Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
ASPARAGUS	Asparagus beetle, Japanese beetle, Grasshoppers	acetamiprid Assail 30SC	 4.5 fl oz	0.1			1
		bifenthrin (**R**) Brigade eVo	 1.6-6.4 fl oz	0.033-0.10		Apply in a minimum 10 gallons of finished spray per acre with ground equipment	3
		carbaryl Sevin XLR Sevin 4F	 1 qt 1 qt	1.0	When damage occurs.	DO NOT apply during bloom.	1
		malathion Malathion 57% EC	 2 pt	1.25			1
		methomyl (**R**) Lannate 2.4 LV Lannate 90 SP	 1.5-3 pt 1/2-1 lb	0.45-0.9			1
		permethrin (**R**) Pounce 25 WP	 3.2-6.4 oz	0.05-0.1			1
		spinetoram Radiant 1 SC	 4-8 oz	0.03-0.063		After harvest of ferns only.	3
		spinosad SpinTor 2 SC	 4-6 oz	0.062-0.094		For protection of ferns only.	60
	Beet armyworm, Cutworms, Yellow-striped armyworm	*Bacillus thuringiensis* Biobit, Dipel, Javelin, etc.	See label for rates.				0
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 1.8-3.75 oz	0.045-0.098 0.047-0.098 0.047-0.098 0.047-0.098		DO NOT use an adjuvant with Coragen.	1
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		methomyl (**R**) Lannate 2.4 LV Lannate 90 SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9	When damage occurs.		1
		spinosad Entrust SC	 2.5-5 fl oz	0.04-0.078			1
BEANS (snap or lima)	Bean leaf beetle, Mexican bean beetle	acetamiprid Assail 30SC	 2.1-4.5 fl oz	0.048-0.10			7
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1			3
		carbaryl Sevin XLR Sevin 4F	 1/2-1 qt 1/2-1 qt	0.5-1	When damage occurs.	DO NOT apply during bloom.	3
		esfenvalerate (**R**) Asana XL 0.66 EC	 2.9-5.8 oz	0.015-0.03		Asana is not registered on lima beans.	3
		gamma-cyhalothrin Proaxis 0.5EC	 2.56-3.84 oz	0.01-0.015			7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 oz	0.02-0.03			7
		methomyl (**R**) Lannate 90 SP	 0.5 lb	0.45			1
		Novaluron Rimon 0.83 EC	 9-12 oz	0.058-0.077		**Controls immature mexican bean beetles only.**	1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.047-0.1			1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
BEANS (snap or lima) (cont.)	Cabbage looper	*Bacillus thuringiensis* Agree WG other formulations		2		Loopers rarely require management on Arkansas snap bean.	
		chlorantraniliprole Shenzi 400SC Coragen Coragen eVo Exceliprole 400 SC Trinalor	 1.7-3.8 fl oz 3.5-7.5 fl oz 1.2-2.5 fl oz (foliar) 1.8-3.75 fl oz 1.8-3.75 oz	0.045-0.098 0.047-0.098 0.047-0.098 0.047-0.098	 Foliar In-furrow application at planting	Do not apply more than 5.1 fl oz Coragen eVo insect control or 0.2 lb a.i. of chlorantraniliprole containing products per acre per crop.	1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 10 fl oz	0.10		For Colorado Potato beetle only.	7 (succulent) 21(dried)
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05		Asana is not registered on lima beans.	3
		methomyl (**R**) Lannate 90 SP Lannate 2.4 LV	 0.5-1 lb 1 1/2-3 pt	0.45-0.9			3
		methoxyfenozide Intrepid 2F	 8-16 oz	0.16-0.25			7
	Corn earworm	bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1		In spring planted snap bean, scouting (300 sweeps per 50 acres) can be used to reduce insecticide applications.	3
		carbaryl Sevin 5% D	 40 lb	2.0	When first pods are 1 inch long and weekly thereafter.	Fall-planted snap beans will generally require corn earworm management. DO NOT apply during bloom.	3
		chlorantraniliprole Coragen 1.67 SC Shenzi 400SC Coragen eVo Exceliprole 400 SC Trinalor	 3.5-7.5 fl oz 1.7-3.8 fl oz 1.2 – 2.5 fl oz (foliar) 2.55-3.75 fl oz 2.15-4.15 oz	0.045-0.098 0.047-0.098 0.066-0.098 0.047-0.098		Do not apply more than 5.1 fl oz Coragen eVo insect control or 0.2 lb a.i. of chlorantraniliprole containing products per acre per crop.	1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-10 fl oz	0.06-0.10		For Colorado Potato beetle only.	7 (succulent) 21(dried)
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05		DO NOT feed treated vines. Asana is not registered on lima beans.	3
		gamma-cyhalothrin Proaxis 0.5EC	 2.56-3.84 oz	0.01-0.015			7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 oz	0.02-0.03			7
		methomyl (**R**) Lannate 90 SP Lannate 2.4 LV	 0.5 lb 1 1/2 pt	0.45			1
		methoxyfenozide Intrepid 2F	 10-16 oz	0.16-0.25			7
		spinetoram Radiant 1 SC	 4-8 oz	0.03-0.063			3 (succulent); 28 (dried)
		spinosad Blackhawk	 1.7-3.3 oz	0.04-0.07			3 (succulent); 28 (dried)
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
BEANS (snap or lima) (cont.)	Corn earworm (cont.)	zeta-cypermethrin +bifenthrin (**R**) Hero	10.3 oz	0.1			3
	European corn borer	chlorantraniliprole Coragen 1.67 SC Coragen eVo Shenzi 400SC Exceliprole 400 SC Trinalor	3.5-7.5 fl oz 1.2 – 2.5 fl oz (foliar) 1.7-3.8 fl oz 2.55-3.75 fl oz 2.15-4.15 oz	0.045-0.098 0.047-0.098 0.066-0.098 0.047-0.098		Corn borers rarely require management on Arkansas snap bean. Do not apply more than 5.1 fl oz Coragen eVo insect control or 0.2 lb a.i. of chlorantraniliprole containing products per acre per crop.	1
		Cyantraniliprole Exirel 0.83 EC	7-13.5 fl oz	0.45-0.88			1
		zeta-cypermethrin + bifenthrin (**R**) Hero	10.3 oz	0.1			3
	Mites	abamectin Agri-Mek SC	1.75-3.5 fl oz	0.01-0.05	For control of spider mites.	DO NOT make more than 2 applications. Must be mixed with an adjuvant.	7
		acequinocyl Kanemite 15 SC	31 fl oz	0.3		DO NOT make more than 2 applications.	7
		fenpyroximate Portal 0.4 EC	2 pt	0.1		Snap bean only. DO NOT make more than 2.	1 (Snap bean)
		bifenthrin (**R**) Brigade 2 EC	6.4 fl oz	0.1			3
		dimethoate Dimethoate 4EC	1 pt	0.5			0
	Seedcorn maggot, Wireworms	bifenthrin Empower 1.15 G	3.5-8.7 lb			Apply preplant broadcast in the top 1 to 3 inches of soil.	9
		phorate (**R**) Thimet 20G		7.6	Distribute 4.5-7.0 oz of the granules evenly in 1,000 row feet over the top of the row at planting time (30-inch row minimum).	DO NOT feed foliage of treated beans. DO NOT place Thimet in contact with seed.	
	Stink bugs	acephate (**R**) Orthene 97	0.5-1 lbs oz	0.49-0.97			14
		bifenthrin (**R**) Brigade 2 EC	2.6-6.4 fl oz	0.04-0.1			3
		lambda-cyhalothrin (**R**) Warrior II	1.28-1.92 oz	0.02-0.03			7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	3.2-4.0 oz	0.02-0.025			1
		zeta-cypermethrin + bifenthrin (**R**) Hero	10.3 oz	0.1			3
BEETS	Flea beetles, webworms	carbaryl Sevin 4F Sevin XLR Plus	1 qt 1 qt	1.0	When insects appear in damaging numbers.	DO NOT apply during bloom.	7
		imidacloprid Prey 1.6 F	3.5 oz	0.044			7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	1.8-4.0 oz	0.011-0.025			1

