
San Francisco Bay Area Pesticide Retail Store Survey



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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 provide current pesticide sales information to San Francisco Bay Area water quality agencies.

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 were visited in May 2004. At each store, product brand name, insecticide active ingredient, formulation type, U.S. EPA registration number, and application locations were obtained for insecticide, herbicides, molluscicides, and fungicides.

The results of this survey, which are similar to findings in 2003, reflect widely anticipated changes in the insecticide market away from organophosphorous pesticides and to pyrethroids. This trend—and resulting domination of the market by pyrethroids—is likely to pose a threat to future urban surface water quality.¹

1.0 INTRODUCTION

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. Although attempts have been made to evaluate insecticide sales data, retailers and manufacturers consider retail sales data confidential—and statewide sales data from the California Department of Pesticide Regulation do not provide regional breakdowns.²

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 and Home Depot.³ Interviews with retailers and thorough shelf surveys conducted by the City of Palo Alto in 1995 and

¹ TDC Environmental, *Insecticide Market Trends and Potential Water Quality Implications*, prepared for the San Francisco Estuary Project and the San Francisco Bay Regional Water Quality Control Board, April 2003.

² *Ibid.*, page 44.

³ 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.

Alameda County in 1997 verified this finding.⁴ These surveys found that 44 to 78% of residential pesticide sales occur at Home Depot and Orchard Supply Hardware (results vary, apparently depending on the presence or absence of these two specific chains in the 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.^{5,6,7}

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 2004 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

Orchard Supply Hardware (OSH) is a California-based hardware chain that appears to focus on product selection and customer service. All 82 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.

Both 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.⁸

3.0 STORE SHELF SURVEY PROCEDURE

The 2004 survey was conducted using the same methods as the September 2003 survey. Following the recommendations of the previous survey, the survey was conducted in the late spring on a Friday, the day when pesticide retail shelves are believed to be most fully stocked.⁹

On May 14, one store from each of the two pesticide retailer chains (Orchard Supply Hardware in Foster City, Home Depot in San Mateo) 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 insecticide, herbicides, molluscicides, and fungicides. The survey did not include disinfectants and cleaning products, pool products, drain clearing products, rodent (or other mammal) control products, non-chemical insect controls, enclosed baits, soaps, petroleum oils, or unregistered “safer substitutes.”

The week of the survey, both stores had newspaper inserts emphasizing garden and outdoor products. Both had multiple special displays of pesticides in locations such as

⁴ 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.

⁵ See section 3.0 (below).

⁶ 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.

⁷ TDC Environmental, *San Francisco Bay Area Pesticide Retail Store Survey*, prepared for U.S. EPA Region IX, November 2003.

⁸ *Ibid.*

⁹ *Ibid.*

aisle “end caps,” in the aisles themselves, and near check-out stations. As expected, shelves at both stores were full, with only one product missing at each store. 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

A total of 219 different products meeting the survey criteria were on sale at the two stores, some in multiple container sizes. The products contained 80 individual registered pesticide active ingredients, including 36 individual insecticide active ingredients (two of which are simply stereoisomers of other insecticides, for a total of 34 different substances), 29 individual herbicide active ingredients, 13 other types of active ingredients, and two synergists. 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.

Although diazinon products can legally be sold until the end of 2004, no diazinon products were observed at either store.

The attached tables (Tables 1 and 2) summarize the observed active ingredients, formulations, and sites of use that are most important for water quality purposes.¹⁰ 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 cataloged 159 different products containing 76 registered pesticide active ingredients (see Table 1). The surveyed products included 90 insecticides, 45 herbicides, 14 molluscicides (2 of which are also insecticides), and 19 fungicides (7 of which are also insecticides). The following formulations were observed: concentrates (49), ready-to-use liquids (35), granules (36), aerosols (23), dusts (7), foggers (6), fertilizers (2), and one solid.

4.2 Home Depot Results

The survey identified 100 different products containing 54 different registered pesticide active ingredients (see Table 2). The surveyed products included 64 insecticides, 25 herbicides, 6 molluscicides (one of which is also an insecticide), 9 fungicides (4 of which are also insecticides) and one growth regulator. The following formulations were observed: concentrates (31), ready-to-use liquids (20), granules (14), aerosols (19), dusts (5), fertilizers (5), foggers (4), and gels (2).

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

¹⁰ 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.

