

# Inspection of Pesticides, Pool Products and Pet Preparations — 1984

By Lester Hankin

## INSPECTION OF PESTICIDES, POOL PRODUCTS, AND PET PREPARATIONS--1984

Results of chemical analysis of 249 official samples of pesticides, pool products, and pet preparations collected during 1984 are presented in this Bulletin. All samples were collected by inspectors of the Connecticut Department of Environmental Protection except two fertilizers containing pesticides collected by inspectors of the Connecticut Department of Agriculture.

Table 1 shows individual samples representing 408 guarantees for active ingredients from 57 manufacturers. Following the names of the manufacturers are the brands of the products and the active ingredients. The percent guarantee is then shown followed by the percent found. Values preceded by an asterisk (\*) are deficient in amount of active ingredient; values enclosed in brackets [ ] are in excess.

Two basic criteria are used to determine if samples are satisfactory. The first is that a sample can not be deficient or excessive in amount of active ingredient. Deficiencies and excesses are based on Laboratory Verification Guidelines established by the U.S. Environmental Protection Agency. Overall, 12.0% of the 249 samples were deficient in amount of at least one active ingredient and 1.6% were excessive in amount of at least one active ingredient. For 408 guarantees for active ingredient only 7.3% were deficient and 1.0% were excessive. The second criteria is that a sample is unsatisfactory if it contains an ingredient not listed on the label. All of the samples tested were satisfactory in this respect.

Table 2 summarizes the number of samples tested from each manufacturer, the number of guarantees for active ingredients, the number of deficiencies or excesses, and the average percent of guarantee.

Analyses were performed by M. Fuzesi, R. Hastings, and M. A. Illig. Samples were collected by M. Beott and D. Griswold. Pesticide laws are administered by the Commissioner of the Department of Environmental Protection.

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Table 1. Analysis of Individual Samples

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Agway		
Agway 25% Methoxychlor Spray		
Methoxychlor	25.0	24.5
Agway Amitrol-T		
Amitrole	21.6	21.9
Agway Asparagus-Berry Weeder		
Simazine	4	4.1
Agway Diazinon Insect Spray		
Diazinon	25	25.7
Agway Diazinon Insect Spray		
Diazinon	25.0	24.60
Agway Dual Garden Orchard Spray		
Captan	14.2	15.7
Malathion	7.5	8.0
Methoxychlor	15.0	15.08
Agway Fruit Tree Spray		
Captan N	11.35	11.15
Malathion	6.00	6.00
Methoxychlor	12.00	12.28
Carbaryl	3.00	3.08
Agway Garden Insect Spray w/Sevin		
Carbaryl	50	49.7
Agway Insect Spray with Malathion		
Malathion	55.0	54.2
Agway Lawn Weed Killer		
2,4-D	20.3	20.2
Dicamba	1.9	2.0
Agway Liquid Sevin 4F		
Carbaryl	42.6	43.2
Agway Liquid Sevin 4F		
Carbaryl	42.6	43.1
Agway Organic Garden Spray		
Pyrethrins	1.0	1.04
Piperonyl Butoxide	10.0	9.6
Agway Swat II		
Tetramethrin	0.200	0.180
Phenothrin	0.191	0.185
Agway Take Out Systemic Weed & Grass Killer		
Glyphosate	0.96	0.97
Agway Thiodan 50W		
Endosulfan	50.	50.3
Agway Total Weed Killer		
Prometon	1.6	1.62
Agway Tree & Shrub Spray		
Metasystox	6.0	6.7
Methoxychlor	5.0	4.6
Kelthane	0.9	0.85

