Table 19: *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones). Use includes primarily agricultural applications. The grand total for acres treated may be less than the sum of acres treated for all active ingredients because some products contain more than one active ingredient. Data are from the Department of Pesticide Regulation's Pesticide Use Reports.*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
(3S, 6R)-3-METHYL-6-ISOPROPENYL-9-DECEN-1-YL ACETATE	0	0	15	86	1,604	1,484	0	0	3	0
(3S, 6S)-3-METHYL-6-ISOPROPENYL-9-DECEN-1-YL ACETATE	0	0	15	86	1,604	1,484	0	0	3	0
(E)-4-TRIDECEN-1-YL-ACETATE	9,159	11,739	10,902	5,555	3,226	4,870	5,193	7,672	3,942	3,905
(E)-5-DECENOL	1,316	1,206	1,360	809	70	385	737	262	118	249
(E)-5-DECENYL ACETATE	1,316	1,206	1,360	809	70	385	737	262	118	249
(E,E)-9, 11-TETRADECADIEN-1-YL ACETATE	0	0	0	0	0	0	22	956	3	474
(E,Z)-7,9-DODECADIEN-1-YL ACETATE	0	0	0	0	0	0	0	0	0	5,168
(R,Z)-5-(1-DECENYL) DIHYDRO-2-(3H)-FURANONE	0	0	0	15	<1	0	0	0	0	0
(S)-KINOPRENE	847	872	755	1,864	494	440	453	575	510	490
(Z)-11-HEXADECEN-1-YL ACETATE	0	1,053	476	365	164	183	116	0	1,622	0
(Z)-11-HEXADECENAL	0	1,053	476	365	164	423	72	0	0	0
(Z)-4-TRIDECEN-1-YL-ACETATE	9,159	11,739	10,902	5,555	3,226	4,870	5,193	7,672	3,942	3,905
(Z)-9-DODECENYL ACETATE	0	0	0	0	570	96	5,342	1,304	123	74
(Z,E)-7,11-HEXADECADIEN-1-YL ACETATE	128	87	0	0	0	0	0	1	93	1
(Z,Z)-11,13-HEXADECADIENAL	0	0	0	0	0	0	200	109	0	763
(Z,Z)-7,11-HEXADECADIEN-1-YL ACETATE	128	87	0	0	0	0	0	0	93	1
1,7-DIOXASPIRO-(5,5)-UNDECANE	0	0	313	0	49	4	55	<1	6	<1
1-DECANOL	<1	0	0	0	0	0	0	0	0	0
1-METHYLCYCLOPROPENE	3	<1	9	4	8	2	6	13	61	3
1-NAPHTHALENEACETAMIDE	3,690	1,705	2,354	2,201	1,100	666	927	870	607	408
3,13 OCTADECADIEN-1-YL ACETATE	0	0	0	0	0	0	0	85	0	50
3,7-DIMETHYL-6-OCTEN-1-OL	0	0	0	0	0	0	0	67	349	1,531
ACETIC ACID	1,182	1,146	734	290	60	0	10	2	226	110
AGROBACTERIUM RADIOBACTER	514	500	365	493	306	698	555	217	215	362
AGROBACTERIUM RADIOBACTER, STRAIN K1026	325	355	716	524	292	335	366	1,935	5,086	81
ALLYL ISOTHIOCYANATE	0	<1	36	<1	20	<1	0	0	0	0
ALMOND, BITTER	0	0	0	0	0	328	2,068	87	471	74

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AMINO ETHOXY VINYL GLYCINE HYDROCHLORIDE	6	10	0	0	229	6,453	9,238	10,253	5,611	10,173
AMMONIUM BICARBONATE	0	0	313	0	49	4	55	<1	6	<1
AMPELOMYCES QUISQUALIS	2,193	540	332	696	247	10	14	0	22	2
ANIMAL GLAND EXTRACTS	135	0	0	0	0	0	0	0	0	0
ASPERGILLUS FLAVUS STRAIN AF36	0	0	0	0	258	0	0	0	0	0
AZADIRACHTIN	73,876	92,145	79,581	64,488	55,657	68,244	91,385	86,813	82,652	70,661
BACILLUS PUMILUS, STRAIN QST 2808	0	0	1	4	34,748	64,333	79,802	91,795	75,509	72,518
BACILLUS SPHAERICUS, SEROTYPE H-5A5B, STRAIN 2362	<1	<1	<1	<1	<1	<1	<1	<1	<1	9
