



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D.C., 20460

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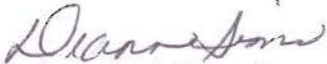
OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

MEMORANDUM

SUBJECT: Updated Screening Level Usage Analysis (SLUA) Report in Support of
Registration Review of Glyphosate

FROM: Sepehr Haddad, Environmental Protection Specialist
Science and Information Analysis Branch
Biological and Economic Analysis Division (7503P)

A handwritten signature in black ink, appearing to read "Sepehr Haddad".

THRU: Diann Sims, Chief 
Science Information and Analysis Branch
Biological and Economic Analysis Division (7503P)

TO: Carissa Cyran, Chemical Review Manager
Risk Management and Implementation Branch I
Pesticide Re-evaluation Division (7508P)

This memorandum transmits the Screening Level Usage Analysis (SLUA) report for Glyphosate. Please refer to the coversheet of the SLUA for an explanation of the data sources and other information that describes the report content. Also, please refer to the footnotes of the SLUA report for an explanation of symbols used to characterize the data.

For questions, comments and other usage or label use information requests, please contact me at 703-308-9331.

**Glyphosate Case Level
Screening Level Usage Analysis (SLUA)
Date: December 6, 2012**

What is a Screening Level Usage Analysis (SLUA)?

- Available estimates of pesticide usage data for a particular active ingredient that is used on **agricultural** crops in the United States.
- Pesticide usage data obtained from various sources. The data are then merged, averaged, and rounded so that the presented information is not proprietary, business confidential, or trade secret.

What does it contain?

- Pesticide usage data for a **single** active ingredient only.
- Agricultural use sites (crops) that the pesticide is *reported* to be used on.
- Available pesticide usage information from U.S. states that produce 80% or more of a crop, in most cases, or less than 80%, in rare cases, depending on the scope of the survey and available resources.
- Annual percent of crop treated (**average & maximum**) for each agricultural crop.
- Average annual pounds of the pesticide applied for each agricultural crop (i.e., for the states surveyed, not for the entire United States).

What assumptions can I make about the reported data?

- **Average pounds of active ingredient applied** - Values are calculated by merging pesticide usage data sources together; averaging across all observations, then rounding. *Note: If the estimated value is less than 500, then that value is labeled <500. Estimated values between 500 & <1,000,000 are rounded to 1 significant digit. Estimated values of 1,000,000 or greater are rounded to 2 significant digits.)*
- **Average percent of crop treated** - Values are calculated by merging data sources together; averaging by year, averaging across all years, & rounding to the nearest multiple of 5. *Note: If the estimated value is less than 2.5, then the value is labeled <2.5. If the estimated value is less than 1, then the value is labeled <1.*
- **Maximum percent of crop treated** - Value is the single maximum value reported across all data sources, across all years, & rounded up to the nearest multiple of 5. *Note: If the estimated value is less than 2.5, then the value is labeled <2.5.*

What are the data sources used?

- **USDA-NASS** (United States Department of Agriculture's National Agricultural Statistics Service) – pesticide usage data from 2004 to 2011.
- **Private pesticide market research** – pesticide usage data from 2004 to 2011.
- **California Department of Pesticide Regulation (DPR) Pesticide Use Reporting (PUR)** data for 2004 to 2010.

What are the limitations to the data?

- Additional registered uses may exist but are not included because the available surveys do not report usage (e.g., small acreage crops).
- Lack of reported usage data for the pesticide on a crop **does not imply** zero usage.
- Usage data on a particular site may be noted in data sources, but **not quantified**. In these instances, the site would not be reported in the SLUA.
- Non-agricultural use sites (e.g., turf, post-harvest, mosquito control, etc.) are not reported in the SLUA. A separate request must be made to receive these estimates.
- Some sites show some use, even though they are not on the label. This usage could be due to various factors, including, but not limited to Section 18 requests, existing stocks of the chemical, data collection errors, and experimental use permits (EUPs).

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**Sorted Alphabetically
(Reporting Timeframe: 2004-2011)**

Crop		Lbs. A.I.	Percent Crop Treated	
			Average	Maximum
1	Alfalfa	300,000	<2.5	5
2	Almonds	2,100,000	85	90
3	Apples	400,000	55	70
4	Apricots	10,000	55	75
5	Artichokes	1,000	10	15
6	Asparagus	30,000	55	70
7	Avocados	80,000	45	65
8	Barley	500,000	20	40
9	Beans, Green	60,000	15	20
10	Blueberries	10,000	20	25
11	Broccoli	3,000	<2.5	<2.5
12	Brussels Sprouts *	<500	N/C	N/C
13	Cabbage	10,000	10	25
14	Caneberries	3,000	10	25
15	Canola	500,000	65	80
16	Cantaloupes	20,000	15	25
17	Carrots	3,000	5	10
18	Cauliflower	1,000	<2.5	5
19	Celery	1,000	5	10
20	Cherries	200,000	65	85
21	Chicory *	<500	N/C	N/C
22	Corn	54,600,000	60	85
23	Cotton	17,500,000	85	95
24	Cucumbers	30,000	20	35
25	Dates	3,000	20	25
26	Dry Beans/Peas	500,000	25	35
27	Fallow	7,900,000	55	65
28	Figs	5,000	40	70
29	Garlic	4,000	10	25
30	Grapefruit	400,000	80	95
31	Grapes	1,400,000	70	80
32	Hazelnuts	30,000	70	90
33	Kiwifruit	2,000	30	40
34	Lemons	200,000	70	90
35	Lettuce	9,000	<2.5	10
36	Nectarines	20,000	45	70
37	Oats	100,000	5	10

38	Olives	20,000	45	50
39	Onions	40,000	30	40
40	Oranges	3,200,000	90	95
41	Pasture	700,000	<1	<2.5
42	Peaches	200,000	55	70
43	Peanuts	300,000	20	30
44	Pears	100,000	65	90
45	Peas, Green	20,000	10	20
46	Pecans	500,000	35	45
47	Peppers	20,000	20	35
48	Pistachios	500,000	85	95
49	Plums/Prunes	200,000	65	80
50	Pluots *	1,000	N/C	N/C
51	Pomegranates *	30,000	N/C	N/C
52	Potatoes	80,000	10	15
53	Pumpkins	20,000	20	25
54	Rice	700,000	25	40
55	Sorghum	2,700,000	40	60
56	Soybeans	86,400,000	95	100
57	Spinach	1,000	<2.5	10
58	Squash	10,000	20	40
59	Strawberries	10,000	10	20
60	Sugar Beets	1,000,000	50	95
61	Sugarcane	300,000	45	50
62	Sunflowers	1,000,000	55	75
63	Sweet Corn	100,000	15	20
64	Tangelos	9,000	55	80
65	Tangerines	60,000	65	80
66	Tobacco	8,000	5	10
67	Tomatoes	100,000	35	45
68	Walnuts	600,000	75	85
69	Watermelons	30,000	15	25
70	Wheat	8,100,000	25	70

All numbers rounded.

<500 Less than 500 pounds of active ingredient

<2.5 Less than 2.5 percent of crop treated

<1 Less than 1 percent of crop treated

* Based on CA DPR data only/ N/C = not calculated, only lbs. A.I. available

The survey data included in this SLUA report does not differentiate between which exact chemical code(s) are included in the case level analysis.

SLUA data sources include:

USDA-NASS (United States Department of Agriculture's National Agricultural Statistics Service)

Private Pesticide Market Research

California DPR (Department of Pesticide Regulation)

These results reflect amalgamated data developed by the Agency and are releasable to the public.