The Top Five Chemicals by Pounds Applied in each County in 2024

Text files of data are available. The ranking of chemicals is determined by total pounds of chemical used. Acres treated totals are cumulative, meaning that if a one-acre field was treated three times in a year, the cumulative acres treated would equal three acres. Cumulative acres treated totals include pesticide use reports (PURs) with unit treated equal to acres (A) or square feet (S), the latter of which was converted to acres. PURs with volume (cubic feet, etc.), weight (tons, lbs, etc.), or miscellaneous units (bins, holes, etc.) are not included in the acres treated totals. Most nonagricultural PURs are not required to report acres treated, so the acres treated totals are predominantly agricultural pesticide uses. Application counts (Apps) include only agricultural pesticide uses. A zero value under Acres Treated or Apps indicates that the pounds applied were nonagricultural uses. N-outdr = Outdoor nursery. N-grnhs = Greenhouse nursery. Values greater than one are rounded. Counties may have less than five rankings if there were not enough commodities or chemicals to rank. For more information, see Pesticide Use Annual Report Data Access, References, and Definitions Guide.

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Alameda	Sulfuryl fluoride	1	63,710	0	0
Alameda	Sodium chlorate	2	52,978	0	0
Alameda	Glyphosate, isopropylamine salt	3	19,600	340	2,531
Alameda	Carbon dioxide	4	19,285	0	0
Alameda	Sulfur	5	18,177	408	3,041
Alpine	Triclopyr, butoxyethyl ester	1	311	0	0
Alpine	Pyriproxyfen	2	224	1	17
Alpine	Metam-sodium	3	80	0	0
Alpine	Glyphosate, isopropylamine salt	4	71	0	0
Alpine	Sodium tetraborate decahydrate	5	63	0	0
Amador	Sulfur	1	37,549	543	6,583
Amador	Glyphosate, isopropylamine salt	2	7,652	156	1,381
Amador	Boric acid	3	3,119	2	60
Amador	Kaolin	4	2,981	13	126
Amador	Glyphosate, diammonium salt	5	2,175	44	1,048
Butte	Propanil	1	421,893	1,243	100,575
Butte	Copper sulfate (pentahydrate)	2	313,044	427	26,130

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Butte	Mineral oil	3	174,239	1,361	86,764
Butte	Copper hydroxide	4	141,923	1,073	39,710
Butte	Glyphosate, potassium salt	5	108,758	1,606	55,773
Calaveras	Sulfur	1	8,671	149	1,557
Calaveras	Glyphosate, diammonium salt	2	7,356	123	2,363
Calaveras	Glyphosate, isopropylamine salt	3	6,608	80	1,636
Calaveras	Boric acid	4	5,930	0	8
Calaveras	Dithiopyr	5	5,529	0	0
Colusa	Propanil	1	525,801	1,580	121,219
Colusa	Glyphosate, potassium salt	2	224,299	1,465	78,015
Colusa	Mineral oil	3	142,568	776	50,882
Colusa	Fatty acids, methyl esters	4	119,530	1,414	102,467
Colusa	Kaolin	5	105,959	92	3,751
Contra costa	Sulfur	1	157,816	573	9,232
Contra costa	Copper ethylenediamine complex	2	48,716	0	1,603
Contra costa	Glyphosate, isopropylamine salt	3	39,785	141	7,957
Contra costa	Mineral oil	4	31,287	498	5,810
Contra costa	Endothall, dipotassium salt	5	27,768	0	1,621
Del norte	Metam-sodium	1	68,658	52	214
Del norte	1,3-dichloropropene	2	45,119	18	185
Del norte	Copper hydroxide	3	6,805	538	3,791
Del norte	Triclopyr, butoxyethyl ester	4	2,043	78	1,124
Del norte	Chlorothalonil	5	1,725	290	2,044
El dorado	Glyphosate, isopropylamine salt	1	48,404	628	9,441
El dorado	Mineral oil	2	38,652	678	5,069
El dorado	Sulfur	3	14,794	518	4,652
El dorado	Glyphosate, diammonium salt	4	10,976	148	2,075

