Agricultural Experiment Station performed germination and purity analyses for compliance with the Connecticut Seed Law Regulations and the Federal Seed Act.

Table 1 shows the results of germination tests for individual vegetable seed samples from 19 companies. Results are presented by plant type, variety, germination found, germination standard, and compliance with the standard. Germination standards are set by the Federal Seed Act. The categories for label compliance are: 1) seeds meet label claims for germination and 2) seeds do not meet label claims for germination within allowable tolerance. All tests were replicated twice. In addition, seedlings must also appear "normal", i.e., they have to be free from decay, have well-developed primary root systems, have well-developed and intact hypocotyls and/or epicotyls, and have healthy cotyledons. Of the 347 vegetable seeds tested, three did not meet their claims for germination. Two samples were not retested because of insufficient numbers of seeds. Seed samples were also examined for prohibited noxious weed seeds. No vegetable samples contained weed contaminants.

The total number of germination claims and the percentage of claims that met or failed label claims are summarized for each vegetable seed company in Table 2. Table 3 summarizes the total number of samples tested and the average germination for each type of vegetable.

Table 4 shows the results of purity and germination tests for individual lawn grass seed samples. These are presented by company, brand name and/or seed type or variety mixture. The categories for both purity and germination are as previously described for vegetable seeds. Lawn seed samples that were labelled with several varieties within a species or with several species within a genus were separated by genus. Purity and germination results are therefore reported as the sum for that genus. The label claim is met as long as this sum equals or exceeds the sum of the individual components for a genus listed on the label. Nine of the 15 lawn seed samples tested met label claims for both purity and germination. Five samples did not meet claims for purity and one sample failed label claims for germination. No samples failed label claims for both purity and germination.

In addition to germination and purity tests, label claims for the percentages of inert matter, crop seed (other than lawn seed), weed seed, and the presence of noxious weeds were also evaluated. All samples met label claims for these criteria.

Analyses were performed by Mary K. Inman and Dr. Sharon M. Douglas. Samples were collected by Alton Van Dyke, Seed Control Official. The Seed Law is administered by the Seed Control Official for the Commissioner of the Department of Agriculture.

Sharon M. Douglas

Table 1. Germination of vegetable seeds. Standards are provided by the rules and regulations of the Federal Seed Act.
 * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Artichoke	Green Globe Improved	Comstock, Ferre and Co.	60	47 *
Asparagus	Mary Washington	Comstock, Ferre and Co.	70	81
Bean	Derby	Agway Inc.	70	96
Bean	Golden Butterwax	Agway Inc.	70	100
Bean	Henderson Bush	Agway Inc.	70	89
Bean	Kentucky Wonder 191	Agway Inc.	70	98
Bean	Legion Bush	Excel Seeds	70	91
Bean	Brittle Wax	W. Atlee Burpee and Co.	70	97
Bean	Blue Lake White-Seeded	W. Atlee Burpee and Co.	70	86
Bean	Kentucky Wonder Pole	The Chas. C. Hart Seed Co	70	95
Bean	Tendergreen	The Chas. C. Hart Seed Co	70	100
Bean	Tendergreen	Comstock, Ferre and Co.	70	100
Bean	Derby	Comstock, Ferre and Co.	70	92
Bean	Roma II	Comstock, Ferre and Co.	70	85
Bean	Cherokee Wax	New England Seed Co.	70	99
Bean	French Horticultural	New England Seed Co.	70	99
Bean	Golden Sands	Better Homes & Gardens, Advance Seed Co.	70	97
Bean	White Runner	Better Homes & Gardens, Advance Seed Co.	70	99
Bean	Blue Lake Bush	Livingston Seed Co.	70	100
Bean	Tendergreen Improved	Lake Valley Seed Co.	70	100
Bean	Improved Commodore	NK Lawn and Garden Co.	70	95
Bean	Romano #14	Ferry-Morse Advance Seed Co.	70	87
Bean	Daytona	Ferry-Morse Advance Seed Co.	70	100
Bean	Yellow Bush	Shepherd's Garden Seeds	70	99
Bean	Bountiful Stringless Snap	Seeds of Change	70	100
Bean	Triomphe de Fancy	Burpee's Heirlooms	70	99
Bean,Lima	Burpee's Best Pole	W. Atlee Burpee and Co.	70	71
Bean,Lima	Jackson Wonder Bush	New England Seed Co.	70	96
Beet	Detroit Dark Red	Agway Inc.	65	94
Beet	Red Ace	Agway Inc.	65	97
Beet	Detroit Dark Red	Excel Seeds	65	98
Beet	Burpee's Redball	W. Atlee Burpee and Co.	65	99
Beet	Early Wonder	The Chas. C. Hart Seed Co	65	95
Beet	Early Wonder Green Top	Comstock, Ferre and Co.	65	87
Beet	Early Wonder Green Top	New England Seed Co.	65	96
Beet	Tall Top Early Wonder	Better Homes & Gardens, Advance Seed Co.	65	97
Beet	Detroit Dark Red	Livingston Seed Co.	65	82
Beet	Golden	NK Lawn and Garden Co.	60	93
Beet	Early Wonder	Greene Valley Seeds	65	93
Beet	Detroit Dark Red	American Seed Co.	65	91
Beet	Chioggia	Burpee's Heirlooms	65	98
Broccoli	3-Way Blend	Agway Inc.	75	60 *
Broccoli	Waltham 29	Excel Seeds	75	80
Broccoli	DeCicco	The Chas. C. Hart Seed Co	75	81
Broccoli	Raab,Primo	Comstock, Ferre and Co.	75	92
Broccoli	Waltham 29	New England Seed Co.	75	86
Broccoli	Green Sprouting	Greene Valley Seeds	75	88
Brussels sprouts	Catskill	Agway Inc.	70	68
Brussels sprouts	Long Island Improved	The Chas. C. Hart Seed Co	70	71
Brussels sprouts	Catskill	Better Homes & Gardens, Advance Seed Co.	70	89

