

Michigan Hemp Pesticide List (Updated 2-28-24)

IMPORTANT: The following is provided as guidance for use of pesticides on hemp in Michigan. Reference to any pesticide product does not indicate acceptance or approval of those products by the Michigan Department of Agriculture and Rural Development (MDARD) as safe or effective in controlling pests in the production of hemp.

Changes from previous list:

- Additions
 - Botrystop WP/ BioWorks BW165E WP, EPA Reg. No. 68539-17
 - Isarid, EPA Reg. No. 89635-5
 - Ninja Goldfish Plant Wash Concentrate, 25(b)
 - Ninja Goldfish Plant Wash RTU, 25(b)
 - PerCarb, EPA Reg. No. 70299-15
 - Triatum, EPA Reg. No. 89635-3
 - WarHammer, 25(b)

- Products evaluated, but not approved. Reason for denial in parenthesis.
 - Bioprotec PLUS, EPA Reg. No. 89046-12 (Product label language not adequate for use on hemp.)
 - Languard M52 GR, EPA Reg. No. 64137-31 (Product label language not adequate for use on hemp.)
 - Languard M52 OD, EPA Reg. No. 64137-33 (Product label language not adequate for use on hemp.)
 - Lalstop G46 WG, EPA Reg. No. 64137-13 (Product label language not adequate for use on hemp.)
 - Tenet WP, EPA Reg. No. 80289-9 (Product label language not adequate for use on hemp.)

To have a pesticide evaluated for inclusion on the Michigan Hemp Pesticide List, complete an [evaluation request form](#) and email the completed form with a copy of the product label to MDARD-Pesticide@michigan.gov. Review the [policy summary](#) on cannabis pesticide product evaluation for more information on the evaluation process of pesticide products for inclusion on the Michigan Hemp Pesticide List.

- All pesticides must be used according to the product label instructions. The label is the law, so ensure that you understand label requirements before using a pesticide.

Product Name	EPA Reg. No.	Active Ingredient	Company Name	Product Type
Agree WG Biological Insecticide	70051-47	Bacillus thuringiensis subsp. aizawai strain GC-91	Certis USA, LLC	Insecticide
Amyprotec 42 / Bexfond	69553-9	Bacillus amyloliquefaciens subsp. plantarum strain FZB42	Andermatt Biocontrol	Fungicide, Bactericide
Arcus	84846-5	Complex Polymeric Polyhydroxy Acids	FBSciences, Inc.	Plant Regulator / Biostimulant
Asperello T34 Biocontrol	87301-1	Trichoderma asperellum strain T34	Biobest USA Inc.	Fungicide
Atrevia 3.0% SL	91234-305	Azadirachtin	Atticus LLC	Insecticide, Nematicide, Miticide
Aza-Direct Biological Insecticide	71908-1	Azadirachtin	Gowan Company	Insecticide
Azaguard Botanical Insecticide / Nematicide	70299-17	Azadirachtin	Biosafe Systems, LLC	Insecticide, Nematicide
Azamax Botanical Insecticide / Miticide / Nematicide 1	91865-4	Azadirachtin	Parry America Inc.	Insecticide, Nematicide, Miticide
Bioceres EC	89600-4	Beauveria bassiana strain ANT-03	Anatis Bioprotection Inc.	Insecticide
Bioceres WP	89600-2	Beauveria bassiana strain ANT-03	Anatis Bioprotection Inc.	Insecticide
Bio-Forge Premier	57538-71	Cytokinin (as kinetin)	Stoller Enterprises, Inc.	Plant Growth Regulator
BioProtec Plus	89046-12	Bacillus thuringiensis subspecies kurstaki, strain EVB-113-19	AEF Global Inc.	Insecticide
Blue Cal RX	48222-15	Copper sulfate pentahydrate, Calcium salts of phosphorous acid, & Phosphorous acid	Agro-K Corporation	Fungicide
Botanigard 22 WP / Mycotrol WPO	82074-2	Beauveria bassiana strain GHA	Certis USA, LLC	Insecticide
Botrystop WP/ BioWorks BW165E WP	68539-17	Ulocladium oudemansii	Bioworks, Inc.	Fungicide
Carbon Power Plant Growth Regulator (Discontinuance)	84846-2F	Complex Polymeric Polyhydroxy Acids	FBSciences, Inc.	Plant Growth Regulator
Carb-O-Nator	70051-117	Potassium Bicarbonate	Certis USA, LLC	Fungicide
Crymax	70051-86	Bacillus thuringiensis subsp. kurstaki strain EG7841	Certis USA, LLC	Insecticide
Debug Turbo	70310-5	Azadirachtin and Neem Oil	Agro Logistic Systems	Insecticide, Miticide, Fungicide, Nematicide, Repellent

