



Pest Management Centre Status Report for Biopesticide Projects from 2011 to 2019

As of: August 28, 2023

Note: Status of biopesticide projects from 2020 onward are included under the Minor use Project statuses by crop table

Note: Updated information since November 7, 2022 in the Status Column is bolded and italicized

See legend below for explanation of the Project/Product Status

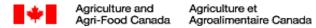
| Crop | Pest(s) | Product | Active ingredient | Project Identification | Project Status |
|------------------------------|-------------------------|----------------------------------|-------------------------------------|---------------------------|---------------------|
| Alfalfa | Botrytis blossom blight | Serenade ASO, Serenade Opti | Bacillus subtilis QST 713 | BPR13-02 | On label |
| Alfalfa | Weevils | beetleGONE! | Bacillus thuringiensis galleriae | BPR14-01 | Project withdrawn |
| Bee hives | varroa mite | Apilife VAR | thymol, eucalyptus oil, menthol | BPR15-01 | On label |
| Bee hives | Varroa mites | Hop Guard II | Potassium salts of hop beta acids | BPR16-03 | On label |
| Bee hives | Varroa mites | HopGuard 3 | K salts of hop beta acids | BPR16-031 | Submitted to PMRA |
| Blueberry, lowbush (organic) | Weeds | AEF-1201 | Pine Oil | BPR13-03 | Project closed |
| Canola | Diamond back moth | Xentari | B. thuringiensis aizawai | BPR12-03 | On label |
| Carrot | Nematode | Dazitol | Mustard oil, Oleoresin of Capsicum | BPR13-05 | Submission rejected |
| Cherry | Cherry fruit fly | Naturalis L | Beauveria bassiana ATCC 74040 | BPR11-04 | Project withdrawn |
| Chrysanthemum | Thrips | Met52 Granular Bioinsecticide | Metarhizium anisopliae F52 | BPR11-06 | On label |
| Cranberry | Sedges and rushes | Serene | acetic acid | BPR12-01 | On label |
| Cucumber, greenhouse | Thrips | SorbiShield | Sorbitol Octanoate | BPR12-05 | Project withdrawn |
| Cucumber, greenhouse | Powdery mildew | Organocide | Sesame Oil | BPR12-06 | Project withdrawn |
| Herbs (organic) | Weeds | MBI-005 | Streptomyces acidiscabies RL | BPR14-04 | Project withdrawn |
| Hops | Downy mildew | Regalia | Extract of Reynoutria sachalinensis | BPR12-041 | On label |
| Hops | Downy mildew | Actinovate | Streptomyces lydicus | BPR12-042 | Project withdrawn |
| Hops | Downy mildew | Organocide | Fish oil and sesame oil | BPR12-043 | Project withdrawn |

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| Hops | Downy mildew | Serenade ASO, Serenade Opti | Bacillus subtilis QST 713 | BPR12-044 | On label |
| Onion | Onion thrips | Met52 Granular Bioinsecticide | Metarhizium anisopliae F52 | BPR11-03 | Project withdrawn |
| Orchards | insect pests | Quassia Extract DM | Quassia amara extract | BPR15-02 | Project closed |
| Ornamentals (gerbera), greenhouse | Powdery mildew (Podosphaera fusca) | Cyclone | Citric acid and lactic acid | BPR14-073 | On label |
| Ornamentals, greenhouse | Thrips | Suffoil-x | Paraffinic oil | BPR12-07 | On label |
| Ornamentals, greenhouse and outdoor | Liverwort and mosses | Mosskade | Wheat gluten and starch | BPR16-04 | Project withdrawn |
| Ornamentals, outdoor and indoor | Foliar diseases | Rhapsody | Bacillus subtilis QST 713 | BPR11-08 | On label |
| Pepper, greenhouse | Thrips | Naturalis L | Beauveria bassiana ATCC 74040 | BPR11-05 | Project withdrawn |
| Pepper, greenhouse | Thrips | Grandevo (MBI- 203) | Chromobacterium subtsugae | BPR13-06 | Project withdrawn |
| Pepper, greenhouse | Botrytis grey mold | Problad Plus | blad protein | BPR14-05 | On label |
| Poinsettia (Greenhouse Ornamentals) | Whiteflies | Grandevo (MBI- 203) | Chromobacterium subtsugae | BPR13-07 | Project withdrawn |
| Potato | Sprout inhibitor | Restrain | Ethanol converted to ethylene | BPR19-01 | On label |
| Potato | Colorado potato beetle | Trident | Bacillus thuringiensis tenebrionis | BPR19-02 | Project withdrawn |
| Raspberry | Nematode | Dazitol | Mustard oil, Oleoresin of Capsicum | BPR13-04 | Submission rejected |
| Strawberry | Tarnished plant bug | Naturalis L | Beauveria bassiana ATCC 74040 | BPR12-02 | Project withdrawn |





