APPENDIX A

Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

(Includes Reportable Pesticide Sales, veterinary flea control product sales, anti-sapstain use and wood preservative use)

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Creosote	2,163,142	46.4%
CCA	824,100	17.7%
Mineral Oil (Insecticidal or Adjuvant)	317,108	6.8%
Didecyl Dimethyl Ammonium Chloride	174,606	3.7%
Pentachlorophenol	147,684	3.2%
Glyphosate	120,724	2.6%
Bacillus thuringiensis Berliner ssp kurstaki	85,765	1.8%
ACQ	74,448	1.6%
Sulphur	73,408	1.6%
Bacillus thuringiensis, Serotype H-14	39,153	0.84%
Mancozeb	34,888	0.75%
Chlorothalonil	33,505	0.72%
Metam	28,582	0.61%
Diazinon	27,074	0.58%
Captan	25,500	0.55%
Disodium Octaborate Tetrahydrate	24,679	0.53%
Mineral Oil (Herbicidal)	23,575	0.51%
Formaldehyde	21,822	0.47%
Lime Sulphur	20,524	0.44%
Copper Oxychloride (as Cu)	19,562	0.42%
Methyl Bromide	18,808	0.40%
Metiram	15,293	0.33%
Disodium Octaborate Tetrahydrate	14,908	0.32%
2,4-D Amine	14,756	0.32%
MCPA Esters	12,810	0.27%
Carbaryl	12,363	0.26%
Iodocarb	11,822	0.25%
Atrazine	11,535	0.25%
MCPA Amine Salts	9,125	0.20%
Quintozene	8,848	0.19%
Nonylphenoxypolyethoxyethanol	8,781	0.19%
Simazine	8,680	0.19%
Dazomet	8,179	0.18%
Fosetyl-Al	8,088	0.17%
Surfactant Blend	7,498	0.16%
Petroleum Hydrocarbon Blend	7,232	0.15%
Soap	6,846	0.15%
Dichlobenil	6,645	0.14%
Azinphos-Methyl	6,499	0.14%
Glyphosate, Trimethylsulfonium Salt	5,545	0.12%
Paraquat	5,418	0.12%
Napropamide	5,361	0.11%
Paraffin Base Mineral Oil (Adjuvant)	4,952	0.11%
Endosulfan	4,729	0.10%
Propiconazole	4,705	0.10%
Malathion	4,658	0.10%
Linuron	4,639	0.10%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Chlorpyrifos	4,561	0.10%
Iprodione	4,416	0.09%
Dimethoate	4,155	0.09%
Azoxystrobin	3,918	0.08%
S-Metolachlor And R-Enantiomer	3,892	0.08%
2,4-D LV Esters	3,735	0.08%
Dicamba	3,627	0.08%
Copper Hydroxide (as Cu)	3,524	0.08%
Mecoprop Amine Salts	3,452	0.07%
Trifluralin	3,408	0.07%
Benomyl	3,259	0.07%
Terbufos	3,210	0.07%
Octylphenoxypolyethoxyethanol	3,133	0.07%
Propamocarb Hydrochloride	3,082	0.07%
Bromoxynil	2,990	0.06%
Metalaxyl-M (Mefenoxam)	2,504	0.05%
Glufosinate Ammonium	2,330	0.05%
Ferbam	2,284	0.05%
Diquat	2,283	0.05%
Triallate	2,248	0.05%
Ziram	2,227	0.05%
ACZA	2,214	0.05%
Maleic Hydrazide	2,210	0.05%
Thiophanate-Methyl	2,171	0.05%
Fludioxonil	2,112	0.05%
Phosmet	2,088	0.04%
Tralkoxydim	2,064	0.04%
Pendimethalin	2,055	0.04%
Nicotine Present As Alkaloid Or As Sulphate	2,029	0.04%
Phosalone	1,878	0.04%
Triforine	1,841	0.04%
Paraffin Base Petroleum Oil	1,839	0.04%
Zineb	1,832	0.04%
Bentazon	1,784	0.04%
Imazamethabenz	1,760	0.04%
MCPA Potassium or Sodium Salt	1,663	0.04%
Fluazifop-P-Butyl	1,621	0.03%
Myclobutanil	1,613	0.03%
Ethalfluralin	1,546	0.03%
Naled	1,409	0.03%
Clopyralid	1,321	0.03%
Monolinuron	1,256	0.03%
Carbathiin	1,244	0.03%
Dichlorprop Ester	1,131	0.02%
Daminozide	1,107	0.02%
Thiram	1,098	0.02%
Fenhexamid	1,039	0.02%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Chloropicrin	998	0.02%
Acephate	985	0.02%
Methamidophos	984	0.02%
Fenoxaprop-P-Ethyl (Isomer)	915	0.02%
Sodium Hypochlorite	912	0.02%
2,4-DB	882	0.02%
Vinclozolin	852	0.02%
Sethoxydim	815	0.02%
Propiconazole	776	0.02%
Diuron	770	0.02%
Permethrin	724	0.02%
Ethephon	704	0.02%
Oxamyl	698	0.01%
Disodium Octaborate Tetrahydrate	694	0.01%
Mecoprop, Potassium Salt	686	0.01%
Chlormequat	683	0.01%
Amitrole	670	0.01%
Clodinafop-Propargyl	658	0.01%
Oxadiazon	649	0.01%
Dicofol	617	0.01%
EPTC	600	0.01%
Soap (Herbicidal)	556	0.01%
Terbacil	547	0.01%
Imidacloprid	528	0.01%
Polyoxyalkylated Alkyl Phosphate Ester	527	0.01%
Pirimicarb	515	0.01%
Carbofuran	484	0.01%
Fenbutatin Oxide	478	0.01%
Fluroxypyr 1-Methylheptyl Ester	457	0.01%
Triclopyr	450	0.01%
Siloxylated Polyether	450	0.01%
Tebufenozide	443	0.01%
Potassium Peroxymonosulfate Sulfate	440	0.01%
Boric Acid	439	0.01%
Metalaxyl	418	0.01%
Chloroneb	412	0.01%
Thifensulfuron Methyl	395	0.01%
Quizalofop P-Ethyl	380	0.01%
Kresoxim-Methyl	358	0.01%
Pyraclostrobin	347	0.01%
Picloram, Amine Salts	346	0.01%
Methomyl	338	0.01%
Spinosad	328	0.01%
Cyprodinil	325	0.01%
Abamectin	318	0.01%
Chlorpropham	315	0.01%
Quinclorac	301	0.01%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Prometryne Plus Related Active Triazines	294	0.01%
Dodemorph-Acetate	289	0.01%
Mecoprop Acid	279	0.01%
Zoxamide	272	0.01%
Metaldehyde	266	0.01%
Hydrogen Peroxide	250	0.01%
Lindane	249	0.01%
Picloram, Acid, Esters or Potassium Salt	246	0.01%
Pyridaben	244	0.01%
Tefluthrin	239	0.01%
Oxyfluorfen	209	0.004%
Piperonyl Butoxide	207	0.004%
Parathion	203	0.004%
Cypermethrin	199	0.004%
Aluminum Phosphide	196	0.004%
Cymoxanil	193	0.004%
Metribuzin	188	0.004%
Etridiazole	187	0.004%
4-(Cyclopropyl-Alpha-Hydroxy-Methylene)-3,5-Dioxo-Cyclohexane	178	0.004%
Oxine Benzoate	172	0.004%
Thiabendazole	153	0.003%
Tribenuron Methyl	143	0.003%
Surfactant Mixture	142	0.003%
Clethodim	141	0.003%
Hexazinone	131	0.003%
Monosodium Methane Arsonate (as As)	128	0.003%
Zinc Phosphide	125	0.003%
Propyzamide	121	0.003%
Acetamiprid	119	0.003%
Nicosulfuron	116	0.002%
Florasulam	116	0.002%
Flucarbazone	111	0.002%
Cyanazine	96.0	0.002%
Cyromazine	88.8	0.002%
Cyhalothrin-Lambda	87.9	0.002%
Chlorthal	82.5	0.002%
Naphthalene Acetic Acid (Present As Ethyl Ester, Sodium Salt, Or As Ammonium Salt)	79.3	0.002%
Pymetrozine	73.1	0.002%
Difenoconazole	71.5	0.002%
Deltamethrin	71.2	0.002%
Imazethapyr	70.0	0.001%
Metsulfuron-Methyl	62.9	0.001%
Silica Aerogel	62.4	0.001%
1-Bromo-3-Chloro-5,5-Dimethylhydantoin	61.0	0.001%
Bendiocarb	60.7	0.001%
Kinoprene	57.9	0.001%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Isoxaflutole	56.4	0.001%
Bromacil	55.0	0.001%
2,4-D Acid	52.4	0.001%
Dichloran	48.9	0.001%
Oxycarboxin	48.5	0.001%
6-Benzylaminopurine (Or: 6-Benzyladenine)	47.7	0.001%
Isoxaben	47.7	0.001%
Strychnine	47.0	0.001%
Silicon Dioxide (Diatomaceous Earth)	46.5	0.001%
Diclofop-Methyl	45.4	0.001%
Propoxur	44.2	0.001%
Cyfluthrin	44.0	0.001%
Maneb	43.2	0.001%
Clofentezine	42.1	0.001%
Pyrethrins	38.3	0.001%
N-Octyl Bicycloheptene Dicarboximide	38.1	0.001%
Sodium Metaborate Tetrahydrate	37.5	0.001%
Acetic Acid	37.5	0.001%
Indar	36.6	0.001%
Methoxychlor	34.1	0.001%
Copper Sulphate (as Cu)	32.5	0.001%
Dichlorvos	31.3	0.001%
Propetamphos	31.2	0.001%
Desmedipham	30.0	0.001%
Phenmedipham	30.0	0.001%
Metolachlor	29.9	0.001%
Didecyl Dimethyl Ammonium Chloride	29.3	0.001%
Potassium Salts of Fatty Acids	27.2	0.001%
Ethametsulfuron-Methyl	26.8	0.001%
Methyl Anthranilate	26.1	0.001%
Bensulide	24.3	0.001%
2-(Hydroxymethyl)-2-Nitro-1,3-Propanediol	23.6	0.001%
Dimethomorph	22.5	<0.001%
Aminoethoxyvinylglycine	20.8	<0.001%
(E,E)-8,10-Dodecadien-1-Ol + 1-Dodecanol + 1-Tetradecanol	20.1	<0.001%
O-Phenylphenol	19.8	<0.001%
Water Soluble Dyes	18.7	<0.001%
Imazamox	18.7	<0.001%
Flusilazole	18.1	<0.001%
Dried Blood	18.0	<0.001%
O-Benzyl-P-Chlorophenol	17.2	<0.001%
Sodium Chlorate	16.6	<0.001%
Sulfosulfuron	16.4	<0.001%
Methoprene	16.1	<0.001%
MCPB Sodium Salt	15.8	<0.001%
Pyrazon	15.5	<0.001%
Amitraz	14.6	<0.001%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Dodine	14.3	<0.001%
Streptomycin	14.0	<0.001%
Gibberellins A4A7	13.8	<0.001%
Poly[Oxyethylene(Dimethyliminio)Ethylene(Dimethyliminio)Ethylene Dichlo	13.5	<0.001%
Fonofos	12.0	<0.001%
Gibberellic Acid A3	9.42	<0.001%
N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Chlo	8.57	<0.001%
Fenthion	8.06	<0.001%
(Z,Z)-3, 13-Octadecadienyl Acetate	7.77	<0.001%
Tetrachlorvinphos	6.85	<0.001%
Brassica Hirta White Mustard Seed Powder	5.66	<0.001%
Rimsulfuron	5.27	<0.001%
Chinomethionat	5.00	<0.001%
Naphthaleneacetamide	4.71	<0.001%
P-Tert Amyl Phenol	3.81	<0.001%
N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride	3.72	<0.001%
Sodium Alpha-Olefin Sulfonate	3.59	<0.001%
Rotenone	3.42	<0.001%
Hydramethylnon	2.91	<0.001%
Bacillus thuringiensis ssp. tenebrionis	2.88	<0.001%
Fluvalinate	2.75	<0.001%
Naptalam Present As Acid Or As Sodium Salt	2.40	<0.001%
Streptomyces griseoviridis Strain K61	2.21	<0.001%
Dinocap	2.19	<0.001%
Tebuconazole	1.92	<0.001%
Paclobutrazol	1.90	<0.001%
Di-N-Propyl Isocinchomeronate	1.63	<0.001%
Diflubenzuron	1.63	<0.001%
D-Trans Allethrin	1.54	<0.001%
Trichlorfon	1.28	<0.001%
Anilazine	1.00	<0.001%
Coumaphos	0.99	<0.001%
Triasulfuron	0.94	<0.001%
Fenvalerate	0.64	<0.001%
Polyacrylamide	0.61	<0.001%
Triflusulfuron Methyl	0.59	<0.001%
Bromadiolone	0.53	<0.001%
Brodifacoum	0.42	<0.001%
Triticonazole	0.29	<0.001%
Uniconazole-P	0.18	<0.001%
(Z)-11-Tetradecenyl Acetate (Or: Cis-11-Tetradecen-1-Yl) Acetate)	0.18	<0.001%
Diphacinone	0.15	<0.001%
Chlorophacinone	0.13	<0.001%
Pyriproxyfen	0.11	<0.001%
Capsaicin	0.088	<0.001%
Ancymidol	0.086	<0.001%

Appendix A
Total Quantities (kg) of Pesticide Active Ingredients Sold or Used in British Columbia in 2003 (Excluding Domestic Pesticides)

Active Ingredient	Quantity (kg)	Percentage of Total
Difethialone	0.081	<0.001%
Cholecalciferol	0.080	<0.001%
(Z)-9-Tricosene	0.077	<0.001%
Ferric Phosphate	0.076	<0.001%
Denatonium Benzoate	0.026	<0.001%
4-Aminopyridine	0.011	<0.001%
Bromethalin	0.006	<0.001%
Grand Total	**4,666,709**	**100%**

APPENDIX B

Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003, by Region

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
(E,E)-8,10-Dodecadien-1-Ol + 1-Dodecanol + 1-Tetradecanol (Codling moth pheromone)			20.12				20.1
(Z)-11-Tetradecenyl Acetate (Or: Cis-11-Tetradecen-1-Yl) Acetate)		0.18					0.18
(Z)-9-Tricosene	0.0026	0.05	0.0025	0.00017	0.0005	0.023	0.08
(Z,Z)-3, 13-Octadecadienyl Acetate			7.77				7.77
1-Bromo-3-Chloro-5,5-Dimethylhydantoin	15.26	45.78					61.0
2-(Hydroxymethyl)-2-Nitro-1,3-Propanediol		23.55					23.6
2,4-D Acid		23.75	11.89		0.25	16.46984	52.4
2,4-D Amine	484.40	6272	4867	81.36	818.34	2232.86	14,756
2,4-D LV Esters	69.69	707.08	724.32	6.58	432.48	1794.70	3,735
2,4-DB		31.25	445.75		404.00	1.12	882
4-(Cyclopropyl-Alpha-Hydroxy-Methylene)-3,5-Dioxo-Cyclohexane	12.81	155.48	9.40				178
4-Aminopyridine		0.011					0.0114
6-Benzylaminopurine (Or: 6-Benzyladenine)	0.036	0.54	47.12				47.7
Abamectin	28.79	283.94	5.09				318
Acephate	42.75	750.51	191.70				985
Acetamiprid		38.32	80.44				119
Acetic Acid	5.00	30.00	2.50				37.5
Aluminum Phosphide		196.45					196
Aminoethoxyvinylglycine			20.78				20.8
Amitraz			14.62				14.6
Amitrole	8.00	542.85	119.02				670
Ancymidol		0.084	0.00106				0.0855
Anilazine		1.00					1.00
Atrazine	644.26	9696	1194				11,535
Azinphos-Methyl		1240	5259				6,499
Azoxystrobin	23.75	3828	66.34				3,918
Bacillus thuringiensis Berliner ssp. *kurstaki*	24.00	5177	12407				17,608
Bacillus thuringiensis ssp. *tenebrionis*			2.88				2.88
Bacillus thuringiensis , Serotype H-14	30.00	38778	335		10.00		39,153
Bendiocarb		43.32	17.40				60.7
Benomyl	4.00	3035	219.88				3,259
Bensulide		24.31					24.3
Bentazon	225.20	1501	28.40			29.95	1,784
Boric Acid		438.84					439
Brassica Hirta White Mustard Seed Powder			5.66				5.66
Brodifacoum	0.035	0.36	0.0081	0.0099	0.00174	0.000405	0.42
Bromacil		31.21	7.13		0.15	16.48	55.0

