

Pest Control Products Registered for Use on Hops in Ontario – 2020

The following tables list pest control products registered on hops in Ontario as of April 15, 2020. This list is intended as a guide and does not replace current product labels. Many hops pesticides are under re-evaluation and labels may change within the lifetime of this document. **Always read the label thoroughly before applying a pest control product and follow all label instructions.** It is the grower and applicator's responsibility to be aware of all federal and provincial regulations governing the use of pesticides in Ontario. More information on the use of pesticides in Ontario can be found on the OMAFRA website at www.ontario.ca/usingpesticides

TABLE 1 – INSECT CONTROL FOR HOPS IN ONTARIO

LEGEND

Group:	Chemical group number for a pest control product established by the Insecticide Resistance Action Committee (insecticides), Fungicide Resistance Action Committee (fungicides) or Weed Science Society of America (herbicides) based on mode of action for resistance management planning.
REI:	Restricted Entry Interval. Do not enter treated fields unprotected until after the REI has passed. For some products REI varies with activity. If the REI is not specified, assume a 12-hr REI.
NS:	Not specified on label.
PHI:	Pre-Harvest Interval. The required time period between the last spray and the first harvest.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
HOP APHID						
4	imidacloprid	Admire 240F	230 mL/ha	24 hrs	28 days	Allow at least 21 days between applications. Maximum 2 applications per season.
4D	flupyradifurone	Sivanto Prime	500-750 mL/ha	12 hrs	21 days	Apply as a directed foliar spray ensuring thorough coverage. Use a minimum application volume of 100 L/ha. Maximum 750 mL/ha Sivanto Prime per season.
23	spirotetramat	Movento 240 SC	365-435 mL/ha	12 hrs	7 days	Apply early in infestation as populations begin to develop. Use higher rates for moderate to heavy pressure. Use a minimum application volume of 500 L water/ha. Apply with an adjuvant as specified on product label. Allow at least 14 days between applications. Maximum 920 mL/ha Movento permitted per season.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
HOP APHID (CONTINUED)						
29	flonicamid	Beleaf 50 SG	0.12-0.16 kg/ha	31 days (stripping and training) 12 hrs (all other activities)	31 days	Apply as populations begin to increase, before damaging levels become established. Apply in enough water to ensure good coverage (minimum 94 L/ha). Increase spray volume when foliage is dense. Allow at least 7 days between applications. Maximum 3 applications per year (max 0.48 kg/ha/season).
NC	mineral oil	Purespray Green Spray Oil 13 E	10 L/ha	12 hrs	N/A – stop at burr development	Feeding deterrent only. Apply in at least 1000 L water/ha (1% solution) to avoid phytotoxicity. Do not tank mix with copper. Discontinue use at burr development. Tolerance has not been determined for all varieties. Do not apply to crops under moisture stress or just prior to or during freezing weather. Re apply at 10-14 day intervals. Maximum 8 applications per year.
		SuffOil X	Mix 12.9 L product in 1000 L water	12 hrs	12 hrs	Feeding deterrent only. Use enough spray solution to completely penetrate the canopy without runoff - use a minimum of 50 L spray solution/ha. Tolerance has not been determined for all varieties. Do not apply to crops under moisture stress, when temperatures are below 4°C or above 33°C, or when there is a danger of freezing. Re apply at 10-14 day intervals. Maximum 8 applications per year..
	potassium salts of fatty acids	Opal Kopa	Mix 8 L product with 400 L water and apply at 700-1900 L/ha	12 hrs	12 hrs	Thoroughly spray to wetting. Spray must contact pests to be effective. Repeat every 1-2 weeks as needed. Apply a maximum of 3 consecutive applications to avoid plant injury. Additional applications may be possible – see product label.
LEAFHOPPER						
4D	flupyradifurone	Sivanto Prime	500-750 mL/ha	12 hrs	21 days	See comments under hop aphid.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
TWO SPOTTED SPIDER MITE						
6	abamectin	Agri-Mek SC	125-250 mL/ha	12 hrs	28 days	For applications at 1/2 trellis growth (1.8-2.5 m), apply 125-250 ml product in at least 400 L water/ha. For applications beyond 1/2 trellis growth, do not use less than 225 mL product/ha in at least 950 L water/ha. Allow at least 21 days between applications. Apply with a non-ionic surfactant as specified on label. Do not graze treated crop. Maximum 2 applications per year (max 500 mL/ha/yr).
20B	acequinocyl	Kanemite 15C	2.07 L/ha	12 hrs	7 days	Apply as a full coverage spray of the foliage to drip. Alternate applications of Kanemite with products from other insecticide families. Maximum 2 applications per season (max 4.1 L product/ha/season).
20D	bifenazate	Acramite 50WS	851 g/ha	5 days (stripping, training) 12 hrs (all other activities)	14 days	Apply in at least 1000 L/ha. This product is primarily active on motile stages of mites. This product is not systemic - thorough coverage of upper and lower leaf surface is necessary for effective control. Maximum 1 application per year.
23	spirodiclofen	Envidor 240SC	0.75 L/ha	2 days (stripping, training) 12 hrs (all other activities)	21 days	Thorough coverage required for effective control. Apply in 500-1000 L water/ha. NOTE: The registrant plans to stop selling this product in Canada as of December 2020, although product use is expected to be permitted in 2021. Maximum 1 application per year (max 0.75 L/ha/season).
NC	mineral oil	Purespray Green Spray Oil 13 E	10 L/ha	12 hrs	N/A – stop at burr development	Suppression only. See comments under hop aphid.
		SuffOil X	Mix 12.9 L product in 1000 L water	12 hrs	12 hrs	Suppression only. See comments under hop aphid.
	potassium salts of fatty acids	Opal Insecticidal Soap Kopa Insecticidal Soap	Mix 8 L product with 400 L water and apply at 700-1900 L/ha	12 hrs	0 days	See comments under hop aphid

