

The Top Five Commodities by Pounds Applied in each County in 2023

[Text files](#) of data are available. The ranking of commodities (sites) is determined by total pounds of chemicals 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	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Alameda	Structural pest control	1	92,822	0	0
Alameda	Water (industrial)	2	63,949	0	0
Alameda	Landscape maintenance	3	50,860	1	2
Alameda	Grape, wine	4	46,142	3,715	26,975
Alameda	Rights of way	5	32,257	6	22
Alpine	Structural pest control	1	185	0	0
Alpine	Rights of way	2	106	0	0
Alpine	Landscape maintenance	3	1	0	0
Alpine	Uncultivated non-ag	4	< 1	0	10
Amador	Grape, wine	1	83,184	3,051	30,104
Amador	Forest, timberland	2	5,626	95	2,057
Amador	Rights of way	3	2,007	6	6
Amador	Landscape maintenance	4	1,706	5	10
Amador	Alfalfa	5	1,629	29	1,290
Butte	Rice	1	1,448,740	6,302	528,843
Butte	Walnut	2	520,097	9,838	386,529
Butte	Almond	3	260,425	6,540	271,719

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Butte	Uncultivated ag	4	73,390	128	3,946
Butte	Prune	5	64,229	1,045	41,962
Calaveras	Grape, wine	1	12,523	858	7,085
Calaveras	Forest, timberland	2	10,524	187	3,685
Calaveras	Landscape maintenance	3	5,734	0	0
Calaveras	Rights of way	4	2,874	8	50
Calaveras	Structural pest control	5	2,351	0	0
Colusa	Rice	1	1,063,462	8,257	560,915
Colusa	Almond	2	416,950	10,696	624,768
Colusa	Tomato, processing	3	314,523	3,566	195,238
Colusa	Walnut	4	156,529	1,890	114,942
Colusa	Uncultivated ag	5	87,115	860	64,677
Contra costa	Tomato, processing	1	151,281	1,044	41,422
Contra costa	Grape, wine	2	85,510	1,628	18,163
Contra costa	Water area	3	58,515	0	4,203
Contra costa	Structural pest control	4	34,574	0	0
Contra costa	Landscape maintenance	5	31,972	14	13
Del norte	N-outdr flower	1	69,976	1,237	9,255
Del norte	Soil fumigation/preplant	2	65,907	34	243
Del norte	Forest, timberland	3	2,137	184	3,016
Del norte	Rights of way	4	278	0	0
Del norte	Structural pest control	5	276	0	0
El dorado	Forest, timberland	1	78,770	1,749	56,271
El dorado	Grape, wine	2	52,771	2,536	22,919
El dorado	Rights of way	3	17,307	13	40
El dorado	Apple	4	15,670	406	2,660
El dorado	Structural pest control	5	13,235	0	0

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Fresno	Tomato, processing	1	4,922,350	8,094	901,282
Fresno	Almond	2	3,869,180	54,462	2,917,375
Fresno	Grape	3	3,383,893	34,929	1,016,639
Fresno	Grape, wine	4	1,792,460	9,512	665,370
Fresno	Pistachio	5	1,649,485	19,833	1,724,673
Glenn	Rice	1	782,035	7,184	421,727
Glenn	Almond	2	426,666	10,532	620,804
Glenn	Walnut	3	287,512	5,704	193,623
Glenn	Olive	4	77,555	1,152	33,109
Glenn	Rights of way	5	62,948	0	0
Humboldt	Forest, timberland	1	9,573	737	15,110
Humboldt	Cannabis (all or unspecified)	2	6,672	1,064	96
Humboldt	Structural pest control	3	3,388	0	0
Humboldt	Rights of way	4	1,957	0	0
Humboldt	N-grnhs flower	5	1,472	979	2,529
Imperial	Alfalfa	1	885,233	18,882	1,210,614
Imperial	Bermudagrass	2	603,464	1,883	140,655
Imperial	Sugarbeet	3	410,349	3,404	235,830
Imperial	Carrot	4	401,457	1,436	74,814
Imperial	Rights of way	5	334,351	0	0
Inyo	Rights of way	1	1,875	0	0
Inyo	Alfalfa	2	1,416	35	1,537
Inyo	Structural pest control	3	576	0	0
Inyo	Forage hay/silage	4	353	7	342
Inyo	N-grnhs flower	5	321	0	412
Kern	Almond	1	4,728,148	39,360	2,619,910
Kern	Grape	2	4,056,226	35,351	1,504,058

