



Pesticide Data Program

Annual Summary, Calendar Year 2009

United States
Department of
Agriculture

Agricultural
Marketing
Service

Science and Technology
Programs



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

May 2011

May 2011

To the Reader:

I am pleased to present the Pesticide Data Program's (PDP) 19th Annual Summary for calendar year 2009. The U.S. Department of Agriculture implemented the PDP in 1991 to test food commodities for pesticide residues. The data produced by the PDP are used to estimate consumer dietary exposure to pesticides and the relationship of those exposures to science-based standards of safety. This report shows that overall pesticide residues found on foods tested are at levels below the tolerances set by the U.S. Environmental Protection Agency (EPA).

Using a rigorous statistical approach to sampling along with the most current laboratory methods, the PDP tests a wide variety of domestic and imported foods. Foods tested include fresh and processed fruit and vegetables, meat and poultry, grains, catfish, rice, specialty products, and water.

The 1996 Food Quality Protection Act (FQPA) directs the Secretary of Agriculture to collect pesticide residue data on foods that are highly consumed, particularly by infants and children. This law also established a strict health-based standard for a "reasonable certainty of no harm" for pesticide residues in food to ensure consumer protection from unacceptable pesticide exposure. The EPA uses the PDP data as a critical component for dietary assessments of pesticide exposure, a critical step to verify that all sources of exposure to pesticides meet the safety standards set by the 1996 FQPA.

The PDP is a voluntary program and is not designed for enforcement of EPA tolerances. However, we inform the U.S. Food and Drug Administration if residues detected exceed the EPA tolerance or have no EPA tolerance established. In 2009, residues exceeding the tolerance were detected in 0.3 percent of the samples tested, and residues with no established tolerance were found in 2.7 percent of the samples.

The PDP works with Cooperating State agencies that are responsible for sample collection and analysis. Twelve States participated in the program during 2009: California, Colorado, Florida, Maryland, Michigan, Minnesota, Montana, New York, Ohio, Texas, Washington, and Wisconsin. These States represent all regions of the country and more than half of the U.S. population.

For more information please visit our website at www.ams.usda.gov or the EPA at <http://www.epa.gov/pesticides/food>.

Sincerely,



Rayne Pegg
Administrator

What Consumers Should Know

- Consumers should always rinse fruits and vegetables in water.
- U.S. Department of Agriculture (USDA) encourages the consumption of fruits and vegetables in every meal as part of a healthy diet.
- Before a company can sell or distribute any pesticide in the United States of America, the U.S. Environmental Protection Agency (EPA) must review studies on the pesticide to determine that it will not pose unreasonable risks to human health or the environment. Once EPA has made that determination, it will license or register that pesticide for use in strict accordance with label directions.
- EPA regulates pesticide use under two major federal statutes: the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) of 1947 which regulates pesticide registrations in the U.S., and the Food, Drug and Cosmetic Act (FFDCA) of 1938 under which EPA establishes tolerances (maximum legally permissible levels) for pesticide residues in food. The Food Quality Protection Act (FQPA) of 1996 amended these two pesticide laws to mandate a single, health-based standard for all pesticides in all foods. FQPA provides stricter safety standards than FIFRA and FFDCA, especially for infants and children and requires periodic re-evaluation of pesticide registrations and tolerances to ensure that the scientific data supporting pesticide registrations will remain up to date in the future. The Pesticide Data Program (PDP) provides data for the periodic re-evaluation of food tolerances.
- If the pesticide is used on food crops, EPA sets a tolerance or maximum residue level of the pesticide that can remain in or on foods. In setting the tolerance, EPA is required to make a safety finding for the pesticide accounting for all possible routes of exposure (through food, water and in home environments).
- In evaluating consumer exposure to pesticides through the diet, EPA uses all available information provided by company registrants, PDP and others to verify that tolerances meet the safety standards set by the FQPA of 1996.
- There are many pesticides available for use on the same crop; however, not all crops are treated with these pesticides and pesticide treatments vary according to crop geographical location, time of year, climatic conditions, and pest and disease pressures. These differences are captured by PDP data which reflect actual residues present in food grown in various regions of the U.S. and overseas.
- PDP data are essential in supporting efforts by the USDA and EPA to assess the American consumer's dietary exposure to pesticide residues, as directed by the FQPA. PDP concentrates its efforts mainly on foods most often consumed by infants and children.

-
- This report shows that overall pesticide residues found on foods tested are at levels below the tolerances established by EPA.
 - The PDP laboratory methods used are geared to detect the smallest possible levels of pesticide residues, even when those levels are well below the safety margins (tolerances) established by EPA. Prior to testing, PDP analysts washed samples for 10 seconds with gently running cold water as a consumer would do at home; no chemicals, soap or any special wash was used.
 - PDP informs the U.S. Food and Drug Administration (FDA) if residues detected exceed the EPA tolerance or have no EPA tolerance established. In 2009, residues exceeding the tolerance were detected in 0.3 percent of all samples tested and residues with no established tolerance were found in 2.7 percent of the samples.
 - The report shows that none of the residue detections in the finished water samples exceeded established EPA Maximum Contaminant Levels, Health Advisory levels, or established Freshwater Aquatic Organism criteria.

Contents

	<u>Page No.</u>
<i>Acknowledgements</i>	ix
<i>Executive Summary</i>	xi
<i>Acronyms and Abbreviations</i>	xiii
<u>Section I--Introduction</u>	1
<u>Section II--Sampling Operations</u>	4
Background.....	4
Fresh and Processed Commodities.....	6
Organic Lettuce.....	9
Rice.....	9
Beef.....	9
Catfish.....	11
Drinking Water.....	12
<u>Section III--Laboratory Operations</u>	14
Overview.....	14
Fresh and Processed Commodities.....	14
Organic Lettuce.....	16
Beef and Catfish.....	16
Rice.....	16
Potable Groundwater from Agriculture/Farm, School/Childcare and Domestic Wells...	16
Municipal Drinking Water.....	17
Quality Assurance Program.....	17
<u>Section IV--Database Management</u>	19
Electronic Data Path.....	19
Data Reporting.....	21
<u>Section V--Sample Results and Discussion</u>	21
Sample Results.....	21
Import vs. Domestic Residue Comparisons.....	22
Postharvest Applications.....	24
Environmental Contaminants.....	24
Overview of Results.....	25
Special Projects.....	26
Potable Groundwater from Domestic Wells.....	26
Municipal Drinking Water.....	27
Tolerance Violations.....	27
<i>References</i>	28

Figures

Page No.

1	PDP Program Operations Support and Data Users.....	2
2	Program Participants.....	3
3	Commodity Origin.....	8
4	Origin of Selected Fresh Commodities: Asparagus, Cucumber and Grape Samples.....	10
5	Location of Beef Sample Collections.....	11
6	Location of Groundwater Collection Sites in 2009.....	13
7	Location of Drinking Water Collection Sites at Community Water Systems in 2009.....	15
8	PDP Data Pathway.....	20

Tables

1	PDP Commodity Collection Schedule for 2009.....	5
2	Distribution of Samples Collected and Analyzed by Each Participating State.....	7
3	Number of Samples Analyzed and Summary of Results per Commodity.....	23

Appendices A-N

Appendix A	Commodity History
Appendix B	Distribution of Residues by Pesticide in Fruit and Vegetables
Appendix C	Distribution of Residues by Pesticide in Rice
Appendix D	Distribution of Residues by Pesticide in Beef
Appendix E	Distribution of Residues by Pesticide in Catfish
Appendix F	Distribution of Residues by Pesticide in Groundwater
Appendix G	Distribution of Residues by Pesticide in Drinking Water
Appendix H	Sample Origin by State or Country
Appendix I	Import vs. Domestic Pesticide Residue Comparisons
Appendix J	Pesticide Residues by Commodity
Appendix K	Number of Pesticides Detected per Sample
Appendix L	Fruit and Vegetable Samples Reported to FDA as Exceeding the Tolerance or Without Established Tolerance

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 when responding to changing trends in commodity distribution and availability. PDP acknowledges the contributions of the State laboratories, the U.S. Department of Agriculture's (USDA) AMS National Science Laboratory, the USDA Grain Inspection, Packers and Stockyards Administration Laboratory and the U.S. Environmental Protection Agency's Analytical Chemistry Laboratory in providing testing services to the program, and the USDA 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 is the latest available and were collected and processed through the efforts of the following organizations:

Program Administration

Agricultural Marketing Service
Science and Technology Programs
1400 Independence Ave., SW
South Building, Mail Stop 0270
Washington, DC 20250

Deputy Administrator
Science and Technology Programs
Robert L. Epstein
(202) 720-5231, Facsimile (202) 720-6496

Monitoring Programs Office
8609 Sudley Rd., Suite 206
Manassas, VA 20110
Director: Martha Lamont
(703) 330-2300 x117, Facsimile (703) 369-0678

Deputy Director: Diana Haynes
(703) 330-2300 x134, Facsimile (703) 369-0678

Electronic-mail Address:

amsmpo.data@ams.usda.gov

Web Site:

<http://www.ams.usda.gov/pdp>

Participating State Agencies

California Department of Food and Agriculture
California Department of Pesticide Regulation
Colorado Department of Agriculture
Florida Department of Agriculture and
Consumer Services
Maryland Department of Agriculture
Michigan Department of Agriculture
Minnesota Department of Agriculture
Montana Department of Agriculture
New York Department of Agriculture and
Markets
Ohio Department of Agriculture
Texas Department of Agriculture
Washington State Department of Agriculture
Wisconsin Department of Agriculture, Trade,
and Consumer Protection

Participating Laboratories

California Department of Food and Agriculture
Division of Inspection Services
Center for Analytical Chemistry
3292 Meadowview Rd.
Sacramento, CA 95832

Colorado Department of Agriculture
Inspection & Consumer Services Division
Laboratory Section
2331 West 31st Ave.
Denver, CO 80211-3859

Florida Department of Agriculture and
Consumer Services
Chemical Residue Laboratory
Building #3
3125 Conner Blvd.
Tallahassee, FL 32399-1650

Michigan Department of Agriculture
Laboratory Division
1615 South Harrison Rd.
East Lansing, MI 48823-5224

Minnesota Department of Agriculture
Laboratory Services Division
601 N. Robert St.
St. Paul, MN 55155-2531

Montana Department of Agriculture
Laboratory Bureau
McCall Hall, Montana State University
Bozeman, MT 59717

New York Department of Agriculture
And Markets
Food Laboratory
1220 Washington Ave.
State Office Campus, Bldg. 7
Albany, NY 12235

Ohio Department of Agriculture
Consumer Analytical Laboratory
8995 East Main St.
Reynoldsburg, OH 43068

Texas Department of Agriculture
Pesticide Laboratory
1500 Research Parkway, Ste. B100
College Station, TX 77845

United States Department of Agriculture
Grain Inspection, Packers & Stockyards Administration
Technical Services Division
10383 North Ambassador Dr.
Kansas City, MO 64153-1394

United States Department of Agriculture
Agricultural Marketing Service
National Science Laboratory
801 Summit Crossing Pl.
Gastonia, NC 28054

United States Environmental Protection Agency
Analytical Chemistry Laboratory
701 Mapes Road
Fort Meade, MD 20755-5350

Washington State Department of Agriculture
Chemical and Hop Laboratory
21 N. 1st Ave., Ste. 106
Yakima, WA 98902

Executive Summary

In 1991, the U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS) was charged with designing and implementing the Pesticide Data Program (PDP) to collect data on pesticide residues in food. PDP provides high-quality data on residues in food, particularly foods most likely consumed by infants and children. This 19th Pesticide Data Program Summary presents results for samples collected in 2009.

This information is provided to the U.S. Environmental Protection Agency (EPA). Before a company can sell or distribute any pesticide in the United States of America, EPA must review studies on the pesticide to determine that it will not pose unreasonable risks to human health or the environment. Once EPA has made that determination, it will license or register that pesticide for use in strict accordance with label directions.

Before allowing a pesticide to be used on a food commodity, EPA sets limits on how much of a pesticide may be used on food during growing and processing, and how much can remain on the food you buy. Government inspectors monitor food in interstate commerce to ensure that these limits are not exceeded. EPA also sets standards to protect workers from exposure to pesticides on the job.

AMS, through its Monitoring Programs Office (MPO), is responsible for the administration, planning and coordination of day-to-day PDP operations. MPO meets regularly with EPA and other government agencies to establish program priorities and direction. Sampling and/or testing program operations are carried out with the support of 12 States: California, Colorado, Florida, Maryland, Michigan, Minnesota, Montana, New York, Ohio, Texas, Washington, and Wisconsin. These States have a prominent role in program planning and policy setting, particularly policies relating to quality assurance.

In 2009, program support for sampling of beef also was provided by USDA's Food Safety and Inspection Service. Sampling and testing of drinking water was conducted with personnel from various public

utilities. State health technicians and homeowners provided sampling for groundwater. Testing also was conducted by USDA's AMS National Science Laboratory, USDA's Grain Inspection, Packers and Stockyards Administration Laboratory, and EPA's Analytical Chemistry Laboratory.

PDP commodity sampling is based on a rigorous statistical design that ensures the data are reliable for use in exposure assessments and can be used to draw various conclusions about the Nation's food supply. The pesticides and commodities to be included each year in the sampling are selected based on EPA data needs and take into account the types and amounts of food consumed by infants and children. The number of samples collected by the States is 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 farm gate) 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 beef are based on production.

Fresh and processed fruit and vegetables accounted for 81.5 percent of the total samples collected in 2009. Other samples collected included water samples, 6.7 percent; beef, 4.4 percent; catfish, 4.1 percent; and rice, 3.3 percent; fresh and processed fruit and vegetables tested include: apples, asparagus, canned beans, cilantro, cucumbers, grapes, green onions, lettuce (organic), oranges, pears, potatoes, spinach, strawberries, sweet corn (fresh on-the-cob/frozen), sweet potatoes and tomato paste. Approximately 79 percent of samples were from U.S. sources, 20 percent were imports and 1 percent was of mixed or of unknown origin.

Because PDP data are mainly used for risk assessments, PDP laboratory methods are geared to detect the smallest possible levels of pesticide residues, even when those levels are well below

the safety margins (tolerances) established by EPA. Prior to testing, PDP analysts washed samples for 10 seconds with gently running cold water as a consumer would do; no chemicals, soap or any special wash was used. Results for more than 1.8 million analyses were reported by the laboratories in 2009, too numerous to be included in their entirety in this summary. The PDP database file for 2009, and annual summaries and database files for previous years, are available on the PDP Web site at <http://www.ams.usda.gov/pdp> or by contacting MPO.

PDP is a voluntary program and is not designed for enforcement of tolerances. However, PDP informs the U.S. Food and Drug Administration if residues detected exceed the EPA tolerance or have no EPA tolerance established. In 2009, residues exceeding the established tolerance were detected in 0.3 percent of the samples tested, and residues with no established tolerance were found in 2.7 percent of the samples. Appendices B through G provide a distribution of residues by pesticide for the commodities tested. More information on results is provided in the Sample Results and Discussion section of the summary.

PDP laboratories also test foods for low levels of environmental contaminants that are no longer used in the U.S., but due to their persistence in the

environment, particularly in soil, can be taken up by plants. PDP tracks these contaminants and provides the data to the Codex Alimentarius Commission.

In 2009, 612 (treated and untreated) drinking water samples were collected at water treatment facilities in 11 States and 278 groundwater samples were collected at farm wells, school/daycare facilities and private residence wells located in 16 States. Low levels of detectable residues, measured in parts per trillion, were detected in both drinking water and groundwater. 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, Health Advisory levels, or established Freshwater Aquatic Organism criteria.

PDP continually strives to improve methods for collection, testing, and reporting 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 and 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 the Summary.

Acronyms and Abbreviations

% C.V.	Percent Coefficient of Variation
ACL	Analytical Chemistry Laboratory
AL	Action Level
AMS	Agricultural Marketing Service
BQL	Below Quantifiable Level
CDFA	California Department of Food and Agriculture
EPA	Environmental Protection Agency
ERS	Economic Research Service
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
FQPA	Food Quality Protection Act
FSIS	Food Safety and Inspection Service
GC	Gas Chromatography
GIPSA	Grain Inspection, Packers and Stockyards Administration
GLP	Good Laboratory Practices
HA	Health Advisory
HCB	Hexachlorobenzene
ISO	International Organization for Standardization
LC	Liquid Chromatography
LOD	Limit of Detection
LOQ	Limit of Quantitation
MCL	Maximum Contaminant Level
MPO	Monitoring Programs Office
MRM	Multiresidue Method

MS	Mass Spectrometry
NASS	National Agricultural Statistics Service
NSL	National Science Laboratory
OFPA	Organic Foods Production Act
PDP	Pesticide Data Program
ppb	parts per billion
ppm	parts per million
PT	Proficiency Testing
QA	Quality Assurance
QAO	Quality Assurance Officer
QAU	Quality Assurance Unit
QuEChERS	Quick, Easy, Cheap, Effective, Rugged and Safe
QC	Quality Control
RDE	Remote Data Entry
SDWA	Safe Drinking Water Act
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 2009

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) was initiated in 1991 to collect data on pesticide residues in food and now has an important role in the implementation of the 1996 Food Quality Protection Act (FQPA). The 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 contributors to PDP program policy development and planning operations. Primary contributors to these activities include the participating States, EPA, U.S. Department of Agriculture's (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. Other Federal, State, and foreign government agencies and industry

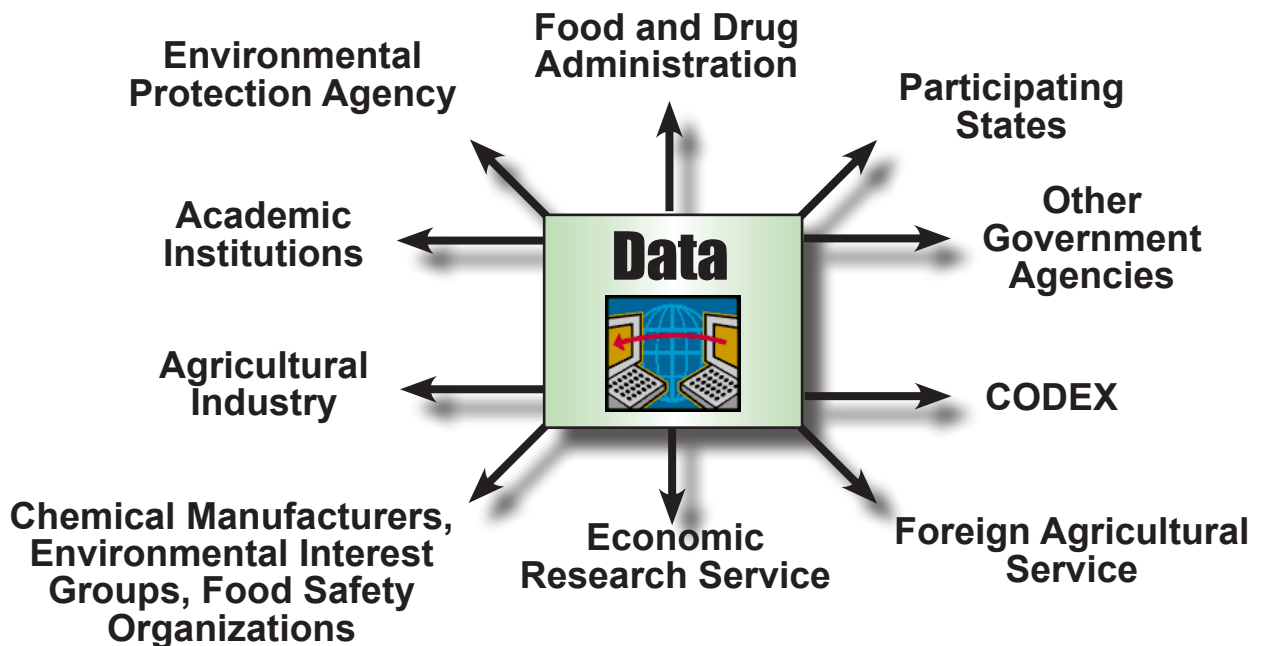
have used PDP data to promote the export of U.S. commodities to international markets. Additionally, the Codex Alimentarius Committee on Pesticides Residues recognizes PDP methodologies as official and validated methods for the determination of pesticide residues in foods.

In 2009, sampling services were provided by 10 States (California, Colorado, Florida, Maryland, Michigan, New York, Ohio, Texas, Washington, and Wisconsin) and the USDA's Food Safety and Inspection Service (FSIS). Sampling services for drinking water were provided by participating facility personnel at 13 individual sites in 11 States (Alabama, California, Georgia, Illinois (2 sites), Kansas, New York, North Carolina, North Dakota, Ohio, Texas, and Virginia (2 sites)). A voluntary groundwater survey was continued in 2009 with homeowners at 70 sites in agricultural areas in Florida (1), Minnesota (9), Nebraska (50), New York (2), South Dakota (3), Virginia (4) and Wisconsin (1) collecting potable well samples for analysis. In addition, a survey of schools and childcare facilities obtaining water from onsite wells was begun. In 2009, 113 schools/childcare facilities from 11 States (California, Georgia, Indiana, Iowa, Louisiana, Michigan, New York, Oklahoma, Pennsylvania, Texas and Virginia) were sampled and analyzed. In addition, 95 wells located within 300 feet of pesticide tank rinse/fill stations which were used as potable water supplies by field workers in the State of Florida were tested. 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); the GIPSA Laboratory; and, the EPA Analytical Chemistry Laboratory (ACL). 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. Together, these States represent about 50 percent of the Nation's



(a) PDP Policy and Planning Contributions



(b) PDP Data Users

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.

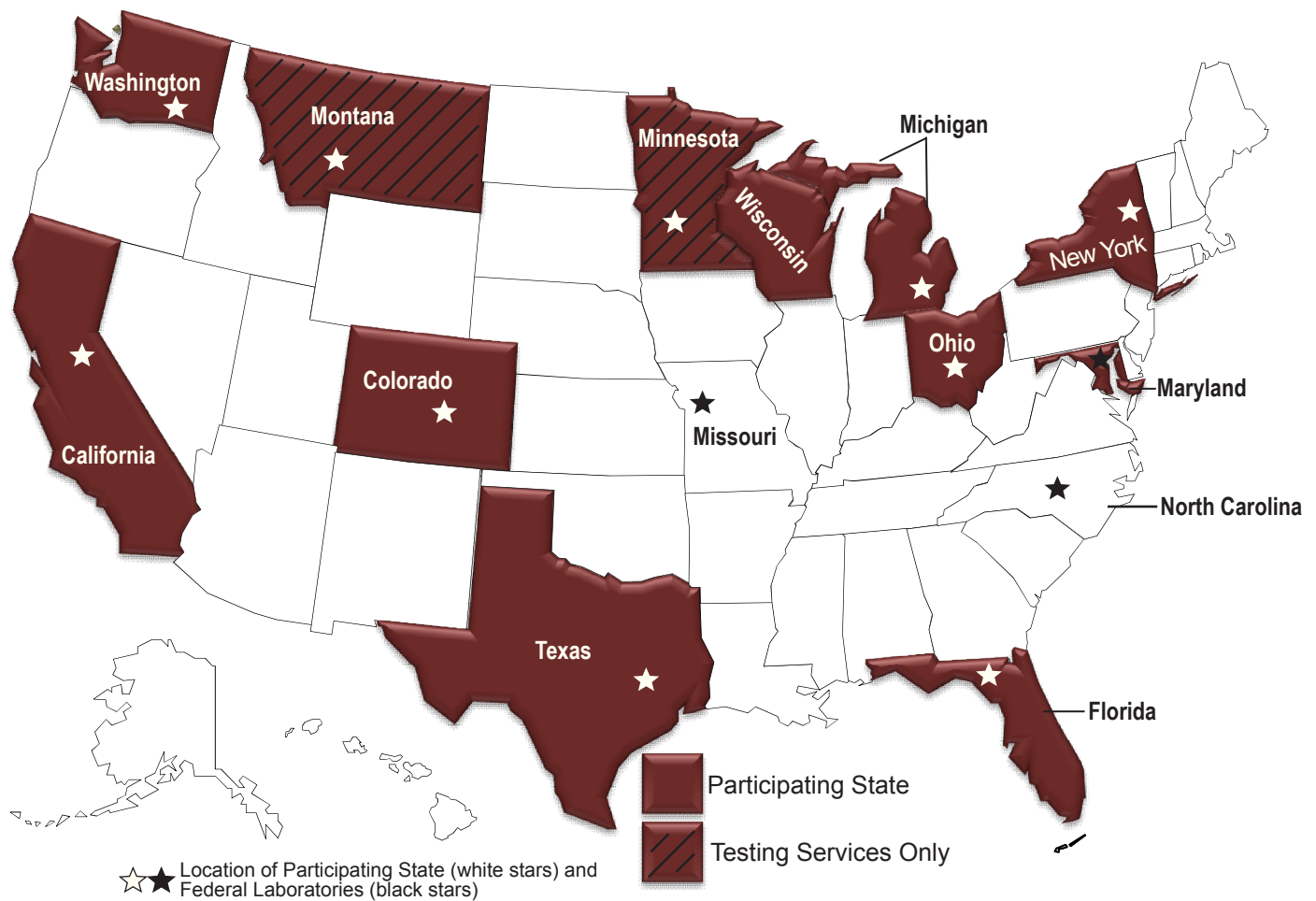


Figure 2. Program Participants. During 2009, AMS established cooperative agreements with 12 States to sample and/or test PDP commodities. Together, these States represent about 50 percent of the Nation's population and all 4 census regions of the U.S. They also represent major U.S. producers of fruit and vegetables. State laboratories are responsible for analyzing fresh and processed fruit and vegetable samples and drinking water samples. The Federal AMS laboratory in Gastonia, North Carolina, analyzes meat, poultry, honey, and dairy products; the Federal laboratory in Kansas City, Missouri, analyzes whole and processed grain products; and, the Federal EPA laboratory in Fort Meade, Maryland, performs specialty analyses for selected crops.

population and all 4 census regions of the U.S. They also represent major U.S. producers of fruit and vegetables. AMS works closely with EPA to select commodities and pesticides for testing and in the selection of drinking water and groundwater sites. The selected commodities represent 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 2010.

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 2009, approximately 600 sites granted access and provided information, including site volume data, to sample collectors. Voluntary cooperation is important to PDP and makes it possible to adjust sampling protocols in response to fluctuations in food distribution and production.

Beef samples are collected by trained USDA-FSIS inspectors. Treated and untreated drinking water samples are collected onsite by trained personnel

at selected water treatment facilities across the country. Groundwater samples are collected from private potable wells by homeowners and State health department technicians. Sites are selected based on geographic locale and proximity to agricultural areas.

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 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), rice (Appendix C), beef (Appendix D), catfish (Appendix E), potable groundwater (Appendix F), and municipal drinking water (Appendix G).

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 that ensure samples are randomly selected from the national food distribution system and reflect what is typically available to the consumer.

In 2009, fruit, vegetables, rice, and catfish were 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 possible contamination by the consumer is eliminated and allows capture of sample information from product boxes. In 2009, 13.7 percent of fruit, vegetable, catfish, and rice samples were collected at proxy sites. The commodities most often collected at these facilities were canned beans, tomato paste, rice, and catfish.

Beef samples were collected from designated slaughter facilities by trained USDA FSIS inspectors. Potable groundwater samples were collected from private domestic wells by the well owners and State health department technicians; participation in the groundwater survey is voluntary, with site selections based on agricultural chemical usage in the watershed and geographic location. Treated and untreated drinking water samples were collected onsite by trained personnel at selected water treatment facilities across the country.

At all sampling locations, information is usually available about the identity and origin of the sample. Sample information is captured at the time of collection for inclusion in the PDP database. 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 PDP sampling is representative of the U.S. food supply. PDP sampling operations are adjusted according to product availability. The number of fruit, vegetable, rice, and catfish samples collected in each participating State is determined by State population. The number and location of collected beef samples are determined by annual domestic production figures. The number and location of groundwater samples are determined based on geographic region, location in an agricultural area, and the willingness of the well owners to participate in the program. The quarterly collection schedule for all 2009 commodities is shown in Table 1.

The number and location of drinking water samples from water treatment facilities are determined by EPA pesticide registration information needs. Each local watershed has its own unique characteristics; therefore, sample collection for this commodity is not intended to reflect national trends, rather PDP collects samples in areas where it is known that targeted pesticides are heavily used.

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

Commodity	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	End Date
Apples	[Bar]				Dec-10
Asparagus	[Bar]				Jun-10
Beef, Adipose	[Bar]				May-09
Beef, Muscle	[Bar]				May-09
Cilantro				[Bar]	Sep-10
Cucumbers	[Bar]				Dec-10
Fish, Catfish	[Bar]		[Bar]	[Bar]	Jun-10
Garbanzo Beans, Canned				[Bar]	Mar-10
Grapes	[Bar]				Dec-10
Green Onions	[Bar]				Sep-09
Kidney Beans, Canned	[Bar]				Mar-09
Lettuce, Organic	[Bar]				Dec-10
Oranges	[Bar]				Dec-10
Pears	[Bar]				Dec-10
Pinto Beans, Canned		[Bar]	[Bar]		Sep-09
Potatoes	[Bar]				Dec-10
Rice	[Bar]		[Bar]		Sep-09
Spinach	[Bar]				Dec-09
Strawberries	[Bar]				Dec-09
Sweet Corn, Fresh	[Bar]				Sep-10
Sweet Corn, Frozen	[Bar]				Sep-10
Sweet Potatoes	[Bar]				Sep-10
Tomato Paste	[Bar]				Dec-10
Water, Finished	[Bar]				Ongoing
Water, Ground	[Bar]			[Bar]	Ongoing
Water, Untreated	[Bar]				Ongoing

Table 1. PDP Commodity Collection Schedule for 2009. 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 (May 1991 through December 2010).

program goals and objectives are met. SOPs for PDP sampling are available on the Internet at www.ams.usda.gov/pdp. On a quarterly basis, sample collectors are provided with commodity Fact Sheets and Quick Reference Guides that list specific collection details for individual commodities that have been added to the program.

Temperature-sensitive samples are packed in heavy-duty, temperature-controlled containers. Holding temperatures are preserved throughout transit time with the inclusion of ample frozen cold packs and insulating materials. Non-temperature-sensitive samples do not require temperature-controlled containers; however, they are shipped in heavy-

duty, well-cushioned containers. To preserve sample integrity, most samples are shipped the same day as collection by overnight delivery. Non-refrigerated processed commodities (canned beans, tomato paste, and rice) are often shipped by ground transportation to reduce shipping costs. Beef and catfish samples are collected in pesticide-free polyethylene bags, frozen overnight, and shipped by next-day delivery to the laboratory for analysis. Groundwater samples and raw intake and treated drinking water samples are collected in specially prepared bottles containing dechlorinating agents to halt potential compound degradation, packed with proper cushioning and cold packs, and shipped the same

day as collection to their respective laboratory by overnight delivery.

Electronic Sample Information Forms (e-SIFs) are used for chain-of-custody and to capture information needed to characterize the sample. Sample collectors use handheld or laptop computers in the field to record sample identification 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 identification number for each sample. Other available information about each sample is also recorded, such as collector name; the State or country of origin; product variety; production claims such as organic, post-harvest chemical applications; and grower, packer, and/or distributor locations. The e-SIFs are electronically mailed the same day as sample collection or, at the latest, by the next morning after collection to ensure that sample information is received at each laboratory by the time samples arrive for analysis. Refer to Section IV on Database Management for more information on the e-SIF system.

Participating State agencies compile and maintain lists of sampling sites. In 2009, approximately 600 sites granted access and provided information, including site volume data, to sample collectors. The States, in turn, 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 to have NASS perform their quarterly site selection. The number of sampling sites and the volume of produce distributed by the sites vary greatly among 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, vegetable, and other specialty 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. The schedule results in a monthly target of 62 samples per commodity, or 744 samples per commodity per year. During the third and fourth quarters of 2009, the monthly collection assignments changed for California (13 samples) and Texas (9 samples).

The total number of samples collected in each State for each commodity is listed in Table 2. Figure 2 illustrates the participating collection States and the laboratories to 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 is shown in Figure 3. The origin of some fresh commodities can vary greatly throughout the year. Graphic examples of this variation can be found in Figure 4 where differences in origin (domestic vs. import) are depicted by month for asparagus, cucumbers, and grapes. Fresh and processed fruit and vegetable, rice, and catfish samples originated from 45 States, 1 U.S. territory, and 22 foreign countries (refer to Appendix H). Beef, groundwater, and drinking water samples are excluded from Appendix H because they rely on differential sampling frames.

◆ Fresh and Processed Commodities

Of all samples collected and analyzed in 2009, 81 percent (10,792 of 13,244) were fruit and vegetables, including fresh and processed products. The fresh commodities collected for PDP were apples, asparagus, cilantro, cucumbers, grapes,

State	AP	AS	CB	CL	CU	GO	GR	LT	OG	PE	PO	SP	ST	SW	Total Fresh
California	162	162	161	39	162	123	162	84	162	162	162	162	162	162	2,027
Colorado	24	24	18	6	24	18	24	12	24	24	24	24	24	24	294
Florida	84	84	83	21	84	49	84	84	84	84	84	84	84	84	1,056
Maryland	48	48	40	10	48	36	48	23	48	47	48	48	48	48	588
Michigan	72	72	58	18	72	54	72	36	72	72	72	72	72	71	885
New York	108	108	98	27	108	81	108	60	108	108	108	108	108	108	1,346
Ohio	72	72	54	18	72	54	72	36	72	72	72	72	72	72	882
Texas	102	102	99	27	102	75	102	50	102	102	102	102	102	102	1,271
Washington	48	48	44	12	48	36	48	25	48	48	48	48	48	44	593
Wisconsin	24	24	13	6	24	18	24	12	24	24	24	24	24	24	289
TOTAL	744	744	668	184	744	558	744	387	744	743	744	744	744	739	9,231

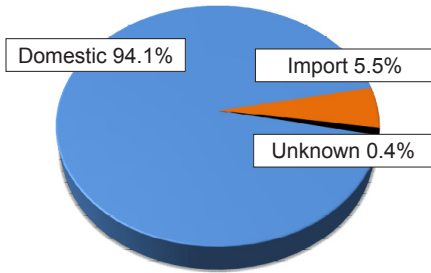
State	CS	KB	NB	TP	ZB	Total Processed	Total Fresh & Processed F&V	Fish FC	Grain RI
California	1	42	81	161	39	324	2,351	103	95
Colorado	6	6	12	25	6	55	349	19	14
Florida	1	21	42	83	21	168	1,224	63	55
Maryland	7	12	24	46	12	101	689	35	28
Michigan	14	18	36	72	18	158	1,043	54	42
New York	10	27	54	108	27	226	1,572	80	63
Ohio	18	18	36	73	18	163	1,045	57	43
Texas	3	24	51	102	27	207	1,478	78	59
Washington	4	12	24	48	12	100	693	36	28
Wisconsin	11	6	12	24	6	59	348	18	8
TOTAL	75	186	372	742	186	1,561	10,792	543	435

Commodity Legend		
AP = Apples	GO = Green Onions	PO = Potatoes
AS = Asparagus	GR = Grapes	RI = Rice
CB = Sweet Corn, Fresh (on cob)	KB = Kidney Beans, Canned	SP = Spinach
CL = Cilantro	LT = Lettuce (Organic)	ST = Strawberries
CS = Sweet Corn, Frozen	NB = Pinto Beans, Canned	SW = Sweet Potatoes
CU = Cucumbers	OG = Oranges	TP = Tomato Paste
FC = Catfish	PE = Pears	ZB = Garbanzo Beans, Canned

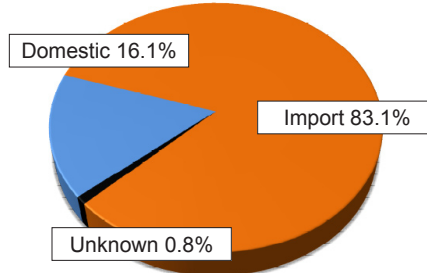
Table 2. Distribution of Samples Collected and Analyzed by Each Participating State. This table includes those commodities collected at terminal markets and distribution centers. This table does not show the beef, groundwater or finished drinking water samples collected. Those distributions can be found in Figures 5, 6, and 7 respectively.

A. Fresh Fruit and Vegetable Samples

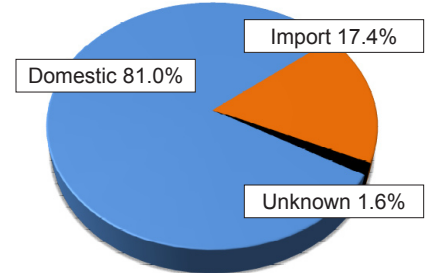
Apples (744 Samples)



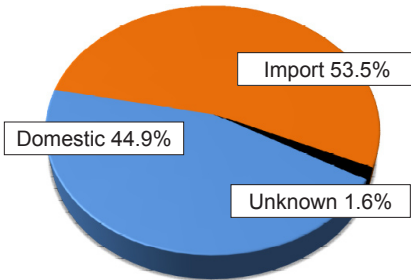
Asparagus (744 Samples)



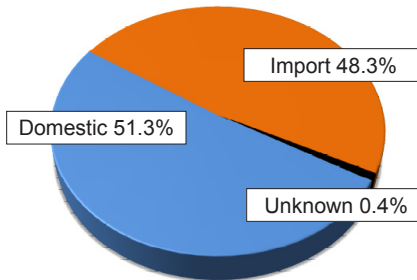
Cilantro (184 Samples)



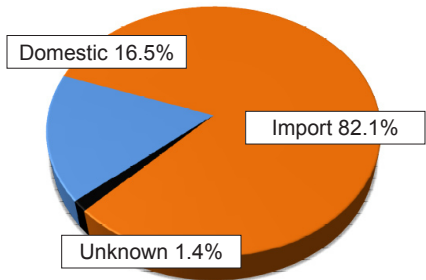
Cucumbers (744 Samples)



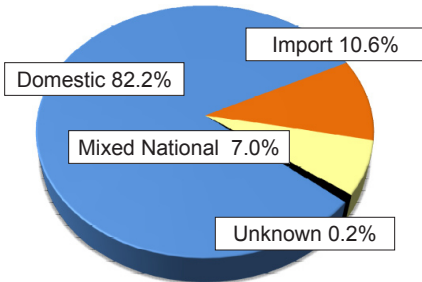
Grapes (744 Samples)



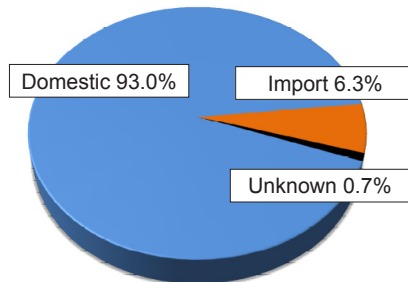
Green Onions (558 Samples)



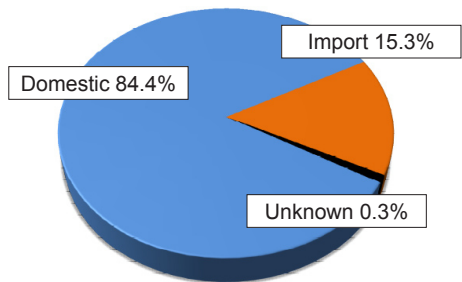
Lettuce, Organic (387 Samples)



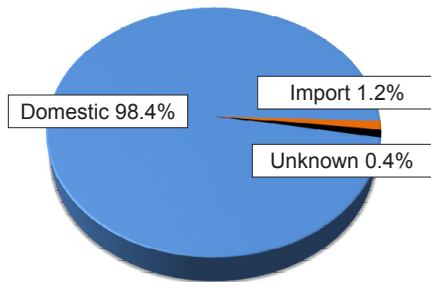
Oranges (744 Samples)



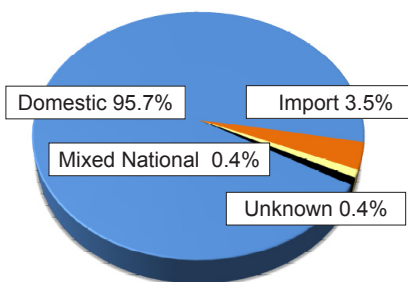
Pears (743 Samples)



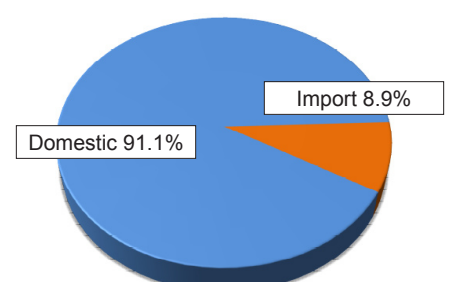
Potatoes (744 Samples)



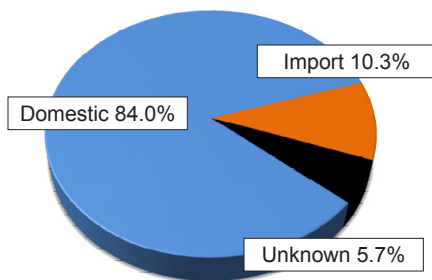
Spinach (744 Samples)



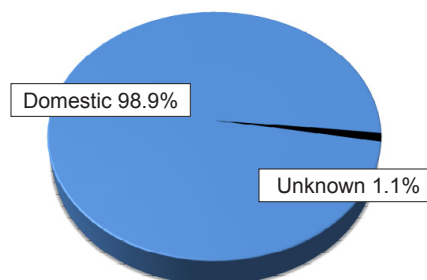
Strawberries (744 Samples)



Sweet Corn, Fresh (668 Samples)



Sweet Potatoes (739 Samples)



B. Processed Fruit and Vegetable Commodities

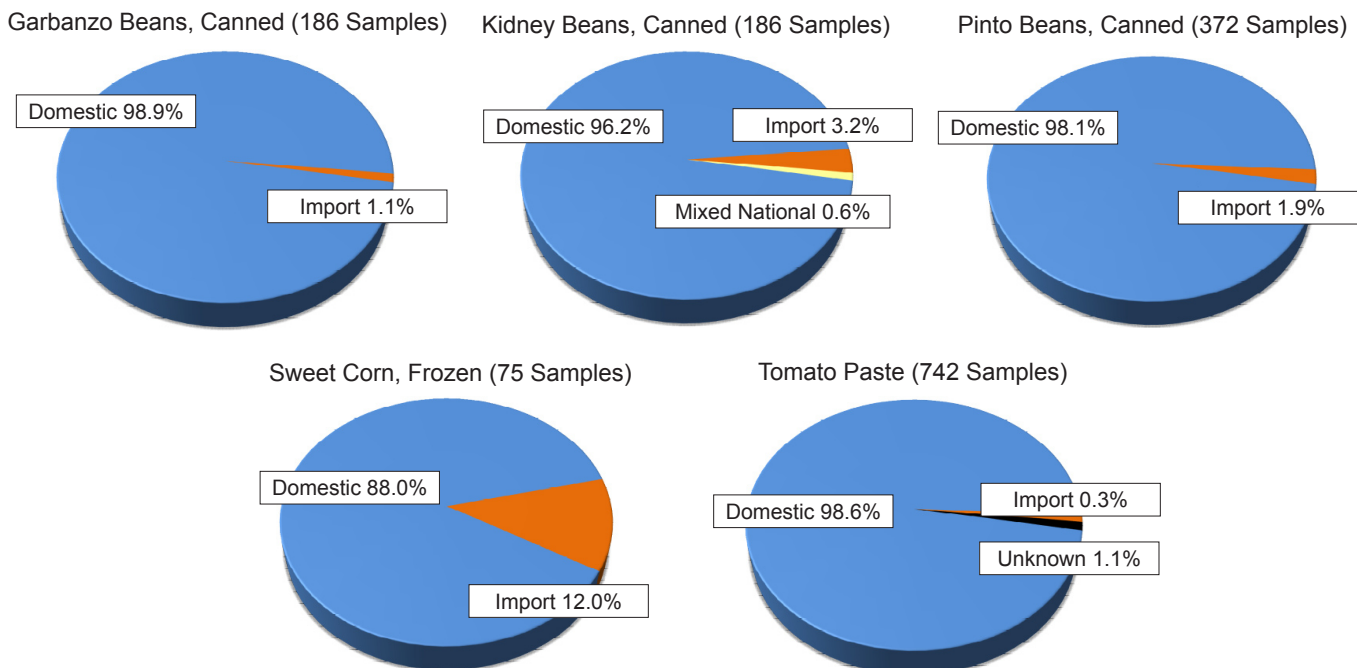


Figure 3. Commodity Origin. This figure depicts the proportion of commodity origin (domestic vs. import vs. unknown origin) for each fresh and processed fruit and vegetable product tested in 2009.

green onions, lettuce (organic), oranges, pears, potatoes, spinach, strawberries, sweet corn on-the-cob, and sweet potatoes. The processed commodities included canned beans (garbanzo, kidney, and pinto), frozen sweet corn, and tomato paste. All fresh fruit and vegetable samples weighed either 3 or 5 pounds with the exception of cilantro and organic lettuce samples that weighed 1 pound. Three pounds were collected for smaller, low-weight commodities such as asparagus and strawberries and 5 pounds were collected for larger, high-weight commodities such as apples and oranges. For processed samples, canned bean samples weighed 28 ounces; frozen sweet corn niblets weighed 3 pounds, and canned tomato paste weighed 16 ounces.

◆ Organic Lettuce

In 2009, PDP collected and analyzed 387 samples of organic lettuce. Samples were collected from routine PDP sampling sites, which included major distribution centers and terminal markets. Samples included both 1-pound unbagged organic lettuce and prebagged organic lettuce. Analysis was performed by the Colorado Department of Agriculture laboratory. Results for organic lettuce are shown in Appendix B.

◆ Rice

In 2009, PDP collected 435 samples of milled rice. Samples were collected from routine PDP sampling sites, which included major distribution centers and terminal markets. Three-pound rice samples included short, medium, and long grain white rice, brown rice, basmati rice, jasmine rice, and texmati rice. Further processed rice types, such as Minute Rice® and Uncle Ben's Rice® were not included in the sampling scheme. Analysis was performed by the USDA Grain Inspection, Packers and Stockyards Administration (GIPSA) Laboratory in Kansas City, MO. Results for rice are shown in Appendix C.

◆ Beef

Between January and May 2009, 584 beef samples were collected for PDP by trained FSIS inspectors. The inspectors collected samples from cows, heifers, and steers at designated slaughter facilities, separately bagged each tissue in pesticide-free polyethylene bags, labeled, and froze the samples overnight. Once frozen, the samples were packed with frozen cold packs in tamper-proof boxes and shipped by overnight delivery to the NSL in

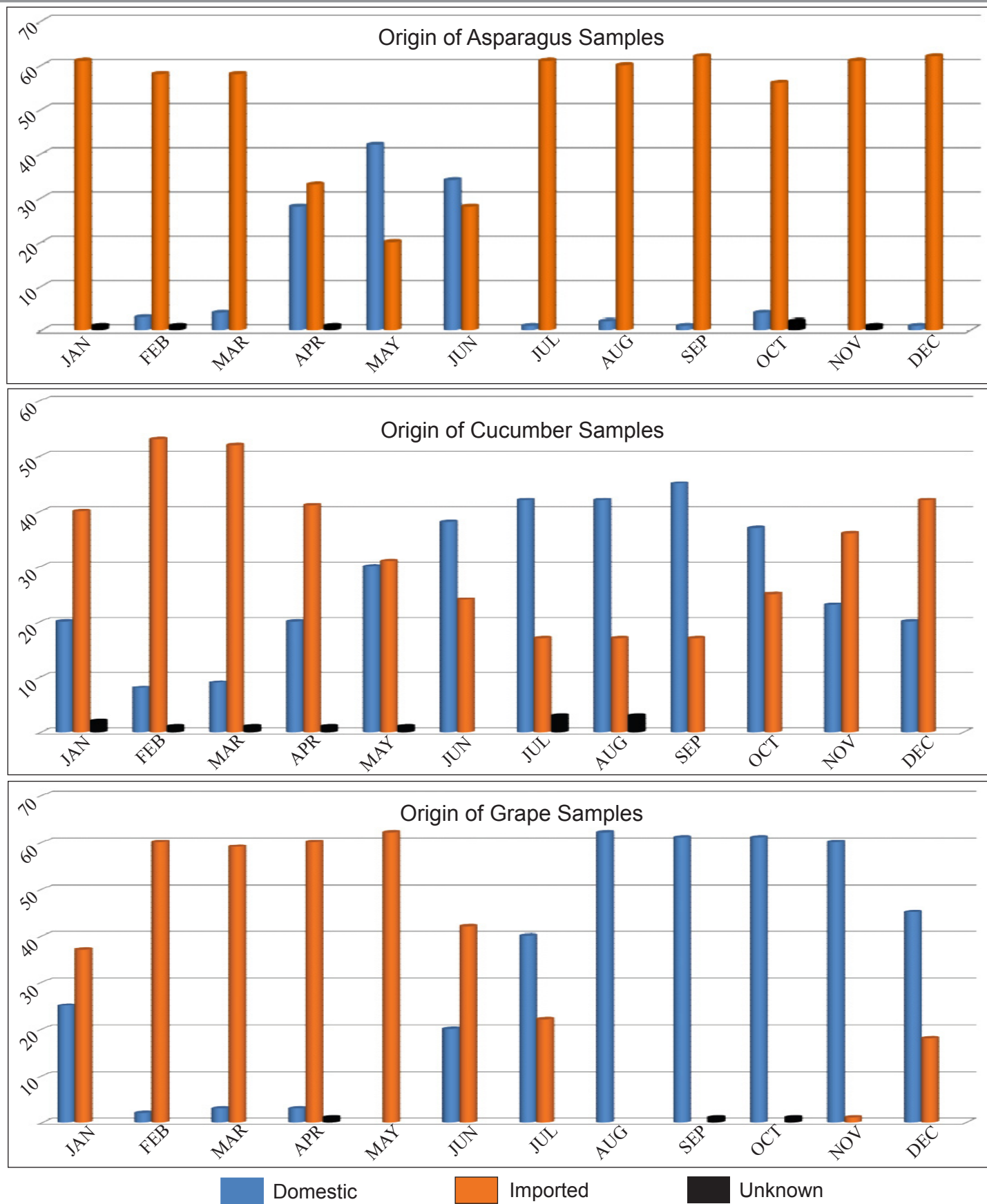


Figure 4. Origin of Selected Fresh Commodities: Asparagus, Cucumber and Grape Samples. Differences in origin (domestic vs. import) are illustrated by month. The targeted number of samples is 62 per month for each commodity.

Gastonia, NC, for analysis. FSIS used specially designed Unified Sampling Forms that contain all required PDP sample information. The forms were completed onsite and accompanied each sample during shipment. A sample was comprised of 1 pound of adipose and 1 pound of muscle from a single animal. A total of 292 adipose and 292 muscle samples were collected. Samples were taken from 47 slaughter facilities in 19 States at rates according to throughput volume (refer to Figure 5 for distribution of samples in each State). The cattle were raised in 29 States and Canada. Results for beef are shown in Appendix D.

◆ Catfish

In 2009, PDP continued the catfish survey which began in 2008. Data were needed to examine levels of pesticides present in catfish, whether from environmental contaminants or from pesticides used in aquaculture. Current, comprehensive data on pesticide residues on fish available to the U.S. consumer is largely unavailable. Sampling was designed to capture domestic and imported products, including farm-raised catfish. Catfish represents the largest sector in the domestic aquaculture industry. The primary domestic production States in 2009 are, in

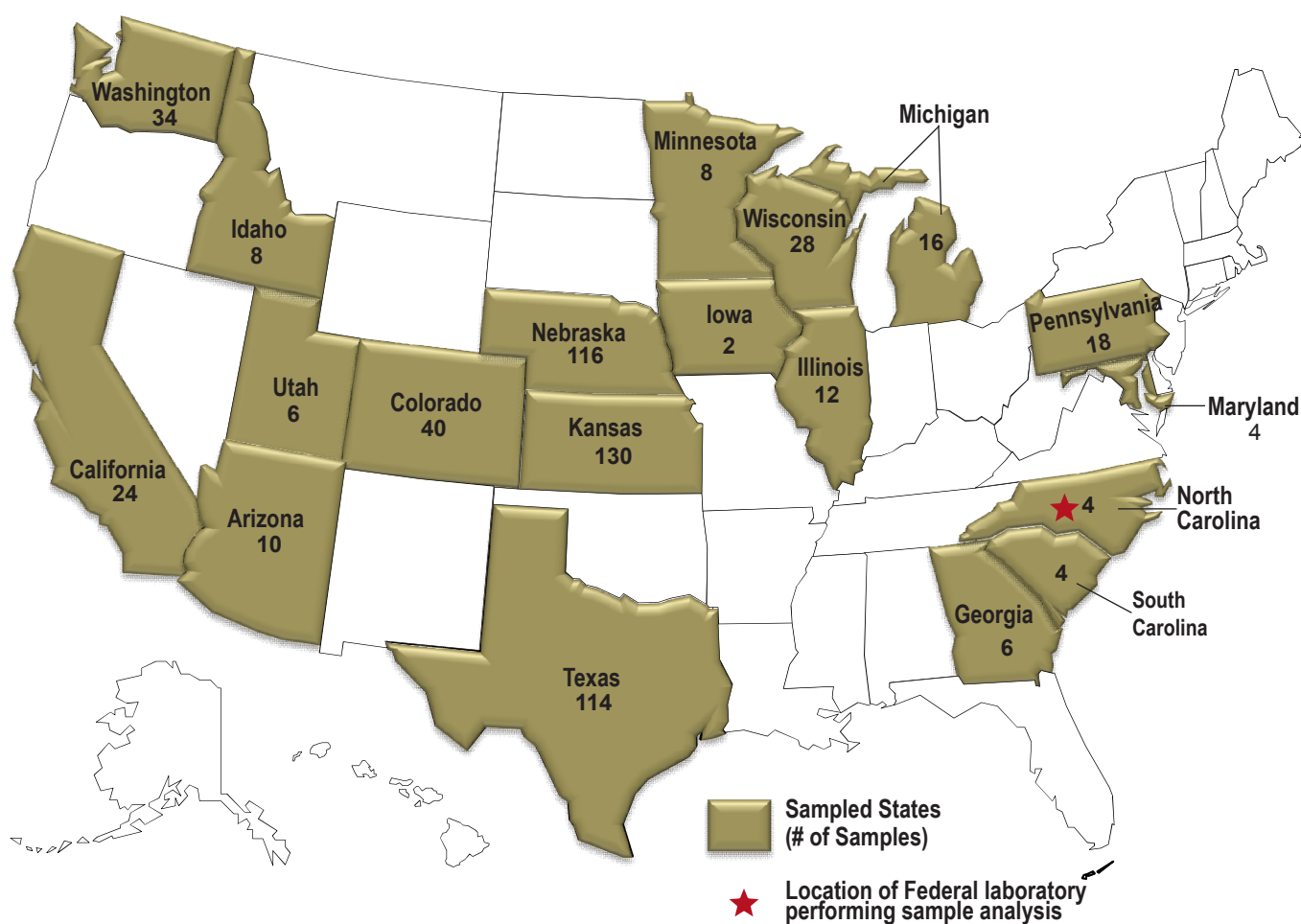


Figure 5. Location of Beef Sample Collection Sites. A total of 584 beef samples were collected including 292 adipose tissue samples and 292 muscle tissue samples from the same animal. All samples were approximately one pound. FSIS inspectors collected samples at 47 designated slaughter facilities in 19 States. The cattle were raised in 29 States and Canada. Residue testing for all samples was performed by the National Science Laboratory in Gastonia, NC.



order of production, Mississippi, Alabama, Arkansas, and Louisiana. The primary import countries are China and Vietnam. PDP sampled catfish available at designated sampling locations regardless of country of origin, in order to capture results for catfish consumed by the American public.

PDP collected and analyzed 543 catfish samples in 2009. Each sample consisted of 1 pound of fresh or frozen raw catfish. Proxy/retail sites provided 59.3 percent of catfish samples, while distribution centers provided 31.5 percent of samples, terminal markets 3.9 percent, and wholesale or specialty fish markets 5.3 percent. Whole catfish samples were not collected; rather, only fillets, nuggets, strips, or steaks were obtained for testing. Both bones-in and no bones were acceptable sample types. To ensure catfish samples arrived at the laboratory in acceptable condition, samples were first frozen overnight and then shipped the following day by overnight air with ample frozen cold packs and insulating materials surrounding all sample units. Analysis was performed by the NSL, Gastonia, NC.