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 pesticides¹¹ within specified buffer zones adjacent to “salmon supporting waters” (which are defined to include most San Francisco Bay Area surface waters).

Pesticide registrants, through their organization Crop Life America, were ordered by the court to provide the point-of-sale notice to retailers. On March 24, U.S. EPA published a *Federal Register* notice describing the retailer notification process.¹² On April 2, Crop Life America issued a retailer notification letter, accompanied by the court-approved point-of-sale-notice (the “Salmon Hazard” notice). This letter references the court order, but does not list the pesticides to which the requirement applies nor does it explain that the point-of-sale notification was required to be made beginning April 5, 2004.¹³

Pesticide manufacturers have appealed the court decision requiring the notices. At the time of this survey, the court order was in effect. 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.

5.1 Point-of-Sale Notification Research

To determine whether the court order may be affecting retail sales, pesticide retail outlets were surveyed for the presence of the point-of-sale notification and information about the buffer zone requirements as part of the 2004 pesticide retail store survey. All store visits were conducted between May 14 and May 18, 2004. In addition to the two major San Francisco Bay Area pesticide retailers evaluated above, the survey included four other chain stores (a supermarket, two drug stores, and a general merchandiser), two small unaffiliated garden stores, and three small hardware stores (two unaffiliated, one Ace Hardware affiliate). The point-of-sale notification research was not comprehensive: stores were selected to cover the range of smaller-volume pesticide retailers.

Products covered by the court order were available at 9 of the 11 surveyed stores (none of the affected products were present at the supermarket or one of the chain drug stores). Of the remaining stores, only one of the small garden stores displayed the “Salmon Hazard” notice. This store displayed the notice as a shelf label in front of carbaryl and malathion products. The notice was also incorrectly placed in front of glyphosate products. The notice was not placed in front of trifluralin products, where it should have appeared. Among the stores visited, 6 of the 7 products to which the point-of-sale notification requirement applied were observed (all but diuron).

¹¹ 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, tebutiuron, triclopyr butoxyethyl ester, and trifluralin.

¹² U.S. EPA, “Notice to Pesticide Retailers and State Agencies Regarding Washington Toxics Coalition et al. v. EPA litigation,” *Federal Register*, March 24, 2004.

¹³ Crop Life America, “Notice to Lawn and Garden Product Retailers,” April 2, 2004.

Where possible without disrupting sales activity (at about half the stores), store staff or managers were informally interviewed.¹⁴ None of the interviewees had heard of the court order, the salmon hazard notice, or the buffer zones. Their comments gave indications of discomfort that they might not be complying with the law and showed that they rely on pesticide distributors to ensure that their stores are in compliance with pesticide sales requirements like sales termination dates.

6.0 ANALYSIS OF SURVEY RESULTS

In general, the results of this survey reflect the continued trend in the insecticide market away from organophosphorous pesticides and to pyrethroids. This trend—and resulting domination of the market by pyrethroids—is likely to pose a threat to future urban surface water quality.¹⁵

- Pyrethroids are now dominating 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),¹⁶ permethrin is the most common insecticide (in almost half of such products), followed by cyfluthrin, esfenvalerate, and bifenthrin.
- Seasonal displays generally highlighted pyrethroid insecticides or weed-and-feed herbicides. In contrast, malathion, imidacloprid, pyrethrins, and other possible pesticide 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. Several pyrethroid products were accompanied by shelf talkers saying “Looking for Diazinon?”.
- Product mix has not changed meaningfully in the last year. Compared to the previous survey (September 2003), the list of products identified was relatively similar. Between 10 and 20% of the products had been replaced, generally 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.
- The Washington Toxics Coalition *et al.* court decision does not appear to be affecting pesticide sales at present. “Salmon Hazard” warning signs required by a court order were observed at only one of nine pesticide stores carrying affected pesticides (and not at either major San Francisco Bay Area pesticide retailer). As no information about the buffer zone requirement was found at any retailer, the buffer zone requirement is also unlikely to be changing pesticide sales and use by retail pesticide purchasers. Given widespread non-compliance with the court order and store staff unfamiliarity with the requirements, it appears likely that the absence of the point-of-sale notices is due to a failure in the procedures for retailer notification.

¹⁴ Without reference to the “Our Water/Our World” program or the funders of this report.

¹⁵ TDC Environmental, *Insecticide Market Trends and Potential Water Quality Implications*, prepared for the San Francisco Estuary Project and the San Francisco Bay Regional Water Quality Control Board, April 2003.

