

Table 40. Fertilizers and Chemicals Applied: 2022 and 2017

[For meaning of abbreviations and symbols, see introductory text.]

Item	Michigan	Alcona	Alger	Allegan	Alpena	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	20,016	65	36	456	119
	2017	22,234	66	34	596	151
acres treated, 2022	5,209,530	5,994	2,101	118,192	18,539	
	2017	5,515,923	8,419	2,838	146,688	19,949
Cropland fertilized, except cropland pasture	farms, 2022	19,038	59	30	434	112
	2017	21,119	63	32	573	134
acres treated, 2022	5,183,052	5,865	2,033	117,360	17,973	
	2017	5,476,783	8,361	2,539	146,019	19,652
Pastureland and rangeland fertilized	farms, 2022	1,787	10	7	41	23
	2017	2,255	5	5	42	26
acres treated, 2022	26,478	129	68	832	566	
	2017	39,140	58	299	669	297
Manure	farms, 2022	8,038	20	24	238	76
	2017	9,687	36	30	298	88
acres treated, 2022	714,345	541	1,561	19,274	3,910	
	2017	825,365	1,431	490	30,845	3,489
Organic fertilizer	farms, 2022	1,450	6	2	50	8
	2017	1,401	3	11	24	12
acres treated, 2022	94,360	146	(D)	1,577	552	
	2017	82,256	302	34	1,366	475
Acres treated to control- Insects	farms, 2022	7,612	28	7	232	37
	2017	8,158	11	4	288	23
acres, 2022	1,557,631	456	29	30,912	2,316	
	2017	2,171,602	964	29	75,043	3,146
Weeds, grass, or brush	farms, 2022	18,618	60	25	413	74
	2017	17,875	40	19	464	81
acres, 2022	5,738,728	6,008	1,194	128,877	20,727	
	2017	5,919,857	9,257	2,267	150,867	19,204
Nematodes	farms, 2022	1,887	5	7	55	2
	2017	1,573	-	4	59	-
acres, 2022	357,684	354	95	7,572	(D)	
	2017	407,101	-	22	19,991	-
Diseases in crops and orchards	farms, 2022	4,738	10	6	105	31
	2017	4,573	6	9	135	25
acres, 2022	976,128	1,251	28	12,136	496	
	2017	944,112	654	582	19,416	1,884
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	2,263	4	-	71	7
	2017	1,490	1	2	33	6
acres on which used, 2022	289,318	81	-	7,996	442	
	2017	281,266	(D)	(D)	5,121	1,020

Item	Antrim	Arenac	Baraga	Barry	Bay	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	156	154	12	291	412
	2017	160	179	19	356	440
acres treated, 2022	12,984	49,849	944	71,237	125,818	
	2017	16,395	44,719	3,292	80,531	148,196
Cropland fertilized, except cropland pasture	farms, 2022	137	149	12	275	405
	2017	158	176	13	337	438
acres treated, 2022	12,438	49,602	(D)	70,773	125,707	
	2017	16,039	44,557	3,149	79,454	148,063
Pastureland and rangeland fertilized	farms, 2022	30	10	2	39	16
	2017	15	15	6	50	8
acres treated, 2022	546	247	(D)	464	111	
	2017	356	162	143	1,077	133
Manure	farms, 2022	77	42	12	188	38
	2017	83	59	18	196	52
acres treated, 2022	4,500	5,859	363	27,129	1,718	
	2017	4,677	6,072	216	20,742	4,459
Organic fertilizer	farms, 2022	21	5	1	28	3
	2017	26	8	5	31	10
acres treated, 2022	3,056	1,050	(D)	691	556	
	2017	150	2,756	7	843	347
Acres treated to control- Insects	farms, 2022	70	38	6	98	181
	2017	76	51	6	101	173
acres, 2022	7,956	6,748	(D)	23,233	47,532	
	2017	11,439	7,589	608	30,043	54,412
Weeds, grass, or brush	farms, 2022	95	141	8	275	415
	2017	105	150	8	271	402
acres, 2022	10,851	52,542	626	78,673	148,565	
	2017	17,932	53,108	3,518	82,660	169,234
Nematodes	farms, 2022	17	11	3	22	51
	2017	12	22	-	14	48
acres, 2022	3,397	1,180	(D)	5,220	12,908	
	2017	590	2,462	-	5,554	5,623
Diseases in crops and orchards	farms, 2022	48	25	1	41	88
	2017	50	33	2	48	105
acres, 2022	6,948	4,248	(D)	8,202	25,037	
	2017	8,671	6,824	(D)	6,889	14,061
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	39	7	3	11	43
	2017	39	13	-	7	46
acres on which used, 2022	6,890	1,758	(D)	879	12,210	
	2017	7,454	3,217	-	437	14,204

