

# San Francisco Bay Area Pesticide Retail Store Survey



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San Francisco Estuary Project*

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# SAN FRANCISCO BAY AREA PESTICIDE RETAIL STORE SURVEY

## SUMMARY

This report documents the results of a survey of San Francisco Bay Area pesticide retail stores. The survey was conducted to examine the pesticides in the retail marketplace. The purpose of the survey is to provide an understanding of the pesticides that are currently being sold and used by non-professional applicators in the San Francisco Bay Area. This survey is conducted annually by the Urban Pesticide Pollution Prevention (UP3) Project.

Data from previous surveys show that at least half of residential pesticide sales in the San Francisco Bay Area probably occur at two stores—Home Depot and Orchard Supply Hardware. These two major San Francisco Bay Area pesticide retailers and a similar competitor that is relatively new to the Bay Area (Lowe's) were visited in May 2005. At each store, product brand name, insecticide active ingredient, formulation type, U.S. EPA registration number, and application locations were obtained for insecticides, herbicides, molluscicides, and fungicides.

The results of this survey, which are similar to findings in 2004, reflect widely anticipated changes in the insecticide market away from organophosphorous pesticides and to pyrethroids. The domination of the professional and non-professional urban insecticide market by pyrethroids is the apparent cause of adverse effects that have been found to occur in aquatic ecosystems receiving urban runoff.<sup>1</sup>

The 2005 survey found that a pyrethroid not previously identified as a water quality priority—tralomethrin—occurs in outdoor consumer products that may have the potential to contribute to surface water quality impacts from pyrethroids. On the basis of this finding, tralomethrin should be added to the list of pyrethroids of concern for urban surface water quality (the others are bifenthrin, cyfluthrin [including beta-cyfluthrin], cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, and permethrin)

## APPROPRIATE USE OF THIS REPORT

*This survey does not provide data appropriate for estimating urban pesticide use.* Pesticide use estimates should be made on the basis of sales and reported use data collected by the California Department of Pesticide Regulation (DPR) (see the UP3 Project *Urban Pesticide Use Trends Annual Report*).<sup>2</sup> Because DPR does not release data for about 10 months after the end of a calendar year, quantitative data—while the only data suitable to support quantitative assessments of urban pesticide use patterns—are a trailing indicator of pesticide use. Shelf surveys serve as non-quantitative leading indicators.

*This survey does not identify which pesticides are of concern for urban surface water quality.* To identify which pesticides are most likely to threaten urban surface water quality, it is necessary to evaluate research, monitoring data, and use patterns together (see the UP3 Project *Annual Research and Monitoring Update*).<sup>3</sup>

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<sup>1</sup> Weston, D., presentation to the Urban Pesticides Committee, July 19, 2005.

<sup>2</sup> TDC Environmental, *Pesticides in Urban Surface Water—Urban Pesticides Use Trends Annual Report 2005*, prepared for the San Francisco Estuary Project Board, March 2005.

<sup>3</sup> TDC Environmental, *Pesticides in Urban Surface Water—Annual Research and Monitoring Update*, prepared for the San Francisco Estuary Project Board, March 2005.

## 1.0 INTRODUCTION

This report documents the results of a survey of major San Francisco Bay Area pesticide retail stores. The survey was conducted to examine the pesticides in the retail marketplace. The purpose of the survey is to provide an understanding of the pesticides that are currently being sold and used by non-professional applicators in the San Francisco Bay Area.

This survey is conducted annually by the Urban Pesticide Pollution Prevention (UP3) Project; it forms one of many data inputs for the UP3 Project's annual Urban Pesticide Use Trends Annual Report, which will be issued in spring 2006. The purpose of the UP3 Project is to provide education, outreach, and technical assistance for implementation of the Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks Water Quality Attainment Strategy and Total Maximum Daily Load (WQAS/TMDL).<sup>4</sup> The project is structured to mirror the three major elements of the WQAS/TMDL Implementation Strategy: Outreach and Education, Science (Research and Monitoring), and Proactive Regulation. The San Francisco Estuary Project (SFEP) has been awarded California water bond grant funds from the State Water Resources Control Board to implement the UP3 Project through March 2007. TDC Environmental is providing technical support for the project.