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
CARROTS	Flea beetles, celery worm, leafhoppers	beta-cyfluthrin + imidacloprid Leverage 360	 2.8 oz	0.066			7
		carbaryl Sevin 4F Sevin XLR Plus	 1 qt 1 qt	1.0	When insects appear in damaging numbers.	Avoid application when foliage is wet. DO NOT apply during bloom.	7
		imidacloprid Prey 1.6 F	 3.5 oz	0.044			7
		malathion Malathion 57% EC	 2 pt	1.25	Use only for leafhoppers.		7
		sulfoxaflor Transform WG	 1.5-2.75	0.047-0.086		Leafhopper control only. Check label for crop rotation restrictions.	7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 1.8-4.0 oz	0.011-0.025			1
COLE CROPS (Broccoli, Brussels sprouts, cabbage and cauliflower)	Aphids	acetamiprid Assail 30SC	 1.7-4.5 fl oz	0.038-0.1			1
		acetamiprid + bifenthrin Savoy	 4.9-12.9 oz			Maximum of 19 oz a season.	7
		beta-cyfluthrin + imidacloprid Leverage 360	 3 oz	0.07			7
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1			7
		flonicamid Beleaf 50SG	 2-2.8 oz	0.062-0.089			0
		flupyradifurone Sivanto Prime	 7-14 fl oz	0.09-0.18		Except green peach aphid. Do not apply more than 28 fl oz in a season.	1
		imidacloprid Admire Pro 4.6 F Prey 1.6 F	 3.75 oz 1.3 fl oz	0.047			7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 10.3 oz	0.1			3
	Caterpillars (cabbage looper, diamondback, imported and cross-striped cabbage worm)	Insecticide-resistant populations of diamondback may not be controlled with some registered insecticides. To manage resistance, avoid transplants from Georgia and Florida, and avoid applying more than 2 sequential applications of insecticides with the same mode of action (MOA) before switching to another MOA. After two applications, rotate to an insecticide with a different mode of action. Do not allow populations to reach high densities before treatments are ini- tiated. Thorough spray coverage is important for achieving effective control and can be improved by the use of a wetting agent. Use of pyrethroid insecticides destroys natural enemies and aggravates diamondback moth infestations.					
		acetamiprid + bifenthrin Savoy	 9.6-12.9 oz			**Use on diamond back moth only.** Maximum of 19 oz a season.	7
		Bacillus thuringiensis (Dipel, Javelin, Agree, Crymax)			Check label.	Slow acting but works well.	0
		beta-cyfluthrin + imidacloprid Leverage 360	 3 oz	0.07			7
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1		Follow label directions.	7

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
COLE CROPS (Broccoli, Brussels sprouts, cabbage and cauliflower) (cont.)	Caterpillars (cabbage looper, diamondback, imported and cross-striped cabbage worm) (cont.)	chlorantraniliprole		0.045-0.098		Diamondback moth resistance management: Do not apply Coragen® eVo insect control more than twice to any generation of diamondback moth or within any 30 day period. After the second application of Coragen® eVo insect control for diamondback moth, rotate to another effective insecticide with a different mode of action (i.e. a product with a different IRAC group number). See label for more info.	3
		Coragen 1.67 SC	3.5-7.5 fl oz				
		Coragen eVo	1.2 - 2.5 fl oz (foliar) 1.2 - 2.5 fl oz (soil)				
		Shenzi 400SC	1.7-3.8 fl oz				
		Exceliprole 400 SC	1.8-3.75 fl oz	0.047-0.098			
		Trinalor	2.15-4.15 oz	0.047-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**)		0.06-0.09			3
		Besiege	6-9 fl oz				
		Cyantraniliprole		0.45-0.88			1
		Exirel 0.83 EC	7-13.5 fl oz				
		esfenvalerate (**R**)		0.03-0.05		DO NOT feed treated plants to livestock.	3
		Asana XL 0.66 EC	5.8-9.6 oz				
		indoxacarb		0.046-0.065			3
		Avaunt eVo	2.5-3.5 oz				
		lambda-cyhalothrin (**R**)		0.02-0.03			1
		Warrior II	1.28-1.92 fl oz				
		methomyl (**R**)		0.45-0.9	Apply when cabbage loopers are small.		1 (cabbage) 3 (broccoli, Brussels sprouts & cauliflower)
		Lannate 2.4 LV	1/2-3 pt				
		Lannate SP	1/2-1 lb				
		methoxyfenozide		0.06-0.12			1
		Intrepid 2F	4-8 oz				
		naled (R)		0.9-1.8		Do not apply when temperature is over 90°F. Allow a minimum of 7 days between applications. Do not make more than 5 applications per season.	7
		Dibrom 8 EC	1-2 pts				
		permethrin (**R**)		0.05-0.1			1
		Ambush 25 W	3.2-6.4 oz				
		Ambush 2.0 EC	3.2-12.8 oz				
		Pounce 25 WP	3.2-6.4 oz				
		spinetoram		0.03- 0.06			1
		Radiant SC	5-10 fl oz				
		spinosad		0.023-0.156			1
		SpinTor 2 SC	1.5-10 fl oz				
		tolfenpyrad		0.17-.21		Do not make more than 2 applications per crop cycle. Allow at least 14 days between applications.	1
		Torac	17-21 fl oz				
		zeta-cypermethrin (**R**)		0.014-0.025			1
		Mustang Maxx 0.8 EC	2.24-4.0 oz				
		zeta-cypermethrin + bifenthrin		0.1			
		Hero	10.3 oz				7
	Cutworms	beta-cyfluthrin		0.007-0.013			0
		Baythroid XL	0.8-1.6 oz				
		bifenthrin (**R**)		0.033-0.01		Follow label directions.	7
		Brigade 2 EC	2.1-6.4				

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
COLE CROPS (Broccoli, Brussels sprouts, cabbage and cauliflower) (cont.)	Cutworms (cont.)	chlorantraniliprole + lambda-cyhalothrin (**R**)		0.05-0.08			3
		Besiege	5-8 fl oz				
		cypermethrin		0.05-0.01		Follow label directions.	1
		Holster 2.5 EC	2.5-5 oz				
		diazinon (**R**)		2.0-4.0	Broadcast just before planting and incorporate.		
		Diazinon AG500	2-4 qt				
		Diazinon AG600 WBC	51-102 fl oz				
		esfenvalerate (**R**)		0.03-0.05	Apply at base of plants.	Use as needed.	3
		Asana XL 0.66 EC	5.8-9.6 oz				
		zeta-cypermethrin (**R**)		0.02-0.025			1
		Mustang Maxx 0.8 EC	3.2-4.0 oz				
	Harlequin bug, stink bugs	acetamiprid + bifenthrin				Maximum of 19 oz a season.	7
		Savoy	9.6-12.9 oz				
		bifenthrin (**R**)		0.033-0.10			7
		Brigade 2 EC	2.1-6.4 oz				
		beta-cyfluthrin + imidacloprid		0.07			7
		Leverage 360	3 oz				
		carbaryl		1.2		Follow label directions.	14
		Sevin XLR Plus	1-2 qt			DO NOT apply during bloom.	
		Sevin 4F	1-2 qt				
		clothianidin		0.05-0.067			7
		Belay 50	3-4 fl oz				
		dinotefuran				Restriction: Do not combine foliar applications	
		Venom 70 SG	1-4 oz	0.044-0.175		of Scorpion with soil application, or vice	1
		Scorpion 35 SL	2-7 fl oz (foliar)	0.23-0.33		versa. Only use one application method.	1
			9-13 fl oz (soil)				21
		lambda cyhalothrin (**R**)		0.02-0.03			1
		Warrior II	1.28-1.92 fl oz				
	Whitefly	acetamiprid		0.047-0.1			3
		Assail 30SC	2.1-4.5 fl oz -				
		afidopyropen		0.032-0.045		DO NOT apply more than 14 fl ozs of Versys	0
		Versys 0.83 DC	5-7 fl oz			Inscalis (0.09 lb afi dopyropen ai) per acre per season.	
		buprofezin		0.25-0.38		For ground application, use a minimum of 20	1
		Courier SC	9-13 fl oz			gallons of water per acre.	
		cyantraniliprole					
		Verimark 1.67 SC	6.75-13.5 fl oz (soil)	0.088-0.176			N/A
		Exirel 0.83 SE	13.5-20.5 fl oz (foliar)	0.088-0.133			1
		dinotefuran,					
		Venom 70 SG	1-4 oz (foliar)	0.044-0.175			1
			5-7.5 oz (soil)	0.219-0.328			21
		Scorpion 35 SL	2-7 fl oz (foliar)	0.05-0.18			1
			9-13 fl oz (soil)	0.23-0.33			21
		flupyradifurone				Do not apply more than 28 fl oz of SIVANTO	
		Sivanto Prime	10.5-14.0 (foliar)	0.14-0.18		prime (0.365 Pound Flupyradifurone) per	1
			21.0-28.0 (soil)	0.27-0.37		Acre Per Crop Season on brassica (cole) leafy vegetables, regardless of method of application, product or formulation.	21