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Benzie	Berrien	Branch	Calhoun	Cass	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	66	443	372	391	338
	2017	94	497	421	456	381
acres treated, 2022	3,720	90,677	133,827	115,640	104,039	
	2017	5,146	91,405	160,163	129,588	131,595
Cropland fertilized, except cropland pasture	farms, 2022	61	430	354	372	331
	2017	82	488	407	434	377
acres treated, 2022	3,644	90,378	133,536	115,190	103,390	
	2017	4,744	91,047	159,519	128,764	130,806
Pastureland and rangeland fertilized	farms, 2022	5	28	28	45	21
	2017	23	28	43	55	35
acres treated, 2022	76	299	291	450	649	
	2017	402	358	644	824	789
Manure	farms, 2022	21	82	145	140	93
	2017	62	109	190	191	135
acres treated, 2022	230	5,284	8,751	13,775	9,423	
	2017	890	4,127	15,131	12,481	18,057
Organic fertilizer	farms, 2022	5	28	13	16	25
	2017	14	25	16	25	14
acres treated, 2022	45	1,298	214	1,865	2,192	
	2017	182	400	519	340	675
Acres treated to control- Insects	farms, 2022	43	283	139	125	124
	2017	43	330	149	154	134
acres, 2022	2,067	48,257	40,733	32,922	40,159	
	2017	3,352	40,179	66,087	52,495	70,970
Weeds, grass, or brush	farms, 2022	47	434	361	372	291
	2017	57	457	344	393	312
acres, 2022	3,179	102,673	163,516	134,091	115,066	
	2017	4,059	95,963	172,804	146,616	127,865
Nematodes	farms, 2022	13	77	23	33	52
	2017	4	48	25	37	17
acres, 2022	157	13,702	8,287	7,192	23,264	
	2017	51	8,150	8,994	4,554	28,621
Diseases in crops and orchards	farms, 2022	37	199	54	60	67
	2017	29	218	47	52	47
acres, 2022	1,617	28,505	19,325	13,270	29,490	
	2017	1,909	17,361	20,135	4,984	23,666
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	28	141	20	17	32
	2017	17	77	8	7	17
acres on which used, 2022	1,954	10,153	5,138	672	6,659	
	2017	1,041	4,646	3,520	340	5,332
Item	Charlevoix	Cheboygan	Chippewa	Clare	Clinton	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	84	73	71	99	482
	2017	99	105	91	118	519
acres treated, 2022	5,293	3,434	5,012	7,763	141,733	
	2017	7,401	4,508	5,501	11,137	127,339
Cropland fertilized, except cropland pasture	farms, 2022	60	60	66	92	454
	2017	84	87	85	113	513
acres treated, 2022	4,783	3,031	4,934	7,293	140,808	
	2017	7,044	4,059	5,038	10,324	126,974
Pastureland and rangeland fertilized	farms, 2022	27	19	7	21	45
	2017	21	28	12	24	37
acres treated, 2022	510	403	78	470	925	
	2017	357	449	463	813	365
Manure	farms, 2022	51	23	63	95	210
	2017	56	56	68	110	209
acres treated, 2022	1,240	686	2,955	3,183	24,952	
	2017	1,591	1,395	3,383	5,340	25,025
Organic fertilizer	farms, 2022	13	11	15	26	14
	2017	9	14	6	23	30
acres treated, 2022	195	22	240	1,572	1,088	
	2017	140	101	(D)	1,327	2,720
Acres treated to control- Insects	farms, 2022	33	20	11	28	121
	2017	33	25	17	21	144
acres, 2022	2,211	621	293	230	31,149	
	2017	2,105	982	1,048	3,406	39,040
Weeds, grass, or brush	farms, 2022	57	24	42	72	495
	2017	66	58	29	71	452
acres, 2022	5,117	2,045	2,840	7,359	166,782	
	2017	4,600	3,394	1,134	9,942	165,994
Nematodes	farms, 2022	7	1	3	3	32
	2017	14	4	-	5	17
acres, 2022	1,546	(D)	(D)	9	4,313	
	2017	1,104	6	-	641	2,467
Diseases in crops and orchards	farms, 2022	19	10	6	12	67
	2017	16	11	12	12	66
acres, 2022	1,002	14	22	73	12,154	
	2017	495	671	102	233	8,103
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	7	7	-	-	22
	2017	8	4	2	4	10
acres on which used, 2022	926	10	-	-	2,771	
	2017	(D)	227	(D)	(D)	468

