

Nova Scotia Entomology Pest Priority Worksheet Vegetables - 2021

Crop Group	Crop	Target Pest	Priority Rank 2020	Priority Rank 2021	Potential Solution	Comments / Rationale
Crop Group 1: Root and tuber vegetables, (Carrot, potato, radish and sugar beet)						
1	Beet, garden	wireworm	1			
1	Carrot	Carrot weevil (spring)	1			Registrant would support Delegate pending efficacy data.
1	Carrot	Carrot rust fly (fall)	3			Cyazypyr project withdrawn; Delegate data generation; Registrant supports Assail use with efficacy data. Risk cup is full. Need to confirm use with PMRA.
1	Carrot	Wireworms	2			Registrant will support Sivanto Prime with efficacy depending on requested use pattern. Provincial efficacy data to be evaluated.
1	Carrot	Flea beetle	4			
1	Parsnip	wireworm	1			Registrant will support Sivanto Prime with efficacy depending on requested use pattern.
1	Potato	Wireworms	1			Registrant support confirmed for Botanigard, registered in GH only in Canada; Naturalis project withdrawn. Verimark / Fortenza FMC supports with efficacy
1	Potato	Flea beetle	3			Registrant supports Pyganic
1	Potato	Colorado potato beetle	2			Grandevo submitted to registrant; PureSpray Green Spray project withdrawn; Bio-Ceres G complete; Avaunt submitted to registrant; Anatis is planning to submit BioCeres-F WP

						for this use; Trident withdrawn; Vestaron would support Spear-Lep (plus coleopteran active Bt) with efficacy data
1	Radish	Cabbage maggot	1			Cyazypyr submitted to registrant
1	Radish	Wireworm	2			
1	Rutabaga	Cabbage maggot	1			Entrust under re-evaluation. If not seed treatment, Corteva could potentially support. Cimegra supported by registrant.
1	Rutabaga	Wireworms	2			Registrant will support Sivanto Prime with efficacy depending on requested use pattern. Provincial efficacy data to be evaluated.
1	Rutabaga	Aphids	3			Vector of TuMV; Add pest to Assail label; Registrant supports this use with efficacy data. Risk cup is full. Need to confirm use with PMRA. Bayer supports joint IR-4 project for Movento to enable trade.
1	Sweet potato	Golden tortoise beetle	1			Registrant could potentially support Success
<b>Crop Group 2: Leaves of root and tuber vegetables</b>						
2	Beet greens	Flea beetle	1			
2	Beet greens	Tarnished Plant bug	2			
<b>Crop Group 3: Bulb vegetables (Onion, bulb, Onion, green)</b>						
3-07	Leeks	Onion Thrips	1			Delegate WG establishing data requirements; Registrant support confirmed for Captiva Prime; Drone application technology needed;

						Vestaron would support Spear T with efficacy data
3-07	Leeks	Leek moth	2			Registrant support for Exirel pending efficacy data; Need for an alternative to Matador; Vestaron would support Spear-Lep with efficacy data
3-07	Onions, bulb	Thrips	1			Movento use accepted by PMRA; Exirel use accepted by PMRA; Success use accepted by PMRA; Entrust use accepted by PMRA; Pyganic submitted to PMRA; Vestaron would support Spear T with efficacy data.
3-07	Onions, bulb	Onion maggot	3			Registrant support for Exirel, Cimegra and Delegate pending efficacy data
3-07	Onions, bulb	wireworm	2			
3-07	Onions, green	Thrips	1			Registrant support confirmed for Captiva Prime; Vestaron would support Spear T with efficacy data. ISM-555 data generation; Beleaf, data generation; Pyganic data generation; Evergreen, data generation
3-07	Onions, green	Leek moth	2			
3-07	Garlic	Thrips	2			Registrant support confirmed for Captiva Prime; Vestaron would support Spear T with efficacy data. Registrant will support Beleaf.
3-07	Garlic	Wireworm	1			
3-07	Garlic	Leek moth	3			Registrant support confirmed for Coragen; Vestaron would support Spear-Lep with efficacy data.

