



**BRYANT CHRISTIE INC.**  
GLOBAL SOLUTIONS

February 1, 2019

To: California Cherry Exporters  
cc: Chris Zanobini  
From: Bryant Christie Inc.  
**Re: 2019 International Cherry MRL Memo**

On behalf of the California Cherry Board

As the 2019 cherry season approaches and crop protection decisions are being made, BCI wanted to provide California cherry shippers an updated international cherry maximum residue level (MRL) memo for major export markets.

While the information within this memo is considered accurate as of February 1, 2019, shippers are reminded that international MRLs can change frequently and it is the responsibility of the shipper to work with importers to ensure that product is compliant with foreign regulations.

Bryant Christie Inc. hopes this memo will be useful to California cherry shippers and wishes the industry success in the 2019 season.

# 2019 International Cherry MRL Memo

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## I. Above-MRL Possibilities According to Industry Residue Data

- The following table indicates pesticides and markets where available pesticide testing data shows the possibility of an MRL violation. Data comes from a variety of public and private sources.
- Please note that these are not actual detections and that applying these pesticides does not automatically mean that residues will always be above the export market's MRL. Regardless, growers should exercise caution and always remain aware of MRLs in export markets.
- Additionally, growers and shippers should also pay close attention to pesticides indicated in **red brackets, { }**, in the following tables. The pesticides in red and bold in this memo indicate where a foreign MRL is more restrictive than the corresponding US MRL. While not all restrictive MRLs are problematic, these represent situations where extra care should be exercised.
- While the pesticides in the table below have data to indicate that residues could exceed MRLs, data is not available for all pesticides and it is possible that these pesticides could exhibit residues that could exceed foreign MRLs that are more restrictive than US MRLs. In other words, the below tables do not necessarily represent the entire range of pesticides that could be problematic.

<b>Pesticides with Residue Detections Capable of Exceeding MRLs in Major Markets</b>		
<b>Trade Name</b>	<b>Common Name</b>	<b>Markets in which the detected residue would have exceeded the MRL</b>
Ambush/Pounce	Permethrin	EU, Canada
Asana	Esfenvalerate	EU, South Korea, Australia
Danitol	Fenpropathrin	EU
Elite/Orius	Tebuconazole	EU
Fyfanon	Malathion	EU
Imidan	Phosmet	South Korea, Taiwan
Indar	Fenbuconazole	Australia
Misc.	O-phenylphenol	Taiwan, EU
Mustang	Zeta-Cypermethrin	Canada, Australia
Piperonyl butoxide (PBO)	Piperonyl butoxide	EU, Taiwan
Procure	Triflumizole	South Korea, EU
Renounce/Tombstone	Cyfluthrin	Canada, Taiwan, Australia
Rovral	Irpodione	EU
Sevin	Carbaryl	EU, Taiwan, South Korea
Tilt/Orbit	Propiconazole	EU
Topsin	Thiophanate-methyl	EU
Voliam	Chlorantraniliprole	Australia
Warrior II	Lambda-cyhalothrin	EU
Zeal	Etoxazole	Australia

## II. MRL Status of SWD Control Insecticides

The following table provides a summary of MRLs for insecticides investigated in Dr. Robert Van Steenwyck's efficacy trials in 2010.

Pesticide MRLs for SWD Insecticides in Major CA Cherry Export Markets								
MRL values listed in <b>red brackets, { }</b> , are more restrictive than the US MRL value. All values listed in parts per million (ppm).								
Trade Name	Common Name	US	Canada	Japan	S. Korea	Taiwan	EU	Australia
Actara/Voliam Flexi	Thiamethoxam	0.5	0.5	5	1	0.5	0.6	0.5
Ambush/Pounce	Permethrin	4	{0.1}*	5	5 Expires Dec 31, 2021	{2}	{0.05}	4
Asana	Esfenvalerate	3	{0.1}*	{2}	{0.01}*	{1}	{0.02}	{0.05}
Assail	Acetamiprid	1.2	1.2	5	1.5	{1}	1.5	2
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	{0.1}*	1	1 Expires Dec 31, 2021	{0.01}	{0.2}	0.3
Danitol	Fenpropathrin	5	5	5	5	5	{0.01}	5
Delegate	Spinetoram	0.3	1	0.5	{0.2}	{0.2}	2	{0.2}
Diazinon	Diazinon	0.2	0.75	{0.1}	{0.01}*	1	{0.01}	0.5
Fyfanon	Malathion	8	{6}	{6}	{0.5} Expires Dec 31, 2021	{0.5}	{0.02}	8
Mustang	Zeta-Cypermethrin	1	{0.1}*	2	1 Expires Dec 31, 2021	2	2	1
PyGanic	Pyrethrins	1	1	1	1 Expires Dec 31, 2021	{0.01}	1	1
Renounce/Tombstone	Cyfluthrin	0.3	{0.1}*	1	1 Expires Dec 31, 2021	{0.01}	{0.2}	0.3
Sevin	Carbaryl	10	10	10	{0.5} Expires Dec 31, 2021	{0.5}	{0.01}	---
Success/Entrust	Spinosad	0.2	1	0.2	0.2	0.2	0.2	1
Warrior II	Lambda Cyhalothrin	0.5	0.5	0.5	0.5 Pending 0.3 Apr 1, 2019	{0.4}	{0.3}	0.5
* Indicates a default value is applied because no specific MRL has been established. (Canada: 0.1 ppm; Japan: 0.01 ppm; EU: 0.01 ppm; Korea 0.01 ppm)								
"---" Indicates there is no applicable cherry MRL. While policies differ from country to country, this generally indicates that residues are not allowed.								

### III. Summary of Pesticide Residues Screening Programs in Key Export Markets

- The following table summarizes pesticides known to be analyzed in official pesticide residue screening programs in key export markets. This information is based on the most recent screening plans available for each market. This summary is for informational purposes only and is not intended to guarantee that a given pesticide will not be tested for as part of import inspection programs in foreign markets.
- **It is critical that growers, packers, and exporters understand that foreign residue screening programs change frequently, and foreign regulators may at any time choose to analyze for any of the pesticides approved for use on cherries in California.**
- Prior to shipping, exporters should first confirm that consignments comply with export market regulations.

