The Connecticut Agricultural Experiment Station, New Haven

Seed Germination and Purity Analysis 1993

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Official samples of 354 vegetable and 10 lawn seed were collected by inspectors from the Bureau of Regulation and Inspection of the Connecticut Department of Agriculture for testing in 1993. 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 13 companies. Results are presented by plant type, variety, germination claim, germination found, and compliance with the standards for germination. These 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. If a seed lot failed, it was retested. In addition, seedlings from the seeds 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 354 vegetable seeds tested, six did not meet their claims for germination. Three of these samples were not retested due to unavailability of seed for retest. 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 in each category for compliance are summarized for each vegetable seed company in Table 2. Table 3 summarizes the average percent germination claimed, that found, and the standard 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. Of the 10 lawn seed samples tested, all samples met label claims for purity and two did not meet label claims for 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 Melanie J. Attwater and 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. * = does not meet label claims within allowable tolerance

Plant	Variety	Seed Company	Germination Claim	Germination Found
Artichoke	Green Globe	Hart	57	61
Asparagus	Mary Washington	Hart	78	74
Bean	Blue Lake 274 Bush	Lake Valley Seed	75	20*
Bean	Blue Lake Bush	Comstock Ferre	85	90
Bean	Blue Lake FM 1 Pole	Lake Valley Seed	75	28*
Bean	Bountiful	Hart	81	79
Bean	Bountiful Green Bush	Comstock Ferre	95	91
Bean	Brittle Wax	Hart	88	86
Bean	Burpee's Stringless Green Pod	Burpee	75	95
Bean	Cherokee Wax Bush	New England Seed	75	93
Bean	Colt Bush	Northrup King	75	73
Bean	Commodore Improved	Fredonia	75	69
Bean	Derby Bush	Ferry-Morse	75	76
Bean	Eastern Butterwax Bush	Michael Leonard	75	98
Bean	Golden Butterwax	Agway	75	91
Bean	Greencrop Bush	Burpee	75	86
Bean	Greencrop Bush	Northrup King	75	80
Bean	Kentucky Wonder 191 Pole	Agway	75	81
Bean	Kentucky Wonder Pole	Ferry-Morse	75	96
Bean	Kentucky Wonder Pole	Lake Valley Seed	75	76
Bean	Long Tendergreen	Agway	75	96
Bean	Pencil Pod Black Wax	Hart	89	99
Bean	Pencil Pod Black Wax	Lake Valley Seed	75	93
Bean	Prince Dwarf Bush	Thompson & Morgan	75	100
Bean	Radar Dwarf Bush	Thompson & Morgan	75	100
Bean	Red Kidney	Hart	85	93
Bean	Roma II Bush	Northrup King	75	88
Bean	Romano Italian Pole	Comstock Ferre	93	99
Bean	Romano Pole	New England Seed	75	95
Bean	Royal Burgundy	Agway	75	86
Bean	Tendergreen Bush	Michael Leonard	75	98
Bean	Tendergreen Bush	New England Seed	75	95
Bean	Tendergreen Improved Bush	Ferry-Morse	75	96
Bean	Tendergreen Bush	Lake Valley Seed	75	95
Bean	Yellow Eye	Comstock Ferre	80	92
Bean, Lima	Fordhook Bush	Comstock Ferre	85	79
Bean, Mung		Hart	85	76
Beet	Burpee's Red Ball	Burpee	65	84
Beet	Cylindra	Agway	65	88
Beet	Detroit Dark Red	Agway	65	91
Beet	Detroit Dark Red	American Seed	65	73
Beet	Detroit Dark Red	Comstock Ferre	90	94
Beet	Detroit Dark Red	Greene Valley	65	91
Beet	Detroit Dark Red	Michael Leonard	65	81
Beet	Detroit Dark Red	New England Seed	65	85

