

Insecticide & Miticide Registrations in Oregon Blueberries – March 2023

Dani Lightle, Pesticide Registration Research Leader, Oregon State University

danielle.lightle@oregonstate.edu

This document is a guide and not intended as a recommendation or endorsement of the pesticides listed within. Trade names are given as examples only, and other products containing the same active ingredient may also be available. Target pests named are as listed on the product label(s) consulted for this document. Pesticide registrations and labels are subject to change at any time. Read pesticide labels carefully and consult with your supplier, field representative, pest consultant or OSU Extension Service Agent prior to pesticide use.

Always remember – *the label is the law.*

Active Ingredient	Example Trade Name	IRAC ¹	REI ² (hours)	PHI ³ (days)	Aphids	Leafhoppers	Weevils (see label for spp)	Leafrollers	SWD	Cherry Fruitworm	Winter Moth	Others
Acequinocyl	Kanemite 15 SC	20B	12	1								Mites
Acetamiprid	Assail 70WP	4A	12	1	✓	✓				✓		Thrips, blueberry gall midge
Acetamiprid + Novaluron	Cormoran	4A + 15	12	8	✓	✓		✓	✓	✓		Other insects (see label)
Azadirachtin	Neemix, Azera, etc	UNE	4	0	✓		✓	✓				Others
Beauveria bassiana	Mycotrol	UNF	12	0	✓		✓					
Bifenthrin	Brigade 2EC	3A	12	1	✓	✓		✓	✓	✓		Scale, mites
Bifenazate	Acramite 4SC	20D	12	365								Mites
Bt	DiPel, Javelin, MVP	11A	4	0				✓			✓	
Burkholderia spp	Venerate XC	?	4	0	✓				✓	✓		
Carbaryl	Sevin	1A	12	7		✓	✓	✓		✓		other insects (see label)
Chlorantraniliprole	Altacor	28	4	1				✓		✓		Crown Borer
Chromobacterium spp	Grandevo WDG	?	4	0				✓		✓		
Cyantraniliprole	Exirel	28	12	3	✓				✓	✓		Blueberry Gall Midge
Cyclaniliprole	Verdepryn	28	4	1				✓	✓	✓		Thrips
Diazinon	Diazinon 50W	1B	5 days	7	✓					✓	✓	Thrips, mites
Esfenvalerate	Asana XL	3A	12	14		✓	✓	✓	✓			Grasshoppers
Fenazaquin	Magister SC	21A	12	7								Mites
Fenpropathrin	Danitol	3A	24	3		✓		✓	✓	✓	✓	Mites
Fenpyroximate	FujiMite SC	21A	12	1								Mites
Flupyradifurone	Sivanto Prime	4D	4	3	✓							
GS-Omega	Spear-Lep	32	4	0						✓	✓	Other Lepidoptera
Imidacloprid (soil)	Admire Pro	4A	12	7								
Imidacloprid (foliar)	Admire Pro	4A	12	3	✓	✓						Thrips

Active Ingredient	Example Trade Name	IRAC ¹	REI ²	PHI ³	Aphids	Leafhoppers	Weevils (see label for spp)	Leafrollers	SWD	Cherry Fruitworm	Winter Moth	Others
Indoxacarb	Avaunt	22A	12	7		✓	✓			✓	✓	
Malathion	Malathion	1B	12	1						✓		
Methomyl	Lannate	1A	48	3	✓	✓		✓	✓	✓	✓	
Methoxyfenozide	Intrepid 2F	18	4	7				✓		✓	✓	
Novaluron	Rimon	15	12	8				✓	✓		✓	
Oil	BioCover, JMS, etc	UNE	4	0							Egg	Scale
Phosmet	Imidan	1B	24	3			✓	✓	✓	✓		Blueberry maggot
Propargite	Omite 30WS	12C	10 days	365								Mites
Pyrethrin	Pyganic	3A	12	0								many - cleanup spray
Pyriproxyfen	Knack, Esteem	7C	12	7						✓		Scale
Soaps	Safer, M-Pede	?	12	0	✓							
Spinetoram	Delegate WG	5	4	1 or 3 see label				✓	✓	✓	✓	Blueberry Gall Midge, Thrips
Spinosad	Entrust SC	5	4	1				✓	✓	✓		Armyworm, Thrips
Spirotetramat	Movento	23	24	7	✓	✓						Thrips, Blueberry Gall Midge
Sulfoxaflor	Transform WG	4C	24	1	✓	✓						Scale, Stinkbug, Thrips
Tebufozide	Confirm 2F	18	4	14				✓		✓	✓	Leafrollers
Thiamethoxam (foliar)	Actara	4A	12	3	✓	✓	✓					Stinkbug
Thiamethoxam (soil)	Platinum 75 SG	4A	12	75	✓	✓						
Tolfenpyrad	Bexar	21A	12	3	✓	✓	✓	✓	✓	✓		Blueberry Gall Midge, Thrips
Zeta-cypermethrin	Mustang Maxx	3A	12	1			✓	✓				