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
Bromadiolone		0.53					0.53
Bromethalin		0.006	0.000034				0.00581
Bromoxynil	38.08	617	376.32		17.92	1940.41	2,990
Capsaicin			0.074	0.0135			0.0878
Captan	196.01	22885	2419				25,500
Carbaryl	16.08	1630	10306	3.85	2.70	404.46	12,363
Carbathiin	45.00	211.052	75.29		82.60	830.53	1,244
Carbofuran	1.92	478.08	3.84				484
Chinomethionat			5.00				5.00
Chlormequat	5.78	657.89	19.71				683
Chloroneb		396.56	15.60				412
Chlorophacinone		0.033	0.091	0.0021	0.001		0.13
Chlorothalonil	997.88	30042	2460			5.00	33,505
Chlorpropham	5.60	309.80					315
Chlorpyrifos	322.76	3929	280			28.80	4,561
Chlorthal			82.50				82.5
Cholecalciferol		0.080					0.0796
Clethodim		14.40				126.58	141
Clodinafop-Propargyl			4.51			653.57	658
Clofentezine	4.26	34.53	3.31				42.1
Clopyralid	1.60	91.91	31.26		10.08	1187	1,321
Copper Hydroxide (as Cu)	454.36	2871	198.86				3,524
Copper Oxychloride (as Cu)	106.50	13815	5639	2			19,562
Copper Sulphate (as Cu)	8.72	12.85	10.77		0.20		32.5
Coumaphos	0.78	0.057			0.150		0.99
Cyanazine	4.80	67.20	24.00				96.0
Cyfluthrin		43.81		0.16	0.005		44.0
Cyhalothrin-Lambda	0.12	18.89	5.15			63.70	87.9
Cymoxanil	21.60	171.72					193
Cypermethrin	1.66	155.25	41.66	0.113	0.435		199
Cyprodinil		90.00	235.13				325
Cyromazine		77.25	11.59				88.8
Daminozide	12.33	1086.30	8.50				1,107
Dazomet	137.20	8042					8,179
Deltamethrin	0.10	41.15	5.45			24.48	71.2
Denatonium Benzoate		0.0025			0.024		0.0265
Desmedipham	1.50	27.00	1.50				30.0

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
Diazinon	253.81	16831	9973	10.61	4.08	1.50	27,074
Dicamba	133.59	1635	678.28	2.05	20.09	1157.55	3,627
Dichlobenil	41.40	6258	343.20		0.60	1.28	6,645
Dichloran		48.87					48.9
Dichlorprop Ester	73.50	742.00	51.80	7.00	12.00	244.50	1,131
Dichlorvos		29.26	2.03				31.3
Diclofop-Methyl		45.44					45.4
Dicofol	7.65	194.54	414.84				617
Didecyl Dimethyl Ammonium Chloride	0.90	23.87	4.50				29.3
Difenoconazole			2.70			68.76	71.5
Difethialone		0.081	0.000375				0.0814
Diflubenzuron		1.50	0.125				1.63
Dimethoate	24.00	2885	1246				4,155
Dimethomorph		22.50					22.5
Dinocap		0.78	1.41				2.19
Di-N-Propyl Isocinchomeronate		0.49			1.12	0.016	1.63
Diphacinone		0.14	0.015				0.15
Diquat	67.92	1750	97.10			367.83	2,283
Disodium Octaborate Tetrahydrate		694.43					694
Diuron		756.80	12.80		0.125		770
Dodemorph-Acetate	13.60	254.24	21.02				289
Dodine			14.30				14.3
Dried Blood	3.99	3.00	7.99		3.00		18.0
D-Trans Allethrin	0.009	0.030				1.50	1.54
Endosulfan	29.50	1504	3195				4,729
EPTC	96.00	488.00	16.00				600
Ethalfluralin						1546	1,546
Ethametsulfuron-Methyl						26.80	26.8
Ethephon		367.20	336.96				704
Etridiazole	16.27	147.23	23.30				187
Fenbutatin Oxide	5.63	84.75	387.75				478
Fenhexamid	2.25	918.25	118.76				1,039
Fenoxaprop-P-Ethyl (Isomer)	1.74	5.65	0.08			907.84	915
Fenthion		0.46		0.36	5.65	1.59	8.06
Fenvalerate		0.20	0.00072	0.122	0.32		0.64
Ferbam	13.80	1929	341.59				2,284
Ferric Phosphate		0.076					0.076

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
Florasulam						115.77	116
Fluazifop-P-Butyl	6.00	143.00	70.00			1402	1,621
Flucarbazone						111.29	111
Fludioxonil	201.50	1910					2,112
Fluroxypyr 1-Methylheptyl Ester			1.73			455.17	457
Flusilazole		0.20	17.90				18.1
Fluvalinate	2.75						2.75
Fonofos			12.00				12.0
Formaldehyde	22.20	21717	82.88				21,822
Fosetyl-Al	186.22	6839	1063				8,088
Gibberellic Acid A3	0.18	0.32	8.91				9.42
Gibberellins A4A7	0.04	0.54	13.19				13.8
Glufosinate Ammonium	128.50	535	151.50			1515.20	2,330
Glyphosate	2351	45659	28096	132	3377	41108	120,724
Glyphosate, Trimethylsulfonium Salt	3.3	1234	1939		3.3	2365.401	5,545
Hexazinone		122.70	7.80				131
Hydramethylnon		2.91					2.91
Hydrogen Peroxide		250.05					250
Imazamethabenz						1760	1,760
Imazamox						18.68	18.7
Imazethapyr			10.584			59.40	70.0
Imidacloprid	9.30	260.1372	155.98				425
Indar			36.56				36.6
Iprodione	171.00	3355	890				4,416
Isoxaben		42.22	5.45				47.7
Isoxaflutole	7.50	30.24	18.69				56.4
Kinoprene	1.27	56.13	0.49				57.9
Kresoxim-Methyl	1.38	45.23	311.22	0.23			358
Lime Sulphur	186.78	6299	14038				20,524
Lindane	45.15	111.39	21.95		8.25	62.6808	249
Linuron	280.40	4305	55				4,639
Malathion	39.52	3412	965	15.00	166	60.50	4,658
Maleic Hydrazide		2210					2,210
Mancozeb	675.07	20002	14211				34,888
Maneb			16.00		0.50	26.66	43.2
MCPA Amine Salts	64.75	3954	211.50	20	78.63	4796.53	9,125
MCPA Esters	75.00	3619	393		34.12	8689.38	12,810

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
MCPA Potassium or Sodium Salt	108.00	90.25	10.08			1454	1,663
MCPB Sodium Salt	4.00	11.75					15.8
Mecoprop Acid	1.26	88.52	100.40		45.8	43.20	279
Mecoprop Amine Salts	261.28	1906	1134	19.40	2.1875	129.67	3,452
Mecoprop, Potassium Salt	36.00	633.00	16.50				686
Metalaxyl	0.84	319.94	97.54				418
Metalaxyl-M (Mefenoxam)	2.99	1820	675.20			5.51	2,504
Metaldehyde		261.55	4.56				266
Metam		24107	4475				28,582
Methamidophos	48.00	936.00					984
Methomyl	0.10	335.23	1.31	0.0068	0.02	0.92	338
Methoprene	1.39	10.19	1.39				13.0
Methoxychlor	2.50	10.00	21.60				34.1
Methyl Anthranilate		21.95	4.19				26.1
Methyl Bromide		9948					9,948
Metiram		371	14922				15,293
Metolachlor			29.92				29.9
Metribuzin		161.25	15.00			11.63	188
Metsulfuron-Methyl						62.94	62.9
Mineral Oil (Herbicidal)		23575					23,575
Mineral Oil (Insecticidal or Adjuvant)	911	36955	279212	30			317,108
Monolinuron		1256					1,256
Monosodium Methane Arsonate (as As)		128.00					128
Myclobutanil	11.21	301.29	1300				1,613
Naled	70.86	1335	3.27				1,409
N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Chloride		8.57					8.57
N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride		3.72					3.72
Naphthalene Acetic Acid (Present As Ethyl Ester, Sodium Salt, Or As Ammonium Salt)			79.28				79.3
Naphthaleneacetamide			4.71				4.71
Napropamide	59.75	5065	225			10.86	5,361
Naptalam Present As Acid Or As Sodium Salt			2.40				2.40
Nicosulfuron	6.08	64.25	44.58		1.5		116
Nicotine Present As Alkaloid Or As Sulphate	34.56	1972	22.47				2,029
N-Octyl Bicycloheptene Dicarboximide	0.01	35.56	0.80	0.034026	1.679506	0.0132	38.1
Nonylphenoxypolyethoxyethanol	468.00	5823	1696		36.60	757.0541	8,781
O-Benzyl-P-Chlorophenol		17.18					17.2
Octylphenoxypolyethoxyethanol	88.93	2571	473.51				3,133

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
O-Phenylphenol		19.76					19.8
Oxadiazon	2.72	577.49	69.01				649
Oxamyl		698.40					698
Oxine Benzoate	14.50	135.49	21.51		0.096		172
Oxycarboxin		34.65	13.80				48.5
Oxyfluorfen	12.40	183.52	13.02				209
Paclobutrazol	0.068	1.80	0.032				1.90
Paraffin Base Mineral Oil (Adjuvant)	531.20	2438	143			1839.54	4,952
Paraffin Base Petroleum Oil						1838.64	1,839
Paraquat	85.40	3537	1793			2.64	5,418
Parathion		201.60	1.20				203
Pendimethalin	98.80	467.40	1489				2,055
Permethrin	0.25	666.12	39.55	4.3625	1.04975	0.48	712
Petroleum Hydrocarbon Blend			26.56			7205	7,232
Phenmedipham	1.50	27.00	1.50				30.0
Phosalone			1878				1,878
Phosmet	2.00	103.12	1982	0.23	0.348		2,088
Picloram, Acid, Esters or Potassium Salt			144.00	2.592	24.00	75.78	246
Picloram, Amine Salts			206.05		72.54	67.42	346
Piperonyl Butoxide	0.23	173.5312	12.65	1.32	6.766352	9.14	204
Pirimicarb	11.50	273.88	229.38				515
Poly[Oxyethylene(Dimethyliminio)Ethylene(Dimethyliminio)Ethylene Dichloride]		13.50					13.5
Polyacrylamide		0.61					0.61
Polyoxyalkylated Alkyl Phosphate Ester		108.00				419.3438	527
Potassium Peroxymonosulfate Sulfate	8.56	423.42	7.49		0.0428		440
Potassium Salts of Fatty Acids		27.20					27.2
Prometryne Plus Related Active Triazines		288.93	4.66				294
Propamocarb Hydrochloride	4.33	3072	5.78				3,082
Propetamphos		31.25					31.2
Propiconazole	16.27	619.15	132.04			8.75	776
Propoxur	2.16	41.52	0.48				44.2
Propyzamide	12.48	99.18	1.02			8.16	121
P-Tert Amyl Phenol		3.81					3.81
Pymetrozine	0.42	72.64					73.1
Pyraclostrobin		274.21	72.64				347
Pyrazon		15.48					15.5
Pyrethrins	0.03	32.36	2.92	0.227205	1.506028	0.015	37.1

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
Pyridaben	11.55	201.42	31.35				244
Quinclorac						301.13	301
Quintozene	187.50	5239	3422				8,848
Quizalofop P-Ethyl						379.94	380
Rimsulfuron	1.07	4.08	0.12				5.27
Rotenone	0.045	0.48	0.16	0.030	2.0847	0.624	3.42
Sethoxydim		328.73	21.54			464.72	815
Silica Aerogel		62.40					62.4
Silicon Dioxide (Diatomaceous Earth)		46.50					46.5
Siloxylated Polyether		136.80	312.79				450
Simazine	155.75	6023	2497	4.503			8,680
S-Metolachlor And R-Enantiomer	231.24	3214	446.90				3,892
Soap	86.86	5967	792.51				6,846
Soap (Herbicidal)	164.00	380.00	12.00				556
Sodium Alpha-Olefin Sulfonate			3.59				3.59
Sodium Chlorate			13.62		3.00		16.6
Sodium Hypochlorite		779.76	131.76				912
Sodium Metaborate Tetrahydrate			30.87		6.65		37.5
Spinosad	0.96	46.08	281.28				328
Streptomyces griseoviridis Strain K61		1.94	0.27				2.21
Streptomycin		2.37	11.64				14.0
Strychnine			46.96				47.0
Sulfosulfuron						16.36103	16.4
Sulphur	1126	28142	44139	1.98	0.18		73,408
Surfactant Blend	108.80	793.09	553.81		24	6018	7,498
Surfactant Mixture		43.20	98.77				142
Tebuconazole						1.92	1.92
Tebufenozide	1.92	102.72	338.40				443
Tefluthrin	31.80	206.46	0.60				239
Terbacil	1.60	292.80	252.83				547
Terbufos	60.00	3144	6.00				3,210
Tetrachlorvinphos		5.05		1.8084			6.85
Thiabendazole		152.50					153
Thifensulfuron Methyl						395.24	395
Thiophanate-Methyl	180.60	1587	403.55				2,171
Thiram	66.13	707.40	156.84			167.86	1,098
Tralkoxydim		1.60	640			1422.48	2,064

Appendix B
Quantities (kg) of Reportable Pesticides Sold in British Columbia in 2003 by Region

Active Ingredient	Region 1	Region 2	Region 3	Region 4	Region 5	Region 7	Grand Total
Triallate			13.62			2234.02	2,248
Triasulfuron						0.94	0.94
Tribenuron Methyl						142.7624	143
Trichlorfon						1.28	1.28
Triclopyr			33.60		2.4	413.99	450
Trifluralin	9.00	1126	55.77		4.50	2213.53	3,408
Triflusulfuron Methyl		0.59					0.59
Triforine	7.80	1607	226.20				1,841
Triticonazole						0.29	0.29
Uniconazole-P		0.18	0.0022				0.18
Vinclozolin	36.00	798.00	18.0000				852
Water Soluble Dyes		3.94	14.76				18.7
Zinc Phosphide		45.65	76.50	0.5	2.40		125
Zineb	16.00	1808	8.00				1,832
Ziram			2227				2,227
Zoxamide	23.52	248.64					272
Grand Total	**14,676**	**522,499**	**498,651**	**349**	**5,734**	**104,355**	**1,146,263**
Percent of Total	**1.28%**	**45.58%**	**43.50%**	**0.03%**	**0.50%**	**9.10%**	**100.00%**

APPENDIX C

PMRA Consolidated List of Formulants, 2005

Appendix C
PMRA Consolidated List of Formulants, 2005

Formulant Name	List
Adipic acid, bis(2-ethylhexyl) ester	1
Coal tar creosote	1
Dimethyl formamide	1
Dioctyl phthalate	1
Hydroquinone	1
Isophorone	1
Rhodamine B	1
Triorthocresylphosphate (listed in 2004, not on January 2005 list)	1
1,1-Difluoroethane	2
Nitromethane	2
Methyl methacrylate	2
Diethyl phthalate	2
Butyl benzyl phthalate	2
Fluorene	2
1,2,3-Benzotriazole	2
Methyl ethyl ketoxime	2
Butyl methacrylate	2
Ethylbenzene	2
alpha-Chlorotoluene	2
1,3-Diphenylguanidine	2
Triethanolamine	2
Adipic acid, dibutyl ester	2
1,2-Butylene oxide	2
Propene, 3-chloro-	2
1,2-Ethanediol	2
2-Methoxy-1-methylethanol	2
Methyl isobutyl ketone	2
Toluene	2
Cyclohexanone	2
Cyclohexane	2
Diethanolamine	2
Ethanol, 1-butoxy	2
Diethylene glycol monomethyl ether	2
Diethylene glycol monoethyl ether	2
Diethylene glycol monobutyl ether	2
Butyraldehyde	2

Appendix C
PMRA Consolidated List of Formulants, 2005

Formulant Name	List
Dimethyl phthalate	2
2-Mercaptobenzothiazole	2
(delta(sup 1,2')-Biindoline)-3,3'-dione	2
Zirconium oxide	2
Xylene	2
1-Butoxy-2-propanol	2
Potassium dichromate	2
Petroleum	2
Stoddard solvent	2
Tremolite	2
Silica, crystalline (quartz)	2
Asbestos, anthophyllite	2
Ethylenediamine hydrochloride	2
Isodecyl alcohol	2
Benzene, diethyl-	2
[2-(2-Methoxymethylethoxy)methylethoxy]propanol	2
Ethylmethylbenzene	2
Methyl-1H-benzotriazole	2
Isoparaffinic petroleum hydrocarbon	2
Gas oil, blend	2
Naphtha (petroleum), heavy alkylate	2
Naphtha (petroleum), light alkylate	2
Distillates (petroleum), alkylate	2
Mineral oil, petroleum distillates, solvent-refined	2
Mineral oil, petroleum distillates, solvent-refined	2
Mineral oil, petroleum distillates, solvent-refined	2
Extracts (petroleum), middle distillate solvent	2
Distillates (petroleum), acid treated light	2
Distillates (petroleum), hydrotreated middle	2
Distillates (petroleum), hydrotreated light	2
Naphtha	2
Mineral oil, petroleum distillates, hydrotreated (mild) heavy naphthenic	2
Mineral oil, petroleum distillates, hydrotreated (mild) light naphthenic	2
Distillates (petroleum), hydrotreated heavy paraffinic	2
Distillates (petroleum), hydrotreated light paraffinic	2
Distillates (petroleum), solvent dewaxed light paraffinic distillate	2