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
El dorado	Permethrin	5	10,488	0	0
Fresno	Sulfur	1	6,770,852	18,298	815,366
Fresno	Mineral oil	2	4,677,315	18,775	678,674
Fresno	Potassium n-methyldithiocarbamate	3	3,439,737	343	18,887
Fresno	Glyphosate, potassium salt	4	916,837	10,832	444,891
Fresno	Glyphosate, isopropylamine salt	5	853,546	9,808	361,938
Glenn	Propanil	1	368,069	1,393	81,288
Glenn	1,3-dichloropropene	2	206,435	66	640
Glenn	Copper sulfate (pentahydrate)	3	152,753	234	12,514
Glenn	Glyphosate, isopropylamine salt	4	121,943	1,753	48,418
Glenn	Copper hydroxide	5	114,042	656	27,140
Humboldt	Imazapyr, isopropylamine salt	1	6,375	439	9,454
Humboldt	Triclopyr, butoxyethyl ester	2	4,015	153	2,711
Humboldt	Glyphosate, isopropylamine salt	3	2,061	84	1,750
Humboldt	Triclopyr choline	4	1,394	41	853
Humboldt	Disodium octaborate tetrahydrate	5	1,346	0	0
Imperial	Sulfur	1	1,037,077	1,112	59,095
Imperial	Mineral oil	2	513,332	4,164	245,685
Imperial	Pendimethalin	3	324,140	2,640	168,051
Imperial	1,3-dichloropropene	4	226,804	54	2,291
Imperial	Glyphosate, isopropylamine salt	5	219,871	591	37,807
Inyo	Glyphosate, isopropylamine salt	1	1,847	6	293
Inyo	Triclopyr, butoxyethyl ester	2	1,733	0	3
Inyo	Fatty acids, methyl esters	3	382	2	180
Inyo	Ammonium sulfate	4	298	7	410
Inyo	Bifenthrin	5	211	0	10
Kern	Mineral oil	1	7,661,060	13,967	801,016

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Kern	Sulfur	2	3,985,873	12,216	666,543
Kern	Metam-sodium	3	1,367,923	129	7,200
Kern	Potassium n-methyldithiocarbamate	4	1,096,995	105	6,528
Kern	Glyphosate, potassium salt	5	931,929	9,046	459,460
Kings	Sulfur	1	1,718,310	1,578	116,612
Kings	Mineral oil	2	699,342	3,153	171,352
Kings	Glyphosate, potassium salt	3	448,559	3,018	267,486
Kings	Potassium n-methyldithiocarbamate	4	287,800	40	2,143
Kings	Glyphosate, isopropylamine salt	5	240,392	2,116	130,590
Lake	Sulfur	1	274,653	1,165	36,548
Lake	Mineral oil	2	186,770	639	13,300
Lake	Glyphosate, isopropylamine salt	3	26,128	239	2,686
Lake	Lime-sulfur	4	14,815	23	416
Lake	Kaolin	5	8,208	16	584
Lassen	Methyl bromide	1	56,009	9	274
Lassen	Glyphosate, isopropylamine salt	2	31,510	180	13,184
Lassen	Chloropicrin	3	26,483	6	184
Lassen	Sulfur	4	12,696	88	3,407
Lassen	Glyphosate, diammonium salt	5	7,375	53	1,672
Los angeles	Sulfuryl fluoride	1	664,087	0	0
Los angeles	Potassium n-methyldithiocarbamate	2	419,273	16	1,250
Los angeles	Boric acid	3	139,070	0	0
Los angeles	Methyl bromide	4	90,189	0	0
Los angeles	Glyphosate, isopropylamine salt	5	66,056	846	3,569
Madera	Sulfur	1	2,638,666	5,351	332,529
Madera	Mineral oil	2	1,398,757	4,242	209,632
Madera	Glyphosate, potassium salt	3	377,727	4,236	186,295

