

Activity of Insecticides and Miticides on Grape Pests and Impact on Honeybees

Use insecticides only for insects listed on the product label for the crop. Some of the information provided in this table is based on information from other areas. It is intended to assist the grower in choosing the best insecticide for control of pests listed on the product label, while managing resistance and avoiding unnecessary sprays for non-target pests. Efficacy can be affected by rate of the product.

	Product Name	Grape berry moth	Leafhoppers	Phylloxera	Japanese beetle	Erineum mite	MALB	Wasps	European red mite	Climbing cutworm	Flea beetle	Grape mealybug	Soft Scales	Spotted wing drosophila	Honeybee Toxicity ¹
1B	Malathion 85 E	1	2 *	—	—	—	3 *	3	2 *	—	—	2 *exp	2 *exp	1 *	HT
3	Perm-UP EC	3 *	2 *	—	2	—	—	—	0	3	3	—	2 exp	2	HT
3	Pounce 384 EC	3 *	2 *	—	2	—	—	—	0	3 *	3	—	2 exp	2	HT
3	Pyganic EC 1.4 II	2	2 *	—	1	—	—	—	0	—	—	—	—	2	HT
3	UP-Cyde 2.5 EC	3 *	2 *	—	—	—	3 *	3 *	0	—	3	—	2 exp	2	HT
4A	Aceta 70 WP	1 *	3 *	2 *	2 *	—	—	—	0	—	2	2 exp	2 exp	2	MT
4A	Admire 240 Flowable	—	3 *	2	—	—	—	—	0	—	2	2 exp	2 exp	2	HT
4A	Assail 70 WP	1 *	3 *	2 *	2 *	—	—	—	0	—	2	2 exp	2 exp	2	MT
4A	Clutch 50 WDG	—	3 *	2 *	—	—	—	—	0	—	2	2 *exp	2 exp	2	HT
4C	Closer	—	1 *	—	—	—	—	—	0	—	—	—	0	2	HT
4D	Sivanto Prime	—	3 *	—	—	—	—	—	—	—	—	2 exp	—	—	MT
5	Delegate	3 *	—	—	—	—	—	—	0	3	2	—	0	3 *	HT
5	Entrust	2 *	—	—	—	—	—	—	0	—	2	—	0	2 *	HT
5	Scorpio Ant & Insect Bait	3	—	—	—	—	—	—	0	1	—	1	1	1 *	HT
5	Success	2 *	—	—	—	—	—	—	0	—	2	—	0	3 *	HT
6	Agri-Mek SC	0	—	—	—	1	—	—	2 *	—	—	—	0	0	HT
11	BioProtec PLUS	2 *	0	0	0	0	0	0	0	—	0	0	0	0	NT
11	Dipel 2X DF	2 *	0	0	0	0	0	0	0	—	0	0	0	0	NT
11	XenTari	2 *	0	0	0	0	0	0	0	—	0	0	0	0	NT
18	Intrepid 240 F	3 *	—	—	—	—	—	—	0	3 *	—	—	0	0	NT

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20D	Acramite 50 WS	0	0	0	0	—	0	0	2 *	0	0	0	0	0	MT
21	Nexter WP, Nexter SC	0	0	0	0	1	0	0	2 *	0	0	0	0	0	HT
23	Envidor 240 SC	0	0	0	0	—	0	0	3 *	0	0	—	0	0	MT
23	Movento 240 SC	0	—	3 *	0	2	0	0	—	0	0	3 *	1 *	0	HT ²
23	Spiro SC	0	0	0	0	—	0	0	3 *	0	0	—	0	0	MT
25	Nealta	0	0	0	0	0	0	0	3 *	0	0	0	0	0	NT
28	Altacor	3 *	—	—	1 *	0	—	—	0	3 *	—	—	0	0	NT
28	Harvanta 50 SC	3 *	2	0	1	0	0	0	0	2	2	0	0	3 *	HT
28	Vayego 200 SC	3 *	0	0	0	0	0	0	0	2	0	0	0	0	HT
NC	Kopa Insecticidal Soap	0	1	—	0	0	0	0	1 *	0	0	1 *exp	1 *exp	0	NT
NC	Kumulus DF	0	0	0	0	2 *	0	0	—	0	0	0	0	0	NT
NC	Lime Sulphur	—	—	—	—	2	—	—	—	—	—	1 exp	1 exp	0	NT
NC	Microthiol Disperss	0	0	0	0	2 *	0	0	—	0	0	0	0	0	NT
NC	Opal Insecticidal Soap	0	1	—	0	0	0	0	1 *	0	0	1 *exp	1 *exp	0	NT
NC	Purespray Green Spray Oil 13 E	0	1 *	1	—	1 *	0	0	2 *	—	—	1 exp	1 exp	0	—
NC	SuffOil	0	1	1	—	1	0	0	2 *	—	—	1 exp	1 exp	0	—
NC	Surround WP	—	2 *	—	1	—	—	—	—	—	1	—	0	0	I
NC	Vegol Crop Oil	—	1 *	1 *	—	1 *	—	—	2 *	—	—	1 *exp	1 *exp	—	—

NC = Not classified by IRAC, or group not indicated on product label. UN = Mode of action has not been determined.

HT = Highly toxic to bees. Severe losses may be expected if used when bees are present at treatment time or within a few days thereafter. MT = Moderately toxic to bees. Can be used around bees if dosage, timing and method of application are correct, but do not apply them directly on bees, in the field or at the colonies. NT = Relatively non-toxic to bees. I = Irritant. White film barrier on plant tissue may act as a repellent to bees when foraging.

¹ Source: PMRA Environmental Assessment Division. For more detailed information on the toxicity of specific pesticides to honeybees, refer to the pesticide label.

² May be toxic to bee colonies exposed to direct treatment, drift or residues on flowering crops or weeds.

Insecticide activity adapted from New York and Pennsylvania *Pest Management Guidelines for Grapes*, Michigan State University and BC Ministry of Agriculture recommendations, *Arthropod Management Tests*, and other sources.

0 = Ineffective. 1 = Slightly effective/suppression, not recommended for very susceptible varieties or at critical stages of infection. 2 = Moderately effective. 3 = Very effective. — = No information is available. * (shaded area) = The pest is listed on the product label for control or suppression. exp = Works only on exposed early instars, not on any growth stage under bark.