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Cabbage	Gourmet	Agway Inc.	75	94
Cabbage	Red Acre	Agway Inc.	75	85
Cabbage	Early Jersey Wakefield	Excel Seeds	75	71
Cabbage	Golden Acre	W. Atlee Burpee and Co.	75	76
Cabbage	Danish Ball Head	The Chas. C. Hart Seed Co	75	84
Cabbage	Red Acre	Comstock, Ferre and Co.	75	72
Cabbage	Chieftan Savoy	New England Seed Co.	75	91
Cantaloupe	Classic	Agway Inc.	75	90
Cantaloupe	Jumbo Hale's Best	Excel Seeds	75	79
Cantaloupe	Burpee Hybrid	W. Atlee Burpee and Co.	75	98
Cantaloupe	Delicious 51	The Chas. C. Hart Seed Co	75	100
Cantaloupe	Iriquois	Comstock, Ferre and Co.	75	98
Cantaloupe	Delicious 51	New England Seed Co.	75	95
Cantaloupe	Hales Best Jumbo	Better Homes & Gardens, Advance Seed Co.	75	96
Cantaloupe	Honey Rock	Livingston Seed Co.	75	99
Cantaloupe	Iroquois	NK Lawn and Garden Co.	75	79
Cantaloupe	Sierra Gold	Ferry-Morse Advance Seed Co.	75	98
Carrot	Danvers 126	Agway Inc.	55	69
Carrot	Nandrin	Agway Inc.	55	88
Carrot	Danvers Half Long	Excel Seeds	55	65
Carrot	Nantes Half Long	W. Atlee Burpee and Co.	55	79
Carrot	Imperator	The Chas. C. Hart Seed Co	55	57
Carrot	Danvers Half Long	Comstock, Ferre and Co.	55	80
Carrot	Red Core Chantenay	New England Seed Co.	55	65
Carrot	Danvers 126	Better Homes & Gardens, Advance Seed Co.	55	70
Carrot	Nantes	Livingston Seed Co.	55	69
Carrot	Tendersweet	NK Lawn and Garden Co.	55	70
Carrot	Nantes Coreless	Greene Valley Seeds	55	67
Carrot	Danvers Half Long	American Seed Co.	55	76
Carrot	Healthmaster	Botanical Interests, Inc.	55	91
Carrot	Royal Chantenay Supreme	Seeds of Change	55	80
Cauliflower	Snow Crown	Agway Inc.	75	74
Cauliflower	Early Snowball	The Chas. C. Hart Seed Co	75	92
Cauliflower	Early Snowball	New England Seed Co.	75	76
Cauliflower	Early Snowball	Greene Valley Seeds	75	86
Cauliflower	Snowball X	American Seed Co.	75	84
Celery	Giant Pascal	The Chas. C. Hart Seed Co	55	82
Celery	Golden Self Blanching	Comstock, Ferre and Co.	55	76
Celery	Giant Pascal	New England Seed Co.	55	73
Celery	Cutting	Johnny's Select Seeds	55	80
Celery	Red Stalk	Seeds of Change	55	78
Chicory	Catalogna	Pagano/Lake Valley Seed	65	74
Chicory, Witloof	French Endive	Comstock, Ferre and Co.	65	81
Chinese cabbage	Jade Pagoda	Agway Inc.	75	94
Chinese cabbage	Michili	New England Seed Co.	75	93
Collards	Vates	Agway Inc.	80	94
Collards	Georgia	Excel Seeds	80	85
Collards	Georgia	New England Seed Co.	80	87