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Madera	Glyphosate, isopropylamine salt	4	258,844	3,233	149,275
Madera	Glufosinate-ammonium	5	237,846	5,800	267,673
Marin	Sulfuryl fluoride	1	17,573	0	0
Marin	Copper ethanolamine complexes, mixed	2	12,724	0	0
Marin	Potassium phosphite	3	10,876	0	0
Marin	Mineral oil	4	6,118	53	250
Marin	Prodiamine	5	3,633	0	0
Mariposa	Glyphosate, isopropylamine salt	1	2,432	20	50
Mariposa	Aminopyralid, triisopropanolamine salt	2	467	0	0
Mariposa	Sodium tetraborate decahydrate	3	466	0	0
Mariposa	Sulfuryl fluoride	4	409	0	0
Mariposa	Glufosinate-ammonium	5	401	0	0
Mendocino	Sulfur	1	399,856	2,358	54,912
Mendocino	Mineral oil	2	185,455	871	22,840
Mendocino	Octhilinone	3	156,772	0	0
Mendocino	5-chloro-2-methyl-4-isothiazolin-3-one	4	62,690	0	0
Mendocino	2-methyl-4-isothiazolin-3-one	5	22,303	0	0
Merced	Sulfur	1	1,579,353	1,603	116,198
Merced	1,3-dichloropropene	2	969,779	303	7,375
Merced	Mineral oil	3	759,152	3,693	199,632
Merced	Glyphosate, potassium salt	4	442,389	5,063	246,105
Merced	Potassium n-methyldithiocarbamate	5	383,957	70	1,928
Modoc	2,4-d, dimethylamine salt	1	9,012	110	8,367
Modoc	Glyphosate, potassium salt	2	8,961	91	5,922
Modoc	Glyphosate, isopropylamine salt	3	7,933	22	1,671
Modoc	Metribuzin	4	6,775	229	14,062
Modoc	Paraquat dichloride	5	6,595	108	7,161

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Mono	Pendimethalin	1	2,658	22	1,380
Mono	Glyphosate, isopropylamine salt	2	1,923	11	857
Mono	Diuron	3	1,210	30	1,259
Mono	Hexazinone	4	112	12	618
Mono	Propionic acid	5	102	11	857
Monterey	Chloropicrin	1	2,434,588	1,089	9,045
Monterey	Sulfur	2	939,473	9,886	214,055
Monterey	Mineral oil	3	850,422	7,620	177,434
Monterey	1,3-dichloropropene	4	820,123	897	8,639
Monterey	Potassium phosphite	5	340,760	11,653	119,311
Napa	Sulfur	1	820,790	8,581	145,252
Napa	Mineral oil	2	210,895	2,949	40,953
Napa	Carbon dioxide	3	36,074	0	0
Napa	Glyphosate, potassium salt	4	14,802	880	6,894
Napa	Hydrogen peroxide	5	11,006	845	7,970
Nevada	Glyphosate, isopropylamine salt	1	5,098	10	1,703
Nevada	Copper ethanolamine complexes, mixed	2	3,806	4	37
Nevada	Fatty acids, methyl esters	3	3,417	66	861
Nevada	Copper ethylenediamine complex	4	2,182	0	14
Nevada	Sulfur	5	2,177	72	441
Orange	Disodium octaborate tetrahydrate	1	638,041	0	0
Orange	Sulfuryl fluoride	2	291,790	0	0
Orange	Mineral oil	3	60,924	82	585
Orange	Glyphosate, isopropylamine salt	4	47,378	570	1,449
Orange	Chloropicrin	5	27,460	9	166
Placer	Propanil	1	30,302	128	7,695
Placer	Permethrin	2	23,859	0	0

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Placer	Glyphosate, isopropylamine salt	3	21,782	102	2,076
Placer	Glyphosate, potassium salt	4	18,896	127	6,005
Placer	Sulfur	5	18,057	100	2,825
Plumas	Glyphosate, isopropylamine salt	1	56,095	170	16,340
Plumas	Hexazinone	2	22,659	83	14,279
Plumas	Glyphosate, diammonium salt	3	21,055	127	8,768
Plumas	Imazapyr, isopropylamine salt	4	4,785	133	12,824
Plumas	Sodium bromide	5	4,424	0	0
Riverside	Sulfur	1	530,886	2,645	80,640
Riverside	Mineral oil	2	377,018	2,819	76,238
Riverside	Kaolin	3	353,446	125	5,847
Riverside	Metam-sodium	4	237,178	46	1,210
Riverside	Glyphosate, potassium salt	5	191,179	2,718	86,522
Sacramento	Sulfur	1	2,878,637	4,089	234,284
Sacramento	Mineral oil	2	674,493	2,646	75,188
Sacramento	Glyphosate, isopropylamine salt	3	82,563	911	26,464
Sacramento	Glyphosate, potassium salt	4	58,814	777	24,032
Sacramento	1,3-dichloropropene	5	52,467	6	159
San benito	Potassium n-methyldithiocarbamate	1	108,192	61	469
San benito	Diatomaceous earth	2	103,280	1,545	7,457
San benito	Sulfur	3	53,233	804	9,966
San benito	Mineral oil	4	42,912	932	12,639
San benito	Potassium phosphite	5	20,681	1,045	7,119
San bernardino	Disodium octaborate tetrahydrate	1	241,583	0	0
San bernardino	Glyphosate, isopropylamine salt	2	82,957	477	6,895
San bernardino	Sulfuryl fluoride	3	54,432	0	0
San bernardino	Copper sulfate (pentahydrate)	4	45,266	3	3,457

