



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 for Glyphosate Case PC #s (103601, 103604, 103607, 103608, 103613, and 417300)

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This memorandum transmits an updated Screening Level Usage Analysis (SLUA) report for the glyphosate case (previously completed in 2007). The usage data in the updated SLUA (2015) are an amalgamation of USDA/NASS and Private Pesticide Market Research data from 2005 to 2014.

The new SLUA (2015) shows a decrease in usage, in terms of pounds a.i. and/or percent crop treated on apples, apricots, artichokes, avocados, broccoli, caneberries, cauliflower, grapefruit, garlic, nectarines, oranges, pasture, peaches, pears, pecans, and tangelos. The usage data did not change for cantaloupes, carrots, celery, lemons, oats, green beans, and pumpkins.

The new SLUA (2015) shows an increase in usage, in terms of pounds a.i. and/or percent crop treated on the remainder of the SLUA crops.

For questions, comments and other usage information requests, please contact me at 703-308-8140.

## Glyphosate Case (103601, 103604, 103607, 103608, 103613, and 417300)

### Screening Level Usage Analysis (SLUA)

Date: October 5, 2015

#### 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 2013.
- **Private pesticide market research** – pesticide usage data from 2004 to 2013.
- **California Department of Pesticide Regulation (DPR) Pesticide Use Reporting (PUR)** data for 2004 to 2012.

#### 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).

**Date: October 5, 2015**  
**Screening Level Estimates of Agricultural Uses of Glyphosate Case (103601, 103604, 103607, 103608, 103613, and 417300)**  
**Sorted Alphabetically**  
**Reporting Years: 2004-2013**

	Crop	Annual Average	Percent Crop Treated	
		Lbs. A.I.	Average	Maximum
1	Alfalfa	400,000	<2.5	5
2	Almonds	2,100,000	85	95
3	Apples	400,000	55	70
4	Apricots	10,000	55	80
5	Artichokes	1,000	10	15
6	Asparagus	30,000	55	70
7	Avocados	80,000	45	65
8	Barley	600,000	25	40
9	Beans, Green	70,000	15	25
10	Blueberries	10,000	20	25
11	Broccoli	3,000	<2.5	<2.5
12	Brussels Sprouts*	<500	<1	<2.5
13	Cabbage	20,000	10	25
14	Caneberries	4,000	10	25
15	Canola	500,000	65	80
16	Cantaloupes	20,000	10	25
17	Carrots	3,000	5	10
18	Cauliflower	1,000	<2.5	5
19	Celery	1,000	<2.5	10
20	Cherries	200,000	65	85
21	Chicory*	<500	<2.5	<2.5
22	Corn	63,500,000	65	85
23	Cotton	18,400,000	85	95
24	Cucumbers	30,000	20	35
25	Dates	8,000	65	25
26	Dry Beans/Peas	600,000	30	45
27	Fallow	8,800,000	55	70
28	Figs	10,000	85	100
29	Garlic	4,000	10	25
30	Grapefruit	400,000	85	100
31	Grapes	1,500,000	70	80
32	Hazelnuts	30,000	65	90
33	Kiwifruit	5,000	70	95
34	Lemons	200,000	75	90
35	Lettuce	10,000	5	10
36	Nectarines	20,000	45	70
37	Oats	100,000	5	10
38	Olives	40,000	60	75

<b>39</b>	<b>Onions</b>	<b>40,000</b>	<b>30</b>	<b>40</b>
<b>40</b>	<b>Oranges</b>	<b>3,200,000</b>	<b>90</b>	<b>95</b>
<b>41</b>	<b>Pasture</b>	<b>600,000</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>
<b>42</b>	<b>Peaches</b>	<b>100,000</b>	<b>55</b>	<b>70</b>
<b>43</b>	<b>Peanuts</b>	<b>300,000</b>	<b>25</b>	<b>35</b>
<b>44</b>	<b>Pears</b>	<b>100,000</b>	<b>65</b>	<b>90</b>
<b>45</b>	<b>Peas, Green</b>	<b>20,000</b>	<b>10</b>	<b>20</b>
<b>46</b>	<b>Pecans</b>	<b>400,000</b>	<b>35</b>	<b>45</b>
<b>47</b>	<b>Peppers</b>	<b>30,000</b>	<b>20</b>	<b>35</b>
<b>48</b>	<b>Pistachios</b>	<b>500,000</b>	<b>85</b>	<b>95</b>
<b>49</b>	<b>Plums/Prunes</b>	<b>200,000</b>	<b>70</b>	<b>85</b>
<b>50</b>	<b>Pluots*</b>	<b>1,000</b>	<b>65</b>	<b>90</b>
<b>51</b>	<b>Pomegranates*</b>	<b>40,000</b>	<b>70</b>	<b>90</b>
<b>52</b>	<b>Potatoes</b>	<b>90,000</b>	<b>10</b>	<b>20</b>
<b>53</b>	<b>Pumpkins</b>	<b>20,000</b>	<b>20</b>	<b>25</b>
<b>54</b>	<b>Rice</b>	<b>800,000</b>	<b>30</b>	<b>50</b>
<b>55</b>	<b>Sorghum</b>	<b>3,000,000</b>	<b>40</b>	<b>60</b>
<b>56</b>	<b>Soybeans</b>	<b>101,200,000</b>	<b>105</b>	<b>100</b>
<b>57</b>	<b>Spinach</b>	<b>1,000</b>	<b>&lt;2.5</b>	<b>10</b>
<b>58</b>	<b>Squash</b>	<b>10,000</b>	<b>20</b>	<b>40</b>
<b>59</b>	<b>Strawberries</b>	<b>10,000</b>	<b>10</b>	<b>20</b>
<b>60</b>	<b>Sugar Beets</b>	<b>1,300,000</b>	<b>60</b>	<b>100</b>
<b>61</b>	<b>Sugarcane</b>	<b>300,000</b>	<b>45</b>	<b>60</b>
<b>62</b>	<b>Sunflowers</b>	<b>1,100,000</b>	<b>60</b>	<b>75</b>
<b>63</b>	<b>Sweet Corn</b>	<b>100,000</b>	<b>15</b>	<b>25</b>
<b>64</b>	<b>Tangelos</b>	<b>9,000</b>	<b>55</b>	<b>80</b>
<b>65</b>	<b>Tangerines</b>	<b>60,000</b>	<b>65</b>	<b>80</b>
<b>66</b>	<b>Tobacco</b>	<b>10,000</b>	<b>5</b>	<b>10</b>
<b>67</b>	<b>Tomatoes</b>	<b>100,000</b>	<b>35</b>	<b>45</b>
<b>68</b>	<b>Walnuts</b>	<b>600,000</b>	<b>75</b>	<b>90</b>
<b>69</b>	<b>Watermelons</b>	<b>30,000</b>	<b>15</b>	<b>25</b>
<b>70</b>	<b>Wheat</b>	<b>8,600,000</b>	<b>25</b>	<b>70</b>

All numbers are rounded.

<500: less than 500 pounds of active ingredients.

<2.5: less than 2.5 percent of crop is treated.

<1: less than 1 percent of crop is treated.

\* Based on CA DPR data only (80% or more of U.S. acres grown are in California).

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.