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Agway Vegetable Garden Dust		
Malathion	5.6	6.30
Methoxychlor	5.0	4.90
Captan & related cmpds.	7.0	7.60
Agway Weed & Brush Killer w/Ammate		
Ammonium Sulfamate	46.5	49.4
Bicep Liquid Fertilizer		
Atrazine	0.351	0.315
Metolachlor	0.464	0.383
Pennwalt Penncap M		
Methyl Parathion	20.9	21.5
Alina Chemical Corp.		
Mr. Destroyer Roach & Ant Killer		
Pyrethrins	0.050	0.048
Piperonyl Butoxide	0.100	0.090
MGK 264	0.166	0.144
Chlorpyrifos	0.500	0.467
American Cyanamid Co./Household Products Div.		
Pine Sol		
Pine Oil	21.8	21.5
Soap	11.3	13.2
Isopropanol	10.9	12.6
Black Leaf Products Co.		
Black Leaf 1% Rotenone Garden Dust		
Rotenone	1	1.1
Black Leaf 25% Methoxychlor Mosquito Insect Spray		
Methoxychlor	25	24.50
Black Leaf 5% Sevin Garden Dust		
Carbaryl	5.0	5.30
Black Leaf 50% Malathion Spray		
Malathion	50	51.3
Black Leaf Lawn Weed Killer Spray		
2,4-D(alkanolamine salts)	1.66	1.52
Dicamba(dimethyl amine salts)	0.31	0.32
Black Leaf Rose & Flower Beauty Spray		
Pyrethrins	0.0255	0.0242
Rotenone	0.1280	0.1290
Captan	0.5035	0.5197
Karathane	0.146	0.137
Piperonyl Butoxide, tech.	0.2560	0.2688
Black Leaf Slug & Snail Killer		
Carbaryl	5.00	5.10
Metaldehyde	2.50	2.90

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Black Leaf Tomato & Vegetable Garden Dust		
Carbaryl	5.0	5.38
Maneb	6.0	6.0
Black Leaf Yard & Patio Fogger Spray Bomb		
Resmethrin	0.250	0.254
Bonide Chemical Co.		
Bonide Bulb Dust		
Methoxychlor	5.0	4.84
Thiram	10.0	9.88
Bonide Captan 50%WP		
Captan	50	50.6
Bonide Malathion 50%EC		
Malathion	50	49.76
Bonide Moletox II		
Zinc Phosphide	2	2.7
Bonide Rose & Floral Spray Bomb		
Carbaryl	0.75	0.79
Folpet	0.50	*0.325
Malathion	0.50	0.60
Kelthane	0.075	0.10
Bonide Systemic Granules		
Disyston	2	2.15
Bonide Systemic Granules		
Disyston	2	2.16
Boyle-Midway		
Black Flag Dead Aim Ant & Roach Killer		
DDVP	0.186	0.182
2-(1-Methylethoxy)phenolmethyl- carbamate	0.950	0.930
Black Flag Flea & Roach Fogger		
Precor	0.150	0.210
DDVP	0.470	0.512
2-(1-Methylethoxy)phenolmethyl- carbamate	1.000	1.123
Black Flag Flea Killer		
Resmethrin	0.10	0.092
Dursban	0.50	0.514
Black Flag Roach Bait		
Baygon	2.000	2.300
Cadwell & Jones		
Cadwell & Jones Specialty Fert. 20-10-10 with Dursban		
Dursban	0.476	0.454

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Ced-O-Products Corp.		
Ced-O-Flora Plant Spray		
Borax	0.28	present#
Kerosine	35.68	present#
Chacon Chemical Corp.		
Chacon Repel Dog + Cat Repellent Carbamate (Ziram + Thiram)	2.50	2.75
Chevron Chemical Co./Ortho Div.		
Flea-E-Gon Flea Killer		
Resmethrin	0.250	0.235
Ortho Ant, Roach & Spider Killer 2-(1-Methylethoxy)phenylmethyl- carbamate	1.0	0.97
Ortho Bug-Geta Snail & Slug Pellets		
Metaldehyde	3.25	3.53
Ortho Diazinon Insect Spray		
Diazinon	25	25.5
Ortho Diazinon Insect Spray		
Diazinon	25.0	24.7
Ortho Diquat Herbicide		
Diquat	35.3	39.3
Ortho Diquat Herbicide -H/A		
Diquat	35.3	36.4
Ortho Flying & Crawling Insect Killer		
Resmethrin	0.250	0.248
Ortho Fruit & Vegetable Insect Control		
Diazinon	25	24.5
Ortho Funginex Rose Disease Control		
Triforine	6.5	6.35
Ortho Hi-Power Indoor Insect Fogger		
Pyrethrins	0.50	0.60
Piperonyl Butoxide	1.00	0.98
N-octyl bicyclo heptene dicarboximide	1.67	1.61
Ortho Home Orchard Spray		
Captan	14.2	17.0
Malathion	7.15	[9.85]
Methoxychlor	15.0	14.9
Ortho Household Insect Killer		
Resmethrin	0.250	0.230
Ortho Isotox Insect Killer		
Acephate	8.0	7.85
Kelthane	3.0	3.50
Ortho Lindane Borer & Leaf Miner Spray		
Lindane	20	19.8
Ortho Liquid Sevin		
Carbaryl	27	27.9
Ortho Malathion 50 Insect Spray		
Malathion	50	51.6