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
CATERPILLARS						
11	<i>Bacillus thuringiensis var kurstaki</i>	Dipel 2 X DF	Hop looper: 275-550 g/ha Corn borer: 560-1120 g/ha	4 hrs or when dry	0 days	Apply at first sign of infestation when larvae are small. Repeat if necessary at 5-10 day (Bioprotec) or 3-14 day (Dipel) intervals. Apply Bioprotec in a minimum of 300 L water/ha. For European corn borer, no more than 3 applications of Bioprotec per generation (max 6 Bioprotec applications/year).
		Bioprotec Plus	Hop looper: 0.9-1.8 L/ha Corn borer: 1.5-2.5 L/ha	12 hrs		
	<i>Bacillus thuringiensis var aizawai</i>	XenTari WG	Hop looper: 500-100 g/ha	4 hrs or when dry	0 days	Apply at first sign of infestation when larvae are small. Ideally, apply in the evening or on a cloudy day. Use sufficient spray volume for thorough coverage but not run off. Repeat if needed at 3-14 day intervals.
28	chlorantraniliprole	Coragen	Cutworms: 250-375 ml/ha Cabbage looper: 250 ml/ha	12 hrs	0 days	Allow at least 7 days between applications. Do not make more than 4 applications per season (maximum 1.25 L/ha/season).
SLUGS						
NC	ferric phosphate	Sluggo Professional	12-50 kg/ha	12 hrs	NS	Apply evenly in a 15 cm band around base of stem with a broadcast or granular spreader. Treat perimeter of crop to intercept slugs travelling into field from daytime refuges. Reapply as bait is consumed or every two weeks if damage continues. Soil should be moist but with no standing water.

TABLE 2 – DISEASE CONTROL FOR HOPS IN ONTARIO

LEGEND

Group: Chemical group number for a pest control product established by the Insecticide Resistance Action Committee (insecticides), Fungicide Resistance Action Committee (fungicides) or Weed Science Society of America (herbicides) based on mode of action for resistance management planning.

REI: Restricted Entry Interval. Do not enter treated fields unprotected until after the REI has passed. For some products REI varies with activity. If the REI is not specified, assume a 12-hr REI.

