

Table S1. Glyphosate usage in California in 2022 (adopted from CDPR). Rows highlighted in orange represent entries that were removed during data processing

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs./A)
Glyphosate	Corn (forage - fodder)	448.31	5	307	A	1	4.48E+02	307.0	2.92E-01
Glyphosate, diammonium salt	Alfalfa	19.59	1	14.5	A	0.83	1.63E+01	14.5	1.12E+00
Glyphosate, diammonium salt	Almond	5078.32	78	2282.72	A	0.83	4.22E+03	2,282.7	2.37E-02
Glyphosate, diammonium salt	Corn (forage - fodder)	1096.61	9	802.5	A	0.83	9.10E+02	802.5	1.26E-01
Glyphosate, diammonium salt	Corn, human consumption	308.09	1	76	A	0.83	2.56E+02	76.0	3.36E+00
Glyphosate, diammonium salt	Cotton	299.17	2	154	A	0.83	2.48E+02	154.0	8.06E-01
Glyphosate, diammonium salt	Grape	9.29	1	20	A	0.83	7.71E+00	20.0	3.86E-01
Glyphosate, diammonium salt	Landscape maintenance	6.93	N/A	N/A	N/A	0.83	5.75E+00	Not possible	-
Glyphosate, diammonium salt	Lemon	114.15	2	56.3	A	0.83	9.47E+01	56.3	8.41E-01
Glyphosate, diammonium salt	N-grnhs transplants	0.65	1	1	A	0.83	5.40E-01	1.0	5.40E-01
Glyphosate, diammonium salt	Olive	9.8	1	6.58	A	0.83	8.13E+00	6.6	1.24E+00
Glyphosate, diammonium salt	Orange	393.33	9	184.66	A	0.83	3.26E+02	184.7	1.96E-01
Glyphosate, diammonium salt	Pistachio	1888.85	19	846.69	A	0.83	1.57E+03	846.7	9.75E-02
Glyphosate, diammonium salt	Prune	259.96	7	110.93	A	0.83	2.16E+02	110.9	2.78E-01
Glyphosate, diammonium salt	Rights of way	54.05	2	40	A	0.83	4.49E+01	40.0	5.61E-01
Glyphosate, diammonium salt	Rights of way	257.08	N/A	N/A	N/A	0.83	2.13E+02	Not possible	-
Glyphosate, diammonium salt	Tangerine	81.08	3	40	A	0.83	6.73E+01	40.0	5.61E-01
Glyphosate, diammonium salt	Uncultivated non-ag	16.81	N/A	16	A	0.83	1.40E+01	16.0	-
Glyphosate, diammonium salt	Walnut	4599.71	93	2098.23	A	0.83	3.82E+03	2,098.2	1.96E-02
Glyphosate, dimethylamine salt	Almond	6575.24	26	3425	A	0.79	5.19E+03	3,425.0	5.83E-02
Glyphosate, dimethylamine salt	Forest, timberland	153459.35	2030	67309.91	A	0.79	1.21E+05	67,309.9	8.87E-04
Glyphosate, dimethylamine salt	Forest, timberland	550.31	1	200	U	0.79	4.35E+02	Not possible	-
Glyphosate, dimethylamine salt	Landscape maintenance	433.34	N/A	N/A	N/A	0.79	3.42E+02	Not possible	-
Glyphosate, dimethylamine salt	Mint	1.28	1	2	A	0.79	1.01E+00	2.0	5.06E-01
Glyphosate, dimethylamine salt	N-outdr plants in containers	2.87	6	12	A	0.79	2.27E+00	12.0	3.15E-02
Glyphosate, dimethylamine salt	N-outdr transplants	38.39	1	7.51	A	0.79	3.03E+01	7.5	4.04E+00
Glyphosate, dimethylamine salt	Rangeland	1.51	2	2	A	0.79	1.19E+00	2.0	2.98E-01
Glyphosate, dimethylamine salt	Research commodity	0.35	N/A	N/A	N/A	0.79	2.77E-01	Not possible	-
Glyphosate, dimethylamine salt	Rights of way	30429.01	N/A	N/A	N/A	0.79	2.40E+04	Not possible	-
Glyphosate, dimethylamine salt	Structural pest control	425.25	N/A	N/A	N/A	0.79	3.36E+02	Not possible	-
Glyphosate, dimethylamine salt	Uncultivated ag	8.28	3	7.75	A	0.79	6.54E+00	7.8	2.81E-01
Glyphosate, dimethylamine salt	Uncultivated non-ag	2.56	1	2	A	0.79	2.02E+00	2.0	1.01E+00
Glyphosate, dimethylamine salt	Unknown	12.29	1	3	A	0.79	9.71E+00	3.0	3.24E+00
Glyphosate, isopropylamine salt	Airport	325.49	3	94.6	A	0.74	2.41E+02	94.6	8.49E-01
Glyphosate, isopropylamine salt	Alfalfa	134285.29	2152	94329.55	A	0.74	9.94E+04	94,329.6	4.90E-04
Glyphosate, isopropylamine salt	Almond	1327394.72	17212	739840.22	A	0.74	9.82E+05	739,840.2	7.71E-05
Glyphosate, isopropylamine salt	Almond	0.39	4	16000	S	0.74	2.89E-01	3.673E-01	1.96E-01
Glyphosate, isopropylamine salt	Apple	1276.4	57	811.61	A	0.74	9.45E+02	811.6	2.04E-02
Glyphosate, isopropylamine salt	Apple	0.21	2	38	U	0.74	1.55E-01	Not possible	-

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Glyphosate, isopropylamine salt	Apricot	2727.68	141	1820.63	A	0.74	2.02E+03	1,820.6	7.86E-03
Glyphosate, isopropylamine salt	Apricot	0.45	5	8600	S	0.74	3.33E-01	1.974E-01	3.37E-01
Glyphosate, isopropylamine salt	Apricot	0.26	2	43	U	0.74	1.92E-01	Not possible	-
Glyphosate, isopropylamine salt	Artichoke, globe	30.23	3	16	A	0.74	2.24E+01	16.0	4.66E-01
Glyphosate, isopropylamine salt	Asparagus	396.13	11	334.19	A	0.74	2.93E+02	334.2	7.97E-02
Glyphosate, isopropylamine salt	Avocado	32681.46	3267	25081.74	A	0.74	2.42E+04	25,081.7	2.95E-04
Glyphosate, isopropylamine salt	Avocado	396.07	28	1670500	U	0.74	2.93E+02	Not possible	-
Glyphosate, isopropylamine salt	Barley	1270.37	3	344	A	0.74	9.40E+02	344.0	9.11E-01
Glyphosate, isopropylamine salt	Barley (forage - fodder)	1057.6	26	413.5	A	0.74	7.83E+02	413.5	7.28E-02
Glyphosate, isopropylamine salt	Basil, sweet	207.2	4	186.5	A	0.74	1.53E+02	186.5	2.06E-01
Glyphosate, isopropylamine salt	Bean, dried	3142.97	21	1678.32	A	0.74	2.33E+03	1,678.3	6.60E-02
Glyphosate, isopropylamine salt	Bean, succulent	513.96	10	286.78	A	0.74	3.80E+02	286.8	1.33E-01
Glyphosate, isopropylamine salt	Bean, unspecified	68.01	1	68	A	0.74	5.03E+01	68.0	7.40E-01
Glyphosate, isopropylamine salt	Bermudagrass	809.75	6	288.9	A	0.74	5.99E+02	288.9	3.46E-01
Glyphosate, isopropylamine salt	Bitter melon	2.16	2	3	A	0.74	1.60E+00	3.0	2.66E-01
Glyphosate, isopropylamine salt	Blackberry	33.46	4	19.82	A	0.74	2.48E+01	19.8	3.12E-01
Glyphosate, isopropylamine salt	Blueberry	4195.39	96	2393.03	A	0.74	3.10E+03	2,393.0	1.35E-02
Glyphosate, isopropylamine salt	Bok choy (choy sum, pak choy)	15.23	1	4.75	A	0.74	1.13E+01	4.8	2.37E+00
Glyphosate, isopropylamine salt	Broccoli	310.64	15	156.15	A	0.74	2.30E+02	156.2	9.81E-02
Glyphosate, isopropylamine salt	Brussels sprout	17.26	4	34.9	A	0.74	1.28E+01	34.9	9.15E-02
Glyphosate, isopropylamine salt	Buildings/non-ag outdoor	8.04	N/A	1.1	A	0.74	5.95E+00	1.1	-
Glyphosate, isopropylamine salt	Cabbage	695.76	24	444.89	A	0.74	5.15E+02	444.9	4.82E-02
Glyphosate, isopropylamine salt	Cantaloupe	5625.22	21	2072.5	A	0.74	4.16E+03	2,072.5	9.56E-02
Glyphosate, isopropylamine salt	Carrot	102.02	1	68	A	0.74	7.55E+01	68.0	1.11E+00
Glyphosate, isopropylamine salt	Cauliflower	113.24	8	79.3	A	0.74	8.38E+01	79.3	1.32E-01
Glyphosate, isopropylamine salt	Celery	2553.07	47	945.39	A	0.74	1.89E+03	945.4	4.25E-02
Glyphosate, isopropylamine salt	Cherimoya	35.97	5	22.25	A	0.74	2.66E+01	22.3	2.39E-01
Glyphosate, isopropylamine salt	Cherry	17323.04	653	9612.23	A	0.74	1.28E+04	9,612.2	2.04E-03
Glyphosate, isopropylamine salt	Cherry	0.8	5	23800	S	0.74	5.92E-01	5.464E-01	2.17E-01
Glyphosate, isopropylamine salt	Cherry	<0.01	1	2	U	0.74	#VALUE!	Not possible	-
Glyphosate, isopropylamine salt	Chestnut	47.65	5	24.44	A	0.74	3.53E+01	24.4	2.89E-01
Glyphosate, isopropylamine salt	Chinese cabbage (napa, wong bok, celery cabbage)	22.92	1	7.15	A	0.74	1.70E+01	7.2	2.37E+00
Glyphosate, isopropylamine salt	Christmas tree	204.98	27	154	A	0.74	1.52E+02	154.0	3.65E-02
Glyphosate, isopropylamine salt	Cilantro	335.71	5	58	A	0.74	2.48E+02	58.0	8.57E-01
Glyphosate, isopropylamine salt	Citrus	965.85	141	1993.88	A	0.74	7.15E+02	1,993.9	2.54E-03
Glyphosate, isopropylamine salt	Citrus	28	2	50000	U	0.74	2.07E+01	Not possible	-
Glyphosate, isopropylamine salt	Clover	209.82	2	140	A	0.74	1.55E+02	140.0	5.55E-01
Glyphosate, isopropylamine salt	Commercial, institutional or industrial areas	102.94	2	648.23	A	0.74	7.62E+01	648.2	5.88E-02
Glyphosate, isopropylamine salt	Commercial, institutional or industrial areas	63.49	N/A	30028.88	K	0.74	4.70E+01	Not possible	-
Glyphosate, isopropylamine salt	Commercial, institutional or industrial areas	12.71	N/A	1981972	S	0.74	9.41E+00	4.550E+01	-
Glyphosate, isopropylamine salt	Commodity fumigation	1.21	1	1	A	0.74	8.95E-01	1.0	8.95E-01

