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1979 INSPECTIONS OF

FERTILIZER PESTICIDE AND FEED PRODUCTS

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THE CONNECTICUT AGRICULTURAL EXPERIMENT STATION NEW HAVEN

1979 Inspections of

Fertilizer, Pesticide and Feed Products

Data obtained by chemical analysis of officially collected samples of commercial feeds, fertilizers and pesticide formulations are contained in this report. The tables show the number of samples from each manufacturer (in parenthesis), the number of determinations made for each guaranteed ingredient, the number of deficiencies, and the average percent of claims for each component.

The deficiencies noted for feeds samples are based on the permitted variations recommended by the Association of American Feed Control Officials, the investigational allowances for fertilizers are those of the Association of American Plant Food Control Officials, and the permissive guarantee variations suggested by the Association of American Pesticide Control Officials are used for pesticide formulations.

Data for 438 samples of feed representing 44 manufacturers, 412 samples of fertilizer representing 34 manufacturers and 224 samples of pesticide representing 46 manufacturers are summarized.

The feed and fertilizer laws are administered by the Commissioner of Agriculture. The pesticide law is under the direction of the Commissioner of Environmental Protection.

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Feed Manufacturer	Number of Claims				Number Not Met			Average % of Claims		
	Protein	Fat	Fiber	Total	Protein	Fat	Fiber	Protein	Fat	Fiber
Agway (69)	69	68	68	205	1	0	0	111	129	62
Allied Mills (36)	37	37	37	111	1	2	0	107	130	65
Andersen Farm Supply (1)	1	1	1	3	0	0	0	124	225	75
Best Feeds & Farm Supplies (6)	6	6	6	18	0	0	0	110	137	61
Bloomfield Farmers Exchange (2)	2	2	2	6	0	0	0	113	119	64
Carnation Co. (43)	43	43	43	129	1	3	3	112	134	81
Central Conn. Co-Op (19)	19	19	19	57	0	0	0	106	131	65
Con Agro (1)	1	1	1	3	0	0	0	116	100	49
Country Foods Div. (12)	12	12	12	36	1	0	0	115	128	61
Dahlgren and Co. (1)	1	1	1	3	0	0	0	139	128	66
Davis-Grande, Inc. (4)	4	4	4	12	1	0	0	99	128	60
D & D Suet Seed Co. (1)	1	1	1	3	0	0	0	110	94	22
Deep Run Packing Co. (3)	3	3	3	9	0	0	0	114	110	42
Derby Feed Co. (4)	4	4	4	12	1	0	0	98	164	62
Eastern Animal Food (1)	1	1	1	3	0	0	0	103	114	74
Evangers Dog & Cat Food Co (3)	3	3	3	9	2	1	0	87	90	76
Farm Bureau Co-op (13)	13	13	13	39	1	4	0	103	111	70
Geisler Pet Products (8)	8	8	8	24	1	1	0	127	397	50
General Foods Corp (2)	2	2	2	6	0	0	0	105	117	70
Gro-Kote, Inc. (4)	4	4	4	12	0	0	1	105	176	127
Hap-EE Pet Food (2)	2	2	2	6	1	0	0	101	112	41
Hardley Products Co (1)	1	1	1	3	0	0	0	110	113	31
Hart Seed Co (1)	1	1	1	3	0	0	0	101	107	32
Hartz Mountain Corp (1)	1	1	1	3	1	1	0	82	56	88
Hyde Bird Feeder (1)	1	1	1	3	0	0	0	110	113	31
IAMS Food Co. (4)	4	4	4	12	0	0	0	103	113	70
K & L Mills Corp. (37)	37	37	37	111	7	10	8	101	97	85
LaCrosse Milling Co. (1)	1	1	1	3	0	0	0	98	111	59
Mackeys (1)	1	1	1	3	0	0	0	117	196	28
Maple Leaf Mills (1)	1	1	1	3	0	0	0	111	229	71
Milk Specialties (1)	1	1	1	3	0	0	1	100	102	250