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Ortho Orthene Insect Spray		
Acephate	15.6	15.4
Ortho Orthene Insect & Disease Control		
Acephate	4.00	4.10
Triforine	3.25	3.10
Kelthane	3.00	3.60
Ortho Outdoor Insect Fogger		
Resmethrin	0.250	0.240
2-Hydroxyethyl-n-octylsulfide	0.950	0.940
Ortho Phaltan Rose & Garden Fungicide		
Folpet	75	74.5
Ortho Poison Ivy & Poison Oak Killer		
2,4-D	0.70	0.80
MCP	0.75	0.81
CIBA-Geigy Corp.		
Bicep		
Atrazine	20.8	20.36
Metolachlor	27.5	27.90
CIBA-Geigy Pramitol 25E		
Prometon	25	25.2
Spectracide Lawn & Garden Insect Control		
Diazinon	25.0	25.3
Spectracide Professional Home Pest Control		
Diazinon	1.0	1.02
Connecticut Aerosols		
707 Automatic Indoor Fogger Roach Bomb		
Phenothrin	0.191	0.192
Allethrin	0.300	0.296
707 Automatic Indoor Fogger Roach Bomb		
Allethrin	0.300	0.310
Phenothrin	0.191	0.183
707 Automatic Indoor Fogger Roach Bomb		
Allethrin	0.300	0.305
Phenothrin	0.191	0.170
707 Automatic Indoor Fogger Roach Bomb		
Allethrin	0.300	0.366
Phenothrin	0.191	0.214
707 Automatic Indoor Fogger Roach Bomb		
Allethrin	0.300	0.326
Phenothrin	0.191	0.197
707 Flying Insect Killer I		
Tetramethrin	0.200	0.170
Phenothrin	0.191	0.176
707 House & Garden Spray		
Tetramethrin	0.200	0.201
Phenothrin	0.191	0.166

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Johnson's No Roach		
D-trans Allethrin	0.050	0.048
Chlorpyrifos	0.500	0.469
N-octyl bicyclo heptene dicarboximide	0.400	0.343
Johnston's Hadabug II		
Tetramethrin	0.250	0.236
Phenothrin	0.143	0.125
Johnston's No-Roach I		
Allethrin	0.050	0.054
Chlorpyrifos	0.500	0.497
N-octyl bicyclo heptene dicarboximide	0.400	0.380
Mr. Destroyer Insect & Roach Killer		
Allethrin	0.300	0.330
Phenothrin	0.191	0.185
No-Roach Indoor Fogger II		
Tetramethrin	0.200	0.190
Phenothrin	0.382	0.340
Rite Aid Ant & Roach Killer IV		
Allethrin	0.050	0.047
Chlorpyrifos	0.500	0.462
N-octyl bicyclo heptene dicarboximide	0.400	0.356
Rite Aid Disinfectant Spray		
O-phenylphenol	0.109	0.102
N-alkyl dimethyl benzyl ammonium chloride	0.035	0.034
N-alkyl dimethyl ethylbenzyl ammonium chloride	0.035	0.034
Rite Aid Roach Killer IV		
D-trans Allethrin	0.050	0.057
Chlorpyrifos	0.500	0.494
N-octyl bicyclo heptene dicarboximide	0.400	0.406
Spider-Not		
B-butoxy B-thiocyanodiethyl ether	1.750	1.680
Time Mist Indoor Fogger-1		
Pyrethrins	0.500	0.509
Piperonyl Butoxide, tech.	1.00	0.94
N-octyl bicyclo heptene dicarboximide	1.67	1.64
Wasp-Not		
B-butoxy B-thiocyanodiethyl ether	1.75	1.77
Creative Products Co.		
Ozium Air Sanitizer	4.4	4.9
Triethylene Glycol	4.4	5.1
Propylene Glycol		
Creative Sales		
Acecap Systemic Insecticide Implants	85	85.9
Acephate		