Since the mid-1990s, San Francisco Bay Area water quality agencies have implemented programs intended to reduce insecticide-related toxicity in urban surface waters. The agencies working on these programs include urban storm water runoff management programs, municipal wastewater treatment plants, and the San Francisco Bay Regional Water Quality Control Board. Because a substantial fraction of urban insecticide use involves residential application of products purchased at retail stores, these water quality agencies have conducted public outreach designed to modify residential insect control methods. Evaluating the effectiveness of residential education efforts has proven challenging—residential surveys are expensive and provide little specific information about active ingredient use. Pesticide retailers and manufacturers consider retail sales data confidential—and statewide sales data from the California Department of Pesticide Regulation do not provide regional breakdowns.

Residential pesticide purchasing data from telephone surveys indicates that most of the applied insecticides are purchased at a relatively small number of retail outlets—these are large volume retailers like Orchard Supply Hardware (OSH) and Home Depot.<sup>5</sup> Interviews with retailers and thorough shelf surveys conducted by the City of Palo Alto in 1995 and Alameda County in 1997 verified this finding.<sup>6</sup> These surveys found that 44 to 78% of residential pesticide sales occur at Home Depot and OSH (results vary, apparently depending on the presence or absence of these two specific chains in the

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<sup>4</sup> Johnson, B., *Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks Water Quality Attainment Strategy and Total Maximum Daily Load (TMDL)*, Final Project Report, prepared by the California Regional Water Quality Control Board, San Francisco Bay Region. March 2004.

<sup>5</sup> TDC Environmental, *Diazinon & Chlorpyrifos Products: Screening for Water Quality Implications*, prepared for the California Department of Pesticide Regulation, May 15, 2001; Wilen, C., University of California Statewide IPM Project, *Survey of Residential Pesticide Use and Sales in the San Diego Creek Watershed of Orange County, California*, prepared for the California Department of Pesticide Regulation, October 16, 2001; and Wilen, C., University of California Statewide IPM Project, *Survey of Residential Pesticide Use in the Chollas Creek Area of San Diego County and Delhi Channel of Orange County, California*, September 2, 2002.

<sup>6</sup> Cooper, A., *Diazinon in Urban Areas*, prepared for the City of Palo Alto, 1996 and Scanlin, J. and A. Cooper, *Outdoor Use of Diazinon and Other Insecticides in Alameda County*, prepared for the Alameda County Flood Control and Water Conservation District, September 1997.

survey area). On the basis of this finding, limited shelf surveys have been used in recent years to provide program planning and evaluation information for Bay Area water quality agencies.<sup>7,8</sup>

This report presents the results of a shelf survey of the insecticides and herbicides available for sale at the two major San Francisco Bay Area pesticide retailers. The survey is intended to provide 2005 data to support pesticide-related program planning and evaluation by San Francisco Bay Area water quality agencies.

## **2.0 SAN FRANCISCO BAY AREA PESTICIDE RETAILERS SURVEYED**

OSH is a California-based hardware chain that appears to focus on product selection and customer service. All 84 stores in the OSH chain are in California. There are about 30 OSH stores in the San Francisco Bay Area.

Home Depot is a large home improvement retailer with more than 1,500 stores in North America, primarily in the U.S. Home Depot has about 25 Bay Area locations. A “warehouse” store, Home Depot appears to focus on low prices.

Lowe’s is a nationwide chain with about 1,125 stores in the U.S. Lowe’s has at least 50 California stores, six of which are in the San Francisco Bay Area. While it is a warehouse store, Lowe’s offers some customer service and a physical setting intermediate between Home Depot’s concrete-floored warehouse and the more conventional retail design of OSH stores.