Feed Manufacturer	Number of Claims				Number Not Met			Average % of Claims		
	Protein	Fat	Fiber	Total	Protein	Fat	Fiber	Protein	Fat	Fiber
L.M. Newfields (1)	1	1	1	3	0	0	0	122	117	114
Old Mother Hubbard (2)	1	1	1	3	0	0	0	116	119	105
Peekskill Pet Supply (3)	0	0	0	0	-	-	-	-	-	-
Quaker Oats Co. (2)	2	2	2	6	1	0	0	95	135	39
Ralston Purina Co. (56)	56	56	56	168	1	2	0	109	151	72
Riviana Foods, Inc. (5)	5	5	5	15	0	0	0	119	125	82
Rytman Grain Co. (11)	11	11	11	33	4	6	0	102	80	83
Stanford Seed Co. (4)	4	4	4	12	0	0	1	125	169	75
TizWhiz Dist. (1)	1	1	1	3	0	0	0	104	106	65
Triumph Pet Industries (3)	3	3	3	9	0	1	0	105	106	65
United Co-op Farmers (16)	16	16	16	48	1	0	0	107	142	62
VoToys, Inc. (1)	1	1	1	3	0	0	0	100	133	21
H.K. Webster Co. (49)	49	49	49	147	3	0	0	105	132	61
(438)	435	434	434	1303	29	31	14	108	134	69

Percent of claims deficient: 5.7

Fertilizer Manufacturer	Number of Claims			Number Not Met		Average % of Claims	
	N	P_2O_5+ K_2O	Total	N	P_2O_5+ K_2O	N	P_2O_5+ K_2O
Agrico (46)	44	89	133	24	45	94.5	96.0
Agway (94)	90	179	269	12	8	105.4	114.3
Atlas Fish Fertilizer (1)	1	1	2	1	0	88.4	117.0
Cadwell & Jones (22)	21	43	64	11	12	91.4	104.2
Chamberlain & Barclay (7)	7	14	21	0	1	111.9	127.1
Chevron (8)	8	16	24	0	0	105.8	104.5
Clinton Nursery (2)	2	4	6	0	0	126.9	106.5
Ross Daniels (1)	1	2	3	0	0	119.4	114.6

Fertilizer Manufacturer	Number of Claims N	Number of Claims P_2O_5+ K_2O	Number of Claims Total	Number Not Met N	Number Not Met P_2O_5+ K_2O	Average % of Claims N	Average % of Claims P_2O_5+ K_2O
Espoma Co. (6)	6	12	18	0	0	121.5	125.4
Fer-Mel Corp. (10)	10	14	24	1	0	104.6	111.1
Garfield Williamson (3)	3	6	9	0	1	116.4	116.4
Green Mountain Products (3)	3	2	5	0	0	130.9	138.6
Hart Seed Co. (5)	5	10	15	1	1	121.1	122.2
Heritage House (3)	3	6	9	0	1	102.3	137.3
Hyponex Co., Inc. (1)	1	2	3	0	0	108.3	107.9
International Spike (1)	1	2	3	0	1	108.8	110.3
Lebanon Chemical Corp. (7)	7	14	21	0	1	112.9	118.9
Leisure Group (1)	1	2	3	0	0	108.0	98.5
Lofts Pedigreed Seed (3)	3	6	9	2	0	91.7	154.0
3 M (4)	4	8	12	0	0	121.0	119.1
Nassau Gardens, Inc. (16)	16	32	48	1	2	112.3	121.5
Old Fox (36)	35	69	104	12	14	100.4	107 7
Robert B. Peters (3)	3	6	9	0	0	110.4	108.8
Pfizer-Leeming Div. (1)	1	2	3	0	0	111.0	114.3
Plantabbs (2)	2	4	6	0	0	109.0	104.3
Schultz Co. (1)	1	2	3	0	0	105.4	98.9
O.M. Scott (15)	15	30	45	0	0	107.1	118.3
Sears (2)	2	4	6	0	0	104.7	118.7
Sewerage Comm. of Mil. (1)	1	1	2	0	0	104.7	167.0
Sierra Chemical Co. (1)	1	2	3	0	0	103.3	106.6
Stern's Nursery (5)	5	10	15	0	2	108.8	98.6
Stim-U-Plants (1)	1	2	3	0	0	104.8	101.7
Swift Agric. Chem. Co. (53)	50	97	147	6	32	112.4	102.3
U.S.S. Agric. (2)	2	4	6	0	0	121.2	109.7
(367)	356	697	1053	71	119	105.5	110.1

