# Pesticide Data Program

## Annual Summary Calendar Year 2005

**United States Department of Agriculture**

Agricultural Marketing Service

Science and Technology Programs

Visit our Web site at: www.ams.usda.gov/pdp

**November 2006**

**United States Department of Agriculture**

Marketing and Regulatory Programs

Agricultural Marketing Service

1400 Independence Ave.
Washington, DC
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To the Reader:

I am pleased to present the Pesticide Data Program's (PDP) 15th Annual Summary, which includes data for calendar year 2005. PDP data continue to demonstrate that the Nation's food supply is among the safest in the world.

The U.S. Department of Agriculture implemented PDP in May 1991. Since then, PDP has tested a wide range of commodities in the U.S. food supply. Using a rigorous statistical approach to sampling and the most current laboratory methods, PDP has tested both fresh and processed fruit and vegetables, grains and grain products, milk and dairy products, beef, pork, poultry, drinking water, bottled water, and groundwater (initiated in 2006) for pesticide residues.

PDP data are essential for the implementation of the 1996 Food Quality Protection Act, which directs the Secretary of Agriculture to collect pesticide residue data on foods most likely consumed by infants and children. The U.S. Environmental Protection Agency (EPA) uses PDP data as a critical component of dietary assessments of pesticide exposure. The extensive and reliable PDP results provide realistic exposure information to the EPA assessment process.

PDP is a partnership with cooperating State agencies responsible for sample collection and analysis. Twelve States participated in the program during 2005: California, Colorado, Florida, Maryland, Michigan, Minnesota, Montana, New York, Ohio, Texas, Washington, and Wisconsin. Sound conclusions about our food supply can be drawn from PDP results because together the sampling States represent all regions of the country and over half the Nation's population.

The format of this Annual Summary is intended to provide the reader with thorough and accurate information. A detachable form is included following this letter for your comments and suggestions on how we can further improve this summary.

Sincerely,

Lloyd C. Day
Administrator

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## *Acknowledgements*

The States participating in the Pesticide Data Program (PDP) deserve special recognition for their contributions to the program. The dedication and flexibility of sample collectors allow the Agricultural Marketing Service (AMS) to adjust sampling protocols to respond to changing trends in commodity distribution and availability. PDP acknowledges the contributions of the State laboratories, U.S. Department of Agriculture's (USDA) AMS National Science Laboratory, the Grain Inspection, Packers, and Stockyards Administration Laboratory in providing testing services to the program, and the National Agricultural Statistics Service for providing statistical support. PDP also acknowledges the exceptional support of the Health Effects Division staff of the U.S. Environmental Protection Agency, Office of Pesticide Programs, in helping set the direction for PDP.

Data presented in this report were collected and processed through the efforts of the following organizations:

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# *Executive Summary*

This summary of results for 2005 is the 15th Annual Summary of the U.S. Department of Agriculture (USDA) Pesticide Data Program (PDP). In 1991, USDA was charged with designing and implementing a program to collect data on pesticide residues in food. The responsibility for this program was given to USDA's Agricultural Marketing Service (AMS).

**Program Operations:** AMS, through its Monitoring Programs Office (MPO), oversees the planning and policy development for PDP. MPO meets regularly with the U.S. Environmental Protection Agency (EPA) and other stakeholders (e.g., industry and grower groups) to establish program priorities and direction. Participating States have a prominent role in program planning activities and policy establishment, particularly policies relating to Quality Assurance (QA). The USDA National Agricultural Statistics Service (NASS) provides sampling support to PDP and statistically reliable data on chemical usage at the State level and collects economic data that link chemical usage with economic characteristics.

**Data Uses:** PDP data are used primarily by EPA to prepare realistic pesticide dietary exposure assessments as part of its ongoing effort to implement the 1996 Food Quality Protection Act (FQPA). PDP provides high-quality data on residues in food, particularly foods most likely consumed by infants and children, including minor crops. Minor crops are those grown on 300,000 acres or less in the U.S. – for example, many fruit and vegetable crops are defined as minor crops. PDP data are used in pesticide re-registration activities, in accordance with FQPA requirements.

PDP data are also used by the U.S. Food and Drug Administration (FDA), USDA's Economic Research Service (ERS) and Foreign Agricultural Service (FAS), participating States, academic institutions, chemical manufacturers, environmental interest groups, food safety organizations, and groups within the private sector representing food producers. PDP data are used by the U.S. Government and agricultural community to examine pesticide residue issues that may affect good agricultural practices relating to integrated pest management objectives and U.S. trade, particularly in the competitive global market. PDP additionally provides support for USDA's participation in the Codex Alimentarius Commission.

**Risk Assessment:** In estimating the potential risks of consumption of pesticide residues from food, EPA uses a step-wise tiered approach. As a first step, EPA may use a conservative, worst-case scenario and assume that a pesticide is applied to the fullest extent permitted by the pesticide label; that is, on every acre of each approved crop at the maximum rate and frequency allowed. EPA may also assume that residues on treated crops are present at the maximum allowable level. Exposure estimates based on such assumptions are likely to significantly exceed actual exposure. When an initial assessment indicates a potential risk, EPA refines its assessment using more realistic exposure data. Refinements may include the use of additional data such as: (1) the percent of a crop treated with a pesticide; (2) studies of the effects of washing, cooking, processing, and storage; and (3) residue monitoring data. During the refinements of this exposure assessment, PDP data can be pivotal. PDP sampling procedures were designed to capture residues in the food supply as close as possible to the time of consumption. PDP concentrates its efforts to provide realistic pesticide residue data on foods that are most often consumed by infants and children and incorporates recommendations made in 1993 by the National Academy of Sciences (NAS) in its report "*Pesticides in the Diets of Infants and Children.*"

**Participants:** In 2005, sampling and/or testing program operations were carried out with the support of 12 States: California, Colorado, Florida, Maryland, Michigan, Minnesota,

Montana, New York, Ohio, Texas, Washington, and Wisconsin. Grain sampling was performed by USDA's Federal Grain Inspection Service (FGIS) and pork sampling by USDA's Food Safety and Inspection Service (FSIS). Two Federal laboratories also provided testing services: USDA's AMS National Science Laboratory and USDA's Grain Inspection, Packers, and Stockyards Administration (GIPSA) Laboratory. Participating water utilities provided drinking water samples which were tested by the Colorado, Montana, and New York State laboratories. Bottled water samples were collected at food distribution centers and tested by the Minnesota laboratory. MPO is responsible for administering the program, coordinating sampling actions, directing technical performance issues and quality assurance measures, and managing database activities.

**Sampling:** PDP commodity sampling is based on a rigorous statistical design which ensures that the data are reliable for use in exposure assessments and that they can be used to draw various conclusions about the Nation's food supply. Pesticides and commodities included each year in PDP are selected based on EPA data needs and on information about the types and amounts of food consumed by infants and children. Fruit and vegetable, dairy, and bottled water samples collected by each of the 10 sampling States (California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin) are apportioned according to that State's population. Samples are randomly chosen close to the time and point of consumption (i.e., distribution centers rather than at farmgate) and reflect what is typically available to the consumer throughout the year. Samples are selected without regard to country of origin, variety, or organic labeling. The monthly sampling rate is 62 samples per commodity, except for highly seasonal commodities. For seasonal commodities, sampling rates are adjusted to reflect market availability. Sampling rates for grain and meat are based on production.

**Results:** During 2005, PDP tested fresh and processed fruit and vegetables, soybeans, wheat, milk, heavy cream, pork, bottled water, and drinking water for various insecticides, herbicides, fungicides, and growth regulators. Of the 14,749 total samples collected and analyzed, 10,154 were fruit and vegetable commodities including apples, cantaloupe, cauliflower, eggplant, grapes, grapefruit, fresh and frozen green beans, lettuce, oranges and orange juice, pears, fresh and dried plums (prunes), strawberries, watermelon, and winter squash. PDP also tested 668 soybean (plus 306 for a soybean rust/aphid special survey), 674 wheat, 746 milk, 369 heavy cream, 704 pork, 378 bottled water, and 750 drinking water samples.

Excluding drinking water, approximately 84 percent of all samples tested were from U.S. sources, 14 percent were imports, 1 percent was of mixed origin, and approximately 1 percent was of unknown origin. Approximately 21 percent of the orange juice samples were of mixed national origin.

Overall, 73 percent of fresh fruit and vegetables and 61 percent of processed fruit and vegetables showed detectable residues. More residues were detected in fresh produce than in processed products and grains. Residues detected in dairy products and pork samples were primarily low level residues of unavoidable environmental contaminants, including DDE p,p' and dieldrin. Additionally, low levels of diphenylamine were detected in dairy products.

Excluding drinking water, 34 percent of samples tested contained no detectable pesticides [parent compound and metabolite(s) combined], 30 percent contained 1 pesticide, and 36 percent contained more than 1 pesticide. Low levels of environmental contaminants were detected in cantaloupe, cauliflower, green beans, heavy cream, lettuce, milk, pork, watermelon, and winter squash at concentrations well below levels that trigger regulatory actions.

Excluding samples for which no tolerances are set (bottled water and drinking water), residues exceeding the tolerance were detected in 0.2 percent of the 13,621 samples tested in 2005 – 25 samples with 1 residue each. A tolerance is the maximum amount of a pesticide residue allowable on a raw agricultural commodity. Established tolerances are listed in the Code of Federal Regulations, Title 40, Part 180. Residues with no established tolerance were found in 4.2 percent of the samples (570 samples with 1 residue each, and 2 samples with 2 residues each). In most cases, these residues were detected at very low levels and some residues may have resulted from spray drift or crop rotations. PDP communicates these findings to FDA when they are reported by testing laboratories.

In finished drinking water, PDP detected low levels (measured in parts per trillion) of some pesticides, primarily widely used herbicides. Forty-eight different residues were detected in the untreated intake water and 43 in the treated water. The majority of pesticides, metabolites, and isomers included in the PDP testing profiles were not detected. None of the detections in the finished water samples exceeded established EPA Maximum Contaminant Levels (MCL) or Health Advisory (HA) levels or established Freshwater Aquatic Organism (FAO) criteria.

**Data Availability:** PDP continuously strives to improve methods for the collection, testing, and reporting of data. These data are freely available to EPA and other Federal and State agencies charged with regulating and setting policies on the use of pesticides. They are also available to all stakeholders by hard copy, Internet, or custom reports generated by MPO. Additional copies of the PDP Annual Summary may be obtained by calling MPO at (703) 330-2300 or by mailing the form provided at the end of this report. This publication, the PDP database file for 2005, and annual summaries and database files for previous years are available on the PDP Website at http://www.ams.usda.gov/pdp.

## *Acronyms and Abbreviations*

| | |
|---|---|
| % C.V. | Percent Coefficient of Variation |
| AMS | Agricultural Marketing Service |
| BQL | Below Quantifiable Level |
| CDFA | California Department of Food and Agriculture |
| EMRL | Extraneous Maximum Residue Limit |
| EPA | Environmental Protection Agency |
| ERS | Economic Research Service |
| ESA | Ethane Sufonic Acid |
| e-SIF | Electronic-Sample Information Form |
| FAO | Freshwater Aquatic Organism |
| FAPAS | Food Analysis Performance Assessment Scheme |
| FAS | Foreign Agricultural Service |
| FDA | Food and Drug Administration |
| FGIS | Federal Grain Inspection Service |
| FSIS | Food Safety and Inspection Service |
| FQPA | Food Quality Protection Act |
| GC | Gas Chromatography |
| GIPSA | Grain Inspection, Packers, and Stockyards Administration |
| GLP | Good Laboratory Practices |
| HA | Health Advisory |
| HPLC | High Performance Liquid Chromatography |
| LC | Liquid Chromatography |
| LIB | Laboratory Information Bulletin |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| MCL | Maximum Contaminant Level |
| MPO | Monitoring Programs Office |
| MRL | Maximum Residue Limit |
| MRM | Multiresidue Methods |
| MS | Mass Spectrometry |
| NAS | National Academy of Sciences |
| NASS | National Agricultural Statistics Service |
| NSL | National Science Laboratory |
| OA | Oxanilic Acid |

| | |
|---|---|
| PAM | Pesticide Analytical Manual |
| PDP | Pesticide Data Program |
| ppb | parts per billion |
| ppm | parts per million |
| ppt | parts per trillion |
| PT | Proficiency Testing |
| QA | Quality Assurance |
| QAO | Quality Assurance Officer |
| QAU | Quality Assurance Unit |
| QC | Quality Control |
| RDE | Remote Data Entry |
| SIF | Sample Information Form |
| SOP | Standard Operating Procedure |
| SPE | Solid Phase Extraction |
| SSL | Secure Sockets Layer |
| TPM | Technical Program Manager |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |

# *Pesticide Data Program (PDP) Annual Summary, Calendar Year 2005*

*This summary consists of the following sections: (I.) Introduction, (II.) Sampling Operations, (III.) Laboratory Operations, (IV.) Database Management, and (V.) Sample Results and Discussion*

## I. Introduction

The Pesticide Data Program (PDP), which was initiated in 1991 to collect data on pesticide residues in food, now has an important role in the implementation of the 1996 Food Quality Protection Act (FQPA). This law directs the Secretary of Agriculture to collect pesticide residue data on commodities most frequently consumed by infants and children. PDP data are used primarily by the U.S. Environmental Protection Agency (EPA) to assess dietary exposure during the review of the safety of existing pesticide tolerances (Maximum Residue Limits).

Because PDP collects data on food commodities primarily for exposure assessment, program operations differ markedly from those followed by regulatory monitoring programs for tolerance enforcement. PDP samples are collected closer to the point of consumption and are prepared emulating consumer practices. Sampling is based on EPA data needs and does not impede commodity distribution. Laboratory operations are designed to achieve the lowest detectable levels rather than quick sample turnaround. As a dietary risk assessment support program, PDP focuses its pesticide testing on registered uses for the commodities in the program rather than screening for all potential illegal uses.

Figure 1(a) illustrates PDP program policy development and planning operations. Primary contributors to these activities include the participating States, EPA, USDA's National Agricultural Statistics Service (NASS), and additional stakeholders including industry and grower groups. Figure 1(b) depicts PDP primary data users including EPA, the U.S. Food and Drug Administration (FDA), USDA's Economic Research Service (ERS) and Foreign Agricultural Service (FAS), participating States, academic institutions, chemical manufacturers, environmental interest groups, food safety organizations, and groups within the private sector representing food producers. Additionally, other Federal, State and foreign government agencies and industry have used PDP data to promote the export of U.S. commodities to international markets, and the Codex Alimentarius Committee on Pesticides Residues has requested information on PDP methodology for detecting residues as well as data profiles.

In 2005, sampling services were provided by 10 States (California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin); the USDA Federal Grain Inspection Service (FGIS); and the USDA Food Safety Inspection Service (FSIS). Additional sampling services were provided by participating drinking water facility personnel in nine States (California, Florida, Louisiana, Michigan, North Carolina, North Dakota, Ohio, Pennsylvania, and Washington). Laboratory services were provided by the States of California, Colorado, Florida, Michigan, Minnesota, Montana, New York, Ohio, Texas, and Washington; the Agricultural Marketing Service (AMS) National Science Laboratory (NSL); and the Grain Inspection, Packers, and Stockyards Administration (GIPSA) Laboratory. The AMS Monitoring Programs Office (MPO) is responsible for overall management of PDP.

Figure 2 shows the States that participate in program sampling and/or testing as well as the States in their direct distribution network. Together, these States represent about 50 percent of the Nation's population and all 4 census regions of the U.S. These States also represent major producers of fruit and vegetables in the U.S.

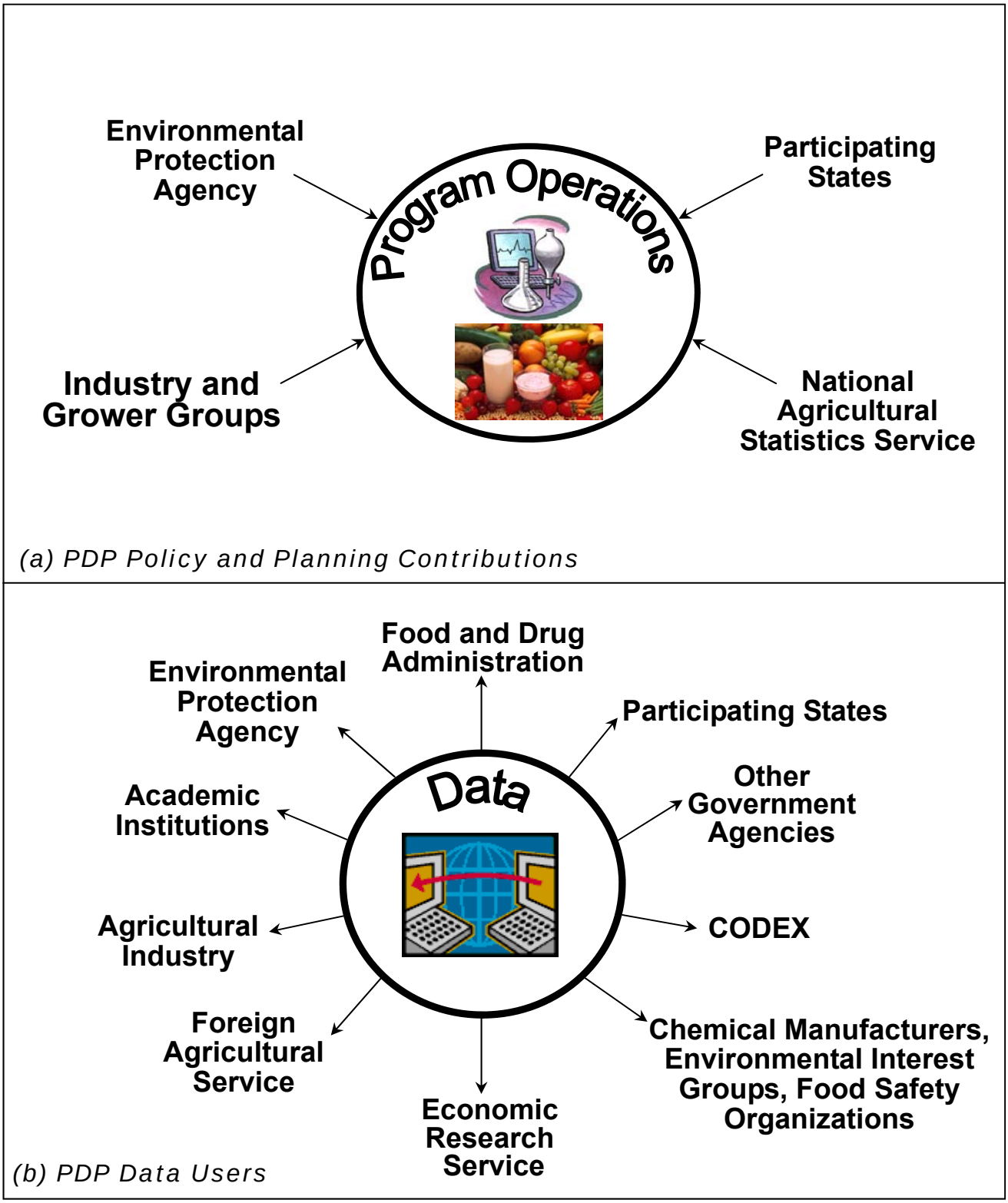



***Figure 1. PDP Program Operations Support and Data Users.*** *This figure illustrates (a) agencies/ groups that support PDP program policy and planning activities, and (b) agencies/groups that use PDP data.*

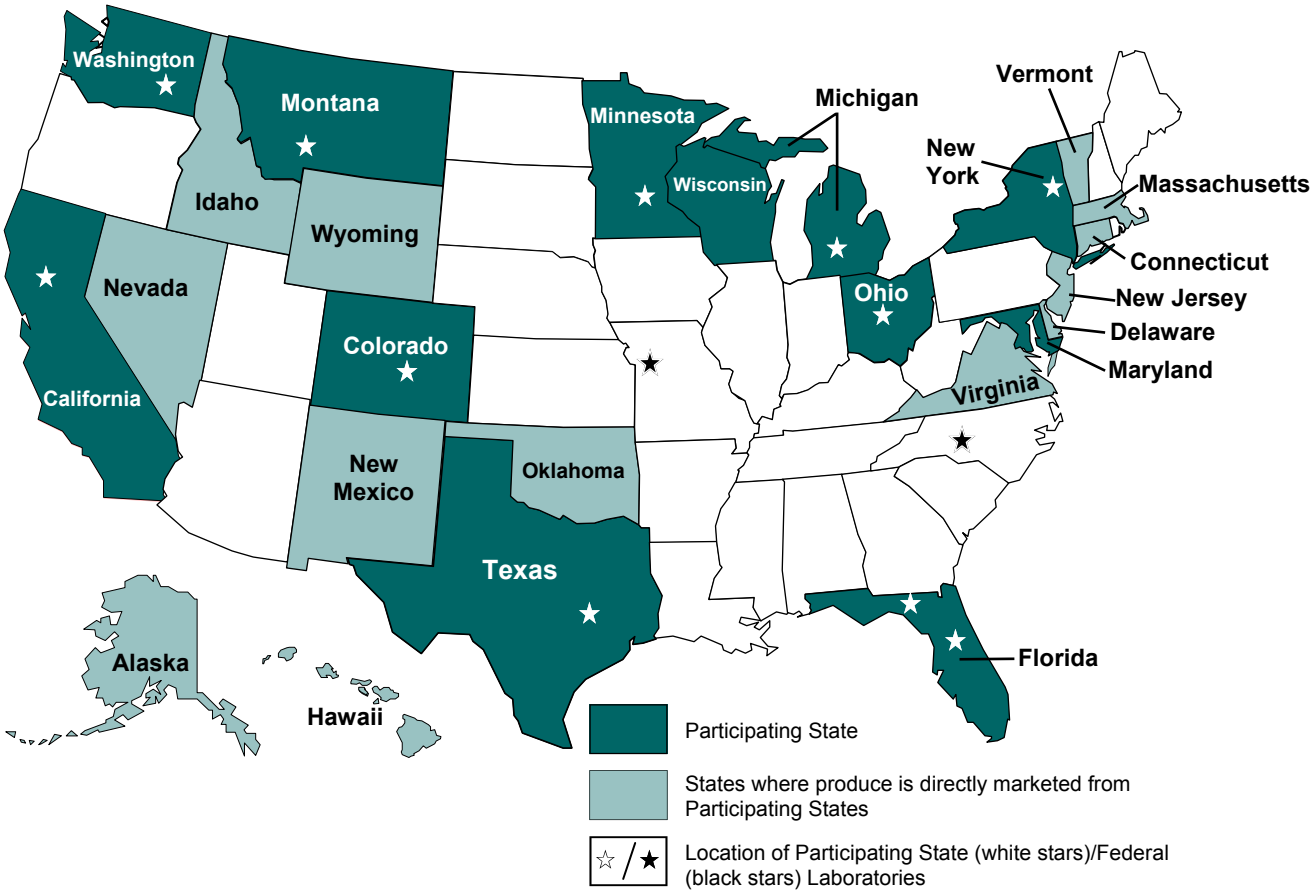



***Figure 2. Program Participants.*** *During 2005, AMS established cooperative agreements with 12 States to sample and/or test PDP commodities. State laboratories are responsible for analyzing fresh and processed fruit and vegetable samples and drinking water samples. The Federal laboratory in Gastonia, North Carolina, analyzes meat, poultry, and dairy products, and the Federal laboratory in Kansas City, Missouri, analyzes whole and processed grain products. States that do not participate in PDP's sampling program but are in the direct distribution networks of the participating States are also shown.*

AMS works closely with EPA to select commodities and pesticides for testing and in the selection of drinking water sites. Commodities selected are those representing the highest U.S. consumption, with an emphasis on foods consumed by infants and children. Appendix A provides a list of commodities tested by PDP from the beginning of the program in 1991 through 2006.

Fruit and vegetable samples are collected at terminal markets and large chain store distribution centers from which food commodities are supplied to supermarkets and grocery stores. Sampling at these locations allows for residue measurements that include pesticides applied during crop production and those applied after harvest (such as fungicides and growth regulators) and takes into account residue degradation while food commodities are in storage. Participation as a PDP sampling site is voluntary, which sets it apart from State and Federal enforcement programs. In 2005, more than 700 sites granted access and provided information, including site volume data, to sample collectors. This voluntary cooperation is important to PDP and makes it possible to adjust sampling protocols in response to fluctuations in food distribution and production.

Pesticides screened by PDP include those with current registered uses and compounds for which toxicity data and preliminary estimates of dietary exposure indicate the need for more extensive residue data. PDP also monitors

pesticides for which EPA has instituted modified use directions (i.e., reduced application rates or frequency) as part of risk management activities. The following appendices list the specific pesticides tested in the program: fruit and vegetables (Appendix B), soybeans (Appendix C), soybean rust/aphid special survey (Appendix D), wheat (Appendix E), milk (Appendix F), heavy cream (Appendix G), pork (Appendix H), bottled water (Appendix I), and drinking water (Appendix J).

## II. Sampling Operations

### ♦ Background

The goal of the PDP sampling program is to obtain a statistically defensible representation of the U.S. food supply. PDP data reflect actual pesticide residue exposure from food. Using a rigorous statistical design, PDP has developed extensive procedures to ensure that samples are randomly selected from the national food distribution system and reflect what is typically available to the consumer.

Fruit, vegetables, dairy products, and bottled water are randomly collected by trained State inspectors at terminal markets and large chain store distribution centers throughout the country. Surrogate or "proxy" sites (retail markets) are occasionally used to collect these samples when the commodity of interest is unavailable at a terminal market or distribution center. In these instances, the commodity is selected in the rear storage area of the retail facility so that possible contamination by the consumer is eliminated and to allow capture of sample information from the product boxes. In 2005, approximately 7 percent of fruit, vegetable, and dairy products were collected at proxy sites. The commodities most often collected at proxy sites included milk, orange juice, heavy cream, and frozen green beans. Most of the bottled water samples were collected at proxy sites (refer to "Bottled Water and Drinking Water" section for details on this special collection criteria).

Whole grain samples are collected from trains, trucks, and barges by trained USDA FGIS inspectors. Drinking water samples are collected by trained personnel at individual water treatment facilities at selected sites across the country. At these locations, information is usually available about the identity and origin of the sample. Sample information is captured at the time of sample collection for inclusion in PDP files.

PDP sample origin data identify the State or country where the commodity was produced. A comparison of PDP sample origin data to State production and import data by USDA's NASS shows that PDP sampling is representative of the U.S. food supply. PDP sampling operations are adjusted according to product availability. The number of fruit, vegetable, dairy, and bottled water samples collected in each participating State is determined by State population. The number and location of collected grain and pork samples are determined by annual domestic production figures. For drinking water, each local watershed has its own unique characteristics; therefore, sample collection for this commodity is not intended to reflect national trends. In this case, PDP collects samples in areas where it is known that targeted pesticides are heavily used. The quarterly collection schedule for all 2005 commodities is shown in Table 1.

PDP State sample collectors are trained to adhere to detailed program Standard Operating Procedures (SOPs) that provide criteria for site selection and specific instructions for sample selection, shipping and handling, and chain-of-custody. SOPs are updated as needed and serve as a technical reference in conducting program sampling reviews to ensure that program goals and objectives are met. SOPs for PDP sampling are available on the Internet at www.ams.usda.gov/pdp.

Fruit, vegetable, dairy, and bottled water samples are packed in heavy-duty, temperature-controlled containers. Samples are shipped the same day as collection by overnight delivery to ensure that the selected commodities maintain their original integrity until they are received at

| Commodity | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | End Date |
|---|---|---|---|---|---|
| Apples | ■ | ■ | ■ | ■ | Dec-05 |
| Cantaloupe | ■ | ■ | ■ | | Sep-05 |
| Cauliflower | ■ | ■ | ■ | ■ | Sep-06 |
| Cream, heavy | | | ■ | ■ | Dec-05 |
| Eggplant | ■ | ■ | ■ | ■ | Dec-06 |
| Grapefruit | ■ | ■ | ■ | ■ | Dec-06 |
| Grapes | ■ | ■ | ■ | ■ | Dec-05 |
| Green Beans, Fresh | ■ | | | | Mar-05 |
| Green Beans, Frozen | | ■ | ■ | ■ | Dec-05 |
| Lettuce | ■ | ■ | ■ | ■ | Dec-05 |
| Milk | ■ | ■ | ■ | ■ | Dec-05 |
| Orange Juice | ■ | ■ | ■ | ■ | Sep-06 |
| Oranges | ■ | ■ | ■ | ■ | Dec-05 |
| Pears | ■ | ■ | ■ | | Sep-05 |
| Plums, Fresh* | ■ | ■ | ■ | ■ | Dec-06 |
| Plums, Dried (prunes)* | ■ | ■ | ■ | ■ | Dec-06 |
| Pork, Adipose/Muscle | ■ | ■ | | | Jun-05 |
| Soybean Grain** | ■ | ■ | ■ | ■ | Dec-05 |
| Strawberries | ■ | ■ | ■ | ■ | Dec-05 |
| Water, Bottled | ■ | ■ | ■ | ■ | Dec-06 |
| Water, Finished | ■ | ■ | ■ | ■ | Ongoing |
| Water, Untreated | ■ | ■ | ■ | ■ | Ongoing |
| Watermelon | | | | ■ | Sep-06 |
| Wheat Grain*** | ■ | ■ | ■ | ■ | Apr-06 |
| Winter Squash | ■ | ■ | ■ | ■ | Jun-06 |

* Dried plums (prunes) were collected if fresh plums were unavailable.

** Soybeans were collected in the 2004 Crop Year, Oct 2004-Aug 2005. Soybeans were also collected for the soybean rust/aphid special survey Oct-Dec 2005.

*** Wheat was collected in the 2004 Crop Year, Oct 2004-Apr 2005 and continued for the remainder of the year for the 2005 Crop Year.

***Table 1. PDP Commodity Collection Schedule for 2005.*** *Samples are most often collected for a 2-year time period. Commodities are initiated or terminated in different quarters of the year, so that new commodities are not brought into the program all at the same time. This table illustrates time ranges for the listed commodities. See Appendix A for the complete PDP commodity history from May 1991 through December 2006.*

their respective laboratory for analysis. Frozen cold packs are included in shipping containers, when necessary, so that holding temperatures are preserved throughout transit time. Grain samples are collected in pesticide-free polyethylene bags and are shipped in canvas pouches or boxes to the laboratory where the samples are refrigerated pending analysis. Pork samples are collected in pesticide-free polyethylene bags, frozen overnight, and shipped by next-day delivery to the laboratory for analysis. Drinking water samples are collected in specially prepared bottles containing dechlorinating agents to halt any potential compound degradation, packed with proper cushioning and cold packs, and shipped the same day as collection to their respective laboratory by overnight delivery.

PDP Sample Information Forms (SIFs) are used for chain-of-custody and to capture information needed to characterize the sample. Sample collectors use the forms to record information such as: (1) State of sample collection, (2) collection date, (3) sampling site code, (4) commodity code, and (5) testing laboratory code. Information from these five data elements is combined to form a unique PDP sample identification number for each sample. Other available information about each sample is recorded also, such as collector name, the State or country of origin, product variety, production claims such as organic, and any postharvest chemical applications. An electronic SIF (e-SIF) capturing system was implemented in 2003 and continues to be used to record relevant sample information. Refer to Section IV on Database Management for more information on the e-SIF system.

### ♦ Fresh and Processed Fruit and Vegetables

Of all samples collected and analyzed in 2005, 69 percent (10,154 of 14,749) were fruit and vegetables, including fresh and processed products. The fresh commodities collected for PDP were apples, cantaloupe, cauliflower, eggplant, grapes, grapefruit, green beans, lettuce, oranges, pears, plums, strawberries, watermelon, and winter squash. The processed commodities included frozen green beans, ready-to-serve and frozen orange juice, and dried plums (prunes). All fresh fruit and vegetable samples weighed either 3 or 5 pounds (3 pounds were collected for small-sized commodities such as grapes and strawberries, and 5 pounds were collected for larger commodities such as eggplant and grapefruit). For large-sized commodities, such as cauliflower and cantaloupe, a minimum of two units were collected to maintain sample representativeness. An exception for these large-sized commodities was watermelon; only one unit was collected per sample because of its unusually heavy shipping weight.

Participating State agencies compile and maintain lists of sampling sites. The States provide AMS and NASS with annual volume information for commodities distributed at each site. This information is used to weight the site to determine the probability for sample selection. For example, a weight of 10 may be given to a site that distributes 100,000 pounds of produce annually and a weight of 1 is given to a site that distributes 10,000 pounds. The probability-proportionate-to-size method of site selection then results in the larger site being 10 times more likely to be selected for sampling than the smaller site.

Participating States work with NASS to develop statistical procedures for site weighting and selection. States are also given the option of having NASS perform their quarterly site selection. The number of sampling sites and the volume of produce distributed by the sites vary greatly between States. Sampling plans that include sampling dates, sites (primary and alternate), targeted commodities, and testing laboratories are prepared by each State on a quarterly basis. Collection of commodities is randomly assigned to weeks of the month, prior to selection of specific sampling dates within a week. Because sampling sites are selected for an entire quarter, States may assign the sites to particular months based on geographic location.

State population figures are used to assign the number of fruit and vegetable samples

scheduled for collection each month. These population- and distribution-network-based numbers result in the following monthly collection assignments for each State: California, 14; Colorado, 2; Florida, 7; Maryland, 4; Michigan, 6; New York, 9; Ohio, 6; Texas, 8; Washington, 4; and Wisconsin, 2. This schedule results in a monthly target of 62 samples per commodity, or 744 samples per commodity per year.

The number of samples collected in each State is listed in Table 2. Figure 2 illustrates the participating States and the laboratories to

| | Fresh Fruit and Vegetables | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **State** | **AP** | **CF** | **CN** | **EP** | **GB** | **GF** | **GR** | **LT** | **OG** | **PE** | **PU** | **ST** | **WM** | **WS** | **Total Fresh** |
| California | 168 | 168 | 126 | 168 | 42 | 167 | 168 | 168 | 168 | 126 | 130 | 168 | 41 | 167 | 1,975 |
| Colorado | 24 | 24 | 18 | 24 | 6 | 24 | 24 | 24 | 24 | 18 | 19 | 24 | - | 24 | 277 |
| Florida | 84 | 84 | 63 | 83 | 21 | 84 | 84 | 84 | 84 | 63 | 64 | 84 | 64 | 84 | 1,030 |
| Maryland | 47 | 47 | 36 | 47 | 12 | 47 | 48 | 48 | 48 | 35 | 32 | 48 | 8 | 46 | 549 |
| Michigan | 72 | 72 | 54 | 72 | 18 | 72 | 72 | 72 | 72 | 54 | 53 | 72 | - | 72 | 827 |
| New York | 108 | 108 | 81 | 108 | 27 | 108 | 108 | 108 | 108 | 81 | 96 | 108 | 10 | 108 | 1,267 |
| Ohio | 72 | 72 | 54 | 68 | 17 | 72 | 71 | 72 | 71 | 52 | 47 | 70 | - | 65 | 803 |
| Texas | 96 | 95 | 72 | 96 | 24 | 96 | 93 | 96 | 94 | 72 | 84 | 94 | 59 | 96 | 1,167 |
| Washington | 48 | 48 | 36 | 48 | 11 | 48 | 48 | 48 | 48 | 36 | 32 | 46 | - | 47 | 544 |
| Wisconsin | 24 | 23 | 18 | 22 | 3 | 24 | 23 | 23 | 24 | 18 | 16 | 23 | - | 22 | 263 |
| | 743 | 741 | 558 | 736 | 181 | 742 | 739 | 743 | 741 | 555 | 573 | 737 | 182 | 731 | 8,702 |

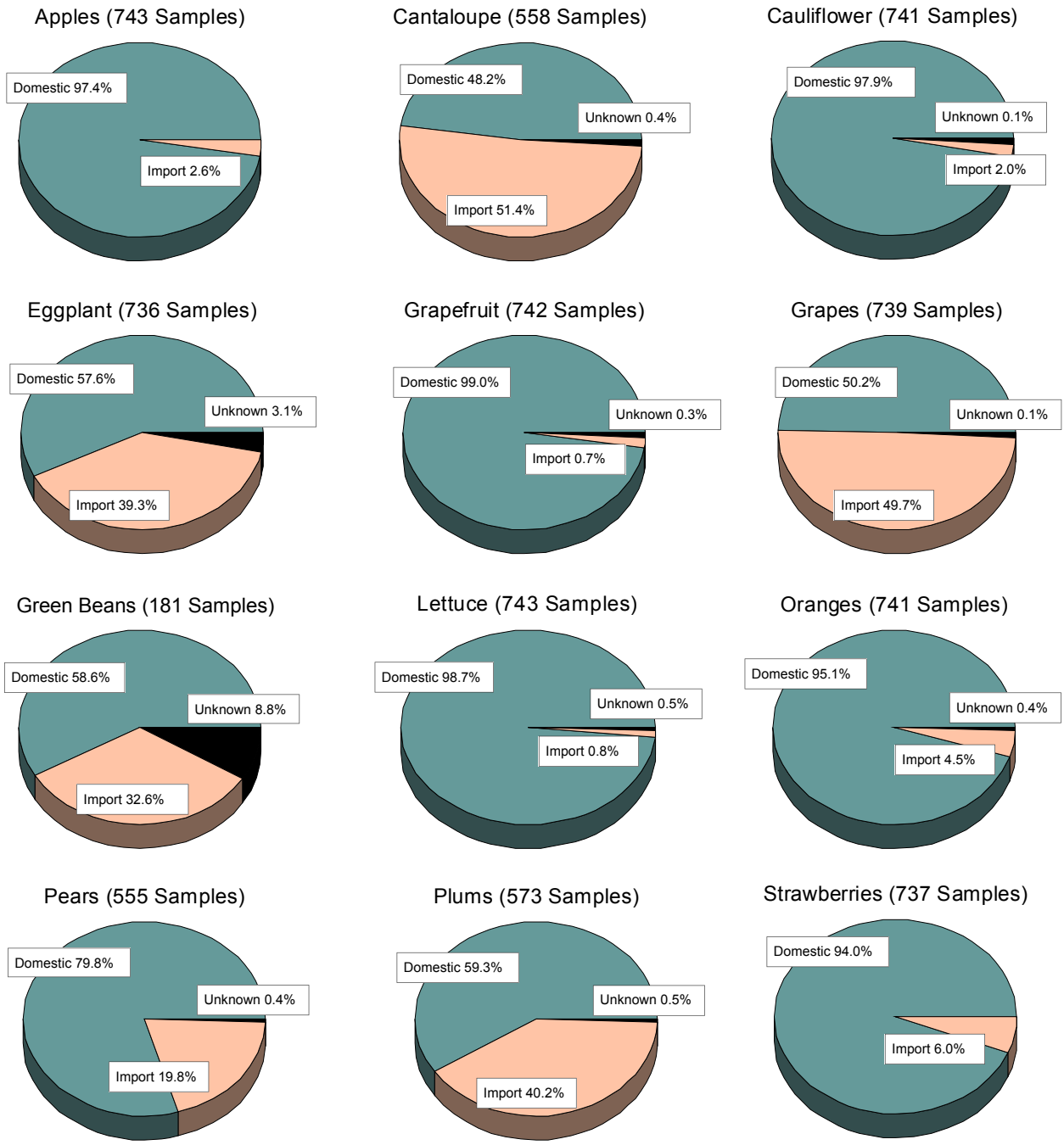
| | Processed Fruit and Vegetables | | | | | Dairy Product | | Water Product |
|---|---|---|---|---|---|---|---|---|
| **State** | **GZ** | **OJ** | **PD** | **Total Processed** | **Total Fresh & Processed F&V** | **CM** | **MK** | **WB** |
| California | 125 | 168 | 36 | 329 | 2,304 | 84 | 168 | 93 |
| Colorado | 18 | 24 | 4 | 46 | 323 | 12 | 24 | 12 |
| Florida | 63 | 84 | 20 | 167 | 1,197 | 40 | 84 | 36 |
| Maryland | 35 | 48 | 13 | 96 | 645 | 24 | 48 | 26 |
| Michigan | 54 | 72 | 10 | 136 | 963 | 36 | 72 | 36 |
| New York | 81 | 108 | 12 | 201 | 1,468 | 54 | 111 | 48 |
| Ohio | 54 | 72 | 25 | 151 | 954 | 35 | 72 | 39 |
| Texas | 72 | 96 | 11 | 179 | 1,346 | 48 | 96 | 52 |
| Washington | 36 | 48 | 16 | 100 | 644 | 24 | 48 | 24 |
| Wisconsin | 17 | 24 | 6 | 47 | 310 | 12 | 23 | 12 |
| | 555 | 744 | 153 | 1,452 | 10,154 | 369 | 746 | 378 |

| **Commodity Legend** | | |
|---|---|---|
| AP = Apples | GR = Grapes | PE = Pears |
| CF = Cauliflower | GZ = Green Beans (Frozen) | PU = Plums |
| CM = Heavy Cream | LT = Lettuce | ST = Strawberries |
| CN = Cantaloupe | MK = Milk | WB = Bottled Water |
| EP = Eggplant | OG = Oranges | WM = Watermelon |
| GB = Green Beans | OJ = Orange Juice | WS = Winter Squash |
| GF = Grapefruit | PD = Plums, Dried (Prunes) | |

***Table 2. Distribution of Samples Collected and Analyzed by Each Participating State.*** *This table includes those commodities collected at terminal markets and distribution centers. The distribution of soybean, wheat, pork, and drinking water samples may be found in Figures 5, 6, 7, and 8, respectively.*

which samples were shipped. The total number of samples per commodity and the percentage of each that were either domestic, imported, or of unknown origin are shown in Figure 3. The origin of some fresh commodities can vary greatly throughout the year. Graphic examples of this variation may be found in Figure 4 where differences in origin (domestic vs. import) are depicted for fresh eggplant, grapes, and winter squash by month. Fruit and vegetable samples originated from 39 States and 27 foreign countries.

**A. Fresh Fruit and Vegetable Commodities**

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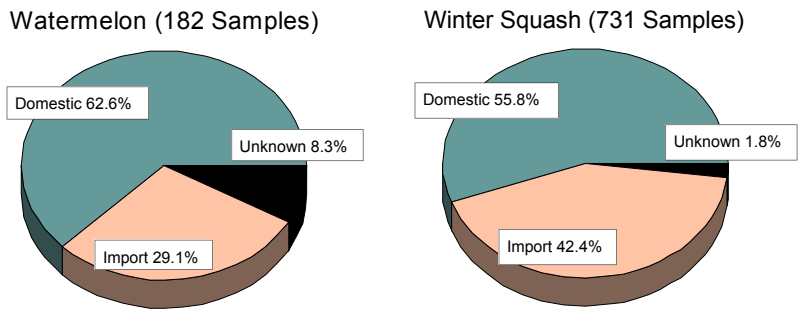


B. Processed Fruit and Vegetable Commodities

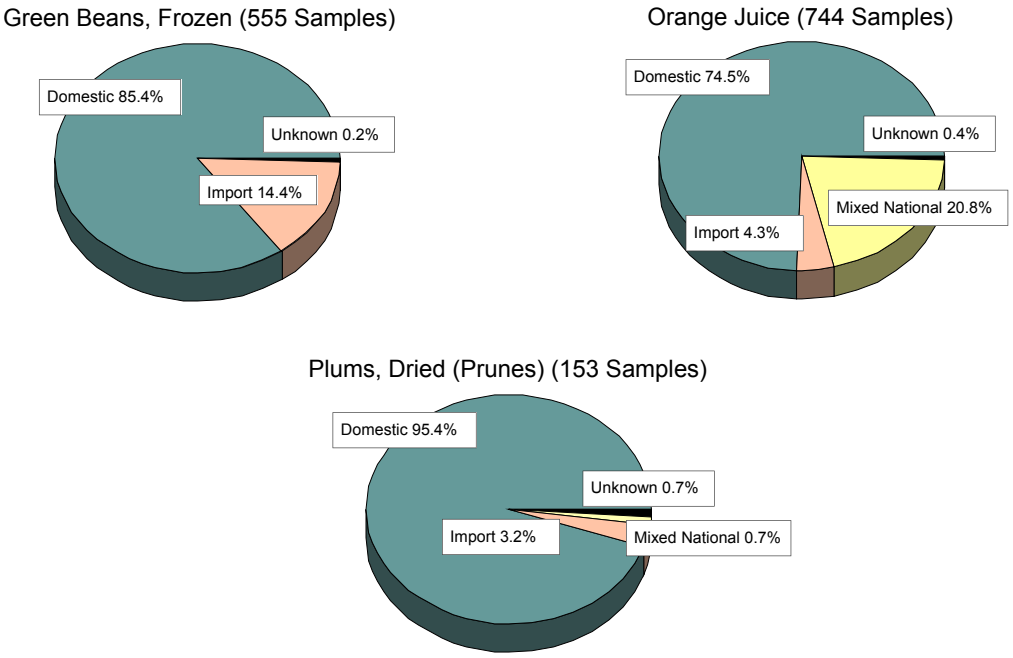


***Figure 3. Commodity Origin.*** *This figure depicts the proportion of commodity origin (domestic vs. import vs. unknown origin) for each fresh and processed fruit and vegetable product tested in 2005.*

## ♦ Grains: Soybeans and Wheat Grain

Trained USDA FGIS inspectors collected 668 soybean samples for PDP for the 2004 crop year (September 2004 through August 2005). The actual sample collection period was divided into two collection phases: October 2004 through February 2005 (493 samples) and April 2005 through August 2005 (175 samples). Sample collection rates, on a statewide basis, were calculated on the basis of crop production totals averaged over a 3-year period. Samples were drawn from trucks (26% of samples), hopper cars (58% of samples), and barges/ships (16% of samples). Soybeans slated for export were excluded from the sampling scheme. PDP chain-of-custody procedures are similar to those used for fruit and vegetable samples. Sample information for soybeans included: inspection location, inspection point code, field office location, official agency collecting the sample, carrier identification (truck, barge, or railcar), State of origin, collection date, quantity of lot sampled, and inspector's name. Pesticide

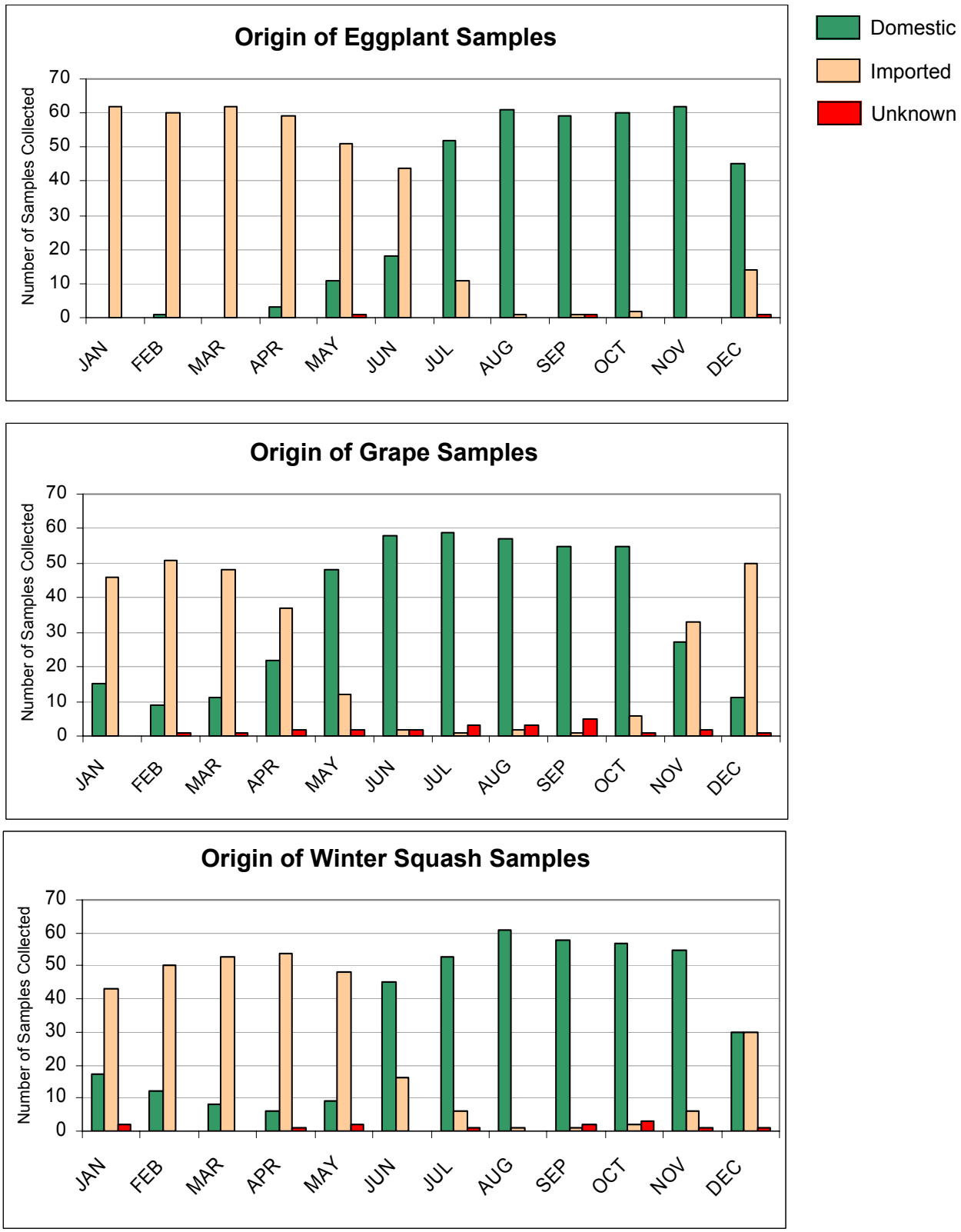


***Figure 4. Origin of Selected Fresh Commodities: Eggplant, Grapes, and Winter Squash.*** *Differences in origin (domestic vs. import) are illustrated by month. The targeted number of samples is 62 per month for each commodity.*

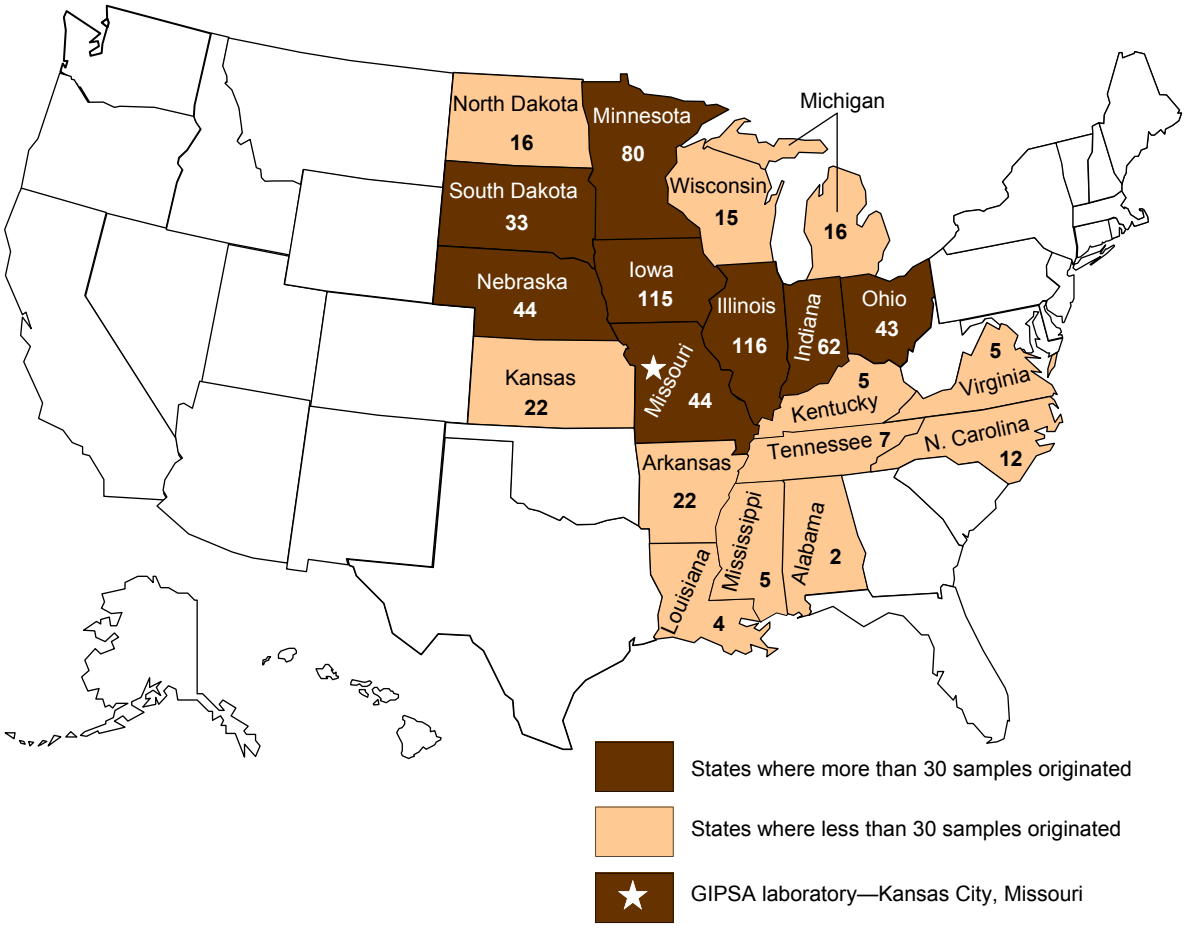


***Figure 5. Number of Samples Collected and Grower States for Soybeans -- Crop Year 2004.*** *A total of 668 soybean samples were collected between September 2004 and August 2005. The samples originated from 20 States and were collected in proportion to their production volumes. Residue testing for all samples was performed by GIPSA, located in Kansas City, Missouri.*

residue analysis was performed by the GIPSA Technical Services Division Laboratory located in Kansas City, Missouri. Soybean samples originated from 20 States and were collected through 8 regional FGIS offices. There were no imported soybean samples; all were of domestic origin. The origin and number of samples collected from each State is displayed in Figure 5.

In addition to routine soybean sampling for multiresidue analyses, PDP conducted a special sampling project for compounds used to combat soybean rust from October 2005 through December 2005. In response to an EPA data request, PDP coordinated with industry to collect soybean samples that were slated only for export. A total of 306 samples were collected primarily from barges (98%-barges and 2%-trucks) that were scheduled for export from New Orleans, Louisiana (291 samples), Brunswick, Georgia (10 samples), and Chesapeake, Virginia (5 samples). Western and northern U.S. ports were excluded from this sampling survey because the soybean rust fungus had not spread beyond the lower Southeastern U.S. where most of the soybean rust compounds had been applied. Sampling and chain-of-custody procedures were the same as those described above for routine soybean collection. Rust compound analysis was performed by the GIPSA Technical Services Division Laboratory in Kansas City, Missouri.

FGIS inspectors collected 674 samples of wheat grain for PDP for the 2004 crop year (October 2004 through April 2005). Wheat grain samples originated from 27 States. The origin and number of samples collected from each State is displayed in Figure 6. Sample collection and chain-of-custody procedures were the same as those described above for routine soybean collection. Wheat grain analysis was performed by the GIPSA Technical Services Division Laboratory in Kansas City, Missouri.

### ♦ Dairy: Milk and Heavy Cream

PDP State sample collectors obtained 746 whole milk samples from distribution centers or proxy sites in the 10 participating States that received milk from 26 different States. Sixty-five percent of milk samples were collected at retail distribution centers and 35 percent of the samples were collected at proxy sites (supermarkets or retail stores that receive product directly from their distribution centers). Selection of proxy sites for

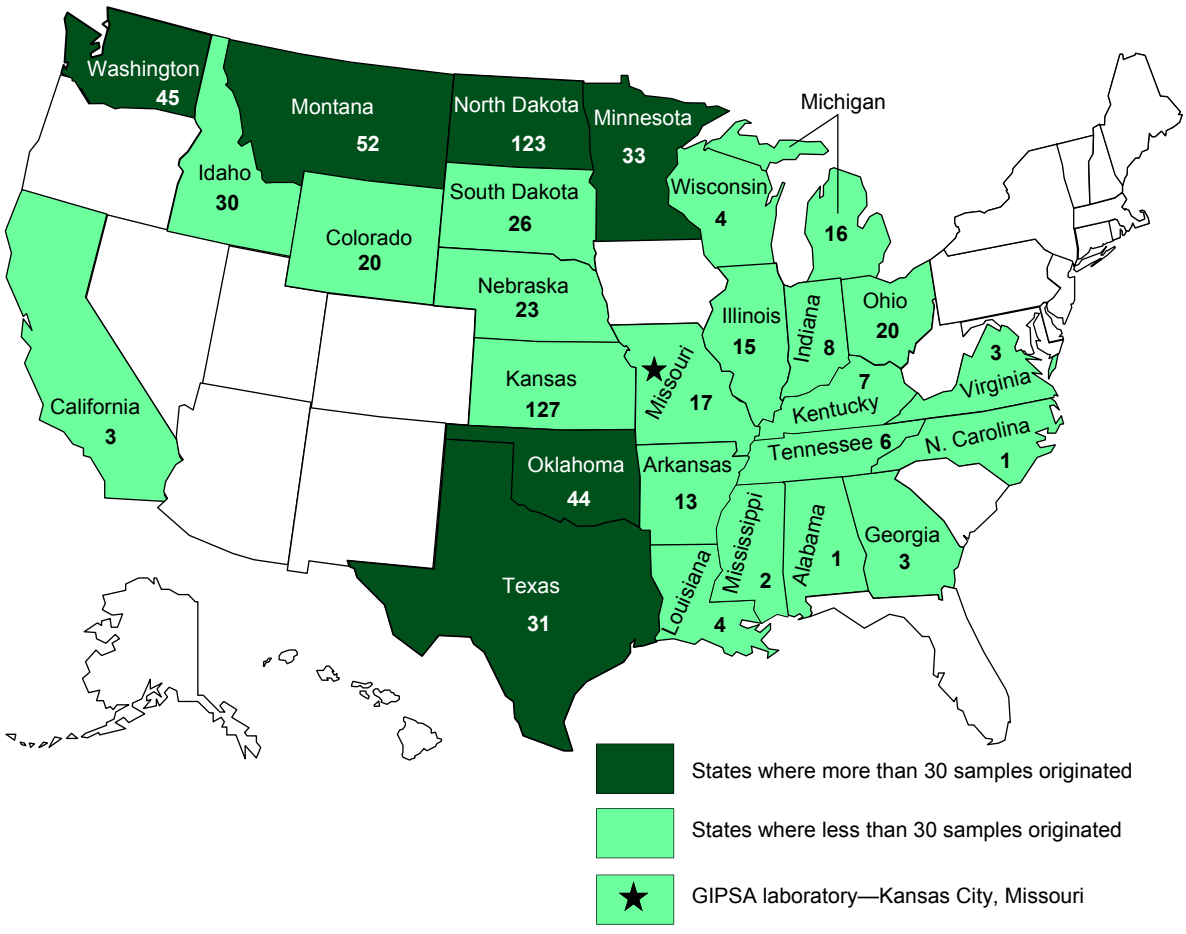


***Figure 6. Number of Samples Collected and Grower States for Wheat -- Crop Year 2004.*** *A total of 674 wheat samples were collected. The samples originated from 27 States and were collected in proportion to their production volumes. Residue testing for all samples was performed by GIPSA, located in Kansas City, Missouri.*

milk sample collection is based on a store's close geographic proximity to its milk distribution center. All whole milk samples were of domestic origin. Sample collection States are found in Table 2. Shipment and chain-of-custody procedures were the same as for fruit and vegetable samples. Pesticide residue analysis for all samples was performed by the AMS NSL in Gastonia, North Carolina.

Between July and December, 369 heavy cream samples were collected by PDP State sample collectors. The heavy cream samples were collected from distribution centers or proxy sites that received the cream from 22 different States. Sixty-six percent of the heavy cream samples were collected at retail distribution centers and 34 percent of the samples were collected at proxy sites. Selection of proxy sites for heavy cream sample collection was the same as described above for milk. All heavy cream samples were of domestic origin. Sample collection States are found in Table 2. Shipment and chain-of-custody procedures were the same as for fruit and vegetable samples. Pesticide residue analysis for all samples was performed by the AMS NSL in Gastonia, North Carolina.

### ♦ Pork

Between January and June, 704 pork samples were collected for PDP by trained FSIS inspectors. The inspectors collected samples at designated slaughter facilities, separately bagged each tissue in pesticide-free polyethylene bags, labeled the samples, and froze the samples overnight. Once frozen, the samples were packed with frozen cold packs, the boxes tamper-proofed, and shipped by overnight delivery to the NSL laboratory in Gastonia, North Carolina, for analysis. FSIS used specially designed Unified Sampling Forms that contain all required PDP sample information. The forms were completed on site and accompanied each sample during shipment. Gilts (young female sows) and barrows (young castrated males) were sampled at the ratio of 51 percent and 47 percent, respectively. Two percent of the samples were of an unknown type. Site samples consisted of approximately 1 pound of adipose tissue (352 samples) and 1 pound of muscle tissue (352 samples). Each set of tissues was sampled from the same hog. For the adipose tissue, back fat (51 percent of samples) and belly fat (49 percent of samples) were collected. Samples were taken from 40 slaughter facilities at rates according to throughput volume in 18 States (refer to Figure 7 for distribution of samples in each State). Ninety-six percent of all samples were obtained from hogs that were of domestic origin; four percent were of Canadian origin. All pork samples were analyzed by NSL, Gastonia, North Carolina.

### ♦ Bottled Water and Municipal Drinking Water

PDP State sample collectors collected 378 bottled water samples at a half sampling rate from the 10 participating States (California-7, Colorado-1, Florida-3, Maryland-2, Michigan-3, New York-4, Ohio-3, Texas-4, Washington-2, and Wisconsin-1). Eighty-five percent of the samples were of domestic origin, 14 percent were imported, and 1 percent was of unknown origin. A minimum of 2 liters per sample was collected from retail facilities in each participating State. Bottled water types excluded from the sampling scheme were: sparkling bottled water and mineral water. Artificially carbonated water, seltzer water, and flavored water, which are not regulated by FDA as bottled water, also were not included in the sampling scheme. Most bottled water sample collection was performed at proxy sites (retail stores) because local, as well as national brands, were included in the survey. Sample information and packing procedures were the same as those for fruit and vegetables; however, the inclusion of cold packs for shipping was unnecessary. Sample information on bottled water also included (1) bottle type and (2) brand name. Sample collection States are found in Table 2. Sample analysis was performed by the State laboratory in Minnesota.

