



Ohio Department of Commerce
Medical Marijuana Control Program



Approved Pesticides for Use in the Cultivation of Medical Marijuana

Pursuant to rule 3796:2-2-01 of the Administrative Code, the Department of Commerce (“Department”) has developed a list of pesticides approved for use by licensed medical marijuana cultivators. As no pesticides are currently approved at the federal level for use on cannabis, the Department has conducted research on pesticides approved by other states for use in the cultivation of medical marijuana. The following list contains pesticides approved by the Department as a result of that research.

It is the responsibility of the cultivator to ensure that any pesticide being used in the cultivation facility:

- a) contains an active ingredient that is on the list;
- b) is not prohibited for use in the facility by the label;
- c) is registered with the Ohio Department of Agriculture; and
- d) is registered with the United States Environmental Protection Agency under section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136 - 136y (2012); or
- e) is exempt from registration under 40 C.F.R. 152.25(f) (2015) and the active and inert ingredients of the pesticide product are authorized for use on crops or plants intended for human consumption by the United States Environmental Protection Agency.

The use of a pesticide, fertilizer, or other chemical by a cultivator that is inconsistent with the product's label or in violation of pesticide use restrictions set forth in Division 3796. of the Administrative Code may result in action being taken by the Department pursuant to rule 3796:5-6-01 of the Administrative Code.



Ohio Department of Commerce
Medical Marijuana Control Program



Active Ingredient	Exempt under 40 CFR 152.25(f)	CAS number	Listed Use
Acequinocyl		57960-19-7	Insecticide
Ammonium Salts/Soaps of Higher Fatty Acids		2235-54-3, 7783-28-0, 84776-33-0	Adjuvant, Insecticide, Microbiocide, Fungicide
Azadirachtin		11141-17-6	Insecticide, Nematicide
Bacillus amyloliquefaciens		N/A	Fungicide, Plant Growth Regulator
Bacillus licheniformis		N/A	Fungicide
Bacillus megaterium		N/A	(not listed)
Bacillus pumilius strain QST 2808		N/A	Plant Growth Regulator
Bacillus pumilus strain GHA 180		N/A	Plant Growth Regulator
Bacillus subtilis		N/A	Fungicide
Bacillus subtilis MBI 600		N/A	Fungicide
Bacillus subtilis GB03		N/A	Fungicide
Bacillus subtilis QST713 Strain		N/A	Fungicide
Bacillus thuringiensis ssp. aizawai		68038-71-1	Insecticide
Bacillus thuringiensis ssp. israelensis		N/A	Insecticide
Bacillus thuringiensis ssp. Kurstaki 0		N/A	Insecticide
Bacillus thuringiensis ssp. Kurstaki 1		N/A	Insecticide
Bacillus thuringiensis ssp. Kurstaki 7841		N/A	Insecticide
Bacillus thuringiensis ssp. Kurstaki Strain SA-12		68038-71-1	Insecticide
Bacillus thuringiensis ssp. Kurstaki STRAIN SA- 11 solids, spores, and lepidopteran active toxins		N/A	Insecticide
Beauveria bassiana strain ANT- 03		N/A	Insecticide
Beauveria bassiana strain GHA		N/A	Insecticide
Beauveria bassiana Condia		N/A	Insecticide
Bifenazate		149877-41-8	Insecticide
Canola Oil		120962-03-0	Insecticide, Adjuvant
Capric Acid		334-48-5	Microbiocide
Caprylic Acid		124-07-2	Microbiocide
Capsaicin		2444-46-4	Insecticide
Capsicum oleoresin		404-86-4	Insecticide