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Glyphosate, isopropylamine salt	Commodity fumigation	9.97	N/A	N/A	N/A	0.74	7.38E+00	Not possible	-
Glyphosate, isopropylamine salt	Corn (forage - fodder)	179100.06	2505	128023.52	A	0.74	1.33E+05	128,023.5	4.13E-04
Glyphosate, isopropylamine salt	Corn, grain	6210.47	95	4434.02	A	0.74	4.60E+03	4,434.0	1.09E-02
Glyphosate, isopropylamine salt	Corn, human consumption	3832.28	55	2330.4	A	0.74	2.84E+03	2,330.4	2.21E-02
Glyphosate, isopropylamine salt	Cotton	114604.34	1003	66445.34	A	0.74	8.48E+04	66,445.3	1.27E-03
Glyphosate, isopropylamine salt	Cucumber	567.16	8	240.75	A	0.74	4.20E+02	240.8	2.18E-01
Glyphosate, isopropylamine salt	Date	5537.16	211	3259.17	A	0.74	4.10E+03	3,259.2	5.96E-03
Glyphosate, isopropylamine salt	Ditch bank	5000.27	201	1916.57	A	0.74	3.70E+03	1,916.6	9.61E-03
Glyphosate, isopropylamine salt	Ditch bank	13.42	N/A	7200	S	0.74	9.93E+00	1.653E-01	-
Glyphosate, isopropylamine salt	Ditch bank	20.9	N/A	20	U	0.74	1.55E+01	Not possible	-
Glyphosate, isopropylamine salt	Eggplant	32.33	5	18	A	0.74	2.39E+01	18.0	2.66E-01
Glyphosate, isopropylamine salt	Farm/ag building	8.1	6	4.5	A	0.74	5.99E+00	4.5	2.22E-01
Glyphosate, isopropylamine salt	Fennel	24.74	1	12	A	0.74	1.83E+01	12.0	1.53E+00
Glyphosate, isopropylamine salt	Fig	4521.19	127	2569.42	A	0.74	3.35E+03	2,569.4	1.03E-02
Glyphosate, isopropylamine salt	Fig	<0.01	1	2	U	0.74	#VALUE!	Not possible	-
Glyphosate, isopropylamine salt	Forage hay/silage	1344.8	18	857.3	A	0.74	9.95E+02	857.3	6.45E-02
Glyphosate, isopropylamine salt	Forest, timberland	63530.08	736	19055.45	A	0.74	4.70E+04	19,055.5	3.35E-03
Glyphosate, isopropylamine salt	Forest, timberland	4.07	N/A	208	U	0.74	3.01E+00	Not possible	-
Glyphosate, isopropylamine salt	Garbanzo bean	974.79	2	329	A	0.74	7.21E+02	329.0	1.10E+00
Glyphosate, isopropylamine salt	Garlic	9914.07	42	4360.11	A	0.74	7.34E+03	4,360.1	4.01E-02
Glyphosate, isopropylamine salt	Golf course turf	342.67	2	373.75	A	0.74	2.54E+02	373.8	3.39E-01
Glyphosate, isopropylamine salt	Golf course turf	25.93	N/A	173000	S	0.74	1.92E+01	3.972E+00	-
Glyphosate, isopropylamine salt	Golf course turf	10.99	N/A	129	U	0.74	8.13E+00	Not possible	-
Glyphosate, isopropylamine salt	Grain	17.98	2	18	A	0.74	1.33E+01	18.0	3.70E-01
Glyphosate, isopropylamine salt	Grape	74837.53	2112	48908.04	A	0.74	5.54E+04	48,908.0	5.36E-04
Glyphosate, isopropylamine salt	Grape	0.43	1	1400	S	0.74	3.18E-01	3.214E-02	9.90E+00
Glyphosate, isopropylamine salt	Grape	0.12	1	50	U	0.74	8.88E-02	Not possible	-
Glyphosate, isopropylamine salt	Grape, wine	221315.08	6391	125655.5	A	0.74	1.64E+05	125,655.5	2.04E-04
Glyphosate, isopropylamine salt	Grape, wine	2.25	1	53100	S	0.74	1.67E+00	1.219E+00	1.37E+00
Glyphosate, isopropylamine salt	Grapefruit	3695.52	242	2745.85	A	0.74	2.73E+03	2,745.9	4.12E-03
Glyphosate, isopropylamine salt	Grapefruit	0.4	1	200	S	0.74	2.96E-01	4.591E-03	6.45E+01
Glyphosate, isopropylamine salt	Grass, seed	603.29	21	324.6	A	0.74	4.46E+02	324.6	6.55E-02
Glyphosate, isopropylamine salt	Herb, spice	180.03	3	108	A	0.74	1.33E+02	108.0	4.11E-01
Glyphosate, isopropylamine salt	Hops	10.01	2	10	A	0.74	7.41E+00	10.0	3.70E-01
Glyphosate, isopropylamine salt	Industrial waste disposal systems, disposal water	2.08	1	5	A	0.74	1.54E+00	5.0	3.08E-01
Glyphosate, isopropylamine salt	Jicama	20.16	2	32	A	0.74	1.49E+01	32.0	2.33E-01
Glyphosate, isopropylamine salt	Kiwi fruit fuzzy	4891.32	163	2201.85	A	0.74	3.62E+03	2,201.9	1.01E-02
Glyphosate, isopropylamine salt	Landscape maintenance	1515.15	123	1264.95	A	0.74	1.12E+03	1,265.0	7.21E-03
Glyphosate, isopropylamine salt	Landscape maintenance	2.12	4	2700	S	0.74	1.57E+00	6.198E-02	6.33E+00
Glyphosate, isopropylamine salt	Landscape maintenance	115.49	1	0.01	U	0.74	8.55E+01	Not possible	-
Glyphosate, isopropylamine salt	Landscape maintenance	267709.21	N/A	N/A	N/A	0.74	1.98E+05	Not possible	-

