

2019 SUPPLEMENT

Publication 838, *Vegetable Crop Protection Guide 2018*

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The pest control product label is a legal document. It prescribes how the pest control product can be legally used. Users are responsible for ensuring that they are complying with all directions stipulated on the most current product label. Read the most current pest control product label thoroughly before application. Copies of all pest control product labels are posted online by the PMRA and may be found at: <http://pr-rp.hc-sc.gc.ca/lr-re/index-eng.php>

APARAGUS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Fitness	propiconazole	Group 3	Rust	150 mL/ha (61 mL/acre)	240	12	Make the first application after harvest, as soon as fern growth begins. Do not make sequential applications of any group 3 fungicides.

BEANS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Angular leaf spot	300 L/ha (121 L/acre)	7	12	Snap beans. Do not make sequential applications of any group 7 or group 11 fungicides.
Beleaf	flonicamid	Group 29	Aphids	0.12–0.16 kg/ha (50–65 g/acre)	7	12	Use high rate on high populations or dense foliage. See label for recropping restrictions.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Bacterial blight	1.0% v:v (100 mL product in 10 L water)	0	4	Partial suppression. Apply prior to or in early stages of disease development. Under severe disease conditions, reduce spray intervals.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp. <i>aizawai</i>	Group 11	Corn earworm	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Presidio	fluopicolide	Group 43	Downy Mildew	292 mL/ha (118 mL/acre)	0	12	Suppression. No more than 2 sequential apps
Presidio	fluopicolide	Group 43	Phytophthora blight	292 mL/ha (118 mL/acre)	0	12	Snap beans only. Suppression. Also provides suppression of downy mildew. Tank-mix with Revus Fungicide. Do not make more than 2 sequential applications.
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Rust	0.3 L/ha (0.1 L/acre)	7	12	Lima beans. Do not make sequential applications of any group 7 or group 11 fungicides.
Kenja 400SC	isofetamid	Group 7	White mold	1.25 kg/ha (0.5 kg/acre)	7	12	Suppression. Do not make more than two sequential applications of any group 7 fungicides. See label for recropping restrictions.

BEETS, GARDEN

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

BRASSICA VEGETABLES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Harvanta 50SL	cyclaniliprole	Group 28	Bertha armyworm	0.8 - 1.2 L/ha(0.32 -0.49 L/acre)	1	12	Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period. Do not apply foliar group 28 insecticides in the same season as a soil application.
Harvanta 50SL	cyclaniliprole	Group 28	Cabbage looper	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period. Do not apply foliar group 28 insecticides in the same season as a soil application.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp. <i>aizawai</i>	Group 11	Cabbage Looper	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days. Thorough coverage required to ensure pests consume XenTari.

BRASSICA VEGETABLES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Entrust	spinosad	Group 5	Cabbage maggot	25mL per 1000 plants	—	24	Apply as a drench before transplanting in the field. Immediately after application apply 2L of water to rinse the product into the soil. Do not rinse the product out of the transplant medium.
Success	spinosad	Group 5	Cabbage maggot	12.5 mL per 1000 plants	—	24	Apply as a drench before transplanting in the field. Immediately after application apply 2L of water to rinse the product into the soil. Do not rinse the product out of the transplant medium.
Harvanta 50SL	cyclaniliprole	Group 28	Diamondback moth	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Do not apply more than two applications within a single generation. Applications to the following generation should be a non-group 28 insecticide. Do not apply foliar group 28 insecticides in the same season as a soil application.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Diamondback Moth	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days. Thorough coverage required to ensure pests consume XenTari.
Reason	fenamidone	Group 11	Downy mildew	400 – 600 mL/ha (162 – 243 mL/acre)	2	24	CG 4-13B, Leafy Brassica.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Downy mildew	1.0% v:v (100 mL product in 10 L water)	0	4	Broccoli and Cauliflower only. Suppression.

BRASSICA VEGETABLES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Downy mildew	600 mL/ha (243 mL/acre)	1	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use shorter interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Exirel	cyantraniliprole	Group 28	Flea beetles	500–1000 mL/ha (202–405 mL/acre)	1	12	Do not make a foliar application for a minimum of 60 days following a soil application of any group 28 insecticide. See label for tank-mix and crop tolerance information, guidance on adjuvant use as well as rotational crop restrictions.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp. <i>aizawai</i>	Group 11	Imported Cabbageworm	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days. Thorough coverage required to ensure pests consume XenTari.
Harvanta 50SL	cyclaniliprole	Group 28	Leafminers	1.2 L/ha (0.49L/acre)	1	12	Do not apply foliar group 28 insecticides in the same season as a soil application.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Sclerotinia (White Mold, white rot, watery soft rot)	400–600 mL/ha (162–243 mL/acre)	0	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Harvanta 50SL	cyclaniliprole	Group 28	Western flower thrips	1.2 L/ha (0.49L/acre)	1	12	Suppression. Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period.

CARROTS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Movento 240 SC	spirotetramet	Group 23	Aphids	220-365 mL/ha (89-148 mL/acre)	1	12	Most effective on young stages. Has slow activity; control may not be apparent for 2-3 weeks. See label for application details and rotational crop restrictions.
Trianium P	<i>Trichoderma harzianum</i> Rifai strain T22	NC	Cavity spot	In furrow: 1.5 kg/ha in 50-200 L of water In beds: 2.5 kg/ha in 50-200 L of water	n/a	4	Suppression. Should be applied preventatively, immediately after or during seeding. Disease suppression is not effective while soils remain cold and is more effective in neutral or acidic soils than in alkaline soils. See label for application instructions.
Trianium G	<i>Trichoderma harzianum</i> Rifai strain T22	NC	Cavity spot	In furrow: 15 kg/ha In beds: 25 kg/ha	n/a	4	Suppression. Should be used preventatively. Apply in-furrow or incorporate into beds. Disease suppression is not effective while soils remain cold and is more effective in neutral or acidic soils than in alkaline soils. See label for application instructions.
Delegate	spinetoram	Group 5	Flea beetles	200 g/ha (80 g/acre)	3	12	Suppression. Apply when pests appear.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Sclerotinia White Mold	500 mL/ha (203 mL/acre)	7	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