¹⁶ TDC Environmental, *Diazinon & Chlorpyrifos Products: Screening for Water Quality Implications*, prepared for the California Department of Pesticide Regulation, May 15, 2001.

- Future actions relating to the Washington Toxics Coalition *et al.* court decision could affect pesticide sales. Since the litigation is continuing, it is possible that the court will modify its order in a manner that would cause widespread implementation of the order's requirements. It is also possible that the court order will be terminated. 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. Such a change could increase sales of pyrethroids. A broader variety of herbicide alternatives exist, making it unlikely that sales of any one class of herbicides would increase significantly. While pesticide use reduction is a possible response to the warning signs, given that no information about less toxic alternatives is required to be provided in association with the court ordered requirements, it is more likely that pesticide purchasers would simply switch to another pesticide.

Table 1: Ingredient Analysis: OSH Survey, May 2004

| Active ingredient | Total # Products | Sites of Use ^a (Excluding Aerosols & Foggers) | | | | Formulations (All Products) | | | | | |
|--------------------|---------------------|---|------------------|--------|-------|--------------------------------|---------|-------|--------|----------------------------|----------|
| | | Structure- Outdoors | Lawn & Garden | Indoor | Other | Aerosol | Granule | Conc. | Fogger | RTU Liquid ^b | Other |
| <i>Pyrethroids</i> | | | | | | | | | | | |
| Allethrin | 4 | | 1 | | | 3 | | | | 1 | |
| Beta-cyfluthrin | 1 | 1 | | | | | | 1 | | | |
| Bifenthrin | 4 | 3 | 2 | 2 | | | 1 | 1 | | 2 | |
| Cyfluthrin | 8 | 6 | 7 | 1 | | | 2 | 3 | | 3 | |
| Cypermethrin | 2 | | | | | 1 | | | 1 | | |
| Deltamethrin | 1 | 1 | | 1 | | | | | | | Dust |
| d-trans allethrin | 2 | | | | | 2 | | | | | |
| Esbiothrin | 1 | | 1 | | | | | | | | Solid |
| Esfenvalerate | 4 | 4 | 3 | 1 | | 1 | | 2 | | 1 | |
| Imiprothrin | 1 | | | | | 1 | | | | | |
| Lambda-Cyhalothrin | 1 | 1 | | 1 | | | | | | 1 | |
| Permethrin | 27 | 13 | 8 | 3 | Pets | 8 | 4 | 5 | 4 | 3 | Dust (3) |
| Phenothrin | 4 | | | | | 4 | | | | | |
| Prallethrin | 3 | | | | | 3 | | | | | |
| Resmethrin | 3 | | | | | 3 | | | | | |
| Tetramethrin | 10 | | | | | 8 | | | 2 | | |
| Tralomethrin | 3 | | | | | 3 | | | | | |
| <i>Carbamates</i> | | | | | | | | | | | |
| Carbaryl | 6 | 2 | 7 | | Pets | | 4 | 1 | | 1 | Dust |

^a 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).

^b RTU = Ready to Use

Table 1: Ingredient Analysis: OSH Survey, May 2004 (Continued)

| Active ingredient Insecticides, continued | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | 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> | | | | | | | | | | | |
| Boric acid | 1 | | | 1 | | | | | | | Dust |
| DEET | 2 | | | | Person | 1 | | | | 1 | |
| Disodium octaborate tetrahydrate | 2 | 2 | | | | | | 1 | | 1 | |
| d-Limonene | 1 | | | 1 | | | | | | 1 | |
| gamma-lactone | 1 | | | 1 | | | | | | 1 | |
| Hydramethylnon | 1 | 1 | 1 | | | | 1 | | | | |
| Imidacloprid | 4 | | 4 | | | | | 3 | | 1 | |
| peach aldehyde | 1 | | | 1 | | | | | | 1 | |
| p-menthane-3,8-diol | 1 | | | | Person | | | | | 1 | |
| Potassium salts of fatty acids | 2 | | 1 | | | 1 | | | | 1 | |
| Pyrethrins | 8 | | 3 | 2 | | 3 | | | 2 | 3 | |
| S-Methoprene | 3 | | 1 | | | 1 | 1 | | 1 | | |