In the municipal water sampling project, 750 drinking water samples were collected from community water systems in California, Florida,

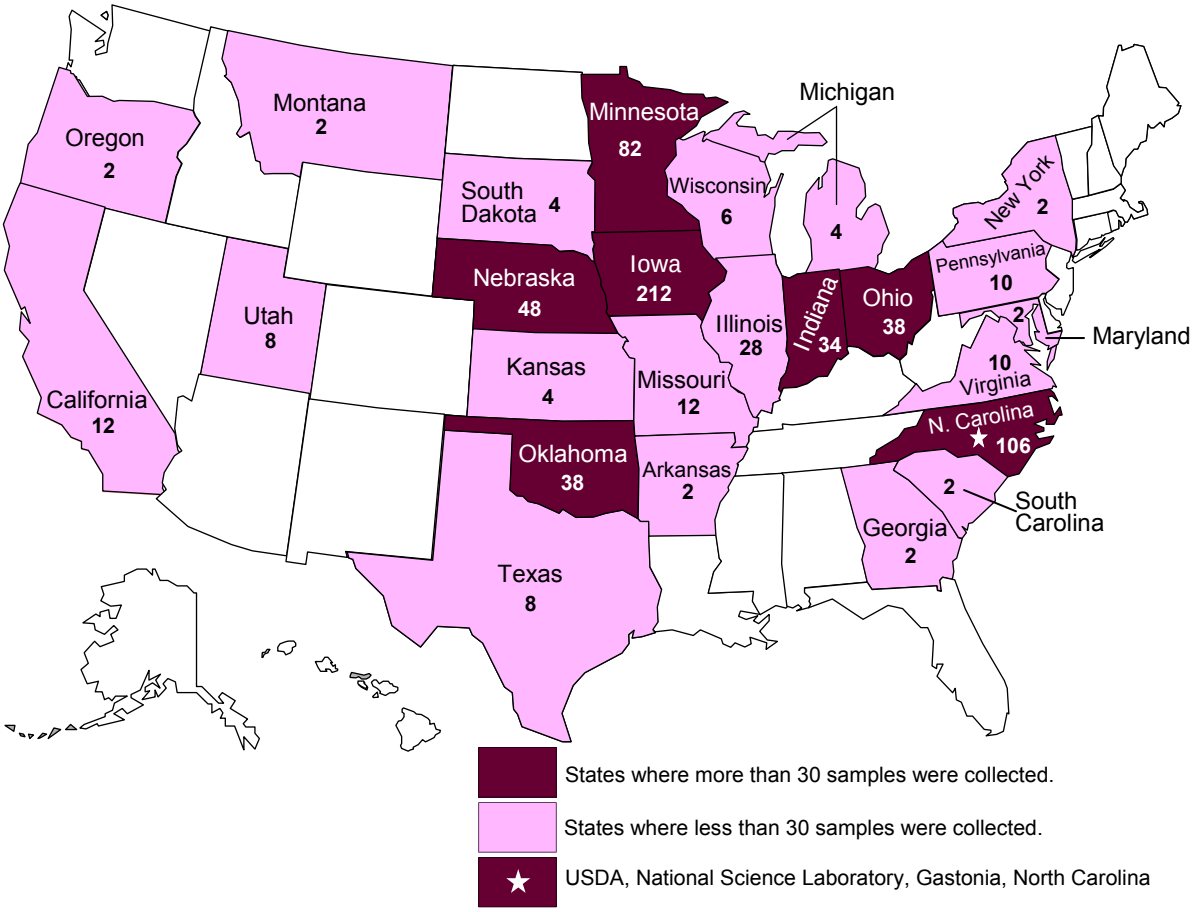


***Figure 7. Location of Pork Sample Collection Sites.*** *A total of 704 pork samples were collected, including 352 adipose tissue samples and 352 muscle tissue samples from the same hog. All samples were approximately 1 pound. FSIS inspectors collected samples at designated slaughter facilities. The samples originated from 25 States (12 samples were of unknown origin and 14 samples were from Canada). Residue testing for all samples was performed by the National Science Laboratory in Gastonia, North Carolina.*

Louisiana, Michigan, North Carolina, North Dakota, Ohio, Pennsylvania, and Washington. Samples were collected bimonthly by trained water treatment facility personnel and sent to State laboratories in Colorado, Montana, and New York for analysis. Samples included water collected from both the raw water intake and the finished drinking water after treatment. The untreated intake water and treated water were collected as paired samples, taking into account each individual plant's processing time. Dechlorination and preservative chemicals were added to the samples at the time of collection. Samples were packed with frozen cold packs and shipped overnight to the testing laboratories.

Two years of water sample collection in Michigan, North Carolina, Ohio, and Washington were completed in 2005. Five sites in Oregon (3), Pennsylvania (1), and Washington (1) were replaced in 2005 with only 1 year of sampling after evaluation of the data. The new sites in Louisiana, Pennsylvania, California, and North Dakota were sampled bimonthly as before; however, they were sampled weekly during the months of April, May, and June, when pesticides were more likely to have been heavily applied in those regions. Site selection was made in collaboration with EPA's Office of Pesticide Programs. All selected sites met

the following criteria: (1) service to populations under 50,000; (2) use of surface water as the primary source of water; and (3) location in regions of heavy agriculture where known amounts of pesticides were applied. Water treatment method was not part of the selection criteria. General locations of water collection sites and testing laboratories are illustrated in Figure 8.

## III. Laboratory Operations

### ♦ Overview

Twelve laboratories (10 State and 2 Federal) performed analyses for PDP. These laboratories are equipped with instrumentation capable of detecting residues at very low levels. Laboratory staff members receive intensive training and must demonstrate analytical proficiency on a periodic basis. Program scientists continuously test new technologies and develop new techniques to improve the levels of detection. Major changes in methodology are evaluated and their soundness demonstrated and documented in accordance with PDP SOPs.

### ♦ Fresh and Processed Fruit and Vegetables

PDP participating laboratories analyzing fruit and vegetables monitored 251 parent pesticides, metabolites, degradates, and isomers using Multiresidue Methods (MRMs). Upon arrival at the testing facility, samples are visually examined for acceptability and discarded if

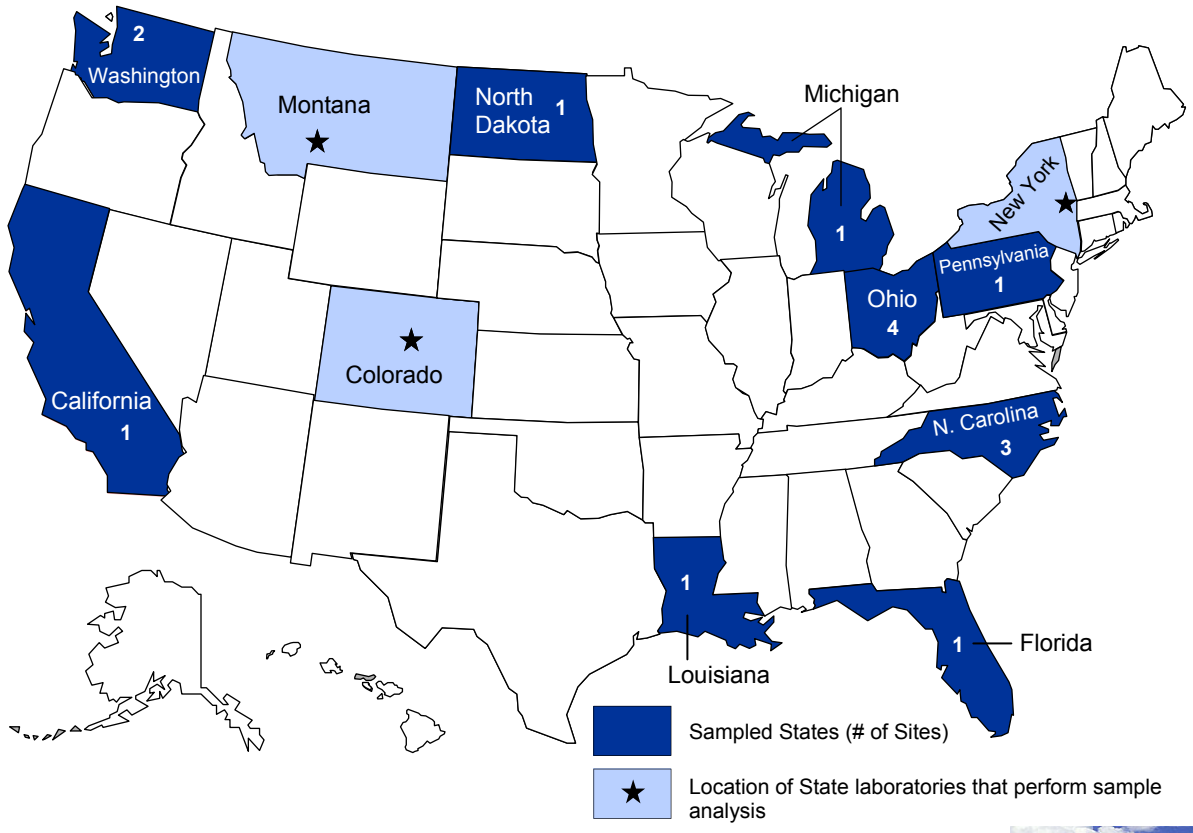


***Figure 8. Location of Drinking Water Collection Sites at Community Water Systems, 2005.*** *A total of 16 water treatment facilities in the U.S. were sampled in paired units (coordinated treated and untreated samples). Sites represent areas of varied geographical settings but are located in watersheds where pesticides were known to have been heavily applied.*

determined to be inedible (decayed, extensively bruised, or spoiled). Accepted samples are prepared emulating the practices of the average consumer to more closely represent actual exposure to residues. Fresh samples are prepared as follows: (1) apples and pears are washed with stems and cores removed; (2) cantaloupes are cut in half and seeds and rinds are removed; (3) cauliflower is washed and the wrapper leaves are removed; (4) eggplant and winter squash are washed and end pieces are removed; (5) grapes and green beans are washed and stems and extraneous materials are removed; (6) grapefruit and oranges are peeled and excess white membrane is removed; (7) lettuce is washed, wrapper leaves are removed (head lettuce only), and damaged portions are removed; (8) plums are washed, the stems and leaves removed, and pitted; (9) strawberries are rinsed and stems and leaves are removed; and (10) watermelon is quartered and the rind removed; for large watermelon, alternate quarters of each fruit are homogenized (rind removed).

Processed samples are prepared as follows: (1) frozen green beans are homogenized with their entire contents, including any liquid present; (2) fresh and reconstituted orange juice samples are mixed until homogeneous; and (3) dried plums are mixed to ensure homogeneity.

Laboratories are permitted to refrigerate incoming fresh fruit and vegetable samples of the same commodity for up to 72 hours to allow for different sample arrival times from collection sites. Frozen and canned commodities may be held in storage (freezer or shelf) until the entire sample set is ready for analysis. Samples are homogenized using choppers and/or blenders and are separated into analytical portions (aliquots) for analysis. If testing cannot be performed immediately, the entire analytical set is frozen at -40°C or lower, according to PDP's Quality Assurance/Quality Control (QA/QC) require-ments. Surplus aliquots not used for the initial testing are retained frozen in the event that replication of analysis or verification testing is required.

For analysis of fruit and vegetables, residues are extracted using organic solvents followed by various cleanup procedures such as Solid Phase Extraction (SPE). The California, Florida (Winter Haven), and Washington laboratories used modifications of the MRM developed by the California Department of Food and Agriculture (CDFA). The New York laboratory used a method based on the Agriculture and Agri-Food Canada SPE method with some modifications based on the Luke procedure. The Florida (Tallahassee) and Michigan laboratories used a modified version of the QuEChERS method, developed and published in July 2003 by USDA's Agricultural Research Service. The Ohio laboratory used variations and combinations of the FDA Luke I [Section 302 of Pesticide Analytical Manual (PAM) I] and Luke II [FDA Laboratory Information Bulletin (LIB) 3896] extraction procedures. The Texas laboratory used its adaptation of the Luke procedures for cantaloupe and winter squash and the CDFA method for watermelon. The Texas laboratory plans a full switch to the CDFA method as new commodities come into the program. All MRMs are determined, prior to use and through appropriate method validation procedures, to produce equivalent data for PDP analytical purposes.

Gas Chromatography (GC) and Liquid Chromatography (LC), coupled with selective detectors and Mass Spectrometry (MS) systems, are used for the initial identification and quantitation of pesticides. Laboratories are increasing their use of GC- and LC-MS systems and are specifically focusing on LC/MS-MS techniques to broaden the scope of testing and to keep pace with emerging analyte chemistries. All residues initially identified must be verified. Confirmation is accomplished by MS, alternate detection systems, or alternate chromatographic behavior. Verification is considered crucial due to the complexity of commodity matrices and the low concentrations of detected residues. The verification process provides an extra measure of confidence in the identification of the analyte and its concentration.

**Triazoles – Strawberries:** The Michigan laboratory analyzed strawberries for three common metabolites of the triazole fungicides: 1,2,4-triazole, triazole acetic acid, and triazole alanine. The analyses were performed using LC coupled with tandem MS in order to achieve the low parts per billion (ppb) detection limits required for dietary risk assessment. Testing for the three common metabolites required development of special analytical techniques in addition to the more conventional PDP multiresidue methods.

### ♦ Soybeans and Wheat

The USDA GIPSA laboratory in Kansas City, Missouri, analyzed soybean samples for 83 parent pesticides, metabolites, and isomers and wheat samples for 71 parent pesticides, metabolites, and isomers. On arrival at the testing facility, samples were visually examined for acceptability and discarded if moldy or infested. Samples were ground before being analyzed and surplus sample aliquots, not used for the initial testing, were retained in the event that replication of analysis or verification testing was required. Extraction of soybean and wheat samples was accomplished using solvent extraction and SPE cleanup coupled with MS detection.

### ♦ Soybean Rust/Aphid Special Survey

During October through December 2005, the USDA GIPSA laboratory also performed a special survey to monitor soybeans for 14 identified compounds used to combat soybean rust - azoxystrobin, boscalid, cyproconazole, difenoconazole, epoxiconazole, fenarimol, fluquinconazole, flutriafol, myclobutanil, propiconazole, pyraclostrobin, tebuconazole, tetraconazole, and trifloxystrobin. In addition, the laboratory analyzed for two compounds used to control Chinese aphid, pymetrozine and thiamethoxam. A specialized method was developed in order to optimize recovery of the 16 compounds. Ground samples were extracted with organic solvent and cleaned using a combined SPE procedure. Analysis was performed using LC/MS-MS.

### ♦ Milk and Heavy Cream

The AMS NSL in Gastonia, North Carolina, tested milk and heavy cream samples for 88 parent pesticides, metabolites, degradates, and isomers. For milk, 1-quart to 1-gallon samples were collected and for cream, 1-pint cartons were collected for shipment to the testing facility. Upon arrival at the testing facility, samples were visually examined for acceptability and discarded if spoiled or if the containers had been ruptured during shipping. Samples were refrigerated until sample aliquots were taken, after which the aliquots were frozen (-70° C) prior to analysis. Because the milk and cream samples received were homogenized, further mixing at the laboratory was not required. A 100-gram aliquot was weighed for milk and a 10-gram aliquot was weighed for cream followed by organic solvent extraction and sample cleanup using ultra-low refrigeration (-70°C), centrifugation, and dispersive SPE. For both milk and cream, three extra sample aliquots were weighed, frozen, and kept in reserve in the event that replication of analysis or verification testing was required. Surplus milk and cream remaining after the four aliquots were taken was then discarded. Samples were analyzed using GC with MS detection and selective detectors and high performance liquid chromatography (HPLC) with post-column derivatization and fluorescence detection.

### ♦ Pork (Adipose and Muscle)

The AMS NSL also tested pork adipose samples for 133 parent pesticides, metabolites, degradates, and isomers and pork muscle samples for 121 parent pesticides, metabolites, degradates, and isomers. For both pork adipose and pork muscle, approximately 1-pound samples were collected for shipment to the testing facility. Upon arrival at the testing facility, samples were visually examined for acceptability and discarded if warm to the touch, spoiled, or leaking. If not homogenized immediately after arrival, samples were frozen at 0°C or lower until homogenized. The tissue samples were homogenized by grinding with dry ice in a large,

high-speed food processor. The sample homogenates were placed into sample cups (approximately 60 grams per cup) and allowed to sublime at -20°C overnight before being stored at -70°C prior to analysis. A 20-gram aliquot was weighed for pork muscle and a 10-gram aliquot was weighed for pork adipose followed by organic solvent extraction and sample cleanup using ultra-low refrigeration (-70°C), centrifugation, and dispersive SPE. For both pork muscle and adipose tissues, two extra sample homogenate cups, not used for the initial testing, were retained frozen in the event that replication of analysis or verification testing was required. Surplus pork tissue homogenate remaining after the three sample cups were filled was then discarded. Samples were analyzed using GC-MS and selective detectors and LC/MS-MS.

### ♦ Bottled Water

The Minnesota laboratory analyzed bottled water for 82 parent pesticides, metabolites, and isomers. These compounds were determined to be of interest to EPA based on data needs for risk assessment as required under FQPA. Upon arrival at the testing laboratory, samples were visually examined for acceptability (within labeled expiration date, no leakage). Samples were refrigerated until time of analysis. One liter of the sample provided was extracted for compounds amenable to GC analysis and one for chloroacetanilide compounds to be analyzed via LC/MS-MS.

### ♦ Drinking Water

The Colorado, Montana, and New York laboratories analyzed drinking water for 222 parent pesticides, metabolites, degradates, and isomers. These compounds were determined to be of interest to EPA. Paired samples of the raw intake water (untreated) and disinfected finished drinking water (treated) were collected for analysis. Treated water samples were collected after the untreated samples at a time interval consistent with the hydraulic residence. Hydraulic residence is the average time from entry into the treatment facility until distribution as treated water. Each sample consisted of three 1-liter amber glass bottles collected at the water treatment facility. Upon arrival at the testing laboratory, samples were visually examined for acceptability and discarded if warm to the touch or leaking. Samples were refrigerated until time of analysis and extracted within 96 hours of collection. A 1-liter bottle was extracted for compounds amenable to GC analysis and another one for compounds amenable to LC analysis. The remaining bottle was held in reserve or extracted for specialty compounds requiring separate extraction/analytical procedures [e.g., ethane sulfonic acid (ESA) and oxanilic acid (OA) analogs of alachlor, acetochlor, and metolachlor]. Extraction methods used were based on SPE methods developed by the U.S. Geological Survey (USGS) and were independently validated by each testing laboratory. Samples were analyzed using MS detection (single and tandem GC and LC technologies), selective detectors, or post-column derivatization HPLC detection systems.

### ♦ Quality Assurance Program

The primary objectives of the QA/QC program are to ensure the reliability of PDP data and the performance equivalency of the participating laboratories. Direction for the PDP QA program is provided through SOPs based on EPA Good Laboratory Practices (GLPs). Written SOPs provide uniform administrative, sampling, and laboratory procedures. SOPs are revised annually to accommodate changes in the program. As laboratories continue to move toward accreditation to ISO 17025, program SOPs are being modified to align with these ISO requirements. Prior to submission to PDP, data are reviewed by each Quality Assurance Unit (QAU) for completeness and adherence to PDP requirements.

**Laboratory Technical Advisory Group and Quality Assurance Officers:** A Technical Advisory Group comprised of laboratory Technical Program Managers (TPMs) and Quality Assurance Officers (QAOs) is responsible for annually reviewing program SOPs and addressing QA

issues. For day-to-day QA oversight, PDP relies on the QAU at each participating facility. As required under EPA GLPs, the QAU operates independently from the laboratory staff and is responsible for performing quarterly internal program audits. Preliminary data review procedures are performed on-site by each laboratory's QAU. Final review procedures are performed by PDP staff who are responsible for collating and reviewing data for conformance with SOPs.

**Method Performance Requirements:** Laboratories are required to determine and verify the limits of detection (LODs) and limits of quantitation (LOQs) for each pesticide/commodity pair. LODs depend on matrix, analyte, and detector used. LODs for each pesticide/commodity pair are shown in the applicable crop results appendix. Additional method performance/validation requirements include modules for consistent instrument response (linearity), method range, and precision and accuracy.

**Confirmation:** Verification by MS or a suitable alternate detection system is required for all preliminary results. Verified residue amounts greater than or equal to LOD and below LOQ are reported as below quantifiable level (BQL). BQLs are assigned values at one-half the LOQ, and are used along with values greater than or equal to LOQ and non-detects in dietary risk assessments, when appropriate.

**Routine Quality Control Procedures:** PDP procedures for QC are intended to assess method and analyst performance during sample preparation, clean-up, extraction, and, where applicable, derivatization. To maximize sample output and decrease the QC/sample ratio, samples are analyzed in analytical sets that include the test samples and the following components:

Reagent Blank - For analysis of fruit and vegetables, soybeans, wheat, milk, heavy cream, and pork, an amount of distilled water, equivalent to the natural moisture content of the commodity, is run through the entire analytical process to confirm glassware cleanliness and system integrity.

Matrix Blank - A previously analyzed sample of the same commodity, which contains either very low concentrations of known residues or no detectable residues, is divided into two portions. The first portion is used to determine background information on naturally occurring chemicals and the second is used to prepare a matrix spike.

Matrix Spike(s) - Prior to extraction, a portion of matrix blank is spiked with marker pesticides to determine the precision and accuracy of the analyst and instrument performance. Marker pesticides are compounds selected from different pesticide classes (e.g., organochlorines, organophosphates, carbamates, conazoles, imidazolinones, neonicotinyls, phenoxy acid herbicides, pyrethroids, strobilurins, triazines), which have physical and chemical characteristics similar to those in the class they represent. Marker pesticides are used to monitor recovery instead of spiking all pesticides. This use of marker pesticides optimizes the resources required to analyze the thousands of analyte/matrix combinations in the program while still allowing evaluation of daily recovery patterns. In addition, each laboratory must perform matrix spikes throughout the year for each analyte/crop combination reported by their laboratory. During 2005, PDP laboratories quantitated a total of 43,059 matrix spikes, with an overall mean recovery of 91 percent and an overall percent coefficient of variation (% C.V.) of 26 percent. The % C.V. is calculated as the standard deviation divided by the mean.

Process Control Spike - A compound with physical and chemical characteristics similar to those of the pesticides being tested is used to evaluate the analytical process on a sample-by-sample basis. Each of the analytical set components, except the reagent and matrix blanks, is spiked with process controls. During 2005, PDP laboratories quantitated a total of 54,997 process controls on 14,749 samples, with an overall mean recovery of 96 percent and an overall % C.V. of 19 percent. Of these process controls, 327 (0.59 percent) were rerun due to initial failure to meet PDP recovery criteria.

These rerun values are not included in these statistics.

**Proficiency Testing:** All facilities are required to participate in PDP's Proficiency Testing (PT) program. For laboratories testing fresh and processed fruit and vegetables, grains, dairy products, and meats, multiresidue test samples containing pesticides of known quantities are periodically issued and analyzed under the same conditions as routine samples. The resulting data are used to determine performance equivalency among the testing laboratories and to evaluate individual laboratory performance. During 2005, PDP laboratories received 5 multiresidue fruit and vegetable proficiency testing sets consisting of 15 samples, 1 soybean and 1 wheat set each consisting of 3 samples, and 1 milk and 1 heavy cream set each consisting of 3 samples. For fruit and vegetable multiresidue screening, the 15 samples comprised 5 commodities and were fortified with 58 compounds at levels generally 1 to 10 times the LOQ. Five compounds were repeated once. Reported results for fruit and vegetable samples yielded an overall mean recovery of 95 percent and an overall % C.V. of 17 percent.

Additionally, PDP laboratories participated in the international AOAC® proficiency testing program. During 2005, PDP laboratories participated in two test rounds, one for apples and one for strawberries. Each sample set was fortified with 10 pesticides. Laboratories were evaluated based on z-scores for reported compounds, as well as any reported false negatives or false positives. Laboratories were not held responsible for reporting compounds not included in their routine screening method. Overall, PDP laboratories performed as well or better than other participating laboratories.

For water, two proficiency sample sets were analyzed during 2005. For the first set, a commercial vendor supplied PT solutions to the testing laboratories. Solution profiles were based on common laboratory analytical profiles and detection limits. Test solutions were used for spiking, rather than distribution of spiked samples, due to stability concerns. For each PT set, the vendor supplied the laboratory's QAU with a custom solution that was diluted according to program protocols by the onsite QAU and fortified into one liter of unfiltered tap water. The spiked samples were then presented to the staff members of each respective laboratory for analysis. For the other drinking water set, replicate samples from a site whose samples historically contained multiple pesticides were sent to each of the water-testing laboratories and reported results compared.

**On-site Reviews:** PDP staff performs on-site visits to determine compliance with PDP SOPs. Improvements in sampling, chain-of-custody, laboratory, recordkeeping, and electronic data transmission procedures are made as a result of on-site reviews.

## IV. Database Management

PDP maintains an electronic database at the MPO in Manassas, Virginia, that serves as a central data repository. The data captured and stored in the PDP database include sample collection and product information, residue findings, and process control recoveries for each sample analyzed, in addition to QA/QC fortified recoveries for each set of samples. Each calendar-year survey is stored in a separate database structure, allowing easier administration and data reporting. The PDP data path is illustrated in Figure 9.

### ♦ Electronic Data Path

PDP utilizes the Remote Data Entry (RDE) system, which is a customized software application that allows participating State and Federal laboratories to enter and transmit data electronically. The RDE system is centralized with all user interface software and database files residing in Washington, D.C. The laboratory users need only a Web browser to interface with the RDE system. Access is controlled through separate user login/password accounts and user access rights for the various system functions based on position requirements. The RDE

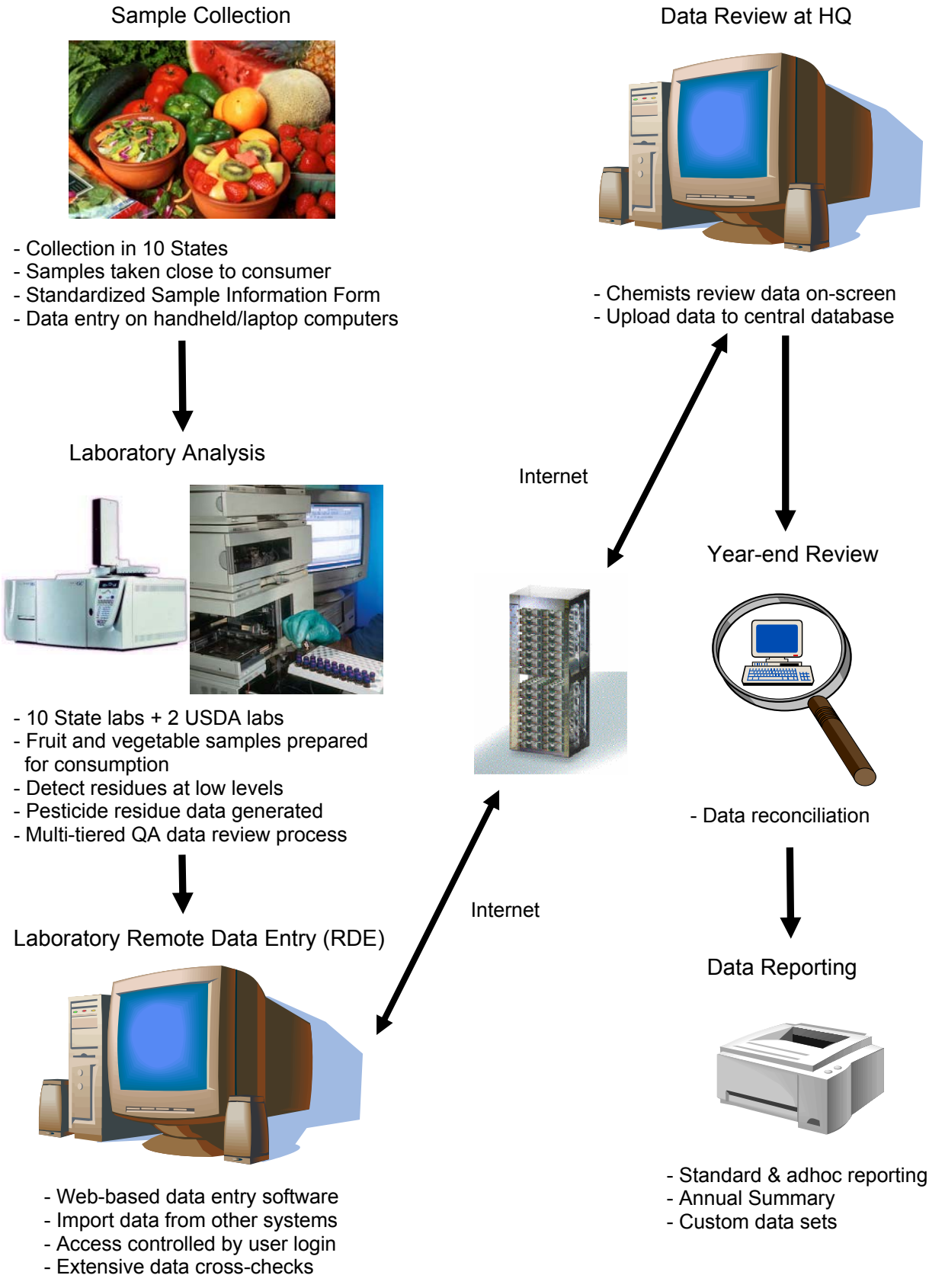


***Figure 9. PDP Data Pathway.*** *An illustration of PDP data path from sample collection through laboratory analysis and reporting.*

system utilizes Secure Sockets Layer (SSL) technology to encrypt all data passed between users' computers and the central Web server.

A separate Windows®-based system allows sample collectors to capture the standardized SIF electronically on handheld or laptop computers. The e-SIF system generates formatted text files containing sample information that are e-mailed to PDP headquarters and then imported into the Web-based RDE system.

The RDE data entry screens have extensive editing functions and cross-checks built into the software to ensure that valid values are entered for all critical data elements. This task is made easier by the practice of capturing and storing standardized codes for all critical alphanumeric data elements rather than their complete names, meanings, or descriptions. This coding scheme allows for faster and more accurate data entry, saves disk storage space, and allows the user to perform adhoc queries (data searches) on the database easily. The data entry screens also perform automatic edits on numeric fields, dates, and other character fields to ensure that entries are within prescribed boundaries.

At PDP headquarters, the RDE system allows staff chemists to review the data on-line and then to mark the data as ready-for-upload to the central PDP database. A separate upload application converts and passes the data to the PDP database which is presently maintained using Microsoft® Access in a Windows® operating environment. Access to the central PDP database is limited to PDP staff personnel only and is controlled through password protection and user access rights. System back-ups are performed each night and back-up tapes are sent to off-site storage once a week.

### ♦ Data Reporting

The PDP staff frequently receives requests for data from Government agencies and interested outside parties. Ad-hoc queries and custom reports are generated to fill such requests. An electronic library of data queries is maintained to generate standardized data summaries, including the data tables, charts, and appendices in this annual summary. Subsets of the PDP calendar-year databases are made available for download from the PDP Website. The data files on the Website are fixed-length text files that contain a portion of the sampling data, all of the reported residue findings, and reference lists that can be used to interpret the standardized codes used in the PDP data. The data files can be imported into defined database structures and manipulated with the use of common database management software packages.

## V. Sample Results and Discussion

### ♦ Sample Results

In 2005, PDP conducted surveys on a variety of foods including fresh and processed fruit and vegetables, soybeans, wheat, milk, heavy cream, pork, bottled water, and drinking water. Of the 14,749 samples that were collected and analyzed, 10,154 were fruit and vegetable commodities, 668 were soybean samples, 306 were soybean rust/aphid survey samples, 674 were wheat samples, 746 were milk samples, 369 were heavy cream samples, 704 were pork samples, 378 were bottled water samples, and 750 were drinking water samples.

Excluding drinking water samples, which were all from U.S. sources, approximately 84 percent of all samples were produced in the U.S., 14 percent were imports, approximately 1 percent were of mixed origin, and about 1 percent were of unknown origin. Appendix K shows the distribution of sample origin by State or country. Of the domestic samples, approximately 40 percent (4,614 of 11,737) were grown, packed, and/or distributed in or from California. Approximately 21 percent (155 of 744) of the orange juice samples were of mixed national origin (i.e., the juice was comprised of oranges grown in more than one country). Appendix L includes a comparison of residues for selected commodities with a significant import component.

Table 3 gives an overview of the number of residue detections for fresh and processed fruit and vegetables, grains, dairy, meat and water products determined during 2005. Overall 73 percent of fresh fruit and vegetables and 61 percent of processed fruit and vegetables showed detectable residues. The percent of samples with detections ranged from 13 percent (dried plums) to 98 percent (apples). Residues were detected in 22 percent of the soybean samples, 75 percent of the wheat samples, 99 percent of the milk samples, 99 percent of the heavy cream samples, 8 percent of the pork samples, and 16 percent of the bottled water samples. Residue findings in heavy cream and milk were primarily low level detections of diphenylamine and the unavoidable environmental contaminants DDE p,p' and dieldrin.

Appendix B tabulates the distribution of residues in fruit and vegetables for the complete 2005 data set. Information included in this appendix are: number of samples analyzed for a particular compound; number and percent of samples with detections; range of concentrations detected; tolerance violations; range of analytical LODs; EPA tolerance levels or FDA action levels; and corresponding Codex Alimentarius MRLs and/or extraneous maximum residue limits (EMRLs), when applicable. Appendices C, D, E, F, G, H, I, and J provide the distribution of residues for soybeans, soybean rust/aphid special survey, wheat, milk, heavy cream, pork, bottled water, and drinking water, respectively. The individual sample data can be downloaded from the PDP Website or obtained by contacting MPO.

In 2005, PDP also completed a special study of triazole fungicides and metabolites begun in 2003 at the request of EPA. Michigan analyzed more than 500 strawberry samples for parent triazoles and common triazole metabolites. Triazole alanine was detected in 11.1 percent of the samples and 1,2,4-triazole was detected in less than 1 percent of the samples. Parent triazoles myclobutanil and triflumizole were detected in 34.7 and 1.4 percent of samples respectively. Triadimefon and triazole acetic acid were not detected.

Food monitoring data, together with dietary consumption surveys, are used by EPA to estimate dietary exposure to pesticides to ensure the safety of existing pesticide uses. EPA uses all results reported by PDP, including sample results reported as below the LOD and those above the tolerance. PDP laboratories are required to establish LODs and report any instrumental response below the LOD as a non-detect. LODs are established experimentally for each pesticide/commodity pair and are reported with each data set. The number of non-detects can be used in conjunction with percent crop treated data to determine what proportion of these values may be counted as zero towards the dietary exposure. As shown in Table 3, 33.7 percent of the samples (excluding drinking water and soybean rust/aphid samples) were reported as having no residue detections (i.e., results were below the established LOD). For samples containing residues, the vast majority of the detections were well below established tolerances.

### ♦ Fresh vs. Processed

The 2005 residue data, as in past years, show that residue profiles for fresh products are significantly different than for processed products. Raw agricultural commodities, if specifically grown for processing into juice for example, could receive different treatments than products destined for fresh market. An increase in residue levels (concentration) or reduction in residue levels is likely a direct result of processing effects such as cooking, pasteurization, and other processing steps. A comparison of residues for selected fresh and processed products is shown in Table 4.

For fresh and/or frozen green beans, detection of pesticides in greater than 10 percent of the samples included acephate, bifenthrin, chlorothalonil, endosulfan I, endosulfan II, endosulfan sulfate, methamidophos, and

| | Number of Samples Analyzed | Samples with Residues Detected | Percent of Samples with Detections | Different Pesticides Detected | Different Residues Detected | Total Residue Detections |
|---|---|---|---|---|---|---|
| **Fresh Fruit and Vegetables:** | | | | | | |
| Apples | 743 | 727 | 98 | 36 | 43 | 2,643 |
| Cantaloupe | 558 | 288 | 52 | 22 | 27 | 445 |
| Cauliflower | 741 | 650 | 88 | 16 | 17 | 816 |
| Eggplant | 736 | 172 | 23 | 15 | 18 | 315 |
| Grapefruit | 742 | 470 | 63 | 11 | 13 | 643 |
| Grapes | 739 | 520 | 70 | 31 | 34 | 1,250 |
| Green Beans | 181 | 166 | 92 | 18 | 22 | 536 |
| Lettuce | 743 | 696 | 94 | 43 | 52 | 2,475 |
| Oranges | 741 | 670 | 90 | 14 | 16 | 1,195 |
| Pears | 555 | 473 | 85 | 25 | 29 | 979 |
| Plums | 573 | 426 | 74 | 16 | 16 | 652 |
| Strawberries | 737 | 685 | 93 | 30 | 39 | 1,938 |
| Watermelon | 182 | 70 | 38 | 12 | 14 | 101 |
| Winter Squash | 731 | 313 | 43 | 25 | 30 | 452 |
| TOTAL FRESH | 8,702 | 6,326 | 73 | | | 14,440 |
| **Processed Fruit and Vegetables:** | | | | | | |
| Green Beans, Frozen | 555 | 431 | 78 | 18 | 19 | 756 |
| Orange Juice | 744 | 430 | 58 | 9 | 10 | 459 |
| Plums, Dried (Prunes) | 153 | 20 | 13 | 7 | 7 | 25 |
| TOTAL PROCESSED | 1,452 | 881 | 61 | | | 1,240 |

Fruit and Vegetables Totals:

Number of Samples Analyzed = 10,154
Number of Samples with Residues Detected = 7,207
Percent with Residue Detections = 71.0%
Total Number of Different Pesticides Detected = 105
Total Number of Different Residues Detected = 118
Total Number of Residue Detections = 15,680

| | | | | | | |
|---|---|---|---|---|---|---|
| **Grain Product:** | | | | | | |
| Soybeans | 668 | 144 | 22 | 9 | 9 | 150 |
| Wheat | 674 | 508 | 75 | 18 | 18 | 750 |
| TOTAL GRAIN | 1,342 | 652 | 49 | | | 900 |
| **Dairy Product:** | | | | | | |
| Heavy Cream | 369 | 366 | 99 | 9 | 11 | 901 |
| Milk | 746 | 738 | 99 | 12 | 12 | 1,857 |
| TOTAL DAIRY | 1,115 | 1,104 | 99 | | | 2,758 |
| **Meat Tissues:** | | | | | | |
| Pork, Adipose | 352 | 40 | 11 | 7 | 8 | 50 |
| Pork, Muscle | 352 | 18 | 5 | 2 | 3 | 20 |
| TOTAL MEAT | 704 | 58 | 8 | | | 70 |
| **Water Product:** | | | | | | |
| Bottled Water | 378 | 59 | 16 | 7 | 14 | 105 |

All Commodities (excludes 750 drinking water samples and 306 soybean rust/aphid special survey samples):

Number of Samples Analyzed = 13,693
Number of Samples with Residues Detected = 9,080
Percent with Residue Detections = 66.3%
Total Number of Different Pesticides Detected = 166
Total Number of Different Residues Detected = 178
Total Number of Residue Detections = 19,513

***Table 3. Number of Samples Analyzed and Summary of Residues Detected by Commodity.*** *The distinction between the number of pesticides and different residues is made to differentiate a parent compound and its metabolite(s). A parent compound and its metabolites are reported as a single pesticide detection rather than as separate residue detections.*

| Pesticide | GREEN BEANS -- Fresh (2005) % of Samples with Detects | Minimum Value Detected, ppm | Maximum Value Detected, ppm | GREEN BEANS -- Frozen (2005) % of Samples with Detects | Minimum Value Detected, ppm | Maximum Value Detected, ppm |
|---|---|---|---|---|---|---|
| Acephate | 21.0 | 0.003 | 3.0 | 26.8 | 0.003 | 0.88 |
| Bifenthrin | 2.8 | 0.013 | 0.39 | 12.6 | 0.013 | 0.093 |
| Chlorothalonil | 35.9 | 0.003 | 3.9 | 0 | 0 | 0 |
| Endosulfan I | 43.6 | 0.003 | 0.13 | 0 | 0 | 0 |
| Endosulfan II | 32.0 | 0.003 | 0.15 | 0 | 0 | 0 |
| Endosulfan sulfate | 58.6 | 0.003 | 0.47 | 0.7 | 0.003 | 0.003 |
| Methamidophos | 24.9 | 0.003 | 1.0 | 25.4 | 0.003 | 0.27 |
| Vinclozolin | 0 | 0 | 0 | 47.4 | 0.004 | 0.4 |
| | ORANGES -- Fresh (2005) | | | ORANGE JUICE (2005) | | |
| Imazalil | 74.2 | 0.050 | 0.79 | 1.5 | 0.050 | 0.25 |
| o-Phenylphenol | 34.3 | 0.017 | 0.084 | 52.0 | 0.017 | 0.096 |
| Thiabendazole | 43.7 | 0.050 | 0.61 | 0.5 | 0.05 | 0.23 |
| | PLUMS -- Fresh (2005) | | | PLUMS -- Dried (2005) | | |
| Fludioxonil | 20.6 | 0.18 | 1.0 | 0 | 0 | 0 |
| Iprodione | 39.6 | 0.065 | 7.1 | 0 | 0 | 0 |
| Phosmet | 19.4 | 0.005 | 0.58 | 0 | 0 | 0 |

***Table 4. Selected Residue Comparisons for Fresh and Processed Commodities.*** *The percentage of samples with detections and the range of reported values for selected pesticides recovered from fresh vs. processed green beans, oranges and plums are shown. Commodity/residue pairs were selected based on the following criteria: data availability for fresh and processed product within the same sampling timeframe; greater than 10% detection rate for a residue in either the fresh or processed commodity; and number of samples analyzed sufficient to ensure adequate representation.*

vinclozolin. Acephate and methamidophos detections were essentially the same in the fresh green beans and frozen green beans. Chlorothalonil, endosulfan I, and endosulfan II were detected in fresh green beans, whereas there were no detections of these compounds in frozen green beans. Endosulfan sulfate was present in 58.6 percent of fresh green beans but was detected in only 0.7 percent of frozen green beans. In contrast, vinclozolin was detected in frozen green beans, but not the fresh product, and detections of bifenthrin were higher in the frozen green beans than in the fresh product.

A direct comparison of fresh oranges to orange juice can be problematic. Not only may oranges specifically grown for processing into juice receive different treatments than products destined for the fresh market, but entirely different varieties are grown specifically for juice production and may be treated completely differently from fresh market oranges. Approximately 21 percent of orange juice samples were comprised of juice from oranges grown in different countries. Ortho-phenylphenol was found in 52.0 percent of the orange juice samples and in 34.4 percent of the fresh product. In contrast, imazalil was found in 1.5 percent of the juice and on 74.2 percent of fresh oranges. Thiabendazole was detected in less than 1 percent of the juice samples but was detected in 43.7 percent of fresh oranges. Results for fresh plums are compared to

findings for dried plums in Table 4. Fludioxonil (20.6%), iprodione (39.6%), and phosmet (19.4%) were detected in fresh plums. None of these compounds were detected in the dried product.

Fludioxonil was found in fresh plums but not dried; the highest residue detected was 1.0 parts per million (ppm) or 20 percent of the tolerance. Iprodione was found in fresh plums but not dried; the highest residue detected was 7.1 ppm or 36 percent of the tolerance. Phosmet was found in fresh plums but not dried; the highest residue detected was 0.58 ppm or 12 percent of the tolerance.

### ♦ Import vs. Domestic Residue Comparisons

Information about the origin of each PDP sample is recorded when the sample is collected. Figure 3 illustrates the portion of the domestic and import component for each PDP fruit and vegetable commodity in 2005. The data generated by PDP reflect pesticide residues in foods available to the U.S. consumer, including both domestic and imported products. Many commodities are almost entirely of domestic origin with only a minor import component. However, some fresh commodities, such as cantaloupe, eggplant, grapes, green beans, pears, plums, watermelon, and winter squash are from domestic growers part of the year and are imported during the remaining months. Comparisons of selected residues detected in imported versus domestic winter squash, grapes, and cantaloupe can be found in Appendix L.

Overall, samples of domestic winter squash had higher percent detections than those from Mexico. Samples of grapes from Chile and cantaloupes from Central America showed higher percent detections than the respective domestic samples. These sample sets were selected to compare data where residues are present in greater than 10 percent of the commodity and allow comparison of individual residues. These data also showed that the residue profile for domestic and imported crops was significantly different.

The winter squash data in Appendix L indicate that in 2005, residues were detected in 43.4 percent of the domestic samples and 38.0 percent of the Mexican samples. Dieldrin was detected in almost 12 percent of the domestic samples but was not detected in any of the samples from Mexico. Endosulfan sulfate was detected more frequently in the Mexican winter squash samples (22.1%) than domestic winter squash samples (11.3%). Ortho-phenylphenol was detected at similar rates in both the domestic and Mexican winter squash samples (19.1% and 20.0% respectively).

For grapes, 87.6 percent of the Chilean samples and 63.9 percent of the domestic samples had residues detected in 2004-2005. Captan, chlorpyrifos, cyprodinil, fludioxonil, and iprodione were detected more often in the imported grape samples than the domestic grape samples. For example, captan residues were detected in 41.2 percent of the Chilean grape samples compared to 2.5 percent of the domestic samples. Conversely, ethephon and myclobutanil were detected more often in the domestic grape samples than in the Chilean grape samples. Ethephon residues were detected in 17.3 percent of the Chilean samples compared to 57.0 percent of the domestic grape samples. Imidacloprid was detected at similar rates in both the domestic (15.8%) and Chilean grape samples (14.0%).

For cantaloupe, 37.5 percent of the domestic product had residues compared to 74.6 percent of the Central American (Costa Rica, Guatemala, Honduras, and Nicaragua) samples in 2003-2005. Cantaloupe samples from Central America had more residues of endosulfan sulfate and methomyl than samples from the U.S.

### ♦ National Estimates

National estimates for selected pesticide/commodity pairs are shown in Appendix M. In most cases for each pair, the levels of detected

residues are a small fraction of the tolerance level. A range of values for the average sample residue concentration (mean) for each pair is provided. The lower value for the range is determined by treating a sample without detectable residues as if it had a residue concentration equal to zero. The upper value is determined by treating such a sample as if it had a residue concentration equal to the LOD. Calculations for the 50th, 75th, and 90th percentiles for each of the selected pairs are shown. The ratio of the 90th percentile to the tolerance, as a normalization factor, is also provided. Percent detections and percentiles for apples, cantaloupe, cauliflower, eggplant, grapefruit, grapes, lettuce, oranges, pears, plums, strawberries, and winter squash were weighted to reflect monthly variations in marketing. No weighting adjustments were made for frozen green beans, heavy cream, milk, orange juice, soybeans, or wheat.

Appendix N displays the estimated distributions of 12 representative pesticide/commodity pairs. These graphs depict that the overwhelming majority of pesticide testing results and the respective means (average values) are at low concentrations. The range of values, the median at the 50th percentile, and the range in percentile representing the lower and upper bound for the sample mean are shown on each chart. The pesticide/commodity pairs included in Appendix N are thiabendazole/apples, imidacloprid/cauliflower, imazalil/grapefruit, vinclozolin/frozen green beans, imazalil/oranges, DCPA/lettuce, azinphos methyl/pears, iprodione/plums, captan/strawberries, THPI/strawberries, DDE p,p'/heavy cream, and malathion/wheat. In some cases, there is convergence of the mean upper and lower bound into a single line due to the insignificant differences between them (e.g., captan/strawberries).

## ♦ Soybean Rust/Aphid Results

In 2005, PDP conducted a special survey of compounds used on soybeans to treat rust and the Chinese aphid. The GIPSA laboratory analyzed more than 300 samples for 14 fungicides used to treat soybean rust and 2 insecticides used to control the Chinese aphid. The fungicide pyraclostrobin was detected in 2 percent of the samples. The highest residue detected was 2 parts per billion (ppb) or 5 percent of the tolerance for pyraclostrobin. No other compounds were detected. Appendix D provides the results for the soybean special survey.

## ♦ Postharvest Applications

Pesticides can be applied before and after harvest depending on the crop and approved label use. PDP data capture both preharvest and postharvest uses because samples are collected at points when all pesticide applications have already occurred. Pesticides applied postharvest are used primarily as fungicides, but some insecticides and sprouting inhibitors are important postharvest crop treatments. Some detections reported in Appendix B were most likely generated by postharvest applications to the raw agricultural commodity.

## ♦ Environmental Contaminants

DDT, DDD, and DDE

A total of 9,417 fruit and vegetable (Appendix B), 522 soybean (Appendix C), 674 wheat (Appendix E), 746 milk samples (Appendix F), 369 heavy cream samples (Appendix G), and 352 pork adipose samples (Appendix H) were screened for DDE p,p', a metabolite of DDT. Other DDT metabolites measured only in fruit and vegetables and pork adipose include DDD o,p' and DDD p,p'. Use of DDT has been prohibited in the U.S. since 1972; however, due to its persistence in the environment, residues of the DDE p,p' metabolite were detected in 1.2 percent (112 detections in 9,417 samples) of the fruit and vegetable samples tested. Residues of DDE p,p' were found in green beans (1.1%), lettuce (14.7%), winter squash (0.1%), milk (85.4%), heavy cream (86.7%), and pork adipose (7.1%). The highest residue of DDE p,p' found in heavy cream was 37 ppb or 3 percent of the established action level. Residues of DDT o,p' and DDT p,p' were detected in

lettuce (0.6% and 0.4% respectively). Residues of DDT p,p' were detected in cauliflower (0.1%) and winter squash (0.5%). These finding are largely attributable to the recent improvements in analytical technologies and associated lower detection limits. All detections of DDT and its metabolites were well below the established action levels.

## OTHER EXTRANEOUS PESTICIDES

In 1974, all aldrin and dieldrin uses were canceled in the U.S., and in 1978, all heptachlor uses were canceled. In 1986, chlordane uses, except termiticide uses, were canceled. Despite these cancellations and due to their persistence in the environment, residues of dieldrin were detected in cantaloupe, watermelon, winter squash, milk, and heavy cream in 2005. Dieldrin was found in 33.1 percent of heavy cream samples, 23.2 percent of milk samples, 6.6 percent of winter squash samples, 1.3 percent of cantaloupe samples, and less than 1 percent of the watermelon samples. One percent of winter squash contained heptachlor epoxide, a metabolite of heptachlor. Cis and trans chlordane were detected in 1.5 and 1 percent of the winter squash samples, respectively. All detections were below the established action levels. No residues of aldrin were detected in fruit and vegetables, pork, or soybeans. Oxychlordane, a chlordane metabolite, was not detected in any of the 1,796 fruit or vegetable samples analyzed.

### ♦ Multiple Pesticide Residue Detections

By virtue of the MRMs employed, PDP provides novel data that can be used by EPA in evaluating exposure to multiple residues from the same commodity. The data are crucial for assessments which consider cumulative exposure to pesticides determined to have common mechanisms of toxicity. The distribution of multiple pesticides occurring in samples tested during 2005 is presented in Appendix O.

These data indicate that approximately 34 percent of all samples tested contained no detectable pesticides [parent compound and metabolite(s) are combined], 30 percent contained 1 pesticide, and 36 percent contained more than 1 pesticide. Parent compounds and their metabolites are combined to report the number of "pesticides" rather than the number of "residues," as was reported in summaries prior to 2003. For example, a sample with positive detections for Endosulfan I, II, and sulfate would have been counted as three residues in the 2002 Appendix L. That sample would be counted as just one pesticide detected in this Summary's Appendix O.

Most multiple residue detections result from the application of more than one pesticide on a crop during a growing season; however, a number of other factors could contribute to multiple detections. Pesticide spray drift, residue transfer through crop rotation, cross-contamination at packing facilities, and/or presence of persistent environmental contaminants could all contribute to residue detections.

### ♦ Tolerance Violations

A tolerance is defined under Section 408 of the Federal Food, Drug, and Cosmetic Act as the maximum quantity of a pesticide residue allowable on a raw agricultural commodity. Tolerances are also applicable to processed foods. EPA is in the process of reassessing tolerances under the health-based standards of FQPA. A tolerance violation occurs when a residue is found that exceeds the tolerance level or when a residue is found for which there is no established tolerance. With the exception of meat, poultry, and egg products, for which USDA is responsible, FDA enforces tolerances for all imported and domestic foods that move through interstate commerce. Unlike enforcement programs, PDP emphasizes determination of residues at the lowest detectable levels rather than quick turn-around times. When PDP identifies samples with residues exceeding the tolerance or with residues for which there is no established tolerance, these detections are reported to FDA regional and headquarters' offices. This notification is made in accordance with a Memorandum of Understanding between

USDA and FDA for the purpose of pinpointing areas where closer surveillance may be needed. FDA enforcement action has not been a practical response to PDP analysis because of the time required between sample collection and data reporting.

Residues exceeding the established tolerance are noted with an "X" in Appendices B, C, D, E, F, G, and H. Similarly, residues for which a tolerance is not established are noted with a "V." The "X" and "V" annotations are followed by a number indicating the number of samples reported to FDA.

An established tolerance may apply to more than one residue because pesticides may break down into more than one metabolite or contain more than one isomer. For example, the tolerance for endosulfan combines residues of endosulfan I, endosulfan II, and endosulfan sulfate; and organophosphate tolerances may combine the parent compound and the sulfone and sulfoxide metabolites. Therefore, where applicable, the violations in Appendix P are combined residues of parent and any isomers and/or metabolites to count the total number of samples with tolerance violations.

Excluding samples for which no tolerances are set (bottled water and drinking water), residues exceeding the tolerance were detected in 0.2 percent of the 13,621 samples tested in 2005 – 25 samples with 1 residue each. Residues with no established tolerance were found in 4.2 percent of the samples (570 samples with 1 residue each, and 2 samples with 2 residues each). In most cases, these residues were detected at very low levels and some residues may have resulted from spray drift or crop rotations. The residue levels and commodities are listed in Appendix P.

### ♦ Bottled Water Results

Bottled water is the second most consumed beverage in the United States. Due to its high consumption, PDP began testing bottled water in 2005. Bottled water is regulated as a packaged food product by the FDA and State regulatory agencies. FDA is adopting EPA's MCLs for municipal water systems as its Standards of Quality (SOQs) for bottled water. Bottled water meets similar standards as municipal water systems.

Bottled water can come from many sources. Waters sampled by PDP included water which was purified from municipal sources, spring water, well water, and melt water from glaciers. It is not required for bottled water to identify a specific source on the label, but bottlers must adhere to the FDA Standard of Identity regulations that provide uniform definitions for the following bottled water classifications: bottled, drinking, artesian, ground, distilled, deionized, reverse osmosis, mineral, purified, sparkling, spring, sterile, and well water. Ninety different brands of bottled water were sampled in 2005. These included small local brands of bottled waters as well as nationally sold brands. Some bottling companies may have multiple sources for their water and may list them on the label. Sampling these major brands of bottled water from various locations across the country allows PDP to obtain samples from these multiple sources. Due to its weight and shipping cost, most bottled water comes from domestic sources; however, 55 samples were imports from Canada, Fiji, France, New Zealand, and the United Kingdom.

PDP analyzed 378 bottled water samples using multiresidue methods to test for 82 pesticides and metabolites. Fourteen different residues from 7 different pesticides were detected in 16 percent of the bottled water samples. All but one of the detections was of commonly used herbicides and their metabolites. One fungicide was detected in a single sample. Appendix I provides a distribution of residues detected in bottled water.

Table 5 shows the residues which were detected in the bottled water sampled by PDP in 2005. The bulk of the residue detections occurred in spring waters while only 12% of the samples purified from municipal sources contained any

detectable residues. Most samples with detectable residues contained only a single pesticide or metabolite. A few of the samples contained multiple residues with a maximum of seven detectable residues within a given sample. All detections were well below any established EPA MCLs and Health Advisories (HAs).

## ♦ Drinking Water Results

Figure 8 shows the distribution of drinking water sites for the 2005 PDP testing program. Untreated and finished drinking water samples were collected from community water systems in California, Florida, Louisiana, Michigan, North Carolina, North Dakota, Ohio, Pennsylvania, and Washington. Each watershed reflects the local topography, watershed size, geomorphology, soil types, geology, land use, land management practices, crop varieties, pesticides applied, and application methods. Due to the complexities associated with water quality assessments, these data reflect only the unique characteristics of the watersheds from which the samples were obtained.

PDP analyzed 750 water samples from community water systems using MRMs to test for more than 200 pesticides and metabolites. Treatment plants participating in the 2005 survey draw from surface water as their primary source waters. The data presented here are for the untreated water collected at treatment plant intakes and treated water (post-disinfection) collected just prior to distribution to customers. Forty-eight different residues were detected in the untreated intake water and 43 in the finished water. Most of the detections were of commonly used herbicides and their metabolites. The majority of pesticides included in the PDP testing profiles were not detected and none of the detections in the finished water samples exceeded EPA MCLs or HA levels.

Appendix J lists the MCL and/or HA values; however, many of the compounds in the PDP testing profiles do not have established regulatory standards. For comparative purposes, EPA FAO criteria, which are much lower than human-based MCLs or HAs, are also given. These criteria are lower than MCL or HA levels due primarily to higher exposure to these compounds because aquatic organisms live all or most of their lives in water. During 2005, no detections exceeded established FAO levels. Additional information regarding EPA drinking water standards is available at: http://www.epa.gov/safewater/standard/setting.html.

Water treatment technologies vary widely and may be based on the local water chemistry, targeted contaminants needing removal, and cost. Appendix J shows the concentration of detected residues in treated and untreated water.

| Bottled Water Source | Number of Samples Collected | Number of Samples with Residues | Number of Residues Detected | Origin |
|---|---|---|---|---|
| Artesian | 1 | 1 | 2 | Domestic |
| Glacier | 2 | 1 | 1 | Canada |
| Groundwater | 20 | 1 | 1 | Fiji |
| Purified Drinking Water | 102 | 7 | 1-4 | Domestic |
| Spring Water | 231 | 47 | 1-7 | U.S., Canada, France |
| Unknown Source | 22 | 2 | 1-2 | Domestic |

***Table 5. Origin of Bottled Water Samples and Number of Residues Detected.*** *PDP analyzed 378 bottled water samples using multiresidue methods to test for 82 pesticides and metabolites. Fourteen different residues from 7 different pesticides were detected in 16 percent of the bottled water samples. All but one of the detections were of commonly used herbicides and their metabolites. One fungicide was detected in a single sample. Appendix I provides a distribution of residues detected in bottled water.*

In most cases, there were more detections in the untreated water than the treated water. In a few cases, residues detected in the treated water were not detected in the untreated water. The data acquired to date indicate that the water treatment process removed matrix interferences, allowing for a more sensitive measurement in the treated water. Depending on the treatment process employed, individual pesticides are entirely, partially, or not removed during the treatment process.

The data clearly show seasonal inputs in many cases, such as atrazine. Figure 10 depicts results for atrazine in finished drinking water at two North Carolina sites, 5002 and 5003, and for two sites in northwestern Ohio and two sites in southeastern Michigan. In the first graph, site 5003 shows seasonal variations, while for site 5002, there is no marked seasonal input but rather a continual year-round input. The second graph shows that for sites in northwestern Ohio and southeastern Michigan, higher concentrations were detected in summer months when atrazine is heavily applied, but again, there is a steady input year-round. These observations convey the importance of year-round monitoring.

## ♦ Synopsis

A total of 10,154 fresh and processed fruit and vegetable samples, 668 soybean samples, 306 soybean rust/aphid survey samples, 674 wheat samples, 746 milk samples, 369 heavy cream samples, 704 pork samples, 378 bottled water samples, and 750 drinking water samples were analyzed for various pesticides including insecticides, herbicides, and fungicides. MRMs were used to detect a wide variety of compounds including carbamates, conazoles, imidazoles, organochlorines, organophosphates, phenoxy acid herbicides, pyrethroids, strobilurins, and triazines.

Excluding drinking water, approximately 84 percent of all samples tested were domestic, 14 percent were imports, 1 percent was of mixed origin, and 1 percent was of unknown origin. Approximately 21 percent of the orange juice samples were of mixed national origin.

Overall, 73 percent of fresh fruit and vegetables and 61 percent of processed fruit and vegetables showed detectable residues. More residues were detected in fresh produce than in processed products and grains. Residues detected in dairy products and pork samples were primarily low-level residues of unavoidable environmental contaminants including DDE p,p' and dieldrin. Additionally, low levels of diphenylamine were detected in dairy products.

Excluding drinking water, 34 percent of samples tested contained no detectable pesticides [parent compound and metabolite(s) are combined], 30 percent contained 1 pesticide, and 36 percent contained more than 1 pesticide. Low levels of environmental contaminants were detected in cantaloupe, cauliflower, green beans, heavy cream, lettuce, milk, pork, watermelon, and winter squash at concentrations well below levels that trigger regulatory actions.

Excluding samples for which no tolerances are set (bottled water and drinking water), residues exceeding the tolerance were detected in 0.2 percent of the 13,621 samples tested in 2005 – 25 samples with 1 residue each. Residues with no established tolerance were found in 4.2 percent of the samples (570 samples with 1 residue each, and 2 samples with 2 residues each). In most cases, these residues were detected at very low levels and some residues may have resulted from spray drift or crop rotations.

In finished drinking water, PDP detected low levels (measured in parts per trillion) of some pesticides, primarily widely used herbicides. Forty-eight different residues were detected in the untreated intake water and 43 in the treated water. The majority of pesticides, metabolites, and isomers included in the PDP testing profiles were not detected. None of the detections in the finished water samples exceeded established EPA MCL or HA levels or established FAO criteria.