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Kern	Orange	3	2,409,732	13,522	523,457
Kern	Pistachio	4	2,086,191	20,124	1,566,949
Kern	Carrot	5	1,696,468	2,301	141,742
Kings	Tomato, processing	1	1,038,253	2,208	247,330
Kings	Soil fumigation/preplant	2	925,251	2,194	410,784
Kings	Pistachio	3	654,190	9,069	577,543
Kings	Almond	4	631,364	9,529	502,060
Kings	Cotton	5	450,349	5,075	867,577
Lake	Grape, wine	1	363,624	3,759	114,312
Lake	Pear	2	146,923	1,559	32,297
Lake	Rights of way	3	7,737	13	108
Lake	Landscape maintenance	4	7,059	46	324
Lake	Water area	5	6,312	2	247
Lassen	Strawberry	1	109,872	172	6,575
Lassen	Soil fumigation/preplant	2	38,460	6	106
Lassen	Forest, timberland	3	24,687	205	12,578
Lassen	Alfalfa	4	16,080	444	37,871
Lassen	Rights of way	5	2,919	17	66
Los angeles	Structural pest control	1	1,196,678	0	0
Los angeles	Carrot	2	496,826	476	34,230
Los angeles	Rights of way	3	221,644	22	156
Los angeles	Water (industrial)	4	174,898	0	0
Los angeles	Landscape maintenance	5	161,768	154	164
Madera	Almond	1	1,771,313	32,534	1,706,617
Madera	Grape, wine	2	1,654,482	7,077	426,026
Madera	Grape	3	1,193,845	6,610	293,228
Madera	Pistachio	4	463,907	9,440	646,391

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Madera	Tomato, processing	5	173,020	771	53,729
Marin	Structural pest control	1	34,682	0	0
Marin	Landscape maintenance	2	21,921	6	6
Marin	Water area	3	10,025	0	170
Marin	Rights of way	4	5,647	0	0
Marin	Grape, wine	5	4,728	208	1,551
Mariposa	Rights of way	1	2,016	0	0
Mariposa	Landscape maintenance	2	1,585	0	0
Mariposa	Structural pest control	3	702	0	0
Mariposa	Water area	4	327	0	129
Mariposa	Regulatory pest control	5	218	0	0
Mendocino	Lumber, treated	1	1,051,554	0	0
Mendocino	Grape, wine	2	616,441	5,905	147,197
Mendocino	Pear	3	97,102	549	24,351
Mendocino	Forest, timberland	4	7,090	324	8,421
Mendocino	Rights of way	5	6,474	7	111
Merced	Almond	1	1,730,094	30,454	1,624,166
Merced	Tomato, processing	2	1,067,111	4,456	283,134
Merced	Sweet potato	3	854,498	555	14,030
Merced	Grape, wine	4	707,924	2,803	238,837
Merced	N-outdr transplants	5	282,726	683	13,571
Modoc	Potato	1	83,210	650	42,517
Modoc	Alfalfa	2	22,662	869	54,642
Modoc	Onion, dry	3	12,131	319	20,474
Modoc	Uncultivated ag	4	11,970	24	1,571
Modoc	Rice, wild	5	8,816	31	970
Mono	Alfalfa	1	1,488	37	2,298

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Mono	Forage hay/silage	2	633	16	642
Mono	Rights of way	3	575	0	0
Mono	Landscape maintenance	4	71	3	8
Mono	Structural pest control	5	27	0	0
Monterey	Strawberry	1	3,679,368	17,506	421,657
Monterey	Grape, wine	2	2,165,097	28,900	1,124,639
Monterey	Lettuce, leaf	3	651,274	119,295	1,092,636
Monterey	Lettuce, head	4	325,681	61,588	661,086
Monterey	Broccoli	5	205,400	33,313	362,212
Napa	Grape, wine	1	1,226,215	34,080	498,170
Napa	Landscape maintenance	2	14,118	0	0
Napa	Fumigation, other	3	13,070	6	0
Napa	Soil fumigation/preplant	4	7,157	2	22
Napa	Structural pest control	5	6,281	0	0
Nevada	Landscape maintenance	1	17,484	43	627
Nevada	Grape, wine	2	17,330	197	3,415
Nevada	Rights of way	3	14,808	0	0
Nevada	Structural pest control	4	2,225	0	0
Nevada	Water (industrial)	5	286	0	0
Orange	Structural pest control	1	404,036	0	0
Orange	Landscape maintenance	2	116,148	22	11
Orange	Water (industrial)	3	56,222	0	0
Orange	Golf course turf	4	56,174	0	78,021
Orange	Strawberry	5	54,009	94	788
Placer	Rice	1	82,751	605	37,712
Placer	Almond	2	39,098	239	22,986
Placer	Walnut	3	37,154	468	21,700