Status of CA Cherry Pesticides in Foreign Screen Programs								
Trade Name	Common Name	Pesticide Type	Included in 2015 Canada pesticide screen?	Included in 2018 Japan pesticide screen?	Included in 2018 Korea pesticide screen?	Included in 2017 Taiwan pesticide screen?	Included in 2017 UK or 2018 EU pesticide screen?	Included in 2015 Australia pesticide screen?
2,4-D	2,4-D	Herbicide		Yes			Yes	
Abound	Azoxystrobin	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Acramite	Bifenazate	Insecticide		Yes		Yes		
Actara/Voliam Flexi	Thiamethoxam	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Admire/Nuprid	Imidacloprid	Insecticide	Yes	Yes		Yes	Yes	
Agri-mek/ Epi-Mek	Abamectin	Insecticide				Yes	Yes	
Aim/Rage/Shark	Carfentrazone-ethyl	Herbicide	Yes	Yes		Yes		
Alion	Indaziflam	Herbicide						
Ambush/Pounce	Permethrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Apogee	Prohexadione calcium	Growth Regulator						

### Status of CA Cherry Pesticides in Foreign Screen Programs

Trade Name	Common Name	Pesticide Type	Included in 2015 Canada pesticide screen?	Included in 2018 Japan pesticide screen?	Included in 2018 Korea pesticide screen?	Included in 2017 Taiwan pesticide screen?	Included in 2017 UK or 2018 EU pesticide screen?	Included in 2015 Australia pesticide screen?
Apollo	Clofentezine	Insecticide		Yes		Yes	Yes	
Aria/Beleaf/Carbine	Flonicamid	Insecticide		Yes	Yes	Yes	Yes	
Asana	Esfenvalerate	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Assail	Acetamiprid	Insecticide	Yes	Yes	Yes	Yes	Yes	
Avaunt	Indoxacarb	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Baythroid XL/Leverage	Beta-cyfluthrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Belt	Flubendiamide	Insecticide		Yes	Yes	Yes	Yes	
Boll'd/CERONE/Ethephon	Ethephon	Growth Regulator		Yes			Yes	
Botran/Britz	Dicloran	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Bravo/Concert	Chlorothalonil	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Cabrio/Insignia/Pageant	Pyraclostrobin	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Cabrio/Pristine	Boscalid	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Captan/Captec	Captan	Fungicide	Yes	Yes	Yes		Yes	Yes
Casoron	Dichlobenil	Herbicide	Yes					
Centaur/Tourismo	Buprofezin	Insecticide	Yes	Yes		Yes	Yes	
Chateau	Flumioxazin	Herbicide		Yes	Yes			
Cobalt/Proaxis	Gamma Cyhalothrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Danitol	Fenpropathrin	Insecticide	Yes	Yes	Yes	Yes	Yes	
Delegate	Spinetoram	Insecticide				Yes	Yes	
Desperado/Nexter	Pyridaben	Insecticide	Yes	Yes	Yes	Yes	Yes	
Diazinon	Diazinon	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Dimethoate	Dimethoate	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Elast/SYLLIT	Dodine	Fungicide					Yes	

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Trade Name	Common Name	Pesticide Type	Included in 2015 Canada pesticide screen?	Included in 2018 Japan pesticide screen?	Included in 2018 Korea pesticide screen?	Included in 2017 Taiwan pesticide screen?	Included in 2017 UK or 2018 EU pesticide screen?	Included in 2015 Australia pesticide screen?
Elevate	Fenhexamid	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Elite/Orius	Tebuconazole	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Envidor	Spirodiclofen	Insecticide	Yes	Yes	Yes	Yes	Yes	
Esteem	Pyriproxyfen	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Flint/Gem	Trifloxystrobin	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Fontelis	Penthiopyrad	Fungicide				Yes	Yes	
Fusilade	Fluazifop-P-butyl	Herbicide	Yes	Yes		Yes	Yes	
Fyfanon	Malathion	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Galigan/Oxyflow	Oxyfluorfen	Herbicide	Yes			Yes		Yes
Gramoxone	Paraquat dichloride	Herbicide		Yes				
Guthion	Azinphos-methyl	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Imidan	Phosmet	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Indar	Fenbuconazole	Fungicide	Yes	Yes	Yes	Yes	Yes	
Inspire	Difenoconazole	Fungicide	Yes	Yes		Yes	Yes	Yes
Intrepid	Methoxyfenozide	Insecticide	Yes	Yes	Yes	Yes	Yes	
Kelthane	Dicofol	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Kerb	Propyzamide	Herbicide	Yes	Yes			Yes	
Kixor	Saflufenacil	Herbicide				Yes		
Lorsban/Dursban	Chlorpyrifos	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Luna Experience	Fluopyram	Fungicide			Yes	Yes	Yes	
Matrix	Rimsulfuron	Herbicide			Yes			
Merivon	Fluxapyroxad	Fungicide				Yes	Yes	
Methyl Bromide	Methyl Bromide	Insecticide		Yes			Yes	



### Status of CA Cherry Pesticides in Foreign Screen Programs

Trade Name	Common Name	Pesticide Type	Included in 2015 Canada pesticide screen?	Included in 2018 Japan pesticide screen?	Included in 2018 Korea pesticide screen?	Included in 2017 Taiwan pesticide screen?	Included in 2017 UK or 2018 EU pesticide screen?	Included in 2015 Australia pesticide screen?
Misc.	1-Naphthaleneacetamide	Growth Regulator						
Misc.	1-Naphthaleneacetic acid	Growth Regulator		Yes				
Misc.	Ferbam	Fungicide					Yes**	
Misc.	Flutriafol	Fungicide	Yes	Yes	Yes	Yes	Yes	
Misc.	O-phenylphenol	Fungicide	Yes	Yes	Yes	yes	Yes	Yes
Movento	Spirotetramat	Insecticide	Yes			Yes	Yes	Yes
Mustang	Zeta-Cypermethrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Penbotec	Pyrimethanil	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Pendulum/Prowl	Pendimethalin	Herbicide	Yes	Yes	Yes	Yes	Yes	Yes
Piperonyl Butoxide	Piperonyl Butoxide	Synergist	Yes	Yes		Yes		Yes
Poast	Sethoxydim	Herbicide		Yes		Yes		Yes
Princep/Sim-Trol	Simazine	Herbicide	Yes	Yes		Yes		
Procure	Triflumizole	Fungicide	Yes	Yes	Yes	Yes		
PyGanic	Pyrethrins	Insecticide	Yes	Yes		Yes	Yes	Yes
Quash	Metconazole	Fungicide		Yes	Yes	Yes		
Quintec	Quinoxifen	Fungicide	Yes	Yes	Yes	Yes	Yes	
Rally	Myclobutanil	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Renounce/Tombstone	Cyfluthrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Ridomil	Metalaxyl/Metalaxyl-M	Fungicide	Yes	Yes		Yes	Yes	Yes
Rimon	Novaluron	Insecticide		Yes	Yes	Yes	Yes	
Roundup	Glyphosate	Herbicide		Yes			Yes	
Rovral	Iprodione	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes

