

Table 48. Relative toxicity of pesticides to mite predators *Neoseiulus fallacis*, *Typhlodromus pyri*, *Zetzelia mali* and *Stethorus punctum* (ladybird beetle).

Trade Name (common name)*	TOXICITY RATING				
	General Predators ¹	<i>N. fallacis</i> ²	<i>T. pyri</i>	<i>Z. mali</i>	<i>S. punctum</i>
INSECTICIDES AND MITICIDES					
Agri-Mek (abamectin)	no data	++	++	++	++
Asana (esfenvalerate)	+++	+++	+++	++	+++
Biobit (<i>Bacillus thuringiensis</i>)	0	+	+	0	0
Brigade (bifenthrin)	no data	+++	+++	no data	no data
Confirm (tebufenozide)	0	+	+	0	0
Dipel (<i>Bacillus thuringiensis</i>)	0	+	+	0	0
Guthion (azinphosmethyl)	++	+	+	+	+
Imidan (phosmet)	+	+	+	+	+
Lannate (methomyl)	+++	+++	+++	++	++
Lorsban (chlorpyrifos)	++	++	++	++	+
Kelthane (dicofol)	+	++	+	+	+
Savey (hexythiozox)	0	+	+	+	+
Sevin (carbaryl)	++	++	+	++	+++
Spintor (spinosad)	0	+	+	0	0
Superior oil	++	++	++	++	+
Thiodan (endosulfan)	++	+	+	no data	++
Vendex (hexakis)	+	+	+	+++	+
FUNGICIDES					
Captan (captan)	0	+	+	+	+
Dithane (mancozeb)	0	++	++	+	+
Ferbam (ferbam)	no data	no data	no data	no data	no data
Nova (myclobutanil)	0	+	+	+	+
Procure (triflumizole)	no data	no data	no data	no data	no data
Ronilan (vinclozolin)	no data	+	no data	no data	no data
Rovral (iprodione)	no data	+	no data	no data	no data
Rubigan (fenarimol)	no data	+	+	no data	no data
Sulfur	no data	+	+	no data	no data
Syllitt (dodine)	no data	+	+	no data	no data
Thiram (thiram)	no data	+	no data	no data	+
Topsin-M (thiophanate-methyl)	0	+	+	++	+
Ziram (ziram)	0	++	++	+	+

0=no impact on population, +=low impact on population (less than 30% mortality in 48 hours), ++=moderate impact on population (between 30% and 70% mortality after 48 hours), +++=severe impact on population (over 70% mortality after 48 hours).

*Where trade names are used, no discrimination is intended and no endorsement by Cooperative Extension is implied. Not a complete list.

¹General predator group includes coccinellids, lacewings, syrphid fly larvae, minute pirate bugs, and mullein plant bugs.

²Formerly *Amblyseius fallacis*.

Adapted from 2003 New England Apple Pest Management Guide.