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Crawford	Delta	Dickinson	Eaton	Emmet	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	8	84	40	454	130
	2017	13	76	42	483	111
acres treated, 2022	(D)	8,362	2,291	119,965	3,413	
	2017	223	9,060	2,729	138,517	4,602
Cropland fertilized, except cropland pasture	farms, 2022	7	83	34	423	123
	2017	5	69	39	457	105
acres treated, 2022	(D)	8,019	2,194	119,146	3,239	
	2017	43	8,336	2,671	137,385	4,309
Pastureland and rangeland fertilized	farms, 2022	2	9	6	54	14
	2017	8	21	4	65	14
acres treated, 2022	(D)	343	97	819	174	
	2017	180	724	58	1,132	293
Manure	farms, 2022	7	44	23	154	83
	2017	12	46	20	179	73
acres treated, 2022		80	2,149	1,191	7,236	2,271
	2017	100	3,977	1,062	8,775	2,527
Organic fertilizer	farms, 2022	-	9	9	35	49
	2017	-	1	4	21	32
acres treated, 2022		-	79	231	1,353	382
	2017	-	(D)	8	968	176
Acres treated to control- Insects	farms, 2022	7	18	19	142	58
	2017	-	14	17	141	29
acres, 2022		20	934	669	33,070	1,079
	2017	-	1,890	677	40,604	548
Weeds, grass, or brush	farms, 2022	6	58	17	438	79
	2017	7	43	33	412	43
acres, 2022		22	6,325	1,636	142,177	1,873
	2017	82	7,305	1,714	145,776	1,739
Nematodes	farms, 2022	4	4	3	39	10
	2017	-	-	3	28	6
acres, 2022		20	85	(D)	7,549	(D)
	2017	-	-	(D)	5,120	37
Diseases in crops and orchards	farms, 2022	4	12	3	123	20
	2017	-	9	5	64	21
acres, 2022		16	536	(D)	21,000	468
	2017	-	388	343	11,276	92
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	-	6	2	19	8
	2017	-	5	5	4	3
acres on which used, 2022		-	104	(D)	906	203
	2017	-	311	341	32	27

Item	Genesee	Gladwin	Gogebic	Grand Traverse	Gratiot	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	264	129	11	287	447
	2017	333	153	7	252	489
acres treated, 2022		68,590	17,652	225	20,454	208,511
	2017	75,763	16,853	90	23,212	191,822
Cropland fertilized, except cropland pasture	farms, 2022	255	119	11	274	441
	2017	289	145	5	243	489
acres treated, 2022		68,439	17,291	225	19,514	208,452
	2017	75,147	16,332	(D)	22,814	(D)
Pastureland and rangeland fertilized	farms, 2022	12	20	-	32	10
	2017	57	28	2	25	4
acres treated, 2022		151	361	(D)	940	59
	2017	616	521	(D)	398	(D)
Manure	farms, 2022	117	83	21	80	145
	2017	138	86	20	70	142
acres treated, 2022		4,048	3,155	150	3,578	38,170
	2017	7,148	3,129	193	1,697	32,116
Organic fertilizer	farms, 2022	23	12	2	36	11
	2017	16	9	2	23	15
acres treated, 2022		740	849	(D)	302	4,499
	2017	376	179	(D)	512	1,114
Acres treated to control- Insects	farms, 2022	99	21	1	186	167
	2017	83	20	2	137	188
acres, 2022		10,658	868	(D)	8,950	43,080
	2017	11,150	4,341	(D)	8,643	67,922
Weeds, grass, or brush	farms, 2022	262	90	7	235	471
	2017	257	107	2	208	444
acres, 2022		85,770	17,983	35	13,401	234,881
	2017	86,056	18,046	(D)	19,111	225,767
Nematodes	farms, 2022	27	2	3	40	53
	2017	37	5	-	29	33
acres, 2022		7,210	(D)	3	771	10,147
	2017	6,908	1,230	-	439	9,428
Diseases in crops and orchards	farms, 2022	48	13	5	153	107
	2017	37	19	-	134	74
acres, 2022		2,367	737	5	4,486	28,035
	2017	2,612	3,812	-	6,870	17,661
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	31	13	-	81	22
	2017	10	6	-	67	12
acres on which used, 2022		1,595	181	-	4,485	2,926
	2017	93	742	-	4,199	3,357