¹IRAC: Insecticide (and Miticide) Resistance Action Committee Code Number. Insecticides/ Miticides with the same number should not be used consecutively, as they are similar in chemistry and/or mode of action and doing so may increase the risk of insecticide resistance.

²PHI: The preharvest interval (PHI) is the amount of time that must elapse between the last application of a pesticide and harvest of the crop. PHI (usually days) is found on the label in the use directions for each crop that is listed on the label.

³REI: All pesticide products have a prescribed-time restricted entry interval (REI) for worker protection. REI is clearly stated in the Agricultural Use Requirements section on the label. Generally, entry into treated areas during the prescribed time (usually hours) REI is not allowed unless Personal Protective Equipment (PPE) is worn or used.

Active Ingredients in **bold type** indicates some formulations are approved for organic production.

Fungicide Registrations in Oregon Blueberries – March 2023

Dani Lightle, Pesticide Registration Research Leader, Oregon State University

danielle.lightle@oregonstate.edu

This document is a guide and not intended as a recommendation or endorsement of the pesticides listed within. Trade names are given as examples only, and other products containing the same active ingredient may also be available. Target pests named are as listed on the product label(s) consulted for this document. Pesticide registrations and labels are subject to change at any time. Read pesticide labels carefully and consult with your supplier, field representative, pest consultant or OSU Extension Service Agent prior to pesticide use.

Always remember – *the label is the law.*

Active Ingredient	Example Trade Name	FRAC ¹	REI ² (hours)	PHI ³ (days)	Alternaria	Anthraco	Mummyberry	Phomopsis	Botrytis	Root Rot	Others
2,4-xyleneol + meta-cresol	Gallex	?	24	365							Crown gall
<i>Agrobacterium radiobacter</i>	Galltrol	?	4	365							Crown gall
<i>Aureobasidium pullulans</i>	Botector	?	4	0		✓		✓	✓		
Azoxystrobin	Abound Flowable	11	4	0	✓	✓	✓	✓			Powdery Mildew
Azoxystrobin + propiconazole	Quilt Xcel	11 + 3	12	30			✓	✓			
Azoxystrobin + difenoconazole	Quadris Top	11 + 3	12	7	✓	✓	✓				
<i>Bacillus amyloliquefaciens</i>	Stargus	BM02	4	0	✓	✓	✓		✓		
<i>Bacillus subtilis</i>	Serenade	BM02	4	0	✓	✓	✓		✓		
Boscalid + pyraclostrobin	Pristine	7 + 11	12	0	✓	✓	✓	✓	✓		
Calcium Polysulfide (lime sulfur)	Lime Sulfur, etc.	?	See label	Dormancy		✓	✓	✓			
Captan	Captan 80 WDG	M4	48	0			✓		✓		
Captan + fenhexamid	CaptEvate 68 WDG	M4 + 17	48	0		✓	✓		✓		
Chlorothalonil	Bravo Ultrex	M5	12	42		✓	✓				
Copper	Kocide, Nordox, etc	M1	24 or 48	0				✓			Bacterial Canker
Cyprodinil + fludioxonil	Switch	9 + 12	12	0	✓	✓	✓	✓	✓		
Difenoconazole + cyprodinil	Inspire Super	3 + 9	12	7	✓	✓	✓				
Fenbuconazole	Indar 2F	3	12	30	✓	✓	✓	✓			
Fenhexamid	Elevate 50WDG	17	12	0					✓		
Fluazinam	Omega 500F	29	12	30		✓		✓	✓		
Fludioxonil	Cannonball WG	12	12	0						✓	
Fluopyram + prothioconazole	Propulse	7 + 3	12	7	✓	✓			✓		
Fluopyram + pyrimethanil	Luna Tranquility	7 + 9	12	0	✓		✓		✓		
Fosetyl-al	Aliette	33	12	12 hrs	✓	✓		✓		✓	