NS: Not specified on label.

PHI: Pre-Harvest Interval. The required time period between the last spray and the first harvest.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
DOWNY MILDEW						
4	metalaxyl-m and s-isomer	Ridomil Gold 480 SL	570 mL/ha	12 hrs	90 days	Apply in early April as a soil drench at the root site. Apply in 200 L water/ha. No more than 1 application per season.
21	cyazofamid	Torrent 400 SC	0.15-0.2 L/ha	12 hrs	3 days	Apply preventatively when conditions are conducive to disease development. Allow at least 7-14 days between applications. Alternate foliar sprays of Torrent with a fungicide with a different mode of action. Increase rate and shortening intervals with increasing disease pressure. Apply with a non-ionic or organosilicone surfactant as specified on product label. Apply in at least 935 L water/ha. No more than 6 applications (1.2 L/ha) per crop growing season.
40	dimethomorph	Forum	450 mL/ha	18 days (hand harvest, stripping, training) 12 hrs (all other activities)	7 days	Suppression only. Apply preventatively when conditions are favorable to disease development. Forum must be tank mixed with a fungicide from another group active against downy mildew. Allow at least 10 days between applications. Do not use less than 200 L water/ha. No more than 3 applications per season.
40	mandipropamid	Revus	600 mL/ha	12 hrs	7 days	Apply preventatively when conditions are conducive to disease development. Allow at least 7-10 days between applications. Use with a non-ionic adjuvant is suggested, where permitted – see label for details. Do not make more than 2 consecutive applications before rotating to a fungicide that is not in Group 40. No more than 50% of all applications for downy mildew/season should be Revus or a Group 40 fungicide. No more than 3 applications (1.8 L product) per year.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
DOWNY MILDEW CONTINUED						
40/45	ametoctradin_ + dimethomorph	Zampro	0.8-1.0 L/ha	18 days (hand harvest, training, stripping) 12 hrs (all other activities)	7 days	Begin applications prior to disease development. Allow at least 10 days between applications. Use with an adjuvant is suggested – see label for details. Apply in a minimum of 200 L water/ha. Do not make more than 2 applications before rotating to another fungicide that is not Group 40 or 45. No more than 3 applications per year.
43	fluopicolide	Presidio Fungicide	292 mL/ha	12 hrs	24 days	Begin applications prior to disease development. Allow 10-14 days between applications. Presidio must be tank mixed with a registered hop downy mildew fungicide that is not in Group 43. Do not make more than 2 sequential applications before alternating with a fungicide that is not Group 43. No more than 3 applications per year (max 880 mL/ha/yr).
44	<i>Bacillus subtilis</i>	Serenade Opti	3.3 kg/ha	12 hrs	0 days	Partial suppression only. Begin applications when conditions are conducive to disease development. Repeat as needed on a 7 to 10 day interval.
M	copper sulfate	Copper 53W	4-5 kg/1000 L	48 hrs	2 days	Apply when conditions are favorable to disease development. Allow at least 10 days between applications. Do not tank mix with spray oils—refer to oil labels for more precautions. No more than 4 applications per year.
	copper hydroxide	Parasol WG	1.2 kg/ha	48 hrs	14 days	May be applied as a crown treatment after pruning but before training. After training, apply at a minimum of 10 day intervals if needed. Apply in 400 to 1000 L water/ha. No more than 5 applications per year.
P5	extract of <i>Reynoutria sachalinensis</i>	Regalia Maxx	0.25-0.50% v/v (1.875-3.75 L product/ 750 L water)	when dry	0 days	Partial suppression only. Apply preventatively when environmental conditions are conducive for disease development. Allow at least 7 days between applications. Adjust spray equipment to achieve thorough coverage as the crop grows. Apply a maximum of 750 L spray solution/ha. No more than 8 applications per season.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
POWDERY MILDEW						
7/11	boscalid+ pyraclostrobin	Pristine WG	0.015 kg/100 L dilute spray	8 days (hand set irrigation) 46 days (harvest) 12 hrs (all other activities)	46 days	Also provides suppression of downy mildew. Begin applications prior to disease development. Allow at least 10-14 days between applications. Use 234 to 468 L dilute spray/ha (0.25-0.49 kg/ha) prior to trellising and 935-1524 L dilute spray/ha (0.98-1.6 kg/ha) after. Do not apply more than 1524 L dilute spray/ha. No more than 3 applications per season