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
COLE CROPS (Broccoli, Brussels sprouts, cabbage and cauliflower) (cont.)	Whitefly (cont.)	Spiromesifen Oberon 2 SC	 8.5 fl oz	0.133			7
		Spirotetramat Movento 2 MPC	 4-5 fl oz	0.06-0.08			1
		pyrifluquinazon PQZ 1.87 EC	 2.4 -3.2 fl oz	0.035-0.047			1
		pyriproxyfen Knack 0.86 EC	 8-10 fl oz	0.054-0.068			7
CUCURBITS (Cantaloupe, cucumber, melons, pumpkin, squash, summer squash and watermelon)	Aphids	acetamiprid Assail 30SC	 2.1-3.4 fl oz	0.047-0.075			0
		acetamiprid + bifenthrin Savoy	 9.6-12.9 oz			Maximum of 38.7 oz a season.	3
		flonicamid Beleaf 50SG	 2-2.8 oz	0.062-0.089			0
		flupyradifurone Sivanto Prime	 7-14 fl oz	0.09-0.18		DO NOT use foliar applications in muskmelon, cantaloupe, or honeydew melon.	1
		sulfoxaflor Transform WG	 0.75	0.023		Check label for crop rotation restrictions.	1
	Cucumber beetles	acetamiprid Assail 30SC	 2.1-4.5 fl oz	0.047-0.1			1
		acetamiprid + bifenthrin Savoy	 6-12.9 oz			Maximum of 38.7 oz a season.	3
		beta-cyfluthrin Baythroid XL	 2.4-2.8 oz	0.019-0.022			0
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1			3
		carbaryl Sevin XLR Plus Sevin 4F	 1 qt 1 qt	1.0	When insects first appear.	Sevin is highly toxic to honeybees. Avoid excessive applications. DO NOT apply when foliage is wet. DO NOT apply during bloom.	3
		clothianidin Belay 5	 3-4 fl oz	0.05-0.067		DO NOT use adjuvant with foliar applications. **DO NOT use after 4th true leaf.**	-
		dinotefuran Venom 70 SG Scorpion 35 SL	 1-4 oz 2-7 fl oz (foliar) 9-13 fl oz (soil)	 0.044-0.175 0.05-0.18 0.23-0.33		Restriction: Do not combine foliar applications of Scorpion with soil application, or vice versa. Only use one application method.	 1 1 21
		imidacloprid Admire Pro 4.6 F	 7-10.5 fl oz	0.28-0.38		Admire applied into soil is highly effective against cucumber beetles and can reduce seedling loss. **Soil Application Only.**	21
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		malathion Malathion 5 EC	 1.5-2.75 pt	0.94-1.7		Use no more than 1.5 pints on winter squash or pumpkins or 2 pints on watermelons.	1
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9		DO NOT use Lannate on pumpkins.	1 (lower rate) 3 (higher rate)
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.8-4.0 oz	0.0175-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 10.3 oz	0.1			3

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
CUCURBITS (Cantaloupe, cucumber, melons, pumpkin, squash, summer squash and watermelon) (cont.)	Flea beetles Tobacco budworm Beet armyworm	methomyl (**R**)		0.45-0.9	When insects first appear.	One day up to 2 pt, over 2 pt 3 days. DO NOT apply to pumpkins.	1-3
		Lannate 2.4 LV	1 1/2-3 pt				
		Lannate SP	1/2-1 lb				
		methoxyfenozide		0.06-0.16		Not for control of tobacco budworm.	3
		Intrepid 2F	4-10 oz				
		spinosad		0.0625-0.125		Not labeled for flea beetles.	3
		SpinTor 2 SC	4-8 fl oz				
	Mites (Mites are primarily a problem on cucumber and watermelon)	abamectin		0.01-0.019		Must be mixed with an adjuvant (NIS surfactant).	7
		Agri-Mek 0.7 SC	1.75-3.5 oz				
		bifenazate		0.375-0.5		Only one application per season.	3
		Acramite 50 WS	0.75-1 lb				
		extazole		0.09-0.135		Does not kill Adults. DO NOT make more than 1 application per season.	7
		Zeal 2.88 SC	4-6 fl oz				
		Fenpyroximate					1
		Portal	2 pt				
		spiromesifen		0.11-0.13			7
		Oberon 2 SC	7-8.5 oz				
	Pickleworm, Melonworm, Cutworms	acetamiprid + bifenthrin				Maximum of 38.7 oz a season.	3
		Savoy	6-12.9 oz				
		Bacillus thuringiensis		Check label.			
		Dipel, Javelin, Agree, Crymax, Xentari					
		beta-cyfluthrin		0.013-0.019			0
		Baythroid XL	1.6-2.4 oz				
		bifenthrin (**R**)		0.04-0.1			3
		Brigade 2 EC	2.6-6.4 fl oz				
		carbaryl		1.0	When insects or damage first appears.	Avoid excessive applications. DO NOT apply when foliage is wet. DO NOT apply during bloom.	3
		Sevin XLR Plus	1 qt				
		Sevin 4F	1 qt				
		chlorantraniliprole					1
		Coragen 1.67 SC	2.0-7.5 fl oz	0.026-0.098			
		Coragen eVo	0.7-1.2 fl oz (melonworm)	0.027-0.047		Coragen eVo not labeled for cutworms	
			1.2-2.5 fl oz (pickleworm)	0.047-0.098			
		Exceliprole 400 SC	1.03-1.8 fl oz (melonworm)	0.027-0.047			
			1.8-3.75 fl oz (pickleworm)	0.047-0.098			
		Shenzi 400SC	1.0-3.8 fl oz	0.026-0.098			
		Trinalor	1-2.5 oz (melonworm)	0.022-0.054			
			2.15-4.5 oz (pickleworm)	0.047-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**)		0.06-0.09		Use higher rate for heavy infestations and for increased residual control	1
		Besiege	6-9 fl oz				
		Cyantraniliprole		0.45-0.88			1
		Exirel 0.83 EC	7-13.5 fl oz				
		cyclaniliprole		0.036- 0.054		Foliar applications of this product are limiting once flowers are present, see the label for more information.	1
		Harvanta 50 SL	10.9-16.4 fl oz				
		esfenvalerate (**R**)		0.03-0.05		Asana may cause some phytotoxicity to zucchini squash.	3
		Asana XL 0.66 EC	5.8-9.6 oz				
		lambda-cyhalothrin (**R**)		0.02-0.03			1
		Warrior II	1.28-1.92 oz				

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
CUCURBITS (Cantaloupe, cucumber, melons, pumpkin, squash, summer squash and watermelon) (cont.)	Pickleworm, Melonworm, Cutworms (cont.)	methoxyfenozide Intrepid 2F	 4-10 fl oz	0.06-0.15			3
		permethrin (**R**) Ambush 2.0 EC Pounce 3.2 EC	 6.4-12.8 oz 4-8 oz	0.1-0.2	When insects or damage first appear.		0
		spinetoram Radiant 1 SC	 5-10 oz	0.038-0.079			3
		spinosad SpinTor 2 SC	 4-8 oz	0.062-0.125		Follow label directions. SpinTor does not control squash bug.	3
		zeta-cypermethrin +bifenthrin Hero	 10.3 oz	0.1			3
	Squash Bug (Rarely a pest of cucumber or watermelon)	acetamiprid Assail 30SC	 2.1-4.5 fl oz	0.047-0.1			
		acetamiprid + bifenthrin Savoy	 12.9 oz			Maximum of 38.7 oz a season.	3
		beta-cyfluthrin Baythroid XL	 1.6-2.4 oz	0.013-0.019			0
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1		Bifenthrin is the only registered insecticide that provides moderate but effective control of squash bug nymphs. Almost no control should be expected of adult squash bugs.	3
		carbaryl Sevin XLR Plus Sevin 4F	 1 qt 1 qt	1.0	When insects or damage first appear.	Avoid excessive applications. DO NOT apply when foliage is wet. DO NOT apply during bloom.	3
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05		Asana may cause some phytotoxicity to zucchini squash.	3
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		permethrin (**R**) Ambush 2.0 Pounce 3.2	 6.4-12.8 oz 4-8 oz	0.1-0.2	When insects or damage first appear.		0
		zeta-cypermethrin + bifenthrin Hero	 10.3 oz	10.3 oz			3
	Squash Vine Borer (Only attacks squash and pumpkin)	acetamiprid Assail 30SC	 4.5 fl oz	0.1		Not generally a serious issue in large plantings of squash or pumpkin. Consider a blue hubbard squash trap crop for control.	0
		acetamiprid + bifenthrin Savoy	 6-12.9 oz	0.1			3
		bifenthrin (**R**) Brigade 2 EC	 2.6-6.4 fl oz	0.04-0.1			3
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-25 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	 0.045-0.098 0.047-0.098 0.047-0.098 0.044-0.098 0.047-0.098			1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-9 fl oz	0.06-0.09		Use higher rate for heavy infestations and for increased residual control	1
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
CUCURBITS (Cantaloupe, cucumber, melons, pumpkin, squash, summer squash and watermelon) (cont.)	Whiteflies	acetamiprid		0.048-0.077		Insecticide use will not effectively reduce high populations of whiteflies. Removal of alternate host plants (Weeds) along with field plowing immediately after harvest aids in population suppression.	0
		Assail 30 SG	2.5 oz-4 oz				
		acetamiprid + bifenthrin	6-12.9 oz				3
		Savoy					
		chlorantraniliprole		0.065-0.098	Use on nymphs only. See label for remarks.		1
		Coragen 1.67 SC	5-7.5 fl oz				
		Coragen eVo	1.7-2.5 fl oz				
		Exceliprole 400 SC	2.55-3.75 fl oz	0.066 -0.098	Suppression only. Use in conjunction with an effective adult whitefly control program.		
		Shenzi 400SC	2.5-3.5 fl oz				
		Trinalor	3-4.5 oz	0.066-0.098			
		Cyantraniliprole		0.088-0.133			1
		Exirel 0.83 EC	13.5-20 fl oz				
		pyriproxyfen		0.05-0.067			7
		Knack 0.86 EC	8-10 oz				
		sulfoxaflor		0.063-0.071			1
		Transform WG	2.0-2.25				
		thiomethoxam		0.047-0.086	Follow label directions.		0
		Actara 25 WDG	3-5.5 oz				
EGGPLANT	Aphids	acetamiprid		0.038-0.075			0
		Assail 30SC	1.7-3.4 fl oz				
		acetamiprid + bifenthrin				Follow label directions.	7
		Savoy	4.9-9.6 oz				
		beta-cyfluthrin + imidacloprid		0.89-0.096			
		Leverage 360	3.8-4.1 oz				7
		flonicamid		0.089-0.133			0
		Beleaf 50 SG	2.8-4.28 oz				
		flupyradifurone		0.09-0.15			1
		Sivanto Prime	7-12 fl oz				
		imidacloprid		0.05-0.08			0
		Admire Pro 4.6 F	1.3-2.2 fl oz				
		sulfoxaflor		0.023-0.031		Check label for crop rotation restrictions.	1
		Transform WG	0.75-1.0				
		thiamethoxam		0.03-0.047			0
		Actara 25 WDG	2-3 oz				
	Caterpillars	beta-cyfluthrin		0.013-0.022		Use higher rates for loopers, pinworms and armyworms.	7
		Baythroid XL	1.6-2.8 oz				
		beta-cyfluthrin + imidacloprid		0.89-0.096			
		Leverage 360	3.8-4.1 oz				7
		chlorantraniliprole		0.045-0.098			1
		Coragen 1.67 SC	3.5-7.5 fl oz				
		Coragen eVo	1.2-25 fl oz	0.047-0.098			
		Exceliprole 400 SC	1.8-3.75 fl oz	0.047-0.098			
		Shenzi 400SC	1.0-3.8 fl oz				
		Trinalor	2.15-4.5 oz	0.047-0.098			
		Cyantraniliprole		0.45-0.88			1
		Exirel 0.83 EC	7-13.5 fl oz				
		chlorantraniliprole + lambda-cyhalothrin (**R**)		0.06-0.09			5
		Besiege	6-9 oz				
		methoxyfenozide		0.06-0.25			1
		Intrepid 2F	4-16 fl oz				