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Corn	Bodacious	Agway Inc.	75	96
Corn	Butter and Sugar	Agway Inc.	75	98
Corn	Silver Queen	Agway Inc.	75	89
Corn	Golden Beauty Hybrid	Excel Seeds	75	94
Corn	Early Sunglow	W. Atlee Burpee and Co.	75	99
Corn	Silver Choice	W. Atlee Burpee and Co.	75	96
Corn	Butter and Sugar	The Chas. C. Hart Seed Co	75	98
Corn	Golden Cross Bantam	The Chas. C. Hart Seed Co	75	94
Corn	Platinum Lady	The Chas. C. Hart Seed Co	75	98
Corn	Sugar n Gold	Comstock, Ferre and Co.	75	98
Corn	Sugar Buns	Comstock, Ferre and Co.	75	89
Corn	Platinum Lady	Comstock, Ferre and Co"	75	100
Corn	Kandy Korn EH	New England Seed Co.	75	97
Corn	Mini Ear	New England Seed Co.	75	96
Corn	Silver Queen	New England Seed Co.	75	96
Corn	Sugar Dots	Better Homes & Gardens, Advance Seed Co.	75	96
Corn	Golden Cross Bantam	Better Homes & Gardens, Advance Seed Co.	75	96
Corn	Silver Queen	Better Homes & Gardens, Advance Seed Co.	75	95
Corn	Peaches and Cream	Livingston Seed Co.	75	96
Corn	Early Sunglow	Lake Valley Seed Co.	75	100
Corn	Calypso Hybrid	NK Lawn and Garden Co.	75	88
Corn	Sweet Treat	Ferry-Morse Advance Seed Co.	75	97
Corn	Sugar Snow	Shepherd's Garden Seeds	75	96
Corn	Golden Bantam Yellow	Burpee's Heirlooms	75	94
Cornsalad	Gayla	Shepherd's Garden Seeds	70	80
Cornsalad	D'Etampes	Burpee's Heirlooms	70	85
Cowpea	California Blackeye	W. Atlee Burpee and Co.	75	86
Cowpea	Pinkeye Purple Hull	Better Homes & Gardens, Advance Seed Co.	75	79
Cucumber	Dasher II	Agway Inc.	80	99
Cucumber	Straight Eight	Agway Inc.	80	100
Cucumber	Marketmore 76	Excel Seeds	80	92
Cucumber	Straight Eight	W. Atlee Burpee and Co.	80	98
Cucumber	Long Green	Pagano/Lake Valley Seed	80	98
Cucumber	Marketmore 76	The Chas. C. Hart Seed Co	80	100
Cucumber	Straight Eight	The Chas. C. Hart Seed Co	80	100
Cucumber	Spacemaster 80	Comstock, Ferre and Co.	80	86
Cucumber	Marketmore	Comstock, Ferre and Co.	80	96
Cucumber	Fanfare	New England Seed Co.	80	96
Cucumber	Marketmore 76	New England Seed Co.	80	96
Cucumber	Poinsett 76	Better Homes & Gardens, Advance Seed Co.	80	93
Cucumber	Boston Pickling	Livingston Seed Co.	80	100
Cucumber	Straight Eight	Lake Valley Seed Co.	80	93
Cucumber	Straight Eight	NK Lawn and Garden Co.	80	99
Cucumber	Straight Eight	Burpee's Heirlooms	80	100
Dill	Dukat	Agway Inc.	60	67
Eggplant	High Bush Select	Agway Inc.	60	76
Eggplant	Burpee Hybrid	W. Atlee Burpee and Co.	60	89
Eggplant	Romanesca	Pagano/Lake Valley Seed	60	90
Eggplant	Dusky Hybrid	The Chas. C. Hart Seed Co	60	75
Eggplant	Black Beauty	Comstock, Ferre and Co.	60	76
Eggplant	Long Purple	New England Seed Co.	60	91
Eggplant	Black Beauty	Better Homes & Gardens, Advance Seed Co.	60	79