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Hillsdale	Houghton	Huron	Ingham	Ionia	Iosco	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	592	38	629	366	455	62
	2017	469	61	720	381	545	85
acres treated, 2022	159,718	3,204	322,817	119,678	147,823	6,516	
	2017	160,645	2,456	355,207	113,782	153,057	9,815
Cropland fertilized, except cropland pasture	farms, 2022	571	35	626	327	440	60
	2017	459	55	717	352	512	78
acres treated, 2022	159,439	3,061	322,698	119,328	147,062	6,441	
	2017	159,773	2,257	355,057	113,130	152,015	9,585
Pastureland and rangeland fertilized	farms, 2022	34	6	10	54	40	6
	2017	42	14	15	50	57	13
acres treated, 2022	279	143	119	350	761	75	
	2017	872	199	150	652	1,042	230
Manure	farms, 2022	264	37	235	164	207	36
	2017	224	59	268	204	260	45
acres treated, 2022	23,154	529	69,843	9,866	29,135	2,161	
	2017	20,346	1,255	68,857	14,116	34,080	2,877
Organic fertilizer	farms, 2022	17	3	30	37	22	3
	2017	32	9	20	29	28	10
acres treated, 2022	946	(D)	9,312	977	522	6	
	2017	2,045	9	2,277	2,511	5,262	76
Acres treated to control- Insects	farms, 2022	220	25	302	99	164	11
	2017	143	12	369	112	201	9
acres, 2022	35,196	460	166,377	11,688	50,179	187	
	2017	48,153	256	217,518	33,591	46,446	(D)
Weeds, grass, or brush	farms, 2022	588	35	662	331	458	46
	2017	401	22	673	314	459	42
acres, 2022	198,300	2,915	333,387	143,424	163,506	6,109	
	2017	169,872	338	396,348	128,006	170,486	8,008
Nematodes	farms, 2022	61	5	51	28	37	-
	2017	37	1	103	19	30	1
acres, 2022	7,198	29	10,642	2,022	11,497	-	
	2017	17,990	(D)	28,209	1,468	8,860	(D)
Diseases in crops and orchards	farms, 2022	156	7	191	78	97	7
	2017	54	3	276	59	77	8
acres, 2022	26,668	68	114,592	13,201	28,733	31	
	2017	18,495	3	135,769	12,738	11,623	(D)
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	30	6	114	14	27	5
	2017	5	2	149	7	14	-
acres on which used, 2022	731	36	34,379	968	1,846	23	
	2017	104	(D)	57,427	841	1,558	-

Item	Iron	Isabella	Jackson	Kalamazoo	Kalkaska	Kent	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	20	376	351	295	43	443
	2017	36	495	359	325	78	492
acres treated, 2022	1,058	119,499	107,811	90,721	4,169	76,266	
	2017	2,852	112,906	93,672	85,603	5,877	94,704
Cropland fertilized, except cropland pasture	farms, 2022	19	374	337	291	41	402
	2017	33	473	329	290	71	451
acres treated, 2022	(D)	119,150	107,211	90,507	3,837	75,444	
	2017	2,752	112,167	91,877	85,098	5,515	93,648
Pastureland and rangeland fertilized	farms, 2022	1	14	30	23	6	53
	2017	5	45	55	54	71	71
acres treated, 2022	(D)	349	600	214	332	822	
	2017	100	739	1,795	505	362	1,056
Manure	farms, 2022	25	175	139	123	27	169
	2017	8	204	192	135	47	195
acres treated, 2022	130	17,417	11,251	10,935	328	11,313	
	2017	87	16,677	11,608	12,843	1,071	13,110
Organic fertilizer	farms, 2022	2	23	31	12	13	44
	2017	-	26	23	24	16	21
acres treated, 2022	(D)	4,230	1,429	467	59	897	
	2017	-	4,456	828	3,400	298	2,158
Acres treated to control- Insects	farms, 2022	7	92	110	159	27	196
	2017	9	111	121	167	20	224
acres, 2022	155	18,114	32,507	27,735	2,278	29,203	
	2017	555	30,399	36,583	46,499	1,554	44,268
Weeds, grass, or brush	farms, 2022	15	375	335	268	27	380
	2017	18	378	297	253	36	366
acres, 2022	348	126,008	112,060	100,467	3,710	75,676	
	2017	1,453	112,743	96,713	98,491	4,659	91,612
Nematodes	farms, 2022	1	44	25	32	6	27
	2017	5	17	30	31	4	21
acres, 2022	(D)	8,138	6,604	3,154	2,189	3,634	
	2017	561	1,968	15,667	5,512	833	7,048
Diseases in crops and orchards	farms, 2022	8	75	62	94	6	130
	2017	6	41	50	77	11	161
acres, 2022	(D)	12,422	21,317	24,886	2,201	13,808	
	2017	612	11,555	15,228	18,330	2,453	17,395
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	3	34	17	55	4	127
	2017	4	15	-	56	3	78
acres on which used, 2022	(D)	2,848	326	1,035	2,185	14,650	
	2017	494	2,521	-	5,410	1,661	8,142