	fluopyram + trifloxystrobin	Luna Sensation	300-600 mL/ha	12 hrs	14 days	Begin applications when conditions are favourable for disease and continue as needed on a 10-14 day interval. Use low rate for small plants. Use sufficient water volume to apply just to the point of runoff. Do not make more than 2 applications before rotating to a fungicide that is not in group 7 or 11. Do not apply more than 1980 mL product/ha per season.
13	quinoxifen	Quintec	300-500 mL/ha	12 hrs	21 days	Suppression only. Apply preventatively when conditions are favorable to disease development. Allow at least 14 days between applications. NOTE: Due to a re-evaluation decision by the Pest Management Regulatory Agency, use of Quintec is being phased in Canada. LAST DATE OF USE OF QUINTEC ON HOPS IS JUNE 2021. No more than 2 applications per year.
46	tea tree oil	Timorex Gold	1.0-1.5 L/ha	4 hrs	2 days	Suppression only. Apply preventatively or early in disease cycle. Apply in 400-800 L water/ha. Do not spray during warm hours of day or in hot season when temperatures exceed 35°C. Do not apply through irrigation system.
50	metrafenone	Vivando SC	0.750-1.12 L/ha	12 hrs	14 days	Suppression only. Begin applications prior to onset of disease. Allow at least 14 days between applications. When plant growth is rapid, ensure new growth is adequately protected. A non-ionic surfactant may improve performance. No more than 2 applications or 2.24 L product/ha per season.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
POWDERY MILDEW CONTINUED						
NC	canola oil	Vegol Crop Oil	Mix 1 L concentrate/50 L water (2% solution)	12 hrs	NA – stop at burr development	Suppression only. Apply at a spray volume of 700-1900 L/ha. Begin applications when disease first appears and continue on a 7-14 day interval as needed. To protect new growth, spray at early leaf stages. Discontinue use at burr development. Do not apply when temperatures are above 32°C, just prior to/during freezing or when plants are wet due to melting frost or heavy dew s. Do not use in combination with or closely following copper, as phytotoxicity may result. No more than 4 summer applications permitted per year.
	mineral oil	Purespray Green Spray Oil 13 E	10 L/ha	12 hrs	N/A – stop at burr development	Suppression only. Apply in at least 1000 L water/ha (1% solution) to avoid phytotoxicity. Do not tank mix with copper. Discontinue use at burr development. Tolerance has not been determined for all varieties. Do not apply to crops under moisture stress or just prior to or during freezing weather. Re apply at 10-14 day intervals. Maximum 8 applications per year.
		SuffOil X	Mix 12.9 L product in 1000 L water and apply at 50 L spray solution/ha	12 hrs	12 hrs	Suppression only. Use enough spray solution to completely penetrate the canopy without runoff - use a minimum of 50 L spray solution/ha. Tolerance has not been determined for all varieties. Do not apply to crops under moisture stress, when temperatures are below 4°C or above 33°C, or when there is a danger of freezing. Re apply at 10-14 day intervals. Maximum 8 applications per year..
	potassium bicarbonate	MilStop Sirocco	2.8-5.6 kg/ha	4 hrs	0 days	Suppression only. Begin application at the first sign of disease. Repeat at 7-14 day intervals until conditions are no longer favorable for disease development. Use the high rate for conditions of high to moderate disease pressure and shorten application interval during periods of rainy weather or high relative humidity. Apply in 500-1000 L water/ha. Do not mix with other pesticides or fertilizers that are not compatible with mild alkaline solutions. No more than 10 applications per season.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
BOTRYTIS GREY MOLD						
46	tea tree oil	Timorex Gold	1.5-2.0 L/ha	4 hrs	2 days	Apply preventatively or early in disease cycle. Apply in 400-1200 L water/ha. Do not spray during warm hours of day or in hot season when temperatures exceed 35°C. Do not apply through irrigation system.
CROWN GALL						
NC	<i>Agrobacterium radiobacter</i>	Dygal	Nursery product only – see label for details	12 hrs	NS	For use only on nursery plants, by trained nursery personnel.
FUSARIUM ROOT ROTS						
NC	<i>Trichoderma harzianum</i>	RootShield WP	3-4 kg/ha	12 hrs	0 days	Suppression only of root rots caused by <i>Fusarium</i>, as well as <i>Pythium</i> and <i>Rhizoctonia</i>. Suspend in at least 1000 L water and apply to soil surface immediately around plants. Use higher rates when conditions favour disease. Irrigation or rainfall of at least 5 mm should occur within 24 hours of application to move active ingredient to the root zone.

