

INSECT CONTROL for vegetable gardeners



*M*ore than 25 major insect pests may attack the average home garden. These pests usually have three or four life stages. Therefore, it may amount to 75 or more insect forms that you might be dealing with in your garden. For example, the insects referred to as true bugs cause plant damage from the time the nymphs hatch from the eggs until death of the adult bugs. The beetles also cause damage both as larvae and adults. However, the damage may be in different areas of the plant. The cucumber beetles for example, feed on foliage of plants whereas their larvae feed on the underground parts of plants in the soil. The moths and butterflies do no plant damage as adults whereas the larval, or caterpillar stage, may be very destructive.

If you cannot identify the insect pest causing your trouble, take it to your local county agent, or package it so it will not get damaged in transit and mail to:

PUBLIC DOCUMENTS DEPT.

MAY 13 1971

Extension Entomology

2309 Gardner Hall
North Carolina State University
Raleigh, North Carolina 27607

Duke University Library

some typical GARDEN PESTS



CORN EARWORM

Adult — Grayish-brown, darker areas near wing tips, $1\frac{1}{2}$ " wingspread. Larva—Brown to green or even pink. About 2" long with yellow heads. The larvae cause damage to the ears of corn and the pods of beans. Foliage damage may also occur to many plants beginning in late June. Host plants are corn, beans, lettuce and tomatoes.



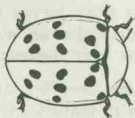
WIREWORMS

Adults — Elongate, hard-shelled, dull colored $\frac{1}{2}$ " to $1\frac{1}{2}$ " long. Often called "click" beetles. Larva—Yellowish, tough bodied $\frac{1}{2}$ " to 2". The larvae attack the roots of many plants at any time during the growing season. Host plants are potatoes and sweet potatoes.



VEGETABLE WEEVIL

Adult— $\frac{1}{2}$ " long, grayish with a "V" shaped marking near rear of wings. Larva— $\frac{1}{2}$ " long when full grown. Greenish, slug-like creatures. Both the adults and larvae feed on foliage and exposed roots of kale, mustard greens, turnips and turnip greens. Most damage is done in late fall, winter and early spring.



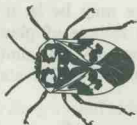
MEXICAN BEAN BEETLE

Adult— $\frac{1}{3}$ " long. Brownish color with 16 black spots arranged in 3 rows across back. Larva— $\frac{1}{3}$ " when full grown. Lemon yellow with spines on back. Both adults and larvae skeletonize bean leaves at any stage of plant development.



IMPORTED CABBAGE-WORM

Adult — White butterfly with 3 or 4 black markings and wingspread of about 2". Larva— $1\frac{1}{2}$ " when full grown, velvety green with 3 thin gold colored stripes. The larvae cause damage at any stage of development of cabbage, collards or broccoli.



HARLEQUIN BUG

Adult — Flat, shield-shaped, $\frac{3}{8}$ " long. Reddish or orange with black markings. Nymph — Resembles adult, but smaller and wingless. Both adults and nymphs feed on the foliage of plants throughout their growth period. Host plants are cabbage, collards, broccoli and kale.



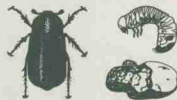
DIAMONDBACK MOTH

Adult—a small grayish moth about $\frac{1}{8}$ " long when the wings are folded. Where the wings meet down the back 3 diamond-shaped white or yellowish spots appear. Larva—the pale-yellowish-green larvae are about $\frac{1}{3}$ " long when full grown. They are very active and can suspend themselves on a silken thread from leaves of cabbage, collards and related plants.



POTATO LEAFHOPPER

Adult—pale green, about $\frac{1}{8}$ " long. Nymphs greenish, resemble adults except they are smaller and wingless. Both adults and nymphs feed on the foliage of plants especially after mid-season. Host plants are beans and potatoes.



WHITE GRUBS

Adult—Dark brown to black, hardshelled, $\frac{1}{2}$ " to 1" long. Larva—White with brown head. Usually rests in a "C" shape. The beetles feed on the foliage of trees. The larvae or white grubs feed on the roots of plants such as potatoes.



