

2016 Spray Bulletin for Commercial Tree Fruit Growers

Virginia, West Virginia, and University of Maryland Extension



Table 9. Relative Toxicity of Pesticides to Orchard Predators¹

(N=nontoxic; L=low; M=moderate; H=high; - = information is lacking)

Chemical	Mite Predators						Aphid Predators & Parasites				
	<i>Stethorus</i>		<i>Amblyseius</i>	<i>Zetzellia</i>	<i>Leptothrips</i>	<i>Orius</i>	Syrphids	Midge	Lady		
	L	A							Beetles	Lacewings	<i>Aphelinus</i>
Acramite	N	N	M	L	-	N	-	N	N	N	-
Actara	M	M	N	N	-	M	M	M	M	M	-
Admire Pro, Pasada	M	M	N	N	-	M	M	L	M	L	H
Agri-Flex	M	M	N	N	-	M	M	M	M	M	-
Agri-Mek, Abba, Temprano	M	M	M	L	-	-	-	-	-	-	-
Aliette	-	-	-	-	-	-	H	-	-	-	-
Altacor	L	L	L	L	L	L	L	L	M	M	M
Ambush, Perm-UP, Pounce ⁴	H	H	H	M	-	M	L	L	M-H	H	H
Apollo	N	N	L	L	L	N	L	N	N	N	-
Apta	-	-	-	-	-	-	-	-	-	-	-
Asana, Adjourn ⁴	H	H	H	M	-	M	L	L-M	M-H	H	H
Assail	M	M	L	L	-	M	L	M	M	M	-
Avaunt	L	L	L	L	-	L	H	L	L	L	-
B.t.	L	L	L	L	L	L	L	L	L	L	L
Battalion	H	H	H	M	-	M	L	L-M	M-H	H	H
Baythroid XL	H	H	H	M	-	M	L	L-M	M-H	H	H
Belay	M	M	L	L	-	M	L	L-M	M-H	H	H
Beleaf	-	-	-	-	-	-	-	-	-	-	-
Belt	L	L	L	L	L	L	L	L	L	L	L
Bifenture	H	H	H	M	-	M	L	L-M	M-H	H	H
Calypso	M	M	L	L	-	M	L	M	M	M	-
Captan ²	L	L	L	-	-	L	-	L	-	L	-
Carzol	M	L	H	-	-	-	-	-	-	-	-
Centaur	-	-	-	-	-	-	-	-	-	-	-
CM Virus	N	N	N	N	N	N	N	N	N	N	N
Danitol ⁴	H	H	H	M	-	M	L	L-M	M-H	H	H
Declare, Proaxis ⁴	H	H	H	M	-	M	L	L-M	M-H	H	H
Delegate	N	N	L	N	N	N	M	L	L	-	H
diazinon	M	M	M	L	-	L	M	H	M	M	H
dodine	-	-	-	-	-	-	-	L	-	-	-
Endigo	H	H	H	M	-	M	M	M	M-H	H	H
Entrust	N	N	N	N	N	N	M	L	L	L	-
Envior	-	-	M	-	-	-	-	-	-	-	-
Esteem	M	N	N	N	-	M	-	N	M	M	-
Exirel	L	L	L	L	L	L	L	L	H	H	M
Gladiator	H	H	H	M	-	M	L	L-M	M-H	H	H
glufosinate	-	-	H	-	-	-	-	-	-	-	-

¹ Pesticides that are not directly toxic to a predator may still reduce its numbers indirectly by reducing prey densities. *Stethorus* L and A refer to larvae and adults.² Although Captan is not toxic to predators, it has been associated with increased populations of spider mites.³ Pheromones includes all mating disruption products.⁴ These pesticides may also increase mite populations by stimulating reproduction.

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	L	A							Beetles	Lacewings	Aphelinus
Goal	-	-	H	-	-	-	-	-	-	-	-
Imidan	L	L	N	N	H	L	-	L	L	L	L
Intrepid	N	N	N	N	N	N	N	N	N	N	N
Kanemite	-	-	L-M	-	-	-	-	-	-	-	-
Lannate	M	M	H	M	-	M	-	H	H	M	-
Leverage	H	H	H	M	-	M	M	L-M	M-H	H	H
Lorsban, Nufos, Yuma	L	L	L	N	-	-	-	-	-	H	H
mancozeb	-	-	-	-	-	M-H	H	-	M-H	-	-
metiram	-	-	-	-	-	-	L	-	-	-	-
Movento	L	L	L	L	L	L	L	L	L	L	L
Mustang Max	H	H	H	M	-	M	L	L-M	M-H	H	H
Nealta	N	N	N	N	N	N	-	-	N	N	-
Nexter	M	M	M	L	-	M	-	L	M	L	-
oil	L	L	L	L	-	-	-	-	-	-	-
oxyfluorfen	-	-	H	-	-	-	-	-	-	-	-
paraquat	-	-	H	-	-	-	-	-	-	-	-
Pheromones ³	N	N	N	N	N	N	N	N	N	N	-
Portal	-	-	M	-	-	-	-	-	-	-	-
Proclaim	-	-	-	-	-	-	-	-	-	-	-
Rely	-	-	H	-	-	-	-	-	-	-	-
Ridomil	-	-	-	-	-	-	-	H	-	-	-
Rimon	H	L	M	-	-	-	-	-	H	H	M
Round-Up	L	L	H	-	-	-	-	-	-	-	-
Savey, Onager	N	N	L	L	L	N	L	N	N	N	-
Sevin	H	H	M	L	-	M	H	H	H	M	H
simazine	-	-	L	-	-	-	-	-	-	-	-
Sivanto	-	-	-	-	-	-	L	-	L	L	-
sulfur	L	L	M	-	-	M	-	-	-	L	-
Supracide	-	-	-	-	-	-	-	-	-	-	-
Surround	-	-	-	-	-	-	-	-	L	-	-
thiram	-	-	-	-	-	-	-	L	-	-	-
Tombstone	H	H	H	M	-	M	L	L-M	M-H	H	H
Topsin-M	L	L	H	M	-	-	-	L	-	-	-
Tourismo	-	-	-	-	-	-	-	-	-	-	-
Vendex	L	L	L-M	H	-	-	-	L	-	H	-
Venom, Scorpion	H	H	-	-	-	-	-	-	H	-	H
Voliam Flexi	M	M	L	L	L	M	M	M	M	M	L
Voliam Xpress	H	H	M	M	-	M	L	L-M	M-H	-	-
Vydate	L	L	M-H	H	-	-	-	M	-	-	-
Warrior, Lambda-Cy, Silencer ⁴	H	H	H	M	-	M	L	L-M	M-H	H	H
Zeal	L	L	M	-	-	M	-	-	L	M	-

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