Active Ingredient	Example Trade Name	FRAC ¹	REI ²	PHI ³	Alternaria	Anthracoze	Mummyberry	Phomopsis	Botrytis	Root Rot	Others
Iprodione	Meteor	2	24	0					✓		
Isofetamid	Kenja 400SC	7	12	7			✓		✓		
Mefenoxam	Ridomil Gold	4	48	0						✓	
Mefentrifluconazole	Cevya	3	12	0			✓				
Metalaxyl	Metastar 2E	4	48	see label						✓	
Metconazole	Quash	3	12	7	✓	✓	✓	✓	✓		
Oxathiapiprolin + Mefenoxam	Orondis Gold	49 + 4	48	1						✓	
Penthiopyrad	Fontelis	7	12	0			✓	✓	✓		
Phosphorous acid	Fosphite, Phostrol	33	4	None listed						✓	
Polyoxin-D	Ph-D, Oso	19	4	0	✓	✓			✓		
Potassium bicarbonate	Kaligreen, Milstop	?	4	1	✓	✓			✓		
Propiconazole	Tilt, PropiMax, etc.	3	12	30			✓				Powdery Mildew
Prothioconazole	Proline 480SC	3	12	7	✓	✓	✓	✓	✓		
Pydiflumetofen + Fludioxinil	Miravis Prime	7 + 12	12	0	✓	✓	✓	✓	✓		
Pyriofenone	Prolivo 300SC	50	4	0							Powdery Mildew
<i>Reynoutria sachalinensis</i>	Regalia	P5	4	0	✓	✓	✓		✓		Bacterial Canker
<i>Streptomyces lydicus</i>	Actinovate	BM02	4	0			✓		✓	✓	
Sulfur	Thiolux, etc.	M2	24	None listed							Powdery Mildew
Ziram	Ziram Granuflo	M3	48	3 wks > full bloom		✓	✓	✓	✓		

¹FRAC: Fungicide Resistance Action Committee Code Number. Fungicides with the same number should not be used consecutively, as they are similar in chemistry and/or mode of action and doing so may increase the risk of resistance.

²PHI: The preharvest interval (PHI) is the amount of time that must elapse between the last application of a pesticide and harvest of the crop. PHI (usually days) is found on the label in the use directions for each crop that is listed on the label.

³REI: All pesticide products have a prescribed-time restricted entry interval (REI) for worker protection. REI is clearly stated in the Agricultural Use Requirements section on the label. Generally, entry into treated areas during the prescribed time (usually hours) REI is not allowed unless Personal Protective Equipment (PPE) is worn or used.

Active Ingredients in **bold type** indicates some formulations are approved for organic production.

Herbicide and Misc. Registrations in Oregon Blueberries – March 2023

Dani Lightle, Pesticide Registration Research Leader, Oregon State University

danielle.lightle@oregonstate.edu

This document is a guide and not intended as a recommendation or endorsement of the pesticides listed within. Trade names are given as examples only, and other products containing the same active ingredient may also be available. Target pests named are as listed on the product label(s) consulted for this document. Pesticide registrations and labels are subject to change at any time. Read pesticide labels carefully and consult with your supplier, field representative, pest consultant or OSU Extension Service Agent prior to pesticide use.