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Dexol Industries		
Dexol African Violet Insect Spray		
Tetramethrin	0.0286	*0.0132
Phenothrin	0.0547	0.0613
Dexol Chlordane 45% Spray		
Chlordane, tech.	45	44.8
Dexol Contact		
Aromatic Petroleum Hydrocarbons	80	81.9
Dexol Cygon Systemic Insecticide		
Cygon	23.4	23.8
Dexol Dexa-Klor Insect Spray		
Dursban	6.7	7.0
Dexol Diazinon Insect Spray		
Diazinon	25.0	25.20
Dexol Maneb Garden Fungicide		
Maneb	80	63.5
Dexol Red Spider & Mite Spray		
Kelthane	0.046	0.042
Dexol Sevin Liquid		
Carbaryl	22.5	23.1
Dexol Whitefly & Mealybug Spray		
Methoprene	0.100	0.120
Pentac	0.075	0.076
Resmethrin	0.050	0.058
Dow Chemical Co.		
Dursban 2E		
Dursban	solution	0.240
Dursban 2E		
Dursban	solution	0.290
Tough Act		
N-alkyl dimethyl benzyl ammonium chloride	0.1	0.12
N-alkyl dimethyl ethylbenzyl ammonium chloride	0.1	0.12
E.I. DuPont De Nemours & Co.		
Ammate X-NI		
Ammonium Sulfamate	95	95.2
Edsan Chemical Co.		
Edsan Double D Cleaner & Disinfectant		
N-alkyl dimethyl benzyl ammonium chloride	0.076	[0.133]
N-alkyl dimethyl ethylbenzyl ammonium chloride	0.076	[0.133]
Edsan Emulsion Bowl Cleaner		
Hydrogen Chloride	23.00	22.56

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Edsan Insect Killer		
Tetramethrin	0.200	0.193
Phenothrin	0.191	0.173
Edsan No. 89 Disinfectant Deodorant		
Ortho-phenylphenol	0.176	0.178
Para-tertiary amyphenol	0.044	0.047
Edsan Q-A Disinfectant-Cleaner-Sanit.-Deod.		
N-alkyl dimethyl benzyl ammonium chloride	5.0	5.30
Edsan Spectrum		
Didecyl dimethyl ammonium chloride	4.5	4.57
Edsan Triple D		
N-alkyl dimethyl benzyl ammonium chloride	4.8	5.18
Estech		
Gro-Tone Crabgrass Preventer w/Tupersan		
Siduron	2.3	2.2
Gro-Tone Weed Control + Lawn Food		
2,4-D	0.58	0.422
MCP	0.24	0.200
Dicamba	0.05	0.039
Gro-Tone Weed Control + Lawn Food		
2,4-D	0.58	*0.085
2-(2 Methyl-4-chlorophenoxy)propionic acid	0.240	*0.072
Dicamba	0.05	* trace
Gro-Tone Weed Killer		
2,4-D	1.40	1.22
K-Mart Weed & Feed 10-6-4		
2,4-D	1.22	*0.656
K-Mart Weed & Feed 10-6-4		
2,4-D	1.22	*0.302
Par-Ex Slow Release Fert. Weed & Feed with IBDU/SCU		
2,4-D	0.66	*0.316
MCP	0.30	*0.164
Dicamba	0.06	*0.026
Super K-Gro Weed & Feed		
2,4-D	0.55	0.506
MCP	0.25	0.238
Dicamba	0.05	0.050
Surban 10-6-4 Weed & Feed		
2,4-D	1.22	*0.420
Swift Lawn Weeder & Feeder		
2,4-D	1.22	*0.141
Terre Lawn Spur Turf Fert. + Crabgrass Preventer		
Benefin	1.04	0.894
Vigoro Crabgrass Preventer + Lawn Fert.		
Benefin	0.7	0.635