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Glyphosate, isopropylamine salt	Lemon	48215.42	2818	35386.86	A	0.74	3.57E+04	35,386.9	3.58E-04
Glyphosate, isopropylamine salt	Lettuce, head	13.92	2	4	A	0.74	1.03E+01	4.0	1.29E+00
Glyphosate, isopropylamine salt	Lettuce, leaf	236.05	11	107.25	A	0.74	1.75E+02	107.3	1.48E-01
Glyphosate, isopropylamine salt	Lime	136.55	26	137.48	A	0.74	1.01E+02	137.5	2.83E-02
Glyphosate, isopropylamine salt	Mango	19.98	1	2.5	A	0.74	1.48E+01	2.5	5.91E+00
Glyphosate, isopropylamine salt	Melon	4599.89	28	1291.55	A	0.74	3.40E+03	1,291.6	9.41E-02
Glyphosate, isopropylamine salt	Mustard greens	208.14	2	51	A	0.74	1.54E+02	51.0	1.51E+00
Glyphosate, isopropylamine salt	N-grnhs flower	198.75	46	317.87	A	0.74	1.47E+02	317.9	1.01E-02
Glyphosate, isopropylamine salt	N-grnhs flower	28.71	3	257775	S	0.74	2.12E+01	5.918E+00	1.20E+00
Glyphosate, isopropylamine salt	N-grnhs plants in containers	627.21	204	200.56	A	0.74	4.64E+02	200.6	1.13E-02
Glyphosate, isopropylamine salt	N-grnhs plants in containers	75.94	72	2404144	S	0.74	5.62E+01	5.519E+01	1.41E-02
Glyphosate, isopropylamine salt	N-grnhs transplants	181.92	37	493.46	A	0.74	1.35E+02	493.5	7.37E-03
Glyphosate, isopropylamine salt	N-grnhs transplants	5.91	6	121500	S	0.74	4.37E+00	2.789E+00	2.61E-01
Glyphosate, isopropylamine salt	N-outdr flower	4878.79	550	1413.9	A	0.74	3.61E+03	1,413.9	4.64E-03
Glyphosate, isopropylamine salt	N-outdr plants in containers	58335.58	7284	14809.39	A	0.74	4.32E+04	14,809.4	4.00E-04
Glyphosate, isopropylamine salt	N-outdr plants in containers	5.99	1	1	C	0.74	4.43E+00	Not possible	-
Glyphosate, isopropylamine salt	N-outdr plants in containers	300.72	281	3222898.88	S	0.74	2.23E+02	7.399E+01	1.07E-02
Glyphosate, isopropylamine salt	N-outdr plants in containers	738.27	47	393862.25	U	0.74	5.46E+02	Not possible	-
Glyphosate, isopropylamine salt	N-outdr transplants	1074.46	188	606.62	A	0.74	7.95E+02	606.6	6.97E-03
Glyphosate, isopropylamine salt	N-outdr transplants	1.86	9	19100	S	0.74	1.38E+00	4.385E-01	3.49E-01
Glyphosate, isopropylamine salt	Nectarine	12435.3	631	7905.35	A	0.74	9.20E+03	7,905.4	1.84E-03
Glyphosate, isopropylamine salt	Nectarine	0.82	5	24800	S	0.74	6.07E-01	5.693E-01	2.13E-01
Glyphosate, isopropylamine salt	Nectarine	<0.01	1	3	U	0.74	#VALUE!	Not possible	-
Glyphosate, isopropylamine salt	Nursery soil	116.02	7	12	A	0.74	8.59E+01	12.0	1.02E+00
Glyphosate, isopropylamine salt	Oat	18.45	2	22	A	0.74	1.37E+01	22.0	3.10E-01
Glyphosate, isopropylamine salt	Oat (forage - fodder)	672.76	20	534	A	0.74	4.98E+02	534.0	4.66E-02
Glyphosate, isopropylamine salt	Olive	20924.06	476	13128.35	A	0.74	1.55E+04	13,128.4	2.48E-03
Glyphosate, isopropylamine salt	Onion, dry	4148.42	45	2069.37	A	0.74	3.07E+03	2,069.4	3.30E-02
Glyphosate, isopropylamine salt	Onion, green	54.71	1	54.2	A	0.74	4.05E+01	54.2	7.47E-01
Glyphosate, isopropylamine salt	Orange	48685.16	2161	39787.31	A	0.74	3.60E+04	39,787.3	4.19E-04
Glyphosate, isopropylamine salt	Orchard floor	0.52	3	15	A	0.74	3.85E-01	15.0	8.55E-03
Glyphosate, isopropylamine salt	Orchardgrass	181.27	1	145	A	0.74	1.34E+02	145.0	9.25E-01
Glyphosate, isopropylamine salt	Parsley	35.97	4	24	A	0.74	2.66E+01	24.0	2.77E-01
Glyphosate, isopropylamine salt	Pastureland	2853.63	124	2014.31	A	0.74	2.11E+03	2,014.3	8.45E-03
Glyphosate, isopropylamine salt	Pastureland	6.07	5	33060	S	0.74	4.49E+00	7.590E-01	1.18E+00
Glyphosate, isopropylamine salt	Peach	29420.76	1387	17240.47	A	0.74	2.18E+04	17,240.5	9.10E-04
Glyphosate, isopropylamine salt	Peach	0.7	4	18800	S	0.74	5.18E-01	4.316E-01	3.00E-01
Glyphosate, isopropylamine salt	Peach	0.4	2	69	U	0.74	2.96E-01	Not possible	-
Glyphosate, isopropylamine salt	Pear	2979.77	97	1880.38	A	0.74	2.21E+03	1,880.4	1.21E-02
Glyphosate, isopropylamine salt	Pear	0.01	1	4	U	0.74	7.40E-03	Not possible	-
Glyphosate, isopropylamine salt	Pear, asian (oriental pear, ya, ya li, nashi)	51.87	12	58.5	A	0.74	3.84E+01	58.5	5.47E-02

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, isopropylamine salt	Pecan	5068.05	91	2670.56	A	0.74	3.75E+03	2,670.6	1.54E-02
Glyphosate, isopropylamine salt	Pepper, fruiting	3208.95	47	1576.25	A	0.74	2.37E+03	1,576.3	3.21E-02
Glyphosate, isopropylamine salt	Peppermint	1	1	1	A	0.74	7.40E-01	1.0	7.40E-01
Glyphosate, isopropylamine salt	Persimmon	717.97	92	692.78	A	0.74	5.31E+02	692.8	8.34E-03
Glyphosate, isopropylamine salt	Persimmon	<0.01	1	1	U	0.74	#VALUE!	Not possible	-
Glyphosate, isopropylamine salt	Pistachio	398504.03	4493	219104.56	A	0.74	2.95E+05	219,104.6	3.00E-04
Glyphosate, isopropylamine salt	Pistachio	6.96	7	39844	S	0.74	5.15E+00	9.147E-01	8.04E-01
Glyphosate, isopropylamine salt	Pistachio	15.89	11	130	U	0.74	1.18E+01	Not possible	-
Glyphosate, isopropylamine salt	Plum	11411.13	883	7041.79	A	0.74	8.44E+03	7,041.8	1.36E-03
Glyphosate, isopropylamine salt	Plum	0.3	2	4800	S	0.74	2.22E-01	1.102E-01	1.01E+00
Glyphosate, isopropylamine salt	Plum	<0.01	1	2	U	0.74	#VALUE!	Not possible	-
Glyphosate, isopropylamine salt	Pluot	6.13	3	5.8	A	0.74	4.54E+00	5.8	2.61E-01
Glyphosate, isopropylamine salt	Pluot	0.26	2	8000	S	0.74	1.92E-01	1.837E-01	5.24E-01
Glyphosate, isopropylamine salt	Pomegranate	9753.62	130	5231.45	A	0.74	7.22E+03	5,231.5	1.06E-02
Glyphosate, isopropylamine salt	Pomelo	542.25	38	325.61	A	0.74	4.01E+02	325.6	3.24E-02
Glyphosate, isopropylamine salt	Potato	2363.25	81	1766.26	A	0.74	1.75E+03	1,766.3	1.22E-02
Glyphosate, isopropylamine salt	Prune	20431.94	508	12185.91	A	0.74	1.51E+04	12,185.9	2.44E-03
Glyphosate, isopropylamine salt	Public health	4914.88	N/A	N/A	N/A	0.74	3.64E+03	Not possible	-
Glyphosate, isopropylamine salt	Pumpkin	4663.01	35	1252.65	A	0.74	3.45E+03	1,252.7	7.87E-02
Glyphosate, isopropylamine salt	Quince	15.06	4	16	A	0.74	1.11E+01	16.0	1.74E-01
Glyphosate, isopropylamine salt	Rangeland	890.48	158	6379.31	A	0.74	6.59E+02	6,379.3	6.54E-04
Glyphosate, isopropylamine salt	Raspberry	139.22	1	34	A	0.74	1.03E+02	34.0	3.03E+00
Glyphosate, isopropylamine salt	Recreation area	37.08	2	22.46	A	0.74	2.74E+01	22.5	6.11E-01
Glyphosate, isopropylamine salt	Regulatory pest control	9.99	1	10	A	0.74	7.39E+00	10.0	7.39E-01
Glyphosate, isopropylamine salt	Regulatory pest control	1689.72	N/A	N/A	N/A	0.74	1.25E+03	Not possible	-
Glyphosate, isopropylamine salt	Research commodity	237.93	18	64.18	A	0.74	1.76E+02	64.2	1.52E-01
Glyphosate, isopropylamine salt	Research commodity	7.47	2	31500	S	0.74	5.53E+00	7.231E-01	3.82E+00
Glyphosate, isopropylamine salt	Research commodity	281.06	N/A	N/A	N/A	0.74	2.08E+02	Not possible	-
Glyphosate, isopropylamine salt	Rice	6966.42	100	6232	A	0.74	5.16E+03	6,232.0	8.27E-03
Glyphosate, isopropylamine salt	Rights of way	80298.66	851	46142.6	A	0.74	5.94E+04	46,142.6	1.51E-03
Glyphosate, isopropylamine salt	Rights of way	4.69	8	59900	S	0.74	3.47E+00	1.375E+00	3.15E-01
Glyphosate, isopropylamine salt	Rights of way	710.4	33	114.03	U	0.74	5.26E+02	Not possible	-
Glyphosate, isopropylamine salt	Rights of way	1076811.92	N/A	N/A	N/A	0.74	7.97E+05	Not possible	-
Glyphosate, isopropylamine salt	Ryegrass	392.31	11	453	A	0.74	2.90E+02	453.0	5.83E-02
Glyphosate, isopropylamine salt	Safflower	1384.87	30	2647.3	A	0.74	1.02E+03	2,647.3	1.29E-02
Glyphosate, isopropylamine salt	Sod farm (turf)	547.35	14	104	A	0.74	4.05E+02	104.0	2.78E-01
Glyphosate, isopropylamine salt	Soil fumigation/preplant	26685.88	156	19929.38	A	0.74	1.97E+04	19,929.4	6.35E-03
Glyphosate, isopropylamine salt	Sorghum (forage - fodder)	134.98	2	130	A	0.74	9.99E+01	130.0	3.84E-01
Glyphosate, isopropylamine salt	Sorghum/milo	93.68	1	75	A	0.74	6.93E+01	75.0	9.24E-01
Glyphosate, isopropylamine salt	Soybean	230.04	1	140	A	0.74	1.70E+02	140.0	1.22E+00
Glyphosate, isopropylamine salt	Squash	1.38	1	0.6	A	0.74	1.02E+00	0.6	1.70E+00

