The following table provides home garden vegetable insect control recommendations with pesticides for use by the homeowner. All chemical information provided below is given with the understanding that no endorsement of named products is intended nor is criticism implied of similar products that are not mentioned. Individuals who use pesticides are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Before purchasing or using any pesticide, always read and carefully follow the label directions.

Insecticides listed below are identified by common chemical name. A trade name in parentheses may also be listed as a convenience for the reader. Pesticide labels for commercial and homeowner products that are currently registered for use in Arkansas may be found through the Arkansas Department of Agriculture/State Plant Board website by clicking on the following link: <a href="https://www.agriculture.arkansas.gov/plant-industries/pesticide-section/registration/">https://www.agriculture.arkansas.gov/plant-industries/pesticide-section/registration/</a>.

The complete Organic Materials Review Institute (OMRI) products list can be viewed by visiting this link: <a href="http://www.omri.org/OMRI">http://www.omri.org/OMRI</a> products list.php.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
ASPARAGUS	Asparagus beetle, Japanese beetle, grasshopper, aphids	carbaryl (various brands)	See label.	1	Repeat applications as necessary up to a total of 3 times prior to harvest or a total of 5 times per crop but not more often than once every 7 days. Sevin is not effective against aphids.
		malathion 50% (Bonide)	See label.	1	Aphids and asparagus beetles ONLY. Refer to label.
		permethrin 2.5% EC (various brands)	1.5 fl oz	3	Aprilia and asparagus socios of ET. Holor to laso.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	60	Post-harvest to protect ferns.
BEAN	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
	Corn earworm	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3/14/21	DO NOT apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed or hay.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Post-harvest to protect ferns.





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BEAN (cont.)	Mexican bean beetle, bean leaf beetle,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
	flea beetle, Japanese beetle, cucumber beetle	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various)	See label.	3/14/21	DO NOT apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed or hay.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
	Potato leafhopper, fleahopper, lygus,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
	stink bug	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Lygus and stinkbugs ONLY. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Leafhoppers ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	NOT for stink bugs. Refer to label.
	Spider mite	gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when mites appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	Apply treatment at first sign of mites and speckled plants.
		sulfur 90%	2 Tbsp	0	DO NOT use if temperature is above 95°F. DO NOT use within 3 weeks of oil spray.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BEAN (cont.)	Thrips, leafminer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Leafminer ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3/14/21	DO NOT apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed or hay.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Leafminer ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Thrips ONLY. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Thrips ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		Beauveria bassiana (Mycotrol WP)	1/4 lb/20 gal water	0	
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry beans 3 snap beans	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
BEET	Aphids	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label. DO NOT apply to sugar beets.
	Flea beetle, beet webworm.	carbaryl (various brands)	See label.	7	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
	blister beetle	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Flea beetles ONLY. DO NOT spray more than 5 times per season.





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BEET (cont.)	Flea beetle, beet webworm, blister beetle (cont.)	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Flea beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
	Leafhopper	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
	Thrips	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Whitefly	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
BROCCOLI, CAULIFLOWER,	Aphids, flea beetle	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
BRUSSELS SPROUTS, RUTABAGA		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	NOT for use on Brussels sprouts or rutabaga. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season, 5 times for rutabaga.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	NOT for use on Brussels sprouts or rutabaga. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho, Bonide)	See label.	2, 7 for rutabaga 7, 3 for broccoli	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BROCCOLI, CAULIFLOWER,	Cabbage looper, diamondback	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
BRUSSELS SPROUTS, RUTABAGA (cont.)	moth, imported cabbageworm	Bacillus thuringiensis (DiPel) 2 X 4 L (Javelin) WG	1 Tbsp 2 tsp 2 tsp	0	On foliage as needed.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	NOT for use on Brussels sprouts or rutabaga. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season, 5 times for rutabaga.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	NOT for use on Brussels sprouts or rutabaga. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho, Bonide)	See label.	2, 7 for rutabaga 7, 3 for broccoli	NOT for diamondback moth. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	NOT for use on rutabaga.