FLEA BEETLES

Adults — Small dark beetles that jump like fleas. Many species about $1/16$ " long. Larva—White-bodied, brown headed, cylindrical, about $1/5$ " when full grown. There are several species on vegetables. The larvae feed on the roots of Irish and sweet potatoes. The adults feed on the foliage of the above crops and beets, eggplant, okra, peppers, radish, sweet corn, tomatoes, turnips and turnip greens. Damage may occur anytime during the growing season.

INSECT CONTROL FOR THE VEGETABLE GARDENER

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
BEANS					
Aphids	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	1½ tsp.	0	On foliage as needed.
	Malathion	57% EC	2 tsp.	1	
		25% WP	2 tbsp.	1	
5% Dust		—	1		
Bean leaf beetle or cucumber beetle	Methoxychlor (Marlate)	50% WP	3 tbsp.	3	
		25% EC	3 tbsp.	3	
		5% Dust	—	3	
Corn earworm	Carbaryl (Sevin)	50% WP	3 tbsp.	0	
		80% WP	2 tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
Mexican bean beetle Cucumber beetles	Carbaryl (Sevin)	50% WP	2 tbsp.	0	
		80% WP	1½ tbsp.	0	
		4 lb. conc. 5% Dust	1 tbsp. —	0 0	
Potato leafhopper	Malathion	57% EC	2 tsp.	1	
		25% WP	2 tbsp.	1	
		5% Dust	—	1	
	Methoxychlor (Marlate)	50% WP	2 tbsp.	3	
25% EC		3 tbsp.	3		
5% Dust		—	3		
Spider mites	Dicofol (Kelthane)	35% WP	1 tbsp.	7	
		18.5% WP	2 tbsp.	7	
		18.5% EC	3 tsp.	7	
Thrips	Methoxychlor (Marlate)	50% WP	2 tbsp.	3	
		25% EC	3 tbsp.	3	
		5% Dust	—	3	

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b Emulsifiable Concentrates (EC) may sometimes be phytotoxic.

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INSECT CONTROL FOR THE VEGETABLE GARDENER (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
BEETS					
Beet webworm Flea beetles	Carbaryl (Sevin)	50% WP	3 tbsp.	3—if tops not used	On foliage as needed.
		80% WP	2 tbsp.	3—if tops not used	
		4 lb. conc.	1 tbsp.	3—if tops not used	
		5% Dust	—	3—if tops not used	
BROCCOLI					
Aphids	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	5	On foliage as needed.
		50% WP	1 tbsp.	5	
	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
	5% Dust	—	3		
Cabbage caterpillars (cabbage looper or imported cabbageworm or diamondback moth)	<i>Bacillus thuringiensis</i>	Follow label directions		0	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Harlequin bug	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
	Naled (Dibrom)	60% EC	2 tsp.	1	
CABBAGE					
Aphids	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	7	On foliage as needed.
		50% WP	1 tbsp.	7	
	Malathion	57% EC	2 tsp.	7	
		25% WP	2 tbsp.	7	
	5% Dust	—	7		
Cabbage maggot (mountain area only)	Diazinon (Spectracide)	50% WP	1 tbsp.	7	Use 1 cupful per plant at transplanting .
		2 lb. conc.	2 tsp.	7	
Cabbage worms —Cabbage looper —Imported cabbageworm —Diamondback moth	<i>Bacillus thuringiensis</i>	Follow directions on label		0	Treat thoroughly. Start control program when first <i>small</i> worms are noted.
		Naled (Dibrom)	60% EC	2 tsp.	

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks	
CABBAGE, (cont.)						
Diamondback moth or imported cabbageworm	Carbaryl (Sevin)	50% WP	4 tbsp.	3	Apply at 3-7 day intervals as needed.	
		80% WP	2½ tbsp.	3		
		4 lb. conc.	4 tsp.	3		
Flea beetles	Carbaryl (Sevin)	50% WP	2 tbsp.	3	On foliage as needed.	
		80% WP	1¼ tbsp.	3		
		4 lb. conc.	2 tsp.	3		
	Malathion	57% EC	2 tsp.	7		
		25% WP	1 tbsp.	7		
Harlequin bug	Malathion	57% EC	2 tsp.	7		
		25% WP	1 tbsp.	7		
	Naled (Dibrom)	60% EC	2 tsp.	1		
CANTALOUPE						
Aphids	Lindane	20% EC	1 tsp.	1	Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after bloom begins.	
		25% WP	1 tbsp.	1		
		1% Dust	—	1		
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	3		
		50% WP	1 tbsp.	3		
	Malathion	57% EC	2 tsp.	1		On foliage as needed.
25% WP		1 tbsp.	1			
Cucumber beetles (Spotted and Striped)	Carbaryl (Sevin)	50% WP	2 tbsp.	0		
		80% WP	1¼ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		5% Dust	—	0		
	Lindane	20% EC	1 tsp.	1		Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after bloom begins.
		25% WP	1 tbsp.	1		
		1% Dust	—	1		
	Methoxychlor (Marlate)	50% WP	1¼ tbsp.	1	On foliage as needed.	
		25% EC	7 tsp.	1		
		5% Dust	—	1		
						1
Leaf miners	Naled (Dibrom)	60% EC	2 tsp.	1		
		2 lb. conc.	2 tsp.	3		
	Diazinon (Spectracide)	50% WP	1 tbsp.	3		
Spider mites	Dicofol (Kelthane)	50% WP	1 tbsp.	2		
		35% WP	1 tbsp.	2		