						Registrant support of Exirel pending efficacy data
Crop group 4: Leafy vegetables (Celery, head lettuce, leaf lettuce and spinach)						
4	Celery	Tarnished plant bug	1			No response for Rimon. Valent support for Pyganic.
4	Celery	Aphid	2			Possibly NA11630 as a joint IR-4/PMC project subject to internal company approval.
4	Lettuce, Head (field)	Tarnished plant bug	2			NeemAzal, withdrawn; Pyganic reporting phase; Evergreen data generation; Registrant conditional support of Captiva Prime, efficacy unknown. Registrant would support Closure and Transform. Crop registered, only efficacy data needed
4	Lettuce, Head (field)	Aphids	1			Clutch project withdrawn; Pyganic reporting phase; Evergreen data generation
4	Lettuce, Head (field)	Leaf hopper	3			Registrant supports Assail use with efficacy data. Risk cup is full. Need to confirm use with PMRA. Need shorter PHI / rotation
4	Swiss chard	Tarnish plant bug	2			
4	Swiss chard	Flea beetles	1			
4	Swiss chard	Aphids	3			
4	Lettuce, leaf (field)	Tarnished plant bug	2			UPL would support Perm-Up with efficacy and tolerance data. Registrant support confirmed for Pyganic. Closer/Transform, registrant would support. Crop registered, only efficacy data needed.
4	Lettuce, leaf	Aphids	1			Clutch, project withdrawn; Pyganic

	(field)					reporting phase; Evergreen data generation, Manufacturer objective to register NA11630
Crop Group 5: Cole crops (Broccoli or cauliflower, cabbage and mustard greens)						
5	Broccoli	cutworm	2			Vestaron would support Spear-Lep with efficacy data
5	Broccoli	Cabbage maggot	1			Sepresto seed treatment - Bayer would support with efficacy data, dependent on re-evaluation outcome. Verimark is registered on GH transplant broccoli. BASF supports cimegra contingent on efficacy and crop tolerance. Residue data required. FMC also suggests Coragen (chlorantraniliprole); Need seed treatment and/or drench treatment
5	Broccoli	Swede midge	3			Success use accepted by PMRA; Entrust use accepted by PMRA; Pyganic submitted to PMRA; Evergreen withdrawn
5	Broccoli (direct seeded)	cutworm	2			Vestaron would support Spear-Lep with efficacy data
5	Broccoli (direct seeded)	fleabeetle	1			
5	Cabbage	Cabbage maggot	1			NipsIT INSIDE / Poncho, seed treatment. Screening trials needed for drench treatment; need OP replacements. Sepresto, Seed treatment - registrant would support with efficacy data, dependent on re-evaluation outcome. Verimark is registered
5	Cabbage	thrips	2			Registrant support confirmed for

						Captiva Prime; Vestaron would support Spear T with efficacy data. Exirel efficacy data needed. Beleaf is registered for thrips control on GH cucumbers - registrant will support
5	Cabbage	Swede midge	3			Success use accepted by PMRA; Entrust use accepted by PMRA
5	Cabbage, Chinese	aphids	3			Need short phi
5	Cabbage, Chinese	Flea beetle	1			
5	Cabbage, Chinese	Tarnished Plant bug	2			Beleaf use registered in the US - registrant will support
5	Cauliflower	Flea beetle	2			Registrant supports Assail use with efficacy data. Risk cup is full. Need to confirm use with PMRA.
5	Cauliflower	Cabbage maggot	1			Sepresto seed treatment - Bayer would support with efficacy data, dependent on re-evaluation outcome. Verimark is registered on GH transplant broccoli. BASF supports cimegra contingent on efficacy and crop tolerance. Residue data required.
5	Cauliflower	Swede midge	3			Success use accepted by PMRA
5	Brussel sprouts	Cabbage maggot	1			
5	Brussel sprouts	aphids	2			Registrant supports Assail use with efficacy data. Risk cup is full. Need to confirm use with PMRA. Manufacturer objective to register

						NA11630.
5	Brussel sprouts	fleabeetle	3			
5	Brussel sprouts	Swede midge	4			
5	Collards	Cabbage maggot	2			
5	Collards	Flea beetles	1			
5	Kale	Cabbage maggot	2			
5	Kale	Flea beetle	1			
Crop Group 6: Legume vegetables (Bean, pea and soybean)						
6	Soybean	Two spotted spider mite	1			Vestaron would support Spear T with data
Crop Group 8: Fruiting vegetables (Tomato, bell pepper and one cultivar of non bell pepper)						
8	Eggplant	Colorado Potato beetle	1			Anatis is planning to submit BioCeres-F WP for this use; Trident was withdrawn; Vestaron would support Spear-Lep (plus coleopteran active Bt) with efficacy data
8	Eggplant	aphid	3			
8	Eggplant	Tarnished Plant bug	2			
8	Tomato (field)	Tomato hornworm	1			
8	Tomato (field)	Colorado potato beetle	2			