	Harlequin bug	acetamiprid 0.5% (Ortho Flower, Fruit and Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	NOT for use on Brussels sprouts or rutabaga. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season, 5 times for rutabaga.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	NOT for use on Brussels sprouts or rutabaga. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	7, 3 for broccoli	Refer to label.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BROCCOLI, CAULIFLOWER,	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
BRUSSELS SPROUTS, RUTABAGA (cont.)		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	NOT for use on Brussels sprouts or rutabaga. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
(20111)		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season, 5 times for rutabaga.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	NOT for use on Brussels sprouts or rutabaga. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	7, 3 for broccoli	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season, 5 times for rutabaga.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	7, 3 for broccoli	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	NOT for use on rutabaga.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled on rutabaga.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	NOT for use on Brussels sprouts or rutabaga. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
BROCCOLI, CAULIFLOWER,	Whitefly (cont.)	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season, 5 times for rutabaga.
BRUSSELS SPROUTS, RUTABAGA (cont.)		esfenvalerate 0.425% (Monterey)	1 fl oz	3	NOT for use on Brussels sprouts or rutabaga. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
(22.2)		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	NOT for use on rutabaga. Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	NOT for use on rutabaga. Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	7, 3 for broccoli	Refer to label.
CABBAGE	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 55% (Hi-Yield) 50% (Ortho, Bonide)	1.5 tsp See label.	7	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CABBAGE (cont.)	Cabbage looper, imported	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled for cutworm.
	cabbageworm, diamondback moth, cutworm	Bacillus thuringiensis (DiPel) 2X 4L (Javelin) WG	1 Tbsp 2 tsp 2 tsp	0	Start control program when worms are small, and treat foliage every 5 to 7 days.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 4 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	1 Tbsp	7	NOT for diamondback moth. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Flea beetle, thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Flea beetles ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 4 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Flea beetle ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CABBAGE (cont.)	Flea beetle, thrips (cont.)	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	1 Tbsp	7	Refer to label.
	Harlequin bug	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	1 Tbsp	7	Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CABBAGE (cont.)	Leafhopper (cont.)	lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	1 Tbsp	7	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	1	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	1 Tbsp	7	Refer to label.
CANTALOUPE	Aphids, thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Aphids ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Aphids ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Thrips ONLY. Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CANTALOUPE (cont.)	Cucumber beetle (spotted and striped),	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
	pickleworm, squash bug, squash vine borer	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	APHIDS only. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days. For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	NOT for squash vine borer. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Cucumber beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label. NOT for squash bug.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	1 Tbsp	1	Refer to label.
	Spider mite	malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CANTALOUPE (cont.)	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	1 Tbsp	1	Refer to label.
CARROT	Aphids	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Bonide)	See Label	7	Refer to label.
	Armyworm, leafminer, leafhopper	Bacillus thuringiensis (DiPel) 2X DiPel) 4L (Javelin) WG	1 Tbsp 2 tsp 2 tsp	0	B.t. will not control leafhoppers.
		carbaryl (various brands)	See label.	7	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days. For cutworm control, this product is most effective against species which feed on the upper portions of the plant.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Leafhoppers ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Bonide)	See label.	7	Refer to label. NOT for armyworms. Bonide product labeled for leafhoppers ONLY.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CARROT	Flea beetle	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
(cont.)		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
	Thrips	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
	Whitefly	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
CELERY	Aphids, flea beetle, leafminer, fleahopper,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
	looper	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	45	Aphids and flea beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
		permethrin 2.5% EC (various brands)	1.5 fl oz	3	On foliage as needed.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Leafminers and loopers ONLY. Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	45	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Spider mite	malathion 50% (Bonide)	See label.	7	Refer to label.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CELERY (cont.)	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	45	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	45	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
COLLARD	Aphids, flea beetle	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Cabbage looper,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
	moth, imported cabbageworm	Bacillus thuringiensis (DiPel) 2X (DiPel) 4L (Javelin) WG	1 Tbsp 2 tsp 2 tsp	0	Begin foliage treatments early and repeat as necessary. Include a spreader/sticker.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
COLLARD (cont.)	Cabbage looper, diamondback moth, imported	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
	cabbageworm (cont.)	malathion 50% (Ortho, Bonide)	See label.	7	NOT for diamondback moth. Refer to label.