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INSECT CONTROL FOR THE VEGETABLE GARDENER (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks	
CANTALOUPE (cont.)						
Squash Vine borer	Carbaryl (Sevin)	50% WP	2 tbsp.	0	Treat plants weekly when first moths or damage noted, especially at base of plant or split stem and kill borer.	
		80% WP	1½ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		5% Dust	—	0		
COLLARDS						
Aphids	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	10	On foliage as needed.	
	Diazinon	60% WP	1 tbsp.	10		
	Malathion	57% EC	2 tsp.	7		
	25% WP	1 tbsp.	7			
	5% Dust	—	7			
				0		
Cabbage looper, diamondback moth & imported cabbageworm	<i>Bacillus thuringiensis</i> — Follow label directions			0		
	Naled (Dibrom)	60% EC	2 tsp.	4		
Diamondback moth and imported cabbageworm	Carbaryl (Sevin)	50% WP	4 tbsp.	14		
		80% WP	2½ tbsp.	14		
		4 lb. conc.	4 tsp.	14		
		5% Dust	—	14		
	Naled (Dibrom)	60% EC	2 tsp.	4		
Harlequin bug	Malathion	57% EC	2 tsp.	7		
		25% WP	1 tbsp.	7		
		5% Dust	—	7		
			Naled (Dibrom)	60% EC		2 tsp.
CUCUMBERS						
Aphids	Lindane	20% EC	1 tsp.	1	Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after bloom begins.	
		25% WP	1 tbsp.	1		
		1% Dust	—	1		
Cucumber beetles (Spotted and Striped)	Carbaryl (Sevin)	50% WP	2 tbsp.	0		On foliage as needed.
		80% WP	1½ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		5% Dust	—	0		
	Lindane	20% EC	1 tsp.	1	Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after bloom begins.	
		25% WP	1 tbsp.	1		
		1% Dust	—	1		
	Methoxychlor (Marlate)	50% WP	2 tbsp.	1		On foliage as needed.
		25% EC	7 tsp.	1		
		5% Dust	—	1		

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
CUCUMBERS (cont.)					
Cucumber beetles (cont.)	Endosulfan (Thiodan)	50% WP	2 tbsp.	0	On foliage as needed.
		3% Dust	—	0	
Pickeworm	Carbaryl (Sevin)	50% WP	2 tbsp.	0	Treat plants thoroughly as needed.
		80% WP	1¼ tbsp.	0	
		4 lb. conc.	2 tsp.	0	
		5% Dust	—	0	
	Endosulfan (Thiodan)	50% WP	2 tbsp.	0	Treat every 5 days as long as necessary.
		3% Dust	—	0	
Spider mites	Dicofol (Kelthane)	35% WP	1 tbsp.	2	On foliage as needed.
		18.5% EC	3 tsp.	2	
EGGPLANT					
Aphids	Malathion	57% EC	2 tsp.	3	On foliage as needed.
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
	Naled (Dibrom)	60% EC	1½ tsp.	1	
Colorado potato beetle	Carbaryl (Sevin)	50% WP	2 tbsp.	0	
		80% WP	1¼ tbsp.	0	
		4 lb. conc.	2 tsp.	0	
		5% Dust	—	0	
	Naled (Dibrom)	60% EC	1½ tsp.	1	
Flea beetles	Carbaryl (Sevin)	50% WP	2 tbsp.	0	
		80% WP	1¼ tbsp.	0	
		4 lb. conc.	2 tsp.	0	
		5% Dust	—	0	
	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
Lace bugs or spider mites	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
KALE					
Aphids	Malathion	57% EC	2 tsp.	7	On foliage as needed.
		25% WP	2 tbsp.	7	
		5% Dust	—	7	
	Diazinon	50% WP	1 tbsp.	10	
	Diazinon (Spectracide)	2 lb. conc.	4 tsp.	10	