Although naming conventions vary across States and regions of the United States and among countries, PDP sample collectors relied solely on the label for identification of catfish (fillets, nuggets, strips and steaks) regardless of the family, genus, or species names that may or may not have been listed on the product. Farm-raised or wild, and domestic or imported catfish were collected on a random, as available basis. The majority of samples were farm-raised and of domestic origin. Approximately 80 percent of the samples were farm-raised, less than 1 percent was wild-caught, and the remainder of the samples had no available source information. Approximately 74 percent of the samples originated in the United States, 24 percent were imported, and 1 percent were of unknown origin. These collection percentages are consistent with the U.S. Department of Commerce and NASS data on domestic production figures for 2009. Distribution of residues in catfish may be found in Appendix E.

◆ Drinking Water

Potable Groundwater from Domestic Wells

Approximately 15 percent of the U.S. population obtains its domestic water from private wells. Many

of these wells are located in agricultural areas and may be susceptible to pesticides, so in dietary risk assessments, it is necessary to monitor these shallow groundwater wells to account for exposure for this population through water consumption.

Some pesticides bind tightly to soils and therefore are unlikely to be found in groundwater; others, such as water-soluble pesticides, can move through soil to reach the water table. Movement of pesticides in soils and rock is much slower than in surface water – for example, pesticide movement in soils and rock can be measured in centimeters per year while movement in surface water is measured in meters per year. Because of these differences in mobility, pesticide concentrations in groundwater are much less variable and samples do not need to be taken as frequently. Consequently, for these groundwater studies, a single monthly sample was taken rather than the bimonthly samples taken for surface water.

In 2009, PDP performed three groundwater studies: one for wells used as drinking water sources for farm field workers; one for school/childcare facilities with onsite wells used for potable supplies; and one as a continuation of private domestic wells testing. The expense of testing for a large suite of pesticide residues at part-per-trillion levels is cost-prohibitive to most farmers, schools, and homeowners, as well as to county and State governments. PDP collaborated with these groups on sample collection and provided them with their individual sample results.

Agricultural farm field workers, because of their work environment, are a subpopulation with a higher potential of pesticide exposure. In many circumstances, a well with a water supply deemed potable is used for drinking water by these farm field workers. The 2009 farm field study was conducted in conjunction with the Florida Department of Health, which sampled wells in six Florida counties. The wells were known to be used as potable supplies for field workers and were within 300 feet of pesticide tank mix/rinse/fill sites. For this project, 95 wells were tested.

Schools and childcare facilities are often located on town perimeters due to lower land costs.

Bringing utilities to these remote locations can be expensive; therefore, onsite wells are often used for water supplies. As children are most susceptible to pesticides during their growth and development years and spend a significant portion of their lives at these locations, it is critical to have adequate data to evaluate children's potential exposure to pesticides through the consumption of water. A total of 113 school/childcare facility wells were sampled in 2009; this project is continuing in 2010.

PDP tested private residence wells, a continuation of a groundwater study that began in 2007. In 2009, PDP tested 70 wells in 7 States (see Figure 6). When pesticides are detected in groundwater, the source is not always the

immediate surface above, but can be where the water is entering, or recharging, the aquifer. Thus, if pesticides are being used in the recharge zone, they may be transported through the aquifer to the well. The transport times from recharge points (where surface water and precipitation enter the ground in route to the aquifer) to the wells can take a significant amount of time, from many days to years. During this time, microbial and chemical degradation of the pesticide can occur.

A total of 278 groundwater samples from wells used for potable water supplies located in agricultural regions (95 samples), schools/childcare facilities (113 samples), and private residences (70 samples) in 16 States were collected. Each well was sampled by the well owner, or in Florida, by State health department

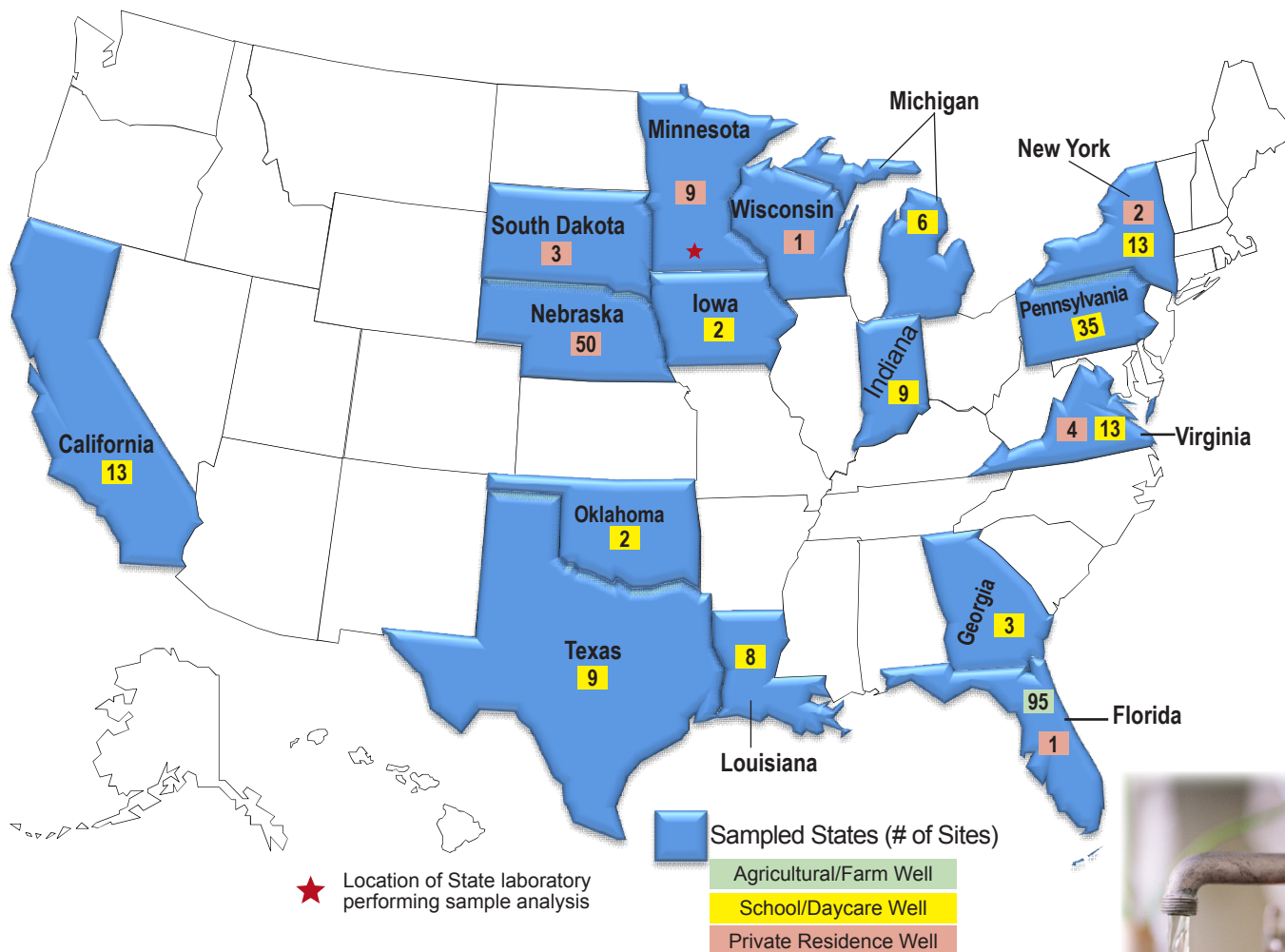


Figure 6. Location of Groundwater Collection Sites in 2009. A total of 278 groundwater samples were collected from 95 agricultural/farm wells, 113 school/daycare wells, and 70 private residence wells in 16 States.



technicians. Sampling was performed at the well head or kitchen faucet following morning showers to ensure that all water from the pressure tank and any storage tanks were used and that the water was fresh from the well and not stagnant. It is assumed that most households do not spray household pesticides around the kitchen faucet; therefore, the chance of contamination is minimal. Figure 6 shows the distribution of groundwater collection sites for the 2009 PDP testing program.

Municipal Drinking Water

In 2001, PDP began testing municipal waters drawing from surface water sources since surface water is more vulnerable to pesticides than municipal waters that draw from groundwater sources. Most municipal systems drawing from groundwater draw from fairly deep (>200 foot) aquifers that are not affected by pesticides.

The sample collection sites are community water systems that draw water from surface water sources. Site selection was made in collaboration with EPA's Office of Pesticide Programs and Office of Water. All selected sites met the following criteria: (1) use of surface water as the primary source of water and (2) location in regions of heavy agriculture where known amounts of targeted pesticides of interest were applied. Water treatment method was not a part of the selection criteria.

Samples were collected bimonthly by trained water treatment facility personnel. Paired samples of the raw intake water (untreated) and disinfected and 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. 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.

Figure 7 shows the distribution of drinking water sites for the 2009 PDP testing program. Untreated and finished drinking water samples were collected from community water systems from 13 sites in 11

States - Alabama, California, Georgia, Illinois (2 sites), Kansas, New York, North Carolina, North Dakota, Ohio, Texas, and Virginia (2 sites). 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.

III. Laboratory Operations

◆ Overview

Thirteen laboratories (10 State and 3 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 an ongoing basis. Program scientists continually 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 Commodities

Fruit and vegetable samples were tested for 309 parent pesticides, metabolites, degradates, and/or isomers using Multiresidue Methods (MRMs). Upon arrival at the testing facility, samples of fresh commodities were visually examined for acceptability and discarded if determined to be inedible (decayed, extensively bruised, or spoiled). Except for oranges and bagged processed products, samples were washed under gently running cold water, emulating the practices of the average consumer to more closely represent actual exposure to residues. Samples were not cooked, bleached, or washed with detergents. Additionally, any inedible or damaged portions were removed prior to further preparation. For example, apples were cored and stems removed; oranges were peeled; sweet corn was husked and kernels removed from the cob, etc. Bagged processed commodities were not washed or cooked

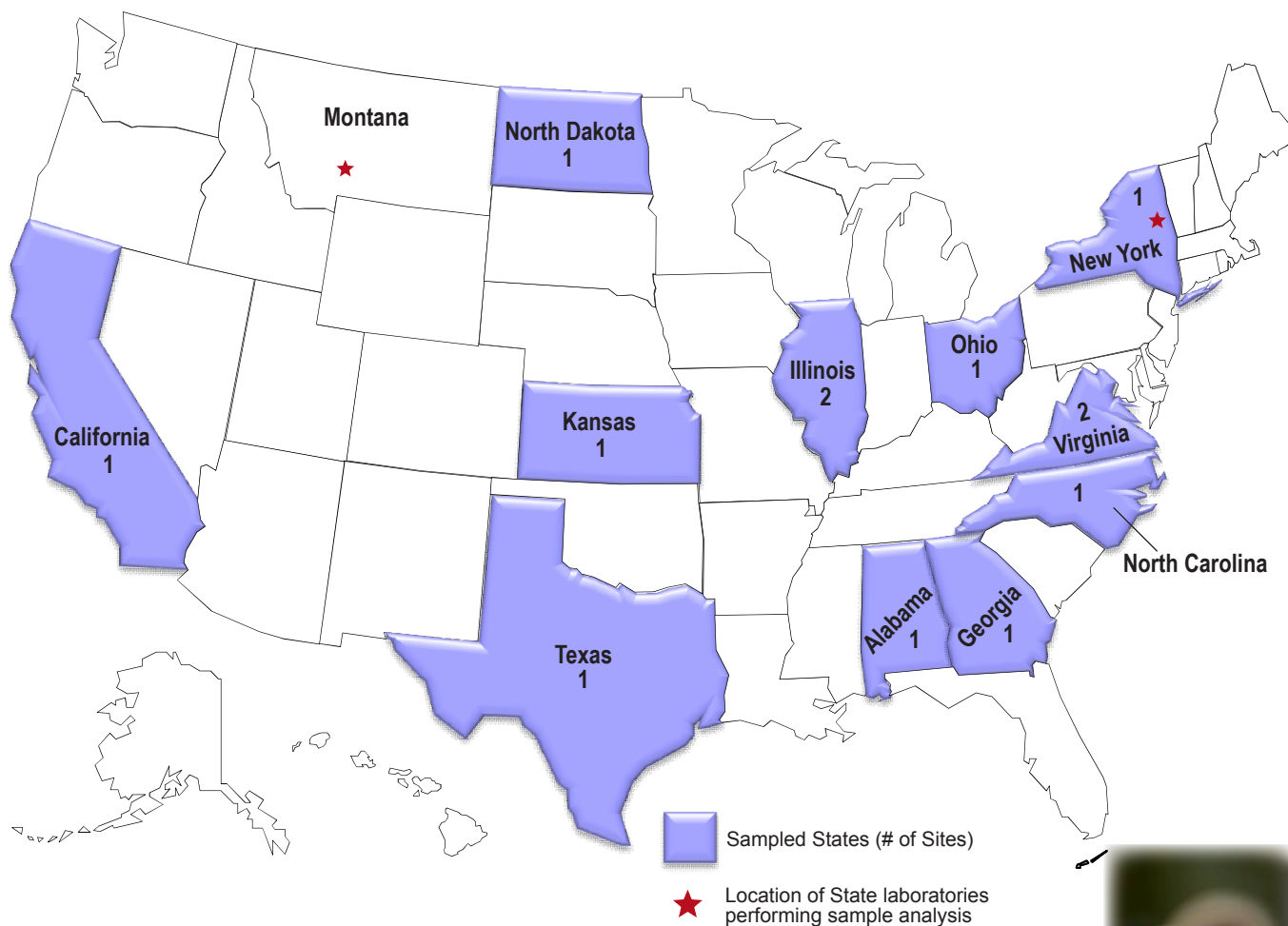


Figure 7. Location of Drinking Water Collection Sites at Community Water Systems in 2009. A total of 13 water treatment facilities in the U.S. were sampled in paired units (612 coordinated treated and untreated samples). Sites represent areas of varied geographical settings but are located in watersheds where pesticides were known to have been heavily applied.



prior to homogenization. Tomato paste was reconstituted with a designated portion of water to facilitate extraction prior to homogenization. Detailed information on sample preparation for each commodity is available in the Laboratory Operations (PDP-LABOP) Standard Operating Procedure on the PDP Web site at www.ams.usda.gov/pdp.

Laboratories are permitted to refrigerate, up to 72 hours, incoming fresh fruit and vegetable samples of the same commodity 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 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) requirements. 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, Michigan, and Washington laboratories used

various QuEChERS-based¹ approaches. The Texas laboratory used a modification 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 Ohio laboratory used variations and combinations of the FDA Luke I [Section 302 of Pesticide Analytical Manual I] and Luke II [FDA Laboratory Information Bulletin 3896] extraction procedures. All MRMs are determined, prior to use and through appropriate method validation procedures, to produce equivalent data for PDP analytical purposes.

PDP laboratories primarily use gas chromatography (GC) and liquid chromatography (LC) instrumentation, coupled with tandem mass spectrometry (MS) detection systems for the simultaneous identification/confirmation and quantitation of pesticides. The use of these GC-MS/MS and LC-MS/MS systems allows the program to capture data for a broad spectrum of pesticides, including emerging product chemistries.

◆ **Organic Lettuce**

The Colorado laboratory tested organic lettuce samples for 57 parent pesticides, metabolites, degradates, and/or isomers, including an emphasis on environmental contaminants and compounds used in organic farming practices. Upon arrival at the testing facility, samples were visually examined for acceptability and discarded if determined to be inedible (decayed, extensively bruised, or spoiled). Accepted samples were prepared emulating the practices of the average consumer to more closely represent actual exposure to residues. For fresh lettuce, except bagged products, damaged/wilted and/or wrapper leaves were discarded, and the fresh leaves washed; bagged lettuce samples were not washed prior to homogenization. Samples were homogenized using food choppers and extracted using a modification of the QuEChERS method. Samples were analyzed using GC-MS and LC-MS/MS systems.

◆ **Beef and Catfish**

The AMS NSL in Gastonia, NC, tested beef adipose and muscle tissues for 147 parent pesticides,

metabolites, degradates, and/or isomers and catfish samples for 196 analytes. 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. Samples were homogenized by grinding with dry ice in a large, high-speed food processor. Sample homogenates were placed into sample cups (approximately 60 grams per cup) and allowed to sublime at -20°C overnight before storing at -70°C prior to analysis. A 20-gram aliquot was weighed for each sample followed by organic solvent extraction and sample cleanup using ultra-low refrigeration (-70°C), centrifugation, and dispersive SPE. 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. Samples were analyzed using GC-MS and LC-MS/MS.

◆ **Rice**

The USDA GIPSA laboratory in Kansas City, MO, analyzed rice samples for 81 parent pesticides, metabolites, degradates, and/or isomers. Upon arrival at the testing facility, samples were visually examined for acceptability and discarded if spoiled, or otherwise inedible. Rice samples were refrigerated at 4°C or lower until time of grinding, after which the samples are stored at -80°C until extraction. Surplus sample aliquots, not used for the initial testing, were retained refrigerated in the event that replication of analysis or verification testing was required. Extraction of rice samples was accomplished using an acetonitrile-based solvent extraction and SPE cleanup coupled with GC-MS and LC-MS/MS detection.

◆ **Potable Groundwater from Agricultural/Farm, School/Childcare Facility, and Domestic Wells**

In 2009, PDP performed three groundwater studies: one for agricultural wells used as drinking water sources for field workers; one for school/childcare facilities with onsite wells used for potable supplies, and one as a continuation

of private domestic wells testing. Agricultural wells providing drinking water to agricultural workers in fields are regulated by EPA's Office of Water under the Safe Drinking Water Act (SDWA) as transient, non-community water systems, while schools and childcare facilities are regulated under the SDWA as non-transient, non-community water systems. Testing for pesticides under the SDWA is limited to 23 compounds that have established maximum contaminant levels (MCLs). These compounds include only parent compounds—no metabolites are tested. In both surface and groundwater, metabolites, rather than parent compounds, are often detected, or the concentration of the metabolite is much greater than that of the parent compound. Metabolites are often more water-soluble and stable than the parent pesticide. EPA does not have established MCL levels or testing requirements for these metabolites.

Private residential wells supply drinking water to approximately 15 percent of the U.S. population. Private wells serving a single or a few families are not regulated under SDWA, nor by other EPA statutes. These wells are typically fairly shallow and are often sourcing the closest, or most shallow, water source. Homes with wells tend to be located in more rural locations, often in agricultural areas. Due to the cost of analysis, data on pesticides and metabolites is scarce. In 2009, PDP continued testing of private residential wells for pesticide residues.

The Minnesota laboratory analyzed groundwater samples for 94 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. Each sample consisted of three 1-liter amber glass bottles. Upon arrival at the testing laboratory, samples were visually examined for acceptability (within 96 hours of collection with no leakage). Samples were refrigerated until time of analysis. One liter of the sample was extracted for compounds amenable to GC-MS analysis and one liter was extracted for compounds amenable to LC-MS/MS. A third bottle was held in reserve in case of breakage or laboratory accident.

◆ Municipal Drinking Water

The Montana and New York laboratories analyzed drinking water for 216 parent pesticides, metabolites, degradates, and isomers. These compounds were determined to be of interest to EPA based on data needs for risk assessment as required under FQPA. 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-MS or GC-MS/MS analysis and another bottle was extracted for compounds amenable to LC-MS/MS analysis. The remaining bottle was held in reserve or extracted for specialty compounds requiring separate extraction/analytical procedures (e.g., pharmaceutical compounds). The extraction methods used were initially based on SPE methods developed by the U.S. Geological Survey (USGS); these methods were modified to capture specific analytes of interest and were independently validated by each testing laboratory.

◆ 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 initially based on EPA Good Laboratory Practices (GLPs). The PDP SOPs provide uniform administrative and sampling procedures, as well as laboratory operations and data analyses guidelines. The program SOPs are revised annually to accommodate changes in the program and are aligned with International Organization for Standardization (ISO) requirements. PDP State food laboratories are accredited to ISO 17025.

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 Quality

Assurance Unit (QAU) at each participating facility. The QAU operates independently from the laboratory staff and is responsible for reviewing all data generated for PDP and for performing quarterly, internal program audits. Preliminary data review procedures are performed onsite by each laboratory's QAU. Final review procedures are performed by MPO staff that 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 methods used (extraction and instrumental). 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.

Identification/Confirmation: Identification and confirmation is performed primarily by MS technologies. 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, extraction, and cleanup. 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, beef, catfish, and rice, 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 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, macrocyclic lactones, neonicotinyls, phenoxy acid herbicides, pyrethroids, strobilurins, sulfonyl urea herbicides, triazines, uracils), with physical and chemical characteristics representative of their corresponding pesticide class. Marker pesticides may be 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 at least quarterly for each analyte/crop combination it reports. Some laboratories choose to rotate spikes of all compounds on a set-to-set basis or spike all compounds analyzed with each set, so that the amount of spike recovery data obtained actually exceeds the minimal requirements previously stated. During 2009, PDP laboratories quantitated a total of 74,085 matrix spikes, with an overall mean recovery of 97 percent and an overall percent coefficient of variation (% C.V.) of 27 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 2009, PDP laboratories quantitated a total of 44,823 process controls on 13,244 samples, with an overall mean recovery of 96 percent and an overall % C.V. of 19 percent. Of these process controls, 193 (0.4%) were reruns due to initial failure to meet PDP recovery criteria. The rerun values are not included in these statistics.

Proficiency Testing: All facilities are required to participate in PDP's Proficiency Testing (PT) program. In order to properly benchmark performance, PDP laboratories participate in two international PT programs: AOAC and the Food Analysis Performance Assessment Scheme (FAPAS) PT program, administered by the Central Science Laboratory, York, UK. In 2009, PDP laboratories that routinely analyze fruit and vegetables via MRMs participated in two AOAC rounds, one for pears and one for cucumbers. Pears were spiked with 10 compounds and cucumbers with 8 compounds. PDP fruit and vegetable laboratories participated in one FAPAS round of apples that contained six fortified analytes. The GIPSA laboratory also participated in a FAPAS round for rice multiresidue analysis and the Colorado laboratory participated in a FAPAS multiresidue pear round; the rice and pear sample sets contained three and six fortified analytes, respectively. For AOAC and FAPAS, laboratories were evaluated based on z-scores for reported compounds, as well as any reported false negatives or false positives. PDP laboratories typically obtained z-scores less than two, which is deemed satisfactory performance.

In addition, PDP laboratories participate in an internal PT program that is tailored to current PDP commodities and testing profiles, including commodities for products other than fruit and vegetables that are not typically available from an outside source. For this internal program, the CDFA QAU prepares and issues rounds designed by MPO. Spiking compounds are selected with specificity and levels for each commodity. Fortification levels of selected analytes are generally 1 to 10 times the program LOQ for that commodity/compound pair. For each multiresidue round, one compound per set is typically repeated within the round to provide an indicator of repeatability. The resulting data are used to determine performance equivalency among the testing laboratories and to evaluate individual laboratory performance. During 2009, PDP laboratories received:

- Two multiresidue fruit and vegetable PT rounds (canned beans and sweet corn), each consisting of three test samples. Each round was fortified with a total of 12 compounds.

- One beef set consisting of 2 samples that were fortified with a total of 12 compounds, and
- One formetanate round consisting of fortified apple, orange, and pear samples.

For water, 2 proficiency sample sets were analyzed during 2009, with 11 compounds fortified in each round. Custom-designed test solutions, based on testing profiles and detection limits, 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 the specified solution, which was diluted according to program protocols. This solution was then used to fortify replicate samples collected from PDP sampling sites whose samples historically contained multiple pesticides but not those included in the spike solution. The spiked samples then were presented to the staff members of each respective laboratory for analysis.

Onsite Reviews: MPO staff performs onsite 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 onsite reviews.

IV. Database Management

PDP maintains an electronic database at the MPO in Manassas, VA, 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, which allows easier administration and data reporting. The PDP data path is illustrated in Figure 8.

◆ 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

SAMPLE COLLECTION



- Collection in 10 States
- Samples taken close to consumer
- Standardized Sample Information Forms
- Data entry on handheld/laptop computers



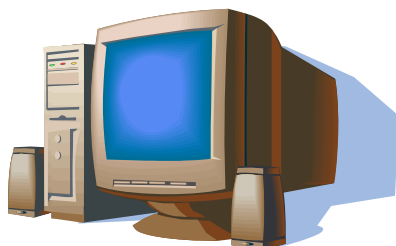
LABORATORY ANALYSIS



- 10 State labs + 2 USDA labs + 1 EPA lab
- Fruit and vegetable samples prepared for consumption
- Detect residues at low levels
- Pesticide residue data generated
- Multi-tiered QA data review process

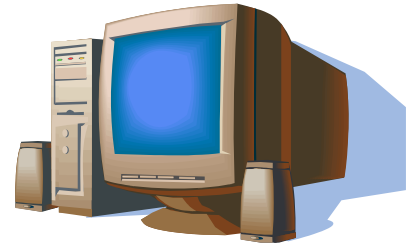


LABORATORY REMOTE DATA ENTRY (RDE)



- Web-based data entry software
- Import data from other systems
- Access controlled by user login
- Extensive data cross-checks

DATA REVIEW AT HQ



- Chemists review data on-screen
- Upload data to central database



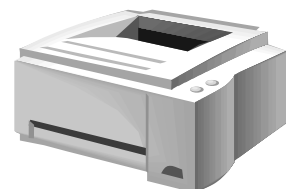
YEAR-END REVIEW



- Data reconciliation



DATA REPORTING



- Standard & adhoc reporting
- Annual Summary
- Custom data sets

INTERNET



INTERNET



Figure 8. PDP Data Pathway. An illustration of PDP data path from sample collection through laboratory analysis and reporting.

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 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 Sample Information Form (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 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 ad-hoc 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 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 maintained using Microsoft® Access and SQL Server database tools. Access to the central PDP database is limited to MPO personnel only and is controlled through password protection and user access rights.

◆ Data Reporting

The MPO 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 Web site. The data files on the Web site are delimited text files that contain a portion of the sampling data, all 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 using common database management software packages.

V. Sample Results and Discussion

◆ Sample Results

In 2009, PDP conducted surveys on a variety of foods including fresh and processed fruit and vegetables, rice, beef muscle and adipose, catfish, groundwater, and treated and untreated drinking water. Of the 13,244 samples collected and analyzed, 10,792 were fresh and processed fruit and vegetable commodities, 435 were rice samples, 292 were beef adipose samples, 292 were beef muscle samples, 543 were catfish samples, 278 were groundwater samples, and 612 were drinking water samples. Appendix B tabulates the distribution of residues in fruit and vegetables for the complete 2009 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; range of analytical LODs; and EPA tolerance levels or FDA action levels. Appendices C, D, E, F and G provide the distribution of residues for rice, beef, catfish, groundwater, and treated and untreated drinking water, respectively. The individual sample data can be downloaded from the PDP Website at <http://www.ams.usda.gov/pdp> or obtained by contacting MPO.

For fresh and processed fruit and vegetables, rice, and beef, approximately 78.7 percent of all samples were produced in the United States, 20.1 percent were imports, 0.3 percent of mixed origin, and 0.9 percent of unknown origin. Appendix H shows the

distribution of sample origin by State or country. Of the domestic samples, approximately 37 percent (3,574 of 9,723) were grown, packed, and/or distributed in or from California. Groundwater and drinking water are excluded from Appendix H since the samples targeted rely on differential sampling frames and are not collected from routine PDP sample collection locations (i.e., terminal markets and large chain store distribution centers throughout the country). Groundwater samples are collected from agricultural/farm wells, school/childcare facility wells, and private domestic wells and treated and untreated drinking water samples are collected by water treatment facilities. Appendix I includes a comparison of residues for selected commodities with a significant import component.

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, 98.7 percent of the analyses performed across all fresh and processed fruit and vegetable commodities, rice, and beef were reported as non-detects (i.e., results were below the established LOD). For samples containing residues, the vast majority of the detections were well below established tolerances.

◆ 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 of the PDP fruit and vegetable commodities in 2009. The data generated by PDP reflect pesticide residues in foods, both domestic and imported products, available to the U.S.

consumer. Many commodities are almost entirely of domestic origin, such as potatoes (98.4%) and sweet potatoes (98.9%) with only minor import (1.2% and 0%, respectively) and unknown components (0.4% and 1.1%, respectively). However, some fresh commodities, such as asparagus, cucumbers, and grapes, are from domestic growers part of the year and imported during the remaining months, as illustrated in Figure 4.

Comparisons of selected residues detected in imported versus domestic cucumbers and grapes can be found in Appendix I. These sample sets were selected to compare data where residues are present in greater than 10 percent of the commodity and allow for the comparison of individual residues. These data also show that the residue profiles for domestic and imported crops are significantly different.

The cucumber data in Appendix I illustrate that in 2009 cyromazine, endosulfan I/II/sulfate, and metalaxyl were detected more frequently in imported samples than in domestic samples. For example, cyromazine was detected in 20.2 percent of the samples from Mexico and 2.5 percent of the U.S. samples. Endosulfan I, II, and sulfate were detected in 39.8 percent, 31.1 percent, and 39.0 percent of the Mexican samples, respectively and in 19.8 percent, 19.2 percent, and 19.8 percent of the domestic samples, respectively. Metalaxyl was detected in 24.3 percent of the Mexican samples and in 13.2 percent of the U.S. samples. Carbendazim, oxamyl and its oxime metabolite, and thiamethoxam were detected with relatively equal frequency in both the U.S. and Mexican cucumbers.

For grapes, cyprodinil, fenhexamid, fludioxonil, imidacloprid, iprodione, myclobutanil, quinoxifen, and tebuconazole were detected more often in the imported grape samples than in the domestic grape samples while methoxyfenozide and trifloxystrobin were detected more frequently in U.S. samples than in Chilean samples. Cyprodinil was detected in 31.5 percent of the Chilean grape samples compared to 19.6 percent of the domestic samples. Fenhexamid was detected in 70.6 percent of the Chilean samples compared to 18.1 percent of the domestic samples while fludioxonil was detected in 45.8 percent of the Chilean samples compared

	Number of Samples Analyzed	Number of Pesticides in Testing Profile	Number of Registered Pesticide Uses	Number of Different Pesticides Detected	Number of Analyses Performed	Number of Residue Detections	Number of Non-Detections	Percent of Residue Detections
Fresh Fruit and Vegetables								
Apples	744	194	138	48	140,881	3,717	137,164	2.6
Asparagus	744	167	121	16	80,724	94	80,630	0.1
Cilantro	184	130	32	43*	28,176	602	27,574	2.1
Cucumbers	744	196	113	69	141,943	2,029	139,914	1.4
Grapes	744	188	151	48	121,458	3,236	118,222	2.7
Green Onions	558	148	74	29	98,840	703	98,137	0.7
Lettuce, Organic	387	47	NA	5	21,859	84	21,775	0.4
Oranges	744	182	105	15	114,428	1,195	113,233	1.0
Pears	743	88	126	36	77,824	1,604	76,220	2.1
Potatoes	744	169	134	28	108,441	1,397	107,044	1.3
Spinach	744	179	95	47	100,914	2,043	98,874	2
Strawberries	744	188	115	39	121,444	3,912	117,532	3.2
Sweet Corn, Fresh	668	174	131	1	88,429	1	88,428	< 0.1
Sweet Potatoes	739	181	92	17	108,998	372	108,626	0.3
TOTAL FRESH	9,231				1,354,362	20,989	1,333,373	
Processed Fruit and Vegetables								
Garbanzo Beans, Canned	186	170	110	1	27,104	1	27,103	< 0.1
Kidney Beans, Canned	186	169	110	1	27,314	2	27,312	< 0.1
Pinto Beans, Canned	372	169	110	2	54,296	12	54,284	< 0.1
Sweet Corn, Frozen	75	174	131	0	8,549	0	8,549	0
Tomato Paste	742	81	139	4	73,458	31	73,427	< 0.1
TOTAL PROCESSED	1,561				190,721	46	190,675	
Fruit and Vegetable Totals								
Number of Samples Analyzed = 10,792				Percent of Total Residue Detections = 1.4%				
Total Number of Analyses Performed = 1,545,083				Total Number of Non-Detects = 1,524,048				
Total Number of Different Pesticides Detected = 124				Total Number of Residue Detections = 21,035				
Grain Product								
Rice	435	70	94	4	32,787	147	32,640	0.4
Meat Product								
Beef Adipose	292	130	171	9	42,884	142	42,742	0.3
Beef Muscle	292	130	163	6	42,924	36	42,888	0.1
All Commodities (excludes 278 groundwater, 612 finished/treated drinking water, and 543 catfish samples)								
Number of Samples Analyzed = 11,811				Percent of Total Residue Detections = 1.3%				
Total Number of Analyses Performed = 1,663,678				Total Number of Non-Detects = 1,642,318				
Total Number of Different Pesticides Detected = 128				Total Number of Residue Detections = 21,360				

* A number of these chemicals are approved for use in parsley, a commodity similar to cilantro. There appears to be confusion whether the uses registered for parsley apply to cilantro; this has been communicated to EPA and FDA.

Table 3. Number of Samples Analyzed and Summary of Results Per Commodity. The percent of residue detections is obtained by comparing the total number of residues detected to the total number of analyses performed per commodity. Table 3 also shows the number of pesticides in PDP's testing profile for a given commodity, number of registered pesticide uses, and number of different pesticides detected.

to 1.6 percent of the U.S. samples. Imidacloprid, iprodione, and myclobutanil were detected in 60.1 percent, 36.4 percent, and 43.7 percent of the Chilean samples, respectively, and in 45.0 percent, 4.2 percent, and 27.2 percent of the domestic samples, respectively. Quinoxifen was detected in 37.6 percent of the Chilean samples and in 23.2 percent of the U.S. samples while tebuconazole was detected in 29.7 percent of the Chilean samples and in 16.2 percent of the domestic samples. Methoxyfenozide was detected in 36.4 percent of the U.S. samples and in 25.9 percent of the Chilean samples and trifloxystrobin was detected in 37.7 percent of the U.S. samples and in 18.5 percent of the Chilean samples. Boscalid, pyraclostrobin, and pyrimethanil were detected with relatively equal frequency in both the U.S. and Chilean grapes.

All pesticides detected were registered in the U.S., however, the profiles of residue findings were markedly different in the U.S. 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.

◆ **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 (e.g., azoxystrobin, imazalil, o-phenylphenol, and thiabendazole) and sprouting inhibitors (e.g., chlorpropham). Some detections reported in Appendix B most likely reflect postharvest applications to the raw agricultural commodity.

◆ **Environmental Contaminants**

Environmental contaminants are pesticides whose uses have been canceled in the United States, but their residues persist in the environment, particularly in soil, where they may be taken up by plants. PDP tracks environmental contaminants to monitor their presence in the environment and provides these data

to Codex Alimentarius. These data are also used to facilitate international trade.

DDT, DDD, and DDE: PDP screened samples for various metabolites of DDT including: DDT o,p'; DDT p,p'; DDD o,p'; DDD p,p'; DDE o,p'; and DDE p,p'. Use of DDT has been prohibited in the United States since 1972; however, due to its persistence in the environment, residues of DDT and its DDD and DDE metabolites were detected in some commodities tested. DDE p,p' was detected mainly in catfish (65.0%), beef adipose tissues (23.6%), spinach (20.8%), and cilantro (19.6%). Except for cilantro, all residues detected were lower than the FDA Action Levels (ALs). Cilantro DDE p,p' residues are not covered by ALs and are therefore, reported as presumptive violations. Details of residue results for DDT, DDD, and DDE may be found in Appendices B, C, D, E, and G.

Other Extraneous Pesticides: PDP screened samples for other extraneous residues (environmental contaminants) including: aldrin; BHC; chlordane (cis/trans) and its metabolite oxychlordane; dieldrin; endrin; heptachlor and its epoxide metabolite; and hexachlorobenzene (HCB). HCB was used as a seed protectant until 1965 but, due to its persistence, remains in soil and grasses. In 1974, all aldrin and dieldrin uses were canceled in the United States and, in 1978, all heptachlor uses were canceled. In 1986, chlordane uses, except termiticide uses, were canceled. Despite these cancellations and because they persist in the environment, residues of BHC, chlordane, HCB, dieldrin, endrin, and heptachlor epoxide were detected in some of the tested commodities. For example, dieldrin was detected in 5.6 percent of cucumber samples, chlordane (cis) was detected in 3.8 percent of cilantro samples, and chlordane (trans) was detected in 1.2 percent of cucumber samples. All other detections of environmental contaminant residues were at a frequency below 5 percent. For all cases, the detected levels were much lower than the FDA action levels, where applicable. None of the drinking water samples (treated or untreated) had residues of aldrin, chlordane or its metabolite oxychlordane, dieldrin, endrin, or heptachlor epoxide. Details of residue results for environmental contaminants may be found in Appendices B, C, D, E, and G.

◆ Overview of Results

Table 3 gives an overview of the number of samples analyzed and a summary of results for fresh and processed fruit and vegetables, rice, and beef. The percent of total residue detections is obtained by comparing the total number of residues detected to the total number of analyses performed per commodity. The percentage of total residue detections for fresh fruit and vegetables ranged from 0 to 3.2 percent, with a mean of 1.5 percent. The percentage of total residue detections for all processed fruit and vegetables was approximately 0.02 percent. The percentage of total residue detections for rice was 0.4 percent, beef adipose was 0.3 percent, and beef muscle 0.1 percent. Of the 11,811 samples analyzed, the overall percentage of total residue detections was 1.3 percent. Excluded from Table 3 are catfish, groundwater, and treated and untreated drinking water, which are presented separately in Appendix E (catfish), Appendix F (groundwater), and Appendix G (drinking water). Catfish and water are not included in the statistics for overall sample results because residue levels, if found, are mainly the result of environmental contamination or transfer, rather than from registered agricultural uses on the commodity.

Table 3 also shows the number of pesticides in PDP's testing profile for a given commodity, the number of registered, or allowable, pesticide uses by commodity, and the number of pesticides actually found on the crop. It should be noted that many pesticides are available for use on the same crop; however, not all crops are sprayed and not all available pesticides are used at the same time or location. These differences are captured by PDP data which reflect actual residues present in food grown in various regions of the U.S. and overseas. Thus, in evaluating consumer exposure to pesticides through the diet, EPA uses all available information provided by registrants, PDP, and others to verify that tolerances meet the safety standards set by FQPA. The reporting of residues present at levels below the established tolerance serves to ensure and verify the safety of the Nation's food supply.

Excluding groundwater and drinking water, pesticide/commodity pairs with detections in at

least 10 percent of samples tested are shown in Appendix J. The data shown include the range and mean of values detected, range of LODs and U.S. EPA tolerance references for each pair. Because beef and catfish residues are expressed in parts per billion (ppb), EPA tolerances have been multiplied by a factor of 1,000 as a basis for comparison using a single scale. Results for beef and catfish are shown at the end of Appendix J.

By virtue of the MRMs employed, PDP provides novel data that can be used by EPA to evaluate exposure to multiple residues from the same commodity. The data are crucial for assessments that consider cumulative exposure to pesticides determined to have common mechanisms of toxicity. The distribution of multiple pesticides occurring in samples tested during 2009 is presented in Appendix K.

These data indicate that approximately 43 percent of all samples tested, excluding catfish, groundwater, and treated and untreated drinking water, contained no detectable pesticides, 17 percent contained 1 pesticide, and 40 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 Appendix K of this Summary.

Thirteen pesticides were detected in two grape samples and one strawberry sample. 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 or at packing facilities, and/or presence of persistent environmental contaminants could all contribute to residue detections.

It should be noted that, in most cases, samples analyzed by PDP are composites of 3 to 5 pounds of commodity from the same lot. Therefore, the

estimated concentrations for multiple residue detections in these composite sample results may or may not reflect the number of pesticides per concentration in a single serving item of a commodity.

◆ **Special Projects**

Organic Lettuce: The Colorado laboratory conducted testing on 387 organic lettuce samples. Appendix B shows that of the 57 compounds tested, 6 different residues (including metabolites), representing 5 pesticides, were detected. The most frequently detected compounds were spinosad (18.3%) and azadirachtin A/B (1.8% and 0.3%, respectively), both of which are allowable for use in organic practices. The Organic Foods Production Act (OFPA) states that, “When residue testing detects prohibited substances at levels that are greater than 5 percent of the Environmental Protection Agency’s tolerance for the specific residue detected or unavoidable residual environmental contamination, the agricultural product must not be sold, labeled, or represented as organically produced.”²² Cypermethrin was found in one organic lettuce sample at 0.06 parts per million (ppm) where a tolerance of 10.00 ppm is established for conventionally-grown lettuce. DDE p,p’, an environmental contaminant, was detected in one sample of organic lettuce (0.5%). Three samples (0.8%) contained violative residues of phosmet oxygen analog; no tolerance is established for the parent compound, phosmet, in conventionally-grown lettuce.

Rice: The USDA GIPSA laboratory conducted testing on 435 rice samples. Appendix C shows that 15 different residues (including metabolites), representing 14 pesticides, were detected in the rice samples. The most frequently detected residue was piperonyl butoxide which was detected in 73 samples (16.8%). MGK-264 was detected in 38 samples (8.7%). Other compounds detected in one or more percent of the samples include: DDD p,p’ (1.1%), malathion (1.8%), permethrin (1.2%), and propiconazole (1.1%). Allethrin, carbaryl, carbendazim, endosulfan II, endosulfan sulfate, fludioxonil, imidacloprid, propanil, and resmethrin were detected in less than one percent of the rice samples.

Beef: The AMS NSL, conducted testing for pesticide residues on 292 beef adipose and 292 beef muscle tissue samples. Overall, 13 different residues (including metabolites), representing 9 pesticides, were detected in the beef samples. DDE p,p’ was the most frequently detected residue with 23.6 percent of the adipose tissue samples containing detectable levels of DDE p,p’ and 6.8 percent of the muscle tissues containing detectable levels. Cyhalothrin was detected in 11.6 percent of adipose samples and 2.4 percent of muscle samples. Bifenthrin was detected in 5.1 percent of the adipose samples and 0.3 percent of the muscle samples. Endosulfan sulfate, hexachlorobenzene, and permethrin were each detected in 1.7 percent of the adipose samples and diphenylamine was detected in 1.7 percent of the muscle samples. Other residues were detected in less than one percent of the samples as follows: cyfluthrin in adipose and muscle; DDD p,p’, DDT p,p’, diphenylamine, endosulfan I, endosulfan II, and piperonyl butoxide in adipose; and endosulfan sulfate in muscle. All residue detections were lower than the established tolerances for those compounds with established tolerances.

Catfish: The AMS NSL conducted testing for pesticide residues on 543 catfish samples. Overall, 41 different residues (including metabolites), representing 30 pesticides, were detected in the catfish samples. The DDT metabolites, DDE p,p’ (65.0%) and DDD p,p’ (29.8%) were the most frequently detected residues. Other residues detected in more than 5 percent of the samples include: bifenthrin (16.2%), DDD o,p’ (8.3%), diuron (7.0%), toxaphene (6.4%), endosulfan sulfate (5.9%), and chlorpyrifos (5.5%).

The majority of residues detected are not associated with pesticide applications, but rather are most likely attributable to environmental exposure and are covered by Action Levels (ALs) established by FDA or by food handling establishment tolerances. Pesticides for which no tolerance was established in fish or catfish are likely to be present in water; EPA is addressing these issues under environmental impact assessments. For these reasons, catfish residue results, along with results from groundwater and drinking water, are excluded when providing overall residue counts.

◆ **Potable Groundwater from Domestic Wells**

In 2009, a total of 278 groundwater samples were collected from agricultural/farm wells, school/childcare

facility wells, and private domestic wells. Overall, PDP detected 29 different residues (including metabolites), representing 19 pesticides, in the groundwater samples. Most of the detections were for herbicides or their metabolites. The samples with detectable residues came from 152 different sites. Residue profiles are shown in Appendix F.

◆ Municipal Drinking Water

PDP analyzed 612 water samples (306 untreated samples and 306 finished samples) from community water systems. Appendix G shows the concentration of detected residues in treated and untreated water. Fifty-three different residues (including metabolites), representing 42 pesticides, were detected in the finished drinking water and 49 different residues (including metabolites), representing 38 pesticides, were detected in the untreated intake water. The majority of pesticides included in the PDP testing profiles were not detected; those compounds that were detected were primarily commonly used herbicides and their metabolites.

Water treatment technologies vary widely and may be based on the local water chemistry, targeted contaminants needing removal, and cost. In most cases, there were more detections in the untreated water than in the treated water. In a few cases, residues detected in the treated water were not found in the untreated water. The data acquired to date indicate 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.

Appendix G also lists the MCL and/or Health Advisory (HA) values. None of the detections in the finished water samples exceeded established EPA MCL or HA levels; however, many of the compounds in the PDP testing profiles do not have established regulatory standards. Therefore, for comparative purposes, EPA Fresh Aquatic Organism (FAO) criteria, which are much lower than human-based MCLs or HA levels, also are 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 2009, no detections exceeded established FAO levels. Additional information regarding EPA drinking water standards is available at: <http://www.epa.gov/safewater/standards/setting.html>.

◆ 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. The FQPA of 1996 contains an amendment to the Federal Insecticide, Fungicide and Rodenticide Act that requires the EPA to review each pesticide registration every 15 years. Timely pesticide data provided by PDP enables the EPA to refine risk estimates used in the pesticide reregistration process.

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, and E. 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. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative.

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 L are combined residues of parent and any isomers and/or metabolites to count the total number of samples with tolerance violations.

A total of 397 samples with 635 residues were reported to the FDA as Presumptive Tolerance Violations. Residues exceeding the tolerance were detected in 46 (0.3%) of the samples tested. The

samples containing residues that exceed established tolerances include: 2 apple samples, 6 asparagus samples, 1 cilantro sample, 3 cucumber samples, 2 samples of grapes, 1 green onion sample, 1 pear sample, 16 potato samples, 6 spinach samples, 4 samples of strawberries, and 4 sweet potato samples. Of those 46 samples, 14 were reported as imported produce.

Residues with no established tolerance were found in 357 (2.7%) of the samples, which included 342 fruit and vegetable samples, 10 samples of rice, and 5 beef adipose samples. There were 241 samples with 1 residue each, 67 samples with 2 residues each, 14 samples with 3 residues each, 17 samples with 4 residues each, 11 samples with 5 residues each, 3 samples with 6 residues each, 2 samples with 7 residues each, and 2 samples with 8 residues each. Six samples with residues having no established tolerance also contained one residue that exceeded an established tolerance. 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 L.

References

- ¹ M. Anastassiades, S.J. Lehotay, D. Stajnbaher and F.J. Schenck, “Quick, Easy, Cheap, Effective, Rugged and Safe (QuEChERS) Method”, *J AOAC Int* 86 (2003) 412.
- ² Title 7 Part 250.671 Code of Federal Regulations



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Disclaimer: Mention of a trade name or brand name does not constitute endorsement or recommendation by USDA over similar products or vendors.

Appendix A

Commodity History

Appendix A identifies commodities sampled by the Pesticide Data Program (PDP) through December 2010. Updates to this list are posted on the PDP Web site at www.ams.usda.gov/pdp.

COMMODITY HISTORY AS OF DECEMBER 2010

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	Jan-09	Dec-10
Apples (T-1)	Jan-03	Dec-03
Asparagus	Jan-02	Jun-03
Asparagus	Jul-08	Jun-10
Bananas	Sep-91	Sep-95
Bananas	Jan-01	Dec-02
Bananas	Jan-06	Dec-07
Bananas (TSP)	Jul-03	Dec-03
Blueberries (cultivated) ²	Jan-07	Dec-08
Broccoli	Oct-92	Dec-94
Broccoli	Jan-01	Dec-02
Broccoli	Oct-06	Sep-08
Cabbage	Jan-10	Ongoing
Cantaloupe	Jul-98	Jun-00
Cantaloupe	Oct-03	Sep-05
Cantaloupe	Jan-10	Mar-10
Cantaloupe	Oct-10	Ongoing
Carrots ¹	Oct-92	Sep-96
Carrots	Oct-00	Sep-02
Carrots	Jan-06	Dec-07
Cauliflower	Oct-04	Sep-06
Celery	Feb-92	Mar-94
Celery	Jan-01	Dec-02
Celery	Jan-07	Dec-08
Cherries ³	May-00	Aug-01
Cherries	May-07	Sep-07
Cilantro	Oct-09	Sep-10
Cranberries	Oct-06	Dec-06
Cucumbers	Jan-99	Dec-00
Cucumbers	Oct-02	Sep-04
Cucumbers	Jan-09	Dec-10
Eggplant	Jan-05	Dec-06
Eggs (TSP)	Jul-03	Dec-03

Commodity	Start Date	End Date
Eggs	Jul-10	Ongoing
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
Grapes	Jan-09	Dec-10
Green Beans	Feb-92	Dec-95
Green Beans	Jan-00	Dec-01
Green Beans	Apr-04	Mar-05
Green Beans	Jan-07	Dec-08
Green Onions (scallions)	Oct-08	Sep-09
Greens (collard & kale)	Oct-06	Sep-08
Hot Peppers	Oct-10	Ongoing
Lettuce	May-91	Dec-94
Lettuce	Oct-99	Sep-01
Lettuce	Jan-04	Dec-05
Lettuce	Jan-10	Ongoing
Lettuce, Organic	Jan-09	Dec-09
Mangoes	Apr-10	Sep-10
Mushrooms	Oct-01	Sep-03
Nectarines ⁴	Jul-00	Sep-01
Nectarines	Jan-07	Dec-08
Onions	Jan-02	Dec-03
Oranges ¹	Aug-91	Dec-96
Oranges	Jan-00	Dec-01
Oranges	Jan-04	Dec-05
Oranges	Jan-09	Dec-10
Peaches	Feb-92	Sep-96
Peaches (S-3)	Jan-00	Sep-00
Peaches ⁵	Jan-01	Sep-02
Peaches (T-1)	May-03	Sep-03
Peaches	Oct-06	Sep-08
Pears	Jan-97	Jun-99
Pears (S-1)	Jul-98	Jun-99
Pears	Oct-03	Sep-05
Pears	Jan-09	Dec-10
Pineapples	Jul-00	Jun-02
Plums ⁶	Jan-05	Dec-06
Potatoes	May-91	Dec-95

Commodity	Start Date	End Date
Potatoes (S-4)	Dec-96	Dec-97
Potatoes	Jul-00	Jun-02
Potatoes	Jan-08	Dec-09
Spinach ¹	Jan-95	Sep-97
Spinach	Jul-02	Dec-03
Spinach ⁷	Jan-06	Sep-06
Spinach	Jan-08	Dec-09
Strawberries ²	Jan-98	Sep-00
Strawberries	Jan-04	Dec-05
Strawberries	Jan-08	Dec-09
Summer Squash	Oct-06	Sep-08
Sweet Corn (on-the-cob)	Oct-08	Sep-10
Sweet Bell Peppers	Jan-99	Dec-00
Sweet Bell Peppers	Oct-02	Sep-04
Sweet Bell Peppers	Jan-10	Ongoing
Sweet Potatoes ¹	Jan-96	Jun-98
Sweet Potatoes	Jan-03	Dec-04
Sweet Potatoes	Oct-08	Sep-10
Tomatoes ¹	Jul-96	Jun-99
Tomatoes	Jan-03	Dec-04
Tomatoes	Jan-07	Dec-08
Watermelon ⁸	Oct-05	Sep-06
Watermelon	Apr-10	Sep-10
Winter Squash ²	Jan-97	Jun-99
Winter Squash	Jul-04	Jun-06

¹ Excludes sampling hiatus September - November 1996.

² Frozen collected when fresh unavailable.

³ Sampling adjusted for market availability. Cherries were sampled for 2 years (May-00 - Aug-01) for a total of 6 months.

⁴ Sampling adjusted for market availability. Nectarines were sampled for 2 years (Jul-00 - Sep-01) for a total of 6 months.

⁵ Sampling adjusted for market availability. Peaches were sampled for 2 years (Jan-01 - Sep-02) for a total of 16 months.

⁶ Dried plums (prunes) were collected when fresh plums were not available.

⁷ Spinach ended earlier than planned due to the unavailability of product.

⁸ 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
Apple Juice	Jul-07	Jun-08
Applesauce	Jul-02	Dec-02
Applesauce	Jan-06	Dec-06
Asparagus, Canned	Jul-03	Dec-03
Baby Food, Green Beans	Oct-10	Ongoing
Baby Food, Pears	Oct-10	Ongoing
Baby Food, Sweet Potatoes	Oct-10	Ongoing
Beans, Canned (4 varieties)	Oct-08	Sep-10
Blueberries (cultivated), Frozen ²	Jan-07	Dec-08
Corn Syrup ³	Jan-98	Jun-99
Grape Juice	Jan-98	Dec-99
Grape Juice	Jan-08	Dec-08
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
Orange Juice	Oct-10	Ongoing
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
Pear Juice, Concentrate/Puree	Jul-02	Jun-03
Pears, Canned	Jul-99	Jun-00
Peas, Canned/Frozen	Apr-94	Jun-96
Peas, Canned/Frozen ⁴	Oct-01	Sep-03
Peas, Frozen	Jan-06	Dec-06
Plums, Dried (Prunes) ⁵	Jan-05	Dec-06
Potatoes, Frozen	Jan-06	Dec-07
Raisins	Jul-06	Jun-07
Spinach, Canned	Oct-97	Dec-98
Spinach, Frozen	Jan-99	Dec-99
Spinach, Canned	Jan-04	Jun-04
Spinach, Canned/Frozen	Jul-10	Ongoing

Commodity	Start Date	End Date
Strawberries, Frozen ²	Jan-98	Sep-00
Sweet Corn, Canned/Frozen	Apr-94	Mar-96
Sweet Corn, Canned/Frozen ⁴	Oct-01	Sep-03
Sweet Corn, Frozen ²	Oct-08	Sep-10
Tomato Paste, Canned	Jan-01	Jun-01
Tomato Paste, Canned	Jan-09	Dec-09
Tomatoes, Canned	Jul-99	Jun-00
Winter Squash, Frozen ²	Jan-97	Jun-99

¹ Excludes sampling hiatus September - November 1996

² Frozen collected when fresh unavailable

³ Excludes sampling hiatus January 1999

⁴ Canned samples collected in first year and frozen samples in second year of testing.

⁵ Dried plums (prunes) were collected when fresh plums were not available.

(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	Sep-08
Oats	Jul-99	Apr-00
Oats	Jan-10	Jun-10
Rice	Oct-00	Sep-02
Rice ¹	Oct-08	Sep-09
Soybeans	Sep-96	Feb-98
Soybeans	Oct-03	Sep-05
Soybeans	Sep-10	Ongoing
Soybean Rust/Aphid	Oct-05	Dec-05
Wheat	Feb-95	Jan-98
Wheat	Sep-04	Jun-06
Wheat Flour	Jan-03	Dec-04
Wheat Flour (T-1)	Jan-03	Dec-03

Nuts and Nut Products

Commodity	Start Date	End Date
Almonds	Jul-07	Mar-08
Peanut Butter	Jan-00	Dec-00
Peanut Butter	Jan-06	Dec-06
Peanut Butter (TSP)	Jul-03	Dec-03

Dairy

Commodity	Start Date	End Date
Butter	Jan-03	Dec-03
Heavy Cream	Jul-05	Dec-05
Heavy Cream	Jan-07	Dec-07
Milk ²	Jan-96	Oct-98
Milk (TSP)	Jul-03	Dec-03
Milk	Jan-04	Dec-05

Meat / Poultry / Fish Products

Commodity	Type	Start Date	End Date
Poultry	Young Chickens	Apr-00	Mar-01
Poultry	Young & Mature Chickens	Jan-06	Dec-06
Beef	Cows, Heifers, Steers	Jun-01	Jul-02
Beef ³	Cows, Heifers, Steers	Dec-08	May-09
Pork	Gilt, Barrow	Jan-05	Jun-05
Fish ⁴	Catfish	Apr-08	Jun-10

Other

Commodity	Start Date	End Date
Honey	Oct-07	Sep-08

Drinking Water

States	Start Date	End Date
---------------	-------------------	-----------------

Finished Water Only (27 sites)

California, Colorado, Kansas, New York, Texas	Mar-01	Dec-03
---	--------	--------

Raw Intake and Finished Water (53 sites)

Alabama, Arizona, California, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, New Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Virginia, Washington State, and Washington, DC	Jan-04	Ongoing
---	--------	---------

Bottled Water

10 Participating States	Jan-05	Dec-06
-------------------------	--------	--------

Groundwater

489 Private Wells in 37 States	Jan-07	Ongoing
--------------------------------	--------	---------

¹ Includes hiatus May-July 2009

² Excludes sampling hiatus September - November 1996

³ Survey ends 7 months early due to budgetary constraints

⁴ Excludes sampling hiatus April-June 2009

(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), and U.S. Environmental Protection Agency (EPA) tolerances for each pair. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative or not.