CELERY

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Exirel	cyantraniliprole	Group 28	Aphids	500–1500 mL/ha (202–607 mL/acre)	1	12	Do not make a foliar application for a minimum of 60 days following a soil application of any group 28 insecticide. See label for tank-mix and crop tolerance information, guidance on adjuvant use as well as rotational crop restrictions.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp. <i>aizawai</i>	Group 11	Cabbage Looper	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cabbage Looper	370 ml/ha (150 ml/acre)	7	12	Also controls armyworms, carmine sprider mite, two spotted spider mite, and corn earworm. Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 6 or 28 insecticides.
Exirel	cyantraniliprole	Group 28	Cabbage looper	250–500 mL/ha (101–202 mL/acre)	1	12	Do not make a foliar application for a minimum of 60 days following a soil application of any group 28 insecticide. See label for tank-mix and crop tolerance information, guidance on adjuvant use as well as rotational crop restrictions.
Switch 62.5 WG	cyprodinil/ fludioxonil	Group 7 + Group 12	Celery leaf curl (Anthracnose)	775–975 g/ha(314–395 g/acre)	0	12	Suppression. Begin applications prior to or at the onset of disease and repeat applications on a 7–10 day interval if conditions remain favorable for disease development. Maximum of two applications per year. See label for rotational restrictions.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cutworm	370-566 ml/ha (150-225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 6 or 28 insecticides.

CELERY

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Coragen	chlorantraniliprole	Group 28	Cutworms	250 mL/ha (101 mL/acre)	1	12	Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Downy mildew	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Late blight	300-400 mL/ha (122-162 mL/acre)	0	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Exirel	cyantraniliprole	Group 28	Leafminers	1000-1500 mL/ha (404-607 mL/acre)	1	12	Dipteran leafminers. Do not make a foliar application for a minimum of 60 days following a soil application of any group 28 insecticide. See label for tank-mix and crop tolerance information, guidance on adjuvant use as well as rotational crop restrictions.
Coragen	chlorantraniliprole	Group 28	Leafminers	250-375 mL/ha (101-152 mL/acre)	1	12	Serpentine leafminers. Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Pea leafminer	370-741 ml/ha (150-300 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 6 or 28 insecticides.
Phostrol	mono- and dibasic sodium, potassium and ammonium phosphites	Group 33	Pythium	3.2 L/ 1000 L of water	—	12	Suppression. Greenhouse treatment only. Make the first application after seeding. Repeat at a 7-14 day interval. Do not make more than four applications during the celery transplant season.

CUCURBITS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Alternaria, Anthracnose, Gummy stem blight, Scab	761-967 mL/ha (308-391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Anthracnose	463-926 ml/ha (187-375 ml/ha)	0	when dry	Apply preventatively when conditions favour disease development.
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Aphids	2-4 g/L	0	4	Cucumber transplants only. Reduction in numbers. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Armyworm	370 ml/ha (150 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Harvanta 50SL	cyclaniliprole	Group 28	Armyworms	0.8 - 1.2 L/ha (0.32 - 0.48 L/acre)	1	12	Beet and Bertha armyworms. Do not apply foliar group 28 insecticides in the same season as a soil application.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cutworm	385-566 ml/ha (156-225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

CUCURBITS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Downy mildew	1.0% v:v (100 mL product in 10 L water)	0	4	Cucumber only. Partial Suppression. Under severe disease conditions, reduce spray intervals.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Downy mildew	463-926 mL/ha (25-50 g ai/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development.
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Downy mildew	400-600 mL/ha (162-243 mL/acre)	0	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use high rate and shorter interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Gummy Stem Blight	463-926 ml/ha (187-375 ml/ha)	0	when dry	Suppression. Apply preventatively when conditions favour disease development.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Gummy stem blight	1.0% v:v (100 mL product in 10 L water)	0	4	Watermelon only. Partial Suppression. Under severe disease conditions, reduce spray intervals.
Kanemite 15SC	acequinocyl	Group 20B	Mites	2070 mL/ha (838 mL/acre)	1	12	Summer squash only.
Nimitz 480 EC	fluensulfone	NC	Nematodes	4-8 L/ha(1.62-3.24 L/acre)	—	12	Applications can be broadcast incorporated, banded and incorporated or applied by drip chemigation at least 7-days before transplanting. Use only before transplanting a crop and not in conjunction with direct seeded crops. See application rate for details. Do not feed treated commodities or residual plant material to animals. Do not freeze. Re-cropping restriction of 365 days except for labelled crops.

CUCURBITS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Vegol	canola oil	NC	Powdery mildew	2% solution, applied at 700–1900 L/ha (283–769 L/acre)	1	24	Suppression. Initiate sprays when conditions are favourable for disease development or when disease first appears.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Powdery Mildew	463-926 ml/ha (187-375 ml/ha)	0	when dry	Apply preventatively when conditions favour disease development.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	0	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Powdery mildew	2.5% v:v (250 mL product in 10 L of water)	0	4	Pumpkin and zucchini only. Partial Suppression. Under severe disease conditions, reduce spray intervals.
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Powdery mildew	761–967 mL/ha (308–391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides.
Property 300SC	pyriofenone	Group U8	Powdery mildew	0.3–0.366 mL/ha (0.121–0.148 mL/ acre)	0	12	Do not make more than 2 sequential applications.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Spider mites	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

EGGPLANT

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Met52 EC bioinsecticide	<i>Metarhizium anisopliae</i> strain F52	NC	Thrips	0.5-5.0L in 1000L water	0	0	Zucchini only. Reduction in numbers. Use higher rate when pest pressure is high.
Vegol	canola oil	NC	Two Spotted Spider Mite	2% solution, applied at 700-1900 L/ha (283-769 L/acre)	1	24	Suppression. Apply at first sign of insect presence.
Harvanta 50SL	cyclaniliprole	Group 28	Western flower thrips	1.2 L/ha (0.49L/acre)	1	12	Suppression. Do not apply foliar group 28 insecticides in the same season as a soil application.