### Status of CA Cherry Pesticides in Foreign Screen Programs

Trade Name	Common Name	Pesticide Type	Included in 2015 Canada pesticide screen?	Included in 2018 Japan pesticide screen?	Included in 2018 Korea pesticide screen?	Included in 2017 Taiwan pesticide screen?	Included in 2017 UK or 2018 EU pesticide screen?	Included in 2015 Australia pesticide screen?
Rubigan	Fenarimol	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Savey	Hexythiazox	Insecticide		Yes		Yes	Yes	Yes
Scholar	Fludioxonil	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Sevin	Carbaryl	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Solicam	Norflurazon	Herbicide	Yes	Yes		Yes		
Spur	Clopyralid	Herbicide						
Success/Entrust	Spinosad	Insecticide		Yes		Yes	Yes	Yes
Supracide	Methidathion	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Surflan	Oryzalin	Herbicide		Yes				
Switch	Cyprodinil	Fungicide	Yes	Yes	Yes	Yes	Yes	Yes
Tilt/Orbit	Propiconazole	Fungicide	Yes	Yes		Yes	Yes	Yes
Topsin	Thiophanate-methyl	Fungicide	Yes	Yes		Yes*	Yes	
Treflan	Trifluralin	Herbicide	Yes	Yes	Yes	Yes		
Vendex	Fenbutatin-oxide	Insecticide		Yes		Yes	Yes	
Venue	Pyraflufen-ethyl	Herbicide	Yes		Yes	Yes		
Voliam	Chlorantraniliprole	Insecticide	Yes	Yes	Yes	Yes	Yes	
Warrior II	Lambda Cyhalothrin	Insecticide	Yes	Yes	Yes	Yes	Yes	Yes
Zeal	Etoxazole	Insecticide	Yes	Yes	Yes	Yes		
Ziram	Ziram	Fungicide					Yes **	

\* Tested for as carbendazim

\*\* Tested for as dithiocarbamates

## IV. Canadian MRL Status

INSECTICIDES: Status of Canadian MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	2.5	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	0.5	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	3	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	0.09	23,839.52	---	---
Ambush/Pounce	Permethrin	4	{0.1}*	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.1}*	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	0.6	4	---	---
Asana	Esfenvalerate	3	{0.1}*	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	1.2	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	{0.1}*	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	{0.1}*	148.44	---	---
Belt	Flubendiamide	1.6	2	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	2	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	{0.1}*	---	---	---
Danitol	Fenpropathrin	5	5	10,543.68	0.01	1.86
Delegate	Spinetoram	0.3	1	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	3	---	---	---
Diazinon	Diazinon	0.2	0.75	854.85	0.002	0.01

## INSECTICIDES: Status of Canadian MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Dimethoate	Dimethoate	2 US Regional	2	---	---	---
Envidor	Spirodiclofen	1	1	1,883.34	0.06	0.06
Esteem	Pyriproxyfen	1	1.5	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	{0.1}*	---	---	---
Fujimite	Fenpyroximate	2	2	6,310.92	---	---
Fyfanon	Malathion	8	{6}	11,199.61	0.003	0.43
Imidan	Phosmet	10	{7}	11	0.005	0.091
Intrepid	Methoxyfenozide	3	6	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	{0.1}*	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	{0.1}*	203.20	---	---
Methyl Bromide	Methyl Bromide	20	{0.1}*	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	4.5	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	{0.1}*	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <i>Exempt</i>	1	74.50	0.01	0.05
Renounce/Tombstone	Cyfluthrin	0.3	{0.1}*	10	0.03	0.11
Rimon	Novaluron	8	8	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	{0.1}*	---	---	---
Savey	Hexythiazox	1	1	2,096.48	---	---

## INSECTICIDES: Status of Canadian MRLs

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- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Sevin	Carbaryl	10	10	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	1	10,177.06	0.005	0.17
Sulfoxaflor	Sulfoxaflor	3	3	---	---	---
Tolfenpyrad	Tolfenpyrad	2	2	---	---	---
Vendex	Fenbutatin-oxide	6	{0.1}*	97	---	---
Voliam	Chlorantraniliprole	2.5	2.5	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	0.5	36,810.51	0.01	0.38
Zeal	Etoxazole	1	1	6,978.51	0.02	0.02

\* Indicates where the Canadian default MRL of 0.1 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## FUNGICIDES: Status of Canadian MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	2	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	{15}	---	---	---
Bravo/Concert	Chlorothalonil	0.5	0.5	142.50	---	---
Cabrio/Insignia/Pageant	Pyraclostrobin	2.5	2.5	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	{1.7}	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{5}	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{2}	---	---	---
Elevate	Fenhexamid	10	{6}	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	{3}	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	2	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	4	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	{0.8}	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	2.5	355.75	0.05	0.06
Luna	Fluopyram	2	2	11,817.70	0.01	0.34
Misc.	Ferbam	4	7	---	---	---
Misc.	Flutriafol	1.5	1.5	---	---	---
Misc.	O-phenylphenol	5	5	---	0.017	0.017
Penbotec	Pyrimethanil	10	10	---	---	---
Procure	Triflumizole	1.5	1.5	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.2	803.80	0.02	0.02
Quintec	Quinoxifen	0.7	0.7	11,118.51	0.0008	0.21
Rally	Myclobutanil	5	{1}	26,527.88	0.001	0.6

## FUNGICIDES: Status of Canadian MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Ridomil	Metalaxyl/ Metalaxyl-M	1	1	254.25	---	---
Rovral	Iprodione	20	{5} Expires Jun 21, 2022	24,772.27	0.006	4.7
Scholar	Fludioxonil	5	5	13,668.30	0.021	0.41
Switch	Cyprodinil	2	2	54.25	---	---
Tilt/Orbit	Propiconazole	4	4	10,271.12	0.002	0.28
Topsin	Thiophanate-methyl	20	{5}	4,779.80	0.02**	0.32**
Xemium	Fluxapyroxad	3	3	3,931.14	0.01	0.07
Ziram	Ziram	7	7	724.80	---	---
* Indicates where the Canadian default MRL of 0.1 ppm applies because no specific MRL has been established.						
** Detected as carbendazim						
Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.						

## HERBICIDES: Status of Canadian MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
2,4-D	2,4-D	0.05	0.05	119.10	---	---
Aim/Rage/Shark	Carfentrazone-ethyl	0.1	0.1	7,633.54	---	---
Alion	Indaziflam	0.01	0.01	3,819.25	---	---
Casoron	Dichlobenil	0.15	{0.1}*	---	---	---
Chateau	Flumioxazin	0.02	0.02	3,140.69	---	---
Fusilade	Fluazifop-P-butyl	0.05	0.05	1,131.94	---	---
Galigan/Oxyflow	Oxyfluorfen	0.05	0.1*	17,757.66	---	---
Gramoxone	Paraquat dichloride	0.05	0.05	10,699.08	---	---
Kerb	Propyzamide	0.1	0.1*	---	---	---
Kixor	Saflufenacil	0.03	0.03	36	---	---
Matrix	Rimsulfuron	0.01	0.01	4,547.25	---	---
Pendulum/Prowl	Pendimethalin	0.1	0.1	6,220	---	---
Poast	Sethoxydim	0.2	{0.1}*	422.94	---	---
Princep/Sim-Trol	Simazine	0.25	{0.1}*	3.53	---	---
Reckon/Rely	Glufosinate-ammonium	0.25	{0.2}	11,490.85	---	---
Roundup	Glyphosate	0.2	{0.1}*	17,275.69	---	---
Solicam	Norflurazon	0.1	0.1*	13	---	---
Spur	Clopyralid	0.5	0.5	---	---	---
Surflan	Oryzalin	0.05	0.1*	1,609.18	---	---
Treflan	Trifluralin	0.05	0.05	---	---	---
Venue	Pyraflufen-ethyl	0.01	0.1*	2,981.60	---	---

\* Indicates where the Canadian default MRL of 0.1 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.