In 2009, 10,792 fruit and vegetable samples were analyzed, of which 9,231 were fresh product and 1,561 were processed product.

The Pesticide Data Program reports tolerance violations to the U.S. 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, 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. Under the Food Quality protection Act, responsibility for establishing tolerances in lieu of ALs has been transferred to EPA. In the interim, ALs are used.

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
2,4-D (herbicide)						
Grapes	534	0			0.005 ^	0.05
Strawberries	<u>534</u>	<u>0</u>			0.005 ^	0.05
TOTAL	1,068	0				
Acephate (insecticide)						
Apples	744	0			0.002 ^	0.02
Asparagus	210	0			0.002 ^	0.02
Cucumbers (X-1)	744	5	0.7	0.003 - 0.034	0.002 - 0.007	0.02
Garbanzo Beans, Canned	186	0			0.002 - 0.030	3.0
Grapes	722	0			0.002 - 0.51	0.02
Green Onions	558	0			0.005 ^	0.02
Kidney Beans, Canned	186	0			0.002 - 0.030	3.0
Oranges	722	0			0.002 - 0.010	0.02
Pears	742	0			0.004 ^	0.02
Pinto Beans, Canned	372	0			0.002 - 0.030	3.0
Potatoes	744	0			0.002 - 0.030	0.02
Spinach	744	7	0.9	0.004 - 0.008	0.002 - 0.010	0.02
Strawberries	744	0			0.002 - 0.51	0.02
Sweet Corn, Fresh	201	0			0.002 ^	0.02
Sweet Corn, Frozen	8	0			0.002 ^	0.02
Sweet Potatoes	210	1	0.5	0.004 ^	0.002 ^	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.015 ^	0.02
TOTAL	8,579	13				
Acetamiprid (insecticide)						
Apples	744	246	33.1	0.002 - 0.11	0.001 - 0.002	1.0
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	50	6.7	0.002 - 0.090	0.001 - 0.002	0.50
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.40
Grapes	744	16	2.2	0.001 - 0.13	0.001 - 0.002	0.20
Green Onions	558	0			0.001 - 0.003	4.5
Kidney Beans, Canned	186	0			0.002 - 0.003	0.40
Lettuce, Organic	387	0			0.020 ^	3.00
Oranges	744	3	0.4	0.003 ^	0.002 - 0.010	0.50
Pears	742	305	41.1	0.012 - 0.28	0.007 ^	1.0
Pinto Beans, Canned	372	0			0.002 - 0.003	0.40
Potatoes	744	0			0.002 - 0.003	0.01
Spinach	744	45	6.0	0.003 - 1.6	0.002 - 0.010	3.00
Strawberries (X-1)	744	152	20.4	0.001 - 0.67	0.001 - 0.002	0.60
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	0.01
Tomato Paste	<u>742</u>	<u>0</u>			0.020 - 0.023	0.40
TOTAL	9,194	817				
Acetochlor (herbicide)						
Sweet Corn, Fresh	467	0			0.020 ^	0.05
Sweet Corn, Frozen	<u>67</u>	<u>0</u>			0.020 ^	0.05
TOTAL	534	0				
Acibenzolar S methyl (plant activator)						
Apples	120	0			0.007 ^	NT
Cilantro	184	0			0.007 ^	NT
Cucumbers	519	0			0.007 ^	2.0
Green Onions	558	0			0.007 ^	0.05
Tomato Paste	<u>742</u>	<u>0</u>			0.18 ^	3.0
TOTAL	2,123	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
Alachlor (herbicide)						
Sweet Corn, Fresh	467	0			0.020 ^	0.05
Sweet Corn, Frozen	<u>67</u>	0			0.020 ^	0.05
TOTAL	534	0				
Aldicarb (insecticide)						
Apples	609	0			0.001 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cucumbers	609	0			0.003 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	744	0			0.005 - 0.006	NT
Green Onions	528	0			0.003 - 0.015	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Oranges	744	0			0.006 - 0.010	0.3
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	0			0.003 - 0.006	1
Spinach	744	0			0.006 - 0.010	NT
Strawberries	744	0			0.005 - 0.006	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	<u>739</u>	0			0.006 - 0.010	0.1
TOTAL	7,368	0				
Aldicarb sulfone (metabolite of Aldicarb)						
Apples	744	0			0.003 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.003 - 0.010	NT
Cucumbers	609	0			0.006 - 0.010	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	744	0			0.005 - 0.006	NT
Green Onions	558	0			0.003 - 0.010	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Oranges	744	0			0.006 - 0.010	0.3
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	20	2.7	0.004 - 0.26	0.003 - 0.006	1
Spinach	298	0			0.006 - 0.010	NT
Strawberries	744	0			0.005 - 0.006	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	<u>739</u>	0			0.006 - 0.010	0.1
TOTAL	7,271	20				
Aldicarb sulfoxide (metabolite of Aldicarb)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	744	0			0.006 - 0.016	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Oranges	744	3	0.4	0.010 - 0.012	0.006 - 0.010	0.3
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	32	4.3	0.004 - 1.5	0.003 - 0.006	1
Spinach	298	0			0.006 - 0.010	NT
Strawberries	744	0			0.006 - 0.016	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	<u>739</u>	1	0.1	0.013 ^	0.006 - 0.010	0.1
TOTAL	7,406	36				
Aldrin (insecticide) (parent of Dieldrin)						
Apples	744	0			0.003 - 0.007	0.03 AL
Asparagus	744	0			0.003 - 0.040	0.03 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
Cilantro	184	0			0.007 ^	NT
Cucumbers	744	0			0.003 - 0.007	0.1 AL
Garbanzo Beans, Canned	186	0			0.003 ^	0.05 AL
Grapes	744	0			0.003 - 0.010	0.05 AL
Green Onions	558	0			0.007 ^	0.1 AL
Kidney Beans, Canned	186	0			0.003 ^	0.05 AL
Lettuce, Organic	387	0			0.010 ^	0.03 AL
Oranges	744	0			0.003 ^	0.02 AL
Pears	742	0			0.006 ^	0.03 AL
Pinto Beans, Canned	372	0			0.003 ^	0.05 AL
Potatoes	744	0			0.003 ^	0.1 AL
Spinach	298	0			0.003 ^	0.05 AL
Strawberries	744	0			0.003 - 0.010	0.05 AL
Sweet Corn, Fresh	668	0			0.003 - 0.040	0.02 AL
Sweet Corn, Frozen	75	0			0.003 - 0.040	0.02 AL
Sweet Potatoes	739	0			0.003 ^	0.1 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.05 AL
TOTAL	10,345	0				
Allethrin (insecticide)						
Apples	210	0			0.015 ^	NT
Asparagus	744	0			0.015 - 0.030	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	186	0			0.015 - 0.020	NT
Grapes	744	0			0.015 - 0.030	NT
Kidney Beans, Canned	186	0			0.015 - 0.020	NT
Lettuce, Organic	387	0			0.020 ^	NT
Oranges	210	0			0.015 ^	NT
Pears	742	0			0.15 ^	NT
Pinto Beans, Canned	372	0			0.015 - 0.020	NT
Potatoes	744	0			0.015 - 0.020	NT
Spinach	210	0			0.015 ^	NT
Strawberries	744	0			0.015 - 0.030	NT
Sweet Corn, Fresh	668	0			0.015 - 0.030	NT
Sweet Corn, Frozen	75	0			0.015 - 0.030	NT
Sweet Potatoes	210	0			0.015 ^	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.48 ^	NT
TOTAL	7,384	0				
Ametryn (herbicide)						
Apples	210	0			0.015 ^	NT
Asparagus	210	0			0.015 ^	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	51	0			0.015 ^	NT
Grapes	210	0			0.015 ^	NT
Kidney Beans, Canned	54	0			0.015 ^	NT
Oranges	744	0			0.010 - 0.015	NT
Pinto Beans, Canned	105	0			0.015 ^	NT
Potatoes	210	0			0.015 - 0.050	NT
Spinach	744	0			0.010 - 0.015	NT
Strawberries	210	0			0.015 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.050	0.25
Sweet Corn, Frozen	75	0			0.002 - 0.015	0.25
Sweet Potatoes	<u>739</u>	<u>0</u>			0.010 - 0.015	NT
TOTAL	4,440	0				
Amitraz (insecticide)						
Pears	<u>656</u>	<u>0</u>			0.013 ^	3.0
TOTAL	656	0				
Atrazine (herbicide)						
Apples	534	0			0.002 ^	NT
Cucumbers (V-1)	534	1	0.2	0.003 ^	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
Green Onions (V-3)	558	3	0.5	0.003 - 0.007	0.002 ^	NT
Sweet Corn, Fresh	467	0			0.016 ^	0.20
Sweet Corn, Frozen	67	0			0.016 ^	0.20
TOTAL	2,160	4				
Azadirachtin A (insecticide) (isomer of Azadirachtin)						
Lettuce, Organic	387	7	1.8	0.011 - 0.13	0.010 ^	EX
TOTAL	387	7				
Azadirachtin B (isomer of Azadirachtin)						
Lettuce, Organic	387	1	0.3	0.039 ^	0.010 ^	EX
TOTAL	387	1				
Azinphos (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Azinphos methyl (insecticide)						
Apples	744	133	17.9	0.005 - 0.73	0.003 - 0.012	1.5
Asparagus	744	0			0.003 - 0.020	NT
Cilantro	184	0			0.012 ^	NT
Cucumbers	744	0			0.003 - 0.012	2.0
Garbanzo Beans, Canned	186	0			0.003 ^	2.0
Grapes	744	14	1.9	0.002 - 0.11	0.002 - 0.003	4.0
Green Onions	558	0			0.012 ^	2.0
Kidney Beans, Canned	186	0			0.003 ^	2.0
Lettuce, Organic	387	0			0.067 ^	NT
Oranges	210	0			0.003 ^	2.0
Pears	742	91	12.3	0.015 - 0.18	0.009 ^	1.5
Pinto Beans, Canned	372	0			0.003 ^	2.0
Potatoes	744	0			0.003 ^	0.2
Spinach	633	0			0.003 - 0.011	2.0
Strawberries	744	0			0.002 - 0.005	2.0
Sweet Corn, Fresh	668	0			0.003 - 0.040	NT
Sweet Corn, Frozen	75	0			0.003 - 0.040	NT
Sweet Potatoes	210	0			0.003 ^	NT
Tomato Paste	742	0			0.028 ^	2.0
TOTAL	9,617	238				
Azinphos methyl oxygen analog (metabolite of Azinphos methyl)						
Apples	210	0			0.006 ^	1.5
Asparagus	744	0			0.006 - 0.010	NT
Cucumbers	210	0			0.006 ^	2.0
Garbanzo Beans, Canned	186	0			0.006 - 0.010	2.0
Grapes	210	0			0.006 ^	4.0
Kidney Beans, Canned	186	0			0.006 - 0.010	2.0
Lettuce, Organic	387	0			0.40 ^	NT
Oranges	210	0			0.006 ^	2.0
Pears	742	0			0.046 ^	1.5
Pinto Beans, Canned	372	0			0.006 - 0.010	2.0

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
Potatoes	744	0			0.006 - 0.010	0.2
Spinach	210	0			0.006 ^	2.0
Strawberries	210	0			0.006 ^	2.0
Sweet Corn, Fresh	668	0			0.006 - 0.010	NT
Sweet Corn, Frozen	75	0			0.006 - 0.010	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	5,574	0				
Azoxystrobin (fungicide)						
Apples	744	0			0.001 - 0.006	NT
Asparagus	744	0			0.002 - 0.030	0.04
Cilantro	184	4	2.2	0.004 - 0.016	0.001 - 0.003	50
Cucumbers	744	50	6.7	0.003 - 0.049	0.001 - 0.003	0.3
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.5
Grapes	744	59	7.9	0.003 - 0.24	0.002 - 0.003	1.0
Green Onions	558	128	22.9	0.002 - 0.38	0.001 ^	7.5
Kidney Beans, Canned	186	0			0.002 - 0.003	0.5
Oranges	744	0			0.002 ^	10.0
Pinto Beans, Canned	372	0			0.002 - 0.003	0.5
Potatoes (X-12)	744	60	8.1	0.003 - 0.41	0.002 - 0.003	0.03
Spinach	744	42	5.6	0.002 - 4.6	0.002 ^	30.0
Strawberries	744	77	10.3	0.003 - 0.96	0.002 - 0.003	10
Sweet Corn, Fresh	668	0			0.002 - 0.030	0.05
Sweet Corn, Frozen	75	0			0.002 - 0.030	0.05
Sweet Potatoes	739	0			0.002 ^	0.03
Tomato Paste	742	7	0.9	0.011 - 0.022	0.007 - 0.013	0.6
TOTAL	9,662	427				
Bendiocarb (insecticide)						
Apples	744	0			0.003 - 0.040	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	744	0			0.003 - 0.040	NT
Garbanzo Beans, Canned	186	0			0.003 ^	NT
Grapes	744	0			0.003 - 0.004	NT
Green Onions	558	0			0.040 ^	NT
Kidney Beans, Canned	186	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.005	NT
Pinto Beans, Canned	372	0			0.003 ^	NT
Potatoes	744	0			0.003 ^	NT
Spinach	744	0			0.003 - 0.005	NT
Strawberries	744	0			0.003 - 0.004	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	0			0.003 - 0.005	NT
Tomato Paste	742	0			0.032 ^	NT
TOTAL	8,410	0				
Benomyl (fungicide)						
Sweet Corn, Fresh	467	0			0.016 ^	0.2
Sweet Corn, Frozen	67	0			0.016 ^	0.2
TOTAL	534	0				
Benoxacor (herbicide safener)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	210	0			0.006 ^	0.01
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.006 - 0.010	0.01
Grapes	744	0			0.006 - 0.024	NT
Green Onions	558	0			0.002 ^	0.1
Kidney Beans, Canned	186	0			0.006 - 0.010	0.01
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	372	0			0.006 - 0.010	0.01

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
Potatoes	744	0			0.006 - 0.010	0.01
Spinach	210	0			0.006 ^	0.01
Strawberries	744	0			0.006 - 0.024	NT
Sweet Corn, Fresh	668	0			0.006 - 0.020	0.01
Sweet Corn, Frozen	75	0			0.006 - 0.020	0.01
Sweet Potatoes	210	0			0.006 ^	0.01
Tomato Paste	<u>742</u>	<u>0</u>			0.034 ^	0.01
TOTAL	7,531	0				
Benthiavalicarb isopropyl (fungicide)						
Grapes	534	0			0.001 ^	0.25
Strawberries	<u>534</u>	<u>0</u>			0.001 ^	NT
TOTAL	1,068	0				
BHC (alpha + beta) (insecticide)						
Lettuce, Organic	<u>387</u>	<u>0</u>			0.010 ^	0.05 AL
TOTAL	387	0				
BHC alpha (isomer of BHC)						
Apples	744	0			0.002 - 0.007	0.05 AL
Asparagus	744	0			0.002 - 0.080	0.05 AL
Cilantro	152	0			0.022 - 0.045	NT
Cucumbers	744	0			0.002 - 0.007	0.05 AL
Garbanzo Beans, Canned	186	0			0.002 - 0.012	0.05 AL
Grapes	744	0			0.002 - 0.025	0.05 AL
Green Onions	558	0			0.007 ^	0.05 AL
Kidney Beans, Canned	186	0			0.002 - 0.012	0.05 AL
Oranges	744	0			0.002 - 0.003	0.05 AL
Pears	742	0			0.036 ^	0.05 AL
Pinto Beans, Canned	372	0			0.002 - 0.012	0.05 AL
Potatoes	744	0			0.002 - 0.012	0.05 AL
Spinach	298	0			0.002 - 0.003	0.05 AL
Strawberries	744	0			0.002 - 0.025	0.05 AL
Sweet Corn, Fresh	668	0			0.002 - 0.080	0.05 AL
Sweet Corn, Frozen	75	0			0.002 - 0.080	0.05 AL
Sweet Potatoes	739	0			0.002 - 0.003	0.05 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.010 ^	0.05 AL
TOTAL	9,926	0				
BHC beta (isomer of BHC)						
Oranges	511	0			0.003 - 0.010	0.05 AL
Pears	742	0			0.034 ^	0.05 AL
Spinach	88	0			0.003 ^	0.05 AL
Sweet Potatoes	484	0			0.003 - 0.010	0.05 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.010 ^	0.05 AL
TOTAL	2,567	0				
Bifenazate (acaricide)						
Apples	210	0			0.042 ^	0.75
Asparagus	210	0			0.042 ^	NT
Cucumbers	210	0			0.042 ^	0.75
Garbanzo Beans, Canned	51	0			0.042 ^	0.70
Grapes	744	8	1.1	0.027 - 0.077	0.017 - 0.042	0.75
Kidney Beans, Canned	54	0			0.042 ^	0.70
Oranges	210	0			0.042 ^	NT
Pinto Beans, Canned	105	0			0.042 ^	0.70
Potatoes	210	0			0.042 ^	0.05
Spinach	210	0			0.042 ^	NT
Strawberries	744	105	14.1	0.018 - 0.87	0.017 - 0.042	1.5
Sweet Corn, Fresh	201	0			0.042 ^	NT
Sweet Corn, Frozen	8	0			0.042 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.042 ^	0.10
TOTAL	3,377	113				

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
Bifenthrin (insecticide)						
Apples	534	0			0.003 ^	0.05
Asparagus	744	0			0.012 - 0.020	0.05
Cilantro	184	3	1.6	0.022 - 0.037	0.010 ^	6.0
Cucumbers	744	59	7.9	0.005 - 0.078	0.003 - 0.012	0.4
Garbanzo Beans, Canned	186	0			0.008 - 0.012	0.05
Grapes	534	14	2.6	0.009 - 0.062	0.009 ^	0.2
Green Onions	558	2	0.4	0.005 - 0.029	0.003 ^	0.05
Kidney Beans, Canned	186	0			0.008 - 0.012	0.05
Lettuce, Organic	387	0			0.013 ^	3.0
Oranges	744	0			0.012 - 0.038	0.05
Pears	742	3	0.4	0.061 - 0.55	0.037 ^	0.5
Pinto Beans, Canned	372	0			0.008 - 0.012	0.05
Potatoes	744	1	0.1	0.014 ^	0.008 - 0.012	0.05
Spinach (X-2)	744	5	0.7	0.020 - 0.37	0.012 - 0.038	0.2
Strawberries	544	122	22.4	0.009 - 0.54	0.009 - 0.012	3.0
Sweet Corn, Fresh	668	0			0.012 - 0.020	0.05
Sweet Corn, Frozen	75	0			0.012 - 0.020	0.05
Sweet Potatoes (X-1)	738	2	0.3	0.046 - 0.11	0.012 - 0.038	0.05
Tomato Paste	742	0			0.074 ^	0.15
TOTAL	10,170	211				
Bitertanol (fungicide)						
Oranges	534	0			0.010 ^	NT
Spinach	534	0			0.010 ^	NT
Sweet Potatoes	529	0			0.010 ^	NT
TOTAL	1,597	0				
Boscalid (fungicide)						
Apples	744	135	18.1	0.005 - 0.16	0.003 - 0.006	3.0
Asparagus	210	0			0.003 ^	NT
Cilantro (V-9)	184	9	4.9	0.010 ^	0.006 ^	NT
Cucumbers	744	66	8.9	0.005 - 0.069	0.003 - 0.020	0.5
Garbanzo Beans, Canned	186	0			0.003 ^	0.6
Grapes	744	277	37.2	0.005 - 0.63	0.003 - 0.040	3.5
Green Onions	558	5	0.9	0.010 - 0.17	0.006 - 0.020	3.0
Kidney Beans, Canned	186	2	1.1	0.004 - 0.005	0.003 ^	0.6
Oranges	744	0			0.003 - 0.010	NT
Pears	742	14	1.9	0.042 - 0.14	0.025 ^	3.0
Pinto Beans, Canned	372	11	3.0	0.005 ^	0.003 ^	0.6
Potatoes	744	58	7.8	0.003 - 0.015	0.003 ^	0.05
Spinach	744	93	12.5	0.005 - 0.073	0.003 - 0.010	60
Strawberries	744	270	36.3	0.005 - 1.8	0.003 - 0.020	4.5
Sweet Corn, Fresh	201	0			0.003 ^	0.20
Sweet Corn, Frozen	8	0			0.003 ^	0.20
Sweet Potatoes	739	0			0.003 - 0.010	0.05
Tomato Paste	742	0			0.090 ^	1.2
TOTAL	9,336	940				
Bromacil (herbicide)						
Apples	210	0			0.030 ^	NT
Asparagus	210	0			0.030 ^	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.030	NT
Grapes	210	0			0.030 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.030	NT
Oranges	210	0			0.030 ^	0.1
Pinto Beans, Canned	372	0			0.003 - 0.030	NT
Potatoes	744	0			0.003 - 0.030	NT
Spinach	210	0			0.030 ^	NT
Strawberries	210	0			0.030 ^	NT
Sweet Corn, Fresh	183	0			0.030 - 0.060	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
Sweet Corn, Frozen	8	0			0.030 - 0.060	NT
Sweet Potatoes	210	0			0.030 ^	NT
TOTAL	3,359	0				
Buprofezin (insecticide)						
Apples	744	3	0.4	0.002 - 0.035	0.001 - 0.021	4.0
Asparagus	210	0			0.021 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	5	0.7	0.002 - 0.010	0.001 - 0.030	0.50
Garbanzo Beans, Canned	186	0			0.001 - 0.021	0.02
Grapes	744	71	9.5	0.001 - 0.14	0.001 - 0.021	2.5
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	186	0			0.015 - 0.021	0.02
Oranges	744	0			0.010 - 0.030	2.5
Pears	742	33	4.4	0.067 - 0.74	0.040 ^	4.0
Pinto Beans, Canned	372	0			0.001 - 0.021	0.02
Potatoes (V-1)	744	1	0.1	0.004 ^	0.001 - 0.021	NT
Spinach	298	0			0.010 - 0.021	35
Strawberries	744	0			0.001 - 0.021	2.5
Sweet Corn, Fresh	167	0			0.021 ^	NT
Sweet Corn, Frozen	6	0			0.021 ^	NT
Sweet Potatoes	739	0			0.010 - 0.021	NT
Tomato Paste	742	0			0.13 ^	1.3
TOTAL	8,854	113				
Captan (fungicide) (parent of THPI)						
Apples	210	18	8.6	0.020 - 0.44	0.012 ^	25.0
Grapes	744	2	0.3	0.080 - 0.12	0.012 - 0.19	25.0
Pears	742	6	0.8	0.087 - 0.86	0.016 - 0.20	25.0
Strawberries	744	317	42.6	0.020 - 7.5	0.012 - 0.19	20.0
Tomato Paste	742	0			0.047 ^	0.05
TOTAL	3,182	343				
Carbaryl (insecticide)						
Apples	744	25	3.4	0.002 - 0.26	0.001 - 0.003	12
Asparagus	744	5	0.7	0.005 - 0.14	0.003 - 0.010	15
Cilantro	184	0			0.006 ^	NT
Cucumbers	744	15	2.0	0.004 - 0.58	0.001 - 0.003	3.0
Garbanzo Beans, Canned	186	0			0.003 ^	NT
Grapes	744	5	0.7	0.001 - 0.049	0.001 - 0.003	10
Green Onions	542	0			0.003 - 0.006	NT
Kidney Beans, Canned	186	0			0.003 ^	NT
Lettuce, Organic	387	0			0.010 ^	10
Oranges	744	9	1.2	0.005 - 0.042	0.003 - 0.010	10
Pears	742	1	0.1	0.011 ^	0.007 ^	12
Pinto Beans, Canned	372	0			0.003 ^	NT
Potatoes	744	1	0.1	0.009 ^	0.003 ^	2.0
Spinach	744	1	0.1	0.066 ^	0.003 - 0.010	22
Strawberries	744	14	1.9	0.001 - 1.1	0.001 - 0.003	4.0
Sweet Corn, Fresh	668	0			0.003 - 0.010	0.1
Sweet Corn, Frozen	75	0			0.003 - 0.010	0.1
Sweet Potatoes	739	0			0.003 - 0.010	0.2
Tomato Paste	742	0			0.022 ^	5.0
TOTAL	10,775	76				
Carbendazim - MBC (fungicide) (metabolite of Benomyl)						
Apples	534	106	19.9	0.002 - 0.19	0.001 ^	7.0
Cilantro (V-4)	184	4	2.2	0.011 - 0.31	0.001 ^	NT
Cucumbers	534	88	16.5	0.002 - 0.10	0.001 ^	1.0
Grapes	534	13	2.4	0.002 - 0.011	0.002 ^	10.0
Green Onions	558	0			0.001 ^	NT
Oranges	534	1	0.2	0.026 ^	0.010 ^	10.0
Spinach	534	0			0.010 ^	0.2

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
Strawberries	534	154	28.8	0.002 - 0.93	0.002 ^	5.0
Sweet Potatoes	529	0			0.010 ^	0.2
TOTAL	4,475	366				
Carbofuran (insecticide) (parent of 3-Hydroxycarbofuran)						
Apples	744	0			0.001 - 0.003	NT
Asparagus (V-4)	744	4	0.5	0.010 - 0.15	0.003 - 0.010	NT
Cilantro (V-2)	184	2	1.1	0.52 - 1.3	0.006 ^	NT
Cucumbers	744	1	0.1	0.002 ^	0.001 - 0.003	0.2
Garbanzo Beans, Canned	186	0			0.003 ^	NT
Grapes	744	0			0.001 - 0.003	0.2
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	186	0			0.003 ^	NT
Lettuce, Organic	387	0			0.010 ^	NT
Oranges	744	0			0.003 - 0.010	NT
Pears	742	0			0.015 ^	NT
Pinto Beans, Canned	372	0			0.003 ^	NT
Potatoes	744	0			0.003 ^	1
Spinach	744	0			0.003 - 0.010	NT
Strawberries	744	0			0.001 - 0.003	0.2
Sweet Corn, Fresh	668	0			0.003 - 0.010	0.2
Sweet Corn, Frozen	75	0			0.003 - 0.010	0.2
Sweet Potatoes	739	0			0.003 - 0.010	NT
TOTAL	10,049	7				
Carbophenothion (insecticide)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.006	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach	210	0			0.006 ^	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	4,119	0				
Carbophenothion methyl (insecticide)						
Apples	210	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	210	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	2,309	0				
Carboxin (fungicide)						
Apples	210	0			0.018 ^	NT
Asparagus	210	0			0.018 ^	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
Cucumbers	210	0			0.018 ^	NT
Garbanzo Beans, Canned	51	0			0.018 ^	0.2
Kidney Beans, Canned	54	0			0.018 ^	0.2
Potatoes	210	0			0.018 - 0.030	NT
Spinach	210	0			0.018 ^	NT
Strawberries	210	0			0.018 ^	NT
Sweet Corn, Fresh	617	0			0.018 - 0.080	0.2
Sweet Corn, Frozen	72	0			0.018 - 0.080	0.2
Sweet Potatoes	<u>210</u>	<u>0</u>			0.018 ^	NT
TOTAL	2,264	0				
Carfentrazone (herbicide)						
Apples	744	0			0.002 - 0.015	0.10
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.005 - 0.015	2.0
Cucumbers	744	0			0.002 - 0.005	0.10
Garbanzo Beans, Canned	186	0			0.002 - 0.005	0.10
Grapes	744	0			0.002 - 0.016	0.10
Green Onions	464	0			0.004 - 0.008	0.10
Kidney Beans, Canned	186	0			0.002 - 0.005	0.10
Oranges	744	0			0.002 - 0.008	0.10
Pears	742	0			0.019 ^	0.10
Pinto Beans, Canned	372	0			0.002 - 0.005	0.10
Potatoes	744	0			0.002 - 0.005	0.10
Spinach	722	0			0.002 - 0.015	0.10
Strawberries	744	0			0.002 - 0.016	0.10
Sweet Corn, Fresh	668	0			0.002 - 0.020	0.10
Sweet Corn, Frozen	75	0			0.002 - 0.020	0.10
Sweet Potatoes	739	0			0.002 - 0.008	0.10
Tomato Paste	<u>742</u>	<u>0</u>			0.061 ^	0.10
TOTAL	9,754	0				
Chlorantraniliprole (insecticide)						
Apples	534	154	28.8	0.003 - 0.095	0.002 ^	0.30
Cilantro (V-23)	184	23	12.5	0.003 - 0.036	0.002 ^	NT
Cucumbers	534	9	1.7	0.003 ^	0.002 ^	0.25
Green Onions	<u>558</u>	<u>0</u>			0.002 - 0.005	0.20
TOTAL	1,810	186				
Chlordane cis (insecticide) (isomer of Chlordane)						
Apples	744	0			0.001 - 0.002	0.1 AL
Asparagus	744	0			0.002 - 0.060	0.1 AL
Cilantro (V-7)	184	7	3.8	0.002 - 0.007	0.001 ^	NT
Cucumbers	744	16	2.2	0.002 - 0.014	0.001 - 0.002	0.1 AL
Garbanzo Beans, Canned	186	0			0.002 - 0.004	0.1 AL
Grapes	744	0			0.002 - 0.012	0.1 AL
Green Onions	558	0			0.001 ^	0.1 AL
Kidney Beans, Canned	186	0			0.002 - 0.004	0.1 AL
Lettuce, Organic	387	0			0.010 ^	0.1 AL
Oranges	542	0			0.002 - 0.005	0.1 AL
Pears	742	0			0.032 ^	0.1 AL
Pinto Beans, Canned	372	0			0.002 - 0.004	0.1 AL
Potatoes	744	1	0.1	0.004 ^	0.002 - 0.004	0.1 AL
Spinach	210	0			0.002 ^	0.1 AL
Strawberries	744	0			0.002 - 0.012	0.1 AL
Sweet Corn, Fresh	668	0			0.002 - 0.060	0.1 AL
Sweet Corn, Frozen	75	0			0.002 - 0.060	0.1 AL
Sweet Potatoes	542	0			0.002 - 0.005	0.1 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.010 ^	0.1 AL
TOTAL	9,858	24				
Chlordane trans (isomer of Chlordane)						
Apples	744	0			0.001 - 0.002	0.1 AL
Asparagus	744	0			0.002 - 0.060	0.1 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
Cilantro (V-2)	184	2	1.1	0.002 ^	0.001 ^	NT
Cucumbers	744	9	1.2	0.002 - 0.004	0.001 - 0.002	0.1 AL
Garbanzo Beans, Canned	186	0			0.002 - 0.004	0.1 AL
Grapes	744	0			0.002 - 0.012	0.1 AL
Green Onions	558	0			0.001 ^	0.1 AL
Kidney Beans, Canned	186	0			0.002 - 0.004	0.1 AL
Lettuce, Organic	387	0			0.010 ^	0.1 AL
Oranges	520	0			0.002 - 0.005	0.1 AL
Pears	742	0			0.032 ^	0.1 AL
Pinto Beans, Canned	372	0			0.002 - 0.004	0.1 AL
Potatoes	744	0			0.002 - 0.004	0.1 AL
Spinach	210	0			0.002 ^	0.1 AL
Strawberries	744	0			0.002 - 0.012	0.1 AL
Sweet Corn, Fresh	668	0			0.002 - 0.060	0.1 AL
Sweet Corn, Frozen	75	0			0.002 - 0.060	0.1 AL
Sweet Potatoes	520	0			0.002 - 0.005	0.1 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.011 ^	0.1 AL
TOTAL	9,814	11				
Chlorethoxyfos (insecticide)						
Apples	744	0			0.001 - 0.002	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	744	0			0.001 - 0.002	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.040	0.01
Sweet Corn, Frozen	75	0			0.002 - 0.040	0.01
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	3,911	0				
Chlorfenapyr (insecticide)						
Apples	534	0			0.002 ^	0.01
Asparagus	534	0			0.050 ^	0.01
Cilantro	184	0			0.008 ^	0.01
Cucumbers (X-1)	534	13	2.4	0.004 - 0.022	0.002 ^	0.01
Garbanzo Beans, Canned	135	0			0.006 ^	0.01
Green Onions	548	0			0.002 - 0.008	0.01
Kidney Beans, Canned	132	0			0.006 ^	0.01
Pears	742	0			0.027 ^	0.01
Pinto Beans, Canned	267	0			0.006 ^	0.01
Potatoes	534	0			0.006 ^	0.01
Sweet Corn, Fresh	467	0			0.050 ^	0.01
Sweet Corn, Frozen	67	0			0.050 ^	0.01
Tomato Paste	<u>742</u>	<u>0</u>			0.084 ^	1.0
TOTAL	5,420	13				
Chlorfenvinphos (insecticide)						
Apples	744	0			0.003 - 0.004	NT
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.004 ^	NT
Cucumbers	744	0			0.003 - 0.004	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Green Onions	558	0			0.004 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	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
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>210</u>	0			0.003 ^	NT
TOTAL	4,119	0				
Chlorothalonil (fungicide)						
Apples	210	0			0.008 ^	NT
Garbanzo Beans, Canned	135	0			0.019 - 0.020	5
Grapes	210	0			0.008 ^	NT
Kidney Beans, Canned	132	0			0.019 ^	5
Oranges	534	0			0.003 ^	NT
Pinto Beans, Canned	267	0			0.019 ^	5
Potatoes	534	0			0.019 ^	0.1
Spinach (V-1)	511	1	0.2	0.017 ^	0.003 - 0.038	NT
Strawberries	210	0			0.008 ^	NT
Sweet Potatoes	529	0			0.003 ^	NT
Tomato Paste	<u>742</u>	0			0.014 ^	5
TOTAL	4,014	1				
Chlorpropham (herbicide, growth regulator)						
Apples (V-3)	744	3	0.4	0.010 - 0.031	0.006 - 0.018	NT
Asparagus	210	0			0.018 ^	NT
Cilantro	154	0			0.020 ^	NT
Cucumbers (V-5)	744	5	0.7	0.010 - 0.030	0.006 - 0.018	NT
Garbanzo Beans, Canned	186	0			0.010 - 0.012	NT
Grapes	210	0			0.018 ^	NT
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	186	0			0.010 - 0.012	NT
Oranges	722	0			0.021 - 0.038	NT
Pinto Beans, Canned	372	0			0.010 - 0.012	NT
Potatoes	744	596	80.1	0.010 - 23	0.010 - 0.012	30
Spinach	744	0			0.018 - 0.038	NT
Strawberries	210	0			0.018 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes (V-2)	<u>739</u>	2	0.3	0.020 ^	0.012 - 0.038	NT
TOTAL	6,732	606				
Chlorpyrifos (insecticide)						
Apples	744	7	0.9	0.002 - 0.14	0.001 - 0.002	0.1
Asparagus	744	19	2.6	0.004 - 0.81	0.002 - 0.020	5.0
Cilantro (X-1)	184	68	37.0	0.002 - 0.31	0.001 ^	0.1
Cucumbers	744	26	3.5	0.002 - 0.10	0.001 - 0.002	0.1
Garbanzo Beans, Canned	186	0			0.002 - 0.025	0.1
Grapes	744	9	1.2	0.004 - 0.019	0.002 - 0.010	0.1
Green Onions	558	7	1.3	0.002 - 0.067	0.001 ^	0.1
Kidney Beans, Canned	186	0			0.002 - 0.025	0.1
Lettuce, Organic	387	0			0.013 ^	1.0
Oranges	744	6	0.8	0.004 - 0.008	0.002 - 0.003	1.0
Pears	742	7	0.9	0.005 - 0.015	0.003 ^	0.1
Pinto Beans, Canned	372	0			0.002 - 0.025	0.1
Potatoes	744	0			0.002 - 0.025	0.1
Spinach	744	15	2.0	0.004 - 0.061	0.002 - 0.004	0.1
Strawberries	744	10	1.3	0.004 - 0.042	0.002 - 0.010	0.2
Sweet Corn, Fresh	668	0			0.002 - 0.020	0.1
Sweet Corn, Frozen	75	0			0.002 - 0.020	0.1
Sweet Potatoes	739	21	2.8	0.004 - 0.024	0.002 - 0.003	0.1
Tomato Paste	<u>742</u>	0			0.009 ^	0.1
TOTAL	10,791	195				

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
Chlorpyrifos oxygen analog (metabolite of Chlorpyrifos)						
Apples	210	0			0.006 ^	0.1
Asparagus	744	0			0.006 - 0.010	5.0
Cucumbers	210	0			0.006 ^	0.1
Garbanzo Beans, Canned	186	0			0.002 - 0.006	0.1
Grapes	678	0			0.006 - 0.018	0.1
Kidney Beans, Canned	186	0			0.002 - 0.006	0.1
Lettuce, Organic	387	0			0.20 ^	1.0
Oranges	210	0			0.006 ^	1.0
Pears	742	0			0.005 ^	0.1
Pinto Beans, Canned	372	0			0.002 - 0.006	0.1
Potatoes	744	1	0.1	0.003 ^	0.002 - 0.006	0.1
Spinach	210	0			0.006 ^	0.1
Strawberries	744	0			0.006 - 0.018	0.2
Sweet Corn, Fresh	668	0			0.006 - 0.010	0.1
Sweet Corn, Frozen	75	0			0.006 - 0.010	0.1
Sweet Potatoes	210	0			0.006 ^	0.1
TOTAL	6,576	1				
Clethodim (herbicide)						
Apples	534	0			0.002 - 0.015	NT
Cilantro	184	0			0.002 ^	12.0
Cucumbers	534	0			0.002 ^	0.50
Green Onions	558	0			0.002 ^	2.0
Tomato Paste	742	0			0.10 ^	3
TOTAL	2,552	0				
Clofentezine (insecticide)						
Apples	210	0			0.012 ^	0.5
Asparagus	210	0			0.012 ^	NT
Cucumbers	210	0			0.012 ^	NT
Garbanzo Beans, Canned	51	0			0.012 ^	NT
Grapes	210	0			0.012 ^	1.0
Kidney Beans, Canned	54	0			0.012 ^	NT
Oranges	210	0			0.012 ^	NT
Pears	742	0			0.094 ^	0.5
Pinto Beans, Canned	105	0			0.012 ^	NT
Potatoes	210	0			0.012 ^	NT
Spinach	210	0			0.012 ^	NT
Strawberries	210	0			0.012 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	210	0			0.012 ^	NT
TOTAL	3,051	0				
Clomazone (herbicide)						
Apples	744	0			0.002 - 0.009	NT
Asparagus	210	0			0.009 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.009	0.1
Garbanzo Beans, Canned	186	0			0.005 - 0.009	0.05
Grapes	210	0			0.009 ^	NT
Green Onions	558	0			0.008 ^	NT
Kidney Beans, Canned	186	0			0.005 - 0.009	0.05
Oranges	744	0			0.009 - 0.015	NT
Pinto Beans, Canned	372	0			0.005 - 0.009	0.05
Potatoes	744	0			0.005 - 0.032	NT
Spinach	744	0			0.009 - 0.075	NT
Strawberries	210	0			0.009 ^	NT
Sweet Corn, Fresh	201	0			0.009 ^	NT
Sweet Corn, Frozen	8	0			0.009 ^	NT
Sweet Potatoes	739	0			0.009 - 0.032	0.05
TOTAL	6,784	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
Clopyralid (herbicide)						
Grapes	534	0			0.10 ^	NT
Strawberries	<u>534</u>	<u>0</u>			0.10 ^	1.0
TOTAL	1,068	0				
Clothianidin (insecticide) (also a metabolite of Thiamethoxam)						
Apples	210	0			0.003 ^	1.0
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	8	3.8	0.005 - 0.012	0.003 ^	0.2
Garbanzo Beans, Canned	186	0			0.003 - 0.010	0.02
Grapes	744	36	4.8	0.003 - 0.34	0.003 ^	0.60
Kidney Beans, Canned	186	0			0.003 - 0.010	0.01
Lettuce, Organic	387	0			0.050 ^	4.0
Oranges	744	0			0.003 - 0.010	0.40
Pears	742	27	3.6	0.030 ^	0.018 ^	1.0
Pinto Beans, Canned	372	0			0.003 - 0.010	0.02
Potatoes	744	24	3.2	0.005 - 0.029	0.003 - 0.010	0.05
Spinach	744	9	1.2	0.013 - 0.068	0.003 - 0.010	4.0
Strawberries	744	0			0.003 ^	0.3
Sweet Corn, Fresh	668	0			0.003 - 0.020	0.02
Sweet Corn, Frozen	75	0			0.003 - 0.020	0.02
Sweet Potatoes	739	0			0.003 - 0.010	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.029 - 0.058	0.25
TOTAL	8,447	104				
Coumaphos (insecticide)						
Apples	744	0			0.003 - 0.006	NT
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.006 ^	NT
Cucumbers	744	0			0.003 - 0.006	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.015	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>716</u>	<u>0</u>			0.003 - 0.015	NT
TOTAL	5,159	0				
Coumaphos oxygen analog (metabolite of Coumaphos)						
Apples	534	0			0.008 ^	NT
Cilantro	184	0			0.008 ^	NT
Cucumbers	534	0			0.008 ^	NT
Green Onions	<u>558</u>	<u>0</u>			0.008 ^	NT
TOTAL	1,810	0				
Crotoxypfos (insecticide, acaricide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 - 0.010	NT
Strawberries	210	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
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Crufomate (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Cyazofamid (fungicide)						
Grapes	534	0			0.010 ^	1.5
Strawberries	534	0			0.010 ^	NT
Tomato Paste	742	0			0.032 ^	0.20
TOTAL	1,810	0				
Cyfluthrin (insecticide)						
Apples	744	0			0.030 - 0.27	0.5
Asparagus	744	0			0.030 - 0.050	0.05
Cucumbers	744	0			0.030 - 0.27	0.1
Garbanzo Beans, Canned	186	0			0.002 - 0.030	0.05
Grapes	744	0			0.030 - 0.11	1.0
Green Onions	558	0			0.041 - 0.14	0.05
Kidney Beans, Canned	186	0			0.002 - 0.030	0.05
Lettuce, Organic	387	0			0.040 ^	3.0
Oranges	744	0			0.030 - 0.075	0.2
Pears	742	0			0.069 ^	0.5
Pinto Beans, Canned	372	0			0.002 - 0.030	0.05
Potatoes	744	0			0.002 - 0.030	0.05
Spinach	744	52	7.0	0.050 - 1.8	0.030 - 0.075	6.0
Strawberries	744	0			0.030 - 0.11	0.05
Sweet Corn, Fresh	668	0			0.030 - 0.25	0.05
Sweet Corn, Frozen	75	0			0.030 - 0.25	0.05
Sweet Potatoes	738	0			0.030 - 0.075	0.05
Tomato Paste	742	0			0.16 ^	0.5
TOTAL	10,606	52				
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer) (insecticide)						
Apples	534	2	0.4	0.030 - 0.060	0.020 ^	0.30
Asparagus (X-2)	534	2	0.4	0.041 - 0.044	0.025 ^	0.01
Cucumbers	534	1	0.2	0.010 ^	0.006 ^	0.05
Garbanzo Beans, Canned	135	0			0.001 ^	0.01
Grapes	534	0			0.020 ^	0.01
Green Onions (X-1)	558	1	0.2	0.027 ^	0.006 - 0.040	0.01
Kidney Beans, Canned	132	0			0.001 ^	0.01
Lettuce, Organic	387	0			0.040 ^	2.0
Oranges	534	0			0.050 ^	0.01
Pinto Beans, Canned	267	0			0.001 ^	0.20
Potatoes	534	0			0.001 ^	0.01
Spinach (X-1)	512	1	0.2	0.40 ^	0.050 ^	0.01
Strawberries	534	0			0.020 ^	0.01

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
Sweet Corn, Fresh	467	0			0.025 ^	0.05
Sweet Corn, Frozen	67	0			0.025 ^	0.05
Sweet Potatoes	<u>528</u>	<u>0</u>			0.050 ^	0.02
TOTAL	6,791	7				
Cyhalothrin, Lambda (includes gamma isomer)						
Apples	210	3	1.4	0.010 ^	0.006 ^	0.30
Asparagus	210	0			0.006 ^	0.01
Cucumbers	210	0			0.006 ^	0.05
Garbanzo Beans, Canned	51	0			0.006 ^	0.01
Grapes	210	0			0.006 ^	0.01
Kidney Beans, Canned	54	0			0.006 ^	0.01
Oranges	210	0			0.006 ^	0.01
Pears	742	0			0.038 ^	0.30
Pinto Beans, Canned	105	0			0.006 ^	0.01
Potatoes	210	0			0.006 ^	0.02
Spinach (X-3)	210	6	2.9	0.010 - 0.088	0.006 ^	0.01
Strawberries	210	0			0.006 ^	0.01
Sweet Corn, Fresh	201	0			0.006 ^	0.05
Sweet Corn, Frozen	8	0			0.006 ^	0.05
Sweet Potatoes	210	0			0.006 ^	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.10 ^	0.20
TOTAL	3,793	9				
Cyhalothrin, Lambda epimer R157836 (isomer of Cyhalothrin)						
Apples	210	1	0.5	0.010 ^	0.006 ^	0.30
Asparagus	210	1	0.5	0.010 ^	0.006 ^	0.01
Cucumbers	210	0			0.006 ^	0.05
Garbanzo Beans, Canned	51	0			0.006 ^	0.01
Grapes	210	0			0.006 ^	0.01
Kidney Beans, Canned	54	0			0.006 ^	0.01
Oranges	210	0			0.006 ^	0.01
Pears	742	0			0.037 ^	0.30
Pinto Beans, Canned	105	0			0.006 ^	0.01
Potatoes	210	0			0.006 ^	0.02
Spinach	210	2	1.0	0.010 ^	0.006 ^	0.01
Strawberries	210	0			0.006 ^	0.01
Sweet Corn, Fresh	201	0			0.006 ^	0.05
Sweet Corn, Frozen	8	0			0.006 ^	0.05
Sweet Potatoes	210	0			0.006 ^	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.11 ^	0.20
TOTAL	3,793	4				
Cymoxanil (fungicide)						
Tomato Paste	<u>742</u>	<u>0</u>			0.048 - 0.065	0.2
TOTAL	742	0				
Cypermethrin (insecticide)						
Apples	744	0			0.030 - 0.051	2
Asparagus	744	0			0.030 - 0.066	0.05
Cucumbers	744	2	0.3	0.086 ^	0.030 - 0.34	0.2
Garbanzo Beans, Canned	186	0			0.002 - 0.030	0.1
Grapes	744	0			0.030 - 0.11	2
Green Onions	558	13	2.3	0.17 - 0.54	0.17 ^	6.0
Kidney Beans, Canned	186	0			0.002 - 0.030	0.1
Lettuce, Organic	387	1	0.3	0.060 ^	0.040 ^	10.00
Oranges	744	0			0.030 - 0.075	0.35
Pears	742	0			0.066 ^	2
Pinto Beans, Canned	372	0			0.002 - 0.030	0.1
Potatoes	744	0			0.002 - 0.030	0.1
Spinach	744	155	20.8	0.050 - 3.2	0.030 - 0.075	10.00
Strawberries	744	0			0.030 - 0.11	0.8
Sweet Corn, Fresh	668	0			0.030 - 0.066	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
Sweet Corn, Frozen	75	0			0.030 - 0.066	0.05
Sweet Potatoes (X-1)	738	1	0.1	0.22 ^	0.030 - 0.075	0.1
Tomato Paste	<u>742</u>	<u>0</u>			0.17 ^	0.2
TOTAL	10,606	172				
Cyphenothrin (insecticide)						
Apples	210	0			0.030 ^	NT
Asparagus	744	0			0.030 - 0.040	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	186	0			0.005 - 0.030	NT
Grapes	744	0			0.015 - 0.030	NT
Kidney Beans, Canned	186	0			0.005 - 0.030	NT
Lettuce, Organic	387	0			0.040 ^	NT
Oranges	210	0			0.030 ^	NT
Pears	742	0			0.040 ^	NT
Pinto Beans, Canned	372	0			0.005 - 0.030	NT
Potatoes	744	0			0.005 - 0.030	NT
Spinach	210	0			0.030 ^	NT
Strawberries	744	0			0.015 - 0.030	NT
Sweet Corn, Fresh	668	0			0.030 - 0.040	NT
Sweet Corn, Frozen	75	0			0.030 - 0.040	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.030 ^	NT
TOTAL	6,642	0				
Cyprodinil (fungicide)						
Apples	210	0			0.009 ^	0.1
Asparagus	210	0			0.009 - 0.021	NT
Cucumbers	210	0			0.009 - 0.018	0.70
Garbanzo Beans, Canned	51	0			0.009 ^	0.6
Grapes (X-1)	744	167	22.4	0.015 - 2.3	0.009 - 0.020	2.0
Kidney Beans, Canned	54	0			0.009 ^	0.6
Lettuce, Organic	387	0			0.010 ^	30
Oranges	210	0			0.018 ^	NT
Pears	742	0			0.018 ^	0.1
Pinto Beans, Canned	105	0			0.009 ^	0.6
Potatoes	210	0			0.009 - 0.018	NT
Spinach	678	0			0.008 - 0.009	NT
Strawberries	744	220	29.6	0.015 - 1.6	0.009 - 0.020	5.0
Sweet Corn, Fresh	201	0			0.009 ^	NT
Sweet Corn, Frozen	8	0			0.009 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.009 ^	NT
TOTAL	4,974	387				
Cyromazine (insect growth regulator)						
Cucumbers	534	57	10.7	0.004 - 0.077	0.002 ^	1.0
Green Onions	<u>558</u>	<u>63</u>	11.3	0.008 - 0.23	0.008 ^	3.0
TOTAL	1,092	120				
DCPA (herbicide)						
Apples	534	0			0.001 ^	NT
Asparagus (V-1)	210	1	0.5	0.010 ^	0.003 ^	NT
Cilantro	184	135	73.4	0.002 - 0.16	0.001 ^	5.0
Cucumbers	744	1	0.1	0.012 ^	0.001 - 0.003	1.0
Garbanzo Beans, Canned	186	0			0.001 - 0.003	2.0
Grapes	534	0			0.004 ^	NT
Green Onions	558	204	36.6	0.002 - 0.13	0.001 ^	1.0
Kidney Beans, Canned	186	0			0.001 - 0.003	2.0
Oranges	744	0			0.003 - 0.008	NT
Pinto Beans, Canned	372	0			0.001 - 0.003	2.0
Potatoes	744	0			0.001 - 0.003	2.0
Spinach (V-6)	722	6	0.8	0.005 - 0.009	0.003 - 0.008	NT
Strawberries	534	0			0.004 ^	2.0
Sweet Corn, Fresh	668	0			0.003 - 0.020	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
Sweet Corn, Frozen	75	0			0.003 - 0.020	0.05
Sweet Potatoes	739	0			0.003 - 0.008	2.0
Tomato Paste	<u>742</u>	<u>0</u>			0.019 ^	1.0
TOTAL	8,476	347				
DDD o,p' (metabolite of DDT)						
Apples	520	0			0.001 ^	0.1 AL
Cilantro (V-2)	184	2	1.1	0.002 ^	0.001 ^	NT
Cucumbers	534	0			0.001 ^	0.1 AL
Green Onions	528	0			0.001 ^	0.2 AL
Lettuce, Organic	<u>387</u>	<u>0</u>			0.010 - 0.020	0.5 AL
TOTAL	2,153	2				
DDD p,p' (metabolite of DDT)						
Apples	744	0			0.001 - 0.004	0.1 AL
Asparagus	744	0			0.004 - 0.030	0.5 AL
Cilantro (V-15)	106	15	14.2	0.002 ^	0.001 ^	NT
Cucumbers	744	0			0.001 - 0.004	0.1 AL
Garbanzo Beans, Canned	186	0			0.004 - 0.007	0.2 AL
Grapes	744	0			0.004 - 0.011	0.05 AL
Green Onions	548	0			0.001 ^	0.2 AL
Kidney Beans, Canned	186	0			0.004 - 0.007	0.2 AL
Oranges	744	0			0.003 - 0.010	0.1 AL
Pears	742	0			0.068 ^	0.1 AL
Pinto Beans, Canned	372	0			0.004 - 0.007	0.2 AL
Potatoes	744	0			0.004 - 0.007	1 AL
Spinach	298	0			0.003 - 0.004	0.5 AL
Strawberries	744	0			0.004 - 0.011	0.1 AL
Sweet Corn, Fresh	668	0			0.004 - 0.030	0.1 AL
Sweet Corn, Frozen	75	0			0.004 - 0.030	0.1 AL
Sweet Potatoes	739	0			0.003 - 0.004	1 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.017 ^	0.05 AL
TOTAL	9,870	15				
DDE p,p' (metabolite of DDT)						
Apples	744	0			0.002 - 0.004	0.1 AL
Asparagus	744	1	0.1	0.007 ^	0.004 - 0.015	0.5 AL
Cilantro (V-36)	184	36	19.6	0.007 - 0.032	0.006 ^	NT
Cucumbers	744	0			0.002 - 0.004	0.1 AL
Garbanzo Beans, Canned	186	0			0.004 - 0.010	0.2 AL
Grapes	722	0			0.004 - 0.007	0.05 AL
Green Onions	558	12	2.2	0.003 ^	0.002 ^	0.2 AL
Kidney Beans, Canned	186	0			0.004 - 0.010	0.2 AL
Lettuce, Organic	189	1	0.5	0.034 ^	0.010 ^	0.5 AL
Oranges	298	0			0.003 - 0.004	0.1 AL
Pears	742	0			0.063 ^	0.1 AL
Pinto Beans, Canned	372	0			0.004 - 0.010	0.2 AL
Potatoes	744	7	0.9	0.007 - 0.042	0.004 - 0.010	1 AL
Spinach	298	62	20.8	0.007 - 0.035	0.003 - 0.004	0.5 AL
Strawberries	744	0			0.004 - 0.007	0.1 AL
Sweet Corn, Fresh	668	0			0.004 - 0.015	0.1 AL
Sweet Corn, Frozen	75	0			0.004 - 0.015	0.1 AL
Sweet Potatoes	320	1	0.3	0.007 ^	0.003 - 0.004	1 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.018 ^	0.05 AL
TOTAL	9,260	120				
DDT o,p' (insecticide)						
Apples	534	0			0.001 ^	0.1 AL
Cilantro (V-47)	184	47	25.5	0.002 - 0.006	0.001 ^	NT
Cucumbers	534	6	1.1	0.002 - 0.014	0.001 ^	0.1 AL
Green Onions	<u>558</u>	<u>0</u>			0.001 ^	0.2 AL
TOTAL	1,810	53				