EGGPLANT

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Anthracnose, Alternaria (early blight)	643-967 mL/ha (260-391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.

EGGPLANT

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Broad mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Harvanta 50SL	cyclaniliprole	Group 28	Colorado potato beetle	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Also controls cabbage looper. Do not apply foliar group 28 insecticides in the same season as a soil application.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Colorado potato beetle	556-670 ml/ha (225-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide. For control of Colorado potato beetle, make the first application after approximately 50% of the egg masses have hatched and larvae are present. If two applications are needed, limit them to a single Colorado potato beetle generation per crop.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cutworm	370-566 ml/ha (150-225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Early Blight	537-926 mL/ha (29-50 g ai/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development.

EGGPLANT

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Flea beetle	385-741 ml/ha (156-300 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Grey Mold	463-926 mL/ha (25-50 g ai/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development.
Botector	<i>Aureobasidium pullulans</i>	Biological	Grey mold	1 kg/ ha (405 g/acre)	0	4	Suppression.
Vegol	canola oil	NC	Mites	2% solution, applied at 700–1900 L/ha (283–769 L/acre)	1	24	Suppression. Begin when pest appears.
Met52 EC bioinsecticide	<i>Metarhizium anisopliae</i> strain F53	NC	Mites	0.5-5.0 L/1000 L water 108 mL/10 L water	0	0	Reduction in numbers. Use higher application concentration when pest pressure is high.
Nimitz 480 EC	fluensulfone	NC	Nematodes	4–8 L/ha (1.62–3.24 L/acre)	—	12	Applications can be broadcast incorporated, banded and incorporated or applied by drip chemigation at least 7-days before transplanting. Use only before transplanting a crop and not in conjunction with direct seeded crops. See application rate for details. Do not feed treated commodities or residual plant material to animals. Do not freeze. Re-cropping restriction of 365 days except for labelled crops.

EGGPLANT

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Phytophthora blight	400-600 mL/ha (162-243 mL/acre)	1	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use shorter interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Powdery mildew	643-967 mL/ha (260-391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Spider mites	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Tomato fruitworm	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato fruitworm (corn earworm)	556 ml/ha (225 ml/acre)	7	12	Also controls cabbage looper. Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

GARLIC

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato russet mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

GARLIC

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Leek Moth	500-1000 g/ha (203-405 g/acre)	0	0	Suppression. For best results apply in evening or on cloudy days

HERBS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Acramite	bifenazate	Group 20D	Two Spotted Spider Mite	851 g/ha (344 g/acre)	7	12	CG 19A. Not for use on fresh parsley
Reason	fenamidone	Group 11	Downy mildew	400 mL/ha (162 mL/acre)	2	12	Basil only. Begin applications as soon as crop or environmental conditions favour disease development.
Delegate	spinetoram	Group 5	Thrips	200-280 g/ha (81-113 g/acre)	7	12	Mint only. Suppression.
Delegate	spinetoram	Group 5	Cabbage Looper	140-200 g/ha (57-81 g/acre)	7	12	Mint only.

HERBS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	whiteflies, aphids, thrips	2-4 g/L in 500 to 1000 L/ha water	0	4	Reduction in numbers. For greenhouse use only. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Beet Army worm, Cabbage looper	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Botector	<i>Aureobasidium pullulans</i>	Biological	Grey mold	1 kg/ha (405 g/acre)	0	4	Suppression.
Presidio	fluopicolide	Group 43	Downy mildew	292 mL/ha (118 mL/acre)	1	12	Basil only. No more than two sequential applications.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Sclerotinia white mold	400-600 mL/ha (162-243 mL/acre)	0	12	Parsley only. Sclerotinia only. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Orondis A + Orondis B	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Basil downy mildew	Orondis A: 175-350 mL/ha (70-142 mL/acre) + Orondis B: 583 mL/ha (236 mL/acre)	1	12	Basil only. Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use high rate and shorter interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Torrent 400 SC	cyazofamid	Group 21	Onion downy mildew	200 mL/ha (80 mL/acre)	0	12	Chives only. Do not use more than one in every three applications. Do not make sequential applications of any group 21 fungicide. Tank-mix with a non-ionic or organosilicone surfactant.

HERBS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Onion downy mildew	400 mL/ha (162 mL/acre)	7	12	Chives only. Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use high rate and shorter interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Oberon	spiromesifen	Group 23	Mites	600-800 mL/ha (243-324 mL/acre)	1	12	Mint only. Mint bud mite and two-spotted spider mite. Begin applications prior to the build up of mite populations. See label for use on two spotted spider mite as well as rotational crop restrictions. No more than three sequential applications per season.