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Beet	Detroit Dark Red	Northrup King	65	65
Beet	Early Wonder	Agway	65	93
Beet	Early Wonder	Hart	90	92
Beet	Early Wonder	Lake Valley Seed	65	88
Beet	Lutz Green Leaf	Burpee	65	84
Beet	Red Ace	Hart	82	85
Beet	Red Ace	New England Seed	65	84
Beet	Ruby Queen	Michael Leonard	65	90
Beet	Tall Top Early Wonder	Ferry-Morse	65	82
Broccoli	Broccoli Blend	Agway	75	93
Broccoli	Calabrese	American Seed	75	87
Broccoli	Calabrese	Hart	90	88
Broccoli	DeCicco	Ferry-Morse	75	94
Broccoli	Green Goliath	Burpee	75	80
Broccoli	Green Sprouting	Greene Valley	75	95
Broccoli	Premium Crop	Comstock Ferre	85	76
Broccoli	Premium Crop Hybrid	New England Seed	75	89
Broccoli	Southern Comet	Agway	75	96
Broccoli	Super Blend	Burpee	75	85
Broccoli	Waltham	Hart	90	97
Broccoli	Waltham 29	Agway	75	90
Broccoli	Waltham 29	Michael Leonard	75	99
Broccoli	Waltham 29	New England Seed	75	87
Broccoli	Waltham 29	Northrup King	75	96
Brussels sprouts	Catskill	Agway	70	74
Brussels sprouts	Catskill	Ferry-Morse	75	89
Brussels sprouts	Long Island Improved	Comstock Ferre	85	86
Brussels sprouts	Long Island Improved	Hart	86	91
Cabbage	Chieftain Savoy	Comstock Ferre	92	87
Cabbage	Copenhagen	Hart	90	97
Cabbage	Copenhagen Market	Northrup King	75	97
Cabbage	Danish Ball Head	Hart	86	87
Cabbage	Earliana	Burpee	75	76
Cabbage	Early Jersey Wakefield	Michael Leonard	75	91
Cabbage	Ferry's Round Dutch	Ferry-Morse	75	95
Cabbage	Golden Acre	Greene Valley	75	80
Cabbage	Gourmet	Agway	75	89
Cabbage	Premium Late Flat Dutch	Michael Leonard	75	82
Cabbage	Red Acre	Agway	75	90
Cabbage	Red Acre	Hart	90	98
Cabbage	Rio Verde	Agway	75	91
Carrot	Chantenay	Michael Leonard	55	84
Carrot	Danvers 126	Agway	55	86
Carrot	Danvers 126	Ferry-Morse	55	80
Carrot	Danvers Half Long	Michael Leonard	55	78
Carrot	Danvers Half Long	New England Seed	55	62

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Carrot	Gold Pak	Comstock Ferre	92	94
Carrot	Little Finger	Burpee	55	90
Carrot	Little Finger	Comstock Ferre	89	95
Carrot	Little Finger	Hart	88	82
Carrot	Nantes Coreless	American Seed	55	76
Carrot	Nantes Coreless	Greene Valley	55	84
Carrot	Nantes coreless	New England Seed	55	69
Carrot	Nantes Long	Agway	55	89
Carrot	Red Core Chantenay	New England Seed	55	68
Carrot	Royal Chantenay	Agway	55	77
Carrot	Scarlet Nantes	Hart	79	82
Carrot	Scarlet Nantes	Lake Valley Seed	55	75
Carrot	Thumbelina	Burpee	55	61
Cauliflower	Early Snowball	Greene Valley	75	77
Cauliflower	Purple Giant	Comstock Ferre	87	75*
Cauliflower	Self-Blanche	Agway	75	91
Cauliflower	Self-Blanche	Hart	89	89
Cauliflower	Snow Crown	Agway	75	84
Cauliflower	Snow King	New England Seed	75	96
Cauliflower	Snowball 34	Agway	75	96
Cauliflower	Snowball Y Improved	Northrup King	75	81
Celery	Giant Pascal	Comstock Ferre	87	89
Celery	Golden Blanche	Hart	80	81
Celery	Tall Utah 52-70 R	Burpee	55	84
Chinese cabbage	Jade Pagoda	Agway	75	93
Collards	Georgia	Comstock Ferre	85	95
Collards	Morris Heading	Burpee	80	97
Collards	Vates	Agway	80	95
Collards	Vates	Hart	90	94
Corn	Bodacious	Comstock Ferre	90	95
Corn	Butter & Sugar	Hart	90	98
Corn	Butter & Sugar	New England Seed	75	93
Corn	Comstock's Pride and Joy	Comstock Ferre	90	95
Corn	Double Delight	Comstock Ferre	90	96
Corn	Early Sunglow	Lake Valley Seed	75	98
Corn	Golden Beauty	Greene Valley	75	98
Corn	Golden Cross Bantam	Hart	81	95
Corn	Golden Cross Bantam	Lake Valley Seed	75	97
Corn	Golden Cross Bantam T-51	Ferry-Morse	75	94
Corn	Iochief	Hart	90	99
Corn	Jubilee	Comstock Ferre	92	100
Corn	Pride and Joy	New England Seed	75	95
Corn	Silver Queen	Agway	75	98
Corn	Silver Queen	Hart	80	97
Corn	Silver Queen	Lake Valley Seed	75	99