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
DDT p,p' (insecticide)						
Apples	714	0			0.002 - 0.004	0.1 AL
Asparagus	210	0			0.004 ^	0.5 AL
Cucumbers	744	0			0.002 - 0.006	0.1 AL
Garbanzo Beans, Canned	164	0			0.004 - 0.049	0.2 AL
Grapes	744	0			0.004 - 0.038	0.05 AL
Green Onions	558	5	0.9	0.003 ^	0.002 ^	0.2 AL
Kidney Beans, Canned	164	0			0.004 - 0.007	0.2 AL
Oranges	722	0			0.003 - 0.004	0.1 AL
Pears	742	0			0.010 ^	0.1 AL
Pinto Beans, Canned	372	0			0.004 - 0.007	0.2 AL
Potatoes	699	4	0.6	0.007 ^	0.004 - 0.007	1 AL
Spinach	210	10	4.8	0.007 ^	0.004 ^	0.5 AL
Strawberries	744	0			0.004 - 0.038	0.1 AL
Sweet Corn, Fresh	201	0			0.004 ^	0.1 AL
Sweet Corn, Frozen	8	0			0.004 ^	0.1 AL
Sweet Potatoes	232	0			0.004 - 0.20	1 AL
Tomato Paste	742	0			0.033 ^	0.05 AL
TOTAL	7,970	19				
DEF - Tribufos (herbicide, plant growth regulator)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Deltamethrin (includes parent Tralomethrin) (insecticide)						
Apples	345	0			0.015 - 0.080	0.2
Asparagus	744	0			0.015 - 0.050	0.05
Cucumbers	345	1	0.3	0.025 ^	0.015 - 0.080	0.2
Garbanzo Beans, Canned	186	0			0.009 - 0.015	0.05
Grapes	744	0			0.015 - 0.12	0.05
Kidney Beans, Canned	186	0			0.009 - 0.015	0.05
Lettuce, Organic	387	0			0.13 ^	0.05
Oranges	744	0			0.015 - 0.075	0.05
Pears	742	0			0.14 ^	0.2
Pinto Beans, Canned	372	0			0.009 - 0.015	0.05
Potatoes	744	0			0.009 - 0.015	0.04
Spinach	744	0			0.015 - 0.075	0.05
Strawberries	744	0			0.015 - 0.059	0.05
Sweet Corn, Fresh	668	0			0.015 - 0.10	0.03
Sweet Corn, Frozen	75	0			0.015 - 0.10	0.03
Sweet Potatoes	738	0			0.015 - 0.075	0.04
Tomato Paste	742	0			0.46 ^	1.0
TOTAL	9,250	1				
Demeton-O (metabolite of the insecticide Demeton)						
Apples	210	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	210	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	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
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	2,309	0				
Demeton-S (metabolite of Demeton)						
Apples	210	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	210	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	2,309	0				
Desmedipham (herbicide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	6.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	<u>8</u>	<u>0</u>			0.003 ^	NT
TOTAL	1,889	0				
Diazinon (insecticide)						
Apples	744	63	8.5	0.002 - 0.11	0.001 - 0.002	0.50
Asparagus	210	0			0.001 ^	NT
Cilantro (V-24)	184	24	13.0	0.003 - 1.0	0.002 ^	NT
Cucumbers	744	3	0.4	0.012 - 0.018	0.001 - 0.002	0.75
Garbanzo Beans, Canned	186	0			0.001 - 0.005	0.50
Grapes	743	0			0.001 - 0.010	0.75
Green Onions	558	3	0.5	0.003 - 0.008	0.002 ^	0.75
Kidney Beans, Canned	186	0			0.001 - 0.005	0.50
Oranges	744	0			0.001 - 0.002	NT
Pears	742	2	0.3	0.005 - 0.026	0.003 ^	0.50
Pinto Beans, Canned	372	0			0.001 - 0.005	0.50
Potatoes	744	0			0.001 - 0.005	0.10
Spinach	744	2	0.3	0.002 - 0.009	0.001 - 0.005	0.70
Strawberries	744	0			0.001 - 0.010	0.50
Sweet Corn, Fresh	668	0			0.001 - 0.010	NT
Sweet Corn, Frozen	75	0			0.001 - 0.010	NT
Sweet Potatoes	739	0			0.001 - 0.002	0.10
Tomato Paste	<u>742</u>	<u>0</u>			0.011 ^	0.75
TOTAL	9,869	97				

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
Diazinon oxygen analog (metabolite of Diazinon)						
Apples	744	0			0.002 - 0.003	0.50
Asparagus	210	0			0.002 ^	NT
Cilantro (V-1)	184	1	0.5	0.005 ^	0.003 ^	NT
Cucumbers	744	0			0.002 - 0.003	0.75
Garbanzo Beans, Canned	186	0			0.002 - 0.005	0.50
Grapes	744	0			0.002 - 0.030	0.75
Green Onions	558	0			0.003 ^	0.75
Kidney Beans, Canned	186	0			0.002 - 0.005	0.50
Oranges	744	0			0.001 - 0.002	NT
Pears	742	0			0.014 ^	0.50
Pinto Beans, Canned	372	0			0.002 - 0.005	0.50
Potatoes	744	0			0.002 - 0.005	0.10
Spinach	744	0			0.001 - 0.002	0.70
Strawberries	744	0			0.002 - 0.030	0.50
Sweet Corn, Fresh	668	0			0.002 ^	NT
Sweet Corn, Frozen	75	0			0.002 ^	NT
Sweet Potatoes	739	0			0.001 - 0.002	0.10
Tomato Paste	742	0			0.047 ^	0.75
TOTAL	9,870	1				
Dicamba (herbicide)						
Grapes	534	0			0.074 - 0.15	NT
Strawberries	534	0			0.074 - 0.15	NT
TOTAL	1,068	0				
Dichlobenil (herbicide)						
Apples	744	0			0.005 - 0.019	0.5
Asparagus	210	0			0.005 ^	NT
Cilantro	184	0			0.019 ^	NT
Cucumbers	744	0			0.005 - 0.019	NT
Garbanzo Beans, Canned	51	0			0.005 ^	NT
Grapes	210	0			0.005 ^	0.15
Green Onions	558	0			0.019 ^	NT
Kidney Beans, Canned	54	0			0.005 ^	NT
Oranges	512	0			0.013 ^	NT
Pears	742	0			0.017 ^	0.5
Pinto Beans, Canned	105	0			0.005 ^	NT
Spinach	543	0			0.005 - 0.013	NT
Strawberries	210	0			0.005 ^	NT
Sweet Corn, Fresh	201	0			0.005 ^	NT
Sweet Corn, Frozen	8	0			0.005 ^	NT
Sweet Potatoes	529	0			0.013 ^	NT
TOTAL	5,605	0				
Dichlorprop (herbicide)						
Grapes	534	0			0.003 ^	NT
Strawberries	534	0			0.003 ^	NT
TOTAL	1,068	0				
Dichlorvos - DDVP (insecticide) (also a metabolite of Naled)						
Apples	744	0			0.002 - 0.003	0.5
Asparagus	744	0			0.002 - 0.10	0.5
Cucumbers	744	4	0.5	0.004 - 0.024	0.002 - 0.003	0.5
Garbanzo Beans, Canned	186	0			0.002 - 0.020	0.5
Grapes	210	0			0.002 ^	0.5
Kidney Beans, Canned	186	0			0.002 - 0.020	0.5
Lettuce, Organic	387	0			0.020 ^	0.5
Oranges	210	0			0.002 ^	0.5
Pears	742	0			0.002 ^	0.5
Pinto Beans, Canned	372	0			0.002 - 0.020	0.5
Potatoes	744	0			0.002 - 0.020	0.5
Spinach	656	2	0.3	0.18 - 0.31	0.002 - 0.008	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
Strawberries	210	15	7.1	0.004 - 0.19	0.002 ^	0.5
Sweet Corn, Fresh	668	0			0.002 - 0.10	0.5
Sweet Corn, Frozen	75	0			0.002 - 0.10	0.5
Sweet Potatoes	673	0			0.002 - 0.003	0.5
Tomato Paste	<u>742</u>	<u>0</u>			0.006 ^	0.05
TOTAL	8,293	21				
Dicloran (fungicide)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cilantro (V-10)	180	10	5.6	0.003 - 0.037	0.002 - 0.013	NT
Cucumbers	744	0			0.002 - 0.006	5
Garbanzo Beans, Canned	186	0			0.004 - 0.006	20
Grapes	744	4	0.5	0.010 - 0.76	0.006 - 0.052	10
Green Onions	558	0			0.002 ^	10
Kidney Beans, Canned	186	0			0.006 - 0.015	20
Oranges (V-1)	655	1	0.2	0.022 ^	0.006 - 0.025	NT
Pinto Beans, Canned	372	0			0.004 - 0.015	20
Potatoes	744	0			0.004 - 0.015	0.25
Spinach (V-7)	744	7	0.9	0.010 - 0.19	0.006 - 0.013	NT
Strawberries (V-1)	744	1	0.1	0.096 ^	0.006 - 0.026	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	739	297	40.2	0.006 - 3.7	0.004 - 0.025	10
Tomato Paste	<u>742</u>	<u>0</u>			0.020 ^	5
TOTAL	8,501	320				
Dicofol o,p' (isomer of insecticide Dicofol)						
Apples	519	0			0.003 ^	10.0
Cilantro	122	0			0.010 ^	NT
Cucumbers	534	9	1.7	0.005 - 0.14	0.003 ^	2.0
Grapes	534	0			0.012 - 0.024	5.0
Green Onions	558	0			0.003 ^	NT
Strawberries	<u>534</u>	<u>0</u>			0.012 ^	10.0
TOTAL	2,801	9				
Dicofol p,p' (isomer of Dicofol)						
Apples	744	1	0.1	0.56 ^	0.003 - 0.012	10.0
Asparagus	210	0			0.015 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	24	3.2	0.005 - 0.91	0.003 - 0.015	2.0
Garbanzo Beans, Canned	186	0			0.002 - 0.021	3.0
Grapes	744	0			0.012 - 0.040	5.0
Green Onions (V-2)	558	2	0.4	0.016 - 0.022	0.003 - 0.019	NT
Kidney Beans, Canned	186	0			0.021 - 0.029	3.0
Oranges	210	0			0.021 ^	6.0
Pears	742	1	0.1	0.025 ^	0.015 ^	10.0
Pinto Beans, Canned	372	0			0.002 - 0.029	3.0
Potatoes	744	0			0.002 - 0.029	NT
Spinach	210	0			0.015 ^	NT
Strawberries	744	0			0.012 - 0.020	10.0
Sweet Corn, Fresh	201	0			0.021 ^	NT
Sweet Corn, Frozen	8	0			0.021 ^	NT
Sweet Potatoes	210	0			0.021 ^	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.026 ^	2.0
TOTAL	7,739	28				
Dicrotophos (insecticide)						
Apples	135	0			0.002 ^	NT
Cucumbers	<u>135</u>	<u>0</u>			0.002 ^	NT
TOTAL	270	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
Dieldrin (insecticide) (also a metabolite of Aldrin)						
Apples	744	0			0.003 - 0.005	0.03 AL
Asparagus	744	0			0.003 - 0.050	0.03 AL
Cilantro (V-3)	146	3	2.1	0.008 ^	0.005 ^	NT
Cucumbers	744	42	5.6	0.005 - 0.095	0.003 - 0.005	0.1 AL
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.05 AL
Grapes	744	0			0.003 - 0.020	0.05 AL
Green Onions	558	0			0.005 ^	0.1 AL
Kidney Beans, Canned	186	0			0.002 - 0.003	0.05 AL
Lettuce, Organic	386	0			0.010 ^	0.03 AL
Oranges	722	0			0.003 ^	0.02 AL
Pears	742	0			0.005 ^	0.03 AL
Pinto Beans, Canned	372	0			0.002 - 0.003	0.05 AL
Potatoes	744	10	1.3	0.002 - 0.006	0.002 - 0.003	0.1 AL
Spinach	298	0			0.003 ^	0.05 AL
Strawberries	744	0			0.003 - 0.020	0.05 AL
Sweet Corn, Fresh	668	0			0.003 - 0.050	0.02 AL
Sweet Corn, Frozen	75	0			0.003 - 0.050	0.02 AL
Sweet Potatoes	717	3	0.4	0.005 ^	0.003 ^	0.1 AL
Tomato Paste	742	0			0.012 ^	0.05 AL
TOTAL	10,262	58				
Difenoconazole (fungicide)						
Apples	744	0			0.001 - 0.003	1.0
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	0			0.001 - 0.003	1.0
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	15	2.0	0.004 - 0.021	0.003 ^	0.10
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.005	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	0.01
Spinach	298	0			0.003 - 0.005	NT
Strawberries	744	0			0.003 ^	NT
Sweet Corn, Fresh	668	0			0.003 - 0.10	0.01
Sweet Corn, Frozen	75	0			0.003 - 0.10	0.01
Sweet Potatoes	739	0			0.003 - 0.005	0.01
TOTAL	6,872	15				
Diflubenzuron (insecticide)						
Apples (V-25)	744	25	3.4	0.011 - 0.087	0.007 - 0.012	NT
Asparagus	210	0			0.012 ^	NT
Cilantro (V-1)	184	1	0.5	0.011 ^	0.007 ^	NT
Cucumbers	744	0			0.007 - 0.022	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.012	NT
Grapes	210	0			0.012 ^	NT
Green Onions	542	0			0.007 - 0.022	NT
Kidney Beans, Canned	186	0			0.003 - 0.012	NT
Oranges	210	0			0.012 ^	0.5
Pinto Beans, Canned	372	0			0.003 - 0.012	NT
Potatoes	744	0			0.003 - 0.012	NT
Spinach (V-2)	210	2	1.0	0.020 ^	0.012 ^	NT
Strawberries	210	0			0.012 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	210	0			0.012 ^	NT
TOTAL	5,171	28				
Diflufenzopyr (herbicide)						
Sweet Corn, Fresh	467	0			0.008 ^	0.05
Sweet Corn, Frozen	67	0			0.008 ^	0.05
TOTAL	534	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
Dimethenamid (herbicide)						
Apples	534	0			0.001 - 0.006	NT
Cilantro (V-1)	138	1	0.7	0.002 ^	0.001 - 0.003	NT
Cucumbers	534	0			0.001 ^	NT
Garbanzo Beans, Canned	135	0			0.003 ^	NT
Green Onions	558	0			0.003 ^	0.01
Kidney Beans, Canned	132	0			0.003 ^	NT
Pinto Beans, Canned	267	0			0.003 ^	NT
Potatoes	534	0			0.003 ^	0.01
Sweet Corn, Fresh	467	0			0.020 ^	0.01
Sweet Corn, Frozen	67	0			0.020 ^	0.01
TOTAL	3,366	1				
Dimethoate (insecticide) (parent of Omethoate)						
Apples (V-2)	744	2	0.3	0.012 - 0.049	0.001 - 0.002	NT
Asparagus	744	2	0.3	0.012 - 0.018	0.001 - 0.008	0.15
Cilantro (V-2)	184	2	1.1	0.83 ^	0.002 ^	NT
Cucumbers (V-11)	744	11	1.5	0.002 - 0.20	0.001 - 0.002	NT
Garbanzo Beans, Canned	186	0			0.001 - 0.005	2.0
Grapes (V-2)	744	2	0.3	0.003 - 0.004	0.001 - 0.002	NT
Kidney Beans, Canned	186	0			0.001 - 0.005	2.0
Oranges	744	0			0.001 - 0.010	2.0
Pears	742	0			0.004 ^	2.0
Pinto Beans, Canned	372	0			0.001 - 0.005	2.0
Potatoes	744	0			0.001 - 0.005	0.2
Spinach (V-7)	744	7	0.9	0.002 - 2.6	0.001 - 0.010	NT
Strawberries (V-1)	744	1	0.1	0.004 ^	0.001 - 0.002	NT
Sweet Corn, Fresh	201	0			0.001 ^	NT
Sweet Corn, Frozen	8	0			0.001 ^	NT
Sweet Potatoes	739	0			0.001 - 0.010	NT
Tomato Paste	742	0			0.012 ^	2.0
TOTAL	9,312	27				
Dimethomorph (fungicide)						
Apples	744	0			0.001 - 0.003	NT
Asparagus	210	0			0.003 ^	NT
Cilantro (V-5)	184	5	2.7	0.002 - 0.009	0.001 ^	NT
Cucumbers	744	47	6.3	0.002 - 0.036	0.0009 - 0.003	0.5
Garbanzo Beans, Canned	186	0			0.003 ^	0.60
Grapes	210	0			0.003 ^	3.5
Green Onions	558	18	3.2	0.002 - 0.45	0.001 ^	2.0
Kidney Beans, Canned	186	0			0.003 ^	0.60
Lettuce, Organic	386	0			0.050 ^	10
Oranges	744	0			0.003 - 0.010	NT
Pinto Beans, Canned	372	0			0.003 ^	0.60
Potatoes	744	0			0.003 ^	0.05
Spinach (V-5)	298	5	1.7	0.005 - 0.098	0.003 - 0.010	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	0.05
Sweet Corn, Frozen	8	0			0.003 ^	0.05
Sweet Potatoes	739	0			0.003 - 0.010	NT
Tomato Paste	742	0			0.33 ^	1.5
TOTAL	7,466	75				
Dinotefuran (insecticide)						
Apples	744	0			0.006 ^	NT
Asparagus	210	0			0.006 ^	NT
Cilantro (V-1)	184	1	0.5	0.033 ^	0.020 ^	NT
Cucumbers	744	15	2.0	0.010 - 0.088	0.006 ^	0.5
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	744	6	0.8	0.010 - 0.35	0.006 - 0.008	0.9
Green Onions	558	0			0.020 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	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
Oranges	744	0			0.006 - 0.010	NT
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	0			0.003 - 0.006	0.05
Spinach	744	4	0.5	0.010 - 0.49	0.006 - 0.010	5.0
Strawberries	744	0			0.006 - 0.008	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.006 ^	NT
TOTAL	7,323	26				
Diphenamid (herbicide)						
Apples	534	0			0.010 - 0.032	NT
Cilantro	162	0			0.010 ^	NT
Cucumbers	534	0			0.010 ^	NT
Green Onions	558	0			0.032 ^	NT
Oranges	534	0			0.050 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.050 ^	NT
TOTAL	2,851	0				
Diphenylamine - DPA (fungicide)						
Apples	744	548	73.7	0.005 - 5.3	0.003 - 0.012	10.0
Asparagus	210	0			0.012 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers (V-1)	744	1	0.1	0.005 ^	0.003 - 0.012	NT
Garbanzo Beans, Canned	186	0			0.010 - 0.012	NT
Grapes	210	0			0.012 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	186	0			0.010 - 0.012	NT
Oranges	678	0			0.010 - 0.012	NT
Pears	742	37	5.0	0.070 - 3.4	0.042 ^	5.0
Pinto Beans, Canned	372	0			0.010 - 0.012	NT
Potatoes	744	0			0.010 - 0.012	NT
Spinach	720	0			0.012 - 0.015	NT
Strawberries	210	0			0.012 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.012 ^	NT
TOTAL	6,907	586				
Disulfoton (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	744	0			0.002 - 0.20	0.1
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.030	0.75
Grapes	210	0			0.002 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.030	0.75
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.030	0.75
Potatoes	744	0			0.002 - 0.030	0.75
Spinach	656	0			0.002 - 0.004	0.75
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.017 ^	0.75
TOTAL	6,351	0				
Disulfoton oxon (metabolite of Disulfoton)						
Garbanzo Beans, Canned	135	0			0.001 ^	0.75
Pinto Beans, Canned	245	0			0.001 ^	0.75
Potatoes	<u>402</u>	<u>0</u>			0.001 ^	0.75
TOTAL	782	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
Disulfoton sulfone (metabolite of Disulfoton)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	744	0			0.002 - 0.010	0.1
Cilantro	184	0			0.006 ^	NT
Cucumbers	744	0			0.002 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.020	0.75
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.020	0.75
Oranges	744	0			0.002 - 0.010	NT
Pinto Beans, Canned	372	0			0.002 - 0.020	0.75
Potatoes	744	0			0.002 - 0.020	0.75
Spinach	656	0			0.002 - 0.004	0.75
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
Tomato Paste	742	0			0.008 ^	0.75
TOTAL	7,443	0				
Disulfoton sulfoxide (metabolite of Disulfoton)						
Asparagus	534	0			0.010 ^	0.1
Garbanzo Beans, Canned	135	0			0.005 ^	0.75
Kidney Beans, Canned	132	0			0.005 ^	0.75
Pinto Beans, Canned	267	0			0.005 ^	0.75
Potatoes	534	0			0.005 ^	0.75
Tomato Paste	742	0			0.11 ^	0.75
TOTAL	2,344	0				
Diuron (herbicide)						
Apples	744	0			0.008 - 0.012	0.1
Asparagus	744	5	0.7	0.089 - 0.82	0.012 - 0.020	7
Cucumbers	744	0			0.008 - 0.025	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.012	NT
Grapes	210	0			0.012 ^	0.05
Green Onions	558	0			0.025 - 0.12	NT
Kidney Beans, Canned	186	0			0.003 - 0.012	NT
Oranges	210	0			0.012 ^	0.05
Pinto Beans, Canned	372	0			0.003 - 0.012	NT
Potatoes	744	0			0.003 - 0.012	NT
Spinach	210	0			0.012 ^	NT
Strawberries	210	0			0.012 ^	0.1
Sweet Corn, Fresh	668	0			0.012 - 0.020	NT
Sweet Corn, Frozen	75	0			0.012 - 0.020	NT
Sweet Potatoes	210	0			0.012 ^	NT
TOTAL	6,071	5				
Emamectin benzoate (insecticide)						
Apples	534	0			0.001 ^	0.025
Cilantro	184	0			0.001 ^	NT
Cucumbers	534	0			0.001 ^	NT
Grapes	534	0			0.001 ^	NT
Green Onions	558	0			0.001 ^	NT
Strawberries	534	0			0.001 ^	NT
TOTAL	2,878	0				
Endosulfan I (insecticide)						
Apples	744	51	6.9	0.005 - 0.24	0.003 - 0.006	1.0
Asparagus	744	0			0.003 - 0.050	NT
Cilantro	184	0			0.006 ^	NT
Cucumbers	744	226	30.4	0.005 - 0.21	0.003 - 0.006	1.0
Garbanzo Beans, Canned	186	0			0.002 - 0.003	2.0
Grapes	744	0			0.003 - 0.040	2.0