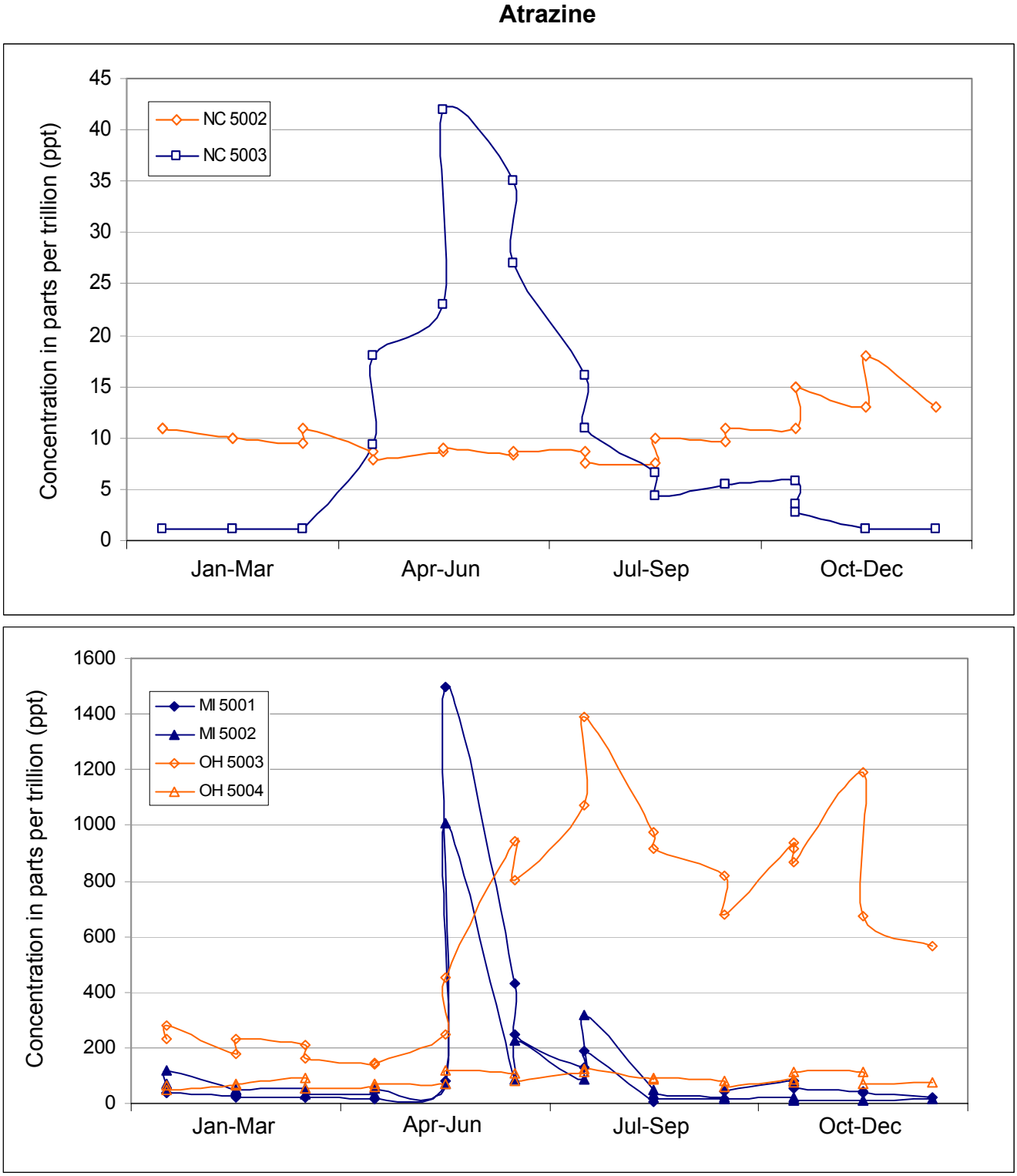


***Figure 10. Seaonality of Pesticides in Finished Drinking Water Samples.*** *Results are depicted for atrazine in finished drinking water at two North Carolina sites, 5002 and 5003, and for two sites in northwestern Ohio and two sites in southeastern Michigan. In the first graph, site 5003 shows seasonal variations, while for site 5002, there is no marked seasonal input but rather a continual year-round input. The second graph shows that for sites in northwestern Ohio and southeastern Michigan, higher concentrations were detected in summer months when atrazine is heavily applied, but again, there is a steady input year-round.*

♦♦♦♦♦

# Appendix A

## Commodity History

Appendix A identifies commodities sampled by the Pesticide Data Program through December 2006. Updates to this list are posted on the PDP Web site at http://www.ams.usda.gov/pdp.

## COMMODITY HISTORY AS OF DECEMBER 2006

### *Fresh Commodities*

| Commodity | Start Date | End Date |
|---|---|---|
| Apples [1] | Sep-91 | Dec-96 |
| Apples (S-1) | Jan-99 | Dec-99 |
| Apples (S-2) | Jan-99 | May-99 |
| Apples | Oct-00 | Sep-02 |
| Apples | Jan-04 | Dec-05 |
| Apples (T-1) | Jan-03 | Dec-03 |
| Asparagus | Jan-02 | Jun-03 |
| Bananas | Sep-91 | Sep-95 |
| Bananas | Jan-01 | Dec-02 |
| Bananas | Jan-06 | Ongoing |
| Bananas (TSP) | Jul-03 | Dec-03 |
| Broccoli | Oct-92 | Dec-94 |
| Broccoli | Jan-01 | Dec-02 |
| Broccoli | Oct-06 | Ongoing |
| Cantaloupe | Jul-98 | Jun-00 |
| Cantaloupe | Oct-03 | Sep-05 |
| Carrots [1] | Oct-92 | Sep-96 |
| Carrots | Oct-00 | Sep-02 |
| Carrots | Jan-06 | Ongoing |
| Cauliflower | Oct-04 | Sep-06 |
| Celery | Feb-92 | Mar-94 |
| Celery | Jan-01 | Dec-02 |
| Cherries [2] | May-00 | Aug-01 |
| Cucumbers | Jan-99 | Dec-00 |
| Cucumbers | Oct-02 | Sep-04 |
| Eggplant | Jan-05 | Dec-06 |
| Eggs (TSP) | Jul-03 | Dec-03 |
| Grapefruit | Aug-91 | Dec-93 |
| Grapefruit | Jan-05 | Dec-06 |
| Grapes [1] | May-91 | Dec-96 |
| Grapes | Jan-00 | Dec-01 |
| Grapes (TSP) | Jul-03 | Dec-03 |
| Grapes | Jan-04 | Dec-05 |

| Commodity | Start Date | End Date |
|---|---|---|
| Green Beans | Feb-92 | Dec-95 |
| Green Beans | Jan-00 | Dec-01 |
| Green Beans | Apr-04 | Mar-05 |
| Greens (collard & kale) | Oct-06 | Ongoing |
| Lettuce | May-91 | Dec-94 |
| Lettuce | Oct-99 | Sep-01 |
| Lettuce | Jan-04 | Dec-05 |
| Mushrooms | Oct-01 | Sep-03 |
| Nectarines [3] | Jul-00 | Sep-01 |
| Onions | Jan-02 | Dec-03 |
| Oranges [1] | Aug-91 | Dec-96 |
| Oranges | Jan-00 | Dec-01 |
| Oranges | Jan-04 | Dec-05 |
| Peaches | Feb-92 | Sep-96 |
| Peaches (S-3) | Jan-00 | Sep-00 |
| Peaches[4] | Jan-01 | Sep-02 |
| Peaches | Oct-06 | Ongoing |
| Peaches (T-1) | May-03 | Sep-03 |
| Pears | Jan-97 | Jun-99 |
| Pears (S-1) | Jul-98 | Jun-99 |
| Pears | Oct-03 | Sep-05 |
| Pineapples | Jul-00 | Jun-02 |
| Plums | Jan-05 | Dec-06 |
| Potatoes | May-91 | Dec-95 |
| Potatoes (S-4) | Dec-96 | Dec-97 |
| Potatoes | Jul-00 | Jun-02 |
| Spinach [1] | Jan-95 | Sep-97 |
| Spinach | Jul-02 | Dec-03 |
| Spinach | Jan-06 | Ongoing |
| Strawberries[5] | Jan-98 | Sep-00 |
| Strawberries | Jan-04 | Dec-05 |
| Sweet Bell Peppers | Jan-99 | Dec-00 |
| Sweet Bell Peppers | Oct-02 | Sep-04 |
| Sweet Potatoes [1] | Jan-96 | Jun-98 |
| Sweet Potatoes | Jan-03 | Dec-04 |

| Commodity | Start Date | End Date |
|---|---|---|
| Tomatoes [1] | Jul-96 | Jun-99 |
| Tomatoes | Jan-03 | Dec-04 |
| Watermelon [6] | Oct-05 | Sep-06 |
| Summer Squash | Oct-06 | Ongoing |
| Winter Squash [5] | Jan-97 | Jun-99 |
| Winter Squash | Jul-04 | Jun-06 |

[1] Excludes sampling hiatus September - November 1996.

[2] Sampling adjusted for market availability. Cherries were sampled for two years (May-00 - Aug-01) for a total of six months.

[3] Sampling adjusted for market availability. Nectarines were sampled for two years (Jul-00 - Sep-01) for a total of six months.

[4] Sampling adjusted for market availability. Peaches were sampled for two years (Jan-01 - Sep-02) for a total of sixteen months.

[5] Frozen collected when fresh unavailable.

[6] Samples collected in California, Florida, and Texas only.

(S-1) Special single serving project testing for organophosphates.

(S-2) Special single serving project testing for carbamates.

(S-3) Special single serving project testing for carbamate, organochlorine, organophosphate, organonitrogen, and sulfur compounds.

(S-4) Special single serving project testing for aldicarb.

(T-1) Triazole parent and metabolite compounds only.

(TSP) Triazole Sampling Project. Samples sent to contract laboratory.

### *Processed Commodities*

| Commodity | Start Date | End Date |
|---|---|---|
| Apple Juice [1] | Jul-96 | Dec-98 |
| Apple Juice | Jan-02 | Dec-02 |
| Applesauce | Jul-02 | Dec-02 |
| Applesauce | Jan-06 | Dec-06 |
| Asparagus, Canned | Jul-03 | Dec-03 |
| Corn Syrup [2] | Jan-98 | Jun-99 |
| Grape Juice | Jan-98 | Dec-99 |
| Green Beans, Canned/Frozen [1] | Jan-96 | Jun-98 |
| Green Beans, Canned | Jan-03 | Mar-04 |
| Green Beans, Frozen | Apr-05 | Dec-05 |
| Orange Juice | Jan-97 | Dec-98 |
| Orange Juice | Oct-04 | Sep-06 |
| Peaches, Canned | Dec-96 | Dec-97 |
| Peaches, Canned | Jan-03 | Dec-04 |
| Peaches, Canned (T-1) | Jan-03 | Mar-03 |
| Peaches, Canned (T-1) | Oct-03 | Dec-03 |
| Peanut Butter | Jan-00 | Dec-00 |
| Peanut Butter | Jan-06 | Dec-06 |
| Peanut Butter (TSP) | Jul-03 | Dec-03 |
| Pear Juice, Concentrate/Puree | Jul-02 | Jun-03 |
| Pears, Canned | Jul-99 | Jun-00 |
| Peas, Canned/Frozen | Apr-94 | Jun-96 |
| Peas, Canned/Frozen[3] | Oct-01 | Sep-03 |
| Peas, Frozen | Jan-06 | Ongoing |
| Potatoes, Frozen | Jan-06 | Ongoing |
| Raisins | Jul-06 | Ongoing |
| Spinach, Canned | Oct-97 | Dec-98 |
| Spinach, Frozen | Jan-99 | Dec-99 |
| Spinach, Canned | Jan-04 | Jun-04 |
| Strawberries, Frozen [4] | Jan-98 | Sep-00 |
| Sweet Corn, Canned/Frozen | Apr-94 | Mar-96 |
| Sweet Corn, Canned/Frozen [3] | Oct-01 | Sep-03 |
| Tomato Paste, Canned | Jan-01 | Jun-01 |
| Tomatoes, Canned | Jul-99 | Jun-00 |
| Winter Squash, Frozen [4] | Jan-97 | Jun-99 |

[1] Excludes sampling hiatus September - November 1996

[2] Excludes sampling hiatus January 1999

[3] Canned samples collected in first year and frozen samples in second year of testing.

[4] Frozen collected when fresh unavailable

(T-1) Triazole parent and metabolite compounds only.

(TSP) Triazole Sampling Project. Samples sent to contract laboratory.

### *Grains*

| Commodity | Start Date | End Date |
|---|---|---|
| Barley | Oct-01 | Sep-03 |
| Corn | Oct-06 | Ongoing |
| Oats | Jul-99 | Apr-00 |
| Rice | Oct-00 | Sep-02 |
| Soybeans | Sep-96 | Feb-98 |
| Soybeans | Oct-03 | Sep-05 |
| Soybean Rust/Aphid | Oct-05 | Dec-05 |
| Wheat | Feb-95 | Jan-98 |
| Wheat | Sep-04 | Aug-06 |
| Wheat Flour | Jan-03 | Dec-04 |
| Wheat Flour (T-1) | Jan-03 | Dec-03 |

### *Dairy*

| Commodity | Start Date | End Date |
|---|---|---|
| Butter | Jan-03 | Dec-03 |
| Heavy Cream | Jul-05 | Dec-05 |
| Milk [1] | Jan-96 | Oct-98 |
| Milk (TSP) | Jul-03 | Dec-03 |
| Milk | Jan-04 | Dec-05 |

### *Drinking Water*

| States | Start Date | End Date |
|---|---|---|
| California, New York | Mar-01 | Dec-03 |
| Colorado, Kansas, Texas | May-02 | Dec-03 |
| Oregon, Pennsylvania | Jan-04 | Dec-04 |
| Michigan, North Carolina, Ohio, Washington | Jan-04 | Ongoing |
| California, Florida | Jan-05 | Dec-05 |
| Louisiana, North Dakota, Pennsylvania | Jan-05 | Ongoing |
| Bottled Water - Ten Participating States | Jan-05 | Dec-06 |

### *Meat / Poultry Products*

| Commodity | Type | Start Date | End Date |
|---|---|---|---|
| Poultry | Young Chickens | Apr-00 | Mar-01 |
| Poultry | Young & Mature Chickens | Jan-06 | Ongoing |
| Beef | Cows, Heifers, Steers | Jun-01 | Jul-02 |
| Pork | Gilt, Barrow | Jan-05 | Jun-05 |

[1] Excludes sampling hiatus September - November 1996

(T-1) Triazole parent and metabolite compounds only.
(TSP) Triazole Sampling Project. Samples sent to contract laboratory.

# Appendix B

## Distribution of Residues by Pesticide in Fruit and Vegetables

Appendix B shows residue detections for all fruit and vegetable pesticide/ commodity pairs tested, including range of values detected, range of Limits of Detection (LODs), Environmental Protection Agency (EPA) tolerances, and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) references for each pair.

In 2005, 10,154 fruit and vegetable samples were analyzed, of which 8,702 were fresh product and 1,452 were processed product.

PDP reports tolerance violations to the Food and Drug Administration (FDA) as part of an interagency Memorandum of Understanding between the U.S. Department of Agriculture and FDA. Residues reported to FDA are shown in the "Pesticide/ Commodity" column to the right of the commodity and are annotated as "X" (if the residue exceeded the established tolerance) or "V" [if the residue did not have a tolerance listed in the Code of Federal Regulations (CFR), Title 40, Part 180]. In both cases, these annotations are followed by a number indicating the number of samples reported to FDA.

Action levels (ALs) are shown in this appendix, where applicable, and denote Action Level values established by FDA and/or Extraneous Maximum Residue Levels (EMRLs) established by the Codex Alimentarious Commission. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

Data to establish Codex MRLs are evaluated by the Food and Agriculture/World Health Organization-sponsored Joint Meeting on Pesticide Residues (JMPR) based on toxicology, residue occurrence in crops determined by supervised field trials, and dietary exposure. The Codex Committee on Pesticide Residues (CCPR) meets annually to discuss proposed MRLs and recommends approval to the Codex Alimentarius Commission. This means that Codex MRLs represent levels that are considered safe to humans. MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38$^{th}$ Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX B. DISTRIBUTION OF RESIDUES BY PESTICIDE IN FRUIT AND VEGETABLES

