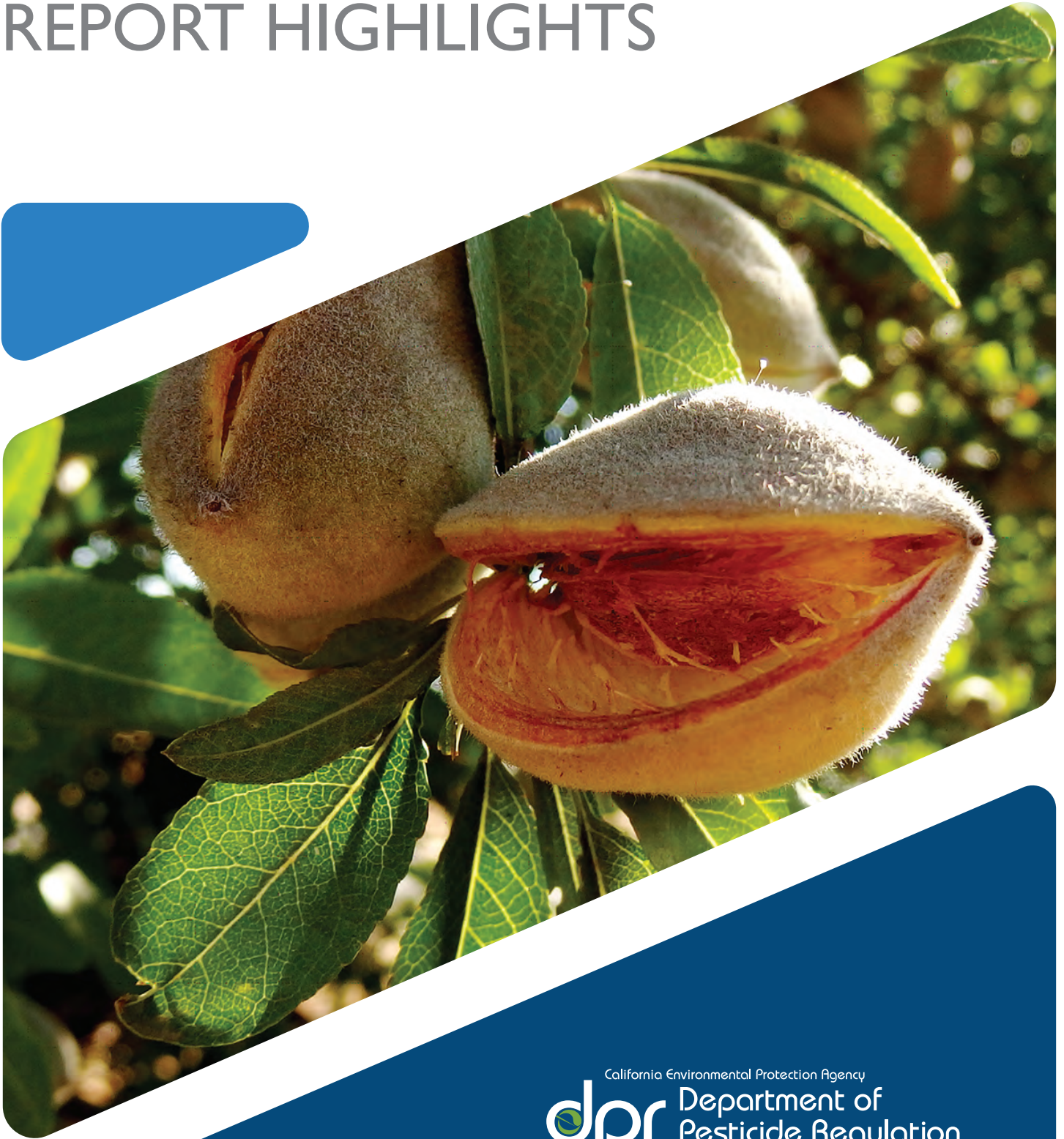


2017 PESTICIDE USE REPORT HIGHLIGHTS



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: thus, comprehensive use reporting including the pesticide applied, amount applied, area treated, application method, and other details began in 1990.

Over the years, these data have 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.



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PESTICIDE USE OVERVIEW

Reported pesticide use for California in 2017 totaled 204.7 million pounds of applied active ingredients (AIs) and 104.3 million cumulative acres treated. Compared to 2016, pounds of AIs decreased by just over 4 million (2.0 percent) while the acres treated increased by around 3.4 million (3.3 percent).

| Highest Pounds Applied (2017) | Highest Cumulative Acres Treated (2017) |
|-------------------------------|---|
| Sulfur | Glyphosate |
| Petroleum and mineral oils | Sulfur |
| Glyphosate | Petroleum and mineral oils |
| 1,3-Dichloropropene | Abamectin |
| Metam-potassium | 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, 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 2017.

Collectively, the pesticides used on these commodities represent 72 percent of the total amount used and 75 percent of the area treated in 2017.

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

In 2017, 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 2017 were almond, wine grape, table and raisin grape, orange, and strawberry. Crops with the greatest increase in the pounds applied from 2016 to 2017 include wine grape, cotton, orange, walnut, and dried beans. Crops with the greatest decrease in the pounds applied include processing tomato, almond, rice, and grape.

Sulfur is a natural fungicide and miticide, and is used on each of these key commodities except rice and dried beans. 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 2017.



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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 2017 versus 2016.

| Category | Change in Pounds Applied | Change in Acres Treated |
|---------------------------|--------------------------|-------------------------|
| Reproductive Toxins | ↓ 1 million lbs. | ↑ 280,000 acres |
| Carcinogens | ↓ 2.5 million lbs. | ↓ 2,000 acres |
| Cholinesterase Inhibitors | ↓ 113,000 lbs. | ↑ 57,000 acres |
| Ground Water Contaminants | ↓ 123,000 lbs. | ↑ 48,000 acres |
| Toxic Air Contaminants | ↓ 2.9 million lbs. | ↓ 159,000 acres |
| Fumigants | ↓ 2.4 million lbs. | ↓ 14,000 acres |
| Oils | ↓ 1.2 million lbs. | ↓ 101,000 acres |
| Biopesticides | ↑ 422,000 lbs. | ↓ 522,000 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 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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