Both Home Depot and OSH have previously been identified as the major pesticide retailers—in terms of volume of active ingredient—in the San Francisco Bay Area. Lowe’s, which recently entered the Bay Area market, is a competitor to Home Depot and thus is likely to be a major Bay Area pesticide retailer in the future.

All three stores control inventories at the corporate level with the apparent intent of having identical product selection at all Bay Area stores. A 2003 survey showed that pesticide inventory, displays, and even shelf arrangements were similar among stores in each chain throughout the Bay Area.<sup>9</sup>

## **3.0 STORE SHELF SURVEY PROCEDURE**

The 2005 survey was conducted using essentially the same methods as the 2003 and 2004 surveys. Following the recommendations of the previous surveys, the survey was conducted in the late spring on a Friday, the day when pesticide retail shelves are believed to be most fully stocked.<sup>10</sup>

On May 27, 2005, one store from each of the three pesticide retailer chains (OSH in Foster City, Home Depot in San Mateo, and Lowe’s in San Bruno) was visited to review insecticide and herbicide products available for sale. Product brand name, active ingredient, formulation type, U.S. EPA registration number, and application locations were obtained for insecticides, herbicides, molluscicides, and fungicides. The survey did

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<sup>7</sup> Moran, K., “Shelf Surveys at Orchard Supply Hardware and Home Depot,” Memorandum to Bill Johnson, San Francisco Bay Regional Water Quality Control Board, March 15, 2002 and Appendix D.2 of TDC Environmental, *Diazinon & Chlorpyrifos Products: Screening for Water Quality Implications*, prepared for the California Department of Pesticide Regulation, May 15, 2001.

<sup>8</sup> TDC Environmental, *San Francisco Bay Area Pesticide Retail Store Survey*, prepared for U.S. EPA Region IX, November 2003, and TDC Environmental, *San Francisco Bay Area Pesticide Retail Store Survey*, funded by the City of San José, June 2004.

<sup>9</sup> TDC Environmental, *San Francisco Bay Area Pesticide Retail Store Survey*, prepared for U.S. EPA Region IX, November 2003.

<sup>10</sup> *Ibid.*

not include disinfectants and cleaning products, pool products, drain clearing products, rodent (or other mammal) control products, non-chemical insect controls, enclosed baits, or unregistered “safer substitutes.” In a small change from previous surveys, this survey included soaps and petroleum oils that are registered as pesticides.

The week of the survey, all three stores had multiple special displays of pesticides in locations such as aisle “end caps,” in the aisles themselves, and near check-out stations. As expected, shelves at all three stores were full, with only a few products shelf spaces open. Since missing products were labeled on the shelf and similar to products already included in the survey, the survey was deemed complete.

#### **4.0 SURVEY RESULTS**

More than 320 different products meeting the survey criteria were on sale at the three stores, some in multiple container sizes. The products contained 99 individual registered pesticide active ingredients. Almost all ready-to-use liquids were in volumes of 24 fluid ounces or more; many also were available in a 128 fluid ounce size. Concentrates were most commonly observed in 16 and 32 fluid ounce containers, but some—particularly herbicides—are sold in volumes as large as 128 fluid ounces. Dusts and granules were generally in 1-pound shaker cans and in 2 to 20 pound boxes and bags.

Reflecting the phase out of most urban diazinon and chlorpyrifos uses, no diazinon or chlorpyrifos products were available for sale at any of the stores.

The attached tables (Tables 1, 2, and 3) summarize the observed active ingredients, formulations, and sites of use that are most important for water quality purposes.<sup>11</sup> Since aerosols comprise a large fraction of the containers but a very small fraction of the active ingredient volume, in this survey (as in previous surveys), sites of use are not summarized for aerosol products. Below, the major findings from each store are summarized.