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Vigoro Crabgrass Preventer w/Benefin		
Benefin	0.62	[1.13]
Vigoro Weed & Feed		
2,4-D	0.55	*0.315
MCP	0.25	*0.153
Dicamba	0.05	*0.031
Vigoro Weed & Feed		
2,4-D	0.55	0.468
2-(2-Methyl-4-chlorophenoxy)propionic acid	0.25	0.250
Dicamba	0.05	0.035
Vigoro Weed Control + Lawn Fert.		
2,4-D	0.58	0.540
MCP	0.24	0.252
Dicamba	0.05	0.058
Farnam Co.		
Farnam Killer Kane Kartridges		
2,4-D	38.5	38.8
FMC Co.		
Anti-Mildew Paint		
3-Iodo-2-propynyl butyl carbamate	no guar.	0.28
Clark Storm/Coat Acrylic Stain "Quartz"		
3-Iodo-2-propynylbutylcarbamate	no guar.	1.60
Clark Storm/Coat Linseed Oil Stain Wood Preservative Chestnut Brown		
N-(Trichloroethylthio)phthalimide	not stated	*0
Grow Consumer Products		
Like Magic House Plant Insecticide		
Tetramethrin	0.0286	0.0230
Phenothrin	0.0547	0.0576
Like Magic Whitefly & Mealybug Insecticide		
Tetramethrin	0.0286	0.0237
Phenothrin	0.0547	0.0630
H. Krevit & Co.		
15% Sodium Hypochlorite		
Sodium Hypochlorite	approx 15	*8.30
15% Sodium Hypochlorite		
Sodium Hypochlorite	approx 15	*10.26
15% Sodium Hypochlorite		
Sodium Hypochlorite	approx 15	*10.45

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Hyponex Co.		
Hyponex Bug Dart + Plant Food		
DiSyston	1.0	0.89
Lebanon Chemical Corp.		
Greenview Preen Flower & Garden Weed Preventer		
Trifluralin	1.47	1.42
Lehn & Fink Prod. Div./Sterling Drug		
Lysol Deodorizing Cleaner		
Alkyl dimethyl benzyl ammonium chloride	2.70	2.94
Lysol Toilet Bowl Cleaner		
Hydrogen Chloride	8.50	8.58
Lesco		
Lesco Oftanol		
Oftanol	1.51	1.43
Lesco Oftanol 1.5% Granular		
Oftanol	1.5	1.54
Mallinckrodt		
Mallinckrodt Dycarb		
Bendiocarb	76	77.3
Miller Chem. & Fert. Corp./Pratt Gabriel Div.		
Pratt 1% Rotenone Dust or Spray		
Rotenone	1.0	1.1
Pratt 5% Sevin Dust		
Carbaryl	5.0	5.3
Pratt Diazinon 25E Insect Spray		
Diazinon	25.0	25.9
Pratt Liquid Weedaway		
2,4-D	12.11	13.18
MCP	5.85	6.22
Dicamba	1.34	1.44
Pratt Methoxychlor-25 Insect Spray		
Methoxychlor	25	25.5
Pratt Mite Spray		
Kelthane	18.5	18.2
Pratt Nocate Systemic Insecticide		
O,O-Diethyl S-[2-(ethylthio)ethyl]-phosphorodithioate	1	*0.79

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Pratt Red Arrow Insect Spray		
Pyrethrins	0.5	0.54
Rotenone	1.5	1.48
Piperonyl Butoxide,tech.	3.0	3.06
Pratt Scalecide		
Petroleum Oil	98	100
Pratt Super D Weedone		
2,4-D	20.3	20.5
Dicamba	1.9	2.0
Pratt Tomato & Vegetable Dust		
Rotenone	0.75	0.94
Copper	7.00	7.65
Pratt Whitefly Spray		
Resmethrin	0.25	0.213
Miller Chem. & Fert. Corp./Science Prod. Div.		
Science Benomyl 50W		
Benomyl	50	49.6
Science Blossom Set		
Beta-naphthoxyacetic acid	0.0042	0.0042
Science Clover Mite & Red Spider Spray		
Kelthane	0.25	0.246
MK Laboratories		
McKesson Oil of Citronella		
Oil of Citronella	100	100
R & C Shampoo		
Pyrethrins	0.30	0.33
Piperonyl Butoxide,tech.	3.00	2.66
Rid		
Pyrethrins	0.30	0.278
Piperonyl Butoxide,tech.	3.00	2.95
Mobay Chem. Corp./Agric. Chem. Div.		
Mobay Guthion 50%WP		
Guthion	50	49.45
Monsanto Co.		
Monsanto Roundup		
Glyphosate	41.0	40.90
Northeast Packaging		
Agway Wasp & Hornet Jet Spray		
Resmethrin	0.250	0.251

