

Table 16 – Poisoning Hazard to Honeybees

Category/Pesticide	Duration of hazard to honeybees	Category/Pesticide	Duration of hazard to honeybees
Do not apply to blooming crops or weeds		Apply only late evening until early morning*	
Ambush	1–2 days	Align	na
Asana	1 day	Carzol	2 hours
Comply	1 day	Fusilade	na
Danitol	1 day	oil (horticultural type)	< 3 hours
Digon	3 days	Neemix	< 2 hours
Diazinon	2 days	Pyramite	< 2 hours
Guthion	2.5 days	Pyrenone (natural pyrethrin)	< 2 hours
Imidan	1–4 days	Pyrellin (pyrethrin/rotenone mix)	< 2 hours
Lannate	> 1 day	rotenone	< 2 hours
Lorsban	4–6 days	Simazine	na
Pounce	1–2 days	Thiodan 50WP < 1 lb. acre	2–3 hours.
Pyramite	> 1 day	Vydate (1 pint/acre or less)	3 hours
Sevin WP	3–7 days	2,4-D	na
Sevin XLRPlus (> 3 pints/acre)	> 1 day		
Sevin-4-oil (> 1 pint/acre)	> 3 days		
Supracide	1–3 days		
Apply only during late evening*		Reasonably safe to honeybees without time restriction	
Agri-Mek 0.15 EC	8 hours	Alette, Apollo, B.t. toxin, captan, copper sulfate, diuron, Ethrel, Ferbam, fixed copper, Goal, Karmex, Kelthane, Kerb, mancozeb, maneb, NAA, Nova, paraquat, Procure, Roundup, Rubigan, Savey, sulfur, Syllit, Thiram, Vendex, Ziram, and most other fungicides and herbicides.	
Confirm	< 8 hours		
Provado	< 8 hours		
Thiodan 50WP > 1 lb./acre	8 hours		
Vydate 2L (> 4 pints/acre)	8 hours		

na = specific duration not available.

Sources: *How to Reduce Bee Poisoning from Pesticides* by D.F. Mayer, C.A. Johansen, D.R. Baird. 1999. Bulletin PNW 518, Washington State Univ. Coop. Ext., and *Bee Pollination of Tree Fruits* by D.F. Mayer, C.A. Johansen and D.M. Burgett. 1986. Bulletin PNW0282, Washington State Univ. Coop. Ext.

* Late evening means after 6–8pm and assumes that evening temperatures are not unusually high and that bees have stopped foraging. Late evening, night or early morning means after 6–8pm and before 4–7am, depending on temperature.

Shift times if abnormally high temperatures cause bees to start foraging earlier or continue later than usual (5:30am to 8:00pm). Few honeybees forage when springtime temperature is below 51°F. Maximum foraging activity occurs at temperatures above 63°F. Evening applications are generally less hazardous to bees than early morning applications.

Bee poisoning hazard can be drastically modified by abnormal weather conditions. If temperatures are unusually low after treatment, residues on the crop may remain toxic to bees up to 20 times as long as during reasonably warm weather. EC formulations usually have shorter residual toxicity to bees than wettable powder formulations. For example, Sevin XLR has shorter residual toxicity than WP formulation. Before applying insecticide, reduce dandelion, clover and other groundcover flowers by mowing or herbicide.