#### **4.1 Orchard Supply Hardware Results**

OSH consistently stocks the largest number of pesticide products of any surveyed pesticide retailer. The survey catalogued 182 different products containing 85 registered pesticide active ingredients (see Table 1). The surveyed products included 107 insecticides, 47 herbicides, 11 molluscicides (1 of which is also an insecticide), and 27 fungicides (9 of which are also insecticides). The following formulations were observed: concentrates (63), ready-to-use liquids (43), granules (32), aerosols (23), dusts (8), foggers (7), fertilizers (3), one wipe, one gel, and one solid.

#### **4.2 Home Depot Results**

The survey identified 110 different products containing 61 different registered pesticide active ingredients (see Table 2). The surveyed products included 69 insecticides, 31 herbicides, 6 molluscicides (one of which is also an insecticide), and 12 fungicides (7 of which are also insecticides). The following formulations were observed: concentrates (36), ready-to-use liquids (24), granules (13), aerosols (21), dusts (5), fertilizers (4), foggers (5), and gels (2).

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<sup>11</sup> Because the detailed survey worksheets documenting product brand names and registration numbers contain details that could be used by competitors to the disadvantage of the stores that allowed their shelves to be surveyed in detail, they are not attached. Agencies may obtain copies from TDC Environmental upon request and with certification that the worksheets will be kept confidential and will not be used for competitive purposes.

### 4.3 Lowe's Results

The survey cataloged 135 products containing 69 different registered pesticide active ingredients (see Table 3). The surveyed products included 83 insecticides, 39 herbicides, 6 molluscicides (2 of which are also insecticides), and 19 fungicides (10 of which are also insecticides). The following formulations were observed: concentrates (46), ready-to-use liquids (35), aerosols (19), granules (18), fertilizers (7), dusts (5), foggers (4) and one wipe.

### 5.0 POTENTIAL EFFECT OF COURT DECISION ON PESTICIDE SALES

A court order coming out of a salmon protection lawsuit by the Washington Toxics Coalition and other environmental groups requires that a point-of-sale notification be provided to San Francisco Bay Area purchasers of seven urban use pesticides. The notice indicates that the pesticides may be harmful to salmon. These seven pesticides are carbaryl, 2,4-D, diazinon, diuron, malathion, triclopyr butoxyethyl ester, and trifluralin. The court order also prohibits application of 38 pesticides<sup>12</sup> within specified buffer zones adjacent to "salmon supporting waters" (which are defined to include most San Francisco Bay Area surface waters). Although the court decision requiring the notices was appealed, an appeals court recently upheld the decision. At the time of this survey, the court order was in effect.

The signage required by the court order was not observed at any of the three surveyed retailers, even though products covered by the court order were available at all three stores. While the court order does not require retailers to distribute information about the buffer zone requirements, it should be noted that none of the stores had any customer information about these requirements, which makes it unlikely that consumers are aware of this use restriction.

Continuing litigation may change the requirements of this court decision in the future. In the long term, U.S. EPA plans to complete actions to modify registrations of the affected pesticides to address their effects on salmon (*i.e.*, complete "consultations" under the Endangered Species Act). As these actions are completed, the requirements for point-of-sale notices and application buffer zones will be phased out.

### 6.0 ANALYSIS OF SURVEY RESULTS

- Pyrethroids dominate the insecticide marketplace. Most of the insecticide shelf space at both stores is populated with pyrethroids. While up to one-third of insecticide products do not contain pyrethroids, non-pyrethroid insecticides are more likely to be specialty products—like products for house plants, cockroaches, mosquitoes, or snails—and thus given limited shelf space. Among non-aerosol products with uses most important for water quality (outdoor structural pest control uses),<sup>13</sup> permethrin is the most common insecticide (in more than a third of such products), followed by cyfluthrin, bifenthrin, and esfenvalerate.
- Seasonal displays highlighted pyrethroid insecticides or weed-and-feed herbicides. In contrast, malathion, imidacloprid, pyrethrins, and other possible pesticide

<sup>12</sup> The 38 pesticides are: 1,3-dichloropropene, 2,4-D, azinphos-methyl, bensulide, bromoxynil, captan, carbaryl, carbofuran, chlorothalonil, chlorpyrifos, coumaphos, diazinon, diflubenzuron dimethoate, disulfoton, diuron, ethoprop, fenamiphos, fenbutatin oxide, lindane, malathion, methidathion, methomyl, methyl parathion, metolachlor, metribuzin, naled, oxyfluorfen, pendimethalin, phorate, prometryn, propargite, tebuthiuron, triclopyr butoxyethyl ester, and trifluralin.