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
EGGPLANT	Flea beetles, Colorado potato beetle (cont.)	beta-cyfluthrin Baythroid XL	 2.8 oz	0.022			7
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	0.89-0.096			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 fl oz	0.033-0.1			7
		carbaryl Sevin XLR Plus Sevin 4F	 1/2-2 qt 1/2-2 qt	0.5-2.0		DO NOT apply during bloom. Use higher rates for Colorado potato beetle.	3
		dinotefuran Venom 70 SG Scorpion 35 SL 	 1-4 oz (foliar) 5-7.5 oz (soil) 2-7 fl oz (foliar) 9-13 fl oz (soil)	 0.044 -0.175 (foliar) 0.219-0.328 (soil) 0.05-0.18 (foliar) 0.23-0.33 (soil)		Stinkbugs: Coverage is essential for adequate control. Use sufficient water volume to ensure good coverage. Restriction: Do not combine foliar applications of Venom or Scorpion with soil application, or vice versa. Only use one application method.	1 21 1 21
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			7
		imidacloprid Admire Pro 4.6 F	 1.3-2.2 fl oz	0.05-0.08			0
		lambda cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			5
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
	Mites	abamectin Agri-Mek 0.7 SC	 1.75-3.5 fl oz	0.01-0.019		Must be mixed with an adjuvant.	7
		fenbutatin-oxide (**R**) Vendex 50 WP	 2-3 lb	1.0-1.5			3
		Fenpyroximate Portal	 2 pt			Apply in a minimum of 20 gallons per acre	1
		spiromesifen Oberon 2 SC	 7-8.5 oz	0.11-0.13			1
	Leafminers	permethrin (**R**) Ambush 2.0 EC Pounce 25 WP	 6-12 oz 6.4-9.6 oz	0.1-0.2			3
		spinosad SpinTor 2 SC	 6-8 oz	0.094-0.125		Follow label directions.	1
GREENS (collards)	Caterpillars	*Bacillus thuringiensis* beta-cyfluthrin Baythroid XL	 1.6-3.2 oz	 0.013-0.025		 Use higher rates for earworms, armyworms and European corn borers.	 0
		beta-cyfluthrin + imidacloprid Leverage 360	 3 oz	0.07			7
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	0.045-0.098 0.047-0.098 0.047-0.098			1
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		esfenvalerate (**R**) Asana XL 0.66EC	 5.8-9.6 oz	0.03-0.05			7

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
GREENS (collards) cont.	Caterpillars (cont.)	indoxacarb Avaunt 30 WDG	 2.5-3.5 oz	0.045-0.065			3
		methoxyfenozide Intrepid 2F	 4-16 oz	0.06-0.25			1
		permethrin (**R**) Ambush 2.0 EC Pounce 25 WP	 3.2-6.4 oz 3.2-9.6 oz	0.05-0.1			1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
GREENS (kale and mustard)	Caterpillars	*Bacillus thuringiensis* beta-cyfluthrin Baythroid XL	 16-3.2 oz	 0.013-0.025		 Use higher rates for earworms and armyworms.	 0
		beta-cyfluthrin + imidacloprid Leverage 360	 3 oz	0.07			7
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	0.045-0.098 0.047-0.098 0.047-0.098			1
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		cypermethrin Holster 2.5 EC	 2.5-5.0 oz	0.05-0.1			1
		methoxyfenozide Intrepid 2F	 4-8 fl oz	0.06-0.125			1
		spinosad SpinTor 2 SC	 3-6 oz	0.047-0.094			1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
GREENS (turnips)	Caterpillars	*Bacillus thuringiensis* beta-cyfluthrin Baythroid XL	 1.6-3.2 oz	 0.013-0.025		 Use higher rates for corn earworms and armyworms.	 0
		beta-cyfluthrin + imidacloprid Leverage 360	 3 oz	0.07			7
		chlorantraniliprole Coragen Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	0.045-0.098 0.047-0.098 0.047-0.098			1
		methoxyfenozide Intrepid 2F	 8-16 oz	0.12-0.25			1
		permethrin (**R**) Pounce 3.2 EC	 2-4 oz	0.05-0.1			1
		spinosad SpinTor 2 SC	 3-8 oz	0.047-0.125			1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			1
HOPS	Aphids and Leafhoppers	imidacloprid Admire Pro 4.6 F	 2.8 fl oz	0.1			28

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
HOPS (cont.)	Aphids and Leafhoppers (cont.)	pymetrozine Fulfill 50 WDG	 4-6 oz	0.125-0.187		Aphids only, will not control leaf hoppers.	14
		spirotetramat Movento	 5-6 fl oz	0.08-0.09		Do not exceed 12.5 fl oz per season.	7
		Malathion Malathion 5 EC Malathion 8 EC	 1 pt 0.63 pt	1.25			10
		Pyrethrins Pyganic EC 1.4 II Pyganic EC 5 II	 16-64 fl oz 4.5-17 fl oz	0.175-0.7		OMRI approved. Do not expect residual control.	0
	Japanese Beetle	bifenthrin (**R**) Brigade 2 EC	 3.8-6.4 fl oz	0.06-0.1			14
		imidacloprid Admire Pro 4.6 F	 2.8 fl oz	0.1			28
	Armyworms, Cutworms, Loopers, Leafrollers, and other caterpillars	Bacillus thuringiensis Bt Containing products					
		bifenthrin (**R**) Brigade 2 EC	 3.8-6.4 fl oz	0.06-0.1			14
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Shenzi 400SC	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.7-3.8 fl oz	 0.045-0.098 0.047 - 0.098 0.045-0.098			0
		spinosad Entrust 2 SC	 4-6 oz	0.063-0.094		OMRI approved.	1
		spinetoram Delegate 25 WG	 2.5-4 oz				3
	Spider Mites	abamectin Agri-Mek 0.7 SC	 1.75-3.5 fl oz	0.01-0.019		Must be mixed with an adjuvant (NIS surfactant).	7
		acequinocyl Kanemite 15 SC	 31 fl oz	0.3			7
		bifenazate Acramite 50 WS	 0.75-1 lb	0.375-0.5		Only one application per season.	14
		extazole Zeal 72 WSP	 3-4 oz	0.135-0.18		Does not kill Adults. DO NOT make more than 1 application per season.	7
		fenpyroximate Portal 0.4 EC	 2 pt	0.1			3
LETTUCE	Aphid	acetamiprid Assail 30SC	 1.7-3.4 fl oz	0.038-0.075	Head and Leaf		7
		dimethoate Dimethoate 4 EC	 0.5 pt	0.25	For use on leaf lettuce.		14
		clothianidin Belay	 9-12 oz (Soil) 3-4 oz (Foliar)	 1.2-1.6 0.4-0.53	Head and Leaf		21 (Soil) 7 (Foliar)
		flonicamid Beleaf 50 SG	 2-2.8 oz	0.06-0.09	Head and Leaf		0
		flupyradifurone Sivanto Prime	 10.5-14.0 fl oz	0.16-0.18	Head and Leaf		1
		imidacloprid Admire Pro 4.6 F	 4.4-10.5 fl oz (Soil) 1.3 fl oz (Foliar)	 0.16-0.38 0.05	Head and Leaf		21 (Soil) 7 (Foliar)
		pymetrozine Fufill	 2.75 oz	1.4	Head and Leaf		7