Appendix C
PMRA Consolidated List of Formulants, 2005

Formulant Name	List
Residual oils (petroleum), hydrotreated	2
Lubricating oils (petroleum), hydrotreated spent	2
Residual oils (petroleum), solvent-dewaxed	2
Distillates (petroleum), solvent-dewaxed heavy paraffinic	2
Naphtha (petroleum), hydrodesulfurized heavy	2
Solvent naphtha (petroleum), medium aliphatic	2
Solvent naphtha (petroleum), light aliphatic	2
Solvent naphtha (petroleum), heavy aromatic	2
Solvent naphtha (petroleum), light aromatic	2
Solvent naphtha (petroleum), heavy aliphatic	2
Distillates (petroleum), oxidized light	2
Paraffins (petroleum), normal C5-20	2
Fuels, diesel	2
Fuel oil, No. 1	2
Fuel oil, No. 4	2
Lubricating oils, refined use	2
Distillates (petroleum), cat. reformer fractionator	2
Benzene, (tetrapropenyl) derivatives	2
Naphtha (petroleum), light steam-cracked aromatic	2
Xylene range aromatic solvent	2
Lubricating oils (petroleum), C15-30, hydrotreated	2
Calcined diatomaceous earth	2
Distillates (petroleum), catalytic reformer fractionator residue, low-boiling, sulfonated, sodium salts	2
Isoparaffinic Hydrocarbon	2

APPENDIX D

Total Quantities (kg) of Pesticide Active Ingredients Applied by Agriculture and Landscape Services in The Lower Mainland (Region 2) in 2003

Appendix D - Table 1
Total Quantities (kg) of Pesticide Active Ingredients Applied by Landscape Services in the Lower Mainland (Region 2) in 2003

Active Ingredient	Total Use (kg)
2,4-D Amine	899
2,4-D LV Esters	13.7
Abamectin	0.038
Acephate	66.3
Acetic Acid	50.6
Amitrole	63.7
Ancymidol	0.00092
Azoxystrobin	7.53
Bacillus thuringiensis Berliner ssp kurstaki	33.6
Bendiocarb	1.00
Benomyl	2.53
Borax	0.032
Capsaicin	0.000024
Captan	8.05
Carbaryl	15.2
Chlormequat	0.059
Chlorothalonil	774
Chlorthal	0.75
Copper Oxychloride (as Cu)	62.0
Copper Sulphate (as Cu)	0.84
Cyromazine	0.0013
Daminozide	0.021
Deet	0.86
Diazinon	507
Dicamba	100
Dichlobenil	464
Dichlorprop Ester	14.6
Dicofol	0.025
Dienochlor	0.0032
Dimethoate	45.0
D-Trans Allethrin	0.0090
Etridiazole	0.0045
Fatty Acid	46.4
Fenbutatin Oxide	0.015
Ferric Phosphate	0.10
Ferrous sulphate	36.0
Fosetyl-Al	15.4
Glufosinate Ammonium	0.060
Glyphosate Acid	962
Glyphosate, Isopropylamine Salt	6.07
Iprodione	124
Kinoprene	0.063
Lime Sulphur	300
Malathion	22.4
Mancozeb	10.2
MCPA Amine Salts	35.8
MCPA Esters	5.00
Mecoprop Acid	2.50
Mecoprop Amine Salts	569

Appendix D - Table 1
Total Quantities (kg) of Pesticide Active Ingredients Applied by Landscape Services in the Lower Mainland (Region 2) in 2003

Active Ingredient	Total Use (kg)
Mecoprop, Potassium Salt	15.8
Metaldehyde	1.25
Methoxychlor	3.88
Methyl Anthranilate	2.90
Mineral Oil (Insecticidal)	1,171
Myclobutanil	12.7
Napropamide	4.50
Natural Gum Resins	2.29
N-Octyl Bicycloheptene Dicarboximide	0.065
Nonylphenoxypolyethoxyethanol	9.27
Oil Of Black Pepper	0.0038
Oxine Benzoate	2.30
Oxydemeton-Methyl	0.00060
Paraquat	10.7
Permethrin	12.2
Piperine	0.00014
Piperonyl Butoxide	0.041
Pirimicarb	0.10
Propiconazole	17.0
Propoxur	0.070
Pyrethrins	0.15
Quintozene	175
Simazine	73.7
Soap	654
Soap (Herbicidal)	7.20
Sulphur	36.8
Thiophanate-Methyl	57.9
Triforine	3.62
Grand Total	7,541

Appendix D - Table 2
Total Quantities (kg) of Pesticide Active Ingredients Applied by Agriculture Services in the Lower Mainland (Region 2) in 2003

Active Ingredient	Total Use (kg)
Methyl Bromide	2,026
Atrazine	1,810
Chlorothalonil	1,096
Chloropicrin	998
Mancozeb	941
Linuron	676
Glyphosate Acid	621
EPTC	367
Nonylphenoxypolyethoxyethanol	279
2,4-D Amine	263
Dicamba	258
Trifluralin	230
Diquat	167
Metalaxyl-M (Mefenoxam)	146
Mineral Oil (Insecticidal)	127
Captan	124
Propamocarb Hydrochloride	120
Paraquat	118
Paraffin Base Mineral Oil (Adjuvant)	114
Bentazon	107
Metalaxyl	70.08
Zoxamide	67.2
Cymoxanil	54
Diazinon	46.83
Picloram, Amine Salts	45.5
S-Metolachlor And R-Enantiomer	39.2
Tefluthrin	36
Lime Sulphur	35.64
Surfactant Blend	31.39
Glufosinate Ammonium	29.4
Simazine	25.002
Copper Hydroxide (as Cu)	24.0381
Nicosulfuron	23.385
Pirimicarb	20.7535
MCPA Amine Salts	20.625
Ferbam	18.848
Triforine	18.67125
Mecoprop Amine Salts	15.6655
Mecoprop, Potassium Salt	15
Cypermethrin	12.395
Desmedipham	12.225
Phenmedipham	12.225
Cyfluthrin	10.584
Soap	9.11525
Azinphos-Methyl	7.65
Propiconazole	6.234
Thiophanate-Methyl	5.11
Iprodione	4.4185
Fosetyl-Al	4.416

Appendix D - Table 2
Total Quantities (kg) of Pesticide Active Ingredients Applied by Agriculture Services in the Lower Mainland (Region 2) in 2003

Active Ingredient	Total Use (kg)
Chlorpyrifos	3.84
Napropamide	3.5
Sethoxydim	3.465
Malathion	3.2265
Acephate	2.72325
Pyraclostrobin	1.85
Etridiazole	1.4391
Fluazifop-P-Butyl	1.375
Copper Sulphate (as Cu)	1.3057
Metaldehyde	1.157
Bacillus thuringiensis Berliner ssp kurstaki	1.128
Fenbutatin Oxide	0.7175
Deltamethrin	0.54295
Chlormequat	0.48515228
Trichoderma harzianum rifai Strain Krl-Ag2	0.367
Daminozide	0.28815
Dichlobenil	0.2
Myclobutanil	0.197336
Bendiocarb	0.1772
Didecyl Dimethyl Ammonium Chloride	0.171
Abamectin	0.151829
Nicotine Present As Alkaloid Or As Sulphate	0.1333
Quintozene	0.1125
Naled	0.06912
Streptomyces griseoviridis Strain K61	0.064
Permethrin	0.061
Benomyl	0.04
Kinoprene	0.0325
Imidacloprid	0.00504
Pyridaben	0.0045
Ancymidol	0.00094248
Warfarin	0.00015
Bromadiolone	0.00001
Brodifacoum	0.0000005
Grand Total	11,338

APPENDIX E

Total Quantities (kg) of Pesticide Active Ingredients Applied by Golf Courses in the Lower Mainland (Region 2) in 2003

Appendix E
Total Quantities (kg) of Pesticide Active Ingredients Applied by Golf Courses in the Lower Mainland (Region 2) in 2003

Active Ingredient	Grand Total
2,4-D Amine	246
2,4-D LV Esters	0.25
4-(Cyclopropyl-Alpha-Hydroxy-Methylene)-3,5-Dioxo-Cyclohexane	42.9
Amitrole	0.017
Azoxystrobin	47.5
Carbaryl	331
Chloroneb	22.4
Chlorothalonil	1,877
Chlorthal	11.3
Copper Hydroxide (as Cu)	78.4
Diazinon	12.2
Dicamba	22.6
Dichlobenil	0.68
Diquat	0.26
Fosetyl-Al	6
Glyphosate Acid	243.6
Glyphosate, Isopropylamine Salt	84.3
Iprodione	373
Mancozeb	321
MCPA Amine Salts	1.05
Mecoprop Acid	26.7
Mecoprop Amine Salts	107
Mecoprop, Potassium Salt	51.8
Metalaxyl-M (Mefenoxam)	0.72
Methoprene	0.44
Mineral Oil (Insecticidal)	3.96
Myclobutanil	24.0
Propiconazole	118
Quintozene	3,149
Soap (Herbicidal)	32.0
Thiophanate-Methyl	204
Grand Total	**7,440**

APPENDIX F

Comparison of Reportable Pesticides Sold in British Columbia in 1991 to 2003

Appendix F - Table 1
Comparison of Reportable Pesticides Sold in British Columbia in 1991 to 2003
(Sorted Alphabetically)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
(E,E)-8,10-Dodecadien-1-Ol + 1-Dodecanol + 1-Tetradecanol (Codling moth pheromone)		3.78	1.03	20.1	+ 20.1	n/a
(Z)-11-Tetradecenyl Acetate (Or: Cis-11-Tetradecen-1-Yl) Acetate)				0.18	+ 0.18	n/a
(Z)-9-Tricosene				0.077	+ 0.08	n/a
(Z,Z)-3, 13-Octadecadienyl Acetate				7.77	+ 7.77	n/a
1,2-Ethanediol	87.0	34.8	34.8		- 87.0	-100%
1,3-Dichloropropene	7,262	4,800			- 7,262	-100%
1-Bromo-3-Chloro-5,5-Dimethylhydantoin				61.0	+ 61.0	n/a
1-Bromo-3-Chloro-5,5-Dimethylhydantoin	224	133			- 224	-100%
2-(Hydroxymethyl)-2-Nitro-1,3-Propanediol	3.07	27.4	26.5	23.6	+ 20.5	667%
2,4-D Acid	34	11.2	54.3	52.4	+ 18.6	55%
2,4-D Amine	12,327	12,340	13,903	14,756	+ 2,429	20%
2,4-D Ester	2,349	2,584	4,083	3,735	+ 1,386	59%
2,4-DB Esters	935	615	972	882	- 53.1	-6%
2,4-Xylenol (or 2,4-Dimethylphenol)		0.11	0.01		-	n/a
2-[[N[4-Methoxy-6-Methyl-1,3,5-Triazine-2-Yl]-N-Methylaminocarbonyl]Aminosulfonyl]-Methyl Ester Benzoic Acid		21.0			-	n/a
2-Chloro-N-[(4-Methoxy-6-Methyl-1,3,5-Triazin-2 Yl)Aminocarbonyl]Benzene Sulfonamide	9.41	0.38	1.13		- 9.4	-100%
4-(Cyclopropyl-Alpha-Hydroxy-Methylene)-3,5-Dioxo-Cyclohexane				178	+ 178	n/a
4-Aminopyridine	0.07	0.21	0.47	0.011	- 0.06	-83%
4-Chloro-3,5-Xylenol	0.19				- 0.19	-100%
6-Benzylaminopurine (or: 6-Benzyladenine)	1.55	8.61	9.75	47.7	+ 46.1	2967%
Abamectin			13.4	318	+ 318	n/a
Acephate	804	949	1,347	985	+ 181	23%
Acetamiprid				119	+ 119	n/a
Acetic Acid				37.5	+ 37.5	n/a
Allethrin	0.60	0.40			- 0.60	-100%
Aluminum Phosphide	200	736	151	196	- 4.0	-2%
Aminoethoxyvinylclycine			1.70		-	n/a
Aminoethoxyvinylglycine				20.8	+ 20.8	n/a
Amitraz		69.3	32.7	14.6	+ 14.6	n/a
Amitrole	1,308	1,258	1,062	670	- 638	-49%
Ammonia	18.2	729			- 18.2	-100%
Ammonium Sulphate	1,343				- 1,343	-100%
Ancymidol	0.13	0.17	0.27	0.086	- 0.05	-35%
Anilazine	99.0	579	5.00	1.00	- 98.0	-99%
Atrazine	22,898	10,928	9,991	11,535	- 11,363	-50%
Azinphos-Methyl	17,820	21,804	10,595	6,499	- 11,321	-64%
Azoxystrobin				3,918	+ 3,918	n/a
Bacillus thuringiensis Berliner ssp. kurstaki	3,095	12,283	17,895	17,608	+ 14,513	469%
Bacillus thuringiensis ssp. tenebrionis			100	2.88	+ 2.88	n/a
Bacillus thuringiensis, Serotype H-14	3,188	11,270	21,875	39,153	+ 35,965	1128%
Bendiocarb	346	216	118	60.7	- 286	-82%
Benomyl	3,689	3,603	4,369	3,259	- 430	-12%
Bensulide		9.60		24.3	+ 24.3	n/a
Bentazon	1,433	1,377	1,314	1,784	+ 351	25%
Boracic Acid (Boric Acid)	59.6	690	422	439	+ 379	637%
Borax			60.0		-	n/a
Brassica Hirta White Mustard Seed Powder				5.66	+ 5.66	n/a
Brodifacoum	0.21	0.34	0.60	0.42	+ 0.21	100%
Bromacil	912	798	351	55.0	- 857	-94%
Bromadiolone	0.43	0.43	0.72	0.53	+ 0.10	24%

Appendix F - Table 1
Comparison of Reportable Pesticides Sold in British Columbia in 1991 to 2003
(Sorted Alphabetically)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Bromethalin				0.006	+ 0.01	n/a
Bromoxynil	2,306	1,053	2,089	2,990	+ 684	30%
Butoxypolypropylene Glycol	3.73				- 3.7	-100%
Butylate	384	80.0			- 384	-100%
Capsaicin			0.51	0.088	+ 0.09	n/a
Captafol	9.60				- 9.6	-100%
Captan	28,451	29,160	27,498	25,500	- 2,951	-10%
Carbaryl	7,274	8,984	9,271	12,363	+ 5,089	70%
Carbathiin	935	889	705	1,244	+ 309	33%
Carbofuran	1,021	997	478	484	- 537	-53%
Chinomethionat	237	295	78.0	5.00	- 232	-98%
Chloramben	57.6				- 57.6	-100%
Chlormequat	833	997	1,388	683	- 150	-18%
Chloroneb	152	727	78.0	412	+ 261	172%
Chlorophacinone	0.24	0.14	0.19	0.13	- 0.12	-48%
Chloropicrin	203				- 203	-100%
Chlorothalonil	3,721	15,871	26,640	33,505	+ 29,783	800%
Chloroxuron	59.4				- 59.4	-100%
Chlorpropham	601	1,944	635	315	- 286	-48%
Chlorpyrifos	4,436	5,552	4,466	4,561	+ 125	3%
Chlorthal	1,034	1,406	165	82.5	- 952	-92%
Cholecalciferol	0.19	1.21	0.17	0.080	- 0.11	-58%
Clethodim		38.9	44.8	141	+ 141	n/a
Clodinafop-Propargyl		141	445	658	+ 658	n/a
Clofentezine	6.75	43.1	517	42.1	+ 35.3	524%
Clopyralid	378	376	1,121	1,321	+ 944	250%
Coal Tar Acids	0.68				- 0.68	-100%
Coal Tar Oils	2.40				- 2.4	-100%
Copper Hydroxide (as Cu)				3,524	+ 3,524	n/a
Copper Oxychloride (as Cu)	10,202	16,316	14,699	19,562	+ 9,360	92%
Copper Sulphate (as Cu)	8.25	3.14	4.11	32.5	+ 24.3	294%
Copper Triethanolamine Complex	276	96.5	24.0		- 276	-100%
Coumaphos	22.6	3.11	0.58	1.0	- 21.7	-96%
Creosote	4.00				- 4.0	-100%
Crotoxyphos	2.44				- 2.4	-100%
Cupric Hydroxide	634	6,023	6,920		- 634	-100%
Cyanazine	74.8		9.60	96.0	+ 21.2	28%
Cycloate	115	43.2	14.4		- 115	-100%
Cyfluthrin			23.0	44.0	+ 44.0	n/a
Cyhalothrin-Lambda			77.0	87.9	+ 87.9	n/a
Cymoxanil				193	+ 193	n/a
Cypermethrin	84.6	258	243	199	+ 115	135%
Cyprodinil			361	325	+ 325	n/a
Cyromazine			20.6	88.8	+ 88.8	n/a
Daminozide	549	455	570	1,107	+ 558	102%
Dazomet	3,450	5,370	10,035	8,179	+ 4,729	137%
Deltamethrin	30.7	43.0	33.8	71.2	+ 40.5	132%
Denatonium Benzoate		0.12	0.03	0.026	+ 0.03	n/a
Desmedipham		24.8	25.5	30.0	+ 30.0	n/a
Diazinon	19,643	22,552	24,563	27,074	+ 7,432	38%
Dicamba	5,596	3,098	3,269	3,627	- 1,969	-35%
Dichlobenil	5,533	5,575	4,981	6,645	+ 1,111	20%
Dichlone	815	36.0	1.00		- 815	-100%
Dichloran	24.0	3.00	122	48.9	+ 24.9	104%
Dichlorprop Ester	414	207	161	1,131	+ 717	173%
Dichlorvos	130	62.0	137	31.3	- 99.2	-76%