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Acephate (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 ^ | 0.02 | - |
| Cantaloupe (X-1) | 558 | 2 | 0.4 | 0.020 - 0.21 | 0.002 - 0.005 | 0.02 | - |
| Eggplant (X-6) | 736 | 8 | 1.1 | 0.008 - 0.30 | 0.005 ^ | 0.02 | - |
| Grapefruit | 742 | 0 | | | 0.002 - 0.004 | 0.02 | - |
| Grapes | 739 | 0 | | | 0.002 - 0.005 | 0.02 | - |
| Green Beans | 181 | 38 | 21.0 | 0.003 - 3.0 | 0.002 - 0.005 | 3 | - |
| Green Beans, Frozen | 555 | 149 | 26.8 | 0.003 - 0.88 | 0.002 - 0.005 | 3 | - |
| Lettuce | 743 | 60 | 8.1 | 0.003 - 0.090 | 0.002 - 0.003 | 10 | - |
| Orange Juice | 744 | 4 | 0.5 | 0.003 ^ | 0.002 ^ | 0.02 | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 0.02 | - |
| Pears | 555 | 0 | | | 0.002 - 0.015 | 0.02 | - |
| Plums | 573 | 0 | | | 0.005 ^ | 0.02 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.005 ^ | 0.02 | - |
| Strawberries | 737 | 0 | | | 0.001 - 0.002 | 0.02 | - |
| Watermelon (X-1) | 182 | 2 | 1.1 | 0.003 - 0.71 | 0.002 - 0.005 | 0.02 | - |
| Winter Squash (X-1) | 731 | 4 | 0.5 | 0.003 - 0.051 | 0.002 - 0.005 | 0.02 | - |
| **TOTAL** | **9,413** | **267** | | | | | |
| **Acetamiprid (insecticide)** | | | | | | | |
| Apples | 260 | 182 | 70.0 | 0.001 - 0.13 | 0.0006 ^ | 1.0 | - |
| Cauliflower | 741 | 7 | 0.9 | 0.001 - 0.005 | 0.0006 ^ | 1.20 | - |
| Lettuce | 527 | 83 | 15.7 | 0.001 - 0.27 | 0.0006 ^ | 3.00 | - |
| **TOTAL** | **1,528** | **272** | | | | | |
| **Acibenzolar S methyl (plant activator)** | | | | | | | |
| Apples | 528 | 0 | | | 0.007 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.007 ^ | 1.0 | - |
| Lettuce | 527 | 0 | | | 0.007 ^ | 0.25 | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Alachlor (herbicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **914** | **0** | | | | | |
| **Aldicarb (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.0003 - 0.001 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.020 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.0003 - 0.001 | NT | - |
| Grapefruit | 214 | 0 | | | 0.007 ^ | 0.3 | 0.2 |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | 0.2 |
| Green Beans | 127 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.0003 - 0.001 | NT | - |
| Orange Juice | 744 | 0 | | | 0.007 - 0.010 | 0.3 | 0.2 |
| Oranges | 719 | 0 | | | 0.007 - 0.010 | 0.3 | 0.2 |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.020 ^ | NT | - |
| **TOTAL** | **5,890** | **0** | | | | | |
| **Aldicarb sulfone (metabolite of Aldicarb)** | | | | | | | |
| Apples | 513 | 0 | | | 0.0009 - 0.003 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.038 ^ | NT | - |
| Cauliflower | 725 | 0 | | | 0.003 ^ | NT | - |
| Grapefruit | 719 | 0 | | | 0.009 - 0.012 | 0.3 | 0.2 |
| Green Beans | 127 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Lettuce | 498 | 0 | | | 0.0009 - 0.003 | NT | - |
| Orange Juice | 744 | 0 | | | 0.009 - 0.010 | 0.3 | 0.2 |
| Oranges | 741 | 0 | | | 0.009 - 0.010 | 0.3 | 0.2 |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.038 ^ | NT | - |
| **TOTAL** | **5,440** | **0** | | | | | |
| **Aldicarb sulfoxide (metabolite of Aldicarb)** | | | | | | | |
| Apples | 411 | 0 | | | 0.0003 - 0.003 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.038 ^ | NT | - |
| Cauliflower | 342 | 0 | | | 0.001 - 0.004 | NT | - |
| Grapefruit | 214 | 0 | | | 0.005 ^ | 0.3 | 0.2 |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | 0.2 |
| Green Beans | 127 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |
| Lettuce | 468 | 0 | | | 0.0003 - 0.003 | NT | - |
| Orange Juice | 744 | 9 | 1.2 | 0.008 ^ | 0.005 - 0.010 | 0.3 | 0.2 |
| Oranges | 741 | 2 | 0.3 | 0.008 - 0.025 | 0.005 - 0.010 | 0.3 | 0.2 |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.038 ^ | NT | - |
| **TOTAL** | **5,337** | **11** | | | | | |
| **Aldrin (insecticide) (parent of Dieldrin)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 - 0.024 | 0.03 AL | 0.05 |
| Cantaloupe | 162 | 0 | | | 0.003 - 0.008 | 0.1 AL | 0.1 |
| Cauliflower | 741 | 0 | | | 0.007 - 0.024 | 0.03 AL | - |
| Eggplant | 736 | 0 | | | 0.006 ^ | 0.05 AL | - |
| Grapefruit | 742 | 0 | | | 0.003 - 0.008 | 0.02 AL | 0.05 |
| Grapes | 523 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Green Beans | 181 | 0 | | | 0.002 - 0.008 | 0.05 AL | 0.05 |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.008 | 0.05 AL | 0.05 |
| Lettuce | 743 | 0 | | | 0.003 - 0.024 | 0.03 AL | 0.05 |
| Orange Juice | 744 | 0 | | | 0.003 - 0.008 | 0.02 AL | 0.05 |
| Oranges | 741 | 0 | | | 0.003 - 0.008 | 0.02 AL | 0.05 |
| Pears | 555 | 0 | | | 0.002 - 0.008 | 0.03 AL | 0.05 |
| Plums | 573 | 0 | | | 0.006 ^ | 0.3 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.006 ^ | 0.3 AL | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.003 | 0.1 AL | 0.1 |
| Winter Squash | 213 | 0 | | | 0.003 - 0.008 | 0.1 AL | 0.1 |
| **TOTAL** | **8,287** | **0** | | | | | |
| **Allethrin (insecticide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.010 ^ | EX | - |
| Cantaloupe | 558 | 0 | | | 0.010 - 0.016 | 4 | - |
| Grapefruit | 742 | 0 | | | 0.010 - 0.040 | EX | - |
| Grapes | 739 | 0 | | | 0.010 - 0.015 | 4 | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | EX | - |
| Oranges | 741 | 0 | | | 0.010 ^ | EX | - |
| Pears | 555 | 0 | | | 0.010 - 0.015 | EX | - |
| Plums | 573 | 0 | | | 0.021 ^ | 4 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.021 ^ | 4 | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **5,602** | **0** | | | | | |
| **Ametryn (herbicide)** | | | | | | | |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **1,117** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Anilazine (fungicide)** | | | | | | | |
| Green Beans | 127 | 0 | | | 0.023 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.023 ^ | NT | - |
| **TOTAL** | **522** | **0** | | | | | |
| **Atrazine (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.006 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.024 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 - 0.006 | NT | - |
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce (V-1) | 527 | 1 | 0.2 | 0.006 ^ | 0.002 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.024 ^ | NT | - |
| **TOTAL** | **5,266** | **1** | | | | | |
| **Azinphos methyl (insecticide)** | | | | | | | |
| Apples | 743 | 234 | 31.5 | 0.013 - 0.33 | 0.008 - 0.012 | 1.5 | 2 |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.012 | 2.0 | 0.2 |
| Eggplant | 736 | 1 | 0.1 | 0.007 ^ | 0.004 ^ | 0.3 | 0.5 |
| Grapefruit | 214 | 0 | | | 0.008 ^ | 2.0 | 1 |
| Grapes | 524 | 2 | 0.4 | 0.013 - 0.018 | 0.008 - 0.011 | 4.0 | 1 |
| Green Beans | 181 | 0 | | | 0.005 - 0.008 | 2.0 | 0.5 |
| Green Beans, Frozen | 555 | 0 | | | 0.005 - 0.008 | 2.0 | 0.5 |
| Lettuce | 527 | 0 | | | 0.012 ^ | NT | 0.5 |
| Orange Juice | 744 | 0 | | | 0.008 ^ | 2.0 | 1 |
| Oranges | 741 | 0 | | | 0.008 ^ | 2.0 | 1 |
| Pears | 555 | 139 | 25.0 | 0.013 - 0.33 | 0.008 - 0.011 | 1.5 | 2 |
| Plums | 573 | 32 | 5.6 | 0.007 - 0.10 | 0.004 ^ | 2.0 | 2 |
| Plums, Dried (Prunes) | 153 | 2 | 1.3 | 0.007 - 0.060 | 0.004 ^ | 2.0 | 2 |
| Strawberries | 216 | 1 | 0.5 | 0.20 ^ | 0.008 ^ | 2.0 | 1 |
| Watermelon | 182 | 0 | | | 0.008 - 0.012 | 2.0 | 0.2 |
| Winter Squash | 518 | 0 | | | 0.012 ^ | NT | 0.5 |
| **TOTAL** | **7,720** | **411** | | | | | |
| **Azoxystrobin (fungicide)** | | | | | | | |
| Apples | 468 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 666 | 0 | | | 0.002 ^ | 30 | - |
| Grapefruit | 528 | 11 | 2.1 | 0.0004 - 0.002 | 0.0004 ^ | 1.0 | - |
| Grapes | 523 | 13 | 2.5 | 0.002 - 0.042 | 0.002 ^ | 1.0 | - |
| Lettuce | 485 | 15 | 3.1 | 0.003 - 2.2 | 0.002 ^ | 30.0 | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | 1.0 | - |
| Oranges | 504 | 0 | | | 0.010 ^ | 1.0 | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Watermelon | 182 | 0 | | | 0.0005 - 0.020 | 0.30 | - |
| **TOTAL** | **4,278** | **39** | | | | | |
| **Bendiocarb (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.040 | SU | - |
| Cantaloupe | 162 | 0 | | | 0.002 ^ | SU | - |
| Cauliflower | 741 | 0 | | | 0.040 ^ | SU | - |
| Eggplant | 736 | 0 | | | 0.010 ^ | SU | - |
| Grapefruit | 719 | 0 | | | 0.002 - 0.010 | SU | - |
| Grapes | 739 | 0 | | | 0.002 - 0.005 | SU | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.88 | SU | - |
| Orange Juice | 744 | 0 | | | 0.002 - 0.010 | SU | - |
| Oranges | 741 | 0 | | | 0.002 - 0.010 | SU | - |
| Pears | 555 | 0 | | | 0.002 - 0.005 | SU | - |
| Plums | 573 | 29 | 5.1 | 0.017 ^ | 0.010 ^ | SU | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Plums, Dried (Prunes) | 153 | 0 | | | 0.010 ^ | SU | - |
| Strawberries | 733 | 0 | | | 0.002 - 0.004 | SU | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.016 | SU | - |
| Winter Squash | 213 | 0 | | | 0.002 ^ | SU | - |
| **TOTAL** | **8,477** | **29** | | | | | |
| **Benfluralin (herbicide)** | | | | | | | |
| Lettuce | 216 | 0 | | | 0.020 ^ | 0.05 | - |
| **TOTAL** | **216** | **0** | | | | | |
| **BHC alpha (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.007 | 0.05 AL | - |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.004 | 0.05 AL | - |
| Cauliflower | 741 | 0 | | | 0.007 ^ | 0.05 AL | - |
| Eggplant | 736 | 0 | | | 0.004 ^ | 0.05 AL | - |
| Grapefruit | 742 | 0 | | | 0.002 - 0.005 | 0.05 AL | - |
| Grapes | 523 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Green Beans | 127 | 0 | | | 0.0008 ^ | 0.05 AL | - |
| Green Beans, Frozen | 395 | 0 | | | 0.0008 ^ | 0.05 AL | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.007 | 0.05 AL | - |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Pears | 555 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Plums | 573 | 0 | | | 0.003 ^ | 0.05 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.003 ^ | 0.05 AL | - |
| Watermelon | 182 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.004 | 0.05 AL | - |
| **TOTAL** | **8,987** | **0** | | | | | |
| **BHC beta (isomer of BHC alpha)** | | | | | | | |
| Green Beans | 127 | 0 | | | 0.0008 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.0008 ^ | NT | - |
| **TOTAL** | **522** | **0** | | | | | |
| **Bifenazate (acaricide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.020 ^ | 0.75 | 1 |
| Cantaloupe | 396 | 0 | | | 0.013 ^ | 0.75 | 0.3 |
| Grapes | 216 | 5 | 2.3 | 0.033 - 0.090 | 0.020 ^ | 0.75 | 1 |
| Pears | 161 | 1 | 0.6 | 0.033 ^ | 0.020 ^ | 0.75 | 1 |
| Strawberries | 216 | 21 | 9.7 | 0.033 - 0.25 | 0.020 ^ | 1.5 | 2 |
| Watermelon | 59 | 0 | | | 0.020 ^ | 0.75 | 0.3 |
| Winter Squash | 731 | 0 | | | 0.013 - 0.034 | 0.75 | 0.7 |
| **TOTAL** | **1,994** | **27** | | | | | |
| **Bifenthrin (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 - 0.010 | 0.05 | - |
| Cantaloupe | 558 | 0 | | | 0.010 - 0.016 | 0.4 | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | 0.6 | - |
| Eggplant | 736 | 1 | 0.1 | 0.047 ^ | 0.028 ^ | 0.05 | - |
| Grapefruit | 742 | 0 | | | 0.010 ^ | 0.05 | 0.05 |
| Grapes | 739 | 1 | 0.1 | 0.018 ^ | 0.010 - 0.011 | 0.2 | - |
| Green Beans | 181 | 5 | 2.8 | 0.012 - 0.39 | 0.008 - 0.010 | 0.6 | - |
| Green Beans, Frozen | 555 | 70 | 12.6 | 0.012 - 0.093 | 0.008 - 0.010 | 0.6 | - |
| Lettuce | 743 | 0 | | | 0.003 - 0.010 | 3.0 | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 0.05 | 0.05 |
| Oranges | 741 | 0 | | | 0.010 ^ | 0.05 | 0.05 |
| Pears | 555 | 0 | | | 0.010 - 0.011 | 0.5 | 0.5 |
| Plums | 573 | 0 | | | 0.037 ^ | 0.05 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.037 ^ | 0.05 | - |
| Strawberries | 737 | 72 | 9.8 | 0.017 - 0.44 | 0.010 - 0.040 | 3.0 | 1 |
| Watermelon | 182 | 3 | 1.6 | 0.007 - 0.018 | 0.004 - 0.011 | 0.4 | - |
| Winter Squash | 731 | 12 | 1.6 | 0.017 - 0.027 | 0.010 - 0.016 | 0.4 | - |
| **TOTAL** | **10,154** | **164** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Bitertanol (fungicide)** | | | | | | | |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **64** | **0** | | | | | |
| **Boscalid (fungicide)** | | | | | | | |
| Apples | 132 | 9 | 6.8 | 0.010 - 0.035 | 0.006 ^ | 3.0 | - |
| Cantaloupe | 396 | 0 | | | 0.039 ^ | 1.6 | - |
| Cauliflower | 682 | 0 | | | 0.006 ^ | 3.0 | - |
| Lettuce | 485 | 12 | 2.5 | 0.010 - 1.6 | 0.006 ^ | 11.0 | - |
| Watermelon | 182 | 0 | | | 0.003 - 0.010 | 1.6 | - |
| Winter Squash | 518 | 1 | 0.2 | 0.065 ^ | 0.039 ^ | 1.6 | - |
| **TOTAL** | **2,395** | **22** | | | | | |
| **Bromacil (herbicide)** | | | | | | | |
| Grapefruit | 742 | 0 | | | 0.015 - 0.067 | 0.1 | - |
| Orange Juice | 744 | 0 | | | 0.010 - 0.015 | 0.1 | - |
| Oranges | 741 | 0 | | | 0.010 - 0.015 | 0.1 | - |
| **TOTAL** | **2,227** | **0** | | | | | |
| **Buprofezin (insecticide)** | | | | | | | |
| Apples | 132 | 1 | 0.8 | 0.0002 ^ | 0.0001 ^ | 4 | - |
| Cantaloupe | 162 | 0 | | | 0.015 ^ | NT | - |
| Cauliflower | 216 | 0 | | | 0.0001 ^ | NT | - |
| Eggplant | 736 | 0 | | | 0.029 ^ | NT | - |
| Grapefruit | 742 | 0 | | | 0.0005 - 0.015 | 2.5 | - |
| Grapes | 739 | 5 | 0.7 | 0.017 - 0.065 | 0.015 ^ | 0.40 | - |
| Lettuce | 333 | 0 | | | 0.0001 - 0.015 | 13 | - |
| Orange Juice | 744 | 0 | | | 0.015 ^ | 2.5 | 0.5 |
| Oranges | 741 | 0 | | | 0.015 ^ | 2.5 | 0.5 |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 182 | 0 | | | 0.012 - 0.015 | 0.5 | - |
| Winter Squash | 213 | 0 | | | 0.015 ^ | 0.50 | - |
| **TOTAL** | **5,334** | **6** | | | | | |
| **Butylate (herbicide)** | | | | | | | |
| Cantaloupe | 308 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 276 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **584** | **0** | | | | | |
| **Captafol (fungicide) (parent of THPI)** | | | | | | | |
| Cantaloupe | 44 | 0 | | | 0.017 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.030 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.030 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 43 | 0 | | | 0.017 ^ | NT | - |
| **TOTAL** | **1,590** | **0** | | | | | |
| **Captan (fungicide) (parent of THPI)** | | | | | | | |
| Apples | 215 | 12 | 5.6 | 0.020 - 2.0 | 0.012 ^ | 25 | 25 |
| Cantaloupe | 80 | 0 | | | 0.012 ^ | 25 | - |
| Eggplant | 736 | 1 | 0.1 | 0.030 ^ | 0.018 ^ | 25 | - |
| Grapes | 721 | 121 | 16.8 | 0.012 - 1.2 | 0.008 - 0.012 | 50 | - |
| Green Beans | 127 | 5 | 3.9 | 0.008 - 0.46 | 0.005 ^ | 25 | - |
| Green Beans, Frozen | 412 | 0 | | | 0.005 - 0.012 | 25 | - |
| Lettuce | 216 | 0 | | | 0.012 ^ | 100 | - |
| Orange Juice | 506 | 0 | | | 0.012 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.012 ^ | NT | - |
| Pears | 555 | 61 | 11.0 | 0.012 - 2.1 | 0.008 - 0.012 | 25 | 25 |
| Plums | 573 | 0 | | | 0.016 ^ | 100 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Plums, Dried (Prunes) | 153 | 1 | 0.7 | 0.060 ^ | 0.016 ^ | 100 | - |
| Strawberries | 737 | 517 | 70.1 | 0.020 - 12 | 0.012 - 0.038 | 25 | 20 |
| Watermelon | 123 | 0 | | | 0.008 - 0.010 | 25 | - |
| Winter Squash | 79 | 0 | | | 0.012 ^ | 25 | - |
| **TOTAL** | **5,758** | **718** | | | | | |
| **Carbaryl (insecticide)** | | | | | | | |
| Apples | 743 | 53 | 7.1 | 0.0005 - 0.32 | 0.0003 - 0.002 | 10.0 | 5 |
| Cantaloupe | 558 | 20 | 3.6 | 0.003 - 0.11 | 0.002 - 0.008 | 10 | - |
| Cauliflower | 741 | 1 | 0.1 | 0.0005 ^ | 0.0003 ^ | 10 | - |
| Eggplant | 736 | 22 | 3.0 | 0.017 - 0.14 | 0.010 ^ | 10 | 1 |
| Grapefruit | 719 | 13 | 1.8 | 0.003 - 0.039 | 0.002 - 0.006 | 10 | 7 |
| Grapes | 739 | 34 | 4.6 | 0.003 - 0.47 | 0.002 - 0.010 | 10 | 5 |
| Green Beans | 181 | 2 | 1.1 | 0.017 - 0.53 | 0.002 - 0.010 | 10 | - |
| Green Beans, Frozen | 555 | 5 | 0.9 | 0.003 - 0.071 | 0.002 - 0.010 | 10 | - |
| Lettuce | 743 | 1 | 0.1 | 0.004 ^ | 0.0003 - 0.002 | 10 | - |
| Orange Juice | 744 | 40 | 5.4 | 0.003 - 0.017 | 0.002 - 0.010 | 10 | 7 |
| Oranges | 741 | 14 | 1.9 | 0.003 - 0.12 | 0.002 - 0.010 | 10 | 7 |
| Pears | 555 | 61 | 11.0 | 0.003 - 0.33 | 0.002 - 0.010 | 10.0 | 5 |
| Plums | 573 | 49 | 8.6 | 0.017 - 0.11 | 0.010 ^ | 10 | - |
| Plums, Dried (Prunes) | 153 | 7 | 4.6 | 0.017 - 0.45 | 0.010 ^ | 10 | - |
| Strawberries | 733 | 21 | 2.9 | 0.003 - 0.44 | 0.002 ^ | 10 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.010 | 10 | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.008 | 10 | - |
| **TOTAL** | **10,127** | **343** | | | | | |
| **Carbendazim - MBC (fungicide) (metabolite of benomyl)** | | | | | | | |
| Apples | 528 | 110 | 20.8 | 0.0002 - 0.16 | 0.0001 - 0.0005 | 7.0 | 3 |
| Cauliflower | 741 | 20 | 2.7 | 0.0002 - 0.001 | 0.0001 - 0.0006 | 0.2 | - |
| Grapefruit | 351 | 0 | | | 0.045 ^ | 10.0 | - |
| Lettuce (V-34) | 527 | 34 | 6.5 | 0.0002 - 0.0008 | 0.0001 - 0.0005 | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **2,211** | **164** | | | | | |
| **Carbofuran (insecticide) (parent of 3-Hydroxycarbofuran)** | | | | | | | |
| Apples | 528 | 0 | | | 0.0003 ^ | NT | - |
| Cantaloupe | 558 | 3 | 0.5 | 0.054 - 0.29 | 0.002 - 0.008 | 0.2 | - |
| Cauliflower | 741 | 0 | | | 0.0003 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.010 ^ | 0.2 | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.0003 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Strawberries | 733 | 0 | | | 0.002 - 0.004 | 0.2 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.010 | 0.4 | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.008 | 0.6 | - |
| **TOTAL** | **6,492** | **3** | | | | | |
| **Carbophenothion (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Carboxin (fungicide)** | | | | | | | |
| Cantaloupe | 44 | 0 | | | 0.016 ^ | NT | - |
| Green Beans | 54 | 0 | | | 0.008 ^ | 0.2 | - |
| Green Beans, Frozen | 160 | 0 | | | 0.008 ^ | 0.2 | - |
| Winter Squash | 43 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **301** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Carfentrazone ethyl (herbicide)** | | | | | | | |
| Apples | 132 | 0 | | | 0.001 ^ | 0.10 | - |
| Cauliflower | 216 | 0 | | | 0.001 ^ | 0.10 | - |
| Eggplant | 736 | 0 | | | 0.030 ^ | 0.10 | - |
| Grapes | 523 | 0 | | | 0.008 ^ | 0.10 | - |
| Lettuce | 132 | 0 | | | 0.001 ^ | 0.10 | - |
| Pears | 394 | 0 | | | 0.008 ^ | 0.10 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.008 | 0.10 | - |
| **TOTAL** | **2,315** | **0** | | | | | |
| **Chlordane cis (insecticide) (isomer of Chlordane)** | | | | | | | |
| Apples | 743 | 0 | | | 0.0007 - 0.002 | 0.1 AL | 0.02 |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.004 | 0.1 AL | 0.02 |
| Cauliflower | 741 | 0 | | | 0.0007 ^ | 0.1 AL | 0.02 |
| Eggplant | 736 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Grapefruit | 742 | 0 | | | 0.002 - 0.020 | 0.1 AL | 0.02 |
| Grapes | 523 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Green Beans | 181 | 0 | | | 0.0008 - 0.002 | 0.1 AL | 0.02 |
| Green Beans, Frozen | 555 | 0 | | | 0.0008 - 0.002 | 0.1 AL | 0.02 |
| Lettuce | 743 | 0 | | | 0.0007 - 0.002 | 0.1 AL | 0.02 |
| Orange Juice | 744 | 0 | | | 0.002 - 0.012 | 0.1 AL | 0.02 |
| Oranges | 741 | 0 | | | 0.002 - 0.012 | 0.1 AL | 0.02 |
| Pears | 555 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Plums | 573 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Watermelon | 182 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Winter Squash | 731 | 11 | 1.5 | 0.003 - 0.025 | 0.002 - 0.004 | 0.1 AL | 0.02 |
| **TOTAL** | **9,201** | **11** | | | | | |
| **Chlordane trans (insecticide) (isomer of Chlordane)** | | | | | | | |
| Apples | 743 | 0 | | | 0.0007 - 0.002 | 0.1 AL | 0.02 |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.004 | 0.1 AL | 0.02 |
| Cauliflower | 741 | 0 | | | 0.0007 ^ | 0.1 AL | 0.02 |
| Eggplant | 736 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Grapefruit | 214 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Grapes | 523 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Green Beans | 181 | 0 | | | 0.0008 - 0.002 | 0.1 AL | 0.02 |
| Green Beans, Frozen | 555 | 0 | | | 0.0008 - 0.002 | 0.1 AL | 0.02 |
| Lettuce | 743 | 0 | | | 0.0007 - 0.002 | 0.1 AL | 0.02 |
| Orange Juice | 744 | 0 | | | 0.002 - 0.012 | 0.1 AL | 0.02 |
| Oranges | 741 | 0 | | | 0.002 - 0.012 | 0.1 AL | 0.02 |
| Pears | 555 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Plums | 573 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.003 ^ | 0.1 AL | 0.02 |
| Watermelon | 182 | 0 | | | 0.002 ^ | 0.1 AL | 0.02 |
| Winter Squash | 731 | 7 | 1.0 | 0.003 - 0.007 | 0.002 - 0.004 | 0.1 AL | 0.02 |
| **TOTAL** | **8,673** | **7** | | | | | |
| **Chlorethoxyfos (insecticide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **914** | **0** | | | | | |
| **Chlorfenapyr (insecticide)** | | | | | | | |
| Eggplant | 736 | 0 | | | 0.029 ^ | 1.0 | - |
| **TOTAL** | **736** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Chlorfenvinphos total (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.004 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.004 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.004 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Chlorothalonil (fungicide)** | | | | | | | |
| Cantaloupe | 206 | 0 | | | 0.005 - 0.008 | 5 | 2 |
| Eggplant (V-10) | 736 | 10 | 1.4 | 0.012 - 0.073 | 0.007 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | 0.5 |
| Green Beans | 181 | 65 | 35.9 | 0.003 - 3.9 | 0.002 - 0.005 | 5 | 5 |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.008 | 5 | 5 |
| Lettuce (V-2) | 2 | 2 | 100.0 | 0.013 - 0.20 | 0.005 - 0.008 | NT | - |
| Orange Juice | 528 | 0 | | | 0.008 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.008 ^ | NT | - |
| Pears (V-2) | 394 | 2 | 0.5 | 0.004 ^ | 0.002 ^ | NT | - |
| Plums | 573 | 0 | | | 0.008 ^ | 0.2 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.008 ^ | 0.2 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.010 | 5 | - |
| Winter Squash | 256 | 14 | 5.5 | 0.008 - 1.0 | 0.005 - 0.008 | 5 | 5 |
| **TOTAL** | **4,814** | **93** | | | | | |
| **Chlorpropham (herbicide, growth regulator)** | | | | | | | |
| Apples (V-1) | 528 | 1 | 0.2 | 0.010 ^ | 0.006 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.017 ^ | NT | - |
| Cauliflower (V-2) | 741 | 2 | 0.3 | 0.010 ^ | 0.006 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.011 ^ | NT | - |
| Green Beans (V-1) | 127 | 1 | 0.8 | 0.038 ^ | 0.023 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.023 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.006 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears (V-1) | 394 | 1 | 0.3 | 0.018 ^ | 0.011 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.011 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.017 ^ | NT | - |
| **TOTAL** | **5,266** | **5** | | | | | |
| **Chlorpyrifos (insecticide)** | | | | | | | |
| Apples | 743 | 8 | 1.1 | 0.002 - 0.013 | 0.001 - 0.004 | 1.5 | 1 |
| Cantaloupe | 558 | 21 | 3.8 | 0.007 - 0.016 | 0.004 ^ | 0.1 | - |
| Cauliflower | 741 | 7 | 0.9 | 0.002 - 0.010 | 0.001 ^ | 1.0 | 0.05 |
| Eggplant | 736 | 0 | | | 0.008 ^ | 0.1 | - |
| Grapefruit | 742 | 18 | 2.4 | 0.001 - 0.004 | 0.0008 - 0.004 | 1.0 | 1 |
| Grapes | 739 | 92 | 12.4 | 0.006 - 0.19 | 0.004 ^ | 0.5 | 0.5 |
| Green Beans | 181 | 0 | | | 0.004 - 0.005 | 0.05 | 0.01 |
| Green Beans, Frozen | 555 | 1 | 0.2 | 0.007 ^ | 0.004 - 0.005 | 0.05 | 0.01 |
| Lettuce | 743 | 19 | 2.6 | 0.002 - 0.060 | 0.001 - 0.004 | 0.1 | - |
| Orange Juice | 744 | 1 | 0.1 | 0.007 ^ | 0.004 ^ | 1.0 | 1 |
| Oranges | 741 | 28 | 3.8 | 0.007 - 0.017 | 0.004 ^ | 1.0 | 1 |
| Pears | 555 | 17 | 3.1 | 0.006 - 0.024 | 0.004 ^ | 0.05 | 1 |
| Plums (X-3) | 573 | 42 | 7.3 | 0.013 - 0.12 | 0.008 ^ | 0.05 | 0.5 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.008 ^ | 0.05 | 0.5 |
| Strawberries | 737 | 29 | 3.9 | 0.001 - 0.035 | 0.0008 - 0.004 | 0.2 | 0.3 |
| Watermelon | 182 | 0 | | | 0.004 ^ | 0.1 | - |
| Winter Squash | 731 | 17 | 2.3 | 0.007 - 0.029 | 0.004 ^ | 0.1 | - |
| **TOTAL** | **10,154** | **300** | | | | | |
| **Chlorpyrifos methyl (insecticide)** | | | | | | | |
| Grapes | 175 | 0 | | | 0.005 ^ | NT | 0.2 |
| Green Beans | 83 | 0 | | | 0.004 ^ | NT | 0.1 |
| Pears | 218 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **476** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Clofentezine (insecticide)** | | | | | | | |
| Apples | 347 | 1 | 0.3 | 0.19 ^ | 0.007 - 0.022 | 0.5 | 0.5 |
| Cauliflower | 92 | 0 | | | 0.022 ^ | NT | - |
| Lettuce | 132 | 0 | | | 0.022 ^ | NT | - |
| Pears | 161 | 1 | 0.6 | 0.012 ^ | 0.007 ^ | 0.5 | 0.5 |
| Watermelon | 22 | 0 | | | 0.007 ^ | NT | - |
| **TOTAL** | **754** | **2** | | | | | |
| **Clomazone (herbicide)** | | | | | | | |
| Apples | 513 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.040 | 0.05 | - |
| Cauliflower | 725 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.005 - 0.008 | 0.05 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.005 - 0.008 | 0.05 | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.008 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.008 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 182 | 0 | | | 0.005 - 0.015 | 0.05 | - |
| Winter Squash | 731 | 0 | | | 0.008 - 0.040 | 0.1 | - |
| **TOTAL** | **5,942** | **0** | | | | | |
| **Clothianidin (insecticide) (also a metabolite of thiamethoxam)** | | | | | | | |
| Watermelon | 123 | 0 | | | 0.002 - 0.010 | NT | - |
| **TOTAL** | **123** | **0** | | | | | |
| **Coumaphos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.006 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **1,055** | **0** | | | | | |
| **Coumaphos oxygen analog (metabolite of Coumaphos)** | | | | | | | |
| Apples | 528 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **1,055** | **0** | | | | | |
| **Cycloate (herbicide)** | | | | | | | |
| Apples | 132 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 216 | 0 | | | 0.002 ^ | NT | - |
| Lettuce | 132 | 0 | | | 0.002 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **1,394** | **0** | | | | | |
| **Cyfluthrin (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.030 - 0.14 | 0.05 | 0.5 |
| Cantaloupe | 558 | 0 | | | 0.030 ^ | 0.05 | - |
| Cauliflower | 741 | 0 | | | 0.14 - 0.27 | 2.5 | - |
| Eggplant | 736 | 0 | | | 0.067 ^ | 0.05 | - |
| Grapefruit | 742 | 0 | | | 0.021 - 0.030 | 0.2 | - |
| Grapes | 739 | 0 | | | 0.023 - 0.030 | 0.05 | - |
| Green Beans | 127 | 0 | | | 0.045 ^ | 0.05 | - |
| Green Beans, Frozen | 395 | 0 | | | 0.045 ^ | 0.05 | - |
| Lettuce | 743 | 14 | 1.9 | 0.050 - 0.68 | 0.030 - 0.27 | 3.0 | - |
| Orange Juice | 744 | 0 | | | 0.030 - 0.060 | 0.2 | - |
| Oranges | 741 | 0 | | | 0.030 - 0.060 | 0.2 | - |
| Pears | 555 | 0 | | | 0.023 - 0.030 | 0.05 | - |
| Plums | 573 | 0 | | | 0.068 ^ | 0.05 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.068 ^ | 0.05 | - |
| Strawberries | 737 | 0 | | | 0.024 - 0.030 | 0.05 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Watermelon | 182 | 0 | | | 0.023 - 0.030 | 0.05 | - |
| Winter Squash | 731 | 0 | | | 0.030 ^ | 0.05 | - |
| **TOTAL** | **9,940** | **14** | | | | | |
| **Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) (insecticide) **** | | | | | | | |
| Apples | 528 | 2 | 0.4 | 0.010 - 0.023 | 0.006 - 0.020 | 0.30 | 0.2 |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | 0.01 | - |
| Cauliflower | 741 | 0 | | | 0.006 - 0.020 | 0.4 | - |
| Grapefruit | 528 | 0 | | | 0.008 ^ | 0.01 | - |
| Grapes | 523 | 0 | | | 0.015 ^ | 0.01 | - |
| Lettuce | 527 | 65 | 12.3 | 0.010 - 0.37 | 0.006 ^ | 2.0 | - |
| Orange Juice | 528 | 0 | | | 0.060 ^ | 0.01 | - |
| Oranges | 525 | 0 | | | 0.060 ^ | 0.01 | - |
| Pears | 394 | 0 | | | 0.015 ^ | 0.30 | 0.2 |
| Strawberries (X-2) | 521 | 3 | 0.6 | 0.014 - 0.17 | 0.008 ^ | 0.01 | - |
| Watermelon | 123 | 0 | | | 0.015 ^ | 0.01 | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | 0.01 | - |
| **TOTAL** | **5,852** | **70** | | | | | |
| **Cyhalothrin, Lambda (includes gamma isomer) (insecticide)** | | | | | | | |
| Apples | 213 | 0 | | | 0.006 ^ | 0.30 | 0.2 |
| Cantaloupe | 162 | 0 | | | 0.006 ^ | 0.01 | - |
| Eggplant | 736 | 0 | | | 0.038 ^ | 0.20 | - |
| Grapefruit | 214 | 0 | | | 0.006 ^ | 0.01 | - |
| Grapes | 216 | 1 | 0.5 | 0.010 ^ | 0.006 ^ | 0.01 | - |
| Green Beans | 181 | 0 | | | 0.006 - 0.030 | 0.20 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.006 - 0.030 | 0.20 | - |
| Lettuce | 216 | 22 | 10.2 | 0.010 - 0.44 | 0.006 ^ | 2.0 | - |
| Orange Juice | 216 | 0 | | | 0.006 ^ | 0.01 | - |
| Oranges | 216 | 0 | | | 0.006 ^ | 0.01 | - |
| Pears | 161 | 3 | 1.9 | 0.010 ^ | 0.006 ^ | 0.30 | 0.2 |
| Plums | 573 | 0 | | | 0.039 ^ | 0.50 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.039 ^ | 0.50 | - |
| Strawberries (X-2) | 216 | 2 | 0.9 | 0.036 - 0.14 | 0.006 ^ | 0.01 | - |
| Watermelon | 59 | 0 | | | 0.006 ^ | 0.01 | - |
| Winter Squash | 213 | 0 | | | 0.006 ^ | 0.01 | - |
| **TOTAL** | **4,300** | **28** | | | | | |
| **Cyhalothrin, epimer R157836 (insecticide)** | | | | | | | |
| Apples | 213 | 0 | | | 0.006 ^ | 0.30 | 0.2 |
| Cantaloupe | 162 | 0 | | | 0.006 ^ | 0.01 | - |
| Eggplant | 124 | 0 | | | 0.077 ^ | 0.20 | - |
| Grapefruit | 214 | 0 | | | 0.006 ^ | 0.01 | - |
| Grapes | 215 | 0 | | | 0.006 ^ | 0.01 | - |
| Green Beans | 54 | 0 | | | 0.006 ^ | 0.20 | - |
| Green Beans, Frozen | 160 | 0 | | | 0.006 ^ | 0.20 | - |
| Lettuce | 216 | 6 | 2.8 | 0.010 - 0.032 | 0.006 ^ | 2.0 | - |
| Orange Juice | 216 | 0 | | | 0.006 ^ | 0.01 | - |
| Oranges | 216 | 0 | | | 0.006 ^ | 0.01 | - |
| Pears | 161 | 0 | | | 0.006 ^ | 0.30 | 0.2 |
| Plums | 46 | 0 | | | 0.047 ^ | 0.50 | - |
| Plums, Dried (Prunes) | 109 | 0 | | | 0.047 ^ | 0.50 | - |
| Strawberries | 216 | 0 | | | 0.006 ^ | 0.01 | - |
| Watermelon | 59 | 0 | | | 0.006 ^ | 0.01 | - |
| Winter Squash | 213 | 0 | | | 0.006 ^ | 0.01 | - |
| **TOTAL** | **2,594** | **6** | | | | | |
| **Cypermethrin (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.030 - 0.17 | NT | 2 |
| Cantaloupe | 558 | 0 | | | 0.030 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.17 - 0.34 | 2.0 | 1 |
| Eggplant | 736 | 0 | | | 0.057 ^ | 0.2 | 0.2 |
| Grapes | 523 | 0 | | | 0.023 ^ | NT | 0.5 |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Green Beans | 127 | 0 | | | 0.015 ^ | 0.5 | 0.5 |
| Green Beans, Frozen | 397 | 4 | 1.0 | 0.025 - 0.050 | 0.015 - 0.030 | 0.5 | 0.5 |
| Lettuce | 743 | 54 | 7.3 | 0.043 - 1.0 | 0.030 - 0.34 | 10.0 | 2 |
| Orange Juice | 528 | 0 | | | 0.035 ^ | NT | 2 |
| Oranges | 525 | 0 | | | 0.035 ^ | NT | 2 |
| Pears | 555 | 0 | | | 0.023 - 0.030 | NT | 2 |
| Plums | 573 | 0 | | | 0.067 ^ | NT | 1 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.067 ^ | NT | 1 |
| Watermelon | 182 | 0 | | | 0.020 - 0.030 | NT | - |
| Winter Squash | 731 | 0 | | | 0.030 ^ | NT | - |
| **TOTAL** | **7,815** | **58** | | | | | |
| **Cyprodinil (fungicide)** | | | | | | | |
| Apples | 215 | 2 | 0.9 | 0.013 ^ | 0.008 ^ | 0.1 | 0.05 |
| Grapes | 739 | 198 | 26.8 | 0.008 - 1.4 | 0.008 ^ | 2.0 | 3 |
| Green Beans, Frozen | 1 | 1 | 100.0 | 0.14 ^ | 0.082 ^ | 0.6 | 0.5 |
| Pears | 555 | 0 | | | 0.008 ^ | 0.1 | 1 |
| Plums | 573 | 7 | 1.2 | 0.013 - 0.079 | 0.008 ^ | 2.0 | 2 |
| Plums, Dried (Prunes) | 153 | 6 | 3.9 | 0.013 ^ | 0.008 ^ | 2.0 | 2 |
| Strawberries | 737 | 132 | 17.9 | 0.013 - 1.1 | 0.008 - 0.092 | 5.0 | 2 |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **3,037** | **346** | | | | | |
| **Cyromazine (insect growth regulator)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 10.0 | - |
| Lettuce | 527 | 17 | 3.2 | 0.004 - 0.59 | 0.002 ^ | 7.0 | 5 |
| **TOTAL** | **1,796** | **17** | | | | | |
| **DCPA (herbicide)** | | | | | | | |
| Apples | 514 | 0 | | | 0.0007 ^ | NT | - |
| Cantaloupe | 558 | 6 | 1.1 | 0.005 - 0.012 | 0.003 - 0.007 | 1 | - |
| Cauliflower | 741 | 57 | 7.7 | 0.001 - 0.006 | 0.0007 ^ | 5 | - |
| Eggplant | 736 | 0 | | | 0.006 ^ | 1 | - |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.002 - 0.006 | 2 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.006 | 2 | - |
| Lettuce | 743 | 228 | 30.7 | 0.001 - 0.17 | 0.0007 - 0.006 | 2 | - |
| Orange Juice | 528 | 0 | | | 0.006 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.006 ^ | NT | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Strawberries | 737 | 0 | | | 0.003 - 0.006 | 2 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.008 | 1 | - |
| Winter Squash | 731 | 1 | 0.1 | 0.043 ^ | 0.003 - 0.007 | 1 | - |
| **TOTAL** | **7,648** | **292** | | | | | |
| **DDD o,p' (metabolite of DDT)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | 0.1 AL | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | 0.5 AL | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | 0.5 AL | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **DDD p,p' (metabolite of DDT)** | | | | | | | |
| Apples | 743 | 0 | | | 0.001 - 0.008 | 0.1 AL | - |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.020 | 0.1 AL | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | 0.5 AL | - |
| Eggplant | 736 | 0 | | | 0.005 ^ | 0.1 AL | - |
| Grapefruit | 742 | 0 | | | 0.004 - 0.016 | 0.1 AL | - |
| Grapes | 739 | 0 | | | 0.004 - 0.008 | 0.05 AL | - |
| Green Beans | 181 | 0 | | | 0.008 - 0.010 | 0.2 AL | - |
| Green Beans, Frozen | 555 | 0 | | | 0.004 - 0.010 | 0.2 AL | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Lettuce | 743 | 0 | | | 0.001 - 0.008 | 0.5 AL | - |
| Orange Juice | 744 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Oranges | 741 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Pears | 555 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Plums | 573 | 0 | | | 0.007 ^ | 0.2 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.007 ^ | 0.2 AL | - |
| Watermelon | 182 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Winter Squash | 731 | 0 | | | 0.004 - 0.020 | 0.1 AL | - |
| **TOTAL** | **9,417** | **0** | | | | | |
| **DDE p,p' (metabolite of DDT)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.007 | 0.1 AL | - |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.007 | 0.1 AL | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 0.5 AL | - |
| Eggplant | 736 | 0 | | | 0.005 ^ | 0.1 AL | - |
| Grapefruit | 742 | 0 | | | 0.004 - 0.010 | 0.1 AL | - |
| Grapes | 739 | 0 | | | 0.004 - 0.007 | 0.05 AL | - |
| Green Beans | 181 | 2 | 1.1 | 0.003 ^ | 0.002 - 0.007 | 0.2 AL | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.007 | 0.2 AL | - |
| Lettuce | 743 | 109 | 14.7 | 0.003 - 0.015 | 0.002 - 0.007 | 0.5 AL | - |
| Orange Juice | 744 | 0 | | | 0.004 - 0.007 | 0.1 AL | - |
| Oranges | 741 | 0 | | | 0.004 - 0.007 | 0.1 AL | - |
| Pears | 555 | 0 | | | 0.004 - 0.007 | 0.1 AL | - |
| Plums | 573 | 0 | | | 0.006 ^ | 0.2 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.006 ^ | 0.2 AL | - |
| Watermelon | 182 | 0 | | | 0.004 - 0.005 | 0.1 AL | - |
| Winter Squash | 731 | 1 | 0.1 | 0.007 ^ | 0.004 - 0.007 | 0.1 AL | - |
| **TOTAL** | **9,417** | **112** | | | | | |
| **DDT o,p' (insecticide)** | | | | | | | |
| Apples | 513 | 0 | | | 0.001 ^ | 0.1 AL | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | 0.5 AL | - |
| Lettuce | 527 | 3 | 0.6 | 0.002 ^ | 0.001 ^ | 0.5 AL | - |
| **TOTAL** | **1,781** | **3** | | | | | |
| **DDT p,p' (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.008 | 0.1 AL | - |
| Cantaloupe | 162 | 0 | | | 0.0004 - 0.008 | 0.1 AL | - |
| Cauliflower | 741 | 1 | 0.1 | 0.003 ^ | 0.002 ^ | 0.5 AL | - |
| Eggplant | 736 | 0 | | | 0.007 ^ | 0.1 AL | - |
| Grapefruit | 742 | 0 | | | 0.004 - 0.029 | 0.1 AL | - |
| Grapes | 739 | 0 | | | 0.004 - 0.008 | 0.05 AL | - |
| Green Beans | 181 | 0 | | | 0.008 - 0.010 | 0.2 AL | - |
| Green Beans, Frozen | 555 | 0 | | | 0.004 - 0.010 | 0.2 AL | - |
| Lettuce | 743 | 3 | 0.4 | 0.003 ^ | 0.002 - 0.008 | 0.5 AL | - |
| Orange Juice | 744 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Oranges | 741 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Pears | 555 | 0 | | | 0.004 - 0.008 | 0.1 AL | - |
| Plums | 573 | 0 | | | 0.010 ^ | 0.2 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.010 ^ | 0.2 AL | - |
| Watermelon | 123 | 0 | | | 0.004 - 0.005 | 0.1 AL | - |
| Winter Squash | 213 | 1 | 0.5 | 0.007 ^ | 0.004 - 0.008 | 0.1 AL | - |
| **TOTAL** | **8,444** | **5** | | | | | |
| **Deltamethrin (insecticide) (includes parent Tralomethrin)** | | | | | | | |
| Apples | 698 | 0 | | | 0.015 - 0.53 | 0.2 | 0.2 |
| Cantaloupe | 558 | 0 | | | 0.015 - 0.24 | 0.2 | 0.2 |
| Cauliflower | 216 | 0 | | | 0.080 ^ | 0.05 | 0.1 |
| Eggplant | 736 | 0 | | | 0.052 ^ | 0.3 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapefruit | 742 | 0 | | | 0.015 - 0.055 | 0.05 | 0.02 |
| Grapes | 739 | 0 | | | 0.015 - 0.023 | 0.05 | 0.2 |
| Lettuce | 216 | 1 | 0.5 | 0.025 ^ | 0.015 ^ | 0.05 | 0.5 |
| Orange Juice | 744 | 0 | | | 0.015 - 0.018 | 0.05 | 0.02 |
| Oranges | 741 | 0 | | | 0.015 - 0.018 | 0.05 | 0.02 |
| Pears | 555 | 0 | | | 0.015 - 0.023 | 0.05 | - |
| Plums | 573 | 0 | | | 0.052 ^ | 0.05 | 0.05 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.052 ^ | 0.05 | 0.05 |
| Strawberries | 737 | 0 | | | 0.015 - 0.11 | 0.05 | 0.2 |
| Watermelon | 182 | 0 | | | 0.015 - 0.023 | 0.2 | 0.2 |
| Winter Squash | 731 | 0 | | | 0.015 - 0.24 | 0.2 | 0.2 |
| **TOTAL** | **8,321** | **1** | | | | | |
| **Diazinon (insecticide)** | | | | | | | |
| Apples | 743 | 13 | 1.7 | 0.003 - 0.13 | 0.002 ^ | 0.5 | 0.3 |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.007 | 0.75 | 0.2 |
| Grapefruit | 742 | 0 | | | 0.001 - 0.002 | 0.7 | - |
| Grapes | 739 | 4 | 0.5 | 0.003 - 0.016 | 0.002 - 0.005 | 0.75 | - |
| Green Beans | 181 | 0 | | | 0.002 - 0.005 | 0.5 | 0.2 |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.005 | 0.5 | 0.2 |
| Lettuce | 743 | 98 | 13.2 | 0.003 - 0.027 | 0.002 ^ | 0.7 | 0.5 |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 0.7 | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 0.7 | - |
| Pears | 555 | 11 | 2.0 | 0.003 - 0.008 | 0.002 - 0.005 | 0.5 | 0.3 |
| Plums | 573 | 2 | 0.3 | 0.012 ^ | 0.007 ^ | 0.5 | 1 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.007 ^ | 0.5 | 1 |
| Strawberries | 737 | 3 | 0.4 | 0.002 - 0.005 | 0.001 - 0.002 | 0.5 | 0.1 |
| Watermelon | 182 | 0 | | | 0.002 - 0.005 | 0.75 | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.007 | 0.75 | 0.05 |
| **TOTAL** | **8,677** | **131** | | | | | |
| **Diazinon oxygen analog (metabolite of Diazinon)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.003 - 0.016 | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.003 ^ | NT | - |
| Grapes | 739 | 0 | | | 0.001 - 0.003 | NT | - |
| Green Beans | 180 | 0 | | | 0.003 - 0.005 | NT | - |
| Green Beans, Frozen | 555 | 0 | | | 0.003 - 0.005 | NT | - |
| Lettuce | 743 | 0 | | | 0.003 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.003 ^ | NT | - |
| Oranges | 741 | 0 | | | 0.003 ^ | NT | - |
| Pears | 555 | 0 | | | 0.001 - 0.003 | NT | - |
| Plums | 573 | 0 | | | 0.011 ^ | NT | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.011 ^ | NT | - |
| Strawberries | 216 | 0 | | | 0.003 ^ | NT | - |
| Watermelon | 182 | 0 | | | 0.001 - 0.012 | NT | - |
| Winter Squash | 731 | 0 | | | 0.003 - 0.016 | NT | - |
| **TOTAL** | **8,368** | **0** | | | | | |
| **Dichlobenil (herbicide)** | | | | | | | |
| Apples | 728 | 0 | | | 0.005 - 0.019 | 0.5 | - |
| Cauliflower | 709 | 0 | | | 0.019 - 0.064 | NT | - |
| Grapes | 697 | 0 | | | 0.005 - 0.013 | 0.15 | - |
| Lettuce | 512 | 0 | | | 0.019 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.005 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.005 ^ | NT | - |
| Pears | 555 | 0 | | | 0.005 - 0.013 | 0.5 | - |
| Plums | 573 | 0 | | | 0.011 ^ | 0.15 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.011 ^ | 0.15 | - |
| Watermelon | 86 | 0 | | | 0.005 - 0.013 | NT | - |
| **TOTAL** | **5,066** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Dichlorvos - DDVP (insecticide) (also a metabolite of Naled)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.003 | 0.5 | - |
| Cantaloupe | 558 | 1 | 0.2 | 0.005 ^ | 0.002 - 0.003 | 0.5 | - |
| Eggplant | 736 | 0 | | | 0.004 ^ | 0.5 | - |
| Grapefruit | 742 | 0 | | | 0.0006 - 0.002 | 3 | - |
| Grapes | 739 | 0 | | | 0.002 ^ | 0.5 | - |
| Green Beans | 181 | 0 | | | 0.002 - 0.006 | 0.5 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.006 | 0.5 | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.003 | 1 | - |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 3 | - |
| Oranges | 741 | 1 | 0.1 | 0.003 ^ | 0.002 ^ | 3 | - |
| Pears | 394 | 0 | | | 0.002 ^ | 0.5 | - |
| Plums | 573 | 0 | | | 0.004 ^ | 0.5 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 0.5 | - |
| Strawberries | 737 | 49 | 6.6 | 0.001 - 0.43 | 0.0007 - 0.002 | 1 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.003 | 0.5 | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.003 | 0.5 | - |
| **TOTAL** | **9,252** | **51** | | | | | |
| **Dicloran (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.010 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 739 | 31 | 4.2 | 0.006 - 0.18 | 0.004 - 0.008 | 10 | 7 |
| Green Beans | 181 | 1 | 0.6 | 0.014 ^ | 0.002 - 0.008 | 20 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.008 | 20 | - |
| Lettuce | 743 | 9 | 1.2 | 0.003 - 0.013 | 0.002 - 0.008 | 10 | - |
| Orange Juice | 528 | 0 | | | 0.008 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.008 ^ | NT | - |
| Pears (V-1) | 395 | 1 | 0.3 | 0.013 ^ | 0.004 - 0.008 | NT | - |
| Plums | 573 | 8 | 1.4 | 0.017 - 1.1 | 0.010 ^ | 15 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.010 ^ | 15 | - |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **6,639** | **50** | | | | | |
| **Dicofol o,p' (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 - 0.010 | 5 | - |
| Cauliflower | 725 | 0 | | | 0.003 - 0.040 | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Strawberries | 521 | 0 | | | 0.006 - 0.012 | 5 | - |
| **TOTAL** | **2,301** | **0** | | | | | |
| **Dicofol p,p' (isomer of Dicofol o,p')** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 - 0.040 | 5 | - |
| Cantaloupe | 558 | 11 | 2.0 | 0.017 - 0.045 | 0.010 - 0.018 | 5 | 0.2 |
| Cauliflower | 741 | 0 | | | 0.003 - 0.019 | NT | - |
| Eggplant | 736 | 5 | 0.7 | 0.017 - 0.11 | 0.010 ^ | 5 | - |
| Grapefruit | 742 | 0 | | | 0.010 - 0.022 | 10 | 5 |
| Grapes | 739 | 2 | 0.3 | 0.49 - 0.51 | 0.010 - 0.015 | 5 | 5 |
| Green Beans | 181 | 0 | | | 0.008 - 0.010 | 5 | 2 |
| Green Beans, Frozen | 555 | 6 | 1.1 | 0.012 - 0.044 | 0.008 - 0.010 | 5 | 2 |
| Lettuce (V-1) | 527 | 1 | 0.2 | 0.005 ^ | 0.003 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 10 | 5 |
| Oranges | 741 | 4 | 0.5 | 0.017 ^ | 0.010 ^ | 10 | 5 |
| Pears | 555 | 1 | 0.2 | 0.14 ^ | 0.010 - 0.015 | 5 | - |
| Plums | 573 | 5 | 0.9 | 0.040 - 0.94 | 0.024 ^ | 5 | 1 |
| Plums, Dried (Prunes) | 153 | 3 | 2.0 | 0.040 - 0.085 | 0.024 ^ | 5 | 1 |
| Strawberries | 737 | 3 | 0.4 | 0.017 - 0.70 | 0.010 - 0.020 | 5 | - |
| Watermelon | 182 | 0 | | | 0.010 - 0.015 | 5 | - |
| Winter Squash | 731 | 0 | | | 0.010 - 0.018 | 5 | 1 |
| **TOTAL** | **9,938** | **41** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Dieldrin (insecticide) (also a metabolite of Aldrin)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 - 0.006 | 0.03 AL | 0.05 |
| Cantaloupe | 558 | 7 | 1.3 | 0.005 - 0.010 | 0.003 - 0.018 | 0.1 AL | 0.1 |
| Cauliflower | 741 | 0 | | | 0.005 ^ | 0.03 AL | - |
| Eggplant | 736 | 0 | | | 0.004 ^ | 0.05 AL | 0.1 |
| Grapefruit | 742 | 0 | | | 0.003 - 0.006 | 0.02 AL | 0.05 |
| Grapes | 523 | 0 | | | 0.005 ^ | 0.05 AL | - |
| Green Beans | 181 | 0 | | | 0.0008 - 0.006 | 0.05 AL | 0.05 |
| Green Beans, Frozen | 555 | 0 | | | 0.0008 - 0.006 | 0.05 AL | 0.05 |
| Lettuce | 743 | 0 | | | 0.003 - 0.006 | 0.03 AL | 0.05 |
| Orange Juice | 744 | 0 | | | 0.003 - 0.006 | 0.02 AL | 0.05 |
| Oranges | 741 | 0 | | | 0.003 - 0.006 | 0.02 AL | 0.05 |
| Pears | 555 | 0 | | | 0.003 - 0.006 | 0.03 AL | 0.05 |
| Plums | 573 | 0 | | | 0.005 ^ | 0.3 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.005 ^ | 0.3 AL | - |
| Watermelon | 182 | 1 | 0.5 | 0.005 ^ | 0.003 - 0.005 | 0.1 AL | 0.1 |
| Winter Squash | 731 | 48 | 6.6 | 0.005 - 0.17 | 0.003 - 0.018 | 0.1 AL | 0.1 |
| **TOTAL** | **9,201** | **56** | | | | | |
| **Difenoconazole (fungicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.072 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.072 ^ | NT | - |
| **TOTAL** | **978** | **0** | | | | | |
| **Diflubenzuron (insecticide)** | | | | | | | |
| Apples (V-23) | 469 | 23 | 4.9 | 0.011 - 0.14 | 0.007 ^ | NT | 5 |
| Cauliflower | 617 | 0 | | | 0.007 - 0.022 | NT | - |
| Grapefruit | 214 | 0 | | | 0.007 ^ | 0.5 | 0.5 |
| Lettuce | 497 | 0 | | | 0.007 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.007 - 0.010 | 0.5 | 0.5 |
| Oranges | 741 | 0 | | | 0.0007 - 0.010 | 0.5 | 0.5 |
| Pears | 161 | 1 | 0.6 | 0.036 ^ | 0.007 ^ | 0.50 | 5 |
| **TOTAL** | **3,443** | **24** | | | | | |
| **Dimethenamid (herbicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **914** | **0** | | | | | |
| **Dimethoate (insecticide) (parent of Omethoate)** | | | | | | | |
| Apples | 743 | 5 | 0.7 | 0.004 - 0.057 | 0.002 ^ | 2 | - |
| Cantaloupe | 558 | 25 | 4.5 | 0.003 - 0.29 | 0.002 - 0.007 | 1 | - |
| Cauliflower | 741 | 42 | 5.7 | 0.004 - 0.026 | 0.002 ^ | 2 | 2 |
| Grapefruit | 742 | 0 | | | 0.002 - 0.003 | 2 | 2 |
| Grapes | 739 | 5 | 0.7 | 0.008 - 0.032 | 0.002 - 0.005 | 1 | - |
| Green Beans | 181 | 18 | 9.9 | 0.003 - 2.0 | 0.002 - 0.005 | 2 | - |
| Green Beans, Frozen | 555 | 7 | 1.3 | 0.003 - 0.040 | 0.002 - 0.005 | 2 | - |
| Lettuce | 743 | 76 | 10.2 | 0.003 - 0.11 | 0.002 ^ | 2 | 2 |
| Orange Juice | 726 | 0 | | | 0.002 ^ | 2 | 2 |
| Oranges | 741 | 2 | 0.3 | 0.003 ^ | 0.002 ^ | 2 | 2 |
| Pears | 555 | 0 | | | 0.002 - 0.005 | 2 | 1 |
| Strawberries (V-1) | 1 | 1 | 100.0 | 0.003 ^ | 0.002 ^ | NT | - |
| Watermelon | 182 | 1 | 0.5 | 0.003 ^ | 0.002 - 0.005 | 1 | - |
| Winter Squash | 518 | 0 | | | 0.007 ^ | NT | - |
| **TOTAL** | **7,725** | **182** | | | | | |
| **Dimethomorph (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 36 | 0 | | | 0.050 - 0.10 | 0.5 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Cauliflower (V-2) | 741 | 2 | 0.3 | 0.003 ^ | 0.002 ^ | NT | - |
| Eggplant | 736 | 0 | | | 0.084 ^ | 1.5 | - |
| Grapes | 216 | 0 | | | 0.050 ^ | 3.5 | - |
| Lettuce | 743 | 212 | 28.5 | 0.003 - 4.2 | 0.002 - 0.10 | 10 | - |
| Orange Juice | 528 | 0 | | | 0.030 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.030 ^ | NT | - |
| Watermelon | 118 | 0 | | | 0.040 - 0.050 | 0.5 | - |
| **TOTAL** | **4,171** | **214** | | | | | |
| **Dinotefuran (insecticide)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.0005 - 0.005 | 0.5 | - |
| **TOTAL** | **59** | **0** | | | | | |
| **Diphenamid (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.010 ^ | NT | - |
| Cantaloupe (V-1) | 396 | 1 | 0.3 | 0.030 ^ | 0.018 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.010 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.010 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.006 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.006 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **4,285** | **1** | | | | | |
| **Diphenylamine - DPA (fungicide)** | | | | | | | |
| Apples | 743 | 616 | 82.9 | 0.005 - 2.9 | 0.003 - 0.010 | 10.0 | 10 |
| Cantaloupe (V-4) | 540 | 4 | 0.7 | 0.014 ^ | 0.008 - 0.010 | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears | 555 | 35 | 6.3 | 0.017 - 0.67 | 0.010 - 0.015 | 10 | 5 |
| Watermelon | 86 | 0 | | | 0.010 - 0.015 | NT | - |
| Winter Squash | 518 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **5,808** | **655** | | | | | |
| **Disulfoton (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.007 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 0.75 | 0.5 |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.003 - 0.008 | 0.75 | 0.2 |
| Green Beans, Frozen | 555 | 0 | | | 0.003 - 0.008 | 0.75 | 0.2 |
| Lettuce | 743 | 0 | | | 0.002 - 0.003 | 0.75 | 0.5 |
| Pears | 394 | 0 | | | 0.004 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.007 ^ | NT | 0.5 |
| **TOTAL** | **4,643** | **0** | | | | | |
| **Disulfoton sulfone (metabolite of Disulfoton)** | | | | | | | |
| Apples | 528 | 0 | | | 0.006 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.009 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.006 ^ | 0.75 | 0.5 |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.004 - 0.005 | 0.75 | 0.2 |
| Green Beans, Frozen | 555 | 0 | | | 0.004 - 0.005 | 0.75 | 0.2 |
| Lettuce | 743 | 0 | | | 0.004 - 0.006 | 0.75 | 0.5 |
| Pears | 394 | 0 | | | 0.004 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.009 ^ | NT | 0.5 |
| **TOTAL** | **4,643** | **0** | | | | | |
| **Diuron (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.008 - 0.011 | 1 | - |
| Cauliflower | 741 | 0 | | | 0.008 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.011 ^ | 1 | - |
| Grapes | 216 | 0 | | | 0.011 ^ | 1 | - |
| Lettuce | 527 | 0 | | | 0.008 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.010 - 0.011 | 1 | - |
| Oranges | 741 | 1 | 0.1 | 0.017 ^ | 0.010 - 0.012 | 1 | - |
| Pears | 161 | 0 | | | 0.011 ^ | 1 | - |
| **TOTAL** | **4,087** | **1** | | | | | |
| **Endosulfan I (insecticide)** | | | | | | | |
| Apples | 733 | 17 | 2.3 | 0.008 - 0.31 | 0.003 - 0.006 | 2.0 | 1 |
| Cantaloupe | 558 | 4 | 0.7 | 0.005 - 0.008 | 0.003 - 0.007 | 2.0 | 0.5 |
| Cauliflower | 725 | 0 | | | 0.006 ^ | 2.0 | 0.5 |
| Eggplant | 736 | 20 | 2.7 | 0.007 - 0.049 | 0.004 ^ | 2.0 | - |
| Grapes | 739 | 0 | | | 0.002 - 0.005 | 2.0 | 1 |
| Green Beans | 181 | 79 | 43.6 | 0.003 - 0.13 | 0.002 - 0.005 | 2.0 | 0.5 |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.005 | 2.0 | 0.5 |
| Lettuce | 743 | 66 | 8.9 | 0.005 - 0.35 | 0.003 - 0.006 | 2.0 | 1 |
| Orange Juice | 546 | 0 | | | 0.005 ^ | NT | 0.5 |
| Oranges | 525 | 0 | | | 0.005 ^ | NT | 0.5 |
| Pears | 555 | 2 | 0.4 | 0.016 - 0.017 | 0.002 - 0.005 | 2.0 | 1 |
| Plums | 573 | 0 | | | 0.004 ^ | 2.0 | 1 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 2.0 | 1 |
| Strawberries | 737 | 4 | 0.5 | 0.053 - 0.22 | 0.003 - 0.006 | 2.0 | - |
| Watermelon | 104 | 0 | | | 0.002 - 0.003 | 2.0 | - |
| Winter Squash | 731 | 10 | 1.4 | 0.005 - 0.027 | 0.003 - 0.007 | 2.0 | 0.5 |
| **TOTAL** | **8,894** | **202** | | | | | |
| **Endosulfan II (isomer of Endosulfan)** | | | | | | | |
| Apples | 743 | 22 | 3.0 | 0.010 - 0.14 | 0.004 - 0.006 | 2.0 | 1 |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.007 | 2.0 | 0.5 |
| Cauliflower | 741 | 0 | | | 0.006 - 0.020 | 2.0 | 0.5 |
| Eggplant | 736 | 63 | 8.6 | 0.007 - 0.071 | 0.004 ^ | 2.0 | - |
| Grapes | 695 | 0 | | | 0.004 - 0.013 | 2.0 | 1 |
| Green Beans | 181 | 58 | 32.0 | 0.003 - 0.15 | 0.002 - 0.006 | 2.0 | 0.5 |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.006 | 2.0 | 0.5 |
| Lettuce | 743 | 46 | 6.2 | 0.007 - 0.39 | 0.004 - 0.006 | 2.0 | 1 |
| Orange Juice | 546 | 0 | | | 0.006 ^ | NT | 0.5 |
| Oranges | 525 | 0 | | | 0.006 ^ | NT | 0.5 |
| Pears | 533 | 3 | 0.6 | 0.010 - 0.046 | 0.004 - 0.013 | 2.0 | 1 |
| Plums | 573 | 0 | | | 0.004 ^ | 2.0 | 1 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 2.0 | 1 |
| Strawberries | 737 | 11 | 1.5 | 0.007 - 0.27 | 0.004 - 0.008 | 2.0 | - |
| Watermelon | 104 | 0 | | | 0.004 ^ | 2.0 | - |
| Winter Squash | 731 | 5 | 0.7 | 0.007 - 0.012 | 0.004 - 0.007 | 2.0 | 0.5 |
| **TOTAL** | **8,854** | **208** | | | | | |
| **Endosulfan sulfate (metabolite of Endosulfan)** | | | | | | | |
| Apples | 743 | 11 | 1.5 | 0.007 - 0.12 | 0.004 - 0.020 | 2.0 | 1 |
| Cantaloupe | 558 | 159 | 28.5 | 0.007 - 0.094 | 0.004 - 0.007 | 2.0 | 0.5 |
| Cauliflower | 741 | 0 | | | 0.020 ^ | 2.0 | 0.5 |
| Eggplant | 736 | 87 | 11.8 | 0.010 - 0.083 | 0.006 ^ | 2.0 | - |
| Grapes | 739 | 0 | | | 0.004 - 0.007 | 2.0 | 1 |
| Green Beans | 181 | 106 | 58.6 | 0.003 - 0.47 | 0.002 - 0.007 | 2.0 | 0.5 |
| Green Beans, Frozen | 555 | 4 | 0.7 | 0.003 ^ | 0.002 - 0.007 | 2.0 | 0.5 |
| Lettuce | 743 | 58 | 7.8 | 0.007 - 0.42 | 0.004 - 0.020 | 2.0 | 1 |
| Orange Juice | 546 | 0 | | | 0.006 - 0.007 | NT | 0.5 |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Oranges | 525 | 0 | | | 0.006 ^ | NT | 0.5 |
| Pears | 555 | 9 | 1.6 | 0.006 - 0.052 | 0.004 - 0.007 | 2.0 | 1 |
| Plums | 573 | 0 | | | 0.006 ^ | 2.0 | 1 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.006 ^ | 2.0 | 1 |
| Strawberries | 737 | 14 | 1.9 | 0.007 - 0.050 | 0.004 - 0.008 | 2.0 | - |
| Watermelon | 104 | 1 | 1.0 | 0.006 ^ | 0.004 ^ | 2.0 | - |
| Winter Squash | 731 | 128 | 17.5 | 0.007 - 0.060 | 0.004 - 0.007 | 2.0 | 0.5 |
| **TOTAL** | **8,920** | **577** | | | | | |
| **Endrin (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.007 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.040 | 0.05 AL | 0.05 |
| Cauliflower | 741 | 0 | | | 0.007 - 0.022 | 0.05 AL | - |
| Eggplant | 736 | 0 | | | 0.004 ^ | 0.05 AL | - |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.001 - 0.008 | 0.05 AL | - |
| Green Beans, Frozen | 555 | 0 | | | 0.001 - 0.008 | 0.05 AL | - |
| Lettuce | 743 | 0 | | | 0.004 - 0.008 | 0.05 AL | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.008 | 0.05 AL | 0.05 |
| Winter Squash | 731 | 0 | | | 0.004 - 0.040 | 0.05 AL | 0.05 |
| **TOTAL** | **5,872** | **0** | | | | | |
| **EPTC (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.064 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.064 ^ | 0.1 | - |
| Eggplant | 736 | 0 | | | 0.016 ^ | 0.1 | - |
| Lettuce | 513 | 0 | | | 0.064 ^ | 0.1 | - |
| Orange Juice | 528 | 0 | | | 0.020 ^ | 0.1 | - |
| Oranges | 525 | 0 | | | 0.020 ^ | 0.1 | - |
| **TOTAL** | **3,571** | **0** | | | | | |
| **Esfenvalerate (insecticide) (isomer of Fenvalerate)** | | | | | | | |
| Eggplant | 736 | 0 | | | 0.054 ^ | 0.05 | - |
| Grapefruit | 528 | 0 | | | 0.013 ^ | 0.05 | - |
| Plums (X-1) | 573 | 1 | 0.2 | 0.10 ^ | 0.060 ^ | 0.05 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.060 ^ | 0.05 | - |
| **TOTAL** | **1,990** | **1** | | | | | |
| **Esfenvalerate+Fenvalerate Total (insecticide)** | | | | | | | |
| Apples | 743 | 3 | 0.4 | 0.025 ^ | 0.015 - 0.12 | 2.0 | 2 |
| Cantaloupe | 558 | 0 | | | 0.015 - 0.042 | 1.0 | 0.2 |
| Cauliflower | 727 | 0 | | | 0.029 - 0.12 | 0.5 | 2 |
| Grapefruit | 214 | 0 | | | 0.015 ^ | 0.05 | 2 |
| Grapes | 739 | 1 | 0.1 | 0.025 ^ | 0.015 - 0.038 | 0.05 | 1 |
| Green Beans | 181 | 7 | 3.9 | 0.025 - 0.064 | 0.015 - 0.050 | 2.0 | 1 |
| Green Beans, Frozen | 555 | 1 | 0.2 | 0.083 ^ | 0.015 - 0.050 | 2.0 | 1 |
| Lettuce | 729 | 0 | | | 0.015 - 0.29 | 5.0 | 2 |
| Orange Juice | 744 | 0 | | | 0.015 - 0.051 | 0.05 | 2 |
| Oranges | 741 | 0 | | | 0.015 - 0.051 | 0.05 | 2 |
| Pears | 555 | 0 | | | 0.015 - 0.038 | 2.0 | 2 |
| Strawberries | 737 | 0 | | | 0.015 - 0.020 | 0.05 | 1 |
| Watermelon | 123 | 0 | | | 0.015 - 0.038 | 1.0 | 0.5 |
| Winter Squash | 731 | 0 | | | 0.015 - 0.042 | 1.0 | 0.5 |
| **TOTAL** | **8,077** | **12** | | | | | |
| **Ethalfluralin (herbicide)** | | | | | | | |
| Apples | 499 | 0 | | | 0.017 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.007 - 0.040 | 0.05 | - |
| Cauliflower | 741 | 0 | | | 0.017 - 0.056 | NT | - |
| Lettuce | 527 | 0 | | | 0.017 - 0.056 | NT | - |
| Orange Juice | 528 | 0 | | | 0.015 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.015 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Watermelon | 118 | 0 | | | 0.007 - 0.015 | 0.05 | - |
| Winter Squash | 731 | 0 | | | 0.007 - 0.040 | 0.05 | - |
| **TOTAL** | **4,227** | **0** | | | | | |
| **Ethiofencarb (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.015 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.015 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.015 ^ | NT | - |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **2,777** | **0** | | | | | |
| **Ethion (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.004 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | NT | - |
| Grapefruit | 742 | 10 | 1.3 | 0.001 - 0.007 | 0.0007 - 0.002 | 5.0 | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.010 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.010 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.002 - 0.005 | 5.0 | - |
| Oranges | 741 | 0 | | | 0.002 - 0.005 | 5.0 | - |
| Pears (V-1) | 394 | 1 | 0.3 | 0.13 ^ | 0.005 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.004 ^ | NT | - |
| **TOTAL** | **6,440** | **11** | | | | | |
| **Ethion di oxon (metabolite of Ethion)** | | | | | | | |
| Grapefruit | 742 | 0 | | | 0.002 - 0.003 | 5.0 | - |
| Orange Juice | 744 | 0 | | | 0.003 - 0.005 | 5.0 | - |
| Oranges | 741 | 0 | | | 0.003 - 0.005 | 5.0 | - |
| **TOTAL** | **2,227** | **0** | | | | | |
| **Ethion mono oxon (metabolite of Ethion)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapefruit | 742 | 0 | | | 0.0007 - 0.002 | 5.0 | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 5.0 | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 5.0 | - |
| **TOTAL** | **4,023** | **0** | | | | | |
| **Ethoprop (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.0009 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | 0.02 |
| Green Beans | 54 | 0 | | | 0.002 ^ | 0.02 | - |
| Green Beans, Frozen | 160 | 0 | | | 0.002 ^ | 0.02 | - |
| Lettuce | 527 | 0 | | | 0.0009 ^ | NT | 0.02 |
| Orange Juice | 528 | 0 | | | 0.002 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.002 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **3,236** | **0** | | | | | |
| **Etoxazole (acaricide)** | | | | | | | |
| Apples | 132 | 7 | 5.3 | 0.0002 - 0.035 | 0.0001 ^ | 0.20 | - |
| Cauliflower | 216 | 0 | | | 0.0001 ^ | NT | - |
| Lettuce | 117 | 0 | | | 0.0001 ^ | NT | - |
| **TOTAL** | **465** | **7** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Etridiazole (fungicide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.003 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Strawberries | 521 | 0 | | | 0.006 ^ | 0.20 | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **2,024** | **0** | | | | | |
| **Famoxadone (fungicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.13 ^ | 0.30 | - |
| Eggplant | 736 | 0 | | | 0.051 ^ | 4.0 | - |
| Watermelon | 118 | 0 | | | 0.002 - 0.030 | 0.3 | - |
| Winter Squash | 518 | 0 | | | 0.13 ^ | 0.30 | - |
| **TOTAL** | **1,768** | **0** | | | | | |
| **Fenamidone (fungicide)** | | | | | | | |
| Watermelon | 118 | 0 | | | 0.003 - 0.004 | 0.15 | - |
| **TOTAL** | **118** | **0** | | | | | |
| **Fenamiphos (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.004 | 0.25 | 0.05 |
| Cantaloupe | 396 | 0 | | | 0.006 ^ | NT | 0.05 |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Eggplant | 736 | 0 | | | 0.007 ^ | 0.1 | - |
| Grapefruit | 742 | 0 | | | 0.001 - 0.004 | 0.60 | - |
| Grapes | 739 | 0 | | | 0.001 - 0.004 | 0.10 | - |
| Green Beans | 127 | 0 | | | 0.008 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.004 ^ | 0.60 | - |
| Oranges | 741 | 0 | | | 0.004 ^ | 0.60 | - |
| Pears | 394 | 0 | | | 0.001 ^ | NT | - |
| Strawberries | 216 | 0 | | | 0.004 ^ | 0.6 | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **7,823** | **0** | | | | | |
| **Fenamiphos sulfone (metabolite of Fenamiphos)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.008 | 0.25 | 0.05 |
| Cantaloupe | 396 | 0 | | | 0.024 ^ | NT | 0.05 |
| Eggplant | 736 | 0 | | | 0.016 ^ | 0.1 | - |
| Grapefruit | 214 | 0 | | | 0.008 ^ | 0.60 | - |
| Grapes | 739 | 0 | | | 0.001 - 0.008 | 0.10 | - |
| Green Beans | 127 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 - 0.004 | NT | - |
| Orange Juice | 744 | 0 | | | 0.008 ^ | 0.60 | - |
| Oranges | 741 | 0 | | | 0.008 ^ | 0.60 | - |
| Pears | 394 | 0 | | | 0.001 ^ | NT | - |
| Strawberries | 216 | 0 | | | 0.008 ^ | 0.6 | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.024 ^ | NT | - |
| **TOTAL** | **6,554** | **0** | | | | | |
| **Fenamiphos sulfoxide (metabolite of Fenamiphos)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.004 | 0.25 | 0.05 |
| Eggplant | 736 | 0 | | | 0.044 ^ | 0.1 | - |
| Grapes | 523 | 9 | 1.7 | 0.001 - 0.002 | 0.001 ^ | 0.10 | - |
| Lettuce | 527 | 0 | | | 0.002 - 0.004 | NT | - |
| Orange Juice | 528 | 0 | | | 0.012 ^ | 0.60 | - |
| Oranges | 525 | 0 | | | 0.012 ^ | 0.60 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Pears | 394 | 0 | | | 0.001 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **3,825** | **9** | | | | | |
| **Fenarimol (fungicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.010 - 0.015 | 0.1 | 0.3 |
| Cauliflower | 741 | 0 | | | 0.010 ^ | NT | - |
| Grapes | 739 | 1 | 0.1 | 0.025 ^ | 0.015 - 0.025 | 0.2 | 0.3 |
| Lettuce | 527 | 0 | | | 0.010 ^ | NT | - |
| Pears | 555 | 0 | | | 0.015 - 0.025 | 0.1 | 0.3 |
| Watermelon | 64 | 0 | | | 0.025 ^ | NT | - |
| **TOTAL** | **3,369** | **1** | | | | | |
| **Fenbuconazole (fungicide)** | | | | | | | |
| Apples | 395 | 0 | | | 0.0009 ^ | NT | 0.1 |
| Cauliflower (V-4) | 604 | 4 | 0.7 | 0.002 - 0.004 | 0.0009 ^ | NT | - |
| Grapefruit | 742 | 26 | 3.5 | 0.0007 - 0.001 | 0.0004 - 0.030 | 0.5 | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | 10 |
| Lettuce (V-1) | 440 | 1 | 0.2 | 0.002 ^ | 0.0009 ^ | NT | - |
| Orange Juice | 546 | 0 | | | 0.030 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.030 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | 0.1 |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **4,233** | **31** | | | | | |
| **Fenhexamid (fungicide)** | | | | | | | |
| Plums | 573 | 9 | 1.6 | 0.032 - 0.10 | 0.019 ^ | 1.5 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.019 ^ | 1.5 | - |
| Strawberries | 517 | 165 | 31.9 | 0.036 - 1.9 | 0.035 ^ | 3.0 | - |
| **TOTAL** | **1,243** | **174** | | | | | |
| **Fenitrothion (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Fenpropathrin (insecticide)** | | | | | | | |
| Apples | 743 | 56 | 7.5 | 0.026 - 0.25 | 0.016 - 0.020 | 5.0 | 5 |
| Cantaloupe | 558 | 0 | | | 0.016 - 0.020 | 0.5 | - |
| Cauliflower | 741 | 0 | | | 0.016 ^ | 3.0 | - |
| Eggplant | 736 | 0 | | | 0.022 ^ | NT | 0.2 |
| Grapefruit | 742 | 0 | | | 0.007 - 0.020 | 2.0 | - |
| Grapes | 739 | 13 | 1.8 | 0.019 - 0.56 | 0.015 - 0.020 | 5.0 | 5 |
| Lettuce | 527 | 0 | | | 0.016 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.020 ^ | 2.0 | - |
| Oranges | 741 | 0 | | | 0.020 ^ | 2.0 | - |
| Pears | 555 | 7 | 1.3 | 0.033 - 0.14 | 0.015 - 0.020 | 5.0 | 5 |
| Strawberries | 737 | 87 | 11.8 | 0.010 - 0.59 | 0.006 - 0.020 | 2.0 | - |
| Watermelon | 182 | 0 | | | 0.015 - 0.020 | 0.5 | - |
| Winter Squash | 731 | 0 | | | 0.016 - 0.020 | 0.5 | - |
| **TOTAL** | **8,476** | **163** | | | | | |
| **Fenpyroximate (acaricide)** | | | | | | | |
| Apples | 132 | 7 | 5.3 | 0.003 - 0.042 | 0.0006 ^ | 0.40 | - |
| Cauliflower | 216 | 0 | | | 0.0006 ^ | NT | - |
| Lettuce | 103 | 0 | | | 0.0006 ^ | NT | - |
| **TOTAL** | **451** | **7** | | | | | |
| **Fenthion (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **2,777** | **0** | | | | | |
| **Fenvalerate (insecticide) (isomer of Esfenvalerate)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.030 ^ | 1.0 | 0.5 |
| **TOTAL** | **59** | **0** | | | | | |
| **Fluazifop butyl (herbicide)** | | | | | | | |
| Apples | 132 | 0 | | | 0.0003 ^ | NT | - |
| Cauliflower | 216 | 0 | | | 0.0003 ^ | NT | - |
| Lettuce | 103 | 0 | | | 0.0003 ^ | NT | - |
| **TOTAL** | **451** | **0** | | | | | |
| **Fludioxonil (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.012 - 0.040 | 5.0 | - |
| Cantaloupe | 414 | 0 | | | 0.020 - 0.036 | 0.03 | - |
| Cauliflower | 741 | 0 | | | 0.012 - 0.27 | 2.0 | - |
| Eggplant | 736 | 0 | | | 0.13 ^ | 0.01 | - |
| Grapes | 739 | 101 | 13.7 | 0.011 - 0.50 | 0.010 - 0.020 | 1.0 | 2 |
| Green Beans | 181 | 0 | | | 0.015 - 0.050 | 0.4 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.015 - 0.050 | 0.4 | - |
| Lettuce | 725 | 0 | | | 0.012 - 0.080 | 30 | - |
| Orange Juice | 528 | 0 | | | 0.015 ^ | 10 | - |
| Oranges | 525 | 0 | | | 0.015 ^ | 10 | - |
| Pears | 394 | 0 | | | 0.010 ^ | 5.0 | - |
| Plums | 573 | 118 | 20.6 | 0.18 - 1.0 | 0.11 ^ | 5.0 | 5 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.11 ^ | 5.0 | 5 |
| Strawberries | 216 | 48 | 22.2 | 0.025 - 0.46 | 0.015 - 0.020 | 2.0 | 3 |
| Watermelon | 182 | 0 | | | 0.010 - 0.030 | 0.03 | - |
| Winter Squash | 518 | 0 | | | 0.036 ^ | 0.01 | - |
| **TOTAL** | **7,708** | **267** | | | | | |
| **Flumioxazin (herbicide)** | | | | | | | |
| Eggplant | 736 | 0 | | | 0.050 ^ | NT | - |
| **TOTAL** | **736** | **0** | | | | | |
| **Fluridone (herbicide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.035 ^ | 0.1 | - |
| Cantaloupe | 540 | 0 | | | 0.016 - 0.035 | 0.1 | - |
| Grapefruit | 499 | 0 | | | 0.004 - 0.050 | 0.1 | - |
| Grapes | 216 | 0 | | | 0.035 ^ | 0.1 | - |
| Green Beans | 181 | 0 | | | 0.035 - 0.15 | 0.1 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.035 - 0.15 | 0.1 | - |
| Lettuce | 198 | 0 | | | 0.035 - 0.070 | 0.1 | - |
| Orange Juice | 744 | 0 | | | 0.035 - 0.036 | 0.1 | - |
| Oranges | 741 | 0 | | | 0.035 - 0.036 | 0.1 | - |
| Pears | 161 | 0 | | | 0.035 ^ | 0.1 | - |
| Strawberries | 733 | 0 | | | 0.0003 - 0.035 | 0.1 | - |
| Watermelon | 118 | 0 | | | 0.016 - 0.035 | 0.1 | - |
| Winter Squash | 713 | 0 | | | 0.016 - 0.035 | 0.1 | - |
| **TOTAL** | **5,614** | **0** | | | | | |
| **Folpet (fungicide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.015 - 0.017 | 25 | - |
| Cantaloupe | 206 | 0 | | | 0.015 - 0.066 | 15 | 3 |
| Grapes | 739 | 16 | 2.2 | 0.025 - 0.14 | 0.015 - 0.017 | 25 | 2 |
| Lettuce | 216 | 0 | | | 0.015 - 0.017 | 50 | - |
| Orange Juice | 528 | 0 | | | 0.012 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.012 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Strawberries | 737 | 1 | 0.1 | 0.12 ^ | 0.015 - 0.017 | 25 | 20 |
| Watermelon | 182 | 0 | | | 0.008 - 0.015 | 15 | - |
| Winter Squash | 27 | 0 | | | 0.066 ^ | NT | - |
| **TOTAL** | **3,769** | **17** | | | | | |
| **Fonofos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.002 - 0.005 | NT | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 - 0.005 | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **3,513** | **0** | | | | | |
| **Forchlorfenuron (plant growth regulator)** | | | | | | | |
| Apples | 441 | 0 | | | 0.0001 ^ | 0.01 | - |
| Cauliflower | 124 | 0 | | | 0.0005 ^ | NT | - |
| Lettuce | 191 | 0 | | | 0.0005 ^ | NT | - |
| **TOTAL** | **756** | **0** | | | | | |
| **Halosulfuron methyl (herbicide)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.001 ^ | 0.1 | - |
| **TOTAL** | **59** | **0** | | | | | |
| **Heptachlor (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.003 - 0.006 | 0.05 AL | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Eggplant | 736 | 0 | | | 0.004 ^ | 0.03 AL | - |
| Grapefruit | 742 | 0 | | | 0.003 - 0.006 | 0.05 AL | 0.01 |
| Grapes | 523 | 0 | | | 0.0008 ^ | 0.05 AL | - |
| Green Beans | 127 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Green Beans, Frozen | 395 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.006 | 0.05 AL | - |
| Orange Juice | 744 | 0 | | | 0.003 - 0.006 | 0.05 AL | 0.01 |
| Oranges | 741 | 0 | | | 0.003 - 0.006 | 0.05 AL | 0.01 |
| Pears | 555 | 0 | | | 0.0008 - 0.006 | 0.05 AL | - |
| Plums | 573 | 0 | | | 0.004 ^ | 0.05 AL | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 0.05 AL | - |
| Watermelon | 182 | 0 | | | 0.0008 - 0.003 | 0.05 AL | - |
| Winter Squash | 731 | 0 | | | 0.003 - 0.006 | 0.05 AL | - |
| **TOTAL** | **8,772** | **0** | | | | | |
| **Heptachlor epoxide (metabolite of Heptachlor)** | | | | | | | |
| Apples | 528 | 0 | | | 0.004 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.006 | 0.05 AL | - |
| Cauliflower | 741 | 0 | | | 0.004 ^ | 0.05 AL | - |
| Grapefruit | 742 | 0 | | | 0.004 - 0.006 | 0.05 AL | - |
| Grapes | 523 | 0 | | | 0.002 ^ | 0.05 AL | - |
| Green Beans | 181 | 0 | | | 0.001 - 0.006 | 0.05 AL | - |
| Green Beans, Frozen | 555 | 0 | | | 0.001 - 0.006 | 0.05 AL | - |
| Lettuce | 743 | 0 | | | 0.004 - 0.006 | 0.05 AL | - |
| Orange Juice | 744 | 0 | | | 0.004 - 0.006 | 0.05 AL | 10 |
| Oranges | 741 | 0 | | | 0.004 - 0.006 | 0.05 AL | 10 |
| Pears | 555 | 0 | | | 0.002 - 0.006 | 0.05 AL | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.004 | 0.05 AL | - |
| Winter Squash | 731 | 7 | 1.0 | 0.006 - 0.059 | 0.004 - 0.006 | 0.05 AL | - |
| **TOTAL** | **7,524** | **7** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Heptachlor epoxide cis (metabolite of Heptachlor)** | | | | | | | |
| Eggplant | 736 | 0 | | | 0.004 ^ | NT | - |
| Plums | 573 | 0 | | | 0.004 ^ | NT | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | NT | - |
| **TOTAL** | **1,462** | **0** | | | | | |
| **Heptachlor epoxide trans (metabolite of Heptachlor)** | | | | | | | |
| Eggplant | 736 | 0 | | | 0.004 ^ | NT | - |
| Plums | 573 | 0 | | | 0.004 ^ | NT | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | NT | - |
| **TOTAL** | **1,462** | **0** | | | | | |
| **Hexachlorobenzene - HCB (impurity of Quintozene)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.003 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | 0.1 | - |
| Grapes | 523 | 0 | | | 0.0008 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.002 ^ | 0.1 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.002 ^ | 0.1 | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| Pears | 394 | 0 | | | 0.0008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.0008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.003 ^ | NT | - |
| **TOTAL** | **4,427** | **0** | | | | | |
| **Hexaconazole (fungicide)** | | | | | | | |
| Orange Juice | 528 | 0 | | | 0.020 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.020 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **1,117** | **0** | | | | | |
| **Hydroprene (insect growth regulator)** | | | | | | | |
| Apples | 528 | 0 | | | 0.013 ^ | 0.2 | - |
| Cantaloupe | 396 | 0 | | | 0.013 ^ | 0.2 | - |
| Cauliflower | 741 | 0 | | | 0.013 ^ | 0.2 | - |
| Lettuce | 527 | 0 | | | 0.013 ^ | 0.2 | - |
| Watermelon | 59 | 0 | | | 0.010 ^ | 0.2 | - |
| Winter Squash | 518 | 0 | | | 0.013 ^ | 0.2 | - |
| **TOTAL** | **2,769** | **0** | | | | | |
| **3-Hydroxycarbofuran (metabolite of Carbofuran)** | | | | | | | |
| Apples | 528 | 0 | | | 0.0006 ^ | NT | - |
| Cantaloupe | 558 | 1 | 0.2 | 0.067 ^ | 0.004 - 0.012 | 0.2 | - |
| Cauliflower | 741 | 0 | | | 0.0006 ^ | NT | - |
| Grapes | 739 | 0 | | | 0.004 - 0.010 | 0.2 | - |
| Green Beans | 126 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.0006 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Strawberries | 733 | 0 | | | 0.004 - 0.007 | 0.2 | - |
| Watermelon | 182 | 0 | | | 0.004 - 0.010 | 0.4 | - |
| Winter Squash | 731 | 0 | | | 0.004 - 0.012 | 0.6 | - |
| **TOTAL** | **6,707** | **1** | | | | | |
| **5-Hydroxythiabendazole (metabolite of Thiabendazole)** | | | | | | | |
| Orange Juice | 132 | 0 | | | 0.010 ^ | 10 | - |
| Oranges | 87 | 0 | | | 0.010 ^ | 10 | - |
| Strawberries | 521 | 0 | | | 0.002 ^ | 5.0 | - |
| **TOTAL** | **740** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Imazalil (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.010 - 0.13 | NT | 5 |
| Cantaloupe | 396 | 0 | | | 0.030 ^ | NT | 2 |
| Cauliflower | 741 | 0 | | | 0.010 ^ | NT | - |
| Grapefruit | 742 | 365 | 49.2 | 0.045 - 0.55 | 0.030 - 0.045 | 10.0 | 5 |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 512 | 0 | | | 0.010 ^ | NT | - |
| Orange Juice | 744 | 11 | 1.5 | 0.050 - 0.25 | 0.030 ^ | 10.0 | 5 |
| Oranges | 741 | 550 | 74.2 | 0.050 - 0.79 | 0.030 ^ | 10.0 | 5 |
| Pears | 394 | 0 | | | 0.005 ^ | NT | 5 |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.030 ^ | NT | - |
| **TOTAL** | **5,903** | **926** | | | | | |
| **Imidacloprid (insecticide)** | | | | | | | |
| Apples | 743 | 198 | 26.6 | 0.0002 - 0.015 | 0.0001 - 0.009 | 0.6 | 0.5 |
| Cantaloupe | 162 | 8 | 4.9 | 0.015 ^ | 0.009 ^ | 0.5 | 0.2 |
| Cauliflower | 741 | 629 | 84.9 | 0.0002 - 0.047 | 0.0001 - 0.0002 | 3.5 | 0.5 |
| Grapefruit | 719 | 0 | | | 0.009 - 0.014 | 0.7 | 1 |
| Grapes | 739 | 134 | 18.1 | 0.010 - 0.47 | 0.009 - 0.010 | 1.0 | 1 |
| Lettuce | 743 | 543 | 73.1 | 0.0002 - 0.19 | 0.0001 - 0.009 | 3.5 | 2 |
| Orange Juice | 744 | 0 | | | 0.009 - 0.010 | 0.7 | 1 |
| Oranges | 741 | 2 | 0.3 | 0.015 - 0.095 | 0.009 - 0.010 | 0.7 | 1 |
| Pears | 555 | 22 | 4.0 | 0.010 - 0.098 | 0.009 - 0.010 | 0.6 | 1 |
| Strawberries | 733 | 9 | 1.2 | 0.015 - 0.27 | 0.009 - 0.033 | 0.50 | - |
| Watermelon | 123 | 15 | 12.2 | 0.010 - 0.18 | 0.009 - 0.010 | 0.50 | 0.2 |
| Winter Squash | 213 | 7 | 3.3 | 0.015 ^ | 0.009 ^ | 0.5 | 1 |
| **TOTAL** | **6,956** | **1,567** | | | | | |
| **Indoxacarb (insecticide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | - |
| Pears | 394 | 0 | | | 0.010 ^ | 0.20 | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |
| **Iprodione (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.008 ^ | NT | 5 |
| Cantaloupe | 396 | 0 | | | 0.008 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.008 - 0.028 | NT | - |
| Grapes | 739 | 119 | 16.1 | 0.025 - 1.6 | 0.015 - 0.023 | 60.0 | 10 |
| Green Beans | 181 | 11 | 6.1 | 0.025 - 0.39 | 0.015 - 0.021 | 2.0 | 2 |
| Green Beans, Frozen | 555 | 10 | 1.8 | 0.025 - 0.22 | 0.015 - 0.021 | 2.0 | 2 |
| Lettuce | 743 | 14 | 1.9 | 0.014 - 1.2 | 0.008 - 0.056 | 25.0 | 25 |
| Pears (V-6) | 395 | 6 | 1.5 | 0.038 - 0.39 | 0.021 - 0.023 | NT | 5 |
| Plums | 573 | 227 | 39.6 | 0.065 - 7.1 | 0.039 ^ | 20.0 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.039 ^ | 20.0 | - |
| Strawberries | 737 | 13 | 1.8 | 0.035 - 2.5 | 0.015 - 0.029 | 15 | 10 |
| Watermelon | 86 | 0 | | | 0.015 - 0.023 | NT | - |
| Winter Squash | 518 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **6,345** | **400** | | | | | |
| **Iprodione metabolite isomer (metabolite of Iprodione)** | | | | | | | |
| Apples | 513 | 0 | | | 0.098 - 1.4 | NT | - |
| Cauliflower | 711 | 0 | | | 0.098 - 0.66 | NT | - |
| Lettuce | 469 | 1 | 0.2 | 0.16 ^ | 0.098 - 1.4 | 25.0 | - |
| Strawberries | 521 | 0 | | | 0.062 ^ | 15 | - |
| **TOTAL** | **2,214** | **1** | | | | | |
| **Kresoxim-methyl (fungicide)** | | | | | | | |
| Apples | 292 | 0 | | | 0.003 ^ | 0.5 | 0.2 |
| Cauliflower | 170 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 338 | 0 | | | 0.003 ^ | NT | - |
| **TOTAL** | **800** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Lindane - BHC gamma (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.003 | 1 | - |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.006 | 3 | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | 1 | - |
| Eggplant | 736 | 0 | | | 0.005 ^ | 1 | - |
| Grapefruit | 742 | 0 | | | 0.002 - 0.005 | 0.5 AL | - |
| Grapes | 739 | 0 | | | 0.002 ^ | 1 | - |
| Green Beans | 181 | 0 | | | 0.001 - 0.002 | 0.5 AL | - |
| Green Beans, Frozen | 555 | 1 | 0.2 | 0.002 ^ | 0.001 - 0.002 | 0.5 AL | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.003 | 3 | - |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 0.5 AL | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 0.5 AL | - |
| Pears | 555 | 0 | | | 0.002 ^ | 1 | - |
| Plums | 573 | 0 | | | 0.004 ^ | 1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 1 | - |
| Strawberries | 216 | 0 | | | 0.002 ^ | 1 | - |
| Watermelon | 182 | 0 | | | 0.002 ^ | 3 | - |
| Winter Squash | 731 | 0 | | | 0.002 - 0.006 | 3 | - |
| **TOTAL** | **9,633** | **1** | | | | | |
| **Linuron (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cauliflower | 725 | 0 | | | 0.003 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce (V-2) | 527 | 2 | 0.4 | 0.005 ^ | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **3,283** | **2** | | | | | |
| **Malathion (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 - 0.004 | 8 | 2 |
| Cantaloupe | 558 | 0 | | | 0.004 - 0.007 | 8 | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | 8 | - |
| Eggplant | 736 | 2 | 0.3 | 0.013 - 0.041 | 0.008 ^ | 8 | - |
| Grapefruit | 742 | 1 | 0.1 | 0.002 ^ | 0.001 - 0.004 | 8 | 4 |
| Grapes | 739 | 0 | | | 0.004 ^ | 8 | 8 |
| Green Beans | 181 | 0 | | | 0.004 - 0.008 | 8 | 1 |
| Green Beans, Frozen | 555 | 0 | | | 0.004 - 0.008 | 8 | 1 |
| Lettuce | 743 | 1 | 0.1 | 0.007 ^ | 0.003 - 0.004 | 8 | - |
| Orange Juice | 744 | 0 | | | 0.004 ^ | 8 | 4 |
| Oranges | 741 | 0 | | | 0.004 ^ | 8 | 4 |
| Pears | 555 | 0 | | | 0.004 ^ | 8 | - |
| Plums | 573 | 0 | | | 0.008 ^ | 8 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.008 ^ | 8 | - |
| Strawberries | 737 | 117 | 15.9 | 0.001 - 0.28 | 0.0007 - 0.004 | 8 | 1 |
| Watermelon | 182 | 0 | | | 0.004 - 0.006 | 8 | - |
| Winter Squash | 731 | 1 | 0.1 | 0.007 ^ | 0.004 - 0.007 | 8 | - |
| **TOTAL** | **10,154** | **122** | | | | | |
| **Malathion oxygen analog (metabolite of Malathion)** | | | | | | | |
| Apples | 743 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.003 - 0.007 | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Eggplant | 736 | 0 | | | 0.019 ^ | NT | - |
| Grapefruit (V-5) | 742 | 5 | 0.7 | 0.002 ^ | 0.001 - 0.003 | NT | - |
| Grapes | 739 | 0 | | | 0.003 - 0.006 | NT | - |
| Green Beans | 181 | 0 | | | 0.003 - 0.005 | NT | - |
| Green Beans, Frozen | 555 | 0 | | | 0.003 - 0.005 | NT | - |
| Lettuce | 743 | 0 | | | 0.003 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.003 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Oranges | 741 | 0 | | | 0.003 ^ | NT | - |
| Pears | 555 | 0 | | | 0.003 - 0.006 | NT | - |
| Plums | 573 | 0 | | | 0.019 ^ | NT | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.019 ^ | NT | - |
| Strawberries (V-16) | 737 | 16 | 2.2 | 0.002 - 0.030 | 0.0009 - 0.003 | NT | - |
| Watermelon | 182 | 0 | | | 0.003 - 0.006 | NT | - |
| Winter Squash | 731 | 0 | | | 0.003 - 0.007 | NT | - |
| **TOTAL** | **10,154** | **21** | | | | | |
| **Metalaxyl (fungicide)** | | | | | | | |
| Apples | 700 | 0 | | | 0.006 - 0.040 | 0.2 | 1 |
| Cantaloupe | 558 | 11 | 2.0 | 0.014 - 0.017 | 0.008 - 0.010 | 1.0 | 0.2 |
| Cauliflower | 710 | 2 | 0.3 | 0.010 ^ | 0.006 - 0.083 | 1.0 | 0.5 |
| Eggplant | 736 | 0 | | | 0.020 ^ | 1.0 | - |
| Grapefruit | 742 | 0 | | | 0.010 - 0.040 | 1.0 | 5 |
| Grapes | 739 | 12 | 1.6 | 0.041 - 0.39 | 0.010 - 0.015 | 2.0 | 1 |
| Green Beans | 181 | 0 | | | 0.010 - 0.015 | 0.2 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.010 - 0.015 | 0.2 | - |
| Lettuce | 743 | 11 | 1.5 | 0.010 - 0.13 | 0.006 - 0.083 | 5.0 | 2 |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 1.0 | 5 |
| Oranges | 741 | 0 | | | 0.010 ^ | 1.0 | 5 |
| Pears | 394 | 0 | | | 0.015 ^ | NT | 1 |
| Plums | 573 | 0 | | | 0.020 ^ | 1.0 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.020 ^ | 1.0 | - |
| Strawberries | 737 | 48 | 6.5 | 0.017 - 0.35 | 0.010 - 0.019 | 10.0 | - |
| Watermelon | 182 | 1 | 0.5 | 0.017 ^ | 0.008 - 0.015 | 1.0 | 0.2 |
| Winter Squash | 731 | 7 | 1.0 | 0.014 - 0.10 | 0.008 - 0.010 | 1.0 | 0.2 |
| **TOTAL** | **9,919** | **92** | | | | | |
| **Methamidophos (insecticide) (also a metabolite of Acephate)** | | | | | | | |
| Apples | 743 | 0 | | | 0.001 - 0.002 | 0.02 | - |
| Cantaloupe | 558 | 5 | 0.9 | 0.003 - 0.023 | 0.002 - 0.004 | 0.5 | - |
| Eggplant | 736 | 49 | 6.7 | 0.007 - 0.37 | 0.004 ^ | 1.0 | - |
| Grapefruit | 214 | 0 | | | 0.002 ^ | 0.02 | - |
| Grapes | 524 | 1 | 0.2 | 0.003 ^ | 0.002 - 0.008 | 0.02 | - |
| Green Beans | 181 | 45 | 24.9 | 0.003 - 1.0 | 0.002 - 0.005 | 1 | - |
| Green Beans, Frozen | 555 | 141 | 25.4 | 0.003 - 0.27 | 0.002 - 0.005 | 1 | - |
| Lettuce | 743 | 20 | 2.7 | 0.002 - 0.026 | 0.001 - 0.002 | 1.0 | - |
| Orange Juice | 744 | 0 | | | 0.002 ^ | 0.02 | - |
| Oranges | 741 | 0 | | | 0.002 ^ | 0.02 | - |
| Pears | 555 | 0 | | | 0.002 - 0.008 | 0.02 | - |
| Plums | 573 | 2 | 0.3 | 0.007 ^ | 0.004 ^ | 0.02 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.004 ^ | 0.02 | - |
| Strawberries | 216 | 1 | 0.5 | 0.003 ^ | 0.002 ^ | 0.02 | - |
| Watermelon | 182 | 2 | 1.1 | 0.006 - 0.069 | 0.002 - 0.008 | 0.5 | - |
| Winter Squash (X-3) | 731 | 8 | 1.1 | 0.003 - 0.17 | 0.002 - 0.004 | 0.02 | - |
| **TOTAL** | **8,149** | **274** | | | | | |
| **Methidathion (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.004 | 0.05 | 0.5 |
| Cantaloupe | 396 | 0 | | | 0.010 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.004 ^ | 2.0 | 2 |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | 1 |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 744 | 1 | 0.1 | 0.008 ^ | 0.004 - 0.005 | 2.0 | 2 |
| Oranges | 741 | 8 | 1.1 | 0.007 - 0.032 | 0.004 - 0.005 | 2.0 | 2 |
| Pears | 555 | 1 | 0.2 | 0.007 ^ | 0.004 ^ | 0.05 | 1 |
| Plums | 573 | 0 | | | 0.003 ^ | 0.05 | 0.2 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.003 ^ | 0.05 | 0.2 |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **6,492** | **10** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Methiocarb (insecticide) (analyzed as sulfoxide)** | | | | | | | |
| Apples | 513 | 0 | | | 0.0006 ^ | NT | - |
| Cauliflower (V-1) | 711 | 1 | 0.1 | 0.001 ^ | 0.0006 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 512 | 0 | | | 0.0006 ^ | NT | - |
| Pears | 394 | 0 | | | 0.010 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **3,239** | **1** | | | | | |
| **Methomyl (insecticide)** | | | | | | | |
| Apples | 743 | 4 | 0.5 | 0.002 - 0.028 | 0.001 - 0.014 | 1 | 2 |
| Cantaloupe | 558 | 88 | 15.8 | 0.020 - 0.14 | 0.012 - 0.014 | 0.2 | 0.2 |
| Cauliflower | 741 | 14 | 1.9 | 0.002 - 0.041 | 0.001 ^ | 2 | 2 |
| Eggplant | 736 | 22 | 3.0 | 0.020 - 0.22 | 0.012 ^ | 0.2 | - |
| Grapefruit | 719 | 0 | | | 0.014 ^ | 2 | 1 |
| Grapes | 739 | 42 | 5.7 | 0.010 - 0.80 | 0.010 - 0.014 | 5 | 5 |
| Green Beans | 181 | 7 | 3.9 | 0.025 - 0.34 | 0.014 - 0.015 | 2 | 1 |
| Green Beans, Frozen | 555 | 8 | 1.4 | 0.023 - 0.20 | 0.014 - 0.015 | 2 | 1 |
| Lettuce | 743 | 100 | 13.5 | 0.002 - 2.2 | 0.001 - 0.014 | 5 | 5 |
| Orange Juice | 744 | 0 | | | 0.010 - 0.014 | 2 | 1 |
| Oranges | 741 | 0 | | | 0.010 - 0.014 | 2 | 1 |
| Pears | 555 | 0 | | | 0.010 - 0.014 | 4 | 2 |
| Strawberries | 216 | 36 | 16.7 | 0.023 - 1.9 | 0.014 ^ | 2 | - |
| Watermelon | 182 | 16 | 8.8 | 0.007 - 0.11 | 0.004 - 0.014 | 0.2 | 0.2 |
| Winter Squash | 731 | 0 | | | 0.012 - 0.014 | 0.2 | 0.1 |
| **TOTAL** | **8,884** | **337** | | | | | |
| **Methoprene (insect growth regulator)** | | | | | | | |
| Apples | 528 | 0 | | | 0.014 - 0.048 | NT | - |
| Cauliflower | 741 | 0 | | | 0.048 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.014 - 0.096 | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Methoxychlor Total (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.005 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **2,318** | **0** | | | | | |
| **Methoxychlor olefin (metabolite of Methoxychlor)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cauliflower | 727 | 0 | | | 0.001 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| **TOTAL** | **1,782** | **0** | | | | | |
| **Methoxychlor p,p' (isomer of Methoxychlor)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.009 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Green Beans | 54 | 0 | | | 0.020 ^ | NT | - |
| Green Beans, Frozen | 160 | 0 | | | 0.010 - 0.020 | NT | - |
| Orange Juice | 528 | 0 | | | 0.020 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.020 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.009 ^ | NT | - |
| **TOTAL** | **3,162** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Methoxyfenozide (insecticide)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.001 ^ | 0.3 | - |
| **TOTAL** | **59** | **0** | | | | | |
| **Metolachlor (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.008 - 0.010 | 0.3 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.008 - 0.010 | 0.3 | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Plums | 573 | 0 | | | 0.023 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.023 ^ | 0.1 | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **6,206** | **0** | | | | | |
| **Metribuzin (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.013 - 0.044 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.013 - 0.044 | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.013 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.030 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.030 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **4,744** | **0** | | | | | |
| **Mevinphos Total (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.002 - 0.012 | 0.5 | - |
| Grapes | 739 | 0 | | | 0.002 - 0.008 | 0.5 | - |
| Green Beans | 127 | 0 | | | 0.017 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.017 ^ | NT | - |
| Lettuce | 743 | 0 | | | 0.002 ^ | 0.5 | - |
| Orange Juice | 528 | 0 | | | 0.004 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.004 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Strawberries | 737 | 2 | 0.3 | 0.001 ^ | 0.0006 - 0.002 | 1.0 | - |
| Watermelon | 182 | 0 | | | 0.002 - 0.008 | 0.5 | - |
| Winter Squash | 518 | 0 | | | 0.012 ^ | NT | - |
| **TOTAL** | **5,974** | **2** | | | | | |
| **Monocrotophos (insecticide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.007 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.007 ^ | NT | - |
| **TOTAL** | **1,895** | **0** | | | | | |
| **Myclobutanil (fungicide)** | | | | | | | |
| Apples | 728 | 33 | 4.5 | 0.002 - 0.020 | 0.0009 - 0.020 | 0.5 | 0.5 |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.020 | 0.20 | - |
| Cauliflower | 711 | 0 | | | 0.0009 ^ | 0.03 | - |
| Eggplant | 736 | 0 | | | 0.040 ^ | 0.03 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 739 | 117 | 15.8 | 0.033 - 0.35 | 0.020 - 0.023 | 1.0 | 1 |
| Green Beans | 181 | 17 | 9.4 | 0.025 - 0.18 | 0.015 - 0.020 | 1.0 | - |
| Green Beans, Frozen | 555 | 10 | 1.8 | 0.025 - 0.033 | 0.015 - 0.020 | 1.0 | - |
| Lettuce | 728 | 0 | | | 0.0009 - 0.020 | 0.03 | - |
| Orange Juice | 528 | 0 | | | 0.020 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.020 ^ | NT | - |
| Pears | 394 | 0 | | | 0.023 ^ | NT | 0.5 |
| Plums | 573 | 0 | | | 0.033 ^ | 2.0 | 0.2 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.033 ^ | 2.0 | 0.2 |
| Strawberries (X-2) | 737 | 256 | 34.7 | 0.002 - 0.69 | 0.001 - 0.020 | 0.50 | 1 |
| Watermelon | 182 | 0 | | | 0.020 - 0.023 | 0.20 | - |
| Winter Squash | 731 | 2 | 0.3 | 0.014 ^ | 0.008 - 0.020 | 0.20 | - |
| **TOTAL** | **8,759** | **435** | | | | | |
| **Napropamide (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.007 - 0.020 | 0.1 | - |
| Cantaloupe | 558 | 1 | 0.2 | 0.067 ^ | 0.020 - 0.040 | 0.1 | - |
| Cauliflower | 741 | 0 | | | 0.007 ^ | 0.1 | - |
| Eggplant | 736 | 0 | | | 0.033 ^ | 0.1 | - |
| Grapefruit | 742 | 0 | | | 0.020 ^ | 0.1 | - |
| Lettuce | 527 | 0 | | | 0.007 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.020 ^ | 0.1 | - |
| Oranges | 741 | 0 | | | 0.020 ^ | 0.1 | - |
| Pears | 161 | 0 | | | 0.020 ^ | 0.1 | - |
| Plums | 573 | 0 | | | 0.033 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.033 ^ | 0.1 | - |
| Watermelon | 118 | 0 | | | 0.020 ^ | 0.1 | - |
| Winter Squash | 731 | 0 | | | 0.020 - 0.040 | 0.1 | - |
| **TOTAL** | **7,268** | **1** | | | | | |
| **Naptalam (herbicide)** | | | | | | | |
| Cantaloupe | 88 | 0 | | | 0.24 ^ | 0.1 | - |
| Winter Squash | 60 | 0 | | | 0.24 ^ | NT | - |
| **TOTAL** | **148** | **0** | | | | | |
| **1-Naphthal (metabolite of Carbaryl)** | | | | | | | |
| Apples ( V-2) | 54 | 2 | 3.7 | 0.017 - 0.11 | 0.010 ^ | NT | - |
| Cantaloupe | 523 | 3 | 0.6 | 0.017 ^ | 0.010 - 0.16 | 10 | - |
| Grapefruit | 196 | 1 | 0.5 | 0.017 ^ | 0.010 ^ | 10 | - |
| Grapes | 198 | 11 | 5.6 | 0.017 - 0.25 | 0.010 ^ | 10 | - |
| Green Beans | 54 | 0 | | | 0.010 ^ | 10 | - |
| Green Beans, Frozen | 142 | 0 | | | 0.010 ^ | 10 | - |
| Lettuce | 180 | 0 | | | 0.010 ^ | 10 | - |
| Orange Juice | 198 | 0 | | | 0.010 ^ | 10 | - |
| Oranges | 198 | 2 | 1.0 | 0.017 - 0.083 | 0.010 ^ | 10 | - |
| Pears (V-10) | 90 | 10 | 11.1 | 0.017 - 0.24 | 0.010 ^ | NT | - |
| Strawberries | 180 | 3 | 1.7 | 0.017 ^ | 0.010 ^ | 10 | - |
| Watermelon | 105 | 0 | | | 0.010 - 0.018 | 10 | - |
| Winter Squash | 678 | 0 | | | 0.010 - 0.16 | 10 | - |
| **TOTAL** | **2,796** | **32** | | | | | |
| **Nitrapyrin (bactericide)** | | | | | | | |
| Cantaloupe | 44 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 43 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **87** | **0** | | | | | |
| **Norflurazon (herbicide)** | | | | | | | |
| Apples | 685 | 0 | | | 0.005 - 0.032 | 0.1 | - |
| Cantaloupe | 396 | 0 | | | 0.018 ^ | NT | - |
| Cauliflower | 404 | 0 | | | 0.016 - 0.11 | NT | - |
| Grapefruit | 214 | 0 | | | 0.020 ^ | 0.2 | - |
| Grapes | 739 | 0 | | | 0.010 - 0.020 | 0.1 | - |
| Lettuce | 440 | 0 | | | 0.005 - 0.11 | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Orange Juice | 744 | 0 | | | 0.020 ^ | 0.2 | - |
| Oranges | 741 | 0 | | | 0.020 ^ | 0.2 | - |
| Pears | 555 | 0 | | | 0.010 - 0.020 | 0.1 | - |
| Plums | 573 | 0 | | | 0.053 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.053 ^ | 0.1 | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **6,226** | **0** | | | | | |
| **Norflurazon desmethyl (metabolite of Norflurazon)** | | | | | | | |
| Apples | 743 | 0 | | | 0.030 - 0.060 | 0.1 | - |
| Cantaloupe | 44 | 0 | | | 0.021 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.060 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.030 - 0.050 | 0.2 | - |
| Grapes | 739 | 0 | | | 0.010 - 0.030 | 0.1 | - |
| Lettuce | 527 | 0 | | | 0.018 - 0.12 | NT | - |
| Orange Juice | 744 | 0 | | | 0.030 ^ | 0.2 | - |
| Oranges | 741 | 0 | | | 0.030 ^ | 0.2 | - |
| Pears | 555 | 0 | | | 0.010 - 0.030 | 0.1 | - |
| Plums | 573 | 0 | | | 0.041 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.041 ^ | 0.1 | - |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 43 | 0 | | | 0.021 ^ | NT | - |
| **TOTAL** | **5,881** | **0** | | | | | |
| **Omethoate (insecticide) (also metabolite of Dimethoate)** | | | | | | | |
| Apples | 743 | 5 | 0.7 | 0.004 - 0.037 | 0.002 - 0.004 | 2 | - |
| Cantaloupe | 558 | 13 | 2.3 | 0.007 - 0.062 | 0.004 - 0.018 | 1 | - |
| Cauliflower | 725 | 12 | 1.7 | 0.004 - 0.013 | 0.002 ^ | 2 | - |
| Grapefruit | 214 | 0 | | | 0.004 ^ | 2 | - |
| Grapes | 739 | 6 | 0.8 | 0.012 - 0.050 | 0.004 - 0.008 | 1 | - |
| Green Beans | 181 | 18 | 9.9 | 0.007 - 0.13 | 0.004 - 0.005 | 2 | - |
| Green Beans, Frozen | 555 | 5 | 0.9 | 0.008 - 0.031 | 0.004 - 0.005 | 2 | - |
| Lettuce | 743 | 64 | 8.6 | 0.004 - 0.077 | 0.002 - 0.004 | 2 | - |
| Orange Juice | 744 | 0 | | | 0.004 ^ | 2 | - |
| Oranges | 741 | 1 | 0.1 | 0.007 ^ | 0.004 ^ | 2 | - |
| Pears | 555 | 1 | 0.2 | 0.012 ^ | 0.004 - 0.008 | 2 | - |
| Watermelon | 182 | 5 | 2.7 | 0.007 - 0.013 | 0.004 - 0.008 | 1 | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **7,198** | **130** | | | | | |
| **Oryzalin (herbicide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.010 ^ | 0.05 | - |
| Pears | 394 | 0 | | | 0.010 ^ | 0.05 | - |
| Watermelon | 64 | 0 | | | 0.020 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |
| **Oxadixyl (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.013 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.015 | NT | - |
| Cauliflower | 741 | 0 | | | 0.013 ^ | NT | - |
| Lettuce | 728 | 0 | | | 0.013 - 0.015 | NT | - |
| Orange Juice | 528 | 0 | | | 0.015 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 519 | 1 | 0.2 | 0.025 ^ | 0.008 - 0.015 | 0.1 | - |
| **TOTAL** | **4,127** | **1** | | | | | |
| **Oxamyl (insecticide)** | | | | | | | |
| Apples | 743 | 2 | 0.3 | 0.006 - 0.022 | 0.0003 - 0.008 | 2 | 2 |
| Cantaloupe | 558 | 4 | 0.7 | 0.013 - 0.062 | 0.008 ^ | 2.0 | 2 |
| Cauliflower | 711 | 0 | | | 0.0003 - 0.0009 | NT | - |
| Eggplant | 736 | 12 | 1.6 | 0.025 - 0.16 | 0.015 ^ | 2.0 | - |
| Grapefruit | 719 | 0 | | | 0.004 - 0.008 | 3 | 5 |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 523 | 0 | | | 0.010 ^ | NT | - |
| Green Beans (V-1) | 126 | 1 | 0.8 | 0.10 ^ | 0.020 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.020 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.0003 - 0.003 | NT | - |
| Orange Juice | 744 | 0 | | | 0.008 - 0.010 | 3 | 5 |
| Oranges | 741 | 0 | | | 0.010 ^ | 3 | 5 |
| Pears | 555 | 0 | | | 0.008 - 0.010 | 2.0 | - |
| Watermelon | 182 | 6 | 3.3 | 0.022 - 0.16 | 0.004 - 0.010 | 2 | - |
| Winter Squash | 731 | 0 | | | 0.008 ^ | 2.0 | - |
| **TOTAL** | **7,991** | **25** | | | | | |
| **Oxamyl oxime (metabolite of Oxamyl)** | | | | | | | |
| Apples | 215 | 0 | | | 0.010 ^ | 2 | 2 |
| Cantaloupe | 148 | 8 | 5.4 | 0.017 - 0.16 | 0.010 ^ | 2.0 | 2 |
| Grapefruit | 683 | 0 | | | 0.010 - 0.014 | 3 | 5 |
| Grapes | 523 | 0 | | | 0.010 ^ | NT | - |
| Orange Juice | 672 | 0 | | | 0.010 ^ | 3 | 5 |
| Oranges | 525 | 0 | | | 0.010 ^ | 3 | 5 |
| Pears | 555 | 0 | | | 0.010 ^ | 2.0 | - |
| Watermelon | 123 | 13 | 10.6 | 0.014 - 0.24 | 0.010 ^ | 2 | - |
| Winter Squash | 213 | 0 | | | 0.010 ^ | 2.0 | - |
| **TOTAL** | **3,657** | **21** | | | | | |
| **Oxychlordane (metabolite of Chlordane)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.008 | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 - 0.008 | NT | - |
| Lettuce | 527 | 0 | | | 0.002 - 0.008 | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Oxydemeton methyl (insecticide)** | | | | | | | |
| Grapefruit | 220 | 0 | | | 0.020 ^ | 1 | - |
| Strawberries | 521 | 0 | | | 0.015 ^ | 2 | - |
| **TOTAL** | **741** | **0** | | | | | |
| **Oxydemeton methyl sulfone (metabolite of Oxydemeton methyl)** | | | | | | | |
| Apples | 743 | 0 | | | 0.009 - 0.015 | 1 | - |
| Cantaloupe | 162 | 0 | | | 0.015 ^ | 0.3 | - |
| Eggplant | 736 | 1 | 0.1 | 0.047 ^ | 0.028 ^ | 1 | - |
| Grapefruit | 720 | 0 | | | 0.005 - 0.015 | 1 | - |
| Grapes | 739 | 0 | | | 0.015 - 0.023 | 0.1 | - |
| Green Beans | 181 | 0 | | | 0.010 - 0.015 | 0.5 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.010 - 0.015 | 0.5 | - |
| Lettuce | 743 | 0 | | | 0.009 - 0.015 | 2 | - |
| Orange Juice | 744 | 0 | | | 0.015 ^ | 1 | - |
| Oranges | 741 | 0 | | | 0.015 ^ | 1 | - |
| Pears | 555 | 0 | | | 0.015 - 0.023 | 0.3 | - |
| Plums | 573 | 0 | | | 0.028 ^ | 1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.028 ^ | 1 | - |
| Strawberries | 737 | 0 | | | 0.002 - 0.015 | 2 | - |
| Watermelon | 182 | 0 | | | 0.012 - 0.023 | 0.3 | - |
| Winter Squash | 213 | 0 | | | 0.015 ^ | 0.3 | - |
| **TOTAL** | **8,477** | **1** | | | | | |
| **Oxyfluorfen (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.010 - 0.030 | 0.05 | - |
| Cauliflower | 741 | 0 | | | 0.010 ^ | 0.05 | - |
| Grapes | 739 | 0 | | | 0.025 - 0.030 | 0.05 | - |
| Lettuce | 527 | 0 | | | 0.003 - 0.019 | NT | - |
| Orange Juice | 528 | 0 | | | 0.030 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.030 ^ | NT | - |
| Pears | 555 | 0 | | | 0.025 - 0.030 | 0.05 | - |
| Plums | 573 | 0 | | | 0.032 ^ | 0.05 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Plums, Dried (Prunes) | 153 | 0 | | | 0.032 ^ | 0.05 | - |
| Watermelon | 64 | 0 | | | 0.025 ^ | NT | - |
| **TOTAL** | **5,148** | **0** | | | | | |
| **Parathion (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.005 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.006 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.005 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.008 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.017 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.017 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.005 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.003 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.008 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **5,266** | **0** | | | | | |
| **Parathion methyl (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | 0.2 |
| Cantaloupe | 396 | 0 | | | 0.006 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | 0.5 |
| Green Beans | 127 | 0 | | | 0.008 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.004 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **4,213** | **0** | | | | | |
| **Parathion methyl oxygen analog (metabolite of Parathion methyl)** | | | | | | | |
| Apples | 528 | 0 | | | 0.005 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Parathion oxygen analog (metabolite of Parathion)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.003 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.003 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **3,763** | **0** | | | | | |
| **Pendimethalin (herbicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.015 - 0.020 | NT | - |
| Green Beans, Frozen | 555 | 0 | | | 0.015 - 0.020 | NT | - |
| Orange Juice | 528 | 0 | | | 0.020 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.020 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash (V-2) | 518 | 2 | 0.4 | 0.027 ^ | 0.016 ^ | NT | - |
| **TOTAL** | **3,684** | **2** | | | | | |
| **Pentachloroaniline - PCA (metabolite of Quintozene)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.001 ^ | 0.1 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.010 ^ | 0.1 | - |
| Green Beans, Frozen | 395 | 0 | | | 0.010 ^ | 0.1 | - |
| Lettuce (V-1) | 527 | 1 | 0.2 | 0.002 ^ | 0.001 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **3,299** | **1** | | | | | |
| **Pentachlorobenzene - PCB (metabolite of Quintozene)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.006 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 0.1 | - |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 163 | 0 | | | 0.002 - 0.003 | 0.1 | - |
| Green Beans, Frozen | 395 | 0 | | | 0.003 ^ | 0.1 | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **4,249** | **0** | | | | | |
| **Pentachlorophenyl methyl sulfide (metabolite of Quintozene)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.001 - 0.005 | 0.1 | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Green Beans | 125 | 0 | | | 0.010 ^ | 0.1 | - |
| Green Beans, Frozen | 395 | 0 | | | 0.010 ^ | 0.1 | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **3,297** | **0** | | | | | |
| **Permethrin Total (insecticide)** | | | | | | | |
| Cantaloupe | 396 | 1 | 0.3 | 0.048 ^ | 0.029 ^ | 3.0 | 0.1 |
| Grapes | 523 | 0 | | | 0.038 ^ | NT | 2 |
| Green Beans | 126 | 0 | | | 0.075 ^ | NT | 1 |
| Green Beans, Frozen | 395 | 0 | | | 0.075 ^ | NT | 1 |
| Pears | 394 | 0 | | | 0.038 ^ | 3.0 | 2 |
| Watermelon | 123 | 0 | | | 0.030 - 0.038 | 3.0 | - |
| Winter Squash | 518 | 0 | | | 0.029 ^ | 3.0 | 0.5 |
| **TOTAL** | **2,475** | **1** | | | | | |
| **Permethrin cis (isomer of Permethrin)** | | | | | | | |
| Apples | 743 | 1 | 0.1 | 0.025 ^ | 0.002 - 0.012 | 0.05 | 2 |
| Cantaloupe | 162 | 0 | | | 0.012 ^ | 3.0 | 0.1 |
| Cauliflower | 741 | 0 | | | 0.002 - 0.008 | 1.0 | 0.5 |
| Eggplant | 736 | 4 | 0.5 | 0.022 - 0.045 | 0.013 ^ | 1.0 | 1 |
| Lettuce | 743 | 146 | 19.7 | 0.004 - 1.7 | 0.002 - 0.012 | 20.0 | 2 |
| Orange Juice (V-1) | 529 | 1 | 0.2 | 0.020 ^ | 0.012 - 0.015 | NT | 0.5 |
| Oranges | 525 | 0 | | | 0.015 ^ | NT | 0.5 |
| Pears | 161 | 0 | | | 0.012 ^ | 3.0 | 2 |
| Watermelon | 59 | 0 | | | 0.012 - 0.015 | 3.0 | - |
| Winter Squash | 213 | 3 | 1.4 | 0.020 ^ | 0.012 ^ | 3.0 | 0.5 |
| **TOTAL** | **4,612** | **155** | | | | | |
| **Permethrin trans (isomer of Permethrin)** | | | | | | | |
| Apples | 743 | 1 | 0.1 | 0.037 ^ | 0.002 - 0.012 | 0.05 | 2 |
| Cantaloupe | 162 | 0 | | | 0.012 ^ | 3.0 | 0.1 |
| Cauliflower | 741 | 0 | | | 0.002 - 0.008 | 1.0 | 0.5 |
| Eggplant | 736 | 6 | 0.8 | 0.022 - 0.046 | 0.013 ^ | 1.0 | 1 |
| Lettuce | 743 | 131 | 17.6 | 0.004 - 2.2 | 0.002 - 0.012 | 20.0 | 2 |
| Orange Juice (V-1) | 529 | 1 | 0.2 | 0.020 ^ | 0.012 - 0.015 | NT | 0.5 |
| Oranges | 525 | 0 | | | 0.015 ^ | NT | 0.5 |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Pears | 161 | 0 | | | 0.012 ^ | 3.0 | 2 |
| Watermelon | 59 | 0 | | | 0.012 - 0.015 | 3.0 | - |
| Winter Squash | 213 | 2 | 0.9 | 0.020 - 0.046 | 0.012 ^ | 3.0 | 0.5 |
| **TOTAL** | **4,612** | **141** | | | | | |
| **Phenmedipham (herbicide)** | | | | | | | |
| Cantaloupe | 396 | 0 | | | 0.097 ^ | NT | - |
| Winter Squash (V-4) | 518 | 4 | 0.8 | 0.16 ^ | 0.097 ^ | NT | - |
| **TOTAL** | **914** | **4** | | | | | |
| **Phenothrin (insecticide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.075 ^ | NT | - |
| Pears | 394 | 0 | | | 0.075 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.075 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |
| **Phenthoate (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.006 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.006 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **o-Phenylphenol (fungicide)** | | | | | | | |
| Apples | 743 | 49 | 6.6 | 0.005 - 0.53 | 0.003 - 0.010 | 25 | - |
| Cantaloupe | 558 | 34 | 6.1 | 0.014 - 0.24 | 0.008 - 0.010 | 10 | - |
| Cauliflower (V-1) | 741 | 1 | 0.1 | 0.005 ^ | 0.003 ^ | NT | - |
| Eggplant (V-1) | 1 | 1 | 100.0 | 0.057 ^ | 0.010 ^ | NT | - |
| Grapefruit | 742 | 75 | 10.1 | 0.017 ^ | 0.010 - 0.076 | 10 | 10 |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans (V-31) | 51 | 31 | 60.8 | 0.017 - 0.020 | 0.010 ^ | NT | - |
| Green Beans, Froz. (V-68) | 68 | 68 | 100.0 | 0.017 - 0.095 | 0.010 ^ | NT | - |
| Lettuce (V-80) | 639 | 80 | 12.5 | 0.017 ^ | 0.003 - 0.010 | NT | - |
| Orange Juice | 744 | 387 | 52.0 | 0.017 - 0.096 | 0.010 ^ | 10 | 0.5 |
| Oranges | 741 | 254 | 34.3 | 0.017 - 0.084 | 0.010 ^ | 10 | 10 |
| Pears | 555 | 76 | 13.7 | 0.015 - 13 | 0.010 - 0.015 | 25.0 | 20 |
| Plums | 573 | 8 | 1.4 | 0.017 ^ | 0.010 ^ | 20 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.010 ^ | 20 | - |
| Strawberries (V-3) | 3 | 3 | 100.0 | 0.017 ^ | 0.010 ^ | NT | - |
| Watermelon (V-28) | 123 | 28 | 22.8 | 0.017 ^ | 0.010 - 0.015 | NT | - |
| Winter Squash (V-128) | 689 | 128 | 18.6 | 0.014 - 0.035 | 0.008 - 0.010 | NT | - |
| **TOTAL** | **7,647** | **1,223** | | | | | |
| **Phorate (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.012 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.003 - 0.011 | 0.1 | 0.1 |
| Green Beans, Frozen | 555 | 0 | | | 0.003 - 0.008 | 0.1 | 0.1 |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.004 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.012 ^ | NT | - |
| **TOTAL** | **3,686** | **0** | | | | | |
| **Phorate oxygen analog (metabolite of Phorate)** | | | | | | | |
| Apples | 528 | 0 | | | 0.001 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.001 ^ | NT | - |
| **TOTAL** | **1,055** | **0** | | | | | |
| **Phorate sulfone (metabolite of Phorate)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.012 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 523 | 0 | | | 0.012 ^ | NT | - |
| Green Beans | 181 | 0 | | | 0.004 - 0.005 | 0.1 | 0.1 |
| Green Beans, Frozen | 555 | 0 | | | 0.004 - 0.005 | 0.1 | 0.1 |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.012 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.012 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.012 ^ | NT | - |
| **TOTAL** | **4,427** | **0** | | | | | |
| **Phorate sulfoxide (metabolite of Phorate)** | | | | | | | |
| Apples | 528 | 0 | | | 0.009 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.009 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.009 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Phosalone (insecticide)** | | | | | | | |
| Apples | 743 | 1 | 0.1 | 0.020 ^ | 0.002 - 0.006 | 10.0 | 2 |
| Grapes | 739 | 0 | | | 0.006 - 0.015 | 10.0 | - |
| Green Beans | 127 | 0 | | | 0.030 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.030 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 555 | 0 | | | 0.006 - 0.015 | 10.0 | 2 |
| Plums | 573 | 0 | | | 0.039 ^ | 15.0 | 2 |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.039 ^ | 15.0 | 2 |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| **TOTAL** | **3,876** | **1** | | | | | |
| **Phosmet (insecticide)** | | | | | | | |
| Apples | 743 | 144 | 19.4 | 0.008 - 0.28 | 0.005 ^ | 10 | 10 |
| Cantaloupe | 396 | 0 | | | 0.012 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.005 ^ | 5 | 5 |
| Grapes | 739 | 16 | 2.2 | 0.008 - 1.7 | 0.005 - 0.008 | 10 | 10 |
| Green Beans | 127 | 0 | | | 0.017 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.017 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.005 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.005 ^ | 5 | 5 |
| Oranges | 741 | 0 | | | 0.005 ^ | 5 | 5 |
| Pears | 555 | 82 | 14.8 | 0.008 - 0.86 | 0.005 - 0.008 | 10 | 10 |
| Plums | 573 | 111 | 19.4 | 0.005 - 0.58 | 0.003 ^ | 5 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.003 ^ | 5 | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.012 ^ | NT | - |
| **TOTAL** | **6,489** | **353** | | | | | |
| **Phosphamidon (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.029 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.033 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.033 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.029 ^ | NT | - |
| **TOTAL** | **4,213** | **0** | | | | | |
| **Piperonyl butoxide (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.005 - 0.016 | 8 | - |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.010 | 8 | 1 |
| Cauliflower | 741 | 0 | | | 0.005 ^ | EX | - |
| Eggplant | 736 | 0 | | | 0.012 ^ | EX | - |
| Grapefruit | 214 | 0 | | | 0.010 ^ | EX | 5 |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Grapes | 739 | 0 | | | 0.010 - 0.015 | 8 | - |
| Green Beans | 181 | 0 | | | 0.010 - 0.015 | 8 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.010 - 0.015 | 8 | - |
| Lettuce | 743 | 2 | 0.3 | 0.021 - 0.025 | 0.005 - 0.010 | EX | 50 |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 8 | 0.05 |
| Oranges | 741 | 1 | 0.1 | 0.017 ^ | 0.010 ^ | 8 | 5 |
| Pears | 555 | 0 | | | 0.010 - 0.015 | 8 | - |
| Plums | 573 | 0 | | | 0.012 ^ | 8 | - |
| Plums, Dried (Prunes) | 153 | 5 | 3.3 | 0.020 ^ | 0.012 ^ | 8 | - |
| Watermelon | 86 | 0 | | | 0.010 - 0.015 | EX | 1 |
| Winter Squash | 731 | 2 | 0.3 | 0.092 - 0.22 | 0.008 - 0.016 | EX | 1 |
| **TOTAL** | **8,793** | **10** | | | | | |
| **Pirimicarb (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.010 ^ | NT | 1 |
| Cauliflower | 741 | 0 | | | 0.010 ^ | NT | 1 |
| Lettuce | 527 | 0 | | | 0.010 ^ | NT | 1 |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **1,860** | **0** | | | | | |
| **Pirimiphos methyl (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.004 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.008 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.004 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.004 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **4,213** | **0** | | | | | |
| **Prallethrin (insecticide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.010 ^ | 1.0 | - |
| Cantaloupe | 558 | 0 | | | 0.010 - 0.024 | 1.0 | - |
| Eggplant | 736 | 0 | | | 0.028 ^ | 1.0 | - |
| Grapefruit | 742 | 0 | | | 0.010 - 0.064 | 1.0 | - |
| Grapes | 216 | 0 | | | 0.010 ^ | 1.0 | - |
| Lettuce | 216 | 0 | | | 0.010 ^ | 1.0 | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 1.0 | - |
| Oranges | 741 | 0 | | | 0.010 ^ | 1.0 | - |
| Pears | 161 | 0 | | | 0.010 ^ | 1.0 | - |
| Plums | 573 | 0 | | | 0.028 ^ | 1.0 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.028 ^ | 1.0 | - |
| Strawberries | 737 | 0 | | | 0.010 - 0.082 | 1.0 | - |
| Watermelon | 182 | 0 | | | 0.010 ^ | 1.0 | - |
| Winter Squash | 731 | 0 | | | 0.010 - 0.024 | 1.0 | - |
| **TOTAL** | **6,705** | **0** | | | | | |
| **Prochloraz (fungicide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.003 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **1,503** | **0** | | | | | |
| **Procymidone (fungicide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | 5 |
| Pears | 394 | 0 | | | 0.005 ^ | NT | 1 |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Profenofos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.011 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.011 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.011 ^ | NT | - |
| **TOTAL** | **2,777** | **0** | | | | | |
| **Prometryn (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.007 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.049 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.007 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.007 - 0.022 | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.049 ^ | NT | - |
| **TOTAL** | **3,763** | **0** | | | | | |
| **Pronamide (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.006 - 0.083 | 0.1 | - |
| Cantaloupe | 396 | 0 | | | 0.018 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.006 ^ | NT | - |
| Grapes | 739 | 0 | | | 0.007 - 0.008 | 0.1 | - |
| Green Beans | 126 | 0 | | | 0.015 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 743 | 4 | 0.5 | 0.010 - 0.053 | 0.006 - 0.008 | 1.0 | - |
| Pears | 555 | 0 | | | 0.007 - 0.008 | 0.1 | - |
| Plums | 573 | 0 | | | 0.014 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.014 ^ | 0.1 | - |
| Watermelon | 64 | 0 | | | 0.008 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **5,746** | **4** | | | | | |
| **Propamocarb hydrochloride (fungicide)** | | | | | | | |
| Watermelon | 64 | 0 | | | 0.010 ^ | 1.5 | - |
| **TOTAL** | **64** | **0** | | | | | |
| **Propargite (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.026 - 0.088 | NT | 3 |
| Cantaloupe | 396 | 0 | | | 0.008 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.026 ^ | NT | - |
| Grapefruit | 742 | 0 | | | 0.020 - 0.030 | 5 | 3 |
| Grapes | 739 | 0 | | | 0.015 - 0.020 | 10 | 7 |
| Lettuce | 527 | 0 | | | 0.026 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.020 ^ | 5 | 0.3 |
| Oranges | 741 | 0 | | | 0.020 ^ | 5 | 3 |
| Pears | 394 | 0 | | | 0.015 ^ | NT | 5 |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **6,134** | **0** | | | | | |
| **Propetamphos (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.003 | 0.1 | - |
| Cantaloupe | 558 | 0 | | | 0.003 - 0.008 | 0.1 | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | 0.1 | - |
| Grapefruit | 214 | 0 | | | 0.003 ^ | 0.1 | - |
| Grapes | 739 | 0 | | | 0.003 - 0.004 | 0.1 | - |
| Lettuce | 743 | 0 | | | 0.002 - 0.003 | 0.1 | - |
| Orange Juice | 744 | 0 | | | 0.003 ^ | 0.1 | - |
| Oranges | 741 | 0 | | | 0.003 ^ | 0.1 | - |
| Pears | 555 | 0 | | | 0.003 - 0.004 | 0.1 | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Plums | 573 | 0 | | | 0.008 ^ | 0.1 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.008 ^ | 0.1 | - |
| Strawberries | 737 | 0 | | | 0.0006 - 0.003 | 0.1 | - |
| Watermelon | 182 | 0 | | | 0.003 - 0.006 | 0.1 | - |
| Winter Squash | 731 | 0 | | | 0.003 - 0.008 | 0.1 | - |
| **TOTAL** | **8,154** | **0** | | | | | |
| **Propham (herbicide)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **59** | **0** | | | | | |
| **Propiconazole (fungicide)** | | | | | | | |
| Apples | 410 | 0 | | | 0.005 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.016 ^ | NT | - |
| Cauliflower | 572 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 469 | 0 | | | 0.005 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.036 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.036 ^ | NT | - |
| Plums | 573 | 2 | 0.3 | 0.060 - 0.12 | 0.036 ^ | 1.0 | 1 |
| Plums, Dried (Prunes) | 153 | 1 | 0.7 | 0.26 ^ | 0.036 ^ | 1.0 | 1 |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **4,208** | **3** | | | | | |
| **Propoxur (insecticide)** | | | | | | | |
| Grapes | 175 | 0 | | | 0.010 ^ | NT | - |
| Green Beans | 83 | 0 | | | 0.015 ^ | NT | - |
| Pears | 218 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **476** | **0** | | | | | |
| **Pymetrozine (insecticide)** | | | | | | | |
| Cauliflower | 648 | 0 | | | 0.005 ^ | 0.5 | - |
| Lettuce | 469 | 1 | 0.2 | 0.033 ^ | 0.005 ^ | 0.6 | - |
| **TOTAL** | **1,117** | **1** | | | | | |
| **Pyraclostrobin (fungicide)** | | | | | | | |
| Apples | 132 | 7 | 5.3 | 0.002 - 0.016 | 0.001 ^ | 1.5 | - |
| Cauliflower | 216 | 0 | | | 0.001 ^ | 5.0 | - |
| Eggplant | 736 | 0 | | | 0.030 ^ | 1.4 | - |
| Grapefruit | 528 | 40 | 7.6 | 0.0003 - 0.003 | 0.0003 ^ | 2.0 | - |
| Lettuce | 132 | 1 | 0.8 | 0.005 ^ | 0.001 ^ | 29.0 | - |
| Watermelon | 123 | 0 | | | 0.001 - 0.003 | 0.5 | - |
| **TOTAL** | **1,867** | **48** | | | | | |
| **Pyridaben (insecticide, acaricide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.015 ^ | 0.5 | - |
| Grapefruit | 742 | 5 | 0.7 | 0.001 - 0.002 | 0.001 - 0.015 | 0.5 | - |
| Grapes | 216 | 1 | 0.5 | 0.025 ^ | 0.015 ^ | 1.5 | - |
| Orange Juice | 744 | 0 | | | 0.010 - 0.015 | 0.5 | - |
| Oranges | 741 | 0 | | | 0.010 - 0.015 | 0.5 | - |
| Pears | 161 | 0 | | | 0.015 ^ | 0.75 | - |
| Plums | 573 | 0 | | | 0.041 ^ | 2.5 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.041 ^ | 2.5 | - |
| **TOTAL** | **3,545** | **6** | | | | | |
| **Pyrimethanil (fungicide)** | | | | | | | |
| Apples | 132 | 6 | 4.5 | 0.0005 - 0.76 | 0.0003 ^ | 3.0 | - |
| Cauliflower | 216 | 0 | | | 0.0003 ^ | NT | - |
| Lettuce | 132 | 0 | | | 0.0003 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.003 ^ | NT | - |
| **TOTAL** | **544** | **6** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Pyriproxyfen (insecticide, growth regulator)** | | | | | | | |
| Apples | 743 | 1 | 0.1 | 0.022 ^ | 0.005 - 0.013 | 0.2 | - |
| Cantaloupe | 162 | 0 | | | 0.005 ^ | 0.10 | - |
| Cauliflower | 741 | 0 | | | 0.013 ^ | 0.70 | - |
| Eggplant | 736 | 0 | | | 0.012 ^ | 0.2 | - |
| Grapefruit | 258 | 0 | | | 0.005 - 0.045 | 0.3 | 0.5 |
| Grapes | 739 | 0 | | | 0.005 - 0.015 | 0.10 | - |
| Green Beans | 181 | 0 | | | 0.005 - 0.030 | 0.10 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.005 - 0.030 | 0.10 | - |
| Lettuce | 743 | 0 | | | 0.005 - 0.013 | 0.10 | - |
| Orange Juice | 744 | 0 | | | 0.005 - 0.008 | 0.3 | 0.5 |
| Oranges | 741 | 0 | | | 0.005 - 0.008 | 0.3 | 0.5 |
| Pears | 555 | 0 | | | 0.005 - 0.015 | 0.2 | - |
| Plums | 573 | 0 | | | 0.012 ^ | 1.0 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.012 ^ | 1.0 | - |
| Strawberries | 216 | 4 | 1.9 | 0.008 - 0.079 | 0.005 ^ | 0.30 | - |
| Watermelon | 182 | 0 | | | 0.004 - 0.015 | 0.10 | - |
| Winter Squash | 213 | 0 | | | 0.005 - 0.009 | 0.10 | - |
| **TOTAL** | **8,235** | **5** | | | | | |
| **Quinoxyfen (fungicide)** | | | | | | | |
| Watermelon | 118 | 0 | | | 0.0005 - 0.004 | 0.30 | - |
| **TOTAL** | **118** | **0** | | | | | |
| **Quintozene - PCNB (fungicide) (parent of HCB, PCA and PCB)** | | | | | | | |
| Apples | 454 | 0 | | | 0.010 - 0.064 | NT | - |
| Cantaloupe | 396 | 0 | | | 0.004 ^ | NT | - |
| Cauliflower | 576 | 0 | | | 0.003 - 0.040 | 0.1 | - |
| Grapes | 523 | 0 | | | 0.002 ^ | NT | - |
| Green Beans | 181 | 12 | 6.6 | 0.001 ^ | 0.0008 - 0.003 | 0.1 | 0.1 |
| Green Beans, Frozen | 555 | 2 | 0.4 | 0.001 - 0.012 | 0.0008 - 0.003 | 0.1 | 0.1 |
| Lettuce | 513 | 0 | | | 0.003 - 0.040 | NT | - |
| Pears | 394 | 0 | | | 0.002 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.004 ^ | NT | - |
| **TOTAL** | **4,174** | **14** | | | | | |
| **Resmethrin (insecticide)** | | | | | | | |
| Apples | 215 | 0 | | | 0.010 ^ | 3.0 | - |
| Cantaloupe | 558 | 0 | | | 0.010 - 0.032 | 3.0 | - |
| Grapefruit | 742 | 0 | | | 0.010 - 0.015 | 3.0 | - |
| Grapes | 674 | 0 | | | 0.010 - 0.075 | 3.0 | - |
| Lettuce | 435 | 0 | | | 0.007 - 0.010 | 3.0 | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 3.0 | - |
| Oranges | 741 | 0 | | | 0.010 ^ | 3.0 | - |
| Pears | 533 | 0 | | | 0.010 - 0.030 | 3.0 | - |
| Strawberries | 216 | 0 | | | 0.010 ^ | 3.0 | - |
| Watermelon | 182 | 0 | | | 0.010 - 0.030 | 3.0 | - |
| Winter Squash | 731 | 0 | | | 0.010 - 0.032 | 3.0 | - |
| **TOTAL** | **5,771** | **0** | | | | | |
| **Resmethrin cis (isomer of Resmethrin)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.008 | 3.0 | - |
| Cauliflower | 741 | 0 | | | 0.002 - 0.008 | 3.0 | - |
| Lettuce | 527 | 0 | | | 0.002 - 0.016 | 3.0 | - |
| **TOTAL** | **1,796** | **0** | | | | | |
| **Resmethrin trans (isomer of Resmethrin)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 - 0.008 | 3.0 | - |
| Cauliflower | 725 | 0 | | | 0.002 - 0.008 | 3.0 | - |
| Lettuce | 527 | 0 | | | 0.002 - 0.008 | 3.0 | - |
| **TOTAL** | **1,780** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Sethoxydim (herbicide)** | | | | | | | |
| Cantaloupe | 308 | 0 | | | 0.13 ^ | 4.0 | - |
| Cauliflower | 216 | 0 | | | 0.001 ^ | 5.0 | - |
| Lettuce | 132 | 0 | | | 0.001 ^ | 4.0 | - |
| Watermelon | 59 | 0 | | | 0.050 ^ | 4.0 | - |
| Winter Squash | 276 | 0 | | | 0.13 ^ | 4.0 | - |
| **TOTAL** | **991** | **0** | | | | | |
| **Simazine (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.002 - 0.010 | 0.25 | - |
| Cantaloupe | 396 | 0 | | | 0.018 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapefruit | 214 | 0 | | | 0.010 ^ | 0.25 | - |
| Grapes | 739 | 0 | | | 0.010 - 0.011 | 0.25 | - |
| Green Beans | 127 | 0 | | | 0.023 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.023 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 744 | 0 | | | 0.010 ^ | 0.25 | - |
| Oranges | 741 | 1 | 0.1 | 0.017 ^ | 0.010 ^ | 0.25 | - |
| Pears | 555 | 0 | | | 0.010 - 0.011 | 0.25 | - |
| Plums | 573 | 0 | | | 0.036 ^ | 0.25 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.036 ^ | 0.25 | - |
| Strawberries | 216 | 0 | | | 0.010 ^ | 0.25 | - |
| Watermelon | 86 | 0 | | | 0.010 - 0.011 | NT | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **7,468** | **1** | | | | | |
| **Spinosad (insecticide) (spinosyns A and D)** | | | | | | | |
| Watermelon | 59 | 0 | | | 0.003 - 0.004 | 0.3 | 0.2 |
| **TOTAL** | **59** | **0** | | | | | |
| **Spinosad A (insecticide)** | | | | | | | |
| Strawberries | 429 | 26 | 6.1 | 0.035 - 0.13 | 0.021 ^ | 1.0 | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | 0.3 | 0.2 |
| **TOTAL** | **493** | **26** | | | | | |
| **Spinosad D (insecticide)** | | | | | | | |
| Strawberries | 429 | 8 | 1.9 | 0.033 - 0.089 | 0.020 ^ | 1.0 | - |
| Watermelon | 64 | 0 | | | 0.002 ^ | 0.3 | 0.2 |
| **TOTAL** | **493** | **8** | | | | | |
| **Spirodiclofen (acaricide)** | | | | | | | |
| Watermelon | 64 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **64** | **0** | | | | | |
| **Spiromesifen (insecticide)** | | | | | | | |
| Watermelon | 64 | 0 | | | 0.002 ^ | 0.1 | - |
| **TOTAL** | **64** | **0** | | | | | |
| **Sulfentrazone (herbicide)** | | | | | | | |
| Strawberries | 517 | 0 | | | 0.020 ^ | 0.60 | - |
| **TOTAL** | **517** | **0** | | | | | |
| **Sulprofos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Tebuconazole (fungicide)** | | | | | | | |
| Apples | 513 | 0 | | | 0.002 ^ | NT | 0.5 |
| Cauliflower | 725 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 739 | 48 | 6.5 | 0.033 - 0.30 | 0.020 - 0.077 | 5.0 | 2 |
| Green Beans | 127 | 0 | | | 0.045 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.045 ^ | NT | - |
| Lettuce | 512 | 0 | | | 0.002 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.020 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.020 ^ | NT | - |
| Pears | 394 | 0 | | | 0.023 ^ | NT | 0.5 |
| Watermelon | 64 | 0 | | | 0.023 ^ | NT | - |
| **TOTAL** | **4,522** | **48** | | | | | |
| **Tebufenozide (insecticide)** | | | | | | | |
| Apples | 698 | 9 | 1.3 | 0.005 - 0.038 | 0.003 ^ | 1.0 | 1 |
| Cauliflower | 588 | 0 | | | 0.003 ^ | 5.0 | - |
| Grapes | 739 | 0 | | | 0.001 - 0.003 | 3.0 | 2 |
| Green Beans | 54 | 0 | | | 0.003 ^ | NT | - |
| Green Beans, Frozen | 160 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 700 | 7 | 1.0 | 0.005 - 0.033 | 0.003 ^ | 10.0 | 10 |
| Pears | 555 | 6 | 1.1 | 0.002 - 0.15 | 0.001 - 0.003 | 1.5 | 1 |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| **TOTAL** | **3,558** | **22** | | | | | |
| **Tecnazene (fungicide)** | | | | | | | |
| Apples | 382 | 0 | | | 0.005 ^ | NT | - |
| Cauliflower | 525 | 0 | | | 0.005 - 0.032 | NT | - |
| Grapes | 523 | 0 | | | 0.001 ^ | NT | - |
| Green Beans | 127 | 0 | | | 0.002 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.002 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.005 - 0.032 | NT | - |
| Pears | 394 | 0 | | | 0.001 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.001 ^ | NT | - |
| **TOTAL** | **2,937** | **0** | | | | | |
| **TEPP (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.006 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.006 ^ | NT | - |
| **TOTAL** | **1,055** | **0** | | | | | |
| **Terbacil (herbicide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.006 - 0.020 | 0.3 | - |
| Cantaloupe | 396 | 0 | | | 0.018 ^ | NT | - |
| Cauliflower | 725 | 0 | | | 0.006 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.006 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Strawberries | 216 | 0 | | | 0.020 ^ | 0.1 | - |
| Watermelon | 182 | 0 | | | 0.015 - 0.080 | 0.4 | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **4,224** | **0** | | | | | |
| **Terbufos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.015 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.015 ^ | NT | - |
| **TOTAL** | **3,691** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Terbufos sulfone (metabolite of Terbufos)** | | | | | | | |
| Apples | 528 | 0 | | | 0.002 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.018 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.002 ^ | NT | - |
| Grapes | 523 | 0 | | | 0.005 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.002 ^ | NT | - |
| Pears | 394 | 0 | | | 0.005 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.018 ^ | NT | - |
| **TOTAL** | **3,627** | **0** | | | | | |
| **Tetrachlorvinphos (insecticide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | NT | - |
| Cantaloupe | 396 | 0 | | | 0.008 ^ | NT | - |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.008 ^ | NT | - |
| **TOTAL** | **2,710** | **0** | | | | | |
| **Tetradifon (insecticide)** | | | | | | | |
| Apples | 743 | 0 | | | 0.006 - 0.032 | 5 | - |
| Cantaloupe | 558 | 0 | | | 0.006 - 0.028 | 1 | - |
| Cauliflower | 726 | 0 | | | 0.032 - 0.13 | NT | - |
| Grapefruit | 742 | 0 | | | 0.006 - 0.012 | 2 | - |
| Grapes | 739 | 0 | | | 0.004 - 0.012 | 5 | - |
| Green Beans | 127 | 0 | | | 0.008 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.008 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.010 - 0.064 | NT | - |
| Orange Juice | 744 | 0 | | | 0.006 - 0.012 | 2 | - |
| Oranges | 741 | 0 | | | 0.006 - 0.012 | 2 | - |
| Pears | 555 | 0 | | | 0.004 - 0.012 | 5 | - |
| Plums | 573 | 0 | | | 0.011 ^ | 5 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.011 ^ | 5 | - |
| Strawberries | 521 | 0 | | | 0.004 - 0.008 | 5 | - |
| Watermelon | 182 | 0 | | | 0.004 - 0.024 | 1 | - |
| Winter Squash | 731 | 0 | | | 0.006 - 0.028 | 1 | - |
| **TOTAL** | **8,757** | **0** | | | | | |
| **Tetrahydrophthalimide - THPI (metabolite of Captafol and Captan)** | | | | | | | |
| Apples | 743 | 114 | 15.3 | 0.033 - 1.5 | 0.020 - 0.27 | 25 | - |
| Cantaloupe | 558 | 0 | | | 0.009 - 0.040 | 25 | - |
| Cauliflower | 741 | 0 | | | 0.020 - 0.13 | 2 | |
| Grapes | 739 | 75 | 10.1 | 0.067 - 0.68 | 0.040 - 0.075 | 50 | - |
| Green Beans | 7 | 7 | 100.0 | 0.067 - 0.53 | 0.040 ^ | 25 | - |
| Lettuce | 707 | 0 | | | 0.020 - 0.065 | 100 | - |
| Pears | 555 | 48 | 8.6 | 0.067 - 1.9 | 0.040 - 0.075 | 25 | - |
| Strawberries | 216 | 146 | 67.6 | 0.060 - 2.3 | 0.040 ^ | 25 | - |
| Watermelon | 123 | 0 | | | 0.040 - 0.075 | 25 | - |
| Winter Squash | 731 | 9 | 1.2 | 0.015 - 0.11 | 0.009 - 0.065 | 25 | - |
| **TOTAL** | **5,120** | **399** | | | | | |
| **Tetramethrin (insecticide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |
| **Thiabendazole (fungicide) (parent of 5-hydroxythiabendazole)** | | | | | | | |
| Apples | 743 | 654 | 88.0 | 0.0002 - 7.0 | 0.0001 - 0.030 | 10 | 3 |
| Cantaloupe | 558 | 3 | 0.5 | 0.075 - 0.33 | 0.030 - 0.045 | 15.0 | - |
| Cauliflower (V-14) | 741 | 14 | 1.9 | 0.0002 - 0.001 | 0.0001 - 0.0005 | NT | - |
| Grapefruit | 214 | 73 | 34.1 | 0.050 - 0.33 | 0.030 ^ | 10 | 10 |
| Grapes | 523 | 0 | | | 0.050 ^ | NT | - |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| Lettuce (V-7) | 527 | 7 | 1.3 | 0.0005 - 0.001 | 0.0005 ^ | NT | - |
| Orange Juice | 744 | 4 | 0.5 | 0.050 - 0.23 | 0.030 ^ | 10 | 10 |
| Oranges | 741 | 324 | 43.7 | 0.050 - 0.61 | 0.030 ^ | 10 | 10 |
| Pears | 555 | 370 | 66.7 | 0.050 - 2.9 | 0.030 - 0.050 | 10 | 3 |
| Strawberries | 737 | 3 | 0.4 | 0.003 - 0.90 | 0.002 - 0.030 | 5.0 | - |
| Watermelon | 86 | 0 | | | 0.010 - 0.030 | NT | - |
| Winter Squash | 731 | 4 | 0.5 | 0.075 - 0.77 | 0.030 - 0.045 | 1 | - |
| **TOTAL** | **6,900** | **1,456** | | | | | |
| **Thiacloprid (insecticide)** | | | | | | | |
| Apples | 132 | 4 | 3.0 | 0.003 - 0.018 | 0.0004 ^ | 0.3 | - |
| Cauliflower | 216 | 0 | | | 0.0004 ^ | NT | - |
| Lettuce | 132 | 0 | | | 0.0004 ^ | NT | - |
| **TOTAL** | **480** | **4** | | | | | |
| **Thiamethoxam (insecticide) (also parent of clothianidin)** | | | | | | | |
| Apples | 528 | 0 | | | 0.015 - 0.050 | 0.2 | - |
| Cauliflower | 741 | 0 | | | 0.015 - 0.060 | NT | - |
| Lettuce (V-1) | 527 | 1 | 0.2 | 0.025 ^ | 0.015 - 0.050 | NT | - |
| Watermelon | 182 | 7 | 3.8 | 0.002 - 0.004 | 0.001 - 0.050 | 0.20 | - |
| **TOTAL** | **1,978** | **8** | | | | | |
| **Thiazopyr (herbicide)** | | | | | | | |
| Grapefruit | 528 | 0 | | | 0.001 ^ | 0.05 | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | 0.05 | - |
| Oranges | 525 | 0 | | | 0.010 ^ | 0.05 | - |
| **TOTAL** | **1,581** | **0** | | | | | |
| **Thiobencarb (herbicide)** | | | | | | | |
| Apples | 132 | 0 | | | 0.0006 ^ | NT | - |
| Cauliflower | 216 | 0 | | | 0.0006 ^ | NT | - |
| Lettuce | 348 | 0 | | | 0.0006 - 0.010 | 0.2 | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.010 ^ | NT | - |
| **TOTAL** | **1,749** | **0** | | | | | |
| **Thiodicarb (insecticide)** | | | | | | | |
| Lettuce | 216 | 0 | | | 0.002 ^ | 35 | 5 |
| **TOTAL** | **216** | **0** | | | | | |
| **Tri-Allate (herbicide)** | | | | | | | |
| Grapes | 523 | 0 | | | 0.015 ^ | NT | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Watermelon | 64 | 0 | | | 0.015 ^ | NT | - |
| **TOTAL** | **981** | **0** | | | | | |
| **Triadimefon (fungicide)** | | | | | | | |
| Apples | 713 | 0 | | | 0.0009 - 0.025 | 1.0 | 0.5 |
| Cantaloupe | 558 | 1 | 0.2 | 0.038 ^ | 0.023 - 0.025 | 0.3 | 0.1 |
| Cauliflower | 696 | 0 | | | 0.0009 ^ | NT | - |
| Grapes | 739 | 1 | 0.1 | 0.073 ^ | 0.011 - 0.025 | 1.0 | 0.5 |
| Green Beans | 127 | 0 | | | 0.023 ^ | NT | - |
| Green Beans, Frozen | 395 | 0 | | | 0.023 ^ | NT | - |
| Lettuce | 483 | 0 | | | 0.0009 - 0.003 | NT | - |
| Orange Juice | 528 | 0 | | | 0.025 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.025 ^ | NT | - |
| Pears | 555 | 0 | | | 0.011 - 0.025 | 1.0 | 0.5 |
| Strawberries | 216 | 0 | | | 0.025 ^ | NT | 0.1 |
| Watermelon | 182 | 0 | | | 0.011 - 0.025 | 0.3 | 0.1 |
| Winter Squash | 731 | 5 | 0.7 | 0.038 ^ | 0.023 - 0.025 | 0.3 | 0.1 |
| **TOTAL** | **6,448** | **7** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Triadimenol (fungicide) (also a metabolite of Triadimefon)** | | | | | | | |
| Cantaloupe | 162 | 0 | | | 0.015 ^ | 0.3 | 2 |
| Grapes | 216 | 12 | 5.6 | 0.025 - 0.22 | 0.015 ^ | 1.0 | 2 |
| Pears | 161 | 0 | | | 0.015 ^ | 1.0 | 0.5 |
| Watermelon | 123 | 0 | | | 0.011 - 0.015 | 0.3 | 2 |
| Winter Squash | 213 | 0 | | | 0.015 ^ | 0.3 | 2 |
| **TOTAL** | **875** | **12** | | | | | |
| **1,2,4-Triazole (common metabolite of triazole compounds)** | | | | | | | |
| Strawberries | 499 | 2 | 0.4 | 0.065 ^ | 0.036 - 0.039 | *** | - |
| **TOTAL** | **499** | **2** | | | | | |
| **Triazole acetic acid - TAA (common metabolite of triazole compounds)** | | | | | | | |
| Strawberries | 499 | 0 | | | 0.011 - 0.012 | NT | - |
| **TOTAL** | **499** | **0** | | | | | |
| **Triazole alanine - TA (common metabolite of triazole compounds)** | | | | | | | |
| Strawberries | 521 | 58 | 11.1 | 0.060 - 0.063 | 0.036 - 0.038 | *** | - |
| **TOTAL** | **521** | **58** | | | | | |
| **Trifloxystrobin (fungicide)** | | | | | | | |
| Apples | 132 | 13 | 9.8 | 0.0002 - 0.007 | 0.0001 ^ | 0.50 | 0.7 |
| Cauliflower | 216 | 0 | | | 0.0001 ^ | NT | - |
| Grapefruit | 528 | 0 | | | 0.0004 ^ | 0.3 | - |
| Lettuce (V-1) | 118 | 1 | 0.8 | 0.0002 ^ | 0.0001 ^ | NT | - |
| Orange Juice | 528 | 0 | | | 0.010 ^ | 0.3 | - |
| Oranges | 504 | 0 | | | 0.010 ^ | 0.3 | - |
| Watermelon | 182 | 0 | | | 0.001 - 0.005 | 0.5 | - |
| **TOTAL** | **2,208** | **14** | | | | | |
| **Triflumizole (fungicide)** | | | | | | | |
| Apples | 213 | 0 | | | 0.050 ^ | 0.5 | - |
| Cantaloupe | 558 | 0 | | | 0.040 - 0.050 | 0.5 | - |
| Grapes | 739 | 0 | | | 0.020 - 0.050 | 2.5 | - |
| Pears | 555 | 0 | | | 0.020 - 0.050 | 0.5 | - |
| Strawberries | 216 | 3 | 1.4 | 0.083 ^ | 0.050 ^ | 2.0 | - |
| Watermelon | 123 | 0 | | | 0.003 - 0.050 | 0.5 | - |
| Winter Squash | 731 | 0 | | | 0.040 - 0.050 | 0.5 | - |
| **TOTAL** | **3,135** | **3** | | | | | |
| **Trifluralin (herbicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.0005 ^ | NT | - |
| Cantaloupe | 558 | 0 | | | 0.008 - 0.017 | 0.05 | - |
| Cauliflower | 741 | 0 | | | 0.0005 ^ | 0.05 | - |
| Grapefruit | 742 | 0 | | | 0.001 - 0.017 | 0.05 | - |
| Grapes | 739 | 0 | | | 0.015 - 0.017 | 0.05 | - |
| Green Beans | 181 | 0 | | | 0.015 - 0.017 | 0.05 | - |
| Green Beans, Frozen | 555 | 0 | | | 0.015 - 0.017 | 0.05 | - |
| Lettuce | 743 | 17 | 2.3 | 0.0008 - 0.005 | 0.0005 - 0.017 | 0.05 | - |
| Orange Juice | 744 | 0 | | | 0.017 ^ | 0.05 | - |
| Oranges | 741 | 0 | | | 0.017 ^ | 0.05 | - |
| Pears | 394 | 0 | | | 0.015 ^ | NT | - |
| Plums | 573 | 0 | | | 0.021 ^ | 0.05 | - |
| Plums, Dried (Prunes) | 153 | 0 | | | 0.021 ^ | 0.05 | - |
| Watermelon | 182 | 0 | | | 0.015 - 0.017 | 0.05 | - |
| Winter Squash | 731 | 0 | | | 0.008 - 0.017 | 0.05 | - |
| **TOTAL** | **8,305** | **17** | | | | | |
| **Triforine (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.003 ^ | 0.01 | 2 |
| Cauliflower | 741 | 0 | | | 0.003 ^ | NT | - |
| Lettuce | 527 | 0 | | | 0.003 ^ | NT | - |
| **TOTAL** | **1,796** | **0** | | | | | |

