



## Pest Management Centre

### Status Report for Biopesticide Projects from 2011 to 2019

As of: November 7, 2022

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

Note: Updated information since February 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 ID	Project/Product Status
Alfalfa	Botrytis blossom blight	Serenade ASO, Serenade Opti	<i>Bacillus subtilis</i> QST 713	BPR13-02	On label
Alfalfa	Weevils	beetleGONE!	<i>Bacillus thuringiensis galleriae</i>	BPR14-01	Project withdrawn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
Blueberry, lowbush (organic)	Weeds	AEF-1201	Pine Oil	BPR13-03	Project closed
Canola	Diamond back moth	Xentari	<i>B. thuringiensis aizawai</i>	BPR12-03	On label
Carrot	Nematode	Dazitol	Mustard oil, Oleoresin of Capsicum	BPR13-05	Submission rejected
Cherry	Cherry fruit fly	Naturalis L	<i>Beauveria bassiana</i> ATCC 74040	BPR11-04	Project withdrawn
Chrysanthemum	Thrips	Met52 Granular Bioinsecticide	<i>Metarhizium anisopliae</i> 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Cucumber, greenhouse	Thrips	SorbiShield	Sorbitol Octanoate	BPR12-05	Project withdrawn
Cucumber, greenhouse	Powdery mildew	Organocide	Sesame Oil	BPR12-06	Project withdrawn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	<i>Streptomyces acidiscabies</i> RL	BPR14-04	Project withdrawn
Hops	Downy mildew	Regalia	Extract of <i>Reynoutria sachalinensis</i>	BPR12-041	On label
Hops	Downy mildew	Actinovate	<i>Streptomyces lydicus</i>	BPR12-042	Project withdrawn
Hops	Downy mildew	Organocide	Fish oil and sesame oil	BPR12-043	Project withdrawn
Hops	Downy mildew	Serenade ASO, Serenade Opti	<i>Bacillus subtilis</i> QST 713	BPR12-044	On label
Onion	Onion thrips	Met52 Granular Bioinsecticide	<i>Metarhizium anisopliae</i> F52	BPR11-03	Project withdrawn



**Pest Management Centre**  
**Status Report for Biopesticide Projects from 2011 to 2019**  
 As of: November 7, 2022

Crop	Pest(s)	Product	Active ingredient	Project ID	Project/Product Status
Orchards	insect pests	Quassia Extract DM	<i>Quassia amara</i> extract	BPR15-02	Project closed
Ornamentals (gerbera), greenhouse	Powdery mildew ( <i>Podosphaera fusca</i> )	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	<i>Bacillus subtilis</i> QST 713	BPR11-08	On label
Pepper, greenhouse	Thrips	Naturalis L	<i>Beauveria bassiana</i> ATCC 74040	BPR11-05	Project withdrawn
Pepper, greenhouse	Thrips	Grandevo (MBI-203)	<i>Chromobacterium subtsugae</i>	BPR13-06	Project withdrawn
Pepper, greenhouse	Botrytis grey mold	Problad Plus	blad protein	BPR14-05	On label
Poinsettia (Greenhouse Ornamentals)	Whiteflies	Grandevo (MBI-203)	<i>Chromobacterium subtsugae</i>	BPR13-07	Project withdrawn
Potato	Sprout inhibitor	Restrain	Ethanol converted to ethylene	BPR19-01	On label
Potato	Colorado potato beetle	Trident	<i>Bacillus thuringiensis tenebrionis</i>	BPR19-02	Project withdrawn
Raspberry	Nematode	Dazitol	Mustard oil, Oleoresin of Capsicum	BPR13-04	Submission rejected
Strawberry	Tarnished plant bug	Naturalis L	<i>Beauveria bassiana</i> ATCC 74040	BPR12-02	Project withdrawn
Strawberry	Nematode	MeloCon/Bioact	<i>Paecilomyces lilacinus</i>	BPR14-03	Project withdrawn
Sunflower	Head rot, white mold	Regalia MAXX	Extract of <i>Reynoutria sachalinensis</i>	BPR14-02	Project withdrawn
Taxus or Thuja (Outdoor Ornamentals)	Scale Insects	Grandevo (MBI-203)	<i>Chromobacterium subtsugae</i>	BPR13-08	Project withdrawn
Tomato, greenhouse	Botrytis	Donguard	<i>Clonostachys rosea</i> ACM941	BPR11-02	Project withdrawn



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

As of: November 7, 2022

Crop	Pest(s)	Product	Active ingredient	Project ID	Project/Product Status
Tomato, greenhouse	Pepino mosaic virus	V10	Pepino Mosaic Virus vaccine	BPR16-05	On label
Turf	European chafer, Japanese beetle, June beetle grubs	grubHALT!	<i>Bacillus thuringiensis galleriae</i>	BPR14-08	On Label
Turf (sod, golf course)	Hairy chinch bug	Grandevo (MBI-203)	<i>Chromobacterium subtsugae</i>	BPR12-08	Project withdrawn
Various crops	Onion thrips	Captiva Prime	Capsicum oleoresin extract, garlic oil, and soybean oil	BPR19-03	Submitted to PMRA by registrant
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	<i>Isaria fumosorosea</i> Apopka Strain 97 (ATCC 20874) (formerly <i>Paecilomyces fumosoroseus</i> )	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	<i>Gliocladium catenulatum</i> strain J1446	BPR18-03	Data with registrant for submission
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	<i>Beauveria bassiana</i> strain ANT-3	BPR16-01	Project withdrawn



**Pest Management Centre**  
**Status Report for Biopesticide Projects from 2011 to 2019**  
 As of: November 7, 2022

Crop	Pest(s)	Product	Active ingredient	Project ID	Project/Product Status
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	<b>Project withdrawn</b>
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	<i>Trichoderma asperellum</i> strain ICC 012 and <i>Trichoderma gamsii</i> strain ICC 080	BPR17-02	<b>On label</b>
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	<i>Aureobasidium pullulans</i> 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



## Pest Management Centre

### Status Report for Biopesticide Projects from 2011 to 2019

As of: November 7, 2022

Crop	Pest(s)	Product	Active ingredient	Project ID	Project/Product Status
Vegetables, greenhouse and ornamentals, greenhouse	Thrips	Spear-T	GS-omega/kappa-Hctx-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	<i>Phoma macrostoma</i>	BPR11-01	Project on Hold
Wheat	Fusarium head blight	Donguard	<i>Clonostachys rosea</i> ACM941	BPR11-07	Project withdrawn
Wheat, spring	Cleavers	MBI-005	<i>Streptomyces acidiscabies</i> RL	BPR13-01	Project withdrawn



**Pest Management Centre**  
**Status Report for Biopesticide Projects from 2011 to 2019**  
As of: November 7, 2022

**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 Management 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