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Keweenaw	Lake	Lapeer	Leelanau	Lenawee	Livingston
Commercial fertilizer, lime, and soil conditioners						
farms, 2022	-	42	377	281	578	201
2017	3	58	404	271	695	227
acres treated, 2022	-	1,975	89,765	20,915	206,122	47,326
2017	54	4,482	94,323	21,021	249,992	46,613
Cropland fertilized, except cropland pasture						
farms, 2022	-	29	350	274	548	171
2017	-	58	368	261	674	210
acres treated, 2022	-	1,836	89,431	20,702	205,883	47,071
2017	-	4,286	93,901	20,508	249,343	46,416
Pastureland and rangeland fertilized						
farms, 2022	-	13	42	13	38	33
2017	3	13	49	27	40	24
acres treated, 2022	-	139	334	213	239	255
2017	54	196	422	513	649	197
Manure						
farms, 2022	-	32	178	60	127	99
2017	-	39	238	96	191	120
acres treated, 2022	-	1,578	7,913	1,340	10,182	2,915
2017	-	2,475	11,535	1,871	17,932	4,103
Organic fertilizer						
farms, 2022	-	4	32	45	8	18
2017	-	-	21	41	15	14
acres treated, 2022	-	14	1,367	1,043	1,005	(D)
2017	-	-	1,132	449	(D)	35
Acres treated to control-						
Insects						
farms, 2022	-	10	94	187	197	66
2017	-	5	126	188	248	65
acres, 2022	-	361	16,634	12,030	61,580	6,212
2017	-	786	31,532	15,248	81,523	14,107
Weeds, grass, or brush						
farms, 2022	-	22	355	239	590	170
2017	-	30	345	216	632	209
acres, 2022	-	1,120	97,469	16,295	248,595	51,354
2017	-	2,506	102,809	17,537	279,504	47,991
Nematodes						
farms, 2022	-	-	27	22	66	18
2017	-	6	28	37	25	13
acres, 2022	-	-	7,670	(D)	14,678	2,321
2017	-	18	6,070	3,288	13,012	515
Diseases in crops and orchards						
farms, 2022	-	-	65	169	134	34
2017	-	1	51	160	145	38
acres, 2022	-	-	12,699	10,187	39,063	5,032
2017	-	(D)	9,771	12,611	55,616	2,195
Chemicals used to control growth, thin fruit, ripen, or defoliate						
farms, 2022	-	-	28	148	27	6
2017	-	1	7	103	22	11
acres on which used, 2022	-	-	1,599	13,205	2,469	46
2017	-	(D)	541	9,706	2,338	221

Item	Luce	Mackinac	Macomb	Manistee	Marquette	Mason
Commercial fertilizer, lime, and soil conditioners						
farms, 2022	4	20	240	123	71	180
2017	18	23	227	124	55	213
acres treated, 2022	(D)	665	46,752	11,370	1,129	40,774
2017	680	2,845	44,384	8,013	3,948	43,184
Cropland fertilized, except cropland pasture						
farms, 2022	4	18	239	110	53	172
2017	14	20	218	103	51	199
acres treated, 2022	(D)	(D)	46,671	11,171	678	40,642
2017	662	2,606	44,217	7,791	3,859	42,576
Pastureland and rangeland fertilized						
farms, 2022	-	2	8	18	25	11
2017	4	6	15	23	9	28
acres treated, 2022	-	(D)	81	199	451	132
2017	18	239	167	222	89	608
Manure						
farms, 2022	3	21	42	64	42	72
2017	9	30	57	84	41	91
acres treated, 2022	(D)	931	1,693	4,441	422	6,544
2017	87	2,545	1,347	4,115	3,469	11,178
Organic fertilizer						
farms, 2022	-	8	15	17	13	9
2017	1	7	11	20	7	20
acres treated, 2022	-	32	210	603	(D)	1,204
2017	(D)	31	38	2,610	14	1,339
Acres treated to control-						
Insects						
farms, 2022	4	5	90	60	24	93
2017	3	4	87	47	3	103
acres, 2022	(D)	42	8,599	4,772	51	13,322
2017	(D)	155	12,338	4,991	3	21,492
Weeds, grass, or brush						
farms, 2022	13	13	260	96	42	164
2017	7	18	193	70	17	178
acres, 2022	(D)	777	56,825	7,501	541	37,470
2017	572	1,140	57,835	8,470	2,492	38,913
Nematodes						
farms, 2022	1	-	32	13	4	15
2017	1	4	18	5	1	13
acres, 2022	(D)	-	8,363	67	17	880
2017	(D)	26	3,680	81	(D)	501
Diseases in crops and orchards						
farms, 2022	3	1	64	33	12	56
2017	6	4	50	18	1	56
acres, 2022	(D)	(D)	8,772	684	25	11,905
2017	(D)	150	6,234	593	(D)	8,917
Chemicals used to control growth, thin fruit, ripen, or defoliate						
farms, 2022	1	-	24	15	1	17
2017	-	-	18	12	-	13
acres on which used, 2022	(D)	-	973	812	(D)	2,161
2017	-	-	554	701	-	2,093