Ohio Department of Commerce
Medical Marijuana Control Program



Active Ingredient	Exempt under 40 CFR 152.25(f)	CAS number	Listed Use
Captan		133-06-2	Fungicide
Castor Oil (USP or equivalent)	YES	8001-79-4	Rodenticide, Insecticide, Insect Repellent
Cedar Oil	YES	85085-29-6, 68990-83-0, 8000-27-9	Insecticide, Fungicide
Chromobacterium sub strain PRAA4-1 cells		N/A	Insecticide
Chomobacterium substsugae		N/A	Insecticide
Cinnamon	YES	N/A	Insecticide
Cinnamon Oil	YES	8015-91-6	Insecticide, Insect Repellent, Dog and Cat Repellent
Citric acid	YES	77-92-9	pH Adjustment, Fungicide, Microbiocide
Citronella	YES	106-23-0	Insect Repellent
Citronella Oil	YES	8000-29-1	Insect Repellent, Dog and Cat Repellent
Cloves	YES	N/A	Insecticide
Clove Oil	YES	8000-34-8	Herbicide
Copper octanoate		20543-04-8	Fungicide
Copper oxychloride		1332-65-6	Fungicide
Copper hydroxide		20427-59-2	Fungicide, Microbiocide, Nematicide
Corn gluten meal	YES	66071-96-3	Herbicide
Corn oil	YES	8001-30-7	(not listed)
Cottonseed oil	YES	8001-29-4	Insecticide
Cyfluthrin and beta-cyfluthrin		68359-37-5	Insecticide
Cytokinin (Kinetin)		9001-54-1	PGR
Diatomaceous Earth		61790-53-2	Insecticide, Molluscicide
Dimethomorph*		110488-70-5	Fungicide
Eugenol		97-53-0	Herbicide, Dog and Cat Repellent, Insecticide
Farnesol		4602-84-0	Pheromone
Fenhexamid		126833-17-8	Fungicide
Flonicamid		158062-67-0	Insecticide
Fludioxonil		131341-86-1	Fungicide
Garlic	YES	8000-78-0, 8008-99-9, 84775-59-7	Insecticide
Garlic oil	YES	8000-78-0	Insecticide
Geraniol	YES	106-24-1	Pheromone, Insecticide, Insect Repellent
Geranium oil	YES	8000-46-2	(not listed)



Ohio Department of Commerce
Medical Marijuana Control Program



Active Ingredient	Exempt under 40 CFR 152.25(f)	CAS number	Listed Use
Gibberellins (Gibberellic Acid)		77-06-5, 510-75-8, 8030-53-3, 468-44-0	PGR
Gliocladium virens G-21		N/A	Fungicide
Harpin protein		151438-54-9	Fungicide, Nematicide, Plant Growth Regulator
Homobrassinolide		80483-89-2	PGR
Hydrogen dioxide		000595, 900595	Microbiocide, Fungicide, Herbicide, Rodenticide
Hydrogen peroxide		000595, 900596	Microbiocide, Fungicide, Herbicide, Rodenticide
IBA (Indole-3-Butyric Acid)		133-32-4	PGR
Imazalil		35554-44-0, 73790-28-0	Fungicide
Iron phosphate (FePO ₄)		10045-86-0	Molluscicide
Isaria fumosorosea		N/A	Insecticide
Joboba oil		067200	Insecticide, Insect Repellent, Fungicide, Dog and Cat Repellent
Kaolin		100104	Insecticide, Adjuvant, Fungicide, Microbiocide
Lauryl sulfate	YES	151-41-7	Adjuvant, Insecticide, Microbiocide, Fungicide
Lemongrass oil	YES	8007-02-1	Insect Repellent, Insecticide
Linseed oil	YES	8001-26-1	(not listed)
Malic acid	YES	6915-15-7	Microbiocide
Metarhizium anisopliae strain F52		N/A	Insecticide
Mineral Oil/Petroleum Distillate		64724-04-7, 64742-48-9	Insecticide, Adjuvant
Mineral Oil/Petroleum Distillate Light		8042-47-5, 64741-88-4, 64741-89-5, 64741-97-5, 64742-56-9	Herbicide, Plant Growth Regulator, Insecticide, Adjuvant, Solvent
Mint		N/A	Insecticide
Mint oil		8006-90-4	Insecticide
Monopotassium phosphate		7778-77-0	pH Adjustment, Fungicide, Herbicide, Microbiocide
Mono- and Dibasic Sodium, Potassium, and Ammonium Phosphites		7783-28-0, 7758-11-4, 7558-79-4	Insecticide, Fungicide, Herbicide, Microbiocide, pH Adjustment
Myrothecium Verrucaria		N/A	Insecticide, Nematicide



