## **Insecticide & Miticide Registrations in Oregon Strawberries – February 2022**

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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.

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Example Trade Name	IRAC¹	REI <sup>2</sup> (hours)	PHI <sup>3</sup> (days)	Aphids	Lygus Bug	Root Weevil	Leafrollers	SWD	Mites (see label for spp)	Thrips	Others
Agri-Mek	6	12	3						✓		
Kanemite 15SC	20B	12	1						✓		
Assail 30SG	4A	12	1	✓							
Aza-Direct	UN	4	0	✓	✓		✓		✓	✓	others
Dipel DF, others	11	4	0				✓				Omnivorous leaftier
Mycotrol, others	UN	4	0	✓							Stinkbug, others
Acramite WS	20	12	1						✓		
Brigade	3A	12	0			✓	✓	✓	✓		
Vetica	16+	12	3								Armyworm, leaftiers
	28						✓				
Venerate XC	UN	4	0				✓	✓		✓	Armyworm
Sevin	1	12	7	✓			✓				Others
Coragen	28	4	1								Armyworm, loopers
Grandevo	UN	4	0	✓	✓		<b>✓</b>	<b>✓</b>	✓	✓	Armyworm
Exirel	28	12	1					<b>✓</b>		✓	Armyworm
Harvanta 50SL	28	4	1								Armyworm, loopers
Nealta	25	12	1						✓		
several	1B	72	5	✓			<b>✓</b>				others
Zeal	10B	12	1		✓				✓		Spittlebug
Magister SC	21A	12	1						✓		
Vendex 50WP	12B	48	1						✓		
Danitol 2.4EC	1B	24	2		✓			<b>✓</b>	✓		Spittlebug
FujiMite SC	21A	12	1						✓		
Beleaf 50 SG	29	12	1	✓	✓						Leafhopper, plant bugs
	Name Agri-Mek Kanemite 15SC Assail 30SG Aza-Direct Dipel DF, others Mycotrol, others Acramite WS Brigade Vetica  Venerate XC Sevin Coragen Grandevo Exirel Harvanta 50SL Nealta several Zeal Magister SC Vendex 50WP Danitol 2.4EC FujiMite SC	Name         IRAC¹           Agri-Mek         6           Kanemite 15SC         20B           Assail 30SG         4A           Aza-Direct         UN           Dipel DF, others         11           Mycotrol, others         UN           Acramite WS         20           Brigade         3A           Vetica         16 +           28         Venerate XC           Sevin         1           Coragen         28           Grandevo         UN           Exirel         28           Harvanta 50SL         28           Nealta         25           several         1B           Zeal         10B           Magister SC         21A           Vendex 50WP         12B           Danitol 2.4EC         1B           FujiMite SC         21A	Name         IRAC¹         (hours)           Agri-Mek         6         12           Kanemite 15SC         20B         12           Assail 30SG         4A         12           Aza-Direct         UN         4           Dipel DF, others         11         4           Mycotrol, others         UN         4           Acramite WS         20         12           Brigade         3A         12           Vetica         16 +         12           28         Venerate XC         UN         4           Sevin         1         12           Coragen         28         4           Grandevo         UN         4           Exirel         28         12           Harvanta 50SL         28         4           Nealta         25         12           several         1B         72           Zeal         10B         12           Magister SC         21A         12           Vendex 50WP         12B         48           Danitol 2.4EC         1B         24           FujiMite SC         21A         12	Name         IRAC¹         (hours)         (days)           Agri-Mek         6         12         3           Kanemite 15SC         20B         12         1           Assail 30SG         4A         12         1           Aza-Direct         UN         4         0           Dipel DF, others         11         4         0           Mycotrol, others         UN         4         0           Acramite WS         20         12         1           Brigade         3A         12         0           Vetica         16+         12         3           Venerate XC         UN         4         0           Sevin         1         12         7           Coragen         28         4         1           Grandevo         UN         4         0           Exirel         28         12         1           Harvanta 50SL         28         4         1           Nealta         25         12         1           several         1B         72         5           Zeal         10B         12         1           Magister SC	Agri-Mek       6       12       3         Kanemite 15SC       20B       12       1         Assail 30SG       4A       12       1         Aza-Direct       UN       4       0         Dipel DF, others       11       4       0         Mycotrol, others       UN       4       0         Acramite WS       20       12       1         Brigade       3A       12       0         Vetica       16 +       12       3         Venerate XC       UN       4       0         Sevin       1       12       7       ✓         Coragen       28       4       1         Grandevo       UN       4       0       ✓         Exirel       28       12       1         Harvanta 50SL       28       4       1         Nealta       25       12       1         several       1B       72       5         Zeal       10B       12       1         Magister SC       21A       12       1         Vendex 50WP       12B       48       1         Danitol 2.4EC       1B	Name       IRAC       (nours)       (days)       Color         Agri-Mek       6       12       3         Kanemite 15SC       20B       12       1         Assail 30SG       4A       12       1         Aza-Direct       UN       4       0       ✓         Dipel DF, others       11       4       0       ✓         Mycotrol, others       UN       4       0       ✓         Acramite WS       20       12       1       Image: Color of the color of	Agri-Mek       6       12       3         Kanemite 15SC       20B       12       1         Assail 30SG       4A       12       1         Aza-Direct       UN       4       0       ✓         Dipel DF, others       11       4       0       ✓         Mycotrol, others       UN       4       0       ✓         Acramite WS       20       12       1          Brigade       3A       12       0       ✓         Vetica       16+       12       3          Venerate XC       UN       4       0       ✓         Sevin       1       12       7       ✓         Coragen       28       4       1          Grandevo       UN       4       0       ✓       ✓         Exirel       28       12       1          Harvanta 50SL       28       4       1          Nealta       25       12       1          several       1B       72       5       ✓         Zeal       10B       12       1       ✓         Magis	Agri-Mek 6 12 3	Agri-Mek 6 12 3	Agri-Mek       6       12       3       ✓         Assail 30SG       4A       12       1       ✓         Aza-Direct       UN       4       0       ✓       ✓       ✓         Dipel DF, others       11       4       0       ✓       ✓       ✓         Mycotrol, others       UN       4       0       ✓       ✓       ✓         Acramite WS       20       12       1       ✓       ✓       ✓         Brigade       3A       12       0       ✓       ✓       ✓       ✓         Vetica       16+       12       3       ✓	Agri-Mek 6 12 3