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Corn	Sugar & Gold	Hart	75	94
Corn	Sugar Dots	Ferry-Morse	75	99
Cress	Curled	Hart	90	96
Cucumber	Boston Pickling	Comstock Ferre	90	94
Cucumber	Bush Crop	Agway	80	99
Cucumber	Marketer	Comstock Ferre	92	98
Cucumber	Marketmore	Hart	90	99
Cucumber	Marketmore 76	Agway	80	89
Cucumber	Poinsett 76	Ferry-Morse	80	98
Cucumber	Poinsett 76	Northrup King	80	98
Cucumber	Straight Eight	Agway	80	99
Cucumber	Straight Eight	Comstock Ferre	94	93
Cucumber	Straight Eight	Hart	90	99
Cucumber	Straight Eight	Lake Valley Seed	80	90
Cucumber	Straight Eight	Michael Leonard	80	95
Cucumber	Straight Eight	New England Seed	80	99
Eggplant	Black Beauty	American Seed	60	97
Eggplant	Dusky	New England Seed	60	93
Eggplant	Dusky Hybrid	Comstock Ferre	80	88
Eggplant	High Bush Select	Agway	60	95
Endive	Batavian Full Hearted	Greene Valley	70	94
Endive	Florida Deep Heart	Agway	70	87
Endive	Full Heart Batavian	Fredonia	70	92
Endive	Green Curled	Burpee	70	94
Endive	Green Curled	Hart	90	96
Endive	Salad King	Agway	70	93
Kale	Blue Scotch	Agway	75	88
Kale	Dwarf Siberian	Hart	90	88
Kale	Vates, Dwarf Blue Curled	Burpee	75	96
Kohlrabi	Early Purple	Hart	83	78
Kohlrabi	Early Purple Vienna	Agway	75	95
Kohlrabi	White Vienna	Agway	75	92
Kohlrabi	White Vienna	Comstock Ferre	90	97
Leek	American Flag	Fredonia	60	93
Leek	American Large Flag	Hart	87	87
Leek	Carina	Agway	60	91
Lettuce	Bibb	Hart	90	99
Lettuce	Bibb	Michael Leonard	80	98
Lettuce	Big Boston	New England Seed	80	95
Lettuce	Black Seeded Simpson	Agway	80	98
Lettuce	Black Seeded Simpson	Greene Valley	80	96
Lettuce	Black Seeded Simpson	Lake Valley Seed	80	98