BACILLUS SUBTILIS GB03	<1	<1	<1	379	23	3	2	5	2	<1
BACILLUS THURINGIENSIS (BERLINER)	644	535	2	441	100	2,939	1,129	41	82	127
BACILLUS THURINGIENSIS (BERLINER), SUBSP. AIZAWAI, GC-91 PROTEIN	71,531	73,992	90,283	63,504	62,244	39,077	53,040	40,440	48,842	40,395
BACILLUS THURINGIENSIS (BERLINER), SUBSP. AIZAWAI, SEROTYPE H-7	41,378	31,487	54,037	24,160	19,190	15,784	24,379	20,390	7,888	6,439
BACILLUS THURINGIENSIS (BERLINER), SUBSP. ISRAELENSIS, SEROTYPE H-14	931	824	2,114	1,048	3,480	543	833	4,719	501	1,873
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI STRAIN SA-12	11,773	43,337	54,540	28,485	34,533	29,505	35,513	21,008	19,700	10,721
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI, SEROTYPE 3A,3B	141,868	56,879	65,654	69,454	31,406	42,279	16,522	8,671	7,812	2,269
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI, STRAIN EG 2348	21,987	10,416	1,931	737	1,625	2,913	1,271	2,147	1,302	688
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI, STRAIN EG2371	439	134	338	18	54	7	0	0	0	<1
BACILLUS THURINGIENSIS (BERLINER), SUBSP. KURSTAKI, STRAIN SA-11	168,496	180,621	158,448	123,796	156,026	125,390	119,055	100,581	101,522	111,567
BACILLUS THURINGIENSIS (BERLINER), SUBSP. SAN DIEGO	7	2	3	1	<1	<1	<1	0	<1	<1

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BACILLUS THURINGIENSIS SUBSPECIES KURSTAKI STRAIN BMP 123	1,913	6,279	3,013	268	20	93	0	1,898	310	73
BACILLUS THURINGIENSIS SUBSPECIES KURSTAKI, GENETICALLY ENGINEERED STRAIN EG7841 LEPIDOPTERAN ACTIVE TOXIN	55,515	5,061	8,479	1,766	1,160	6,684	1,225	451	62	3
BACILLUS THURINGIENSIS VAR. KURSTAKI STRAIN M-200	<1	0	1	0	0	0	<1	0	<1	0
BACILLUS THURINGIENSIS VAR. KURSTAKI, GENETICALLY ENGINEERED STRAIN EG7826	76,935	2,571	8,493	6,456	8,724	3,021	479	1,298	250	0
BACILLUS THURINGIENSIS, SUBSP. AIZAWAI, STRAIN ABTS-1857	0	13,835	34,164	38,718	47,071	41,546	43,209	49,890	41,724	37,187
BACILLUS THURINGIENSIS, SUBSP. AIZAWAI, STRAIN SD-1372, LEPIDOPTERAN ACTIVE TOXIN(S)	4,718	10,897	4,989	3,465	3,025	4,235	4,766	2,343	2,136	1,057
BACILLUS THURINGIENSIS, SUBSP. ISRAELENSIS, STRAIN AM 65-52	<1	5	1	3	313	4,809	25	2,497	270	756
BACILLUS THURINGIENSIS, SUBSP. KURSTAKI, STRAIN ABTS-351, FERMENTATION SOLIDS AND SOLUBLES	6,938	33,146	75,373	94,559	109,681	100,697	133,297	134,290	120,656	162,442
BACILLUS THURINGIENSIS, SUBSP. KURSTAKI, STRAIN HD-1	170,574	110,540	62,367	44,536	29,129	23,346	20,045	15,173	20,295	18,333
BACILLUS THURINGIENSIS, VAR. KURSTAKI DELTA ENDOTOXINS CRY 1A(C) AND CRY 1C (GENETICALLY ENGINEERED) ENCAPSULATED IN PSEUDOMONAS FLUORESCENS (KILLED)	4,622	546	111	7	<1	<1	<1	25	52	2
BALSAM FIR OIL	0	0	0	0	0	0	0	0	0	<1