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, isopropylamine salt	Squash, winter	23.12	1	15.4	A	0.74	1.71E+01	15.4	1.11E+00
Glyphosate, isopropylamine salt	Stone fruit	10.5	7	4.93	A	0.74	7.77E+00	4.9	2.25E-01
Glyphosate, isopropylamine salt	Strawberry	1488.96	18	275.4	A	0.74	1.10E+03	275.4	2.22E-01
Glyphosate, isopropylamine salt	Structural pest control	898.64	N/A	N/A	N/A	0.74	6.65E+02	Not possible	-
Glyphosate, isopropylamine salt	Sudangrass	451.12	5	356	A	0.74	3.34E+02	356.0	1.88E-01
Glyphosate, isopropylamine salt	Sugarbeet	17460.55	203	14296.9	A	0.74	1.29E+04	14,296.9	4.45E-03
Glyphosate, isopropylamine salt	Sunflower	2523.82	23	1442.14	A	0.74	1.87E+03	1,442.1	5.63E-02
Glyphosate, isopropylamine salt	Sweet potato	22.55	1	15	A	0.74	1.67E+01	15.0	1.11E+00
Glyphosate, isopropylamine salt	Tangelo	580.69	38	444.64	A	0.74	4.30E+02	444.6	2.54E-02
Glyphosate, isopropylamine salt	Tangerine	38739.33	1144	20202.28	A	0.74	2.87E+04	20,202.3	1.24E-03
Glyphosate, isopropylamine salt	Thyme	0.38	1	0.63	A	0.74	2.81E-01	0.6	4.46E-01
Glyphosate, isopropylamine salt	Tomato	7483.22	84	4230.58	A	0.74	5.54E+03	4,230.6	1.56E-02
Glyphosate, isopropylamine salt	Tomato, processing	58721.82	402	32176.4	A	0.74	4.35E+04	32,176.4	3.36E-03
Glyphosate, isopropylamine salt	Triticale	803.55	23	406.88	A	0.74	5.95E+02	406.9	6.35E-02
Glyphosate, isopropylamine salt	Tropical/subtropical fruit	5.12	2	6	A	0.74	3.79E+00	6.0	3.16E-01
Glyphosate, isopropylamine salt	Turf/sod	2817.98	82	1523.71	A	0.74	2.09E+03	1,523.7	1.67E-02
Glyphosate, isopropylamine salt	Turf/sod	8.72	N/A	280000	S	0.74	6.45E+00	6.428E+00	-
Glyphosate, isopropylamine salt	Uncultivated ag	263320.94	4957	122772.2	A	0.74	1.95E+05	122,772.2	3.20E-04
Glyphosate, isopropylamine salt	Uncultivated ag	19.33	28	136969.8	S	0.74	1.43E+01	3.144E+00	1.62E-01
Glyphosate, isopropylamine salt	Uncultivated ag	33.24	1	0.07	U	0.74	2.46E+01	Not possible	-
Glyphosate, isopropylamine salt	Uncultivated non-ag	11627.29	301	52641.34	A	0.74	8.60E+03	52,641.3	5.43E-04
Glyphosate, isopropylamine salt	Uncultivated non-ag	0.88	N/A	26374	S	0.74	6.51E-01	6.055E-01	-
Glyphosate, isopropylamine salt	Uncultivated non-ag	24.14	N/A	0.03	U	0.74	1.79E+01	Not possible	-
Glyphosate, isopropylamine salt	Unknown	643.4	15	477.41	A	0.74	4.76E+02	477.4	6.65E-02
Glyphosate, isopropylamine salt	Vegetable	7.31	5	12	A	0.74	5.41E+00	12.0	9.02E-02
Glyphosate, isopropylamine salt	Vegetables, fruiting	1.5	1	1.5	A	0.74	1.11E+00	1.5	7.40E-01
Glyphosate, isopropylamine salt	Vertebrate control	1.6	1	2	A	0.74	1.18E+00	2.0	5.92E-01
Glyphosate, isopropylamine salt	Vertebrate control	1.17	N/A	N/A	N/A	0.74	8.66E-01	Not possible	-
Glyphosate, isopropylamine salt	Walnut	286403.98	5913	165075.2	A	0.74	2.12E+05	165,075.2	2.17E-04
Glyphosate, isopropylamine salt	Walnut	0.31	3	12000	S	0.74	2.29E-01	2.755E-01	2.78E-01
Glyphosate, isopropylamine salt	Water (industrial)	183.61	2	115.46	A	0.74	1.36E+02	115.5	5.88E-01
Glyphosate, isopropylamine salt	Water area	19195.02	65	2653.53	A	0.74	1.42E+04	2,653.5	8.24E-02
Glyphosate, isopropylamine salt	Water area	46.56	2	1231821	S	0.74	3.45E+01	2.828E+01	6.09E-01
Glyphosate, isopropylamine salt	Water area	81.98	N/A	88	U	0.74	6.07E+01	Not possible	-
Glyphosate, isopropylamine salt	Watercress	2	2	3	A	0.74	1.48E+00	3.0	2.47E-01
Glyphosate, isopropylamine salt	Watermelon	11065.96	47	3772.7	A	0.74	8.19E+03	3,772.7	4.62E-02
Glyphosate, isopropylamine salt	Wheat	3489.2	44	2257.4	A	0.74	2.58E+03	2,257.4	2.60E-02
Glyphosate, isopropylamine salt	Wheat (forage - fodder)	1183.29	10	804	A	0.74	8.76E+02	804.0	1.09E-01
Glyphosate, monoammonium salt	Almond	11.15	2	16.5	A	0.94	1.05E+01	16.5	3.18E-01
Glyphosate, monoammonium salt	Golf course turf	145.68	N/A	24	A	0.94	1.37E+02	24.0	-
Glyphosate, monoammonium salt	Landscape maintenance	13294.81	N/A	N/A	N/A	0.94	1.25E+04	Not possible	-