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Comparison of Reportable Pesticides Sold in British Columbia in 1991 to 2003
(Sorted Alphabetically)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Diclofop-Methyl	3,593	304	128	45.4	- 3,548	-99%
Dicofol	735	466	313	617	- 118	-16%
Didecyl Dimethyl Ammonium Chloride	0.11	1.18	2.02	29.3	+ 29.2	26035%
Dienochlor	246	645	162		- 246	-100%
Difenoconazole			10.3	71.5	+ 71.5	n/a
Difenzoquat	1,889	68.0	64.0		- 1,889	-100%
Difethialone				0.081	+ 0.08	n/a
Diflubenzuron				1.63	+ 1.63	n/a
Dimethoate	2,999	7,702	4,275	4,155	+ 1,156	39%
Dimethomorph			347	22.5	+ 22.5	n/a
Dinocap	114	77.9	1.77	2.19	- 112	-98%
Dinoseb	7,233	6.00	48.0		- 7,233	-100%
Di-N-Propyl Isocinchomeronate	10.5	0.73	0.30	1.63	- 8.8	-84%
Diphacinone	0.17	0.17	0.16	0.15	- 0.02	-13%
Diphenamid	4.00				- 4.0	-100%
Diphenylamine	805	429			- 805	-100%
Diquat	1,374	1,837	1,641	2,283	+ 908	66%
Disodium Octaborate Tetrahydrate			591	694	+ 694	n/a
Disulfoton	702	556	343		- 702	-100%
Dithiopyr			0.48		-	n/a
Diuron	1,641	3,015	4,906	770	- 871	-53%
DNOC, Sodium Salt	386				- 386	-100%
Dodemorph-Acetate	54.4	320	480	289	+ 234	431%
Dodine	7,281	81.9	91.0	14.3	- 7,267	-100%
Dried Blood				18.0	+ 18.0	n/a
D-Trans Allethrin	10.0	7.94	1.48	1.54	- 8.5	-85%
Endosulfan	6,857	7,308	4,712	4,729	- 2,129	-31%
EPTC	5,592	4,496	2,616	600	- 4,992	-89%
Ergocalciferol	0.23				- 0.23	-100%
Ethalfluralin	26,917	5,033	2,289	1,546	- 25,371	-94%
Ethametsulfuron-Methyl	20.5	27.3	42.4	26.8	+ 6.28	31%
Ethephon	479	532	609	704	+ 226	47%
Ethion	245	3.00			- 245	-100%
Ethoxyquin	315	20.3			- 315	-100%
Etridiazole	169	201	173	187	+ 17.4	10%
Fatty Acid		162			-	n/a
Fenbutatin Oxide	206	351	78.8	478	+ 272	132%
Fenhexamid			102	1,039	+ 1,039	n/a
Fenoxaprop-Ethyl	609	5.96	0.36		- 609	-100%
Fenoxaprop-P-Ethyl (Isomer)		1,180	565	915	+ 915	n/a
Fensulfothion	211				- 211	-100%
Fenthion	37.3	9.35	7.18	8.06	- 29.3	-78%
Fenvalerate	7.40	4.76	1.20	0.64	- 6.8	-91%
Ferbam	730	850	1,854	2,284	+ 1,554	213%
Ferric Phosphate				0.076	+ 0.08	n/a
Flamprop-Methyl	427		1.85		- 427	-100%
Flamprop-M-Methyl	70.4	19.4	1.16		- 70.4	-100%
Florasulam				116	+ 116	n/a
Fluazifop-Butyl	527	166	122		- 527	-100%
Fluazifop-P-Butyl	720	2,165	1,056	1,621	+ 901	125%
Flucarbazone				111	+ 111	n/a
Flucythrinate	4.79	0.08			- 4.8	-100%
Fludioxonil				2,112	+ 2,112	n/a
Fluroxypyr 1-Methylheptyl Ester			793	457	+ 457	n/a
Flusilazole			7.50	18.1	+ 18.1	n/a
Fluvalinate			0.24	2.75	+ 2.75	n/a

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(Sorted Alphabetically)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Folpet	4,285	70.0	765		- 4,285	-100%
Fonofos	3,796	6,292	90.0	12.0	- 3,784	-100%
Formaldehyde	3,007	14,342	25,495	21,822	+ 18,815	626%
Formetanate Hydrochloride	14.7	59.3	55.2		- 14.7	-100%
Fosetyl-Al			14,451	8,088	+ 8,088	n/a
Gibberellins + Gibberellic Acid	2.29	13.88	18.49	23.18	+ 20.9	910%
Glufosinate Ammonium		167	1,484	2,330	+ 2,330	n/a
Glycolic Acid		2.02	7.84		-	n/a
Glyphosate	110,157	124,698	135,573	120,724	+ 10,567	10%
Glyphosate, Mono-Ammonium Salt			158		-	n/a
Glyphosate, Trimethylsulfonium Salt			10,176	5,545	+ 5,545	n/a
Hexazinone	156	58.9	213	131	- 25.0	-16%
Hydramethylnon	0.18	21.6	7.98	2.91	+ 2.73	1517%
Hydrogen Peroxide				250	+ 250	n/a
Imazamethabenz	589	1,152	1,528	1,760	+ 1,171	199%
Imazamox			31.3	18.7	+ 18.7	n/a
Imazapyr		34.2	57.0		-	n/a
Imazethapyr		59.0	65.0	70.0	+ 70.0	n/a
Imidacloprid			188	425	+ 425	n/a
Indar				36.6	+ 36.6	n/a
Iprodione	1,204	3,320	5,477	4,416	+ 3,213	267%
Isoxaben			30.1	47.7	+ 47.7	n/a
Isoxaflutole				56.4	+ 56.4	n/a
Kinoprene	4.99	82.4	47.5	57.9	+ 52.9	1061%
Kresoxim-Methyl				358	+ 358	n/a
Lime Sulphur	8,835	20,565	10,851	20,524	+ 11,689	132%
Lindane (Gamma-BHC)	326	272	239	249	- 76.9	-24%
Linuron	1,990	3,900	3,533	4,639	+ 2,649	133%
Malathion	12,094	6,523	6,691	4,658	- 7,436	-61%
Maleic Hydrazide	2,576	2,672	3,126	2,210	- 366	-14%
Mancozeb	29,511	41,907	44,682	34,888	+ 5,377	18%
Maneb	3,621	55.7	85.0	43.2	- 3,578	-99%
MCPA Amine Salts	11,382	8,065	9,625	9,125	- 2,257	-20%
MCPA Esters	4,973	7,697	10,847	12,810	+ 7,838	158%
MCPA Potassium or Sodium Salt	922	1,729	996	1,663	+ 741	80%
MCPB Sodium Salt	173	72.0	52.5	15.8	- 157	-91%
M-Cresol	0.07	0.11	0.011		- 0.07	-100%
Mecoprop Acid	18.9	30.2	10.7	279	+ 260	1377%
Mecoprop Amine Salts	2,882	4,290	3,533	3,452	+ 570	20%
Mecoprop, Potassium Salt	433	234	768	686	+ 252	58%
Metalaxyl	982	1,704	3,463	418	- 563	-57%
Metalaxyl-M (Mefenoxam)			4.46	2,504	+ 2,504	n/a
Metaldehyde	21.0	4.50		266	+ 245	1167%
Metam	27,437	20,422	30,855	28,582	+ 1,145	4%
Methamidophos	2,947	1,910	1,500	984	- 1,963	-67%
Methidathion	3,732	1,174	130		- 3,732	-100%
Methiocarb	4.60	25.6	6.72		- 4.6	-100%
Methomyl	346	439	128	338	- 8.3	-2%
Methoprene	105	0.65	27.1	13.0	- 91.6	-88%
Methoxychlor	171	65.0	56.7	34.1	- 137	-80%
Methyl 3-[[[[(4-Methoxy-6-Methyl-1,3,5-Triazin-2-Yl) Amino] Carbonyl] Amino] Sulfonyl]-2-Thiophenecarboxylate	541	733			- 541	-100%
Methyl Anthranilate				26.1	+ 26.1	n/a
Methyl Bromide	21,958	21,888	9,353	9,948	- 12,010	-55%
Methyl Isothiocyanate	550	2,400			- 550	-100%

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Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Metiram	27,618	20,874	23,890	15,293	- 12,325	-45%
Metobromuron	192	48.0	88.0		- 192	-100%
Metolachlor	10,727	6,807	5,621	29.9	- 10,697	-100%
Metribuzin	722	634	287	188	- 534	-74%
Metsulfuron-Methyl	90.9	107	81.0	62.9	- 28.0	-31%
Mineral Oil (Herbicidal)	38,540	25,215	35,260	23,575	- 14,965	-39%
Mineral Oil (Insecticidal or Adjuvant)	162,245	206,440	261,845	317,108	+ 154,863	95%
Monolinuron	944	924	508	1,256	+ 312	33%
Monosodium Methane Arsonate (as As)		1,210	493	128	+ 128	n/a
Muscalure	0.40	0.28	0.12		- 0.40	-100%
Myclobutanil		860	1,204	1,613	+ 1,613	n/a
Naled	1,481	1,965	658	1,409	- 72.2	-5%
N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Chloride	20.7	135	49.5	8.57	- 12.1	-59%
N-Alkyl (5% C12, 60% C14, 30% C16, 5% C18) Dimethyl Benzyl Ammonium Chloride	8.80	0.45			- 8.8	-100%
N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride	0.37	4.33	4.76	3.72	+ 3.35	915%
N-Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride		0.45			-	n/a
Naphthalene Acetic Acid (Present As Ethyl Ester, Sodium Salt, Or As Ammonium Salt)	202	170	95.8	79.3	- 122	-61%
Naphthaleneacetamide	82.3	24.9	7.98	4.71	- 77.6	-94%
Napropamide	3,666	5,102	6,693	5,361	+ 1,695	46%
Naptalam Present As Acid Or As Sodium Salt	373	192	74.4	2.40	- 371	-99%
Nicosulfuron			123	116	+ 116	n/a
Nicotine Present As Alkaloid Or As Sulphate	1,280	1,066	1,142	2,029	+ 750	59%
N-Octyl Bicycloheptene Dicarboximide	55.7	41.6	56.5	38.1	- 17.6	-32%
Nonylphenoxypolyethoxyethanol	5,585	8,929	9,245	8,781	+ 3,196	57%
O-Benzyl-P-Chlorophenol	31.3	40.8	143	17.2	- 14.1	-45%
Octylphenoxypolyethoxyethanol	2,564	5,957	4,680	3,133	+ 569	22%
Oleoresin Capsicum		0.73			-	n/a
O-Phenylphenol	36.8	46.8	156	19.8	- 17.0	-46%
Oxadiazon		254	299	649	+ 649	n/a
Oxamyl	141	2,027	658	698	+ 557	395%
Oxine Benzoate	31.8	62.4	117	172	+ 140	440%
Oxycarboxin	6.15	44.6	22.8	48.5	+ 42.3	688%
Oxydemeton-Methyl	529	468	539		- 529	-100%
Oxyfluorfen	184	254	180	209	+ 25.0	14%
Paclobutrazol			0.45	1.90	+ 1.90	n/a
Paraffin Base Mineral Oil (Adjuvant)	7,599	5,912	7,266	4,952	- 2,647	-35%
Paraffin Base Petroleum Oil	6,342	5,579	1,548	1,839	- 4,504	-71%
Paraformaldehyde			25.5		-	n/a
Paraquat	6,342	5,579	4,817	5,418	- 924	-15%
Parathion	4,054	3,969	3,792	203	- 3,851	-95%
Pendimethalin	333	1,119	2,422	2,055	+ 1,722	517%
Pentachlorophenol	4.18				- 4.2	-100%
Permethrin	198	405	579	712	+ 514	259%
Petroleum Hydrocarbon Blend			3,849	7,232	+ 7,232	n/a
Phenmedipham		26.0	25.5	30.0	+ 30.0	n/a
Phenylmercuric Acetate	8.20				- 8.2	-100%
Phorate	878				- 878	-100%
Phosalone	2,025	2,753	1,628	1,878	- 148	-7%
Phosmet	2,604	4,535	2,228	2,088	- 516	-20%
Phosphoric Acid		81.6			-	n/a
Picloram, Acid, Esters or Potassium Salt	330	2,241	1,762	246	- 83.9	-25%

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Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Picloram, Amine Salts	41.1	27.0	43.6	346	+ 305	742%
Pindone	0.35	0.17			- 0.35	-100%
Pine Oil	0.34				- 0.34	-100%
Piperonyl Butoxide	139	301	245	204	+ 64.9	47%
Pirimicarb	720	624	712	515	- 206	-29%
Poly[Oxyethylene(Dimethyliminio)Ethylene(Dimethyliminio) Ethylene Dichloride]				13.5	+ 13.5	n/a
Polyacrylamide		17.6	4.84	0.61	+ 0.61	n/a
Polymerized Butenes	31.1		49.7		- 31.1	-100%
Polyoxyalkylated Alkyl Phosphate Ester			116	527	+ 527	n/a
Potassium Peroxymonosulfate Sulfate			119	440	+ 440	n/a
Potassium Salts of Fatty Acids				27.2	+ 27.2	n/a
Prometryne Plus Related Active Triazines	327	430	285	294	- 33.2	-10%
Propamocarb Hydrochloride			2,044	3,082	+ 3,082	n/a
Propargite	2,856	1,493	3.90		- 2,856	-100%
Propetamphos	16.3	7.59	4.18	31.2	+ 15.0	92%
Propiconazole	18.0	40.0	508	776	+ 758	4212%
Propoxur	832	765	257	44.2	- 788	-95%
Propyzamide	93.5	63.0	198	121	+ 27.3	29%
P-Tert Amyl Phenol	7.36	9.80	32.8	3.81	- 3.6	-48%
Putrescent Whole Egg Solids		1.11			-	n/a
Pymetrozine				73.1	+ 73.1	n/a
Pyraclostrobin				347	+ 347	n/a
Pyrazon			20.6	15.5	+ 15.5	n/a
Pyrazophos	12.0	9.00			- 12.0	-100%
Pyrethrins	27.6	47.5	49.3	37.1	+ 9.45	34%
Pyridaben			40.0	244	+ 244	n/a
Pyridate	306	1,060	634		- 306	-100%
Quinclorac			71.2	301	+ 301	n/a
Quintozene	5,813	15,581	7,253	8,848	+ 3,035	52%
Quizalofop P-Ethyl			228	380	+ 380	n/a
Quizalofop-Ethyl		448	31.2		-	n/a
Rimsulfuron			1.68	5.27	+ 5.27	n/a
Rotenone	0.61	2.13	2.28	3.42	+ 2.81	461%
Sethoxydim	943	784	1,466	815	- 128	-14%
Silica Aerogel		10.8	34.7	62.4	+ 62.4	n/a
Silicon Dioxide (Diatomaceous Earth)	13.4		128	46.5	+ 33.1	246%
Siloxylated Polyether			276	450	+ 450	n/a
Simazine	9,048	10,639	8,079	8,680	- 368	-4%
S-Metolachlor and R-Enantiomer				3,892	+ 3,892	n/a
Soap (Herbicidal)		564	568	556	+ 556	n/a
Soap (Insecticidal)	1,033	2,405	3,599	6,846	+ 5,814	563%
Sodium Alpha-Olefin Sulfonate				3.59	+ 3.59	n/a
Sodium Chlorate	6,416	12,930	3,881	16.6	- 6,399	-100%
Sodium Chlorite			12.9		-	n/a
Sodium Hypochlorite			611	912	+ 912	n/a
Sodium Metaborate Tetrahydrate	14,259	29,020	8,773	37.5	- 14,222	-100%
Spinosad				328	+ 328	n/a
Streptomyces griseoviridis Strain K61				2.21	+ 2.21	n/a
Streptomycin	3.47	15.6	21.4	14.0	+ 10.5	304%
Strychnine	61.1	49.2	30.0	47.0	- 14.2	-23%
Sulfaquinoxaline	0.16	0.19	0.005		- 0.16	-100%