BEAUVERIA BASSIANA STRAIN GHA	2,853	3,702	2,887	4,019	3,531	2,743	2,481	2,091	2,188	1,686
BUFFALO GOURD ROOT POWDER	0	0	0	0	0	0	1,694	3,227	8	138
CANDIDA OLEOPHILA ISOLATE I-182	0	0	0	0	0	0	0	0	0	0
CANOLA OIL	2	2	2	<1	2	5	33	1,388	1,541	4,786
CAPSICUM OLEORESIN	254	149	318	379	71	247	277	528	325	388
CASTOR OIL	<1	<1	<1	<1	<1	2	<1	4	12	<1

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CHENOPODIUM AMBROSIODES NEAR AMBROSIODES	0	0	0	0	0	0	0	0	6,355	9,265
CHITOSAN	0	0	0	<1	0	0	0	0	0	0
CINNAMALDEHYDE	1,534	295	105	137	18	10	2	556	0	0
CLARIFIED HYDROPHOBIC EXTRACT OF NEEM OIL	36,602	34,157	38,357	51,009	69,051	73,386	71,278	64,156	47,422	42,313
CODLING MOTH GRANULOSIS VIRUS	0	0	0	0	0	1,479	2,141	1,487	1,139	984
CONIOTHYRIUM MINITANS STRAIN CON/M/91-08	0	935	1,301	1,781	26	62	120	0	1,204	395
CORN GLUTEN MEAL	7	3	<1	<1	<1	<1	0	3	0	0
CORN SYRUP	0	0	0	0	0	0	1,132	7,991	14,316	12,877
COYOTE URINE	0	0	0	0	0	0	0	0	0	<1
CYTOKININ	<1	0	<1	0	0	0	0	0	0	0
DIHYDRO-5-HEPTYL-2(3H)-FURANONE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
DIHYDRO-5-PENTYL-2(3H)-FURANONE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
E,E-8,10-DODECADIEN-1-OL	10,381	11,841	21,255	17,383	21,896	20,728	27,784	21,536	14,885	15,283
E-11-TETRADECEN-1-YL ACETATE	14,063	16,870	10,335	8,836	7,351	6,637	6,189	5,996	5,592	4,628
E-8-DODECENYL ACETATE	33,383	33,602	39,198	41,752	33,419	37,412	49,086	54,291	47,172	49,591
ENCAPSULATED DELTA ENDOTOXIN OF BACILLUS THURINGIENSIS VAR. KURSTAKI IN KILLED PSEUDOMONAS FLUORESCENS	15,188	7,529	1,160	143	33	9	35	91	37	0
ENCAPSULATED DELTA ENDOTOXIN OF BACILLUS THURINGIENSIS VAR. SAN DIEGO IN KILLED PSEUDOMONAS FLUORESCENS	4	<1	0	1	0	0	0	0	0	0
ESSENTIAL OILS	268	<1	<1	1	<1	<1	1	0	<1	4
ETHYLENE	<1	<1	<1	7	0	0	0	0	0	4
EUCALYPTUS OIL	0	0	0	0	150	<1	0	0	0	2
EUGENOL	0	0	0	15	<1	<1	0	0	0	0
FARNESOL	8,495	6,584	5,451	4,294	4,369	1,246	652	422	503	1,596
FENUGREEK	0	0	0	0	0	328	2,068	87	471	74
FORMIC ACID	0	0	0	0	0	<1	1	51	10	60
FOX URINE	0	0	0	0	0	0	0	0	0	<1
GAMMA AMINOBUTYRIC ACID	320	43,682	87,153	117,477	114,189	58,586	24,697	12,905	1,786	835
GARLIC	2,407	2,756	828	259	513	363	346	288	374	1,123
GERANIOL	0	0	0	0	0	<1	0	67	349	1,531
GERMAN COCKROACH PHEROMONE	0	<1	<1	<1	6	<1	<1	<1	<1	<1
GIBBERELLINS	387,488	423,337	431,001	414,093	462,231	458,764	454,509	490,530	513,328	491,218
GIBBERELLINS, POTASSIUM SALT	188	22	59	170	65	348	32	8	0	34

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GLIOCLADIUM VIRENS GL-21 (SPORES)	768	6	<1	<1	18	<1	5	1,090	716	1,401
GLUTAMIC ACID	320	43,682	87,153	117,477	114,189	58,586	24,697	12,905	1,786	835
HARPIN PROTEIN	6,847	39,669	19,651	17,949	12,232	6,089	3,721	1,998	1,562	435
