

## Spotted wing drosophila in home fruit plantings: Insecticide options

(extrapolated from data for control in commercial fruit production in OR, WA, CA, MI, NJ, NC, FL in 2011 and 2012):

Efficacy rating	Active ingredient <sup>1</sup>	Residual activity (days)	Pre-harvest interval (PHI) <sup>2</sup>						
			raspberry, blackberry	blueberry	straw-berry	grape	cherry	peach	plum
Very effective	bifenthrin	7-10	3 days	X	X	X	X	X	X
	cyfluthrin	7-10	X	X	X	3 days	X	X	X
	permethrin	7-10	14 days	14 days	14 days	X	X	7 days	X
	esfenvalerate	7-10	21 days	14 days	X	X	14 days	14 days	14 days
	gamma-cyhalothrin	7-10	X	X	X	X	14 days	14 days	14 days
Effective	malathion	5-7	1 day	1 day	X	X	3 days	7 days	X
	spinosad	3-5	3 days	3 days	1 day	7 days	14 days	7 days	7 days
Moderately effective	carbaryl	10	7 days	7 days	7 days	7 days	3 days	3 days	3 days
	acetamiprid	1-3	1 day	1 day	1 day	7 days	7 days	7 days	7 days
Unrated but likely to be effective	pyrethrins + PBO	1-3	0 days	0 days	0 days	0 days	0 days	0 days	0 days

<sup>1</sup> Color code: For resistance management, rotate among products from different chemical groups: spinosyns (yellow in chart below), pyrethroids (pink in chart), organophosphates (blue in chart), carbamates (green in chart), and neonicotinoids (gray in chart).

<sup>2</sup> The pre-harvest interval (PHI) is the minimum number of days required to wait after application of the pesticide, before it is safe to harvest. An 'X' in chart means that the product is **not allowed** for use on that crop.

See page 2 for representative product names for each active ingredient.

**Representative product names for each active ingredient:**

**acetamiprid**

Ortho Flower, Fruit & Vegetable Insect Killer, Concentrate (0.5%); includes berries and peaches.  
Ortho Bug B Gon Systemic Insect Killer, Concentrate (0.5%); includes berries and peaches.  
Ortho Flower, Fruit & Vegetable Insect Killer, Ready-to-Use (0.006%); ok for apples, veg, but **no berries or peaches**.  
Ortho Bug B Gon Garden Insect Killer, Ready-to-Use (0.006%); ok for apples, veg, but **no berries or peaches**.

**bifenthrin**

Ferti-lome Broad Spectrum Insecticide, concentrate (0.3%)  
Ferti-lome Broad Spectrum Insecticide, ready to use (0.05%)  
Ortho Bug B Gon Max Lawn & Garden Insect Killer Ready-to-Spray (0.3%)

**carbaryl**

Ferti-lome: Liquid Carbaryl Garden Spray (23.7%)  
Garden Tech: Sevin Ready to Use (0.126%)  
Garden Tech: Sevin Bug Killer Concentrate (22.5%)  
Garden Tech: Sevin-5 Bug Killer Ready to Use 5% Dust (5%)  
Hi-Yield: 10% Carbaryl Garden & Pet Dust (10%)  
Hi-Yield: 5% Carbaryl Garden & Pet Dust (5%)

**cyfluthrin**

Bayer Advanced: Vegetable & Garden Insect Spray, Ready to Use (0.003%)  
Bayer Advanced: Vegetable & Garden Insect Spray, Concentrate (0.75%)

**esfenvalerate**

Monterey: Bug Buster II Concentrate (0.425%)  
Monterey: Bug Buster Ready to Spray (0.425%)

**gamma-cyhalothrin**

Spectracide Triazicide Insect Killer For Lawns & Landscapes, Concentrate (0.08%)

**malathion**

Bonide: Malathion Insect Control Concentrate (50%)  
Gordon's: Malathion 50% Spray (50%)  
Hi-Yield: 55% Malathion Spray (55%)  
Ortho: Malathion Plus Insect Spray Concentrate (50%)  
Schultz: Malathion Concentrate (50%)  
Spectracide: Malathion Insect Spray Concentrate (50%)

**permethrin**

Bayer Advanced: Complete Insect Dust for Gardens Ready to Use (0.25%)  
Bonide: Borer Miner Killer Concentrate (2.5%)  
Bonide: Eight Insect Control Vegetable, Fruit & Flower Concentrate (2.5%)  
Bonide: Eight Insect Control Yard & Garden Ready to Spray (2.5%)  
Bonide: Total Pest Control Outdoor Formula Concentrate (13.3%)  
Gordon's: Bug-No-More Multi-Purpose Concentrate (2.5%)  
Gordon's: Garden Guard Insecticide [dust] (0.25%)  
Hi-Yield: Indoor/Outdoor Broad Use Insecticide (10%)  
Hi-Yield: Lawn, Garden, Pet & Livestock Insect Control (10%)  
Hi-Yield: Garden, Pet & Livestock Dust (0.25%)

**pyrethrins + piperonyl butoxide (PBO)**

FoxFarm: Don't Bug Me Home & Garden Insect Spray (0.02% + 0.2%)  
Schultz: Garden Safe Fruit & Vegetable Insect Killer Ready to Use (0.02% + 0.2%)  
Schultz: Garden Safe Houseplant & Garden Insect Killer Ready to Use (0.02% + 0.2%)  
Schultz: Garden Safe Lawn & Garden Insect Killer Ready to Spray (0.3% + 3%)  
Schultz: Garden Safe Multi-Purpose Garden Insect Killer (0.02% + 0.2%)  
Spectracide: Bug Stop For Gardens Concentrate (0.3% + 3.0%)  
Spectracide: Garden Insect Killer Concentrate (0.3% + 3.0%)  
Spectracide: Garden Insect Killer Ready to Spray (0.3% + 3.0%)  
Woodstream: Concern Multi-Purpose Insect Killer (0.02% + 0.2%)

**spinosad**

Bonide: Captain Jack's Deadbug Brew Ready to Use (0.001%)  
Bonide: Captain Jack's Deadbug Brew Ready to Spray (0.5%)  
Bonide: Captain Jack's Deadbug Brew Concentrate (0.5%)  
Bonide: Colorado Potato Beetle Beater, Concentrate (0.5%)  
Ferti-lome: Borer, Bagworm, Tent Caterpillar & Leafminer Spray (0.5%)  
Gardens Alive: Bulls-Eye Bioinsecticide (0.5%)  
Green Light: Lawn & Garden Spray With Spinosad, Concentrate (0.5%)  
Green Light: Lawn & Garden Spray With Spinosad, Hose-end Ready to Spray (0.015%)  
Monterey: Garden Insect Spray (0.5%)  
Natural Guard: Spinosad Landscape and Garden Insecticide, Ready to Spray (0.5%)