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KALE (cont.)					
Harlequin bug	Malathion	57% EC	2 tsp.	7	
		25% WP	2 tbsp.	7	
		5% Dust	—	7	
	Naled (Dibrom)	60% EC	2 tsp.	4	
Vegetable weevil	Naled (Dibrom)	60% EC	2 tsp.	4	
		4% WP	6 tbsp.	1	
		1% Dust	—	1	
LETTUCE					
Aphids	Malathion	57% EC	2 tsp.	14 leaf — 7 head	On foliage as needed.
		25% WP	2 tbsp.	14 leaf — 7 head	
		5% Dust	—	14 leaf — 7 head	
	Naled (Dibrom)	60% EC	1 tsp.	1	
Cabbage looper	<i>Bacillus thuringiensis</i>	— Follow directions on label		0	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Corn earworm	Carbaryl (Sevin)	50% WP	4 tbsp.	14 leaf — 3 head	
		80% WP	2 tbsp.	14 leaf — 3 head	
		4 lb. conc.	1 tbsp.	14 leaf — 3 head	
		5% Dust	—	14 leaf — 3 head	
Leafhoppers	Malathion	57% EC	2 tsp.	14 leaf — 7 head	
		25% WP	2 tbsp.	14 leaf — 7 head	
		5% Dust	—	14 leaf — 7 head	
	Methoxychlor (Marlate)	50% WP	3 tbsp.	14	
		25% EC	3 tsp.	14	
		5% Dust	—	14	
MUSTARD GREENS					
Aphids	Malathion	57% EC	2 tsp.	7	On foliage as needed.
		25% WP	2 tbsp.	7	
		5% Dust	—	7	
	Naled (Dibrom)	60% EC	2 tsp.	4	
Vegetable weevil	Naled (Dibrom)	60% EC	2 tsp.	4	
		4% WP	6 tbsp.	1	
		1% Dust	—	1	

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OKRA					
Aphids	Malathion	57% EC	2 tsp.	1	On foliage as needed.
		25% WP	2 tbsp.	1	
		5% Dust	—	1	
Corn earworm or flea beetles	Carbaryl (Sevin)	50% WP	4 tsp.	0	
		80% WP	3 tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
		5% Dust	—	0	
Stink bugs	Malathion	57% EC	2 tsp.	1	
		25% WP	2 tbsp.	1	
		5% Dust	—	1	
ONIONS					
Onion maggot	Diazinon (Spectracide)	2 lb. conc.	1 tsp.	10	Make 3 or 4 weekly applications to young plants. Treat base at soil level thoroughly.
	Diazinon	50% WP	2 tbsp.	—	
	Diazinon (Spectracide)	2 lb. conc.**	4 tsp.	—	Apply to seed furrow at planting time at a rate of 1 gallon per 1000 linear feet.
	Diazinon (Spectracide)	2 G	—	—	Apply as a broadcast soil application prior to planting at a rate of 11.5 pounds per 1000 square feet. Mix into the top 3-4 inches of soil.
Onion thrips	Diazinon	50% WP	1 tbsp.	10	On foliage every 7 to 10 days as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	10	
	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
PEAS—English or Garden					
Aphids	Diazinon	50% WP	1 tbsp.	0	On foliage as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	0	
	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	½ tsp.	0	
	Malathion	25% WP	2 tbsp.	3	
		57% EC	2 tsp.	3	
		5% Dust	—	3	