TABLE 3 – WEED CONTROL FOR HOPS IN ONTARIO

LEGEND

Group: Chemical group number for a pest control product established by the Insecticide Resistance Action Committee (insecticides), Fungicide Resistance Action Committee (fungicides) or Weed Science Society of America (herbicides) based on mode of action for resistance management planning.

REI: Restricted Entry Interval. Do not enter treated fields unprotected until after the REI has passed. For some products REI varies with activity. If the REI is not specified, assume a 12-hr REI.

NS: Not specified on label.

PHI: Pre-Harvest Interval. The required time period between the last spray and the first harvest.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
PRE-EMERGENT HERBICIDES (control weeds prior to germination)						
14	flumioxazin	Chateau WDG	280 g/ha (coarse soil, <5 % organic matter) 420 g/ha (medium soil, <5% organic matter)	12 hrs	30 days	For pre-emergence weed control, apply using ground equipment as a 30-45 cm (1-1.5 ft) band to each side of the row to dormant hops only in the fall. Moisture is necessary for activation – weeds that germinate after application but before activating rainfall or irrigation may not be controlled. For sucker control, apply as a directed application to the lower 0.6 m (2 ft) of hops, once plants have reached a minimum of 1.8 m (6 ft) in height. Crop injury may occur when applied to poorly drained soils or under cool wet conditions – see label for details. Do not allow spray to contact green stem, foliage, flower or cones (unless used for sucker control). Do not use with an adjuvant. Do not apply to fine textured soils. See label for further details for avoiding crop injury. Do not apply more than 420 g/ha Chateau per season.
29	indaziflam	Alion	375 mL/ha	12 hrs	120 days	For residual control of susceptible grass and broadleaf weeds when applied preemergence to the soil. See label for weed species controlled. Apply as a directed spray to the soil prior to shoot emergence. Dormant application only. Do not use on soils with 20% or more gravel content or less than 1% organic matter or crop injury may result. Note some sandy soils have <1% organic matter. Use only on hops established for at least one year with normal growth and good vigour. Refer to product label for other precautions to avoid crop injury. No more than one application per season.