<sup>13</sup> TDC Environmental, *Diazinon & Chlorpyrifos Products: Screening for Water Quality Implications*, prepared for the California Department of Pesticide Regulation, May 15, 2001.

substitutes for diazinon were not observed in promotional displays. Safer alternatives, such as baits and traps were observed in several promotional displays.

- Diazinon and chlorpyrifos phase out is evident. No diazinon or chlorpyrifos products were observed.
- Product mix has not changed meaningfully in the last year. Compared to the previous survey (May 2004), the list of products identified was relatively similar. Some products had been replaced, often by similar products with different brand names. The changes in product active ingredients, formulations, and sizes were relatively minor and did not appear to reflect any meaningful trend. Product instructions were similar to those observed in recent surveys.
- Because the requirements of the Washington Toxics Coalition *et al.* court decision are not being followed by major retailers, the decision does not appear to be affecting pesticide sales. “Salmon Hazard” warning signs required by a court order were not observed at any retailer. Should the point-of-sale notices be posted in the future, the presence of the warning would be expected to shift consumer purchases away from labeled products (those containing 2,4-D, carbaryl, diazinon, diuron, malathion, triclopyr butoxyethyl ester and trifluralin) to alternatives.
- Tralomethrin occurs in outdoor consumer products that may have enough use to have the potential to contribute to surface water quality impacts from pyrethroids. Although most tralomethrin-containing products are aerosols and foggers,<sup>14</sup> two ready to use liquid products were observed to have a relatively large amount of shelf space at one of the major retailers. This is the second year in a row that such products were observed in quantity during the survey. On the basis of this finding, tralomethrin should be added to the list of pyrethroids of concern for urban surface water quality.

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<sup>14</sup> Aerosols and foggers are relatively unimportant for surface water quality because they contain relatively small quantities of pesticide active ingredient. Based on previous analysis of the relative importance of various pesticide formulations to water quality, these formulations are believed to have the potential to contribute relatively small quantities of pesticide active ingredients to urban runoff and municipal wastewater discharges (TDC Environmental, *Diazinon & Chlorpyrifos Products: Screening for Water Quality Implications*, prepared for the California Department of Pesticide Regulation, May 15, 2001.)



**Table 1: Ingredient Analysis: OSH Survey, May 2005**

Active ingredient	Total # Products	Sites of Use <sup>a</sup> (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid <sup>b</sup>	Other
<i>Pyrethroids</i>											
Allethrin	4					3					Fuel
beta Cyfluthrin	1	1						1			
Bifenthrin	5	3	3	2			1	1		2	Fertilizer
Cyfluthrin	8	6	7	1			2	3		3	
Cypermethrin	2					1			1		
Deltamethrin	1	1		1							Dust
d-trans Allethrin	2					2					
Esbiothrin	1										Fuel
Esfenvalerate	4	2	3			1		1		2	
Imiprothrin	1					1					
lambda Cyhalothrin	1	1		1						1	
Permethrin	28	14	10	4	Pets	7	3	8	5	3	
Phenothrin	3					3					
Prallethrin	3					3					
Resmethrin	3					3					
Tetramethrin	11					8			3		
Tralomethrin	3					3					
<i>Carbamates</i>											
Carbaryl	5	2	5		Pets		2	1		1	Dust

<sup>a</sup> All uses allowed by the label are recorded. Product labels often allow more than one of these sites of use (e.g., both structure-outdoors and indoor uses).

