

## LIST OF INSECTICIDES AND NEMATOCIDES USED ON COMMERCIAL VEGETABLES

Trade Name	Common Name	Class <sup>1</sup>	LD <sub>50</sub> 's <sup>2</sup>		Leaching Potential <sup>3</sup>	Runoff Potential <sup>3</sup>	Restricted Entry Interval <sup>4</sup>
			Oral	Dermal			
Actara	thiamthoxam	4	>5000	>2000	1	2	12 hrs
Admire	imidacloprid	4	4143-4870	>2000	1	2	12 hrs
Agree	<i>Bacillus thuringiensis aizawai</i>	11	>5050	>2020	3	1	4 hrs
• Agri-Mek	abamectin	6	300	>1800	3	2	12 hrs
• Ambush	permethrin	3	>5000	>2000	3	2	12 hrs
• Ammo	cypermethrin	3	137	>2000	3	1	12 hrs
• Asana XL	esfenvalerate	3	458	>2000	3	2	12 hrs
Assail	acetamiprid	4	1064	>2000	2	3	12 hrs
Avaunt	indoxacarb	22	687-1867	>5000	3	1	12 hrs
• Aztec	cyfluthrin + tebupirimphos	3, 1	132-190	>2000	2	1	48 hrs
• Baythroid	cyfluthrin	3	826-1015	>2000	3	2	12 hrs
Beleaf	Flonicamid	9	>2000	>2000	-	-	12 hrs
• Bifenture	bifenthrin	3	262	>2000	3	2	12 hrs
Biobit	<i>Bacillus thuringiensis kurstaki</i>	11	>5000	>2500	3	1	4 hrs
• Brigade	bifenthrin	3	262	>2000	3	2	12 hrs
• Brom-o-gas	methyl bromide	8	214	-	1	2	48 hrs
• Capture	bifenthrin	3	262	>2000	3	2	2-18 days
Clutch 50 WDG	clothianidin	4	3900-4700	>5000	1	2	12 hrs
• Counter	terbufos	1	<50	182	3	3	48 hrs
Cruiser	thiamethoxam	4	>5000	>2000	1	2	12 hrs
• Danitol	fenpropathrin	3	66	>2000	3	2	24 hrs
Deadline M-Ps	metaldehyde	-	227	2275	3	3	12 hrs
Decis	deltamethrin	3	42.9	>2000	3	1	12 hrs
• Diazinon	diazinon	1	500-2000	>1000	3	1	1-4 days
Dibrom	naled	1	92-250	360-800	3	3	48-72 hrs
Dimethoate	dimethoate	1	571	>2000	2	3	48 hrs
Dipel	<i>Bacillus thuringiensis kurstaki</i>	11	4000	>5050	3	1	4 hrs
• DiSyston	disulfoton	1	3-52	9-1000	2	3	48 hrs

<sup>1</sup> Insecticide Resistance Action Committee Mode of Action Classification (<http://www.irac-online.org/resources/moa.asp>)

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| <ol style="list-style-type: none"> <li>1. Acetylcholine esterase inhibitors</li> <li>2. GABA-gated chloride channel antagonists</li> <li>3. Sodium channel modulators</li> <li>4. Nicotinic acetylcholine receptor agonists/antagonists</li> <li>5. Nicotinic acetylcholine receptor agonists (not group 4)</li> <li>6. Chloride channel activators</li> <li>7. Juvenile hormone mimics</li> <li>9. Compounds of unknown or non-specific mode of action (selective feeding blockers)</li> </ol> | <ol style="list-style-type: none"> <li>11. Microbial disruptors of insect midgut membranes</li> <li>15. Inhibitors of chitin biosynthesis, type O, Lepidopteran</li> <li>17. Inhibitors of chitin biosynthesis, type 2, Dipteran</li> <li>18. Ecdysone agonist/disruptor</li> <li>20. Site II electron transport inhibitors</li> <li>21. Site I electron transport inhibitors</li> <li>22. Voltage-dependent sodium channel blocker</li> </ol> |
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<sup>2</sup> The LD<sub>50</sub> is a standard toxicological term which indicates the number of milligrams (mg) of pesticide per kilogram (kg) of test animal body weight required to kill 50 percent of a test animal population. Values less than 10 indicate extremely high toxicity to mammals. The LD<sub>50</sub> data have been obtained from Material Safety Data Sheets.