Active Ingredient	Example Trade Name	IRAC¹	REI <sup>2</sup> (hours)	PHI <sup>3</sup> (days)	Aphids	Lygus Bug	Root Weevil	Leafrollers	SWD	Mites (see label for spp)	Thrips	Others
Flupyradifurone	Sivanto	4D	4	0	✓							
Hexythiazox	Savey DF	10	12	3						✓		
Imidacloprid (soil)	Admire Pro	4A	12	14	✓							Spittlebug
Imidacloprid (foliar)	Admire Pro	4A	12	7	✓							Spittlebug
Malathion	Malathion	1B	12	3	✓		✓	✓				Others
Methoxyfenozide	Intrepid 2F	18	4	3				✓				
Naled	Dibrom	1B	48	1	✓			✓		✓	✓	
Neem	AzaDirect, Neemix	UN	4	0	✓			✓		✓		Others
Novaluron	Rimon 0.8 EC	15	12	1		✓						
Propargite	Omite	12C	10 days	365						✓		
Pyrethrins	Pyganic	3A	12	0	✓			✓		✓		Others
Pyridaben	Nexter SC	21A	12	1	✓					✓		Leafhoppers
Pyriproxyfen	Esteem	7C	12	2	✓			✓			✓	Others
Soap	Safer, M-Pede	?	12	0	✓					✓		
Spinetoram	Radiant SC	5	4	1				✓	✓		✓	Thrips
Spinosad	Success, Entrust	5	4	1				✓	✓		✓	Thrips
Spiromesifen	Oberon 2 SC	23	12	3						✓		
Sulfoxaflor	Transform WG	4C	12	7							✓	Plant bugs
Thiamethoxam	Actara	4A	12	3	✓		✓					
Tolfenpyrad	Bexar	21A	12	1	✓	✓		✓	✓	✓	✓	

<sup>&</sup>lt;sup>1</sup>IRAC: 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.

