Insecticide & Miticide Registrations in Washington Blueberries – March 2023

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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 15SC	20B	12	1								Mites
Acetamiprid	Assail 70WP	4A	12	1	\checkmark	\checkmark				\checkmark		Thrips, blueberry gall midge
Acetamiprid +	Cormoran	4A +	12	8								Other insects (see label)
Novaluron		15			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark		
Azadirachtin	Neemix, Azera, etc	UNE	4	0	\checkmark		\checkmark	~				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				✓			\checkmark	
Burkholderia spp	Venerate XC	?	4	0	✓				✓	\checkmark		
Carbaryl	Sevin	1A	12	7		✓	✓	✓		✓		Other insects (see label)
Chlorantraniliprole	Altacor	28	4	1				\checkmark		✓		Crown Borer
Chromobacterium spp	Grandevo WDG	?	4	0				✓		✓		
Cyantraniliprole	Exirel	28	12	3	\checkmark				\checkmark	✓		Blueberry Gall Midge
Cyclaniliprole	Verdepryn	28	4	1				✓	✓	✓		Thrips
Diazinon	Diazinon 50W	1B	5 days	7	✓					✓	\checkmark	Thrips, mites
Esfenvalerate	Asana XL	3A	12	14		\checkmark	✓	✓	✓			Grasshoppers
Ethoprop	Mocap EC	1B	48	365								Symphylans
Fenazaquin	Magister SC	21A	12	7								Mites
Fenpropathrin	Danitol	3A	24	3		\checkmark		\checkmark	\checkmark	✓	\checkmark	Mites
Fenpyroximate	FujiMite SC	21A	12	1								Mites
Flupyradifurone	Sivanto Prime	4D	4	3	\checkmark							
GS-Omega	Spear-Lep	32	4	0						\checkmark	\checkmark	Other Lepidoptera

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Imidacloprid (soil)	Admire Pro	4A	12	7								
Imidacloprid (foliar)	Admire Pro	4A	12	3	\checkmark	✓						Thrips
Indoxacarb	Avaunt	22A	12	7		✓	✓			✓	\checkmark	
Malathion	Malathion	1B	12	1 or 2 see label						~		
Methomyl	Lannate	1A	48	3	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	
Methoxyfenozide	Intrepid 2F	18	4	7				\checkmark		\checkmark	\checkmark	
Novaluron	Rimon	15	12	8				\checkmark	~		\checkmark	
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	\checkmark							
Spinetoram	Delegate WG	5	4	3				✓	✓	✓	\checkmark	Blueberry Gall Midge, Thrips
Spinosad	Entrust SC	5	4	1				✓	~	✓		Armyworm, Thrips
Spirotetramat	Movento	23	24	7	\checkmark	\checkmark						Thrips, Blueberry Gall Midge
Sulfoxaflor	Transform WG	4C	24	1	\checkmark	\checkmark						Scale, Stinkbug, Thrips
Tebufenozide	Confirm 2F	18	4	14				✓		✓	\checkmark	Leafrollers
Thiamethoxam (foliar)	Actara	4A	12	3	\checkmark	\checkmark	\checkmark					Stinkbug
Thiamethoxam (soil)	Platinum 75 SG	4A	12	75	✓	✓						
Tolfenpyrad	Bexar	21A	12	3	\checkmark	\checkmark	\checkmark	\checkmark	✓	✓		Blueberry Gall Midge, Thrips
Zeta-cypermethrin	Mustang Maxx	3A	12	1			\checkmark	\checkmark				

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 Washington Blueberries – March 2023

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

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

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

Herbicide and Misc. Registrations in Washington Blueberries – March 2023

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

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Active Ingredient	Example Trade Name	HRG ¹	REI ² (hours)	PHI ³ (days)	PRE	POST	Grass	Broadleaf	Others
Pelargonic acid	Scythe	17	12	1		>	\checkmark	\checkmark	
Pendimethalin	Prowl H2O	3	24	30	\checkmark		\checkmark	\checkmark	
Pronamide	Kerb SC	3	24	Fall or winter use	\checkmark		\checkmark	✓	
Quinclorac	Quinstar 4L	4	12	30	✓	\checkmark	✓	✓	
Rimsulfuron	Matrix SG	2	4	21	✓	\checkmark	✓	✓	
Sethoxydim	Poast	1	12	1		\checkmark	✓		
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	\checkmark		\checkmark	✓	

¹HRG: Herbicide Rotation Guide (from the Weed Science Society of America). Based on mode of action. To avoid selecting for herbicideresistant 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.

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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		70 (Dormant use only)	Voles

Misc.

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