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, monoammonium salt	Lemon	0.93	2	16.9	A	0.94	8.74E-01	16.9	2.59E-02
Glyphosate, monoammonium salt	N-grnhs flower	5.36	N/A	3	A	0.94	5.04E+00	3.0	-
Glyphosate, monoammonium salt	N-outdr plants in containers	0.55	1	1500	S	0.94	5.17E-01	3.444E-02	1.50E+01
Glyphosate, monoammonium salt	N-outdr transplants	5.86	1	4	A	0.94	5.51E+00	4.0	1.38E+00
Glyphosate, monoammonium salt	Public health	6.96	N/A	N/A	N/A	0.94	6.54E+00	Not possible	-
Glyphosate, monoammonium salt	Research commodity	0.39	N/A	N/A	N/A	0.94	3.67E-01	Not possible	-
Glyphosate, monoammonium salt	Rights of way	2894.86	N/A	N/A	N/A	0.94	2.72E+03	Not possible	-
Glyphosate, monoammonium salt	Structural pest control	26.39	N/A	N/A	N/A	0.94	2.48E+01	Not possible	-
Glyphosate, monoammonium salt	Uncultivated non-ag	34.02	N/A	61	A	0.94	3.20E+01	61.0	-
Glyphosate, monoammonium salt	Walnut	4.88	2	11	A	0.94	4.59E+00	11.0	2.09E-01
Glyphosate, potassium salt	Airport	114.47	N/A	32	A	0.81	9.27E+01	32.0	-
Glyphosate, potassium salt	Alfalfa	216941.42	2941	138613.7	A	0.81	1.76E+05	138,613.7	4.31E-04
Glyphosate, potassium salt	Almond	1484346.9	17853	746003.08	A	0.81	1.20E+06	746,003.1	9.03E-05
Glyphosate, potassium salt	Animal premise	193.09	N/A	8	U	0.81	1.56E+02	Not possible	-
Glyphosate, potassium salt	Apple	1245.32	54	790.35	A	0.81	1.01E+03	790.4	2.36E-02
Glyphosate, potassium salt	Apricot	1031.07	58	516.63	A	0.81	8.35E+02	516.6	2.79E-02
Glyphosate, potassium salt	Arugula	8.84	1	8	A	0.81	7.16E+00	8.0	8.95E-01
Glyphosate, potassium salt	Asparagus	1561.15	10	581.7	A	0.81	1.26E+03	581.7	2.17E-01
Glyphosate, potassium salt	Avocado	35608.26	3066	24935.76	A	0.81	2.88E+04	24,935.8	3.77E-04
Glyphosate, potassium salt	Barley	22.07	1	16.5	A	0.81	1.79E+01	16.5	1.08E+00
Glyphosate, potassium salt	Barley (forage - fodder)	43.47	1	45.9	A	0.81	3.52E+01	45.9	7.67E-01
Glyphosate, potassium salt	Bean, dried	1019.21	9	383.4	A	0.81	8.26E+02	383.4	2.39E-01
Glyphosate, potassium salt	Bean, succulent	81.72	9	54	A	0.81	6.62E+01	54.0	1.36E-01
Glyphosate, potassium salt	Bermudagrass	7404.07	39	2226	A	0.81	6.00E+03	2,226.0	6.91E-02
Glyphosate, potassium salt	Beverage crop	0.66	3	4.2	A	0.81	5.35E-01	4.2	4.24E-02
Glyphosate, potassium salt	Blackberry	25.48	5	17.36	A	0.81	2.06E+01	17.4	2.38E-01
Glyphosate, potassium salt	Blueberry	797.65	21	300.37	A	0.81	6.46E+02	300.4	1.02E-01
Glyphosate, potassium salt	Bok choy (choy sum, pak choy)	0.26	3	3	A	0.81	2.11E-01	3.0	2.34E-02
Glyphosate, potassium salt	Broccoli	226.3	8	72.3	A	0.81	1.83E+02	72.3	3.17E-01
Glyphosate, potassium salt	Bushberry	5.52	1	4.75	A	0.81	4.47E+00	4.8	9.41E-01
Glyphosate, potassium salt	Cabbage	131.29	8	51.1	A	0.81	1.06E+02	51.1	2.60E-01
Glyphosate, potassium salt	Cantaloupe	698.72	11	287	A	0.81	5.66E+02	287.0	1.79E-01
Glyphosate, potassium salt	Carrot	175.76	3	101.8	A	0.81	1.42E+02	101.8	4.66E-01
Glyphosate, potassium salt	Celery	3.48	1	5	A	0.81	2.82E+00	5.0	5.64E-01
Glyphosate, potassium salt	Cherimoya	133.44	15	72.88	A	0.81	1.08E+02	72.9	9.89E-02
Glyphosate, potassium salt	Cherry	20364.87	724	9018.16	A	0.81	1.65E+04	9,018.2	2.53E-03
Glyphosate, potassium salt	Chestnut	37.19	3	18.66	A	0.81	3.01E+01	18.7	5.38E-01
Glyphosate, potassium salt	Chinese cabbage (napa, wong bok, celery cabbage)	25.1	2	11.6	A	0.81	2.03E+01	11.6	8.76E-01
Glyphosate, potassium salt	Citrus	116.38	10	275.22	A	0.81	9.43E+01	275.2	3.43E-02
Glyphosate, potassium salt	Clover	37.24	1	18	A	0.81	3.02E+01	18.0	1.68E+00
Glyphosate, potassium salt	Commodity fumigation	2.76	N/A	N/A	N/A	0.81	2.24E+00	Not possible	-

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, potassium salt	Corn (forage - fodder)	260051.68	3428	172857.9	A	0.81	2.11E+05	172,857.9	3.55E-04
Glyphosate, potassium salt	Corn, grain	14495.83	246	9670.68	A	0.81	1.17E+04	9,670.7	4.94E-03
Glyphosate, potassium salt	Corn, human consumption	4061.44	30	1480.5	A	0.81	3.29E+03	1,480.5	7.41E-02
Glyphosate, potassium salt	Cotton	230539.5	2212	157845.0 2	A	0.81	1.87E+05	157,845.0	5.35E-04
Glyphosate, potassium salt	County ag comm	167.1	N/A	N/A	N/A	0.81	1.35E+02	Not possible	-
Glyphosate, potassium salt	Cucumber	2224.07	13	790.38	A	0.81	1.80E+03	790.4	1.75E-01
Glyphosate, potassium salt	Daikon	26.89	4	16	A	0.81	2.18E+01	16.0	3.40E-01
Glyphosate, potassium salt	Date	563.36	23	721	A	0.81	4.56E+02	721.0	2.75E-02
Glyphosate, potassium salt	Ditch bank	920.11	51	535.26	A	0.81	7.45E+02	535.3	2.73E-02
Glyphosate, potassium salt	Eggplant	4.83	4	3.5	A	0.81	3.91E+00	3.5	2.79E-01
Glyphosate, potassium salt	Endive (escarole)	81.26	4	40.1	A	0.81	6.58E+01	40.1	4.10E-01
Glyphosate, potassium salt	Farm/ag building	355.83	26	27.7	A	0.81	2.88E+02	27.7	4.00E-01
Glyphosate, potassium salt	Fennel	18.39	1	22	A	0.81	1.49E+01	22.0	6.77E-01
Glyphosate, potassium salt	Fig	7187.14	87	3155.6	A	0.81	5.82E+03	3,155.6	2.12E-02
Glyphosate, potassium salt	Forage hay/silage	844.08	8	400	A	0.81	6.84E+02	400.0	2.14E-01
Glyphosate, potassium salt	Forest, timberland	33.1	3	30.9	A	0.81	2.68E+01	30.9	2.89E-01
Glyphosate, potassium salt	Garbanzo bean	22.51	2	12	A	0.81	1.82E+01	12.0	7.60E-01
Glyphosate, potassium salt	Garlic	16810.36	54	7146.2	A	0.81	1.36E+04	7,146.2	3.53E-02
Glyphosate, potassium salt	Golf course turf	31.2	N/A	15.4	A	0.81	2.53E+01	15.4	-
Glyphosate, potassium salt	Golf course turf	7.88	N/A	11000	S	0.81	6.38E+00	2.525E-01	-
Glyphosate, potassium salt	Grain	67.69	1	35	A	0.81	5.48E+01	35.0	1.57E+00
Glyphosate, potassium salt	Grape	71962.36	1697	38698.35	A	0.81	5.83E+04	38,698.4	8.88E-04
Glyphosate, potassium salt	Grape, wine	249922.98	6676	144184.2 5	A	0.81	2.02E+05	144,184.3	2.10E-04
Glyphosate, potassium salt	Grapefruit	4671.3	240	3556.8	A	0.81	3.78E+03	3,556.8	4.43E-03
Glyphosate, potassium salt	Grass, seed	46.81	14	12.5	A	0.81	3.79E+01	12.5	2.17E-01
Glyphosate, potassium salt	Guava	383.15	34	189.7	A	0.81	3.10E+02	189.7	4.81E-02
Glyphosate, potassium salt	Herb, spice	68.3	1	36	A	0.81	5.53E+01	36.0	1.54E+00
Glyphosate, potassium salt	Hops	12.91	3	4.67	A	0.81	1.05E+01	4.7	7.46E-01
Glyphosate, potassium salt	Jicama	0.69	2	34	A	0.81	5.59E-01	34.0	8.22E-03
Glyphosate, potassium salt	Kale	150.33	3	50	A	0.81	1.22E+02	50.0	8.12E-01
Glyphosate, potassium salt	Kiwi fruit fuzzy	11439.87	480	4353.8	A	0.81	9.27E+03	4,353.8	4.43E-03
Glyphosate, potassium salt	Kiwi fruit hardy	13.79	1	4	A	0.81	1.12E+01	4.0	2.79E+00
Glyphosate, potassium salt	Kohlrabi	5.52	1	3	A	0.81	4.47E+00	3.0	1.49E+00
Glyphosate, potassium salt	Kumquat	15.17	2	6	A	0.81	1.23E+01	6.0	1.02E+00
Glyphosate, potassium salt	Landscape maintenance	747.73	162	437.17	A	0.81	6.06E+02	437.2	8.55E-03
Glyphosate, potassium salt	Landscape maintenance	11.53	8	50000	S	0.81	9.34E+00	1.148E+00	1.02E+00
Glyphosate, potassium salt	Landscape maintenance	115901.81	N/A	N/A	N/A	0.81	9.39E+04	Not possible	-
Glyphosate, potassium salt	Lemon	65333.19	2271	45226.16	A	0.81	5.29E+04	45,226.2	5.15E-04
Glyphosate, potassium salt	Lettuce, head	2760.24	42	892.3	A	0.81	2.24E+03	892.3	5.97E-02
Glyphosate, potassium salt	Lettuce, leaf	2436.01	36	982.91	A	0.81	1.97E+03	982.9	5.58E-02
Glyphosate, potassium salt	Lime	429.78	46	326.77	A	0.81	3.48E+02	326.8	2.32E-02