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| Strawberry | Nematode | MeloCon/Bioact | Paecilomyces lilacinus | BPR14-03 | Project withdrawn |
| Sunflower | Head rot, white mold | Regalia MAXX | Extract of Reynoutria sachalinensis | BPR14-02 | Project withdrawn |
| Taxus or Thuja (Outdoor Ornamentals) | Scale Insects | Grandevo (MBI- 203) | Chromobacterium subtsugae | BPR13-08 | Project withdrawn |
| Tomato, greenhouse | Botrytis | Donguard | Clonostachys rosea ACM941 | BPR11-02 | Project withdrawn |
| Tomato, greenhouse | Pepino mosaic virus | V10 | Pepino Mosaic Virus vaccine | BPR16-05 | On label |
| Turf | European chafer, Japanese beetle, June beetle grubs | grubHALT! | Bacillus thuringiensis galleriae | BPR14-08 | On Label |
| Turf (sod, golf course) | Hairy chinch bug | Grandevo (MBI- 203) | Chromobacterium subtsugae | BPR12-08 | Project withdrawn |
| Various crops | Onion thrips | Captiva Prime | Capsicum oleoresin extract, garlic oil, and soybean oil | BPR19-03 | Submitted to PMRA |
| Various crops (alfalfa, apple, cranberry, eggplant, grape, onion, mustard, pecan, pepper, tomato, potato, strawberry, sweet corn, ornamentals) | Whiteflies, thrips, aphids, spider mites, leafminers, psyllids, plant bugs by foliar spray; weevils, grape phylloxera, rootworms, wireworms, coleoptera, lepidoptera, symphylans | PFR-97 / Preferal | Isaria fumosorosea Apopka Strain 97 (ATCC 20874) (formerly Paecilomyces fumosoroseus) | BPR18-02 | Data with registrant for submission |
| Various crops (apple, basil, cucumber, cauliflower, grape, lettuce, onion, ornamentals, pepper, raspberry, strawberry) | Multiple fungal soilborne and foliar diseases | Prestop | Gliocladium catenulatum strain J1446 | BPR18-03 | Submitted to PMRA |



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| Various crops (berries, field vegetables, ornamental, turf) | Insects including tarnished plant bug, Colorado potato beetle, striped cucumber beetle, green peach aphid, european corn borer, strawberry weevil, emerald ash borer, european chafer, hairy chinch bug, Japanese beetle | Bio-Ceres | Beauveria bassiana strain ANT-3 | BPR16-01 | Project withdrawn |
| Various crops (cucumber, grape, greenhouse tomato, and ornamentals) | Powdery mildews, whiteflies and thrips, mealybugs, mites, aphids, spotted wing drosophila; Botrytis gray mold | Prev-Am / Appeal | Orange oil | BPR17-01 | Project withdrawn |
| Various crops (fruiting vegetables, squash, lettuce, field and greenhouse strawberries, greenhouse ornamentals and Cannabis produced commercially indoors) | Phytophthora spp., Sclerotinia sclerotiorum, Sclerotinia minor, Verticillium dahliae | Foretryx | Trichoderma asperellum strain ICC 012 and Trichoderma gamsii strain ICC 080 | BPR17-02 | On label |



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| Various crops (grains, pulses, potatoes) | Nonselective post-emergent herbicide; also desiccant and harvest aid in potatoes, grain crops, and pulse crops | BioLink (Suppress) | Caprylic acid, capric acid | BPR18-04 | On label |
| Various crops (greenhouse and field vegetables on crops of Solanaceae, Cruciferae, and Cucurbitaceae; potato seed) | Various bacterial diseases | Nobactra | Cocktail of 10 Bacteria and Oregano oil | BPR18-01 | Project withdrawn |
| Various crops (small fruits, tree fruit, vegetables) | Spider mites, thrips, white fly, spotted wing drosophila | Ecotrol | Rosemary oil, peppermint oil and Geraniol/nerol | BPR16-02 | Project withdrawn |
| Vegetables and ornamentals | Botrytis grey mold | Botector | Aureobasidium pullulans DSM 14940 and DSM 14941 | BPR15-04 | On label |
| Vegetables, fruit, pulse crops, ornamentals | Botrytis grey mould, white mould, powdery mildews, and bacterial blight | Oxidate | hydrogen peroxide | BPR15-03 | On label |
| Vegetables, greenhouse and ornamentals, greenhouse | Thrips | Spear-T | GS-omega/kappa-Hxtx-Hv1a (spider venom peptide) | BPR17-03 | Submitted to PMRA by registrant |
| Wasabi, greenhouse | Aphids | PureSpray GREEN Spray Oil 13E | mineral oil | BPR14-06 | Submitted to PMRA |
| Wheat | Broadleaf weeds | Phoma macrostoma | Phoma macrostoma | BPR11-01 | Project on Hold |
| Wheat | Fusarium head blight | Donguard | Clonostachys rosea ACM941 | BPR11-07 | Project withdrawn |
| Wheat, spring | Cleavers | MBI-005 | Streptomyces acidiscabies RL | BPR13-01 | Project withdrawn |





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Legend:

Data generation: Efficacy field trials are in process of being conducted

Data requirements determined: Pre-submission consultation advice to confirm data requirements has been received from the Pest Mangement

Regulatory Agency (PMRA)

Data with registrant for submission: The data generated through the project has been sent to the registrant for submission

On label: The product is registered

PMRA approved: The PMRA review is complete and approved the use

Preparing submission: Compiling and assembling data package for submission

Project closed: The file was closed in accordance with PMC policy for projects without a reasonable prospect for successful completion within the timeframe

Project complete: All data requirements within a project are complete

Project initiated: Project planning and establishment are in process

Project on hold: Specific issues need to be addressed

Project withdrawn: Support for this project has been withdrawn by the registrant or as a result of a change from the original selected

Submission rejected: The submitted application was not registered by the PMRA

Reporting phase: Data resulting from field trials and/or other sources are being summarized

Submitted to PMRA: Data generated has been submitted to PMRA by Pest Management Centre or by the registrant