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Mecosta	Menominee	Midland	Missaukee	Monroe	Montcalm
Commercial fertilizer, lime, and soil conditioners						
farms, 2022	215	117	221	162	625	372
2017	301	149	236	170	585	479
acres treated, 2022	40,124	24,263	47,953	54,362	149,039	151,141
2017	48,302	22,621	47,671	58,294	157,471	146,507
Cropland fertilized, except cropland pasture						
farms, 2022	201	115	194	153	620	340
2017	281	141	217	158	573	453
acres treated, 2022	39,489	24,050	47,091	54,050	148,634	150,605
2017	46,469	21,988	47,024	58,048	157,276	145,585
Pastureland and rangeland fertilized						
farms, 2022	28	7	34	14	22	56
2017	55	24	31	22	26	56
acres treated, 2022	635	213	862	312	405	536
2017	1,833	633	647	246	195	922
Manure						
farms, 2022	140	68	69	81	131	202
2017	224	92	95	114	99	235
acres treated, 2022	11,824	14,092	3,194	28,036	2,159	18,904
2017	15,280	9,902	2,421	28,190	1,975	18,923
Organic fertilizer						
farms, 2022	12	2	15	17	11	20
2017	20	12	15	13	20	23
acres treated, 2022	688	(D)	4,557	1,100	989	459
2017	695	(D)	706	780	861	656
Acres treated to control-						
Insects						
farms, 2022	47	21	44	85	224	109
2017	42	17	75	55	207	163
acres, 2022	7,836	187	10,312	17,529	34,317	56,394
2017	17,347	2,891	21,055	15,168	45,329	77,358
Weeds, grass, or brush						
farms, 2022	185	99	208	115	652	318
2017	219	102	184	129	526	369
acres, 2022	39,866	23,676	53,547	42,573	170,928	153,797
2017	42,887	13,936	53,326	39,417	174,248	148,422
Nematodes						
farms, 2022	20	5	21	11	48	40
2017	6	3	15	8	62	26
acres, 2022	(D)	55	5,216	1,176	6,467	20,915
2017	5,635	(D)	1,235	691	17,695	23,026
Diseases in crops and orchards						
farms, 2022	27	14	36	11	133	74
2017	29	8	46	25	120	76
acres, 2022	7,101	71	4,377	1,397	23,433	38,162
2017	9,349	(D)	12,557	3,638	26,589	33,432
Chemicals used to control growth, thin fruit, ripen, or defoliate						
farms, 2022	27	6	10	8	44	35
2017	5	-	12	-	19	25
acres on which used, 2022	6,544	172	242	(D)	2,959	19,736
2017	6,611	-	645	-	5,442	24,758
Item	Montmorency	Muskegon	Newaygo	Oakland	Oceana	Ogemaw
Commercial fertilizer, lime, and soil conditioners						
farms, 2022	37	177	307	124	242	107
2017	55	194	373	133	280	117
acres treated, 2022	4,657	30,377	55,168	7,718	52,677	30,544
2017	7,034	25,208	67,948	7,376	65,046	28,756
Cropland fertilized, except cropland pasture						
farms, 2022	23	172	289	112	234	104
2017	52	178	345	110	265	112
acres treated, 2022	4,480	30,173	54,323	7,630	52,217	30,499
2017	6,989	24,915	67,158	6,920	64,662	28,558
Pastureland and rangeland fertilized						
farms, 2022	17	11	40	14	22	3
2017	3	24	60	27	18	7
acres treated, 2022	177	204	845	88	460	45
2017	45	293	790	456	384	198
Manure						
farms, 2022	36	65	159	78	71	45
2017	30	97	235	68	114	95
acres treated, 2022	1,295	12,462	12,406	1,090	9,170	4,898
2017	892	6,509	20,667	1,249	16,914	9,948
Organic fertilizer						
farms, 2022	6	19	28	34	13	7
2017	3	21	36	18	15	3
acres treated, 2022	6	287	1,058	149	1,201	186
2017	(D)	590	1,354	74	655	106
Acres treated to control-						
Insects						
farms, 2022	4	85	110	54	170	13
2017	1	82	118	46	182	12
acres, 2022	35	9,248	14,517	406	32,736	(D)
2017	(D)	10,236	22,724	1,841	41,148	5,780
Weeds, grass, or brush						
farms, 2022	21	137	239	119	241	89
2017	43	125	243	108	225	93
acres, 2022	5,551	33,244	51,330	8,160	51,824	29,603
2017	6,869	27,878	55,784	7,487	60,575	21,062
Nematodes						
farms, 2022	3	18	21	3	55	2
2017	-	10	11	1	40	7
acres, 2022	33	1,882	2,034	18	10,184	(D)
2017	-	839	738	(D)	3,768	833
Diseases in crops and orchards						
farms, 2022	4	61	58	35	128	2
2017	1	60	51	19	132	8
acres, 2022	57	7,725	11,426	493	21,477	(D)
2017	(D)	6,184	12,060	521	26,752	5,433
Chemicals used to control growth, thin fruit, ripen, or defoliate						
farms, 2022	2	32	36	8	108	3
2017	1	10	14	6	53	1
acres on which used, 2022	(D)	4,912	3,838	48	17,944	(D)
2017	(D)	1,469	1,730	256	9,006	(D)