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Lettuce	Burpee Bibb	Burpee	80	91
Lettuce	Burpee's Iceberg	Burpee	80	98
Lettuce	Buttercrunch	Agway	80	97
Lettuce	Buttercrunch	Comstock Ferre	82	90
Lettuce	Buttercrunch	Fredonia	80	93
Lettuce	Buttercrunch	Hart	85	98
Lettuce	Grand Rapids	Ferry-Morse	80	99
Lettuce	Grand Rapids	Ferry-Morse	80	99
Lettuce	Grand Rapids	Michael Leonard	80	97
Lettuce	Grand Rapids	Northrup King	80	81
Lettuce	Great Lakes	Comstock Ferre	85	99
Lettuce	Great Lakes	New England Seed	80	100
Lettuce	Ithaca	Agway	80	96
Lettuce	Prizehead	Agway	80	95
Lettuce	Red Sails	New England Seed	80	98
Lettuce	Romaine/Cos	Greene Valley	80	96
Lettuce	Romaine/Cos	Hart	90	87
Lettuce	Salad Bowl	Agway	80	93
Lettuce	Salad Bowl	Hart	90	96
Lettuce	Wheelers' Tom Thumb	Comstock Ferre	94	93
Muskmelon	Delicious 51	Comstock Ferre	95	93
Muskmelon	Hale's Best	Hart	89	100
Muskmelon	Hale's Best	Michael Leonard	75	92
Muskmelon	Iroquois	Hart	90	82
Mustard	Burpee's Fordhook Fancy	Burpee	75	96
Mustard	Southern Giant Curled	Michael Leonard	75	72
Mustard	Tendergreen	Comstock Ferre	85	99
New Zealand Spinach		Agway	40	84
New Zealand Spinach		Fredonia	40	84
New Zealand Spinach		Hart	63	77
Okra	Clemson Spineless	Fredonia	50	78
Okra	Clemson Spineless	Hart	78	75
Okra	Clemson Spineless	Michael Leonard	50	85
Onion	Utah Sweet Spanish	Comstock Ferre	85	82
Onion	Evergreen Long White Bunching	Burpee	70	96
Onion	Green Bunching	Michael Leonard	70	81
Onion	Green Scallions	Greene Valley	70	95
Onion	Lancastrian	Thompson & Morgan	70	98
Onion	Long White Bunching	Agway	70	77
Onion	Spartan Banner	Agway	70	89
Onion	Sweet Spanish	Agway	70	96
Onion	Utah Sweet Spanish	New England Seed	70	91
Onion	Wethersfield Red	Comstock Ferre	85	90
Onion	White Portugal	Hart	88	72*
Onion	Yellow Globe	Hart	77	85

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Onion	Yellow Sweet Spanish	Fredonia	70	91
Onion	Yellow Sweet Spanish	Greene Valley	70	88
Onion	Yellow Sweet Spanish	Hart	90	91
Parsley	Hamburg Rooted	Agway	60	87
Parsley	Moss Curled	Agway	60	80
Parsley	Moss Curled	Hart	77	85
Parsnip	All American	New England Seed	60	79
Pea	Alaska	Hart	90	100
Pea	Alaska	Michael Leonard	80	98
Pea	Dwarf Gray Sugar	Comstock Ferre	90	98
Pea	Dwarf White Sugar	Agway	80	96
Pea	Early Snap	Agway	80	87
Pea	Freezonia	Hart	82	94
Pea	Lincoln	Hart	82	96
Pea	Little Marvel	Ferry-Morse	80	95
Pea	Little Marvel	Lake Valley Seed	80	94
Pea	Little Marvel	Northrup King	80	98
Pea	Oregon Sugar Pod II	Lake Valley Seed	80	93
Pea	Progress No. 9	Agway	80	95
Pea	Sparkle	New England Seed	80	94
Pea	Sugar Ann	Ferry-Morse	80	92
Pea	Sugar Bon Snap	Hart	89	94
Pea	Sugar Snap	Agway	80	88
Pea	Sugar Snap	Comstock Ferre	90	92
Pea	Sugar Snap	Lake Valley Seed	80	93
Pea	Sugar Snap	New England Seed	80	89
Pea	Tall Telephone	New England Seed	80	96
Pea	Wando	Agway	80	97
Pea	Wando	Burpee	80	96
Pea	Wando	Hart	81	93
Pepper	Anaheim Chili	Hart	90	87
Pepper	California Wonder	American Seed	55	91
Pepper	California Wonder	Burpee	55	82
Pepper	California Wonder	Hart	90	88
Pepper	California Wonder	Michael Leonard	55	75
Pepper	California Wonder	Thompson & Morgan	55	84
Pepper	Cubanelle	Comstock Ferre	93	86
Pepper	Cubanelle	Hart	83	78
Pepper	Early Calwonder	Agway	55	76
Pepper	Early Calwonder	Comstock Ferre	84	87
Pepper	Early Calwonder	Greene Valley	55	88
Pepper	Early Calwonder	New England Seed	55	85
Pepper	Jalopeno	Burpee	55	69
Pepper	Large Red Cherry Hot	New England Seed	55	84
Pepper	Sweet Banana	Agway	55	75
Pepper	Sweet Banana	Hart	90	81