	,	spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Harlequin bug	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
COLLARD (cont.)	Whitefly (cont.)	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
CORN (SWEET)	Aphids	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 10 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	21	Apply when insects first appear or when damage occurs. DO NOT apply more than 5 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	21	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 5 times per season.
		malathion 50% (Bonide)	See label.	5	Refer to label.
	Corn earworm, sap beetle, flea beetle, Japanese beetle	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	2/14/48	DO NOT apply within 2 days of harvest of ears or within 14 days of harvest or grazing of forage or within 48 days of harvest of fodder.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 10 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	21	Apply when insects first appear or when damage occurs. DO NOT apply more than 5 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	21	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 5 times per season.
		malathion 50% (Bonide)	See label.	5	Refer to label. Bonide product labeled for sap beetles ONLY.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	For corn earworms ONLY, treat silk frequently as it grows.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CORN (SWEET) (cont.)	Corn earworm, European corn borer,	Bacillus thuringiensis (various brands)	2 tsp	0	Consult specific label. <i>B.t.</i> is effective while worms are feeding on the foliage.
	fall armyworm	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Corn earworm and European corn borer ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	2/14/48	DO NOT apply within 2 days of harvest of ears or within 14 days of harvest or grazing of forage or within 48 days of harvest of fodder.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 10 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Corn earworm and European corn borer ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	21	Apply when insects first appear or when damage occurs. DO NOT apply more than 5 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	21	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 5 times per season.
		permethrin 2.5% EC (various brands)	1.5 fl oz	3	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Corn borers, Worms (caterpillars, including ear-worm).
CUCUMBER	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
	Cucumber beetle (spotted and striped),	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
	pickleworm, squash bug	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CUCUMBER (cont.)	Cucumber beetle (spotted and striped), pickleworm, squash bug (cont.)	carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days. For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Cucumber beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	NOT for squash bug. Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
	Spider mite	malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
CUCUMBER (cont.)	Thrips (cont.)	malathion 50% (Ortho)	See label	1	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
EGGPLANT	Aphids, thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Aphids ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Aphids ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	3	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Thrips ONLY.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Colorado potato beetle, hornworm,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
	corn earworm	Bacillus thuringiensis var. tennebrionus (Trident II)	2-4 Tbsp	0	Colorado potato beetles ONLY. Treat when small larvae are present. NOT effective against adults or large larvae.





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
EGGPLANT (cont.)	Colorado potato beetle, hornworm, corn earworm	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
	(cont.)	carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Colorado potato beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Flea beetle	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	3	Refer to label.
	Lace bug, spider mite, whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Whiteflies ONLY. Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Lace bugs and whiteflies ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
EGGPLANT (cont.)	Lace bug, spider mite, whitefly (cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Whiteflies ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Whiteflies ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	3	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
KALE	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
KALE (cont.)	Cabbage looper, diamondback moth,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
	imported cabbageworm	Bacillus thuringiensis (DiPel) 2X (Javelin) WG	1 Tbsp 2 tsp	0	On foliage as needed.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho, Bonide)	See label.	7	NOT for diamondback moth. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Harlequin bug	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Vegetable weevil	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
LETTUCE	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	HEAD LETTUCE ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	14	Refer to label. Preharvest interval (PHI) for Bonide product is 7 head and 14 leaf.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Cabbage looper, corn earworm	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		Bacillus thuringiensis (DiPel) 2X (Javelin) WG	1 Tbsp 1 tsp	0	On foliage as needed.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	HEAD LETTUCE ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	14	Repeat applications as needed up to a total of 5 times but not more than once every 7 days. Will not control cabbage looper.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		malathion 50% (Ortho, Bonide)	See label.	14	Cabbage loopers ONLY. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Refer to label.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	HEAD LETTUCE ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
LETTUCE (cont.)	Leafhopper (cont.)	gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	14	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		gamma-cyhalothrin 0.08% (Spectracide	1.5 fl oz	1	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	14	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	HEAD LETTUCE ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	14	Refer to label.