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
NU-Method Pest Control Service		
NU-MRK Ant & Roach Killer Household Insect Spray		
Diazinon	0.500	0.490
Pyrethrins	0.052	0.055
Piperonyl Butoxide,Tech.	0.261	0.258
Nutrigo		
Derby's 25-3-5 Fert. + Weedicide		
Dichlorophenoxyacetic Acid	0.684	0.465
2-(2 Methyl-4-chlorophenoxy)propionic acid	0.306	0.249
Dicamba	0.065	0.068
Flower Time Crabgrass Preventer + Lawn Fert.		
Benefin	1.280	1.290
Flower Time Premium Weed & Feed w/Trimec		
2,4-D	0.761	0.771
MCPP	0.341	0.457
Dicamba	0.072	0.103
Nutrigo Premium Weed & Feed w/Trimec		
Dichlorophenoxyacetic acid	0.684	0.697
2-(2-Methyl-4-chlorophenoxy)propionic acid	0.306	0.366
Dicamba	0.065	0.075
O.M. Scott & Sons		
Scotts Spot Dandelion Control		
2,4,-D	1.66	1.50
Dicamba	0.31	0.40
Scotts Spot Grass & Weed Control		
Total Arsenic	0.70	0.70
Old Fox Chemical		
Old Fox Dacthal 5G		
Dacthal	5	4.7
Old Fox Granular Crab Control		
Siduron	2.3	*1.44
Parrott Agro Industries		
Lucky Strike 48% Chlordane Formula 57		
Chlordane, tech.	48	46.7
Lucky Strike 5% Sevin Dust or Spray		
Carbaryl	5.00	5.20



Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Lucky Strike Black Magic For Roses Formula 500		
Carbaryl	5.00	*1.48
Sulphur	25.0	26.40
Pyrethrins	0.05	0.043
Captan	5.00	5.10
Lucky Strike Crop Maker Veg. Dust Formula 300		
Copper	7.00	6.78
Rotenone	0.80	0.74
Lucky Strike Cropmaker Vegetable Dust Formula 300		
Copper	7.00	6.88
Lucky Strike D-Ban Roach & Ant Spray Formula 30		
Pyrethrins	0.052	0.057
Chlorpyrifos	0.500	0.530
Piperonyl Butoxide	0.260	0.280
Lucky Strike Diazinon 25% Conc. Formula 10		
Diazinon	25	25.1
Lucky Strike Diazinon Dust Formula 40		
Diazinon	4	*3.29
Lucky Strike Malathion 50% Formula 99		
Malathion	50	51.0
Lucky Strike Malcap Dust or Spray Formula 488		
Captan	8.00	6.60
Malathion	4.00	3.97
Methoxychlor	8.00	7.98
Lucky Strike Maltos Formula 24		
Pyrethrins	0.02	0.022
Piperonyl Butoxide	0.20	0.184
Lucky Strike Metacine Weed Killer Formula 9 2,4-D(isooctyl ester)	19.00	20.60
Lucky Strike Rotenone 1% Dust or Spray Formula 1000		
Rotenone	1.00	1.10
Lucky Strike Sevin 22.5% Formula 27		
Carbaryl	22.5	*
Could not be tested-not mixable		
Lucky Strike Weed Buster & Grass Killer Formula 45		
Prometon	1.6	1.80
Parrott Black Magic For Roses		
Carbaryl	5.00	5.60
Captan	5.00	5.40
Sulphur	25.00	25.20
Pyrethrins	0.05	0.047
Parrott Malathion 50%		
Malathion	50	50.7
Parrott Metacine Weed Killer 2,4-D(isooctyl ester)	19.00	19.10

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Parrott Multi Purpose Maltos Insecticide Fungicide		
Malathion	15	15.65
Methoxychlor	20	19.30
Dichlone	1.80	*0.259
Parrott Ready-to-use Maltos Spray		
Pyrethrins	0.02	0.024
Piperonyl Butoxide, tech.	0.20	0.18
Scatter Bait Formula 101		
Ortho boric acid	100	100.0
Pet Chemicals		
Vapo Total Release Aerosol		
Vapona	6.51	6.40
2-(1-Methylethoxy)-phenolmethyl- carbamate	1.00	1.04
Pharmaceutical Research Laboratories		
AN-FA-CIDE-S Activator		
Lactic acid	8.6	9.06
AN-FA-CIDE-S Base		
Sodium chlorite	1.37	1.44
Entix Dip		
Pyrethrins	0.33	0.34
Piperonyl Butoxide, tech.	0.67	0.65
N-octyl bicyclo heptene dicarboximide	1.11	1.10
Entix Flea Tick Killer		
Pyrethrins	0.25	0.26
Piperonyl Butoxide, tech.	2.45	2.56
Quatricide Disinfectant Detergent		
N-alkyl ethylbenzyl ammonium chloride	2.25	2.45
N-alkyl benzyl ammonium chloride	2.25	2.45
Quatricide-Ten Disinfectant Deodorizer Sanitizer		
N-alkyl dimethyl benzyl ammonium chloride	5	5.04
N-alkyl ethylbenzyl ammonium chloride	5	5.04
Proctor & Gamble		
Comet Cleanser		
phosphorus, total	2.9	2.7
Sodium dodecyl benzenesulfonate	1.90	2.18
Sodium Hypochlorite	0.45	*0.21