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Ethalfluralin	26,917	5,033	2,289	1,546	- 25,371	-94%
Triallate *	20,584	5,958	3,289	2,248	- 18,337	-89%
Mineral Oil (Herbicidal)	38,540	25,215	35,260	23,575	- 14,965	-39%
Sodium Metaborate Tetrahydrate	14,259	29,020	8,773	37.5	- 14,222	-100%
Metiram	27,618	20,874	23,890	15,293	- 12,325	-45%
Methyl Bromide	21,958	21,888	9,353	9,948	- 12,010	-55%
Atrazine	22,898	10,928	9,991	11,535	- 11,363	-50%
Azinphos-Methyl	17,820	21,804	10,595	6,499	- 11,321	-64%
Metolachlor	10,727	6,807	5,621	29.9	- 10,697	-100%
Malathion	12,094	6,523	6,691	4,658	- 7,436	-61%
Dodine	7,281	81.9	91.0	14.3	- 7,267	-100%
1,3-Dichloropropene	7,262	4,800			- 7,262	-100%
Dinoseb	7,233	6.00	48.0		- 7,233	-100%
Ziram	8,656	5,976	3,539	2,227	- 6,429	-74%
Sodium Chlorate	6,416	12,930	3,881	16.6	- 6,399	-100%
EPTC	5,592	4,496	2,616	600	- 4,992	-89%
Paraffin Base Petroleum Oil	6,342	5,579	1,548	1,839	- 4,504	-71%
Folpet	4,285	70.0	765		- 4,285	-100%
Parathion	4,054	3,969	3,792	203	- 3,851	-95%
Fonofos	3,796	6,292	90.0	12.0	- 3,784	-100%
Methidathion	3,732	1,174	130		- 3,732	-100%
Maneb	3,621	55.7	85.0	43.2	- 3,578	-99%
Diclofop-Methyl	3,593	304	128	45.4	- 3,548	-99%
Captan	28,451	29,160	27,498	25,500	- 2,951	-10%
Propargite	2,856	1,493	3.90		- 2,856	-100%
Paraffin Base Mineral Oil (Adjuvant)	7,599	5,912	7,266	4,952	- 2,647	-35%
Trifluralin	5,857	4,125	2,347	3,408	- 2,449	-42%
Vernolate	2,284	16.0			- 2,284	-100%
MCPA Amine Salts	11,382	8,065	9,625	9,125	- 2,257	-20%
Sulfotep	2,131	3,665	1,593		- 2,131	-100%
Endosulfan	6,857	7,308	4,712	4,729	- 2,129	-31%
Dicamba	5,596	3,098	3,269	3,627	- 1,969	-35%
Methamidophos	2,947	1,910	1,500	984	- 1,963	-67%
Difenzoquat	1,889	68.0	64.0		- 1,889	-100%
Tallow Fatty Acid Amine Ethoxylate	1,836	559	88.0		- 1,836	-100%
Ammonium Sulphate	1,343				- 1,343	-100%
Chlorthal	1,034	1,406	165	82.5	- 952	-92%
Paraquat	6,342	5,579	4,817	5,418	- 924	-15%
Phorate	878				- 878	-100%
Diuron	1,641	3,015	4,906	770	- 871	-53%
Bromacil	912	798	351	55.0	- 857	-94%
Dichlone	815	36.0	1.00		- 815	-100%
Diphenylamine	805	429			- 805	-100%
Propoxur	832	765	257	44.2	- 788	-95%
Disulfoton	702	556	343		- 702	-100%
Amitrole	1,308	1,258	1,062	670	- 638	-49%
Cupric Hydroxide	634	6,023	6,920		- 634	-100%
Fenoxaprop-Ethyl	609	5.96	0.36		- 609	-100%
Metalaxyl	982	1,704	3,463	418	- 563	-57%
Methyl Isothiocyanate	550	2,400			- 550	-100%
Methyl 3-[[[[(4-Methoxy-6-Methyl-1,3,5-Triazin-2-Yl) Amino] Carbonyl] Amino] Sulfonyl]-2-Thiophenecarboxylate	541	733			- 541	-100%
Carbofuran	1,021	997	478	484	- 537	-53%
Metribuzin	722	634	287	188	- 534	-74%
Oxydemeton-Methyl	529	468	539		- 529	-100%

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Fluazifop-Butyl	527	166	122		- 527	-100%
Phosmet	2,604	4,535	2,228	2,088	- 516	-20%
Benomyl	3,689	3,603	4,369	3,259	- 430	-12%
Flamprop-Methyl	427		1.85		- 427	-100%
DNOC, Sodium Salt	386				- 386	-100%
Butylate	384	80.0			- 384	-100%
Thiabendazole	529	373	186	153	- 377	-71%
Naptalam Present As Acid Or As Sodium Salt	373	192	74.4	2.40	- 371	-99%
Simazine	9,048	10,639	8,079	8,680	- 368	-4%
Maleic Hydrazide	2,576	2,672	3,126	2,210	- 366	-14%
Ethoxyquin	315	20.3			- 315	-100%
Pyridate	306	1,060	634		- 306	-100%
Chlorpropham	601	1,944	635	315	- 286	-48%
Bendiocarb	346	216	118	60.7	- 286	-82%
Copper Triethanolamine Complex	276	96.5	24.0		- 276	-100%
Dienochlor	246	645	162		- 246	-100%
Ethion	245	3.00			- 245	-100%
Chinomethionat	237	295	78.0	5.00	- 232	-98%
Tebuthiuron	230	27.8	1.00		- 230	-100%
1-Bromo-3-Chloro-5,5-Dimethylhydantoin	224	133			- 224	-100%
Fensulfothion	211				- 211	-100%
Pirimicarb	720	624	712	515	- 206	-29%
Chloropicrin	203				- 203	-100%
Metobromuron	192	48.0	88.0		- 192	-100%
MCPB Sodium Salt	173	72.0	52.5	15.8	- 157	-91%
Chlormequat	833	997	1,388	683	- 150	-18%
Phosalone	2,025	2,753	1,628	1,878	- 148	-7%
Methoxychlor	171	65.0	56.7	34.1	- 137	-80%
Water Soluble Dyes	149	48.6	25.2	18.7	- 130	-87%
Sethoxydim	943	784	1,466	815	- 128	-14%
Naphthalene Acetic Acid (Present As Ethyl Ester, Sodium Salt, Or As Ammonium Salt)	202	170	95.8	79.3	- 122	-61%
Dicofol	735	466	313	617	- 118	-16%
Cycloate	115	43.2	14.4		- 115	-100%
Dinocap	114	77.9	1.77	2.19	- 112	-98%
Dichlorvos	130	62.0	137	31.3	- 99.2	-76%
Anilazine	99.0	579	5.00	1.00	- 98.0	-99%
Methoprene	105	0.65	27.1	13.0	- 91.6	-88%
Thiophanate-Methyl	2,261	1,079	1,527	2,171	- 89.4	-4%
1,2-Ethanediol	87.0	34.8	34.8		- 87.0	-100%
Tribasic Copper Sulphate	85.4		21.2		- 85.4	-100%
Picloram, Acid, Esters or Potassium Salt	330	2,241	1,762	246	- 83.9	-25%
Naphthaleneacetamide	82.3	24.9	7.98	4.71	- 77.6	-94%
Lindane (Gamma-BHC)	326	272	239	249	- 76.9	-24%
Naled	1,481	1,965	658	1,409	- 72.2	-5%
Flamprop-M-Methyl	70.4	19.4	1.16		- 70.4	-100%
Zinc Phosphide	194	162	122	125	- 69.4	-36%
Chloroxuron	59.4				- 59.4	-100%
Chloramben	57.6				- 57.6	-100%
2,4-DB Esters	935	615	972	882	- 53.1	-6%
Prometryne Plus Related Active Triazines	327	430	285	294	- 33.2	-10%
Polymerized Butenes	31.1		49.7		- 31.1	-100%
Fenthion	37.3	9.35	7.18	8.06	- 29.3	-78%
Metsulfuron-Methyl	90.9	107	81.0	62.9	- 28.0	-31%
Trichlorfon	26.8	9.36	2.30	1.28	- 25.5	-95%
Hexazinone	156	58.9	213	131	- 25.0	-16%

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Coumaphos	22.6	3.11	0.58	1.0	- 21.7	-96%
Ammonia	18.2	729			- 18.2	-100%
Tetrachlorvinphos	25.0	36.0	25.0	6.85	- 18.1	-73%
N-Octyl Bicycloheptene Dicarboximide	55.7	41.6	56.5	38.1	- 17.6	-32%
O-Phenylphenol	36.8	46.8	156	19.8	- 17.0	-46%
Formetanate Hydrochloride	14.7	59.3	55.2		- 14.7	-100%
Strychnine	61.1	49.2	30.0	47.0	- 14.2	-23%
O-Benzyl-P-Chlorophenol	31.3	40.8	143	17.2	- 14.1	-45%
Triadimefon	13.5				- 13.5	-100%
N-Alkyl (40% C12, 50% C14, 10% C16) Dimethyl Benzyl Ammonium Chloride	20.7	135	49.5	8.57	- 12.1	-59%
Pyrazophos	12.0	9.00			- 12.0	-100%
Tetradifon	11.3				- 11.3	-100%
Captafol	9.60				- 9.6	-100%
2-Chloro-N-[(4-Methoxy-6-Methyl-1,3,5-Triazin-2 Yl)Aminocarbonyl]Benzene Sulfonamide	9.41	0.38	1.13		- 9.4	-100%
Di-N-Propyl Isocinchomeronate	10.5	0.73	0.30	1.63	- 8.8	-84%
N-Alkyl (5% C12, 60% C14, 30% C16, 5% C18) Dimethyl Benzyl Ammonium Chloride	8.80	0.45			- 8.8	-100%
D-Trans Allethrin	10.0	7.94	1.48	1.54	- 8.5	-85%
Methomyl	346	439	128	338	- 8.3	-2%
Phenylmercuric Acetate	8.20				- 8.2	-100%
Fenvalerate	7.40	4.76	1.20	0.64	- 6.8	-91%
Flucythrinate	4.79	0.08			- 4.8	-100%
Methiocarb	4.60	25.6	6.72		- 4.6	-100%
Pentachlorophenol	4.18				- 4.2	-100%
Creosote	4.00				- 4.0	-100%
Diphenamid	4.00				- 4.0	-100%
Aluminum Phosphide	200	736	151	196	- 4.0	-2%
Butoxypolypropylene Glycol	3.73				- 3.7	-100%
P-Tert Amyl Phenol	7.36	9.80	32.8	3.81	- 3.6	-48%
Crotoxyphos	2.44				- 2.4	-100%
Coal Tar Oils	2.40				- 2.4	-100%
Coal Tar Acids	0.68				- 0.68	-100%
Allethrin	0.60	0.40			- 0.60	-100%
Muscalure	0.40	0.28	0.12		- 0.40	-100%
Pindone	0.35	0.17			- 0.35	-100%
Pine Oil	0.34				- 0.34	-100%
Warfarin	0.32	0.26	0.013		- 0.32	-100%
Ergocalciferol	0.23				- 0.23	-100%
4-Chloro-3,5-Xylenol	0.19				- 0.19	-100%
Sulfaquinoxaline	0.16	0.19	0.005		- 0.16	-100%
Chlorophacinone	0.24	0.14	0.19	0.13	- 0.12	-48%
Cholecalciferol	0.19	1.21	0.17	0.080	- 0.11	-58%
M-Cresol	0.07	0.11	0.011		- 0.07	-100%
4-Aminopyridine	0.07	0.21	0.47	0.011	- 0.06	-83%
Ancymidol	0.13	0.17	0.27	0.086	- 0.05	-35%
Diphacinone	0.17	0.17	0.16	0.15	- 0.02	-13%
2,4-Xylenol (or 2,4-Dimethylphenol)		0.11	0.01		-	n/a
2-[[N[4-Methoxy-6-Methyl-1,3,5-Triazine-2-Yl]-N-Methylaminocarbonyl]Aminosulfonyl]-Methyl Ester Benzoic Acid		21.0			-	n/a
Aminoethoxyvinylclycine			1.70		-	n/a
Borax			60.0		-	n/a
Dithiopyr			0.48		-	n/a
Fatty Acid		162			-	n/a

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Glycolic Acid		2.02	7.84		-	n/a
Glyphosate, Mono-Ammonium Salt			158		-	n/a
Imazapyr		34.2	57.0		-	n/a
N-Alkyl (68% C12, 32% C14) Dimethyl Ethylbenzyl Ammonium Chloride		0.45			-	n/a
Oleoresin Capsicum		0.73			-	n/a
Paraformaldehyde			25.5		-	n/a
Phosphoric Acid		81.6			-	n/a
Putrescent Whole Egg Solids		1.11			-	n/a
Quizalofop-Ethyl		448	31.2		-	n/a
Sodium Chlorite			12.9		-	n/a
Bromethalin				0.006	+ 0.01	n/a
Denatonium Benzoate		0.12	0.03	0.026	+ 0.03	n/a
Ferric Phosphate				0.076	+ 0.08	n/a
(Z)-9-Tricosene				0.077	+ 0.08	n/a
Difethialone				0.081	+ 0.08	n/a
Capsaicin			0.51	0.088	+ 0.09	n/a
Bromadiolone	0.43	0.43	0.72	0.53	+ 0.10	24%
(Z)-11-Tetradecenyl Acetate (Or: Cis-11-Tetradecen-1-Yl) Acetate)				0.18	+ 0.18	n/a
Uniconazole-P				0.18	+ 0.18	n/a
Brodifacoum	0.21	0.34	0.60	0.42	+ 0.21	100%
Triticonazole				0.29	+ 0.29	n/a
Triflusulfuron Methyl				0.59	+ 0.59	n/a
Polyacrylamide		17.6	4.84	0.61	+ 0.61	n/a
Triasulfuron			27.7	0.94	+ 0.94	n/a
Diflubenzuron				1.63	+ 1.63	n/a
Paclobutrazol			0.45	1.90	+ 1.90	n/a
Tebuconazole				1.92	+ 1.92	n/a
Streptomyces griseoviridis Strain K61				2.21	+ 2.21	n/a
Hydramethylnon	0.18	21.6	7.98	2.91	+ 2.73	1517%
Fluvalinate			0.24	2.75	+ 2.75	n/a
Rotenone	0.61	2.13	2.28	3.42	+ 2.81	461%
Bacillus thuringiensis ssp. tenebrionis			100	2.88	+ 2.88	n/a
N-Alkyl (67% C12, 25% C14, 7% C16, 1% C18) Dimethyl Benzyl Ammonium Chloride	0.37	4.33	4.76	3.72	+ 3.35	915%
Sodium Alpha-Olefin Sulfonate				3.59	+ 3.59	n/a
Rimsulfuron			1.68	5.27	+ 5.27	n/a
Brassica Hirta White Mustard Seed Powder				5.66	+ 5.66	n/a
Ethametsulfuron-Methyl	20.5	27.3	42.4	26.8	+ 6.28	31%
(Z,Z)-3, 13-Octadecadienyl Acetate				7.77	+ 7.77	n/a
Pyrethrins	27.6	47.5	49.3	37.1	+ 9.45	34%
Streptomycin	3.47	15.6	21.4	14.0	+ 10.5	304%
Poly[Oxyethylene(Dimethyliminio)Ethylene(Dimethyliminio) Ethylene Dichloride]				13.5	+ 13.5	n/a
Amitraz		69.3	32.7	14.6	+ 14.6	n/a
Propetamphos	16.3	7.59	4.18	31.2	+ 15.0	92%
Pyrazon			20.6	15.5	+ 15.5	n/a
Sulfosulfuron			96.4	16.4	+ 16.4	n/a
Etridiazole	169	201	173	187	+ 17.4	10%
Dried Blood				18.0	+ 18.0	n/a
Flusilazole			7.50	18.1	+ 18.1	n/a
2,4-D Acid	34	11.2	54.3	52.4	+ 18.6	55%
Imazamox			31.3	18.7	+ 18.7	n/a
(E,E)-8,10-Dodecadien-1-Ol + 1-Dodecanol + 1-Tetradecanol (Codling moth pheromone)		3.78	1.03	20.1	+ 20.1	n/a