HEPTYL BUTYRATE	0	0	0	0	0	0	0	0	0	<1
HYDROGEN PEROXIDE	485	636	802	1,057	985	9,952	7,744	9,361	14,521	23,204
HYDROPRENE	1	<1	<1	<1	<1	7	2	200	82	<1
IBA	124	244	252	1,566	79	27,670	44,093	3,862	150	227
IRON PHOSPHATE	1,036	1,929	1,253	2,148	3,910	4,197	7,145	6,569	4,561	6,345
LACTOSE	37,971	45,903	36,654	45,293	79,734	95,549	80,366	99,526	77,363	80,273
LAGENIDIUM GIGANTEUM (CALIFORNIA STRAIN)	<1	0	0	24	2	0	<1	<1	0	0
LAURYL ALCOHOL	6,429	4,635	4,791	6,009	6,719	5,488	9,358	7,782	4,705	5,495
LAVANDULYL SENECIOATE	0	0	0	0	0	0	0	4,316	2,375	7,025
LIMONENE	34,695	39,562	48,939	49,320	62,359	75,333	79,012	64,151	55,465	29,621
LINALOOL	<1	<1	<1	<1	<1	<1	<1	7	1	<1
MENTHOL	0	0	<1	0	150	<1	0	0	0	2
METARHIZIUM ANISOPLIAE, VAR. ANISOPLIAE, STRAIN ESF1	<1	<1	<1	<1	<1	<1	<1	<1	0	<1
METHOPRENE	50	<1	359	1	<1	157	51	42	211	4
METHYL ANTHRANILATE	<1	80	56	1,458	448	1,557	298	219	550	380
METHYL SALICYLATE	<1	0	0	0	0	<1	1	0	<1	0
MONTOK PEPPER	0	0	<1	0	0	0	0	0	0	0
MUSCALURE	189	121	2,283	307	2,715	476	1,179	<1	739	300
MYRISTYL ALCOHOL	6,429	4,635	4,791	6,009	6,719	5,488	9,358	7,782	4,705	5,495
MYROTHECIUM VERRUCARIA, DRIED FERMENTATION SOLIDS & SOLUBLES, STRAIN AARC-0255	4,392	3,926	4,390	8,348	4,680	4,478	5,097	5,257	5,331	4,840
N6-BENZYL ADENINE	1,620	967	1,510	4,544	1,552	7,711	2,628	1,775	2,072	3,352
NAA	102	72	75	1,096	49	26,799	43,507	3,331	47	38
NAA, AMMONIUM SALT	14,790	14,313	15,620	12,889	12,569	11,174	11,709	10,445	9,024	9,140
NAA, ETHYL ESTER	64	78	58	<1	<1	<1	<1	73	1	23
NAA, SODIUM SALT	2,076	470	1,856	642	858	452	340	37	257	0
NEROLIDOL	8,495	6,584	5,451	4,294	4,369	1,246	652	422	503	1,596
NITROGEN, LIQUIFIED	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
NONANOIC ACID	495	443	476	1,075	675	883	1,275	498	703	412
NONANOIC ACID, OTHER RELATED	495	443	476	1,075	675	877	1,275	498	701	412
NOSEMA LOCUSTAE SPORES	9	<1	35	37	1	<1	254	30	132	12
OIL OF ANISE	<1	<1	<1	<1	<1	<1	<1	<1	0	0
OIL OF BERGAMOT	0	0	0	0	0	<1	0	0	0	0

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
OIL OF CEDARWOOD	0	0	0	0	0	0	0	0	0	15
OIL OF CITRONELLA	<1	0	<1	0	<1	<1	<1	2	0	34
OIL OF CITRUS	0	0	0	0	<1	0	0	0	0	0
OIL OF GERANIUM	0	0	0	0	0	0	0	0	0	15
OIL OF JOJOBA	308	556	379	1,259	4,705	9,029	7,846	11,566	7,203	8,255
OIL OF LEMONGRASS	0	0	36	0	20	<1	0	0	0	0
OIL OF MUSTARD	0	0	0	0	0	0	0	0	0	0
OIL OF PEPPERMINT	<1	0	<1	<1	<1	0	<1	<1	0	15
OXYPURINOL	<1	0	0	0	<1	0	1	0	0	0
PAECILOMYCES FUMOSOROSEUS APOPKA STRAIN 97	13	0	0	0	0	0	0	0	0	0
PAECILOMYCES LILACINUS STRAIN 251	0	0	0	0	0	0	0	0	0	1,115
PANTOEA AGGLOMERANS STRAIN E325, NRRL B-21856	0	0	0	0	0	0	0	0	698	55
PERFUME	0	0	0	<1	0	0	0	0	0	0