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
LETTUCE (cont.)	Aphid (cont.)	pyrifluquinazon PQZ	2.4-3.2 fl oz	0.035-0.047	Head and Leaf		1
		spirotetramat Movento	4-5 fl oz	0.06 - 0.08	Head and Leaf		3
		thiamethoxam			Head and Leaf		
		Platinum 75 SG	1.66-3.67oz	0.08-0.17	Soil application Only		30
		Actara 25 WDG	1.5-3.0 oz	0.08-0.17	Foliar Application Only		7
		tolfenpyrad Torac	17-21 fl oz	0.17-0.21	Head and Leaf		1
	Armyworms, Cabbage Looper, Corn Earworm, and other Lepidopterans	Bacillus thuringiensis			Head and Leaf		0
		Crymax WDG	0.5-1.5 lb	0.2-0.6			
		Dipel DF	0.5-2 lb	0.27-1.08			
		beta-cyfluthrin (**R**) Baythroid XL	2.4-3.2 fl oz	0.019-0.025	Head and Leaf		0
		beta-cyfluthrin (**R**) + imidacloprid Leverage 360	3.0		Head and Leaf		7
		bifenthrin Brigade 2 EC	2.1-6.4 fl oz	0.033-0.1	Head Lettuce Only		7
		chlorantraniliprole			Head and Leaf		1
		Coragen 1.67 SC	3.5- 7.5 fl oz	0.045-0.098			
		Corage eVo 5 SC	1.2-2.5 fl oz	0.047-0.098			
		Exceliprole 400 SC	1.8-3.75 fl oz	0.047-0.098			
		Shenzi SC	1.7-3.8	0.044-0.098			
		Trinalor	2.15-4.5 oz	0.047-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	6-9 fl oz		Head and Leaf		5
		cyantraniliprole,			Head and Leaf		
		Verimark 1.67 SC	5- 13.5 fl oz (Soil)	0.065-0.176			1
		Exirel 0.83SE	7- 17 fl oz (Foliar)	0.045-0.11			1
		cyclaniliprole Harvanta 50 SL	11- 16.4 fl oz	0.036-0.054	Head and Leaf		1
		emamectin benzoate (**R**) Proclaim 5 WDG	3.2- 4.8 oz	0.01-0.015	Head and Leaf		7
		indoxacarb Avaunt eVo 30 WDG	3.5- 6 oz	0.065 - 0.11	Head and Leaf		3
		Lambda-cyhalotyhrin (**R**) Warrior II	1.28-1.92	0.02-0.03	Head and Leaf		
		Methomyl (**R**)			Head and Leaf		See Label
		Lannate 90 SP	0.5-1 lb	0.45-0.9			
		Lannate 2.4 LV	1.5- 3 pts	0.54-1.08			
		methoxyfenozide, MOA 18 Intrepid 2 F	4-10 fl oz	0.06-0.16	Head and Leaf		1
		permethrin Ambush 24 EC	6.4-12.8 oz	0.1-0.2			1
		spinetoram Radiant 1 SC	5-10 fl oz	0.31-0.62	Head and Leaf		1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	3.2-4 fl oz	0.02-0.025	Head and Leaf		1
		zeta-cypermethrin (**R**) + bifenthrin (**R**) Hero	4-10.3 fl oz		Head Lettuce Only		7

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
OKRA	Aphids	acetamiprid Assail 30SC	 1.7-3.4 fl oz	0.038-0.075			
		acetamiprid + bifenthrin Savoy	 4.9-9.6 oz			Follow label directions.	7
		flonicamid Beleaf 50 SC	 2.8-4.28 oz	0.089-0.133			0
		imidacloprid Admire Pro 4.6 F	 1.3-2.2 fl oz	0.05-0.08			0
		sulfoxaflor Transform WG	 0.75-1.0	0.023-0.031		Check label for crop rotation restrictions.	1
	Corn earworm	bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1			7
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	 0.045-0.098 0.047 - 0.098 0.047-0.098 0.045-0.098 0.047-0.098			1
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		methoxyfenozide Intrepid 2F	 4-16 oz	0.06-0.25			1
		spinosad SpinTor 2 SC	 3-6 oz	0.047-0.094			1
ONION	Thrips	abamectin Agri-Mek SC	 1.75-3.5 fl oz	0.0094 -0.019			30
		acetamiprid Assail 30SC	 4.2-6.7 fl oz	0.094-0.15			7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			14
		malathion Malathion 57% EC	 1 1/2 pt	0.9		Highly toxic to honeybees.	3
		spinetoram Radiant 1 SC	 6-8 oz	0.047-0.063			3
		sulfoxaflor Transform WG	 2.75	0.086		Check label for crop rotation restrictions.	7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			7
	Onion Maggot and Seedcorn Maggot	diazinon (**R**) Diazinon 50W Diazinon AG600 Diazinon AG500	 6-8 lb 76 1/2-102 oz 3-4 qt	3.0-4.0			
PEAS (Garden or English)	Aphids	acetamiprid Assail 30SC	 2.1-4.5 fl oz	0.047-0.1			
		acetamiprid + bifenthrin Savoy	 4.9-9.6 oz			Follow label directions.	7
		esfenvalerate (**R**) Asana XL 0.66 EC	 2.9-5.8 oz	0.015-0.05			3
		imidacloprid Admire Pro 4.6F	 1.2 fl oz	0.05			7

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
PEAS (Garden or English) (cont.)	Aphids (cont.)	lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		malathion Malathion 57% EC 5 lb/gal	 1 1/2 pt	0.9	When insects appear.	Seven days if forage is to be fed to livestock.	3
PEPPERS	Aphids	acetamiprid Assail 30SC	 1.7-3.4 fl oz	0.038-0.075			7
		acetamiprid + bifenthrin Savoy	 4.9-9.6 oz			Follow label directions.	7
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	0.89-0.096			7
		flonicamid Beleaf 50 SG	 2.0-2.8 oz	0.026-0.69			0
		imidacloprid Admire Pro 4.6F	 1.2 fl oz	0.047			0
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2 pt 1/2 lb	0.45			3
		sulfoxaflor Transform WG	 0.75-1.0	0.023-0.031		Check label for crop rotation restrictions.	1
		thiamethoxam Actara 25 WDG	 2-3 oz	0.033-0.047			0
	Cutworms	bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1			7
		lambda-cyhalothrin (**R**) Warrior II	 0.96-1.6 fl oz	0.015-0.025			5
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 1.28-4.0 oz	0.008-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 10.3 oz	0.1			7
	Flea beetles, Colorado potato beetle, earworm, European corn borer, hornworms	acetamiprid + bifenthrin Savoy	 3.6-6.0 oz			Follow label directions. Colorado potato beetle only.	7
		beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			7
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	0.89-0.096			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1			7
		carbaryl Sevin 4F Sevin XLR Plus	 1-2 qt 1-2 qt	1.0-2.0	When insects appear.	DO NOT apply during bloom.	3
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 2.0-7.5 fl oz 1.2-2.5 fl oz 0.7-1.7 fl oz (hornworms) 1.8-3.75 fl oz 1.0-3.8 fl oz 2.15-4.5 oz	 0.026-0.098 0.047-0.098 0.027 - 0.066 (hornworms) 0.047-0.098 0.026-0.098 0.047-0.098		Does not control Flea Beetle	1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-9 fl oz	0.06-0.09		Use higher rate for heavy infestations and for increased residual control	5
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88		Does not control Flea Beetle	1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
PEPPERS (cont.)	Flea beetles, Colorado potato beetle, earworm, European corn borer, hornworms (cont,)	esfenvalerate (**R**)		0.03-0.05			7
		Asana XL 0.66 EC	5.8-9.6				
		lambda-cyhalothrin (**R**)		0.02-0.03			5
		Warrior II	1.28-1.92 fl oz				
		methoxyfenozide		0.08-0.25		European corn borer and hornworm control. Does not control Flea Beetle	1
		Intrepid 2F	4-16 oz				
		permethrin (**R**)		0.1-0.2			3
		Pounce 25 WP	6.4-12.8 oz				
		spinetoram		0.04-0.078		Does not control Flea Beetle	1
		Radiant 1 SC	5-10 fl oz				
		spinosad		0.047-0.125		Does not control Flea Beetle	1
		SpinTor 2 SC	3-8 fl oz				
		zeta-cypermethrin (**R**)		0.014-0.025			1
		Mustang Maxx 0.8 EC	2.24-4.0 oz				
		zeta-cypermethrin + bifenthrin		0.04-0.1			
		Hero	4.0-10.3 oz				7
	Broad mites and other mites	abamectin (**R**)		0.0094-0.019			7
		Agri-Mek 0.7 SC	1.75-3.5 fl oz				
		fenazaquin		0.32 – 0.48		Do not make more than one application per season.	3
		Magister SC	24- 36 fl oz				
		fenpyroximate		0.10		Do not make more than two applications per season.	3
		Portal 0.4 EC	2 pt				
		spiromesifen		0.110-0.133		Do not exceed 3 applications per season	7
		Oberon 2 SC	7-8.5 oz				
		spirotetramat		0.06 - 0.08			1
		Movento 2 SC	4- 5 fl oz				
		tolfenpyrad		0.17-0.21			1
		Torac	17- 21 fl oz				
	Other caterpillars	bifenthrin (**R**)		0.033-0.1			7
		Brigade 2 EC	2.1-6.4 oz				
		beta-cyfluthrin		0.013-0.022			7
		Baythroid XL	1.6-2.8 oz				
		beta-cyfluthrin + imidacloprid					7
		Leverage 360	3.8-4.1 oz	0.89-0.096			
		chlorantraniliprole					1
		Coragen 1.67 SC	3.5-7.5 fl oz	0.045-0.098			
		Coragen eVo	1.2-2.5 fl oz	0.047-0.098			
		Exceliprole 400 SC	1.8-3.75 fl oz	0.047-0.098			
		Shenzi 400SC	1.7-3.8 fl oz	0.045-0.098			
		Trinalor	2.15-4.5 oz	0.047-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**)		0.06-0.09			5
		Besiege	6-9 oz				
		Cyantraniliprole		0.45-0.88			1
		Exirel 0.83 EC	7-13.5 fl oz				
		lambda-cyhalothrin (**R**)		0.02-0.03			5
		Warrior II	1.28-1.92 fl oz				
		methomyl (**R**)		0.45			3
		Lannate 2.4 LV	1 1/2 pt				
		Lannate 90 SP	1/2 lb				
		methoxyfenozide		0.06-0.25			1
		Intrepid 2F	4-16 fl oz				
		zeta-cypermethrin (**R**)		0.014-0.025			1
		Mustang Maxx 0.8 EC	2.24-4.0 oz				