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Pepper	Sweet Banana	Northrup King	55	79
Pumpkin	Big Max	Hart	89	74*
Pumpkin	Big Max	Michael Leonard	75	63*
Pumpkin	Connecticut Field	Comstock Ferre	96	98
Pumpkin	Connecticut Field	Hart	90	97
Pumpkin	Howden	Comstock Ferre	90	99
Radish	Champion	Agway	75	97
Radish	Champion	Comstock Ferre	85	99
Radish	Champion	Hart	89	97
Radish	Cherry Belle	New England Seed	75	95
Radish	Chinese White Winter	Agway	75	98
Radish	Early Scarlet Globe	Agway	75	98
Radish	Early Scarlet Globe	American Seed	75	92
Radish	Early Scarlet Globe	Comstock Ferre	96	97
Radish	French Breakfast	Burpee	75	93
Radish	Icicle	Michael Leonard	75	97
Radish	Plum Purple	Fredonia	75	93
Radish	Red Devil	Ferry-Morse	75	98
Radish	Scarlet Turnip White Tipped	Michael Leonard	75	94
Radish	Sparkler	Greene Valley	75	97
Radish	Sparkler	Northrup King	75	97
Radish	White Icicle	Agway	75	94
Radish	White Icicle	Greene Valley	75	97
Radish	White Tipped	Hart	90	96
Rutabaga	American Purple Top	Agway	75	82
Rutabaga	Improved Purple Top	Comstock Ferre	96	97
Spinach	America	New England Seed	60	92
Spinach	Bloomsdale	Burpee	60	99
Spinach	Bloomsdale	Ferry-Morse	60	95
Spinach	Bloomsdale	Hart	90	99
Spinach	Bloomsdale Longstanding	Greene Valley	60	91
Spinach	Bloomsdale Longstanding	Michael Leonard	60	85
Spinach	Melody	Agway	60	90
Spinach	Melody Hybrid	Comstock Ferre	84	88
Spinach	Winter Bloomsdale	Agway	60	95
Squash	Blue Hubbard	Comstock Ferre	97	98
Squash	Buttercup	Comstock Ferre	96	95
Squash	Cucozzi Caravazzi	Hart	62	78
Squash	Early Crookneck	Hart	86	85
Squash	Early Prolific Straight Neck	Ferry-Morse	75	96
Squash	Greyzini	Comstock Ferre	85	86
Squash	Straightneck, Early Prolific	New England Seed	75	99
Squash	Sun Drops	Comstock Ferre	90	90
Squash	Table Queen	Hart	90	96
Squash	Waltham Butternut	Comstock Ferre	90	95

Table 1. Germination of vegetable seeds (continued).