## SYNERGISTS/PLANT GROWTH REGULATORS: Status of Canadian MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Canada MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Apogee	Prohexadione calcium	0.4	0.4	4,686.70	---	---
Boll'd/CERONE/Ethephon	Ethephon	10	{8}	---	---	---
Forchlorfenuron	Forchlorfenuron	0.01	0.1*	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	0.1*	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	0.1*	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	8	---	0.017	0.064

\* Indicates where the Canadian default MRL of 0.1 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## V. Japanese MRL Status

INSECTICIDES: Status of Japanese MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	{2}	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	5	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	{2}	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	0.09	23,839.52	---	---
Ambush/Pounce	Permethrin	4	5	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.5}	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	2	4	---	---
Asana	Esfenvalerate	3	{2}	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	5	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	0.9	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	1	148.44	---	---
Belt	Flubendiamide	1.6	2	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	5	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	{0.01}*	---	---	---
Danitol	Fenpropathrin	5	5	10,543.68	0.01	1.86
Delegate	Spinetoram	0.3	0.5	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	{0.7}	---	---	---
Diazinon	Diazinon	0.2	{0.1}	854.85	0.002	0.01
Dimethoate	Dimethoate	2 US Regional	2	---	---	---

## INSECTICIDES: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Envidor	Spirodiclofen	1	3	1,883.34	0.06	0.06
Esteem	Pyriproxyfen	1	1	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	{0.01}*	---	---	---
Fujimite	Fenpyroximate	2	{0.7}	6,310.92	---	---
Fyfanon	Malathion	8	{6}	11,199.61	0.003	0.43
Imidan	Phosmet	10	{0.1}	11	0.005	0.091
Intrepid	Methoxyfenozide	3	{2}	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	2	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	1	203.20	---	---
Methyl Bromide	Methyl Bromide	20	20	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	{3}	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	2	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <i>Exempt</i>	1	74.50	0.01	0.05
Renounce/Tombstone	Cyfluthrin	0.3	1	10	0.03	0.11
Rimon	Novaluron	8	{7}	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	10	---	---	---
Savey	Hexythiazox	1	1	2,096.48	---	---
Sevin	Carbaryl	10	10	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	0.2	10,177.06	0.005	0.17
Sulfoxaflor	Sulfoxaflor	3	3	---	---	---

## INSECTICIDES: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Tolfenpyrad	Tolfenpyrad	2	{0.01}*	---	---	---
Vendex	Fenbutatin-oxide	6	10	97	---	---
Voliam	Chlorantraniliprole	2.5	{1}	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	0.5	36,810.51	0.01	0.38
Zeal	Etoxazole	1	1	6,978.51	0.02	0.02

\* Indicates where the Japanese default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## FUNGICIDES: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	3	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	{10}	---	---	---
Bravo/Concert	Chlorothalonil	0.5	0.5	142.50	---	---
Cabrio/Insignia/Pageant	Pyraclostrobin	2.5	3	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	{3}	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{25}	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{3}	---	---	---
Elevate	Fenhexamid	10	10	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	5	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	3	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	5	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	1	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	3	355.75	0.05	0.06
Luna	Fluopyram	2	5	11,817.70	0.01	0.34
Misc.	Ferbam	4	7	---	---	---
Misc.	Flutriafol	1.5	{0.01}*	---	---	---
Misc.	O-phenylphenol	5	{2}	---	0.017	0.017
Penbotec	Pyrimethanil	10	10	---	---	---
Procure	Triflumizole	1.5	3	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.2	803.80	0.02	0.02
Quintec	Quinoxifen	0.7	{0.4}	11,118.51	0.0008	0.21
Rally	Myclobutanil	5	{2}	26,527.88	0.001	0.6
Ridomil	Metalaxyl/ Metalaxyl-M	1	{0.2}	254.25	---	---
Rovral	Iprodione	20	{10}	24,772.27	0.006	4.7

## FUNGICIDES: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Scholar	Fludioxonil	5	5	13,668.30	0.021	0.41
Switch	Cyprodinil	2	2	54.25	---	---
Tilt/Orbit	Propiconazole	4	4	10,271.12	0.002	0.28
Topsin	Thiophanate-methyl	20	{3}	4,779.80	0.02**	0.32**
Xemium	Fluxapyroxad	3	3	3,931.14	0.01	0.07
Ziram	Ziram	7	7	724.80	---	---

\* Indicates where the Japanese default MRL of 0.01 ppm applies because no specific MRL has been established.

\*\* Detected as carbendazim

Note: This chart includes pesticide use information from 2016; this is the most current data available.

## HERBICIDES: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
2,4-D	2,4-D	0.05	0.2	119.10	---	---
Aim/Rage/Shark	Carfentrazone-ethyl	0.1	0.1	7,633.54	---	---
Alion	Indaziflam	0.01	0.01*	3,819.25	---	---
Casoron	Dichlobenil	0.15	{0.01}*	---	---	---
Chateau	Flumioxazin	0.02	0.02	3,140.69	---	---
Fusilade	Fluazifop-P-butyl	0.05	{0.01}*	1,131.94	---	---
Galigan/Oxyflow	Oxyfluorfen	0.05	0.05	17,757.66	---	---
Gramoxone	Paraquat dichloride	0.05	0.05	10,699.08	---	---
Kerb	Propyzamide	0.1	{0.01}*	---	---	---
Kixor	Saflufenacil	0.03	0.03	36	---	---
Matrix	Rimsulfuron	0.01	0.01*	4,547.25	---	---
Pendulum/Prowl	Pendimethalin	0.1	{0.05}	6,220	---	---
Poast	Sethoxydim	0.2	1	422.94	---	---
Princep/Sim-Trol	Simazine	0.25	{0.2}	3.53	---	---
Reckon/Rely	Glufosinate-ammonium	0.25	0.3	11,490.85	---	---
Roundup	Glyphosate	0.2	0.2	17,275.69	---	---
Solicam	Norflurazon	0.1	0.1	13	---	---
Spur	Clopyralid	0.5	0.5	---	---	---
Surflan	Oryzalin	0.05	0.08	1,609.18	---	---
Treflan	Trifluralin	0.05	0.05	---	---	---
Venue	Pyraflufen-ethyl	0.01	0.02	2,981.60	---	---

\* Indicates where the Japanese default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## SYNERGISTS/PLANT GROWTH REGULATORS: Status of Japanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Japan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Apogee	Prohexadione calcium	0.4	0.4**	4,686.70	---	---
Boll'd/CERONE/Ethephon	Ethephon	10	10	---	---	---
Forchlorfenuron	Forchlorfenuron	0.01	0.1	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	{0.01}*	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	0.1	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	8	---	0.017	0.064
* Indicates where the Japanese default MRL of 0.01 ppm applies because no specific MRL has been established.						
** The MRL was established according to the MHLW amendment “生食発 0718 第2号” from July 2018. It does not currently appear in the Japanese Food Chemical Research Foundation database.						
Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.						