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Eggplant	Dusky Hybrid	NK Lawn and Garden Co.	60	93
Eggplant	Black Beauty	American Seed Co.	60	84
Endive	Salad King	Agway Inc.	70	75
Endive	Broadleaved Escarolle	The Chas. C. Hart Seed Co	70	75
Endive	Batavian Full Heart	New England Seed Co.	70	81
Kale	Blue Scotch	Agway Inc.	75	95
Kale	Vates Dwarf Blue Curled	Excel Seeds	75	90
Kale	Vates	The Chas. C. Hart Seed Co	75	93
Kale	Vates Dwarf Curled	New England Seed Co.	75	91
Kale	Vates Dwarf Blue Curled	NK Lawn and Garden Co.	75	89
Kohlrabi	Early Purple Vienna	Agway Inc.	75	100
Kohlrabi	Purple Vienna	Comstock, Ferre and Co.	75	82
Kohlrabi	Grand Duke Hybrid	New England Seed Co.	75	89
Leek	Carina	Agway Inc.	60	83
Leek	American Flag	The Chas. C. Hart Seed Co	60	94
Leek	American Broad Flag	New England Seed Co.	60	79
Lettuce	Black Seeded Simpson	Agway Inc.	80	96
Lettuce	Buttercrunch	Agway Inc.	80	95
Lettuce	Summertime	Agway Inc.	80	99
Lettuce	Buttercrunch	Excel Seeds	80	83
Lettuce	Bibb	Excel Seeds	80	82
Lettuce	Burpee's Iceberg	W. Atlee Burpee and Co.	80	98
Lettuce	Bionda	Pagano/Lake Valley Seed	80	94
Lettuce	Iceberg	The Chas. C. Hart Seed Co	80	98
Lettuce	Buttercrunch	The Chas. C. Hart Seed Co	80	96
Lettuce	Black Seeded Simpson	Comstock, Ferre and Co.	80	96
Lettuce	Salad Bowl Green	Comstock, Ferre and Co.	80	97
Lettuce	Big Boston	New England Seed Co.	80	97
Lettuce	Great Lakes	New England Seed Co.	80	95
Lettuce	Grand Rapids	Better Homes & Gardens, Advance Seed Co.	80	97
Lettuce	Salad Bowl	Livingston Seed Co.	80	98
Lettuce	Black Seeded Simpson	NK Lawn and Garden Co.	80	97
Lettuce	Romaine	Greene Valley Seeds	80	96
Lettuce	Iceberg	American Seed Co.	80	95
Lettuce	Great Lakes #118	Ferry-Morse Advance Seed Co.	80	99
Lettuce	Red Deer Tongue	Seeds of Change	80	95
Lettuce	Iceberg Crisphead	Burpee's Heirlooms	80	97
Mustard	Florida Broadleaf	Excel Seeds	75	99
Mustard	Florida Broadleaf	Comstock, Ferre and Co.	75	97
Mustard	Florida Broadleaf, India	NK Lawn and Garden Co.	75	96
New Zealand Spinach		Agway Inc.	40	39
New Zealand Spinach		The Chas. C. Hart Seed Co	40	53
New Zealand Spinach		NK Lawn and Garden Co.	40	33
Okra	Clemson Spineless	Agway Inc.	50	68
Okra	Clemson Spineless	Excel Seeds	50	79
Okra	Dwarf Long Stalk Green	The Chas. C. Hart Seed Co	50	65
Okra	Clemson Spineless	New England Seed Co.	50	87
Okra	Emerald	Better Homes & Gardens, Advance Seed Co.	50	56+10H

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Onion	Long White Bunching	Agway Inc.	70	76
Onion	Sweet Spanish	Agway Inc.	70	82
Onion	White Lisbon	Excel Seeds	70	91
Onion	Redman	W. Atlee Burpee and Co.	70	82
Onion	Wethersfield Red	The Chas. C. Hart Seed Co	70	83
Onion	Sweet Spanish, Utah	Comstock, Ferre and Co.	70	83
Onion	Bunching, He-shi-ko	Comstock, Ferre and Co.	70	86
Onion	Burgermaster Hybrid	New England Seed Co.	70	87
Onion	Evergreen Bunching	Better Homes & Gardens, Advance Seed Co."	70	84
Onion	Texas Grano 502	NK Lawn and Garden Co.	70	60
Onion	Green Scallions	Greene Valley Seeds	70	79
Onion	Italian Button	Shepherd's Garden Seeds	70	66
Parsley	Moss Curled	The Chas. C. Hart Seed Co	60	63
Parsley	Plain	Better Homes & Gardens, Advance Seed Co.	60	81
Parsley	Moss Curled	American Seed Co.	60	43*
Parsnip	All American	Agway Inc.	60	77
Parsnip	All American	New England Seed Co.	60	61
Pea	Dwarf White Sugar	Agway Inc.	80	97
Pea	Little Marvel	Agway Inc.	80	90+2H
Pea	Sugar Daddy	Agway Inc.	80	90
Pea	Wando	Excel Seeds	80	92
Pea	Sugar Bon	W. Atlee Burpee and Co.	80	95+1H
Pea	Lincoln	The Chas. C. Hart Seed Co	80	96
Pea	Wando	The Chas. C. Hart Seed Co	80	92
Pea	Sparkle	Comstock, Ferre and Co.	80	94
Pea	Mammoth Melting Sugar Snow	Comstock, Ferre and Co.	80	81
Pea	Sugar Snap	New England Seed Co.	80	84
Pea	Tall Telephone	New England Seed Co.	80	92+2H
Pea	Wando	Better Homes & Gardens, Advance Seed Co.	80	95
Pea	Little Marvel	Livingston Seed Co.	80	83
Pea	Oregon Sugar Pod II	Lake Valley Seed Co.	80	94
Pea	Early Perfection	NK Lawn and Garden Co.	80	89
Pea	Triple Treat	Greene Valley Seeds	80	97
Pea	Oregon Giant Snow	Shepherd's Garden Seeds	80	92
Pea	Oregon Sugar Pod II	Botanical Interests, Inc.	80	92
Pea	Thomas Laxton	Burpee's Heirlooms	80	96
Pepper	Staddon's Select	Agway Inc.	55	98
Pepper	Jalapeno M	Agway Inc.	55	83
Pepper	Jalapeno, Early	Excel Seeds	55	78
Pepper	California Wonder	W. Atlee Burpee and Co.	55	74
Pepper	Square Yellow of Asti	Pagano/Lake Valley Seed	55	79
Pepper	Cubanelle	The Chas. C. Hart Seed Co	55	66
Pepper	Jalapeno	The Chas. C. Hart Seed Co	55	69
Pepper	Golden California Wonder	Comstock, Ferre and Co.	55	56
Pepper	Habanero	Comstock, Ferre and Co.	55	64
Pepper	Cubanelle	New England Seed Co.	55	89
Pepper	Large Cayenne Hot	New England Seed Co.	55	80
Pepper	Belle Star Hybrid	Better Homes & Gardens, Advance Seed Co.	55	68
Pepper	Hungarian Yellow Wax	NK Lawn and Garden Co.	55	59
Pepper	Emerald Giant	Botanical Interests, Inc.	55	67
Pepper	Red Heart Pimiento	Seeds of Change	55	46
Pepper	Chinese Giant	Burpee's Heirlooms	55	66