| Pesticide / Commodity | Number of Samples | Samples with Detections | % of Samples with Detections | Range of Values Detected, ppm | Range of LODs, ppm | EPA Tolerance Level, ppm | Codex MRL/EMRL, ppm |
|---|---|---|---|---|---|---|---|
| **Vernolate (herbicide)** | | | | | | | |
| Cantaloupe | 308 | 0 | | | 0.016 ^ | NT | - |
| Winter Squash | 276 | 0 | | | 0.016 ^ | NT | - |
| **TOTAL** | **584** | **0** | | | | | |
| **Vinclozolin (fungicide)** | | | | | | | |
| Apples | 528 | 0 | | | 0.004 ^ | NT | 1 |
| Cantaloupe | 396 | 0 | | | 0.014 ^ | NT | 1 |
| Cauliflower | 741 | 0 | | | 0.004 ^ | NT | 1 |
| Grapes | 523 | 0 | | | 0.003 ^ | NT | 5 |
| Green Beans | 181 | 0 | | | 0.003 - 0.010 | 2.0 | 2 |
| Green Beans, Frozen | 555 | 263 | 47.4 | 0.004 - 0.40 | 0.003 - 0.010 | 2.0 | 2 |
| Lettuce | 743 | 4 | 0.5 | 0.006 - 0.017 | 0.004 - 0.010 | 10.0 | 5 |
| Orange Juice | 528 | 0 | | | 0.003 ^ | NT | - |
| Oranges | 525 | 0 | | | 0.003 ^ | NT | - |
| Pears | 394 | 0 | | | 0.003 ^ | NT | 1 |
| Watermelon | 64 | 0 | | | 0.003 ^ | NT | - |
| Winter Squash | 518 | 0 | | | 0.014 ^ | NT | - |
| **TOTAL** | **5,696** | **267** | | | | | |
| **Zoxamide (fungicide)** | | | | | | | |
| Cantaloupe | 44 | 0 | | | 0.020 ^ | 1.0 | - |
| Watermelon | 59 | 0 | | | 0.025 ^ | 1 | - |
| Winter Squash | 43 | 0 | | | 0.020 ^ | 1.0 | - |
| **TOTAL** | **146** | **0** | | | | | |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

**NOTES**

^ Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

EX = Exempt from a tolerance when applied to growing crops (pre-harvest) in accordance with Good Agricultural Practices. The reader is advised to consult 40 CFR Part 180 for specific compounds. NOTE: Some commodity/compound pairs have post-harvest tolerances, but because PDP cannot ascertain when application occurred, the tolerance exemption is used.

SU Safe use in spot and/or crack and crevice treatments.

(V) = Residue was found where no tolerance was established by EPA. Following "V" are the number of occurrences.

(X) = Residue was found which exceeds EPA tolerance or FDA action level. Following "X" are the number of occurrences.

** = Previously reported as lambda cyhalothrin total, which included lambda cyhalothrin (a 1:1 mixture of the cis-(1R,3R),S-enantiomer and the cis-(1S,3S),R-enantiomer) as well as R157836 (a 1:1 mixture of the cis-(1S,3S),S-enantiomer and the cis-(1R,3R), R-enantiomer).

*** = Residues of this compound were detected. This compound has been determined to be a common metabolite of the triazole class of chemicals. Therefore, the residues detected cannot be attributed to a single triazole compound.

# Appendix C

## Distribution of Residues by Pesticide in Soybeans

Appendix C shows residue detections for all soybean compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/ Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed 668 soybean samples. A total of 44 samples (22 percent) were reported with residue detections. All but one of the residue detections were much lower than the established tolerances.

See Appendix B for definition of ALs and MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38th Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because soybean residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX C. DISTRIBUTION OF RESIDUES BY PESTICIDE IN SOYBEANS

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Acephate | I | 648 | | | | 40 ^ | 1,000 | 300 |
| Acetochlor | H | 667 | | | | 3.1 ^ | 100 | - |
| Alachlor | H | 667 | 2 | 0.3 | 2.0 - 5.0 | 1.2 ^ | 200 | - |
| Aldicarb | I | 668 | | | | 10 ^ | 20 | 20 |
| Aldicarb sulfone | IM | 638 | | | | 3.0 ^ | 20 | 20 |
| Aldicarb sulfoxide | IM | 668 | | | | 10 ^ | 20 | 20 |
| Aldrin | I | 606 | | | | 12.5 ^ | 50 AL | 50 |
| Bendiocarb | I | 640 | | | | 1.5 ^ | SU | - |
| Benoxacor | S | 658 | | | | 3.0 ^ | 10 | - |
| Boscalid | F | 667 | | | | 1.5 ^ | 2,000 | - |
| Carbaryl | I | 668 | | | | 3.0 ^ | 5,000 | 200 |
| Carbendazim - MBC | F | 668 | | | | 1.5 ^ | 200 | 200 |
| Carbofuran | I | 663 | | | | 3.0 ^ | 200 | - |
| Carboxin | F | 667 | | | | 1.2 ^ | 200 | - |
| Chlorimuron ethyl | H | 284 | | | | 10 ^ | 50 | - |
| Chlorpyrifos | I | 647 | 94 | 14.5 | 5.0 - 24 | 3.0 ^ | 300 | 100 |
| Clofencet | P | 622 | | | | 30 ^ | 30,000 | - |
| Clomazone | H | 667 | | | | 3.0 ^ | 50 | - |
| Clothianidin | I | 656 | | | | 3.0 ^ | NT | - |
| Cyfluthrin | I | 628 | | | | 10 ^ | 50 | - |
| Cyhalothrin, epimer R157836 | I | 279 | | | | 4.0 ^ | 10 | - |
| Cyhalothrin, Total (Cyhalothrin-L + R157836) | I | 368 | | | | 5.5 ^ | 10 | - |
| Cypermethrin | I | 667 | | | | 25 ^ | 50 | 50 |
| DDD p,p' | IM | 667 | | | | 1.5 ^ | 200 AL | - |
| DDE p,p' | IM | 522 | | | | 1.9 ^ | 200 AL | - |
| Deltamethrin (includes parent Tralomethrin) | I | 667 | | | | 15 ^ | 100 | 200 |
| Dieldrin | I | 667 | | | | 2.4 ^ | 50 AL | 50 |
| Dimethenamid | H | 667 | 9 | 1.3 | 2.0 - 9.0 | 1.0 ^ | 10 | - |
| Dimethoate | I | 646 | | | | 8.0 ^ | 50 | - |
| Disulfoton | I | 667 | | | | 6.0 ^ | 100 | 50 |
| Disulfoton sulfone | IM | 647 | | | | 30 ^ | 100 | 50 |
| Disulfoton sulfoxide | IM | 657 | | | | 3.6 ^ | 100 | 50 |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Endrin | I | 667 | | | | 5.4 ^ | 50 AL | - |
| EPTC | H | 599 | | | | 3.0 ^ | 100 | - |
| Esfenvalerate | I | 667 | | | | 10 ^ | 50 | - |
| Ethalfluralin | H | 667 | | | | 0.80 ^ | 50 | - |
| Fenoxaprop ethyl | H | 667 | | | | 1.5 ^ | 50 | - |
| Fenpropathrin | I | 667 | | | | 4.2 ^ | NT | - |
| Fluazifop butyl | H | 667 | | | | 3.0 ^ | 1,000 | - |
| Fludioxonil | F | 667 | | | | 8.0 ^ | 10 | 10 |
| Flumetsulam | H | 662 | | | | 10 ^ | 50 | - |
| Fluridone | H | 647 | | | | 1.0 ^ | 100 | - |
| Hydroprene | R | 667 | | | | 21 ^ | 200 | - |
| 3-Hydroxycarbofuran | IM | 668 | | | | 3.0 ^ | 200 | - |
| 5-Hydroxythiabendazole | FM | 615 | | | | 3.0 ^ | 100 | - |
| Imazaquin | H | 658 | | | | 3.0 ^ | 50 | - |
| Imidacloprid | I | 668 | | | | 3.0 ^ | 1,000 | - |
| Indoxacarb | I | 667 | | | | 27 ^ | 800 | - |
| Lactofen | H | 667 | | | | 9.0 ^ | 10 | - |
| Linuron | H | 614 | | | | 3.0 ^ | 1,000 | - |
| Malathion | I | 667 | 35 | 5.2 | 9.7 - 73 | 5.8 ^ | 8,000 | - |
| Malathion oxygen analog | IM | 667 | | | | 2.7 ^ | NT | - |
| Metalaxyl | F | 667 | | | | 2.0 ^ | 1,000 | 50 |
| Methamidophos | I | 621 | | | | 30 ^ | 1,000 | 100 |
| Methomyl | I | 663 | | | | 3.0 ^ | 200 | 200 |
| Methoxyfenozide | I | 668 | 1 | 0.1 | 5.0 ^ | 3.0 ^ | 100 | - |
| Metolachlor | H | 667 | | | | 1.9 ^ | 200 | - |
| Metribuzin | H | 626 | | | | 6.5 ^ | 300 | - |
| Myclobutanil | F | 647 | | | | 1.9 ^ | 50 | - |
| Norflurazon | H | 667 | | | | 15 ^ | 100 | - |
| Norflurazon desmethyl | HM | 607 | | | | 5.0 ^ | 100 | - |
| Omethoate | IM | 651 | | | | 4.2 ^ | 50 | - |
| Oxadixyl | F | 667 | | | | 3.0 ^ | NT | - |
| Oxamyl | I | 663 | | | | 3.0 ^ | 200 | - |
| Oxyfluorfen | H | 667 | | | | 2.0 ^ | 50 | - |
| Parathion ethyl | I | 667 | | | | 4.2 ^ | 100 | - |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Parathion methyl | I | 667 | | | | 6.1 ^ | 100 | - |
| Parathion methyl oxygen analog | IM | 633 | | | | 1.7 ^ | NT | - |
| Parathion oxygen analog | IM | 667 | | | | 25 ^ | NT | - |
| Pendimethalin | H | 667 | | | | 6.0 ^ | NT | - |
| Permethrin Total | IM | 667 | 5 | 0.7 | 15.5 ^ | 9.3 ^ | 50 | 50 |
| Phorate | I | 667 | | | | 4.4 ^ | 100 | 50 |
| Prallethrin | I | 667 | | | | 45 ^ | 1,000 | - |
| Propetamphos | I | 667 | | | | 1.0 ^ | 100 | - |
| Pyriproxyfen | I | 667 | | | | 32.3 ^ | 100 | - |
| Quizalofop ethyl | H | 667 | | | | 1.9 ^ | 50 | - |
| Resmethrin | I | 667 | | | | 2.3 ^ | 3,000 | - |
| Spinosad A | I | 638 | | | | 3.0 ^ | 20 | 10 |
| Sulfentrazone | H | 647 | 1 | 0.2 | 25 ^ | 15 ^ | 50 | - |
| Tetrahydrophthalimide (THPI) | FM | 667 | | | | 15 ^ | 2,000 | - |
| Thiabendazole | F | 643 | 1 | 0.2 | 16 ^ | 3.0 ^ | 100 | - |
| Thifensulfuron methyl | H | 668 | | | | 6.0 ^ | 100 | - |
| Trifluralin (X-1) | H | 667 | 2 | 0.3 | 3.0 - 78.1 | 2.0 ^ | 50 | - |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

## NOTES

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

(X) = Residue was found which exceeds EPA tolerance. Following "X" are the number of occurrences.