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Rhone Poulenc Chem. Co./Agrochem Div. Chipoo 26019 Iprodione	50	49.5
Rigo Co. Kill-Ko Weedone Super BK 32 2,4-D(butoxy ethyl ester)	16.7	17.1
2,4-D propionic acid(butoxy ethyl ester)	16.4	16.8
Rockland Chemical Co. Rockland Captan Garden Fungicide Captan & Related Derivatives	50.0	51.50
Rockland Ferbam Fungicide Ferbam	76	76.4
Rockland Liquid Fruit Tree Spray Captan	11.35	11.28
Malathion	6.00	*4.78
Methoxychlor	12.00	12.32
Carbaryl	3.00	3.35
Rockland Weed & Grass Killer Prometon	3.50	3.42
2,4-D(butoxy propyl ester)	1.63	1.54
Savol Bleach Co. Savol Algaecide Alkyl dimethyl benzyl ammonium chloride	10	10.5
Savol Bleach Sodium Hypochlorite	3.25	3.84
Savol Shock Treatment Sodium Hypochlorite	12.5	*10.2
Schultz Co. Schultz Insecticide Spray Pyrethrins	0.02	0.021
Piperonyl Butoxide	0.20	0.183
Science Products Co. Science Hornet & Wasp Bomb Malathion	3.00	3.60
Vapona	0.46	0.44
Science Systemic Insecticide Granules Disyston	1	0.95

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Seacoast Laboratories Twin Light Diazinon 5% Granular Diazinon	5	4.96
Twin Light Garden Spray Malathion	15.00	15.90
Methoxychlor	7.50	7.59
Kelthane	5.00	5.15
Twin Light Liquid Sevin Carbaryl	21.50	21.20
Twin Light Malathion 50% Spray Malathion	50	51.0
Twin Light Methoxychlor Spray Methoxychlor	25	24.77
Shell Chemical Co. Shell Vendex 50WP Hexakis (2-methyl-2-phenylpropyl-distanoxane)	50	50.1
Swift Agric. Chem. Corp. Vigoro Rose & Flower Spray Pyrethrins	0.020	0.025
Rotenone	0.100	0.120
Methoxychlor	0.300	0.305
Karathane	0.091	0.104
N-octyl bicyclo heptene dicarboximide	0.300	0.309
Vigoro Rotenone Insecticide Rotenone	1.00	1.20
Vigoro Weed & Grass Topkill Sodium cacodylate	1.11	1.25
Dimethylarsinic acid(total arsenic)		
Top Products Top Disinfectant 450 N-alkyl dimethyl benzyl ammonium chloride	2.25	3.17
N-alkyl dimethyl ethylbenzyl ammonium chloride	2.25	3.17
Union Carbide Agric. Prod. Liquid Amizine Amitrol	4.9	4.98
Simazine	9.9	10.20
Whitmire Research Labs. Whitmire PT 1200 Resmethrin Resmethrin	1.000	1.025