Percent of claims deficient: 18.0

Secondary and Minor Elements

Manufacturer	Element Claimed	Number Of Claims	Number Not Met	Average % Of Claims
Agrico (1)	Magnesium	1	1	72
Agway (12)	Boron	8	0	180
	Iron	4	0	120
	Magnesium	1	0	292
	Manganese	1	0	211
	Zinc	1	1	60
Chevron (2)	Calcium	1	0	198
	Copper	1	0	120
	Iron	2	0	400
	Magnesium	1	1	80
	Manganese	1	0	288
	Zinc	2	0	235
Garfield-Williamson (1)	Iron	1	0	262
Green Mountain Plant Prod. (2)	Boron	1	0	180
	Calcium	1	0	105
	Copper	1	1	40
	Iron	1	0	111
	Magnesium	1	0	113
	Manganese	1	0	80
	Zinc	1	1	25
Lebanon Chemical Corp (2)	Iron	2	0	744
	Magnesium	1	0	275
3 M (1)	Boron	1	0	248
	Copper	1	0	140
	Iron	1	0	151
	Manganese	1	0	132
	Zinc	1	0	113
Nassau Gardens (5)	Iron	5	0	1291
Old Fox (5)	Magnesium	5	0	233
Plantabbs (1)	Iron	1	0	110
Sears (1)	Iron	1	0	150
Sewerage Comm. of Mil. (1)	Iron	1	0	146
Stern's Nursery (4)	Copper	3	0	193
	Iron	4	0	152
	Manganese	3	0	460
	Zinc	3	0	187
Swift Agric. Chem. Co. (5)	Calcium	1	0	113
	Chlorine	2	1	79
	Magnesium	2	0	96
U.S.S. Agric. (2)	Boron	2	0	283
(45)		73	6	276

Percent of claims deficient: 8.2

Mixed Fertilizer Distribution

July 1, 1978 - June 30, 1979

Grade	Tons
0-10-40	100
0-15-30	93
0-20-20	20
0-25-25	62
4-10-6	21
5-10-5	1,267
5-10-10	1,993
5-20-20	39
8-16-16	26
10-6-4	3,774
10-10-10	6,372
10-20-10	520
12-4-8	161
15-8-12	1,012
15-10-10	3,774
15-15-15	715
15-30-15	27
16-4-8	15
16-8-8	88
18-6-6	17
19-19-19	131
20-5-10	487
20-10-5	128
20-10-10	271
20-12-8	52
20-20-20	47
24-4-8	457
24-12-18	438
25-5-10	195
26-4-6	161
Miscellaneous*	23,813
Total	44,043

Tonnages of Fertilizer Materials and Mixed Fertilizers Purchased During the Period of July 1, 1978 - June 30, 1979

Chemical Nitrogen		
Ammonium Nitrate		115
Ammonium Sulfate		2
Calcium Nitrate		66
Nitrate of Soda		37
Nitrogen Solutions (30%)		331
Urea		3,854
Urea - Formaldehyde		32
Other Nitrogen Materials	(15%)	2
	(30%)	2
		4,441
Organics		
Blood Meal		3
Castor Pomace		12
Cottonseed Meal		98
Dried Blood		6
Dried Manures		3,094
Sewage Sludge		707
Other organics		3
		3,924
Phosphates		
Ammonium Phosphate		1,819
Bonemeal		95
Dicalcium Phosphate		3,163
Phosphate Rock		19
Superphosphate, 20%		82
Superphosphate, 40%		493
		5,671
Potash		
Muriate of Potash		925
Nitrate of Potash		1
Sulfate of Potash		10
Other Potassium Materials	44%	7
		943
Secondary and Micronutrients		
Ammonium sulfate		2
Borax		20
Copper sulfate		1
Gypsum		101
Iron		1
Sulfur		1
Zinc		5
		131
Total		15,110
Commercial Mixtures		44,043
Total		59,153