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PEAS—Field or Southern or Blackeye					
Aphids	Diazinon	50% WP	1 tbsp.	0	On foliage as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	0	
	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	½ tsp.	0	
	Malathion	25% WP	2 tbsp.	3	
		57% EC	2 tsp.	3	
		5% Dust	—	3	
Cowpea curculio	Carbaryl (Sevin)	50% WP	6 tbsp.	0	Make first application at time of bloom. Repeat at 5 day intervals 3 or 4 times or as needed.
		80% WP	4 tbsp.	0	
		4 lb. conc.	2 tbsp.	0	
		5% Dust	—	0	
PEPPERS					
Aphids	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	1½ tsp.	0	On foliage as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	5	
	Diazinon	50% WP	½ tsp.	5	
	Malathion	57% EC	2 tsp.	3	
		25% WP	2 tbsp.	3	
		5% Dust	—	3	
European corn borer	Naled (Dibrom)	60% EC	2 tsp.	1	Treat plants weekly when needed or following heavy moth flights.
	Carbaryl (Sevin)	50% WP	4 tbsp.	0	
		80% WP	3 tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
5% Dust		—	0		
Flea beetles	Carbaryl (Sevin)	50% WP	4 tbsp.	0	On foliage as needed.
		80% WP	3 tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
		5% Dust	—	0	
	Methoxychlor (Marlate)	50% WP	2 tbsp.	1	
		25% EC	2 tbsp.	1	
		5% Dust	—	1	
Pepper maggot (Sporadic pest)	Malathion	57% EC	2½ tsp.	3	Continue weekly treatments as long as flies are seen or trapped.
		25% WP	2 tbsp.	3	
		5% Dust	—	3	

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PEPPER (cont.)					
Pepper maggot (cont.)	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	1½ tsp.	1	
POTATOES (Irish)					
Aphids	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	35	On foliage as needed.
	Diazinon	50% WP	1 tbsp.	35	
	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	1½ tsp.	0	
	Malathion	57% EC	2 tsp.	0	
		25% WP	2 tbsp.	0	
		5% Dust	—	0	
European corn borer	Carbaryl (Sevin)	50% WP	2 tbsp.	1	Apply when eggs begin to hatch and re-treat every 5 days as needed.
		80% WP	1¼ tbsp.	1	
		4 lb. conc.	2 tsp.	1	
		5% Dust	—	1	
Potato leafhopper or Colorado potato beetle or flea beetle	Carbaryl (Sevin)	50% WP	2 tbsp.	1	On foliage every 7 days, as needed.
		80% WP	1¼ tbsp.	1	
		4 lb. conc.	2 tsp.	1	
		5% Dust	—	1	
	Methoxychlor (Marlate)	50% WP	2 tbsp.	0	
		25% EC	2 tbsp.	0	
		5% Dust	—	0	
		Endosulfan (Thiodan)	50% WP	2 tbsp.	
	3% Dust	—	0		
Potato tuberworm	Carbaryl (Sevin)	50% WP	3 tbsp.	1	Treat when first damage is noted repeating in 10 days. Especially prior to harvest. Do not leave dug potatoes in the field over night.
		80% WP	2 tbsp.	1	
		4 lb. conc.	1 tbsp.	1	
		5% Dust	—	1	
White grubs or Wireworms	Chlordane	45% EC	8 tsp.		Preplanting soil treatment. Work into top 6 inch layer of soil. Apply to 100 sq. ft.
		75% EC	4 tbsp.		
		40% WP	6 oz.		
Wireworms	Diazinon	2G	1 lb.		Preplanting soil treatment. Work into top 6 inch layer of soil. Apply to 100 sq. ft.

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b Emulsifiable Concentrates (EC) may sometimes be phytotoxic.

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
RADISHES					
Aphids	Diazinon	50% WP	1 tbsp.	10	On foliage as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	10	
	Malathion	57% EC 25% WP 5% Dust	2 tsp. 2 tbsp. —	7 7 7	
Flea beetle	Carbaryl (Sevin)	50% WP	2 tbsp.	3	On foliage as needed.
		80% WP	1¼ tbsp.	3	
		4 lb. conc.	2 tsp.	3	
		5% Dust	—	3	
Root maggot	Diazinon	50% WP	1 tbsp.	10	2 or 3 weekly treatments when plants emerge.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	10	
	Diazinon (Spectracide)	2% Granular	7 oz./100 feet of row	—	Planting time treatment in the seed furrow.
	Diazinon (Spectracide)	2 lb. conc.	8 tsp.	—	Apply 1 pint per 100 linear feet of row in the seed furrow at planting time.
SPINACH					
Aphids or Leaf miners	Naled (Dibrom)	60% EC	2 tsp.	1	On foliage as needed.
SQUASH (and PUMPKINS)					
Aphids	Lindane	20% EC	1 tsp.	1	Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after bloom begins.
		25% WP	1 tbsp.	1	
		1% Dust	—	1	
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	7	On foliage as needed.
Cucumber beetle (Spotted and striped)	Diazinon	50% WP	1 tbsp.	7	
		80% WP	1 tbsp.	7	
		4 lb. conc.	2 tsp.	7	
	Carbaryl (Sevin)	50% WP	2 tbsp.	0	
		80% WP	1¼ tbsp.	0	
		4 lb. conc.	2 tsp.	0	
Lindane	20% EC	1 tsp.	1	Do not use lindane in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after blooms open.	
	25% WP	1 tbsp.	1		
	1% Dust	—	1		