Table 1: Ingredient Analysis: OSH Survey, May 2004 (Continued)

| Active ingredient | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | Formulations (All Products) | | | | | |
|------------------------------------|---------------------|--|------------------|--------|-------|--------------------------------|---------|-------|--------|---------------|------------|
| | | Structure- Outdoors | Lawn & Garden | Indoor | Other | Aerosol | Granule | Conc. | Fogger | RTU Liquid | Other |
| 2-(2,4-DP), dimethylamine salt | 2 | | 2 | | | | 1 | 1 | | | |
| 2,4-D | 4 | | 4 | | | | 3 | | | | Fertilizer |
| 2,4-D, dimethylamine salt | 9 | | 9 | | | | 1 | 6 | | 2 | |
| Benefin | 1 | | 1 | | | | 1 | | | | |
| Calcium acid methanearsonate | 2 | | 2 | | | | | 1 | | 1 | |
| Dicamba | 4 | | 4 | | | | 3 | 1 | | | |
| Dicamba, dimethylamine salt | 7 | | 7 | | | | | 5 | | 2 | |
| Diquat dibromide | 3 | | 3 | | | | | 2 | | 1 | |
| Dithiopyr | 1 | | 1 | | | | 1 | | | | |
| Fluazifop-p-butyl | 3 | | 3 | | | | | 1 | | 2 | |
| Glyphosate | 5 | | 5 | | | | | 3 | | 2 | |
| Glyphosate, isopropylamine salt | 4 | 1 | 4 | | | | | 2 | | 2 | |
| Imazapyr | 1 | | 1 | | | | | 1 | | | |
| MCPA, isooctyl ester | 1 | | 1 | | | | | 1 | | | |
| MCPP | 2 | | 2 | | | | 2 | | | | |
| MCPP, dimethylamine salt | 7 | | 7 | | | | 1 | 4 | | 2 | |

Table 1: Ingredient Analysis: OSH Survey, May 2004 (Continued)

| Active ingredient | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | Formulations (All Products) | | | | | |
|-------------------------------------|-----------------------------|--|------------------------------|---------------|--------------|--------------------------------|----------------|--------------|---------------|-----------------------|--------------|
| | | Structure- Outdoors | Lawn & Garden | Indoor | Other | Aerosol | Granule | Conc. | Fogger | RTU Liquid | Other |
| Herbicides, continued | | | | | | | | | | | |
| MCPP-p | 2 | | 2 | | | | 1 | | | | Fertilizer |
| MCPP-p, dimethylamine salt | 2 | | 2 | | | | | 1 | | 1 | |
| Magnesium chloride | 1 | | 1 | | | | | 1 | | | |
| MSMA | 3 | | 3 | | | | | 2 | | 1 | |
| Oxyfluorfen | 1 | 1 | 1 | | | | | | | 1 | |
| Oryzalin | 3 | | 3 | | | | 1 | 2 | | | |
| Pendamethalin | 2 | | 2 | | | | 1 | | | | Fertilizer |
| Prometon | 1 | | 1 | | | | | 1 | | | |
| Sethoxydim | 1 | | 1 | | | | | 1 | | | |
| Trichlopyr triethylamine salt | 3 | | 3 | | | | | 2 | | 1 | |
| Triclopyr, butoxyethyl ester | 1 | | 1 | | | | | 1 | | | |
| Trifluralin | 2 | | 2 | | | | 2 | | | | |
| Zinc | 1 | 1 | | | | | | 1 | | | |
| Synergists | Total # Products | Structure- Outdoors | Lawn & Garden | Indoor | Other | Aerosol | Granule | Conc. | Fogger | RTU Liquid | Other |
| PBO | 5 | | 2 | 2 | | 1 | | | 2 | 2 | |
| n-octylbicycloheptene dicarboximide | 5 | | | | | 3 | | | 2 | | |

Table 1: Ingredient Analysis: OSH Survey, May 2004 (Continued)