LIMA BEANS	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Bonide)	See label.	1	Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
LIMA BEANS (cont.)	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
	Lima bean vine borer, plant bug,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Plant bug and Mexican bean beetle ONLY. Maximum applications per season (3). Days to wait to reapply (7).
	Mexican bean beetle, corn earworm	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3/14/21	DO NOT apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed or hay.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Lima bean vine borer and corn earworm ONLY.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
MUSTARD GREENS	Aphids, flea beetle	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
MUSTARD GREENS	Aphids, flea beetle (cont.)	malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
(cont.)		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Cabbage looper, diamondback moth,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
	imported cabbageworm	Bacillus thuringiensis (DiPel) 2X (Javelin) WG	1 Tbsp 2 tsp	0	Begin foliage treatments early and repeat as necessary.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho, Bonide)	See label.	7	NOT for diamondback moth. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Vegetable weevil	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
MUSTARD GREENS	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
(cont.)		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
OKRA	Aphids, leafminer	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Aphids ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Leafminer ONLY.
	Corn earworm, European corn borer, flea beetle, stink bug	carbaryl (various brands)	See label.	3	
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Flea beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Corn earworm and European corn borer ONLY.
	Leafhopper	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
	Stink bug	carbaryl 5% dust (Hi-Yield)		3	Dust lightly to cover upper leaf surface with a thin, even film of dust. Apply when air is calm. DO NOT repeat applications more often than every 7 days. DO NOT exceed more than 4 applications per year.
	Thrips	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Whitefly	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
ONION	Onion thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	14	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	14	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho, Bonide)	See label.	3	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
PEAS	Aphids, leafminer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry peas 3 green peas	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Aphids ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Leafminer ONLY.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
	Cowpea curculio	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3/14/21	Suppression ONLY. DO NOT apply within 14 days of grazing or harvest for forage or within 3 days of harvest of fresh beans or peas or within 21 days of harvest of dried beans or peas, seed or hay.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry peas 3 green peas	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
PEAS (cont.)	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry peas 3 green peas	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
	Spider Mite	sulfur 90%	2 Tbsp	0	DO NOT use if temperature is above 95°F. DO NOT use within 3 weeks of oil spray.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	7	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (3). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	21 dry peas 3 green peas	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
PEPPER	Aphids, leafminer, thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Aphid and leafminer ONLY. Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
PEPPER	Aphids, leafminer,	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	7	DO NOT spray more than 6 times per season.
(cont.)	thrips (cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Aphid and leafminer ONLY. Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Aphids and thrips ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	3	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Leafminer and thrips ONLY.
	European corn borer, flea beetle, tomato fruitworm, hornworm, stink bug	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	7	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Flea beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		permethrin 2.5% EC (various brands)	2 fl oz	3	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	European corn borer, tomato fruitworm, and hornworm ONLY.
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
PEPPER	Leafhopper	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	7	DO NOT spray more than 6 times per season.
(cont.)	(cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	7	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	7	Adults ONLY. DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	3	Refer to label.
POTATO, IRISH	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	2 tsp	0	Refer to label.
	European corn borer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		carbaryl (various brands)	See label.	7	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
POTATO, IRISH	European corn borer	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
(cont.)	(cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	7	
	Potato leafhopper, potato flea beetle,	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7). NOT labeled for blister beetles.
	Colorado potato beetle, blister beetle, stink bug	Bacillus thuringiensis var. san diego (M-Trak) var. tennebrionus (Trident II)	1.5-3 Tbsp 2-4 Tbsp	0	Colorado potato beetles ONLY. Treat when small larvae are present. NOT effective against adults or large larvae.
		carbaryl (various brands)	See label.	7	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	See label.	0	Leafhoppers and blister beetles ONLY. Refer to label.
		phosmet 70W (Imidan)	Follow label	7	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	7	Colorado potato beetle ONLY
	Potato tuberworm	Bacillus thuringiensis (DiPel) 2X (DiPel) 4L	1 Tbsp 2 tsp	0	
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
PUMPKIN	See SQUASH and Pt	JMPKIN.			