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
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.003	2.0
Lettuce, Organic	387	0			0.010 ^	11.0
Oranges	744	0			0.003 ^	NT
Pears	742	2	0.3	0.086 - 0.15	0.005 ^	2.0
Pinto Beans, Canned	372	0			0.001 - 0.003	2.0
Potatoes	744	0			0.001 - 0.003	0.2
Spinach	722	1	0.1	0.005 ^	0.003 - 0.015	2.0
Strawberries	744	3	0.4	0.088 - 0.16	0.003 - 0.040	2.0
Sweet Corn, Fresh	668	0			0.003 - 0.050	0.2
Sweet Corn, Frozen	75	0			0.003 - 0.050	0.2
Sweet Potatoes	739	0			0.003 ^	0.15
Tomato Paste	742	0			0.013 ^	1.0
TOTAL	10,769	283				
Endosulfan II (isomer of Endosulfan)						
Apples	739	94	12.7	0.007 - 0.19	0.004 - 0.006	1.0
Asparagus	744	0			0.004 - 0.050	NT
Cilantro	154	0			0.020 ^	NT
Cucumbers	744	187	25.1	0.007 - 0.13	0.004 - 0.006	1.0
Garbanzo Beans, Canned	186	0			0.001 - 0.004	2.0
Grapes	744	0			0.004 - 0.040	2.0
Green Onions	556	0			0.006 - 0.020	NT
Kidney Beans, Canned	186	0			0.001 - 0.004	2.0
Oranges	744	0			0.003 - 0.004	NT
Pears	742	5	0.7	0.008 - 0.50	0.005 ^	2.0
Pinto Beans, Canned	372	0			0.001 - 0.004	2.0
Potatoes	744	2	0.3	0.001 - 0.002	0.001 - 0.004	0.2
Spinach	744	0			0.003 - 0.015	2.0
Strawberries	744	4	0.5	0.007 - 0.32	0.004 - 0.040	2.0
Sweet Corn, Fresh	668	0			0.004 - 0.050	0.2
Sweet Corn, Frozen	75	0			0.004 - 0.050	0.2
Sweet Potatoes	739	1	0.1	0.005 ^	0.003 - 0.004	0.15
Tomato Paste	742	7	0.9	0.022 ^	0.013 ^	1.0
TOTAL	10,367	300				
Endosulfan sulfate (metabolite of Endosulfan)						
Apples	729	53	7.3	0.007 - 0.12	0.004 - 0.020	1.0
Asparagus	744	0			0.004 - 0.050	NT
Cucumbers	744	217	29.2	0.007 - 0.11	0.004 - 0.020	1.0
Garbanzo Beans, Canned	186	0			0.003 - 0.004	2.0
Grapes	744	0			0.004 - 0.020	2.0
Green Onions (V-1)	556	1	0.2	0.033 ^	0.020 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.004	2.0
Oranges	744	0			0.003 - 0.004	NT
Pears	742	4	0.5	0.011 - 0.20	0.007 - 68	2.0
Pinto Beans, Canned	372	0			0.003 - 0.004	2.0
Potatoes	744	40	5.4	0.003 - 0.022	0.003 - 0.004	0.2
Spinach	744	13	1.7	0.005 - 0.071	0.003 - 0.015	2.0
Strawberries	744	15	2.0	0.022 - 0.096	0.004 - 0.020	2.0
Sweet Corn, Fresh	668	0			0.004 - 0.050	0.2
Sweet Corn, Frozen	75	0			0.004 - 0.050	0.2
Sweet Potatoes	739	2	0.3	0.005 - 0.011	0.003 - 0.004	0.15
Tomato Paste	742	0			0.017 ^	1.0
TOTAL	10,203	345				
Endrin (insecticide)						
Apples	734	0			0.004 - 0.007	NT
Asparagus	210	0			0.004 ^	0.05 AL
Cilantro	184	0			0.007 ^	NT
Cucumbers	744	1	0.1	0.017 ^	0.004 - 0.007	0.05 AL
Garbanzo Beans, Canned	186	0			0.004 ^	0.05 AL
Grapes	744	0			0.004 - 0.030	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
Green Onions	556	0			0.007 ^	0.05 AL
Kidney Beans, Canned	186	0			0.002 - 0.004	0.05 AL
Lettuce, Organic	387	0			0.010 ^	0.05 AL
Oranges	744	0			0.003 - 0.004	NT
Pears	742	0			0.006 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.004	0.05 AL
Potatoes	744	0			0.002 - 0.004	0.05 AL
Spinach	298	0			0.003 - 0.004	0.05 AL
Strawberries	744	0			0.004 - 0.030	NT
Sweet Corn, Fresh	668	0			0.004 - 0.080	0.05 AL
Sweet Corn, Frozen	75	0			0.004 - 0.080	0.05 AL
Sweet Potatoes	739	0			0.003 - 0.004	0.05 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.05 AL
TOTAL	9,799	1				
EPN (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.003 ^	NT
TOTAL	2,309	0				
EPTC (herbicide)						
Apples	534	0			0.064 ^	0.1
Cilantro	184	0			0.064 ^	0.1
Cucumbers	534	0			0.064 ^	0.1
Garbanzo Beans, Canned	135	0			0.010 ^	0.1
Grapes	534	0			0.074 ^	0.1
Green Onions	558	0			0.064 ^	NT
Pinto Beans, Canned	245	0			0.010 ^	0.1
Potatoes	402	0			0.010 ^	0.1
Strawberries	534	0			0.074 ^	0.1
Tomato Paste	<u>742</u>	<u>0</u>			0.17 ^	0.1
TOTAL	4,402	0				
Esfenvalerate+Fenvalerate Total (insecticide)						
Apples	534	5	0.9	0.031 - 0.068	0.029 - 0.058	2.0
Asparagus	534	0			0.050 ^	0.05
Cucumbers	534	0			0.029 - 0.19	0.5
Garbanzo Beans, Canned	135	0			0.002 ^	2.0
Green Onions	558	0			0.029 - 0.058	0.05
Kidney Beans, Canned	132	0			0.002 ^	2.0
Oranges	534	0			0.13 ^	0.05
Pears	742	0			0.061 ^	2.0
Pinto Beans, Canned	267	0			0.002 ^	2.0
Potatoes	534	0			0.002 ^	0.02
Spinach	534	0			0.13 ^	0.05
Sweet Corn, Fresh	467	0			0.050 ^	0.1
Sweet Corn, Frozen	67	0			0.050 ^	0.1
Sweet Potatoes	<u>528</u>	<u>0</u>			0.13 ^	0.05
TOTAL	6,100	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
Esfenvalerate (isomer of Fenvalerate)						
Apples	210	0			0.015 ^	2.0
Asparagus	210	0			0.015 ^	0.05
Cucumbers	210	0			0.015 ^	0.5
Garbanzo Beans, Canned	51	0			0.015 ^	2.0
Grapes	744	0			0.015 - 0.070	0.05
Kidney Beans, Canned	54	0			0.015 ^	2.0
Oranges	210	0			0.015 ^	0.05
Pinto Beans, Canned	105	0			0.015 ^	2.0
Potatoes	210	0			0.015 ^	0.02
Spinach	210	0			0.015 ^	0.05
Strawberries	744	0			0.015 - 0.070	0.05
Sweet Corn, Fresh	201	0			0.015 ^	0.1
Sweet Corn, Frozen	8	0			0.015 ^	0.1
Sweet Potatoes	210	0			0.015 ^	0.05
Tomato Paste	<u>742</u>	<u>0</u>			0.23 ^	1.0
TOTAL	4,119	0				
Ethalfuralin (herbicide)						
Apples	744	0			0.008 - 0.017	NT
Asparagus	744	0			0.008 - 0.050	NT
Cilantro	184	0			0.017 ^	NT
Cucumbers	730	0			0.008 - 0.017	0.05
Garbanzo Beans, Canned	186	0			0.001 - 0.008	NT
Grapes	210	0			0.008 ^	NT
Green Onions	526	0			0.017 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.008	NT
Oranges	210	0			0.008 ^	NT
Pinto Beans, Canned	372	0			0.001 - 0.008	NT
Potatoes	744	0			0.001 - 0.008	0.05
Spinach	210	0			0.008 ^	NT
Strawberries	210	0			0.008 ^	NT
Sweet Corn, Fresh	668	0			0.008 - 0.050	NT
Sweet Corn, Frozen	75	0			0.008 - 0.050	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.008 ^	NT
TOTAL	6,209	0				
Ethiofencarb (insecticide)						
Apples	534	0			0.015 - 0.050	NT
Cucumbers	534	0			0.015 - 0.050	NT
Green Onions	542	0			0.015 ^	NT
Oranges	534	0			0.010 ^	NT
Spinach	88	0			0.010 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	NT
TOTAL	2,761	0				
Ethion (insecticide)						
Apples	744	0			0.001 - 0.002	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	0			0.001 - 0.002	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	744	0			0.002 - 0.010	5.0
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	657	0			0.002 - 0.010	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>717</u>	<u>0</u>			0.002 - 0.010	NT
TOTAL	5,607	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
Ethion mono oxon (metabolite of Ethion)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	5.0
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	4,119	0				
Ethoprop (insecticide)						
Apples	744	0			0.001 ^	NT
Asparagus	210	0			0.001 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	0			0.0009 - 0.001	0.02
Garbanzo Beans, Canned	186	0			0.001 - 0.002	0.02
Grapes	210	0			0.001 ^	NT
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.002	0.02
Oranges	744	0			0.001 - 0.010	NT
Pinto Beans, Canned	372	0			0.001 - 0.002	0.02
Potatoes	744	0			0.001 - 0.002	0.02
Spinach	744	0			0.001 - 0.010	NT
Strawberries	210	0			0.001 ^	NT
Sweet Corn, Fresh	668	0			0.001 - 0.008	0.02
Sweet Corn, Frozen	75	0			0.001 - 0.008	0.02
Sweet Potatoes	739	2	0.3	0.004 - 0.005	0.001 - 0.010	0.02
TOTAL	7,318	2				
Etoxazole (acaricide)						
Apples	534	18	3.4	0.002 - 0.019	0.001 ^	0.20
Cilantro	184	0			0.001 ^	NT
Cucumbers	534	1	0.2	0.002 ^	0.001 ^	0.02
Green Onions	558	0			0.001 - 0.003	NT
TOTAL	1,810	19				
Etridiazole (fungicide)						
Grapes	515	0			0.010 ^	NT
Strawberries	466	0			0.010 ^	NT
Tomato Paste	742	0			0.20 ^	0.15
TOTAL	1,723	0				
Famoxadone (fungicide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	7	3.3	0.005 - 0.016	0.003 ^	0.30
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	1	0.1	0.20 ^	0.003 - 0.033	2.5
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	0.02
Spinach	210	2	1.0	0.005 - 0.93	0.003 ^	50
Strawberries	744	0			0.003 - 0.066	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
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
Tomato Paste	742	0			0.16 ^	1.0
TOTAL	4,119	10				
Fenamidone (fungicide)						
Apples	744	0			0.002 - 0.003	NT
Asparagus	210	0			0.003 ^	NT
Cilantro	162	2	1.2	0.004 - 0.077	0.002 ^	60
Cucumbers	734	11	1.5	0.004 - 0.019	0.002 - 0.003	0.15
Garbanzo Beans, Canned	186	0			0.003 - 0.005	NT
Grapes	744	2	0.3	0.021 - 0.024	0.003 - 0.010	1.0
Green Onions	558	1	0.2	0.010 ^	0.002 - 0.008	1.5
Kidney Beans, Canned	186	0			0.003 - 0.005	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	372	0			0.003 - 0.005	NT
Potatoes	744	0			0.003 - 0.005	0.02
Spinach	210	31	14.8	0.005 - 7.8	0.003 ^	60
Strawberries	744	0			0.003 - 0.010	0.15
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	0.02
TOTAL	6,223	47				
Fenamiphos (insecticide)						
Apples	744	0			0.002 ^	0.25
Asparagus	744	0			0.002 - 0.007	0.02
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	744	0			0.001 - 0.002	0.10
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	744	0			0.002 - 0.005	0.50
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	744	0			0.002 - 0.005	NT
Strawberries	744	0			0.001 - 0.002	0.60
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	739	0			0.002 - 0.005	NT
TOTAL	7,318	0				
Fenamiphos sulfone (metabolite of Fenamiphos)						
Apples	744	0			0.003 - 0.004	0.25
Asparagus	744	0			0.003 - 0.007	0.02
Cilantro	184	0			0.004 ^	NT
Cucumbers (V-1)	744	1	0.1	0.006 ^	0.003 - 0.004	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	0			0.001 - 0.003	0.10
Green Onions	558	0			0.004 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.005	0.50
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	744	0			0.003 - 0.005	NT
Strawberries	744	0			0.001 - 0.003	0.60
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	0			0.003 - 0.005	NT
TOTAL	7,318	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
Fenamiphos sulfoxide (metabolite of Fenamiphos)						
Apples	744	0			0.003 - 0.004	0.25
Asparagus	744	0			0.003 - 0.010	0.02
Cilantro	184	0			0.004 ^	NT
Cucumbers (V-2)	744	2	0.3	0.006 - 0.015	0.003 - 0.004	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	2	0.3	0.002 - 0.003	0.001 - 0.003	0.10
Green Onions	558	0			0.004 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.005	0.50
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	744	0			0.003 - 0.005	NT
Strawberries	744	0			0.001 - 0.003	0.60
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.003 - 0.005	NT
TOTAL	7,318	4				
Fenarimol (fungicide)						
Apples	744	0			0.010 - 0.030	0.1
Asparagus	210	0			0.030 ^	NT
Cilantro	168	0			0.010 ^	NT
Cucumbers	729	0			0.010 - 0.032	NT
Garbanzo Beans, Canned	51	0			0.030 ^	NT
Grapes	744	1	0.1	0.024 ^	0.015 - 0.030	0.1
Green Onions	558	0			0.010 ^	NT
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	744	0			0.025 - 0.030	NT
Pears	742	0			0.022 ^	0.1
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 ^	NT
Spinach	210	0			0.030 ^	NT
Strawberries	744	0			0.015 - 0.030	NT
Sweet Corn, Fresh	201	0			0.030 - 0.060	NT
Sweet Corn, Frozen	8	0			0.030 ^	NT
Sweet Potatoes	<u>716</u>	<u>0</u>			0.025 - 0.030	NT
TOTAL	6,938	1				
Fenazaquin (insecticide, acaricide)						
Pears	<u>742</u>	<u>0</u>			0.015 ^	0.2
TOTAL	742	0				
Fenbuconazole (fungicide)						
Apples	744	6	0.8	0.003 - 0.024	0.001 - 0.060	0.4
Asparagus	210	0			0.060 ^	NT
Cilantro	184	0			0.001 - 0.003	NT
Cucumbers	744	0			0.001 - 0.060	NT
Garbanzo Beans, Canned	51	0			0.060 ^	NT
Grapes	744	0			0.001 - 0.060	1.0
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.060 ^	NT
Oranges	744	0			0.005 - 0.060	1.0
Pinto Beans, Canned	105	0			0.060 ^	NT
Potatoes	210	0			0.060 ^	NT
Spinach	744	0			0.005 - 0.060	NT
Strawberries	744	0			0.001 - 0.060	NT
Sweet Corn, Fresh	201	0			0.060 - 0.12	NT
Sweet Corn, Frozen	8	0			0.060 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.005 - 0.060	NT
TOTAL	6,784	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
Fenchlorphos (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Fenhexamid (fungicide)						
Apples	504	0			0.010 ^	NT
Cilantro	108	0			0.032 ^	30.0
Cucumbers	519	0			0.010 - 0.13	2.0
Grapes	534	194	36.3	0.002 - 1.4	0.002 ^	4.0
Green Onions	558	0			0.010 - 0.032	NT
Pears	742	1	0.1	0.043 ^	0.026 ^	10
Strawberries	534	210	39.3	0.002 - 2.2	0.002 ^	3.0
Tomato Paste	742	0			0.052 ^	2.0
TOTAL	4,241	405				
Fenitrothion (insecticide)						
Apples	744	0			0.002 - 0.003	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.003 - 0.020	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	3,935	0				
Fenpropathrin (insecticide)						
Apples	744	25	3.4	0.015 - 0.20	0.009 - 0.016	5.0
Asparagus	744	0			0.009 - 0.050	NT
Cilantro	184	0			0.052 ^	NT
Cucumbers	744	4	0.5	0.015 - 0.026	0.009 - 0.016	0.5
Garbanzo Beans, Canned	186	0			0.009 - 0.020	NT
Grapes	744	62	8.3	0.015 - 0.21	0.009 - 0.020	5.0
Green Onions	558	0			0.016 - 0.052	NT
Kidney Beans, Canned	186	0			0.009 - 0.020	NT
Oranges	722	0			0.009 - 0.015	2.0
Pears	742	4	0.5	0.062 - 0.61	0.037 ^	5.0
Pinto Beans, Canned	372	0			0.009 - 0.020	NT
Potatoes	744	0			0.009 - 0.020	NT
Spinach	722	0			0.009 - 0.075	NT
Strawberries	744	64	8.6	0.015 - 1.7	0.009 - 0.020	2.0
Sweet Corn, Fresh	668	0			0.009 - 0.10	NT
Sweet Corn, Frozen	75	0			0.009 - 0.10	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
Sweet Potatoes	716	0			0.009 - 0.015	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.12 ^	1.0
TOTAL	10,337	159				
Fenpyroximate (acaricide)						
Apples	534	70	13.1	0.002 - 0.12	0.001 - 0.006	0.40
Cilantro	62	0			0.001 - 0.015	NT
Cucumbers	399	0			0.003 ^	NT
Green Onions	450	0			0.003 ^	NT
Oranges	534	0			0.010 ^	0.60
Pears	742	80	10.8	0.025 - 0.080	0.015 ^	0.40
Spinach	88	0			0.010 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	NT
TOTAL	3,338	150				
Fensulfthion (insecticide, fumigant)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.003 ^	NT
TOTAL	2,309	0				
Fenthion (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	656	0			0.002 - 0.008	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	4,565	0				
Fenvalerate (isomer of Esfenvalerate)						
Apples	210	0			0.015 ^	2.0
Asparagus	210	0			0.015 ^	0.05
Cucumbers	210	0			0.015 ^	0.5
Garbanzo Beans, Canned	51	0			0.015 ^	2.0
Grapes	210	0			0.015 ^	0.05
Kidney Beans, Canned	54	0			0.015 ^	2.0
Oranges	210	0			0.015 ^	0.05
Pinto Beans, Canned	105	0			0.015 ^	2.0
Potatoes	210	0			0.015 ^	0.02
Spinach	210	0			0.015 ^	0.05
Strawberries	210	0			0.015 ^	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
Sweet Corn, Fresh	201	0			0.015 ^	0.1
Sweet Corn, Frozen	8	0			0.015 ^	0.1
Sweet Potatoes	<u>210</u>	<u>0</u>			0.015 ^	0.05
TOTAL	2,309	0				
Flonicamid (insecticide)						
Apples	744	4	0.5	0.002 - 0.013	0.001 - 0.018	0.20
Asparagus	210	0			0.018 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	45	6.0	0.002 - 0.11	0.001 - 0.018	0.40
Garbanzo Beans, Canned	51	0			0.018 ^	NT
Grapes	210	0			0.018 ^	NT
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	54	0			0.018 ^	NT
Lettuce, Organic	387	0			0.010 ^	4.0
Oranges	210	0			0.018 ^	NT
Pears	742	0			0.010 ^	0.20
Pinto Beans, Canned	105	0			0.018 ^	NT
Potatoes	210	0			0.018 ^	0.20
Spinach	210	9	4.3	0.088 - 1.8	0.018 ^	9.0
Strawberries	210	0			0.018 ^	NT
Sweet Corn, Fresh	201	0			0.018 ^	NT
Sweet Corn, Frozen	8	0			0.018 ^	NT
Sweet Potatoes	210	0			0.018 ^	0.20
Tomato Paste	<u>742</u>	<u>0</u>			0.032 ^	2.0
TOTAL	5,990	58				
Fluazifop butyl (herbicide)						
Apples	534	0			0.001 ^	NT
Cilantro (V-1)	184	1	0.5	0.010 ^	0.001 - 0.003	NT
Cucumbers	534	0			0.001 ^	NT
Green Onions	526	0			0.003 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	0.5
TOTAL	2,307	1				
Fludioxonil (fungicide)						
Apples	744	67	9.0	0.010 - 1.2	0.006 - 0.012	5.0
Asparagus	210	0			0.006 ^	NT
Cilantro	184	1	0.5	0.081 ^	0.040 ^	10
Cucumbers	744	0			0.006 - 0.080	0.45
Garbanzo Beans, Canned	186	0			0.006 - 0.055	0.4
Grapes	744	138	18.5	0.001 - 0.86	0.001 - 0.006	1.0
Green Onions	542	0			0.012 - 0.080	7.0
Kidney Beans, Canned	186	0			0.006 - 0.055	0.4
Lettuce, Organic	387	0			0.020 ^	30
Oranges	744	1	0.1	0.010 ^	0.006 - 0.010	10
Pears	742	163	22.0	0.025 - 0.79	0.015 ^	5.0
Pinto Beans, Canned	372	0			0.006 - 0.055	0.4
Potatoes	744	0			0.006 - 0.055	0.02
Spinach	744	0			0.006 - 0.010	0.01
Strawberries	744	263	35.3	0.001 - 0.96	0.001 - 0.006	2.0
Sweet Corn, Fresh	668	0			0.006 - 0.050	0.02
Sweet Corn, Frozen	75	0			0.006 - 0.050	0.02
Sweet Potatoes	694	14	2.0	0.013 - 0.23	0.006 - 0.010	3.5
Tomato Paste	<u>742</u>	<u>0</u>			0.049 ^	0.50
TOTAL	10,196	647				
Flufenacet (herbicide)						
Sweet Corn, Fresh	467	0			0.040 ^	0.05
Sweet Corn, Frozen	<u>67</u>	<u>0</u>			0.040 ^	0.05
TOTAL	534	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
Flumioxazin (herbicide)						
Pears	742	0			0.14 ^	0.02
TOTAL	742	0				
Fluoxastrobin (fungicide)						
Apples	534	0			0.001 ^	NT
Cilantro (V-1)	184	1	0.5	0.002 ^	0.001 - 0.004	NT
Cucumbers	534	0			0.001 ^	NT
Green Onions	558	0			0.001 ^	NT
Oranges	534	0			0.002 ^	NT
Spinach	88	0			0.002 ^	NT
Sweet Potatoes	529	0			0.002 ^	0.010
Tomato Paste	742	0			0.010 ^	1.5
TOTAL	3,703	1				
Fluridone (herbicide)						
Apples	210	0			0.002 ^	0.1
Asparagus	744	0			0.002 - 0.050	NT
Cucumbers	210	0			0.002 ^	0.1
Garbanzo Beans, Canned	186	0			0.001 - 0.002	0.1
Grapes	744	0			0.001 - 0.002	0.1
Kidney Beans, Canned	186	0			0.001 - 0.002	0.1
Oranges	744	0			0.002 - 0.010	0.1
Pinto Beans, Canned	372	0			0.001 - 0.002	0.1
Potatoes	744	4	0.5	0.002 - 0.006	0.001 - 0.002	0.1
Spinach	744	0			0.002 - 0.010	0.1
Strawberries	744	0			0.001 - 0.002	0.1
Sweet Corn, Fresh	668	0			0.002 - 0.050	0.1
Sweet Corn, Frozen	75	0			0.002 - 0.050	0.1
Sweet Potatoes	739	0			0.002 - 0.010	0.1
TOTAL	7,110	4				
Flutolanil (fungicide)						
Garbanzo Beans, Canned	135	0			0.003 ^	NT
Kidney Beans, Canned	132	0			0.003 ^	NT
Pinto Beans, Canned	267	0			0.003 ^	NT
Potatoes	534	59	11.0	0.003 - 0.032	0.003 ^	0.20
TOTAL	1,068	59				
Fluvalinate (insecticide)						
Apples	210	0			0.015 ^	NT
Asparagus	744	0			0.015 - 0.12	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	186	0			0.010 - 0.015	NT
Grapes	744	0			0.015 - 0.035	NT
Kidney Beans, Canned	186	0			0.010 - 0.015	NT
Lettuce, Organic	387	0			0.067 ^	NT
Oranges	210	0			0.015 ^	NT
Pinto Beans, Canned	372	0			0.010 - 0.015	NT
Potatoes	744	0			0.010 - 0.015	NT
Spinach	656	0			0.015 ^	NT
Strawberries	744	0			0.015 - 0.035	NT
Sweet Corn, Fresh	668	0			0.015 - 0.12	NT
Sweet Corn, Frozen	75	0			0.015 - 0.12	NT
Sweet Potatoes	738	0			0.015 ^	NT
TOTAL	6,874	0				
Folpet (fungicide)						
Grapes	534	0			0.060 ^	50.0
Strawberries	534	0			0.060 ^	5.0
Tomato Paste	742	0			0.043 ^	25.0
TOTAL	1,810	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
Fonofos (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.010	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.010	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.010	NT
Potatoes	744	0			0.002 - 0.010	NT
Spinach	656	0			0.002 - 0.005	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	5,633	0				
Forchlorfenuron (plant growth regulator)						
Pears	742	0			0.015 ^	0.01
TOTAL	742	0				
Formetanate hydrochloride (insecticide)						
Apples	744	109	14.7	0.0002 - 0.026	0.0001 - 0.006	0.50
Asparagus	210	0			0.006 ^	NT
Cucumbers	210	0			0.006 ^	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes (V-1)	744	1	0.1	0.003 ^	0.001 - 0.006	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	742	35	4.7	0.0002 - 0.001	0.0001 - 0.006	1.5
Pears	742	93	12.5	0.0002 - 0.033	0.0001 ^	0.50
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach	210	0			0.006 ^	NT
Strawberries	744	0			0.001 - 0.006	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	5,185	238				
Halosulfuron methyl (herbicide)						
Oranges	534	0			0.010 ^	NT
Spinach	88	0			0.010 ^	NT
TOTAL	622	0				
Heptachlor (insecticide)						
Apples	744	0			0.002 - 0.003	0.01 AL
Asparagus	744	0			0.003 - 0.040	0.05 AL
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.003	0.02 AL
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.01 AL
Grapes	744	0			0.003 - 0.010	0.01 AL
Green Onions	528	0			0.002 ^	0.01 AL
Kidney Beans, Canned	186	0			0.002 - 0.003	0.01 AL
Lettuce, Organic	387	0			0.010 ^	0.01 AL
Oranges	721	0			0.002 - 0.003	0.01 AL
Pears	742	0			0.004 ^	0.01 AL
Pinto Beans, Canned	372	0			0.002 - 0.003	0.01 AL
Potatoes	744	0			0.002 - 0.003	0.01 AL
Spinach	744	0			0.002 - 0.003	0.01 AL
Strawberries	744	0			0.003 - 0.010	0.01 AL
Sweet Corn, Fresh	668	0			0.003 - 0.040	0.01 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
Sweet Corn, Frozen	75	0			0.003 - 0.040	0.01 AL
Sweet Potatoes	739	0			0.002 - 0.005	0.01 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.014 ^	0.01 AL
TOTAL	10,738	0				
Heptachlor epoxide (metabolite of Heptachlor)						
Apples	739	0			0.004 ^	0.01 AL
Asparagus	744	0			0.004 - 0.040	0.05 AL
Cilantro	170	0			0.004 ^	NT
Cucumbers	744	1	0.1	0.006 ^	0.004 ^	0.02 AL
Garbanzo Beans, Canned	186	0			0.001 - 0.004	0.01 AL
Grapes	744	0			0.004 - 0.010	0.01 AL
Green Onions	558	0			0.004 ^	0.01 AL
Kidney Beans, Canned	186	0			0.001 - 0.004	0.01 AL
Lettuce, Organic	387	0			0.010 ^	0.01 AL
Oranges	744	0			0.002 - 0.004	0.01 AL
Pinto Beans, Canned	372	0			0.001 - 0.004	0.01 AL
Potatoes	744	3	0.4	0.001 - 0.003	0.001 - 0.004	0.01 AL
Spinach	298	0			0.002 - 0.004	0.01 AL
Strawberries	744	0			0.004 - 0.010	0.01 AL
Sweet Corn, Fresh	668	0			0.004 - 0.040	0.01 AL
Sweet Corn, Frozen	75	0			0.004 - 0.040	0.01 AL
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 - 0.004	0.01 AL
TOTAL	8,842	4				
Heptachlor epoxide cis (metabolite of Heptachlor)						
Pears	742	0			0.004 ^	0.01 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.01 AL
TOTAL	1,484	0				
Heptachlor epoxide trans (metabolite of Heptachlor)						
Pears	742	0			0.004 ^	0.01 AL
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.01 AL
TOTAL	1,484	0				
Hexachlorobenzene - HCB (impurity of Quintozene)						
Apples	744	0			0.001 - 0.002	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	744	0			0.001 - 0.002	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.1
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.001 - 0.010	NT
Kidney Beans, Canned	186	0			0.002 - 0.003	0.1
Lettuce, Organic	387	0			0.010 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.003	0.1
Potatoes	744	0			0.002 - 0.003	0.1
Spinach	744	0			0.001 - 0.002	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	210	0			0.002 ^	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.009 ^	0.1
TOTAL	6,666	0				
Hexaconazole (fungicide)						
Apples	210	0			0.030 ^	NT
Asparagus	210	0			0.030 ^	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	51	0			0.030 ^	NT
Grapes	210	0			0.030 ^	NT
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	744	0			0.010 - 0.040	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
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 ^	NT
Spinach	744	0			0.010 - 0.030	NT
Strawberries	210	0			0.030 ^	NT
Sweet Corn, Fresh	136	0			0.030 ^	NT
Sweet Corn, Frozen	3	0			0.030 ^	NT
Sweet Potatoes	739	0			0.010 - 0.030	NT
TOTAL	3,836	0				
Hexythiazox (insecticide, acaricide)						
Apples	210	6	2.9	0.005 - 0.026	0.003 ^	0.25
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	0			0.003 - 0.006	0.75
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	0.35
Pears	742	0			0.015 ^	0.25
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	744	55	7.4	0.005 - 0.60	0.003 - 0.006	3.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	4,119	61				
Hydroprene (insect growth regulator)						
Apples	534	0			0.013 ^	0.2
Asparagus	331	0			0.030 ^	0.2
Cilantro	184	0			0.013 ^	0.2
Cucumbers	534	0			0.013 ^	0.2
Green Onions	558	0			0.013 ^	0.2
TOTAL	2,141	0				
3-Hydroxycarbofuran (metabolite of Carbofuran)						
Apples	744	0			0.002 - 0.006	NT
Asparagus (V-2)	744	2	0.3	0.011 - 0.036	0.006 - 0.010	NT
Cilantro (V-2)	184	2	1.1	0.088 - 0.16	0.002 - 0.005	NT
Cucumbers	744	0			0.002 - 0.006	0.2
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	744	0			0.001 - 0.006	0.2
Green Onions	558	0			0.004 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Lettuce, Organic	387	0			0.020 ^	NT
Oranges	744	0			0.006 - 0.010	NT
Pears	742	0			0.018 ^	NT
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	0			0.003 - 0.006	1
Spinach	744	0			0.006 - 0.010	NT
Strawberries	744	0			0.001 - 0.006	0.2
Sweet Corn, Fresh	668	0			0.006 - 0.010	0.2
Sweet Corn, Frozen	75	0			0.006 - 0.010	0.2
Sweet Potatoes	739	0			0.006 - 0.010	NT
TOTAL	10,049	4				
5-Hydroxythiabendazole (metabolite of Thiabendazole)						
Apples	210	5	2.4	0.005 - 0.018	0.003 ^	5.0
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	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
Oranges	210	2	1.0	0.005 ^	0.003 ^	10.0
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	10.0
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	5.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	0.05
TOTAL	2,309	7				
Imazalil (fungicide)						
Apples	744	0			0.003 - 0.010	NT
Asparagus (V-1)	210	1	0.5	0.005 ^	0.003 ^	NT
Cilantro	184	0			0.010 ^	NT
Cucumbers (V-1)	744	1	0.1	0.005 ^	0.003 - 0.010	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	0			0.001 - 0.003	NT
Green Onions	542	0			0.010 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	611	82.1	0.005 - 0.57	0.003 - 0.010	10.0
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	744	0			0.003 - 0.010	NT
Strawberries	744	0			0.001 - 0.003	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	0			0.003 - 0.010	NT
TOTAL	6,768	613				
Imidacloprid (insecticide)						
Apples	744	126	16.9	0.002 - 0.051	0.001 - 0.006	0.5
Asparagus (V-1)	210	1	0.5	0.010 ^	0.006 ^	NT
Cilantro	184	47	25.5	0.002 - 0.040	0.001 - 0.003	8.0
Cucumbers	744	36	4.8	0.002 - 0.074	0.001 - 0.006	0.5
Garbanzo Beans, Canned	186	0			0.003 - 0.006	4.0
Grapes (X-1)	744	391	52.6	0.002 - 1.1	0.002 - 0.006	1.0
Green Onions (V-10)	558	10	1.8	0.002 - 0.003	0.001 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	4.0
Lettuce, Organic	387	0			0.010 ^	3.5
Oranges	744	10	1.3	0.010 - 0.038	0.006 - 0.010	0.7
Pears	742	37	5.0	0.025 - 0.15	0.015 ^	0.6
Pinto Beans, Canned	372	0			0.003 - 0.006	4.0
Potatoes	744	189	25.4	0.003 - 0.088	0.003 - 0.006	0.40
Spinach	744	316	42.5	0.010 - 0.64	0.006 - 0.010	3.5
Strawberries	744	104	14.0	0.002 - 0.080	0.002 - 0.006	0.50
Sweet Corn, Fresh	201	0			0.006 ^	0.05
Sweet Corn, Frozen	8	0			0.006 ^	0.05
Sweet Potatoes	739	0			0.006 - 0.010	0.40
TOTAL	8,981	1,267				
Imidacloprid urea (metabolite of Imidacloprid)						
Grapes	534	2	0.4	0.011 - 0.013	0.011 ^	1.0
Strawberries	534	0			0.011 ^	0.50
Sweet Corn, Fresh	467	0			0.020 ^	0.05
Sweet Corn, Frozen	62	0			0.020 ^	0.05
TOTAL	1,602	2				
Imiprothrin (insecticide)						
Apples	210	0			0.030 ^	NT
Asparagus	744	0			0.030 - 0.040	NT
Cucumbers	210	0			0.042 ^	NT
Garbanzo Beans, Canned	186	0			0.010 - 0.030	NT
Grapes	744	0			0.030 - 0.12	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
Kidney Beans, Canned	186	0			0.010 - 0.030	NT
Oranges	210	0			0.030 ^	NT
Pinto Beans, Canned	372	0			0.010 - 0.030	NT
Potatoes	744	0			0.010 - 0.042	NT
Spinach (V-1)	210	1	0.5	0.034 ^	0.030 ^	NT
Strawberries	744	0			0.030 - 0.12	NT
Sweet Corn, Fresh	668	0			0.030 - 0.090	NT
Sweet Corn, Frozen	75	0			0.030 - 0.040	NT
Sweet Potatoes	210	0			0.030 ^	NT
TOTAL	5,513	1				
Indoxacarb (insecticide)						
Apples	210	1	0.5	0.010 ^	0.006 ^	1.0
Asparagus	210	0			0.006 ^	NT
Cucumbers	210	0			0.006 ^	0.60
Garbanzo Beans, Canned	186	0			0.006 - 0.010	NT
Grapes	744	33	4.4	0.010 - 0.13	0.006 - 0.021	2.0
Kidney Beans, Canned	186	0			0.006 - 0.010	NT
Lettuce, Organic	387	0			0.10 ^	14
Oranges	744	0			0.006 - 0.010	NT
Pears	742	0			0.015 ^	0.20
Pinto Beans, Canned	372	0			0.006 - 0.010	NT
Potatoes	744	0			0.006 - 0.010	0.01
Spinach	744	8	1.1	0.010 - 0.37	0.006 - 0.010	14
Strawberries	744	0			0.006 - 0.021	NT
Sweet Corn, Fresh	668	0			0.006 - 0.040	0.02
Sweet Corn, Frozen	75	0			0.006 - 0.040	0.02
Sweet Potatoes	739	0			0.006 - 0.010	0.01
Tomato Paste	742	0			0.049 ^	0.50
TOTAL	8,447	42				
Iprodione (fungicide)						
Apples	714	0			0.008 - 0.028	NT
Asparagus	210	0			0.015 ^	NT
Cucumbers (V-1)	744	1	0.1	0.17 ^	0.008 - 0.028	NT
Garbanzo Beans, Canned	186	0			0.015 - 0.021	2.0
Grapes	744	127	17.1	0.025 - 0.85	0.015 - 0.050	60.0
Green Onions	526	0			0.008 - 0.056	NT
Kidney Beans, Canned	186	0			0.015 - 0.021	2.0
Oranges	210	0			0.015 ^	NT
Pears (V-1)	742	1	0.1	0.076 ^	0.046 ^	NT
Pinto Beans, Canned	372	0			0.015 - 0.021	2.0
Potatoes	744	0			0.015 - 0.021	0.5
Spinach	210	0			0.015 ^	NT
Strawberries	744	4	0.5	0.049 - 0.72	0.015 - 0.025	15.0
Sweet Corn, Fresh	201	0			0.015 ^	NT
Sweet Corn, Frozen	8	0			0.015 ^	NT
Sweet Potatoes	210	0			0.015 ^	NT
TOTAL	6,751	133				
Iprovalicarb (fungicide)						
Grapes	534	0			0.002 ^	2
Strawberries	534	0			0.002 ^	NT
Tomato Paste	742	0			0.049 ^	1.0
TOTAL	1,810	0				
Isofenphos (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	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
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Kresoxim-methyl (fungicide)						
Apples	534	0			0.003 ^	0.5
Cilantro	184	0			0.003 ^	NT
Cucumbers	534	2	0.4	0.013 - 0.33	0.003 - 0.010	0.40
Grapes	534	16	3.0	0.008 - 0.075	0.008 ^	1.0
Green Onions	542	0			0.010 - 0.020	NT
Pears	742	0			0.040 ^	0.5
Strawberries	534	0			0.008 ^	NT
TOTAL	3,604	18				
Lindane - BHC gamma (insecticide)						
Apples	744	0			0.002 - 0.003	NT
Asparagus	744	0			0.002 - 0.040	NT
Cilantro	152	0			0.010 - 0.019	NT
Cucumbers	715	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.013	0.5 AL
Grapes	744	0			0.002 - 0.021	0.5 AL
Green Onions	558	0			0.010 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.013	0.5 AL
Oranges	744	0			0.002 - 0.003	0.5 AL
Pinto Beans, Canned	372	0			0.002 - 0.013	0.5 AL
Potatoes	744	0			0.002 - 0.013	0.5 AL
Spinach	276	0			0.002 - 0.003	NT
Strawberries	744	0			0.002 - 0.021	0.5 AL
Sweet Corn, Fresh	668	0			0.002 - 0.040	0.5 AL
Sweet Corn, Frozen	75	0			0.002 - 0.040	0.5 AL
Sweet Potatoes	739	0			0.002 - 0.003	0.5 AL
TOTAL	8,391	0				
Linuron (herbicide)						
Apples	744	0			0.003 - 0.006	NT
Asparagus	744	9	1.2	0.022 - 0.55	0.006 - 0.020	7.0
Cilantro (V-28)	184	28	15.2	0.010 - 0.36	0.010 ^	NT
Cucumbers	744	0			0.003 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	210	0			0.006 ^	NT
Green Onions (V-2)	558	2	0.4	0.005 ^	0.003 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	0			0.003 - 0.006	0.2
Spinach (V-7)	210	7	3.3	0.010 - 0.047	0.006 ^	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	668	0			0.006 - 0.040	0.25
Sweet Corn, Frozen	75	0			0.006 - 0.040	0.25
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	6,255	46				
Malathion (insecticide)						
Apples	744	0			0.002 - 0.003	8
Asparagus	744	0			0.002 - 0.010	8
Cilantro (V-10)	184	10	5.4	0.005 - 0.066	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
Cucumbers	744	0			0.002 - 0.003	8
Garbanzo Beans, Canned	186	0			0.002 ^	8
Grapes	744	0			0.002 - 0.005	8
Green Onions	558	34	6.1	0.005 - 0.27	0.003 ^	8
Kidney Beans, Canned	186	0			0.002 ^	8
Lettuce, Organic	387	0			0.040 ^	8
Oranges	744	0			0.002 - 0.010	8
Pears	742	4	0.5	0.005 - 0.025	0.003 ^	8
Pinto Beans, Canned	372	0			0.002 ^	8
Potatoes	744	0			0.002 ^	8
Spinach	744	2	0.3	0.028 - 0.053	0.002 - 0.010	8
Strawberries	744	160	21.5	0.004 - 0.35	0.002 - 0.005	8
Sweet Corn, Fresh	668	0			0.002 - 0.010	2
Sweet Corn, Frozen	75	0			0.002 - 0.010	2
Sweet Potatoes	739	0			0.002 - 0.010	1
Tomato Paste	742	0			0.011 ^	8
TOTAL	10,791	210				
Malathion oxygen analog (metabolite of Malathion)						
Apples	744	0			0.002 - 0.003	8
Asparagus	744	0			0.002 - 0.010	8
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.002 - 0.003	8
Garbanzo Beans, Canned	186	0			0.002 ^	8
Grapes	744	0			0.002 - 0.003	8
Kidney Beans, Canned	186	0			0.002 ^	8
Lettuce, Organic	387	0			0.013 ^	8
Oranges	744	0			0.002 - 0.010	8
Pears	742	0			0.019 ^	8
Pinto Beans, Canned	372	0			0.002 ^	8
Potatoes	744	0			0.002 ^	8
Spinach	744	0			0.002 - 0.010	8
Strawberries	744	77	10.3	0.003 - 0.027	0.002 - 0.003	8
Sweet Corn, Fresh	668	0			0.002 - 0.010	2
Sweet Corn, Frozen	75	0			0.002 - 0.010	2
Sweet Potatoes	739	0			0.002 - 0.010	1
Tomato Paste	742	0			0.062 ^	8
TOTAL	10,233	77				
Mandipropamide (fungicide)						
Apples	534	0			0.005 - 0.030	NT
Cilantro	184	0			0.005 - 0.015	NT
Cucumbers	534	7	1.3	0.008 ^	0.005 - 0.015	0.6
Grapes	534	0			0.020 ^	1.4
Green Onions	450	2	0.4	0.019 - 0.13	0.005 - 0.030	4
Strawberries	534	0			0.020 ^	NT
TOTAL	2,770	9				
MCPA (herbicide)						
Grapes	534	0			0.003 ^	NT
Strawberries	534	0			0.003 ^	NT
TOTAL	1,068	0				
Mecoprop - MCPP (herbicide)						
Grapes	534	0			0.002 ^	NT
Strawberries	534	0			0.002 ^	NT
TOTAL	1,068	0				
Mepanipyrim (fungicide)						
Tomato Paste	742	0			0.41 ^	0.5
TOTAL	742	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
Metalaxyl (fungicide)						
Apples	729	0			0.006 - 0.015	0.2
Asparagus	744	1	0.1	0.025 ^	0.015 ^	7.0
Cilantro (V-4)	184	4	2.2	0.010 - 0.12	0.006 ^	NT
Cucumbers	744	142	19.1	0.010 - 0.49	0.006 - 0.015	1.0
Garbanzo Beans, Canned	186	0			0.001 - 0.015	0.2
Grapes	744	0			0.015 - 0.089	2.0
Green Onions	558	0			0.020 ^	10.0
Kidney Beans, Canned	186	0			0.010 - 0.030	0.2
Oranges	744	0			0.015 - 0.020	1.0
Pinto Beans, Canned	372	0			0.001 - 0.015	0.2
Potatoes	744	39	5.2	0.001 - 0.012	0.001 - 0.015	0.5
Spinach	656	7	1.1	0.025 - 0.12	0.015 ^	10.0
Strawberries	744	12	1.6	0.025 - 0.26	0.015 - 0.089	10.0
Sweet Corn, Fresh	668	0			0.015 ^	0.1
Sweet Corn, Frozen	75	0			0.015 ^	0.1
Sweet Potatoes	739	0			0.015 ^	0.5
Tomato Paste	742	0			0.11 ^	3.0
TOTAL	9,559	205				
Methamidophos (insecticide) (also a metabolite of Acephate)						
Apples	744	0			0.001 ^	0.02
Asparagus (X-3)	213	8	3.8	0.002 - 0.31	0.001 - 0.080	0.02
Cilantro	184	1	0.5	0.002 ^	0.001 ^	0.02
Cucumbers	744	28	3.8	0.002 - 0.20	0.001 ^	1.0
Garbanzo Beans, Canned	186	0			0.001 - 0.005	3.0
Grapes	744	18	2.4	0.002 - 0.017	0.001 - 0.002	0.02
Green Onions	558	0			0.001 ^	0.02
Kidney Beans, Canned	186	0			0.001 - 0.005	3.0
Oranges	744	0			0.001 - 0.010	0.02
Pinto Beans, Canned	372	0			0.001 - 0.005	3.0
Potatoes	744	1	0.1	0.002 ^	0.001 - 0.005	0.1
Spinach	744	1	0.1	0.002 ^	0.001 - 0.010	0.02
Strawberries	744	0			0.001 - 0.002	0.02
Sweet Corn, Fresh	201	0			0.001 ^	0.02
Sweet Corn, Frozen	8	0			0.001 ^	0.02
Sweet Potatoes (X-1)	739	2	0.3	0.005 - 0.038	0.001 - 0.010	0.02
Tomato Paste	742	15	2.0	0.020 - 0.074	0.012 ^	1.0
TOTAL	8,597	74				
Methidathion (insecticide)						
Apples	744	0			0.002 ^	0.05
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	744	0			0.001 - 0.002	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	744	0			0.002 - 0.010	4.0
Pears	742	0			0.003 ^	0.05
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	744	0			0.002 - 0.010	NT
Strawberries	744	0			0.001 - 0.002	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	739	0			0.002 - 0.010	NT
TOTAL	7,526	0				
Methidathion oxygen analog (metabolite of Methidathion)						
Apples	744	0			0.003 - 0.006	0.05
Asparagus	210	0			0.006 ^	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
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.003 - 0.006	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	210	0			0.006 ^	4.0
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach	210	0			0.006 - 0.020	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	4,119	0				
Methiocarb (insecticide) (analyzed as sulfoxide)						
Apples	744	0			0.001 - 0.006	NT
Asparagus	210	0			0.006 ^	NT
Cucumbers	744	0			0.001 - 0.006	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.003 - 0.006	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	320	0			0.006 - 0.010	NT
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach	298	0			0.006 - 0.010	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	320	0			0.006 - 0.010	NT
TOTAL	4,243	0				
Methomyl (insecticide)						
Apples	744	3	0.4	0.016 - 0.020	0.002 - 0.012	1
Asparagus	744	24	3.2	0.010 - 0.63	0.010 - 0.012	2
Cilantro	184	0			0.002 - 0.008	NT
Cucumbers	744	22	3.0	0.004 - 0.067	0.002 - 0.012	0.2
Garbanzo Beans, Canned	186	0			0.010 - 0.012	2
Grapes	744	30	4.0	0.013 - 1.8	0.012 - 0.013	5
Green Onions	558	55	9.9	0.004 - 0.26	0.002 ^	3
Kidney Beans, Canned	186	0			0.010 - 0.012	2
Lettuce, Organic	387	0			0.20 ^	5
Oranges	744	0			0.010 - 0.012	2
Pears	742	0			0.010 ^	4
Pinto Beans, Canned	372	0			0.010 - 0.012	2
Potatoes	744	0			0.010 - 0.012	0.2
Spinach	744	33	4.4	0.010 - 0.71	0.010 - 0.012	6
Strawberries	744	50	6.7	0.020 - 2.7	0.012 - 0.013	2
Sweet Corn, Fresh	668	1	0.1	0.011 ^	0.010 - 0.012	0.1
Sweet Corn, Frozen	75	0			0.010 - 0.012	0.1
Sweet Potatoes	739	0			0.010 - 0.012	0.2
Tomato Paste	742	0			0.016 - 0.032	1
TOTAL	10,791	218				
Methoprene (insect growth regulator)						
Apples	534	0			0.014 ^	NT
Cilantro	184	0			0.048 ^	NT
Cucumbers	534	0			0.014 ^	NT
Green Onions	558	0			0.014 ^	NT
TOTAL	1,810	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
Methoxychlor Total (insecticide)						
Apples	534	0			0.002 ^	NT
Cilantro	184	0			0.006 ^	NT
Cucumbers	534	0			0.002 ^	NT
Grapes	534	0			0.076 ^	NT
Green Onions	542	0			0.002 - 0.006	NT
Strawberries	534	0			0.076 ^	NT
TOTAL	2,862	0				
Methoxychlor olefin (metabolite of Methoxychlor)						
Apples	519	0			0.001 ^	NT
Cilantro	122	0			0.001 ^	NT
Cucumbers	534	0			0.001 ^	NT
Green Onions	526	0			0.001 ^	NT
TOTAL	1,701	0				
Methoxychlor p,p' (isomer of Methoxychlor)						
Apples	210	0			0.012 ^	NT
Asparagus	210	0			0.012 ^	NT
Cucumbers	210	0			0.012 ^	NT
Garbanzo Beans, Canned	51	0			0.012 ^	NT
Grapes	210	0			0.012 ^	NT
Kidney Beans, Canned	54	0			0.012 ^	NT
Oranges	744	0			0.012 - 0.025	NT
Pinto Beans, Canned	105	0			0.012 ^	NT
Potatoes	210	0			0.012 ^	NT
Spinach (V-1)	210	1	0.5	0.81 ^	0.012 ^	NT
Strawberries	210	0			0.012 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	694	0			0.012 - 0.025	NT
TOTAL	3,327	1				
Methoxyfenozide (insecticide)						
Apples	744	93	12.5	0.002 - 0.11	0.001 - 0.003	1.5
Asparagus	210	0			0.003 ^	NT
Cilantro	184	3	1.6	0.006 - 0.12	0.003 ^	30
Cucumbers	744	36	4.8	0.002 - 0.029	0.001 - 0.003	0.3
Garbanzo Beans, Canned	186	0			0.003 ^	0.2
Grapes	744	217	29.2	0.001 - 0.45	0.001 - 0.003	1.0
Green Onions	558	26	4.7	0.003 - 0.42	0.003 ^	5.0
Kidney Beans, Canned	186	0			0.003 ^	0.2
Oranges	744	0			0.003 - 0.010	NT
Pears	742	37	5.0	0.025 - 0.39	0.015 ^	1.5
Pinto Beans, Canned	372	0			0.003 ^	0.2
Potatoes	744	0			0.003 ^	0.10
Spinach	744	23	3.1	0.005 - 2.1	0.003 - 0.010	30
Strawberries	744	77	10.3	0.002 - 0.71	0.001 - 0.003	1.5
Sweet Corn, Fresh	668	0			0.003 - 0.040	0.05
Sweet Corn, Frozen	75	0			0.003 - 0.040	0.05
Sweet Potatoes	739	0			0.003 - 0.010	0.02
TOTAL	9,128	512				
Metolachlor (herbicide)						
Apples	744	0			0.001 - 0.012	NT
Asparagus	744	0			0.010 - 0.012	0.10
Cilantro (V-2)	184	2	1.1	0.002 ^	0.001 ^	NT
Cucumbers (V-14)	744	14	1.9	0.002 ^	0.001 - 0.012	NT
Garbanzo Beans, Canned	186	0			0.001 - 0.012	0.30
Grapes	744	0			0.012 - 0.015	NT
Green Onions	558	0			0.001 ^	2.0
Kidney Beans, Canned	186	0			0.010 - 0.012	0.30
Oranges	744	0			0.012 - 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
Pinto Beans, Canned	372	0			0.001 - 0.012	0.30
Potatoes	744	1	0.1	0.001 ^	0.001 - 0.012	0.20
Spinach	656	0			0.012 - 0.015	0.50
Strawberries	744	0			0.012 - 0.015	NT
Sweet Corn, Fresh	668	0			0.010 - 0.012	0.10
Sweet Corn, Frozen	75	0			0.010 - 0.012	0.10
Sweet Potatoes	739	0			0.012 - 0.015	0.20
Tomato Paste	<u>742</u>	<u>0</u>			0.081 ^	0.30
TOTAL	9,574	17				
Metribuzin (herbicide)						
Apples	709	0			0.013 - 0.088	NT
Asparagus (X-1)	744	7	0.9	0.028 - 1.7	0.020 - 0.030	0.1
Cilantro	184	0			0.044 ^	NT
Cucumbers	684	0			0.013 - 0.030	NT
Garbanzo Beans, Canned	186	0			0.005 - 0.030	NT
Grapes	210	0			0.030 ^	NT
Green Onions	558	0			0.044 ^	NT
Kidney Beans, Canned	186	0			0.030 - 0.045	NT
Oranges	210	0			0.030 ^	NT
Pinto Beans, Canned	372	0			0.005 - 0.045	NT
Potatoes	744	6	0.8	0.005 - 0.017	0.005 - 0.045	0.6
Spinach	210	0			0.030 ^	NT
Strawberries	210	0			0.030 ^	NT
Sweet Corn, Fresh	668	0			0.030 ^	0.05
Sweet Corn, Frozen	75	0			0.030 ^	0.05
Sweet Potatoes	<u>210</u>	<u>0</u>			0.030 ^	NT
TOTAL	6,160	13				
Mevinphos (insecticide)						
Apples	744	0			0.001 - 0.002	NT
Asparagus	210	0			0.001 ^	NT
Cucumbers	744	0			0.001 - 0.002	0.2
Garbanzo Beans, Canned	51	0			0.001 ^	NT
Grapes	744	0			0.001 - 0.006	0.5
Green Onions	558	0			0.005 ^	NT
Kidney Beans, Canned	54	0			0.001 ^	NT
Oranges	744	0			0.001 - 0.025	NT
Pinto Beans, Canned	105	0			0.001 ^	NT
Potatoes	210	0			0.001 ^	NT
Spinach	656	0			0.001 - 0.008	1.0
Strawberries	744	0			0.001 - 0.006	1.0
Sweet Corn, Fresh	201	0			0.001 ^	NT
Sweet Corn, Frozen	8	0			0.001 ^	NT
Sweet Potatoes	717	0			0.001 - 0.025	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.006 ^	0.2
TOTAL	7,232	0				
MGK-264 (insecticide)						
Apples	210	0			0.012 ^	10
Asparagus	744	0			0.012 - 0.040	10
Cucumbers	210	0			0.012 ^	10
Garbanzo Beans, Canned	51	0			0.012 ^	10
Grapes	210	0			0.012 ^	10
Kidney Beans, Canned	54	0			0.012 ^	10
Oranges	210	0			0.018 ^	10
Pinto Beans, Canned	105	0			0.012 ^	10
Potatoes	210	0			0.012 ^	10
Spinach	210	0			0.012 ^	10
Strawberries	210	0			0.012 ^	10
Sweet Corn, Fresh	668	0			0.012 - 0.040	10
Sweet Corn, Frozen	75	0			0.012 - 0.040	10
Sweet Potatoes	<u>210</u>	<u>0</u>			0.012 ^	10
TOTAL	3,377	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
Monocrotophos (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	0			0.001 - 0.003	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.010	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	656	0			0.003 - 0.008	NT
Strawberries	744	0			0.001 - 0.003	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	4,357	0				
Myclobutanil (fungicide)						
Apples	744	26	3.5	0.002 - 0.022	0.001 - 0.021	0.5
Asparagus	726	0			0.025 - 0.042	0.02
Cilantro	184	4	2.2	0.002 - 0.007	0.001 ^	9.0
Cucumbers	744	25	3.4	0.002 - 0.070	0.001 - 0.042	0.20
Garbanzo Beans, Canned	186	0			0.003 - 0.030	1.0
Grapes	744	264	35.5	0.001 - 0.54	0.001 - 0.021	1.0
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.030	1.0
Oranges	534	0			0.015 ^	NT
Pinto Beans, Canned	372	0			0.003 - 0.030	1.0
Potatoes	744	0			0.003 - 0.045	0.03
Spinach	708	0			0.015 - 0.075	0.03
Strawberries (X-1)	744	221	29.7	0.001 - 0.66	0.001 - 0.021	0.50
Sweet Corn, Fresh	617	0			0.025 - 0.030	0.03
Sweet Corn, Frozen	72	0			0.025 - 0.030	0.03
Sweet Potatoes	739	0			0.015 - 0.050	0.03
Tomato Paste	742	0			0.11 ^	1.0
TOTAL	9,344	540				
Naled (insecticide)						
Lettuce, Organic	387	0			0.050 ^	1
Pears	742	0			0.004 ^	0.5
TOTAL	1,129	0				
1-Naphthol (metabolite of Carbaryl)						
Apples	210	1	0.5	0.020 ^	0.012 ^	12
Asparagus	511	0			0.20 ^	15
Garbanzo Beans, Canned	186	0			0.012 - 0.030	NT
Grapes	175	1	0.6	0.078 ^	0.012 - 0.040	10
Kidney Beans, Canned	186	0			0.012 - 0.025	NT
Pinto Beans, Canned	267	0			0.025 ^	NT
Potatoes	534	0			0.025 ^	2.0
Spinach	210	0			0.012 ^	22
Sweet Corn, Fresh	668	0			0.012 - 0.20	0.1
Sweet Corn, Frozen	75	0			0.012 - 0.20	0.1
Sweet Potatoes	210	0			0.012 - 0.040	0.2
TOTAL	3,232	2				
Napropamide (herbicide)						
Apples	744	0			0.007 - 0.045	0.1
Asparagus	744	0			0.045 - 0.066	0.1
Cilantro	168	0			0.007 ^	NT
Cucumbers	735	0			0.007 - 0.045	NT
Garbanzo Beans, Canned	51	0			0.045 ^	NT
Grapes	744	0			0.010 - 0.045	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
Green Onions	558	0			0.007 ^	NT
Kidney Beans, Canned	54	0			0.045 ^	NT
Oranges	744	0			0.010 - 0.045	0.1
Pears	742	0			0.038 ^	0.1
Pinto Beans, Canned	105	0			0.045 ^	NT
Potatoes	210	0			0.045 ^	NT
Spinach	744	0			0.010 - 0.045	NT
Strawberries	744	0			0.010 - 0.045	0.1
Sweet Corn, Fresh	183	0			0.045 - 0.080	NT
Sweet Corn, Frozen	8	0			0.045 ^	NT
Sweet Potatoes	739	0			0.010 - 0.045	0.1
Tomato Paste	<u>742</u>	<u>0</u>			0.13 ^	0.1
TOTAL	8,759	0				
Nicosulfuron (herbicide)						
Sweet Corn, Fresh	467	0			0.008 ^	0.1
Sweet Corn, Frozen	<u>67</u>	<u>0</u>			0.008 ^	0.1
TOTAL	534	0				
Norflurazon (herbicide)						
Apples	594	0			0.005 - 0.021	0.1
Asparagus	744	0			0.021 - 0.030	0.05
Cilantro	170	0			0.005 ^	NT
Cucumbers	744	0			0.005 - 0.032	NT
Garbanzo Beans, Canned	51	0			0.021 - 0.050	NT
Grapes	744	0			0.001 - 0.021	0.1
Green Onions	542	0			0.005 - 0.032	NT
Kidney Beans, Canned	54	0			0.021 ^	NT
Oranges	744	0			0.010 - 0.030	0.2
Pears	742	0			0.060 ^	0.1
Pinto Beans, Canned	105	0			0.021 ^	NT
Potatoes	210	0			0.021 ^	NT
Spinach	721	0			0.010 - 0.021	NT
Strawberries	744	0			0.001 - 0.021	NT
Sweet Corn, Fresh	201	0			0.021 ^	NT
Sweet Corn, Frozen	8	0			0.021 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.010 - 0.021	NT
TOTAL	7,857	0				
Norflurazon desmethyl (metabolite of Norflurazon)						
Apples	729	0			0.018 - 0.12	0.1
Asparagus	744	0			0.010 - 0.060	0.05
Cilantro	106	0			0.060 - 0.12	NT
Cucumbers	744	0			0.018 - 0.25	NT
Garbanzo Beans, Canned	51	0			0.060 ^	NT
Grapes	744	0			0.004 - 0.060	0.1
Green Onions	528	0			0.018 - 0.12	NT
Kidney Beans, Canned	54	0			0.060 ^	NT
Oranges	744	0			0.010 - 0.060	0.2
Pears	742	0			0.055 ^	0.1
Pinto Beans, Canned	105	0			0.060 ^	NT
Potatoes	192	0			0.060 ^	NT
Spinach	744	0			0.010 - 0.060	NT
Strawberries	744	0			0.004 - 0.060	NT
Sweet Corn, Fresh	201	0			0.060 ^	NT
Sweet Corn, Frozen	8	0			0.060 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.010 - 0.060	NT
TOTAL	7,919	0				
Novaluron (insecticide)						
Oranges	534	0			0.010 ^	NT
Spinach	88	0			0.010 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	0.05
TOTAL	1,151	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
Omethoate (insecticide) (also a metabolite of Dimethoate)						
Apples (V-2)	744	2	0.3	0.004 - 0.012	0.002 - 0.003	NT
Asparagus	210	0			0.003 ^	0.15
Cilantro (V-2)	184	2	1.1	0.43 - 0.44	0.002 ^	NT
Cucumbers (V-9)	744	9	1.2	0.004 - 0.077	0.002 - 0.003	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.020	2.0
Grapes (V-2)	744	2	0.3	0.005 - 0.009	0.002 - 0.003	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.020	2.0
Oranges	744	0			0.003 - 0.010	2.0
Pears	742	2	0.3	0.015 ^	0.009 ^	2.0
Pinto Beans, Canned	372	0			0.003 - 0.020	2.0
Potatoes	744	0			0.003 - 0.020	0.2
Spinach (V-24)	744	24	3.2	0.005 - 0.76	0.003 - 0.010	NT
Strawberries	744	0			0.002 - 0.003	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	0			0.003 - 0.010	NT
Tomato Paste	742	0			0.029 ^	2.0
TOTAL	9,336	41				
Oryzalin (herbicide)						
Oranges	534	0			0.020 ^	0.05
Spinach	534	0			0.020 ^	NT
Sweet Potatoes	529	0			0.020 ^	NT
TOTAL	1,597	0				
Oxadixyl (fungicide)						
Apples	744	0			0.013 - 0.021	NT
Asparagus	210	0			0.021 ^	NT
Cilantro	184	0			0.013 ^	NT
Cucumbers	744	0			0.013 - 0.021	NT
Garbanzo Beans, Canned	51	0			0.021 ^	NT
Grapes	210	0			0.021 ^	NT
Green Onions	558	0			0.013 ^	NT
Kidney Beans, Canned	54	0			0.021 ^	NT
Oranges	744	0			0.010 - 0.030	NT
Pinto Beans, Canned	105	0			0.021 ^	NT
Potatoes	210	0			0.021 ^	NT
Spinach	210	0			0.021 ^	NT
Strawberries	210	0			0.021 ^	NT
Sweet Corn, Fresh	201	0			0.021 - 0.060	NT
Sweet Corn, Frozen	8	0			0.021 ^	NT
Sweet Potatoes	739	0			0.010 - 0.021	NT
TOTAL	5,182	0				
Oxamyl (insecticide)						
Apples	744	0			0.002 - 0.006	2
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	84	11.3	0.006 - 1.4	0.006 ^	2.0
Garbanzo Beans, Canned	186	0			0.003 - 0.006	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.002 - 0.006	NT
Kidney Beans, Canned	186	0			0.003 - 0.006	NT
Oranges	744	0			0.006 - 0.010	3
Pears	742	0			0.015 ^	2.0
Pinto Beans, Canned	372	0			0.003 - 0.006	NT
Potatoes	744	2	0.3	0.004 ^	0.003 - 0.006	0.1
Spinach	744	0			0.006 - 0.010	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	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
Sweet Potatoes	739	0			0.006 - 0.010	0.1
Tomato Paste	<u>742</u>	<u>0</u>			0.049 ^	2
TOTAL	8,268	86				
Oxamyl oxime (metabolite of Oxamyl)						
Apples	210	0			0.012 ^	2
Asparagus	210	0			0.012 ^	NT
Cucumbers	210	39	18.6	0.020 - 0.64	0.012 ^	2.0
Garbanzo Beans, Canned	186	0			0.003 - 0.012	NT
Grapes	744	0			0.012 - 0.035	NT
Kidney Beans, Canned	186	0			0.003 - 0.012	NT
Oranges	744	0			0.010 - 0.012	3
Pinto Beans, Canned	372	0			0.003 - 0.012	NT
Potatoes	744	2	0.3	0.004 - 0.006	0.003 - 0.012	0.1
Spinach	298	0			0.010 - 0.012	NT
Strawberries (V-1)	744	1	0.1	0.051 ^	0.012 - 0.035	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.010 - 0.012	0.1
TOTAL	5,596	42				
Oxychlorane (metabolite of Chlordane)						
Apples	534	0			0.002 - 0.008	0.1 AL
Cilantro	170	0			0.008 ^	NT
Cucumbers	534	0			0.002 - 0.008	0.1 AL
Green Onions	<u>558</u>	<u>0</u>			0.002 - 0.008	0.1 AL
TOTAL	1,796	0				
Oxydemeton methyl (insecticide)						
Grapes	534	0			0.003 ^	NT
Oranges	534	0			0.010 ^	1.0
Spinach	88	0			0.010 ^	NT
Strawberries	534	0			0.003 ^	2.0
Sweet Corn, Fresh	467	0			0.008 ^	0.5
Sweet Corn, Frozen	67	0			0.008 ^	0.5
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	NT
TOTAL	2,753	0				
Oxydemeton methyl sulfone (metabolite of Oxydemeton methyl)						
Apples	744	0			0.006 - 0.012	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.012 ^	NT
Cucumbers	744	0			0.006 - 0.020	1.0
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.040 ^	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	744	0			0.006 - 0.010	1.0
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach (V-1)	726	1	0.1	0.032 ^	0.006 - 0.020	NT
Strawberries	210	0			0.006 ^	2.0
Sweet Corn, Fresh	668	0			0.006 - 0.008	0.5
Sweet Corn, Frozen	75	0			0.006 - 0.008	0.5
Sweet Potatoes	<u>739</u>	<u>0</u>			0.006 - 0.010	NT
TOTAL	6,232	1				
Oxyfluorfen (herbicide)						
Apples	744	0			0.003 - 0.030	0.05
Asparagus	210	0			0.030 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.003 - 0.030	NT
Garbanzo Beans, Canned	51	0			0.030 ^	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
Grapes	210	0			0.030 ^	0.05
Green Onions (V-1)	558	1	0.2	0.005 ^	0.003 ^	NT
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	210	0			0.030 ^	NT
Pears	742	0			0.037 ^	0.05
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 ^	NT
Spinach	210	0			0.030 ^	NT
Strawberries	210	0			0.030 ^	NT
Sweet Corn, Fresh	167	0			0.030 ^	NT
Sweet Corn, Frozen	6	0			0.030 ^	NT
Sweet Potatoes	210	0			0.030 ^	NT
TOTAL	4,825	1				
Parathion (insecticide)						
Apples	744	0			0.002 - 0.003	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	744	0			0.002 - 0.040	NT
Green Onions	558	0			0.010 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	656	0			0.002 - 0.008	NT
Strawberries	744	0			0.002 - 0.040	NT
Sweet Corn, Fresh	668	0			0.002 - 0.040	1.0
Sweet Corn, Frozen	75	0			0.002 - 0.040	1.0
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	5,983	0				
Parathion methyl (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.010	NT
Grapes	210	0			0.002 ^	NT
Green Onions	528	0			0.008 - 0.040	1.0
Kidney Beans, Canned	186	0			0.002 - 0.010	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.010	NT
Potatoes	744	0			0.002 - 0.010	0.1
Spinach	656	0			0.002 - 0.004	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.080	1.0
Sweet Corn, Frozen	75	0			0.002 - 0.080	1.0
Sweet Potatoes	210	0			0.002 ^	0.1
TOTAL	5,953	0				
Parathion methyl oxygen analog (metabolite of Parathion methyl)						
Apples	744	0			0.003 - 0.005	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	744	0			0.003 - 0.005	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.020	NT
Grapes	210	0			0.003 ^	NT
Green Onions	558	0			0.005 ^	1.0
Kidney Beans, Canned	186	0			0.003 - 0.020	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	372	0			0.003 - 0.020	NT
Potatoes	744	0			0.003 - 0.020	0.1
Spinach	210	0			0.003 ^	NT
Strawberries	210	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
Sweet Corn, Fresh	668	0			0.003 - 0.032	1.0
Sweet Corn, Frozen	75	0			0.003 - 0.032	1.0
Sweet Potatoes	<u>210</u>	<u>0</u>			0.003 ^	0.1
TOTAL	5,537	0				
Parathion oxygen analog (metabolite of Parathion)						
Apples	744	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	744	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Green Onions	558	0			0.010 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	1.0
Sweet Corn, Frozen	8	0			0.003 ^	1.0
Sweet Potatoes	<u>210</u>	<u>0</u>			0.003 ^	NT
TOTAL	3,935	0				
Pendimethalin (herbicide)						
Apples	744	11	1.5	0.004 - 0.021	0.002 - 0.021	0.10
Asparagus	744	0			0.021 - 0.050	0.15
Cilantro (V-12)	184	12	6.5	0.004 - 0.062	0.002 ^	NT
Cucumbers	744	0			0.002 - 0.021	NT
Garbanzo Beans, Canned	51	0			0.021 ^	0.10
Grapes	744	0			0.021 - 0.030	0.1
Green Onions	558	0			0.002 ^	0.20
Kidney Beans, Canned	54	0			0.021 ^	0.10
Oranges	744	0			0.015 - 0.021	0.1
Pears	742	0			0.046 ^	0.10
Pinto Beans, Canned	105	0			0.021 ^	0.10
Potatoes	210	0			0.021 ^	0.1
Spinach	678	0			0.015 - 0.021	NT
Strawberries	744	0			0.021 - 0.030	0.10
Sweet Corn, Fresh	668	0			0.021 - 0.050	0.1
Sweet Corn, Frozen	75	0			0.021 - 0.050	0.1
Sweet Potatoes	739	0			0.015 - 0.021	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.15 ^	0.10
TOTAL	9,270	23				
Pentachloroaniline - PCA (metabolite of Quintozene)						
Apples	534	0			0.001 ^	NT
Cilantro (V-11)	184	11	6.0	0.002 - 0.075	0.001 ^	NT
Cucumbers (V-5)	534	5	0.9	0.002 ^	0.001 - 0.005	NT
Garbanzo Beans, Canned	135	0			0.002 ^	0.1
Green Onions (V-1)	558	1	0.2	0.002 ^	0.001 ^	NT
Kidney Beans, Canned	132	0			0.010 ^	0.1
Oranges	534	0			0.030 ^	NT
Pinto Beans, Canned	267	0			0.002 - 0.010	0.1
Potatoes	534	27	5.1	0.002 - 0.028	0.002 - 0.010	0.1
Spinach	534	0			0.030 - 0.060	NT
Sweet Potatoes	529	0			0.030 ^	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.011 ^	0.1
TOTAL	5,217	44				
Pentachlorobenzene - PCB (metabolite of Quintozene)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro (V-2)	168	2	1.2	0.003 - 0.010	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
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	186	0			0.002 ^	0.1
Grapes	210	0			0.002 ^	NT
Green Onions	542	0			0.002 - 0.013	NT
Kidney Beans, Canned	186	0			0.002 ^	0.1
Oranges	722	0			0.002 - 0.005	NT
Pinto Beans, Canned	372	0			0.002 ^	0.1
Potatoes	744	35	4.7	0.002 - 0.031	0.002 ^	0.1
Spinach	630	0			0.002 - 0.005	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	739	0			0.002 - 0.005	NT
Tomato Paste	742	0			0.010 ^	0.1
TOTAL	7,358	37				
Pentachlorophenyl methyl sulfide (metabolite of Quintozene)						
Apples	534	0			0.001 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	534	0			0.001 ^	NT
Garbanzo Beans, Canned	135	0			0.001 ^	0.1
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	132	0			0.010 ^	0.1
Oranges	490	0			0.005 ^	NT
Pinto Beans, Canned	267	0			0.001 - 0.010	0.1
Potatoes	534	22	4.1	0.001 - 0.030	0.001 - 0.010	0.1
Spinach	512	0			0.005 - 0.010	NT
Sweet Potatoes	464	0			0.005 ^	NT
TOTAL	4,344	22				
Permethrin Total (insecticide)						
Asparagus	534	0			0.050 ^	2.0
Oranges	534	0			0.10 ^	NT
Spinach	534	278	52.1	0.10 - 19	0.10 ^	20
Sweet Corn, Fresh	467	0			0.050 ^	0.10
Sweet Corn, Frozen	67	0			0.050 ^	0.10
Sweet Potatoes	528	0			0.10 ^	NT
TOTAL	2,664	278				
Permethrin cis (isomer of Permethrin)						
Apples	744	1	0.1	0.004 ^	0.002 - 0.015	0.05
Asparagus	210	0			0.015 ^	2.0
Cilantro (V-6)	184	6	3.3	0.010 - 0.73	0.008 ^	NT
Cucumbers	744	12	1.6	0.004 - 0.037	0.002 - 0.015	1.5
Garbanzo Beans, Canned	186	0			0.012 - 0.015	NT
Grapes	744	0			0.006 - 0.015	NT
Green Onions (V-6)	558	6	1.1	0.004 - 0.028	0.002 - 0.016	NT
Kidney Beans, Canned	186	0			0.012 - 0.015	NT
Lettuce, Organic	387	0			0.050 ^	20
Oranges	210	0			0.015 ^	NT
Pears (X-1)	742	1	0.1	0.25 ^	0.024 ^	0.05
Pinto Beans, Canned	372	0			0.012 - 0.015	NT
Potatoes	744	0			0.012 - 0.015	0.05
Spinach	210	106	50.5	0.025 - 6.0	0.015 ^	20
Strawberries	744	0			0.006 - 0.015	NT
Sweet Corn, Fresh	201	0			0.015 ^	0.10
Sweet Corn, Frozen	8	0			0.015 ^	0.10
Sweet Potatoes	210	0			0.015 ^	NT
Tomato Paste	742	0			0.040 ^	2.0
TOTAL	8,126	132				
Permethrin trans (isomer of Permethrin)						
Apples	744	0			0.008 - 0.015	0.05
Asparagus	210	0			0.015 ^	2.0

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
Cilantro (V-6)	184	6	3.3	0.009 - 0.79	0.008 ^	NT
Cucumbers	744	3	0.4	0.004 - 0.052	0.002 - 0.015	1.5
Garbanzo Beans, Canned	186	0			0.013 - 0.015	NT
Grapes	744	0			0.006 - 0.015	NT
Green Onions (V-3)	542	3	0.6	0.009 - 0.053	0.008 - 0.016	NT
Kidney Beans, Canned	186	0			0.013 - 0.015	NT
Lettuce, Organic	387	0			0.050 ^	20
Oranges	210	0			0.015 ^	NT
Pears (X-1)	742	1	0.1	0.30 ^	0.024 ^	0.05
Pinto Beans, Canned	372	0			0.013 - 0.015	NT
Potatoes	744	0			0.013 - 0.015	0.05
Spinach	210	106	50.5	0.025 - 7.6	0.015 ^	20
Strawberries	744	0			0.006 - 0.018	NT
Sweet Corn, Fresh	185	0			0.015 ^	0.10
Sweet Corn, Frozen	6	0			0.015 ^	0.10
Sweet Potatoes	210	0			0.015 ^	NT
Tomato Paste	742	0			0.039 ^	2.0
TOTAL	8,092	119				
Phenmedipham (herbicide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	4.0
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	2,309	0				
Phenothrin (insecticide)						
Apples	744	0			0.002 - 0.016	NT
Asparagus	744	0			0.015 - 0.20	NT
Cucumbers	594	0			0.002 - 0.021	NT
Garbanzo Beans, Canned	186	0			0.015 - 0.025	NT
Grapes	744	0			0.015 - 0.035	NT
Green Onions	558	0			0.002 - 0.033	NT
Kidney Beans, Canned	186	0			0.015 - 0.025	NT
Lettuce, Organic	387	0			0.20 ^	NT
Oranges	744	0			0.015 - 0.075	NT
Pinto Beans, Canned	372	0			0.015 - 0.025	NT
Potatoes	744	0			0.015 - 0.025	NT
Spinach	744	0			0.015 - 0.38	NT
Strawberries	744	0			0.015 - 0.035	NT
Sweet Corn, Fresh	668	0			0.015 - 0.20	NT
Sweet Corn, Frozen	75	0			0.015 - 0.20	NT
Sweet Potatoes	738	0			0.015 - 0.075	NT
TOTAL	8,972	0				
Phenthoate (insecticide)						
Apples	534	0			0.006 ^	NT
Cilantro	184	0			0.020 ^	NT
Cucumbers	534	0			0.006 ^	NT
Green Onions	558	0			0.006 ^	NT
TOTAL	1,810	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
o-Phenylphenol (fungicide)						
Apples	744	10	1.3	0.005 - 0.047	0.003 - 0.012	25
Cucumbers	744	19	2.6	0.005 - 2.8	0.003 - 0.012	10
Oranges	210	2	1.0	0.020 - 0.082	0.012 ^	10
Pears	742	192	25.9	0.017 - 10.6	0.010 ^	25.0
Spinach	446	0			0.015 ^	NT
Sweet Potatoes	210	0			0.012 ^	15
Tomato Paste	<u>742</u>	<u>2</u>	0.3	0.052 ^	0.031 ^	10
TOTAL	3,838	225				
Phorate (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	0.05
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.020	0.05
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 - 0.006	NT
Kidney Beans, Canned	186	0			0.002 - 0.020	0.05
Oranges	700	0			0.002 - 0.010	NT
Pinto Beans, Canned	372	0			0.002 - 0.020	0.05
Potatoes	744	0			0.002 - 0.020	0.2
Spinach	656	0			0.002 - 0.004	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.10	0.05
Sweet Corn, Frozen	75	0			0.002 - 0.10	0.05
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	6,657	0				
Phorate oxygen analog (metabolite of Phorate)						
Apples	744	0			0.001 - 0.002	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	0			0.001 - 0.002	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.010	0.05
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.010	0.05
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.010	0.05
Potatoes	744	0			0.002 - 0.010	0.2
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.080	0.05
Sweet Corn, Frozen	75	0			0.002 - 0.080	0.05
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	5,721	0				
Phorate sulfone (metabolite of Phorate)						
Apples	744	0			0.002 - 0.003	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.010	0.05
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.010	0.05
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.010	0.05
Potatoes	744	6	0.8	0.004 - 0.036	0.002 - 0.010	0.2
Spinach	656	0			0.002 - 0.012	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.080	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
Sweet Corn, Frozen	75	0			0.002 - 0.080	0.05
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	6,167	6				
Phorate sulfoxide (metabolite of Phorate)						
Apples	744	0			0.006 - 0.009	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.009 ^	NT
Cucumbers	744	0			0.006 - 0.009	NT
Garbanzo Beans, Canned	186	0			0.006 - 0.010	0.05
Grapes	210	0			0.006 ^	NT
Kidney Beans, Canned	186	0			0.006 - 0.010	0.05
Oranges	744	0			0.006 - 0.010	NT
Pinto Beans, Canned	372	0			0.006 - 0.010	0.05
Potatoes	744	10	1.3	0.010 - 0.080	0.006 - 0.010	0.2
Spinach	656	0			0.006 - 0.012	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	668	0			0.006 - 0.010	0.05
Sweet Corn, Frozen	75	0			0.006 - 0.010	0.05
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	6,143	10				
Phosalone (insecticide)						
Apples	744	0			0.002 - 0.003	10.0
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	722	0			0.003 - 0.052	10.0
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.050	NT
Pears	742	0			0.039 ^	10.0
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	744	0			0.003 - 0.052	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	716	0			0.003 - 0.050	NT
TOTAL	6,947	0				
Phosmet (insecticide)						
Apples	744	104	14.0	0.005 - 1.2	0.003 - 0.005	10
Asparagus	744	0			0.003 - 0.013	NT
Cilantro	184	0			0.005 ^	NT
Cucumbers	744	0			0.003 - 0.005	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.010	NT
Grapes	744	17	2.3	0.005 - 0.53	0.003 - 0.050	10
Green Onions	558	0			0.005 ^	NT
Kidney Beans, Canned	186	0			0.003 - 0.010	NT
Lettuce, Organic	387	0			0.013 ^	NT
Oranges	700	0			0.003 - 0.025	5
Pears	742	72	9.7	0.008 - 1.3	0.005 ^	10
Pinto Beans, Canned	372	0			0.003 - 0.010	NT
Potatoes	744	0			0.003 - 0.010	0.1
Spinach	656	0			0.003 - 0.008	NT
Strawberries	744	0			0.003 - 0.050	NT
Sweet Corn, Fresh	668	0			0.003 - 0.013	NT
Sweet Corn, Frozen	75	0			0.003 - 0.013	NT
Sweet Potatoes	716	1	0.1	0.18 ^	0.003 - 0.025	10
TOTAL	9,894	194				