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Popcorn	Robust	Agway Inc.	75	99
Pumpkin	Thomas Halloween	Agway Inc.	75	99
Pumpkin	Early Sugar	Excel Seeds	75	100
Pumpkin	Big Max	The Chas. C. Hart Seed Co	75	98
Pumpkin	Connecticut Field	The Chas. C. Hart Seed Co	75	87
Pumpkin	Jack Be Little	Comstock, Ferre and Co.	75	77
Pumpkin	Jack O'Lantern	Comstock, Ferre and Co.	75	91
Pumpkin	Connecticut Field	New England Seed Co.	75	98
Pumpkin	Jack O'Lantern	Livingston Seed Co.	75	97
Radish	Easter Egg	Agway Inc.	75	85
Radish	White Icicle	Agway Inc.	75	91
Radish	Early Scarlet Globe	Excel Seeds	75	92
Radish	Salad Rose	W. Atlee Burpee and Co.	75	96
Radish	Cherry Belle	The Chas. C. Hart Seed Co	75	98
Radish	French Breakfast	Comstock, Ferre and Co.	75	91
Radish	Cherry Belle	New England Seed Co.	75	97
Radish	Red Devil B	Better Homes & Gardens, Advance Seed Co.	75	97
Radish	Crimson Giant	Livingston Seed Co.	75	96
Radish	Cherry Belle	NK Lawn and Garden Co.	75	100
Radish	Sparkler	Greene Valley Seeds	75	97
Radish	Early Scarlet Globe	American Seed Co.	75	90
Rutabaga	Improved Purple Yellow Top	New England Seed Co.	75	90
Salsify	Sandwich Island Mammoth	Burpee's Heirlooms	75	69
Spinach	Melody	Agway Inc.	60	85
Spinach	Bloomsdale Long Standing	Excel Seeds	60	92
Spinach	Melody Hybrid	W. Atlee Burpee and Co.	60	89
Spinach	Winter Bloomsdale	The Chas. C. Hart Seed Co	60	95
Spinach	Bloomsdale Long Standing	Comstock, Ferre and Co.	60	92
Spinach	Melody Hybrid	New England Seed Co.	60	96
Spinach	Teton Hybrid	Better Homes & Gardens, Advance Seed Co.	60	84
Spinach	Bloomsdale Long Standing	Livingston Seed Co.	60	89
Spinach	Bloomsdale Long Standing	Greene Valley Seeds	60	92
Squash	Ambercup	Agway Inc.	75	97
Squash	Zucchini, Black Beauty	Agway Inc.	75	99
Squash	Early Prolific Straightneck	Agway Inc.	75	96
Squash	Bennings Green Tint	Excel Seeds	75	74
Squash	Improved Hubbard	Excel Seeds	75	84
Squash	Yellow Summer Crookneck	Excel Seeds	75	88
Squash	Zucchini, Burpee's Hybrid	W. Atlee Burpee and Co.	75	92
Squash	Vegetable Spaghetti	W. Atlee Burpee and Co.	75	100
Squash	Zucchini, San Pasquale	Pagano/Lake Valley Seed	75	99
Squash	Butternut, Waltham	The Chas. C. Hart Seed Co	75	99
Squash	Yellow Straight Neck	The Chas. C. Hart Seed Co	75	100
Squash	Zucchini, Dark Green	The Chas. C. Hart Seed Co	75	90
Squash	Crookneck Bush	Comstock, Ferre and Co.	75	86
Squash	Acorn, Table Ace	Comstock, Ferre and Co.	75	97
Squash	Blue Hubbard	Comstock, Ferre and Co.	75	99
Squash	Early Summer Crookneck	New England Seed Co.	75	96
Squash	Spaghetti	New England Seed Co.	75	96
Squash	Buttercup	New England Seed Co.	75	97
Squash	Yellow Summer Crookneck	Better Homes & Gardens, Advance Seed Co.	75	100
Squash	Buttercup	Livingston Seed Co.	75	95

Table 1. Germination of vegetable seeds (continued). Standards are provided by the rules and regulations of the Federal Seed Act. * = the seed does not meet label claims. H = hard seed.