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks	
SQUASH (cont.)						
Cucumber beetles (cont.)	Methoxychlor (Marlate)	50% WP	2 tbsp.	1	On foliage as needed.	
		25% EC	7 tsp.	1		
		5% Dust	—	1		
	Endosulfan (Thiodan)	50% WP	2 tbsp.	0		
		3% Dust	—	0		
Leaf miners	Diazinon (Spectracide)	2 lb. conc.	1 tsp.	7		
		50% WP	2 tbsp.	7		
Pickleworm	Carbaryl (Sevin)	50% WP	2 tbsp.	0	Treat weekly once damage to blossoms or other plant parts noted.	
		80% WP	1¼ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		5% Dust	—	0		
		Endosulfan (Thiodan)	50% WP	2 tbsp.		0
	3% Dust		—	0		
	Methoxychlor (Marlate)	50% WP	2 tbsp.	1		
		25% EC	7 tsp.	1		
		5% Dust	—	1		
Squash bug	Carbaryl (Sevin)	50% WP	2 tbsp.	0	On foliage as needed.	
		80% WP	1¼ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		5% Dust	—	0		
Squash vine borer	Carbaryl (Sevin)	50% WP	2 tbsp.	0	Treat plants weekly when first moths or damage noted, especially at base of plant.	
		80% WP	1¼ tbsp.	0		
		4 lb. conc.	2 tsp.	0		
		Lindane	20% EC	1 tsp.		1
			25% WP	1 tsp.		1
			1% Dust	—		1
	Methoxychlor (Marlate)	50% WP	2 tbsp.	1	Treat plants weekly as needed.	
		25% EC	7 tsp.	1		
		5% Dust	—	1		
SWEET CORN						
Aphids	Methidathion	57% EC	2 tsp.	5	On foliage as needed.	
		25% WP	2 tbsp.	5		
		5% Dust	—	5		
Corn earworm	Carbaryl (Sevin)	50% WP	16 tbsp.	0	Use 25 gallons per acre. Treat silks when they first appear. Repeat at 2 day intervals for four applications, then at 3 day intervals until harvest.	
		80% WP	10 tbsp.	0		
		10% Dust	—	0		
	Gardona	75% WP	1 tbsp.	0		

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
SWEET CORN (cont.)					
Corn earworm or European corn borer or fall armyworm or flea beetles	Carbaryl (Sevin)	50% WP	4 tbsp.	0	On young corn direct treatment into whorl of plant.
		80% WP	2½ tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
		5% Dust	—	0	
Rootworms	Diazinon (Spectracide)	2% G	7 oz./100 feet of row	—	Apply to furrow at planting time.
SWEET POTATOES					
White grubs or Wireworms	Chlordane	45% EC	8	—	Preplanting soil treatment. Work into top 6 inch layer of soil. Apply to 100 sq. ft.
		75% EC	4 tbsp.	—	
		40% WP	6 oz.	—	
Wireworms	Diazinon (Spectracide)	2% Granular	11.5 lb./1000 sq. ft.	—	Apply over foliage when roots begin to form. This is usually during the latter part of July.
TOMATOES					
Aphids	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	1	On foliage as needed.
	Diazinon	50% WP	1 tbsp.	1	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Blister beetles or Colorado potato beetle	Carbaryl (Sevin)	50% WP	4 tbsp.	0	Weekly treatments beginning when first fruits are ½" diameter.
		80% WP	3 tbsp.	0	
		4 lb. conc.	3 tsp.	0	
		5% Dust	—	0	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Cutworms	Carbaryl (Sevin)	Follow label directions			To soil as needed on a warm evening.
	Diazinon	Follow label directions			
Flea beetles	Carbaryl (Sevin)	50% WP	2 tbsp.	0	On foliage as needed.
		80% WP	1¼ tbsp.	0	
		4 lb. conc.	2 tsp.	0	
		5% Dust	—	0	
	Methoxychlor (Marlate)	50% WP	2 tbsp.	1	
		25% EC	7 tsp.	1	
Endosulfan (Thiodan)	50% WP	2 tbsp.	1		
	3% Dust	—	1		
Hornworms (tomato and tobacco)	Carbaryl (Sevin)	50% WP	3 tbsp.	0	
		80% WP	2 tbsp.	0	
		4 lb. conc.	1 tbsp.	0	
		5% Dust	—	0	