## VI. European Union MRL Status

INSECTICIDES: Status of EU MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	{2}	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	0.6	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	{0.5}	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	{0.01}	23,839.52	---	---
Ambush/Pounce	Permethrin	4	{0.05}	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.02}	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	{0.4}	4	---	---
Asana	Esfenvalerate	3	{0.02}	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	1.5	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	1	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	{0.2}	148.44	---	---
Belt	Flubendiamide	1.6	2	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	2	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	{0.3}	---	---	---
Danitol	Fenpropathrin	5	{0.01}	10,543.68	0.01	1.86
Delegate	Spinetoram	0.3	2	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	{2.5}	---	---	---
Diazinon	Diazinon	0.2	{0.01}	854.85	0.002	0.01
Dimethoate	Dimethoate	2 US Regional	{0.02}	---	---	---

## INSECTICIDES: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Envidor	Spirodiclofen	1	2	1,883.34	0.06	0.06
Esteem	Pyriproxyfen	1	1	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	{1}	---	---	---
Fujimite	Fenpyroximate	2	2	6,310.92	---	---
Fyfanon	Malathion	8	{0.02}	11,199.61	0.003	0.43
Imidan	Phosmet	10	{1}	11	0.005	0.091
Intrepid	Methoxyfenozide	3	{2}	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	{0.1}	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	{0.05}	203.20	---	---
Methyl Bromide	Methyl Bromide	20	20	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	{3}	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	2	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <i>Exempt</i>	1	74.50	0.01	0.05
Renounce/Tombstone	Cyfluthrin	0.3	{0.2}	10	0.03	0.11
Rimon	Novaluron	8	{7}	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	{0.01}*	---	---	---
Savey	Hexythiazox	1	1	2,096.48	---	---
Sevin	Carbaryl	10	{0.01}	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	0.2	10,177.06	0.005	0.17
Sulfoxaflor	Sulfoxaflor	3	{1.5}	---	---	---

## INSECTICIDES: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Tolfenpyrad	Tolfenpyrad	2	{0.01}*	---	---	---
Vendex	Fenbutatin-oxide	6	{0.05}	97	---	---
Voliam	Chlorantraniliprole	2.5	{1}	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	{0.3}	36,810.51	0.01	0.38
Zeal	Etoxazole	1	{0.3}	6,978.51	0.02	0.02

\* Indicates where the EU default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## FUNGICIDES: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	2	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	{0.01}	---	---	---
Bravo/Concert	Chlorothalonil	0.5	{0.01}	142.50	---	---
Cabrio/Insignia/Pageant	Pyraclostrobin	2.5	3	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	4	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{6}	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{3}	---	---	---
Elevate	Fenhexamid	10	{7}	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	{1}	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	3	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	4	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	1	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	{0.3}	355.75	0.05	0.06
Luna	Fluopyram	2	{1.5}	11,817.70	0.01	0.34
Misc.	Ferbam	4	{0.01}*	---	---	---
Misc.	Flutriafol	1.5	{1}	---	---	---
Misc.	O-phenylphenol	5	{0.01}	---	0.017	0.017
Penbotec	Pyrimethanil	10	{4}	---	---	---
Procure	Triflumizole	1.5	1.5 <u>Pending</u> 0.02 May 01, 2019	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.2	803.80	0.02	0.02
Quintec	Quinoxyfen	0.7	{0.3}	11,118.51	0.0008	0.21

## FUNGICIDES: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Rally	Myclobutanil	5	{3}	26,527.88	0.001	0.6
Ridomil	Metalaxyl/ Metalaxyl-M	1	{0.01}	254.25	---	---
Rovral	Iprodione	20	{10} <u>Pending</u> 0.01 Jul 31, 2019	24,772.27	0.006	4.7
Scholar	Fludioxonil	5	5	13,668.30	0.021	0.41
Switch	Cyprodinil	2	2	54.25	---	---
Tilt/Orbit	Propiconazole	4	{0.01}	10,271.12	0.002	0.28
Topsin	Thiophanate-methyl	20	{0.3}	4,779.80	0.02**	0.32**
Xemium	Fluxapyroxad	3	3	3,931.14	0.01	0.07
Ziram	Ziram	7	{5}	724.80	---	---
* Indicates where the EU default MRL of 0.01 ppm applies because no specific MRL has been established.						
** Detected as carbendazim						
Note: This chart includes pesticide use information from 2016; this is the most current data available.						

## HERBICIDES: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "----" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
2,4-D	2,4-D	0.05	0.05	119.10	---	---
Aim/Rage/Shark	Carfentrazone-ethyl	0.1	{0.01}	7,633.54	---	---
Alion	Indaziflam	0.01	0.01*	3,819.25	---	---
Casoron	Dichlobenil	0.15	{0.01}	---	---	---
Chateau	Flumioxazin	0.02	0.02	3,140.69	---	---
Fusilade	Fluazifop-P-butyl	0.05	{0.01}	1,131.94	---	---
Galigan/Oxyflow	Oxyfluorfen	0.05	0.1	17,757.66	---	---
Gramoxone	Paraquat dichloride	0.05	{0.02}	10,699.08	---	---
Kerb	Propyzamide	0.1	{0.02}	---	---	---
Kixor	Saflufenacil	0.03	0.03	36	---	---
Matrix	Rimsulfuron	0.01	0.01	4,547.25	---	---
Pendulum/Prowl	Pendimethalin	0.1	{0.05}	6,220	---	---
Poast	Sethoxydim	0.2	{0.1}	422.94	---	---
Princep/Sim-Trol	Simazine	0.25	0.25	3.53	---	---
Reckon/Rely	Glufosinate-ammonium	0.25	{0.15}	11,490.85	---	---
Roundup	Glyphosate	0.2	{0.1}	17,275.69	---	---
Solicam	Norflurazon	0.1	{0.01}*	13	---	---
Spur	Clopyralid	0.5	0.5	---	---	---
Surflan	Oryzalin	0.05	{0.01}	1,609.18	---	---
Treflan	Trifluralin	0.05	{0.01}	---	---	---
Venue	Pyraflufen-ethyl	0.01	0.02	2,981.60	---	---

\* Indicates where the EU default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## SYNERGISTS/PLANT GROWTH REGULATORS: Status of EU MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	EU MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Apogee	Prohexadione calcium	0.4	0.4	4,686.70	---	---
Boll'd/CERONE/Ethephon	Ethephon	10	{5}	---	---	---
Forchlorfenuron	Forchlorfenuron	0.01	0.01	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	{0.06}	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	{0.06}	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	---	---	0.017	0.064
* Indicates where the EU default MRL of 0.01 ppm applies because no specific MRL has been established.						
Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.						