Plant	Variety	Seed Company	Standard	Germ. Found
Squash	Zucchini, Dark	Livingston Seed Co.	75	90
Squash	Zucchini, Black Beauty	Lake Valley Seed Co.	75	86
Squash	Cucuzzi	NK Lawn and Garden Co.	75	74
Squash	Table King Bush	NK Lawn and Garden Co.	75	72
Squash	Zucchini, Black Beauty	Ferry-Morse Advance Seed Co.	75	69
Swiss chard	Fordhook Giant	Agway Inc.	65	96
Swiss chard	Ruby Red	Agway Inc.	65	95
Swiss chard	Fordhook	Excel Seeds	65	89
Swiss chard	Fordhook	The Chas. C. Hart Seed Co	65	84
Swiss chard	Giant Lucullus	New England Seed Co.	65	95
Swiss chard	Rhubarb	NK Lawn and Garden Co.	65	84
Swiss chard	Bright Lights	Johnny's Select Seeds	65	90
Tomatillo		Botanical Interests, Inc.	50	94
Tomato	Heinz 1370	Agway Inc.	75	88
Tomato	Burpee Big Boy	Agway Inc.	75	92
Tomato	Beefsteak	Excel Seeds	75	79
Tomato	Rutgers	Excel Seeds	75	86
Tomato	Roma VF	W. Atlee Burpee and Co.	75	87
Tomato	Gardener's Delight (cherry)	W. Atlee Burpee and Co.	75	83
Tomato	Genoa Ribbed	Pagano/Lake Valley Seed	75	82
Tomato	Jet Star	The Chas. C. Hart Seed Co	75	76
Tomato	Roma VF	The Chas. C. Hart Seed Co	75	85
Tomato	Ponderosa Beefsteak	The Chas. C. Hart Seed Co	75	86
Tomato	Big Beef	Comstock, Ferre and Co.	75	90
Tomato	Rutgers	Comstock, Ferre and Co.	75	89
Tomato	Large Red Cherry	Comstock, Ferre and Co.	75	82
Tomato	Better Boy VFN	New England Seed Co.	75	83
Tomato	Husky Gold Hybrid	New England Seed Co.	75	82
Tomato	Sweet 100	New England Seed Co.	75	87
Tomato	Rutgers	Better Homes & Gardens, Advance Seed Co.	75	86
Tomato	San Marzano	Greene Valley Seeds	75	75
Tomato	Burpee's Jubilee	Burpee's Heirlooms	75	72
Turnip	Purple Top White Globe	Excel Seeds	80	96
Turnip	Purple Top White Globe	The Chas. C. Hart Seed Co	80	99
Turnip	Yellow Globe	Comstock, Ferre and Co.	80	89
Turnip	Seven Top	New England Seed Co.	80	100
Watercress		The Chas. C. Hart Seed Co	40	61
Watercress		New England Seed Co.	40	90
Watercress		Botanical Interests, Inc.	40	91
Watermelon	Sugar Baby	Excel Seeds	70	98
Watermelon	Charleston Gray	The Chas. C. Hart Seed Co	70	92
Watermelon	Sweet Favorite	Comstock, Ferre and Co.	70	77
Watermelon	Sugar Baby	New England Seed Co.	70	97
Watermelon	Jubilee	Better Homes & Gardens, Advance Seed Co.	70	94
Watermelon	Charleston Gray	NK Lawn and Garden Co.	70	74

Table 2. Summary for each seed company of total number of germination claims and the percentage that met or failed label claims.

Seed Company	Total Claims	% Meeting Claims	% Not Meeting Claims
Agway, Inc.	52	98	2
American Seed Co.	7	86	14
Better Homes & Gardens, Advance Seed Co.	23	100	0
Botanical Interests, Inc.	5	100	0
Burpee's Heirlooms	10	100	0
Comstock, Ferre and Co.	40	97	3
Excel Seeds	28	100	0
Ferry-Morse Advance Seed Co.	6	100	0
Greene Valley Seeds	10	100	0
Johnny's Select Seeds	2	100	0
Lake Valley Seed Co.	5	100	0
Livingston Seed Co.	13	100	0
New England Seed Co.	45	100	0
NK Lawn and Garden Co.	19	100	0
Pagano/Lake Valley Seed	7	100	0
Seeds of Change	5	100	0
Shepherd's Garden Seeds	5	100	0
The Chas. C. Hart Seed Co.	43	100	0
W. Atlee Burpee and Co.	22	100	0

Table 3. Summary by vegetable type of number of samples tested, average percent germination found, and germination standards. Standards are provided for by the rules and regulations of the Federal Seed Act.