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks
Tomatoes (cont.)					
Leaf miners	Diazinon	50% WP	1 tbsp.	1	On foliage as needed.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	1	
	Dimethoate (Cygon, De-Fend)	2.67 lb. conc.	1½ tsp.	7	
Spider mites	Dicofol (Kelthane)	35% WP	1 tbsp.	2	
		18.5% EC	3 tsp.	2	
Stink bugs	Malathion	57% EC	2 tsp.	1	
		25% WP	2 tbsp.	1	
		5% Dust	—	1	
	Naled (Dibrom)	60% EC	2 tbsp.	1	
Thrips	Methoxychlor (Marlate)	50% WP	2 tbsp.	1	
		25% EC	7 tsp.	1	
		5% Dust	—	1	
Tomato fruitworm	Carbaryl (Sevin)	50% WP	4 tbsp.	0	Weekly treatments beginning when first fruits are ¼" diameter.
		80% WP	3 tbsp.	0	
		4 lb. conc.	3 tsp.	0	
		5% Dust	—	0	
TURNIPS AND TURNIP GREENS					
Aphids	Malathion	57% EC	2 tsp.	3	On foliage as needed.
		25% WP	2 tbsp.	3	
		5% EC	—	3	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Cabbage looper	<i>Bacillus thuringiensis</i>	—	Follow label directions	0	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Flea beetles	Carbaryl (Sevin)	50% WP	2 tbsp.	14 Tops-3 Roots	
		80% WP	1½ tsp.	14 Tops-3 Roots	
		4 lb. conc.	1 tbsp.	14 Tops-3 Roots	
		5% Dust	—	14 Tops-3 Roots	
	Naled (Dibrom)	60% EC	2 tsp.	1	
Root maggots	Diazinon (Spectracide)	50% WP	2 tbsp.	10	Treat 2 or 3 times at weekly intervals immediately after emergence.
		2 lb. conc.	4 tsp.	10	
	Diazinon (Spectracide)	2G	Follow label directions	—	In seed furrow at planting time.
	Diazinon (Spectracide)	2 lb. conc.	2 tsp.	—	Apply 1 cupful per plant at transplanting time.

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Insect Control for the Vegetable Gardener (Continued)

Pest	Recommended Pesticide	Formulation You Buy ^b	Amount To Make One Gallon of Spray ^a	Days Waiting Time After Treatment Before Harvesting	Remarks	
TURNIPS (cont.)						
Vegetable weevil	Naled (Dibrom)	60% EC	2 tsp.	1	On foliage as needed.	
	Rotenone	4% WP	6 tbsp.	1		
		1% Dust		1		
WATERMELONS						
Cucumber beetles (Spotted and Striped)	Carbaryl (Sevin)	50% WP	2 tbsp.	0	On foliage as needed.	
		80% WP	1½ tbsp.	0		
		5% Dust		0		
	Lindane	20% EC	1 tsp.	1		Do not use in fields to be planted within 2 years to root crops as it may affect their flavor. Do not use after blooms open.
		25% WP	1 tbsp.	1		
		1% Dust		1		
Methoxychlor (Marlate)	50% WP	2 tbsp.	1	On foliage as needed.		
	5% Dust		1			
Leaf miners	Diazinon (Spectracide)	50% WP	1 tbsp.	3		
		2 lb. conc.	4 tsp.	3		
Spider mites	Dicofol (Kelthane)	35% EC	1 tbsp.	2		
		18.5% EC	2 tbsp.	2		
Thrips	Methoxychlor (Marlate)	50% WP	1¾ tbsp.	1		
		25% EC	7 tsp.	1		
		5% Dust		1		

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