| Active ingredient Other (Molluscicides, Fungicides) | Total # Product s | Sites of Use (Excluding Aerosols & Foggers) | | | | Formulations (All Products) | | | | | |
|---|-------------------------|--|------------------|--------|-------|--------------------------------|---------|-------|--------|---------------|-------|
| | | Structure- Outdoors | Lawn & Garden | Indoor | Other | Aerosol | Granule | Conc. | Fogger | RTU Liquid | Other |
| Basic copper sulfate | 1 | | 1 | | | | | | | | Dust |
| Chlorothalonil | 2 | | 2 | | | | | 1 | | 1 | |
| Copper, metallic | 2 | | 2 | | | | | 2 | | | |
| Fenbutatin-oxide | 2 | | 2 | | | | | 2 | | | |
| Iron Phosphate | 1 | | 1 | | | | 1 | | | | |
| Metaldehyde | 14 | | 14 | | | | 12 | | | 2 | |
| Myclobutanil | 3 | | 2 | | | 1 | 1 | 1 | | | |
| Neem Oil | 4 | | 4 | 2 | | | | 2 | | 2 | |
| Tebuconazole | 1 | | 1 | | | | | 1 | | | |
| Thiophanate-methyl | 1 | | 1 | | | | 1 | | | | |
| Triadimefon | 2 | | 2 | | | | 1 | 1 | | | |
| Triforine | 4 | | 2 | | | 2 | | 2 | | | |

Table 2: Ingredient Analysis: Home Depot Survey, May 2004

| Active ingredient | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | 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 | 3 | 2 | 2 | 1 | | | | 1 | | 2 | |
| Cypermethrin | 3 | 1 | 1 | 1 | | 1 | | 1 | 1 | | |
| d-trans allethrin | 4 | | | | | 4 | | | | | |
| Esfenvalerate | 3 | 3 | 3 | | | | | 2 | | 1 | |
| Imiprothrin | 1 | | | | | 1 | | | | | |
| Lambda-Cyhalothrin | 3 | 2 | 2 | 1 | | | 1 | 1 | | 1 | |
| Permethrin | 18 | 6 | 5 | | Pets | 8 | 2 | 4 | 2 | | Dust (2) |
| Phenothrin | 3 | | | | | 3 | | | | | |
| Prallethrin | 1 | | | | | 1 | | | | | |
| Resmethrin | 3 | | | | | 3 | | | | | |
| Tetramethrin | 6 | | | | | 5 | | | 1 | | |
| Tralomethrin | 5 | | | | | 4 | | | 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 | 1 | 1 | 1 | | | | | 1 | | | |

Table 2: Ingredient Analysis: Home Depot Survey, May 2004 (Continued)

| Active ingredient Insecticides, continued | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | 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 |
| Fipronil | 1 | 1 | | 1 | | | | | | | Gel |
| Hydramethylnon | 1 | 1 | | 1 | | | | | | | Gel |
| Imidacloprid | 2 | | 2 | | | | | 1 | | 1 | |
| Orthoboric acid | 1 | | | 1 | | | | | | | Dust |
| Pyrethrins | 5 | | 3 | 3 | | 2 | | | | 3 | |

Table 2: Ingredient Analysis: Home Depot Survey, May 2004 (Continued)

| Active ingredient | Total # Products | Sites of Use (Excluding Aerosols & Foggers) | | | | 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 | | | | Fertilizer |
| 2,4-D, dimethylamine salt | 6 | | 6 | | | | | 4 | | 2 | |
| Calcium acid methanearsonate | 1 | | 1 | | | | | 1 | | | |
| Dicamba | 2 | | 2 | | | | | | | | Fertilizer |
| Dicamba, dimethylamine salt | 3 | | 3 | | | | | 2 | | 1 | |
| Diquat dibromide | 2 | | 2 | | | | | 2 | | | |
| Dithiopyr | 1 | | 1 | | | | | | | | Fertilizer |
| Fluazifop-p-butyl | 2 | | 2 | | | | | 1 | | 1 | |
| Glyphosate | 6 | 1 | 6 | | | | | 3 | | 3 | |
| Glyphosate, isopropylamine salt | 2 | 2 | 2 | | | | | 1 | | 1 | |
| Imazapyr | 1 | | 1 | | | | | 1 | | | |
| MCPP | 2 | | 2 | | | | | | | | Fertilizer |
| MCPP, dimethylamine salt | 6 | | 6 | | | | | 4 | | 2 | |
| MCPP-p | 1 | | 1 | | | | 1 | | | | |
| Oxyfluorfen | 1 | 1 | 1 | | | | | | | 1 | |
| Prometon | 1 | 1 | 1 | | | | | 1 | | | |
| Trichlopyr triethylamine salt | 2 | | 2 | | | | | 1 | | 1 | |
| Trifluralin | 3 | | 3 | | | | 1 | 1 | | | Fertilizer |

Table 2: Ingredient Analysis: Home Depot Survey, May 2004 (Continued)

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