Plant	Samples Tested	Standard	Avg. Germination
Artichoke	1	60	47
Asparagus	1	70	81
Bean	24	70	96
Bean,Lima	2	70	84
Beet	13	65	94
Broccoli	6	75	81
Brussels sprouts	3	70	76
Cabbage	7	75	82
Cantaloupe	10	75	93
Carrot	14	55	73
Cauliflower	5	75	82
Celery	5	55	77
Chicory	2	65	78
Chinese cabbage	2	75	93
Collards	3	80	89
Corn	24	75	96
Cornsalad	2	70	82
Cowpea	2	75	82
Cucumber	16	80	97
Dill	1	60	67
Eggplant	9	60	84
Endive	3	70	78
Kale	5	75	92
Kohlrabi	3	75	91
Leek	3	60	85
Lettuce	21	80	95
Mustard	3	75	97
New Zealand Spinach	3	40	43
Okra	5	50	71
Onion	12	70	80
Parsley	3	60	53
Parsnip	2	60	69
Pea	19	80	86
Pepper	16	55	71
Popcorn	1	75	99
Pumpkin	8	75	93
Radish	12	75	95
Rutabaga	1	75	90
Salsify	1	75	69
Spinach	9	60	90
Squash	25	75	91
Swiss chard	7	65	90
Tomatillo	1	50	94
Tomato	19	75	84
Turnip	4	80	96
Watercress	3	40	81
Watermelon	6	70	89

Table 4. Germination and purity of lawn seed. Results for purity and germination are for seeds separated by genus and not by species or variety are reported for that genus. Tolerance is calculated according to the rules for seed testing published by the Association of Official Seed Analysts (AOSA). Variance is calculated as: Purity Found minus Purity Claimed. * = does not meet label claims

Seed Company/Seed Mixture	Purity		Variance	Tolerance	Germination	
	Claim	Found			Claim	Found
New England Seed	PUTNAM CO-OP CONSERVATION MIX					
Perennial Ryegrass	11.94				90	
Annual Ryegrass	19.33				90	
total ryegrass	31.27	33.01	1.74	3.78	avg 90	93
Creeping Red Fescue	29.62	29.65	0.03	2.99	85	93
Tall Fescue	33.95	33.59	-0.36	3.78	85	92
White Clover	2.97	3.07	0.20	1.60	80	87
New England Seed	SHADE LAWN SEED					
Boardwalk Perennial Ryegrass	29.66	30.13	0.47	3.72	90	96
Creeping Red Fescue	39.50				85	
Chewings Fescue	29.58				85	
total fescue	69.08	67.36	-1.72	3.78	avg 85	80
New England Seed	TREE LINE SHADE					
Kentucky Bluegrass	8.58	9.88	1.30	1.33	80	87
Patriot Perennial Ryegrass	49.83	50.18	0.35	3.83	90	92
Creeping Red Fescue	39.74	36.83	-2.91	3.33	90	82
Agway, Inc.	AGWAY FALL SEED					
Kentucky Bluegrass	12.75	23.67	10.92	2.27*	80	88
Pegasus Perennial Ryegrass	29.10				90	
Patriot II Perennial Ryegrass	29.10				90	
Dimension Perennial Ryegrass	24.25				90	
total ryegrass	82.45	70.51	-11.94	5.8*	avg 90	95
Blue Seal Feeds, Inc.	BLUE SEAL EARLY GREEN LAWN MIXTURE					
Kentucky Bluegrass	14.81	18.20	3.39	2.07	85	88
Perennial Ryegrass	48.69				90	
Annual Ryegrass	3.81				90	
total ryegrass	52.50	59.03	1.07	4.19	avg 90	93
Creeping Red Fescue	24.57	21.04	3.53	3.54	93	93
Blue Seal Feeds, Inc.	BLUE SEAL CLASSIC LAWN MIXTURE					
Kentucky Bluegrass	34.52	40.25	5.73	3.94*	85	85
Omega III Perennial Ryegrass	19.66				90	
Saturn Perennial Ryegrass	19.57				90	
total ryegrass	39.23	37.31	1.92	5.38	avg 90	95
Creeping Red Fescue	24.51	19.60	4.91	4.12*	90	91
Blue Seal Feeds, Inc.	BLUE SEAL SHADY LAWN MIXTURE					
Kentucky Bluegrass	9.87				85	
Ram Kentucky Bluegrass	4.96				85	
total Kentucky Bluegrass	14.83	13.16	-1.67	1.99	avg 85	96
Perennial Ryegrass	14.61	15.26	0.65	4.80	90	92
Creeping Red Fescue	39.05				85	
Chewings Fescue	9.94				85	
total fescue	48.99	41.09	-7.90	4.66*	avg 85	86
Rough Bluegrass	19.84	28.63	8.79	2.75*	85	