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

<sup>&</sup>lt;sup>2</sup>PHI: 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.

<sup>&</sup>lt;sup>3</sup>REI: 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.

## Fungicide Registrations in Oregon Strawberries – February 2022

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Active Ingredient	Example Trade Name	FRAC <sup>1</sup>	REI <sup>2</sup> (hours)	PHI³ (days)	Anthracnos	Botrytis	Powdery Mildew	Root rot	Leaf spot	Others
Acibenzolar	Actigard 50WG	P1	12	0						Xanthomonas
Aureobasidium pullalans	Botector	UN	4	0	✓	✓				
Azoxystrobin	Abound	11	4	0		✓	✓			
Azoxystrobin + Difenconazole	Quadris Top	11+3	4	0	✓		✓		✓	Leaf rust
Azoxystrobin + Flutriafol	Topguard EQ	11+3	12	0	✓		✓			Leather rot
Azoxystrobin + Propiconazole	Quilt Excel	11+3	12	0	✓		✓		✓	Leaf rust
Bacillus spp.	Serenade, others	44	4	0	✓	✓	✓			
Boscalid + Pyraclostrobin	Pristine	11+7	12	0		✓	✓		<b>✓</b>	
Captan	Captan	M4	24	0		✓				
Captan + Fenhexamid	CaptEvate 68 WDG	M4+17	24	0		✓				
Chlorothalonil	Chlorothalonil	M5	12	0					✓	
Copper Hydroxide	Kocide 2000	M1	24	0	✓				✓	
Cyflufenamid	Torino	U6	4	0			✓			
Cyprodinil	Vango WG	9	12	0	✓	✓	✓			
Cyprodinil + Difenconazole	Inspire Super	9+3	12	0	✓	✓	<b>✓</b>		<b>✓</b>	
Cyprodinil + Fludioxonil	Switch	9+12	12	0		✓	<b>✓</b>			
Fenhexamid	Elevate	17	12	0		✓				
Fenpyrazamine	Protexio SC	17	12	0		✓				
Fludioxinil	Canavine WG	12	12	0	✓	✓				
Fludioxinil + Pydiflumetofen	Miravis Prime	12+7	12	0	✓	✓	✓			
Fluopyram	Velum Prime	7	12	0			✓			
Fluopyram + Pyrimethanil	Luna Tranquility	7+9	12	1		✓	✓			
Fluopyram + Trifloxystrobin	Luna Sensation	7+11	12	0	✓	✓	✓		✓	
Fluoxastrobin	Evito	11	12	1	✓		✓			

Active Ingredient	Example Trade Name	FRAC <sup>1</sup>	REI <sup>2</sup> (hours)	PHI³ (days)	Anthracnose	Botrytis	Powdery Mildew	Root Rot	Leaf Spot	Others
Fluxapyroxad + Pyraclostrobin	Merivon	7+11	12	0	✓	✓	✓		✓	
Flutianil	Gatten	U13	12	0			✓			
Fosetyl Al	Aliette WDG	P7	12	0				✓		
Iprodione	Rovral	2	24	Pre-bloom only		✓			✓	
Isofetamid	Kenja 400 SC	7	12	0	✓	✓	✓			
Mandestrobin	Intuity	11	12	0		✓	✓			
Mefenoxam	Ridomil Gold SL	4	48	0				✓		
Metalaxyl	MetaStar 2E	4	48	0				✓		Leather rot
Myclobutanil	Rally 40 WSP	3	24	0			✓		✓	
Oil	BioCover, JMS	NC	4	0			✓			
Oxathiapiprolin + Mefenoxam	Orondis Gold	49+4	48	28 (soil apps)				✓		Crown rot
Penthiopyrad	Fontelis	7	12	0		✓	✓			
Phosphorous acid	Phostrol, Fosphite	33	4	0		✓	✓	✓		
Polyoxin D	Ph-D	19	4	0	✓	✓	✓			
Potassium bicarbonate	Kaligreen, Milstop	NC	1	0		✓	<b>✓</b>		<b>\</b>	
Propiconazole	Tilt	3	12	0			✓		✓	
Propiconazole + Thiophanate Methyl	Talaris XL	3+1	24	1	✓	✓	<b>✓</b>		<b>\</b>	Leaf rust
Pyraclostrobin	Cabrio	11	12	0		✓	<b>✓</b>		<b>\</b>	
Pyrimethanil	Scala SC	9	12	1		✓				
Pyriofenone	Prolivo 300	U8	4	0			<b>✓</b>			
Quinoxyfen	Quintec	13	12	1			<b>✓</b>			
Reynoutria sachalinensis	Regalia 12	P5	4	0	✓	✓	<b>✓</b>	✓	<b>✓</b>	Crown rots, leaf blight
Streptomyces lydicus	Actinovate AG	?	4	0	✓	✓	✓	✓		Alternaria
Sulfur	Microthiol	M2	24	0			<b>✓</b>		<b>\</b>	Downy mildew
Tetraconazole	Mettle	3	12	0			<b>✓</b>			
Thiophanate Methyl	Topsin	1	24	1		✓	✓			Leaf scorch
Thiram	Thiram SC	M3	24	1		✓				
Trifloxystrobin	Flint Extra	11	12	0			✓			
Triflumizole	Procure 480SC	3	12	1			<b>✓</b>			