## VII. South Korean MRL Status

INSECTICIDES: Status of S. Korean MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	{0.3} Expires Dec 31, 2021	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	1	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	3	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	{0.07} Expires Dec 31, 2021	23,839.52	---	---
Ambush/Pounce	Permethrin	4	5 Expires Dec 31, 2021	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.2} Expires Dec 31, 2021	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	0.9 Expires Dec 31, 2021	4	---	---
Asana	Esfenvalerate	3	{0.01}* Expires Dec 31, 2021	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	1.5	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	0.9	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	1 Expires Dec 31, 2021	148.44	---	---
Belt	Flubendiamide	1.6	2	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	{1}	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	0.5 Pending 0.3 Apr 1, 2019	---	---	---
Danitol	Fenpropathrin	5	5	10,543.68	0.01	1.86



## INSECTICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Delegate	Spinetoram	0.3	{0.2}	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	{0.01}* Expires Dec 31, 2021	---	---	---
Diazinon	Diazinon	0.2	{0.01}* Expires Dec 31, 2021	854.85	0.002	0.01
Dimethoate	Dimethoate	2 US Regional	2 Expires Dec 31, 2021	---	---	---
Envidor	Spirodiclofen	1	2	1,883.34	0.06	0.06
Esteem	Pyriproxyfen	1	{0.2} Expires Dec 31, 2021	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	{1}	---	---	---
Fujimite	Fenpyroximate	2	2	6,310.92	---	---
Fyfanon	Malathion	8	{0.5} Expires Dec 31, 2021	11,199.61	0.003	0.43
Imidan	Phosmet	10	{0.05} Expires Dec 31, 2021	11	0.005	0.091
Intrepid	Methoxyfenozide	3	{2}	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	{0.5}	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	{0.5} Expires Dec 31, 2021	203.20	---	---
Methyl Bromide	Methyl Bromide	20	20 Expires Dec 31, 2021	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	{3}	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	1 Expires Dec 31, 2021	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <b>Exempt</b>	1 Expires Dec 31, 2021	74.50	0.01	0.05
Renounce/Tombsto	Cyfluthrin	0.3	1	10	0.03	0.11

## INSECTICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
ne			Expires Dec 31, 2021			
Rimon	Novaluron	8	{0.2} Expires Dec 31, 2021	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	2 Expires Dec 31, 2021	---	---	---
Savey	Hexythiazox	1	{0.1} Expires Dec 31, 2021	2,096.48	---	---
Sevin	Carbaryl	10	{0.5} Expires Dec 31, 2021	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	0.2	10,177.06	0.005	0.17
Sulfoxaflor	Sulfoxaflor	3	{1.5}	---	---	---
Tolfenpyrad	Tolfenpyrad	2	2	---	---	---
Vendex	Fenbutatin-oxide	6	{5} Expires Dec 31, 2021	97	---	---
Voliam	Chlorantraniliprole	2.5	{0.5}	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	0.5 Pending 0.3 Apr 1, 2019	36,810.51	0.01	0.38
Zeal	Etoxazole	1	{0.2} Expires Dec 31, 2021	6,978.51	0.02	0.02
* Indicates where the Korean default MRL of 0.01 ppm applies because no specific MRL has been established.						
Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.						

## FUNGICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	2	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	{10} Expires Dec 31, 2021	---	---	---
Bravo/Concert	Chlorothalonil	0.5	3 Expires Dec 31, 2021	142.50	---	---
Cabrio/Insignia/ Pageant	Pyraclostrobin	2.5	{2}	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	4	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{5} Expires Dec 31, 2021	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{2} Expires Dec 31, 2021	---	---	---
Elevate	Fenhexamid	10	{5}	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	{4}	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	{0.5}	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	4	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	2 Expires Dec 31, 2021	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	{2}	355.75	0.05	0.06
Luna	Fluopyram	2	{0.6}	11,817.70	0.01	0.34
Misc.	Ferbam	4	{0.2} Expires Dec 31, 2021	---	---	---

## FUNGICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Misc.	Flutriafol	1.5	{0.8} Expires Dec 31, 2021	---	---	---
Misc.	O-phenylphenol	5	{3} Expires Dec 31, 2021	---	0.017	0.017
Penbotec	Pyrimethanil	10	{4}	---	---	---
Procure	Triflumizole	1.5	{0.01}*	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.5	803.80	0.02	0.02
Quintec	Quinoxifen	0.7	{0.4} Expires Dec 31, 2021	11,118.51	0.0008	0.21
Rally	Myclobutanil	5	{2}	26,527.88	0.001	0.6
Ridomil	Metalaxyl/ Metalaxyl-M	1	{0.05} Expires Dec 31, 2021	254.25	---	---
Rovral	Iprodione	20	{10} Expires Dec 31, 2021	24,772.27	0.006	4.7
Scholar	Fludioxonil	5	{4}	13,668.30	0.021	0.41
Switch	Cyprodinil	2	2 Expires Dec 31, 2021	54.25	---	---
Tilt/Orbit	Propiconazole	4	{2}	10,271.12	0.002	0.28
Topsin	Thiophanate-methyl	20	{15}	4,779.80	0.02**	0.32**
Xemium	Fluxapyroxad	3	3	3,931.14	0.01	0.07
Ziram	Ziram	7	{0.2} Expires Dec 31, 2021	724.80	---	---

\*\* Detected as carbendazim

\* Indicates where the Korean default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most current data available.

## HERBICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
2,4-D	2,4-D	0.05	0.05	119.10	---	---
Aim/Rage/Shark	Carfentrazone-ethyl	0.1	0.1 Expires Dec 31, 2021	7,633.54	---	---
Alion	Indaziflam	0.01	0.01*	3,819.25	---	---
Casoron	Dichlobenil	0.15	0.15 Expires Dec 31, 2021	---	---	---
Chateau	Flumioxazin	0.02	{0.01}*	3,140.69	---	---
Fusilade	Fluazifop-P-butyl	0.05	{0.01}*	1,131.94	---	---
Galigan/Oxyflow	Oxyfluorfen	0.05	0.05	17,757.66	---	---
Gramoxone	Paraquat dichloride	0.05	0.05 Expires Dec 31, 2021	10,699.08	---	---
Kerb	Propyzamide	0.1	{0.02} Expires Dec 31, 2021	---	---	---
Kixor	Saflufenacil	0.03	0.03	36	---	---
Matrix	Rimsulfuron	0.01	0.01*	4,547.25	---	---
Pendulum/Prowl	Pendimethalin	0.1	{0.05}	6,220	---	---
Poast	Sethoxydim	0.2	1 Expires Dec 31, 2021	422.94	---	---
Princep/Sim-Trol	Simazine	0.25	0.25 Expires Dec 31, 2021	3.53	---	---
Reckon/Rely	Glufosinate-Ammonium	0.25	{0.15}	11,490.85	---	---
Roundup	Glyphosate	0.2	{0.05} Expires Dec 31, 2021	17,275.69	---	---

### HERBICIDES: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Solicam	Norflurazon	0.1	0.1 <i>Expires Dec 31, 2021</i>	13	---	---
Spur	Clopyralid	0.5	3 <i>Expires Dec 31, 2021</i>	---	---	---
Surflan	Oryzalin	0.05	0.05 <i>Expires Dec 31, 2021</i>	1,609.18	---	---
Treflan	Trifluralin	0.05	0.05 <i>Expires Dec 31, 2021</i>	---	---	---
Venue	Pyraflufen-ethyl	0.01	0.01*	2,981.60	---	---

\* Indicates where the Korean default MRL of 0.01 ppm applies because no specific MRL has been established.

