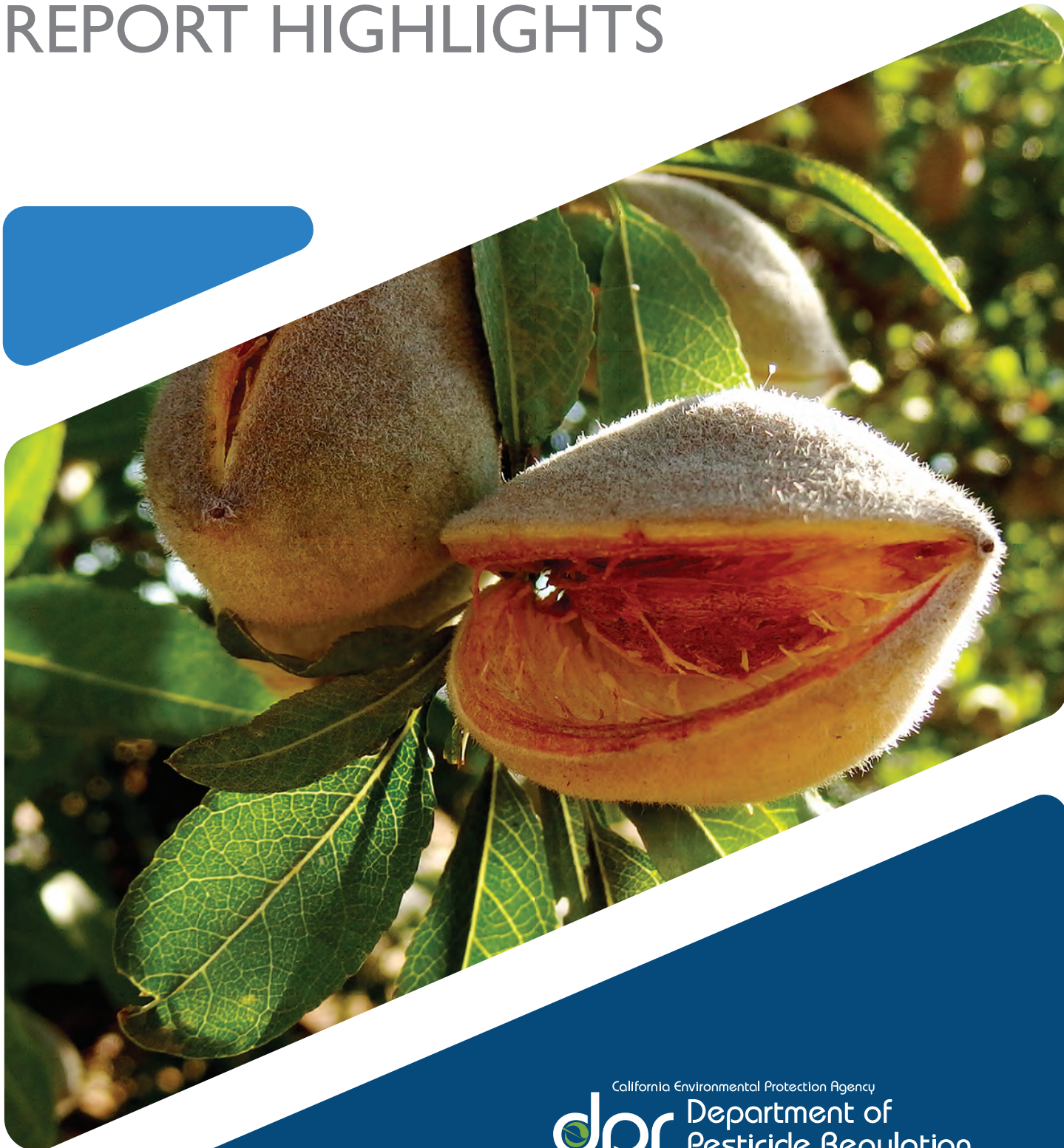


2018 PESTICIDE USE REPORT HIGHLIGHTS



California Environmental Protection Agency
dpr Department of
Pesticide Regulation

BACKGROUND

California began requiring limited pesticide use reporting in 1934. However, the detailed reporting that occurs today did not begin until the 1990s. The Food Safety Act of 1989 gave the California Department of Pesticide Regulation (DPR) the authority to require full reporting of agricultural pesticide use. Comprehensive use reporting including the pesticide applied, amount applied, area treated, application method, and other details began in 1990. On average, DPR collects around three million pesticide use records a year.

Currently the Pesticide Use Reporting (PUR) database contains over 80 million pesticide use records, going back to 1990. This collection of data is used by a variety of individuals and groups, including government officials, scientists, growers, legislators, and public interest groups.