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, potassium salt	Melon	1166.57	18	706.46	A	0.81	9.45E+02	706.5	7.43E-02
Glyphosate, potassium salt	Mint	176.54	1	73	A	0.81	1.43E+02	73.0	1.96E+00
Glyphosate, potassium salt	Mushroom	11.03	1	8	A	0.81	8.93E+00	8.0	1.12E+00
Glyphosate, potassium salt	Mustard greens	1.1	1	0.4	A	0.81	8.91E-01	0.4	2.23E+00
Glyphosate, potassium salt	N-grnhs flower	63.78	9	11.25	A	0.81	5.17E+01	11.3	5.10E-01
Glyphosate, potassium salt	N-grnhs flower	73.32	8	325075	S	0.81	5.94E+01	7.463E+00	9.95E-01
Glyphosate, potassium salt	N-grnhs plants in containers	131.15	17	58.15	A	0.81	1.06E+02	58.2	1.07E-01
Glyphosate, potassium salt	N-grnhs plants in containers	10.65	11	205618	S	0.81	8.63E+00	4.720E+00	1.66E-01
Glyphosate, potassium salt	N-grnhs transplants	1.89	1	2.5	A	0.81	1.53E+00	2.5	6.12E-01
Glyphosate, potassium salt	N-grnhs transplants	22.07	N/A	999999	U	0.81	1.79E+01	Not possible	-
Glyphosate, potassium salt	N-outdr flower	575.48	106	483.15	A	0.81	4.66E+02	483.2	9.10E-03
Glyphosate, potassium salt	N-outdr flower	3.1	N/A	9000	S	0.81	2.51E+00	2.066E-01	-
Glyphosate, potassium salt	N-outdr plants in containers	3952.69	850	2548.23	A	0.81	3.20E+03	2,548.2	1.48E-03
Glyphosate, potassium salt	N-outdr plants in containers	217.11	224	2550036	S	0.81	1.76E+02	5.854E+01	1.34E-02
Glyphosate, potassium salt	N-outdr plants in containers	120.23	34	10146	U	0.81	9.74E+01	Not possible	-
Glyphosate, potassium salt	N-outdr transplants	400.9	18	215.25	A	0.81	3.25E+02	215.3	8.38E-02
Glyphosate, potassium salt	Nectarine	14133.61	630	7195.54	A	0.81	1.14E+04	7,195.5	2.53E-03
Glyphosate, potassium salt	Nuts	3.79	2	3	A	0.81	3.07E+00	3.0	5.12E-01
Glyphosate, potassium salt	Oat	899.64	12	845.2	A	0.81	7.29E+02	845.2	7.18E-02
Glyphosate, potassium salt	Oat (forage - fodder)	164.59	5	103	A	0.81	1.33E+02	103.0	2.59E-01
Glyphosate, potassium salt	Olive	9938.58	263	5388.77	A	0.81	8.05E+03	5,388.8	5.68E-03
Glyphosate, potassium salt	Onion, dry	9352.44	72	5587.01	A	0.81	7.58E+03	5,587.0	1.88E-02
Glyphosate, potassium salt	Onion, green	8.84	1	8	A	0.81	7.16E+00	8.0	8.95E-01
Glyphosate, potassium salt	Orange	89621.02	3144	67809.82	A	0.81	7.26E+04	67,809.8	3.41E-04
Glyphosate, potassium salt	Orchard floor	312.99	21	230.92	A	0.81	2.54E+02	230.9	5.23E-02
Glyphosate, potassium salt	Orchardgrass	3.45	1	2	A	0.81	2.79E+00	2.0	1.40E+00
Glyphosate, potassium salt	Parsley	940.6	3	341	A	0.81	7.62E+02	341.0	7.45E-01
Glyphosate, potassium salt	Pasture (forage - fodder)	2.76	1	1	A	0.81	2.24E+00	1.0	2.24E+00
Glyphosate, potassium salt	Pastureland	1100.58	52	619.67	A	0.81	8.91E+02	619.7	2.77E-02
Glyphosate, potassium salt	Peach	30463.42	1424	15469.3	A	0.81	2.47E+04	15,469.3	1.12E-03
Glyphosate, potassium salt	Pear	826.21	26	585.82	A	0.81	6.69E+02	585.8	4.39E-02
Glyphosate, potassium salt	Pear, asian (oriental pear, ya, ya li, nashi)	119.65	7	88.5	A	0.81	9.69E+01	88.5	1.56E-01
Glyphosate, potassium salt	Peas	13.68	1	3.3	A	0.81	1.11E+01	3.3	3.36E+00
Glyphosate, potassium salt	Pecan	4467.31	92	1856.51	A	0.81	3.62E+03	1,856.5	2.12E-02
Glyphosate, potassium salt	Pepper, fruiting	779.96	7	374	A	0.81	6.32E+02	374.0	2.41E-01
Glyphosate, potassium salt	Persimmon	1660.8	123	939.4	A	0.81	1.35E+03	939.4	1.16E-02
Glyphosate, potassium salt	Pistachio	466202.15	5108	226508.7	A	0.81	3.78E+05	226,508.7	3.26E-04
Glyphosate, potassium salt	Pistachio	5.17	7	39844	S	0.81	4.19E+00	9.147E-01	6.54E-01
Glyphosate, potassium salt	Pistachio	11.8	11	130	U	0.81	9.56E+00	Not possible	-
Glyphosate, potassium salt	Plum	6204.24	372	3122.99	A	0.81	5.03E+03	3,123.0	4.33E-03
Glyphosate, potassium salt	Pluot	14.62	2	9.2	A	0.81	1.18E+01	9.2	6.44E-01

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, potassium salt	Pomegranate	18596.96	171	9491.42	A	0.81	1.51E+04	9,491.4	9.28E-03
Glyphosate, potassium salt	Pomelo	703.44	34	487.5	A	0.81	5.70E+02	487.5	3.44E-02
Glyphosate, potassium salt	Potato	410.64	7	274.5	A	0.81	3.33E+02	274.5	1.73E-01
Glyphosate, potassium salt	Prune	30624.2	486	14947.87	A	0.81	2.48E+04	14,947.9	3.41E-03
Glyphosate, potassium salt	Public health	3.62	N/A	N/A	N/A	0.81	2.93E+00	Not possible	-
Glyphosate, potassium salt	Pumpkin	<0.01	1	1	A	0.81	#VALUE!	1.0	-
Glyphosate, potassium salt	Quince	8.28	1	4	A	0.81	6.71E+00	4.0	1.68E+00
Glyphosate, potassium salt	Radicchio	410.57	6	323	A	0.81	3.33E+02	323.0	1.72E-01
Glyphosate, potassium salt	Radish	77.36	24	24.54	A	0.81	6.27E+01	24.5	1.06E-01
Glyphosate, potassium salt	Rangeland	1389.28	33	1118.5	A	0.81	1.13E+03	1,118.5	3.05E-02
Glyphosate, potassium salt	Rape (leafy vegetable)	8.84	1	8	A	0.81	7.16E+00	8.0	8.95E-01
Glyphosate, potassium salt	Raspberry	200.12	5	91.14	A	0.81	1.62E+02	91.1	3.56E-01
Glyphosate, potassium salt	Regulatory pest control	0.09	1	0.01	U	0.81	7.29E-02	Not possible	-
Glyphosate, potassium salt	Regulatory pest control	94.15	N/A	N/A	N/A	0.81	7.63E+01	Not possible	-
Glyphosate, potassium salt	Research commodity	774.07	154	346.93	A	0.81	6.27E+02	346.9	1.17E-02
Glyphosate, potassium salt	Research commodity	0.68	4	15100	S	0.81	5.51E-01	3.466E-01	3.97E-01
Glyphosate, potassium salt	Research commodity	223.5	N/A	N/A	N/A	0.81	1.81E+02	Not possible	-
Glyphosate, potassium salt	Rice	2057.06	29	1217.8	A	0.81	1.67E+03	1,217.8	4.72E-02
Glyphosate, potassium salt	Rights of way	31187.07	311	17424.21	A	0.81	2.53E+04	17,424.2	4.66E-03
Glyphosate, potassium salt	Rights of way	545.03	32	1945200	S	0.81	4.41E+02	4.466E+01	3.09E-01
Glyphosate, potassium salt	Rights of way	68.27	6	0.06	U	0.81	5.53E+01	Not possible	-
Glyphosate, potassium salt	Rights of way	158950.77	N/A	N/A	N/A	0.81	1.29E+05	Not possible	-
Glyphosate, potassium salt	Rye	583.39	8	337.5	A	0.81	4.73E+02	337.5	1.75E-01
Glyphosate, potassium salt	Ryegrass	444.81	7	212.5	A	0.81	3.60E+02	212.5	2.42E-01
Glyphosate, potassium salt	Safflower	6461.39	62	10873.5	A	0.81	5.23E+03	10,873.5	7.76E-03
Glyphosate, potassium salt	Sod farm (turf)	61.81	1	28	A	0.81	5.01E+01	28.0	1.79E+00
Glyphosate, potassium salt	Soil fumigation/preplant	8301.22	43	4837.12	A	0.81	6.72E+03	4,837.1	3.23E-02
Glyphosate, potassium salt	Sorghum (forage - fodder)	548.89	7	363.75	A	0.81	4.45E+02	363.8	1.75E-01
Glyphosate, potassium salt	Sorghum/milo	1683.68	16	857.81	A	0.81	1.36E+03	857.8	9.94E-02
Glyphosate, potassium salt	Spinach	11.03	1	2	A	0.81	8.93E+00	2.0	4.47E+00
Glyphosate, potassium salt	Squash	384.13	6	115	A	0.81	3.11E+02	115.0	4.51E-01
Glyphosate, potassium salt	Squash, winter	70.12	1	15.4	A	0.81	5.68E+01	15.4	3.69E+00
Glyphosate, potassium salt	Stone fruit	47.69	8	43.3	A	0.81	3.86E+01	43.3	1.12E-01
Glyphosate, potassium salt	Strawberry	1936.15	36	608.12	A	0.81	1.57E+03	608.1	7.16E-02
Glyphosate, potassium salt	Structural pest control	57.93	3	16.5	A	0.81	4.69E+01	16.5	9.48E-01
Glyphosate, potassium salt	Structural pest control	147.13	N/A	N/A	N/A	0.81	1.19E+02	Not possible	-
Glyphosate, potassium salt	Sudangrass	114.14	2	60.2	A	0.81	9.25E+01	60.2	7.68E-01
Glyphosate, potassium salt	Sugarbeet	34950.76	312	23859.59	A	0.81	2.83E+04	23,859.6	3.80E-03
Glyphosate, potassium salt	Sugarbeet (forage - fodder)	389.59	5	282.4	A	0.81	3.16E+02	282.4	2.23E-01
Glyphosate, potassium salt	Sunflower	1525.66	22	688.2	A	0.81	1.24E+03	688.2	8.16E-02
Glyphosate, potassium salt	Sweet potato	1066.98	21	529.5	A	0.81	8.64E+02	529.5	7.77E-02