Table 4. Germination and purity of lawn seed (continued). Results for purity and germination are for seeds separated by genus and not by species or variety are reported for that genus. Tolerance is calculated according to the rules for seed testing published by the Association of Official Seed Analysts (AOSA). Variance is calculated as: Purity Found minus Purity Claimed. * = does not meet label claims

Seed Company/Seed Mixture	Purity		Variance	Tolerance	Germination	
	Claim	Found			Claim	Found
Lesco, Inc. LESCO EAGLE BLEND PLUS BLUE						
Shamrock Kentucky Bluegrass	24.68	29.84	5.16	3.12*	85	89
Wizard Perennial Ryegrass	24.75				90	
Pleasure Perennial Ryegrass	24.73				90	
Statesman Perennial Ryegrass	24.47				90	
total ryegrass	73.95	68.96	-4.99	3.32*	avg 90	98
Lesco, Inc. LESCO PREMIUM ATHLETIC SEED MIX						
Baron Kentucky Bluegrass	29.42				85	
Shamrock Kentucky Bluegrass	19.88				85	
Cannon Kentucky Bluegrass	19.78				85	
total bluegrass	69.08	71.72	2.64	5.98	avg 85	88
Wizard Perennial Ryegrass	19.69				90	
Quickstart Perennial Ryegrass	9.81				90	
total ryegrass	29.50	25.37	-4.13	5.97	avg 90	93
Lesco, Inc. LESCO SHADE SEED MIXTURE						
Shamrock Kentucky Bluegrass	5.04	6.02	0.98	1.00	83	85
Commander Perennial Ryegrass	14.72	14.63	-0.09	3.69	87	90
Victory Chewings Fescue	34.57				85	
Pennlawn Creeping Red Fescue	34.11				85	
Hard Fescue	9.89				85	
total fescue	78.57	76.78	-1.79	2.67	avg 85	88
Salem Country Gardens SALEM COUNTRY GARDENS PREMIUM MIX						
Kentucky Bluegrass	19.78	18.11	-1.67	2.29	85	83
Precision Perennial Ryegrass	19.77				90	
Manhattan III Perennial Ryegrass	19.43				90	
total ryegrass	39.20	42.74	3.54	4.66	avg 90	91
Creeping Red Fescue	24.42				90	
Mary Chewings Fescue	14.80				90	
total fescue	39.22	34.56	-4.66	3.81*	avg 90	90
Salem Country Gardens SALEM COUNTRY GARDENS LANDSCAPERS MIX						
Gnome Kentucky Bluegrass	9.89	10.66	0.77	1.50	90	79*
Precision Perennial Ryegrass	29.66				90	
Manhattan III Perennial Ryegrass	19.43				90	
total ryegrass	49.09	49.91	0.82	4.17	avg 90	91
Creeping Red Fescue	39.18	35.40	-3.78	3.81	90	88
Jonathan Green JONATHAN GREEN HEAVY TRAFFIC GRASS SEED MIX						
Gettysburg Perennial Ryegrass	24.65	26.51	1.86	2.78	94	95
Duke Tall Fescue	39.45				90	
Mohawk Tall Fescue	34.40				90	
total fescue	73.85	72.53	-1.32	2.89	avg 90	96

Table 4. Germination and purity of lawn seed (continued). Results for purity and germination are for seeds separated by genus and not by species or variety are reported for that genus. Tolerance is calculated according to the rules for seed testing published by the Association of Official Seed Analysts (AOSA). Variance is calculated as: Purity Found minus Purity Claimed. * = does not meet label claims

Seed Company/Seed Mixture	Purity		Variance	Tolerance	Germination	
	Claim	Found			Claim	Found
Lebanon Seaboard Corp. HOLDRIDGE CUSTOM MIXTURE-MULTI PURPOSE						
Kentucky Bluegrass	14.91	22.18	7.27	2.24	85	93
Rodeo II Perennial Ryegrass	9.54				90	
Allaire II Perennial Ryegrass	9.54				90	
Buccaneer Perennial Ryegrass	9.54				90	
total ryegrass	28.62	28.42	-0.20	4.28	avg 90	96
Creeping Red Fescue	39.04				85	
Hard Fescue	14.90				85	
total total fescue	53.94	46.99	-6.95	3.60	avg 85	91
Agriturf, Inc. CHAMPION TURFGRASS MIXTURE						
SR 4200 Perennial Ryegrass	39.48				90	
SR 4100 Perennial Ryegrass	29.38				90	
SR 4010 Perennial Ryegrass	29.25				90	
total ryegrass	98.11	98.76	0.65	0.89	avg 90	93



The Connecticut Agricultural Experiment Station, founded in 1875, is the first experiment station in America. It is chartered by the General Assembly to make scientific inquiries and experiments regarding plants and their pests, insects, soil and water, and to perform analyses for State agencies. The laboratories of the Station are in New Haven and Windsor; its Lockwood Farm is in Hamden. Single copies of bulletins are available free upon request to Publications; Box 1106; New Haven, Connecticut 06504.

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