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
Phosmet oxygen analog (metabolite of Phosmet)						
Asparagus	534	0			0.010 ^	NT
Lettuce, Organic (V-3)	387	3	0.8	0.17 - 0.22	0.053 ^	NT
Sweet Corn, Fresh	467	0			0.010 ^	NT
Sweet Corn, Frozen	67	0			0.010 ^	NT
TOTAL	1,455	3				
Phosphamidon (insecticide)						
Apples	744	0			0.003 - 0.006	1.0
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.003 - 0.006	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	744	0			0.006 - 0.010	NT
Pinto Beans, Canned	105	0			0.006 ^	NT
Potatoes	210	0			0.006 ^	NT
Spinach	656	0			0.006 - 0.015	NT
Strawberries	210	0			0.006 ^	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	5,099	0				
Piperonyl butoxide (insecticide)						
Apples	729	1	0.1	0.031 ^	0.005 - 0.009	8
Asparagus	744	0			0.009 - 0.025	10
Cilantro	168	0			0.005 ^	10
Cucumbers	744	0			0.005 - 0.009	10
Garbanzo Beans, Canned	186	1	0.5	0.038 ^	0.009 - 0.023	8
Grapes	744	0			0.009 - 0.033	8
Green Onions	558	4	0.7	0.008 ^	0.005 ^	10
Kidney Beans, Canned	186	0			0.009 - 0.023	8
Oranges	744	0			0.009 - 0.015	8
Pears	742	0			0.043 ^	8
Pinto Beans, Canned	372	0			0.009 - 0.023	8
Potatoes	744	0			0.009 - 0.023	0.25
Spinach	744	0			0.009 - 0.030	10
Strawberries	744	16	2.2	0.015 - 0.74	0.009 - 0.033	10
Sweet Corn, Fresh	668	0			0.009 - 0.025	20
Sweet Corn, Frozen	75	0			0.009 - 0.025	20
Sweet Potatoes	738	17	2.3	0.015 - 0.087	0.009 - 0.015	0.25
Tomato Paste	742	0			0.14 ^	8
TOTAL	10,372	39				
Pirimicarb (insecticide)						
Apples	534	0			0.010 ^	NT
Cilantro	184	0			0.010 ^	NT
Cucumbers	534	0			0.010 ^	NT
Green Onions	558	0			0.010 ^	NT
Oranges	534	0			0.005 ^	NT
Spinach	534	0			0.005 ^	NT
Sweet Potatoes	529	0			0.005 ^	NT
TOTAL	3,407	0				
Pirimiphos methyl (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	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
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	744	0			0.002 - 0.013	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	656	0			0.002 - 0.004	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.020	NT
Sweet Corn, Frozen	75	0			0.002 - 0.020	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 - 0.013	NT
TOTAL	6,162	0				
Prallethrin (insecticide)						
Apples	210	0			0.009 ^	1.0
Asparagus	744	0			0.009 - 0.033	1.0
Cucumbers	210	0			0.009 ^	1.0
Garbanzo Beans, Canned	186	0			0.002 - 0.009	1.0
Grapes	744	0			0.009 - 0.050	1.0
Kidney Beans, Canned	186	0			0.002 - 0.009	1.0
Lettuce, Organic	387	0			0.13 ^	1.0
Oranges	744	0			0.009 - 0.010	1.0
Pears	742	0			0.11 ^	1.0
Pinto Beans, Canned	372	0			0.002 - 0.009	1.0
Potatoes	744	0			0.002 - 0.009	1.0
Spinach	744	0			0.009 - 0.010	1.0
Strawberries	744	0			0.009 - 0.050	1.0
Sweet Corn, Fresh	668	0			0.009 - 0.033	1.0
Sweet Corn, Frozen	75	0			0.009 - 0.033	1.0
Sweet Potatoes	739	0			0.009 - 0.010	1.0
Tomato Paste	<u>742</u>	<u>0</u>			0.36 ^	1.0
TOTAL	8,981	0				
Procymidone (fungicide)						
Grapes	534	2	0.4	0.14 - 0.18	0.019 ^	5.0
Strawberries	<u>534</u>	<u>0</u>			0.019 ^	NT
TOTAL	1,068	2				
Profenofos (insecticide)						
Apples	534	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers (V-2)	534	2	0.4	0.003 - 0.008	0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Oranges	490	0			0.010 ^	NT
Spinach	<u>446</u>	<u>0</u>			0.011 ^	NT
TOTAL	2,746	2				
Prometryn (herbicide)						
Apples	744	0			0.007 - 0.009	NT
Asparagus	210	0			0.015 ^	NT
Cilantro	184	13	7.1	0.011 - 0.19	0.007 ^	3.5
Cucumbers	744	0			0.007 - 0.009	NT
Garbanzo Beans, Canned	51	0			0.009 ^	NT
Grapes	210	0			0.009 ^	NT
Green Onions	558	0			0.007 ^	NT
Kidney Beans, Canned	54	0			0.009 ^	NT
Oranges	210	0			0.009 ^	NT
Pinto Beans, Canned	105	0			0.009 ^	NT
Potatoes	210	0			0.009 - 0.020	NT
Spinach	210	0			0.015 ^	NT
Strawberries	210	0			0.009 ^	NT
Sweet Corn, Fresh	201	0			0.009 - 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
Sweet Corn, Frozen	8	0			0.009 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.009 ^	NT
TOTAL	4,119	13				
Pronamide (herbicide)						
Apples	744	0			0.006 - 0.008	0.1
Asparagus	210	0			0.008 ^	NT
Cilantro (V-1)	184	1	0.5	0.024 ^	0.006 ^	NT
Cucumbers	744	0			0.006 - 0.008	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.008	NT
Grapes	744	0			0.008 - 0.015	0.1
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.008	NT
Oranges	744	0			0.008 - 0.025	NT
Pears	742	0			0.014 ^	0.1
Pinto Beans, Canned	372	0			0.001 - 0.008	NT
Potatoes	744	0			0.001 - 0.008	NT
Spinach	210	0			0.008 ^	NT
Strawberries	744	0			0.008 - 0.015	NT
Sweet Corn, Fresh	201	0			0.008 ^	NT
Sweet Corn, Frozen	8	0			0.008 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.008 - 0.025	NT
TOTAL	8,060	1				
Propamocarb hydrochloride (fungicide)						
Oranges	534	0			0.010 ^	NT
Spinach	88	0			0.010 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	NT
TOTAL	1,151	0				
Propargite (insecticide)						
Apples (V-4)	744	4	0.5	0.005 - 0.044	0.003 - 0.088	NT
Asparagus	210	0			0.003 ^	NT
Cilantro	168	0			0.088 ^	NT
Cucumbers	744	0			0.003 - 0.18	NT
Garbanzo Beans, Canned	186	0			0.003 - 0.045	NT
Grapes	744	0			0.003 - 0.090	10.0
Green Onions	558	0			0.026 - 0.088	NT
Kidney Beans, Canned	186	0			0.003 - 0.045	NT
Oranges	210	0			0.003 ^	10.0
Pinto Beans, Canned	372	0			0.003 - 0.045	NT
Potatoes	744	0			0.003 - 0.045	0.1
Spinach	210	0			0.003 ^	NT
Strawberries	744	0			0.003 - 0.090	NT
Sweet Corn, Fresh	668	0			0.003 - 0.080	0.1
Sweet Corn, Frozen	75	0			0.003 - 0.080	0.1
Sweet Potatoes	<u>210</u>	<u>0</u>			0.003 ^	NT
TOTAL	6,773	4				
Propetamphos (insecticide)						
Apples	744	0			0.002 ^	0.1
Asparagus	744	0			0.002 - 0.16	0.1
Cilantro	184	0			0.002 ^	0.1
Cucumbers	744	0			0.002 ^	0.1
Garbanzo Beans, Canned	186	0			0.002 - 0.010	0.1
Grapes	744	0			0.002 ^	0.1
Green Onions	558	0			0.002 ^	0.1
Kidney Beans, Canned	186	0			0.002 - 0.010	0.1
Oranges	700	0			0.002 - 0.010	0.1
Pears	742	0			0.004 ^	0.1
Pinto Beans, Canned	372	0			0.002 - 0.010	0.1
Potatoes	744	0			0.002 - 0.010	0.1
Spinach	744	0			0.002 - 0.010	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
Strawberries	744	0			0.002 ^	0.1
Sweet Corn, Fresh	668	0			0.002 - 0.040	0.1
Sweet Corn, Frozen	75	0			0.002 - 0.040	0.1
Sweet Potatoes	210	0			0.002 ^	0.1
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.1
TOTAL	9,831	0				
Propam (herbicide)						
Apples	210	0			0.015 ^	NT
Asparagus	210	0			0.015 ^	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	51	0			0.015 - 0.030	NT
Grapes	210	0			0.015 ^	NT
Kidney Beans, Canned	54	0			0.015 ^	NT
Oranges	210	0			0.021 ^	NT
Pinto Beans, Canned	105	0			0.015 ^	NT
Potatoes	210	0			0.015 - 0.030	NT
Spinach	210	0			0.015 ^	NT
Strawberries	210	0			0.015 ^	NT
Sweet Corn, Fresh	201	0			0.015 ^	NT
Sweet Corn, Frozen	8	0			0.015 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.015 ^	NT
TOTAL	2,309	0				
Propiconazole (fungicide)						
Apples	534	0			0.008 ^	NT
Cilantro	184	0			0.008 ^	13
Cucumbers	534	0			0.008 ^	NT
Grapes	534	0			0.003 ^	1.0
Green Onions	558	0			0.008 ^	9.0
Kidney Beans, Canned	132	0			0.035 ^	NT
Oranges	534	0			0.010 ^	NT
Pinto Beans, Canned	44	0			0.035 ^	NT
Potatoes	132	0			0.035 ^	NT
Spinach	88	0			0.010 ^	NT
Strawberries	534	55	10.3	0.004 - 0.47	0.003 ^	1.3
Sweet Corn, Fresh	467	0			0.080 ^	0.1
Sweet Corn, Frozen	67	0			0.080 ^	0.1
Sweet Potatoes	<u>529</u>	<u>0</u>			0.010 ^	NT
TOTAL	4,871	55				
Propiconazole I (isomer of Propiconazole)						
Apples	210	0			0.030 ^	NT
Asparagus	210	0			0.030 ^	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	51	0			0.030 ^	NT
Grapes	210	0			0.030 ^	1.0
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	210	0			0.030 ^	NT
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 ^	NT
Spinach	210	0			0.030 ^	NT
Strawberries	210	3	1.4	0.050 ^	0.030 ^	1.3
Sweet Corn, Fresh	201	0			0.030 - 0.060	0.1
Sweet Corn, Frozen	8	0			0.030 ^	0.1
Sweet Potatoes	<u>210</u>	<u>0</u>			0.030 ^	NT
TOTAL	2,309	3				
Propiconazole II (isomer of Propiconazole)						
Apples	210	0			0.030 ^	NT
Asparagus	210	0			0.030 ^	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	51	0			0.030 ^	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
Grapes	210	0			0.030 ^	1.0
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	210	0			0.030 ^	NT
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 ^	NT
Spinach	210	0			0.030 ^	NT
Strawberries	210	5	2.4	0.050 - 0.10	0.030 ^	1.3
Sweet Corn, Fresh	201	0			0.030 - 0.060	0.1
Sweet Corn, Frozen	8	0			0.030 ^	0.1
Sweet Potatoes	210	0			0.030 ^	NT
TOTAL	2,309	5				
Pymetrozine (insecticide)						
Cilantro	184	0			0.005 ^	NT
Cucumbers	534	2	0.4	0.008 - 0.038	0.005 ^	0.1
Green Onions	526	0			0.005 ^	NT
Spinach	446	1	0.2	0.015 ^	0.010 ^	0.6
Sweet Potatoes	529	0			0.010 ^	0.02
TOTAL	2,219	3				
Pyraclostrobin (fungicide)						
Apples	744	119	16.0	0.002 - 0.11	0.001 - 0.004	1.5
Asparagus	210	0			0.002 ^	NT
Cilantro (V-7)	184	7	3.8	0.002 - 0.091	0.001 - 0.004	NT
Cucumbers	744	36	4.8	0.002 - 0.018	0.001 - 0.004	0.5
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.5
Grapes	744	337	45.3	0.001 - 0.51	0.001 - 0.002	2.0
Green Onions	480	1	0.2	0.006 ^	0.004 - 0.018	0.9
Kidney Beans, Canned	186	0			0.002 - 0.003	0.5
Oranges	744	1	0.1	0.003 ^	0.002 - 0.003	2.0
Pears	742	13	1.8	0.025 - 0.12	0.015 ^	1.5
Pinto Beans, Canned	372	0			0.002 - 0.003	0.5
Potatoes	744	0			0.002 - 0.003	0.04
Spinach	744	70	9.4	0.003 - 2.9	0.002 - 0.003	29.0
Strawberries	744	324	43.5	0.001 - 0.61	0.001 - 0.002	1.2
Sweet Corn, Fresh	668	0			0.002 - 0.040	0.04
Sweet Corn, Frozen	75	0			0.002 - 0.040	0.04
Sweet Potatoes	739	0			0.002 - 0.003	0.04
Tomato Paste	742	0			0.049 ^	1.4
TOTAL	9,792	908				
Pyrethrins (insecticide)						
Grapes	534	0			0.099 ^	1.0
Strawberries	534	0			0.099 ^	1.0
TOTAL	1,068	0				
Pyrethrum (natural pyrethrins) (insecticide)						
Lettuce, Organic	387	0			0.13 ^	1.0
TOTAL	387	0				
Pyridaben (insecticide, acaricide)						
Apples	210	1	0.5	0.025 ^	0.015 ^	0.5
Asparagus	210	0			0.015 ^	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	51	0			0.015 ^	NT
Grapes	722	1	0.1	0.18 ^	0.001 - 0.015	1.5
Kidney Beans, Canned	186	0			0.015 - 0.021	NT
Oranges	744	0			0.013 - 0.030	0.5
Pears	742	3	0.4	0.070 ^	0.042 ^	0.75
Pinto Beans, Canned	149	0			0.015 - 0.021	NT
Potatoes	342	0			0.015 - 0.021	NT
Spinach	210	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
Strawberries	744	0			0.001 - 0.015	2.5
Sweet Corn, Fresh	185	0			0.015 - 0.060	NT
Sweet Corn, Frozen	6	0			0.015 - 0.050	NT
Sweet Potatoes	738	0			0.013 - 0.015	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.11 ^	0.15
TOTAL	6,191	5				
Pyrimethanil (fungicide)						
Apples	744	427	57.4	0.002 - 6.0	0.001 - 0.003	14
Asparagus	210	0			0.003 ^	NT
Cilantro (V-15)	184	15	8.2	0.002 - 0.008	0.001 ^	NT
Cucumbers (V-25)	744	25	3.4	0.002 - 0.066	0.001 - 0.003	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	98	13.2	0.001 - 1.7	0.001 - 0.003	5.0
Green Onions	558	1	0.2	0.003 ^	0.001 ^	2.0
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	6	0.8	0.003 - 0.037	0.003 ^	10
Pears	742	247	33.3	0.082 - 6.5	0.049 ^	14
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	0.05
Spinach	744	0			0.003 ^	NT
Strawberries (X-2)	744	274	36.8	0.001 - 5.7	0.001 - 0.003	3.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	0			0.003 ^	0.05
Tomato Paste	<u>742</u>	<u>0</u>			0.16 ^	0.50
TOTAL	8,268	1,093				
Pyriproxyfen (insecticide, growth regulator)						
Apples	744	0			0.013 - 0.015	0.2
Asparagus	744	0			0.015 ^	0.10
Cilantro	184	0			0.013 ^	0.10
Cucumbers	744	0			0.013 - 0.015	0.10
Garbanzo Beans, Canned	186	0			0.001 - 0.015	0.20
Grapes	744	0			0.001 - 0.015	2.5
Green Onions	558	0			0.013 ^	0.70
Kidney Beans, Canned	186	0			0.015 - 0.016	0.20
Oranges	744	0			0.015 - 0.018	0.3
Pears	742	0			0.042 ^	0.2
Pinto Beans, Canned	372	0			0.001 - 0.016	0.20
Potatoes	744	0			0.001 - 0.016	0.15
Spinach	210	0			0.015 ^	0.10
Strawberries	744	7	0.9	0.001 - 0.077	0.001 - 0.015	0.30
Sweet Corn, Fresh	668	0			0.015 - 0.060	1.1
Sweet Corn, Frozen	75	0			0.015 ^	1.1
Sweet Potatoes	738	0			0.015 ^	0.15
Tomato Paste	<u>742</u>	<u>0</u>			0.14 ^	0.2
TOTAL	9,869	7				
Quinoxifen (fungicide)						
Apples	729	0			0.002 - 0.008	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers (V-6)	744	6	0.8	0.003 - 0.004	0.002 - 0.008	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	58	27.6	0.003 - 0.11	0.002 ^	0.60
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	744	0			0.002 - 0.010	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	298	0			0.002 - 0.010	NT
Strawberries	210	29	13.8	0.003 - 0.090	0.002 ^	0.90
Sweet Corn, Fresh	201	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
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 - 0.010	NT
TOTAL	4,697	93				
Quintozene - PCNB (fungicide) (parent of HCB, PCA and PCB)						
Apples	744	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cilantro (V-4)	184	4	2.2	0.005 - 0.30	0.003 ^	NT
Cucumbers	729	0			0.003 ^	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.1
Grapes	744	0			0.003 - 0.021	NT
Kidney Beans, Canned	186	0			0.002 - 0.003	0.1
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.003	0.1
Potatoes	744	10	1.3	0.002 - 0.016	0.002 - 0.003	0.1
Spinach (V-1)	656	1	0.2	0.014 ^	0.003 - 0.005	NT
Strawberries	744	0			0.003 - 0.021	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	717	0			0.003 - 0.005	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.013 ^	0.1
TOTAL	7,377	15				
Resmethrin (insecticide)						
Grapes	445	0			0.070 ^	3.0
Lettuce, Organic	387	0			0.20 ^	3.0
Oranges	534	0			0.030 - 0.15	3.0
Spinach	490	0			0.030 - 0.15	3.0
Strawberries	534	0			0.070 ^	3.0
Sweet Corn, Fresh	467	0			0.030 ^	3.0
Sweet Corn, Frozen	67	0			0.030 ^	3.0
Sweet Potatoes	528	0			0.030 - 0.15	3.0
Tomato Paste	<u>742</u>	<u>0</u>			0.11 ^	3.0
TOTAL	4,194	0				
Resmethrin-c (isomer of Resmethrin)						
Apples	354	0			0.008 ^	3.0
Cucumbers	534	0			0.002 - 0.016	3.0
Garbanzo Beans, Canned	135	0			0.025 ^	3.0
Green Onions	558	0			0.002 - 0.008	3.0
Kidney Beans, Canned	132	0			0.025 ^	3.0
Pinto Beans, Canned	267	0			0.025 ^	3.0
Potatoes	<u>534</u>	<u>0</u>			0.025 ^	3.0
TOTAL	2,514	0				
Resmethrin-t (isomer of Resmethrin)						
Apples	385	0			0.008 ^	3.0
Asparagus	210	0			0.030 ^	3.0
Cilantro	168	0			0.008 - 0.016	3.0
Cucumbers	534	0			0.002 - 0.016	3.0
Garbanzo Beans, Canned	186	0			0.025 - 0.030	3.0
Green Onions	558	0			0.002 - 0.008	3.0
Kidney Beans, Canned	186	0			0.025 - 0.030	3.0
Oranges	210	0			0.030 ^	3.0
Pinto Beans, Canned	372	0			0.025 - 0.030	3.0
Potatoes	744	0			0.025 - 0.030	3.0
Sweet Corn, Fresh	201	0			0.030 ^	3.0
Sweet Corn, Frozen	8	0			0.030 ^	3.0
Sweet Potatoes	<u>174</u>	<u>0</u>			0.030 ^	3.0
TOTAL	3,936	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
Rotenone (insecticide)						
Lettuce, Organic	387	0			0.010 ^	NT
TOTAL	387	0				
Salannin (insecticide)						
Lettuce, Organic	387	0			0.050 ^	NT
TOTAL	387	0				
Sethoxydim (herbicide)						
Cucumbers	18	0			0.003 ^	4.0
Grapes	534	0			0.007 ^	1.0
Strawberries	534	0			0.007 - 0.013	10
TOTAL	1,086	0				
Simazine (herbicide)						
Apples	744	0			0.002 - 0.003	0.20
Asparagus	744	0			0.003 - 0.030	NT
Cucumbers	744	0			0.002 - 0.003	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	0			0.003 - 0.005	0.20
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	2	1.0	0.005 ^	0.003 ^	0.25
Pears	742	0			0.022 - 0.023	0.25
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	744	0			0.003 - 0.005	0.25
Sweet Corn, Fresh	668	0			0.003 - 0.030	0.25
Sweet Corn, Frozen	75	0			0.003 - 0.030	0.25
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	6,813	2				
Spinetoram (insecticide)						
Apples	519	18	3.5	0.002 - 0.008	0.001 ^	0.20
Cilantro	184	2	1.1	0.021 - 0.029	0.006 ^	3.0
Cucumbers	534	2	0.4	0.002 - 0.017	0.001 ^	0.30
Green Onions	542	27	5.0	0.002 - 0.019	0.001 ^	2.0
Pears	742	30	4.0	0.025 - 0.064	0.015 ^	0.20
TOTAL	2,521	79				
Spinosad (insecticide) (total of spinosyns A and D)						
Apples	534	1	0.2	0.002 ^	0.001 ^	0.20
Cilantro	184	2	1.1	0.016 - 0.030	0.003 ^	8.0
Cucumbers	534	5	0.9	0.002 - 0.031	0.001 ^	0.3
Green Onions	542	62	11.4	0.002 - 0.037	0.001 ^	2.0
Lettuce, Organic	387	71	18.3	0.002 - 0.40	0.002 ^	8.0
Pears	742	0			0.015 ^	0.20
TOTAL	2,923	141				
Spinosad A (isomer of Spinosad)						
Apples	210	4	1.9	0.003 - 0.006	0.002 ^	0.20
Asparagus	210	0			0.002 ^	0.2
Cucumbers	210	1	0.5	0.014 ^	0.002 ^	0.3
Garbanzo Beans, Canned	51	0			0.002 ^	0.02
Grapes	744	43	5.8	0.001 - 0.041	0.001 - 0.002	0.50
Kidney Beans, Canned	54	0			0.002 ^	0.02
Oranges	722	0			0.002 ^	0.3
Pinto Beans, Canned	105	0			0.002 ^	0.02
Potatoes	210	0			0.002 ^	0.10
Spinach	744	264	35.5	0.002 - 1.1	0.002 ^	8.0
Strawberries	744	84	11.3	0.001 - 0.20	0.001 - 0.002	1.0
Sweet Corn, Fresh	201	0			0.002 ^	0.02

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
Sweet Corn, Frozen	8	0			0.002 ^	0.02
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 ^	0.10
TOTAL	4,952	396				
Spinosad D (isomer of Spinosad)						
Apples	210	0			0.002 ^	0.20
Asparagus	210	0			0.002 ^	0.2
Cucumbers	210	0			0.002 ^	0.3
Garbanzo Beans, Canned	51	0			0.002 ^	0.02
Grapes	744	23	3.1	0.001 - 0.013	0.001 - 0.002	0.50
Kidney Beans, Canned	54	0			0.002 ^	0.02
Oranges	744	0			0.002 ^	0.3
Pinto Beans, Canned	105	0			0.002 ^	0.02
Potatoes	210	0			0.002 ^	0.10
Spinach	744	188	25.3	0.002 - 0.28	0.002 ^	8.0
Strawberries	744	50	6.7	0.001 - 0.040	0.001 - 0.002	1.0
Sweet Corn, Fresh	201	0			0.002 ^	0.02
Sweet Corn, Frozen	8	0			0.002 ^	0.02
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 ^	0.10
TOTAL	4,974	261				
Spirodiclofen (acaricide)						
Grapes	422	3	0.7	0.021 - 0.070	0.012 ^	2.0
Oranges	534	0			0.010 ^	0.50
Pears	742	17	2.3	0.036 - 0.15	0.022 ^	0.80
Strawberries	<u>422</u>	<u>0</u>			0.012 ^	NT
TOTAL	2,120	20				
Spiromesifen Total (parent + enol metabolite) (insecticide)						
Apples	534	0			0.006 ^	NT
Cilantro	184	0			0.006 - 0.040	NT
Cucumbers	534	0			0.006 - 0.020	0.10
Green Onions	<u>512</u>	<u>0</u>			0.020 - 0.040	NT
TOTAL	1,764	0				
Spiromesifen (insecticide)						
Apples	210	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cucumbers	210	1	0.5	0.026 ^	0.003 ^	0.10
Garbanzo Beans, Canned	51	0			0.003 ^	0.10
Grapes	210	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	0.10
Oranges	744	0			0.002 - 0.003	NT
Pinto Beans, Canned	105	0			0.003 ^	0.10
Potatoes	210	0			0.003 ^	0.02
Spinach	700	3	0.4	0.005 - 0.37	0.002 - 0.003	12
Strawberries	210	27	12.9	0.005 - 0.21	0.003 ^	2.0
Sweet Corn, Fresh	201	0			0.003 ^	0.02
Sweet Corn, Frozen	8	0			0.003 ^	0.02
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 - 0.003	0.02
TOTAL	3,862	31				
Spirotetramat (insecticide)						
Pears	<u>742</u>	<u>4</u>	0.5	0.025 - 0.031	0.015 ^	0.70
TOTAL	742	4				
Sulfentrazone (herbicide)						
Apples	210	0			0.006 ^	NT
Asparagus	210	0			0.006 ^	0.15
Cucumbers	210	0			0.006 ^	NT
Garbanzo Beans, Canned	51	0			0.006 ^	0.1
Grapes	722	0			0.006 - 0.018	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
Kidney Beans, Canned	54	0			0.006 ^	0.1
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	105	0			0.006 ^	0.1
Potatoes	210	0			0.006 ^	0.15
Spinach	210	0			0.006 ^	NT
Strawberries	744	0			0.006 - 0.018	0.60
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.006 ^	NT
TOTAL	3,355	0				
Sulprofos (insecticide)						
Apples	534	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	534	0			0.002 ^	NT
Green Onions	<u>558</u>	<u>0</u>			0.002 ^	NT
TOTAL	1,810	0				
TCMTB (fungicide)						
Sweet Corn, Fresh	467	0			0.010 ^	NT
Sweet Corn, Frozen	<u>67</u>	<u>0</u>			0.010 ^	NT
TOTAL	534	0				
Tebuconazole (fungicide)						
Apples	744	1	0.1	0.007 ^	0.002 - 0.042	0.05
Asparagus	210	0			0.042 ^	0.05
Cilantro (V-3)	184	3	1.6	0.003 - 0.023	0.002 - 0.006	NT
Cucumbers	744	0			0.002 - 0.042	0.09
Garbanzo Beans, Canned	51	0			0.042 ^	0.1
Grapes	744	159	21.4	0.003 - 0.65	0.003 - 0.042	5.0
Green Onions	558	0			0.006 ^	1.3
Kidney Beans, Canned	54	0			0.042 ^	0.1
Oranges	210	0			0.030 ^	NT
Pinto Beans, Canned	105	0			0.042 ^	0.1
Potatoes	210	0			0.042 ^	NT
Spinach	210	0			0.042 ^	NT
Strawberries (V-1)	744	1	0.1	0.003 ^	0.003 - 0.042	NT
Sweet Corn, Fresh	201	0			0.042 - 0.14	0.5
Sweet Corn, Frozen	8	0			0.042 ^	0.5
Sweet Potatoes	<u>210</u>	<u>0</u>			0.042 ^	NT
TOTAL	5,187	164				
Tebufenozide (insecticide)						
Apples	609	1	0.2	0.031 ^	0.003 - 0.010	1.0
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.003 - 0.020	NT
Cucumbers (V-1)	744	1	0.1	0.014 ^	0.003 - 0.010	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	744	2	0.3	0.006 - 0.031	0.003 ^	3.0
Green Onions	558	0			0.010 - 0.020	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	744	0			0.003 - 0.005	0.80
Pears	742	0			0.015 ^	1.5
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	744	2	0.3	0.006 - 0.015	0.003 - 0.005	10.0
Strawberries	744	0			0.003 ^	3.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.003 - 0.005	0.25
TOTAL	7,391	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
Tecnazene (plant growth regulator)						
Apples	534	0			0.005 ^	NT
Cilantro (V-2)	184	2	1.1	0.008 ^	0.005 ^	NT
Cucumbers	534	0			0.005 ^	NT
Green Onions	<u>542</u>	<u>0</u>			0.005 - 0.032	NT
TOTAL	1,794	2				
Tefluthrin (insecticide)						
Apples	744	0			0.002 - 0.006	NT
Asparagus	744	0			0.006 - 0.010	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 - 0.006	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.006	NT
Grapes	744	0			0.006 - 0.015	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.006	NT
Lettuce, Organic	387	0			0.013 ^	NT
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.006	NT
Potatoes	744	0			0.002 - 0.006	NT
Spinach	210	0			0.006 ^	NT
Strawberries	744	0			0.006 - 0.015	NT
Sweet Corn, Fresh	668	0			0.006 - 0.010	0.06
Sweet Corn, Frozen	75	0			0.006 - 0.010	0.06
Sweet Potatoes	<u>210</u>	<u>0</u>			0.006 ^	NT
TOTAL	7,710	0				
Terbacil (herbicide)						
Apples	729	0			0.006 - 0.021	0.3
Asparagus	744	0			0.021 - 0.060	0.4
Cilantro	164	0			0.006 - 0.040	NT
Cucumbers	744	0			0.006 - 0.021	NT
Garbanzo Beans, Canned	51	0			0.030 ^	NT
Grapes	210	0			0.021 ^	NT
Green Onions	558	0			0.006 ^	NT
Kidney Beans, Canned	54	0			0.030 ^	NT
Oranges	193	0			0.021 ^	NT
Pinto Beans, Canned	105	0			0.030 ^	NT
Potatoes	210	0			0.030 - 0.080	NT
Spinach	210	0			0.021 ^	NT
Strawberries	210	0			0.021 ^	0.1
Sweet Corn, Fresh	201	0			0.030 - 0.080	NT
Sweet Corn, Frozen	8	0			0.030 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.030 ^	NT
TOTAL	4,601	0				
Terbufos (insecticide)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	656	0			0.002 - 0.005	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.020	0.05
Sweet Corn, Frozen	75	0			0.002 - 0.020	0.05
Sweet Potatoes	<u>210</u>	<u>0</u>			0.002 ^	NT
TOTAL	5,099	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
Terbufos sulfone (metabolite of Terbufos)						
Apples	744	0			0.002 ^	NT
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.002 ^	NT
Cucumbers	744	0			0.002 ^	NT
Garbanzo Beans, Canned	51	0			0.002 ^	NT
Grapes	210	0			0.002 ^	NT
Green Onions	558	0			0.002 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Oranges	210	0			0.002 ^	NT
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	210	0			0.002 ^	NT
Strawberries	210	0			0.002 ^	NT
Sweet Corn, Fresh	668	0			0.002 - 0.010	0.05
Sweet Corn, Frozen	75	0			0.002 - 0.010	0.05
Sweet Potatoes	210	0			0.002 ^	NT
TOTAL	4,653	0				
Terbufos oxygen analog (metabolite of Terbufos)						
Sweet Corn, Fresh	467	0			0.002 ^	0.05
Sweet Corn, Frozen	67	0			0.002 ^	0.05
TOTAL	534	0				
Tetrachlorvinphos (insecticide)						
Apples	744	0			0.003 ^	NT
Asparagus	210	0			0.003 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.003 ^	NT
Garbanzo Beans, Canned	51	0			0.003 ^	NT
Grapes	210	0			0.003 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.003 ^	NT
Oranges	210	0			0.003 ^	NT
Pinto Beans, Canned	105	0			0.003 ^	NT
Potatoes	210	0			0.003 ^	NT
Spinach	210	0			0.003 ^	NT
Strawberries	210	0			0.003 ^	NT
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	210	0			0.003 ^	NT
TOTAL	4,119	0				
Tetradifon (insecticide)						
Apples	744	0			0.006 - 0.032	NT
Asparagus	210	0			0.006 ^	NT
Cilantro	184	0			0.032 ^	NT
Cucumbers	744	0			0.006 - 0.032	NT
Garbanzo Beans, Canned	186	0			0.002 - 0.006	NT
Grapes	744	0			0.006 - 0.010	NT
Green Onions	558	0			0.032 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.006	NT
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	372	0			0.002 - 0.006	NT
Potatoes	744	0			0.002 - 0.006	NT
Spinach	210	0			0.006 ^	NT
Strawberries	744	0			0.006 - 0.010	NT
Sweet Corn, Fresh	201	0			0.006 ^	NT
Sweet Corn, Frozen	8	0			0.006 ^	NT
Sweet Potatoes	210	0			0.006 ^	NT
TOTAL	6,255	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
Tetrahydrophthalimide - THPI (metabolite of Captafol and Captan)						
Apples	744	118	15.9	0.033 - 0.92	0.020 - 0.16	25.0
Asparagus	210	0			0.090 ^	NT
Cilantro (V-1)	184	1	0.5	0.033 ^	0.020 ^	NT
Cucumbers (X-1)	744	6	0.8	0.033 - 0.23	0.020 - 0.090	0.05
Garbanzo Beans, Canned	186	0			0.071 - 0.090	0.05
Grapes	210	0			0.090 ^	25.0
Green Onions	558	0			0.020 ^	0.05
Kidney Beans, Canned	186	0			0.071 - 0.090	0.05
Oranges	210	0			0.060 ^	NT
Pinto Beans, Canned	372	0			0.071 - 0.090	0.05
Potatoes (X-4)	708	4	0.6	0.15 ^	0.071 - 0.090	0.05
Spinach	210	0			0.090 ^	0.05
Strawberries	210	116	55.2	0.15 - 2.4	0.090 ^	20.0
Sweet Corn, Fresh	183	0			0.090 ^	0.05
Sweet Corn, Frozen	8	0			0.090 ^	0.05
Sweet Potatoes (X-1)	210	1	0.5	0.15 ^	0.090 ^	0.05
TOTAL	5,133	246				
Tetramethrin (insecticide)						
Apples	210	0			0.030 ^	NT
Asparagus	744	0			0.010 - 0.030	NT
Cucumbers	210	0			0.030 ^	NT
Garbanzo Beans, Canned	186	0			0.005 - 0.030	NT
Grapes	744	0			0.020 - 0.030	NT
Kidney Beans, Canned	186	0			0.005 - 0.030	NT
Lettuce, Organic	387	0			0.040 ^	NT
Oranges	744	0			0.010 - 0.030	NT
Pears	742	0			0.059 ^	NT
Pinto Beans, Canned	372	0			0.005 - 0.030	NT
Potatoes	744	0			0.005 - 0.030	NT
Spinach (V-1)	744	1	0.1	0.017 ^	0.010 - 0.030	NT
Strawberries	744	0			0.020 - 0.030	NT
Sweet Corn, Fresh	668	0			0.030 ^	NT
Sweet Corn, Frozen	75	0			0.030 ^	NT
Sweet Potatoes	717	0			0.015 - 0.030	NT
TOTAL	8,217	1				
Thiabendazole (fungicide) (parent of 5-hydroxythiabendazole)						
Apples (X-2)	744	561	75.4	0.002 - 5.9	0.001 - 0.003	5.0
Asparagus (V-1)	210	1	0.5	0.005 ^	0.003 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers (V-9)	744	9	1.2	0.002 - 0.004	0.001 - 0.003	NT
Garbanzo Beans, Canned	186	0			0.003 ^	NT
Grapes	744	0			0.003 ^	NT
Green Onions	558	0			0.001 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.003	NT
Oranges	744	502	67.5	0.005 - 0.38	0.003 - 0.010	10.0
Pinto Beans, Canned (V-1)	372	1	0.3	0.003 ^	0.001 - 0.003	NT
Potatoes	744	60	8.1	0.002 - 1.5	0.001 - 0.030	10.0
Spinach	722	0			0.003 - 0.010	NT
Strawberries	744	6	0.8	0.004 - 0.037	0.003 ^	5.0
Sweet Corn, Fresh	201	0			0.003 ^	NT
Sweet Corn, Frozen	8	0			0.003 ^	NT
Sweet Potatoes	739	3	0.4	0.005 ^	0.003 - 0.010	0.05
TOTAL	7,830	1,143				
Thiacloprid (insecticide)						
Apples	744	67	9.0	0.002 - 0.057	0.001 - 0.002	0.3
Asparagus	210	0			0.002 ^	NT
Cilantro	184	0			0.003 ^	NT
Cucumbers	744	0			0.001 - 0.002	NT
Garbanzo Beans, Canned	51	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
Grapes	744	0			0.001 - 0.002	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.002 ^	NT
Lettuce, Organic	387	0			0.005 ^	NT
Oranges	744	0			0.002 - 0.010	NT
Pears	742	35	4.7	0.025 - 0.22	0.015 ^	0.30
Pinto Beans, Canned	105	0			0.002 ^	NT
Potatoes	210	0			0.002 ^	NT
Spinach	298	0			0.002 - 0.010	NT
Strawberries	744	0			0.001 - 0.002	NT
Sweet Corn, Fresh	201	0			0.002 ^	NT
Sweet Corn, Frozen	8	0			0.002 ^	NT
Sweet Potatoes	<u>739</u>	<u>0</u>			0.002 - 0.010	NT
TOTAL	7,467	102				
Thiamethoxam (insecticide) (also a parent of Clothianidin)						
Apples	744	0			0.002 - 0.005	0.2
Asparagus	210	0			0.002 ^	NT
Cilantro (V-2)	184	2	1.1	0.008 ^	0.005 ^	NT
Cucumbers	744	86	11.6	0.003 - 0.19	0.002 - 0.005	0.2
Garbanzo Beans, Canned	186	0			0.002 - 0.003	0.02
Grapes	744	5	0.7	0.006 - 0.078	0.002 - 0.005	0.20
Green Onions	558	0			0.005 ^	NT
Kidney Beans, Canned	186	0			0.002 - 0.003	0.02
Lettuce, Organic	387	0			0.020 ^	4.0
Oranges	744	0			0.002 - 0.010	0.40
Pears	742	1	0.1	0.025 ^	0.015 ^	0.2
Pinto Beans, Canned	372	0			0.002 - 0.003	0.02
Potatoes	744	55	7.4	0.003 - 0.032	0.002 - 0.003	0.25
Spinach	744	1	0.1	0.003 ^	0.002 - 0.010	4.0
Strawberries	744	46	6.2	0.003 - 0.25	0.002 - 0.005	0.3
Sweet Corn, Fresh	668	0			0.002 - 0.040	0.02
Sweet Corn, Frozen	75	0			0.002 - 0.040	0.02
Sweet Potatoes	739	0			0.002 - 0.010	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.049 ^	0.80
TOTAL	10,257	196				
Thiobencarb (herbicide)						
Apples	744	0			0.001 - 0.012	NT
Asparagus	210	0			0.012 ^	NT
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	0			0.001 - 0.012	NT
Garbanzo Beans, Canned	51	0			0.012 ^	NT
Grapes	210	0			0.012 ^	NT
Green Onions	558	0			0.003 ^	NT
Kidney Beans, Canned	54	0			0.012 ^	NT
Oranges	210	0			0.021 ^	NT
Pinto Beans, Canned	105	0			0.012 ^	NT
Potatoes	210	0			0.012 ^	NT
Spinach	210	0			0.012 ^	NT
Strawberries	210	0			0.012 ^	NT
Sweet Corn, Fresh	201	0			0.012 ^	NT
Sweet Corn, Frozen	8	0			0.012 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.012 ^	NT
TOTAL	4,119	0				
Thiodicarb (insecticide)						
Apples	210	0			0.006 ^	NT
Asparagus	193	0			0.006 ^	NT
Cucumbers	210	0			0.006 ^	NT
Garbanzo Beans, Canned	51	0			0.006 ^	NT
Grapes	210	0			0.006 ^	NT
Kidney Beans, Canned	54	0			0.006 ^	NT
Oranges	210	0			0.006 ^	NT
Pinto Beans, Canned	105	0			0.006 ^	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
Potatoes	210	0			0.006 ^	NT
Strawberries	210	0			0.006 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.006 ^	NT
TOTAL	1,873	0				
Thionazin (insecticide, fumigant)						
Apples	210	0			0.001 ^	NT
Asparagus	210	0			0.001 ^	NT
Cucumbers	210	0			0.001 ^	NT
Garbanzo Beans, Canned	51	0			0.001 ^	NT
Grapes	210	0			0.001 ^	NT
Kidney Beans, Canned	54	0			0.001 ^	NT
Oranges	210	0			0.001 ^	NT
Pinto Beans, Canned	105	0			0.001 ^	NT
Potatoes	210	0			0.001 ^	NT
Spinach	210	0			0.001 ^	NT
Strawberries	210	0			0.001 ^	NT
Sweet Corn, Fresh	201	0			0.001 ^	NT
Sweet Corn, Frozen	8	0			0.001 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.001 ^	NT
TOTAL	2,309	0				
Thiophanate methyl (fungicide)						
Pears	<u>742</u>	<u>22</u>	3.0	0.025 - 0.47	0.015 ^	3.0
TOTAL	742	22				
Tolyfluanid (fungicide)						
Grapes	534	0			0.097 ^	11
Strawberries	468	0			0.010 - 0.097	NT
Tomato Paste	<u>742</u>	<u>0</u>			0.043 ^	2.0
TOTAL	1,744	0				
Tralomethrin (insecticide)						
Pears	742	0			0.11 ^	0.02
Tomato Paste	<u>742</u>	<u>0</u>			0.23 ^	0.02
TOTAL	1,484	0				
Tri-Allate (herbicide)						
Oranges	534	0			0.015 ^	NT
Sweet Potatoes	<u>529</u>	<u>0</u>			0.015 ^	NT
TOTAL	1,063	0				
Triadimefon (fungicide) (also a parent of Triadimenol)						
Apples	744	0			0.001 - 0.027	1.0
Asparagus	210	0			0.027 ^	NT
Cucumbers (V-4)	744	4	0.5	0.002 - 0.007	0.0009 - 0.027	NT
Garbanzo Beans, Canned	51	0			0.027 ^	NT
Grapes	744	16	2.2	0.001 - 0.005	0.001 - 0.027	1.0
Green Onions	558	0			0.003 - 0.006	NT
Kidney Beans, Canned	54	0			0.027 ^	NT
Oranges	210	0			0.027 ^	NT
Pears	742	0			0.036 ^	1.0
Pinto Beans, Canned	105	0			0.027 ^	NT
Potatoes	210	0			0.027 ^	NT
Spinach	210	0			0.027 ^	NT
Strawberries	744	0			0.001 - 0.027	NT
Sweet Corn, Fresh	201	0			0.027 ^	NT
Sweet Corn, Frozen	8	0			0.027 ^	NT
Sweet Potatoes	<u>210</u>	<u>0</u>			0.027 ^	NT
TOTAL	5,745	20				
Triadimenol (fungicide) (also a metabolite of Triadimefon)						
Apples	210	0			0.015 ^	1.0
Asparagus	210	0			0.015 ^	NT
Cucumbers	210	0			0.015 ^	NT
Garbanzo Beans, Canned	51	0			0.015 - 0.030	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
Grapes	744	26	3.5	0.006 - 0.071	0.006 - 0.015	1.0
Kidney Beans, Canned	36	0			0.015 - 0.060	NT
Oranges	210	0			0.015 ^	NT
Pinto Beans, Canned	87	0			0.015 ^	NT
Potatoes	210	0			0.015 - 0.030	NT
Spinach	210	0			0.015 ^	NT
Strawberries	744	0			0.006 - 0.015	NT
Sweet Corn, Fresh	668	0			0.015 - 0.050	0.05
Sweet Corn, Frozen	75	0			0.015 - 0.050	0.05
Sweet Potatoes	210	0			0.030 ^	NT
TOTAL	3,875	26				
Triclopyr (herbicide)						
Grapes	534	0			0.013 ^	NT
Strawberries	534	0			0.013 ^	NT
TOTAL	1,068	0				
Trifloxystrobin (fungicide)						
Apples	744	28	3.8	0.002 - 0.012	0.001 - 0.002	0.5
Asparagus	744	0			0.002 - 0.030	0.07
Cilantro	184	0			0.001 ^	NT
Cucumbers	744	5	0.7	0.002 - 0.007	0.001 - 0.002	0.50
Garbanzo Beans, Canned	186	0			0.002 - 0.003	NT
Grapes	744	211	28.4	0.003 - 0.31	0.002 - 0.003	2.0
Green Onions	542	0			0.001 - 0.003	NT
Kidney Beans, Canned	186	0			0.002 - 0.003	NT
Oranges	744	0			0.002 - 0.005	0.6
Pears	742	6	0.8	0.008 - 0.034	0.005 ^	0.5
Pinto Beans, Canned	372	0			0.002 - 0.003	NT
Potatoes	744	0			0.002 - 0.003	0.04
Spinach	744	0			0.002 - 0.005	NT
Strawberries	744	10	1.3	0.003 - 0.13	0.002 - 0.003	1.1
Sweet Corn, Fresh	668	0			0.002 - 0.030	0.04
Sweet Corn, Frozen	75	0			0.002 - 0.030	0.04
Sweet Potatoes	739	0			0.002 - 0.005	NT
Tomato Paste	742	0			0.016 ^	0.5
TOTAL	10,388	260				
Triflumizole (fungicide)						
Apples	210	0			0.060 ^	0.5
Asparagus	210	0			0.060 ^	NT
Cucumbers	210	0			0.060 ^	0.5
Garbanzo Beans, Canned	51	0			0.060 ^	NT
Grapes	744	15	2.0	0.001 - 0.046	0.001 - 0.060	2.5
Kidney Beans, Canned	54	0			0.060 ^	NT
Oranges	744	0			0.003 - 0.060	NT
Pears	742	0			0.015 ^	0.5
Pinto Beans, Canned	105	0			0.060 ^	NT
Potatoes	210	0			0.060 ^	NT
Spinach	744	0			0.003 - 0.060	NT
Strawberries	744	81	10.9	0.001 - 0.41	0.001 - 0.060	2.0
Sweet Corn, Fresh	183	0			0.060 - 0.12	NT
Sweet Corn, Frozen	8	0			0.060 - 0.12	NT
Sweet Potatoes	739	0			0.003 - 0.060	NT
TOTAL	5,698	96				
Trifluralin (herbicide)						
Apples	744	0			0.001 - 0.018	NT
Asparagus	744	0			0.018 - 0.030	0.05
Cucumbers	744	0			0.001 - 0.018	0.05
Garbanzo Beans, Canned	186	0			0.001 - 0.018	0.05
Grapes	744	0			0.018 ^	0.05
Green Onions	542	0			0.001 - 0.003	0.05
Kidney Beans, Canned	186	0			0.017 - 0.018	0.05
Oranges	744	0			0.015 - 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
Pinto Beans, Canned	372	0			0.001 - 0.018	0.05
Potatoes	744	4	0.5	0.001 - 0.002	0.001 - 0.018	0.05
Spinach (V-1)	744	1	0.1	0.029 ^	0.015 - 0.018	NT
Strawberries	744	0			0.018 ^	NT
Sweet Corn, Fresh	201	0			0.018 ^	0.05
Sweet Corn, Frozen	8	0			0.018 ^	0.05
Sweet Potatoes	739	0			0.015 - 0.018	0.05
Tomato Paste	742	0			0.095 ^	0.05
TOTAL	8,928	5				
Triticonazole (fungicide)						
Oranges	534	0			0.010 ^	NT
Spinach	88	0			0.010 ^	NT
Sweet Potatoes	529	0			0.010 ^	NT
TOTAL	1,151	0				
Vernolate (herbicide)						
Oranges	534	0			0.010 ^	NT
Sweet Potatoes	529	0			0.010 ^	NT
TOTAL	1,063	0				
Vinclozolin (fungicide)						
Apples	744	0			0.004 - 0.008	NT
Asparagus	210	0			0.008 ^	NT
Cilantro	180	0			0.004 - 0.024	NT
Cucumbers	744	0			0.004 - 0.008	NT
Garbanzo Beans, Canned	186	0			0.001 - 0.008	2.0
Grapes	744	0			0.008 - 0.020	6.0
Green Onions	526	0			0.004 ^	NT
Kidney Beans, Canned	186	0			0.001 - 0.008	2.0
Oranges	210	0			0.008 ^	NT
Pinto Beans, Canned	372	0			0.001 - 0.008	2.0
Potatoes	744	0			0.001 - 0.008	NT
Spinach	210	0			0.008 ^	NT
Strawberries	744	0			0.008 - 0.020	NT
Sweet Corn, Fresh	201	0			0.008 ^	NT
Sweet Corn, Frozen	8	0			0.008 ^	NT
Sweet Potatoes	210	0			0.008 ^	NT
TOTAL	6,219	0				
Zoxamide (fungicide)						
Tomato Paste	742	0			0.033 ^	2.0
TOTAL	742	0				

Many of the listed tolerances 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. The cited tolerances apply to 2009 and not to the current year. There may be instances where a tolerance was recently set or revoked that would have an effect on whether a residue is violative or not.

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 for some pesticides. Under Food Quality Protection Act, responsibility for establishing tolerances in lieu of action levels has been transferred to EPA. In the interim, action levels are used.

EX = Azadirachtin A, Azadirachtin B, Pyrethrum (natural pyrethrins), Rotenone, and Salannin are compounds which have been approved for use in organic farming practices by the USDA National Organic Program. They are exempt from the requirement of a tolerance on all raw agricultural commodities. Positive detects of these compounds on organic lettuce are not considered to be tolerance violations.

(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.

Appendix C

Distribution of Residues by Pesticide in Rice

Appendix C shows residue detections for all compounds tested in rice, including range of values detected, range of Limits of Detection (LODs), and U.S. Environmental Protection Agency (EPA) tolerance references for each pair. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative or not.

In 2009, the Pesticide Data Program (PDP) analyzed 435 rice samples. PDP detected 15 different residues (including metabolites), representing 14 pesticides, in the rice samples.

PDP reports tolerance violations to the U.S. 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" column to the right of the pesticide name 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, 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 AL values established by the U.S. Food and Drug Administration. Under the Food Quality Protection Act, responsibility for establishing tolerances in lieu of ALs has been transferred to EPA. In the interim, ALs are used.

APPENDIX C. DISTRIBUTION OF RESIDUES BY PESTICIDE IN RICE

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
Acetochlor	H	415				0.003 ^	NT
Aldrin	I	435				0.003 ^	0.02 AL
Allethrin (V-3)	I	394	3	0.8	0.017 ^	0.010 ^	NT
Azinphos methyl	I	415				0.050 ^	NT
Azinphos methyl oxygen analog	IM	435				0.010 ^	NT
Azoxystrobin	F	415				0.010 ^	5.0
Benoxacor	S	435				0.020 ^	0.01
BHC alpha	I	435				0.003 ^	0.05 AL
Bifenthrin	I	415				0.001 ^	0.05
Boscalid	F	415				0.003 ^	0.20
Carbaryl	I	395	1	0.3	0.042 ^	0.010 ^	15
Carbendazim (MBC)	F	435	2	0.5	0.009 - 0.010	0.003 ^	5.0
Carbofuran	I	216				0.003 ^	0.2
Carboxin	F	394				0.006 ^	0.2
Carfentrazone ethyl	H	435				0.001 ^	1.3
Chlorpyrifos	I	435				0.010 ^	0.1
Chlorpyrifos methyl	I	435				0.10 ^	6.0
Chlorpyrifos methyl O-analog	IM	435				0.006 ^	6.0
Chlorpyrifos oxygen analog	IM	398				0.006 ^	0.1
Clomazone	H	435				0.006 ^	0.02
Cyfluthrin	I	375				0.006 ^	0.05
Cyhalofop butyl	H	395				0.001 ^	0.03
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	I	415				0.012 ^	1.0
Cypermethrin	I	395				0.030 ^	1.50
Cyphenothrin	I	217				0.003 ^	NT
DDD p,p'	IM	354	4	1.1	0.002 - 0.008	0.001 ^	0.5 AL
DDT p,p'	I	414				0.003 ^	0.5 AL
Deltamethrin (includes parent Tralomethrin)	I	308				0.006 ^	1.0
Dieldrin	I	435				0.003 ^	0.02 AL
Diflubenzuron	I	435				0.020 ^	0.02
Dimethomorph	F	404				0.006 ^	0.05

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
Endosulfan I	I	335				0.003 ^	NT
Endosulfan II (V-1)	IM	433	1	0.2	0.005 ^	0.003 ^	NT
Endosulfan sulfate (V-1)	IM	374	1	0.3	0.002 ^	0.001 ^	NT
EPTC	H	435				0.010 ^	0.1
Esfenvalerate	I	435				0.006 ^	0.05
Fenbuconazole	F	95				0.006 ^	NT
Fenoxaprop ethyl	H	415				0.001 ^	0.05
Fenpropathrin	I	395				0.003 ^	NT
Fipronil	I	415				0.10 ^	0.04
Fludioxonil	F	414	1	0.2	0.010 ^	0.006 ^	0.02
Fluridone	H	435				0.030 ^	0.1
Flutolanil	F	414				0.003 ^	7.0
Fluvalinate	I	415				0.003 ^	NT
Heptachlor	I	435				0.003 ^	0.01 AL
Heptachlor epoxide	IM	395				0.001 ^	0.01 AL
Hydroprene	R	414				0.006 ^	0.2
3-Hydroxycarbofuran	IM	435				0.010 ^	0.2
Imidacloprid	I	435	1	0.2	0.011 ^	0.010 ^	0.05
Imiprothrin	I	435				0.020 ^	NT
Iprodione	F	415				0.003 ^	10.0
Isoxadifen ethyl	S	435				0.010 ^	0.10
Lindane (BHC gamma)	I	435				0.006 ^	0.1 AL
Malathion	I	435	8	1.8	0.017 - 0.043	0.010 ^	8
Malathion oxygen analog	IM	414				0.006 ^	8
Metalaxyl	F	435				0.006 ^	0.1
Methamidophos	I	335				0.020 ^	0.02
Methomyl	I	435				0.010 ^	NT
Metolachlor	H	435				0.006 ^	0.10
MGK-264	I	435	38	8.7	0.050 - 1.4	0.030 ^	10
Myclobutanil	F	414				0.003 ^	0.03
Parathion methyl	I	435				0.010 ^	1.0
Parathion methyl oxygen analog	IM	435				0.006 ^	1.0
Pendimethalin	H	435				0.10 ^	0.1
Permethrin Total (V-5)	I	414	5	1.2	0.17 ^	0.10 ^	NT

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppm	Range of LODs, ppm	EPA Tolerance Level, ppm
Phenothrin	I	335				0.003 ^	NT
Piperonyl butoxide	I	435	73	16.8	0.010 - 0.46	0.006 ^	20
Propanil	H	435	1	0.2	0.11 ^	0.003 ^	10
Propetamphos	I	394				0.003 ^	0.1
Propiconazole	F	435	5	1.1	0.011 - 0.061	0.010 ^	7.0
Pyriproxyfen	I	276				0.003 ^	1.1
Resmethrin	I	415	3	0.7	0.011 - 0.019	0.003 ^	3.0
Spinosad A	IM	415				0.020 ^	1.5
Spinosad D	IM	415				0.020 ^	1.5
TCMTB	F	435				0.020 ^	0.1
Tefluthrin	I	435				0.003 ^	NT
Tetrahydrophthalimide (THPI)	FM	372				0.10 ^	0.05
Tetramethrin	I	415				0.030 ^	NT
Thiobencarb	H	435				0.010 ^	0.2
Trifloxystrobin	F	435				0.006 ^	3.5
Trifluralin	H	435				0.003 ^	NT

Many of the listed tolerances 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. The cited tolerances apply to 2009 and not to the current year. There may be instances where a tolerance was recently set or revoked that would have an effect on whether a residue is violative or not.

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 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

S = Herbicide Safener

Appendix D

Distribution of Residues by Pesticide in Beef

Appendix D shows residue detections for all compounds tested in beef, including range of values detected, range of Limits of Detection (LODs), and U.S. Environmental Protection Agency (EPA) tolerance references for each pair. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative or not.

In 2009, the Pesticide Data Program (PDP) analyzed 584 beef tissue samples, consisting of 292 adipose samples and 292 muscle samples. PDP detected 13 different residues (including metabolites), representing 9 pesticides, in the adipose and muscle samples. All residue detections were lower than the established tolerances for those compounds with established tolerances.

PDP reports tolerance violations to the U.S. 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" column to the right of the pesticide name 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, 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 AL values established by the U.S. Food and Drug Administration. Under the Food Quality Protection Act, responsibility for establishing tolerances in lieu of ALs has been transferred to EPA. In the interim, ALs are used.

EPA tolerances as published in *40 CFR Part 180* are expressed in parts per million (ppm). Because beef residues are expressed in parts per billion (ppb), EPA tolerances 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.

APPENDIX D. DISTRIBUTION OF RESIDUES BY PESTICIDE IN BEEF

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Acephate	I						
Beef Adipose		292				200 ^	100
Beef Muscle		292				200 ^	100
Acetamiprid	I						
Beef Adipose		292				60 ^	100
Beef Muscle		292				60 ^	100
Alachlor	H						
Beef Adipose		292				20 ^	20
Beef Muscle		292				20 ^	20
Aldicarb	I						
Beef Adipose		292				100 ^	NT
Beef Muscle		292				100 ^	NT
Aldicarb sulfone	IM						
Beef Adipose		292				40 ^	NT
Beef Muscle		292				40 ^	NT
Aldicarb sulfoxide	IM						
Beef Adipose		292				800 ^	NT
Beef Muscle		292				800 ^	NT
Aldrin	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Allethrin	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Atrazine	H						
Beef Adipose		292				8.0 ^	20
Beef Muscle		292				8.0 ^	20
Azinphos methyl	I						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Azoxystrobin	F						
Beef Adipose		292				4.0 ^	30
Beef Muscle		292				4.0 ^	10
Benfluralin	H						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
BHC alpha	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Bifenazate	A						
Beef Adipose		292				40 ^	100
Beef Muscle		292				40 ^	20

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Bifenthrin	I						
Beef Adipose		292	15	5.1	1.3 - 3.4	1.0 ^	1000
Beef Muscle		292	1	0.3	1.2 ^	1.0 ^	500
Boscalid	F						
Beef Adipose		292				12 ^	300
Beef Muscle		292				12 ^	100
Captan	F						
Beef Adipose		292				20 ^	150
Beef Muscle		292				20 ^	200
Carbaryl	I						
Beef Adipose		292				20 ^	500
Beef Muscle		292				20 ^	1000
Carbofuran	I						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Carbophenothion	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Carboxin	F						
Beef Adipose		292				12 ^	50
Beef Muscle		292				12 ^	50
Carfentrazone ethyl	H						
Beef Adipose		292				4.0 ^	100
Beef Muscle		292				4.0 ^	100
Chlordane cis	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Chlordane trans	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Chlorfenvinphos total	I						
Beef Adipose		292				40 ^	NT
Beef Muscle		292				40 ^	NT
Chlorothalonil	F						
Beef Adipose		292				8.0 ^	100
Beef Muscle		292				8.0 ^	30
Chlorpropham	H						
Beef Adipose		292				40 ^	200
Beef Muscle		292				40 ^	60
Chlorpyrifos	I						
Beef Adipose		292				1.0 ^	300
Beef Muscle		292				1.0 ^	50

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Chlorpyrifos methyl	I						
Beef Adipose		292				4.0 ^	500
Beef Muscle		292				4.0 ^	500
Clofentezine	I						
Beef Adipose		292				30 ^	50
Beef Muscle		292				30 ^	50
Clothianidin	I						
Beef Adipose		292				40 ^	NT
Beef Muscle		292				40 ^	20
Coumaphos	I						
Beef Adipose		292				1.0 - 4.0	1000
Beef Muscle		292				1.0 - 4.0	1000
Cyfluthrin	I						
Beef Adipose		292	2	0.7	19.8 - 128	4.0 ^	2000
Beef Muscle		292	1	0.3	6.6 ^	4.0 ^	100
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	I						
Beef Adipose		292	34	11.6	1.0 - 33.9	1.0 ^	3000
Beef Muscle		292	7	2.4	1.2 - 3.6	1.0 ^	200
Cypermethrin	I						
Beef Adipose		292				4.0 ^	1000
Beef Muscle		292				4.0 ^	200
Cyphenothrin	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
DDD o,p'	IM						
Beef Adipose		292				2.0 ^	5000 AL
Beef Muscle		292				2.0 ^	5000 AL
DDD p,p'	IM						
Beef Adipose		292	1	0.3	4.6 ^	2.0 ^	5000 AL
Beef Muscle		292				2.0 ^	5000 AL
DDE o,p'	IM						
Beef Adipose		292				2.0 ^	5000 AL
Beef Muscle		292				2.0 ^	5000 AL
DDE p,p'	IM						
Beef Adipose		292	69	23.6	2.1 - 103	2.0 ^	5000 AL
Beef Muscle		292	20	6.8	2.3 - 34.6	2.0 ^	5000 AL
DDT p,p'	I						
Beef Adipose		292	1	0.3	16.1 ^	8.0 ^	5000 AL
Beef Muscle		292				8.0 ^	5000 AL
DEF (Tribufos)	H						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Deltamethrin (includes parent Tralomethrin)	I						
Beef Adipose		292				40 ^	50
Beef Muscle		292				40 ^	20
Diazinon	I						
Beef Adipose		292				4.0 ^	500
Beef Muscle		292				4.0 ^	NT
Dichlorvos (DDVP)	I						
Beef Adipose		292				12 ^	20
Beef Muscle		292				12 ^	20
Dicofol p,p'	I						
Beef Adipose		292				4.0 ^	50000
Beef Muscle		292				4.0 ^	3000
Dieldrin	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Diflubenzuron	I						
Beef Adipose		292				50 ^	50
Beef Muscle		292				50 ^	50
Dimethoate	I						
Beef Adipose		292				16 ^	NT
Beef Muscle		292				16 ^	NT
2,4-dimethylphenyl formamide (2,4-DMPF)	IM						
Beef Adipose		292				40 ^	100
Beef Muscle		292				40 ^	20
Dinotefuran	I						
Beef Adipose		292				50 ^	50
Beef Muscle		292				50 ^	50
Diphenylamine (DPA)	F						
Beef Adipose		292	2	0.7	2.7 - 3.9	2.0 ^	10
Beef Muscle		292	5	1.7	2.5 - 3.7	2.0 ^	10
Diuron	H						
Beef Adipose		292				60 ^	1000
Beef Muscle		292				60 ^	1000
Endosulfan I	I						
Beef Adipose		292	1	0.3	2.1 ^	2.0 ^	13000
Beef Muscle		292				2.0 ^	2000
Endosulfan II	IM						
Beef Adipose		292	1	0.3	2.8 ^	2.0 ^	13000
Beef Muscle		292				2.0 ^	2000
Endosulfan sulfate	IM						
Beef Adipose		292	5	1.7	2.4 - 123	2.0 ^	13000
Beef Muscle		292	2	0.7	3.2 - 22.6	2.0 ^	2000

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Endrin	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Esfenvalerate+Fenvalerate Total	I						
Beef Adipose		292				4.0 ^	1500
Beef Muscle		292				4.0 ^	1500
Ethalfuralin	H						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Ethion	I						
Beef Adipose		292				20 ^	200
Beef Muscle		292				20 ^	200
Ethofumesate	H						
Beef Adipose		292				16 ^	50
Beef Muscle		292				16 ^	50
Etridiazole	F						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT
Famoxadone	F						
Beef Adipose		292				40 ^	20
Beef Muscle		292				40 ^	NT
Fenamidone	F						
Beef Adipose		292				20 ^	100
Beef Muscle		292				20 ^	100
Fenarimol	F						
Beef Adipose		292				2.0 ^	10
Beef Muscle		292				2.0 ^	10
Fenitrothion	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Fenoxaprop ethyl	H						
Beef Adipose		292				8.0 ^	50
Beef Muscle		292				8.0 ^	50
Fenpropathrin	I						
Beef Adipose		292				20 ^	1000
Beef Muscle		292				20 ^	100
Fenpyroximate	A						
Beef Adipose		292				8.0 ^	30
Beef Muscle		292				8.0 ^	30
Fenthion	I						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Fipronil	I						
Beef Adipose		292				12 ^	400
Beef Muscle		292				12 ^	40
Flonicamid	I						
Beef Adipose		292				200 ^	30
Beef Muscle		292				200 ^	80
Fluazifop butyl	H						
Beef Adipose		292				2.0 ^	50
Beef Muscle		292				2.0 ^	50
Flufenoxuron	I						
Beef Adipose		292				30 ^	4500
Beef Muscle		292				30 ^	100
Fluoxastrobin	F						
Beef Adipose		292				8.0 ^	100
Beef Muscle		292				8.0 ^	50
Fluroxypyr 1-methylheptyl ester	H						
Beef Adipose		292				1.0 ^	100
Beef Muscle		292				1.0 ^	100
Flutolanil	F						
Beef Adipose		292				4.0 ^	100
Beef Muscle		292				4.0 ^	50
Fluvalinate	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Heptachlor	I						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Heptachlor epoxide	IM						
Beef Adipose		292				20 ^	NT
Beef Muscle		292				20 ^	NT
Hexachlorobenzene (HCB)	FM						
Beef Adipose (V-5)		292	5	1.7	1.1 - 1.8	1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Hexythiazox	I						
Beef Adipose		292				12 ^	20
Beef Muscle		292				12 ^	NT
3-Hydroxycarbofuran	IM						
Beef Adipose		292				16 ^	NT
Beef Muscle		292				16 ^	NT
Imidacloprid	I						
Beef Adipose		292				40 ^	300
Beef Muscle		292				40 ^	300

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Imiprothrin	I						
Beef Adipose		252				40 ^	NT
Beef Muscle		292				40 ^	NT
Indoxacarb	I						
Beef Adipose		292				50 ^	1500
Beef Muscle		292				50 ^	50
Iprodione	F						
Beef Adipose		292				20 ^	500
Beef Muscle		292				20 ^	500
Isofenphos	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Lindane (BHC gamma)	I						
Beef Adipose		292				8.0 ^	7000
Beef Muscle		292				8.0 ^	NT
Linuron	H						
Beef Adipose		292				20 ^	200
Beef Muscle		292				20 ^	100
Malathion	I						
Beef Adipose		292				4.0 ^	4000
Beef Muscle		292				4.0 ^	4000
Metalaxyl	F						
Beef Adipose		292				40 ^	400
Beef Muscle		292				40 ^	50
Methidathion	I						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT
Methiocarb	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Methomyl	I						
Beef Adipose		292				24 ^	NT
Beef Muscle		292				24 ^	NT
Methoxyfenozide	I						
Beef Adipose		292				8.0 ^	500
Beef Muscle		292				8.0 ^	20
Metolachlor	H						
Beef Adipose		292				8.0 ^	40
Beef Muscle		292				8.0 ^	40
Metribuzin	H						
Beef Adipose		292				4.0 ^	700
Beef Muscle		292				4.0 ^	700

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
MGK-264	I						
Beef Adipose		292				20 ^	300
Beef Muscle		292				20 ^	NT
Myclobutanil	F						
Beef Adipose		292				40 ^	50
Beef Muscle		292				40 ^	100
1-Naphthol	IM						
Beef Adipose		292				12 ^	500
Beef Muscle		292				12 ^	1000
Nonachlor cis	IM						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Nonachlor trans	IM						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Norflurazon	H						
Beef Adipose		292				8.0 ^	100
Beef Muscle		292				8.0 ^	100
Novaluron	I						
Beef Adipose		292				150 ^	11000
Beef Muscle		292				150 ^	600
Oxadiazon	H						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Oxyfluorfen	H						
Beef Adipose		292				1.0 ^	10
Beef Muscle		292				1.0 ^	10
Parathion ethyl	I						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Parathion methyl	I						
Beef Adipose		292				4.0 ^	NT
Beef Muscle		292				4.0 ^	NT
Pentachloroaniline (PCA)	FM						
Beef Adipose		292				2.0 ^	NT
Beef Muscle		292				2.0 ^	NT
Pentachlorobenzene (PCB)	FM						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Permethrin Total	I						
Beef Adipose		292	5	1.7	10 - 27.8	10 ^	1500
Beef Muscle		292				10 ^	100

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Phenothrin	I						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT
Phorate	I						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT
Phosalone	I						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	NT
Phosmet	I						
Beef Adipose		292				12 ^	200
Beef Muscle		292				12 ^	200
Piperonyl butoxide	I						
Beef Adipose		292	1	0.3	10.7 ^	8.0 ^	100
Beef Muscle		292				8.0 ^	100
Prallethrin	I						
Beef Adipose		292				8.0 ^	1000
Beef Muscle		292				8.0 ^	1000
Profenofos	I						
Beef Adipose		292				12 ^	50
Beef Muscle		292				12 ^	50
Pronamide	H						
Beef Adipose		292				4.0 ^	200
Beef Muscle		292				4.0 ^	20
Propachlor	H						
Beef Adipose		292				12 ^	50
Beef Muscle		292				12 ^	20
Propanil	H						
Beef Adipose		292				100 ^	100
Beef Muscle		292				100 ^	50
Propargite	I						
Beef Adipose		292				20 ^	100
Beef Muscle		292				20 ^	100
Pyraclostrobin	F						
Beef Adipose		292				60 ^	100
Beef Muscle		292				60 ^	100
Pyrethrins	I						
Beef Adipose		292				40 ^	1000
Beef Muscle		292				40 ^	50
Pyridaben	I						
Beef Adipose		292				4.0 ^	50
Beef Muscle		292				4.0 ^	50

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Quintozene (PCNB)	F						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Quizalofop ethyl	H						
Beef Adipose		292				4.0 ^	50
Beef Muscle		292				4.0 ^	20
Resmethrin	I						
Beef Adipose		292				12 ^	3000
Beef Muscle		292				12 ^	3000
Simazine	H						
Beef Adipose		292				12 ^	NT
Beef Muscle		292				12 ^	30
Spirodiclofen	A						
Beef Adipose		292				2.0 ^	20
Beef Muscle		292				2.0 ^	20
Spiromesifen	I						
Beef Adipose		292				20 ^	100
Beef Muscle		292				20 ^	20
Sulprofos	I						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Tebufenozide	I						
Beef Adipose		292				10 ^	100
Beef Muscle		292				10 ^	80
Tebuthiuron	H						
Beef Adipose		292				8.0 ^	1000
Beef Muscle		292				8.0 ^	1000
Tefluthrin	I						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Tetrachlorvinphos	I						
Beef Adipose		292				8.0 ^	200
Beef Muscle		292				8.0 ^	2000
Tetrahydrophthalimide (THPI)	FM						
Beef Adipose		292				12 ^	150
Beef Muscle		292				12 ^	200
Tetramethrin	I						
Beef Adipose		292				10 ^	NT
Beef Muscle		292				10 ^	NT
Thiacloprid	I						
Beef Adipose		292				8.0 ^	20
Beef Muscle		292				8.0 ^	30

Pesticide / Commodity	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detections	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Thiamethoxam	I						
Beef Adipose		292				80 ^	NT
Beef Muscle		292				80 ^	20
Thiobencarb	H						
Beef Adipose		292				40 ^	200
Beef Muscle		292				40 ^	200
Triadimefon	F						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Tridiphane	H						
Beef Adipose		292				8.0 ^	NT
Beef Muscle		292				8.0 ^	NT
Trifloxystrobin	F						
Beef Adipose		292				4.0 ^	50
Beef Muscle		292				4.0 ^	50
Trifluralin	H						
Beef Adipose		292				1.0 ^	NT
Beef Muscle		292				1.0 ^	NT
Vinclozolin	F						
Beef Adipose		292				2.0 ^	50
Beef Muscle		292				2.0 ^	50

Many of the listed tolerances 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. The cited tolerances apply to 2009 and not to the current year. There may be instances where a tolerance was recently set or revoked that would have an effect on whether a residue is violative or not.