HORSERADISH

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Verimark	cyantraniliprole	Group 28	Cabbage maggot	10–15 mL/ 100 m of row or 1100–1700 mL/ha (445–688 mL/ acre) based on 90cm (36") spacing	21	12	See label for application details and rotational crop restrictions. Do not apply any subsequent applications of group 28 insecticides for a minimum of 60 days following a soil application.
Delegate	spinetoram	Group 5	Flea beetles	200 g/ha (80 g/acre)	3	12	Suppression. Apply when pests appear.
Entrust	spinosad	Group 5	Flea beetles	364 mL/ha (146 mL/acre)	3	12	Suppression. Apply Entrust Insecticide in sufficient water to ensure thorough and complete coverage of the foliage. Apply at emergence of adults.
Success	spinosad	Group 5	Flea beetles	182 ml/ha (73 mL/acre)	3	when dry	Suppression. Apply at emergence of adults and reapply at 7-10 day intervals as necessary.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Leaf-eating caterpillars	500-1000 g/ha (203-405 g/acre)	0	0	Cabbage looper, imported cabbageworm and diamondback moth. For best results apply in evening or on cloudy days.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

LETTUCE AND ENDIVE

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Versys	afidopyropen	Group 9D	Aphids	0.1 L/ha (0.04 L/acre)	0	12	CG 4-13A & CG 22B. Also controls green peach aphid, potato aphid, lettuce aphid and whiteflies. Monitor pest populations and reapply if necessary if thresholds are reached. Do not make sequential applications of any group 9 insecticide.
Confine Extra	mono- and di-potassium salts of phosphorous acid	Group 33	Bacterial leaf spot (<i>Xanthomonas campestris</i>)	7 L/ha (2.8 L/acre)	1	12	Begin applications when conditions are favourable to disease development. Use higher rate and shorter spray interval when disease pressure is high.
Taegro 2 Biofungicide	<i>Bacillus subtilis</i> var. <i>amyloliquefaciens</i> Strain FZB26	NC	Bottom rot	190 g/ha(77 g/acre)	0	0	Lettuce only. Suppression. Drench application. Continue applications at 7-day intervals when conditions are conducive to disease development
Harvanta 50SL	cyclaniliprole	Group 28	Cabbage looper	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period. Do not apply foliar group 28 insecticides in the same season as a soil application.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Cabbage Looper	500-1000 g/ha (203-405 g/acre)	0	0	Suppression. For best results apply in evening or on cloudy days
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	cabbage looper	370 ml/ha (150 ml/acre)	7	12	CG 4-13A & CG 22B. Also controls armyworm (beet armyworm, fall armyworm), two spotted spider mite and corn earworm. Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 6 or group 28 insecticides.

LETTUCE AND ENDIVE

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	cutworm	370-566 ml/ha (150-225 ml/acre)	7	12	CG 4-13A & CG 22B. Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 6 or group 28 insecticides.
Coragen	chlorantraniliprole	Group 28	Cutworms	250 mL/ha (101 mL/acre)	1	12	Black cutworm. Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.
Trianium P	Trichoderma harzianum Rifai strain T22	NC	Damping off	After seeding: 1.5 g/m ² in 1.33 L of water. After transplanting: 6 g in 1 L of water and apply 500 L/ha of suspension.	n/a	4	Lettuce only. Suppression. Immediately after sowing seeds or transplanting. Use preventatively. Disease suppression is not effective while soils remain cold and is more effective in neutral or acidic soils than in alkaline soils.
Trianium G	<i>Trichoderma harzianum</i> Rifai strain T22	NC	Damping off	In furrow: 15 kg/ha (6 kg/acre) In beds: 25 kg/ha (10 kg/acre)	n/a	4	Lettuce only. Suppression. Use preventatively. Disease suppression is not effective while soils remain cold and is more effective in neutral or acidic soils than in alkaline soils.
Reason	fenamidone	Group 11	Downy mildew	400 – 600 mL/ha (162 – 243 mL/acre)	2	24	Begin applications as soon as crop or environmental conditions favour disease development. Apply at a 5 -10 day interval
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Downy mildew	1.0% v:v (100 mL product in 10 L water)	0	4	Lettuce only. Suppression.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Downy mildew	463-926 mL/ha (25-50 g ai/ha)	0	when dry	Lettuce only. Suppression.

LETTUCE AND ENDIVE

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Downy mildew	400–600 mL/ha (162–243 mL/acre)	1	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use shorter application interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Botector	<i>Aureobasidium pullulans</i>	Biological	Grey mold	1 kg/ha (405 g/acre)	0	4	Lettuce, Endive, Radicchio and Parsley only. Suppression.
Harvanta 50SL	cyclaniliprole	Group 28	Leafminers	1.2 L/ha (0.49L/acre)	1	12	Do not apply foliar group 28 insecticides in the same season as a soil application.
Coragen	chlorantraniliprole	Group 28	Leafminers	250–375 mL/ha (101–152 mL/acre)	1	12	Serpentine leafminers. Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Lettuce drop (Sclerotinia white mold)	400–600 mL/ha (162–243 mL/acre)	0	12	Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

ONION, LEEKS AND SHALLOTS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
XenTari WG	<i>Bacillus thuringiensis</i> , subsp. <i>aizawai</i>	Group 11	Leek Moth	500-1000 g/ha (203-405 g/acre)	0	0	Suppression. For best results apply in evening or on cloudy days.
Pen 240	penflufen	Group 7	Onion smut	1043mL/ 100 kg of seed	—	—	Seed treatment. Do not treat seeds in Canada. For import use only.
Aprovia	benzovindiflupyr	Group 7	Purple blotch	750 mL/ha (304 mL/acre)	7	12	Do not make sequential applications of any group 7 fungicide.
Aprovia	benzovindiflupyr	Group 7	Stemphylium leaf blight	750 mL/ha (304 mL/acre)	7	12	Suppression only. Do not make sequential applications of any group 7 fungicide.

PARSNIP

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha(123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

PEAS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Beleaf	flonicamid	Group 29	Aphids	120–160 g/ha (49–65 g/acre)	7	12	Use high rate on high populations or dense foliage. See label for lygus bug control and recropping restrictions.
Cosavet DF Edge	sulphur	Group M1	Powdery mildew	1.5 kg/ha (0.6 kg/acre)	1	24	Apply at first appearance of disease and repeat at 7–10 day intervals as necessary.