RADISH	Aphids	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
RADISH (cont.)	Flea beetle, imported cabbageworm	carbaryl (various brands)	See label.	7	Repeat applications as necessary up to a total of 6 times but not more often than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Flea beetles ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Leafhopper	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 5 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Thrips	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Whitefly	esfenvalerate 0.425% (Monterey)	1 fl oz	7	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
SPINACH	Aphids, thrips, leafminer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	Aphids and thrips ONLY. This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.



Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
SPINACH (cont.)	Aphids, thrips, leafminer	malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
	(cont.)	soap (insecticidal, M-Pede 49 EC)	2 tsp	0	On foliage as needed.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Thrips and leafminer ONLY.
	Corn earworm, looper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		<i>Bacillus thuringiensis</i> (DiPel) 2X (DiPel) 4L	1 Tbsp 2 tsp	0	
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho)	See label.	7	Cabbage loopers ONLY. Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
SQUASH, PUMPKIN	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
SQUASH, PUMPKIN (cont.)	Aphids (cont.)	malathion 50% (Ortho, Bonide)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
	Cucumber beetle (spotted and striped),	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
	flea beetle, leafhopper	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
	Pickleworm	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	See label.	1 (squash) 3 (pumpkin)	Refer to label.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
SQUASH, PUMPKIN	Spider mite	malathion 50% (Ortho, Bonide)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
(cont.)	Squash bug	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days. For optimum control of squash bugs, apply sufficient spray volume for thorough coverage and time sprays for early morning or late afternoon.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
	Squash vine borer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
SQUASH,	Whitefly	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
PUMPKIN (cont.)	(cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1 (squash) 3 (pumpkin)	Refer to label.
SWEET POTATO	Wireworm				No effective registered control measures.
ТОМАТО	Aphids	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
	Cutworm (surface type)	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
TOMATO (cont.)	Cutworm (surface type) (cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
	Flea beetle, Colorado potato beetle	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		Bacillus thuringiensis var. san diego (M-Trak) var. tennebrionus (Trident II)	1.5-3 Tbsp 2-4 Tbsp	0	Colorado potato beetles ONLY. Treat when small larvae are present. NOT effective against adults or large larvae.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	Colorado potato beetle ONLY
	Grasshopper	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
TOMATO (cont.)	Leafhopper	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	1	Refer to label.
	Leafminer	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Spider mite	malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
		sulfur 90%	2 Tbsp	0	DO NOT use if temperature is above 95°F. DO NOT use within 3 weeks of oil spray.





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
TOMATO (cont.)	Stink bug	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		permethrin 2.5% EC (various brands)	1.5 fl oz	7	DO NOT apply on cherry tomatoes or varieties less than 1 inch in diameter.
	Thrips	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Tomato fruitworm, cabbage looper, tomato hornworm	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		Bacillus thuringiensis (DiPel) 2X (DiPel) 4L (Javelin) WG (Biobit) FC	1 Tbsp 2 tsp 2 tsp 1-3 tsp	0	Treat weekly, if necessary. Begin when fruits are 0.5 inch in diameter. Fruitworms are most serious after August 1. DO NOT tank mix <i>B.t.</i> formulations with Dyrene.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 7 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 6 times per season.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
TOMATO (cont.)	Tomato fruitworm, cabbage looper, tomato hornworm (cont.)	esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
	(COIII.)	gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		permethrin 2.5% EC (various brands)	1.5 fl oz	7	DO NOT apply on cherry tomatoes or varieties less than 1 inch in diameter.
	-	spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	1	
	Whitefly	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (4). Days to wait to reapply (7).
		Beauveria bassiana (Mycotrol WP)	1/4 lb/20 gal water	0	Apply when whiteflies are observed. Repeat in 4- to 5-day intervals.