Pesticide Types:

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide, HM = Herbicide Metabolite

I = Insecticide, IM = Insecticide Metabolite

P = Plant Growth Regulator

R = Insect Growth Regulator

S = Herbicide Safener

# Appendix D

## Distribution of Residues by Pesticide for the Soybean Rust/Aphid Special Survey

Appendix D shows residue detections for the soybean rust/aphid special survey, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/ Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed 306 soybean samples during October through December for 14 identified compounds used to combat soybean rust and 2 insecticides used to control Chinese aphid in response to an EPA data need. Six samples were reported with residue detections. All detections were much lower than the established tolerances.

See Appendix B for definition of MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38th Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because soybean residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than than originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

## APPENDIX D. DISTRIBUTION OF RESIDUES FOR SOYBEAN RUST/APHID SPECIAL SURVEY

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Azoxystrobin | F | 306 | | | | 1.0 ^ | NT | - |
| Boscalid | F | 306 | | | | 7.0 ^ | 2000 | - |
| Cyproconazole | F | 306 | | | | 5.0 ^ | NT | - |
| Difenoconazole | F | 306 | | | | 3.0 ^ | NT | - |
| Epoxiconazole | F | 306 | | | | 4.0 ^ | NT | - |
| Fenarimol | F | 286 | | | | 31 ^ | NT | - |
| Fluquinconazole | F | 306 | | | | 14 ^ | NT | - |
| Flutriafol | F | 306 | | | | 4.0 ^ | NT | - |
| Myclobutanil | F | 306 | | | | 4.0 ^ | 50 | - |
| Propiconazole | F | 306 | | | | 3.0 ^ | NT | - |
| Pymetrozine | I | 306 | | | | 3.0 ^ | NT | - |
| Pyraclostrobin | F | 306 | 6 | 2 | 1.0 - 2.0 | 1.0 ^ | 40 | - |
| Tebuconazole | F | 286 | | | | 4.0 ^ | 100 | - |
| Tetraconazole | F | 286 | | | | 6.0 ^ | NT | - |
| Thiamethoxam | I | 306 | | | | 1.0 ^ | NT | - |
| Trifloxystrobin | F | 306 | | | | 1.0 ^ | NT | - |

**NOTES**

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

Pesticide Types:

F = Fungicide

I = Insecticide

# Appendix E

## Distribution of Residues by Pesticide in Wheat

Appendix E shows residue detections for all wheat compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed 674 wheat samples. A total of 508 samples (75 percent) were reported with residue detections. All residue detections were much lower than the established tolerances.

See Appendix B for definition of ALs and MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38th Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because wheat residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than than originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX E. DISTRIBUTION OF RESIDUES BY PESTICIDE IN WHEAT

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Acetochlor | H | 654 | 2 | 0.3 | 5.0 ^ | 3.0 ^ | 20 | - |
| Allethrin | I | 674 | | | | 3.0 ^ | 2,000 | - |
| Atrazine | H | 674 | | | | 3.0 ^ | 250 | - |
| Bromuconazole 46 | FM | 674 | | | | 6.0 ^ | NT | - |
| Bromuconazole 47 | FM | 674 | | | | 4.0 ^ | NT | - |
| Carbaryl | I | 634 | | | | 6.0 ^ | 3,000 | 2,000 |
| Carbofuran | I | 494 | | | | 34 ^ | 100 | - |
| Carboxin | F | 674 | | | | 3.0 ^ | 200 | - |
| Carfentrazone ethyl | H | 674 | | | | 3.0 ^ | 100.0 | - |
| Chlorpyrifos | I | 674 | 4 | 0.6 | 10 - 42 | 6.0 ^ | 500 | 500 |
| Chlorpyrifos methyl | I | 674 | 156 | 23.1 | 32 - 2610 | 19 ^ | 6,000 | 10,000 |
| Clodinafop propargyl | H | 654 | | | | 3.0 ^ | 100 | - |
| Cyanazine | H | 674 | 1 | 0.1 | 8.0 ^ | 5.0 ^ | 100 | - |
| Cyfluthrin | I | 654 | 19 | 2.9 | 38 - 669 | 23 ^ | 4,000 | - |
| Cyhalothrin, Total (Cyhalothrin-L + R157836) | I | 674 | 1 | 0.1 | 7.0 ^ | 4.0 ^ | 50 | - |
| Cyproconazole | F | 674 | | | | 11 ^ | NT | - |
| DDE p,p' | IM | 674 | | | | 3.0 ^ | 500 AL | 100 |
| Diazinon | I | 674 | 1 | 0.1 | 5.0 ^ | 3.0 ^ | 50 | - |
| Diazinon oxygen analog | IM | 674 | | | | 6.0 ^ | NT | - |
| Diclofop methyl | H | 674 | | | | 3.0 ^ | 100 | - |
| Dieldrin | I | 674 | | | | 6.0 ^ | 20 AL | 20 |
| Difenoconazole | F | 674 | | | | 4.0 ^ | 100 | - |
| Dimethoate | I | 674 | | | | 28 ^ | 40 | 50 |
| Dimethomorph | F | 644 | | | | 19 ^ | NT | - |
| Disulfoton | I | 674 | | | | 3.0 ^ | 300 | 200 |
| Disulfoton sulfone | IM | 674 | | | | 13 ^ | 300 | 200 |
| Endosulfan I | I | 674 | | | | 6.0 ^ | 100 | 200 |
| Endosulfan II | IM | 674 | | | | 6.0 ^ | 100 | 200 |
| Endosulfan sulfate | IM | 674 | | | | 3.0 ^ | 100 | 200 |
| Epoxiconazole | F | 674 | | | | 4.0 ^ | NT | - |
| Etridiazole | F | 654 | | | | 10 ^ | 50 | - |
| Fenbuconazole | F | 434 | | | | 18 ^ | NT | 100 |
| Fenitrothion | I | 671 | | | | 6.0 ^ | NT | 10,000 |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Fludioxonil | F | 674 | | | | 9.0 ^ | 20 | 50 |
| Flufenacet | H | 674 | | | | 6.0 ^ | 1,000 | - |
| Fluridone | H | 674 | | | | 3.0 ^ | 100 | - |
| Heptachlor epoxide | IM | 674 | | | | 3.0 ^ | NT | 20 |
| Hexaconazole | F | 674 | | | | 4.0 ^ | NT | - |
| 3-Hydroxycarbofuran | IM | 569 | | | | 6.0 ^ | 100 | - |
| Imazalil | F | 674 | | | | 28 ^ | 50 | 10 |
| Lindane (BHC gamma) | I | 654 | 3 | 0.5 | 10 - 21 | 6.0 ^ | 100 AL | 10 |
| Linuron | H | 674 | | | | 25 ^ | 250 | - |
| Malathion | I | 674 | 451 | 66.9 | 5.0 - 2577 | 3.0 ^ | 8,000 | 8,000 |
| Malathion oxygen analog | IM | 674 | | | | 5.0 ^ | NT | - |
| Metalaxyl | F | 674 | 1 | 0.1 | 25 ^ | 6.0 ^ | 200 | 50 |
| Methoprene | R | 634 | 4 | 0.6 | 22 - 279 | 13 ^ | 5,000 | 5,000 |
| Methoxychlor p,p' (V-40) | IM | 674 | 40 | 5.9 | 8.0 - 21 | 5.0 ^ | NT | - |
| Metolachlor | H | 674 | | | | 3.0 ^ | 100 | - |
| Metribuzin | H | 634 | | | | 6.0 ^ | 750 | - |
| Myclobutanil | F | 674 | | | | 13 ^ | 30 | - |
| Omethoate | IM | 654 | | | | 3.0 ^ | 40 | - |
| Parathion ethyl | I | 671 | | | | 5.0 ^ | 1,000 | - |
| Parathion oxygen analog | IM | 654 | | | | 19 ^ | NT | - |
| Phorate | I | 434 | 6 | 1.4 | 13 ^ | 8.0 ^ | 50 | 50 |
| Phorate sulfone | IM | 674 | | | | 5.0 ^ | 50 | 50 |
| Piperonyl butoxide | I | 674 | 17 | 2.5 | 10 - 42 | 6.0 ^ | 20,000 | 30,000 |
| Pirimiphos methyl (V-22) | I | 674 | 22 | 3.3 | 5.0 ^ | 3.0 ^ | NT | 7,000 |
| Propanil | H | 674 | 9 | 1.3 | 8.0 ^ | 5.0 ^ | 200 | - |
| Propiconazole | F | 654 | | | | 11 ^ | 100 | 50 |
| RH 9129 (fenbuconazole metabolite) (V-4) | FM | 594 | 4 | 0.7 | 8.0 - 81 | 5.0 ^ | NT | - |
| RH 9130 (fenbuconazole metabolite) | FM | 674 | | | | 4.0 ^ | NT | - |
| TCMTB | F | 674 | | | | 25 ^ | 100 | - |
| Tebuconazole | F | 640 | | | | 10 ^ | 50 | 50 |
| Tetraconazole | F | 674 | | | | 4.0 ^ | NT | - |
| Thiabendazole | F | 514 | | | | 13 ^ | 1,000 | - |
| Thiamethoxam | I | 654 | | | | 3.0 ^ | 20 | - |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Tri Allate | H | 654 | | | | 6.0 ^ | 50 | - |
| Triadimefon | F | 674 | | | | 3.0 ^ | 1,000 | 100 |
| Triadimenol | F | 669 | | | | 6.0 ^ | 50 | 200 |
| Trifluralin | H | 654 | 9 | 1.4 | 10 ^ | 6.0 ^ | 50 | - |
| Triticonazole | F | 674 | | | | 4.0 ^ | 50 | - |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

**NOTES**

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

(V) = Residue was found where no tolerance was established by EPA. Following "V" are the number of occurrences.

Pesticide Types:

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

R = Insect Growth Regulator

# Appendix F

## Distribution of Residues by Pesticide in Milk

Appendix F shows residue detections for all milk compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed 746 milk samples. A total of 738 samples (99 percent) were reported with residue detections. All residue detections were much lower than the established tolerances.

See Appendix B for definition of ALs and MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38th Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because milk residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX F. DISTRIBUTION OF RESIDUES BY PESTICIDE IN MILK

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Acephate | I | 746 | | | | 0.090 ^ | 100 | 20 |
| Alachlor | H | 746 | | | | 0.15 ^ | 20 | - |
| Aldicarb | I | 746 | | | | 0.060 ^ | NT | 10 |
| Aldicarb sulfone | IM | 746 | | | | 0.090 ^ | NT | 10 |
| Aldicarb sulfoxide | IM | 746 | | | | 0.18 ^ | NT | 10 |
| Amitraz | I | 746 | | | | 0.75 ^ | 30 | 10 |
| Atrazine | H | 746 | | | | 0.18 ^ | 20 | - |
| Bifenthrin | I | 746 | 17 | 2.3 | 0.10 - 0.67 | 0.060 ^ | 100 | 50 |
| Buprofezin | I | 746 | | | | 0.24 ^ | 10 | - |
| Carbaryl | I | 746 | 2 | 0.3 | 0.083 ^ | 0.050 ^ | 300 | 50 |
| Carbofuran | I | 746 | | | | 0.090 ^ | 20 | 50 |
| Chlorfenapyr | I | 746 | | | | 0.090 ^ | 10 | - |
| Chlorpropham | H | 746 | | | | 0.30 ^ | 50 | - |
| Chlorpyrifos | I | 746 | | | | 0.17 ^ | 10 | 20 |
| Chlorpyrifos methyl | I | 746 | | | | 0.11 ^ | 50 | 10 |
| Chlorpyrifos methyl O-analog | IM | 746 | | | | 1.5 ^ | 50 | - |
| Coumaphos | I | 746 | | | | 0.11 ^ | 500 | - |
| Coumaphos oxygen analog | IM | 746 | | | | 0.40 ^ | 500 | - |
| Cyfluthrin | I | 746 | 6 | 0.8 | 1.0 ^ | 0.60 ^ | 1,000 | 10 |
| Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) | I | 746 | 155 | 20.8 | 0.25 - 1.2 | 0.15 ^ | 200 | - |
| Cypermethrin | I | 746 | | | | 0.60 ^ | 100 | 50 |
| Cyproconazole | F | 746 | | | | 0.21 ^ | NT | - |
| DDE p,p' | IM | 746 | 637 | 85.4 | 0.10 - 11 | 0.060 ^ | 1,250 AL | 20 |
| DEF (Tribufos) | H | 746 | | | | 0.12 ^ | 2 | - |
| Deltamethrin (includes parent Tralomethrin) | I | 746 | | | | 0.15 ^ | 20 | 50 |
| Dichlorvos (DDVP) | I | 746 | | | | 0.050 ^ | 20 | 20 |
| Dieldrin | I | 746 | 173 | 23.2 | 0.13 ^ | 0.080 ^ | 300 AL | 6 |
| Difenoconazole | F | 746 | | | | 0.15 ^ | 10 | - |
| Dimethoate | I | 746 | 1 | 0.1 | 0.10 ^ | 0.060 ^ | 2 | 50 |
| Diphenylamine (DPA) | F | 746 | 683 | 91.6 | 0.10 - 6.3 | 0.060 ^ | 10 | 0.4 |
| Endosulfan I | I | 746 | | | | 0.060 ^ | 500 | 4 |
| Endosulfan II | IM | 746 | | | | 0.020 ^ | 500 | 4 |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Endosulfan sulfate | IM | 746 | 115 | 15.4 | 0.050 - 3.0 | 0.030 ^ | 500 | 4 |
| Epoxiconazole | F | 746 | | | | 0.21 ^ | NT | - |
| Esfenvalerate+Fenvalerate Total | I | 746 | | | | 0.15 ^ | 300 | 100 |
| Etridiazole | F | 746 | | | | 0.21 ^ | 50 | - |
| Fenamiphos | I | 746 | | | | 0.17 ^ | 100 | 5 |
| Fenamiphos sulfone | IM | 746 | | | | 0.70 ^ | 100 | 5 |
| Fenamiphos sulfoxide | IM | 746 | | | | 0.84 ^ | 100 | 5 |
| Fenarimol | F | 746 | | | | 0.24 ^ | NT | - |
| Fenoxaprop ethyl | H | 746 | | | | 0.090 ^ | 20 | - |
| Fenpropathrin | I | 746 | | | | 0.36 ^ | 80 | 100 |
| Fipronil | I | 746 | | | | 0.30 ^ | 50 | 20 |
| Fluridone | H | 746 | | | | 0.30 ^ | 50 | - |
| Fluroxypyr 1-methylheptyl ester | H | 746 | | | | 0.24 ^ | 300 | - |
| Flutolanil | F | 746 | | | | 0.12 ^ | 50 | 50 |
| Fluvalinate | I | 746 | | | | 0.45 ^ | NT | - |
| Hexachlorobenzene (HCB) | FM | 746 | | | | 0.21 ^ | NT | - |
| Hexaconazole | F | 746 | | | | 0.15 ^ | NT | - |
| 3-Hydroxycarbofuran | IM | 746 | 45 | 6.0 | 0.083 - 0.66 | 0.050 ^ | 20 | - |
| Iprodione | F | 746 | | | | 0.75 ^ | 500 | - |
| Malathion | I | 746 | | | | 0.12 ^ | 500 | - |
| Malathion oxygen analog | IM | 746 | | | | 0.13 ^ | NT | - |
| Metalaxyl | F | 746 | | | | 0.090 ^ | 20 | - |
| Methamidophos | I | 746 | | | | 0.080 ^ | 100 | 20 |
| Metolachlor | H | 746 | | | | 0.27 ^ | 20 | - |
| Metribuzin | H | 746 | | | | 0.60 ^ | 50 | - |
| MGK-264 | I | 746 | | | | 0.51 ^ | 300 | - |
| Myclobutanil | F | 746 | | | | 0.24 ^ | 200 | 10 |
| Norflurazon | H | 746 | | | | 0.45 ^ | 100 | - |
| Omethoate | IM | 746 | | | | 0.12 ^ | 2 | - |
| Oxydemeton methyl | I | 746 | | | | 0.32 ^ | 10 | - |
| Oxyfluorfen | H | 746 | | | | 0.090 ^ | 50 | - |
| Pentachloroaniline (PCA) | FM | 746 | | | | 0.27 ^ | NT | - |
| Pentachlorobenzene (PCB) | FM | 746 | | | | 0.30 ^ | NT | - |
| Pentachlorophenyl methyl ether | FM | 746 | | | | 0.090 ^ | NT | - |
| Pentachlorophenyl methyl sulfide | FM | 746 | | | | 0.12 ^ | NT | - |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Permethrin Total | IM | 746 | 21 | 2.8 | 1.0 - 4.1 | 0.60 ^ | 250 | 100 |
| Profenofos | I | 746 | | | | 0.17 ^ | 10 | 10 |
| Pronamide | H | 746 | | | | 0.15 ^ | 20 | - |
| Propachlor | H | 746 | | | | 0.18 ^ | 20 | - |
| Propanil | H | 746 | | | | 0.18 ^ | 50 | - |
| Propargite | I | 746 | | | | 0.75 ^ | 80 | 100 |
| Propham | H | 746 | | | | 0.75 ^ | NT | - |
| Propiconazole | F | 746 | | | | 0.36 ^ | 50 | 10 |
| Pyrazon | H | 746 | | | | 0.15 ^ | 10 | - |
| Quintozene (PCNB) | F | 746 | | | | 0.24 ^ | NT | - |
| Simazine | H | 746 | | | | 0.18 ^ | 20 | - |
| Tefluthrin | I | 746 | | | | 0.27 ^ | NT | - |
| Tetrachlorvinphos | I | 746 | 2 | 0.3 | 0.27 ^ | 0.16 ^ | 500 | - |
| Tetraconazole | F | 746 | | | | 0.33 ^ | 50.0 | - |
| Tetradifon | I | 746 | | | | 0.080 ^ | 400 AL | - |
| Tetramethrin | I | 746 | | | | 0.75 ^ | NT | - |
| Thiabendazole | F | 746 | | | | 0.33 ^ | 400 | 200 |
| Triadimefon | F | 746 | | | | 0.27 ^ | 40 | 50 |
| Triadimenol | F | 746 | | | | 0.21 ^ | 10 | 10 |
| Triflumizole | F | 746 | | | | 0.18 ^ | 50 | - |
| Vinclozolin | F | 746 | | | | 0.15 ^ | 50 | 50 |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

**NOTES**

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

Pesticide Types:

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

# Appendix G

## Distribution of Residues by Pesticide in Heavy Cream

Appendix G shows residue detections for all heavy cream compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/ Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed 369 heavy cream samples. A total of 366 samples (99 percent) were reported with residue detections. All residue detections were much lower than the established tolerances.

See Appendix B for definition of ALs and MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38th Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because heavy cream residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX G. DISTRIBUTION OF RESIDUES BY PESTICIDE IN HEAVY CREAM

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Acephate | I | 369 | | | | 0.90 ^ | 100 | 20 |
| Alachlor | H | 369 | | | | 1.5 ^ | 20 | - |
| Aldicarb | I | 369 | | | | 0.60 ^ | NT | 10 |
| Aldicarb sulfone | IM | 369 | | | | 0.90 ^ | NT | 10 |
| Aldicarb sulfoxide | IM | 369 | | | | 1.8 ^ | NT | 10 |
| Amitraz | I | 369 | | | | 7.5 ^ | 30 | 10 |
| Atrazine | H | 369 | | | | 1.8 ^ | 20 | - |
| Bifenthrin | I | 369 | 1 | 0.3 | 1.0 ^ | 0.60 ^ | 100 | 50 |
| Buprofezin | I | 369 | | | | 2.4 ^ | 10 | - |
| Carbaryl | I | 369 | 2 | 0.5 | 0.80 - 3.6 | 0.50 ^ | 300 | 50 |
| Carbofuran | I | 369 | | | | 0.90 ^ | 20 | 50 |
| Chlorfenapyr | I | 369 | | | | 0.90 ^ | 10 | - |
| Chlorpropham | H | 369 | | | | 3.0 ^ | 50 | - |
| Chlorpyrifos | I | 369 | | | | 1.7 ^ | 10 | 20 |
| Chlorpyrifos methyl | I | 369 | | | | 0.11 ^ | 50 | 10 |
| Chlorpyrifos methyl O-analog | IM | 369 | | | | 14.8 ^ | 50 | - |
| Coumaphos | I | 369 | | | | 1.1 ^ | 500 | - |
| Coumaphos oxygen analog | IM | 369 | | | | 4.0 ^ | 500 | - |
| Cyfluthrin | I | 369 | 1 | 0.3 | 10 ^ | 6.0 ^ | 1,000 | 10 |
| Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) | I | 369 | 85 | 23.0 | 2.5 ^ | 1.5 ^ | 200 | - |
| Cypermethrin | I | 369 | | | | 6.0 ^ | 100 | 50 |
| Cyproconazole | F | 369 | | | | 2.1 ^ | NT | - |
| DDE p,p' | IM | 369 | 320 | 86.7 | 1.0 - 37 | 0.60 ^ | 1,250 AL | 20 |
| DEF (Tribufos) | H | 369 | | | | 1.2 ^ | 2 | - |
| Deltamethrin (includes parent Tralomethrin) | I | 369 | | | | 1.5 ^ | 20 | 50 |
| Dichlorvos (DDVP) | I | 369 | | | | 0.50 ^ | 20 | 20 |
| Dieldrin | I | 369 | 122 | 33.1 | 1.3 ^ | 0.80 ^ | 300 AL | 6 |
| Difenoconazole | F | 369 | | | | 1.5 ^ | 10 | - |
| Dimethoate | I | 369 | | | | 0.60 ^ | 2 | 50 |
| Diphenylamine (DPA) | F | 369 | 305 | 82.7 | 1.0 - 6.2 | 0.60 ^ | 10 | 0.4 |
| Endosulfan I | I | 369 | 1 | 0.3 | 1.0 ^ | 0.60 ^ | 500 | 4 |
| Endosulfan II | IM | 369 | 1 | 0.3 | 4.6 ^ | 0.20 ^ | 500 | 4 |
| Endosulfan sulfate | IM | 369 | 56 | 15.2 | 0.50 - 192 | 0.30 ^ | 500 | 4 |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Epoxiconazole | F | 369 | | | | 2.1 ^ | NT | - |
| Esfenvalerate+Fenvalerate Total | I | 369 | | | | 1.5 ^ | 300 | 100 |
| Etridiazole | F | 369 | | | | 2.1 ^ | 50 | - |
| Fenamiphos | I | 369 | | | | 1.7 ^ | 100 | 5 |
| Fenamiphos sulfone | IM | 369 | | | | 7.0 ^ | 100 | 5 |
| Fenamiphos sulfoxide | IM | 369 | | | | 8.4 ^ | 100 | 5 |
| Fenarimol | F | 369 | | | | 2.4 ^ | NT | - |
| Fenoxaprop ethyl | H | 369 | | | | 0.90 ^ | 20 | - |
| Fenpropathrin | I | 369 | | | | 3.6 ^ | 80 | 100 |
| Fipronil | I | 369 | | | | 3.0 ^ | 50 | 20 |
| Fluridone | H | 369 | | | | 3.0 ^ | 50 | - |
| Fluroxypyr 1-methylheptyl ester | H | 369 | | | | 2.4 ^ | 300 | - |
| Flutolanil | F | 369 | | | | 1.2 ^ | 50 | 50 |
| Fluvalinate | I | 369 | | | | 4.5 ^ | NT | - |
| Hexachlorobenzene (HCB) | FM | 369 | | | | 2.1 ^ | NT | - |
| Hexaconazole | F | 369 | | | | 1.5 ^ | NT | - |
| 3-Hydroxycarbofuran | IM | 369 | | | | 0.50 ^ | 20 | - |
| Iprodione | F | 369 | | | | 7.5 ^ | 500 | - |
| Malathion | I | 369 | | | | 1.2 ^ | 500 | - |
| Malathion oxygen analog | IM | 369 | | | | 1.3 ^ | NT | - |
| Metalaxyl | F | 369 | | | | 0.90 ^ | 20 | - |
| Methamidophos | I | 369 | | | | 0.80 ^ | 100 | 20 |
| Metolachlor | H | 369 | | | | 2.7 ^ | 20 | - |
| Metribuzin | H | 369 | | | | 6.0 ^ | 50 | - |
| MGK-264 | I | 369 | | | | 5.1 ^ | 300 | - |
| Myclobutanil | F | 369 | | | | 2.4 ^ | 200 | 10 |
| Norflurazon | H | 369 | | | | 4.5 ^ | 100 | - |
| Omethoate | IM | 369 | | | | 1.2 ^ | 2 | - |
| Oxydemeton methyl | I | 369 | | | | 3.2 ^ | 10 | - |
| Oxyfluorfen | H | 369 | | | | 0.90 ^ | 50 | - |
| Pentachloroaniline (PCA) | FM | 369 | | | | 2.7 ^ | NT | - |
| Pentachlorobenzene (PCB) | FM | 369 | | | | 3.0 ^ | NT | - |
| Pentachlorophenyl methyl ether | FM | 369 | | | | 0.90 ^ | NT | - |
| Pentachlorophenyl methyl sulfide | FM | 369 | | | | 1.2 ^ | NT | - |
| Permethrin Total | IM | 369 | 7 | 1.9 | 10 - 60.1 | 6.0 ^ | 250 | 100 |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| Profenofos | I | 369 | | | | 1.7 ^ | 10 | 10 |
| Pronamide | H | 369 | | | | 1.5 ^ | 20 | - |
| Propachlor | H | 369 | | | | 1.8 ^ | 20 | - |
| Propanil | H | 369 | | | | 1.8 ^ | 50 | - |
| Propargite | I | 369 | | | | 7.5 ^ | 80 | 100 |
| Propham | H | 369 | | | | 7.5 ^ | NT | - |
| Propiconazole | F | 369 | | | | 3.6 ^ | 50 | 10 |
| Pyrazon | H | 369 | | | | 1.5 ^ | 10 | - |
| Quintozene (PCNB) | F | 369 | | | | 2.4 ^ | NT | - |
| Simazine | H | 369 | | | | 1.8 ^ | 20 | - |
| Tefluthrin | I | 369 | | | | 2.7 ^ | NT | - |
| Tetrachlorvinphos | I | 369 | | | | 1.6 ^ | 500 | - |
| Tetraconazole | F | 369 | | | | 3.3 ^ | 50.0 | - |
| Tetradifon | I | 369 | | | | 0.80 ^ | 400 AL | - |
| Tetramethrin | I | 369 | | | | 7.5 ^ | NT | - |
| Thiabendazole | F | 369 | | | | 3.3 ^ | 400 | 200 |
| Triadimefon | F | 369 | | | | 2.7 ^ | 40 | 50 |
| Triadimenol | F | 369 | | | | 2.1 ^ | 10 | 10 |
| Triflumizole | F | 369 | | | | 1.8 ^ | 50 | - |
| Vinclozolin | F | 369 | | | | 1.5 ^ | 50 | 50 |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

**NOTES**

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

Pesticide Types:

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

# Appendix H

## Distribution of Residues by Pesticide in Pork

Appendix F shows residue detections for all pork compounds tested, including range of values detected, range of Limits of Detection (LODs), and Environmental Protection Agency (EPA) and Codex Maximum Residue Limit/Extraneous Maximum Residue Limit (MRL/EMRL) tolerance references for each pair.

In 2005, PDP analyzed pork tissue samples which included 352 adipose samples and 352 muscle samples. A total of 40 adipose samples (11 percent) and 18 muscle samples (5 percent) were reported with residue detections. Two of the adipose samples contained residues that exceeded the established EPA tolerance.

See Appendix B for definition of ALs and MRLs.

MRLs/EMRLs shown in this appendix are from the Codex Alimentarius: *Proc. of Codex Committee on Pesticide Residues*, 38$^{th}$ Session, April 3-8, 2006, Fortaleza, Brazil. Only Codex MRLs (CXLs) are listed.

EPA tolerances as published in 40 CFR Part 180 are expressed in parts per million (ppm). Because pork residues are expressed in parts per billion (ppb), EPA Tolerances and Codex MRLs have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

The information herein is only intended to be an initial reference. Readers are reminded that international regulations and MRLs may change and that it is important that information obtained from this table be verified with knowledgeable parties in the market of interest prior to sale or shipment of exports.

# APPENDIX H. DISTRIBUTION OF RESIDUES BY PESTICIDE IN PORK

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| **Acephate** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 100 | 50 |
| **Acetamiprid** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 9.0 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 6.9 ^ | 100 | - |
| **Alachlor** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 20 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 20 | - |
| **Aldicarb** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.42 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.21 ^ | NT | 10 |
| **Aldicarb sulfone** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.4 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | NT | 10 |
| **Aldicarb sulfoxide** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 13.5 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 6.8 ^ | NT | 10 |
| **Aldrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 7.5 ^ | 300 AL | 200 |
| **Atrazine** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.60 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | NT | - |
| **Azoxystrobin** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 10.0 | - |
| Pork, Muscle | | 352 | | | | 3.0 ^ | 10 | - |
| **Benoxacor** | S | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.60 ^ | 10 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 10 | - |
| **BHC alpha** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 300 AL | - |
| **Bifenazate** | A | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | NT | 100 |
| Pork, Muscle | | 352 | | | | 2.4 ^ | 20 | - |
| **Bifenthrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 500 | - |
| **Boscalid** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 50 | - |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| **Buprofezin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 1.8 ^ | 50 | - |
| **Captan** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 18 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 30 ^ | 50 | - |
| **Carbaryl** | I | | | | | | | |
| Pork, Adipose | | 352 | 7 | 2.0 | 1.0 - 98.6 | 0.60 ^ | 100 | - |
| Pork, Muscle | | 352 | 10 | 2.8 | 0.50 - 6.6 | 0.30 ^ | 100 | 50 |
| **Carbendazim (MBC)** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.60 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 100 | - |
| **Carbofuran** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.30 ^ | NT | 50 |
| Pork, Muscle | | 352 | | | | 0.15 ^ | NT | 50 |
| **Carboxin** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 7.5 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 100 | - |
| **Chlordane cis** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 300 AL | 50 |
| **Chlordane trans** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 300 AL | 50 |
| **Chloroneb** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 1.8 ^ | 200 | - |
| **Chlorothalonil** | F | | | | | | | |
| Pork, Adipose | | 352 | 1 | 0.3 | 7.5 ^ | 4.5 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 30 | - |
| **Chlorpropham** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 500 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 500 | - |
| **Chlorpyrifos** | I | | | | | | | |
| Pork, Adipose | | 352 | 1 | 0.3 | 2.5 ^ | 1.5 ^ | 200 | 20 |
| Pork, Muscle | | 352 | | | | 0.75 ^ | 50 | - |
| **Chlorpyrifos methyl** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 500 | - |
| Pork, Muscle | | 352 | | | | 0.45 ^ | 500 | - |
| **Clethodim** | H | | | | | | | |
| Pork, Muscle | | 352 | | | | 1.4 ^ | 200 | 200 |
| **Clofentezine** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.45 ^ | 50 | - |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| **Coumaphos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 1,000 | - |
| **Coumaphos oxygen analog** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.2 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 2.1 ^ | 1,000 | - |
| **Cyfluthrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.8 ^ | 10,000 | - |
| Pork, Muscle | | 352 | | | | 2.4 ^ | 400 | - |
| **Cyhalothrin, Lambda** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.4 ^ | 3,000 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 200 | - |
| **Cypermethrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 1,000 | 200 |
| Pork, Muscle | | 352 | | | | 3.0 ^ | 200 | - |
| **DDD p,p'** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 5,000 AL | 5,000 |
| **DDE p,p'** | IM | | | | | | | |
| Pork, Adipose | | 352 | 25 | 7.1 | 1.5 - 3.8 | 0.90 ^ | 5,000 AL | 5,000 |
| **DDT p,p'** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 5,000 AL | 5,000 |
| **Deltamethrin (includes parent Tralomethrin)** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 9.0 ^ | 50 | 500 |
| Pork, Muscle | | 352 | | | | 4.5 ^ | 50 | - |
| **Dichlorvos (DDVP)** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.45 ^ | 100 | 50 |
| **Dieldrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 300 AL | 200 |
| **Difenoconazole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.8 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 2.4 ^ | 50 | - |
| **Diflubenzuron** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.60 ^ | 50 | 100 |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 50 | - |
| **Diflufenzopyr** | H | | | | | | | |
| Pork, Adipose | | 352 | 1 | 0.3 | 57 ^ | 3.0 ^ | 300 | - |
| **Dimethoate** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | NT | 50 |
| Pork, Muscle | | 352 | | | | 0.45 ^ | NT | 50 |

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|---|---|---|---|---|---|---|---|---|
| **Diphenamid** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | - |
| **2,6-DIPN** | P | | | | | | | |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 1,350 | - |
| **Endosulfan I** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 10.5 ^ | 200 | 100 |
| Pork, Muscle | | 352 | | | | 4.5 ^ | 200 | - |
| **Endosulfan II** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 15 ^ | 200 | 100 |
| Pork, Muscle | | 352 | | | | 4.5 ^ | 200 | - |
| **Endosulfan sulfate** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 200 | 100 |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 200 | - |
| **Esfenvalerate+Fenvalerate Total** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 1,500 | 1,000 |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 1,500 | - |
| **Ethalfluralin** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | - |
| **Ethion** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 200 | - |
| **Ethofumesate** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 9.0 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Etridiazole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | 100.0 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 100.0 | - |
| **Fenamiphos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | 10 |
| **Fenamiphos sulfone** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 3.0 ^ | 50 | 10 |
| **Fenamiphos sulfoxide** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 50 | - |
| **Fenarimol** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | - |
| **Fenbuconazole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | 10 | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | 10 | - |

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|---|---|---|---|---|---|---|---|---|
| **Fenoxaprop ethyl** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Fenpropathrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 100 | - |
| **Fenthion** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.4 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | NT | - |
| **Fenthion sulfone** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 3.0 ^ | NT | - |
| **Fipronil** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.1 ^ | 40 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 10 | - |
| **Flufenacet** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 15 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 4.5 ^ | 50 | - |
| **Fluridone** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Fluroxypyr 1-methylheptyl ester** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 100 | - |
| **Flutolanil** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.5 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 50 | 50 |
| **Fluvalinate** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | NT | - |
| **Heptachlor** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 200 AL | 200 |
| **Heptachlor epoxide** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 200 AL | 200 |
| **Hexazinone** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 2.4 ^ | 100 | - |
| **Hexythiazox** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 10.5 ^ | 20 | - |
| **Hydroprene** | R | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.5 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 200 | - |

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|---|---|---|---|---|---|---|---|---|
| **3-Hydroxycarbofuran** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | - |
| **Imazalil** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 10 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 10 | - |
| **Imidacloprid** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 300 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 300 | 20 |
| **Indoxacarb** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.30 ^ | 1,500 | - |
| Pork, Muscle | | 352 | | | | 0.15 ^ | 100 | - |
| **Iprodione** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 5.4 ^ | 500 | - |
| Pork, Muscle | | 352 | | | | 5.4 ^ | 500 | - |
| **Isofenphos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.4 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | NT | - |
| **Isoxaflutole** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 4.5 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 1.8 ^ | 200 | - |
| **Lindane (BHC gamma)** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | 4,000 | 100 |
| **Linuron** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 0.75 ^ | 1,000 | - |
| **Malathion** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 4,000 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 4,000 | - |
| **Malathion oxygen analog** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | - |
| **Metalaxyl** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.7 ^ | 400 | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | 50 | - |
| **Methamidophos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 100 | 10 |
| **Methidathion** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | - |
| **Methoprene** | R | | | | | | | |
| Pork, Adipose | | 352 | | | | 10.5 ^ | 1,000 | 200 |
| Pork, Muscle | | 352 | | | | 5.4 ^ | 100 | - |

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|---|---|---|---|---|---|---|---|---|
| **Methoxychlor p,p'** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | NT | - |
| **Methoxyfenozide** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.30 ^ | 100 | 50 |
| Pork, Muscle | | 352 | | | | 0.15 ^ | 20 | - |
| **Metolachlor** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 10.5 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | - |
| **Metribuzin** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 12 ^ | 700 | - |
| Pork, Muscle | | 352 | | | | 4.5 ^ | 700 | - |
| **MGK-264** | I | | | | | | | |
| Pork, Adipose | | 352 | 6 | 1.7 | 10 - 63.9 | 6.0 ^ | 300 | - |
| **MGK-326 (dipropyl isocinchomeronate)** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 100 | - |
| **Mirex** | I | | | | | | | |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 100 AL | - |
| **Myclobutanil** | F | | | | | | | |
| Pork, Muscle | | 352 | | | | 1.8 ^ | 100 | - |
| **1-Naphthol** | IM | | | | | | | |
| Pork, Adipose (X-1) | | 352 | 3 | 0.9 | 5.0 - 188 | 3.0 ^ | 100 | - |
| Pork, Muscle | | 352 | 1 | 0.3 | 2.5 ^ | 1.5 ^ | 100 | - |
| **Nitrapyrin** | N | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Norflurazon** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.60 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 100 | - |
| **Omethoate** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.75 ^ | NT | - |
| **Oxadiazon** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.5 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | - |
| **Oxydemeton methyl** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 10 | - |
| **Oxydemeton methyl sulfone** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 15 ^ | 10 | - |
| Pork, Muscle | | 352 | | | | 7.5 ^ | 10 | - |

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|---|---|---|---|---|---|---|---|---|
| **Oxyfluorfen** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 50 | - |
| **Oxythioquinox** | I | | | | | | | |
| Pork, Muscle | | 352 | | | | 1.8 ^ | NT | - |
| **Permethrin Total** | IM | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 3,000 | 1,000 |
| Pork, Muscle | | 352 | | | | 3.0 ^ | 250 | - |
| **Phorate** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | 50 |
| **Phosalone** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | NT | - |
| **Phosmet** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 200 | - |
| **Piperonyl butoxide** | I | | | | | | | |
| Pork, Adipose (X-1) | | 352 | 6 | 1.7 | 10 - 179 | 6.0 ^ | 100 | 2,000 |
| Pork, Muscle | | 352 | 9 | 2.6 | 7.5 - 53.5 | 4.5 ^ | 100 | - |
| **Pirimiphos methyl** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 0.45 ^ | NT | 10 |
| **Prallethrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 9.0 ^ | 1,000 | - |
| Pork, Muscle | | 352 | | | | 5.4 ^ | 1,000 | - |
| **Profenofos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | 50 |
| **Pronamide** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.90 ^ | 20 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 20 | - |
| **Propachlor** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 7.5 ^ | 20 | - |
| **Propachlor oxanilic acid** | HM | | | | | | | |
| Pork, Muscle | | 352 | | | | 3.6 ^ | 20 | - |
| **Propanil** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | 100 | - |
| **Propargite** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 7.2 ^ | 100 | 100 |
| Pork, Muscle | | 352 | | | | 3.6 ^ | 100 | - |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| **Propetamphos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 100 | - |
| **Propham** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 10.5 ^ | NT | - |
| **Propiconazole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 100 | 50 |
| **Pyrethrins** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 90 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 45 ^ | 100 | - |
| **Pyridaben** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 1.8 ^ | 50 | - |
| **Pyriproxyfen** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 1.2 ^ | 100 | - |
| **Resmethrin** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 9.0 ^ | 3,000 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 3,000 | - |
| **Sethoxydim** | H | | | | | | | |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 200 | - |
| **Simazine** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.9 ^ | 20 | - |
| Pork, Muscle | | 352 | | | | 2.0 ^ | 20 | - |
| **Sulprofos** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.8 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | NT | - |
| **Tebufenozide** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 0.30 ^ | 100 | 50 |
| Pork, Muscle | | 352 | | | | 0.15 ^ | 80 | - |
| **Terbacil** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.1 ^ | NT | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | NT | - |
| **Tetrachlorvinphos** | I | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.4 ^ | 1,500 | - |
| **Tetrahydrophthalimide (THPI)** | FM | | | | | | | |
| Pork, Adipose | | 352 | | | | 12 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 6.0 ^ | 50 | - |
| **Thiabendazole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 45 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 3.0 ^ | 100 | - |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppb | Range of LODs, ppb | EPA Tolerance Level, ppb* | Codex MRL/EMRL, ppb* |
|---|---|---|---|---|---|---|---|---|
| **Thiamethoxam** | I | | | | | | | |
| Pork, Muscle | | 352 | | | | 1.2 ^ | 20 | - |
| **Thiobencarb** | H | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 200 | - |
| Pork, Muscle | | 352 | | | | 0.60 ^ | 200 | - |
| **Triadimefon** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.0 ^ | 40 | - |
| Pork, Muscle | | 352 | | | | 1.5 ^ | 40 | 50 |
| **Triadimenol** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 3.6 ^ | 100 | - |
| Pork, Muscle | | 352 | | | | 2.4 ^ | 100 | 50 |
| **Trifloxystrobin** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 6.0 ^ | 50 | 50 |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Triflumizole** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 2.1 ^ | 500 | - |
| Pork, Muscle | | 352 | | | | 0.90 ^ | 50 | - |
| **Vinclozolin** | F | | | | | | | |
| Pork, Adipose | | 352 | | | | 1.2 ^ | 50 | - |
| Pork, Muscle | | 352 | | | | 0.30 ^ | 50 | - |

*Many of the listed tolerances and MRLs are the sum of a parent compound and metabolite(s)/isomer(s). The reader is advised to refer to EPA for the complete listing of compounds in tolerance expressions and to Codex for the complete listing of compounds in MRL expressions.*

## NOTES

* = EPA Tolerances and Codex MRLs have been multiplied by a factor of 1000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA and Codex.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

NT = No tolerance level was set for that pesticide/commodity pair.

AL = Numbers shown are Action Levels established by FDA and Codex Extraneous Maximum Residue Levels (EMRLs) for some pesticides. Under FQPA, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

(X) = Residue was found which exceeds EPA tolerance. Following "X" are the number of occurrences.

Pesticide Types:

A = Acaricide
F = Fungicide, FM = Fungicide Metabolite
H = Herbicide, HM = Herbicide Metabolite
I = Insecticide, IM = Insecticide Metabolite
N = Nitrification Inhibitor
P = Plant Growth Regulator
R = Insect Growth Regulator
S = Herbicide Safener

# Appendix I

## Distribution of Residues by Pesticide in Bottled Water

Appendix I shows residue detections for all bottled water compounds tested, including range of values detected and range of Limits of Detection (LODs) for each pair.

In 2005, PDP analyzed 378 bottled water samples. A total of 59 samples (16%) were reported with residue detections. Fourteen different residues from seven different pesticides were detected. Most samples with detections were for a single residue with only a few samples having multiple residues (up to a maximum of seven). Bottled water is regulated by the FDA and State regulatory agencies for the same list of pesticides currently regulated in public drinking water by EPA. The Safe Drinking Water Act amendments of 1996 require that FDA consider applicability of all EPA MCLs and monitoring for bottled water. All detections were well below any established EPA MCLs, which are being adopted by FDA as SOQs and HAs.

# APPENDIX I. DISTRIBUTION OF RESIDUES BY PESTICIDE IN BOTTLED WATER

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppt | Range of LODs, ppt |
|---|---|---|---|---|---|---|
| 2,4 DB | H | 211 | | | | 4.0 ^ |
| 2,4-D | H | 211 | | | | 2.5 ^ |
| Acetochlor | H | 378 | 1 | 0.3 | 17 ^ | 10 ^ |
| Acetochlor ethanesulfonic acid | HM | 211 | | | | 9.0 ^ |
| Acetochlor oxanilic acid | HM | 211 | 1 | 0.5 | 17.3 ^ | 10 ^ |
| Alachlor | H | 378 | | | | 10 ^ |
| Alachlor ethanesulfonic acid | HM | 211 | 9 | 4.3 | 13.7 - 121 | 12.5 ^ |
| Alachlor oxanilic acid | HM | 211 | 1 | 0.5 | 17.3 ^ | 10 ^ |
| Atrazine | H | 378 | 10 | 2.6 | 17 - 50 | 10 ^ |
| Bensulfuron methyl | H | 211 | | | | 5.0 ^ |
| Boscalid | F | 378 | | | | 100 ^ |
| Bromacil | H | 211 | | | | 6.0 ^ |
| Carbaryl | I | 211 | | | | 7.5 ^ |
| Carbofuran | I | 211 | | | | 4.0 ^ |
| Chlorimuron ethyl | H | 211 | | | | 6.0 ^ |
| Chlorothalonil | F | 378 | | | | 30 ^ |
| Chlorpyrifos | I | 378 | | | | 30 ^ |
| Clomazone | H | 378 | | | | 30 ^ |
| Clopyralid | H | 211 | | | | 12.5 ^ |
| Cyanazine | H | 378 | | | | 50 ^ |
| DCPA | H | 378 | | | | 30 ^ |
| Desethyl Atrazine | HM | 378 | 26 | 6.9 | 17 - 80 | 10 ^ |
| Desethyl-desisopropyl Atrazine | HM | 211 | 4 | 1.9 | 50.5 - 69 | 15 ^ |
| Desisopropyl atrazine | HM | 378 | 3 | 0.8 | 83 ^ | 50 ^ |
| Diazinon | I | 378 | | | | 30 ^ |
| Dimethenamid ESA | HM | 211 | | | | 2.0 ^ |
| Dimethenamid oxanilic acid | HM | 211 | | | | 3.0 ^ |
| Dimethenamid/Dimethenamid P | H | 378 | | | | 10 ^ |
| Dimethoate | I | 378 | | | | 50 ^ |
| Disulfoton sulfone | IM | 211 | | | | 6.0 ^ |
| Diuron | H | 211 | | | | 4.0 ^ |
| EPTC | H | 378 | | | | 30 ^ |
| Ethalfluralin | H | 378 | | | | 30 ^ |
| Flufenacet | H | 211 | | | | 2.5 ^ |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppt | Range of LODs, ppt |
|---|---|---|---|---|---|---|
| Fonofos | I | 378 | | | | 30 ^ |
| Halosulfuron | H | 211 | | | | 9.0 ^ |
| Hydroxy Atrazine | HM | 211 | 22 | 10.4 | 3.0 - 92.7 | 2.0 ^ |
| Imazamethabenz acid | H | 211 | | | | 3.0 ^ |
| Imazamethabenz methyl | H | 211 | | | | 1.5 ^ |
| Imazamox | H | 211 | | | | 4.0 ^ |
| Imazapic | H | 211 | | | | 3.0 ^ |
| Imazapyr | H | 211 | | | | 2.5 ^ |
| Imazaquin | H | 211 | | | | 5.0 ^ |
| Imazethapyr | H | 211 | 2 | 0.9 | 3.0 ^ | 2.0 ^ |
| Linuron | H | 211 | | | | 6.0 ^ |
| Malathion | I | 378 | | | | 30 ^ |
| MCPA | H | 211 | | | | 1.5 ^ |
| MCPB | H | 211 | | | | 3.0 ^ |
| Metalaxyl | F | 211 | | | | 2.5 ^ |
| Metolachlor | H | 378 | | | | 15 ^ |
| Metolachlor ethanesulfonic acid | HM | 211 | 18 | 8.5 | 5.0 - 180 | 3.0 ^ |
| Metolachlor oxanilic acid | HM | 211 | 6 | 2.8 | 6.1 - 22.6 | 3.0 ^ |
| Metribuzin | H | 378 | | | | 30 ^ |
| Metsulfuron methyl | H | 211 | | | | 7.0 ^ |
| Myclobutanil | F | 378 | | | | 50 ^ |
| Neburon | H | 211 | | | | 3.0 ^ |
| Nicosulfuron | H | 211 | | | | 8.0 ^ |
| Parathion methyl | I | 378 | | | | 30 ^ |
| Pendimethalin | H | 378 | | | | 30 ^ |
| Phorate | I | 378 | | | | 30 ^ |
| Picloram | H | 211 | 1 | 0.5 | 52.8 ^ | 12.5 ^ |
| Prometon | H | 378 | | | | 30 ^ |
| Prometryn | H | 211 | | | | 1.0 ^ |
| Propachlor | H | 378 | | | | 30 ^ |
| Propachlor oxanilic acid | HM | 211 | | | | 3.0 ^ |
| Propanil | H | 378 | | | | 30 ^ |
| Propazine | H | 378 | | | | 30 ^ |
| Propiconazole | F | 378 | | | | 50 ^ |
| Propoxur | I | 211 | | | | 3.0 ^ |
| Siduron | H | 211 | | | | 2.0 ^ |

| Pesticide | Pest. Type | Number of Samples | Samples with Detections | % of Samples w/ Detects | Range of Values Detected, ppt | Range of LODs, ppt |
|---|---|---|---|---|---|---|
| Simazine | H | 378 | | | | 30 ^ |
| Sulfometuron methyl | H | 211 | | | | 2.5 ^ |
| Tebuconazole | F | 378 | | | | 50 ^ |
| Tebupirimfos | I | 378 | | | | 30 ^ |
| Tebuthiuron | H | 378 | | | | 30 ^ |
| Terbufos | I | 378 | | | | 30 ^ |
| Tetraconazole | F | 378 | 1 | 0.3 | 100 ^ | 30 ^ |
| Thifensulfuron | H | 211 | | | | 5.0 ^ |
| Thiobencarb | H | 211 | | | | 2.5 ^ |
| Tri Allate | H | 378 | | | | 30 ^ |
| Triasulfuron | H | 211 | | | | 7.0 ^ |
| Trifluralin | H | 378 | | | | 30 ^ |

**NOTES**

^ = Only one distinct detected concentration or LOD value was reported for the pair.

Pesticide Types:

F = Fungicide

H = Herbicide, HM = Herbicide Metabolite

I = Insecticide, IM = Insecticide Metabolite

# Appendix J

## Distribution of Residues by Pesticide in Drinking Water

Appendix J shows residue detections for all drinking water compounds tested, including range of values detected and range of Limits of Detection (LODs). The Environmental Protection Agency (EPA) National Primary Drinking Water Regulation (NPDWR) Maximum Contaminant Levels (MCLs) for drinking water, Health Advisory (HA) values for drinking water, and Freshwater Aquatic Organism (FAOs) Criteria for ambient water are also shown. Units for LODs, MCLs, HAs, and FAOs are shown in parts per trillion (ppt).

In 2005, PDP analyzed 750 drinking water samples. PDP detected 43 different pesticide residues in finished drinking water and 48 residues in the untreated intake water; most of the detections were herbicides. None of the finished drinking water samples exceeded EPA MCLs for any pesticide detected. In fact, the majority of pesticides included in the PDP screens were not detected.

The MCLs are legally enforceable standards that apply to public water systems. EPA's regulations for MCLs may be referenced at http://www.epa.gov/safewater/mcl.html. The HAs are an estimate of acceptable drinking water levels for a chemical substance based on health effects information. The values published are for lifetime HA, which is the concentration of a chemical in drinking water that is not expected to cause any adverse noncarcinogenic effects for a lifetime of exposure. The HA values can be referenced at http://www.epa.gov/waterscience/criteria/drinking. FAO criteria are set by EPA and are the concentration of a chemical in water at or below which aquatic life are protected from acute and chronic adverse effects of the chemical. The FAO values can be referenced at http://www.epa.gov/waterscience/criteria/wqcriteria.html. Health Advisories and FAO criteria are not legally enforceable Federal standards, but serve as technical guidance to assist Federal, State, and local officials.

EPA MCL, HA, and FAO values are expressed in parts per million (ppm). Because drinking water residues are expressed in parts per trillion (ppt), EPA MCL, HA, and FAO values have been multiplied by a factor of 1,000,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA.