Group	Active Ingredient	Trade Name	Rate	REI	PHI	Notes
POSTEMERGENT HERBICIDES (apply to actively growing weeds)						
1	clethodim	Select Centurion Shadow RTM	0.19-0.38 L/ha	12 hrs	21 days	For post emergence control of grassy weeds - see product label for specific weeds and rates. Apply with an adjuvant, where permitted, as specified on product label. Apply in a minimum of 110 L water/ha using ground equipment. Apply when annual grasses and cereals are in the 2 to 6-leaf stage. Control is most effective when applied when grasses are small and actively growing and will be less effective when plants are stressed due to inadequate or excess moisture, low temperature or very low relative humidity. No more than 1 application per season.
	sethoxydim	Poast Ultra	1.1 L/ha	12 hrs	180 days	For post emergence control of annual grasses and quackgrass. Merge Adjuvant must be applied to all applications of Poast Ultra. For more details on application, refer to product label or OMAFRA Publication 75, <i>Guide to Weed Control</i> .
14	carfentrazone-ethyl	Aim EC	Sucker Management: 150 ml/ha Post-emergent weed control: 36.5-117 mL/ha	12 hrs	7 days	For management of sucker growth, apply as a directed spray to basal portion (approximately lower 45 cm) of plant and to sucker mat extending away from plant to approximately 45-60 cm into row. Apply in at least 200 L/ha spray solution using boom type ground application equipment. For postemergent control of broadleaf weeds within and between rows, apply with shielded sprayer and refer to product label for rates and weeds controlled. Apply with an adjuvant as specified on product label. Do not apply until trained vines have sufficient barking to avoid stem damage and are high enough that there is no contact with apical bud. Do not allow upward drift of spray solution or contact with new growth. Do not apply AIM using airblast or air assisted sprayers or through an irrigation system. No more than 2 applications/year, at least 14 days apart, for sucker management and no more than 1 application/year for weed control.
NC	ammonium salt of fatty acid	Axxe	45 L product/325 L water/ha – 106 L product/765 L water/ha (0.5% a.i solution)	when dry	NS	For post emergent burndown and suppression of grassy and broadleaf weeds. Non selective - do not allow spray to contact desirable plants. Apply at a 5% active ingredient concentration to the point of runoff, adjusting water volume to weed height – see label for details. Avoid moisture through irrigation or rainfall within 3 hours of application.

TABLE 4 – POTENTIAL ORGANIC PRODUCTS FOR HOPS IN ONTARIO

This table is intended as a guide for products that **may** be acceptable for organic production. However they may not be accepted by all certification bodies. Always check with your organic certification body before applying any product. For rate and other application instructions, refer to the entry for each product in Tables 1 to 3.

Product	Active ingredient	Labelled Pests
INSECTICIDES		
Bioprotec Plus	<i>Bacillus thuringiensis kurstaki</i>	hop looper, European corn borer
Dipel 2x DF	<i>Bacillus thuringiensis kurstaki</i>	hop looper, European corn borer
Kopa Insecticidal Soap	potassium salts of fatty acids	aphids, spider mites
Opal Insecticidal Soap	potassium salts of fatty acids	aphids, spider mites
Purespray Green Spray Oil 13E	mineral oil	aphids, spider mites
Sluggo Professional	ferric phosphate	slugs
SuffOil-X	mineral oil	aphids, spider mites
XenTari WG	<i>Bacillus thuringiensis aizawai</i>	hop looper
FUNGICIDES		
Copper 53 W	copper sulphate	dow ny mildew
MilStop	potassium bicarbonate	pow dery mildew
Parasol WG	copper hydroxide	dow ny mildew
Purespray Green Spray Oil 13E	mineral oil	pow dery mildew
Serenade Opti	<i>Bacillus subtilis</i>	dow ny mildew
Sirocco	potassium bicarbonate	pow dery mildew
SuffOil-X	mineral oil	pow dery mildew
Timorex Gold	tea tree oil	pow dery mildew
Regalia Maxx	<i>Reynoutria sachalinensis</i> extract	dow ny mildew
RootShield WP	<i>Trichoderma harzianum</i>	fusarium canker
Vegol Crop Oil	canola oil	pow dery mildew
HERBICIDES		
None currently registered on hops		

APPENDIX A – Registrants for Hops Pesticides

This information is provided as a guideline only. Consult each product label before use for the most up-to-date information. Pesticide labels are also available at the Pest Management Regulatory Agency (PMRA) website at www.pmr-arla.gc.ca. Click on “Search Pesticide Labels”.