POLYHEDRAL OCCLUSION BODIES (OB'S) OF THE NUCLEAR POLYHEDROSIS VIRUS OF HELICOVERPA ZEA (CORN EARWORM)	0	0	293	742	0	0	0	98	254	302
POTASSIUM BICARBONATE	52,654	74,151	106,988	64,994	143,968	61,465	47,299	41,899	69,155	100,920
PROPYLENE GLYCOL	812,714	746,000	763,898	778,321	754,665	738,448	520,537	420,161	381,957	587,374
PSEUDOMONAS FLUORESCENS, STRAIN A506	11,668	13,126	16,945	6,559	7,176	11,929	4,801	1,943	2,463	1,472
PSEUDOMONAS SYRINGAE STRAIN ESC-11	0	<1	0	<1	<1	<1	0	0	0	0
PSEUDOMONAS SYRINGAE, STRAIN ESC-10	0	0	0	0	0	<1	0	0	0	3
PUTRESCENT WHOLE EGG SOLIDS	<1	<1	<1	<1	<1	<1	<1	<1	33	2
QST 713 STRAIN OF DRIED BACILLUS SUBTILIS	15,205	40,786	54,547	58,871	56,342	64,606	67,563	75,619	81,252	99,091
QUILLAJA	0	0	0	0	0	3,591	18,584	27,814	22,595	22,916
REYNOUTRIA SACHALINENSIS	0	0	0	0	0	0	0	0	1,297	70,363
S-ABSCISIC ACID	0	0	0	0	0	0	0	34	502	5,195
S-METHOPRENE	951	166	21	49	2,395	9,552	30,635	47,284	47,190	65,114
SAWDUST	252	<1	<1	<1	23	<1	10	19	<1	<1
SESAME OIL	0	0	0	0	0	<1	888	846	1,448	1,912
SILVER NITRATE	0	0	0	0	0	0	0	0	0	<1
SODIUM BICARBONATE	<1	<1	0	100	0	0	0	17	57	1
SODIUM LAURYL SULFATE	<1	29	<1	<1	<1	<1	<1	14	<1	<1

Table 19: (continued) *The reported cumulative acres treated with pesticides that are biopesticides. Biopesticides include microorganisms and naturally occurring compounds, or compounds essentially identical to naturally occurring compounds that are not toxic to the target pest (such as pheromones).*

AI	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SOYBEAN OIL	11,254	18,627	15,359	9,870	6,344	3,675	3,277	2,460	3,792	6,160
STREPTOMYCES GRISEOVIRIDIS STRAIN K61	50	17	14	5	20	29	12	<1	<1	<1
STREPTOMYCES LYDICUS WYEC 108	0	0	0	0	0	50	96	1,910	4,009	6,998
SUCROSE OCTANOATE	0	0	0	0	0	4	0	448	930	1,172
THYME	0	0	0	0	0	<1	<1	<1	68	<1
TRICHODERMA HARZIANUM RIFAI STRAIN KRL-AG2	1,048	293	466	833	406	286	311	201	320	7,253
VANILLIN	0	0	0	0	0	328	2,068	87	471	74
VEGETABLE OIL	85,656	103,798	125,724	214,183	211,388	275,541	144,591	231,954	211,586	291,930
XANTHINE	<1	0	0	0	<1	0	1	0	0	0
XANTHOMONAS CAMPESTRIS PV. POANNUA	0	0	0	0	0	14	0	0	0	0
YEAST	4,034	5,106	6,708	4,630	4,835	5,262	4,694	4,560	3,957	1,306
YUCCA SCHIDIGERA	0	0	0	0	0	0	0	18	598	2,316
Z,E-9,12-TETRADECADIEN-1-YL ACETATE	0	13	0	0	0	0	44	0	1,622	<1
Z-11-TETRADECEN-1-YL ACETATE	14,063	16,870	10,335	8,836	7,351	6,637	6,166	5,040	5,589	4,154
Z-8-DODECENOL	33,383	33,602	39,198	41,752	33,419	37,412	49,086	54,291	47,172	49,591
Z-8-DODECENYL ACETATE	33,383	33,602	39,198	41,752	33,419	37,412	49,086	54,291	47,172	49,591
Z-9-TETRADECEN-1-OL	0	13	0	0	0	0	0	0	0	0
TOTAL	2,486,855	2,427,975	2,585,729	2,526,848	2,698,117	2,681,867	2,385,565	2,351,286	2,221,166	2,637,566