Deliver Biological Insecticide	70051-69	Bacillus thuringiensis subsp. kurstaki strain SA-12	Certis USA, LLC	Insecticide
Dipel DF / Dipel Pro DF	73049-39	Bacillus thuringiensis subsp. kurstaki strain ABTS-351	Valent Biosciences LLC	Insecticide
Double Nickel 55 Biofungicide	70051-108	Bacillus amyloliquefaciens strain D747	Certis USA, LLC	Fungicide
Double Nickel LC Biofungicide	70051-107	Bacillus amyloliquefaciens strain D747	Certis USA, LLC	Fungicide
Dyna-Start 3P Soybean / Consensus	34704-1055	Indole-3-butric acid, Salicylic acid, Chitosan	Loveland Products	Plant Regulator / Biostimulant
Ecoworks EC	89152-4	Cold pressed neem oil	Ecostadt Technologies, LLC	Insecticide, Miticide, Fungicide, Nematicide
Ferroxx AQ Slug & Snail Bait	67702-49	Iron Phosphate	W. Neudorff GMBH KG	Molluscicide
Ferroxx Slug & Snail Bait / Corry's Slug & Snail Killer	67702-33	Sodium Ferrix EDTA	W. Neudorff GMBH KG	Molluscicide
Gemstar LC Insecticidal Virus	70051-45	Polyhedral occlusion bodies of the nuclear polyhedrosis virus of Helicoverpa zea (corn earworm)	Certis USA, LLC	Insecticide
General Hydroponics Defguard Biofungicide / Bactericide (1)	91865-3	Bacillus amyloliquefaciens strain D747	General Hydroponics	Fungicide, Bactericide
General Hydroponics Exile Insecticide / Fungicide / Miticide	91865-2	Potassium Salts of Fatty Acids	General Hydroponics	Insecticide, Fungicide, Miticide
General Hydroponics Prevasyn Insect Repellent / Insecticide (2)	91865-1	Soybean Oil, Garlic Oil, and Resin, Oleo-, capsicum	General Hydroponics	Insecticide, Repellent
Grandevo CG / Grandevo WDG	84059-27	Chromobacterium subsugae strain PRAA4-1 cells and spent fermentation media	Marone Bio Innovations	Insecticide
Guarda	92144-2	Oil of thyme	Biosafe Systems, LLC	Fungicide, Bactericide
Helicovex / Hearken	69553-2	Helicoverpa armigera Nucleopolyhedrovirus strain BV-0003	Andermatt Biocontrol	Insecticide
Howler Fungicide / Howler Lawn & Garden Fungicide	91197-3	Pseudomonas chlororaphis strain AFS009	Agbiome Innovations Inc.	Fungicide
Intergize	90866-26	Gamma-aminobutyric acid, Cytokinin (as kinetin), & Choline chloride	PGR Advantage Inc.	Plant Growth Regulator
Isarid	89635-5	Isaria fumosorosea	Koppert Biological Systems, Inc	Insecticide
Javelin WG Biological Insecticide	70051-66	Bacillus thuringiensis subsp. kurstaki strain SA-11	Certis USA, LLC	Insecticide
Julietta	86431-38	Saccharomyces cerevisiae strain LAS02	Agrauxine Corp.	Fungicide

Lifegard LC Biological Plant Activator	70051-126	Bacillus mycoides isolate J	Certis USA, LLC	Plant Regulator / Biostimulant
Lifegard WG Biological Plant Activator	70051-119	Bacillus mycoides isolate J	Certis USA, LLC	Plant Regulator / Biostimulant
Majestene Bionematicide / Venerate XC / Zelto / Venerate CG	84059-14	Heat-Killed Burkholderia sp strain A396 cells and spent fermentation media	Marone Bio Innovations	Plant Regulator / Biostimulant
Metagro L	90866-13	Cytokinin and Indole - 3 butyric Acid (IBA)	CH Biotech R&D CO LTD	Plant Regulator / Biostimulant
Milstop SP	68539-13	Potassium bicarbonate	Bioworks, Inc.	Fungicide
Mycostop Biofungicide / Lalstop K61 WP	64137-5	Streptomyces strain K61	Danstar Ferment Ag / Lallemand Plant Care	Fungicide
Mycotrol ESO / Botanigard ES / Botegha ES	82074-1	Beauveria bassiana strain GHA	LAM International Corporation	Plant Regulator / Biostimulant
Mycotrol Optima ESO / Botanigard Optima ES / Botegha Optima ES	82074-17	Beauveria bassiana strain GHA	LAM International Corporation	Plant Regulator / Biostimulant
Ninja Goldfish Plant Wash Concentrate	25(b)	Soybean Oil, Corn Oil, Peppermint Oil	Ninja Goldfish	Fungicide, Insecticide, Miticide
Ninja Goldfish Plant Wash RTU	25(b)	Soybean Oil, Corn Oil, Peppermint Oil	Ninja Goldfish	Fungicide, Insecticide, Miticide
NoFly WP	88664-1	Isaria fumosorosea strain FE 9901	Blacksmith BioScience, LLC	Insecticide
Oxiphos	70299-22	Mono- and di-potassium salts of Phosphorus Acid; Hydrogen Peroxide	Futureco Bioscience SA	Fungicide, Bactericide
Pacesetter / Regalia 12 Biofungicide	84059-21	Reynoutria sachalinesis	Marone Bio Innovations	Fungicide
Pear T Liquid Concentrate / Spear-Lep	88847-6	GS-omega/kappa - Hctx-Hv1a (spider venom peptides)	Vestaron Corporation	Fungicide
PFR-97 10% ES Microbial Insecticide	70051-133	Isaria fumosorosea Apopka strain 97	Certis USA, LLC	Insecticide
PFR-97 20% WDG Microbial Insecticide / Ancora	70051-19	Isaria fumosorosea Apopka strain 97	Certis USA, LLC	Insecticide
Percarb	70299-15	Sodium Carbonate Peroxyhydrate	BioSafe Systems, LLC	Fungicide, Bactericide