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## SYNERGISTS/PLANT GROWTH REGULATORS: Status of S. Korean MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	S. Korea MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Apogee	Prohexadione calcium	0.4	{0.05} Expires Dec 31, 2021	4,686.70	---	---
Boll'd/CERONE/Ethephon	Ethephon	10	{5} Expires Dec 31, 2021	---	---	---
Forchlorfenuron	Forchlorfenuron	0.01	0.05 Expires Dec 31, 2021	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	{0.01}*	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	{0.01}*	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	{0.2} Expires Dec 31, 2021	---	0.017	0.064
* Indicates where the Korean default MRL of 0.01 ppm applies because no specific MRL has been established.						
Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.						

## VIII. Taiwanese MRL Status

INSECTICIDES: Status of Taiwanese MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	{2}	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	0.5	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	{0.5}	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	0.09	23,839.52	---	---
Ambush/Pounce	Permethrin	4	{2}	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.5}	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	{0.01}	4	---	---
Asana	Esfenvalerate	3	{1}	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	{1}	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	{0.5}	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	{0.01}	148.44	---	---
Belt	Flubendiamide	1.6	{1}	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	{1.5}	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	{0.4}	---	---	---
Danitol	Fenpropathrin	5	5	10,543.68	0.01	1.86
Delegate	Spinetoram	0.3	{0.2}	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	{0.5}	---	---	---
Diazinon	Diazinon	0.2	1	854.85	0.002	0.01
Dimethoate	Dimethoate	2 US Regional	{0.01}	---	---	---



## INSECTICIDES: Status of Taiwanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Envidor	Spirodiclofen	1	{0.8}	1,883.34	0.06	0.06
Esteem	Pyriproxyfen	1	{0.5}	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	{0.01}	---	---	---
Fujimite	Fenpyroximate	2	{0.3}	6,310.92	---	---
Fyfanon	Malathion	8	{0.5}	11,199.61	0.003	0.43
Imidan	Phosmet	10	{2}	11	0.005	0.091
Intrepid	Methoxyfenozide	3	{2}	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	{0.5}	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	1	203.20	---	---
Methyl Bromide	Methyl Bromide	20	---	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	{3}	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	2	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <i>Exempt</i>	{0.01}	74.50	0.01	0.05
Renounce/Tombstone	Cyfluthrin	0.3	{0.01}	10	0.03	0.11
Rimon	Novaluron	8	{2}	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	{1}	---	---	---
Savey	Hexythiazox	1	1	2,096.48	---	---
Sevin	Carbaryl	10	{0.5}	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	0.2	10,177.06	0.005	0.17

## INSECTICIDES: Status of Taiwanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes "---" indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Sulfoxaflor	Sulfoxaflor	3	{0.01}	---	---	---
Tolfenpyrad	Tolfenpyrad	2	{0.01}	---	---	---
Vendex	Fenbutatin-oxide	6	{2}	97	---	---
Voliam	Chlorantraniliprole	2.5	{1}	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	{0.4}	36,810.51	0.01	0.38
Zeal	Etoxazole	1	1	6,978.51	0.02	0.02

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## FUNGICIDES: Status of Taiwanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
- Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs
- Dashes “---” indicate that no MRL has been established in the market

Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	{1}	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	{5}	---	---	---
Bravo/Concert	Chlorothalonil	0.5	0.5	142.50	---	---
Cabrio/Insignia/Pageant	Pyraclostrobin	2.5	{1}	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	{1.7}	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{25}	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{2}	---	---	---
Elevate	Fenhexamid	10	{7}	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	{2}	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	3	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	4	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	1	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	{1}	355.75	0.05	0.06
Luna	Fluopyram	2	{0.7}	11,817.70	0.01	0.34
Misc.	Ferbam	4	{2.5}	---	---	---
Misc.	Flutriafol	1.5	{1}	---	---	---
Misc.	O-phenylphenol	5	{0.01}	---	0.017	0.017
Penbotec	Pyrimethanil	10	{4}	---	---	---
Procure	Triflumizole	1.5	{1}	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.2	803.80	0.02	0.02
Quintec	Quinoxifen	0.7	{0.4}	11,118.51	0.0008	0.21
Rally	Myclobutanil	5	{1}	26,527.88	0.001	0.6
Ridomil	Metalaxyl/ Metalaxyl-M	1	{0.2}	254.25	---	---

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Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Rovral	Iprodione	20	{5}	24,772.27	0.006	4.7
Scholar	Fludioxonil	5	5	13,668.30	0.021	0.41
Switch	Cyprodinil	2	2	54.25	---	---
Tilt/Orbit	Propiconazole	4	{1}	10,271.12	0.002	0.28
Topsin	Thiophanate-methyl	20	{5}	4,779.80	0.02**	0.32**
Xemium	Fluxapyroxad	3	{2}	3,931.14	0.01	0.07
Ziram	Ziram	7	{2.5}	724.80	---	---

\*\* Detected as carbendazim

Note: This chart includes pesticide use information from 2016; this is the most current data available.

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Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
2,4-D	2,4-D	0.05	0.2	119.10	---	---
Aim/Rage/Shark	Carfentrazone-ethyl	0.1	0.1	7,633.54	---	---
Alion	Indaziflam	0.01	---	3,819.25	---	---
Casoron	Dichlobenil	0.15	---	---	---	---
Chateau	Flumioxazin	0.02	---	3,140.69	---	---
Fusilade	Fluazifop-P-butyl	0.05	{0.01}	1,131.94	---	---
Galigan/Oxyflow	Oxyfluorfen	0.05	{0.03}	17,757.66	---	---
Gramoxone	Paraquat dichloride	0.05	{0.01}	10,699.08	---	---
Kerb	Propyzamide	0.1	---	---	---	---
Kixor	Saflufenacil	0.03	{0.01}	36	---	---
Matrix	Rimsulfuron	0.01	---	4,547.25	---	---
Pendulum/Prowl	Pendimethalin	0.1	{0.01}	6,220	---	---
Poast	Sethoxydim	0.2	0.2	422.94	---	---
Princep/Sim-Trol	Simazine	0.25	{0.01}	3.53	---	---
Reckon/Rely	Glufosinate-ammonium	0.25	{0.1}	11,490.85	---	---
Roundup	Glyphosate	0.2	0.2	17,275.69	---	---
Solicam	Norflurazon	0.1	{0.01}	13	---	---
Spur	Clopyralid	0.5	---	---	---	---
Surflan	Oryzalin	0.05	---	1,609.18	---	---
Treflan	Trifluralin	0.05	{0.01}	---	---	---
Venue	Pyraflufen-ethyl	0.01	0.01	2,981.60	---	---

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## SYNERGISTS/PLANT GROWTH REGULATORS: Status of Taiwanese MRLs

- MRL values listed in **red brackets { }** are more restrictive than the US MRL value
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Trade Name	Common Name	US MRL (ppm)	Taiwan MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Apogee	Prohexadione calcium	0.4	0.4	4,686.70	---	---
Boll'd/CERONE/Ethephon	Ethephon	10	{3}	---	---	---
Forchlorfenuron	Forchlorfenuron	0.01	---	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	---	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	-- <i>Exempt</i>	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	{0.01}	---	0.017	0.064

Note: This chart includes pesticide use information from 2016; this is the most recent data that is currently available.