# APPENDIX J. DISTRIBUTION OF RESIDUES BY PESTICIDE IN DRINKING WATER

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **2 4 5 T** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 1.8 - 22 | 50,000 | | |
| Water, Untreated | | 231 | | | | 1.8 - 22 | | | |
| **2,4 DB** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 14 - 151 | | | |
| Water, Untreated | | 375 | | | | 14 - 151 | | | |
| **2,4-D** | H | | | | | | | | |
| Water, Finished | | 374 | 220 | 58.8 | 1.1 - 430 | 0.65 - 90 | 70,000 | 70,000 | |
| Water, Untreated | | 375 | 234 | 62.4 | 1.1 - 1200 | 0.65 - 90 | | | |
| **Acetochlor** | H | | | | | | | | |
| Water, Finished | | 374 | 9 | 2.4 | 15.3 - 314 | 9.2 - 49.5 | | | |
| Water, Untreated | | 376 | 27 | 7.2 | 15.3 - 669 | 9.2 - 49.5 | | | |
| **Acetochlor ethanesulfonic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 150 | 40.1 | 2.7 - 1200 | 1.6 - 45 | | | |
| Water, Untreated | | 376 | 151 | 40.2 | 7.2 - 1900 | 1.6 - 45 | | | |
| **Acetochlor oxanilic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 144 | 38.5 | 1.1 - 1300 | 0.68 - 45 | | | |
| Water, Untreated | | 376 | 147 | 39.1 | 1.1 - 1900 | 0.68 - 45 | | | |
| **Acifluorfen** | H | | | | | | | | |
| Water, Finished | | 111 | | | | 79 ^ | | | |
| Water, Untreated | | 113 | | | | 79 ^ | | | |
| **Alachlor** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 7.8 - 45 | 2000 | | |
| Water, Untreated | | 376 | | | | 7.8 - 45 | | | |
| **Alachlor ethanesulfonic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 188 | 50.3 | 2.8 - 244 | 1.7 - 45 | | | |
| Water, Untreated | | 376 | 193 | 51.3 | 2.8 - 281 | 1.7 - 45 | | | |
| **Alachlor oxanilic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 142 | 38.0 | 1.0 - 61 | 0.61 - 45 | | | |
| Water, Untreated | | 376 | 150 | 39.9 | 1.0 - 84 | 0.61 - 45 | | | |
| **Aldicarb** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 1500 ^ | | | |
| Water, Untreated | | 113 | | | | 1500 ^ | | | |
| **Aldicarb sulfone** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 200 ^ | | | |
| Water, Untreated | | 113 | | | | 200 ^ | | | |
| **Aldicarb sulfoxide** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 5.0 ^ | | | |
| Water, Untreated | | 113 | | | | 5.0 ^ | | | |
| **Aldrin** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 5.0 - 9.6 | | | |
| Water, Untreated | | 257 | | | | 5.0 - 9.6 | | | 3000 |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Atrazine** | H | | | | | | | | |
| Water, Finished | | 374 | 279 | 74.6 | 1.1 - 1500 | 0.66 - 5.0 | 3000 | | |
| Water, Untreated | | 376 | 284 | 75.5 | 1.1 - 3500 | 0.66 - 5.0 | | | |
| **Azinphos methyl** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 12 ^ | | | |
| Water, Untreated | | 119 | | | | 12 ^ | | | |
| **Benfluralin** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 2.0 - 20 | | | |
| Water, Untreated | | 232 | | | | 2.0 - 20 | | | |
| **Bensulfuron methyl** | H | | | | | | | | |
| Water, Finished | | 369 | | | | 1.2 - 53 | | | |
| Water, Untreated | | 370 | | | | 1.2 - 53 | | | |
| **Bentazon** | H | | | | | | | | |
| Water, Finished | | 374 | 167 | 44.7 | 0.30 - 31 | 0.18 - 206 | | 200,000 | |
| Water, Untreated | | 375 | 180 | 48.0 | 0.30 - 194 | 0.18 - 206 | | | |
| **BHC alpha** | I | | | | | | | | |
| Water, Finished | | 44 | | | | 20 ^ | | | |
| Water, Untreated | | 44 | | | | 20 ^ | | | |
| **Bifenthrin** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 3.2 - 5.0 | | | |
| Water, Untreated | | 257 | | | | 3.2 - 5.0 | | | |
| **Bromacil** | H | | | | | | | | |
| Water, Finished | | 263 | | | | 2.5 - 9.6 | | 90,000 | |
| Water, Untreated | | 262 | 32 | 12.2 | 4.2 - 77 | 2.5 - 9.6 | | | |
| **Bromoxynil** | H | | | | | | | | |
| Water, Finished | | 195 | | | | 6.0 - 39 | | | |
| Water, Untreated | | 197 | 1 | 0.5 | 65 ^ | 6.0 - 39 | | | |
| **Butachlor** | H | | | | | | | | |
| Water, Finished | | 263 | | | | 1.9 - 5.3 | | | |
| Water, Untreated | | 263 | | | | 1.9 - 5.3 | | | |
| **Butylate** | H | | | | | | | | |
| Water, Finished | | 255 | | | | 1.8 - 10 | | 400,000 | |
| Water, Untreated | | 257 | | | | 1.8 - 10 | | | |
| **Carbaryl** | I | | | | | | | | |
| Water, Finished | | 374 | 1 | 0.3 | 19 ^ | 4.7 - 23 | | 700,000 | |
| Water, Untreated | | 375 | 3 | 0.8 | 7.8 - 17 | 4.7 - 23 | | | |
| **Carbendazim (MBC)** | F | | | | | | | | |
| Water, Finished | | 230 | | | | 1.8 - 15 | | | |
| Water, Untreated | | 231 | | | | 1.8 - 15 | | | |
| **Carbofuran** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 0.60 - 17 | 40,000 | 40,000 | |
| Water, Untreated | | 375 | | | | 0.60 - 17 | | | |
| **Carbophenothion** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.3 - 11 | | | |
| Water, Untreated | | 232 | | | | 5.3 - 11 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Chloramben** | H | | | | | | | | |
| Water, Finished | | 119 | | | | 60 ^ | | 100,000 | |
| Water, Untreated | | 118 | | | | 60 ^ | | | |
| **Chlordane cis** | I | | | | | | | | |
| Water, Finished | | 225 | | | | 2.3 - 5.0 | 2000 [4] | | |
| Water, Untreated | | 227 | | | | 2.3 - 5.0 | | | 2400 |
| **Chlordane trans** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 2.3 - 5.0 | 2000 [4] | | |
| Water, Untreated | | 232 | | | | 2.3 - 5.0 | | | 2400 |
| **Chlorfenvinphos total** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 7.5 - 24 | | | |
| Water, Untreated | | 376 | | | | 7.5 - 24 | | | |
| **Chlorimuron ethyl** | H | | | | | | | | |
| Water, Finished | | 144 | 8 | 5.6 | 9.5 - 22 | 5.7 - 13 | | | |
| Water, Untreated | | 144 | 18 | 12.5 | 9.5 - 52 | 5.7 - 13 | | | |
| **Chlorothalonil** | F | | | | | | | | |
| Water, Finished | | 111 | | | | 50 ^ | | | |
| Water, Untreated | | 113 | | | | 50 ^ | | | |
| **Chlorpyrifos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 11 | | 20,000 | |
| Water, Untreated | | 232 | | | | 6.0 - 11 | | | |
| **Chlorpyrifos methyl** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 11.3 - 14 | | | |
| Water, Untreated | | 232 | | | | 11.3 - 14 | | | |
| **Chlorpyrifos oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 510 ^ | | | |
| Water, Untreated | | 113 | | | | 510 ^ | | | |
| **Clopyralid** | H | | | | | | | | |
| Water, Finished | | 364 | 35 | 9.6 | 5.7 - 190 | 3.4 - 151 | | | |
| Water, Untreated | | 365 | 30 | 8.2 | 5.7 - 100 | 3.4 - 151 | | | |
| **Coumaphos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 3.8 - 61 | | | |
| Water, Untreated | | 232 | | | | 3.8 - 61 | | | |
| **Cyanazine** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 1.7 - 25 | | 1000 | |
| Water, Untreated | | 376 | 4 | 1.1 | 2.8 ^ | 1.7 - 25 | | | |
| **Cycloate** | H | | | | | | | | |
| Water, Finished | | 256 | | | | 3.3 - 6.0 | | | |
| Water, Untreated | | 255 | | | | 3.3 - 6.0 | | | |
| **Cyfluthrin** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 40 - 75 | | | |
| Water, Untreated | | 257 | | | | 40 - 75 | | | |
| **Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 21 - 75 | | | |
| Water, Untreated | | 257 | | | | 21 - 75 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Cypermethrin** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 74 - 90 | | | |
| Water, Untreated | | 257 | | | | 74 - 90 | | | |
| **DCPA** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 0.80 - 2.5 | | 70,000 | |
| Water, Untreated | | 232 | | | | 0.75 - 2.5 | | | |
| **DCPA monoacid** | HM | | | | | | | | |
| Water, Finished | | 119 | | | | 222 - 740 | | | |
| Water, Untreated | | 118 | | | | 222 - 740 | | | |
| **DDD o,p'** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 3.8 ^ | | | |
| Water, Untreated | | 119 | | | | 3.8 ^ | | | |
| **DDD p,p'** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 3.8 ^ | | | |
| Water, Untreated | | 119 | | | | 3.8 ^ | | | |
| **DDE o,p'** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 4.0 ^ | | | |
| Water, Untreated | | 113 | | | | 4.0 ^ | | | |
| **DDE p,p'** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 2.5 - 7.5 | | | |
| Water, Untreated | | 232 | | | | 2.5 - 7.5 | | | |
| **DDT o,p'** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 3.8 ^ | | | |
| Water, Untreated | | 119 | | | | 3.8 ^ | | | |
| **DDT p,p'** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 3.8 ^ | | | |
| Water, Untreated | | 119 | | | | 3.8 ^ | | | |
| **DEF (Tribufos)** | H | | | | | | | | |
| Water, Finished | | 141 | | | | 3.8 - 8.0 | | | |
| Water, Untreated | | 143 | | | | 3.8 - 8.0 | | | |
| **Deltamethrin (includes parent Tralomethrin)** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 84 ^ | | | |
| Water, Untreated | | 144 | | | | 84 ^ | | | |
| **Desethyl atrazine** | HM | | | | | | | | |
| Water, Finished | | 374 | 247 | 66.0 | 0.72 - 869 | 0.43 - 25 | | | |
| Water, Untreated | | 376 | 271 | 72.1 | 0.72 - 1078 | 0.43 - 25 | | | |
| **Desisopropyl atrazine** | HM | | | | | | | | |
| Water, Finished | | 374 | 150 | 40.1 | 2.7 - 139 | 1.6 - 50 | | | |
| Water, Untreated | | 376 | 167 | 44.4 | 2.7 - 330 | 1.6 - 50 | | | |
| **Diazinon** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.2 - 7.5 | | 600 | |
| Water, Untreated | | 232 | | | | 6.2 - 7.5 | | | |
| **Diazinon oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 9.0 - 49 | | | |
| Water, Untreated | | 232 | | | | 9.0 - 49 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Dicamba** | H | | | | | | | | |
| Water, Finished | | 111 | | | | 266 ^ | | 200,000 | |
| Water, Untreated | | 113 | | | | 266 ^ | | | |
| **Dichlobenil** | H | | | | | | | | |
| Water, Finished | | 225 | | | | 6.7 - 45 | | | |
| Water, Untreated | | 227 | | | | 6.7 - 45 | | | |
| **Dichlorprop** | H | | | | | | | | |
| Water, Finished | | 119 | 5 | 4.2 | 3.0 ^ | 1.8 ^ | | | |
| Water, Untreated | | 118 | 5 | 4.2 | 3.0 - 11 | 1.8 ^ | | | |
| **Dichlorvos (DDVP)** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 16 - 22.5 | | | |
| Water, Untreated | | 232 | | | | 16 - 22.5 | | | |
| **Dicloran** | F | | | | | | | | |
| Water, Finished | | 119 | | | | 7.5 ^ | | | |
| Water, Untreated | | 119 | | | | 7.5 ^ | | | |
| **Dicofol p,p'** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 11.3 | | | |
| Water, Untreated | | 232 | | | | 5.0 - 11.3 | | | |
| **Dicrotophos** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 132 ^ | | | |
| Water, Untreated | | 113 | | | | 132 ^ | | | |
| **Dieldrin** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 15 | | 2000 | |
| Water, Untreated | | 232 | | | | 5.0 - 15 | | | 240 |
| **Dimethenamid ESA** | HM | | | | | | | | |
| Water, Finished | | 111 | | | | 45 ^ | | | |
| Water, Untreated | | 113 | | | | 45 ^ | | | |
| **Dimethenamid oxanilic acid** | HM | | | | | | | | |
| Water, Finished | | 255 | 20 | 7.8 | 1.0 - 23 | 0.63 - 45 | | | |
| Water, Untreated | | 257 | 31 | 12.1 | 1.0 - 54 | 0.63 - 45 | | | |
| **Dimethenamid/Dimethenamid P** | H | | | | | | | | |
| Water, Finished | | 374 | 35 | 9.4 | 1.0 - 75 | 0.60 - 45 | | | |
| Water, Untreated | | 375 | 65 | 17.3 | 1.0 - 76 | 0.60 - 45 | | | |
| **Dimethoate** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.3 - 52 | | | |
| Water, Untreated | | 232 | | | | 5.3 - 52 | | | |
| **Dinoseb** | H | | | | | | | | |
| Water, Finished | | 119 | 25 | 21.0 | 1.0 - 7.1 | 0.60 ^ | 7000 | 7000 | |
| Water, Untreated | | 118 | 3 | 2.5 | 1.0 ^ | 0.60 ^ | | | |
| **Diphenamid** | H | | | | | | | | |
| Water, Finished | | 119 | | | | 24 ^ | | 200,000 | |
| Water, Untreated | | 119 | | | | 24 ^ | | | |
| **Disulfoton** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 6.0 - 8.8 | | 300 | |
| Water, Untreated | | 376 | | | | 6.0 - 8.8 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Disulfoton sulfone** | IM | | | | | | | | |
| Water, Finished | | 263 | | | | 3.8 - 8.8 | | | |
| Water, Untreated | | 263 | | | | 3.8 - 8.8 | | | |
| **Diuron** | H | | | | | | | | |
| Water, Finished | | 263 | 4 | 1.5 | 5.8 ^ | 3.5 - 16 | | 10,000 | |
| Water, Untreated | | 262 | 20 | 7.6 | 5.8 - 27 | 3.5 - 16 | | | |
| **Endosulfan I** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 22.5 | | | |
| Water, Untreated | | 232 | | | | 5.0 - 22.5 | | | 220 |
| **Endosulfan II** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 12 - 18.8 | | | 220 |
| Water, Untreated | | 232 | | | | 12 - 18.8 | | | 220 |
| **Endosulfan sulfate** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 30 - 46.8 | | | |
| Water, Untreated | | 119 | | | | 30 - 46.8 | | | |
| **Endrin** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 22 - 52.5 | 2000 | 2000 | |
| Water, Untreated | | 232 | | | | 22 - 52.5 | | | 86 |
| **EPTC** | H | | | | | | | | |
| Water, Finished | | 369 | | | | 2.5 - 117.8 | | | |
| Water, Untreated | | 371 | | | | 2.5 - 117.8 | | | |
| **Esfenvalerate** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 50 ^ | | | |
| Water, Untreated | | 113 | | | | 50 ^ | | | |
| **Esfenvalerate+Fenvalerate Total** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 19 ^ | | | |
| Water, Untreated | | 144 | | | | 19 ^ | | | |
| **Ethalfluralin** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 50 - 60 | | | |
| Water, Untreated | | 232 | | | | 50 - 60 | | | |
| **Ethion** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 2.3 - 25 | | | |
| Water, Untreated | | 376 | | | | 2.3 - 25 | | | |
| **Ethion di oxon** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 35 ^ | | | |
| Water, Untreated | | 113 | | | | 35 ^ | | | |
| **Ethion mono oxon** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 3.8 - 51 | | | |
| Water, Untreated | | 232 | | | | 3.8 - 51 | | | |
| **Ethoprop** | I | | | | | | | | |
| Water, Finished | | 369 | | | | 4.5 - 6.0 | | | |
| Water, Untreated | | 371 | | | | 4.5 - 6.0 | | | |
| **Fenamiphos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 7.5 - 26 | | 2000 | |
| Water, Untreated | | 232 | | | | 7.5 - 26 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Fenamiphos sulfone** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 193 ^ | | | |
| Water, Untreated | | 113 | | | | 193 ^ | | | |
| **Fenarimol** | F | | | | | | | | |
| Water, Finished | | 119 | | | | 37.5 ^ | | | |
| Water, Untreated | | 119 | | | | 37.5 ^ | | | |
| **Fenitrothion** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 6.0 - 52 | | | |
| Water, Untreated | | 376 | | | | 6.0 - 52 | | | |
| **Fenpropathrin** | I | | | | | | | | |
| Water, Finished | | 263 | | | | 14 - 60 | | | |
| Water, Untreated | | 263 | | | | 14 - 60 | | | |
| **Fenthion** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 6.0 - 22 | | | |
| Water, Untreated | | 376 | | | | 6.0 - 22 | | | |
| **Fenthion-O analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 7.5 - 99 | | | |
| Water, Untreated | | 232 | | | | 7.5 - 99 | | | |
| **Fenuron** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 15 - 27 | | | |
| Water, Untreated | | 231 | | | | 15 - 27 | | | |
| **Fludioxonil** | F | | | | | | | | |
| Water, Finished | | 119 | | | | 37.5 ^ | | | |
| Water, Untreated | | 119 | | | | 37.5 ^ | | | |
| **Flufenacet** | H | | | | | | | | |
| Water, Finished | | 111 | | | | 45 ^ | | | |
| Water, Untreated | | 113 | | | | 45 ^ | | | |
| **Flufenacet ESA** | HM | | | | | | | | |
| Water, Finished | | 111 | | | | 45 ^ | | | |
| Water, Untreated | | 113 | | | | 45 ^ | | | |
| **Flufenacet OA** | HM | | | | | | | | |
| Water, Finished | | 144 | 24 | 16.7 | 1.2 - 26 | 0.75 ^ | | | |
| Water, Untreated | | 144 | 21 | 14.6 | 1.2 - 15 | 0.75 ^ | | | |
| **Flumetsulam** | H | | | | | | | | |
| Water, Finished | | 230 | 4 | 1.7 | 10 ^ | 6.0 - 129 | | | |
| Water, Untreated | | 231 | 7 | 3.0 | 10 ^ | 6.0 - 129 | | | |
| **Fluometuron** | H | | | | | | | | |
| Water, Finished | | 119 | | | | 1.2 ^ | | 90,000 | |
| Water, Untreated | | 118 | 1 | 0.8 | 2.0 ^ | 1.2 ^ | | | |
| **Fluvalinate** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 79 - 130 | | | |
| Water, Untreated | | 144 | | | | 79 - 130 | | | |
| **Fonofos** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 7.5 ^ | | 10,000 | |
| Water, Untreated | | 119 | | | | 7.5 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Formetanate** | I | | | | | | | | |
| Water, Finished | | 18 | | | | 1500 ^ | | | |
| Water, Untreated | | 20 | | | | 1500 ^ | | | |
| **Halosulfuron methyl** | H | | | | | | | | |
| Water, Finished | | 144 | | | | 3.3 ^ | | | |
| Water, Untreated | | 144 | | | | 3.3 ^ | | | |
| **Heptachlor** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 5.0 ^ | 400 | | |
| Water, Untreated | | 113 | | | | 5.0 ^ | | | 520 |
| **Heptachlor epoxide** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 15 | 200 | | |
| Water, Untreated | | 232 | | | | 5.0 - 15 | | | 520 |
| **Hexachlorobenzene** | FM | | | | | | | | |
| Water, Finished | | 111 | | | | 10 ^ | 1000 | | |
| Water, Untreated | | 113 | | | | 10 ^ | | | |
| **Hydroxy Atrazine** | HM | | | | | | | | |
| Water, Finished | | 144 | 96 | 66.7 | 4.2 - 120 | 1.2 ^ | | | |
| Water, Untreated | | 144 | 97 | 67.4 | 2.0 - 440 | 1.2 ^ | | | |
| **3-Hydroxycarbofuran** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 24 - 46 | | | |
| Water, Untreated | | 231 | | | | 24 - 46 | | | |
| **Imazamethabenz acid** | H | | | | | | | | |
| Water, Finished | | 144 | 1 | 0.7 | 2.2 ^ | 0.60 ^ | | | |
| Water, Untreated | | 144 | 1 | 0.7 | 2.0 ^ | 0.60 ^ | | | |
| **Imazamethabenz methyl** | H | | | | | | | | |
| Water, Finished | | 374 | 1 | 0.3 | 5.2 ^ | 0.15 - 4.2 | | | |
| Water, Untreated | | 375 | 1 | 0.3 | 5.2 ^ | 0.15 - 4.2 | | | |
| **Imazamox** | H | | | | | | | | |
| Water, Finished | | 263 | 1 | 0.4 | 4.0 ^ | 1.8 - 3.1 | | | |
| Water, Untreated | | 262 | | | | 1.8 - 3.1 | | | |
| **Imazapic** | H | | | | | | | | |
| Water, Finished | | 263 | 5 | 1.9 | 1.5 - 4.0 | 0.90 - 2.4 | | | |
| Water, Untreated | | 262 | 5 | 1.9 | 1.5 - 4.0 | 0.90 - 2.4 | | | |
| **Imazapyr** | H | | | | | | | | |
| Water, Finished | | 263 | 156 | 59.3 | 1.5 - 31 | 0.90 - 1.0 | | | |
| Water, Untreated | | 262 | 116 | 44.3 | 1.5 - 29 | 0.90 - 1.0 | | | |
| **Imazaquin** | H | | | | | | | | |
| Water, Finished | | 374 | 27 | 7.2 | 1.8 - 38 | 1.1 - 9.3 | | | |
| Water, Untreated | | 375 | 27 | 7.2 | 1.8 - 58 | 1.1 - 9.3 | | | |
| **Imazethapyr** | H | | | | | | | | |
| Water, Finished | | 374 | 77 | 20.6 | 2.0 - 63 | 1.0 - 7.9 | | | |
| Water, Untreated | | 375 | 67 | 17.9 | 2.0 - 36 | 1.0 - 7.9 | | | |
| **Imidacloprid** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 1.5 - 42 | | | |
| Water, Untreated | | 231 | | | | 1.5 - 42 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Isofenphos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 4.5 - 9.5 | | | |
| Water, Untreated | | 232 | | | | 4.5 - 9.5 | | | |
| **Isofenphos oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 52 ^ | | | |
| Water, Untreated | | 113 | | | | 52 ^ | | | |
| **Lindane (BHC gamma)** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 10 - 20 | 200 | 200 | |
| Water, Untreated | | 376 | | | | 10 - 20 | | | 950 |
| **Linuron** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 2.5 - 189 | | | |
| Water, Untreated | | 376 | 2 | 0.5 | 4.2 - 11 | 2.5 - 189 | | | |
| **Malathion** | I | | | | | | | | |
| Water, Finished | | 374 | | | | 6.0 - 21 | | 100,000 | |
| Water, Untreated | | 376 | | | | 6.0 - 21 | | | |
| **Malathion oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 6.0 ^ | | | |
| Water, Untreated | | 119 | | | | 6.0 ^ | | | |
| **MCPA** | H | | | | | | | | |
| Water, Finished | | 374 | 1 | 0.3 | 152 ^ | 7.2 - 91 | | 4000 | |
| Water, Untreated | | 375 | | | | 7.2 - 91 | | | |
| **MCPB** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 6.6 - 228 | | | |
| Water, Untreated | | 375 | | | | 6.6 - 228 | | | |
| **Mecoprop (MCPP)** | H | | | | | | | | |
| Water, Finished | | 111 | | | | 52 ^ | | | |
| Water, Untreated | | 113 | | | | 52 ^ | | | |
| **Metalaxyl** | F | | | | | | | | |
| Water, Finished | | 374 | | | | 3.0 - 36 | | | |
| Water, Untreated | | 376 | 1 | 0.3 | 10 ^ | 3.0 - 36 | | | |
| **Methidathion** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.3 - 31 | | | |
| Water, Untreated | | 232 | | | | 5.3 - 31 | | | |
| **Methidathion oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 22.5 - 915 | | | |
| Water, Untreated | | 232 | | | | 22.5 - 915 | | | |
| **Methiocarb** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 15 - 22 | | | |
| Water, Untreated | | 231 | | | | 15 - 22 | | | |
| **Methomyl** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 3.6 - 25 | | 200,000 | |
| Water, Untreated | | 231 | | | | 3.6 - 25 | | | |
| **Methoxychlor olefin** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 3.8 ^ | 40,000 | 40,000 | |
| Water, Untreated | | 119 | | | | 3.8 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Methoxychlor Total** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 7.5 - 40 | 40,000 | 40,000 | |
| Water, Untreated | | 232 | | | | 7.5 - 40 | | | |
| **Metolachlor** | H | | | | | | | | |
| Water, Finished | | 374 | 161 | 43.0 | 2.5 - 290 | 1.5 - 45 | | 100,000 | |
| Water, Untreated | | 376 | 184 | 48.9 | 2.5 - 430 | 1.5 - 45 | | | |
| **Metolachlor ethanesulfonic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 277 | 74.1 | 0.60 - 1917 | 0.36 - 45 | | | |
| Water, Untreated | | 376 | 280 | 74.5 | 0.60 - 3603 | 0.36 - 45 | | | |
| **Metolachlor oxanilic acid** | HM | | | | | | | | |
| Water, Finished | | 374 | 235 | 62.8 | 5.3 - 1200 | 3.2 - 45 | | | |
| Water, Untreated | | 376 | 246 | 65.4 | 5.3 - 1500 | 3.2 - 45 | | | |
| **Metribuzin** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 35 - 45 | | 200,000 | |
| Water, Untreated | | 232 | | | | 35 - 45 | | | |
| **Metsulfuron methyl** | H | | | | | | | | |
| Water, Finished | | 238 | | | | 1.5 - 28 | | | |
| Water, Untreated | | 237 | 4 | 1.7 | 2.5 - 5.0 | 1.5 - 28 | | | |
| **Mevinphos Total** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 15 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 15 | | | |
| **Molinate** | H | | | | | | | | |
| Water, Finished | | 225 | | | | 9.8 - 12 | | | |
| Water, Untreated | | 227 | | | | 9.8 - 12 | | | |
| **Monuron** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 54 | | | |
| Water, Untreated | | 231 | | | | 6.0 - 54 | | | |
| **Myclobutanil** | F | | | | | | | | |
| Water, Finished | | 230 | 4 | 1.7 | 18.8 ^ | 5.0 - 11.3 | | | |
| Water, Untreated | | 232 | 2 | 0.9 | 18.8 ^ | 5.0 - 11.3 | | | |
| **Napropamide** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 24 - 25 | | | |
| Water, Untreated | | 232 | | | | 24 - 25 | | | |
| **Neburon** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 1.2 - 75 | | | |
| Water, Untreated | | 375 | | | | 1.2 - 75 | | | |
| **Nicosulfuron** | H | | | | | | | | |
| Water, Finished | | 263 | 20 | 7.6 | 3.0 - 35 | 1.8 - 4.8 | | | |
| Water, Untreated | | 262 | 31 | 11.8 | 3.0 - 35 | 1.8 - 4.8 | | | |
| **Norflurazon** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 18.8 - 31 | | | |
| Water, Untreated | | 232 | | | | 18.8 - 31 | | | |
| **Norflurazon desmethyl** | HM | | | | | | | | |
| Water, Finished | | 225 | | | | 37.5 - 72 | | | |
| Water, Untreated | | 227 | | | | 37.5 - 72 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Oxadiazon** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 15 ^ | | | |
| Water, Untreated | | 232 | | | | 15 ^ | | | |
| **Oxadixyl** | F | | | | | | | | |
| Water, Finished | | 119 | | | | 48.8 ^ | | | |
| Water, Untreated | | 119 | | | | 48.8 ^ | | | |
| **Oxamyl** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 20 | 200,000 | 200,000 | |
| Water, Untreated | | 231 | | | | 6.0 - 20 | | | |
| **Oxychlordane** | IM | | | | | | | | |
| Water, Finished | | 119 | | | | 7.5 ^ | | | |
| Water, Untreated | | 119 | | | | 7.5 ^ | | | |
| **Oxydemeton methyl** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 255 ^ | | | |
| Water, Untreated | | 113 | | | | 255 ^ | | | |
| **Oxyfluorfen** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 11.3 - 25 | | | |
| Water, Untreated | | 232 | | | | 11.3 - 25 | | | |
| **Parathion ethyl** | I | | | | | | | | |
| Water, Finished | | 263 | | | | 7.5 - 15 | | | |
| Water, Untreated | | 263 | | | | 7.5 - 15 | | | |
| **Parathion methyl** | I | | | | | | | | |
| Water, Finished | | 263 | | | | 4.5 - 53 | | | |
| Water, Untreated | | 263 | | | | 4.5 - 53 | | | |
| **Parathion methyl oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 9.8 - 195 | | | |
| Water, Untreated | | 232 | | | | 9.8 - 195 | | | |
| **Parathion oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 7.5 - 104 | | | |
| Water, Untreated | | 232 | | | | 7.5 - 104 | | | |
| **Pebulate** | H | | | | | | | | |
| Water, Finished | | 225 | | | | 2.3 - 25 | | | |
| Water, Untreated | | 227 | | | | 2.3 - 25 | | | |
| **Pendimethalin** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 4.5 - 5.0 | | | |
| Water, Untreated | | 232 | | | | 4.5 - 5.0 | | | |
| **Permethrin cis** | IM | | | | | | | | |
| Water, Finished | | 255 | 1 | 0.4 | 68 ^ | 4.5 - 8.0 | | | |
| Water, Untreated | | 257 | | | | 4.5 - 8.0 | | | |
| **Permethrin trans** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 7.5 ^ | | | |
| Water, Untreated | | 144 | | | | 7.5 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Phenthoate** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 15 ^ | | | |
| Water, Untreated | | 119 | | | | 15 ^ | | | |
| **Phorate** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.2 - 11.3 | | | |
| Water, Untreated | | 232 | | | | 5.2 - 11.2 | | | |
| **Phorate oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 5.3 - 10 | | | |
| Water, Untreated | | 232 | | | | 5.3 - 10 | | | |
| **Phorate sulfone** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 16 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 16 | | | |
| **Phorate sulfoxide** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 37.5 - 199 | | | |
| Water, Untreated | | 232 | | | | 37.5 - 199 | | | |
| **Phosalone** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 4.5 - 52 | | | |
| Water, Untreated | | 232 | | | | 4.5 - 52 | | | |
| **Phosalone oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 631 ^ | | | |
| Water, Untreated | | 113 | | | | 631 ^ | | | |
| **Phosmet** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 227 ^ | | | |
| Water, Untreated | | 113 | | | | 227 ^ | | | |
| **Phosphamidon** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 12 - 297 | | | |
| Water, Untreated | | 232 | | | | 12 - 297 | | | |
| **Picloram** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 22 - 447 | 500,000 | 500,000 | |
| Water, Untreated | | 375 | 1 | 0.3 | 37 ^ | 22 - 447 | | | |
| **Piperonyl butoxide** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 18.8 ^ | | | |
| Water, Untreated | | 119 | | | | 18.8 ^ | | | |
| **Pirimicarb** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 37.5 ^ | | | |
| Water, Untreated | | 119 | | | | 37.5 ^ | | | |
| **Pirimiphos methyl** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.3 - 8.8 | | | |
| Water, Untreated | | 232 | | | | 5.3 - 8.8 | | | |
| **Prallethrin** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 25 ^ | | | |
| Water, Untreated | | 144 | | | | 25 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Profenofos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 3.8 - 30 | | | |
| Water, Untreated | | 232 | | | | 3.8 - 30 | | | |
| **Prometon** | H | | | | | | | | |
| Water, Finished | | 374 | 199 | 53.2 | 0.28 - 83 | 0.17 - 50 | | 100,000 | |
| Water, Untreated | | 376 | 212 | 56.4 | 0.28 - 65 | 0.17 - 50 | | | |
| **Prometryn** | H | | | | | | | | |
| Water, Finished | | 374 | 11 | 2.9 | 0.28 - 89 | 0.17 - 24 | | | |
| Water, Untreated | | 376 | 54 | 14.4 | 0.28 - 118 | 0.17 - 24 | | | |
| **Pronamide** | H | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 22.5 | | 50,000 | |
| Water, Untreated | | 232 | | | | 5.0 - 22.5 | | | |
| **Propachlor** | H | | | | | | | | |
| Water, Finished | | 374 | 1 | 0.3 | 2.1 ^ | 0.64 - 16 | | 90,000 | |
| Water, Untreated | | 376 | | | | 0.64 - 16 | | | |
| **Propachlor OA** | HM | | | | | | | | |
| Water, Finished | | 144 | | | | 1.4 ^ | | | |
| Water, Untreated | | 144 | | | | 1.4 ^ | | | |
| **Propanil** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 2.9 - 25 | | | |
| Water, Untreated | | 376 | | | | 2.9 - 25 | | | |
| **Propargite** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 90 - 180 | | | |
| Water, Untreated | | 232 | | | | 90 - 180 | | | |
| **Propetamphos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 8.4 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 8.4 | | | |
| **Propham** | H | | | | | | | | |
| Water, Finished | | 119 | | | | 18 ^ | | 100,000 | |
| Water, Untreated | | 118 | | | | 18 ^ | | | |
| **Propiconazole** | F | | | | | | | | |
| Water, Finished | | 230 | | | | 37.5 - 55 | | | |
| Water, Untreated | | 232 | | | | 37.5 - 55 | | | |
| **Propoxur** | I | | | | | | | | |
| Water, Finished | | 119 | | | | 24.8 ^ | | | |
| Water, Untreated | | 119 | | | | 24.8 ^ | | | |
| **Quintozene (PCNB)** | F | | | | | | | | |
| Water, Finished | | 119 | | | | 11.3 ^ | | | |
| Water, Untreated | | 119 | | | | 11.3 ^ | | | |
| **Resmethrin** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 7.8 ^ | | | |
| Water, Untreated | | 144 | | | | 7.8 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **S-(2-hydroxy)propyl EPTC** | HM | | | | | | | | |
| Water, Finished | | 111 | | | | 125 ^ | | | |
| Water, Untreated | | 113 | | | | 125 ^ | | | |
| **Siduron** | H | | | | | | | | |
| Water, Finished | | 263 | 1 | 0.4 | 3.5 ^ | 2.1 - 2.4 | | | |
| Water, Untreated | | 262 | 3 | 1.1 | 3.5 - 16 | 2.1 - 2.4 | | | |
| **Simazine** | H | | | | | | | | |
| Water, Finished | | 374 | 179 | 47.9 | 1.2 - 287 | 0.71 - 50 | 4000 | 4,000 | |
| Water, Untreated | | 376 | 202 | 53.7 | 1.2 - 731 | 0.71 - 50 | | | |
| **Sulfometuron methyl** | H | | | | | | | | |
| Water, Finished | | 255 | 2 | 0.8 | 3.2 - 13 | 1.9 - 15 | | | |
| Water, Untreated | | 257 | 5 | 1.9 | 3.2 - 14 | 1.9 - 15 | | | |
| **Sulfotep** | I | | | | | | | | |
| Water, Finished | | 225 | | | | 2.4 - 4.5 | | | |
| Water, Untreated | | 227 | | | | 2.4 - 4.5 | | | |
| **Sulprofos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 11 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 11 | | | |
| **Sulprofos oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 111 | | | | 37 ^ | | | |
| Water, Untreated | | 113 | | | | 37 ^ | | | |
| **Tebuconazole** | F | | | | | | | | |
| Water, Finished | | 230 | | | | 60 - 62 | | | |
| Water, Untreated | | 232 | | | | 60 - 62 | | | |
| **Tebupirimfos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 5.6 - 7.5 | | | |
| Water, Untreated | | 232 | | | | 5.6 - 7.5 | | | |
| **Tebupirimfos oxygen analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 9.0 - 13 | | | |
| Water, Untreated | | 232 | | | | 9.0 - 13 | | | |
| **Tebuthiuron** | H | | | | | | | | |
| Water, Finished | | 374 | 141 | 37.7 | 0.35 - 3.8 | 0.21 - 10 | | 500,000 | |
| Water, Untreated | | 375 | 164 | 43.7 | 0.35 - 7.8 | 0.21 - 10 | | | |
| **Tecnazene** | P | | | | | | | | |
| Water, Finished | | 114 | | | | 18.8 ^ | | | |
| Water, Untreated | | 114 | | | | 18.8 ^ | | | |
| **Tefluthrin** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 2.1 - 5.0 | | | |
| Water, Untreated | | 257 | | | | 2.1 - 5.0 | | | |
| **Terbacil** | H | | | | | | | | |
| Water, Finished | | 119 | | | | 22.5 ^ | | 90,000 | |
| Water, Untreated | | 119 | | | | 22.5 ^ | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Terbufos** | I | | | | | | | | |
| Water, Finished | | 255 | | | | 5.2 - 6.3 | | 900 | |
| Water, Untreated | | 257 | | | | 5.2 - 6.3 | | | |
| **Terbufos sulfone** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 4.5 - 7.7 | | | |
| Water, Untreated | | 232 | | | | 4.5 - 7.7 | | | |
| **Terbufos-O analog** | IM | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 12 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 12 | | | |
| **Tetrachlorvinphos** | I | | | | | | | | |
| Water, Finished | | 230 | | | | 6.0 - 63 | | | |
| Water, Untreated | | 232 | | | | 6.0 - 63 | | | |
| **Tetradifon** | I | | | | | | | | |
| Water, Finished | | 89 | | | | 37.5 ^ | | | |
| Water, Untreated | | 89 | | | | 37.5 ^ | | | |
| **Tetramethrin** | I | | | | | | | | |
| Water, Finished | | 144 | | | | 28 ^ | | | |
| Water, Untreated | | 144 | | | | 28 ^ | | | |
| **Thifensulfuron** | H | | | | | | | | |
| Water, Finished | | 144 | | | | 1.7 - 8.9 | | | |
| Water, Untreated | | 144 | 1 | 0.7 | 2.8 ^ | 1.7 - 8.9 | | | |
| **Thiobencarb** | H | | | | | | | | |
| Water, Finished | | 263 | | | | 1.6 - 24.8 | | | |
| Water, Untreated | | 263 | | | | 1.6 - 24.8 | | | |
| **Thiodicarb** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 25 ^ | | | |
| Water, Untreated | | 113 | | | | 25 ^ | | | |
| **Tolclofos methyl** | F | | | | | | | | |
| Water, Finished | | 111 | | | | 5.0 ^ | | | |
| Water, Untreated | | 113 | | | | 5.0 ^ | | | |
| **Tralomethrin** | I | | | | | | | | |
| Water, Finished | | 111 | | | | 300 ^ | | | |
| Water, Untreated | | 113 | | | | 300 ^ | | | |
| **Tri Allate** | H | | | | | | | | |
| Water, Finished | | 374 | | | | 11 - 24.8 | | | |
| Water, Untreated | | 376 | | | | 11 - 24.8 | | | |
| **Triadimefon** | F | | | | | | | | |
| Water, Finished | | 230 | | | | 5.0 - 22.5 | | | |
| Water, Untreated | | 232 | | | | 5.0 - 22.5 | | | |
| **Triasulfuron** | H | | | | | | | | |
| Water, Finished | | 144 | | | | 1.6 - 3.1 | | | |
| Water, Untreated | | 144 | | | | 1.6 - 3.1 | | | |

| Pesticide / Commodity | Pest. Type | Number of Samples | Samples with Detects | % of Samples with Detects | Range of Values Detected, ppt | Range of LODs, ppt | EPA MCL, ppt [1] | EPA HA[2], ppt [1] | EPA FAO[3], ppt [1] |
|---|---|---|---|---|---|---|---|---|---|
| **Triclopyr** | H | | | | | | | | |
| Water, Finished | | 230 | 74 | 32.2 | 10 - 174 | 6.0 - 42 | | | |
| Water, Untreated | | 231 | 70 | 30.3 | 10 - 283 | 6.0 - 42 | | | |
| **Trifluralin** | H | | | | | | | | |
| Water, Finished | | 220 | | | | 1.5 - 3.3 | | 5000 | |
| Water, Untreated | | 222 | | | | 1.5 - 3.3 | | | |
| **Vinclozolin** | F | | | | | | | | |
| Water, Finished | | 200 | | | | 5.0 - 6.0 | | | |
| Water, Untreated | | 202 | | | | 5.0 - 6.0 | | | |

**NOTES**

[1] = EPA MCL, HA, and FAO values have been multiplied by a factor of 1,000,000 as a basis for comparison using a single scale. There is no intention to imply any more exactness in the value than that originally expressed by EPA.

[2] = EPA Health Advisory values shown are for lifetime exposure.

[3] = The FAO value applies to ambient water rather than drinking water.

[4] = The MCL for chlordane is inclusive of the isomers.

^ = Only one distinct detected concentration or LOD value was reported for the pair.

Pesticide Types:

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide, HM = Herbicide Metabolite

I = Insecticide, IM = Insecticide Metabolite

P = Plant Growth Regulator

# Appendix K

## Sample Origin by State or Country
### (Determined by Grower, Packer, or Distributor)

Appendix K gives the number of fruit and vegetables, dairy, and bottled water samples per State or country of origin and the number of samples of unknown origin. Where available, origin of fresh commodities is taken from the grower or packer information. For processed commodities, origin is determined primarily by packer or distributor.

As shown in Appendix K, fruit and vegetable, dairy, and bottled water samples originated from 39 States and 27 foreign countries. There were 247 domestic and 53 imported samples from unknown States and countries, respectively. There were an additional 93 samples from unknown countries of origin. Pork, soybean, and wheat samples were all of domestic origin. Overall, for all samples except drinking water, 84 percent were from U.S. sources, 14 percent were imports, 1 percent were of mixed origin, and approximately 1 percent were of unknown origin.

# APPENDIX K. SAMPLE ORIGIN BY STATE OR COUNTRY [1]
# (Determined by Grower, Packer, or Distributor)

## Part 1. Domestic Samples

| | Fresh F&V | | | | | | | | | | | | | | Processed F&V | | | Dairy | | $H_2O$ | No. of | % of |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| States = 39 | AP | CF | CN | EP | GB | GF | GR | LT | OG | PE | PU | ST | WM | WS | GZ | OJ | PD | CM | MK | WB | Domestic | Total |
| Alabama | | | | | | | | | | | | | | | 2 | | | | | | 2 | <0.1 |
| Arizona | | 1 | 12 | 11 | 1 | 3 | 1 | 1 | | | | | 2 | 28 | | | | | 3 | | 63 | 0.5 |
| Arkansas | | | | | | | | | | | | | | | 8 | 5 | 3 | 13 | 9 | | 38 | 0.3 |
| California | 36 | 678 | 155 | 123 | | 330 | 324 | 652 | 595 | 87 | 310 | 604 | 32 | 147 | 64 | 79 | 111 | 73 | 156 | 58 | 4614 | 39.6 |
| Colorado | | 1 | 4 | 1 | 1 | | | 6 | | 1 | | | | 5 | | 2 | 1 | 1 | 23 | 4 | 50 | 0.4 |
| Connecticut | | | | | | | | | | | | | | | | 3 | 1 | 1 | 3 | 55 | 63 | 0.5 |
| Florida | 1 | 4 | 59 | 72 | 60 | 211 | 20 | 5 | 62 | 3 | 7 | 65 | 27 | 27 | 29 | 256 | 1 | 23 | 59 | 16 | 1007 | 8.6 |
| Georgia | | 1 | 2 | 56 | 2 | | | | | | | | | 16 | 3 | 10 | | | | 16 | 106 | 0.9 |
| Hawaii | | | | | | | | | | | | | | | | | | | | 4 | 4 | <0.1 |
| Idaho | 8 | | | | | | | | | | 1 | | | | 42 | 35 | 4 | 21 | 33 | 6 | 150 | 1.3 |
| Illinois | | | | | | | | | 2 | 2 | | | | | 16 | 7 | 2 | 6 | 25 | 1 | 61 | 0.5 |
| Kansas | | | | | | | | | | | | | | | | | | | | 4 | 4 | <0.1 |
| Kentucky | | | | 2 | | | | | | | | | | | | 1 | | 5 | 11 | 2 | 21 | 0.2 |
| Louisiana | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | <0.1 |
| Maine | 1 | | | | | | | | | | | | | | 5 | 1 | 1 | 1 | 3 | | 12 | 0.1 |
| Maryland | 3 | | 2 | 5 | 6 | 1 | 1 | 6 | 2 | | 2 | | | | 28 | 16 | 1 | 19 | 28 | 3 | 123 | 1.1 |
| Massachusetts | 2 | | | | | | | | | | | | | 1 | | 2 | | 11 | 20 | 1 | 37 | 0.3 |
| Michigan | 33 | | | 14 | 6 | 1 | 2 | 6 | | | | | | 39 | 27 | 10 | 5 | 23 | 39 | 13 | 218 | 1.9 |
| Minnesota | 1 | | | 3 | 1 | | 4 | 3 | | | | | 2 | 1 | 28 | 8 | | 11 | 22 | 5 | 89 | 0.8 |
| Mississippi | | | | 1 | | | | | | | | | | | | | | | | | 1 | <0.1 |
| Missouri | 1 | | | | | | | | 1 | 1 | | | | | | | | | 4 | | 7 | 0.1 |
| New Hampshire | | | | | | | | | | | | | | | | | | | | 1 | 1 | <0.1 |
| New Jersey | | | | 15 | | | | 3 | | | | | | 17 | 3 | 5 | | 16 | 38 | | 97 | 0.8 |
| New Mexico | | | | | | | | 1 | | | | | 4 | | | | | | | | 5 | <0.1 |
| New York | 53 | 1 | | 16 | 5 | | | | | 2 | | | | 22 | 55 | 1 | 4 | 10 | 31 | 34 | 234 | 2.0 |
| North Carolina | | | 7 | 5 | 2 | | | 3 | | | | 1 | 6 | 3 | | | | | 2 | | 29 | 0.2 |
| Ohio | 5 | 2 | 2 | 12 | 7 | 1 | | 1 | | | 1 | 2 | | 23 | 38 | 32 | 2 | 39 | 85 | 23 | 275 | 2.4 |
| Oklahoma | | | | | | | | | | | | | | | 3 | | | | | | 3 | <0.1 |
| Oregon | 6 | | | | | | | | | 91 | | | | 2 | 30 | 4 | 2 | | 10 | 7 | 152 | 1.3 |
| Pennsylvania | 2 | 1 | | 1 | | | | 1 | | 1 | 1 | | | | 10 | 3 | | 6 | 11 | 7 | 44 | 0.4 |
| Rhode Island | | | | | | | | | | | | | | | | | | | | 1 | 1 | <0.1 |
| South Carolina | | | | 4 | | | | | | | | | | | | | | | | | 4 | <0.1 |
| Tennessee | | | | | | | | | | | | | | | 19 | | | | | 6 | 25 | 0.2 |
| Texas | 20 | 22 | 20 | 16 | 7 | 172 | 12 | 23 | 29 | 11 | | 15 | 26 | 10 | 45 | 63 | 5 | 54 | 88 | 21 | 659 | 5.7 |
| Vermont | | | | | | | | | | | | | | | | | | | | 1 | 1 | <0.1 |
| Virginia | | | | 3 | | | | | | | | | | | 3 | | | 2 | 5 | | 13 | 0.1 |
| Washington | 540 | 3 | | 5 | | 3 | | 9 | | 231 | 6 | | | 12 | 7 | 1 | | 21 | 22 | 4 | 864 | 7.4 |
| West Virginia | 1 | | | | | | | | | | | | | | | | | | | | 1 | <0.1 |
| Wisconsin | 4 | 3 | 3 | 3 | 1 | 4 | 2 | 3 | 1 | 3 | 1 | 2 | | 3 | 6 | 5 | 2 | 8 | 15 | 3 | 72 | 0.6 |
| Unknown State | 7 | 8 | 3 | 56 | 7 | 9 | 5 | 10 | 13 | 10 | 11 | 4 | 15 | 52 | 3 | 5 | 1 | 5 | | 23 | 247 | 2.1 |
| No. of Domestics | 724 | 725 | 269 | 424 | 106 | 735 | 371 | 733 | 705 | 443 | 340 | 693 | 114 | 408 | 474 | 554 | 146 | 369 | 746 | 320 | 9,399 | |
| % of Total | 97 | 98 | 48 | 58 | 59 | 99 | 50 | 99 | 95 | 80 | 59 | 94 | 63 | 56 | 85 | 74 | 95 | 100 | 100 | 85 | | 80.7 |
| Number and Percentage computed with 690 Pork samples, 974 Soybean samples, and 674 Wheat samples of domestic origin added: | | | | | | | | | | | | | | | | | | | | | 11,737 | 83.8 |

## Part 2. Imported Samples

| | Fresh F&V | | | | | | | | | | | | | | Processed F&V | | | Dairy | | $H_2O$ | No. of | % of |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Countries = 27 | AP | CF | CN | EP | GB | GF | GR | LT | OG | PE | PU | ST | WM | WS | GZ | OJ | PD | CM | MK | WB | Imports | Total |
| Argentina | | | | | | | | | | 51 | 2 | | | | | | | | | | 53 | 0.5 |
| Australia | | | | | | | | | 18 | | | | | | | | | | | | 18 | 0.2 |
| Bahamas | | | | | | 2 | | | | | | | | | | | | | | | 2 | <0.1 |
| Belgium | | | | | | | | | | | | | | | 3 | | | | | | 3 | <0.1 |
| Belize | | | | | | | | | | | | | | | | 1 | | | | | 1 | <0.1 |
| Brazil | | | | | | | 3 | | | | | | | | | 22 | | | | | 25 | 0.2 |
| Canada | 4 | 7 | | 3 | | | | 3 | | 2 | | | | 10 | 39 | | | | | 11 | 79 | 0.7 |
| Chile | 8 | | | | | | 284 | | 1 | 46 | 227 | | | | | | 4 | | | | 570 | 4.9 |
| China | | | | | | | | | | | | | | | 6 | | | | | | 6 | 0.1 |
| Costa Rica | | | 83 | | | | | | | | | | | | | 5 | | | | | 88 | 0.8 |
| Dominican Republic | | | 2 | | | | | | | | | | | | | | | | | | 2 | <0.1 |
| Egypt | | | | | | | | | | | | | | | 6 | | | | | | 6 | 0.1 |
| Fiji | | | | | | | | | | | | | | | | | | | | 14 | 14 | 0.1 |
| France | | | | | | | | | | | | | | | 9 | | 1 | | | 26 | 36 | 0.3 |
| Guatemala | | | 90 | | | | | | | | | | 4 | | | | | | | | 94 | 0.8 |
| Honduras | | | 86 | 15 | | | | | | | | | | 36 | | | | | | | 137 | 1.2 |
| Japan | | | | | | | | | | | | | | | | | | | | 1 | 1 | <0.1 |
| Korea, Republic of | | | | | | | | | | 2 | | | | | | | | | | | 2 | <0.1 |
| Mexico | | 6 | 9 | 265 | 59 | 2 | 63 | 3 | 2 | 1 | | 43 | 48 | 258 | 1 | 3 | | | | | 763 | 6.6 |
| Netherlands | | | | 6 | | | | | | | | | | | | | | | | | 6 | 0.1 |
| New Zealand | 7 | | | | | | | | | 1 | | | | 1 | | | | | | 2 | 11 | 0.1 |
| Nicaragua | | | 3 | | | | | | | | | | 1 | 4 | | | | | | | 8 | 0.1 |
| Panama | | | | | | | | | | | | | | 1 | | | | | | | 1 | <0.1 |
| Peru | | | | | | | 4 | | | | | 1 | | | | | | | | | 5 | <0.1 |
| South Africa | | | | | | | | | 12 | 1 | | | | | | | | | | | 13 | 0.1 |
| Taiwan | | | | | | | | | | | | | | | 1 | | | | | | 1 | <0.1 |
| United Kingdom | | | | | | | | | | | | | | | | | | | | 1 | 1 | <0.1 |
| Unknown Country | | 2 | 14 | | | 1 | 13 | | | 6 | 1 | | | | 15 | 1 | | | | | 53 | 0.5 |
| No. of Imports | 19 | 15 | 287 | 289 | 59 | 5 | 367 | 6 | 33 | 110 | 230 | 44 | 53 | 310 | 80 | 32 | 5 | 0 | 0 | 55 | 1999 | |
| % of Total | 3 | 2 | 51 | 39 | 33 | 1 | 50 | 1 | 4 | 20 | 40 | 6 | 29 | 42 | 14 | 4 | 3 | 0 | 0 | 14 | | 17.2 |
| Number and Percentage computed with 14 Pork samples originating from Canada added: | | | | | | | | | | | | | | | | | | | | | 2,013 | 14.4 |

## Part 3. Mixed National Origin Samples

| | Processed F&V | | | Dairy | | $H_2O$ | No. of | % of |
|---|---|---|---|---|---|---|---|---|
| | GZ | OJ | PD | CM | MK | WB | Mixed Orig | Total |
| Argentina / Chile / France / USA | | | 1 | | | | 1 | <0.1 |
| Belize / Brazil | | 1 | | | | | 1 | <0.1 |
| Belize / Brazil / Mexico / USA | | 2 | | | | | 2 | <0.1 |
| Belize / Costa Rica | | 4 | | | | | 4 | <0.1 |
| Brazil / Costa Rica | | 2 | | | | | 2 | <0.1 |
| Brazil / Costa Rica / USA | | 10 | | | | | 10 | 0.1 |
| Brazil / Mexico | | 7 | | | | | 7 | 0.1 |
| Brazil / Mexico / USA | | 40 | | | | | 40 | 0.3 |
| Brazil / USA | | 81 | | | | | 81 | 0.7 |
| Honduras / Mexico / USA | | 4 | | | | | 4 | <0.1 |
| Mexico / USA | | 2 | | | | | 2 | <0.1 |
| Multi-Country Origin - Countries Unknown | | 2 | | | | | 2 | <0.1 |
| No. of Mixed National Origin Samples | | 155 | 1 | | | | 156 | |
| % of Total | | 21 | 1 | | | | | 1.3 |

## Part 4. Unknown Origin Samples

| | Fresh F&V | | | | | | | | | | | | | | Processed F&V | | | Dairy | | $H_2O$ | No. of | % of |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AP | CF | CN | EP | GB | GF | GR | LT | OG | PE | PU | ST | WM | WS | GZ | OJ | PD | CM | MK | WB | Unknown | Total |
| Unknown Origin | | 1 | 2 | 23 | 16 | 2 | 1 | 4 | 3 | 2 | 3 | | 15 | 13 | 1 | 3 | 1 | | | 3 | 93 | |
| % of Total | | <1 | <1 | 3 | 9 | <1 | <1 | 1 | <1 | <1 | 1 | | 8 | 2 | <1 | <1 | 1 | | | 1 | | 0.8 |
| SAMPLE TOTALS | 743 | 741 | 558 | 736 | 181 | 742 | 739 | 743 | 741 | 555 | 573 | 737 | 182 | 731 | 555 | 744 | 153 | 369 | 746 | 378 | 11,647 | |
| Grand Total computed with 704 Pork samples, 974 Soybean samples, and 674 Wheat samples added: | | | | | | | | | | | | | | | | | | | | | 13,999 | |

**NOTE**

[1] Excludes soybean, wheat, pork, and treated/untreated drinking water samples.

| **Commodity Legend** | | |
|---|---|---|
| AP = Apples | GR = Grapes | PE = Pears |
| CF = Cauliflower | GZ = Green Beans (Frozen) | PU = Plums |
| CM = Heavy Cream | LT = Lettuce | ST = Strawberries |
| CN = Cantaloupe | MK = Milk | WB = Bottled Water |
| EP = Eggplant | OG = Oranges | WM = Watermelon |
| GB = Green Beans | OJ = Orange Juice | WS = Winter Squash |
| GF = Grapefruit | PD = Plums, Dried (Prunes) | |

# Appendix L

## Import vs. Domestic Pesticide Residue Comparisons

PDP is designed to provide a comprehensive statistical picture of pesticide residues in the U.S. food supply, representing all sources, including imports. Most commodities consumed are generally produced in the United States with import components that vary by commodity. However, several commodities tested over the past several years were cyclical; that is, part of the year the commodity was produced domestically and part of the year it was imported.

Appendix L compares residue data reported for samples originating in the United States with those of the same commodity from major exporting countries. Residue data for domestic winter squash are compared with data for samples originating in Mexico for 2005 only. Residue data for grapes from the United States are compared with data for samples originating in Chile for 2004 and 2005. For cantaloupe, 2003-2005 data from Costa Rica, Guatemala, Honduras, and Nicaragua were combined and compared with data from the United States. Only residues detected in more than 10 percent of all samples are included in each comparison. All pesticides detected were registered in the United States. However, the profiles of residue findings were markedly different in the United States samples versus samples from these exporting countries. The differences in residue detections between countries were likely due to the pesticides used in response to pest pressures based on differing environmental, climatic, and growing conditions.

# Appendix L. Import vs. Domestic Pesticide Residue Comparisons

## 2005 Distribution of Residues for Winter Squash
## United States Samples vs. Samples Originating in Mexico

| Origin | Year | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections | # of Residues Detected |
|---|---|---|---|---|---|
| United States | 2005 | 408 | 177 | 43.4 | 250 |
| Mexico | 2005 | 258 | 98 | 38.0 | 147 |

## 2005 Distribution of Residues for Winter Squash Samples Originating in Mexico vs. United States
### (Only Pesticides with Residue Detections in at least 10 Percent of all Samples)

| Pesticide | Origin | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections |
|---|---|---|---|---|
| Dieldrin | United States | 408 | 48 | 11.8 |
| | Mexico | 258 | 0 | 0 |
| Endosulfan sulfate | United States | 408 | 46 | 11.3 |
| | Mexico | 258 | 57 | 22.1 |
| o-Phenylphenol | United States | 376 | 72 | 19.1 |
| | Mexico | 250 | 50 | 20.0 |

*NOTE: The Limits of Detection (LODs) for pesticide detections in winter squash are listed in Appendix B.*

## 2004-2005 Distribution of Residues for Grapes
## United States Samples vs. Samples Originating in Chile

| Origin | Year | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections | # of Residues Detected |
|---|---|---|---|---|---|
| United States | 2004 | 390 | 271 | 69.5 | 473 |
| | 2005 | 371 | 215 | 58.0 | 397 |
| | **2004-2005** | **761** | **486** | **63.9** | **870** |
| Chile | 2004 | 287 | 256 | 89.2 | 768 |
| | 2005 | 284 | 244 | 85.9 | 737 |
| | **2004-2005** | **571** | **500** | **87.6** | **1,505** |

## 2004-2005 Distribution of Residues for Grape Samples
## Originating in Chile vs. United States
### (Only Pesticides with Residue Detections in at least 10 Percent of all Samples)

| Pesticide | Origin | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections |
|---|---|---|---|---|
| Captan | United States | 726 | 18 | 2.5 |
| | Chile | 571 | 235 | 41.2 |
| Chlorpyrifos | United States | 761 | 15 | 2.0 |
| | Chile | 571 | 162 | 28.4 |
| Cyprodinil | United States | 761 | 172 | 22.6 |
| | Chile | 571 | 201 | 35.2 |
| Ethephon | United States | 186 | 106 | 57.0 |
| | Chile | 255 | 44 | 17.3 |
| Fludioxonil | United States | 761 | 9 | 1.2 |
| | Chile | 571 | 176 | 30.8 |
| Imidacloprid | United States | 761 | 120 | 15.8 |
| | Chile | 571 | 80 | 14.0 |
| Iprodione | United States | 761 | 22 | 2.9 |
| | Chile | 571 | 166 | 29.1 |
| Myclobutanil | United States | 761 | 141 | 18.5 |
| | Chile | 571 | 53 | 9.3 |

*NOTE: The Limits of Detection (LODs) for pesticide detections in grapes are listed in Appendix B.*

## 2003-2005 Distribution of Residues for Cantaloupe United States Samples vs. Samples Originating in Central America[1]

| Origin | Year | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections | # of Residues Detected |
|---|---|---|---|---|---|
| United States | 2003 | 144 | 69 | 47.9 | 84 |
| | 2004 | 394 | 132 | 33.5 | 165 |
| | 2005 | 269 | 102 | 37.9 | 141 |
| | **2003-2005** | **807** | **303** | **37.5** | **390** |
| Central America[1] | 2003 | 35 | 33 | 94.3 | 52 |
| | 2004 | 325 | 258 | 79.4 | 436 |
| | 2005 | 262 | 173 | 66.0 | 281 |
| | **2003-2005** | **622** | **464** | **74.6** | **769** |

## 2003-2005 Distribution of Residues for Cantaloupe Samples Originating in Central America[1] vs. United States

### (Only Pesticides with Residue Detections in at least 10 Percent of all Samples)

| Pesticide | Origin | # of Samples Analyzed | # of Samples w/ Detections | % of Samples w/ Detections |
|---|---|---|---|---|
| Endosulfan sulfate | United States | 807 | 192 | 23.8 |
| | Central America[1] | 622 | 372 | 59.8 |
| Methomyl | United States | 807 | 37 | 4.6 |
| | Central America[1] | 622 | 205 | 33.0 |

[1] Combined findings from Costa Rica, Guatemala, Honduras, and Nicaragua.

*NOTE: The Limits of Detection (LODs) for pesticide detections in cantaloupe are listed in Appendix B.*

# Appendix M

## National Estimates for Concentration Percentiles vs. Tolerance

(Pairs With Residue Detections in at Least 10 Percent of Samples)

Appendix M shows 78 pesticide/commodity pairs (including metabolites, isomers, and degradates) with detections in at least 10 percent of the samples tested. Concentrations detected are arranged in percentiles. The 90th percentile is compared to the Environmental Protection Agency tolerance established for each pesticide/ commodity pair.

The meaning of a percentile can be most easily explained through an example. For the apples/thiabendazole pair, the 50th percentile, or median, is estimated to be 0.13 ppm. This means that PDP estimates that at least 50 percent of apples available to U.S. consumers had thiabendazole residues of 0.13 ppm or less, while at least 50 percent had residues of 0.13 ppm or more. Similarly, the 75th percentile (or the upper quartile) for this pair is estimated to be 0.49 ppm, which means that at least 75 percent of apples had thiabendazole residues of 0.49 ppm or less, while at least 25 percent had residues of 0.49 ppm or more. Finally, the 90th percentile is estimated to be 1.2 ppm, meaning that at least 90 percent of all apples had thiabendazole residues of 1.2 ppm or less, while at least 10 percent had residues of 1.2 ppm or more.

Percent detections and percentiles for apples, cantaloupe, cauliflower, eggplant, grapefruit, grapes, lettuce, oranges, pears, plums, strawberries, and winter squash were weighted based on marketing data.

## APPENDIX M. NATIONAL ESTIMATES FOR CONCENTRATION PERCENTILES vs. TOLERANCE
## (Pairs With Residue Detections in at Least 10 Percent of Samples [1])

| | Commodity / Pesticide | % of Samples with Detections | Mean (ppm) [2] Lower | Mean (ppm) [2] Upper | Percentiles (ppm) 50th | Percentiles (ppm) 75th | Percentiles (ppm) 90th | Ratio of 90th Percentile to Tolerance |
|---|---|---|---|---|---|---|---|---|
| 1 | **Apples (W)** | | | | | | | |
| | Acetamiprid | 80.0 | 0.014 | 0.014 | 0.007 | 0.019 | 0.036 | 0.036 |
| | Azinphos methyl | 32.4 | 0.017 | 0.024 | * | 0.02 | 0.06 | 0.037 |
| | Carbendazim (MBC) | 20.0 | 0.004 | 0.004 | * | * | 0.004 | 0.001 |
| | Diphenylamine | 81.5 | 0.37 | 0.37 | 0.041 | 0.57 | 1.2 | 0.12 |
| | Imidacloprid | 26.1 | 0.001 | 0.003 | * | * | 0.002 | 0.004 |
| | Phosmet | 20.6 | 0.010 | 0.013 | * | * | 0.028 | 0.003 |
| | Tetrahydrophthalimide (THPI) | 14.8 | 0.030 | 0.057 | * | * | 0.092 | 0.004 |
| | Thiabendazole | 87.9 | 0.41 | 0.42 | 0.13 | 0.49 | 1.2 | 0.12 |
| 2 | **Cantaloupe (W) (January - September only)** | | | | | | | |
| | Endosulfan sulfate | 19.4 | 0.004 | 0.009 | * | * | 0.018 | 0.009 |
| | Methomyl | 11.1 | 0.005 | 0.016 | * | * | 0.014 | 0.070 |
| 3 | **Cauliflower (W)** | | | | | | | |
| | Imidacloprid | 84.8 | 0.003 | 0.003 | 0.001 | 0.003 | 0.007 | 0.002 |
| 4 | **Eggplant (W)** | | | | | | | |
| | Endosulfan sulfate | 11.9 | 0.002 | 0.008 | * | * | 0.007 | 0.004 |
| 5 | **Grapefruit (W)** | | | | | | | |
| | Imazalil | 49.2 | 0.046 | 0.066 | * | 0.075 | 0.12 | 0.012 |
| | o-Phenylphenol | 10.1 | 0.002 | 0.058 | * | < 0.001 | 0.012 | 0.001 |
| | Thiabendazole | 34.0 | 0.037 | 0.057 | * | 0.055 | 0.13 | 0.013 |
| 6 | **Grapes (W)** | | | | | | | |
| | Captan | 13.0 | 0.013 | 0.020 | * | * | 0.030 | 0.001 |
| | Chlorpyrifos | 10.5 | 0.003 | 0.006 | * | * | 0.004 | 0.009 |
| | Cyprodinil | 26.9 | 0.040 | 0.046 | * | 0.011 | 0.12 | 0.060 |
| | Fludioxonil | 11.2 | 0.012 | 0.023 | * | * | 0.029 | 0.029 |
| | Imidacloprid | 18.6 | 0.008 | 0.016 | * | * | 0.022 | 0.022 |
| | Iprodione | 14.0 | 0.027 | 0.045 | * | * | 0.057 | 0.001 |
| | Myclobutanil | 16.8 | 0.011 | 0.030 | * | * | 0.050 | 0.050 |
| | Tetrahydrophthalimide (THPI) | 8.5 | 0.014 | 0.073 | * | * | * | <0.001 |
| 7 | **Green Beans, Frozen (April - December only)** | | | | | | | |
| | Acephate | 26.8 | 0.033 | 0.036 | * | 0.006 | 0.075 | 0.025 |
| | Bifenthrin | 12.6 | 0.003 | 0.010 | * | * | 0.014 | 0.023 |
| | Methamidophos | 25.4 | 0.014 | 0.017 | * | 0.003 | 0.041 | 0.041 |
| | Vinclozolin | 47.4 | 0.024 | 0.025 | * | 0.031 | 0.072 | 0.036 |
| 8 | **Heavy Cream** (in parts per billion) | | | | | | | |
| | Cyaholothrin, Total | 23.0 | 0.75 | 1.9 | * | * | 3.8 | 0.019 |
| | DDE p,p' | 86.7 | 3.6 | 3.7 | 2.0 | 5.3 | 8.0 | 0.006 |
| | Dieldrin | 33.1 | 0.56 | 1.1 | * | 0.91 | 1.9 | 0.065 |
| | Diphenylamine | 82.7 | 1.2 | 1.3 | 1.1 | 1.9 | 1.9 | 0.19 |
| | Endosulfan sulfate | 15.2 | 0.63 | 0.89 | * | * | 0.55 | 0.001 |

| | Commodity / Pesticide | % of Samples with Detections | Mean (ppm) [2] Lower | Mean (ppm) [2] Upper | Percentiles (ppm) 50th | Percentiles (ppm) 75th | Percentiles (ppm) 90th | Ratio of 90th Percentile to Tolerance |
|---|---|---|---|---|---|---|---|---|
| **9** | **Lettuce (W)** | | | | | | | |
| | Acetamiprid | 15.9 | 0.004 | 0.004 | * | * | 0.003 | 0.017 |
| | Cyhalothrin, Lambda | 10.3 | 0.006 | 0.011 | * | * | 0.007 | 0.002 |
| | Cyaholothrin, Total | 12.3 | 0.008 | 0.013 | * | * | 0.015 | 0.008 |
| | DCPA | 30.6 | 0.002 | 0.003 | * | 0.001 | 0.005 | 0.003 |
| | DDE p,p' | 14.6 | 0.001 | 0.003 | * | * | 0.004 | 0.007 |
| | Diazinon | 13.3 | 0.001 | 0.002 | * | * | 0.003 | 0.005 |
| | Dimethoate | 10.0 | 0.001 | 0.003 | * | * | 0.002 | 0.001 |
| | Dimethomorph | 28.1 | 0.074 | 0.089 | * | 0.003 | 0.10 | 0.010 |
| | Imidacloprid | 73.0 | 0.010 | 0.012 | 0.003 | 0.012 | 0.028 | 0.008 |
| | Methomyl | 13.3 | 0.015 | 0.019 | * | * | 0.006 | 0.001 |
| | Permethrin cis | 11.9 | 0.003 | 0.005 | * | * | 0.012 | NT |
| | Permethrin trans | 19.7 | 0.038 | 0.045 | * | * | 0.069 | 0.003 |
| | o-Phenylphenol | 17.6 | 0.035 | 0.041 | * | * | 0.047 | 0.002 |
| **10** | **Milk** (in parts per billion) | | | | | | | |
| | Cyaholothrin, Total | 20.8 | 0.078 | 0.20 | * | * | 0.38 | 0.002 |
| | DDE p,p' | 85.4 | 0.44 | 0.45 | 0.19 | 0.43 | 0.85 | 0.001 |
| | Dieldrin | 23.2 | 0.040 | 0.10 | * | * | 0.20 | 0.001 |
| | Diphenylamine | 91.6 | 0.34 | 0.34 | 0.15 | 0.21 | 0.56 | 0.056 |
| | Endosulfan sulfate | 15.4 | 0.024 | 0.049 | * | * | 0.075 | < 0.001 |
| **11** | **Orange Juice** | | | | | | | |
| | o-Phenylphenol | 52.0 | 0.014 | 0.019 | 0.012 | 0.026 | 0.032 | 0.003 |
| **12** | **Oranges (W)** | | | | | | | |
| | Imazalil | 74.2 | 0.095 | 0.10 | 0.075 | 0.13 | 0.21 | 0.021 |
| | o-Phenylphenol | 32.8 | 0.009 | 0.015 | * | 0.019 | 0.032 | 0.003 |
| | Thiabendazole | 44.8 | 0.050 | 0.067 | * | 0.075 | 0.14 | 0.014 |
| **13** | **Pears (W) (January - September only)** | | | | | | | |
| | Azinphos methyl | 24.8 | 0.012 | 0.020 | * | * | 0.040 | 0.027 |
| | Captan | 11.5 | 0.027 | 0.035 | * | * | 0.019 | 0.001 |
| | Carbaryl | 9.8 | 0.007 | 0.014 | * | * | * | < 0.001 |
| | o-Phenylphenol | 15.5 | 0.18 | 0.19 | * | * | 0.036 | 0.001 |
| | Phosmet | 14.0 | 0.018 | 0.023 | * | * | 0.022 | 0.002 |
| | Thiabendazole | 68.5 | 0.41 | 0.42 | 0.23 | 0.62 | 1.1 | 0.11 |
| **14** | **Plums (W)** | | | | | | | |
| | Fludioxonil | 31.9 | 0.10 | 0.18 | * | 0.19 | 0.34 | 0.068 |
| | Iprodione | 11.9 | 0.18 | 0.21 | * | * | 0.35 | 0.018 |
| | Phosmet | 29.3 | 0.007 | 0.009 | * | 0.006 | 0.015 | 0.003 |
| **15** | **Soybeans** (in parts per billion) | | | | | | | |
| | Chlorpyrifos | 14.5 | 1.3 | 3.8 | * | * | 5.5 | 0.018 |

| Commodity / Pesticide | % of Samples with Detections | Mean (ppm) [2] Lower | Mean (ppm) [2] Upper | Percentiles (ppm) 50th | Percentiles (ppm) 75th | Percentiles (ppm) 90th | Ratio of 90th Percentile to Tolerance |
|---|---|---|---|---|---|---|---|
| **16 Strawberries (W)** | | | | | | | |
| Captan | 63.6 | 0.31 | 0.32 | 0.008 | 0.32 | 0,81 | 0.032 |
| Cyprodinil | 14.4 | 0.040 | 0.10 | * | * | 0.11 | 0.022 |
| Fenhexamid | 30.2 | 0.063 | 0.088 | * | 0.057 | 0.21 | 0.070 |
| Fenpropathrin | 12.3 | 0.014 | 0.024 | * | * | 0.023 | 0.012 |
| Fludioxonil | 18.5 | 0.022 | 0.037 | * | * | 0.087 | 0.044 |
| Malathion | 17.1 | 0.004 | 0.006 | * | * | 0.009 | 0.001 |
| Methomyl | 14.8 | 0.053 | 0.065 | * | * | 0.092 | 0.046 |
| Myclobutanil | 37.8 | 0.018 | 0.023 | * | 0.008 | 0.056 | 0.11 |
| Tetrahydrophthalimide (THPI) | 61.7 | 0.24 | 0.25 | 0.13 | 0.34 | 0.54 | 0.022 |
| Triazole alanine (TA) | 11.9 | 0.010 | 0.043 | * | * | 0.044 | NT |
| **17 Wheat** (in parts per billion) | | | | | | | |
| Chlorpyrifos methyl | 23.1 | 29.6 | 44.2 | * | * | 60.8 | 0.10 |
| Malathion | 66.9 | 55.6 | 56.6 | 11.0 | 45.0 | 119.0 | 0.015 |
| **18 Winter Squash (W)** | | | | | | | |
| Endosulfan sulfate | 17.6 | 0.003 | 0.009 | * | * | 0.016 | 0.008 |
| o-Phenylphenol | 18.1 | 0.004 | 0.011 | * | * | 0.019 | NT |

**NOTES**

[1] Includes some pairs with detections in more than 10 percent of the samples, but with estimated detections in less than 10 percent of the population. Excludes pairs with less than 100 sample observations.