NOTES

* = EPA Tolerances 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.

^ = 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 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:

A = Acaricide

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

Appendix E

Distribution of Residues by Pesticide in Catfish

Appendix E shows residue detections for all compounds tested in catfish, including range of values detected, range of Limits of Detection (LODs), and U.S. Environmental Protection Agency (EPA) tolerance references for each pair. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative or not.

In 2009, the Pesticide Data Program (PDP) analyzed 543 catfish samples. PDP detected 41 different residues (including metabolites), representing 30 pesticides, in the catfish samples. The majority of these residue detections are not associated with pesticide applications, but rather are most likely attributable to environmental exposure and are covered by Action Levels (ALs) established by the U.S. Food and Drug Administration (FDA) or by food handling establishment tolerances. Pesticides for which no tolerance was established in fish or catfish are likely to be present in water; EPA is addressing these issues under environmental impact assessments. For these reasons, catfish residue results, along with results from groundwater and drinking water, are excluded when providing overall residue counts.

Action Levels (ALs) are shown in this appendix, where applicable, and denote ALs established by FDA. Under the Food Quality Protection Act, responsibility for establishing tolerances in lieu of ALs has been transferred to EPA. In the interim, ALs are used.

EPA tolerances as published in *40 CFR Part 180* are expressed in parts per million (ppm). Because catfish residues are expressed in parts per billion (ppb), EPA tolerances 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.

APPENDIX E. DISTRIBUTION OF RESIDUES BY PESTICIDE IN CATFISH

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Acetamiprid	I	543				16 ^	NA
Acetochlor	H	543	2	0.4	7.7 - 8.8	3.0 - 6.0	NA
Alachlor	H	543				5.0 - 10	NA
Aldicarb	I	543				25 ^	NA
Aldicarb sulfone	IM	543				10 ^	NA
Aldrin	I	543				5.0 ^	300 AL
Allethrin	I	543				5.0 ^	NA
Atrazine	H	543	4	0.7	2.5 - 17.9	2.0 ^	NA
Azinphos methyl	I	543				2.0 ^	NA
Azoxystrobin	F	543				1.0 ^	NA
Benfluralin	H	543				1.0 ^	NA
BHC alpha	I	543	6	1.1	1.2 - 5.7	1.0 ^	NA
BHC beta	IM	543				5.0 ^	NA
BHC delta	IM	543	1	0.2	4.0 ^	1.0 ^	NA
Bifenazate	A	543				10 - 20	NA
Bifenox	H	543				3.0 - 12	NA
Bifenthrin	I	543	88	16.2	1.0 - 6.3	1.0 ^	50
Boscalid	F	543				3.0 - 6.0	NA
Bromuconazole	F	543				5.0 - 20	NA
Buprofezin	I	543				5.0 - 20	NA
Butralin	H	543				2.0 - 6.0	NA
Butylate	H	543				2.0 - 4.0	NA
Captan	F	543				5.0 ^	NA
Carbaryl	I	543				5.0 ^	NA
Carbofuran	I	543				2.0 ^	NA
Carbophenothion	I	543				1.0 ^	NA
Carfentrazone ethyl	H	521				1.0 ^	300
Chlordane cis	I	543	2	0.4	1.1 - 1.4	1.0 ^	300 AL
Chlordane trans	I	543	1	0.2	1.2 ^	1.0 ^	300 AL
Chlorethoxyfos	I	543				1.0 ^	NA
Chlorfenapyr	I	543				1.0 ^	10
Chlorobenzilate	A	543				5.0 ^	NA
Chloroxuron	H	543				8.0 ^	NA
Chlorpropham	H	543				10 - 20	NA
Chlorpyrifos	I	543	30	5.5	1.0 - 38.2	1.0 ^	100
Chlorpyrifos methyl	I	543	8	1.5	1.0 - 1.5	1.0 ^	NA
Clofentezine	I	543				6.0 ^	NA

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Clomazone	H	543				3.0 ^	NA
Clothianidin	I	543				10 ^	NA
Coumaphos	I	543				1.0 ^	NA
Cyfluthrin	I	543				1.0 ^	50
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	I	543	5	0.9	1.0 - 7.8	1.0 ^	10
Cypermethrin	I	543	10	1.8	1.1 - 3.5	1.0 ^	50
Cyphenothrin	I	543	1	0.2	38.7 ^	5.0 - 20	NA
Cyprodinil	F	543				3.0 ^	NA
DCPA	H	543				1.0 ^	NA
DDD o,p'	IM	543	45	8.3	1.0 - 36	1.0 - 2.0	5000 AL
DDD p,p'	IM	543	162	29.8	1.0 - 115	1.0 - 2.0	5000 AL
DDE o,p'	IM	543	15	2.8	1.0 - 11.9	1.0 - 2.0	5000 AL
DDE p,p'	IM	543	353	65.0	1.0 - 2310	1.0 - 2.0	5000 AL
DDT p,p'	I	543	3	0.6	2.1 - 7.0	2.0 - 4.0	5000 AL
Deltamethrin (includes parent Tralomethrin)	I	543				10 ^	50
Diazinon	I	543				1.0 ^	NA
Dichlorvos (DDVP)	I	543				3.0 - 9.0	500
Diclofop methyl	H	543				1.0 - 2.0	NA
Dicloran	F	543				1.0 ^	NA
Dicofol p,p'	I	543	5	0.9	1.1 - 3.1	1.0 ^	NA
Dieldrin	I	543	6	1.1	5.7 - 29.2	5.0 ^	300 AL
Difenoconazole	F	543				3.0 - 12	NA
Diffubenzuron	I	543				13 ^	NA
Dimethenamid	H	543				3.0 - 6.0	NA
Dimethoate	I	543				4.0 ^	NA
Dimethomorph	F	543				5.0 ^	NA
2,4-dimethylphenyl formamide (2,4-DMPF)	IM	543				2.0 - 8.0	NA
Dinitramine	H	543				1.0 ^	NA
Dinotefuran	I	543				13 ^	NA
Diphenamid	H	543				1.0 ^	NA
Diphenylamine (DPA)	F	543	7	1.3	1.1 - 2.4	1.0 - 2.0	NA
Disulfoton	I	543				5.0 ^	NA
Diuron	H	543	38	7.0	16.1 - 179	16 ^	2000
Endosulfan I	I	543	7	1.3	1.1 - 2.6	1.0 ^	NA
Endosulfan II	IM	543	2	0.4	1.1 - 3.8	1.0 ^	NA
Endosulfan sulfate	IM	543	32	5.9	1.0 - 25.4	1.0 ^	NA
Endrin	I	543				5.0 ^	NA
EPN	I	543				1.0 ^	NA

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Epoxiconazole	F	543				1.0 ^	NA
Esfenvalerate+Fenvalerate Total	I	543	9	1.7	1.0 - 8.9	1.0 ^	50
Ethalfuralin	H	543				1.0 ^	NA
Ethofumesate	H	543				4.0 ^	NA
Etoxazole	A	543				1.0 ^	NA
Etridiazole	F	543				3.0 - 6.0	NA
Famoxadone	F	543				10 - 20	NA
Fenamidone	F	543				3.0 ^	NA
Fenamiphos	I	543				2.0 ^	NA
Fenarimol	F	543				1.0 ^	NA
Fenbuconazole	F	543				4.0 ^	NA
Fenhexamid	F	543				2.0 ^	NA
Fenitrothion	I	543				1.0 ^	NA
Fenoxaprop ethyl	H	543				2.0 - 4.0	NA
Fenoxycarb	I	543				10 ^	NA
Fenpropathrin	I	543				5.0 - 20	NA
Fenpyroximate	A	543				2.0 ^	NA
Fenthion	I	543				3.0 - 9.0	NA
Fipronil	I	543				3.0 - 9.0	NA
Fluazifop butyl	H	543				1.0 - 2.0	NA
Fluchloralin	H	543				2.0 - 6.0	NA
Flucythrinate	I	543				5.0 - 20	NA
Flumetralin	P	543				1.0 ^	NA
Flumiclorac pentyl	H	543				3.0 - 6.0	NA
Fluoxastrobin	F	543				2.0 ^	NA
Fluridone	H	543				5.0 - 10	500
Fluroxypyr 1-methylheptyl ester	H	521				1.0 ^	NA
Fluvalinate	I	543				1.0 ^	NA
Heptachlor	I	543				5.0 ^	300 AL
Heptachlor epoxide	IM	543				5.0 ^	300 AL
Hexachlorobenzene (HCB)	FM	543	2	0.4	1.8 - 3.3	1.0 ^	NA
Hydroprene	R	543				3.0 - 12	200
3-Hydroxycarbofuran	IM	543				4.0 ^	NA
Imidacloprid	I	543				10 ^	NA
Imiprothrin	I	543				10 - 30	NA
Indoxacarb	I	543				13 ^	NA
Iprodione	F	543				5.0 ^	NA
Isopropalin	H	543				2.0 - 10	NA

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Isoxaflutole	H	543				3.0 - 30	NA
Lactofen	H	543				3.0 - 6.0	NA
Lindane (BHC gamma)	I	543	2	0.4	2.2 - 3.1	2.0 ^	NA
Linuron	H	543				5.0 ^	NA
Malathion	I	543				1.0 ^	NA
Metalaxyl	F	543				2.0 ^	NA
Methidathion	I	543				3.0 ^	NA
Methomyl	I	543				6.0 ^	NA
Methoxychlor p,p'	IM	543				2.0 - 6.0	NA
Methoxyfenozide	I	543				2.0 ^	NA
Metolachlor	H	543				2.0 - 4.0	NA
Metribuzin	H	543				1.0 ^	NA
Mevinphos Total	I	543				10 ^	NA
MGK-264	I	543	1	0.2	16 ^	5.0 - 15	NA
MGK-326 (dipropyl isocinchomeronate)	I	543				3.0 - 6.0	NA
Mirex	I	543				2.0 ^	NA
Myclobutanil	F	543				10 ^	NA
1-Naphthol	IM	543				3.0 - 6.0	NA
Nitrofen	H	543				1.0 ^	NA
Nonachlor cis	IM	543	1	0.2	1.0 ^	1.0 ^	NA
Nonachlor trans	IM	543	2	0.4	1.1 - 3.1	1.0 ^	NA
Norflurazon	H	543				2.0 ^	NA
Oxadiazon	H	543	1	0.2	2.3 ^	2.0 ^	NA
Oxamyl	I	543				6.0 ^	NA
Oxamyl oxime	IM	543				16 ^	NA
Oxychlorane	IM	543				2.0 ^	300 AL
Oxyfluorfen	H	543				1.0 ^	NA
Parathion ethyl	I	543	1	0.2	2.3 ^	2.0 ^	NA
Parathion methyl	I	543				1.0 ^	NA
Pendimethalin	H	543	7	1.3	2.1 - 13.4	2.0 ^	NA
Pentachloroaniline (PCA)	FM	543	6	1.1	1.0 - 8.3	1.0 ^	NA
Permethrin Total	I	543				3.0 ^	NA
Phenmedipham	H	543				13 ^	NA
Phenothrin	I	543				3.0 - 12	NT
Phorate	I	543				3.0 - 12	NA
Phosalone	I	543				3.0 - 12	NA
Phosmet	I	543				3.0 ^	NA
Piperonyl butoxide	I	543	3	0.6	2.1 - 83.6	2.0 - 8.0	NA

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Pirimiphos methyl	I	543	3	0.6	4.0 - 22.9	1.0 - 3.0	NA
Prallethrin	I	543	1	0.2	2.5 ^	2.0 ^	1000
Prodiamine	H	543				1.0 - 3.0	NA
Pronamide	H	543				1.0 ^	NA
Propachlor	H	543				3.0 - 12	NA
Propargite	I	543	1	0.2	32.8 ^	5.0 - 10	NA
Propazine	H	543				1.0 ^	NA
Propetamphos	I	543				1.0 - 10	100
Propham	H	543				5.0 ^	NA
Propiconazole	F	543				3.0 - 9.0	NA
Propoxur	I	543				25 ^	NA
Pyraclostrobin	F	543				15 ^	NA
Pyrethrins	I	543				10 ^	1000
Pyridaben	I	543				1.0 ^	NA
Pyrimethanil	F	543				4.0 ^	NA
Quintozene (PCNB)	F	521				1.0 ^	NA
Resmethrin	I	543				3.0 - 8.0	3000
Sethoxydim	H	543				2.0 ^	NA
Simazine	H	543				3.0 ^	NA
Spirodiclofen	A	543				1.0 ^	NA
Spiromesifen Total (parent + enol metabolite)	I	543				5.0 ^	NA
Sulprofos	I	543				2.0 - 8.0	NA
Tebufenozide	I	543				25 ^	NA
Tebupirimfos	I	543				1.0 - 3.0	NA
Tebuthiuron	H	543				2.0 ^	NA
Tefluthrin	I	543				1.0 ^	NA
Temephos	I	543				4.0 ^	NA
Terbufos	I	543				5.0 ^	NA
Tetrachlorvinphos	I	543				2.0 ^	NA
Tetraconazole	F	543	1	0.2	2.0 ^	2.0 ^	NA
Tetradifon	I	543				1.0 ^	NA
Tetrahydrophthalimide (THPI)	FM	543				12 - 24	NA
Tetramethrin	I	543				3.0 ^	NA
Thiacloprid	I	543				2.0 ^	NA
Thiamethoxam	I	543				20 ^	NA
Thiobencarb	H	543				10 - 20	NA
Thiodicarb	I	543				50 ^	NA
Tolclofos methyl	F	543				3.0 ^	NA

Pesticide	Pest. Type	Number of Samples	Samples with Detections	% of Samples with Detects	Range of Values Detected, ppb	Range of LODs, ppb	EPA Tolerance Level, ppb*
Toxaphene	I	543	35	6.4	50 - 461	50 ^	NA
Tri Allate	H	543				2.0 - 6.0	NA
Triadimefon	F	543				2.0 ^	NA
Tridiphane	H	543				2.0 - 12	NA
Trifluralin	H	543	8	1.5	1.4 - 80.5	1.0 ^	NA
Triticonazole	F	543				3.0 - 9.0	NA
Vinclozolin	F	543				1.0 ^	NA

Many of the listed tolerances 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. The cited tolerances apply to 2009 and not to the current year. There may be instances where a tolerance was recently set or revoked that would have an effect on whether a residue is violative or not.

NOTES

* = EPA tolerances 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.

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

NA = Findings in catfish are covered by tolerances established for fish, by tolerances set for pesticide uses in food handling establishments, and by action levels set for persistent chemicals commonly found in the environment. In addition, there are other findings that may arise from a number of attributable sources including runoff from agricultural uses to water sources or ponds. For the latter group, where no specific tolerance has been established, "NA" has been entered as the tolerance value.

AL = Numbers shown are Action Levels established by FDA 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:

A = Acaricide

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

P = Plant Growth Regulator

R = Insect Growth Regulator

Appendix F

Distribution of Residues by Pesticide in Groundwater

Appendix F shows residue detections for all compounds tested in groundwater, including range of values detected and range of Limits of Detection (LODs) for each pair in parts per trillion (ppt).

In 2009, the Pesticide Data Program (PDP) analyzed 278 groundwater samples from 278 different collection sites, including 95 from agricultural wells, 113 from school/daycare wells, and 70 from private residential wells. PDP detected 29 different residues (including metabolites), representing 19 pesticides, in the groundwater samples. Most of the detections were for herbicides. The samples with detectable residues came from 152 different sites.

APPENDIX F. DISTRIBUTION OF RESIDUES BY PESTICIDE IN GROUNDWATER

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
2,4-D	H					
Groundwater - Agricultural/Farm Wells		95				2.5 ^
Groundwater - Private Residence Wells		70	2	2.9	4.2 ^	2.5 ^
Groundwater - School/Daycare Wells		113	6	5.3	4.2 - 24.9	2.5 ^
2,4-DB	H					
Groundwater - Agricultural/Farm Wells		95				4.0 ^
Groundwater - Private Residence Wells		70				4.0 ^
Groundwater - School/Daycare Wells		113				4.0 ^
Acetochlor	H					
Groundwater - Agricultural/Farm Wells		95				10 ^
Groundwater - Private Residence Wells		70				10 ^
Groundwater - School/Daycare Wells		113				10 ^
Acetochlor ethanesulfonic acid (ESA)	HM					
Groundwater - Agricultural/Farm Wells		95	4	4.2	15 - 57.3	9.0 ^
Groundwater - Private Residence Wells		70	30	42.9	15 - 600	9.0 ^
Groundwater - School/Daycare Wells		113	4	3.5	15 - 91.2	9.0 ^
Acetochlor oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95				10 ^
Groundwater - Private Residence Wells		70	6	8.6	17 - 63.9	10 ^
Groundwater - School/Daycare Wells		113	2	1.8	17 - 46	10 ^
Alachlor	H					
Groundwater - Agricultural/Farm Wells		95	1	1.1	17 ^	10 ^
Groundwater - Private Residence Wells		70				10 ^
Groundwater - School/Daycare Wells		113				10 ^
Alachlor ethanesulfonic acid (ESA)	HM					
Groundwater - Agricultural/Farm Wells		95	21	22.1	20.8 - 3920	12.5 ^
Groundwater - Private Residence Wells		70	52	74.3	20.8 - 2630	12.5 ^
Groundwater - School/Daycare Wells		113	18	15.9	20.8 - 294	12.5 ^
Alachlor oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95	18	18.9	17 - 3900	10 ^
Groundwater - Private Residence Wells		70	15	21.4	17 - 2160	10 ^
Groundwater - School/Daycare Wells		113	3	2.7	17 - 80.3	10 ^
Atrazine	H					
Groundwater - Agricultural/Farm Wells		95				10 ^
Groundwater - Private Residence Wells		70	32	45.7	17 - 172	10 ^
Groundwater - School/Daycare Wells		113	3	2.7	17 - 231	10 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Bensulfuron methyl	H					
Groundwater - Agricultural/Farm Wells		95				5.0 ^
Groundwater - Private Residence Wells		70				5.0 ^
Groundwater - School/Daycare Wells		113				5.0 ^
Bentazon	H					
Groundwater - Agricultural/Farm Wells		6	6	100	0.30 - 19.3	0.30 ^
Groundwater - Private Residence Wells		2	2	100	0.53 - 2.2	0.30 ^
Boscalid	F					
Groundwater - Agricultural/Farm Wells		95				100 ^
Groundwater - Private Residence Wells		70				100 ^
Groundwater - School/Daycare Wells		113				100 ^
Bromacil	H					
Groundwater - Agricultural/Farm Wells		95	19	20.0	6.2 - 21800	6.0 ^
Groundwater - Private Residence Wells		70	2	2.9	10 - 50.2	6.0 ^
Groundwater - School/Daycare Wells		113				6.0 ^
Carbaryl	I					
Groundwater - Agricultural/Farm Wells		95				7.5 ^
Groundwater - Private Residence Wells		70				7.5 ^
Groundwater - School/Daycare Wells		113				7.5 ^
Carbofuran	I					
Groundwater - Agricultural/Farm Wells		95				4.0 ^
Groundwater - Private Residence Wells		70				4.0 ^
Groundwater - School/Daycare Wells		113				4.0 ^
Chlorimuron ethyl	H					
Groundwater - Agricultural/Farm Wells		95				6.0 ^
Groundwater - Private Residence Wells		70	1	1.4	10 ^	6.0 ^
Groundwater - School/Daycare Wells		113				6.0 ^
Chlorothalonil	F					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Chlorpyrifos	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Clomazone	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Clopyralid	H					
Groundwater - Agricultural/Farm Wells		95				12.5 ^
Groundwater - Private Residence Wells		70	1	1.4	20.8 ^	12.5 ^
Groundwater - School/Daycare Wells		113				12.5 ^
Cyanazine	H					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
DCPA	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Desethyl atrazine	HM					
Groundwater - Agricultural/Farm Wells		95				10 ^
Groundwater - Private Residence Wells		70	41	58.6	17 - 1070	10 ^
Groundwater - School/Daycare Wells		113	9	8.0	17 - 767	10 ^
Desethyl-desisopropyl atrazine	HM					
Groundwater - Agricultural/Farm Wells		95	2	2.1	25 ^	15 ^
Groundwater - Private Residence Wells		70	36	51.4	25 - 990	15 ^
Groundwater - School/Daycare Wells		113	2	1.8	25 - 334	15 ^
Desisopropyl atrazine	HM					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70	19	27.1	83 - 202	50 ^
Groundwater - School/Daycare Wells		113	1	0.9	83 ^	50 ^
Diazinon	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Dichlobenil	H					
Groundwater - Agricultural/Farm Wells		95				5.0 ^
Groundwater - Private Residence Wells		70				5.0 ^
Groundwater - School/Daycare Wells		113				5.0 ^
Dimethenamid	H					
Groundwater - Agricultural/Farm Wells		95				10 ^
Groundwater - Private Residence Wells		70				10 ^
Groundwater - School/Daycare Wells		113				10 ^
Dimethenamid ethanesulfonic acid (ESA)	HM					
Groundwater - Agricultural/Farm Wells		95				2.0 ^
Groundwater - Private Residence Wells		70	6	8.6	3.0 - 80.3	2.0 ^
Groundwater - School/Daycare Wells		113				2.0 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Dimethenamid oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70	2	2.9	5.0 - 15.4	3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Dimethoate	I					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Disulfoton sulfone	IM					
Groundwater - Agricultural/Farm Wells		95				6.0 ^
Groundwater - Private Residence Wells		70				6.0 ^
Groundwater - School/Daycare Wells		113				6.0 ^
Diuron	H					
Groundwater - Agricultural/Farm Wells		95	4	4.2	7.0 - 26.3	4.0 ^
Groundwater - Private Residence Wells		70	1	1.4	89.1 ^	4.0 ^
Groundwater - School/Daycare Wells		113	2	1.8	7.0 ^	4.0 ^
EPTC	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Ethalfuralin	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Flufenacet oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95				2.5 ^
Groundwater - Private Residence Wells		70				2.5 ^
Groundwater - School/Daycare Wells		113				2.5 ^
Fluometuron	H					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Fonofos	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Halosulfuron	H					
Groundwater - Agricultural/Farm Wells		95				9.0 ^
Groundwater - Private Residence Wells		70				9.0 ^
Groundwater - School/Daycare Wells		113				9.0 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Hydroxy atrazine	HM					
Groundwater - Agricultural/Farm Wells		95	2	2.1	3.0 ^	2.0 ^
Groundwater - Private Residence Wells		70	41	58.6	3.0 - 50.8	2.0 ^
Groundwater - School/Daycare Wells		113	2	1.8	19.4 - 35.4	2.0 ^
Imazamethabenz acid	H					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Imazamethabenz methyl	H					
Groundwater - Agricultural/Farm Wells		95				1.5 ^
Groundwater - Private Residence Wells		70				1.5 ^
Groundwater - School/Daycare Wells		113				1.5 ^
Imazamox	H					
Groundwater - Agricultural/Farm Wells		95				4.0 ^
Groundwater - Private Residence Wells		70				4.0 ^
Groundwater - School/Daycare Wells		113				4.0 ^
Imazapic	H					
Groundwater - Agricultural/Farm Wells		95	1	1.1	5.0 ^	3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Imazapyr	H					
Groundwater - Agricultural/Farm Wells		95	5	5.3	14.8 - 414	2.5 ^
Groundwater - Private Residence Wells		70				2.5 ^
Groundwater - School/Daycare Wells		113	1	0.9	8.4 ^	2.5 ^
Imazaquin	H					
Groundwater - Agricultural/Farm Wells		95				5.0 ^
Groundwater - Private Residence Wells		70	1	1.4	8.0 ^	5.0 ^
Groundwater - School/Daycare Wells		113				5.0 ^
Imazethapyr	H					
Groundwater - Agricultural/Farm Wells		95				2.0 ^
Groundwater - Private Residence Wells		70	3	4.3	3.0 ^	2.0 ^
Groundwater - School/Daycare Wells		113				2.0 ^
Linuron	H					
Groundwater - Agricultural/Farm Wells		95				6.0 ^
Groundwater - Private Residence Wells		70				6.0 ^
Groundwater - School/Daycare Wells		113				6.0 ^
Malathion	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Malathion oxygen analog	IM					
Groundwater - Agricultural/Farm Wells		95				300 - 600
Groundwater - Private Residence Wells		70				600 ^
Groundwater - School/Daycare Wells		113				600 ^
MCPA	H					
Groundwater - Agricultural/Farm Wells		95				1.5 ^
Groundwater - Private Residence Wells		70				1.5 ^
Groundwater - School/Daycare Wells		113				1.5 ^
MCPB	H					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Metalaxyl	F					
Groundwater - Agricultural/Farm Wells		95	24	25.3	4.2 - 955	2.5 ^
Groundwater - Private Residence Wells		70	1	1.4	4.2 ^	2.5 ^
Groundwater - School/Daycare Wells		113				2.5 ^
Methidathion	I					
Groundwater - Agricultural/Farm Wells		95				100 ^
Groundwater - Private Residence Wells		70				100 ^
Groundwater - School/Daycare Wells		113				100 ^
Methidathion oxygen analog	IM					
Groundwater - Agricultural/Farm Wells		95				700 ^
Groundwater - Private Residence Wells		70				700 ^
Groundwater - School/Daycare Wells		113				700 ^
Metolachlor	H					
Groundwater - Agricultural/Farm Wells		95	2	2.1	25 ^	15 ^
Groundwater - Private Residence Wells		70	7	10.0	25 - 11900	15 ^
Groundwater - School/Daycare Wells		113	1	0.9	25 ^	15 ^
Metolachlor ethanesulfonic acid (ESA)	HM					
Groundwater - Agricultural/Farm Wells		95	13	13.7	5.0 - 97.1	3.0 ^
Groundwater - Private Residence Wells		70	55	78.6	5.0 - 15900	3.0 ^
Groundwater - School/Daycare Wells		113	40	35.4	5.0 - 1360	3.0 ^
Metolachlor oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95	3	3.2	5.0 - 102	3.0 ^
Groundwater - Private Residence Wells		70	49	70.0	5.0 - 3760	3.0 ^
Groundwater - School/Daycare Wells		113	14	12.4	5.0 - 109	3.0 ^
Metribuzin	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Metsulfuron methyl	H					
Groundwater - Agricultural/Farm Wells		95				7.0 ^
Groundwater - Private Residence Wells		70				7.0 ^
Groundwater - School/Daycare Wells		113				7.0 ^
Myclobutanil	F					
Groundwater - Agricultural/Farm Wells		95	1	1.1	83 ^	50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Neburon	H					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Nicosulfuron	H					
Groundwater - Agricultural/Farm Wells		95				8.0 ^
Groundwater - Private Residence Wells		70				8.0 ^
Groundwater - School/Daycare Wells		113				8.0 ^
Parathion methyl	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Pendimethalin	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Permethrin cis	IM					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Permethrin trans	IM					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Phorate	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Phorate oxygen analog	IM					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Phorate sulfone	IM					
Groundwater - Agricultural/Farm Wells		95				100 ^
Groundwater - Private Residence Wells		70				100 ^
Groundwater - School/Daycare Wells		113				100 ^
Phorate sulfoxide	IM					
Groundwater - Agricultural/Farm Wells		95				100 ^
Groundwater - Private Residence Wells		70				100 ^
Groundwater - School/Daycare Wells		113				100 ^
Picloram	H					
Groundwater - Agricultural/Farm Wells		95				12.5 ^
Groundwater - Private Residence Wells		70	1	1.4	20.8 ^	12.5 ^
Groundwater - School/Daycare Wells		113	1	0.9	20.8 ^	12.5 ^
Prometon	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Prometryn	H					
Groundwater - Agricultural/Farm Wells		95				1.0 ^
Groundwater - Private Residence Wells		70				1.0 ^
Groundwater - School/Daycare Wells		113				1.0 ^
Propachlor	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Propachlor oxanilic acid (OA)	HM					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Propanil	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Propazine	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Propiconazole	F					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Propoxur	I					
Groundwater - Agricultural/Farm Wells		95				3.0 ^
Groundwater - Private Residence Wells		70				3.0 ^
Groundwater - School/Daycare Wells		113				3.0 ^
Siduron	H					
Groundwater - Agricultural/Farm Wells		95				2.0 ^
Groundwater - Private Residence Wells		70				2.0 ^
Groundwater - School/Daycare Wells		113				2.0 ^
Simazine	H					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Sulfometuron methyl	H					
Groundwater - Agricultural/Farm Wells		95				2.5 ^
Groundwater - Private Residence Wells		70				2.5 ^
Groundwater - School/Daycare Wells		113				2.5 ^
Tebuconazole	F					
Groundwater - Agricultural/Farm Wells		95				50 ^
Groundwater - Private Residence Wells		70				50 ^
Groundwater - School/Daycare Wells		113				50 ^
Tebupirimfos	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Tebuthiuron	H					
Groundwater - Agricultural/Farm Wells		95	1	1.1	50 ^	30 ^
Groundwater - Private Residence Wells		70	1	1.4	333 ^	30 ^
Groundwater - School/Daycare Wells		113				30 ^
Terbufos	I					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Tetraconazole	F					
Groundwater - Agricultural/Farm Wells		95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Thifensulfuron	H					
Groundwater - Agricultural/Farm Wells		95				5.0 ^
Groundwater - Private Residence Wells		70				5.0 ^
Groundwater - School/Daycare Wells		113				5.0 ^

Pesticide / Commodity / Well Type	Pest. Type	Number of Samples	Samples with Detections	% of Samples w/ Detects	Range of Values Detected, ppt	Range of LODs, ppt
Thiobencarb						
Groundwater - Agricultural/Farm Wells	H	95				2.5 ^
Groundwater - Private Residence Wells		70				2.5 ^
Groundwater - School/Daycare Wells		113				2.5 ^
Tri Allate						
Groundwater - Agricultural/Farm Wells	H	95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Triasulfuron						
Groundwater - Agricultural/Farm Wells	H	95				7.0 ^
Groundwater - Private Residence Wells		70				7.0 ^
Groundwater - School/Daycare Wells		113				7.0 ^
Trifluralin						
Groundwater - Agricultural/Farm Wells	H	95				30 ^
Groundwater - Private Residence Wells		70				30 ^
Groundwater - School/Daycare Wells		113				30 ^
Triticonazole						
Groundwater - Agricultural/Farm Wells	F	95				500 ^
Groundwater - Private Residence Wells		70				500 ^
Groundwater - School/Daycare Wells		113				500 ^

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 G

Distribution of Residues by Pesticide in Drinking Water

Appendix G shows residue detections for all compounds tested in drinking water, including range of values detected and range of Limits of Detection (LODs). The U.S. 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 2009, the Pesticide Data Program (PDP) analyzed 612 drinking water samples, including 306 finished drinking water samples and 306 untreated (raw intake) drinking water samples. PDP detected 53 different residues (including metabolites), representing 42 pesticides, in finished drinking water and 49 different residues (including metabolites), representing 38 pesticides, in the untreated intake water; most of the detections were herbicides. None of the finished drinking water samples exceeded EPA MCLs or HAs 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 can 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 non-carcinogenic 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/wqctable/index.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 G. 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		306				1.6 - 6.0		70,000	
Water, Untreated		305				1.6 - 6.0			
2,4-D	H								
Water, Finished		306	249	81.4	1.1 - 180	0.65 - 3.6	70,000		
Water, Untreated		305	250	82.0	1.1 - 690	0.65 - 3.6			
2,4-DB	H								
Water, Finished		306				14 - 100			
Water, Untreated		305				14 - 100			
3-Hydroxycarbofuran	IM								
Water, Finished		119				24 ^			
Water, Untreated		118				24 ^			
Acetochlor	H								
Water, Finished		306	12	3.9	15.3 ^	9.2 - 49.5			
Water, Untreated		306	34	11.1	15.3 - 210	9.2 - 49.5			
Acetochlor ethanesulfonic acid (ESA)	HM								
Water, Finished		306	119	38.9	2.7 - 960	1.6 - 4.8			
Water, Untreated		305	127	41.6	2.7 - 1000	1.6 - 4.8			
Acetochlor oxanilic acid (OA)	HM								
Water, Finished		306	120	39.2	2.3 - 1300	1.4 - 4.8			
Water, Untreated		305	128	42.0	2.3 - 1300	1.4 - 4.8			
Alachlor	H								
Water, Finished		306	2	0.7	13 ^	7.8 - 9.8	2,000		
Water, Untreated		306	4	1.3	13 - 16.3	7.8 - 9.8			
Alachlor ethanesulfonic acid (ESA)	HM								
Water, Finished		306	135	44.1	2.8 - 110	1.7 - 4.8			
Water, Untreated		305	143	46.9	2.8 - 110	1.7 - 4.8			
Alachlor oxanilic acid (OA)	HM								
Water, Finished		306	109	35.6	1.0 - 61	0.61 - 4.8			
Water, Untreated		305	116	38.0	1.0 - 81	0.61 - 4.8			
Aldicarb	I								
Water, Finished		119				5.3 ^	3,000	7,000	
Water, Untreated		119				5.3 ^			
Aldrin	I								
Water, Finished		187				9.6 ^			
Water, Untreated		187				9.6 ^			3,000
Atrazine	H								
Water, Finished		306	269	87.9	1.1 - 1248	0.66 - 2.3	3,000		
Water, Untreated		306	273	89.2	1.1 - 1832	0.66 - 2.2			

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
Azinphos methyl	I								
Water, Finished		306				10 - 22.5			
Water, Untreated		306				10 - 22.5			
Azinphos methyl oxygen analog	IM								
Water, Finished		187				8.7 ^			
Water, Untreated		187				8.7 ^			
Benfluralin	H								
Water, Finished		119				11.3 - 15			
Water, Untreated		119				11.3 - 15			
Bensulfuron methyl	H								
Water, Finished		306				1.2 - 1.5			
Water, Untreated		305				1.2 - 1.5			
Bentazon	H								
Water, Finished		306	76	24.8	0.30 - 7.1	0.18 - 1.2		200,000	
Water, Untreated		305	120	39.3	0.30 - 13	0.18 - 1.2			
Bifenthrin	I								
Water, Finished		187				3.2 ^			
Water, Untreated		187				3.2 ^			
Bromacil	H								
Water, Finished		306	2	0.7	27 - 45	2.5 - 9.6		70,000	
Water, Untreated		305	22	7.2	4.2 - 41	2.5 - 9.6			
Bromoxynil	H								
Water, Finished		119				6.0 ^			
Water, Untreated		118				6.0 ^			
Bromuconazole 46	FM								
Water, Finished		187				3.2 ^			
Water, Untreated		187				3.2 ^			
Bromuconazole 47	FM								
Water, Finished		187				5.4 ^			
Water, Untreated		187				5.4 ^			
Butachlor	H								
Water, Finished		306				1.9 - 5.3			
Water, Untreated		306				1.9 - 5.3			
Butylate	H								
Water, Finished		187				1.8 ^		400,000	
Water, Untreated		187				1.8 ^			
Carbaryl	I								
Water, Finished		306	2	0.7	20 - 100	12 - 23			
Water, Untreated		305	2	0.7	38 - 92	12 - 23			
Carbendazim (MBC)	F								
Water, Finished		119				1.8 ^			
Water, Untreated		118	15	12.7	3.0 - 52	1.8 ^			
Carbofuran	I								
Water, Finished		306	3	1.0	2.0 ^	0.60 - 1.0	40,000		
Water, Untreated		305	2	0.7	2.0 - 7.7	0.60 - 1.0			

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
Carbophenothion	I								
Water, Finished		119				6.0 - 7.5			
Water, Untreated		119				6.0 - 7.5			
Chloramben	H								
Water, Finished		119				60 ^		100,000	
Water, Untreated		118				60 ^			
Chlordane cis	I								
Water, Finished		119				2.3 ^	2,000		
Water, Untreated		119				2.3 ^			2,400
Chlordane trans	I								
Water, Finished		119				2.3 ^	2,000		
Water, Untreated		119				2.3 ^			2,400
Chlorfenvinphos total	I								
Water, Finished		306				7.5 - 9.6			
Water, Untreated		306				7.5 - 9.6			
Chlorimuron ethyl	H								
Water, Finished		298	17	5.7	22 - 52	8.4 - 13			
Water, Untreated		297	22	7.4	22 - 57	8.4 - 13			
Chlorpyrifos	I								
Water, Finished		119				6.0 - 7.5		2,000	
Water, Untreated		119				6.0 - 7.5			
Chlorpyrifos methyl	I								
Water, Finished		119				11.3 ^			
Water, Untreated		119				11.3 ^			
Clopyralid	H								
Water, Finished		226	27	11.9	5.7 - 92	3.4 - 30			
Water, Untreated		225	32	14.2	5.7 - 38	3.4 - 30			
Coumaphos	I								
Water, Finished		119				12 ^			
Water, Untreated		119				12 ^			
Coumaphos oxygen analog	IM								
Water, Finished		119				30 ^			
Water, Untreated		119				30 ^			
Cyanazine	H								
Water, Finished		306				1.7 - 24.8		1000	
Water, Untreated		306				1.7 - 24.8			
Cycloate	H								
Water, Finished		306				3.3 - 6.0			
Water, Untreated		305				3.3 - 6.0			
Cyfluthrin	I								
Water, Finished		187				40 ^			
Water, Untreated		187				40 ^			

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
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)									
	I	187				42 ^			
Water, Finished		187				42 ^			
Water, Untreated		187				42 ^			
Cypermethrin									
	I	187				74 ^			
Water, Finished		187				74 ^			
Water, Untreated		187				74 ^			
Cyphenothrin									
	I	187				14 ^			
Water, Finished		187				14 ^			
Water, Untreated		187				14 ^			
Cyproconazole									
	F	187				1.6 ^			
Water, Finished		187				1.6 ^			
Water, Untreated		187				1.6 ^			
DCPA									
	H	114				0.80 ^		70,000	
Water, Finished		114				0.80 ^		70,000	
Water, Untreated		114				0.75 ^			
DCPA monoacid									
	H	119				141 - 222			
Water, Finished		119				141 - 222			
Water, Untreated		118				141 - 222			
DDD o,p'									
	IM	119				3.8 ^			
Water, Finished		119				3.8 ^			
Water, Untreated		119				3.8 ^			
DDD p,p'									
	IM	119				3.8 ^			
Water, Finished		119				3.8 ^			
Water, Untreated		119				3.8 ^			
DDE p,p'									
	IM	119				7.5 ^			
Water, Finished		119				7.5 ^			
Water, Untreated		119				7.5 ^			
DDT o,p'									
	I	119				3.8 ^			
Water, Finished		119				3.8 ^			
Water, Untreated		119				3.8 ^			
DDT p,p'									
	I	119				3.8 - 12.5			
Water, Finished		119				3.8 - 12.5			
Water, Untreated		119				3.8 - 12.5			
Deltamethrin (includes parent Tralomethrin)									
	I	187				84 ^			
Water, Finished		187				84 ^			
Water, Untreated		187				84 ^			
Desethyl atrazine									
	HM	306	234	76.5	0.72 - 540	0.43 - 24.8			
Water, Finished		306	234	76.5	0.72 - 540	0.43 - 24.8			
Water, Untreated		306	245	80.1	0.72 - 520	0.43 - 24.8			
Desisopropyl atrazine									
	HM	306	164	53.6	5.2 - 333	3.1 - 9.8			
Water, Finished		306	164	53.6	5.2 - 333	3.1 - 9.8			
Water, Untreated		306	182	59.5	5.2 - 310	3.1 - 9.8			

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
Diazinon	I								
Water, Finished		306				3.3 - 7.5		1,000	
Water, Untreated		306				3.3 - 7.5			170
Diazinon oxygen analog	IM								
Water, Finished		119				4.5 - 9.0			
Water, Untreated		119				4.5 - 9.0			
Dicamba	H								
Water, Finished		187				15 ^		4,000,000	
Water, Untreated		187				15 ^			
Dichlobenil	H								
Water, Finished		119				45 ^			
Water, Untreated		119				45 ^			
Dichlorprop	H								
Water, Finished		306				1.7 - 1.8			
Water, Untreated		305				1.7 - 1.8			
Dichlorvos (DDVP)	I								
Water, Finished		119				11.3 ^			
Water, Untreated		119				11.3 ^			
Dicloran	F								
Water, Finished		119				7.5 ^			
Water, Untreated		119				7.5 ^			
Dicofol p,p'	I								
Water, Finished		119				11.3 - 37.5			
Water, Untreated		119				11.3 - 37.5			
Dicrotophos	I								
Water, Finished		119				6.0 - 9.0			
Water, Untreated		119				6.0 - 9.0			
Dieldrin	I								
Water, Finished		119				15 ^			
Water, Untreated		119				15 ^			240
Difenoconazole	F								
Water, Finished		179				6.3 ^			
Water, Untreated		179				6.3 ^			
Dimethenamid	H								
Water, Finished		119	4	3.4	1.0 ^	0.60 ^			
Water, Untreated		118	18	15.3	1.0 - 4.2	0.60 ^			
Dimethenamid oxanilic acid (OA)	HM								
Water, Finished		187	23	12.3	1.0 - 21	0.63 ^			
Water, Untreated		187	67	35.8	1.0 - 61	0.63 ^			
Dimethenamid / Dimethenamid P	H								
Water, Finished		187	13	7.0	4.2 - 17	2.5 ^			
Water, Untreated		187	43	23	4.2 - 510	2.5 ^			
Dimethoate	I								
Water, Finished		306	2	0.7	7.5 - 68	4.5 - 7.5			
Water, Untreated		306				4.5 - 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
Dinoseb	H								
Water, Finished		306				0.60 - 0.78	7,000	7,000	
Water, Untreated		305	2	0.7	1.0 - 1.3	0.60 - 0.78			
Diphenamid	H								
Water, Finished		119				24 ^		200,000	
Water, Untreated		119				24 ^			
Disulfoton	I								
Water, Finished		306				7.5 - 9.0		700	
Water, Untreated		306				7.5 - 9.0			
Disulfoton sulfone	IM								
Water, Finished		306				4.1 - 12			
Water, Untreated		306				4.1 - 12			
Diuron	H								
Water, Finished		306	40	13.1	5.8 - 62	3.5 - 9.6			
Water, Untreated		305	70	23.0	5.8 - 309	3.5 - 9.6			
Endosulfan I	I								
Water, Finished		119				22.5 ^			
Water, Untreated		119				22.5 ^			220
Endosulfan II	IM								
Water, Finished		119				18.8 ^			
Water, Untreated		119				18.8 ^			220
Endosulfan sulfate	IM								
Water, Finished		119				30 ^			
Water, Untreated		119				30 ^			
Endrin	I								
Water, Finished		119				30 - 52.5	2,000	2,000	
Water, Untreated		119				30 - 52.5			86
Epoxiconazole	F								
Water, Finished		187				6.9 ^			
Water, Untreated		187				6.9 ^			
EPTC	H								
Water, Finished		306				5.0 - 61.9			
Water, Untreated		306				5.0 - 61.9			
Esfenvalerate+Fenvalerate Total	I								
Water, Finished		187				38 ^			
Water, Untreated		187				38 ^			
Ethalfuralin	H								
Water, Finished		119				60 ^			
Water, Untreated		119				60 ^			
Ethion	I								
Water, Finished		306				2.3 - 25			
Water, Untreated		306				2.3 - 25			
Ethion mono oxon	IM								
Water, Finished		119				3.8 ^			
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
Ethoprop	I								
Water, Finished		306				5.3 - 6.0			
Water, Untreated		306				5.3 - 6.0			
Fenamiphos	I								
Water, Finished		119				6.0 - 7.5		700	
Water, Untreated		119				6.0 - 7.5			
Fenamiphos sulfone	IM								
Water, Finished		119				11.3 - 15			
Water, Untreated		119				11.3 - 15			
Fenamiphos sulfoxide	IM								
Water, Finished		119				11.3 - 15			
Water, Untreated		119				11.3 - 15			
Fenarimol	F								
Water, Finished		119				37.5 ^			
Water, Untreated		119				37.5 ^			
Fenbuconazole	F								
Water, Finished		306				2.4 - 3.0			
Water, Untreated		305				2.4 - 3.0			
Fenitrothion	I								
Water, Finished		306				9.0 - 20			
Water, Untreated		306				9.0 - 20			
Fenitrothion oxygen analog	IM								
Water, Finished		119				6.0 ^			
Water, Untreated		119				6.0 ^			
Fenpropathrin	I								
Water, Finished		306				14 - 200			
Water, Untreated		306				14 - 200			
Fenthion	I								
Water, Finished		306				6.0 - 22			
Water, Untreated		306				6.0 - 22			
Fenthion-O analog	IM								
Water, Finished		119				11.3 - 15			
Water, Untreated		119				11.3 - 15			
Fenuron	H								
Water, Finished		119				15 ^			
Water, Untreated		118				15 ^			
Fipronil	I								
Water, Finished		119				12 ^			
Water, Untreated		118				12 ^			
Fludioxonil	F								
Water, Finished		119	1	0.8	62.4 ^	37.5 - 125			
Water, Untreated		119				37.5 - 125			
Flufenacet oxanilic acid (OA)	HM								
Water, Finished		187	24	12.8	3.3 - 7.7	0.75 ^			
Water, Untreated		187	24	12.8	2.5 - 5.7	0.75 ^			

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
Flumetsulam	H								
Water, Finished		306				6.0 - 20			
Water, Untreated		305				6.0 - 20			
Fluometuron	H								
Water, Finished		306				1.2 - 4.2		90,000	
Water, Untreated		305				1.2 - 4.2			
Fluvalinate	I								
Water, Finished		187				130 ^			
Water, Untreated		187				130 ^			
Fonofos	I								
Water, Finished		119				7.5 ^		10,000	
Water, Untreated		119				7.5 ^			
Halosulfuron methyl	H								
Water, Finished		179				3.3 ^			
Water, Untreated		179				3.3 ^			
Heptachlor epoxide	IM								
Water, Finished		119				15 ^	200		
Water, Untreated		119				15 ^			520
Hexaconazole	F								
Water, Finished		187				11 ^			
Water, Untreated		187				11 ^			
Hydroxy atrazine	HM								
Water, Finished		187	139	74.3	2.0 - 350	1.2 ^			
Water, Untreated		187	133	71.1	2.0 - 360	1.2 ^			
Imazamethabenz acid	H								
Water, Finished		187				0.60 ^			
Water, Untreated		187				0.60 ^			
Imazamethabenz methyl	H								
Water, Finished		306	2	0.7	19 - 23	0.31 - 2.0			
Water, Untreated		305				0.31 - 2.0			
Imazamox	H								
Water, Finished		306				2.4 - 3.1			
Water, Untreated		305				2.4 - 3.1			
Imazapic	H								
Water, Finished		306	3	1.0	1.5 ^	0.90 - 2.4			
Water, Untreated		305	2	0.7	1.5 ^	0.90 - 2.4			
Imazapyr	H								
Water, Finished		306	108	35.3	1.5 - 110	0.90 - 1.0			
Water, Untreated		305	102	33.4	1.5 - 55	0.90 - 1.0			
Imazaquin	H								
Water, Finished		306	2	0.7	1.8 ^	1.1 - 2.4			
Water, Untreated		305	1	0.3	1.8 ^	1.1 - 2.4			
Imazethapyr	H								
Water, Finished		306	18	5.9	2.0 - 3.9	1.0 - 2.4			
Water, Untreated		305	14	4.6	2.0 - 5.5	1.0 - 2.4			

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
Imidacloprid	I								
Water, Finished		306	22	7.2	2.5 - 21	1.5 - 6.2			
Water, Untreated		305	52	17.0	2.5 - 29	1.5 - 6.2			
Isofenphos	I								
Water, Finished		119				4.5 ^			
Water, Untreated		119				4.5 ^			
Lindane (BHC gamma)	I								
Water, Finished		306				11.3 - 20	200		
Water, Untreated		306				11.3 - 20			950
Linuron	H								
Water, Finished		306				3.0 - 4.5			
Water, Untreated		305				3.0 - 4.5			
Malathion	I								
Water, Finished		306				10 - 20		500,000	
Water, Untreated		306				10 - 20			
Malathion oxygen analog	IM								
Water, Finished		119				6.0 ^			
Water, Untreated		119				6.0 ^			
MCPA	H								
Water, Finished		306	47	15.4	1.3 - 47	0.78 - 7.2		30,000	
Water, Untreated		305	66	21.6	1.3 - 69	0.78 - 7.2			
MCPB	H								
Water, Finished		306				6.6 - 21			
Water, Untreated		305				6.6 - 21			
Metalaxyl	F								
Water, Finished		306	17	5.6	5.0 - 11	3.0 - 22.5			
Water, Untreated		306	21	6.9	5.0 - 37.5	3.0 - 22.5			
Methidathion	I								
Water, Finished		119				5.3 ^			
Water, Untreated		119				5.3 ^			
Methidathion oxygen analog	IM								
Water, Finished		119				22.5 ^			
Water, Untreated		119				22.5 ^			
Methiocarb	I								
Water, Finished		119				15 ^			
Water, Untreated		118				15 ^			
Methomyl	I								
Water, Finished		306				1.8 - 7.3		200,000	
Water, Untreated		305				1.8 - 7.3			
Methoxychlor olefin	IM								
Water, Finished		119				3.8 ^	40,000	40,000	
Water, Untreated		119				3.8 ^			
Methoxychlor Total	I								
Water, Finished		119				7.5 - 125	40,000	40,000	
Water, Untreated		119				7.5 - 125			

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
Metolachlor	H								
Water, Finished		306	175	57.2	2.5 - 295	1.5 - 3.0		700,000	
Water, Untreated		306	200	65.4	2.5 - 603	1.5 - 3.0			
Metolachlor ethanesulfonic acid (ESA)	HM								
Water, Finished		306	253	82.7	0.60 - 887	0.36 - 4.8			
Water, Untreated		305	255	83.6	0.60 - 1023	0.36 - 4.8			
Metolachlor oxanilic acid (OA)	HM								
Water, Finished		306	171	55.9	5.3 - 394	3.2 - 4.8			
Water, Untreated		305	194	63.6	5.3 - 370	3.2 - 4.8			
Metribuzin	H								
Water, Finished		119				22.5 ^		70,000	
Water, Untreated		119				22.5 ^			
Metsulfuron methyl	H								
Water, Finished		298	2	0.7	2.5 ^	1.5 - 8.4			
Water, Untreated		297	2	0.7	2.5 - 6.0	1.5 - 8.4			
Mevinphos Total	I								
Water, Finished		119				12 - 75			
Water, Untreated		119				12 - 75			
Molinate	H								
Water, Finished		119				9.8 ^			
Water, Untreated		119				9.8 ^			
Monuron	H								
Water, Finished		119				6.0 ^			
Water, Untreated		118				6.0 ^			
Myclobutanil	F								
Water, Finished		306				2.9 - 9.6			
Water, Untreated		305				2.9 - 9.6			
Napropamide	H								
Water, Finished		119				24 ^			
Water, Untreated		119				24 ^			
Neburon	H								
Water, Finished		306	2	0.7	61 - 100	1.2 - 9.4			
Water, Untreated		305				1.2 - 9.4			
Nicosulfuron	H								
Water, Finished		306				1.7 - 4.8			
Water, Untreated		305	1	0.3	11 ^	1.7 - 4.8			
Norflurazon	H								
Water, Finished		119	11	9.2	31.3 - 96	18.8 ^			
Water, Untreated		119	11	9.2	31.3 - 100	18.8 ^			
Norflurazon desmethyl	HM								
Water, Finished		119				37.5 - 250			
Water, Untreated		119				37.5 - 250			

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
Omethoate	IM								
Water, Finished		187	3	1.6	0.50 - 3.6	0.30 ^			
Water, Untreated		187				0.30 ^			
Oxadiazon	H								
Water, Finished		119				15 ^			
Water, Untreated		119				15 ^			
Oxadixyl	F								
Water, Finished		119				48.8 ^			
Water, Untreated		119				48.8 ^			
Oxamyl	I								
Water, Finished		119				18 - 60	200,000		
Water, Untreated		118				18 - 60			
Oxychlordan	IM								
Water, Finished		119				7.5 ^			
Water, Untreated		119				7.5 ^			
Oxydemeton methyl sulfone	IM								
Water, Finished		119				22.5 - 45			
Water, Untreated		119				22.5 - 45			
Oxyfluorfen	H								
Water, Finished		119				187.5			
Water, Untreated		119				187.5			
Parathion ethyl	I								
Water, Finished		306				15 - 50			
Water, Untreated		306				15 - 50			65
Parathion methyl	I								
Water, Finished		306				18.8 - 62.5			
Water, Untreated		306				18.8 - 62.5			65
Parathion methyl oxygen analog	IM								
Water, Finished		306				9.8 - 11			
Water, Untreated		306				9.8 - 11			
Parathion oxygen analog	IM								
Water, Finished		119				7.5 ^			
Water, Untreated		119				7.5 ^			
Pebulate	H								
Water, Finished		119				3.8 - 7.5			
Water, Untreated		119				3.8 - 7.5			
Pendimethalin	H								
Water, Finished		119				4.5 ^			
Water, Untreated		119				4.5 ^			
Permethrin cis	IM								
Water, Finished		187				9.0 ^			
Water, Untreated		187				9.0 ^			
Permethrin trans	IM								
Water, Finished		187				7.5 ^			
Water, Untreated		187				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
Phenothrin	I								
Water, Finished		187				27 ^			
Water, Untreated		187				27 ^			
Phenthoate	I								
Water, Finished		119				15 ^			
Water, Untreated		119				15 ^			
Phorate	I								
Water, Finished		306				11.3 - 15			
Water, Untreated		306				11.2 - 15			
Phorate oxygen analog	IM								
Water, Finished		119				5.3 ^			
Water, Untreated		119				5.3 ^			
Phorate sulfone	IM								
Water, Finished		119				6.0 ^			
Water, Untreated		119				6.0 ^			
Phorate sulfoxide	IM								
Water, Finished		119				22.5 - 37.5			
Water, Untreated		119				22.5 - 37.5			
Phosalone	I								
Water, Finished		119				4.5 ^			
Water, Untreated		119				4.5 ^			
Phosphamidon	I								
Water, Finished		119				12 - 40			
Water, Untreated		119				12 - 40			
Picloram	H								
Water, Finished		306	5	1.6	37 - 84	22 - 30	500,000		
Water, Untreated		305	3	1.0	37 - 89	22 - 30			
Piperonyl butoxide	I								
Water, Finished		119				11.3 - 18.8			
Water, Untreated		119				11.3 - 18.8			
Pirimicarb	I								
Water, Finished		119				37.5 ^			
Water, Untreated		119				37.5 ^			
Pirimiphos methyl	I								
Water, Finished		119				2.3 - 5.3			
Water, Untreated		119				2.3 - 5.3			
Prallethrin	I								
Water, Finished		187				25 ^			
Water, Untreated		187				25 ^			
Profenofos	I								
Water, Finished		119				12 ^			
Water, Untreated		119				12 ^			
Prometon	H								
Water, Finished		306	270	88.2	0.28 - 19	0.17 - 1.5		400,000	
Water, Untreated		306	275	89.9	0.28 - 36	0.17 - 1.5			

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
Prometryn	H								
Water, Finished		306	3	1.0	0.28 - 76	0.17 - 24			
Water, Untreated		306	21	6.9	0.28 - 0.98	0.17 - 24			
Pronamide	H								
Water, Finished		119				22.5 ^			
Water, Untreated		119				22.5 ^			
Propachlor	H								
Water, Finished		306				0.17 - 5.3			
Water, Untreated		306				0.17 - 5.3			
Propachlor oxanilic acid (OA)	HM								
Water, Finished		187				1.4 ^			
Water, Untreated		187				1.4 ^			
Propanil	H								
Water, Finished		306	3	1.0	11.2 - 170	6.7 - 24.8			
Water, Untreated		306				6.7 - 24.8			
Propargite	I								
Water, Finished		119				90 - 1500			
Water, Untreated		119				90 - 1500			
Propazine	H								
Water, Finished		306	44	14.4	5.5 - 16	3.3 - 4.5		10,000	
Water, Untreated		306	70	22.9	5.5 - 28	3.3 - 4.5			
Propetamphos	I								
Water, Finished		119				9.8 - 12			
Water, Untreated		119				9.8 - 12			
Propham	H								
Water, Finished		119				18 ^		100,000	
Water, Untreated		118				18 ^			
Propiconazole	F								
Water, Finished		306	2	0.7	5.7 ^	3.4 - 6.0			
Water, Untreated		305	9	3.0	10 ^	3.4 - 6.0			
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		187				7.8 ^			
Water, Untreated		187				7.8 ^			
Siduron	H								
Water, Finished		306	2	0.7	23 - 25	2.1 - 2.4			
Water, Untreated		305	2	0.7	4.0 ^	2.1 - 2.4			
Simazine	H								
Water, Finished		306	180	58.8	1.2 - 484	0.71 - 3.8	4,000		
Water, Untreated		306	210	68.6	1.2 - 1143	0.71 - 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
Sulfometuron methyl	H								
Water, Finished		306	5	1.6	3.2 - 9.1	1.9 - 12			
Water, Untreated		305	24	7.9	3.2 - 59	1.9 - 12			
Sulfotep	I								
Water, Finished		119				4.5 - 6.0			
Water, Untreated		119				4.5 - 6.0			
Sulprofos	I								
Water, Finished		119				6.0 ^			
Water, Untreated		119				6.0 ^			
Tebuconazole	F								
Water, Finished		306	2	0.7	150 ^	3.5 - 4.8			
Water, Untreated		305				3.5 - 4.8			
Tebupirimfos	I								
Water, Finished		119				5.3 - 7.5			
Water, Untreated		119				5.3 - 7.5			
Tebupirimfos oxygen analog	IM								
Water, Finished		119				4.5 - 9.0			
Water, Untreated		119				4.5 - 9.0			
Tebuthiuron	H								
Water, Finished		306	164	53.6	0.35 - 16	0.21 - 0.60		500,000	
Water, Untreated		305	204	66.9	0.35 - 16	0.21 - 0.60			
Tecnazene	P								
Water, Finished		119				18.8 ^			
Water, Untreated		119				18.8 ^			
Tefluthrin	I								
Water, Finished		187				2.1 ^			
Water, Untreated		187				2.1 ^			
Terbacil	H								
Water, Finished		306				1.6 - 22.5		90,000	
Water, Untreated		306				1.6 - 22.5			
Terbufos	I								
Water, Finished		306				6.3 - 22.5		400	
Water, Untreated		306				6.3 - 22.5			
Terbufos sulfone	IM								
Water, Finished		119				4.5 ^			
Water, Untreated		119				4.5 ^			
Terbufos-O analog	IM								
Water, Finished		119				6.0 ^			
Water, Untreated		119				6.0 ^			
Tetrachlorvinphos	I								
Water, Finished		306				6.0 - 7.5			
Water, Untreated		306				6.0 - 7.5			
Tetraconazole	F								
Water, Finished		306	1	0.3	3.2 ^	1.8 - 1.9			
Water, Untreated		305				1.8 - 1.9			

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
Tetradifon	I								
Water, Finished		306				7.2 - 37.5			
Water, Untreated		306				7.2 - 37.5			
Tetramethrin	I								
Water, Finished		187				28 ^			
Water, Untreated		187				28 ^			
Thifensulfuron	H								
Water, Finished		187				8.9 ^			
Water, Untreated		187	1	0.5	14.8 ^	8.9 ^			
Thiobencarb	H								
Water, Finished		306	2	0.7	71 - 190	7.7 - 18			
Water, Untreated		305				7.7 - 18			
Tri Allate	H								
Water, Finished		306				12 - 24.8			
Water, Untreated		306				12 - 24.8			
Triadimefon	F								
Water, Finished		306				1.3 - 8.4			
Water, Untreated		305				1.3 - 8.4			
Triadimenol	F								
Water, Finished		187				20 ^			
Water, Untreated		187				20 ^			
Triasulfuron	H								
Water, Finished		187				3.1 ^			
Water, Untreated		187	1	0.5	5.2 ^	3.1 ^			
Triclopyr	H								
Water, Finished		306	115	37.6	2.7 - 76	1.6 - 6.0			
Water, Untreated		305	122	40.0	2.7 - 100	1.6 - 6.0			
Trifluralin	H								
Water, Finished		119				1.5 ^		10,000	
Water, Untreated		119				1.5 ^			
Triticonazole	F								
Water, Finished		187				14 ^			
Water, Untreated		187				14 ^			

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.