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
PEPPERS (cont.)	Other caterpillars (cont.)	zeta-cypermethrin + bifenthrin Hero	 4.0-10.3 oz	0.4-0.1			7
POTATOES (white or Irish)	Aphids	acetamiprid Assail 30SC	 2.1-3.4 fl oz	0.047-0.075			7
		beta-cyfluthrin + imidacloprid Leverage 360	 2.8 oz	0.066			7
		flonicamid Beleaf 50 SG	 2.0-2.8 oz	0.026-0.69			7
		sulfoxaflor Transform WG	 0.75-1.0	0.023-0.031			
		thiamethoxam Actara 25 WDG	 3 oz	0.047			14
	Colorado potato beetle, potato leafhopper, flea beetles	acetamiprid Assail 30SC	 1.3-3.4 fl oz	0.028-0.075			7
		beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		beta-cyfluthrin + imidacloprid Leverage 360	 2.8 oz	 0.066			7
		carbaryl Sevin 4F Sevin XLR Plus	 1/2-2 qt 1/2-2 qt	0.5-2.0	When insects first appear.	DO NOT apply during bloom. Use higher rates on Colorado potato beetle.	7
		chlorantraniliprole Coragen Coragen eVo Exceliprole 400 SC Shenzi 400 SC Vantacor Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 1.2-2.5 fl oz 2.15-4.5 oz	 0.045-0.098 0.047-0.098 0.047-0.098 0.044-0.098 0.047-0.098 0.047-0.098		Foliar or chemigation applications.	1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-9 fl oz	0.06-0.09		For Colorado Potato beetle only.	5
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		permethrin (**R**) Ambush 25 WP Ambush 2.0 EC Pounce 25 WP	 3.2-12.8 oz 3.2-12.8 oz 6.4-12.8 oz	 0.05-0.2 0.05-0.2 0.1-0.2		Apply no more than 12 applications. DO NOT graze or feed foliage.	7
		spinosad SpinTor 2 SC	 3-6 fl oz	0.047-0.094			7
		sulfoxaflor Transform WG	 1.5-2.25	0.047-0.071		For leaf hopper control. Check label for crop rotation restrictions.	7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			1
	Wireworms	bifenthrin (**R**) Capture LFR			See label directions.	Check label for crop rotation restrictions.	7
		broflanilide Nurizma	0.08-0.16 fl oz/1,000 row ft	0.0016-0.0032	In-furrow at planting.		90
		phorate (**R**) Thimet 20G	 8.5-17.3 lb		Distribute granules evenly in furrow or band on each side of row at planting or sidedress postemer-gence. Sandy soils use low rate.		90

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
RADISHES	Aphids	beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		imidacloprid Admire Pro 4.6F	 1.3 fl oz	0.044			7
		malathion Malathion 57% EC	 1 1/2 pt	1	When insects appear in damaging numbers.		7
		sulfoxaflor Transform WG	 0.75-1.0	0.023-0.031		Check label for crop rotation restrictions.	7
	Flea beetles	beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		carbaryl Sevin 4F Sevin XLR Plus	 1/2-1 qt 1/2-1 qt	0.5-1.0	When insects appear in damaging numbers.	DO NOT apply during bloom.	3
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			7
		imidacloprid Admire Pro 4.6F	 1.3 fl oz	0.044			7
SOUTHERN PEAS	Bean leaf beetle	beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1			3
		carbaryl Sevin 4F Sevin XLR Plus	 1/2-1 qt 1/2-1 qt	0.5-1.0	Plant early. Apply treatment to prevent defoliation.	DO NOT apply during bloom. DO NOT use on succulent shelled peas (Group 6B).	3
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
	Corn earworm	beta-cyfluthrin Baythroid XL	 1.6-2.1 oz	0.013-0.017			3
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1			3
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor Vantacor 5 SC	 3.5-7.5 fl oz 1.7-2.5 fl oz (soil) 1.2-2.5 fl oz(foliar) 2.55-3.75 fl oz (soil) 1.8-3.75 fl oz (foliar) 1.7-3.8 fl oz 2.15-4.5 oz 1.2-2.5 fl oz	1 0.045-0.098 0.066-0.098 (soil) 0.047-0.098(foliar) 0.066-0.098 (soil) 0.047-0.098 (foliar) 0.045-0.098 0.047-0.098 0.047-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-10 fl oz	0.06-0.10			7 (Edible/ Shelled) 21(Dried shelled)
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05		DO NOT feed vines.	21

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SOUTHERN PEAS (cont.)	Corn earworm (Cont.)	lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		methoxyfenozide Intrepid 2F	 10-16 oz	0.16-0.25			7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
	Cowpea aphid	acetamiprid Assail 30SC	 2.1-4.5 fl oz	0.047-0.1			7
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.03-0.1			3
		imidacloprid Admire Pro 4.6 F	 7.0-10.5 fl oz	0.25-0.37		Soil application.	21
		imidacloprid Admire Pro 4.6F	 1.3 fl oz	0.044		Foliar application.	7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		malathion Malathion 57% EC 5 lb/gal	 1 1/2 pt	1			3
		methomyl (**R**) Lannate 1.8 LV Lannate SP	 1 1/3-3 pt 1/2-1 pt	0.4-0.9		DO NOT apply more than 4.5 lb ai per acre per crop.	1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025		Aphid control may be variable.	1
	Cowpea curculio	beta-cyfluthrin Baythroid XL	 1.6-2.1 oz	0.013-0.017			3
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-10 fl oz	 0.06-0.10			7 (Edible/ Shelled) 21(Dried shelled)
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			21
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
	European corn borer	beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor Vantacor 5 SC	 3.5-7.5 fl oz 1.2-2.5 fl oz (foliar) 1.7-2.5 fl oz (soil) 1.8 - 3.75 fl oz (foliar) 2.55-3.75 fl oz (soil) 1.7-3.8 fl oz 2.15-4.5 oz (foliar) 3-4.5 oz (soil) 1.2-2.5 fl oz (foliar) 1.7-2.5 fl oz(soil)	1 0.045-0.098 0.047-0.098 (foliar) 0.066-0.098 (soil) 0.047-0.098 (foliar) 0.066-0.098 (soil) 0.045-0.098 0.047-0.098 (foliar) 0.066-0.098 (soil) 0.047-0.098 (foliar) 0.066-0.098 (soil)			

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SOUTHERN PEAS (cont.)	European corn borer	chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	6-10 fl oz	0.06-0.10			7 (Succulent) 21(Dried)
		Cyantraniliprole Exirel 0.83 EC	7-13.5 fl oz	0.45-0.88			1
		methoxyfenozide Intrepid 2F	8-16 oz	0.12-0.25			7
		spinosad SpinTor 2 SC	4-6 fl oz	0.062-0.094			3
SPINACH	Aphids, plant bugs, leafhoppers, leafminers	acetamiprid Assail 30SC	1.7-3.4 fl oz	0.038-0.075			7
		beta-cyfluthrin + imidacloprid Leverage 360	3 oz	0.07			7
		dimethoate Dimethoate 4 EC	1/2 pt	0.25		Effectiveness of dimethoate is reduced when aphid colonies are established.	14
		dinotefuran Venom 70 SG	1-3 oz foliar 5-6 oz soil	0.044-0.131 0.219-0.263			7 21
		flonicamid Beleaf 50 SG	2.0-2.8 oz	0.062-0.089			0
		imidacloprid Admire Pro 4.6 F	4.4-10.5 fl oz	0.158-0.337		Soil application.	21
		imidacloprid Admire Pro 4.6F	1.3 fl oz	0.047		Imidacloprid should only be used with an aphid scouting program. Apply only when aphid numbers exceed the threshold.	7
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	3.2-4.0 oz	0.02-0.025			1
	Caterpillars	*Bacillus thuringiensis*	Follow label directions.				
		beta-cyfluthrin Baythroid XL	2.4-3.2 oz	0.019-0.025			0
		beta-cyfluthrin + imidacloprid Leverage 360	3 oz	0.07			7
		bifenthrin (**R**) Brigade 2 EC	2.1-6.4 oz	0.033-0.1		Pyrethroid use against Leps. can result in increases in aphid populations.	40
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2 -2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	 0.045-0.098 0.047 - 0.098 0.047-0.098 0.045-0.098 0.047-0.098			3
		Cyantraniliprole Exirel 0.83 EC	7-13.5 fl oz	0.45-0.88			1
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9	When insects appear or as needed to keep crop free of insects. Not labeled on corn earworm.	DO NOT apply to seedlings less than 3 inches in diameter.	7
		methoxyfenozide Intrepid 2F	4-8 oz	0.06-0.12			1
		permethrin (**R**) Ambush 2.0 EC Ambush 25 WP Pounce 3.2 EC	 6.4-12.8 oz 6.4-12.8 oz 4-8 oz	0.1-0.2			7