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Ontonagon	Osceola	Oscoda	Otsego	Ottawa	Presque Isle	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	11	164	35	77	519	123
	2017	13	209	56	69	624	130
acres treated, 2022		527	25,267	2,426	9,971	84,956	18,694
	2017	1,033	27,914	2,917	6,510	104,657	19,804
Cropland fertilized, except cropland pasture	farms, 2022	9	145	20	67	516	122
	2017	12	194	37	67	595	127
acres treated, 2022		283	24,672	2,342	9,713	84,655	18,569
	2017	(D)	27,167	2,237	6,365	104,062	19,008
Pastureland and rangeland fertilized	farms, 2022	5	40	15	11	28	15
	2017	2	42	22	5	62	11
acres treated, 2022		244	595	84	258	301	125
	2017	(D)	747	680	145	595	796
Manure	farms, 2022	13	114	41	34	248	49
	2017	16	150	59	38	294	64
acres treated, 2022		1,473	9,587	2,150	907	20,361	829
	2017	1,464	12,885	2,561	692	27,150	3,618
Organic fertilizer	farms, 2022	1	12	7	9	15	11
	2017	-	8	18	12	19	6
acres treated, 2022		(D)	927	689	9	40	264
	2017	-	247	1,243	76	480	111
Acres treated to control- Insects	farms, 2022	-	26	9	18	302	37
	2017	5	29	19	21	322	39
acres, 2022		-	1,086	45	1,437	32,205	3,168
	2017	252	5,480	37	2,627	57,814	6,855
Weeds, grass, or brush	farms, 2022	2	101	22	47	504	115
	2017	7	111	23	41	476	109
acres, 2022		(D)	19,547	1,322	5,572	84,187	22,524
	2017	276	22,993	1,031	5,819	95,309	21,015
Nematodes	farms, 2022	-	8	-	4	64	11
	2017	-	3	-	1	41	1
acres, 2022		-	401	-	1,410	5,428	(D)
	2017	-	(D)	-	(D)	6,317	(D)
Diseases in crops and orchards	farms, 2022	-	10	9	20	174	31
	2017	-	17	2	7	185	10
acres, 2022		-	78	47	(D)	21,877	3,763
	2017	-	(D)	(D)	749	13,500	838
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	-	5	1	6	102	12
	2017	-	1	-	-	65	4
acres on which used, 2022		-	92	(D)	(D)	8,110	2,099
	2017	-	(D)	-	-	4,499	(D)
Item	Roscommon	Saginaw	St. Clair	St. Joseph	Sanilac	Schoolcraft	
Commercial fertilizer, lime, and soil conditioners	farms, 2022	12	708	509	394	801	16
	2017	6	735	499	498	800	26
acres treated, 2022		451	194,433	109,724	173,367	318,171	1,181
	2017	56	230,925	103,699	169,751	294,598	1,111
Cropland fertilized, except cropland pasture	farms, 2022	12	697	478	365	790	16
	2017	3	728	476	477	783	26
acres treated, 2022		(D)	194,304	109,343	172,614	317,431	(D)
	2017	(D)	230,821	102,983	169,355	293,610	1,079
Pastureland and rangeland fertilized	farms, 2022	2	16	58	66	34	1
	2017	3	7	44	52	49	7
acres treated, 2022		(D)	129	381	753	740	(D)
	2017	(D)	104	716	396	988	32
Manure	farms, 2022	2	85	129	225	302	4
	2017	12	134	174	251	402	14
acres treated, 2022		(D)	5,876	3,224	22,695	44,775	109
	2017	203	7,674	4,384	24,506	58,068	260
Organic fertilizer	farms, 2022	-	15	17	28	54	-
	2017	-	13	14	38	64	-
acres treated, 2022		-	1,046	144	4,967	6,922	-
	2017	-	1,461	378	2,817	3,642	-
Acres treated to control- Insects	farms, 2022	2	239	113	208	247	6
	2017	-	261	116	255	301	7
acres, 2022		(D)	62,858	10,005	106,665	86,324	40
	2017	-	103,999	15,089	117,057	95,479	90
Weeds, grass, or brush	farms, 2022	4	776	491	326	807	8
	2017	2	673	456	395	720	24
acres, 2022		46	238,079	125,291	188,933	352,295	562
	2017	(D)	263,375	129,701	188,298	332,766	1,872
Nematodes	farms, 2022	2	81	38	53	59	-
	2017	1	77	23	55	78	-
acres, 2022		(D)	16,670	6,110	21,226	16,059	-
	2017	(D)	27,561	8,588	17,875	20,139	-
Diseases in crops and orchards	farms, 2022	2	150	61	104	190	2
	2017	-	185	62	119	198	7
acres, 2022		(D)	34,610	5,203	57,866	59,703	(D)
	2017	-	67,012	10,884	53,469	50,322	1,296
Chemicals used to control growth, thin fruit, ripen, or defoliate	farms, 2022	-	45	27	49	73	2
	2017	-	29	13	48	91	3
acres on which used, 2022		-	6,381	750	16,856	14,526	(D)
	2017	-	2,833	150	20,899	18,995	357