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
2-(Hydroxymethyl)-2-Nitro-1,3-Propanediol	3.07	27.4	26.5	23.6	+ 20.5	667%
Aminoethoxyvinylglycine				20.8	+ 20.8	n/a
Gibberellins + Gibberellic Acid	2.29	13.88	18.49	23.18	+ 20.9	910%
Cyanazine	74.8		9.60	96.0	+ 21.2	28%
Dimethomorph			347	22.5	+ 22.5	n/a
Copper Sulphate (as Cu)	8.25	3.14	4.11	32.5	+ 24.3	294%
Bensulide		9.60		24.3	+ 24.3	n/a
Dichloran	24.0	3.00	122	48.9	+ 24.9	104%
Oxyfluorfen	184	254	180	209	+ 25.0	14%
Methyl Anthranilate				26.1	+ 26.1	n/a
Potassium Salts of Fatty Acids				27.2	+ 27.2	n/a
Propyzamide	93.5	63.0	198	121	+ 27.3	29%
Didecyl Dimethyl Ammonium Chloride	0.11	1.18	2.02	29.3	+ 29.2	26035%
Desmedipham		24.8	25.5	30.0	+ 30.0	n/a
Phenmedipham		26.0	25.5	30.0	+ 30.0	n/a
Silicon Dioxide (Diatomaceous Earth)	13.4		128	46.5	+ 33.1	246%
Clofentezine	6.75	43.1	517	42.1	+ 35.3	524%
Indar				36.6	+ 36.6	n/a
Acetic Acid				37.5	+ 37.5	n/a
Deltamethrin	30.7	43.0	33.8	71.2	+ 40.5	132%
Oxycarboxin	6.15	44.6	22.8	48.5	+ 42.3	688%
Cyfluthrin			23.0	44.0	+ 44.0	n/a
6-Benzylaminopurine (or: 6-Benzyladenine)	1.55	8.61	9.75	47.7	+ 46.1	2967%
Isoxaben			30.1	47.7	+ 47.7	n/a
Kinoprene	4.99	82.4	47.5	57.9	+ 52.9	1061%
Isoxaflutole				56.4	+ 56.4	n/a
1-Bromo-3-Chloro-5,5-Dimethylhydantoin				61.0	+ 61.0	n/a
Silica Aerogel		10.8	34.7	62.4	+ 62.4	n/a
Piperonyl Butoxide	139	301	245	204	+ 64.9	47%
Imazethapyr		59.0	65.0	70.0	+ 70.0	n/a
Difenoconazole			10.3	71.5	+ 71.5	n/a
Pymetrozine				73.1	+ 73.1	n/a
Cyhalothrin-Lambda			77.0	87.9	+ 87.9	n/a
Cyromazine			20.6	88.8	+ 88.8	n/a
Flucarbazone				111	+ 111	n/a
Cypermethrin	84.6	258	243	199	+ 115	135%
Florasulam				116	+ 116	n/a
Nicosulfuron			123	116	+ 116	n/a
Acetamiprid				119	+ 119	n/a
Chlorpyrifos	4,436	5,552	4,466	4,561	+ 125	3%
Monosodium Methane Arsonate (as As)		1,210	493	128	+ 128	n/a
Oxine Benzoate	31.8	62.4	117	172	+ 140	440%
Clethodim		38.9	44.8	141	+ 141	n/a
Tribenuron Methyl			106	143	+ 143	n/a
4-(Cyclopropyl-Alpha-Hydroxy-Methylene)-3,5-Dioxo-Cyclohexane				178	+ 178	n/a
Acephate	804	949	1,347	985	+ 181	23%
Cymoxanil				193	+ 193	n/a
Ethephon	479	532	609	704	+ 226	47%
Dodemorph-Acetate	54.4	320	480	289	+ 234	431%
Tefluthrin			78.0	239	+ 239	n/a
Pyridaben			40.0	244	+ 244	n/a
Metaldehyde	21.0	4.50		266	+ 245	1167%
Hydrogen Peroxide				250	+ 250	n/a
Mecoprop, Potassium Salt	433	234	768	686	+ 252	58%
Mecoprop Acid	18.9	30.2	10.7	279	+ 260	1377%

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Chloroneb	152	727	78.0	412	+ 261	172%
Fenbutatin Oxide	206	351	78.8	478	+ 272	132%
Zoxamide				272	+ 272	n/a
Quinclorac			71.2	301	+ 301	n/a
Picloram, Amine Salts	41.1	27.0	43.6	346	+ 305	742%
Carbathiin	935	889	705	1,244	+ 309	33%
Monolinuron	944	924	508	1,256	+ 312	33%
Abamectin			13.4	318	+ 318	n/a
Cyprodinil			361	325	+ 325	n/a
Spinosad				328	+ 328	n/a
Pyraclostrobin				347	+ 347	n/a
Bentazon	1,433	1,377	1,314	1,784	+ 351	25%
Kresoxim-Methyl				358	+ 358	n/a
Boracic Acid (Boric Acid)	59.6	690	422	439	+ 379	637%
Quizalofop P-Ethyl			228	380	+ 380	n/a
Thifensulfuron Methyl			329	395	+ 395	n/a
Imidacloprid			188	425	+ 425	n/a
Potassium Peroxymonosulfate Sulfate			119	440	+ 440	n/a
Triclopyr	9.60	15.4	7,144	450	+ 440	4587%
Tebufenozide			633	443	+ 443	n/a
Siloxylated Polyether			276	450	+ 450	n/a
Fluroxypyr 1-Methylheptyl Ester			793	457	+ 457	n/a
Permethrin	198	405	579	712	+ 514	259%
Polyoxyalkylated Alkyl Phosphate Ester			116	527	+ 527	n/a
Terbacil	4.00	8.00	35.2	547	+ 543	13581%
Soap (Herbicidal)		564	568	556	+ 556	n/a
Oxamyl	141	2,027	658	698	+ 557	395%
Daminozide	549	455	570	1,107	+ 558	102%
Octylphenoxypolyethoxyethanol	2,564	5,957	4,680	3,133	+ 569	22%
Mecoprop Amine Salts	2,882	4,290	3,533	3,452	+ 570	20%
Oxadiazon		254	299	649	+ 649	n/a
Clodinafop-Propargyl		141	445	658	+ 658	n/a
Bromoxynil	2,306	1,053	2,089	2,990	+ 684	30%
Zineb	1,142	2,459	1,278	1,832	+ 690	60%
Disodium Octaborate Tetrahydrate			591	694	+ 694	n/a
Dichlorprop Ester	414	207	161	1,131	+ 717	173%
Thiram	360	702	427	1,098	+ 739	205%
MCPA Potassium or Sodium Salt	922	1,729	996	1,663	+ 741	80%
Nicotine Present As Alkaloid Or As Sulphate	1,280	1,066	1,142	2,029	+ 750	59%
Propiconazole	18.0	40.0	508	776	+ 758	4212%
Triforine	1,079	995	683	1,841	+ 762	71%
Vinclozolin		55.5	528	852	+ 852	n/a
Fluazifop-P-Butyl	720	2,165	1,056	1,621	+ 901	125%
Diquat	1,374	1,837	1,641	2,283	+ 908	66%
Sodium Hypochlorite			611	912	+ 912	n/a
Fenoxaprop-P-Ethyl (Isomer)		1,180	565	915	+ 915	n/a
Clopyralid	378	376	1,121	1,321	+ 944	250%
Fenhexamid			102	1,039	+ 1,039	n/a
Dichlobenil	5,533	5,575	4,981	6,645	+ 1,111	20%
Metam	27,437	20,422	30,855	28,582	+ 1,145	4%
Dimethoate	2,999	7,702	4,275	4,155	+ 1,156	39%
Imazamethabenz	589	1,152	1,528	1,760	+ 1,171	199%
2,4-D Ester	2,349	2,584	4,083	3,735	+ 1,386	59%
Ferbam	730	850	1,854	2,284	+ 1,554	213%
Myclobutanil		860	1,204	1,613	+ 1,613	n/a
Napropamide	3,666	5,102	6,693	5,361	+ 1,695	46%

Appendix F - Table 2
Comparison of Reportable Pesticides Sold in British Columbia, 1991 to 2003
(Sorted by Magnitude of Change)

Active Ingredient	1991 Sales (kg)	1995 Sales (kg)	1999 Sales (kg)	2003 Sales (kg)	Change from 1991 (kg)	Percent Change from 1991
Pendimethalin	333	1,119	2,422	2,055	+ 1,722	517%
Tralkoxydim		705	1,152	2,064	+ 2,064	n/a
Fludioxonil				2,112	+ 2,112	n/a
Glufosinate Ammonium		167	1,484	2,330	+ 2,330	n/a
2,4-D Amine	12,327	12,340	13,903	14,756	+ 2,429	20%
Metalaxyl-M (Mefenoxam)			4.46	2,504	+ 2,504	n/a
Linuron	1,990	3,900	3,533	4,639	+ 2,649	133%
Quintozene	5,813	15,581	7,253	8,848	+ 3,035	52%
Terbufos	143	585	2,405	3,210	+ 3,068	2153%
Propamocarb Hydrochloride			2,044	3,082	+ 3,082	n/a
Nonylphenoxypolyethoxyethanol	5,585	8,929	9,245	8,781	+ 3,196	57%
Iprodione	1,204	3,320	5,477	4,416	+ 3,213	267%
Copper Hydroxide (as Cu)				3,524	+ 3,524	n/a
S-Metolachlor and R-Enantiomer				3,892	+ 3,892	n/a
Azoxystrobin				3,918	+ 3,918	n/a
Dazomet	3,450	5,370	10,035	8,179	+ 4,729	137%
Carbaryl	7,274	8,984	9,271	12,363	+ 5,089	70%
Mancozeb	29,511	41,907	44,682	34,888	+ 5,377	18%

APPENDIX G

Comparison of Pesticide Active Ingredients Applied by Agriculture Landscape Services in the Lower Mainland 1991-2003

Appendix G - Table 1
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
2,4-D Acid	0.72	0.30			- 0.72	-100%
2,4-D Amine	921	1,088	863	899	- 22.0	-2%
2,4-D LV Esters	0.87	7.19		13.7	+ 12.8	1482%
Abamectin			0.001	0.038	+ 0.038	n/a
Acephate	4.2	8.4	26.2	66.3	+ 62.0	1467%
Acetic Acid				50.6	+ 50.6	n/a
Allethrin			0.0002		-	n/a
Aluminum Phosphide		2.48			-	n/a
Amitrole	91.1	46.6	43.8	63.7	- 27.4	-30%
Ancymidol		0.00005	0.00056	0.00092	+ 0.00092	n/a
Anilazine	8.15				- 8.15	-100%
Arsenic (Dodecyl and Octyl Ammonium Methyl Arsenates)		0.007			-	n/a
Azoxystrobin				7.53	+ 7.53	n/a
Bacillus thuringiensis Berliner ssp. *kurstaki*	21.7	52.5	38.0	33.6	+ 11.9	55%
Bendiocarb	0.65	1.41	0.78	1.00	+ 0.35	54%
Benomyl	111	30.7	59.3	2.53	- 108	-98%
Boracic Acid		0.67			-	n/a
Borax	13.1	5.46	0.01	0.032	- 13.1	-100%
Bromacil	65.0	84.4	2.79		- 65.0	-100%
Capsaicin				0.000024	+ 0.000024	n/a
Captan	6.97	18.6	1.35	8.05	+ 1.08	16%
Carbaryl	52.9	26.0	7.39	15.2	- 37.7	-71%
Carbathin			4.80		-	n/a
Chlormequat	0.15	0.49	0.12	0.059	- 0.089	-60%
Chloroneb	14.9	8.66	0.98		- 14.9	-100%
Chlorothalonil	28.5	72.1	371	774	+ 745	2613%
Chlorpyrifos	15.4	20.0	16.3		- 15.4	-100%
Chlorthal	6.0	14.2	20.1	0.75	- 5.21	-87%
Copper Oxychloride (as Cu)	132	146	74.0	62.0	- 70.2	-53%
Copper Sulphate (as Cu)				0.84	+ 0.84	n/a
Cypermethrin		0.12			-	n/a
Cyromazine				0.0013	+ 0.0013	n/a
Daminozide	0.07	0.14	0.19	0.021	- 0.045	-68%
Dazomet	1.47				- 1.47	-100%
Deet				0.86	+ 0.86	n/a
Deltamethrin	0.0007	0.02	0.0002		- 0.0007	-100%
Diazinon	676	539	639	507	- 169	-25%
Dicamba	140	204	129	100	- 39.5	-28%
Dichlobenil	394	636	452	464	+ 69.4	18%
Dichlone	0.00004	0.0008	0.01		- 0.00004	-100%
Dichlorprop, Butoxyethyl Ester or Isooctyl Ester	8.89	6.50		14.6	+ 5.69	64%
Dichlorvos	0.10	0.01			- 0.10	-100%
Dicofol	34.4	10.4	0.29	0.025	- 34.3	-100%
Dienochlor	0.83	2.34	0.11	0.0032	- 0.83	-100%
Dimethoate	20.5	52.1	32.2	45.0	+ 24.6	120%
Dinocap	0.006	0.01			- 0.006	-100%
Diquat	0.18	0.11			- 0.18	-100%

Appendix G - Table 1
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Disulfoton	1.50				- 1.50	-100%
Diuron			17.6		-	n/a
D-Trans Allethrin	0.0007		0.003	0.0090	+ 0.0083	1186%
Endosulfan	8.00	3.32			- 8.00	-100%
Ethephon		0.003			-	n/a
Etridiazole	0.008	1.28	0.005	0.0045	- 0.0036	-45%
Fatty Acid		38.0	66.8	46.4	+ 46.4	n/a
Fenbutatin Oxide	0.27	0.45	0.07	0.015	- 0.26	-95%
Ferbam			0.004		-	n/a
Ferric Phosphate				0.10	+ 0.103	n/a
Ferrous Sulfate		82.2	64.8	36.0	+ 36.0	n/a
Fluazifop-P-Butyl		0.01	0.009		-	n/a
Folpet	0.14	1.03	0.94		- 0.14	-100%
Fosetyl-Al			1.20	15.4	+ 15.4	n/a
Glufosinate Ammonium		1.56	0.05	0.060	+ 0.060	n/a
Glyphosate	2,145	1,068	1,084	969	- 1,176	-55%
Glyphosate, Trimethylsulfonium Salt			1.65		-	n/a
Hexaconazole		0.25			-	n/a
Imidacloprid			0.02		-	n/a
Ioxynil	0.11	0.04			- 0.11	-100%
Iprodione	50.4	61.8	128	124	+ 73.1	145%
Kinoprene	0.88	2.57	1.65	0.063	- 0.81	-93%
Lime Sulphur or Calcium Polysulphide	328	379	428	300	- 27.3	-8%
Lindane (Gamma-BHC)	0.78	0.38			- 0.78	-100%
Malathion	34.0	17.4	7.49	22.4	- 11.6	-34%
Mancozeb	559	157	70.0	10.2	- 549	-98%
MCPA Amine Salts	65.0	62.1	65.9	35.8	- 29.2	-45%
MCPA Esters	7.8	5.4	10.0	5.00	- 2.75	-35%
MCPA Potassium Salt or Sodium Salt	6.00	2.40	3.09		- 6.00	-100%
Mecoprop Acid	2.69	2.27		2.50	- 0.19	-7%
Mecoprop Amine Salts	669	903	567	569	- 99.1	-15%
Mecoprop, Potassium Salt	44.0	22.9	13.7	15.8	- 28.3	-64%
Metalaxyl	25.5	0.24			- 25.5	-100%
Metaldehyde	2.59	0.79	2.26	1.25	- 1.34	-52%
Methomyl	0.009				- 0.009	-100%
Methoxychlor	58.6	67.3	21.4	3.88	- 54.7	-93%
Methyl Anthranilate				2.90	+ 2.90	n/a
Methyl Nonyl Ketone			0.002		-	n/a
Mineral Oil (Insecticidal or Adjuvant)	2,443	4,183	1,342	1,171	- 1,272	-52%
Myclobutanil				12.7	+ 12.7	n/a
Naled		1.09	0.28		-	n/a
Napropamide	15.7	15.3	37.7	4.50	- 11.2	-71%
Natural Gum Resins	87.4	11.7	7.95	2.29	- 85.1	-97%
Nicotine		2.10			-	n/a
N-Octyl Bicycloheptene Dicarboximide	0.002		0.03	0.065	+ 0.063	3460%
Nonylphenoxypolyethoxyethanol	0.1	47.6	25.1	9.27	+ 9.14	6767%