Plant	Variety	Seed Company	Germination Claim	Germination Found
Swiss chard	Burpee's Fordhook Giant	Burpee	65	78
Swiss chard	Fordhook G T	New England Seed	65	84
Swiss chard	Fordhook Giant	Agway	65	90
Swiss chard	Fordhook Giant	Comstock Ferre	90	89
Swiss chard	Lucullus	Hart	90	89
Swiss chard	Rhubarb	Hart	90	95
Swiss chard	Ruby Red	Agway	65	91
Tomato	Alicante	Thompson & Morgan	75	100
Tomato	Beefsteak	American Seed	75	82
Tomato	Beefsteak	Michael Leonard	75	84
Tomato	Burpee's Big Boy	Burpee	75	88
Tomato	Cherry	Michael Leonard	75	96
Tomato	Genoa	Northrup King	75	96
Tomato	Jumbo Jim	Agway	75	91
Tomato	Large Red Cherry	Comstock Ferre	88	100
Tomato	Marglobe	Hart	85	92
Tomato	Marglobe	Michael Leonard	75	94
Tomato	Marglobe	New England Seed	75	97
Tomato	Pixie Hybrid II	Burpee	75	94
Tomato	Red Cherry	Agway	75	95
Tomato	Roma VF	Agway	75	90
Tomato	Rutgers	Greene Valley	75	86
Tomato	Rutgers	Michael Leonard	75	90
Tomato	San Marzano	Greene Valley	75	82
Tomato	Supersonic	Comstock Ferre	86	96
Tomato	Sweet 101 Hybrid	Thompson & Morgan	75	99
Tomato	Sweet Chelsea	Comstock Ferre	90	96
Tomato	Tigerella	Thompson & Morgan	75	93
Turnip	Purple Top White Globe	Agway	80	93
Turnip	Purple Top White Globe	Greene Valley	80	94
Turnip	Purple Top White Globe	Michael Leonard	80	99
Turnip	Purple Top White Globe	New England Seed	80	97
Turnip	Seven Top	Hart	90	100
Turnip	Seven Top	Michael Leonard	80	100
Turnip	Tokyo Market Early	Ferry-Morse	80	100
Turnip	White Egg	Hart	90	96
Turnip	Yellow Globe	Comstock Ferre	85	95
Watermelon	Crimson Sweet	Hart	90	89
Watermelon	Kleckley's Sweet	Comstock Ferre	97	94
Watermelon	Sugar Baby	Comstock Ferre	96	96
Watermelon	Sugar Baby	Hart	90	94

Table 2. Summary for each seed company of total number of germination claims and the percentage of claims in each compliance category.

		% Samples in Each Compliance Category*	
Seed Company	Claims	1	2
Agway	64	100	0
American Seed	7	100	0
Burpee	25	100	0
Comstock Ferre	51	98	2
Ferry-Morse	19	100	0
Fredonia	8	100	0
Greene Valley	18	100	0
Hart	68	97	3
Lake Valley Seed	15	87	13
Michael Leonard	28	96	4
New England Seed	31	100	0
Northrup King	13	100	0
Thompson & Morgan	7	100	0

* Compliance Categories: 1= meets label claims 2= does not meet label claims within allowable tolerance.

Table 3. Summary by vegetable type of average percent germination claimed, that found, and set standard.

Vegetable	No. of Samples	Average % Germination Claimed	Found	Standard *
Artichoke	1	57	61	60
Asparagus	1	78	74	70
Bean	33	78	86	75
Bean, Lima	1	85	79	75
Bean, Mung	1	85	76	75
Beet	17	69	85	65
Broccoli	15	78	90	75
Brussels sprouts	4	79	85	73
Cabbage	13	79	89	75
Carrot	18	62	80	55
Cauliflower	8	78	86	75
Celery	3	74	85	55
Chinese cabbage	1	75	93	75
Collards	4	84	95	79
Corn	18	81	97	75
Cress	1	90	96	75
Cucumber	13	84	96	80
Eggplant	4	65	93	60
Endive	6	73	93	70
Kale	3	80	91	75
Kohlrabi	4	81	91	75
Leek	3	69	90	60
Lettuce	26	82	95	80
Muskmelon	4	87	92	75
Mustard	3	78	89	75
New Zealand Spinach	3	48	82	40
Okra	3	59	79	50
Onion	15	75	88	70
Parsley	3	66	84	60
Parsnip	1	60	79	60
Pea	23	82	94	80
Pepper	17	67	82	55
Pumpkin	5	88	86	75
Radish	18	78	96	75
Rutabaga	2	86	90	75
Spinach	9	66	93	60
Squash	10	85	92	75
Swiss chard	7	76	88	65
Tomato	21	77	92	75
Turnip	9	83	97	80
Watermelon	4	93	93	70