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Placer	Structural pest control	4	35,589	0	0
Placer	Landscape maintenance	5	35,201	1	4
Plumas	Forest, timberland	1	79,002	614	60,511
Plumas	Water (industrial)	2	3,498	0	0
Plumas	Rights of way	3	3,058	2	20
Plumas	Landscape maintenance	4	1,132	0	0
Plumas	N-grnhs flower	5	960	0	248
Riverside	Lemon	1	408,631	1,978	78,717
Riverside	Pepper, fruiting	2	358,274	2,794	71,876
Riverside	Grape	3	247,280	3,093	91,356
Riverside	Alfalfa	4	223,487	8,417	334,051
Riverside	Peach	5	185,183	57	7,341
Sacramento	Grape, wine	1	3,348,049	11,477	569,283
Sacramento	Pear	2	619,217	3,157	113,788
Sacramento	Tomato, processing	3	135,392	1,636	71,979
Sacramento	Cannabis (all or unspecified)	4	120,249	6,361	343
Sacramento	Rice	5	98,021	555	45,590
San benito	Grape, wine	1	124,269	2,724	64,989
San benito	Pepper, fruiting	2	113,597	1,225	23,289
San benito	Lettuce, leaf	3	102,895	11,865	88,675
San benito	Broccoli	4	31,396	2,181	17,580
San benito	Spinach	5	22,646	4,197	31,421
San bernardino	Structural pest control	1	105,223	0	0
San bernardino	Rights of way	2	67,709	41	283
San bernardino	Landscape maintenance	3	52,690	76	1,157
San bernardino	Water (industrial)	4	16,486	0	0
San bernardino	Orange	5	14,543	1,316	11,718

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
San diego	Structural pest control	1	514,390	2	< 1
San diego	Tomato	2	147,553	1,165	46,649
San diego	Water (industrial)	3	140,620	0	0
San diego	Landscape maintenance	4	132,788	17	81
San diego	Avocado	5	119,761	2,374	30,768
San francisco	Water (industrial)	1	8,482	0	0
San francisco	Golf course turf	2	7,277	0	4,677
San francisco	Structural pest control	3	6,353	0	0
San francisco	Landscape maintenance	4	2,937	0	0
San francisco	Public health	5	1,292	0	0
San joaquin	Grape, wine	1	5,844,118	31,905	1,054,617
San joaquin	Almond	2	1,257,163	25,177	1,159,517
San joaquin	Tomato, processing	3	509,247	4,987	269,766
San joaquin	Walnut	4	444,505	11,221	382,656
San joaquin	Cherry	5	383,611	13,224	221,307
San luis obispo	Strawberry	1	1,007,704	6,042	196,677
San luis obispo	Grape, wine	2	833,060	15,703	503,615
San luis obispo	Carrot	3	157,337	424	22,601
San luis obispo	Avocado	4	88,518	667	14,859
San luis obispo	Lemon	5	58,322	728	21,675
San mateo	Structural pest control	1	60,518	1	< 1
San mateo	Landscape maintenance	2	49,061	73	61
San mateo	Brussels sprout	3	42,028	540	6,373
San mateo	Public health	4	15,322	0	0
San mateo	Ditch bank	5	8,517	0	18
Santa barbara	Strawberry	1	3,440,480	17,769	566,941
Santa barbara	Grape, wine	2	960,410	8,802	379,143