^ = 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 H

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

Appendix H gives the number of fruit and vegetable, rice, beef, and catfish samples per State or country of origin and the number of samples of unknown origin. Where available, the 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 H, fruit and vegetable, rice, beef, and catfish samples originated from 45 States, 1 U.S. territory, and 22 foreign countries. There were 40 samples from mixed national origins (multiple countries). There were 455 domestic and 2 imported samples from unknown States and countries, respectively. There were an additional 113 samples from unknown origins. Overall, for all samples except groundwater and drinking water, 78.7 percent were from U.S. sources, 20.1 percent were imports, 0.3 percent were of mixed national origin, and 0.9 percent were of unknown origin.

APPENDIX H. SAMPLE ORIGIN BY STATE OR COUNTRY ¹ (Determined by Grower, Packer, or Distributor)

Part 1. Domestic Samples

States = 45	Fresh F&V														Processed F&V					Other Commodities				# of Samples	% of Total
	AP	AS	CB	CL	CU	GO	GR	LT	OG	PE	PO	SP	ST	SW	CS	KB	NB	TP	ZB	BA	BM	FC	RI		
Alabama																						18	1	19	0.2
Arizona			4		13				2		2	1			2	2	1	2		4	4			37	0.3
Arkansas											1		7		2	12	27	34	9			9	42	143	1.2
California	24	74	145	90	22	55	334	258	580	101	103	519	570	227	4	20	40	246	24	12	12	55	59	3574	30.1
Colorado			20			2		2		2	36	8				1	1			20	20	2		114	1.0
Connecticut												1						1						2	<0.1
Delaware			3								3													6	0.1
Florida	1	6	115	9	91	2	4	5	46		39	10	90	5		6	9	19	4			11	19	491	4.1
Georgia			21		43													2						66	0.6
Idaho	5										185				3	8	10	15	1	7	7	1	2	244	2.1
Illinois			2					3				1			3	16	34	47	13	2	2		25	148	1.2
Indiana	3		3															3	1	1	1			12	0.1
Iowa																				19	19			38	0.3
Kansas																	1		1	56	56			114	1.0
Kentucky										1	6		2						3	3				15	0.1
Louisiana													51									12		63	0.5
Maine	1										8	2					2	5				5	1	24	0.2
Maryland	11		13	2	8		1	1	8	2	10	15	6	9	4	3	11	19	6			5	6	140	1.2
Massachusetts	2							8			2	35							1			25		73	0.6
Michigan	32	8	11		32	6	3			1	30	27		2	6	13	22	35	7	1	1	10	18	265	2.2
Minnesota	2		4		2		4	7	13		17	2	2	10	3	25	20	12	11	12	12		13	171	1.4
Mississippi			1											50								132		183	1.5
Missouri										1			12					4		1	1		6	25	0.2
Montana																				2	2			4	<0.1
Nebraska											3					1	1	140		40	40		1	226	1.9
Nevada							1				13													14	0.1
New Hampshire																	2	2	1					5	<0.1
New Jersey		4	2	9	11	4						8		3	1	18	33	20	19			5	17	154	1.3
New Mexico											4									3	3	1		11	0.1
New York	59	1	18		7	1		2	1	2	25	5		4	10	8	16	15	9	1	1	12	11	208	1.8
North Carolina	1		1		7			2			3			214		2	3	5	1	1	1	8	4	253	2.1
North Dakota											9									1	1			11	0.1
Ohio	8		11	2	17	11	1	9		3	18	6		5	9	8	21	46	6	4	4	20	13	222	1.9
Oklahoma																				8	8			16	0.1
Oregon	1		8	1		1		3		92	19	3			2	2	5	9	3	5	5	1	11	171	1.4
Pennsylvania	5	1	1	1	1		1	9		2	13	8			2	9	14	12	13	4	4	2	9	111	0.9
Puerto Rico																							1	1	<0.1
South Carolina			2			3							1											6	0.1
South Dakota																								16	0.1
Tennessee													1		1	16	52		34	1	1			106	0.9
Texas	21		25	22	20	3	12	5	37	18	52	23	7	44	10	6	32	23	15	52	52	21	120	620	5.2
Utah																				1	1			2	<0.1
Virginia	2		1								2	5					1	2		1	1			15	0.1
Washington	506	13	5	3	14		5	2		384	94	10			2	3	1	9		6	6	18	4	1085	9.1
West Virginia	1																							1	<0.1
Wisconsin	1		1								23	7					2	1	3	2	2	1		43	0.4
Unknown State	14	13	144	10	46	4	16	2	5	20	16	10	3	84	2	2	3	5		11	11	30	4	455	3.8
No. of Domestic	700	120	561	149	334	92	382	318	692	627	732	712	678	731	66	179	365	732	184	289	289	404	387	9,723	
% of Total	94	16	84	81	45	16	51	82	93	84	98	96	91	99	88	96	98	99	99	99	99	74	89		78.7

Part 2. Imported Samples

Countries = 22	Fresh F&V															Processed F&V					Other Commodities				# of Samples	% of Total					
	AP	AS	CB	CL	CU	GO	GR	LT	OG	PE	PO	SP	ST	SW	CS	KB	NB	TP	ZB	BA	BM	FC	RI								
Argentina		3							53																			56	0.5		
Australia									14																			14	0.1		
Brazil							8																					10	0.1		
Canada	6	6	2	2	22	9			1	1	9	6																87	0.7		
Chile	20	4					286		10	54																		374	3.2		
China																												93	0.8		
Costa Rica				1																								1	<0.1		
Dominican Republic					1																							1	<0.1		
Ecuador		2																										2	<0.1		
Egypt																												1	<0.1		
Guatemala					1	8																						9	0.1		
Honduras					19																							19	0.2		
India																												18	0.2		
Italy																		2										2	<0.1		
Mexico		183	67	29	354	441	59	41	5			20	65				6		1									1271	10.7		
New Zealand	15									3																		18	0.2		
Peru		420					6						1															427	3.6		
South Africa									16	3																		19	0.2		
Spain									1																			1	<0.1		
Taiwan																												18	0.2		
Thailand																												4	24	28	0.2
Vietnam																												7	7	0.1	
Unknown Country					1																							1	2	<0.1	
No. of Imports	41	618	69	32	398	458	359	41	47	114	9	26	66	0	9	6	7	2	2	3	3	124	44				2,478				
% of Total	6	83	10	17	53	82	48	11	6	15	1	3	9	0	12	3	2	<1	1	1	1	23	10						20.1		

Part 3. Mixed National Origin Samples

	Fresh F&V															Processed F&V					Other Commodities				# of Samples	% of Total					
	AP	AS	CB	CL	CU	GO	GR	LT	OG	PE	PO	SP	ST	SW	CS	KB	NB	TP	ZB	BA	BM	FC	RI								
Argentina / Uruguay / USA																												2	2	<0.1	
Canada / USA																	1												1	1	<0.1
China / Taiwan																													7	7	0.1
Mexico / USA								27				3																	30	0.3	
No. of Mixed National Origin Samples								27				3																	40		
% of Total								6.98				<1																	1	<1	0.3

Part 4. Unknown Origin Samples

	Fresh F&V															Processed F&V					Other Commodities				# of Samples	% of Total					
	AP	AS	CB	CL	CU	GO	GR	LT	OG	PE	PO	SP	ST	SW	CS	KB	NB	TP	ZB	BA	BM	FC	RI								
Unknown Origin	3	6	38	3	12	8	3	1	5	2	3	3		8															113		
% of Total	<1	1	6	2	2	1	<1	<1	1	<1	<1	<1		1				1											1	<1	0.9

Sample Totals: 744 744 668 184 744 558 744 387 744 743 744 744 744 739 75 186 372 742 186 292 292 543 435 12,354

NOTE

¹ Excludes groundwater and untreated/finished drinking water samples.

Commodity Legend		
AP = Apples	FC = Catfish	PO = Potatoes
AS = Asparagus	GO = Green Onions	RI = Rice
BA = Beef, Adipose	GR = Grapes	SP = Spinach
BM - Beef, Muscle	KB = Kidney Beans, Canned	ST = Strawberries
CB = Sweet Corn, Fresh (On-the-Cob)	LT = Lettuce (Organic)	SW = Sweet Potatoes
CL = Cilantro	NB = Pinto Beans, Canned	TP = Tomato Paste
CS = Sweet Corn, Frozen	OG = Oranges	ZB = Garbanzo Beans, Canned
CU = Cucumbers	PE = Pears	

Appendix I

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 I 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 cucumbers are compared with data for samples originating in Mexico for 2009. Residue data for grapes from the United States are compared with data for samples originating in Chile for 2009. 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 I. Import vs. Domestic Pesticide Residue Comparisons

2009 Distribution of Residues for Cucumber 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
Carbendazim (MBC)	United States	279	45	16.1
	Mexico	213	41	19.2
Cyromazine	United States	279	7	2.5
	Mexico	213	43	20.2
Endosulfan I	United States	334	66	19.8
	Mexico	354	141	39.8
Endosulfan II	United States	334	64	19.2
	Mexico	354	110	31.1
Endosulfan sulfate	United States	334	66	19.8
	Mexico	354	138	39.0
Metalaxyl	United States	334	44	13.2
	Mexico	354	86	24.3
Oxamyl	United States	334	39	11.7
	Mexico	354	44	12.4
Oxamyl oxime	United States	55	10	18.2
	Mexico	141	28	19.9
Thiamethoxam	United States	334	38	11.4
	Mexico	354	39	11.0

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

**2009 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
Boscalid	United States	382	141	36.9
	Chile	286	127	44.4
Cyprodinil	United States	382	75	19.6
	Chile	286	90	31.5
Fenhexamid	United States	270	49	18.1
	Chile	201	142	70.6
Fludioxonil	United States	382	6	1.6
	Chile	286	131	45.8
Imidacloprid	United States	382	172	45.0
	Chile	286	172	60.1
Iprodione	United States	382	16	4.2
	Chile	286	104	36.4
Methoxyfenozide	United States	382	139	36.4
	Chile	286	74	25.9
Myclobutanil	United States	382	104	27.2
	Chile	286	125	43.7
Pyraclostrobin	United States	382	190	49.7
	Chile	286	135	47.2
Pyrimethanil	United States	382	67	17.5
	Chile	286	31	10.8
Quinoxyfen	United States	112	26	23.2
	Chile	85	32	37.6
Tebuconazole	United States	382	62	16.2
	Chile	286	85	29.7
Trifloxystrobin	United States	382	144	37.7
	Chile	286	53	18.5

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

Appendix J

Pesticide Residues by Commodity

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

Appendix J shows 104 commodity/pesticide pairs (including metabolites, isomers, and degradates) with detections in at least 10 percent of the samples tested. The data shown include the range and mean of values detected, range of Limits of Detection (LODs), and U.S. Environmental Protection Agency (EPA) tolerance references for each pair. The EPA tolerances cited in this summary and Appendices apply to 2009 and not to the current year. There may be instances where tolerances may have been recently set or revoked that would have an effect on whether a residue is violative or not.

EPA tolerances as published in *40 CFR Part 180* are expressed in parts per million (ppm). Because beef and catfish residues are expressed in parts per billion (ppb), EPA tolerances 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.

APPENDIX J. PESTICIDE RESIDUES BY COMMODITY
(Pairs With Residue Detections in at Least 10 Percent of Samples)

Commodity / Pesticide	Pest. Type	% of Samples with Detections	Number of Samples Analyzed	Number of Samples with Detections	Range of Detections, ppm	Mean of Detections, ppm	EPA Tolerance, ppm
1 Apples							
Acetamiprid	I	33.1	744	246	0.002 - 0.11	0.021	1.0
Azinphos methyl	I	17.9	744	133	0.005 - 0.73	0.041	1.5
Boscalid	F	18.1	744	135	0.005 - 0.16	0.041	3.0
Carbendazim (MBC)	F	19.9	534	106	0.002 - 0.19	0.033	7.0
Chlorantraniliprole	I	28.8	534	154	0.003 - 0.095	0.01	0.30
Diphenylamine (DPA)	F	73.7	744	548	0.005 - 5.3	0.35	10
Endosulfan II	IM	12.7	739	94	0.007 - 0.19	0.023	1.0
Fenpyroximate	A	13.1	534	70	0.002 - 0.12	0.015	0.40
Formetanate hydrochloride	I	14.7	744	109	0.0002 - 0.026	0.003	0.50
Imidacloprid	I	16.9	744	126	0.002 - 0.051	0.005	0.5
Methoxyfenozide	I	12.5	744	93	0.002 - 0.11	0.008	1.5
Phosmet	I	14.0	744	104	0.005 - 1.2	0.062	10
Pyraclostrobin	F	16.0	744	119	0.002 - 0.11	0.02	1.5
Pyrimethanil	F	57.4	744	427	0.002 - 6.0	0.48	14
Tetrahydrophthalimide (THPI)	FM	15.9	744	118	0.033 - 0.92	0.25	25.0
Thiabendazole	F	75.4	744	561	0.002 - 5.9	0.38	5.0
2 Cilantro							
Chlorantraniliprole	I	12.5	184	23	0.003 - 0.036	0.007	NT
Chlorpyrifos	I	37.0	184	68	0.002 - 0.31	0.020	0.1
DCPA	H	73.4	184	135	0.002 - 0.16	0.014	5.0
DDD p,p'	IM	14.2	106	15	0.002 - 0.002	0.002	NT
DDE p,p'	IM	19.6	184	36	0.0065 - 0.032	0.013	NT
DDT o,p'	I	25.5	184	47	0.002 - 0.006	0.002	NT
Diazinon	I	13.0	184	24	0.003 - 1.0	0.057	NT
Imidacloprid	I	25.5	184	47	0.002 - 0.040	0.008	8.0
Linuron	H	15.2	184	28	0.010 - 0.36	0.060	NT
3 Cucumbers							
Carbendazim (MBC)	F	16.5	534	88	0.002 - 0.10	0.010	1.0
Cyromazine	R	10.7	534	57	0.004 - 0.077	0.017	1.0
Endosulfan I	I	30.4	744	226	0.005 - 0.21	0.023	1.0
Endosulfan II	IM	25.1	744	187	0.007 - 0.13	0.017	1.0
Endosulfan sulfate	IM	29.2	744	217	0.007 - 0.11	0.034	1.0
Metalaxyl	F	19.1	744	142	0.010 - 0.49	0.033	1.0
Oxamyl	I	11.3	744	84	0.006 - 1.4	0.096	2.0
Oxamyl oxime	IM	18.6	210	39	0.020 - 0.64	0.099	2.0
Thiamethoxam	I	11.6	744	86	0.003 - 0.19	0.020	0.2
4 Grapes							
Boscalid	F	37.2	744	277	0.005 - 0.63	0.076	3.5
Cyprodinil	F	22.4	744	167	0.015 - 2.3	0.19	2.0
Fenhexamid	F	36.3	534	194	0.002 - 1.4	0.16	4.0
Fludioxonil	F	18.5	744	138	0.001 - 0.86	0.074	1.0
Imidacloprid	I	52.6	744	391	0.002 - 1.1	0.082	1.0

Commodity / Pesticide	Pest. Type	% of Samples with Detections	Number of Samples Analyzed	Number of Samples with Detections	Range of Detections, ppm	Mean of Detections, ppm	EPA Tolerance, ppm
Methoxyfenozide	I	29.2	744	217	0.001 - 0.45	0.053	1.0
Myclobutanil	F	35.5	744	264	0.001 - 0.54	0.029	1.0
Pyraclostrobin	F	45.3	744	337	0.001 - 0.51	0.043	2.0
Pyrimethanil	F	13.2	744	98	0.001 - 1.7	0.26	5.0
Quinoxifen	F	27.6	210	58	0.003 - 0.11	0.012	0.60
Tebuconazole	F	21.4	744	159	0.003 - 0.65	0.044	5.0
Trifloxystrobin	F	28.4	744	211	0.003 - 0.31	0.019	2.0
5 Green Onions							
Azoxystrobin	F	22.9	558	128	0.002 - 0.38	0.048	7.5
Cyromazine	R	11.3	558	63	0.008 - 0.23	0.032	3.0
DCPA	H	36.6	558	204	0.002 - 0.13	0.011	1.0
Spinosad	I	11.4	542	62	0.002 - 0.037	0.006	2.0
6 Lettuce, Organic							
Spinosad	I	18.3	387	71	0.002 - 0.40	0.033	8.0
7 Oranges							
Imazalil	F	82.1	744	611	0.005 - 0.57	0.053	10.0
Thiabendazole	F	67.5	744	502	0.005 - 0.38	0.061	10.0
8 Pears							
Acetamiprid	I	41.1	742	305	0.012 - 0.28	0.058	1.0
Azinphos methyl	I	12.3	742	91	0.015 - 0.18	0.039	1.5
Fenpyroximate	A	10.8	742	80	0.025 - 0.080	0.032	0.40
Fludioxonil	F	22.0	742	163	0.025 - 0.79	0.19	5.0
Formetanate hydrochloride	I	12.5	742	93	0.0002 - 0.033	0.002	0.50
o-Phenylphenol	F	25.9	742	192	0.017 - 10.6	0.51	25.0
Pyrimethanil	F	33.3	742	247	0.082 - 6.5	0.99	14
9 Potatoes							
Chlorpropham	H	80.1	744	596	0.010 - 23	2.5	30
Flutolanil	F	11.0	534	59	0.003 - 0.032	0.009	0.20
Imidacloprid	I	25.4	744	189	0.003 - 0.088	0.012	0.40
10 Rice							
Piperonyl butoxide	I	16.8	435	73	0.010 - 0.46	0.049	20
11 Spinach							
Boscalid	F	12.5	744	93	0.005 - 0.073	0.013	60
Cypermethrin	I	20.8	744	155	0.050 - 3.2	0.52	10.00
DDE p,p'	IM	20.8	298	62	0.007 - 0.035	0.010	0.5
Fenamidone	F	14.8	210	31	0.005 - 7.8	1.5	60
Imidacloprid	I	42.5	744	316	0.010 - 0.64	0.053	3.5
Permethrin cis	IM	50.5	210	106	0.025 - 6.0	1.0	20
Permethrin Total	I	52.1	534	278	0.10 - 19	2.5	20
Permethrin trans	IM	50.5	210	106	0.025 - 7.6	1.2	20
Spinosad A	IM	35.5	744	264	0.002 - 1.1	0.088	8.0
Spinosad D	IM	25.3	744	188	0.002 - 0.28	0.028	8.0

Commodity / Pesticide	Pest. Type	% of Samples with Detections	Number of Samples Analyzed	Number of Samples with Detections	Range of Detections, ppm	Mean of Detections, ppm	EPA Tolerance, ppm
12 Strawberries							
Acetamiprid	I	20.4	744	152	0.001 - 0.67	0.059	0.60
Azoxystrobin	F	10.3	744	77	0.002 - 0.96	0.095	10
Bifenazate	A	14.1	744	105	0.018 - 0.87	0.15	1.5
Bifenthrin	I	22.4	544	122	0.009 - 0.54	0.064	3.0
Boscalid	F	36.3	744	270	0.005 - 1.8	0.15	4.5
Captan	F	42.6	744	317	0.020 - 7.5	0.74	20.0
Carbendazim (MBC)	F	28.8	534	154	0.002- 0.93	0.10	5.0
Cyprodinil	F	29.6	744	220	0.015 - 1.6	0.24	5.0
Fenhexamid	F	39.3	534	210	0.002 - 2.2	0.26	3.0
Fludioxonil	F	35.3	744	263	0.001 - 0.96	0.10	2.0
Imidacloprid	I	14.0	744	104	0.002 - 0.080	0.012	0.50
Malathion	I	21.5	744	160	0.004 - 0.35	0.059	8
Malathion oxygen analog	IM	10.3	744	77	0.003 - 0.027	0.006	8
Methoxyfenozide	I	10.3	744	77	0.002 - 0.71	0.041	1.5
Myclobutanil	F	29.7	744	221	0.001 - 0.66	0.061	0.50
Propiconazole	F	10.3	534	55	0.004 - 0.47	0.074	1.3
Pyraclostrobin	F	43.5	744	324	0.001 - 0.61	0.079	1.2
Pyrimethanil	F	36.8	744	274	0.001 - 5.7	0.33	3.0
Quinoxyfen	F	13.8	210	29	0.003 - 0.090	0.026	0.90
Spinosad A	IM	11.3	744	84	0.001 - 0.20	0.021	1.0
Spiromesifen	I	12.9	210	27	0.005 - 0.21	0.058	2.0
Tetrahydrophthalimide (THPI)	FM	55.2	210	116	0.15 - 2.4	0.56	20.0
Triflumizole	F	10.9	744	81	0.001 - 0.41	0.03	2.0
13 Sweet Potatoes							
Dicloran	F	40.2	739	297	0.006 - 3.7	0.36	10
14 Beef, Adipose (in parts-per-billion)							
Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	I	11.6	292	34	1.0 - 33.9	4.4	3000
DDE p,p'	IM	23.6	292	69	2.1 - 103	12	5000
15 Catfish (in parts-per-billion)							
Bifenthrin	I	16.2	543	88	1.0 - 6.3	2.1	50
DDD p,p'	IM	29.8	543	162	1.0 - 115	12.3	5000
DDE p,p'	IM	65.0	543	353	1.0 - 2310	29.4	5000

NOTES

NT No tolerance established.

Pesticide Types:

A = Acaricide

F = Fungicide, FM = Fungicide Metabolite

H = Herbicide

I = Insecticide, IM = Insecticide Metabolite

R = Insect Growth Regulator

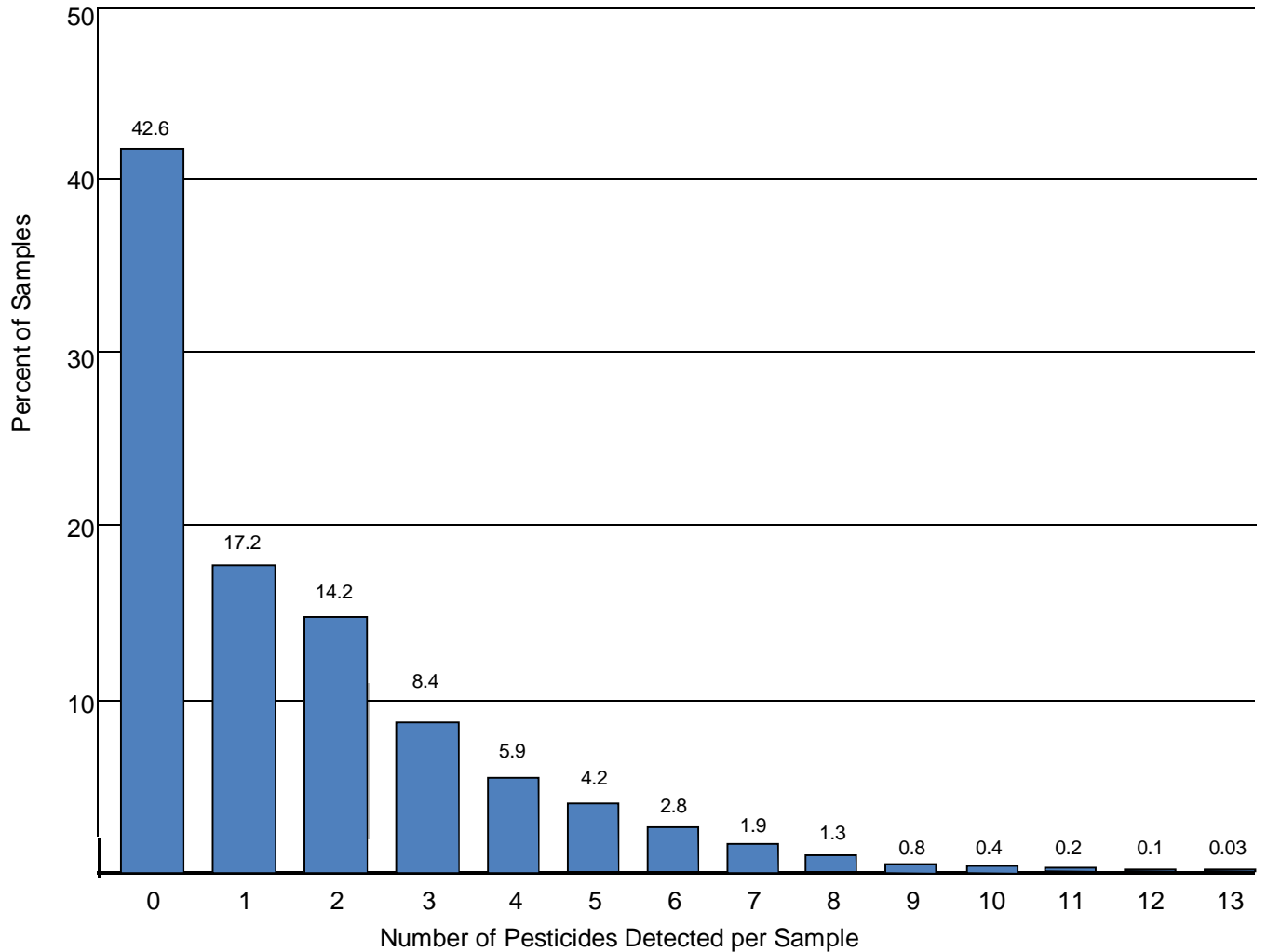
Appendix K

Number of Pesticides Detected per Sample

Appendix K shows the percentage of samples versus the number of pesticides detected per sample, excluding catfish, groundwater, and drinking water samples. 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 11,811 samples analyzed, 42.6 percent of the samples had no detectable pesticides, 17.2 percent had 1 pesticide, and 40.2 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 K. SAMPLES vs. NUMBER OF PESTICIDES¹ DETECTED PER SAMPLE²



	Number of Pesticides Detected per Sample													
	0	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of Samples	5,033	2,028	1,679	995	697	500	327	222	156	91	47	19	14	3
Percent of Total Samples	42.6	17.2	14.2	8.4	5.9	4.2	2.8	1.9	1.3	0.8	0.4	0.2	0.1	0.03

TOTAL NUMBER OF SAMPLES = 11,811

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 catfish, groundwater, and finished/untreated drinking water samples.

APPENDIX K. 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	10	11	12	13
Fresh Fruit and Vegetables:														Percent
Apples (744)	2.3	5.8	7.9	13.4	15.9	17.2	13.8	9.7	7.7	3.5	1.9	0.7	0.3	--
Asparagus (744)	90.1	7.7	2.2	0.1	--	--	--	--	--	--	--	--	--	--
Cilantro (184)	6.0	17.4	26.1	19.6	12.0	7.6	4.9	3.8	1.1	1.6	--	--	--	--
Cucumbers (744)	15.1	24.1	22.6	16.8	12.4	5.6	2.3	1.1	0.1	--	--	--	--	--
Grapes (744)	2.8	8.9	12.5	16.9	16.4	14.7	9.9	7.1	4.4	3.0	2.0	0.3	0.8	0.3
Green Onions (558)	34.1	28.7	22.0	9.9	4.5	0.2	0.7	--	--	--	--	--	--	--
Lettuce, Organic (387)	80.4	17.8	1.8	--	--	--	--	--	--	--	--	--	--	--
Oranges (744)	8.2	30.1	55.5	5.6	0.4	0.1	--	--	--	--	--	--	--	--
Pears (743)	20.5	16.8	22.5	19.1	11.8	7.3	1.9	--	0.1	--	--	--	--	--
Potatoes (744)	7.7	36.6	33.2	16.1	5.0	0.8	0.5	0.1	--	--	--	--	--	--
Spinach (744)	9.5	23.7	27.7	20.3	8.9	5.4	2.0	1.3	0.9	0.3	--	--	--	--
Strawberries (744)	4.3	5.1	9.0	12.2	16.5	14.1	11.7	9.5	7.4	5.1	2.4	1.6	0.8	0.1
Sweet Corn, Fresh (668)	99.9	0.1	--	--	--	--	--	--	--	--	--	--	--	--
Sweet Potatoes (739)	52.2	45.6	1.9	0.3	--	--	--	--	--	--	--	--	--	--
Processed Fruit and Vegetables:														
Garbanzo Beans, Canned (186)	99.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
Kidney Beans, Canned (186)	98.9	1.1	--	--	--	--	--	--	--	--	--	--	--	--
Pinto Beans, Canned (372)	97	3.2	--	--	--	--	--	--	--	--	--	--	--	--
Sweet Corn, Frozen (75)	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Tomato Paste (742)	96	3.4	0.4	--	--	--	--	--	--	--	--	--	--	--
Percent of Total Samples	39.6	16.8	15.0	9.2	6.4	4.6	3.1	2.0	1.4	0.88	0.44	0.19	0.13	0.03
Actual Number of Samples	4,275	1,817	1,622	995	695	501	333	221	154	95	47	20	14	3
TOTAL NUMBER OF FRUIT & VEGETABLE SAMPLES = 10,792														
Grain Product:														
Rice (435)	73.6	19.8	6.0	0.7	--	--	--	--	--	--	--	--	--	--
Actual Number of Samples	320	86	26	3	--	--	--	--	--	--	--	--	--	--
Beef Product:														
Beef Adipose (292)	60.3	33.2	5.8	0.3	0.3	--	--	--	--	--	--	--	--	--
Beef Muscle (292)	89.4	8.9	1.7	--	--	--	--	--	--	--	--	--	--	--
Actual Number of Samples	437	123	22	1	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 543 catfish, 278 groundwater, and 612 drinking water samples.

Appendix L

Fruit and Vegetable Samples Reported to the U.S. Food and Drug Administration as Exceeding the Tolerance or Without Established Tolerance (per Code of Federal Regulations, Title 40, Part 180)

Appendix L shows residues reported to the U.S. Food and Drug Administration (FDA) as exceeding the tolerance or residues for which no established tolerance was listed under the *Code of Federal Regulations, Title 40, Part 180*. In 2009, a total of 397 samples with 635 residues were reported to the FDA as Presumptive Tolerance Violations.

Catfish and water are not included in this appendix because residue levels, if found, are mainly the result of environmental contamination or transfer, rather than from registered agricultural uses on the commodity. Residues exceeding the tolerance were detected in 46 samples including 2 apple samples, 6 asparagus samples, 1 cilantro sample, 3 cucumber samples, 2 grape samples, 1 green onion sample, 1 pear sample, 16 potato samples, 6 spinach samples, 4 samples of strawberries, and 4 sweet potato samples. Of those 46 samples, 14 were reported as imported produce.

In addition, 357 samples were found to have residues for which no tolerance was established, including 341 fresh fruit and vegetable samples, 1 processed fruit/vegetable sample, 10 samples of rice, and 5 beef adipose samples.

241 samples contained 1 residue for which no tolerance was established.
67 samples contained 2 residues for which no tolerance was established.
14 samples contained 3 residues for which no tolerance was established.
17 samples contained 4 residues for which no tolerance was established.
11 samples contained 5 residues for which no tolerance was established.
3 samples contained 6 residues for which no tolerance was established.
2 samples contained 7 residues for which no tolerance was established.
2 samples contained 8 residues for which no tolerance was established.

Six of the 357 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, imported, or unknown origin for each pesticide/commodity pair listed.

Appendix L 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, the Pesticide Data Program accounted for both as part of the same tolerance expression.

**APPENDIX L. 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	Country of Origin
1 Apples / Thiabendazole	0.003	5.9	5.0	U.S.
2 Apples / Thiabendazole	0.003	5.7	5.0	U.S.
3 Asparagus / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	0.025	0.044	0.01	Ecuador
4 Asparagus / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	0.025	0.041	0.01	Ecuador
5 Asparagus / Methamidophos	0.08	0.31	0.02	Peru
6 Asparagus / Methamidophos	0.08	0.13	0.02	Peru
7 Asparagus / Methamidophos	0.08	0.095	0.02	Peru
8 Asparagus / Metribuzin	0.02	1.7	0.1	Mexico
9 Cilantro / Chlorpyrifos	0.001	0.31	0.1	Costa Rica
10 Cucumbers / Acephate	0.002	0.034	0.02	U.S.
11 Cucumbers / Chlorfenapyr	0.002	0.022	0.01	Dominican Rep.
12 Cucumbers / Captan (detected as THPI) ¹	0.02	0.46	0.05	Mexico
13 Grapes / Cyprodinil	0.009	2.3	2.0	Chile
14 Grapes / Imidacloprid	0.002	1.1	1.0	Chile
15 Green Onions / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	0.006	0.027	0.01	Canada
16 Pears / Permethrin cis/trans ²	0.024	0.55	0.05	U.S.
17 Potatoes / Azoxystrobin	0.003	0.41	0.03	U.S.
18 Potatoes / Azoxystrobin	0.003	0.36	0.03	U.S.
19 Potatoes / Azoxystrobin	0.002	0.23	0.03	U.S.
20 Potatoes / Azoxystrobin	0.002	0.19	0.03	U.S.
21 Potatoes / Azoxystrobin	0.002	0.16	0.03	U.S.
22 Potatoes / Azoxystrobin	0.002	0.14	0.03	U.S.
23 Potatoes / Azoxystrobin	0.002	0.12	0.03	U.S.
24 Potatoes / Azoxystrobin	0.002	0.12	0.03	U.S.
25 Potatoes / Azoxystrobin	0.002	0.11	0.03	U.S.
26 Potatoes / Azoxystrobin	0.002	0.076	0.03	U.S.
27 Potatoes / Azoxystrobin	0.003	0.058	0.03	U.S.
28 Potatoes / Azoxystrobin	0.003	0.043	0.03	Canada
29 Potatoes / Captan (detected as THPI) ¹	0.09	0.30	0.05	U.S.
30 Potatoes / Captan (detected as THPI) ¹	0.09	0.30	0.05	U.S.
31 Potatoes / Captan (detected as THPI) ¹	0.09	0.30	0.05	U.S.

Commodity / Pesticide	Limit of Detection, ppm	Concentration Detected, ppm	EPA Tolerance Level, ppm	Country of Origin
32 Potatoes / Captan (detected as THPI) ¹	0.09	0.30	0.05	U.S.
33 Spinach / Bifenthrin	0.038	0.37	0.2	U.S.
34 Spinach / Bifenthrin	0.038	0.30	0.2	U.S.
35 Spinach / Cyhalothrin, Lambda	0.006	0.088	0.01	U.S.
36 Spinach / Cyhalothrin, Lambda	0.006	0.057	0.01	U.S.
37 Spinach / Cyhalothrin, Lambda	0.006	0.025	0.01	U.S.
38 Spinach / Cyhalothrin, Total (Cyhalothrin-L + R157836 epimer)	0.05	0.40	0.01	U.S.
39 Strawberries / Acetamiprid	0.001	0.67	0.60	U.S.
40 Strawberries / Myclobutanil	0.001	0.66	0.50	Mexico
41 Strawberries / Pyrimethanil	0.003	5.7	3.0	U.S.
42 Strawberries / Pyrimethanil	0.003	3.7	3.0	U.S.
43 Sweet Potatoes / Bifenthrin	0.038	0.11	0.05	U.S.
44 Sweet Potatoes / Cypermethrin	0.03	0.22	0.1	U.S.
45 Sweet Potatoes / Methamidophos	0.01	0.038	0.02	U.S.
46 Sweet Potatoes / Captan (detected as THPI) ¹	0.09	0.30	0.05	U.S.

**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								
Chlorpropham	744	3	0.4	0.010 - 0.031	0.006 - 0.018	3	0	0
Diflubenzuron	744	25	3.4	0.011 - 0.087	0.007 - 0.012	23	2	0
Dimethoate ³	744	2	0.3	0.012 - 0.049	0.001 - 0.002	2	0	0
Omethoate ³	744	2	0.3	0.004 - 0.012	0.002 - 0.003	2	0	0
Propargite	744	4	0.5	0.005 - 0.044	0.003 - 0.088	4	0	0
2 Asparagus								
Carbofuran ⁴	744	4	0.5	0.010 - 0.15	0.003 - 0.010	0	4	0
DCPA	210	1	0.5	0.010 ^	0.003 ^	1	0	0
3-Hydroxycarbofuran ⁴	744	2	0.3	0.011 - 0.036	0.006 - 0.010	0	2	0
Imazalil	210	1	0.5	0.005 ^	0.003 ^	0	1	0
Imidacloprid	210	1	0.5	0.010 ^	0.006 ^	0	1	0
Thiabendazole	210	1	0.5	0.005 ^	0.003 ^	0	1	0
3 Beef Adipose (in parts per billion)								
				(ppb)	(ppb)			
Hexachlorobenzene (HCB)	292	5	1.7	1.1 - 1.8	1.0 ^	5	0	0
4 Cilantro								
Boscalid	184	9	4.9	0.010 ^	0.006 ^	9	0	0
Carbendazim (MBC)	184	4	2.2	0.011 - 0.31	0.001 ^	3	0	1
Carbofuran ⁴	184	2	1.1	0.52 - 1.3	0.006 ^	1	1	0
Chlorantraniliprole	184	23	12.5	0.003 - 0.036	0.002 ^	22	1	0
Chlordane cis ⁵	184	7	3.8	0.002 - 0.007	0.001 ^	7	0	0
Chlordane trans ⁵	184	2	1.1	0.002 ^	0.001 ^	2	0	0
DDD o,p' ⁶	184	2	1.1	0.002 ^	0.001 ^	2	0	0
DDD p,p' ⁶	106	15	14.2	0.002 ^	0.001 ^	15	0	0
DDE p,p' ⁶	184	36	19.6	0.007 - 0.032	0.006 ^	32	3	1
DDT o,p' ⁶	184	47	25.5	0.002 - 0.006	0.001 ^	43	3	1
Diazinon ⁷	184	24	13	0.003 - 1.0	0.002 ^	19	5	0
Diazinon oxygen analog ⁷	184	1	0.5	0.005 ^	0.003 ^	1	0	0
Dicloran	180	10	5.6	0.003 - 0.037	0.002 - 0.013	8	2	0
Dieldrin	146	3	2.1	0.008 ^	0.005 ^	2	1	0
Diflubenzuron	184	1	0.5	0.011 ^	0.007 ^	1	0	0
Dimethenamid	138	1	0.7	0.002 ^	0.001 - 0.003	1	0	0
Dimethoate ³	184	2	1.1	0.83 ^	0.002 ^	0	2	0
Dimethomorph	184	5	2.7	0.002 - 0.009	0.001 ^	5	0	0
Dinotefuran	184	1	0.5	0.033 ^	0.020 ^	1	0	0
Fluazifop butyl	184	1	0.5	0.010 ^	0.001 - 0.003	1	0	0
Fluoxastrobin	184	1	0.5	0.002 ^	0.001 - 0.004	1	0	0
3-Hydroxycarbofuran ⁴	184	2	1.1	0.088 - 0.16	0.002 - 0.005	1	1	0
Linuron	184	28	15.2	0.010 - 0.36	0.010 ^	24	4	0
Malathion	184	10	5.4	0.005 - 0.066	0.003 ^	10	0	0
Metalaxyl	184	4	2.2	0.010 - 0.12	0.006 ^	2	2	0
Metolachlor	184	2	1.1	0.002 ^	0.001 ^	1	1	0
Omethoate ³	184	2	1.1	0.43 - 0.44	0.002 ^	0	2	0
Pendimethalin	184	12	6.5	0.004 - 0.062	0.002 ^	9	3	0

Commodity / Pesticide	Number of Samples	Samples Reported	% of Samples	Range of Values Detected, ppm	Range of LODs, ppm	Sample Origin		
						U.S.	Import	Unk.
4 Cilantro (continued)								
Pentachloroaniline (PCA) ⁸	184	11	6	0.002 - 0.075	0.001 ^	6	5	0
Pentachlorobenzene (PCB) ⁹	168	2	1.2	0.003 - 0.010	0.002 ^	0	2	0
Permethrin cis ²	184	6	3.3	0.010 - 0.73	0.008 ^	4	2	0
Permethrin trans ²	184	6	3.3	0.009 - 0.79	0.008 ^	4	2	0
Pronamide	184	1	0.5	0.024 ^	0.006 ^	1	0	0
Pyraclostrobin	184	7	3.8	0.002 - 0.091	0.001 - 0.004	7	0	0
Pyrimethanil	184	15	8.2	0.002 - 0.008	0.001 ^	14	1	0
Quintozene (PCNB)	184	4	2.2	0.005 - 0.30	0.003 ^	2	2	0
Tebuconazole	184	3	1.6	0.003 - 0.023	0.002 - 0.006	1	2	0
Tecnazene	184	2	1.1	0.008 ^	0.005 ^	0	2	0
Captan (detected as THPI) ¹	184	1	0.5	0.066 ^	0.020 ^	1	0	0
Thiamethoxam	184	2	1.1	0.008 ^	0.005 ^	2	0	0
5 Cucumbers								
Atrazine	534	1	0.2	0.003 ^	0.002 ^	1	0	0
Chlorpropham	744	5	0.7	0.010 - 0.030	0.006 - 0.018	3	2	0
Dimethoate ³	744	11	1.5	0.002 - 0.20	0.001 - 0.002	1	10	0
Diphenylamine (DPA)	744	1	0.1	0.005 ^	0.003 - 0.012	0	1	0
Fenamiphos sulfone	744	1	0.1	0.006 ^	0.003 - 0.004	1	0	0
Fenamiphos sulfoxide	744	2	0.3	0.006 - 0.015	0.003 - 0.004	2	0	0
Imazalil	744	1	0.1	0.005 ^	0.003 - 0.010	1	0	0
Iprodione	744	1	0.1	0.17 ^	0.008 - 0.028	0	1	0
Metolachlor	744	14	1.9	0.002 ^	0.001 - 0.012	14	0	0
Omethoate ³	744	9	1.2	0.004 - 0.077	0.002 - 0.003	1	8	0
Pentachloroaniline (PCA)	534	5	0.9	0.002 ^	0.001 - 0.005	5	0	0
Profenofos	534	2	0.4	0.003 - 0.008	0.002 ^	1	1	0
Pyrimethanil	744	25	3.4	0.002 - 0.066	0.001 - 0.003	9	16	0
Quinoxifen	744	6	0.8	0.003 - 0.004	0.002 - 0.008	0	6	0
Tebufenozide	744	1	0.1	0.014 ^	0.003 - 0.010	0	1	0
Thiabendazole	744	9	1.2	0.002 - 0.004	0.001 - 0.003	2	7	0
Triadimefon	744	4	0.5	0.002 - 0.007	0.0009 - 0.027	1	3	0
6 Grapes								
Dimethoate ¹⁰	744	2	0.3	0.003 - 0.004	0.001 - 0.002	1	1	0
Formetanate hydrochloride	744	1	0.1	0.003 ^	0.001 - 0.006	1	0	0
Omethoate ¹⁰	744	2	0.3	0.005 - 0.009	0.002 - 0.003	1	1	0
7 Green Onions								
Atrazine	558	3	0.5	0.003 - 0.007	0.002 ^	1	2	0
Dicofol p,p'	558	2	0.4	0.016 - 0.022	0.003 - 0.019	1	1	0
Endosulfan sulfate	556	1	0.2	0.033 ^	0.020 ^	0	1	0
Imidacloprid	558	10	1.8	0.002 - 0.003	0.001 ^	5	5	0
Linuron	558	2	0.4	0.005 ^	0.003 ^	1	1	0
Oxyfluorfen	558	1	0.2	0.005 ^	0.003 ^	1	0	0
Pentachloroaniline (PCA)	558	1	0.2	0.002 ^	0.001 ^	0	1	0
Permethrin cis ²	558	6	1.1	0.004 - 0.028	0.002 - 0.016	2	4	0
Permethrin trans ²	542	3	0.6	0.009 - 0.053	0.008 - 0.016	1	2	0

Commodity / Pesticide	Number of Samples	Samples Reported	% of Samples	Range of Values Detected, ppm	Range of LODs, ppm	Sample Origin		
						U.S.	Import	Unk.
8 Lettuce, Organic								
Phosmet oxygen analog	387	3	0.8	0.17 - 0.22	0.053 ^	3	0	0
9 Oranges								
Dicloran	655	1	0.2	0.022 ^	0.006 - 0.025	1	0	0
10 Pears								
Iprodione	742	1	0.1	0.076 ^	0.046 ^	0	1	0
11 Pinto Beans, Canned								
Thiabendazole	372	1	0.3	0.003 ^	0.001 - 0.003	1	0	0
12 Potatoes								
Buprofezin	744	1	0.1	0.004 ^	0.001 - 0.021	1	0	0
13 Rice								
Allethrin	394	3	0.8	0.017 ^	0.010 ^	3	0	0
Endosulfan II	433	1	0.2	0.005 ^	0.003 ^	0	1	0
Endosulfan sulfate	374	1	0.3	0.002 ^	0.001 ^	0	1	0
Permethrin Total	414	5	1.2	0.17 ^	0.10 ^	5	0	0
14 Spinach								
Chlorothalonil	511	1	0.2	0.017 ^	0.003 - 0.038	1	0	0
DCPA	722	6	0.8	0.005 - 0.009	0.003 - 0.008	6	0	0
Dicloran	744	7	0.9	0.010 - 0.19	0.006 - 0.013	7	0	0
Diflubenzuron	210	2	1	0.020 ^	0.012 ^	2	0	0
Dimethoate ³	744	7	0.9	0.002 - 2.6	0.001 - 0.010	7	0	0
Dimethomorph	298	5	1.7	0.005 - 0.098	0.003 - 0.010	5	0	0
Imiprothrin	210	1	0.5	0.034 ^	0.030 ^	1	0	0
Linuron	210	7	3.3	0.010 - 0.047	0.006 ^	6	1	0
Methoxychlor p,p'	210	1	0.5	0.81 ^	0.012 ^	1	0	0
Omethoate ³	744	24	3.2	0.005 - 0.76	0.003 - 0.010	24	0	0
Oxydemeton methyl sulfone	726	1	0.1	0.032 ^	0.006 - 0.020	1	0	0
Quintozone (PCNB)	656	1	0.2	0.014 ^	0.003 - 0.005	1	0	0
Tetramethrin	744	1	0.1	0.017 ^	0.010 - 0.030	1	0	0
Trifluralin	744	1	0.1	0.029 ^	0.015 - 0.018	1	0	0
15 Strawberries								
Dicloran	744	1	0.1	0.096 ^	0.006 - 0.026	0	1	0
Dimethoate	744	1	0.1	0.004 ^	0.001 - 0.002	1	0	0
Oxamyl oxime	744	1	0.1	0.051 ^	0.012 - 0.035	1	0	0
Tebuconazole	744	1	0.1	0.003 ^	0.003 - 0.042	1	0	0
16 Sweet Potatoes								
Chlorpropham	739	2	0.3	0.020 ^	0.012 - 0.038	2	0	0

NOTES

- ¹ Captan's tetrahydrophthalimide (THPI) metabolite was detected and quantitated. The result for THPI was stoichiometrically converted and is expressed as the parent, captan.
- ² Permethrin cis and trans isomers were detected within the same samples.
- ³ Omethoate metabolite was detected within the same samples as Dimethoate.
- ⁴ 3-Hydroxycarbofuran metabolite was detected within the same samples as Carbofuran.
- ⁵ Chlordane cis and trans isomers were detected within the same samples.
- ⁶ DDT metabolites were detected within the same samples.
- ⁷ Diazinon oxygen analog metabolite was detected within the same sample as Diazinon.
- ⁸ Pentachloroaniline (PCA) metabolite was detected within the same three samples as Quintozene (PCNB).
- ⁹ Pentachlorobenzene (PCB) metabolite was detected within the same two samples as PCA metabolite and Quintozene (PCNB).
- ¹⁰ Omethoate metabolite was detected within one same sample as Dimethoate.

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 2009

Your satisfaction is very important to us and we welcome your comments and suggestions. Thank you for taking a moment to fill out and return this card.

How would you rate this document on: **Good Fair Poor**

Visual Presentation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ease of Readability?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Information Provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments/ Suggestions: (Attach additional pages if needed)

How did you obtain this copy? _____

Would you like additional copies? (limit 10 per person, 25 per organization)

Requested _____

Mailing Address _____

Would you like to have your name/organization added to our mailing list?

Mail or Fax to: USDA-AMS-S&T-Monitoring Programs Office
8609 Sudley Road, Suite 206
Manassas, VA 20110

Facsimile: (703) 369-0678

Electronic Mail: amsmpo.data@usda.gov