<sup>&</sup>lt;sup>1</sup>FRAC: 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.

<sup>&</sup>lt;sup>2</sup>PHI: The preharvest interval (PHI) is the amount of time that must elapse between the last application of a pesticide and harvest of the crop.

<sup>&</sup>lt;sup>3</sup>REI: 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 Strawberries – February 2022

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Active Ingredient	Example Trade Name	HRG¹	REI <sup>2</sup> (hours)	PHI³ (days)	PRE	POST	Grass	Broadleaf	Others
2,4-D Amine	multiple	4	48	Post-harvest or dormant		✓		✓	
2,4-D Choline	Embed Extra	4	48	Post-harvest or dormant		✓		✓	
Acetic acid	Weed Pharm (vinegar)	Ş	48	0		✓	✓	✓	
Aciflurofen	Acifluorfen 2	14	48	60		✓	✓	✓	
Ammonium nonanoate	Axxe Broad Spectrum	?	4	0	✓	✓	✓	✓	
Carfentrazone-ethyl	Aim EC	14	12	0		✓		✓	
Clethodim	Select Max	1	24	14		✓	✓		
Clopyralid	Stinger	4	12	30		✓		✓	
DCPA	Dacthal	3	12	Pre-bloom only	✓		✓	✓	
Caprylic acid	Suppress	?	24	0		✓	✓	✓	
Fluazifop-P-butyl	Fusilade DX	1	12	14		✓	✓		
Flumioxazin	Chateau	14	12	Prior to fruit set	✓		✓	✓	
Glyphosate	Roundup	9	4	14		✓	✓	✓	
Limonene	Avenger	?	4	7		✓	✓	✓	
Napropamide	Devrinol	15	24	Spring/Fall use	✓		✓	✓	
Paraquat	Gramoxone	22	24	21		✓	✓	✓	
Pelargonic acid	Scythe	27	12	1		✓	✓	✓	
Pendimethalin	Prowl H2O	3	24	35	✓		✓	✓	
Sethoxydim	Poast	1	12	7		✓	✓		
Simazine	Princep	5	12	Spring/Fall use	✓		✓	✓	
S-metolachlor	Dual Magnum	15	24	30	✓		✓	✓	Nutsedge
Sulfentrazone	Spartan	14	12	70	✓		✓	✓	
Terbacil	Sinbar	5	12	110	✓		✓	✓	

(See next page for footnotes)

- <sup>1</sup>HRG: 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.
- <sup>2</sup>PHI: 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.
- <sup>3</sup>REI: 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.

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## Misc. Registrations in Oregon Strawberries – February 2022

		REI <sup>1</sup>		
Active Ingredient	Example Trade Name	(hours)	PHI <sup>2</sup> (days)	Purpose (as listed on label)
Fluensulfone	Nimitz	12	0	Lesion and other nematodes
Iron Phosphate	Sluggo Maxx	4	0	Slugs and snails
Metaldehyde	Deadline, others	12	0	Slugs and snails

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<sup>&</sup>lt;sup>2</sup>PHI: 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.