Always remember – *the label is the law.*

Active Ingredient	Example Trade Name	HRG ¹	REI ² (hours)	PHI ³ (days)	PRE	POST	Grass	Broadleaf	Others
2,4-D amine	Saber	4	48	30		✓		✓	
2,4-D choline	Embed Extra	4	48	30		✓		✓	
Acetic acid	Vinagreen	?	48	0		✓	✓	✓	
Bentazon	Basagran, Broadloom	6	48	365 (non-bearing only)		✓		✓	sedges
Caprylic & Capric acids	Suppress EC	?	24	0		✓	✓	✓	
Carfentrazone-ethyl	Aim EC	14	12	0		✓		✓	
Clethodim	Select Max, Arrow	1	24	14		✓	✓		
Clopyralid	Stinger	4	12	30		✓		✓	
Dichlobenil	Casoron 4G	20	12	Avoid new shoots	✓			✓	some grasses
Diquat dibromide	Reglone	22	24	365 (non-bearing only)		✓	✓	✓	
Diruon	Karmex DF	7	12	Spring or fall use	✓		✓	✓	
Fluazifop-p-butyl	Fusilade DX	1	12	1		✓	✓		
Flumioxazin	Chateau	14	12	7	✓			✓	some grasses
Glufosinate	Rely 280	10	12	14		✓	✓	✓	
Glyphosate	Roundup	9	4	14, avoid foliage		✓	✓	✓	
Halosulfuron-methyl	Sandea	2	12	14	✓	✓		✓	nutsedge
Hexazinone	Velpar L CU	5	48	50	✓	✓	✓	✓	
Indaziflam	Alion	29	12	Prior to bud swell	✓		✓	✓	
Isoxaben	Trellis SC	21	12	60	✓			✓	
Mesotrione	Callisto	27	12	Pre-bloom	✓	✓		✓	some grasses
Napropamide	Devrinol 2-XT	15	12	Spring or fall use	✓		✓	✓	
Norflurazon	Solicam DF	12	12	60	✓		✓	✓	
Oryzalin	Surflan WDG	3	24	Spring or fall use	✓		✓	✓	
Paraquat	Gramoxone SL 2.0	22	24	Avoid new shoots		✓	✓	✓	

Active Ingredient	Example Trade Name	HRG ¹	REI ² (hours)	PHI ³ (days)	PRE	POST	Grass	Broadleaf	Others
Pelargonic acid	Scythe	17	12	1		✓	✓	✓	
Pendimethalin	Prowl H2O	3	24	30	✓		✓	✓	
Pronamide	Kerb SC	3	24	Fall or winter use	✓		✓	✓	
Quinclorac	Quinstar 4L	4	12	30	✓	✓	✓	✓	
Rimsulfuron	Matrix SG	2	4	21	✓	✓	✓	✓	
Sethoxydim	Poast	1	12	1		✓	✓		
Simazine	Simazine, Princep	5	12	Spring or fall use	✓		✓	✓	
S-metolachlor	Dual Magnum	15	24	28	✓		✓	✓	nutsedge
Sulfentrazone	Zeus XC	14	12	3	✓		✓	✓	nutsedge
Terbacil	Sinbar WDG	5	12	Spring or fall use	✓		✓	✓	
Trifluralin + Isoxaben	Snapshot DG	3 + 21	12	365	✓		✓	✓	

¹HRG: Herbicide Rotation Guide (from the Weed Science Society of America). Based on mode of action. To avoid selecting for herbicide-resistant weeds, do not use herbicides from the same group more than once within three years. Rather, rotate to a different group every year of the production system.

²PHI: The preharvest interval (PHI) is the amount of time that must elapse between the last application of a pesticide and harvest of the crop. PHI (usually days) is found on the label in the use directions for each crop that is listed on the label.

³REI: All pesticide products have a prescribed-time restricted entry interval (REI) for worker protection. REI is clearly stated in the Agricultural Use Requirements section on the label. Generally, entry into treated areas during the prescribed time (usually hours) REI is not allowed unless Personal Protective Equipment (PPE) is worn or used.

Active Ingredients in **bold type** indicates some formulations are approved for organic production.

Misc.

Active Ingredient	Example Trade Name	REI ¹ (hours)	PHI ² (days)	Purpose (as listed on label)
Ethephon	Ethrel	48	7	PGR, promotes fruit ripening
Iron Phosphate	Sluggo	0	0	Slugs and snails
Metaldehyde	Deadline, others	12	0	Slugs and snails
Zinc Phosphide	Prozap ZP Pellets		See labels	Voies, deer mouse, house mouse

¹REI: All pesticide products have a prescribed-time restricted entry interval (REI) for worker protection. REI is clearly stated in the Agricultural Use Requirements section on the label. Generally, entry into treated areas during the prescribed time (usually hours) REI is not allowed unless Personal Protective Equipment (PPE) is worn or used.

²PHI: The preharvest interval (PHI) is the amount of time that must elapse between the last application of a pesticide and harvest of the crop. PHI (usually days) is found on the label in the use directions for each crop that is listed on the label.