

TIMELY INFORMATION

Agriculture & Natural Resources

Insecticides for Backyard Vegetable Production (NEW IN 2010)

+ sign in a column indicates active ingredient (AI) that can be used to control the target insect. Rotate insecticides between chemical classes to avoid insecticide resistance and nontarget effects. Insecticides can be purchased from reliable sources on the Internet or from retail stores.

IRAC Chemical class	Active ingredient	Aphids, leafhoppers	Whiteflies	Thrips	Onion maggots (adult)	Flea beetles	Cutworms (in soil), armyworms (on foliage)	Fruitworm, hornworm, tomato pinworm (on foliage)	Colorado potato beetle	Stink bugs, Harlequin bugs	Spider mites	Asparagus beetle	Remarks on AI
1A (contact poison)	Carbaryl					+		+	+	+		+	2d PHI on sweet corn, 3d PHI on tomato, pepper 7d PHI on potato & turnip roots, 14d PHI on mustard greens and turnip tops
1B (contact poison)	Malathion	+		+									1d PHI on okra, 7d PHI on tomato, radish, turnip & head lettuce, 3d PHI on pumpkin, eggplant, onion, pepper 7-14d PHI on lettuce & spinach leaves, mustard greens
3A (contact poison)	Bifenthrin	+	+			+	+	+		+	+		Granule can be applied once before planting; RTU spray can be applied many times 1d PHI on tomato & sweet corn (spray every 2 days in silking corn) 7d PHI on broccoli, Brussels sprouts, cabbage, cauliflower, eggplant, pepper 14d PHI on head lettuce
3A (contact poison)	Cyfluthrin					+	+			+			0d PHI on tomato, sweet corn & radish, 7d PHI on pepper

3A (contact poison)	Esfenvalerate	+				+	+	+	+	+			1d PHI on tomato & sweet corn, 7d PHI on collard, eggplant, pepper, radish
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3A (contact poison)	Lambda-cyhalothrin	+		+	+	+	+	+	+	+			5d PHI on tomato, pepper 1d PHI on lettuce 14d on onion 21d PHI on sweet corn
3A (contact poison)	Permethrin					+		+	+	+			0d PHI on tomato 1d PHI on lettuce, spinach, sweet corn 14d PHI on potato
4A (systemic & stomach poison)	Imidacloprid (NEW IN 2010)	+	Suppression only	+		+			+				Apply at transplant or shortly after plants establish 21d PHI on cucurbits, fruiting & leafy vegetables 45d PHI on celery and other leafy petiole vegetables.
-	Pyrethrin + synergist (PBO)		+									+	0d PHI on most crops
-	Insecticidal soap	+	+									+	No residual, repeat spray 3-4 days 0d PHI on most crops.
-	Sulfur											+	0d PHI on tomato, do not use if temp is over 95F. Do not use within 3wk of oil application.
Bacteria	<i>Bacillus thuringiensis</i>						+	+					Treat small caterpillars that feed on foliage, use high rates for larger caterpillars or use other insecticides 0d PHI on most crops.

PHI = Pre Harvest Interval in days (d)

This bulletin was developed by Dr. Ayanava Majumdar, *Extension Entomologist*, on April 14, 2010 based on the 2008 Alabama IPM Handbook (ANR-500) by Dr. Timothy Reed and revised after a short survey of new insecticides in retail stores in southwest AL. Contact bugdoctor@auburn.edu or call 2513318416 for any questions or to suggest changes to this publication. AL Vegetable Entomology Webpage is <https://sites.aces.edu/group/commhort/vegetable/default.aspx>