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	1	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 6 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	1	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		gamma-cyhalothrin 0.08% (Spectracide)	1.5 fl oz	5	Apply when insects first appear or when damage occurs. DO NOT apply more than 9 times per growing season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		lambda-cyhalothrin 0.5% (Bonide)	ready-to-use premix	5	Apply thoroughly as a foliar cover spray to both sides of plant leaves and all plant surfaces where insects are present. DO NOT spray more than 9 times per season.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		pyrethrum products	Follow label	0	
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
TURNIP,	Aphids, flea beetle	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
TURNIP GREENS		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	7	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	





Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
TURNIP, TURNIP GREENS (cont.)	Cabbage looper, diamondback moth, imported cabbageworm	Bacillus thuringiensis (DiPel) 2X (Javelin) WG	1 Tbsp 2 tsp	0	On foliage as needed.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho)	See label.	7	NOT for diamondback moth. Refer to label.
		spinosad 0.5% F (Naturalyte)	4 Tbsp	1	On foliage as needed.
	Harlequin bug	carbaryl (various brands)	0.5-1.0 qt/acre	14	Repeat applications as needed up to a total of 4 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Leafhopper	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Thrips	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
	Vegetable weevil	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
	Whitefly	cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	7	Refer to label.
WATERMELON	Aphids	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
WATERMELON (cont.)	Aphids (cont.)	imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.		Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	On foliage as needed.
	Cucumber	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	7	Maximum applications per season (5). Days to wait to reapply (5).
	beetle (spotted and striped)	bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
	Leafhopper	acetamiprid (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
	Pickleworm	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns & Gardens)	1.5 fl oz	3	Apply when insects first appear. Re-apply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced Vegetable & Garden Insect Spray Concentrate)	0.5 fl oz	0	Adults only. Do not spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey Bug Buster II)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		malathion 50% (Ortho, Bonide)	See label.	1	

Commodity	Insect	Insecticide and Formulation	Amount of Formulation Per Gallon of Spray	Minimum Interval (Days) Between Last Application and Harvest	Precautions and Remarks
WATERMELON	Spider mite	malathion 50% (Ortho, Bonide)	See label.	1	Refer to label.
(cont.)		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
	Thrips	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		carbaryl (various brands)	See label.	3	Repeat applications as needed up to a total of 6 times but not more than once every 7 days.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
		soap (insecticidal, M-Pede 49 EC)	2 Tbsp	0	
		spinosad 0.5% (Bonide, Monterey, Natural Guard)	2.0 fl oz	3	Refer to label.
	Whitefly	acetamiprid 0.5% (Ortho Flower, Fruit & Vegetable Insect Killer)	1.5 fl oz	0	Maximum applications per season (5). Days to wait to reapply (5).
		bifenthrin 0.3% + zeta-cypermethrin 0.075% (Ortho Bug-G-Gon Insect Killer for Lawns and Gardens)	1.5 fl oz	3	Apply when insects first appear. Reapply as necessary to maintain control waiting at least 7 days between applications.
		cyfluthrin 0.75% (Bayer Advanced)	0.5 fl oz	0	Adults ONLY. DO NOT spray more than 4 times per season.
		esfenvalerate 0.425% (Monterey)	1 fl oz	3	Spray plants to wet upper and lower leaf surfaces until dripping. Apply as necessary to maintain control waiting at least 7 days between each application.
		imidacloprid 0.235% (Bayer Advanced Fruit, Citrus and Vegetable Insect Control Concentrate)	0.5 fl oz/1 qt of water/10 sq ft of row as a drench	21	This systemic insecticide dissolved in water moves down through the soil, where it is absorbed by the roots. Once absorbed, it moves up through the plant providing insect protection.
		malathion 50% (Ortho)	See label.	1	Refer to label.
WITHIN GARDEN TREATMENT (See labels for specific crops)	Red imported fire ant	S-methoprene (Extinguish)	3-5 Tbsp/mound 1.0-1.5 lb/acre	Mound-to-mound treatment rate Broadcast rate	This product is an insect growth regulator (IGR).
		pyriproxyfen (Esteem)	2-4 Tbsp/mound 1.5-2.0 lb/acre	Mound-to-mound treatment rate Broadcast rate	This product is an insect growth regulator (IGR).
		spinosad (Conserve Fire Ant Bait, Ferti-lome Come and Get It Fire Ant Killer)	4-6 Tbsp/mound 2.5-5.0 lb/acre	Mound-to-mound treatment rate Broadcast rate	See label for specific rate and application instructions. Conserve Fire Ant Bait is OMRI listed for organic production.