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SPINACH (cont.)	Caterpillars	spinosad SpinTor 2 SC	 3-6 fl oz	0.047-0.094			1
		thiodicarb (**R**) Larvin 3.2	 24-30 oz	0.6-0.75			14
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			1
SWEET CORN	Corn Earworm	beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 fl oz	0.033-0.1	When larvae are found.		1
		carbaryl Sevin 4F Sevin XLR	 1-2 qt 1-2 qt	1.0-2.0		DO NOT apply during bloom.	2
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Vantacor Shenzi 400SC	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8 - 3.75 fl oz 1.2-2.5 fl oz 1.7-3.8 fl oz	 0.045-0.098 0.047-0.098 0.066-0.098 0.045-0.098 0.045-0.098		 Cheaper option than Coragen in Sweet Corn	1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-10 fl oz	0.06-0.10			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			1
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1-1 1/2 pt 1/3-1/2 lb	0.3-0.45			0 (ears) 3 (forage)
		methoxyfenozide + spinetoram Intrepid Edge	 8-12 oz			Follow label directions.	21 (dry fodder) 3 (forage) 3 (ears)
		permethrin (**R**) Ambush 2.0 EC Ambush 25 WP	 6.4-12.8 oz 6.4-12.8 oz	0.1-0.2			1
		spinosad SpinTor 2 SC	 3-6 fl oz	0.047-0.094			1
		thiodicarb (**R**) Larvin 3.2	 20-30 oz	0.5-0.75			0
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			3
	Cutworms, rootworms, seed corn maggot, white grubs, wireworms	beta-cyfluthrin Baythroid XL	 0.8-1.6 oz	0.007-0.013		Cutworms only.	0
		bifenthrin (**R**) Capture LFR	 0.39-0.44 oz/ 1,000 ft row	0.08-0.1	Apply in 5- to 7-inch band or in furow ahead of press wheel. Compatible with liquid fertilizers.		3
		lambda cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		tefluthrin (**R**) Force 3G	 4-5 oz/ 1,000 ft row	0.075-0.165	Banded, T-banded or in furrow.		
		zeta-cypermethrin + bifenthrin Hero	 2.6-6.1 oz	0.025-0.05			3

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SWEET CORN (cont.)	European corn borer, southwestern corn borer (cont.)	carbaryl		1.5-2.0	When 50% of plants show rows of tiny pinholes in leaves (feeding signs).	Use high volume sprays directed into whorls. DO NOT apply during bloom.	0
		Sevin 4F	1 1/2-2 qt				
		Sevin XLR Plus	1 1/2-2 qt				
		chlorantraniliprole					1
		Coragen 1.67 SC	3.5-7.5 fl oz	0.045-0.098			
		Coragen eVo	1.2-2.5 fl oz	0.047-0.098			
		Exceliprole 400 SC	1.8 - 3.75 fl oz	0.066-0.098			
		Shenzi 400SC	1.7-3.8 fl oz	0.045-0.098			
		Vantacor	1.2-2.5 fl oz	0.045-0.098			
		chlorantraniliprole + lambda-cyhalothrin (**R**)		0.06-0.10			1
		Besiege	6-10 fl oz				
		esfenvalerate (**R**)		0.03-0.05			1
		Asana XL 0.66 EC	5.8-9.6 oz				
		lambda cyhalothrin (**R**)		0.02-0.03			1
		Warrior II	1.28-1.92 fl oz				
		methomyl (**R**)		0.45		Lannate not labeled on southwestern corn borer.	0 (ears) 3 (forage)
		Lannate 2.4 LV	1 1/2 pt				
		Lannate SP	1/2 lb				
		methoxyfenozide		0.06-0.25			21 (dry fodder) 3 (forage) 3 (ears)
		Intrepid 2F	4-16 oz				
		methoxyfenozide + spinetoram					21 (dry fodder) 3 (forage) 3 (ears)
		Intrepid Edge	4-12 oz				
		spinosad		0.023-0.094			1
		SpinTor 2 SC	1.5-6.0 fl oz				
		thiodicarb (**R**)		0.05-0.75			0
		Larvin 3.2	20-30 oz				
	Flea beetles	acetamiprid + bifenthrin				Maximum of 25.8 oz a season.	7
		Savoy	9.6-12.9 oz				
		beta-cyfluthrin		0.007-0.013			0
		Baythroid XL	0.8-1.6 oz				
		carbaryl		1.0-2.0	When damage appears.	DO NOT apply during bloom. Hand harvesting is prohibited.	2
		Sevin 4F	1-2 qt				
		Sevin XLR Plus	1-2 qt				
		esfenvalerate (**R**)		0.03-0.05			1
		Asana XL 0.66 EC	5.8-9.6 oz				
		zeta-cypermethrin (**R**)		0.017-0.025			3
		Mustang Maxx 0.8 EC	2.8-4.0 oz				
	Mites	abamectin		0.01-0.05	For control of spider mites.	Must be mixed with an adjuvant (NIS surfactant).	7
		Agri-Mek SC	1.75-3.5 fl oz				
	Stink Bugs	cetamiprid + bifenthrin				Maximum of 25.8 oz a season.	7
		Savoy	12.9 oz				
		bifenthrin (**R**)		0.033-0.1		Follow label directions.	1
		Brigade 2 EC	2.1-6.4 oz				
		methomyl (**R**)		0.45			0 (ears) 3 (forage)
		Lannate 2.4 LV	1/2 lb				
		Lannate SP	1/2 lb				
		lambda cyhalothrin (**R**)		0.02-0.03			1
		Warrior II	1.28-1.92 fl oz				

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SWEET CORN (cont.)	Whorl feeders, fall armyworm, corn earworm (cont.)	beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 oz	0.033-0.1		Follow label directions.	1
		carbaryl Sevin 4F Sevin XLR Plus	 1-2 qt 1-2 qt	1.0-2.0	Apply when needed. Hand harvesting is prohibited.	Plants will tolerate a great deal of feeding with no yield loss. DO NOT apply during bloom.	2
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Vantacor 5 SC	 3.5-7.5 fl oz 1.2-2.5 fl oz 2.55-3.75 fl oz 1.7-3.8 fl oz 1.2-2.5 fl oz	 0.045-0.098 0.047-0.098 0.066-0.098 0.045-0.098 0.047-0.098			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			1
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			1
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1-1 1/2 pt 1/3-1/2 pt	0.03-0.45			3
		spinosad SpinTor 2 SC	 3-6 oz	0.042-0.094		Follow label directions.	1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			3
		zeta-cypermethrin + bifenthrin Hero	 4.0-10.3 oz	0.04-0.1			3
SWEET POTATO	Flea beetles, tortoise beetles	beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	 0.056-0.066			7
		bifenthrin (**R**) Brigade 2 EC	 2.1-6.4 fl oz	0.033-0.1		Follow label directions.	21
		carbaryl Sevin 4F Sevin XLR Plus	 1-2 qt 1-2 qt	1.0-2.0	When damage occurs on leaves as needed.	DO NOT apply during bloom.	7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		spinosad SpinTor 2 SC	 3-6 fl oz	0.047-0.094		Not labeled for tortoise beetle.	7
	Sweet potato weevil	beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022			0
		beta-cyfluthrin + imidacloprid Leverage 360	 2.4-2.8 oz	0.056-0.066			7
		carbaryl Sevin 4F Sevin XLR Plus	 2.6 oz/gal 2.6 oz/gal		Use as a preplant dip for sweet potato weevil. Just prior to planting, dip sweet potato cuttings in the suspension.	DO NOT apply during bloom.	7
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			7
		phosmet Imidan 5% dust	 2-4 oz/50 lb bu stored		One application.		