Promote	90866-23	Gamma-aminobutyric acid, Cytokinin (as kinetin), & Choline chloride	CH Biotech R&D CO LTD	Plant Growth Regulator
Pvent (Discontinuance)	64137-13	Gliocladium catenulatem (maybe Clonostachys rosea) strain J1446	Danstar Ferment Ag / Lallemand Plant Care	Plant Regulator / Biostimulant
Radiate	34704-909	Cytokinin (as kinetin), Indole-3-butyric acid	Loveland Products	Fungicide
Rango / Socoro / Proof Cold-Pressed Neem Oil Concentrate	88760-10	Neem Oil	Terramera Inc.	Fungicide
Regalia Bioprotectant Concentrate / Regalia CG Biofungicide	84059-3	Reynoutria sachalinesis	Marone Bio Innovations	Fungicide
Reliant Systemic Fungicide	83416-1	mono and Di Potassium Salts of Phosphoric Acid	Quest Products LLC	Fungicide
Rootshield Granules	68539-3	Trichoderma harzianum Rifai strain T-22	Bioworks, Inc.	Fungicide
Rootshield Plus Granules Biological Fungicide	68539-10	Trichoderma harzianum Rifai strain T-22 & Trichoderma virens strain G-41	Bioworks, Inc.	Fungicide
Rootshield Plus WP Biological Fungicide	68539-9	Trichoderma harzianum Rifai strain T-22 & Trichoderma virens strain G-41	Bioworks, Inc.	Fungicide
Rootshield WP Biological Fungicide	68539-7	Trichoderma harzianum Rifai strain T-22	Bioworks, Inc.	Fungicide
Sil-Matrix LC	70051-127	Potassium Silicate	Certis USA, LLC	Plant Regulator / Biostimulant
Stargus / Amplitude ST	84059-28	Bacillus amyloliquefaciens strain F727	Marone Bio Innovations	Plant Regulator / Biostimulant
Sugar Mover Premier	57538-67	Cytokinin (as kinetin)	Stoller Enterprises, Inc.	Plant Regulator / Biostimulant
Terraclean 5.0	70299-13	Ethaneperoxoic acid and Hydrogen peroxide	Biosafe Systems, LLC	Plant Regulator / Biostimulant
Trianium-P Biological Fungicide	89635-3	Trichoderma harzianum	Koppert Biological Systems, Inc.	Fungicide
Vinagreen	85208-1	Vinegar (CAS 64-19-7)	Fleischmanns Vinegar Company	Herbicide
WarHammer	25(b)	Chitosan	Blacksmith Bioscience, LLC	Nematicide, Fungicide, Bactericide

Xentari Dry Flowable Biological Insecticide	73049-40	Bacillus thuringiensis, subsp. aizawai strain ABTS 1857	Valent Biosciences LLC	Insecticide
X-Tra Power Premier	57538-69	Cytokinin (as kinetin)	Stoller Enterprises, Inc.	Plant Regulator / Biostimulant
Zerotol 2.0 / GreenClean Liquid 2.0 / Oxidate 2.0	70299-12	Hydrogen peroxide and peroxyacetic acid	Biosafe Systems, LLC	Plant Regulator / Biostimulant
Zorda WG Biological Fungicide	73049-522	Bacillus amyloliquefaciens strain PTA-4838	Valent Biosciences LLC	Fungicide