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Agway Inc. (20)	Ammonium Sulfamate	1	0	101
	Captan	1	0	103
	Carbaryl	4	0	104
	Chlorothalonil	1	0	101
	2,4-D	1	0	98
	Dacthal	1	0	104
	Diazinon	3	0	100
	Dicamba	1	0	123
	Disyston	1	0	109
	Dursban	1	0	105
	Imidan	1	0	104
	Kelthane	1	0	102
	Malathion	2	0	100
	Methoxychlor	3	0	104
	Piperonyl butoxide	1	0	104
	Prometon	1	0	99
	Pyrethrins	1	0	96
	Rotenone	1	0	105
	Thiram	1	0	102
Amchem Products, Inc. (6)	Amitrol	2	0	102
	2,4-D	3	0	102
	Dicamba	2	0	113
	2-(2,4-Dichlorophenoxy)-propionic acid	1	0	101
Avitrol Corp. (1)	4-Aminopyridine	1	0	105
Baird & McGuire Co. (1)	Chlordane	1	0	100
Bell Laboratories Inc. (1)	Zinc phosphide	1	0	109
Black Leaf Products Co. (3)	(5-Benzyl-3-furyl) methyl-22-dimethyl-3-(2-Methylpropenyl)-cyclopropane carboxylate	1	0	104
	2,4-D	1	0	106
	Methoxychlor	1	0	101
Bonide Chemical Co. (11)	Ammonium sulfamate	1	0	100
	Benomyl	1	0	101
	Captan	1	0	100
	Carbaryl	2	0	95
	Chlordane	1	0	90
	Copper	1	0	116

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Bonide Chemical Co. (11)	Malathion	2	1	91
	Methyxychlor	2	0	104
	Piperonyl butoxide	1	0	107
	Pyrethrins	1	0	96
	Rotenone	1	0	100
	Thiram	1	0	102
Chevron Chemical Co. (21)	Acephate	2	0	102
	Ammonium sulfamate	1	0	100
	Arsonates	2	0	100
	Captan	2	0	134
	Carbaryl	3	0	100
	2,4-D	2	0	100
	Diazinon	4	0	100
	Kelthane	1	0	100
	Malathion	2	0	102
	MCPP	1	0	97
	Metasystox-R	1	0	100
	Methoxychlor	2	0	105
	2-(1-Methylethoxy) phenylmethylcarbamate	2	0	97
	Piperonyl butoxide	1	0	96
	Prometon	1	0	94
	Pyrethrins	1	0	102
	Silvex	2	0	100
Ciba-Geigy Corp. (5)	2,4-D	1	0	96
	Diazinon	4	0	100
	Dicamba	1	0	92
	MCPP	1	0	98
Clinipad Corp. (1)	Quaternary ammonium compounds	1	0	108
Connecticut Aersols Inc. (41)	d-trans Allethrin	29	9	93
	Chlorpyrifos	10	0	100
	2,2-Dichlorovinyldimethyl-phosphate	6	0	102
	O,O-Diethyl-O-(2-isopropyl-6-methyl-4-pyrimidinyl)-phosphorothioate	2	0	99
	O-Isopropoxyphenyl-methylcarbamate	2	0	99
	2-(1-Methylethory)phenol-methylcarbamate	4	0	97
	N-Octylbicycloheptene-dicarboximide	31	0	97

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Connecticut Aersols Inc (41)	Piperonyl butoxide	29	0	113
	Pyrethrins	12	10	16
	Quaternary ammonium compounds	1	0	108
	Tetramethrin	6	0	100
Cutter Laboratories Inc. (1)	N,N-Diethyl-m-toluamide	1	0	100
Darworth Co. (6)	Cuprinol	6	0	102
Dexol Industries (4)	Carbaryl	2	0	105
	1,1-bis(p-Chlorophenyl)-2,2,2-trichloroethanol	1	0	93
	Karathane	1	0	100
	Kelthane	1	0	108
	Piperonyl butoxide	1	0	115
	Pyrethrins	1	0	100
	Zineb	1	0	107
The Dow Chemical Co. (5)	Chlorpyrifos	3	0	100
	Picloram	1	0	98
	2,4,5-T	1	0	100
	Tricyclohexyltin	1	0	101
DuBois Chemical Co. (1)	N-Octylbicycloheptene-dicarboximide	1	-	-
	Piperonyl butoxide	1	-	-
	Pyrethrins	1	-	-
E.I. duPont de Nemours & Co. (1)	Benomyl	1	0	102
J.T. Eaton & Co., Inc. (1)	2-Pivalyl-1,3-indandione	1	0	104
Edsan Chemical Co., Inc. (2)	Quaternary ammonium compounds	2	0	98
Elanco Products Co. (1)	Trifluralin	1	0	100
Hofmann Water Testing Co. (2)	Disodium Cyanodithio-imidocarbonate	2	2	65
	Potassium N-methyl-dinitro carbamate	2	0	123