PCP No. ¹	Trade Name	Active Ingredient	Guaranteed Active	Registrant or Canadian Agent
27925	Acramite 50 WS	bifenazate	50%	UPL Open Ag
24094	Admire 240	imidacloprid	240 g/L	Bayer CropScience Inc
31607	Agri-mek SC	abamectin	84 g/L	Syngenta Canada Inc.
28573	Aim EC	carfentrazone-ethyl	240 g/L	FMC Corporation
30451	Alion	Indaziflam	200 g/L	Bayer CropScience Inc
32719	Axxe Broad Spectrum Herbicide	ammonium salt of fatty acid	36.0%	BioSafe Systems L.L.C.
29796	Beleaf 50SG	Flonicamid	50%	ISK Biosciences Corporation
32425	Bioprotec Plus	<i>Bacillus thuringiensis var kurstaki</i>	17,500 Cabbage Looper Units/mg	AEF Global Inc
29231	Chateau WDG	flumioxazin	51.1%	Valent Canada Inc.
9934	Copper 53W	copper sulphate	53.4%	UAP Canada
28982	Coragen	chlorantraniliprole	200 g/L	FMC Corporation
27598	Centurion	clethodim	240 g/L	BASF Canada Inc
26508	DiPel 2XDF	<i>Bacillus thuringiensis var kurstaki</i>	57%	Valent Canada Inc
21106	Dygal	<i>Agrobacterium radiobacter</i>	5x10 ⁹ colony forming units	Mori Nurseries Ltd.
28051	Envidor	spirodiclofen	240 g/L	Bayer CropScience Inc
32026	Forum Fungicide	dimethomorph	500 g/L	Bayer CropScience Inc
28641	Kanemite 15 SC	Acequinocyl	15.8%	UPL Open Ag
31433	Kopa Insecticidal Soap	potassium salts of fatty acids	47%	Neudorff North America
32107	Luna Sensation	fluopyram + trifloxystrobin	250 g/L 250 g/L	Bayer CropScience Inc
28095	MilStop Foliar	potassium bicarbonate	85%	BioWorks Inc.
28953	Movento 240SC	spirotetramat	240 g/L	Bayer CropScience Inc
28146	Opal Insecticidal Soap	potassium salts of fatty acids	47%	Omex Agriculture Inc.
29063	Parasol WG	copper hydroxide	50.0%	Nufarm Agriculture Inc.
24835	Poast Ultra	sethoxydim	450 g/L	BASF Canada Inc
30051	Presidio Fungicide	fluopicolide	39.5%	Valent Canada Inc.
27985	Pristine WG	boscalid + pyraclostrobin	25.2% 12.8%	BASF Canada Inc
27666	PuresprayGreen Spray Oil 13E	mineral oil	99%	Intelligro
29755	Quintec	quinoxifen	250 g/L	Corteva Agriscience
30199	Regalia Maxx	<i>Reynoutria sachalinensis</i> extract	20%	Marrone Bio Innovations Inc.
29074	Revus	mandipropamid	23.3%	Syngenta Canada Inc.
28474	Ridomil Gold 480SL	metalaxyl-m and s-isomer	480 g/L	Syngenta Canada Inc.

29890	RootShield WP	<i>Trichoderma harzianum</i>	1x10 ⁷ CFU/g	BioWorks Inc.
22625	Select	clethodim	240 g/L	UPL Open Ag
31666	Serenade Opti	<i>Bacillus subtilis</i>	1.21x10 ¹⁰ CFU/g	Bayer CropScience Inc
29277	Shadow RTM	clethodim	240 g/L	Loveland Products Canada Inc.
31091	Sirocco	potassium bicarbonate	85%	AEF Global
31452	Sivanto Prime	flupyradifurone	200 g/L	Bayer CropScience Inc
30025	Sluggo Professional	ferric phosphate	0.28%	Belchim Crop Protection Canada
30910	Timorex Gold	tea tree oil	23.8%	Belchim Crop Protection Canada
30392	Torrent 400SC	cyazofamid	34.5%	Belchim Crop Protection Canada
32408	Vegol Crop Oil	canola oil	96%	Neudorff North America
27965	Vivando SC	metrafenone	300 g/L	BASF Canada Inc.
31557	XenTari WG	<i>Bacillus thuringiensis</i> subsp <i>aizawai</i>	48.1%	Valent Canada Inc
30321	Zampro	ametoctradin + dimethomorph	300 g/L + 225 g/L	BASF Canada Inc.

¹ Pest Control Product Number. See the pesticide label to confirm the current product registration number (PCP#).