

# Agricultural pesticide use in California climbs sharply, shows no sign of abating

By Don Villarejo

**D**ESPITE MOUNTING ENVIRONMENTAL concerns, pesticide use in California remains high and continues to grow unabated according to the *Summary of Pesticide Use Report Data for 1992* just released by the California Department of Pesticide Regulation.

Reported pesticide use for 1992 totaled 191.9 million pounds, up sharply from 170.2 million pounds the year before. Reported agricultural pesticide use in California reached 170.2 million pounds in 1992, a significant increase from the 142.2 million pounds reported in 1991 — that's about five pounds of pure pesticide per California resident, most of which remains in the environment after application.

After declining 12 percent between 1990 and 1991, agricultural pesticide use grew 20 percent between 1991 and 1992. Large fluctuations in pesticide use from year to year are not especially unusual given the variation in pest control problems arising from drought, flood, and exotic pest invasions. Nevertheless, it is disturbing to find a 20 percent climb over the course of a single year (please see chart, above right).

## Grapes top crop list

Echoing the overall trend, reported pesticide use increased for almost every crop. The top five crops — by amount of reported chemical use — were the same in 1992 as in 1991, but the amount each used was up sharply (please see first table, page 5). This increase appeared most dramatically in all varieties of grapes. In one year pesticide use grew 27 percent for raisin and table grapes, and 43 percent for processed wine and juice grapes. The five crops listed below accounted for fully one-half of all

REPORTED AGRICULTURAL PESTICIDE USE IN CALIFORNIA, BY YEAR  
(MILLIONS OF POUNDS)

1990	163.1 mil.
1991	142.2 mil.
1992	170.2 mil.

agricultural pesticide use in the state.

The only major commodities in which there was a significant reduction in reported pesticide use were fresh market tomatoes and walnuts. Pesticide use for fresh tomatoes declined from 5.5 million pounds in 1991 to 4.8 million pounds in 1992, a drop of 13 percent. However, harvested fresh market tomato acreage in California also fell, from 40,000 acres in 1991 to 37,000 acres in 1992, a decline of 7.5 percent. Therefore most of the reduction in pesticide use resulted from a smaller acreage of tomatoes. In walnuts, acreage remained unchanged but reported annual pesticide use fell from 2.5 million pounds in 1991 to 2.3 million pounds in 1992, representing an 8 percent decline.

## Sulfur: leading chemical in state

Pesticide use rankings in 1992 show that the state's leading agricultural chemical was sulfur, with 61.8 million pounds sprayed on crops, a substantial jump from the 49.5 million pounds reported in 1991. This increase of 12.3 million pounds, or 25 percent, is accounted for mainly by sulfur's increased use in grapes (up 9.3 million

pounds).

Sulfur is a naturally occurring element and is used by both conventional farms and certified organic farms, which are permitted to use it and keep their certification under California law. Despite its organic status, sulfur is responsible for the largest number of reported farm worker pesticide poisonings (562 acute illness cases during the period 1984-90 versus 481 cases for propargyte, the chemical with the second largest number of reported poisonings). In large part, the high number of worker injuries attributed to sulfur exposure is a reflection of the enormous amount of the chemical being used in the state.

The top five chemicals — ranked by amount reportedly used in 1992 — also include methyl bromide, a highly toxic material widely employed as a soil and structural fumigant. Its annual reported use also grew, though only slightly, from 18.7 million pounds in 1991 to 19.0 million pounds in 1992 (please see second table, page 5).

The second table summarizes the top five pesticides primarily used in agriculture, which together accounted for more than half of all reported pesticide use in the state in 1992.

## Kicking chemical dependency

If these figures accurately reflect pesticide use trends — and we think that they do — they also reveal that there is a great deal of work ahead before we successfully reduce our dependence on agricultural chemicals. These data also underscore the fact that the resources available to support alternative farming techniques are sadly inadequate.

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Efforts to develop and promote non-toxic farming methods, such as CIR's Rural Toxics Project which focuses on the organic cotton industry, hold the promise of ultimately reducing the pesticide load. Though promising, it is only one project. A formidable goal such as this one requires an equally powerful, unified effort.

**Resources:**

Veda Federighi, California Department of Pesticide Regulation, 1020 N Street, Sacramento, CA 95814, (916) 445-3974. The 1992 *Summary of Pesticide Use Report Data*, is available in two volumes, indexed by chemical or by commodity. Send \$25 for each volume to: Cashier, California Department of Pesticide Regulation, 1020 N Street, Sacramento, CA 95814.

To obtain information about purchasing the full computerized data base of the individual use reports, call (916) 445-4110. ♦

**TOP FIVE CROPS BY AMOUNT OF REPORTED PESTICIDE USE, CALIFORNIA, 1992**  
(MILLION POUNDS)

CROP	AMOUNT, 1992	AMOUNT, 1991
Grapes	27.6	21.8
Grapes, processed	22.5	15.8
Almonds	14.3	13.8
Cotton	12.2	10.4
Sugar beets	9.7	8.7

Source: Department of Pesticide Regulation, *Summary of Pesticide Use Report Data: Indexed by Commodity, 1992 and 1991.*

**TOP FIVE PESTICIDES BY AMOUNT OF REPORTED USE, CALIFORNIA, 1992**  
(MILLION POUNDS)

PESTICIDE	AMOUNT, 1992	AMOUNT, 1991
Sulfur	61.8	49.5
Methyl bromide	19.0	18.7
Petroleum oil	19.0	17.8
Metam-sodium	8.6	4.9
Sodium chlorate	4.0	2.6

Source: Department of Pesticide Regulation, *Summary of Pesticide Use Report Data: Indexed by Chemical, 1992 and 1991.*

**HEALTH, cont. from page 3**

not afford.

Growers should be required to contribute to their employees' health care. The state of Washington has developed

additional federal support, they should not be permitted to impose fees for visits.

Third, it is a serious mistake to exclude workers from the health care

chance to remain healthy and productive. But if employers are able to escape responsibility for employee health care, then they have all the more incentive to hire undocumented workers. ♦

***"If someone is good enough to be hired by an American employer, that worker deserves to remain healthy."***

an employer pay-in pool for growers with part-time or seasonal employees to pay for a portion of their employees' medical coverage. This could serve as a model for the national health insurance plan.

Second, government support for migrant clinics must be increased. At present, the Clinton plan contemplates a 50 percent reduction in federal support for community and migrant clinics. But if clinics serving the poor receive

system because they are foreign-born and unauthorized to work in this country, despite the political rhetoric of an election year. Increasingly, foreign-born workers and their children shun migrant and emergency clinics in the mistaken belief that they will be asked to prove their immigration status.

Health care for all workers makes moral and economic sense. If someone is good enough to be hired by an American employer, that worker deserves a

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