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Table 40. Fertilizers and Chemicals Applied: 2022 and 2017 (continued)

[For meaning of abbreviations and symbols, see introductory text.]

Item	Shiawassee	Tuscola	Van Buren	Washtenaw	Wayne	Wexford
Commercial fertilizer, lime, and soil conditioners farms, 2022	478	571	416	504	104	107
..... farms, 2017	457	700	514	526	104	91
..... acres treated, 2022	133,514	197,908	74,544	103,732	3,694	14,528
..... acres treated, 2017	138,576	202,147	82,807	112,116	5,976	11,296
Cropland fertilized, except cropland pasture farms, 2022	472	546	400	476	104	92
..... farms, 2017	441	675	484	495	94	84
..... acres treated, 2022	133,278	197,334	74,263	103,361	(D)	14,266
..... acres treated, 2017	138,304	201,058	82,216	110,985	5,878	11,050
Pastureland and rangeland fertilized farms, 2022	19	42	29	44	2	29
..... farms, 2017	26	65	48	50	10	15
..... acres treated, 2022	236	574	281	371	(D)	262
..... acres treated, 2017	272	1,089	591	1,131	98	246
Manure farms, 2022	188	214	113	294	31	71
..... farms, 2017	180	280	133	237	21	61
..... acres treated, 2022	11,204	31,827	3,763	11,316	159	3,093
..... acres treated, 2017	14,916	38,057	5,035	10,922	129	1,822
Organic fertilizer farms, 2022	9	55	29	71	33	18
..... farms, 2017	11	76	18	56	14	11
..... acres treated, 2022	993	13,211	213	864	205	2,556
..... acres treated, 2017	801	13,044	417	1,897	19	750
Acres treated to control-						
Insects farms, 2022	103	162	307	202	58	23
..... farms, 2017	91	248	380	208	39	26
..... acres, 2022	17,929	59,066	43,576	25,345	1,393	1,563
..... acres, 2017	26,344	83,628	59,436	41,908	2,329	4,211
Weeds, grass, or brush farms, 2022	514	583	396	496	78	77
..... farms, 2017	427	563	443	411	61	58
..... acres, 2022	156,715	228,041	79,368	113,405	4,776	13,127
..... acres, 2017	157,933	233,012	94,298	119,409	6,087	10,240
Nematodes farms, 2022	35	37	73	39	18	1
..... farms, 2017	28	31	76	43	5	-
..... acres, 2022	5,182	7,357	7,797	4,669	508	(D)
..... acres, 2017	4,960	9,044	17,073	11,488	300	-
Diseases in crops and orchards farms, 2022	80	133	206	81	38	8
..... farms, 2017	45	150	240	96	25	11
..... acres, 2022	15,956	46,233	30,080	9,838	723	319
..... acres, 2017	10,930	37,699	26,434	9,536	785	303
Chemicals used to control growth, thin fruit, ripen, or defoliate farms, 2022	27	67	140	23	16	5
..... farms, 2017	11	71	55	8	9	3
..... acres on which used, 2022	1,953	15,447	11,974	705	459	226
..... acres on which used, 2017	1,216	21,725	7,581	321	62	(D)