PEPPERS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Anthracnose, Alternaria (early blight)	643–967 mL/ha (260–391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Harvanta 50SL	cyclaniliprole	Group 28	Armyworms	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period. Do not apply foliar group 28 insecticides in the same season as a soil application.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Broad mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

PEPPERS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cutworm	370-566 ml/ha (150-225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide. For optimal control, apply to smaller plants or when lower portions of the plant can receive adequate coverage.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Early Blight	537-926 mL/ha (217-375 mL/acre)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	European corn borer	370-566 ml/ha (150-225 ml/acre)	7	12	Also controls cabbage looper. Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide. For European corn borer control, time the application to coincide with peak egg hatch. Scout for European corn borer by monitoring egg laying and egg hatch to determine application timing.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Flea beetle	385-741 ml/ha (156-300 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Grey Mold	463-926 mL/ha (187-375 mL/acre)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development

PEPPERS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Botector	<i>Aureobasidium pullulans</i>	Biological	Grey mold	1 kg/ha (405 g/acre)	0	4	Suppression.
Vegol	canola oil	NC	Mites	2% solution, applied at 700–1900 L/ha (283–769 L/acre)	1	24	Suppression. Begin when pest appears.
Met52 EC bioinsecticide	<i>Metarhizium anisopliae</i> strain F53	NC	Mites	0.5-5.0 L/1000 L 108 mL/10 L	0	0	Reduction in numbers. Use higher application concentration when pest pressure is high.
Nimitz 480 EC	fluensulfone	NC	Nematodes	4–8 L/ha (1.62–3.24 L/acre)	—	12	Applications can be broadcast incorporated, banded and incorporated or applied by drip chemigation at least 7-days before transplanting. Use only before transplanting a crop and not in conjunction with direct seeded crops. See application rate for details. Do not feed treated commodities or residual plant material to animals. Do not freeze. Re-cropping restriction of 365 days except for labelled crops.
Rimon	novaluron	Group 15	Pepper weevil	820 mL/ha (332 mL/acre)	1	12	Suppression. Re-application may be required when monitoring indicates the need.
Exirel	cyantraniliprole	Group 28	Pepper weevil and pepper maggot	1000–1500 mL/ha (404–606 mL/acre)	1	12	Do not make a foliar application for a minimum of 60 days following a soil application of any group 28 insecticide. See label for tank-mix and crop tolerance information, guidance on adjuvant use as well as rotational crop restrictions. For information on emergency use registrations of rotational fungicides, contact an OMAFRA specialist.

PEPPERS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Phytophthora blight	600 mL/ha (243 mL/acre)	1	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use shorter application interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Powdery mildew	643-967 mL/ha (260-391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Spider mites	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato fruitworm (corn earworm)	556 ml/ha (225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato russet mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

POTATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Vegol	canola oil	NC	Aphids	2% solution, applied at 700–1900 L/ha (283–769 L/acre)	1	24	Suppression. Begin when pests appear.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Botrytis grey mould	2.5% v:v (250 mL product in 10 L of water)	0	4	Suppression. Apply at 7 day spray intervals, depending upon the level of disease pressure. Under severe disease conditions, reduce spray intervals to once every 5 days .and use stronger dilution rates if a rate range is indicated for the crop.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Brown spot	1.0-2.5% v:v (100-250 mL product in 10 L water)	0	4	Suppression. Apply at 7 day spray intervals, depending upon the level of disease pressure. Under severe disease conditions, reduce spray intervals.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Colorado potato beetle	556-670 ml/ha (225-271 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. For control of Colorado potato beetle, make the first application after approximately 50% of the egg masses have hatched and larvae are present. If two applications are needed, limit them to a single Colorado potato beetle generation per crop. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

POTATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Vibrance Ultra Potato	sedaxane + difenoconazole + mandipropamid	Group 7 + Group 3 + Group 49	Control of seed borne late blight, seed borne silver scurf, seed borne black scurf/stolon canker, fusarium dry rot. Suppression of pink rot.	32 ml/100 kg of seed	—	—	Seed Treatment. DO NOT apply more than 600 g mandipropamid/ha/year. Refer to the chart on the REVUS® label on the maximum number of foliar applications allowed following the use of VIBRANCE ULTRA POTATO Fungicide as potato seed piece treatment.
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Late Blight	400–600 mL/ha (162–243 mL/acre)	14	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Use shorter application interval when disease pressure is high. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Early blight	537-926 ml/ha (217-375 ml/ha)	0	When dry	Suppression. Begin as a preventative application when conditions favour disease development
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	European corn borer	370-556 ml/ha (150-225 ml/acre)	14	12	Apply with 0.5-1.0 %v/v non-ionic surfactant (NIS). Apply a maximum two applications at a minimum of a 7-day interval before rotating to a non-group 28 or non-group 6 insecticide. For European corn borer control, time the application to coincide with peak egg hatch. Scout for European corn borer by monitoring egg laying and egg hatch to determine application timing.

POTATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	flea beetle	370-670 ml/ha (150-271 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
StorOx	hydrogen peroxide	NC	Fusarium Dry Rot	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression. For foliar applications, be sure to use StorOx at labeled dilutions as solutions more concentrated can result in leaf necrosis for some crops
Timorex Gold	tea tree oil	NC	Late Blight	2.25 L/ha (0.91 L/acre)	2	4	Suppression. Reapply Timorex Gold throughout the growing season at 7-14 day intervals. Do not spray during the warm hours of the day and in hot seasons with temperatures above 35°C (95°F)
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Potato psyllid	370-670 ml/ha (150-271 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Revus	mandipropamid	Group 40	Seed-borne late blight	13-26 mL/100 kg of seed (5.9-11.8 mL/100 lb of seed)	—	—	Potato seed treatment. See label for application instructions.
StorOx	hydrogen peroxide	NC	Silver Scurf	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression. For foliar applications, be sure to use StorOx at labeled dilutions as solutions more concentrated can result in leaf necrosis for some crops

POTATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Spider mites	370-556 ml/ha (150-225 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Elatus A + Elatus B	azoxystrobin + benzovindiflupyr	Group 11 + Group 7	Verticillium wilt	Elatus A:4-6 mL/100 m of row (1.2-2 mL/100 ft of row) or 440-660 mL/ha(178-267 mL/acre)Elatus B:4.5-6.8 mL/100 m row (1.4-2.1 mL/100 ft of row)or 500-750 mL/ha(200-303 mL/acre)based on 90 cm (36") row spacing	—	12	Suppression. Use high rate for suppression of verticillium wilt. Also controls silver scurf, stem and stolon canker and black scurf. Apply once at planting in 50-140 L of water/ ha (5-14 gal/acre). Mount the spray nozzle so the spray is directed into the furrow as a 15-20 cm band just before the seed is covered.

POTATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia	benzovindiflupyr	Group 7	Verticillium wilt	4.5–6.8 mL/100 m row (1.4–2.1 mL/100 ft of row) or 500–750 mL/ha (200–303 mL/acre) based on 90 cm (36") row spacing	1	12	Suppression. Use high rate for suppression of verticillium wilt. Also suppresses silver scurf, stem and stolon canker and black scurf. Apply once at planting in 50–140 L of water/ha (5–14 gal/acre). Mount the spray nozzle so the spray is directed into the furrow as a 15–20 cm band just before the seed is covered.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	White mold	2.5% v:v (250 mL product in 10 L of water)	0	4	Suppression. Apply at 7 day spray intervals, depending upon the level of disease pressure. Under severe disease conditions, reduce spray intervals.

RADISH

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Cabbage Looper	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Diamondback moth	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Delegate	spinetoram	Group 5	Flea beetles	200 g/ha (80 g/acre)	3	12	Suppression. For the suppression of flea beetles apply 200 grams of product per hectare. Apply when pests appear. Maximum of three applications per year with a minimum re-treatment interval of 5 days and a preharvest interval of 3 days.
Entrust	spinosad	Group 5	Flea beetles	364 mL/ha (146 mL/acre)	3	12	Suppression. Radish and oriental radish. Apply Entrust Insecticide in sufficient water to ensure thorough and complete coverage of the foliage. Apply at emergence of adults and reapply at 7-10 day intervals as necessary.
Success	spinosad	Group 5	Flea beetles	182 mL/ha (73 mL/acre)	3	when dry	Suppression. Apply at emergence of adults and reapply at 7-10 day intervals as necessary.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Imported Cabbageworm	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.

RHUBARB

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cabbage Looper	370 ml/ha (150 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

RUTABAGAS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Delegate	spinetoram	Group 5	Flea beetles	200 g/ha (80 g/acre)	3	12	Suppression. For the suppression of flea beetles apply 200 grams of product per hectare. Apply when pests appear. Maximum of three applications per year with a minimum re-treatment interval of 5 days and a preharvest interval of 3 days.
Entrust	spinosad	Group 5	Flea beetles	364 mL/ha (146 mL/acre)	3	12	Suppression. Apply Entrust Insecticide in sufficient water to ensure thorough and complete coverage of the foliage. Apply at emergence of adults and reapply at 7-10 day intervals as necessary.

SPINACH

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Leaf-eating caterpillars	500-1000 g/ha (203-405 g/acre)	0	0	Cabbage looper, imported cabbageworm and diamondback moth. For best results apply in evening or on cloudy days.
Vegol	canola oil	NC	Mosiac virus	2% solution, applied at 700-1900 L/ha (283-769 L/acre)	1	24	Deters feeding of aphids. Do not apply in direct sunlight. See precautions on label.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Fitness	propiconazole	Group 3	Powdery mildew	240 mL/ha (97 mL/acre)	21	12	Make the first application 50 days after planting and the second application 20 days later.

SPINACH

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Diplomat 5SC	polyoxin D zinc salt	Group 19	White rust	463 mL/ha (25 g ai/ha)	0	when dry	Suppression.

SUGARBEETS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Movento 240 SC	spirotetramet	Group 23	Aphids	220–365 mL/ha (89–148 mL/acre)	1	12	See label for application details and rotational crop restrictions.
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Cercospora leaf spot	0.45 L/ha(0.18 L/acre)	7	12	Begin applications prior to disease development. Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 7 or group 11 fungicides.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Cerospora leaf spot	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression. Apply at 7 day spray intervals, depending upon the level of disease pressure. Under severe disease conditions, reduce spray intervals.
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Powdery mildew	0.45 L/ha (0.18 L/acre)	7	12	Begin applications prior to disease development. Tank-mix with a non-ionic surfactant. Do not make sequential applications of any group 7 or group 11 fungicides.

SWEET CORN

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Closer	sulfoxaflor	Group 4C	Aphids	75-150 mL/ha (30 to 61 mL/acre)	7	12	
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Northern corn leaf blight	0.3 L/ha (0.12 L/acre)	7	12	Do not make sequential applications of any group 7 or group 11 fungicides.
Fitness	propiconazole	Group 3	Northern corn leaf blight	150-300 mL/ha (61-121 mL/acre)	1	12	
Priaxor	fluxapyroxad + pyraclostrobin	Group 7 + Group 11	Rust	0.3 L/ha (0.12 L/acre)	7	12	Do not make sequential applications of any group 7 or group 11 fungicides.
Fitness	propiconazole	Group 3	Rust	300 mL/ha (121 mL/acre)	1	12	
Trivapro A + Trivapro B	azoxystrobin/ propiconazole + benzovindiflupyr	Group 3/7 + Group 11	Rust	750-1000 mL/ha (304-405 mL/acre) + 300-750 mL/ha (121-304 mL/acre)	14	12	For optimal disease control, begin applications prior to disease development. Do not make more than two sequential applications of any group 3, 7 or 11 fungicides.