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Whitmire PT 1300 w/Orthene Acephate	3.0	3.05
Whitmire PT 1400 Phenothrin	0.48	0.505
N-octyl bicyclo heptene dicarboximide	5.0	5.12
Why-Not Industries Mill-o-Cide Aerosol Pyrethrins	0.3	0.34
Piperonyl Butoxide	0.60	0.63
N-octyl bicyclo heptene dicarboximide	1.00	0.980
Woolfolk Chemical Works Security Benomyl Spray Benomyl	50	50.6
Security Blot-Out 2 Glyphosate	0.96	0.93
Security Bug Off Dust Carbaryl	5.000	5.000
Security De-Flea Pyrethrins	0.06	0.063
Piperonyl Butoxide, tech.	0.60	0.62
Security Diazinon Yard & Vegetable Garden Granules Diazinon	5.0	4.93
Security EZE Garden Weed Killer Trifluralin	1.75	1.72
Security Home Fruit Spray Flowable Captan	10.9	11.7
Malathion	8.5	9.5
Security Indoor Insect Fogger 2,2-Dichlorovinyl dimethyl phosphate	0.47	0.43
Pyrethrins	0.4	0.39
Piperonyl Butoxide, tech.	0.80	0.77
N-octyl bicyclo heptene dicarboximide	1.55	1.64
Security Malathion Malathion	56.1	55.20
Security Mealybug & Whitefly Houseplant Spray Altosid	0.100	0.118
Pentac	0.075	0.070
Resmethrin	0.050	0.052
Security Pro-Tect Dursban	0.50	0.52
Security Rose & Flower Spray Pyrethrins	0.02	0.025
Piperonyl Butoxide, tech.	0.20	0.19
Security Slug, Snail & Insect Bait Metaldehyde	2.0	2.37
Carbaryl	5.0	4.95

Table 1. Analysis of Individual Samples (continued)

Manufacturer, Product Name & Active Ingredient	% Guaranteed	% Found
Security Super D II Weedone 2,4-D(diethanolamine salts)	13.8	14.0
Dicamba(diethanolamine salts)	1.4	1.30
Security Tomato & Vegetable Dust Maneb	6.0	*4.44
Carbaryl	5.0	5.50
Security Zineb Spray Zineb	75	*69.4
Zoecon Corp./Crop Protection Div. Maurik Aquaflow Insecticide Fluvalinate	22.3	22.9

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# Not tested quantitatively

Table 2. Summary for each manufacturer of number of products tested, number of guarantees for active ingredients, number of samples not meeting guarantee (deficient or excessive), and average percentage of guarantee.

Manufacturer	Number of products tested	Number of guarantees	Number of guarantees deficient(-) or excessive(+)	Average % of guarantee
Agway	22	35	0	101
Alina Chem.	1	4	0	92
American Cyanamid	1	3	0	110
Black Leaf Prod.	9	16	0	102
Bonide Chem.	7	11	1-	106
Boyle-Midway	4	8	0	108
Cadwell & Jones	1	1	0	95
Ced-O-Products	1	2	0	-
Chacon Chem.	1	1	0	110
Chevron	22	31	1+	104
Ciba-Geigy	4	5	0	101
Conn. Aerosols	18	40	0	98
Creative Products	1	2	0	114
Creative Sales	1	1	0	101
Dexol Indust.	10	13	1-	98
Dow Chem.	3	4	0	120
E.I. DuPont deNemours	1	1	0	100
Edsan Chem.	7	10	2+	116
Estech	16	30	13-, 1+	71
Farnam	1	1	0	101
FMC	3	3	1-	-
Grow Consumer Prod.	2	4	0	96
H. Krevit	3	3	3-	65
Hyponex	1	1	0	89
Lebanon Chem.	1	1	0	97
Lehn & Fink	2	2	0	105
Lesco	2	2	0	99
Mallinckrodt	1	1	0	102
Miller/Pratt Gabriel	12	18	1-	103
Miller/Science Prod.	3	3	0	100
MK Laboratories	3	5	0	98
Mobay Chem.	1	1	0	99
Monsanto	1	1	0	100
Northeast Packaging	1	1	0	100
NU-Method Pest Control	1	3	0	101
Nutrico	4	10	0	107
O.M. Scott & Sons	2	3	0	107
Old Fox Chem.	2	2	1-	78
Parrott Agro Indust.	21	36	4-	97
Pet Chem.	1	2	0	101
Pharmaceutical Research Labs.	6	11	0	103
Proctor & Gamble	1	3	1-	84
Rhone-Poulenc	1	1	0	99
Rigo	1	2	0	102
Rockland Chem.	4	8	1-	99
Savol Bleach	3	3	1-	102
Schultz	1	2	0	98
Science Prod.	2	3	0	104
Seacoast Labs.	5	7	0	101
Shell Chem.	1	1	0	100
Swift Agric. Chem.	3	7	0	114
Top Prod.	1	2	0	141
Union Carbide	1	2	0	102
Whitmire Res. Labs.	3	4	0	103
Why-Not Indust.	1	3	0	105
Woolfolk Chem.	16	27	2-	102
Zoecon	1	1	0	103
Total	249	408		