<sup>b</sup> RTU = Ready to Use

**Table 1: Ingredient Analysis: OSH Survey, May 2005 (Continued)**

Active ingredient Insecticides, continued	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<i>Organophosphorous Pesticides</i>											
Acephate	5		3			2	1	2			
Disulfoton	1		1				1				
Malathion	1	1	1					1			
<i>Other</i>											
Bacillus thuringiensis, var. israelensis	1		1				1				
Bacillus thuringiensis, subsp. kurstaki	1		1					1			
Borax	1			1				1			
Boric acid	1			1							Dust
DEET	5				Clothing Skin	2				2	Wipe
Disodium octaborate tetrahydrate	2	2						1		1	
d-Limonene	1			1						1	
gamma Lactone	1			1						1	
Hydramethylnon	2	1	1	1			1				Gel
Imidacloprid	5		5					4		1	
Paraffinic oil	1		1					1			
Peach aldehyde	1		1	1						1	
Petroleum oil	3		3					3			
p-Menthane-3,8-diol	1				Clothing Skin					1	

**Table 1: Ingredient Analysis: OSH Survey, May 2005 (Continued)**

Active ingredient	Total #	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<i>Other (continued)</i>											
Potassium salts of fatty acids	7		5	1		1		2		4	
Pyrethrins	6		2	2		2			2	2	
Silicon dioxide	1	1		1							Dust
S-Methoprene	2					1			1		
Herbicides	Total #	Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
2-(2,4-DP), dimethylamine salt	1		1				1				
2,4-D	4		4				3				Fertilizer
2,4-D, dimethylamine salt	7		7				1	3		3	
Benefin	2		2				2				
Calcium acid methanearsonate	2		2					1		1	
Dicamba	4		4				3	1			
Dicamba, dimethylamine salt	7		7					4		3	
Diquat dibromide	3		3					2		1	
Dithiopyr	2		2				1			1	
Fluazifop-p-butyl	4		4					1		3	
Glyphosate	8		8					4		4	
Glyphosate, isopropylamine salt	4	1	4					2		2	

**Table 1: Ingredient Analysis: OSH Survey, May 2005 (Continued)**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
Imazapyr	1		1				1				
MCPA, dimethylamine salt	1		1					1			
MCPA, isooctyl ester	1		1					1			
MCPP	1		1				1				
MCPP, dimethylamine salt	5		5				1	2		2	
MCPP-p	3		3				2				Fertilizer
MCPP-p, dimethylamine salt	2		2					1		1	
MSMA	3		3					2		1	
Oxyfluorfen	1	1	1							1	
Oryzalin	5		5					3		2	
Pendamethalin	1		1								Fertilizer
Prometon	1		1					1			
Sethoxydim	1		1					1			
Triclopyr, triethylamine salt	4		4					3		1	
Triclopyr, butoxyethyl ester	1		1					1			
Trifluralin	2		2				2				
Zinc	1	1						1			

**Table 1: Ingredient Analysis: OSH Survey, May 2005 (Continued)**

Active ingredient Other (Molluscicides, Fungicides, Etc.)	Total # Product s	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
Basic copper sulfate	1		1								Dust
Calcium polysulfide	2		2					2			
Chlorothalonil	1		1							1	
Copper, metallic	2		2					2			
Ethephon	1		1					1			
Fenbutatin-oxide	2		2					2			
Iron Phosphate	1		1				1				
Metaldehyde	10		10				9			1	
Myclobutanil	4		3			1	1	2			
Neem Oil	4		4	2				2		2	
n-Octylbicycloheptene dicarboximide	4					2			2		
PBO	8		2	2		3			3	2	
Sulfur	2		2							1	Dust
Tebuconazole	2		2					2			
Thiophanate methyl	1		1				1				
Triadimefon	2		2				1	1			
Triforine	4		2			2		2			

