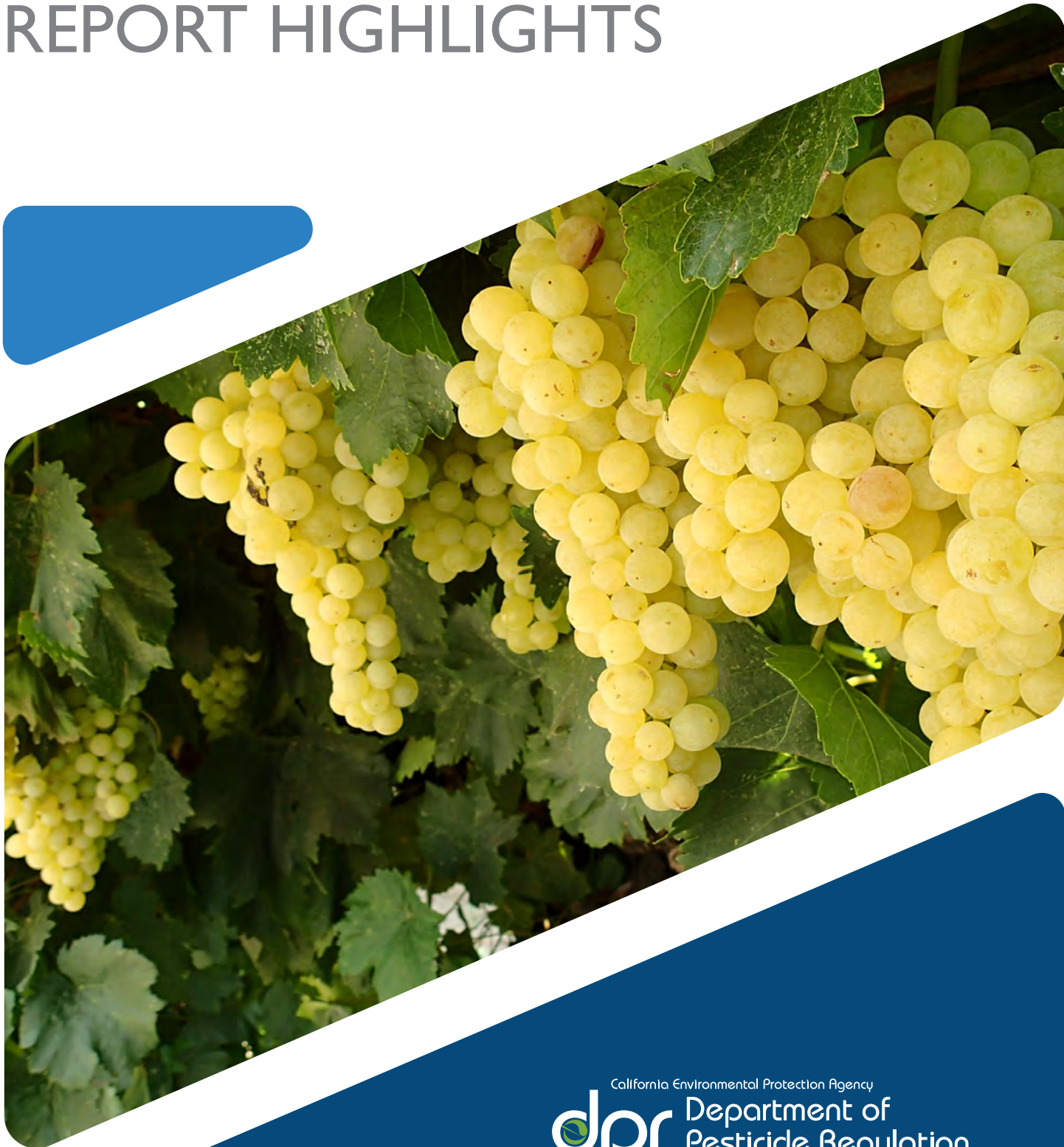


2019 PESTICIDE USE REPORT HIGHLIGHTS



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.

Over the years, this data has been used by a variety of individuals and groups, including government officials, scientists, growers, legislators, and public interest groups. 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.



PHOTO BY JOHN GERLACH

PESTICIDE USE OVERVIEW

Reported pesticide use for California in 2019 totaled 210.3 million pounds of applied active ingredients (AIs) and 109.3 million cumulative acres treated. Compared to 2018, pounds of AIs increased by just over 101,506 (0.05 percent) while the acres treated increased by around 3.5 million (3.33 percent).

Highest Pounds Applied (2019)	Highest Cumulative Acres Treated (2019)
Sulfur	Sulfur
Petroleum and mineral oils	Glyphosate
1,3-Dichloropropene	Petroleum and mineral oils
Glyphosate	Abamectin
Copper	Copper

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, DPR 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 2019.

Collectively, the pesticides used on these commodities represent 78 percent of the total amount used and 76 percent of the area treated in 2019.

More information will be released in the full PUR Annual Report in 2021.

In 2019, the commodities of interest were:

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



PHOTO BY DPR STAFF

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 2019 were almond, wine grape, table and raisin grape, orange and tangerine, and processing tomato. Crops and application sites with the greatest increase in the pounds applied from 2018 to 2019 include rights of way, orange, landscape maintenance, tangerine, and grape. Crops and application sites with the greatest decrease in the pounds applied include treated lumber, potato, walnut, processing tomato, and almond.

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 2019.



PHOTO BY JOHN GERLACH

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 2019 versus 2018.

Category	Change in Pounds Applied	Change in Acres Treated
Toxic Air Contaminants	↓ 2.9 million lbs.	↓ 422,135 acres
Fumigants	↓ 2.3 million lbs.	↓ 33,723 acres
Cholinesterase Inhibitors	↓ 633,643 lbs.	↓ 403,224 acres
Carcinogens	↓ 1,714,345 lbs.	↑ 159,805 acres
Ground Water Contaminants	↓ 44,818 lbs.	↓ 30,114 acres
Reproductive Toxins	↓ 325,189 lbs.	↓ 544,561 acres
Oils	↑ 416,451 lbs.	↑ 43,445 acres
Biopesticides	↑ 240,509 lbs.	↑ 935,029 acres



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PUR INFORMATION

Web Access

- Annual reports issued by DPR can be found by clicking the “Access Annual Reports” link under the Pesticide Use Annual Summary Reports section at: www.cdpr.ca.gov/docs/pur/purmain.htm. (The 2019 PUR Annual Report is expected to come out in 2021)
- 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.

Cover Photograph by John Gerlach



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