Chemical	Commodity or Site	Pounds Applied	Number of Applications	Area Treated	Unit Treated	a.e. (ratio)	Pounds Applied (a.e.)	Area (A)	Application rate (Lbs/A)
Glyphosate, potassium salt	Tangelo	1451.58	53	1253.52	A	0.81	1.18E+03	1,253.5	1.77E-02
Glyphosate, potassium salt	Tangerine	86360.74	1911	47660.29	A	0.81	7.00E+04	47,660.3	7.68E-04
Glyphosate, potassium salt	Tomato	6155.57	52	2605.76	A	0.81	4.99E+03	2,605.8	3.68E-02
Glyphosate, potassium salt	Tomato, processing	46378.49	267	19041.54	A	0.81	3.76E+04	19,041.5	7.39E-03
Glyphosate, potassium salt	Triticale	768.9	21	687.89	A	0.81	6.23E+02	687.9	4.31E-02
Glyphosate, potassium salt	Tropical/subtropical fruit	156.08	17	69.34	A	0.81	1.26E+02	69.3	1.07E-01
Glyphosate, potassium salt	Turf/sod	214.73	4	78.04	A	0.81	1.74E+02	78.0	5.57E-01
Glyphosate, potassium salt	Turf/sod	1.03	N/A	6000	S	0.81	8.34E-01	1.377E-01	-
Glyphosate, potassium salt	Uncultivated ag	146089.94	2035	62437.84	A	0.81	1.18E+05	62,437.8	9.31E-04
Glyphosate, potassium salt	Uncultivated ag	2.59	2	14457	S	0.81	2.10E+00	3.319E-01	3.16E+00
Glyphosate, potassium salt	Uncultivated non-ag	10088.41	182	3288.19	A	0.81	8.17E+03	3,288.2	1.37E-02
Glyphosate, potassium salt	Uncultivated non-ag	9.83	4	146000	S	0.81	7.96E+00	3.352E+00	5.94E-01
Glyphosate, potassium salt	Uncultivated non-ag	2.11	N/A	6	U	0.81	1.71E+00	Not possible	-
Glyphosate, potassium salt	Unknown	236.36	5	115.57	A	0.81	1.91E+02	115.6	3.31E-01
Glyphosate, potassium salt	Vegetable	0.08	1	0.15	A	0.81	6.48E-02	0.2	4.32E-01
Glyphosate, potassium salt	Vertebrate control	8.27	N/A	N/A	N/A	0.81	6.70E+00	Not possible	-
Glyphosate, potassium salt	Walnut	303938.99	5040	144316.1	A	0.81	2.46E+05	144,316.1	3.38E-04
Glyphosate, potassium salt	Water area	521.55	4	391	A	0.81	4.22E+02	391.0	2.70E-01
Glyphosate, potassium salt	Watermelon	3126.59	24	1278.4	A	0.81	2.53E+03	1,278.4	8.25E-02
Glyphosate, potassium salt	Wheat	4760.28	40	2389.3	A	0.81	3.86E+03	2,389.3	4.03E-02
Glyphosate, potassium salt	Wheat (forage - fodder)	2650.39	27	1703.86	A	0.81	2.15E+03	1,703.9	4.67E-02
Glyphosate-trimesium	Almond	59.98	1	40	A	0.69	4.14E+01	40.0	1.03E+00

Abbreviations: A: acres; S: square feet; C: cubic feet; K: thousand cubic feet; P: pounds; T: tons; U: miscellaneous unit; N/A: data not available

Table S2. Number and percentage of entries for the various glyphosate forms noted in Table S1

Glyphosate form	Number of entries (all data)	Percentage of entries (all data)	Number of entries (filtered data)	Percentage of entries (filtered data)
Glyphosate	1	0.23	1.00	0.28
Glyphosate, diammonium salt	18	4.19	15.00	4.24
Glyphosate, dimethylamine salt	14	3.26	9.00	2.54
Glyphosate, isopropylamine salt	208	48.37	170.00	48.02
Glyphosate, monoammonium salt	13	3.02	5.00	1.41
Glyphosate, potassium salt	175	40.70	153.00	43.22
Glyphosate-trimesium	1	0.23	1.00	0.28
<i>Total</i>	<i>430</i>	<i>100</i>	<i>354</i>	<i>100</i>

Maximum glyphosate application rates that would not exceed the levels of concerns (LOCs)

The maximum glyphosate application rates that would not exceed the acute and chronic LOCs were calculated using the most conservative assumptions and scenarios. The sections below provide the datasets and linear regressions used in these calculations.

- **Honeybees**

The datasets for acute and chronic scenarios are provided in **Table S3**. The linear regressions are provided in **Figure S1**.

Table S3. Acute and chronic RQs used to calculate the maximum glyphosate application rates that would not exceed the LOCs in honeybees

Application rate (lbs/A)	Acute RQ	Chronic RQ
7.70E-05	2.48E-05	8.72E+00
1.42E-01	4.57E-02	1.61E+04
7.01E-01	2.25E-01	7.92E+04
2.23E+00	7.16E-01	2.52E+05
6.45E+01	2.07E+01	7.29E+06

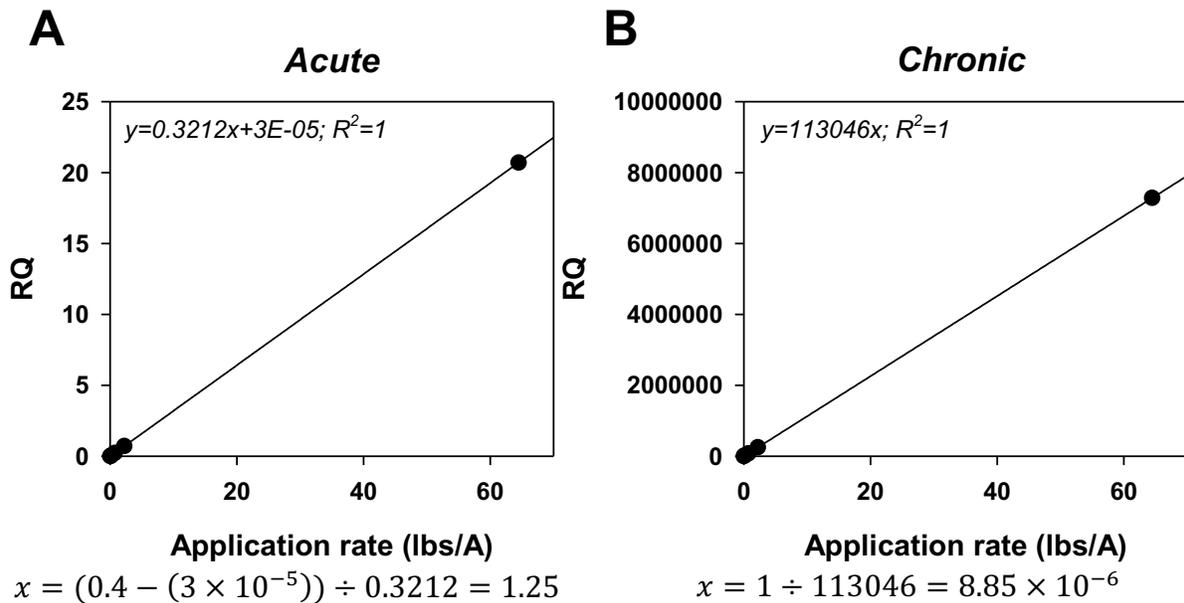


Figure S1. Linear regressions for acute (A) and chronic (B) scenarios used to calculate the maximum glyphosate application rates that would not exceed the LOCs in honeybees

- *Herpetofauna*

The datasets for acute and chronic scenarios are provided in **Table S4**. The linear regressions are provided in **Figure S2**.