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
SWEET POTATO (cont.)	Wireworm, other soil insects	bifenthrin (**R**) Capture LFR			See label directions.		
		broflanilide Nurizma	0.08-0.16 fl oz /1,000 row ft	0.0016-0.0032	In-furrow at planting.		90
TOMATO	Cabbage loopers (cont.)	*Bacillus thuringiensis* Dipel, Javelin, Biobit, Agree		Check label.			
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	 0.045-0.098 0.047-0.098 0.047-0.098 0.045-0.098 0.047-0.098			1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 5-8 oz	0.05-0.08			5
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			1
		lambda cyhalothrin (**R**) Warrior II	 0.96-1.60 fl oz	0.015-0.025			5
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9	Apply on foliage as needed when loopers are small.		1
		methoxyfenozide Intrepid 2F	 4-8 oz	0.06-0.12			1
		methoxyfenozide + spinetoram Intrepid Edge	 10-12 oz			Follow label directions.	1
	Colorado potato beetles, flea beetles, stink bugs	acetamiprid Assail 30SC	 1.3-2.1 fl oz	0.047-0.1		Colorado Potato Beetle only.	7
		beta-cyfluthrin Baythroid XL	 1.6-2.8 oz	0.013-0.022	2.8 oz for flea beetles.		0
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	 0.089-0.096			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-5.2 oz	0.033-0.08			1
		carbaryl Sevin 4F Sevin XLR Plus	 1-2 qt 1-2 qt	1.0-2.0	Apply on foliage as needed.	DO NOT apply during bloom.	3
		chlorantraniliprole Coragen Coragen eVo Shenzi 400 SC	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.7-3.8 fl oz	 0.045-0.098 0.047-0.098 0.044-0.098	Foliar or chemigation applications.	For control of Colorado Potato beetle only.	1
		imidacloprid Admire Pro 4.6F	 1.3 fl oz	0.047			0
		lambda cyhalothrin (**R**) Warrior II	 0.96-1.60 fl oz	0.015-0.025			21
		spinosad SpinTor 2 SC	 3-6 oz	0.047-0.094		Follow label directions.	1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 4.0-10.3 oz	 0.04-0.1			1

VEGETABLE INSECT CONTROL RECOMMENDATIONS (COMMERCIAL)

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
TOMATO (cont.)	Cutworms (cont.)	beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	 0.089-0.096			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-5.2 oz	0.033-0.08			1
		bifenthrin (**R**) Capture LFR	0.29-0.39 oz/ 1,000 ft row **OR** 3.4-6.8 oz/acre	0.04-0.08	Apply in 5- to 7-inch band or in furrow ahead of press wheel. Compatible with liquid fertilizers.		30
		carbaryl Sevin 4F Sevin XLR Plus	 2 qt 2 qt	2.0	Apply to soil surface 2-3 days prior to transplanting or when damage occurs.	DO NOT apply during bloom.	3
		diazinon Diazinon AG500 Diazinon 50 W Diazinon AG600C	 2-4 qt 4-8 lb 51-102 oz	2.0-4.0	Broadcast to soil surface just prior to planting. Incorporate into soil 3-6 inches immediately. Mix in a minimum of 5 gallons of water/acre.		
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05	Broadcast prior to planting and work into soil 4-8 inches.		1
		lambda cyhalothrin (**R**) Warrior II	 0.96-1.60 fl oz	0.015-0.025			5
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 1.28-4.0 oz	0.008-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 10.3 oz	0.1			1
	Leaf miners, aphids	acetamiprid Assail 30SC	 1.7-3.4 fl oz	0.038-0.075			7
		acetamiprid + bifenthrin Savoy	 4.9-9.6 oz			Aphids only. Follow label directions.	7
		abamectin (**R**) Agri-Mek 0.7 SC	 1.75-3.5 fl oz	0.009-0.019	20 gallons of water/acre required.	Mites, leafminers, pinworms, potato beetle. Must be mixed with an adjuvant (NIS surfactant).	7
		acetamiprid Assail 30SG	 2-4 oz	0.038-0.075		Follow label directions.	7
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	 0.089-0.096			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-5.2 oz	0.033-0.08			1
		dimethoate Dimethoate 400 Dimethoate 4EC Dimethoate 5 lb	 1/2-1 pt 1/2-1 pt 6.4-12.8 oz	0.25-0.5			7
		esfenvalerate (**R**) Asana XL 0.66 EC	 9.6 oz	0.05		Use 5.8-9.6 oz of Asana per acre for aphids.	1
		imidacloprid Admire Pro 4.6F	 1.3 fl oz	0.047			0
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9		Aphids only.	1
		sulfoxaflor Transform WG	 0.75-1.0	0.023-0.031		Not for leaf miners. Check label for crop rotation restrictions.	1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 3.2-4.0 oz	0.02-0.025		Aphid control may be variable.	1
		zeta-cypermethrin + bifenthrin Hero	 4.0-10.3 oz	0.04-0.1			1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
TOMATO (cont.)	Pinworms	abamectin (**R**) Agri-Mek 0.7 SC	 3.5 oz	0.019		Must be mixed with an adjuvant (NIS surfactant).	7
		beta-cyfluthrin Baythroid XL	 2.1-2.8 oz	0.017-0.022			0
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	0.089-0.096			0
		chlorantraniliprole Coragen Coragen eVo Exceliprole 400 SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 2.15-4.5 oz	0.045-0.098 0.047-0.098 0.047-0.098 0.047-0.098			1
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05		DO NOT exceed 0.5 lb ai/acre per season.	1
		gamma-cyhalothrin Proaxis 0.5 EC	 2.56-3.84 oz	0.01-0.015		Follow label directions.	5
		indoxacarb Avaunt 30 DG	 3.5 oz	0.065		Follow label directions.	3
		lambda cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03			5
		methomyl (**R**) Lannate LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9		All are alternatives. Check dosage on label.	1
		methoxyfenozide Intrepid 2F	 10-16 oz	0.16-0.25			1
		No-Mate Spiral Bioinsecticide			Read product label.	Comes in a plastic coil that is wrapped around tomato vines or support stakes.	
	Spider mites	abamectin (**R**) Agri-Mek 0.7 SC	 1.75-3.5 oz	0.0094-0.019	DO NOT apply Agri-Mek in less than 20 gallons of water per acre.	Must be mixed with an adjuvant (NIS surfactant).	7
		bifenthrin (**R**) Brigade 2 EC	 5.2-6.4 oz	0.08-0.1		Follow label directions.	1
		fenpyroximate Portal	 2 pt		Apply in a minimum of 20 gallons of water per acre		1
		spiromesifen Oberon 2 SC	 7-8.5 oz	0.11-0.13			1
	Thrips	acetamiprid + bifenthrin Savoy	 9.6 oz			Follow label directions.	7
		beta-cyfluthrin + imidacloprid Leverage 360	 3.8-4.1 oz	0.089-0.096			0
		bifenthrin (**R**) Brigade 2 EC	 2.1-5.2 oz	0.033-0.08			1
		flonicamid Beleaf	 2.4-4.8 oz	0.089-0.133			0
		spinetoram Radiant 1 SC	 6-10 oz	0.047-0.078		Will control thrips on foliage, but not in flowers.	1

Crop	Insect	Insecticide	Formulation Per Acre	Lb ai/Acre	Application	Remarks/Precautions	Days to Harvest
TOMATO (cont.)	Tomato fruitworm, Hornworms	carbaryl Sevin 4F Sevin XLR Plus	 1-2 qt 1-2 qt	1.0-2.0		DO NOT apply during bloom.	3
		chlorantraniliprole Coragen 1.67 SC Coragen eVo Exceliprole 400 SC Shenzi 400SC Trinalor	 3.5-7.5 fl oz 1.2-2.5 fl oz 1.8-3.75 fl oz 1.7-3.8 fl oz 2.15-4.5 oz	 0.045-0.098 0.047-0.098 0.047-0.098 0.044-0.098 0.047-0.098		 Coragen: 2.0-5.0 fl oz/ac for hornworms Shenzi: 1.0-2.5 fl oz and (0.026 - 0.065) lbs ai/acre for hornworms	1
		Cyantraniliprole Exirel 0.83 EC	 7-13.5 fl oz	0.45-0.88			1
		chlorantraniliprole + lambda-cyhalothrin (**R**) Besiege	 6-9 oz	 0.06-0.09			 5
		esfenvalerate (**R**) Asana XL 0.66 EC	 5.8-9.6 oz	0.03-0.05			1
		lambda-cyhalothrin (**R**) Warrior II	 1.28-1.92 fl oz	0.02-0.03	Five-day intervals.		5
		methomyl (**R**) Lannate 2.4 LV Lannate SP	 1 1/2-3 pt 1/2-1 lb	0.45-0.9		*Bacillus thuringiensis* 1/2 lb/acre may be used in combination with methomyl. Other areas have had good results.	
		methoxyfenozide Intrepid 2F	 4-16 oz	0.06-0.25			1
		methoxyfenozide + spinetoram Intrepid Edge	 10-12 oz	0.06-0.25		Follow label directions.	1
		rynaxypyr Coragen	 3.5-5 fl oz	0.045-0.065			1
		spinosad SpinTor 2 SC	 3-8 fl oz	0.047-0.125			1
		zeta-cypermethrin (**R**) Mustang Maxx 0.8 EC	 2.24-4.0 oz	0.014-0.025			1
		zeta-cypermethrin + bifenthrin Hero	 4.0-10.3 oz	0.04-0.1			1
	Wireworms	bifenthrin (**R**) Capture LFR	0.29-0.39 oz/ 1,000 ft row or 3.4-6.8 oz/A	0.04-0.08	Apply in 5- to 7-inch band or in furrow ahead of press wheel. Compatible with liquid fertilizers.		30
		diazinon (**R**) Diazinon 50W Diazinon AG600 Diazinon AG500	 6-8 lb 76 1/2-102 oz 3-4 qt	3.0-4.0	Broadcast prior to planting and immediately work into soil 4-8 inches.		
VEGETABLES (See labels for specific crops)	Red Imported Fire Ants	**ALL FIRE ANT BAITS – Apply when ants are active and soil temperature is above 60 degrees F. DO NOT treat if rain is anticipated within 6 hours.**					
		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). Apply 3 to 4 weeks prior to harvest date.	
		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 Eliminator Fire Ant Bait Green Light Fire Ant Control Ortho Fire Ant Bait Safer Fire Ant Bait	 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. Acceptable for organic production.	