**Table 2: Ingredient Analysis: Home Depot Survey, May 2005**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<i>Pyrethroids</i>											
Allethrin	3					3					
Bifenthrin	6	3	4	2			2	1		2	Fertilizer
Cyfluthrin	2	1	1	1						2	
Cypermethrin	3	1	1	1		1		1	1		
d-trans Allethrin	5					5					
Esfenvalerate	3	3	3					2		1	
Imiprothrin	1					1					
lambda Cyhalothrin	3	2	2	1			1	1		1	
Permethrin	19	5	4	1	Pets	8	1	5	3		Dust
Phenothrin	3					3					
Prallethrin	1					1					
Resmethrin	3					3					
Tetramethrin	7					5			2		
Tralomethrin	6					5			1		
<i>Carbamates</i>											
Carbaryl	3	1	3		Pets		1			1	Dust
<i>Organophosphorous Pesticides</i>											
Acephate	4		2			2		2			
Disulfoton	1		1				1				
Malathion	2	1	2					2			

**Table 2: Ingredient Analysis: Home Depot Survey, May 2005 (Continued)**

Active ingredient Insecticides, continued	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<i>Other</i>											
Canola Oil	3		3	3						3	
Disodium octaborate tetrahydrate	1	1									Dust
Eugenol	1					1					
Fipronil	1	1		1							Gel
Hydramethylnon	1	1		1							Gel
Imidacloprid	3		3					2		1	
Nylar	1			1				1			
Orthoboric acid	1			1							Dust
Paraffinic oil	1		1					1			
2-phenylethyl propionate	1					1					
Potassium salts of fatty acids	2		2					1		1	
Pyrethrins	5		3	3		2				3	

**Table 2: Ingredient Analysis: Home Depot Survey, May 2005 (Continued)**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
2-(2,4-DP), dimethylamine salt	3		3					2		1	
2,4-D	3		3				1	1			Fertilizer
2,4-D, dimethylamine salt	4		4					2		2	
Calcium acid methanearsonate	1		1					1			
Dicamba	3		3					1		1	Fertilizer
Dicamba, dimethylamine salt	2		2					1		1	
Diquat dibromide	3		3					2		1	
Dithiopyr	2		2							1	Fertilizer
Fluazifop-p-butyl	3		3					1		2	
Glyphosate	7	1	7					3		4	
Glyphosate, isopropylamine salt	2	2	2					1		1	
Imazapyr	2	1	2					1		1	
MCPA, dimethylamine salt	1		1					1			
MCPP	1		1								Fertilizer
MCPP, dimethylamine salt	4		4					2		2	
MCPP-p	2		2				1	1			
Oxyfluorfen	2	2	2							2	
Prometon	1	1	1					1			
Triclopyr, triethylamine salt	3		3					2		1	
Trifluralin	3		3				1	1			Fertilizer



**Table 2: Ingredient Analysis: Home Depot Survey, May 2005 (Continued)**

Active ingredient Other (Molluscicides, Fungicides, Etc.)		Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc .	Fogger	RTU Liquid	Other
Calcium polysulfide	1		1					1			
Ethephon	1		1					1			
Fenbutatin oxide	2		2					2			
Iron Phosphate	1		1				1				
Metaldehyde	5		5				4			1	
Myclobutanil	3		2			1		2			
Neem Oil	2		2	2				1			
PBO	4					3			1		
Tebuconazole	1		1					1			
Thiophanate methyl	1		1				1			1	
Triforine	4		2			2		2			

**Table 3: Ingredient Analysis: Lowe's Survey, May 2005**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<i>Pyrethroids</i>											
Bifenthrin	4	2	2	1		1	1		1	Fertilizer	
beta-Cyfluthrin	1	1					1				
Cyfluthrin	7	6	6	1		2	2		3		
Cypermethrin	1					1					
d-trans Allethrin	5					5					
Deltamethrin	2	2	2	2					1	Dust	
Esfenvalerate	2	2	2					1	1		
Imiprothrin	1					1					
lambda-Cyhalothrin	6	3	3	2		1	1	1	3		
Permethrin	16	3	6			4	2	5	3	Fertilizer	
Phenothrin	2			1		1				Dust	
Prallethrin	3					3					
Resmethrin	2					2					
Tetramethrin	5					2			3		
Tralomethrin	10	2	2	3		6			1	3	
<i>Carbamates</i>											
Carbaryl	4	1	4		Pets		2	1		Dust	
<i>Organophosphorous Pesticides</i>											
Acephate	3		2			1		2			
Disulfoton	1		1				1				
Malathion	1	1	1					1			