<sup>3</sup> 1=high, 2=intermediate, 3=low. These leaching/runoff potential ratings are from the NRCS WIN-PST Pesticide Properties Database at [http://www.wcc.nrcs.usda.gov/pestmgmt/sp2\\_main.html](http://www.wcc.nrcs.usda.gov/pestmgmt/sp2_main.html)

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			Oral	Dermal			
Endosulfan	endosulfan	2A	50-481	1467-2000	3	1	24 hrs
Entrust	spinosad	5	>5000	>5000	-	-	4 hrs
Esteem	pyriproxyfen	7	3773-4733	>2000	3	2	12 hrs
• Force	tefluthrin	3	969	>2000	3	2	-
Fulfill	pymetrisone	9	>5000	>2000	2	1	12 hrs
• Furadan	carbofuran	1	7	6783	1	2	2-14 days
• Gaucho	imidacloprid	4	4143-4870	>5000	1	2	n/a (seed treatment)
• Genesis	imidacloprid	4	4143-4870	>5000	1	2	n/a (seed treatment)
Hero	bifenthrin + zeta cypermethrin	3	550	>5000	3	2	12 hrs
Imidan	phosmet	1	126-681	>4.6	3	3	24 hrs
Javelin	<i>Bacillus thuringiensis kurstaki</i>	11	>5100	5000	3	1	4 hrs
Kelthane	dicofol	20	1835-5022	>5000	3	1	12-48 hrs
Kryocide	cryolite	9	>5000	>2100	3	1	12 hrs
• Lannate	methomyl	1	30-59	>2000	1	3	48 hrs
• Larvin	thiodicarb	1	166	>2000	3	3	48 hrs
Lepinox	<i>Bacillus thuringiensis kurstaki</i>	11	-	-	3	1	12 hrs
• Leverage	imidacloprid + cyfluthrin	4, 3	200	>5000	1	2	12 hrs
Lorsban	chlorpyrifos	1	300-2250	>2000	3	2	2-3 days
Malathion	malathion	1	>5000	>2000	3	3	12 hrs
Metaldehyde	metaldehyde	8	227	2275	3	3	12 hrs
Metasystox-R	oxydemetonmethyl	1	125-138	253-359	1	3	48 hrs
• Mocap	ethoprop	1	15-425	166-369	1	3	48 hrs
• Monitor	methamidophos	1	17-21	516-987	2	3	48 hrs
• Mustang	cypermethrin	3	234	>2000	3	1	12 hrs
• Nemacur	fenamiphos	2	10-24	72-75	1	2	48 hrs
Novodor	<i>Bacillus thuringiensis tenebrionensis</i>	11	>5000	>2500	3	1	4 hrs

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			Oral	Dermal			
Oberon	spiromesifen	23	>2000	>4000	-	-	12 hrs
Orthene	acephate	1	846-1447	>2000	3	3	24 hrs
• PennCap-M	methyl parathion (encapsulated)	1	1237	>1250	3	2	4-5 days
Perm-Up	permethrin	3	1030-1100	>2000	3	2	12 hrs
Phaser	Endosulfan	2A	50-481	1467-2000	3	1	24 hrs
Platinum	thiamethoxam	4	>5000	>2000	1	2	12 hrs
Poncho	chlorothianidin	4	>5000	>5000	1	2	n/a (seed treatment)
• Pounce	permethrin	3	1030-1100	>2000	3	2	12 hrs
• Proclaim	emamectin benzoate	6	1516	>2000	2	1	48 hrs
Provado	imidacloprid	4	4143-4870	>2000	1	2	12 hrs
Pyrellin	pyrethrin + rotenone + piperonyl butoxide	3, 21	1620	-	3	2	12 hrs
Pyrenone	pyrethrin plus piperonyl butoxide	3	4500-4900	>2000	3	2	12 hrs
Radiant SC	spinetoram	5	>5000	>5000	-	-	4 hrs
Rimon	novaluron	15	>5000	>2000	-	-	12 hrs
Scout X-tra	tralomethrin	3	284	>2000	3	2	24 hrs
Sevin	carbaryl	1	250-649	>2000	3	3	12 hrs
SpinTor	spinosad	5	>5000	>5000	3	2	4 hrs
• Telone II	1,3-Dichloropropene	1	224-300	333	3	3	5 days
• Thimet	phorate	1	5-13	86-113	3	1	48 hrs
Trigard	cyromazine	17	4460	>2010	1	2	12 hrs
Vapam	metam sodium	3	812	>2020	2	3	48 hrs
Vault	<i>Bacillus subtilis</i>	-	-	-	3	1	See label
Venom	dinotefuran	-	>5000	>5000	-	-	12 hrs
• Vydate	oxamyl	1	9	>5000	3	3	48 hrs
• Warrior	Lambda-cyhalothrin	3	351	>2000	3	2	24 hrs
Xentari	<i>Bacillus thuringiensis aizawai</i>	11	>5000	>2000	3	1	4 hrs

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