## IX. Australian MRL Status

INSECTICIDES: Status of Australian MRLs						
<ul style="list-style-type: none"> <li>MRL values listed in <b>red brackets { }</b> are more restrictive than the US MRL value</li> <li>Cells shaded in yellow indicate actual residues detected in USDA and industry tests higher than foreign MRLs</li> <li>Dashes "---" indicate that no MRL has been established in the market</li> </ul>						
Trade Name	Common Name	US MRL (ppm)	Australia MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Acramite	Bifenazate	2.5	2.5	5,672.20	0.02	0.02
Actara/Voliam Flexi	Thiamethoxam	0.5	0.5	5,471.48	0.002	0.032
Admire/Nuprid	Imidacloprid	3	3	9,549.13	0.01	0.35
Agri-mek/ Epi-Mek	Abamectin	0.09	0.09	23,839.52	---	---
Ambush/Pounce	Permethrin	4	4	662.07	0.01	0.31
Apollo	Clofentezine	1	{0.1}	1,565.13	---	---
Aria/Beleaf/Carbine	Flonicamid	0.6	0.6	4	---	---
Asana	Esfenvalerate	3	{0.05}	2,258.88	0.014	0.04
Assail	Acetamiprid	1.2	2	324.75	0.03	0.18
Avaunt	Indoxacarb	0.9	2	---	0.03	0.03
Baythroid XL/Leverage 360	Beta-cyfluthrin	0.3	0.3	148.44	---	---
Belt	Flubendiamide	1.6	1.6	199.85	---	---
Centaur/Tourismo	Buprofezin	1.9	1.9	106	---	---
Cobalt/Proaxis	Gamma Cyhalothrin	0.5	0.5	---	---	---
Danitol	Fenpropathrin	5	5	10,543.68	0.01	1.86
Delegate	Spinetoram	0.3	{0.2}	2,603.13	0.01	0.06
Desperado/Nexter	Pyridaben	3	{0.5}	---	---	---
Diazinon	Diazinon	0.2	0.5	854.85	0.002	0.01
Dimethoate	Dimethoate	2 US Regional	{0.2}	---	---	---
Envidor	Spirodiclofen	1	1	1,883.34	0.06	0.06

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Trade Name	Common Name	US MRL (ppm)	Australia MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Esteem	Pyriproxyfen	1	1	1,510.60	0.002	0.03
Etofenprox	Etofenprox	5	---	---	---	---
Fujimite	Fenpyroximate	2	2	6,310.92	---	---
Fyfanon	Malathion	8	8	11,199.61	0.003	0.43
Imidan	Phosmet	10	{1}	11	0.005	0.091
Intrepid	Methoxyfenozide	3	3	13,366.05	0.002	0.1
Kanemite	Acequinocyl	1	{0.5}	4	---	---
Lorsban/Dursban	Chlorpyrifos	1	1	203.20	---	---
Methyl Bromide	Methyl Bromide	20	20	1,334,643 (C)	---	---
Movento	Spirotetramat	4.5	4.5	2,970.03	---	---
Mustang	Zeta-Cypermethrin	1	1	6,647.61	0.02	1
PyGanic	Pyrethrins	1 <i>Exempt</i>	1	74.50	0.01	0.05
Renounce/Tombstone	Cyfluthrin	0.3	0.3	10	0.03	0.11
Rimon	Novaluron	8	8	---	---	---
Safari	Dinotefuran	2 US Section 18: Expires Dec 31, 2021	---	---	---	---
Savey	Hexythiazox	1	1	2,096.48	---	---
Sevin	Carbaryl	10	---	48.20	0.003	0.84
Success/Entrust	Spinosad	0.2	1	10,177.06	0.005	0.17
Sulfoxaflor	Sulfoxaflor	3	3	---	---	---
Tolfenpyrad	Tolfenpyrad	2	---	---	---	---
Vendex	Fenbutatin-oxide	6	6	97	---	---



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Trade Name	Common Name	US MRL (ppm)	Australia MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Voliam	Chlorantraniliprole	2.5	{1}	160.65	0.01	0.02
Warrior II	Lambda Cyhalothrin	0.5	0.5	36,810.51	0.01	0.38
Zeal	Etoxazole	1	1	6,978.51	0.02	0.02

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Trade Name	Common Name	US MRL (ppm)	Australia MRL (ppm)	2016 CA Acreage	2007-2018 Residue Testing Results (Low)	2007-2018 Residue Testing Results (High)
Abound	Azoxystrobin	2	{1.5}	977.90	0.0005	0.16
Botran/Britz	Dicloran	20	---	---	---	---
Bravo/Concert	Chlorothalonil	0.5	10	142.50	---	---
Cabrio/Insignia/Pageant	Pyraclostrobin	2.5	3	26,037.98	0.002	0.38
Cabrio/Pristine	Boscalid	3.5	3.5	22,045.30	0.004	0.38
Captan/Captec	Captan	50	{15}	23.08	0.17	0.53
Elast/SYLLIT	Dodine	5	{3}	---	---	---
Elevate	Fenhexamid	10	10	7,773.53	0.01	1.21
Elite/Orius	Tebuconazole	5	5	17,009.90	0.01	1.97
Flint/Gem	Trifloxystrobin	2	5	12,145.70	0.001	0.11
Fontelis	Penthiopyrad	4	5	6,888.02	0.02	0.31
Indar	Fenbuconazole	1	{0.02}	737.29	0.003	0.18
Inspire	Difenoconazole	2.5	2.5	355.75	0.05	0.06
Luna	Fluopyram	2	3	11,817.70	0.01	0.34
Misc.	Ferbam	4	{3}	---	---	---
Misc.	Flutriafol	1.5	1.5	---	---	---
Misc.	O-phenylphenol	5	{0.1}	---	0.017	0.017
Penbotec	Pyrimethanil	10	10	---	---	---
Procure	Triflumizole	1.5	1.5	6,934.34	0.01	0.72
Quash	Metconazole	0.2	0.2	803.80	0.02	0.02
Quintec	Quinoxifen	0.7	0.7	11,118.51	0.0008	0.21
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Poast	Sethoxydim	0.2	0.2	422.94	---	---
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Reckon/Rely	Glufosinate-ammonium	0.25	{0.05}	11,490.85	---	---
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Forchlorfenuron	Forchlorfenuron	0.01	---	---	---	---
Misc.	1-Naphthaleneacetamide	0.1	---	---	---	---
Misc.	1-Naphthaleneacetic acid	0.1	---	---	---	---
Piperonyl Butoxide	Piperonyl Butoxide	8 <i>Exempt</i>	8	---	0.017	0.064

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