Appendix G - Table 1
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Octylphenoxypolyethoxyethanol		1.25			-	n/a
Oil Of Black Pepper				0.0038	+ 0.0038	n/a
Oxine Benzoate	0.004		1.60	2.30	+ 2.30	61340%
Oxycarboxin			1.20		-	n/a
Oxydemeton-Methyl	0.51	0.15	0.68	0.00060	- 0.51	-100%
Paraffin Base Mineral Oil (Adjuvant)		0.35			-	n/a
Paraquat	622	29.4	16.8	10.7	- 611	-98%
Permethrin	0.11	0.01	0.19	12.2	+ 12.1	10949%
Phosalone			0.001		-	n/a
Piperine				0.00014	+ 0.00014	n/a
Piperonyl Butoxide	0.01	0.82	0.13	0.041	+ 0.033	382%
Pirimicarb	0.16	0.36	0.04	0.10	- 0.056	-35%
Propargite	6.00	1.20	0.08		- 6.00	-100%
Propiconazole		1.7	18.1	17.0	+ 17.0	n/a
Propoxur	0.01	0.002	0.06	0.070	+ 0.060	618%
Putrescent Whole Egg Solids			1.48		-	n/a
Pyrethrins	1.6	46.2	28.6	0.15	- 1.43	-90%
Quintozene	468	371	794	175	- 293	-63%
Rotenone	0.03	0.02			- 0.028	-100%
Sethoxydim	1.66				- 1.66	-100%
Silicon Dioxide	0.05	0.05			- 0.049	-100%
Simazine	41.4	93.6	76.7	73.7	+ 32.3	78%
Soap (Herbicidal)		10.0	4.20	7.20	+ 7.20	n/a
Soap (Insecticidal)	316	418	1,033	654	+ 338	107%
Sodium Chlorate	1,321	1,076	55.8		- 1,321	-100%
Sodium Fluosilicate (Or Sodium Silicofluoride)		0.02			-	n/a
Sodium Metaborate Tetrahydrate	2,930	2,385	124		- 2,930	-100%
Sulfotep	2.35	13.3			- 2.35	-100%
Sulphur	1.10	33.4	0.32	36.8	+ 35.7	3232%
Surfactant Blend		0.07			-	n/a
Tallow Fatty Acid	16.0	44.0	36.0		- 16.0	-100%
Tebuthiuron	2.45				- 2.45	-100%
Thiophanate-Methyl	93.4	39.5	30.1	57.9	- 35.6	-38%
Thiram		0.1	89.6		-	n/a
Tribasic Copper Sulphate			0.11		-	n/a
Trichlorfon		5.04	2.86		-	n/a
Trifluralin	3.52	0.35			- 3.52	-100%
Triforine	0.99	3.16	3.68	3.62	+ 2.63	265%
Zineb	0.16	0.05	0.01		- 0.16	-100%
Total	**15,154**	**14,802**	**9,071**	**7,541**	**- 7,613**	**-50%**
Number of Active Ingredients	**87**	**99**	**89**	**76**	**- 11**	**-13%**

Appendix G - Table 2
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Sodium Metaborate Tetrahydrate	2,930	2,385	124		- 2,930	-100%
Sodium Chlorate	1,321	1,076	55.8		- 1,321	-100%
Mineral Oil (Insecticidal or Adjuvant)	2,443	4,183	1,342	1,171	- 1,272	-52%
Glyphosate	2,145	1,068	1,084	969	- 1,176	-55%
Paraquat	622	29.4	16.8	10.7	- 611	-98%
Mancozeb	559	157	70.0	10.2	- 549	-98%
Quintozene	468	371	794	175	- 293	-63%
Diazinon	676	539	639	507	- 169	-25%
Benomyl	111	30.7	59.3	2.53	- 108	-98%
Mecoprop Amine Salts	669	903	567	569	- 99.1	-15%
Natural Gum Resins	87.4	11.7	7.95	2.29	- 85.1	-97%
Copper Oxychloride (as Cu)	132	146	74.0	62.0	- 70.2	-53%
Bromacil	65.0	84.4	2.79		- 65.0	-100%
Methoxychlor	58.6	67.3	21.4	3.88	- 54.7	-93%
Dicamba	140	204	129	100	- 39.5	-28%
Carbaryl	52.9	26.0	7.39	15.2	- 37.7	-71%
Thiophanate-Methyl	93.4	39.5	30.1	57.9	- 35.6	-38%
Dicofol	34.4	10.4	0.29	0.025	- 34.3	-100%
MCPA Amine Salts	65.0	62.1	65.9	35.8	- 29.2	-45%
Mecoprop, Potassium Salt	44.0	22.9	13.7	15.8	- 28.3	-64%
Amitrole	91.1	46.6	43.8	63.7	- 27.4	-30%
Lime Sulphur or Calcium Polysulphide	328	379	428	300	- 27.3	-8%
Metalaxyl	25.5	0.24			- 25.5	-100%
2,4-D Amine	921	1,088	863	899	- 22.0	-2%
Tallow Fatty Acid	16.0	44.0	36.0		- 16.0	-100%
Chlorpyrifos	15.4	20.0	16.3		- 15.4	-100%
Chloroneb	14.9	8.66	0.98		- 14.9	-100%
Borax	13.1	5.46	0.01	0.032	- 13.1	-100%
Malathion	34.0	17.4	7.49	22.4	- 11.6	-34%
Napropamide	15.7	15.3	37.7	4.50	- 11.2	-71%
Anilazine	8.15				- 8.15	-100%
Endosulfan	8.00	3.32			- 8.00	-100%
MCPA Potassium Salt or Sodium Salt	6.00	2.40	3.09		- 6.00	-100%
Propargite	6.00	1.20	0.08		- 6.00	-100%
Chlorthal	6.0	14.2	20.1	0.75	- 5.21	-87%
Trifluralin	3.52	0.35			- 3.52	-100%
MCPA Esters	7.8	5.4	10.0	5.00	- 2.75	-35%
Tebuthiuron	2.45				- 2.45	-100%
Sulfotep	2.35	13.3			- 2.35	-100%
Sethoxydim	1.66				- 1.66	-100%
Disulfoton	1.50				- 1.50	-100%
Dazomet	1.47				- 1.47	-100%
Pyrethrins	1.6	46.2	28.6	0.15	- 1.43	-90%
Metaldehyde	2.59	0.79	2.26	1.25	- 1.34	-52%
Dienochlor	0.83	2.34	0.11	0.0032	- 0.83	-100%
Kinoprene	0.88	2.57	1.65	0.063	- 0.81	-93%
Lindane (Gamma-BHC)	0.78	0.38			- 0.78	-100%

Appendix G - Table 2
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
2,4-D Acid	0.72	0.30			- 0.72	-100%
Oxydemeton-Methyl	0.51	0.15	0.68	0.00060	- 0.51	-100%
Fenbutatin Oxide	0.27	0.45	0.07	0.015	- 0.26	-95%
Mecoprop Acid	2.69	2.27		2.50	- 0.19	-7%
Diquat	0.18	0.11			- 0.18	-100%
Zineb	0.16	0.05	0.01		- 0.16	-100%
Folpet	0.14	1.03	0.94		- 0.14	-100%
Ioxynil	0.11	0.04			- 0.11	-100%
Dichlorvos	0.10	0.01			- 0.10	-100%
Chlormequat	0.15	0.49	0.12	0.059	- 0.089	-60%
Pirimicarb	0.16	0.36	0.04	0.10	- 0.056	-35%
Silicon Dioxide	0.05	0.05			- 0.049	-100%
Daminozide	0.07	0.14	0.19	0.021	- 0.045	-68%
Rotenone	0.03	0.02			- 0.028	-100%
Methomyl	0.009				- 0.009	-100%
Dinocap	0.006	0.01			- 0.006	-100%
Etridiazole	0.008	1.28	0.005	0.0045	- 0.004	-45%
Deltamethrin	0.0007	0.02	0.0002		- 0.0007	-100%
Dichlone	0.00004	0.0008	0.01		- 0.00004	-100%
Allethrin			0.0002		-	n/a
Aluminum Phosphide		2.48			-	n/a
Arsenic (Dodecyl and Octyl Ammonium Methyl Arsenates)		0.007			-	n/a
Boracic Acid		0.67			-	n/a
Carbathin			4.80		-	n/a
Cypermethrin		0.12			-	n/a
Diuron			17.6		-	n/a
Ethephon		0.003			-	n/a
Ferbam			0.004		-	n/a
Fluazifop-P-Butyl		0.01	0.009		-	n/a
Glyphosate, Trimethylsulfonium Salt			1.65		-	n/a
Hexaconazole		0.25			-	n/a
Imidacloprid			0.02		-	n/a
Methyl Nonyl Ketone			0.002		-	n/a
Naled		1.09	0.28		-	n/a
Nicotine		2.10			-	n/a
Octylphenoxypolyethoxyethanol		1.25			-	n/a
Oxycarboxin			1.20		-	n/a
Paraffin Base Mineral Oil (Adjuvant)		0.35			-	n/a
Phosalone			0.001		-	n/a
Putrescent Whole Egg Solids			1.48		-	n/a
Sodium Fluosilicate (Or Sodium Silicofluoride)		0.02			-	n/a
Surfactant Blend		0.07			-	n/a
Thiram		0.1	89.6		-	n/a
Tribasic Copper Sulphate			0.11		-	n/a
Trichlorfon		5.04	2.86		-	n/a
Capsaicin				0.000024	+ 0.000024	n/a

Appendix G - Table 2
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Landscape Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1995 Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Piperine				0.00014	+ 0.00014	n/a
Ancymidol		0.00005	0.00056	0.00092	+ 0.0009	n/a
Cyromazine				0.0013	+ 0.0013	n/a
Oil Of Black Pepper				0.0038	+ 0.0038	n/a
D-Trans Allethrin	0.0007		0.003	0.0090	+ 0.0083	1186%
Piperonyl Butoxide	0.01	0.82	0.13	0.041	+ 0.033	382%
Abamectin			0.001	0.038	+ 0.038	n/a
Glufosinate Ammonium		1.56	0.05	0.060	+ 0.060	n/a
Propoxur	0.01	0.002	0.06	0.070	+ 0.060	618%
N-Octyl Bicycloheptene Dicarboximide	0.002		0.03	0.065	+ 0.063	3460%
Ferric Phosphate				0.10	+ 0.10	n/a
Bendiocarb	0.65	1.41	0.78	1.00	+ 0.35	54%
Copper Sulphate (as Cu)				0.84	+ 0.84	n/a
Deet				0.86	+ 0.86	n/a
Captan	6.97	18.6	1.35	8.05	+ 1.08	16%
Oxine Benzoate	0.004		1.60	2.30	+ 2.30	61340%
Triforine	0.99	3.16	3.68	3.62	+ 2.63	265%
Methyl Anthranilate				2.90	+ 2.90	n/a
Dichlorprop, Butoxyethyl Ester or Isooctyl Ester	8.89	6.50		14.6	+ 5.69	64%
Soap (Herbicidal)		10.0	4.20	7.20	+ 7.20	n/a
Azoxystrobin				7.53	+ 7.53	n/a
Nonylphenoxypolyethoxyethanol	0.1	47.6	25.1	9.27	+ 9.14	6767%
Bacillus thuringiensis Berliner ssp. *kurstaki*	21.7	52.5	38.0	33.6	+ 11.9	55%
Permethrin	0.11	0.01	0.19	12.2	+ 12.1	10949%
Myclobutanil				12.7	+ 12.7	n/a
2,4-D LV Esters	0.87	7.19		13.7	+ 12.8	1482%
Fosetyl-Al			1.20	15.4	+ 15.4	n/a
Propiconazole		1.7	18.1	17.0	+ 17.0	n/a
Dimethoate	20.5	52.1	32.2	45.0	+ 24.6	120%
Simazine	41.4	93.6	76.7	73.7	+ 32.3	78%
Sulphur	1.10	33.4	0.32	36.8	+ 35.7	3232%
Ferrous Sulfate		82.2	64.8	36.0	+ 36.0	n/a
Fatty Acid		38.0	66.8	46.4	+ 46.4	n/a
Acetic Acid				50.6	+ 50.6	n/a
Acephate	4.2	8.4	26.2	66.3	+ 62.0	1467%
Dichlobenil	394	636	452	464	+ 69.4	18%
Iprodione	50.4	61.8	128	124	+ 73.1	145%
Soap (Insecticidal)	316	418	1,033	654	+ 338	107%
Chlorothalonil	28.5	72.1	371	774	+ 745	2613%
Total	**15,154**	**14,802**	**9,071**	**7,541**	**- 7,613**	**-50%**
Number of Active Ingredients	**62**	**56**	**44**	**35**	**- 27**	**-44%**

Appendix G - Table 3
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
1,3-Dichloropropene	6,711			- 6,711	-100%
2,4-D Amine	371	757	263	-109	-29%
2,4-DB Esters	7.50	2.81		-7.50	-100%
Abamectin			0.15	0.15	n/a
Acephate	3.75	117	2.72	-1.03	-27%
Amitrole	55.0	0.003		-55.00	-100%
Ancymidol			0.00094	0.00094	n/a
Atrazine	4,647	4,840	1,810	-2,837	-61%
Azinphos-Methyl	157	36.8	7.65	-149.60	-95%
Azoxystrobin		0.01		0.00	n/a
Bacillus thuringiensis Berliner ssp. *kurstaki*	1.00		1.13	0.13	13%
Bendiocarb		0.06	0.18	0.18	n/a
Benomyl	72.4	83.9	0.040	-72.340	-100%
Bentazon	195	483	107	-88	-45%
Brodifacoum			0.0000005	0.0000005	n/a
Dazomet			0.00001	0.00001	n/a
Bromoxynil	13.4	244		-13.398	-100%
Captan	358	597	124	-234	-65%
Carbaryl	20.4	209		-20	-100%
Carbofuran	7.20	3.84		-7	-100%
Chlormequat		0.72	0.49	0.49	n/a
Chloropicrin	1,116	3,039	998	-119	-11%
Chlorothalonil		1,124	1,096	1,096	n/a
Chlorpropham		47.3		-	n/a
Chlorpyrifos		233	3.84	3.84	n/a
Clofentezine		1.60		-	n/a
Clopyralid		4.08		-	n/a
Copper Hydroxide (as Cu)			24.0	+ 24	n/a
Copper Oxychloride (as Cu)	418	373		- 418	-100%
Copper Sulphate (as Cu)		0.00003	1.31	+ 1.31	n/a
Cupric Hydroxide		471		-	n/a
Cyfluthrin		0.84	10.6	+ 11	n/a
Cyhalothrin-Lamda		1.46		-	n/a
Cymoxanil			54.0	+ 54	n/a
Cypermethrin		13.9	12.4	+ 12	n/a
Daminozide		0.02	0.29	+ 0.29	n/a
Dazomet	662			- 662	-100%
Deltamethrin	0.66	0.95	0.54	- 0.12	-18%
Desmedipham		10.5	12.2	+ 12	n/a
Diazinon	143	122	46.8	- 96	-67%
Dicamba	656	527	258	- 398	-61%
Dichlobenil	766	16.4	0.20	- 766	-100%

Appendix G - Table 3
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Diclofop-Methyl		14.1		-	n/a
Dicofol	1.00			- 1.00	-100%
Didecyl Dimethyl Ammonium Chloride			0.17	+ 0.17	n/a
Dienochlor	0.03			- 0.03	-100%
Dimethoate	880	266		- 880	-100%
Dimethomorph		30.1		-	n/a
Dinoseb	1,454			- 1,454	-100%
Diquat	39.4	155	167	+ 128	324%
Disulfoton	46.5			- 47	-100%
Endosulfan	92.0	35.8		- 92	-100%
EPTC	1,270	864	367	- 903	-71%
Etridiazole		0.23	1.44	+ 1.44	n/a
Fenbutatin Oxide	0.03	0.03	0.72	+ 0.69	2770%
Ferbam	465		18.8	- 446	-96%
Fluazifop-Butyl/Fluazifop-P-Butyl	2.45	1.73	1.38	- 1.08	-44%
Folpet	2,798			- 2,798	-100%
Fosetyl-Al		121	4.42	+ 4.42	n/a
Glufosinate Ammonium		15.2	29.4	+ 29	n/a
Glyphosate	1,719	1,706	621	- 1,098	-64%
Glyphosate, Trimethylsulfonium Salt		392		-	n/a
Hexazinone		6.00		-	n/a
Imidacloprid			0.0050	+ 0.005	n/a
Iprodione	43.0	7.52	4.42	- 39	-90%
Kinoprene	58.5	0.02	0.033	- 58	-100%
Lime Sulphur	149	63.1	35.6	- 113	-76%
Linuron		531	676	+ 676	n/a
Malathion	336	17.0	3.23	- 333	-99%
Maleic Hydrazide		449		-	n/a
Mancozeb	155	212	941	+ 786	507%
MCPA Amine Salts	68.0	210	20.6	- 47	-70%
MCPA Potassium Salt or Sodium Salt	1.88			- 1.88	-100%
MCPB, Sodium Salt	28.1			- 28	-100%
Mecoprop Amine Salts	247	580	15.7	- 231	-94%
Mecoprop, Potassium Salt	4.88	70.1	15.0	+ 10	208%
Metalaxyl	39.8	84.6	70.1	+ 30	76%
Metalaxyl-M (Mefenoxam)			146	+ 146	n/a
Metaldehyde			1.16	+ 1.16	n/a
Metam	2,124	39,854		- 2,124	-100%
Methamidophos	37.9	176		- 38	-100%
Methomyl	6.88	17.6		- 6.88	-100%
Methoxychlor		0.63		-	n/a
Methyl Bromide *	5,186	6,403	2,026	- 3,160	-61%