SWEET POTATO

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Safer's Insecticide Soap Concentrate	potassium salts of fatty acids	NC	Aphids	1 L in 100 L water. Apply 250 L of solution per 4000 m ²	0	n/a	For greenhouse sweet potato slips. Apply 250 L spray mixture per 4000 m ² of greenhouse area. Begin treatment at first appearance of target pest. Re-apply every 14 days. Maximum 6 applications per cropping cycle.
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Aphids	2-4 g/L in 500 to 1000 L/ha water	0	4	Reduction in numbers. For greenhouse sweet potato slips. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Armyworm	500-1000 g/ha (203-405 g/acre)	0	0	For best results apply in evening or on cloudy days.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Armyworm	370 ml/ha (150 ml/acre)	14	12	Also controls cabbage looper. Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
StorOx	hydrogen peroxide	NC	Bacterial Soft Rot	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression. For foliar applications, be sure to use StorOx at labeled dilutions as solutions more concentrated can result in leaf necrosis for some crops
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Beet armyworm	370 ml/ha (150 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

SWEET POTATO

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Fall armyworm	370 ml/ha (150 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Flea beetle	370-670 ml/ha (150-271 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Leaf blights	643-967 mL/ha (260-391 mL/acre)	1	12	Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Safer's Insecticide Soap Concentrate	potassium salts of fatty acids	NC	Spider mites	1 L in 100 L water. Apply 250 L of solution per 4000 m ²	0	n/a	For greenhouse sweet potato slips. Apply 250 L spray mixture per 4000 m ² of greenhouse area. Begin treatment at first appearance of target pest. Re-apply every 14 days. Maximum 6 applications per cropping cycle.
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Thrips	2-4 g/L in 500 to 1000 L/ha water	0	4	Reduction in numbers. For greenhouse sweet potato slips. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.

SWEET POTATO

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tobacco hornworm	556 ml/ha (225 ml/acre)	14	12	Suppression. Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Variegated cutworm	370-556 ml/ha (150-225 ml/acre)	14	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Safer's Insecticide Soap Concentrate	potassium salts of fatty acids	NC	Whiteflies	1 L in 100 L water. Apply 250 L of solution per 4000 m ²	0	n/a	For greenhouse sweet potato slips. Apply 250 L spray mixture per 4000 m ² of greenhouse area. Begin treatment at first appearance of target pest. Re-apply every 14 days. Maximum 6 applications per cropping cycle.
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Whiteflies	2-4 g/L in 500 to 1000 L/ha water	0	4	Reduction in numbers. For greenhouse sweet potato slips. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.

SWISS CHARD

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Coragen	chlorantraniliprole	Group 28	Cutworms	250 mL/ha (101 mL/acre)	1	12	Black cutworm. Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.
Coragen	chlorantraniliprole	Group 28	Leafminers	250–375 mL/ha (101–152 mL/acre)	1	12	Vegetable and serpentine leafminers. Do not use on areas treated with product the previous season. Do not apply foliar group 28 insecticides in the same season as a soil application.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Anthraco-nose, Alternaria (early blight)	643–967 mL/ha (260–391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Aphids	2-4g/L in 500 to 1000 L/ha water	0	4	Reduction in numbers. For greenhouse only. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Bio Ceres G WP	<i>Beauveria bassiana</i> strain ANT-03	NC	Aphids	2-4 g/L in 500 to 1000 L/ha water	0	4	Reduction in damage. For greenhouse only. Begin treatment of crops at the first appearance of the insect pest. Do not mix with fungicide. It takes 5-7 days after the first application to observe control.
OxiDate 2.0	hydrogen peroxide + peroxyacetic acid	NC	Botrytis grey mould (<i>Botrytis cinerea</i>)	1.0% v:v (100 mL product in 10 L water)	0	4	Suppression. Apply at 7 day spray intervals, depending upon the level of disease pressure. Under severe disease conditions, reduce spray intervals.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Broad mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Harvanta 50SL	cyclaniliprole	Group 28	Cabbage looper	0.8 - 1.2 L/ha (0.32 -0.49 L/acre)	1	12	Do not make sequential applications of any group 28 insecticide after 2 consecutive applications within a 30 day period. Do not apply foliar group 28 insecticides in the same season as a soil application.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Cabbage looper	500-1000 g/ha (203-405 g/acre)	0	0	Suppression. For best results apply in evening or on cloudy days.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cabbage looper	370 ml/ha (150 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Harvanta 50SL	cyclaniliprole	Group 28	Colorado potato beetle	0.8 - 1.2 L/ha(0.32 -0.49 L/acre)	1	12	Do not apply foliar group 28 insecticides in the same season as a soil application.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Colorado potato beetle	556-670 ml/ha (225-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide. For control of Colorado potato beetle, make the first application after approximately 50% of the egg masses have hatched and larvae are present. If two applications are needed, limit them to a single Colorado potato beetle generation per crop.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Cutworms	370-566 ml/ha (150-225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. For early season cutworm control, apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Early blight	537-926 ml/ha (217-375 ml/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development
Timorex Gold	tea tree oil	NC	Early blight	1.5 - 1.88 L/ha (0.61 -0.76 L/acre)	2	4	Suppression. Use the shortest application interval under conditions that promote rapid disease development or heavier disease pressure. Do not spray during the warm hours of the day and in hot seasons with temperatures above 35°C (95°F)
Diplomat 5SC	polyoxin D zinc salt	Group 19	Early Blight	537-926 mL/ha (29-50 g ai/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Flea beetle	385-741 ml/ha (156-300 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Timorex Gold	tea tree oil	NC	Gray Mold	1.5 - 2 L/ha (0.61 - 0.81 L/acre)	2	4	Reapply Timorex Gold throughout the growing season at 7-14 day intervals. Within this range, use the shortest application interval under conditions that promote rapid disease development or heavier disease pressure. Do not spray during the warm hours of the day and in hot seasons with temperatures above 35°C (95°F)
Botector	<i>Aureobasidium pullulans</i>	Biological	Grey mold	1 kg/ha (405 g/acre)	0	4	Suppression.
Diplomat 5SC	polyoxin D zinc salt	Group 19	Grey Mold	463-926 mL/ha (25-50 g ai/ha)	0	when dry	Suppression. Begin as a preventative application when conditions favour disease development.
Taegro 2 Biofungicide	<i>Bacillus subtilis</i> var. <i>amyloliquefaciens</i> Strain FZB27	NC	Late blight	364 g/ha (147 g/acre)	0	0	Suppression. Apply after emergence as a foliar spray. Continue applications at 7-day intervals when conditions are conducive to disease development
Timorex Gold	tea tree oil	NC	Late Blight	2 - 12 L/ha (0.81 - 4.86 L/acre)	2	4	Suppression. Use the shortest application interval under conditions that promote rapid disease development or heavier disease pressure. Do not spray during the warm hours of the day and in hot seasons with temperatures above 35°C (95°F)