8	Pepper, field	Corn borer	1			Rimon use accepted by PMRA; Coragen use accepted by PMRA; Pyganic reporting phase; Evergreen reporting phase; Vestaron would support Spear-Lep
Crop Group 9: Cucurbit Vegetables: cucumber, muskmelon, and summer squash						
9	Cantaloupe	Cucumber beetle	1			Cruiser 5FS use accepted by PMRA; Pyganic submitted to PMRA; Evergreen Crop Protection project complete
9	Cantaloupe	Tarnished Plant bug	3			
9	Cantaloupe	Two spotted spider mite	4			
9	Cantaloupe	Squash bug	2			Products needed during flowering
9	Cucumber	Tarnished plant bug	3			
9	Cucumber	Two spotted spider mite	4			Oberon 240 use accepted by PMRA; Nealta data generation; Vestaron would support Spear T for non-eriophyid mite species with efficacy data. GWN1708, registrant seeking Cat. A.
9	Cucumber	Squash bug	2			Beleaf 50 SG data generation
9	Cucumber	Cucumber beetle	1			Gaucha 480 FL, project complete; Cruiser 5FS use accepted by PMRA; Mycotrol-O project withdrawn; Evergreen Crop Protection EC project complete; Pyganic submitted to PMRA.



						Coragen and Verimark registrant support confirmed. Harvanta registered. Belchim cannot support Mako at this time
9	Pumpkin	Tarnished plant bug	3			
9	Pumpkin	Cucumber beetle	1			
9	Pumpkin	Squash bug	2			
9	Squash, summer	Tarnished plant bug	3			
9	Squash, summer	Cucumber beetle	1			Cruiser 5FS, project complete; Pyganic, submitted to PMRA; Evergreen Crop Protection EC project complete. Trident, withdrawn. Coragen, Verimark, UpCycle - registrant support pending efficacy data. Cimegra no support.
9	Squash, summer	Squash bug	2			
9	Squash, winter	Tarnished plant bug	3			
9	Squash, winter	Cucumber beetle	1			Trident, withdrawn. Coragen and Verimark - registrant support pending efficacy data
9	Squash, winter	Squash bug	2			
9	Melons	Tarnished plant bug	3			
9	Melons	Cucumber beetle	1			Coragen and Verimark - registrant support pending efficacy data

9	Melons	Squash bug	2			
Crop Group 15: (Corn, (sweet and field), barley and wheat)						
15	Sweet corn	Aphids	1			Beleaf, data generation; Need efficacy and residue data. Closer/Transform - registrant support. No support NA11630.
15	Sweet corn	Corn earworm/ecb	2			Coragen, use accepted by PMRA; Rimon, use accepted by PMRA; Intrepid - Need efficacy and residue data; Vestaron support Spear-Lep
Not Included in any crop Group						
NC	Asparagus	Asparagus beetles	1			Matador, use accepted by PMRA; Success, use accepted by PMRA; Warrior, use accepted by PMRA; Entrust, use accepted by PMRA; Success, reporting phase; Entrust, reporting phase; Delegate, reporting phase; Vestaron would support Spear T with efficacy data targeting larvae
NC	Hops	Hop aphid	2			Evergreen Crop Protection EC project withdrawn; Exirel, data generation; Malathion 85E data generation. NA11630 under consideration by Syngenta. Vestaron would support Spear T. Support for Bb-protec.
NC	Hops	Hop looper, European corn borer	1			Success 480 SC, reporting phase; Entrust SC, establishing data requirements; Delegate WG, establishing data requirements; IR-4: residue data generation for export market MRL establishment; Vestaron would support Spear-Lep
NC	Hops	Mites	3			Kanemite use accepted by PMRA; Nealta, project complete; Captiva Prime, registrant & PMC submission; Vestaron would support Spear T for non-eriophyid mite species with

						efficacy data. GWN1708, registrant seeking Cat. A.
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