

## Effective SWD insecticides registered for use in OR and WA strawberries, and considerations for their use.

Active Ingredient	Trade Name (Examples only)	Insecticide Resistance Management Group (IRAC)	PHI	REI	MRL <sup>1</sup> USA (ppm)	MRL <sup>1</sup> Japan (ppm)	MRL <sup>1</sup> EU/UK (ppm)	MRL <sup>1</sup> Canada (ppm)	Bee hazard <sup>2</sup>	Surface water hazard <sup>3</sup>	Residual effects (days)	Potential for controlling SWD <sup>4</sup>
Acetamiprid	Assail	4A	1 day	12 hrs	0.6	3.0	0.01	NT	y	n	1-3	F
Bifenthrin	Brigade	3A	0 day	12 hrs	3.0	2.0	0.5	NT	y	y	10-14	E
Carbaryl	Sevin	1A	7 days	12 hrs	4.0	7.0	0.05	7.0	y	y	10-14	G
Diazinon	Diazinon	1B	5 days	5 days	0.5	0.1	0.01	0.75	y	y	7-10	E
Endosulfan	Thionex	2A	4 days	5 or 9 days	2.0	0.5	0.05	1.0	y	y	?	F
Fenpropathrin	Danitol	3A	2 days	24 hrs	2.0	5.0	2.0	NT	y	y	10-14	E
Imidacloprid (foliar)	Provado 1.6F	4A	7 days	12 hrs	0.5	0.5	0.5	NT	y	y	1-3	F
Malathion	Malathion	1B	3 day	12 hrs	8.0	0.5	0.02	8.0	y	y	7-10	E
Pyrethrin	Pyganic*	3A	0 day	12 hrs	?	?	?	?	y	y	0	G
Spinetoram	Radiant	5	1 days	4 hrs	1.0	2.0	0.2	0.7	y	y	5-7	E
Spinosad	Entrust*, Success	5	1 days	4 hrs	1.0	1.0	0.3	0.7	y	y	5-7	G-E
Thiamethoxam (foliar)	Actara	4A	3 days	12 hrs	0.3	2.0	0.05	0.02	y	y	1-3	F

<sup>1</sup> MRL = Maximum Residue Level expressed in parts per million. NT = no tolerance listed. MRLs for other countries can be found at: [www.mrlatabase.com](http://www.mrlatabase.com)

<sup>2</sup> y = Bee hazard indicated on label; n = No bee hazard indicated. For details, consult label or Extension publication PNW591:How to Reduce Bee Poisoning from Pesticides (<http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/20772/pnw591.pdf>)

<sup>3</sup> Surface water hazard indicated on pesticide label. See specific label for precautions.

<sup>4</sup> E = 90-100% mortality; G = 70-90% mortality; F = 50-70% mortality. This information is an efficacy rating only, based on information from field and lab experiments, and does not include potential negative impacts on IPM programs, beneficial arthropods, or the environment.

\* Approved for organic production.

### Considerations:

- Make application only when trap count indicates adults are present AND fruit is susceptible (i.e. fruit has started to turn color)
- Rotate insecticide chemical classes (IRAC) to reduce likelihood of resistance.
- Thorough coverage is essential to achieve control.
- Consider other pests that may also be controlled when choosing an insecticide for SWD.
- Be mindful of protecting bees and other beneficial organisms; all insecticides listed above will impact IPM programs.
- Aerial applications may result in reduced control compared to ground applications. All above products allow aerial application EXCEPT diazinon.
- Be aware of buffer restrictions, surface water hazard, PHIs, REIs. Consider MRLs if fruit is destined for export market.

This table is a guideline and not a legal document. Changes in registration status may occur. Consult the pesticide label before application. The label is the law.

For further information, contact Joe DeFrancesco, OSU.

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