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
San bernardino	Carbon dioxide	5	37,430	0	0
San diego	Sulfuryl fluoride	1	324,469	0	0
San diego	Mineral oil	2	194,858	3,656	17,765
San diego	Sodium chlorate	3	115,228	0	0
San diego	Metam-sodium	4	78,270	47	724
San diego	Glyphosate, isopropylamine salt	5	71,334	4,186	17,210
San francisco	Chlorothalonil	1	4,448	0	613
San francisco	Glutaraldehyde	2	3,132	0	0
San francisco	1-bromo-3-chloro-5,5-dimethyl hydantoin	3	2,709	0	0
San francisco	Sodium hypochlorite	4	2,457	0	29
San francisco	Disodium octaborate tetrahydrate	5	1,778	0	0
San joaquin	Sulfur	1	6,094,175	11,451	474,363
San joaquin	Mineral oil	2	684,351	5,497	195,283
San joaquin	Glyphosate, isopropylamine salt	3	369,616	6,056	180,180
San joaquin	Glyphosate, potassium salt	4	246,457	3,666	126,694
San joaquin	1,3-dichloropropene	5	231,036	61	863
San luis obispo	Chloropicrin	1	617,587	132	3,063
San luis obispo	Sulfur	2	554,673	3,630	133,662
San luis obispo	Mineral oil	3	413,648	2,689	61,012
San luis obispo	Metam-sodium	4	226,279	18	951
San luis obispo	1,3-dichloropropene	5	211,201	96	1,902
San mateo	Sulfuryl fluoride	1	42,872	0	0
San mateo	Potassium n-methyldithiocarbamate	2	37,466	29	408
San mateo	Potassium phosphite	3	19,039	44	558
San mateo	Sodium percarbonate	4	11,262	0	130
San mateo	Mineral oil	5	10,693	74	257
Santa barbara	Chloropicrin	1	1,826,192	306	8,966

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Santa barbara	Sulfur	2	829,322	4,604	155,829
Santa barbara	Potassium n-methyldithiocarbamate	3	763,025	106	2,855
Santa barbara	1,3-dichloropropene	4	381,485	102	3,238
Santa barbara	Mineral oil	5	292,387	3,822	77,373
Santa clara	Potassium n-methyldithiocarbamate	1	199,598	53	949
Santa clara	Sulfuryl fluoride	2	146,294	0	0
Santa clara	Chloropicrin	3	63,037	30	458
Santa clara	1,3-dichloropropene	4	29,401	30	458
Santa clara	Glyphosate, isopropylamine salt	5	24,841	465	6,417
Santa cruz	Chloropicrin	1	774,689	347	2,580
Santa cruz	1,3-dichloropropene	2	235,179	294	2,783
Santa cruz	Mineral oil	3	76,419	908	7,607
Santa cruz	Soybean oil	4	74,822	527	5,851
Santa cruz	Sulfuryl fluoride	5	40,165	0	0
Shasta	Glyphosate, isopropylamine salt	1	37,633	436	14,256
Shasta	Glyphosate, diammonium salt	2	26,736	262	8,859
Shasta	Methyl bromide	3	26,004	10	115
Shasta	Chloropicrin	4	19,320	8	114
Shasta	Copper sulfate (pentahydrate)	5	18,445	25	1,386
Sierra	Glyphosate, diammonium salt	1	3,400	103	957
Sierra	Fatty acids, methyl esters	2	2,050	68	923
Sierra	Glyphosate, isopropylamine salt	3	1,721	10	718
Sierra	Sodium tetraborate decahydrate	4	432	8	1,213
Sierra	Triclopyr choline	5	368	11	133
Siskiyou	Methyl bromide	1	722,339	168	3,153
Siskiyou	Chloropicrin	2	414,673	167	3,140
Siskiyou	Mineral oil	3	54,609	172	9,611