“PHOTO BY (KIM STEINMANN).”

PESTICIDE USE OVERVIEW

Reported pesticide use for California in 2018 totaled 209 million pounds of applied active ingredients (AIs) and 105.5 million cumulative acres treated. Compared to 2017, pounds of AIs increased by just over 2.6 million (1.28 percent) while the acres treated increased by around 859 thousand (0.82 percent).

Highest Pounds Applied (2018)	Highest Cumulative Acres Treated (2018)
Sulfur	Sulfur
Petroleum and mineral oils	Glyphosate
1,3-Dichloropropene	Petroleum and mineral oils
Glyphosate	Abamectin
Metam-potassium	Lambda-cyhalothrin

DEFINITIONS

Cumulative Acres Treated

The cumulative acres treated for a crop may be greater than the planted area of the crop since this measure accounts for a field being treated with the same active ingredient (AI) more than once in a year. For example, if a 20-acre field is treated three times in a calendar year with an AI, the cumulative acres treated would be reported as 60 acres while the area planted would be reported as 20 acres.

Pounds Applied

Total pounds of AI summed over a given time period, geographic area, crop, or other unit of interest.

KEY COMMODITIES

Every year, the PUR Annual Report focuses on a number of commodities of interest.

Each of these commodities were treated with over 4 million pounds of AIs or applied to more than 3 million cumulative acres in 2018.

Collectively, the pesticides used on these commodities represent 74 percent of the total amount used and 76 percent of the area treated in 2018.

The possible reasons for the use trends of each commodity are discussed in detail in the full PUR Annual Report.

In 2018, the commodities of interest were:

- Alfalfa
- Almond
- Carrot
- Cotton
- Orange
- Peach and Nectarine
- Pistachio
- Processing Tomato
- Rice
- Strawberry
- Table, Wine, and Raisin Grapes
- Walnut



“PHOTO BY (ANGELINA SCHULER)”

KEY COMMODITY TRENDS

Pesticide use is affected by many factors, including crop value, weather, pest populations/outbreaks, cost of pesticides and labor, pesticide resistance and effectiveness, and more.

Crops treated with the greatest total pounds of pesticides in 2018 were almond, wine grape, table and raisin grape, orange, and processing tomato. Crops with the greatest increase in the pounds applied from 2017 to 2018 include almond, processing tomato, wine grape, tangerine, and pistachio. Crops with the greatest decrease in the pounds applied include walnut, table and raisin grape, orange, carrot, and strawberry.

Sulfur is a natural fungicide and miticide, and is used on each of these key commodities. It is used by both conventional and organic farmers to manage powdery mildew, mites, and other pests. Sulfur was the top AI in terms of pounds applied to the key commodities in 2018.



"PHOTO BY (JOSEPH DAMIANO)."

PESTICIDE CATEGORIES OF INTEREST

The pesticide use report summarizes data from eight pesticide categories. The following table lists these categories and shows their use trends in 2018 versus 2017.

Category	Change in Pounds Applied	Change in Acres Treated
Toxic Air Contaminants	↓ 2.8 million lbs.	↓ 411,000 acres
Fumigants	↓ 2.5 million lbs.	↓ 287,000 acres
Cholinesterase Inhibitors	↓ 429,000 lbs.	↓ 360,000 acres
Carcinogens	↓ 192,000 lbs.	↓ 628,000 acres
Ground Water Contaminants	↑ 5,000 lbs.	↓ 60,000 acres
Reproductive Toxins	↑ 80,000 lbs.	↓ 406,000 acres
Oils	↑ 257,000 lbs.	↑ 155,000 acres
Biopesticides	↑ 2.6 million lbs.	↑ 46,000 acres



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PUR INFORMATION

Web Access

- Annual reports issued by DPR can be found in the Pesticide Use Annual Summary Reports section at: www.cdpr.ca.gov/docs/pur/purmain.htm. If a reporting year is not listed, you can request that year's summary report via email at PUR.inquiry@cdpr.ca.gov.
- The California Pesticide Information Portal can be used to obtain PUR data at: <http://calpip.cdpr.ca.gov/main.cfm>.

FTP Access

- Raw data used in the annual reports, as well as older data (dating back to 1970) can be obtained via FTP at: ftp://transfer.cdpr.ca.gov/pub/outgoing/pur_archives/.
- Data from each figure or table in the annual report can be found at: <ftp://transfer.cdpr.ca.gov/pub/outgoing/pur/data/>.

Email

- If you have questions, or would like to request copies of the annual report data, email DPR at: PUR.Inquiry@cdpr.ca.gov.

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