Appendix G - Table 3
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Methyl Isothiocyanate	862			- 862	-100%
Metobromuron	16.0			- 16	-100%
Metolachlor	2,700	2,515		- 2,700	-100%
Metribuzin		65.4		-	n/a
Mineral Oil (Insecticidal or Adjuvant)		624	127	+ 127	n/a
Myclobutanil		0.009	0.20	+ 0.20	n/a
Naled	7.78	78.5	0.069	- 7.71	-99%
Napropamide	46.0	316	3.50	- 43	-92%
Nicosulfuron		51.2	23.4	+ 23	n/a
Nicotine		0.58	0.13	+ 0.13	n/a
Nonylphenoxypolyethoxyethanol	53.3	1,476	279	+ 226	423%
O-Benzyl-P-Chlorophenol	1.72			- 1.72	-100%
Octylphenoxypolyethoxyethanol	28.0	264		- 28	-100%
O-Phenylphenol	2.03			- 2.03	-100%
Oxine Benzoate		0.16		-	n/a
Oxydemeton-Methyl	19.0	112		- 19	-100%
Oxyfluorfen	10.7	2.96		- 11	-100%
Paraffin Base Mineral Oil (Adjuvant)	887	2,035	114	- 773	-87%
Paraquat	22.5	164	118	+ 95	424%
Parathion	405	200		- 405	-100%
Pendimethalin		18.4		-	n/a
Permethrin	1.00	4.92	0.061	- 0.94	-94%
Phenmedipham		10.5	12.2	+ 12	n/a
Picloram, Amine Salts			45.5	+ 46	n/a
Pirimicarb	0.005	12.2	20.8	+ 21	414970%
Prometryne	84.0	68.6		- 84	-100%
Propamocarb Hydrochloride		260	120	+ 120	n/a
Propiconazole		11.5	6.23	+ 6.23	n/a
Propyzamide	8.50			- 8.50	-100%
P-Tert Amyl Phenol	0.41			- 0.41	-100%
Pyraclostrobin			1.85	+ 1.85	n/a
Pyridaben			0.0045	+ 0.0045	n/a
Pyridate	85.1	198		- 85	-100%
Quintozene			0.11	+ 0.11	n/a
Rimsulfuron		0.18		-	n/a
Sethoxydim	50.6	23.5	3.47	- 47	-93%
Simazine	105	18.1	25.0	- 80	-76%
S-Metolachlor And R-Enantiomer			39.2	+ 39	n/a
Soap (Insecticidal)	0.25	0.22	9.12	+ 8.86	3510%
Streptomyces Griseoviridis Strain K61			0.064	+ 0.064	n/a
Sulfotep		0.07		-	n/a
Surfactant Blend	153	1,097	31.4	- 122	-79%

Appendix G - Table 3
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted Alphabetically)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Tallow Fatty Acid	669			- 669	-100%
Tefluthrin			36.0	+ 36	n/a
Thiophanate-Methyl			5.11	+ 5.11	n/a
Tribasic Copper Sulphate		70.2		-	n/a
Trichoderma Harzianum Rifai Strain Krl-Ag2			0.37	+ 0.37	n/a
Trifluralin	567	595	230	- 337	-60%
Triforine	101	86.0	18.7	- 82	-81%
Vernolate	1,562			- 1,562	-100%
Vinclozolin		52.8		-	n/a
Warfarin			0.00015	+ 0.00015	n/a
Zoxamide			67.2	+ 67	n/a
Total	**42,083**	**86,565**	**11,338**	**-30,745**	**-73%**
Number of Active Ingredients	**78**	**98**	**84**	**+ 6**	**8%**

Appendix G - Table 4
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
1,3-Dichloropropene	6,711			- 6,711	-100%
Methyl Bromide *	5,186	6,403	2,026	- 3,160	-61%
Atrazine	4,647	4,840	1,810	- 2,837	-61%
Folpet	2,798			- 2,798	-100%
Metolachlor	2,700	2,515		- 2,700	-100%
Metam	2,124	39,854		- 2,124	-100%
Vernolate	1,562			- 1,562	-100%
Dinoseb	1,454			- 1,454	-100%
Glyphosate	1,719	1,706	621	- 1,098	-64%
EPTC	1,270	864	367	- 903	-71%
Dimethoate	880	266		- 880	-100%
Methyl Isothiocyanate	862			- 862	-100%
Paraffin Base Mineral Oil (Adjuvant)	887	2,035	114	- 773	-87%
Dichlobenil	766	16.4	0.20	- 766	-100%
Tallow Fatty Acid	669			- 669	-100%
Dazomet	662			- 662	-100%
Ferbam	465		18.8	- 446	-96%
Copper Oxychloride (as Cu)	418	373		- 418	-100%
Parathion	405	200		- 405	-100%
Dicamba	656	527	258	- 398	-61%
Trifluralin	567	595	230	- 337	-60%
Malathion	336	17.0	3.23	- 333	-99%
Captan	358	597	124	- 234	-65%
Mecoprop Amine Salts	247	580	15.7	- 231	-94%
Azinphos-Methyl	157	36.8	7.65	- 150	-95%
Surfactant Blend	153	1,097	31.4	- 122	-79%
Chloropicrin	1,116	3,039	998	- 119	-11%
Lime Sulphur	149	63.1	35.6	- 113	-76%
2,4-D Amine	371	757	263	- 109	-29%
Diazinon	143	122	46.8	- 96	-67%
Endosulfan	92.0	35.8		- 92	-100%
Bentazon	195	483	107	- 88	-45%
Pyridate	85.1	198		- 85	-100%
Prometryne	84.0	68.6		- 84	-100%
Triforine	101	86.0	18.7	- 82	-81%
Simazine	105	18.1	25.0	- 80	-76%
Benomyl	72.4	83.9	0.040	- 72	-100%
Kinoprene	58.5	0.02	0.033	- 58	-100%
Amitrole	55.0	0.003		- 55	-100%
MCPA Amine Salts	68.0	210	20.6	- 47	-70%
Sethoxydim	50.6	23.5	3.47	- 47	-93%
Disulfoton	46.5			- 47	-100%

Appendix G - Table 4
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted by Magnitude of Change)

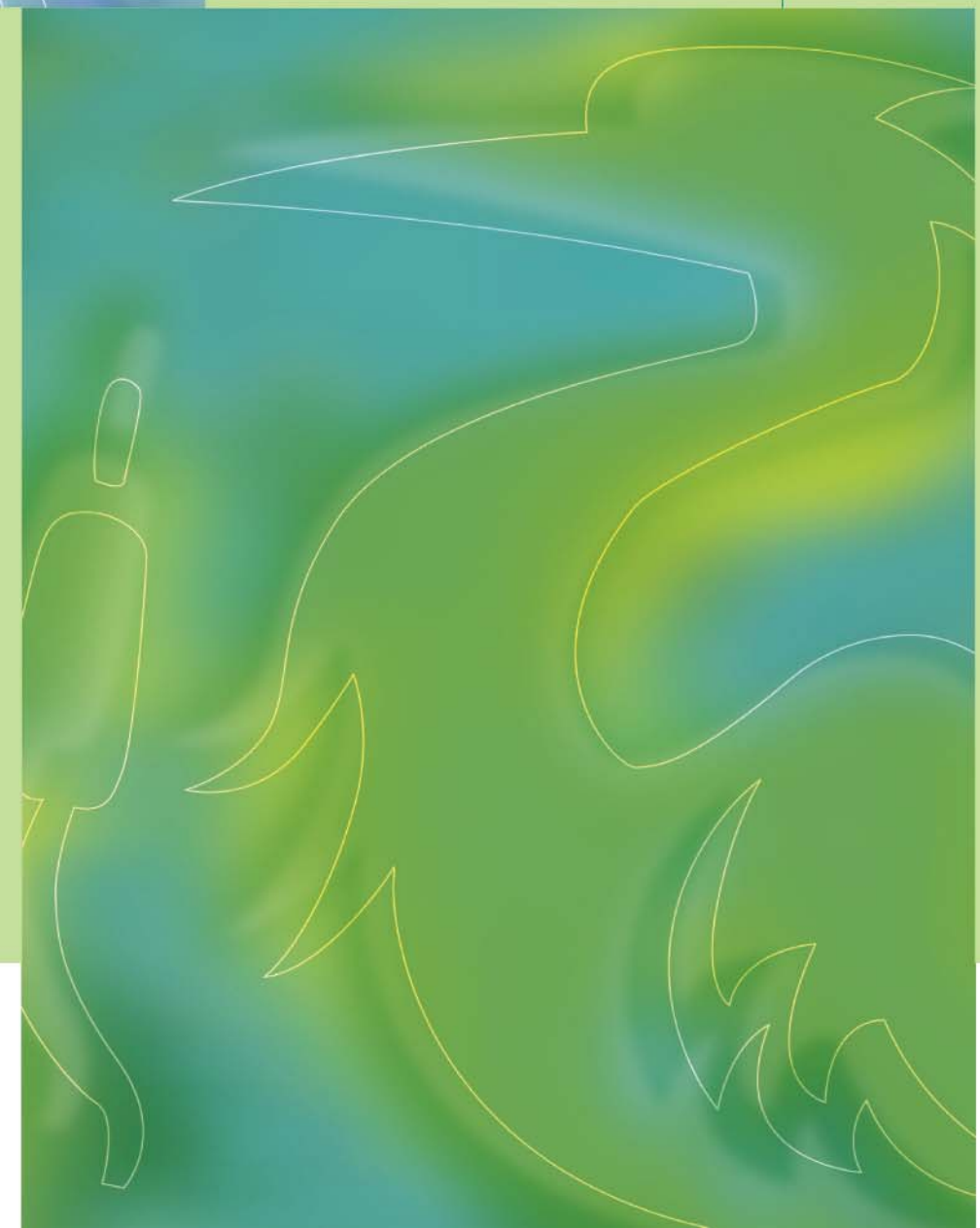
Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Napropamide	46.0	316	3.50	- 43	-92%
Iprodione	43.0	7.52	4.42	- 39	-90%
Methamidophos	37.9	176		- 38	-100%
MCPB, Sodium Salt	28.1			- 28	-100%
Octylphenoxypolyethoxyethanol	28.0	264		- 28	-100%
Carbaryl	20.4	209		- 20	-100%
Oxydemeton-Methyl	19.0	112		- 19	-100%
Metobromuron	16.0			- 16	-100%
Bromoxynil	13.4	244		- 13	-100%
Oxyfluorfen	10.7	2.96		- 11	-100%
Propyzamide	8.50			- 9	-100%
Naled	7.78	78.5	0.069	- 8	-99%
2,4-DB Esters	7.50	2.81		- 8	-100%
Carbofuran	7.20	3.84		- 7	-100%
Methomyl	6.88	17.6		- 7	-100%
O-Phenylphenol	2.03			- 2	-100%
MCPA Potassium Salt or Sodium Salt	1.88			- 2	-100%
O-Benzyl-P-Chlorophenol	1.72			- 2	-100%
Fluazifop-Butyl/Fluazifop-P-Butyl	2.45	1.73	1.38	- 1	-44%
Acephate	3.75	117	2.72	- 1	-27%
Dicofol	1.00			- 1	-100%
Permethrin	1.00	4.92	0.061	- 1	-94%
P-Tert Amyl Phenol	0.41			- 0	-100%
Deltamethrin	0.66	0.95	0.54	- 0	-18%
Dienochlor	0.03			- 0	-100%
Cupric Hydroxide		471		-	n/a
Maleic Hydrazide		449		-	n/a
Glyphosate, Trimethylsulfonium Salt		392		-	n/a
Tribasic Copper Sulphate		70.2		-	n/a
Metribuzin		65.4		-	n/a
Vinclozolin		52.8		-	n/a
Chlorpropham		47.3		-	n/a
Dimethomorph		30.1		-	n/a
Pendimethalin		18.4		-	n/a
Diclofop-Methyl		14.1		-	n/a
Hexazinone		6.00		-	n/a
Clopyralid		4.08		-	n/a
Clofentezine		1.60		-	n/a
Cyhalothrin-Lamda		1.46		-	n/a
Methoxychlor		0.63		-	n/a
Rimsulfuron		0.18		-	n/a
Methyl Bromide *		0.16		-	n/a

Appendix G - Table 4
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Sulfotep		0.07		-	n/a
Azoxystrobin		0.01		-	n/a
Brodifacoum			0.0000005	+ 0.0000005	n/a
Bromadiolone			0.00001	+ 0.00001	n/a
Warfarin			0.00015	+ 0.00015	n/a
Ancymidol			0.00094	+ 0.00094	n/a
Pyridaben			0.0045	+ 0.0045	n/a
Imidacloprid			0.0050	+ 0.005	n/a
Streptomyces Griseoviridis Strain K61			0.064	+ 0.064	n/a
Quintozene			0.11	+ 0.11	n/a
Bacillus thuringiensis Berliner ssp. *kurstaki*	1.00		1.13	+ 0.13	13%
Nicotine		0.58	0.13	+ 0.13	n/a
Abamectin			0.15	+ 0.15	n/a
Didecyl Dimethyl Ammonium Chloride			0.17	+ 0.17	n/a
Bendiocarb		0.06	0.18	+ 0.18	n/a
Myclobutanil		0.009	0.20	+ 0.20	n/a
Daminozide		0.02	0.29	+ 0.29	n/a
Trichoderma Harzianum Rifai Strain Krl-Ag2			0.37	+ 0.37	n/a
Chlormequat		0.72	0.49	+ 0.49	n/a
Fenbutatin Oxide	0.03	0.03	0.72	+ 0.69	2770%
Metaldehyde			1.16	+ 1.16	n/a
Copper Sulphate (as Cu)		0.00003	1.31	+ 1.31	n/a
Etridiazole		0.23	1.44	+ 1.44	n/a
Pyraclostrobin			1.85	+ 1.85	n/a
Chlorpyrifos		233	3.84	+ 3.84	n/a
Fosetyl-Al		121	4.42	+ 4.42	n/a
Thiophanate-Methyl			5.11	+ 5.11	n/a
Propiconazole		11.5	6.23	+ 6.23	n/a
Soap (Insecticidal)	0.25	0.22	9.12	+ 8.86	3510%
Mecoprop, Potassium Salt	4.88	70.1	15.0	+ 10	208%
Cyfluthrin		0.84	10.6	+ 11	n/a
Desmedipham		10.5	12.2	+ 12	n/a
Phenmedipham		10.5	12.2	+ 12	n/a
Cypermethrin		13.9	12.4	+ 12	n/a
Pirimicarb	0.005	12.2	20.8	+ 21	414970%
Nicosulfuron		51.2	23.4	+ 23	n/a
Copper Hydroxide (as Cu)			24.0	+ 24	n/a
Glufosinate Ammonium		15.2	29.4	+ 29	n/a
Metalaxyl	39.8	84.6	70.1	+ 30	76%
Tefluthrin			36.0	+ 36	n/a
S-Metolachlor And R-Enantiomer			39.2	+ 39	n/a
Picloram, Amine Salts			45.5	+ 46	n/a

Appendix G - Table 4
Changes in Use of Pesticide Active Ingredients by Pest Control Services Licensed in the Agriculture Category, 1991-2003
(Sorted by Magnitude of Change)

Active Ingredient	1991Use (kg)	1999 Use (kg)	2003 Use (kg)	Change from 1991	Percent Change from 1991
Cymoxanil			54.0	+ 54	n/a
Zoxamide			67.2	+ 67	n/a
Paraquat	22.5	164	118	+ 95	424%
Propamocarb Hydrochloride		260	120	+ 120	n/a
Mineral Oil (Insecticidal or Adjuvant)		624	127	+ 127	n/a
Diquat	39.4	155	167	+ 128	324%
Metalaxyl-M (Mefenoxam)			146	+ 146	n/a
Nonylphenoxypolyethoxyethanol	53.3	1,476	279	+ 226	423%
Linuron		531	676	+ 676	n/a
Mancozeb	155	212	941	+ 786	507%
Chlorothalonil		1,124	1,096	+ 1,096	n/a
Total	**42,083**	**86,565**	**11,338**	**-30,745**	**-73%**
Number of Active Ingredients	**78**	**98**	**84**	**+ 6**	**8%**



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