[2] The mean is estimated with a range of values. The lower bound is calculated with non-detections valued at zero. The upper bound is calculated using the LOD.

* The percentile value is estimated to be below the Limit of Detection (LOD)

(W) Weighted for utilization. The Percent of Samples with Detections was recalculated to reflect national estimates.

NT No Tolerance established.

# Appendix N

## Cumulative Distributions of Residues for Selected Pesticide/ Commodity Pairs

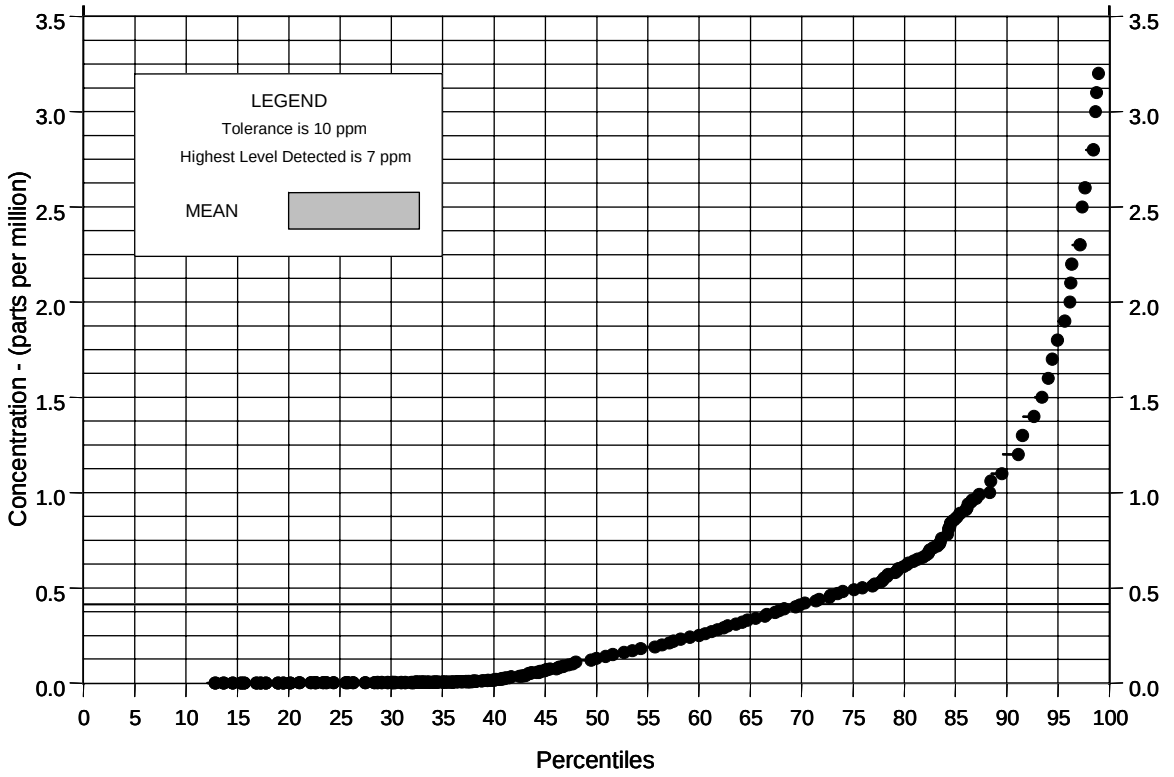
In Appendix N, the concentrations detected (in parts per million, except where otherwise noted) are plotted versus the calculated percentiles for the following 12 pesticide/commodity pairs:

Thiabendazole / Apples
Imidacloprid / Cauliflower
Imazalil / Grapefruit
Vinclozolin / Green Beans (Frozen)
Imazalil / Oranges
DCPA / Lettuce
Azinphos methyl / Pears
Iprodione / Plums
Captan / Strawberries
THPI / Strawberries
DDE p,p' / Heavy Cream
Malathion / Wheat

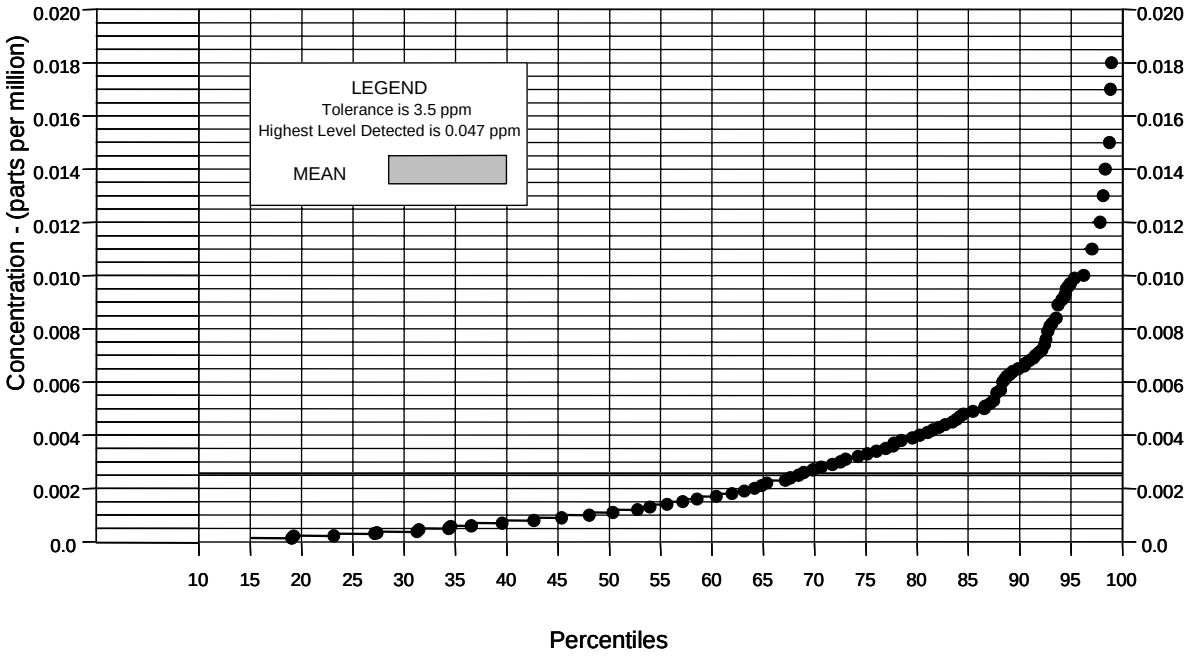
The distribution of residues for all of the PDP pesticide/commodity pairs has the same curved shape. For each pesticide/commodity pair, the highest percentile graphed in the appendix ($99^{th}$) is lower than the highest concentration detected in the sample (refer to the value shown in each graph's legend). Inclusion of the highest concentration would cause graph distortion, which would obscure concentrations in the low ranges. The tolerance for the pesticide/commodity pair is also indicated in the legend of each graph. The large dots show the percentage of the commodity at or below a given level of residue concentration. For example, an estimated 50 percent of apples available to U.S. consumers in 2005 had thiabendazole residue concentrations of 0.13 ppm or less. The solid lines, tailing the large dots, depict percentage values. The lowest value of these solid lines indicates the estimated percentage of the commodity available to U.S. consumers with no detectable residues. For thiabendazole in apples, this is 13 percent. The shaded bar denotes the range of values estimated for the mean. In some cases, there is convergence of the mean upper and lower bound into a single line due to the insignificant differences between them. For thiabendazole in apples, the mean range is approximately 0.41 – 0.42 ppm, corresponding to the 70th percentile.

# Appendix N. Cumulative Distributions of Residues for Selected Pesticide/Commodity Pairs

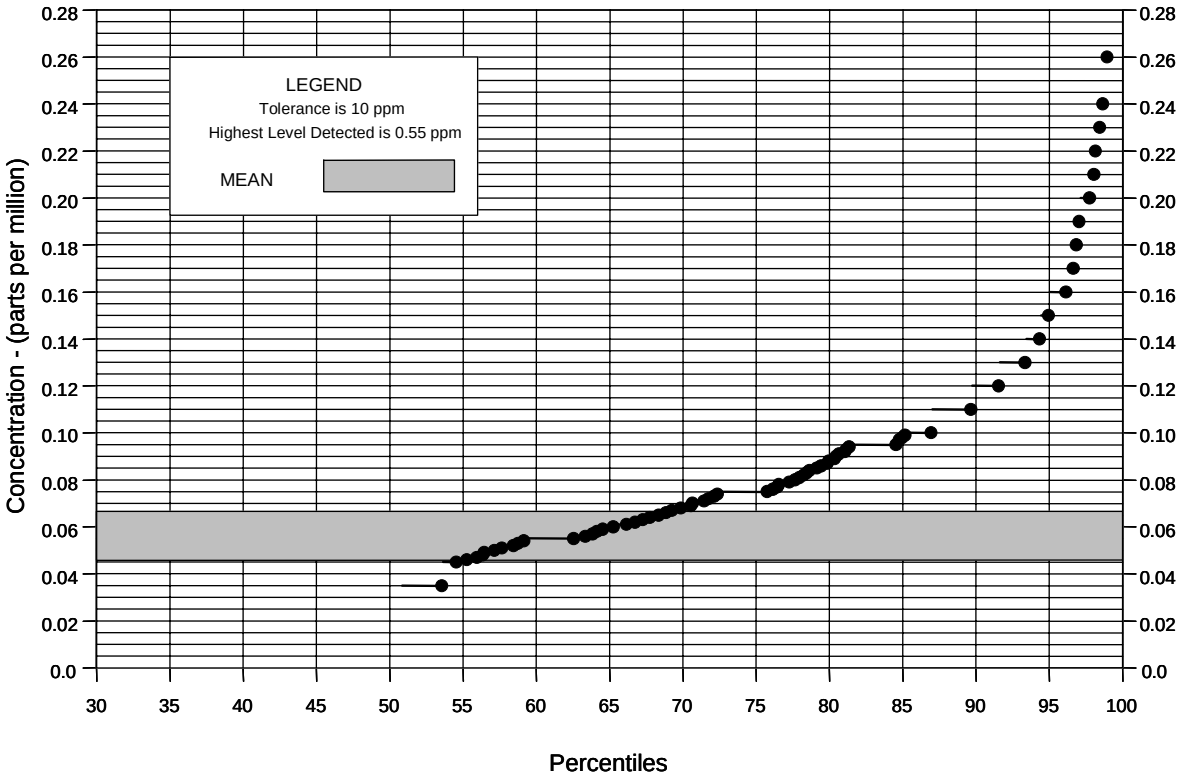
## Thiabendazole / Apples



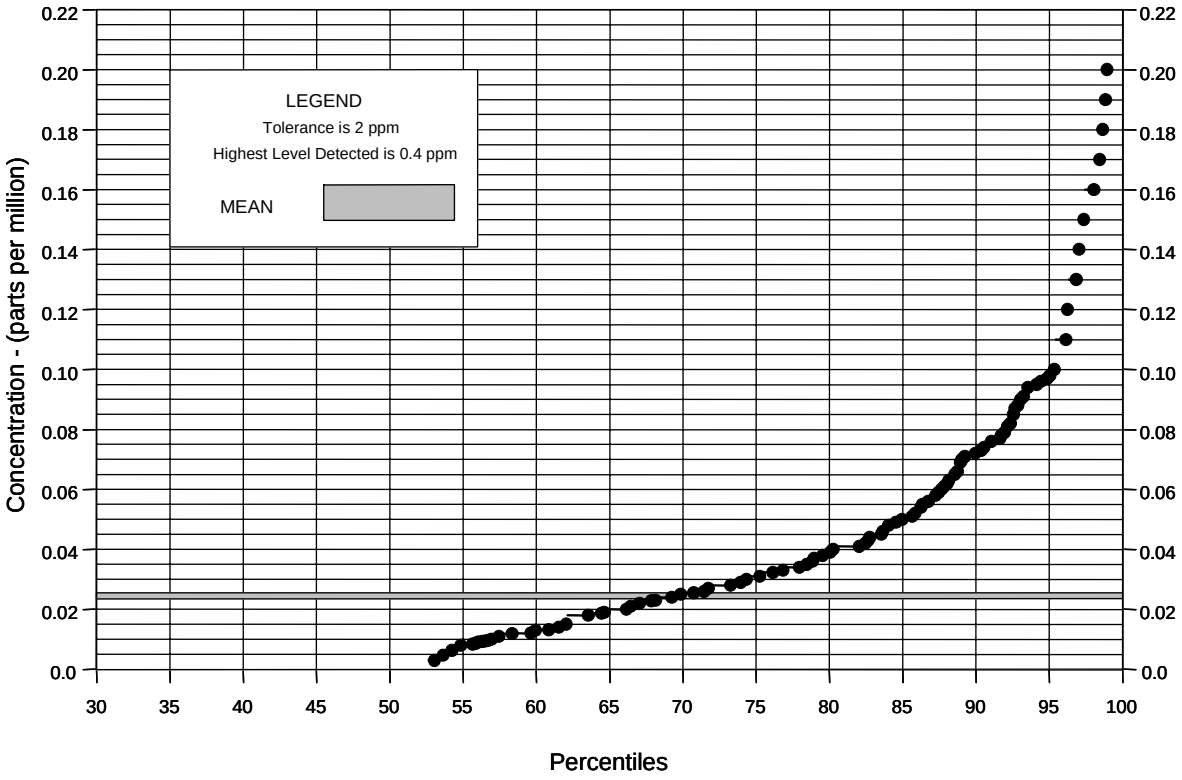

## Imidacloprid / Cauliflower



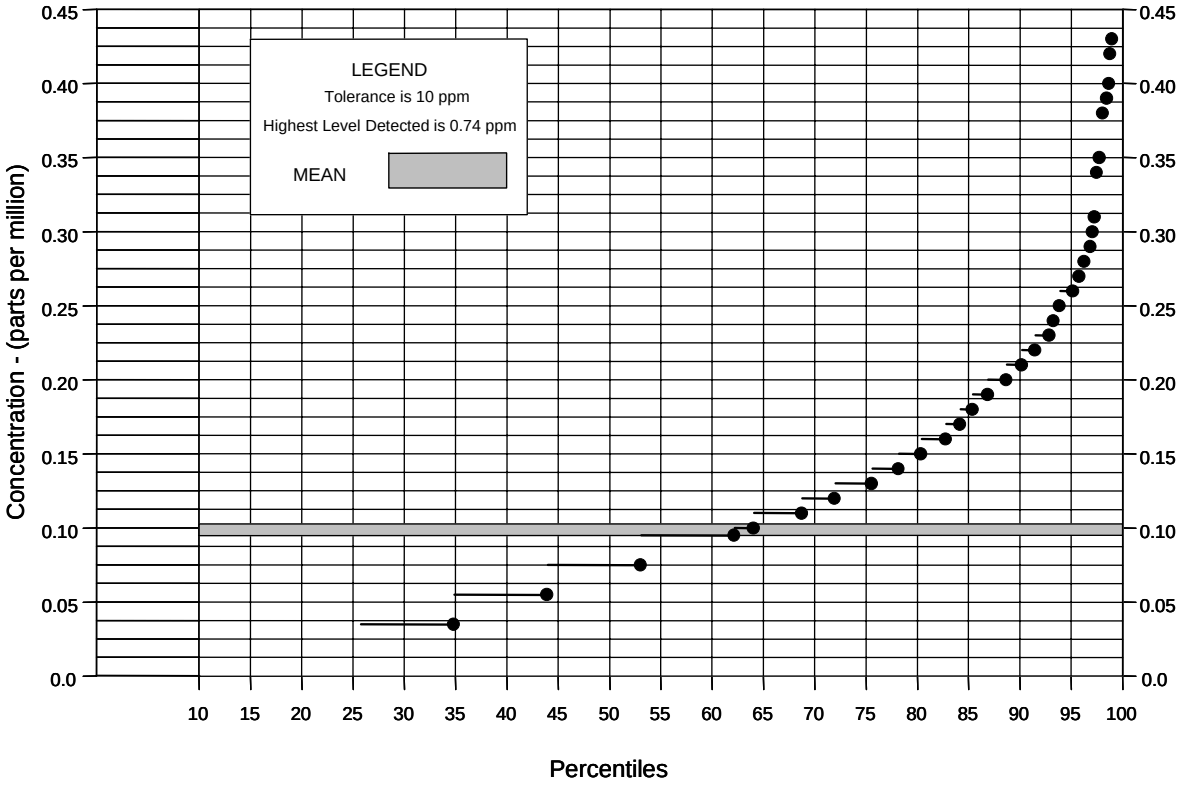
## Imazalil / Grapefruit



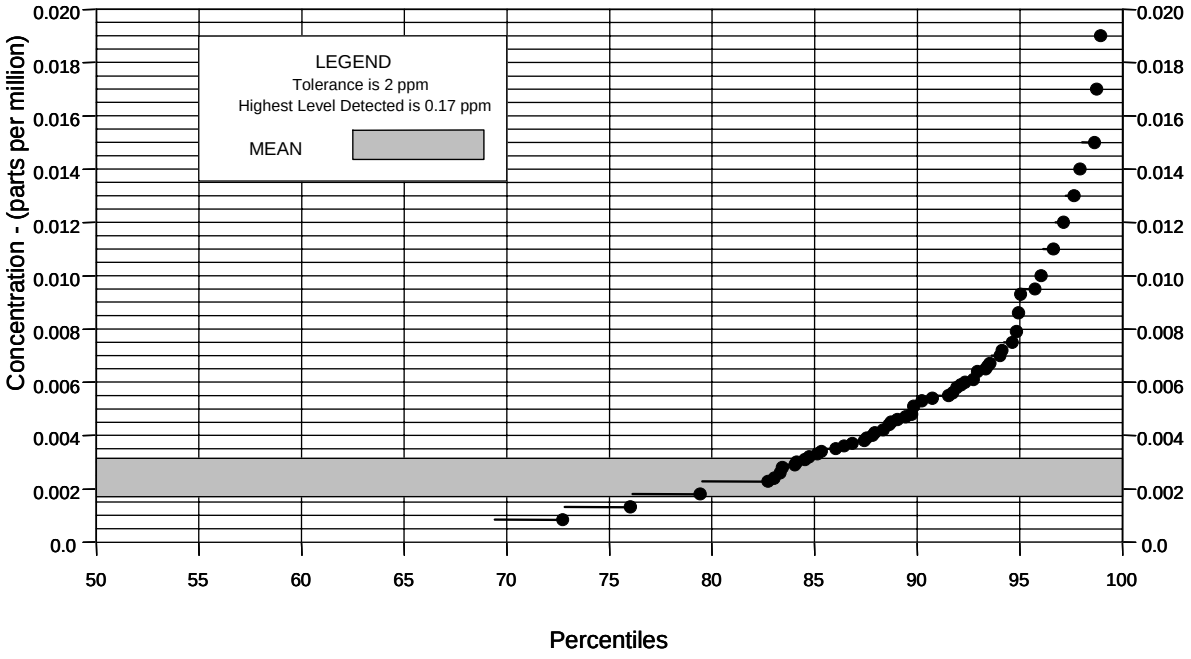

## Vinclozolin / Green Beans (Frozen)



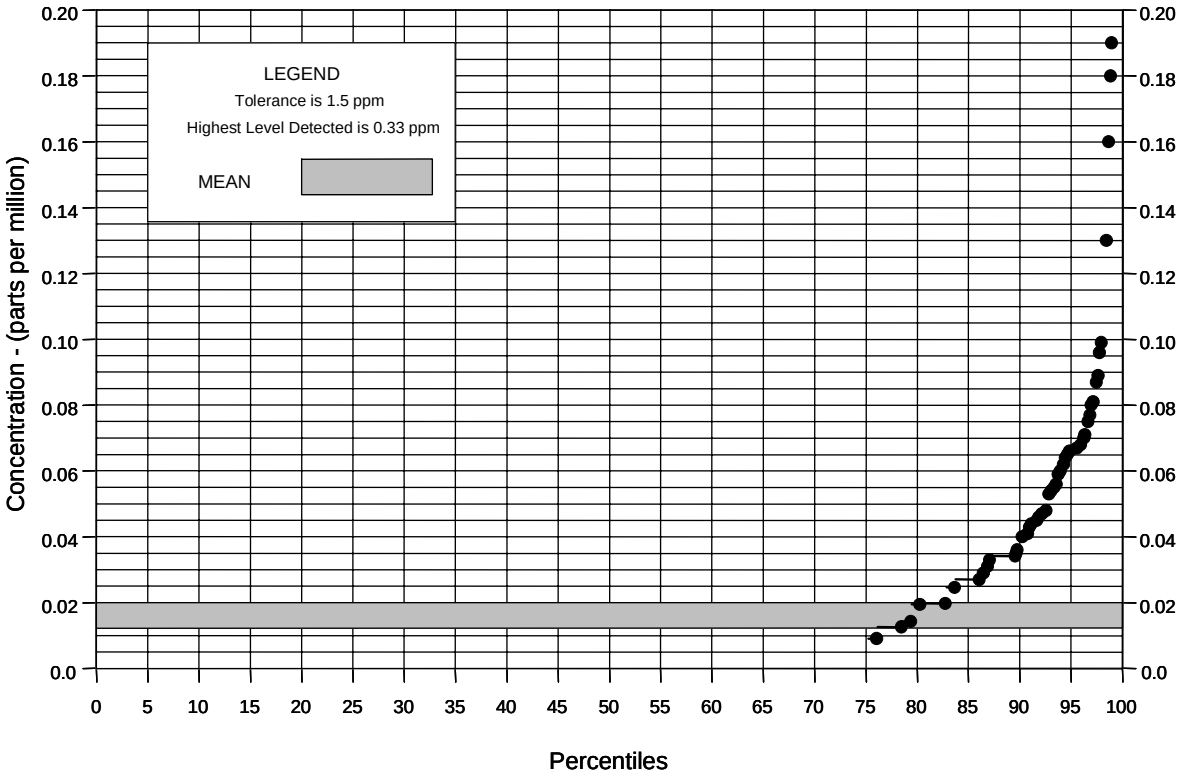
## Imazalil / Oranges



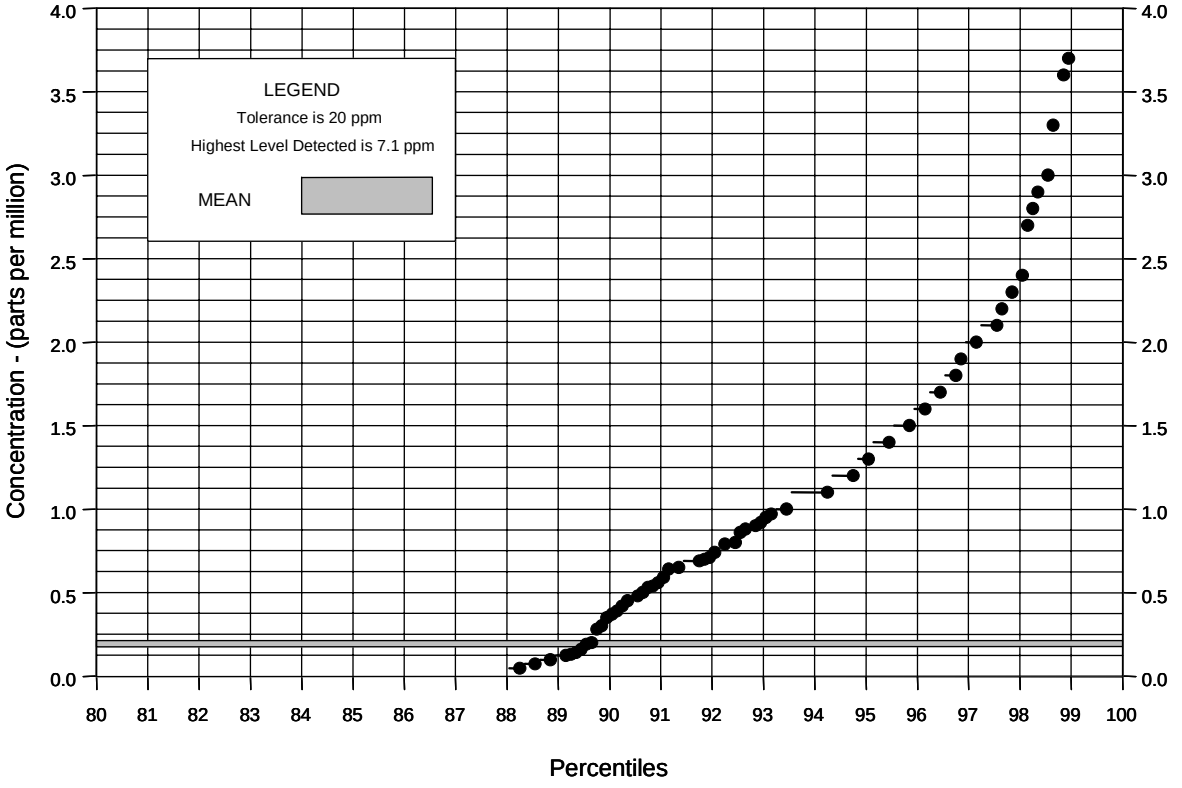

## DCPA / Lettuce



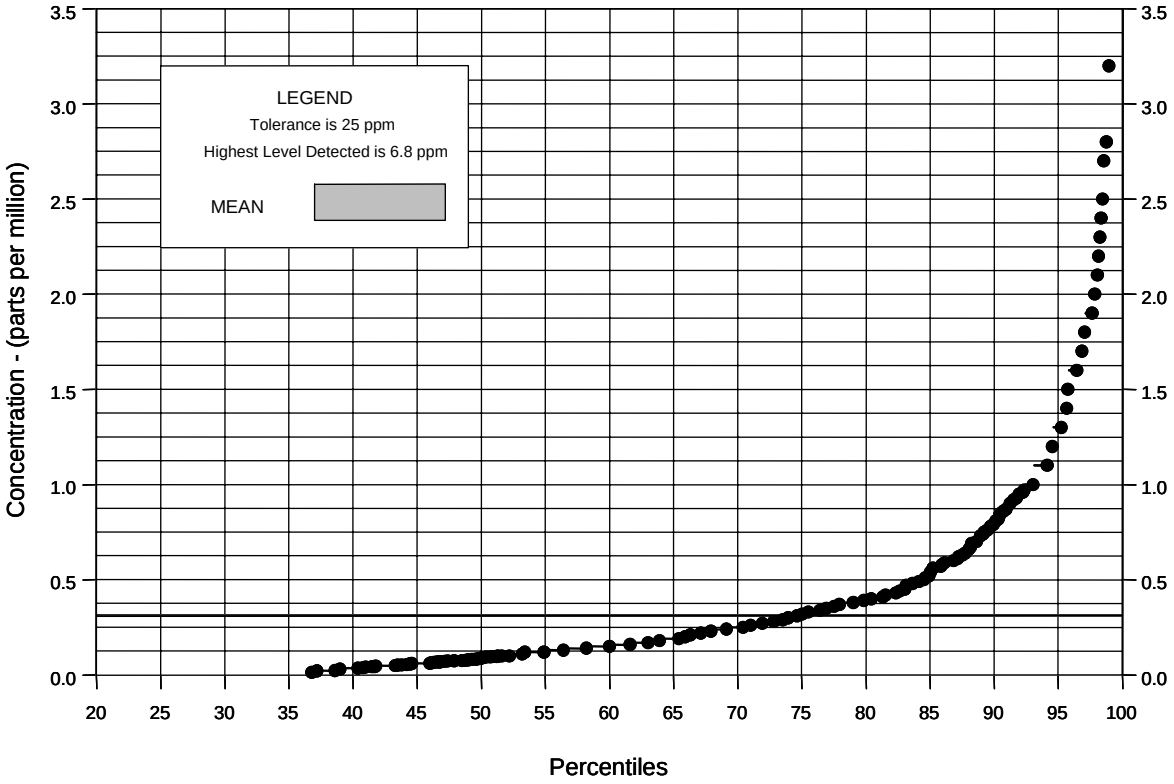
## Azinphos methyl / Pears



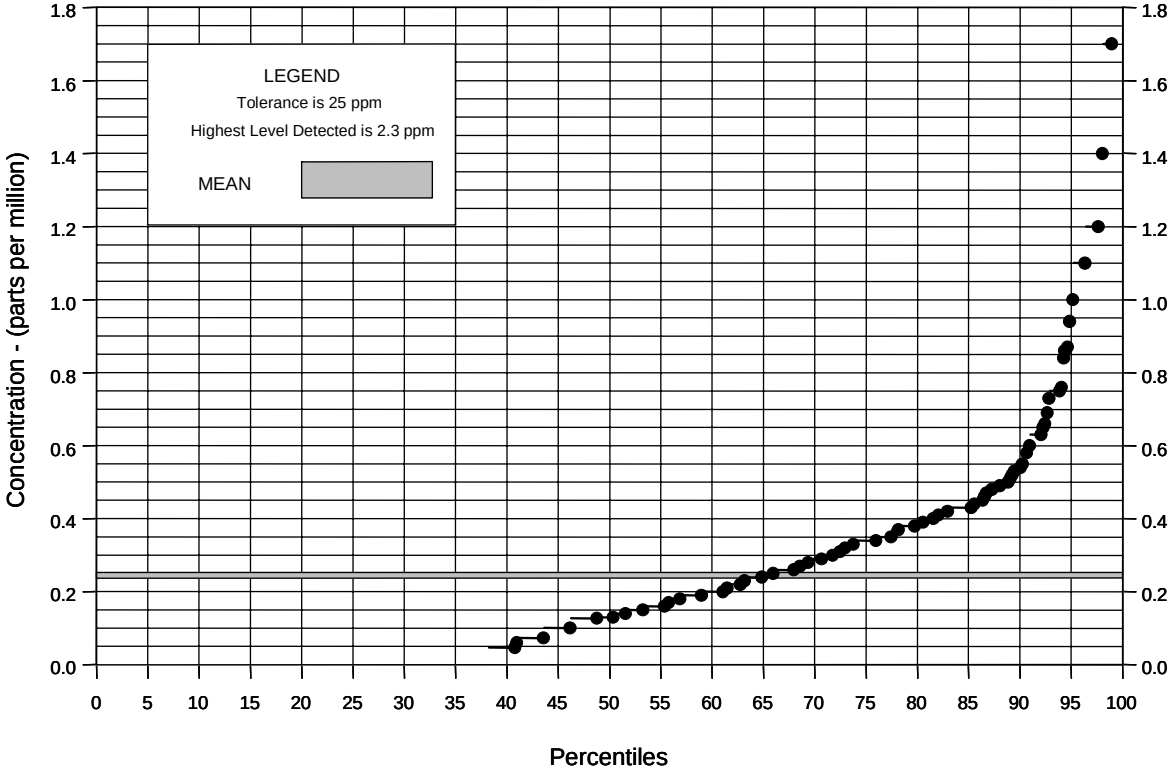

## Iprodione / Plums

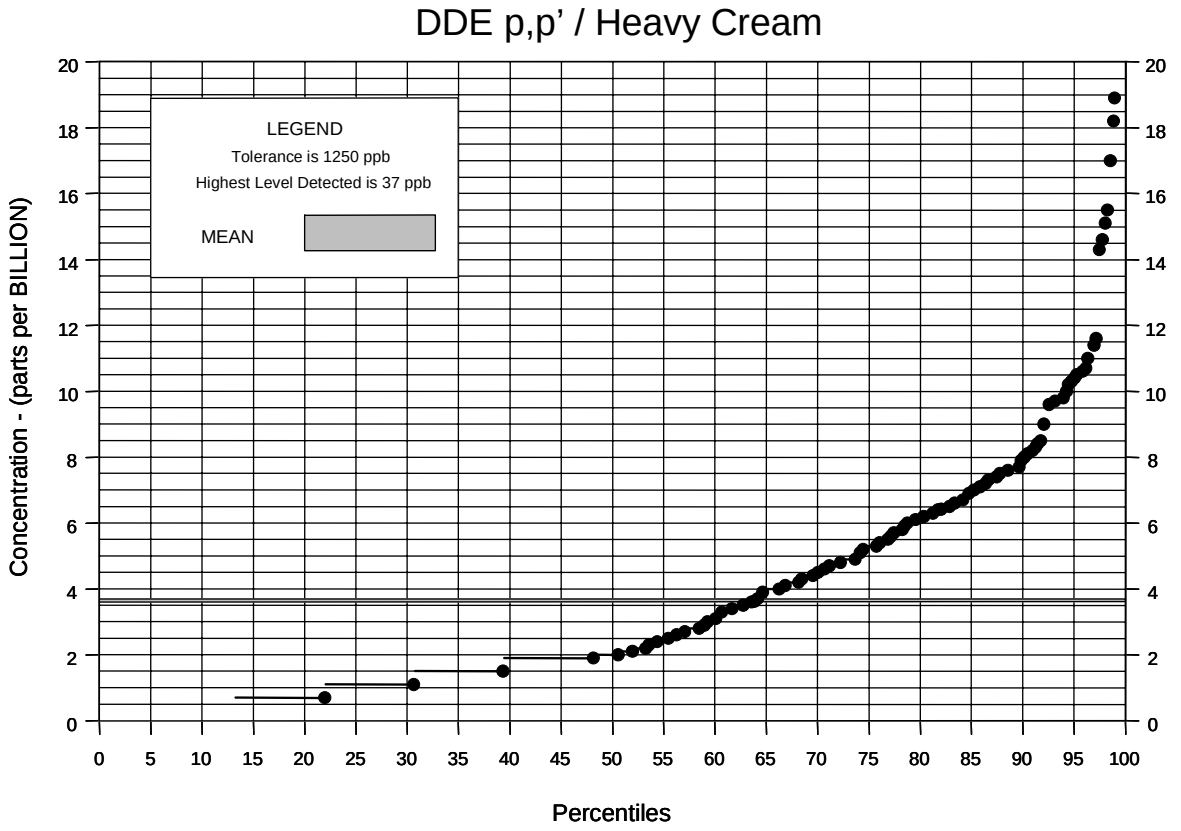


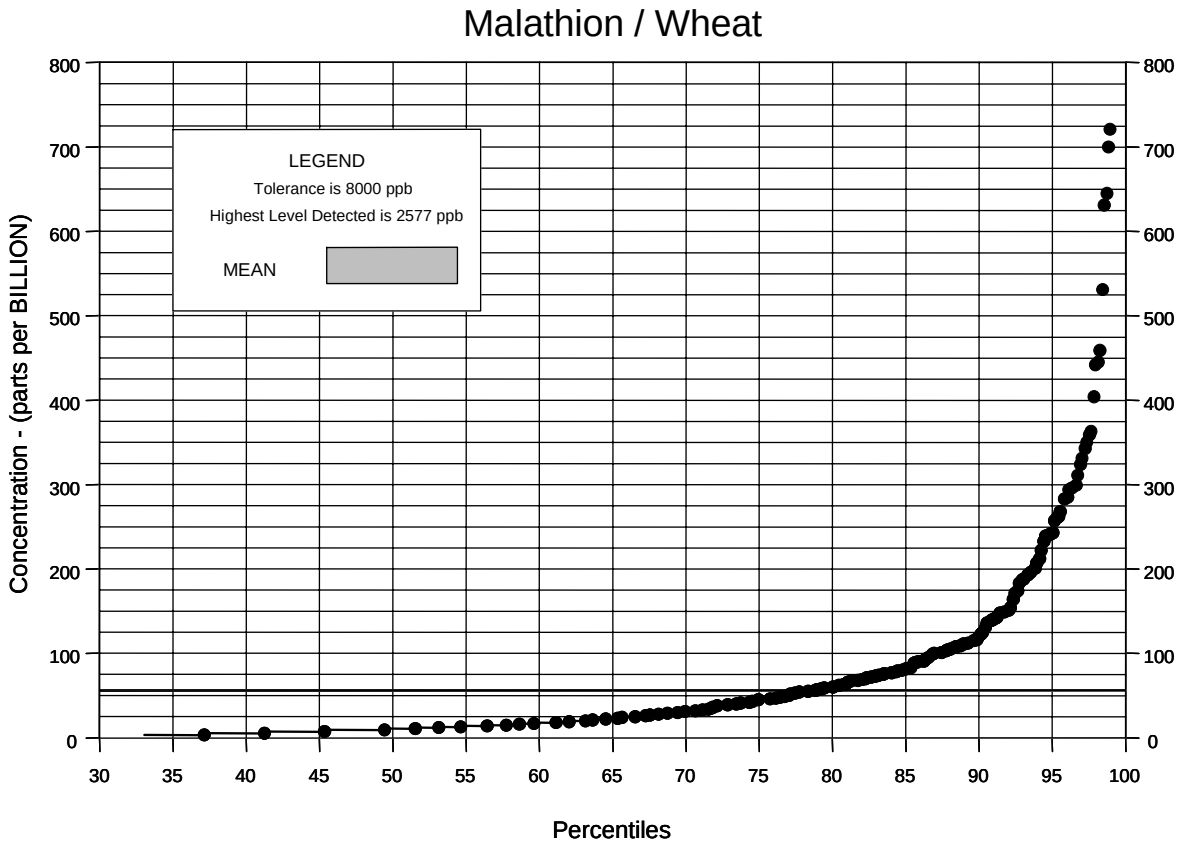
## Captan / Strawberries




## THPI (Captan metabolite) / Strawberries




DDE p,p' / Heavy Cream
LEGEND
Tolerance is 1250 ppb
Highest Level Detected is 37 ppb
MEAN
Concentration - (parts per BILLION)
Percentiles
0
2
4
6
8
10
12
14
16
18
20
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100


Malathion / Wheat
LEGEND
Tolerance is 8000 ppb
Highest Level Detected is 2577 ppb
MEAN
Concentration - (parts per BILLION)
Percentiles
0
100
200
300
400
500
600
700
800
30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

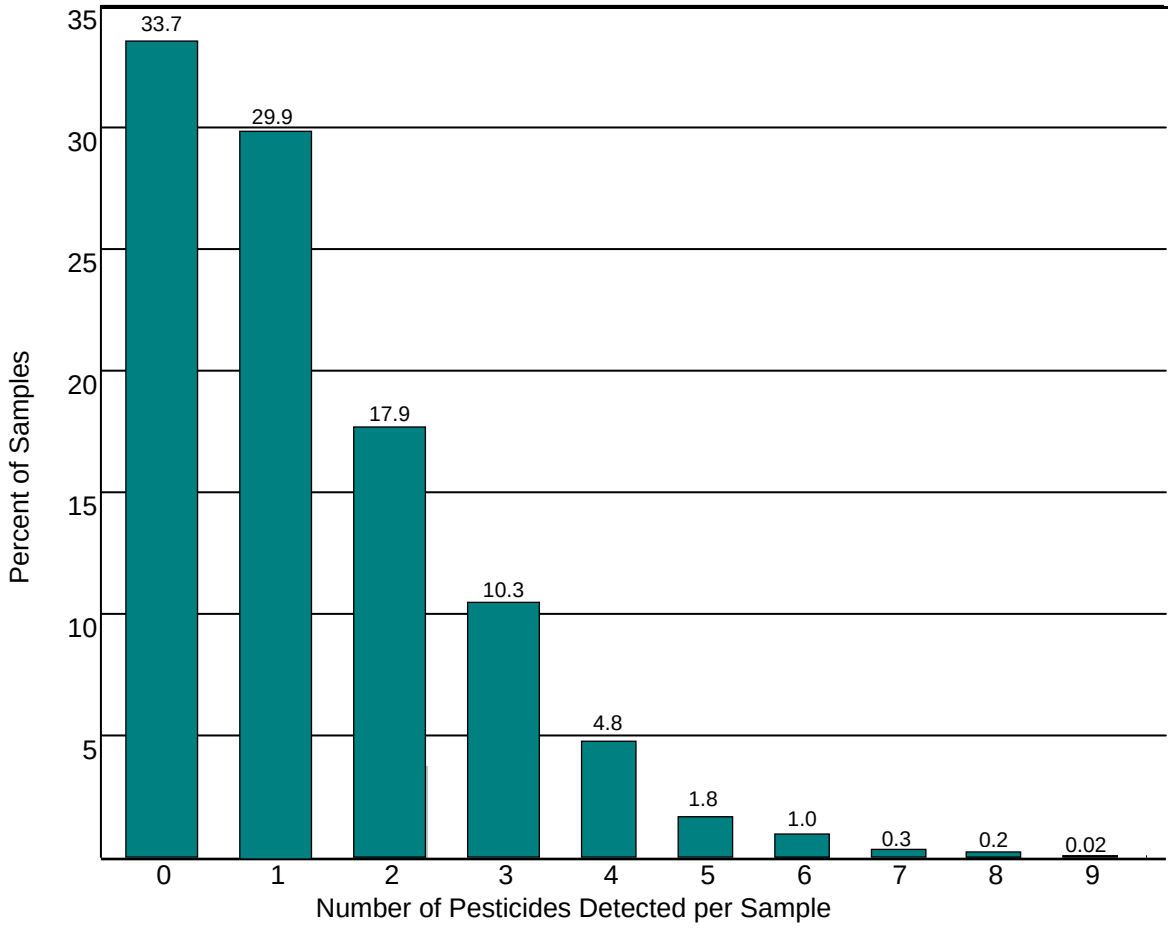
# Appendix O

## Number of Pesticides Detected per Sample

Appendix O shows the percentage of samples versus the number of pesticides detected per sample, excluding drinking water and the soybean rust/aphid special survey. The graph and data on page 1 show the overall number of samples and percentages (of total number of samples analyzed) for each detection group across all commodities. The table on page 2 shows the number of pesticides detected by individual commodity. For the 13,693 samples analyzed, 33.7 percent of the samples had no detectable pesticides, 29.9 percent had 1 pesticide, and 36.4 percent of the samples had more than 1 pesticide.

This appendix reports the number of distinct pesticides rather than residues, as was reported in summaries prior to 2003. A parent compound and its metabolites are reported as a single pesticide. For example, a single application of the pesticide endosulfan may result in residues of the parent compound endosulfan I, its endosulfan II isomer, and its endosulfan sulfate metabolite. Thus, three residue detections could result from the use of a single pesticide. In the 2002 and previous summaries, the corresponding appendix would have counted these results as three distinct residues, while this appendix counts the findings as just one distinct pesticide.

## APPENDIX O. SAMPLES vs. NUMBER OF PESTICIDES[1] DETECTED PER SAMPLE[2]




Number of Pesticides Detected per Sample

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Number of Samples | 4,613 | 4,101 | 2,449 | 1,416 | 655 | 248 | 141 | 46 | 22 | 2 |
| Percent of Total Samples | 33.7 | 29.9 | 17.9 | 10.3 | 4.8 | 1.8 | 1.0 | 0.3 | 0.2 | 0.02 |

**TOTAL NUMBER OF SAMPLES = 13,693**

*Multiple pesticide detections may result from: application of more than one pesticide, spray drift, crop rotation, cross-contamination, and/or indicate the presence of environmental contaminants.*

**NOTES**

[1] Parent compounds and their metabolites are combined to report the number of "pesticides" rather than the number of "residues," as was reported in summaries prior to 2003. For example, a sample with positive detections for Endosulfan I, II, and sulfate would have been counted as three residues detected in the 2002 Appendix L. That same sample would be counted as just one pesticide detected in this appendix.

[2] Excludes drinking water and soybean rust/aphid special survey samples.

# APPENDIX O. SAMPLES vs. NUMBER OF PESTICIDES DETECTED PER SAMPLE

| Commodity (# of samples) | Number of Pesticides[1] Detected per Sample[2] | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **Fresh Fruit and Vegetables:** | Percent | | | | | | | | | |
| Apples (743) | 2.2 | 5.1 | 19.4 | 27.2 | 21.3 | 14.0 | 8.1 | 1.9 | 0.9 | -- |
| Cantaloupe (558) | 48.4 | 32.8 | 14.3 | 3.2 | 1.3 | -- | -- | -- | -- | -- |
| Cauliflower (741) | 12.3 | 71.0 | 13.6 | 2.3 | 0.7 | 0.1 | -- | -- | -- | -- |
| Eggplant (736) | 76.6 | 16.4 | 6.3 | 0.5 | 0.1 | -- | -- | -- | -- | -- |
| Grapefruit (742) | 36.7 | 45.7 | 12.5 | 4.7 | 0.4 | -- | -- | -- | -- | -- |
| Grapes (739) | 29.6 | 26.7 | 20.6 | 11.4 | 6.8 | 2.7 | 1.8 | 0.4 | 0.1 | -- |
| Green Beans (181) | 8.3 | 17.1 | 41.4 | 23.8 | 8.3 | 0.6 | 0.6 | -- | -- | -- |
| Lettuce (743) | 6.3 | 18.8 | 23.7 | 15.5 | 15.9 | 7.9 | 6.1 | 3.6 | 1.9 | 0.3 |
| Oranges (741) | 9.6 | 37.0 | 37.8 | 14.3 | 1.3 | -- | -- | -- | -- | -- |
| Pears (555) | 14.8 | 42.3 | 19.3 | 13.0 | 8.6 | 1.1 | 0.9 | -- | -- | -- |
| Plums (573) | 25.7 | 43.8 | 23.0 | 6.3 | 1.0 | 0.2 | -- | -- | -- | -- |
| Strawberries (737) | 7.1 | 23.1 | 27.8 | 22.5 | 14.2 | 3.4 | 1.6 | 0.3 | -- | -- |
| Watermelon (182) | 61.5 | 25.3 | 10.4 | 2.2 | 0.5 | -- | -- | -- | -- | -- |
| Winter Squash (731) | 57.2 | 30.6 | 8.9 | 2.7 | 0.4 | 0.1 | -- | -- | -- | -- |
| **Processed Fruit and Vegetables:** | | | | | | | | | | |
| Green Beans, Frozen (555) | 22.3 | 43.8 | 15.7 | 13.5 | 3.8 | 0.7 | 0.2 | -- | -- | -- |
| Orange Juice (744) | 42.2 | 54.6 | 2.8 | 0.3 | 0.1 | -- | -- | -- | -- | -- |
| Plums, Dried (153) | 86.9 | 10.5 | 2.0 | 0.7 | -- | -- | -- | -- | -- | -- |
| Percent of Total Samples | 29.0 | 33.9 | 17.6 | 9.8 | 5.4 | 2.2 | 1.3 | 0.5 | 0.2 | 0.02 |
| Actual Number of Samples | 2,947 | 3,440 | 1,786 | 1,000 | 552 | 222 | 137 | 46 | 22 | 2 |
| **TOTAL NUMBER OF FRUIT & VEGETABLE SAMPLES = 10,154** | | | | | | | | | | |
| **Grain Products:** | | | | | | | | | | |
| Soybeans (668) | 78.4 | 20.7 | 0.9 | -- | -- | -- | -- | -- | -- | -- |
| Wheat (674) | 24.6 | 46.9 | 21.4 | 6.8 | 0.3 | -- | -- | -- | -- | -- |
| Percent of Total Samples | 51.4 | 33.8 | 11.2 | 3.4 | 0.1 | -- | -- | -- | -- | -- |
| Actual Number of Samples | 690 | 454 | 150 | 46 | 2 | -- | -- | -- | -- | -- |
| **Dairy Products:** | | | | | | | | | | |
| Heavy Cream (369) | 0.8 | 10 | 43.6 | 36.6 | 8.1 | 0.8 | -- | -- | -- | -- |
| Milk (746) | 1.1 | 9.7 | 45.7 | 30.6 | 9.4 | 3.1 | 0.5 | -- | -- | -- |
| Percent of Total Samples | 1.0 | 9.8 | 45.0 | 32.6 | 9 | 2.3 | 0.4 | -- | -- | -- |
| Actual Number of Samples | 11 | 109 | 502 | 363 | 100 | 26 | 4 | -- | -- | -- |
| **Meat Tissues:** | | | | | | | | | | |
| Pork, Adipose (352) | 88.6 | 9.7 | 1.4 | 0.3 | -- | -- | -- | -- | -- | -- |
| Pork, Muscle (352) | 94.9 | 4.8 | 0.3 | -- | -- | -- | -- | -- | -- | -- |
| Percent of Total Samples | 91.8 | 7.2 | 0.9 | 0.1 | -- | -- | -- | -- | -- | -- |
| Actual Number of Samples | 646 | 51 | 6 | 1 | -- | -- | -- | -- | -- | -- |
| **Water Product:** | | | | | | | | | | |
| Bottled Water (378) | 84.4 | 12.4 | 1.3 | 1.6 | 0.3 | -- | -- | -- | -- | -- |
| Actual Number of Samples | 319 | 47 | 5 | 6 | 1 | -- | -- | -- | -- | -- |

**NOTES**

[1] Parent compounds and their metabolites are combined to report the number of "pesticides" rather than the number of "residues."

[2] Excludes the 750 drinking water samples and 306 soybean rust/aphid special survey samples.

# Appendix P

## Fruit and Vegetable Samples Reported to FDA as Exceeding the Tolerance or Without Established Tolerance

(per Code of Federal Regulations, Title 40, Part 180)

Appendix P shows residues reported to FDA as exceeding the tolerance or residues for which no established tolerance was listed under the Code of Federal Regulations (CFR), Title 40, Part 180. In 2005, a total of 593 samples with 599 residues were reported to the FDA as Presumptive Tolerance Violations.

A total of 22 fruit and vegetable samples, 2 pork adipose samples, and 1 soybean sample, were found to have residues at levels exceeding the established tolerance. Fruit and vegetable samples containing a residue exceeding an established tolerance included 1 cantaloupe sample, 6 eggplant samples, 4 plum samples, 6 strawberry samples, 1 watermelon sample, and 4 winter squash samples. Of those 25 samples, 8 were reported as imported produce.

In addition, 572 fruit and vegetable samples were found to have residues for which no tolerance was established.

- 570 samples contained 1 residue for which no tolerance was established.
- 2 samples contained 2 residues for which no tolerance was established.

Four of the 572 samples also contained 1 residue each that exceeded an established tolerance.

The columns under the Sample Origin heading provide the number of samples that were of domestic, import, or unknown origin for each pesticide/commodity pair listed.

Appendix P also notes if metabolites (or isomers) were detected as part of the same sample. In instances where both parent and metabolite (or isomer) were detected, PDP accounted for both as part of the same tolerance expression.

## APPENDIX P. SAMPLES REPORTED TO FDA AS EXCEEDING THE TOLERANCE OR WITHOUT ESTABLISHED TOLERANCE (per Code of Federal Regulations, Title 40, Part 180)

### Residues Exceeding Established Tolerance

| | Commodity / Pesticide | Limit of Detection, ppm | Concentration Detected, ppm | EPA Tolerance Level, ppm | Sample Origin |
|---|---|---|---|---|---|
| **1** | Cantaloupe / Acephate | 0.005 | 0.21 | 0.02 | U.S. |
| **2** | Eggplant / Acephate | 0.005 | 0.3 | 0.02 | U.S. |
| **3** | Eggplant / Acephate | 0.005 | 0.27 | 0.02 | U.S. |
| **4** | Eggplant / Acephate | 0.005 | 0.13 | 0.02 | U.S. |
| **5** | Eggplant / Acephate | 0.005 | 0.12 | 0.02 | U.S. |
| **6** | Eggplant / Acephate | 0.005 | 0.07 | 0.02 | U.S. |
| **7** | Eggplant / Acephate | 0.005 | 0.055 | 0.02 | U.S. |
| **8** | Plums / Chlorpyrifos | 0.008 | 0.12 | 0.05 | Import |
| **9** | Plums / Chlorpyrifos | 0.008 | 0.069 | 0.05 | Import |
| **10** | Plums / Chlorpyrifos | 0.008 | 0.062 | 0.05 | Import |
| **11** | Plums / Esfenvalerate | 0.06 | 0.1 | 0.05 | U.S. |
| **12** | Pork, Adipose / 1-Naphthol (Carbaryl metabolite) | 3 (ppb) | 188 (ppb) | 100 (ppb) | U.S. |
| **13** | Pork, Adipose / Piperonyl butoxide | 6 (ppb) | 179 (ppb) | 100 (ppb) | U.S. |
| **14** | Soybean Grain / Trifluralin | 2 (ppb) | 78.1 (ppb) | 50 (ppb) | U.S. |
| **15** | Strawberries / Cyhalothrin, Lambda | 0.006 | 0.14 | 0.01 | U.S. |
| **16** | Strawberries / Cyhalothrin, Lambda | 0.006 | 0.036 | 0.01 | U.S. |
| **17** | Strawberries / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) | 0.008 | 0.17 | 0.01 | U.S. |
| **18** | Strawberries / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) | 0.008 | 0.046 | 0.01 | U.S. |
| **19** | Strawberries / Myclobutanil | 0.001 | 0.69 | 0.50 | U.S. |
| **20** | Strawberries / Myclobutanil | 0.001 | 0.63 | 0.50 | U.S. |
| **21** | Watermelon / Acephate | 0.002 | 0.71 | 0.02 | Import |
| **22** | Winter Squash / Acephate | 0.002 | 0.051 | 0.02 | Import |
| **23** | Winter Squash / Methamidophos | 0.002 | 0.17 | 0.02 | Import |
| **24** | Winter Squash / Methamidophos | 0.004 | 0.062 | 0.02 | Import |
| **25** | Winter Squash / Methamidophos | 0.004 | 0.03 | 0.02 | Import |

## Distribution of Residues with No Tolerance Listed in 40 CFR, Part 180, by Commodity/Pesticide

| Commodity / Pesticide | Number of Samples | Samples Reported | % of Samples | Range of Values Detected, ppm | Range of LODs, ppm | Sample Origin U.S. | Import | Unk. |
|---|---|---|---|---|---|---|---|---|
| **1 Apples** | | | | | | | | |
| 1-Naphthol | 54 | 2 | 3.7 | 0.017 - 0.11 | 0.010 ^ | 2 | 0 | 0 |
| Chlorpropham | 528 | 1 | 0.2 | 0.010 ^ | 0.006 ^ | 1 | 0 | 0 |
| Diflubenzuron | 469 | 23 | 4.9 | 0.011 - 0.14 | 0.007 ^ | 23 | 0 | 0 |
| **2 Cantaloupe** | | | | | | | | |
| Diphenamid | 396 | 1 | 0.3 | 0.030 ^ | 0.018 ^ | 0 | 1 | 0 |
| Diphenylamine (DPA) | 540 | 4 | 0.7 | 0.014 ^ | 0.008 - 0.010 | 4 | 0 | 0 |
| **3 Cauliflower** | | | | | | | | |
| Chlorpropham | 741 | 2 | 0.3 | 0.010 ^ | 0.006 ^ | 2 | 0 | 0 |
| Dimethomorph | 741 | 2 | 0.3 | 0.003 ^ | 0.002 ^ | 2 | 0 | 0 |
| Fenbuconazole | 604 | 4 | 0.7 | 0.002 - 0.004 | 0.0009 ^ | 4 | 0 | 0 |
| Methiocarb | 711 | 1 | 0.1 | 0.001 ^ | 0.0006 ^ | 1 | 0 | 0 |
| o-Phenylphenol [1] | 741 | 1 | 0.1 | 0.005 ^ | 0.003 ^ | 1 | 0 | 0 |
| Thiabendazole | 741 | 14 | 1.9 | 0.0002 - 0.001 | 0.0001 - 0.0005 | 13 | 1 | 0 |
| **4 Eggplant** | | | | | | | | |
| Chlorothalonil | 736 | 10 | 1.4 | 0.012 - 0.073 | 0.007 ^ | 9 | 1 | 0 |
| o-Phenylphenol [1] | 1 | 1 | 100 | 0.057 ^ | 0.010 ^ | 1 | 0 | 0 |
| **5 Grapefruit** | | | | | | | | |
| Malathion oxygen analog | 742 | 5 | 0.7 | 0.002 ^ | 0.001 - 0.003 | 5 | 0 | 0 |
| **6 Green Beans** | | | | | | | | |
| Chlorpropham | 127 | 1 | 0.8 | 0.038 ^ | 0.023 ^ | 1 | 0 | 0 |
| Oxamyl | 126 | 1 | 0.8 | 0.10 ^ | 0.020 ^ | 1 | 0 | 0 |
| o-Phenylphenol [1] | 51 | 31 | 60.8 | 0.017 - 0.020 | 0.010 ^ | 4 | 27 | 0 |
| **7 Green Beans, Frozen** | | | | | | | | |
| o-Phenylphenol [1] | 68 | 68 | 100 | 0.017 - 0.095 | 0.010 ^ | 58 | 10 | 0 |
| **8 Lettuce** | | | | | | | | |
| Atrazine | 527 | 1 | 0.2 | 0.006 ^ | 0.002 ^ | 1 | 0 | 0 |
| Carbendazim (MBC) | 527 | 34 | 6.5 | 0.0002 - 0.0008 | 0.0001 - 0.0005 | 33 | 1 | 0 |
| Chlorothalonil | 2 | 2 | 100 | 0.013 - 0.20 | 0.005 - 0.008 | 2 | 0 | 0 |
| Dicofol p,p' | 527 | 1 | 0.2 | 0.005 ^ | 0.003 ^ | 1 | 0 | 0 |
| Fenbuconazole | 440 | 1 | 0.2 | 0.002 ^ | 0.0009 ^ | 1 | 0 | 0 |
| Linuron | 527 | 2 | 0.4 | 0.005 ^ | 0.003 ^ | 2 | 0 | 0 |
| Pentachloroaniline (PCA) | 527 | 1 | 0.2 | 0.002 ^ | 0.001 ^ | 1 | 0 | 0 |
| o-Phenylphenol [1] | 639 | 80 | 12.5 | 0.017 ^ | 0.003 - 0.010 | 78 | 2 | 0 |
| Thiabendazole | 527 | 7 | 1.3 | 0.0005 - 0.001 | 0.0005 ^ | 7 | 0 | 0 |
| Thiamethoxam | 527 | 1 | 0.2 | 0.025 ^ | 0.015 - 0.050 | 1 | 0 | 0 |
| Trifloxystrobin | 118 | 1 | 0.8 | 0.0002 ^ | 0.0001 ^ | 1 | 0 | 0 |

| ity / Pesticide | Number of Samples | Samples Reported | % of Samples | Range of Values Detected, ppm | Range of LODs, ppm | Sample Origin U.S. | Import | Unk. |
|---|---|---|---|---|---|---|---|---|
| **9 Orange Juice** | | | | | | | | |
| Permethrin cis [2] | 529 | 1 | 0.2 | 0.020 ^ | 0.012 - 0.015 | 1 | 0 | 0 |
| Permethrin trans [2] | 529 | 1 | 0.2 | 0.020 ^ | 0.012 - 0.015 | 1 | 0 | 0 |
| **10 Pears** | | | | | | | | |
| 1-Naphthol | 90 | 10 | 11.1 | 0.017 - 0.24 | 0.010 ^ | 2 | 8 | 0 |
| Chlorothalonil | 394 | 2 | 0.5 | 0.004 ^ | 0.002 ^ | 2 | 0 | 0 |
| Chlorpropham | 394 | 1 | 0.3 | 0.018 ^ | 0.011 ^ | 0 | 0 | 1 |
| Dicloran | 395 | 1 | 0.3 | 0.013 ^ | 0.004 - 0.008 | 1 | 0 | 0 |
| Ethion | 394 | 1 | 0.3 | 0.13 ^ | 0.005 ^ | 1 | 0 | 0 |
| Iprodione | 395 | 6 | 1.5 | 0.038 - 0.39 | 0.021 - 0.023 | 1 | 5 | 0 |
| **11 Strawberries** | | | | | | | | |
| Dimethoate | 1 | 1 | 100 | 0.003 ^ | 0.002 ^ | 1 | 0 | 0 |
| Malathion oxygen analog | 737 | 16 | 2.2 | 0.002 - 0.030 | 0.0009 - 0.003 | 12 | 4 | 0 |
| o-Phenylphenol [1] | 3 | 3 | 100 | 0.017 ^ | 0.010 ^ | 3 | 0 | 0 |
| **12 Watermelon** | | | | | | | | |
| o-Phenylphenol [1] | 123 | 28 | 22.8 | 0.017 ^ | 0.010 - 0.015 | 14 | 14 | 0 |
| **13 Wheat** (in parts per billion) | | | | (ppb) | (ppb) | | | |
| Methoxychlor p,p' | 674 | 40 | 5.9 | 8.0 - 21 | 5.0 ^ | 40 | 0 | 0 |
| Pirimiphos methyl | 674 | 22 | 3.3 | 5.0 ^ | 3.0 ^ | 22 | 0 | 0 |
| RH 9129 | 594 | 4 | 0.7 | 8.0 - 81 | 5.0 ^ | 4 | 0 | 0 |
| **14 Winter Squash** | | | | | | | | |
| Pendimethalin | 518 | 2 | 0.4 | 0.027 ^ | 0.016 ^ | 2 | 0 | 0 |
| Phenmedipham | 518 | 4 | 0.8 | 0.16 ^ | 0.097 ^ | 4 | 0 | 0 |
| o-Phenylphenol [1] | 689 | 128 | 18.6 | 0.014 - 0.035 | 0.008 - 0.010 | 72 | 55 | 1 |

**NOTES**

[1] o-Phenylphenol is a disinfectant approved for use in food handling establishments, including production facilities for commodities identified above.

[2] Permethrin cis and trans isomers were detected within the same sample.

**Note:**

*For those pesticide/commodity pairs where the minimum detected value is less than the limit of quantitation (three times the limit of detection), the reported values are estimates. In a few cases, this may apply to the maximum detected value.*

# PESTICIDE DATA PROGRAM

**Annual Summary Calendar Year 2005**

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