Table S4. Acute and chronic RQs used to calculate the maximum glyphosate application rates that would not exceed the LOCs in herpetofauna

Application rate (lbs/A)	Acute RQ	Chronic RQ
7.70E-05	6.58E-06	3.69E-05
1.42E-01	1.21E-02	6.80E-02
7.01E-01	5.99E-02	3.36E-01
2.23E+00	1.91E-01	1.07E+00
6.45E+01	5.51E+00	3.09E+01

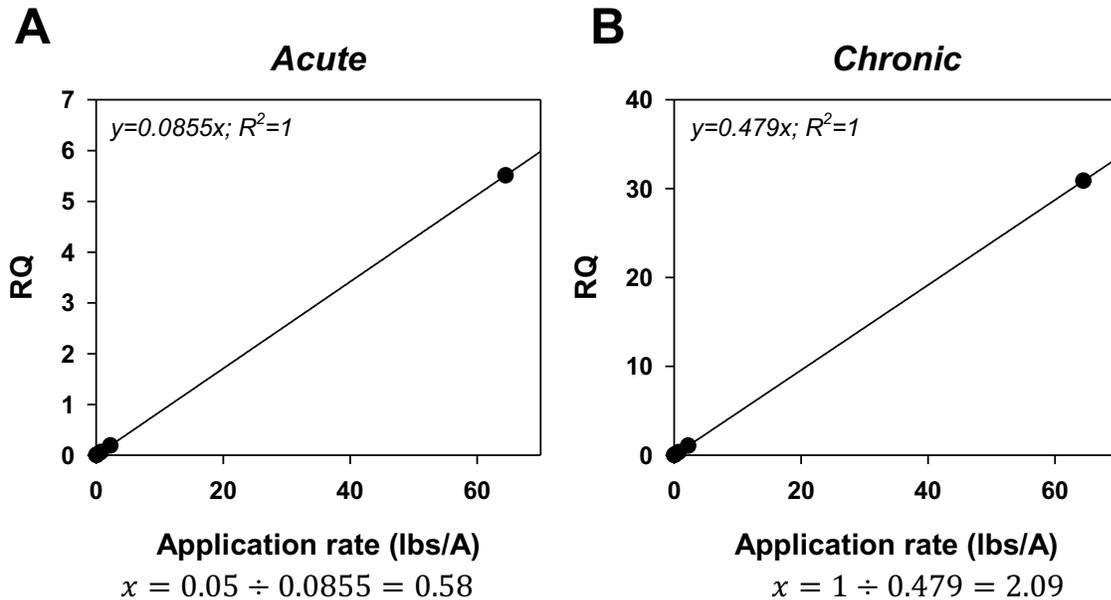


Figure S2. Linear regressions for acute (A) and chronic (B) scenarios used to calculate the maximum glyphosate application rates that would not exceed the LOCs in herpetofauna

- **Birds**

The datasets for acute and chronic scenarios are provided in **Table S5**. The linear regressions are provided in **Figure S3**.

Table S5. Acute and chronic RQs used to calculate the maximum glyphosate application rates that would not exceed the LOCs in birds

Application rate (lbs/A)	Acute RQ	Chronic RQ
7.70E-05	1.46E-05	3.69E-05
1.42E-01	2.70E-02	6.81E-02
7.01E-01	1.33E-01	3.36E-01
2.23E+00	4.23E-01	1.07E+00
6.45E+01	1.22E+01	3.09E+01

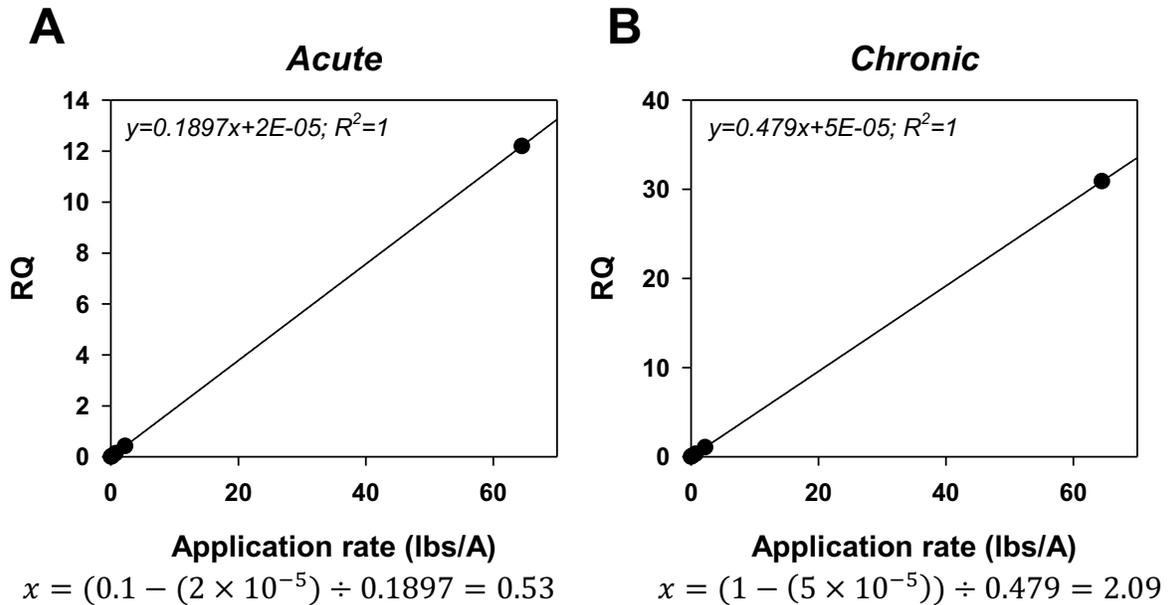


Figure S3. Linear regressions for acute (A) and chronic (B) scenarios used to calculate the maximum glyphosate application rates that would not exceed the LOCs in birds

- *Mammals*

The datasets for acute and chronic scenarios are provided in **Table S6**. The linear regressions are provided in **Figure S4**.

Table S6. Acute and chronic RQs used to calculate the maximum glyphosate application rates that would not exceed the LOCs in mammals

Application rate (lbs/A)	Acute RQ	Chronic RQ
7.70E-05	9.47E-06	2.68E-04
1.42E-01	1.74E-02	4.93E-01
7.01E-01	8.60E-02	2.43E+00
2.23E+00	2.74E-01	7.74E+00
6.45E+01	7.91E+00	2.24E+02

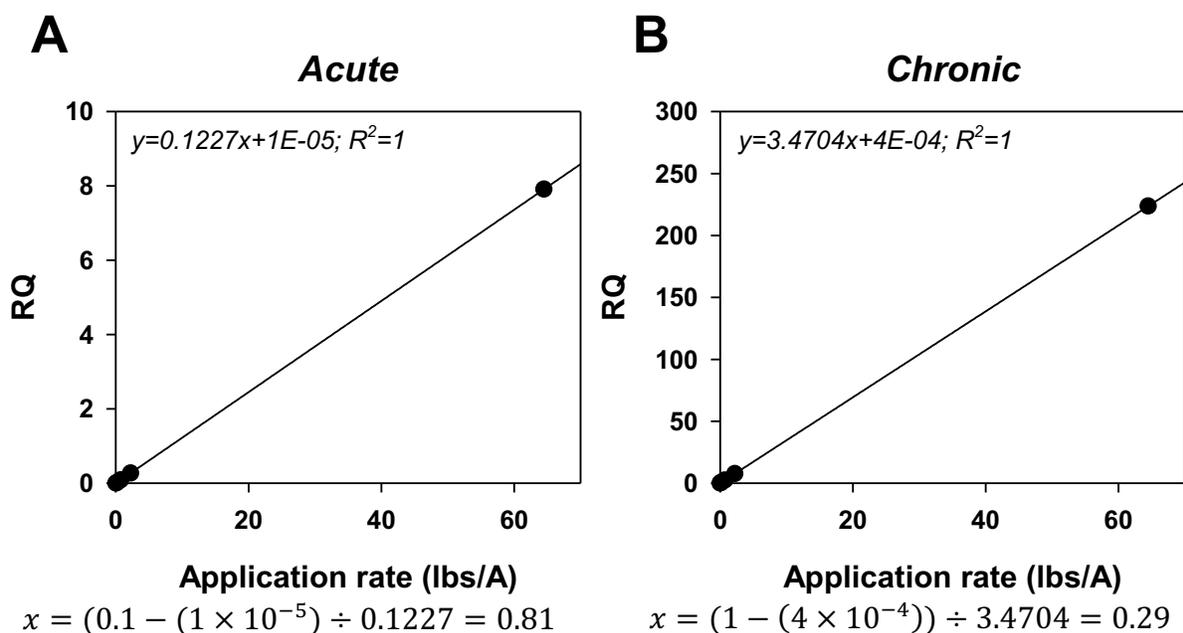


Figure S4. Linear regressions for acute (A) and chronic (B) scenarios used to calculate the maximum glyphosate application rates that would not exceed the LOCs in mammals

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