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Hooker Chemicals & Plastic Corp(1)	Bis(pentachloro-2,4-cyclopentadien-1-yl)	1	0	101
Hysan Corp. (4)	2,2-Methylene-bis (3,4,6-trichloro-phenol)	1	1	64
	o-Phenylphenol	3	0	102
	p-tert-Amylphenol	3	0	105
Jamestown Chemical Co. (1)	Poly[oxyethylene (dimethylimino) ethylene (dimethyl-imino)-ethylene-dichloride	2	2	82
Kerr McGee Corp. (1)	Tupersan	1	0	109
Konalrod Products Co. (2)	Tetramethrin	2	0	107
Lofts Pedigree Seed Co. (1)	Silvex	1	0	96
Mobay Chemical Corp. (1)	Baygon	1	0	105
Nutmeg Chemical Co. (10)	Disodium cyanodi-thioimido cabonate	2	0	84
	Poly[oxyethylene(di-methylimino)-dichloride	8	8	91
	Potassium N-methyl-dithis carbonate	2	0	155
Oakite Products Inc. (1)	Calcium hypochlorite	1	0	104
Parrett Chemical Co. (26)	Captan	4	0	105
	Carbaryl	6	0	108
	Copper	6	0	107
	2,4-D	2	0	98
	Diazinon	2	0	103
	Malathion	4	0	108
	Methoxychlor	2	0	107
	Petroleum oil	2	0	101
	Piperonyl butoxide	1	0	106
	Pyrethrins	1	0	96
	Rotenone	4	0	99
	Sevin	2	0	82

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Parrott Chemical Co. (26)	Sulfur	4	0	100
Pharmacal Research Labs (4)	N-Octylbicyclo-heptenedicarboximide	1	0	97
	Piperonyl butoxide	3	0	95
	Pyrethrins	3	0	107
	Quaternary ammonium compounds	1	0	102
B.G. Pratt, Gabriel Chem. (2)	Diazinon	1	0	102
	0,0,0,0,-Tetra-propyldithiopyro-phosphate	1	0	98
Ralston Purina Co. (11)	(5-Benzyl-3-furyl) methyl-2,2-dimethyl-3-(2-methyl propenyl) cyclopropane car-boxylate	1	0	96
	Captan	1	0	101
	Chlordane	1	0	101
	Diazinon	1	0	103
	Dimethoate	1	0	98
	2-Hydroxyethyl-n-octyl sulfide	1	0	97
	Malathion	4	2	91
	Methoxychlor	3	0	99
	Piperonyl butoxide	2	0	94
	Pyrethrins	1	0	93
	Sevin	2	0	100
	Zineb	1	0	97
Roebic Laboratories Inc. (2)	Copper Sulfate	2	0	99
Science Products Co. Inc. (3)	Mameb	1	0	99
	Methoxychlor	1	0	101
	Zineb	1	0	99
Service Master Industries Inc (1)	Quaternary ammonium compounds	1	0	101
O.M. Scott & Sons (1)	Diazinon	1	0	98
Shield Chemical Co. (3)	(5-Benxyl-3-furyl) methyl-2,2-dimethyl-3-(2-methylpropenyl) cyclopropane carboxylate	3	0	104

Pesticide Manufacturer	Pesticide	Number Of Claims	Number Not Met	Average % Of Claims
Shield Chemical Co. (3)	Tetramethrin	2	0	101
Sudbury Laboratory, Inc. (1)	Naphthalene	1	0	100
Syndet Products Inc. (3)	Quaternary ammonium compounds	3	0	110
The Tanglefoot Co. (1)	Piperonyl butoxide	1	0	97
	Pyrethrins	1	0	110
United States Chemical Corp. (1)	Quaternary ammonium compounds	1	0	102
Upjohn Co. (4)	2,6-Dichloro-4-nitroaniline	2	0	101
	Diphenamid	2	0	100
Velsicol Chemical Co. (3)	Chlordane	2	0	101
	2,4-D	1	0	102
	Dicamba	1	0	108
York Chemical Co. (1)	Pentachlorophenol	1	0	111
(224)		386	35	99

Percent of claims deficient: 9.1