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Siskiyou	Hydrogen peroxide	4	51,430	303	13,983
Siskiyou	Glyphosate, isopropylamine salt	5	39,409	401	16,407
Solano	Sulfur	1	458,372	1,276	35,905
Solano	Glyphosate, potassium salt	2	122,664	1,293	61,560
Solano	Glyphosate, isopropylamine salt	3	66,718	616	25,778
Solano	Mineral oil	4	38,136	319	17,694
Solano	Glufosinate-ammonium	5	35,635	734	33,624
Sonoma	Sulfur	1	1,575,887	14,348	236,525
Sonoma	Mineral oil	2	348,901	4,273	65,547
Sonoma	Sulfuryl fluoride	3	32,130	0	0
Sonoma	Glyphosate, potassium salt	4	22,605	1,064	14,684
Sonoma	Glufosinate-ammonium	5	21,681	2,242	20,273
Stanislaus	Mineral oil	1	1,158,523	4,145	200,285
Stanislaus	Sulfur	2	656,176	1,259	62,997
Stanislaus	1,3-dichloropropene	3	608,145	117	2,681
Stanislaus	Glyphosate, isopropylamine salt	4	393,847	5,003	186,207
Stanislaus	Boric acid	5	286,217	11	18
Sutter	Propanil	1	504,303	1,291	120,783
Sutter	Mineral oil	2	367,849	1,764	93,761
Sutter	Copper sulfate (pentahydrate)	3	139,179	140	11,815
Sutter	Sodium percarbonate	4	119,681	77	6,182
Sutter	Sulfur	5	116,588	154	6,074
Tehama	1,3-dichloropropene	1	301,477	137	918
Tehama	Copper hydroxide	2	135,927	1,087	34,631
Tehama	Mancozeb	3	74,118	1,088	30,966
Tehama	Glyphosate, isopropylamine salt	4	67,102	1,606	30,583
Tehama	Sulfuryl fluoride	5	52,170	0	0

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Trinity	Glyphosate, isopropylamine salt	1	7,473	201	4,655
Trinity	Glyphosate, diammonium salt	2	5,532	94	2,436
Trinity	Imazapyr, isopropylamine salt	3	2,686	202	4,608
Trinity	Clopyralid, monoethanolamine salt	4	2,086	69	2,608
Trinity	Oxyfluorfen	5	944	11	664
Tulare	Mineral oil	1	6,442,415	26,888	597,174
Tulare	Calcium hydroxide	2	2,301,476	5,659	105,537
Tulare	Sulfur	3	1,904,500	7,862	326,350
Tulare	Kaolin	4	795,881	908	18,198
Tulare	Glyphosate, isopropylamine salt	5	453,819	9,303	240,978
Tuolumne	Glyphosate, isopropylamine salt	1	14,573	104	3,601
Tuolumne	Glyphosate, diammonium salt	2	12,564	166	3,211
Tuolumne	Glyphosate, dimethylamine salt	3	2,788	32	992
Tuolumne	Sodium tetraborate decahydrate	4	2,738	37	678
Tuolumne	Glyphosate, potassium salt	5	1,444	1	9
Ventura	Chloropicrin	1	2,074,103	249	10,820
Ventura	Mineral oil	2	1,286,589	5,962	121,640
Ventura	Potassium n-methyldithiocarbamate	3	887,434	111	3,356
Ventura	1,3-dichloropropene	4	362,053	52	2,325
Ventura	Captan	5	152,329	2,000	91,406
Yolo	Sulfur	1	1,627,834	2,944	133,782
Yolo	Potassium n-methyldithiocarbamate	2	159,689	21	1,116
Yolo	Glyphosate, potassium salt	3	148,015	1,445	67,852
Yolo	Glyphosate, isopropylamine salt	4	139,702	1,564	71,041
Yolo	Propanil	5	122,992	263	28,966
Yuba	Propanil	1	187,202	718	45,401
Yuba	Mineral oil	2	148,845	686	25,463

County	Chemical	Rank	Pounds Applied	Apps	Acres Treated
Yuba	Kaolin	3	58,389	109	2,168
Yuba	Sodium percarbonate	4	48,291	39	2,412
Yuba	Copper hydroxide	5	40,891	342	11,368