* Standards are provided for by the rules and regulations of the Federal Seed Act.

Table 4. Germination and Purity of Lawn Seed

Seed Company	Seed Mixture	Purity Claim	Purity Found 1&2	Germination Claim	Germination Found1&2
LOFTS	*TriPlex*				
	Caliente Perennial Rye	49.50		90	
	Regal Perennial Rye	24.50		90	
	Repell II Perennial Rye	24.50	99.01	90	94
LOFTS	*Shady Mix*				
	Baron Kentucky Bluegrass	7.60	8.84	80	83
	Sabre Rough Bluegrass	6.65	5.01	80	75
	Palmer Perennial Rye	14.70	14.33	90	91
	Jamestown Chewings Fescue	48.50		85	
	Penlawn Red Fescue	19.60	68.43	85	90
LOFTS	*Fairway Mixture*				
	Kentucky Bluegrass	8.50	8.93	80	57*
	Perennial Rye	24.75		85	
	Gulf Annual Rye	49.50	75.02	90	96
	Creeping Red Fescue	14.55	14.19	85	82
GREENVIEW	*Greenview Kentucky Bluegrass*	91.26	90.56	85	76
AGWAY	*Shady Green Grass Seed Mixture*				
	Kentucky Bluegrass	19.78	23.97	85	90
	Riviera Perennial Rye	19.61	19.61	90	93
	Creeping Red Fescue	34.29		88	
	Chewings Fescue	14.62		85	
	Pennlawn Red Fescue	9.85	55.24	88	90
AGWAY	*Wear Green Seed Mixture*				
	Kentucky Bluegrass	14.78	14.56	85	88
	Riviera Perennial Rye	19.70	17.79	90	97
	Cochise Tall Fescue	17.87		88	
	Chieftain Tall Fescue	17.75		88	
	Arid Tall Fescue	13.91	50.92	88	93
	Creeping Red Fescue	14.57	15.33	88	91
HOLDRIDGE	*Holdridge Special Front Lawn Mixture*				
	Kentucky Bluegrass	34.40	39.58	85	85
	Aquarius Perennial Rye	24.58		90	
	Patriot II Perennial Rye	9.76	32.97	90	98
	Creeping Red Fescue	29.44	26.25	90	90
HOLDRIDGE	*Holdridge Contractors Mix*				
	Kentucky Bluegrass	8.81	9.59	85	74*
	Perennial Rye	19.40		85	
	Annual Rye	68.60	88.13	85	97
NEW ENGLAND SEED CO.	*New England Athletic Lawn Mix*				
	Manhattan Annual Rye	9.81	10.89	90	93
	Creeping Red Fescue	19.88	20.26	85	93
	Fawn Tall Fescue	66.66	67.18	85	89

STONINGTON FEED CO.	*Soil Conservation Lawn Seed Mix*				
	Kentucky Bluegrass	13.21	16.3	80	73
	Calypso Perennial Rye	34.20		90	
	Annual Rye	8.86	41.66	90	96
	Creeping Red Fescue	39.53	40.05	85	90

1 Results for seeds which were separated by genus and not by species or by variety are reported as the sum for that genus.

2 * = does not meet label claims within allowable tolerance.

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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