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Met52 EC bioinsecticide	<i>Metarhizium anisopliae</i> strain F53	NC	Mites	0.5-5.0 L/1000 L water 108 mL/10 L water	0	0	Reduction in numbers. Use higher application concentration when pest pressure is high.
Nimitz 480 EC	fluensulfone	NC	Nematodes	4-8 L/ha (1.62-3.24 L/acre)	—	12	Applications can be broadcast incorporated, banded and incorporated or applied by drip chemigation at least 7-days before transplanting. Use only before transplanting a crop and not in conjunction with direct seeded crops. See application rate for details. Do not feed treated commodities or residual plant material to animals. Do not freeze. Re-cropping restriction of 365 days except for labelled crops.
Orondis Ultra 280 SC	mandipropamid + oxathiapiprolin	Group 40 + Group 49	Phytophthora blight	600 mL/ha (243 mL/acre)	1	12	Do not use more than one in every three applications. Do not use on areas treated with product the previous season. Begin applications prior to disease development. Do not make sequential applications of any group 40 or group 49 fungicides. Tank-mix with a non-ionic surfactant. See label for recropping restrictions.
Timorex Gold	tea tree oil	NC	Powdery Mildew	2 - 12 L/ha (0.81 - 4.86 L/acre)	2	4	Use the shortest application interval under conditions that promote rapid disease development or heavier disease pressure. Do not spray during the warm hours of the day and in hot seasons with temperatures above 35°C (95°F)
Diplomat 5SC	polyoxin D zinc salt	Group 19	Powdery Mildew	278 - 926 mL/ha (15-50 g ai/ha)	0	when dry	Begin as a preventative application when conditions favour disease development.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Aprovia Top	difenoconazole + benzovindiflupyr	Group 3 + Group 7	Powdery mildew	643-967 mL/ha (260-391 mL/acre)	1	12	Begin applications prior to disease development. If disease pressure is high, use the highest rate. Do not use on areas treated with product the previous season. Do not make sequential applications of any group 3 or group 7 fungicides. See label for rotational crop restrictions.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Spider mites	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tobacco hornworm	556 ml/ha (225 ml/acre)	7	12	Suppression. Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Tomato fruitworm	500-1000 g/ha (203-405 g/acre)	0	0	Suppression. For best results apply in evening or on cloudy days.
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato fruitworm (corn earworm)	556 ml/ha (225 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.

TOMATOES

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Minecto Pro	abamectin + cyantraniliprole	Group 6 + Group 28	Tomato russet mite	385-670 ml/ha (156-271 ml/acre)	7	12	Tank-mix with a non-ionic surfactant. Apply to foliage when rain is not expected in the next 24 hours. Thorough coverage is important to obtain optimum control. Do not make a foliar application following an infurrow or soil application of any Group 28 insecticide.
Vegol	canola oil	NC	Two spotted spider mite	2% solution, applied at 700-1900 L/ha (283-769 L/acre)	1	24	Suppression. Begin when pest appears.

TURNIPS

Trade Name	Common Name	Chemical Group	Pest	Rate per hectare (rate per acre)	PHI (days)	REI (hours)	Notes
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Alternaria blight	300-500 mL/ha (123-203 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.
Delegate	spinetoram	Group 5	Flea beetles	200 g/ha (80 g/acre)	3	12	Suppression. For the suppression of flea beetles apply 200 grams of product per hectare. Apply when pests appear. Maximum of three applications per year with a minimum re-treatment interval of 5 days and a preharvest interval of 3 days.
Entrust	spinosad	Group 5	Flea beetles	364 mL/ha (146 mL/acre)	3	12	Suppression. Apply Entrust Insecticide in sufficient water to ensure thorough and complete coverage of the foliage. Apply at emergence of adults and reapply at 7-10 day intervals as necessary.
XenTari WG	<i>Bacillus thuringiensis</i> , subsp, <i>aizawai</i>	Group 11	Leaf-eating caterpillars	500-1000 g/ha (203-405 g/acre)	0	0	Cabbage looper, imported cabageworm and diamondback moth. For best results apply in evening or on cloudy days.
Luna Sensation	fluopyram + trifloxystrobin	Group 7 + Group 11	Powdery mildew	300-400 mL/ha (122-162 mL/acre)	7	12	Use high rate when disease pressure is high. Do not make sequential applications of any group 11 or more than two sequential applications of any group 7 fungicide.