**Table 3: Ingredient Analysis: Lowe's Survey, May 2005 (Continued)**

Active ingredient Insecticides, continued	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granul e	Conc.	Fogger	RTU Liquid	Other
<i>Other</i>											
Borax	1	1		1				1			
Calcium polysulfide	1		1					1			
Canola oil	1		1							1	
DEET	3				Clothing Skin	1				1	Wipe
Hydramethylnon	2	1	2				2				
Imidacloprid	3		3					2		1	
Orthoboric acid	2			1		1					Dust
Petroleum oil	2		2					2			
Potassium salts of fatty acids	2	1	2	1				1		1	
Pyrethrins	7		3	2	Pets	3		2		2	

**Table 3: Ingredient Analysis: Lowe's Survey, May 2005 (Continued)**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
2,4-DP, isooctyl ester	1		1				1				
2,4-D	7		7				1	1		2	Fertilizer
2,4-D, dimethylamine salt	4		4					2		2	
2,4-D, isooctyl ester	1		1					1			
Calcium acid methanearsonate	1		1					1			
Dicamba	9		9				1	3		3	Fertilizer
Dicamba, dimethylamine salt	5		5					3		2	
Dichlobenil	1		1				1				
Diquat dibromide	5	1	5					3		2	
Dithiopyr	2		2							1	Fertilizer
Fluazifop-p-butyl	4		4					1		3	
Glyphosate	3		3					1		2	
Glyphosate, isopropylamine salt	7	1	7					4		3	
Imazapyr	2		2					1		1	
MCPA, dimethylamine salt	1		1					1			
MCPP	2		2								Fertilizer
MCPP, dimethylamine salt	2		2					1		1	
MCPP-p	4		4					1		2	Fertilizer
MCPP-p, dimethylamine salt	2		2					1		1	

**Table 3: Ingredient Analysis: Lowe's Survey, May 2005 (Continued)**

Active ingredient	Total # Products	Sites of Use (Excluding Aerosols, Foggers & Fuel)				Formulations (All Products)					
		Structure- Outdoors	Lawn & Garden	Indoor	Other	Aerosol	Granule	Conc.	Fogger	RTU Liquid	Other
<b>Herbicides, continued</b>											
MSMA	3		3					2		1	
Oxyfluorfen	2	1	2							2	
Pelargonic acid	1		1							1	
Prometon	1	1	1					1			
Triclopyr	3		3					3			
Triclopyr, triethylamine salt	1		1					1			
Trifluralin	2		2				1				Fertilizer
<b>Other (Molluscicides, Fungicides, Etc.)</b>	<b>Total # Products</b>	<b>Structure- Outdoors</b>	<b>Lawn &amp; Garden</b>	<b>Indoor</b>	<b>Other</b>	<b>Aerosol</b>	<b>Granule</b>	<b>Conc.</b>	<b>Fogger</b>	<b>RTU Liquid</b>	<b>Other</b>
Basic copper sulfate	1		1								Dust
Chlorothalonil	2		2					1		1	
Fenbutatin oxide	2		2					2			
Iron Phosphate	1		1				1				
Metaldehyde	5		5				4			1	
Myclobutanil	4		3			1		2		1	
Neem Oil	4	1	4					2		2	
n-Octylbicycloheptene dicarboximide	1					1					
PBO	8		2	1	Pets	3		2	2	1	
Sulfur	1		1							1	
Tebuconazole	2		2					2			
Thiophanate methyl	1		1				1				
Triforine	3		2			1		2			
Zinc chloride	1	1						1			