Ohio Department of Commerce
Medical Marijuana Control Program



Active Ingredient	Exempt under CFR 152.25(f)	CAS number	Listed Use
Neem Oil, Cold Pressed		8002-65-1, 947173-77-5	Insecticide
Neem Oil, Clarified Hydrophobic Extract		8002-65-1, 947173-77-6	Insecticide
Nerolidol		7212-44-4	Pheromone
Oregano Oil		N/A	(not listed)
Paecilomyces fumosoroseus		N/A	Insecticide
Paraffinic oil (mineral oil)		64724-04-7, 64742-48-9	Insecticide, Adjuvant
Pentachloronitrobenzene (quintozene)		82-68-8	Fungicide, Nematicide, Algaecide
Peppermint	YES	N/A	Insecticide
Peppermint Oil	YES	8006-90-4	Insecticide
Peroxyacetic acid		79-21-0	Microbiocide, Fungicide, Herbicide, Rodenticide
2-Phenethyl propionate	YES	122-70-3	Insecticide, Pheromone, Herbicide, Insect Repellent, Dog and Cat Repellent
Phosphorous acid, mono- and dibasic potassium and ammonium salts		13598-36-2, 10294-56-1	Fungicide, Microbiocide
Piperonyl Butoxide		51-03-6	Insecticide, Synergist
Potassium Bicarbonate		298-14-6	Fungicide
Potassium Laurate		61789-30-8, 10124-65-9, 67701-09-1	Adjuvant, Insecticide, Microbiocide, Fungicide, Soap/Surfactant
Potassium Salts of Fatty Acids		61789-30-8, 10124-65-9, 67701-09-2	Adjuvant, Insecticide, Microbiocide, Fungicide, Soap/Surfactant
Potassium silicate		1312-76-1, 1312-81-8	Insecticide, Adjuvant, Fungicide, Microbiocide
Potassium sorbate	YES	24634-61-5	Fungicide
Pyrethrins		121-21-1	Insecticide
Pythium oligandrum DV 74		N/A	Fungicide
Reynoutria sachalinensis		N/A	Fungicide, Plant Growth Regulator
Rhamnolipid Biosurfactant		147858-26-2	Soap/Surfactant
Rosemary	YES	N/A	Insecticide
Rosemary Oil	YES	8000-25-7	Insecticide
Sesame	YES	N/A	Insecticide, Nematicide
Sesame Oil	YES	8008-74-0	Insecticide, Nematicide
Silicon Dioxide		61790-53-2	Insecticide, Molluscicide
Sodium chloride (common salt)	YES	7647-14-5	Molluscicide, Herbicide, Insecticide, Microbiocide



Ohio Department of Commerce
Medical Marijuana Control Program



Active Ingredient	Exempt under CFR 152.25(f)	CAS number	Listed Use
Sodium Ferric EDTA		15708-41-5	Herbicide
Sodium Lauryl Sulfate		151-21-3	Adjuvant, Insecticide, Microbiocide, Fungicide
Sorbic Acid Potassium Salt		590-00-1, 24634-61-5	Fungicide
Sorbitol Octanoate		108175-15-1	(not listed)
Soybean Oil	YES	8001-22-7	Insecticide, Adjuvant
Spinetoram		935545-74-7, 187166-40-1, 187166-15-0	Insecticide
Spinosad		131929-60-7, 168316-95-8	Insecticide
Spirotetramat		203313-25-1	Insecticide
Steinernema feltiae		N/A	Insecticide
Streptomyces griseoviridis strain K61		N/A	Fungicide
Streptomyces lydicus W YEC 108		N/A	Fungicide
Sucrose octanoate		42922-74-7	(not listed)
Sulfur		7704-34-9	Fungicide, Insecticide
Thiamethoxam		153719-23-4	Insecticide
Thiophanate-methyl		23564-05-8	Fungicide
Thyme	YES	N/A	Insect Repellent, Insecticide
Thyme Oil	YES	8007-46-3	Microbiocide
Trichoderma asperellum Strain ICC 012		N/A	Fungicide
Trichoderma gamsii Strain ICC 080		N/A	Fungicide
Trichoderma harzianum		N/A	Fungicide
Trichoderma harzianum Rifai strain KRL-AG2		67892-31-3	Fungicide
Trichoderma reesei		N/A	Fungicide
Trichoderma virens		N/A	Fungicide
Trichoderma virens strain G-41		N/A	Fungicide
Trifloxystrobin		141517-21-7	Fungicide
White pepper	YES	N/A	Insecticide
Zinc metal strips	YES	7440-66-6	Herbicide