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Santa barbara	Carrot	3	283,094	786	38,142
Santa barbara	Avocado	4	106,742	1,716	21,882
Santa barbara	Landscape maintenance	5	103,083	118	2,014
Santa clara	Pepper, fruiting	1	187,147	1,411	32,741
Santa clara	Structural pest control	2	185,131	2	1
Santa clara	Water (industrial)	3	62,685	0	0
Santa clara	Tomato	4	58,749	1,106	32,929
Santa clara	Landscape maintenance	5	57,545	92	36
Santa cruz	Strawberry	1	681,909	3,305	70,677
Santa cruz	Raspberry	2	233,702	1,580	22,168
Santa cruz	Blackberry	3	117,241	2,535	28,348
Santa cruz	Brussels sprout	4	71,476	537	9,528
Santa cruz	Structural pest control	5	49,534	0	0
Shasta	Soil fumigation/preplant	1	59,382	15	169
Shasta	Forest, timberland	2	42,163	1,238	31,488
Shasta	Rice, wild	3	33,035	41	3,012
Shasta	Rights of way	4	20,650	19	158
Shasta	Water (industrial)	5	19,207	0	0
Sierra	Rights of way	1	1,863	0	0
Sierra	Alfalfa	2	299	9	685
Sierra	Wheat (forage - fodder)	3	61	1	60
Sierra	County ag comm	4	43	0	0
Sierra	Structural pest control	5	42	0	0
Siskiyou	Soil fumigation/preplant	1	1,215,626	161	3,763
Siskiyou	Strawberry	2	75,318	1,362	53,341
Siskiyou	Alfalfa	3	29,991	1,060	60,795
Siskiyou	Potato	4	29,063	583	27,611

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Siskiyou	Forest, timberland	5	20,386	471	17,250
Solano	Tomato, processing	1	349,019	3,293	171,359
Solano	Grape, wine	2	306,446	2,891	70,104
Solano	Almond	3	296,609	3,408	258,588
Solano	Rights of way	4	72,518	10	1,120
Solano	Alfalfa	5	45,875	1,312	61,817
Sonoma	Grape, wine	1	2,158,377	46,060	837,273
Sonoma	Apple	2	51,567	700	5,724
Sonoma	Landscape maintenance	3	50,552	5	6
Sonoma	Structural pest control	4	45,800	0	0
Sonoma	Rights of way	5	18,530	4	80
Stanislaus	Almond	1	2,754,403	48,322	2,362,814
Stanislaus	Grape, wine	2	338,573	1,794	83,431
Stanislaus	Walnut	3	268,565	5,607	162,735
Stanislaus	Tomato, processing	4	231,564	1,815	97,596
Stanislaus	Animal premise	5	155,112	14	91
Sutter	Rice	1	1,147,784	5,647	528,248
Sutter	Walnut	2	256,501	5,921	171,406
Sutter	Peach	3	192,892	5,082	71,553
Sutter	Tomato, processing	4	172,499	1,209	77,641
Sutter	Prune	5	160,379	1,889	64,953
Tehama	Walnut	1	271,622	8,206	186,661
Tehama	Soil fumigation/preplant	2	204,872	57	873
Tehama	Almond	3	186,782	4,517	218,599
Tehama	Commodity fumigation	4	51,408	0	0
Tehama	Rights of way	5	42,666	42	363
Trinity	Forest, timberland	1	12,612	251	11,481

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Trinity	Structural pest control	2	21	0	0
Trinity	Rights of way	3	10	0	0
Trinity	Landscape maintenance	4	7	0	0
Trinity	Beehive	5	< 1	1	0
Tulare	Orange	1	5,150,432	62,239	1,147,881
Tulare	Grape	2	2,316,324	20,970	858,493
Tulare	Tangerine	3	1,734,454	18,595	385,368
Tulare	Almond	4	1,414,708	19,293	1,016,548
Tulare	Lemon	5	880,354	12,452	196,265
Tuolumne	Forest, timberland	1	16,800	253	6,137
Tuolumne	Rights of way	2	8,170	3	150
Tuolumne	Landscape maintenance	3	2,939	0	0
Tuolumne	Structural pest control	4	1,202	0	0
Tuolumne	Water area	5	1,127	0	358
Ventura	Strawberry	1	3,551,029	12,650	592,278
Ventura	Lemon	2	1,003,348	9,308	160,636
Ventura	Pepper, fruiting	3	280,282	3,346	80,264
Ventura	Avocado	4	228,623	5,691	56,562
Ventura	Structural pest control	5	108,589	0	0
Yolo	Grape, wine	1	1,546,587	8,086	278,024
Yolo	Tomato, processing	2	399,939	4,180	247,356
Yolo	Rice	3	385,773	1,179	129,314
Yolo	Almond	4	285,104	5,369	335,905
Yolo	Uncultivated ag	5	264,713	1,196	83,304
Yuba	Rice	1	358,415	2,990	193,416
Yuba	Walnut	2	145,900	2,359	96,830
Yuba	Prune	3	88,519	1,010	40,969

County	Commodity or Site	Rank	Pounds Applied	Apps	Acres Treated
Yuba	Peach	4	60,311	1,925	22,390
Yuba	Kiwi fruit fuzzy	5	25,820	711	7,491