



Bulletin

Extension

Control of Insect Pests of Field Crops

Bulletin 545 – 09

SOYBEAN

Insecticide application to manage soybean insect pests may be required at any time throughout the development of the crop. At planting time, seed treatments may be warranted for protection against seed maggots. On early-planted beans, rescue treatment following emergence may be required to control overwintering bean leaf beetles if severe stand loss appears likely. Up to bloom, soybean can tolerate up to 40 percent defoliation by the defoliating pests without an economic loss in yield that would justify a rescue treatment. Soybean becomes more susceptible to defoliation from bloom to pod-fill, and defoliation should not be allowed to exceed 15 percent during that time. Once pods have set, pod injury due to bean leaf beetle may be problem, especially on early-planted beans. If pod injury is detected, rescue treatment is warranted when injury of 10 percent or more of the pods appears imminent.

Following is a listing of insecticide products labeled for control of the pests that affect soybean. An asterisk (*) indicates that use is restricted to certified applicators only.

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Bean Leaf Beetle	Adjourn* (esfenvalerate)	5.8 - 9.6 fl. oz.	21	Treatment is warranted when defoliation is greater than 40% pre-bloom, 15% bloom through pod fill or 25% after pod fill but prior to plant yellowing.
	Ambush* 25W (permethrin)	3.2 - 6.4 oz.	60	
	Arctic* 3.2 EC (permethrin)	2 - 4 fl. oz.	60	
	Asana* XL (esfenvalerate)	5.8 - 9.6 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	11.5 - 14.1 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	1.6 - 2.8 fl. oz.	45	Treatment is also warranted when greater than 10% of the pods show feeding damage.
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Carbaryl 4L (carbaryl)	½ - 1 qt.	14	
	Chlorpyrifos* 4E AG (chlorpyrifos)	1 - 2 pt.	28	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	19 - 38 fl. oz.	30	
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45	
CruiserMaxx (thiamethoxam)	3 fl. oz./100 lb. seed	na	See Fact Sheet FC-23 for additional information.	

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Bean Leaf Beetle (cont.)	Cruiser 5FS (thiamethoxam)	1.28 fl. oz./100 lb. seed	na	^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.
	Delta Gold* (deltamethrin)	1.5 - 1.9 fl. oz.	21	
	Dimethoate (dimethoate)	1 pt. 400, 4EC or Dimate 4E	21	
	Endigo*.a ZC (lambda-cyhalothrin & thiamethoxam)	3.5 - 4.5 fl. oz.	30	
	Furadan* 4F (carbofuran)	¼ - ½ pt.	21	
	Gaucho 480 (imidacloprid)	2 - 4 fl. oz./cwt seed	na	
	Govern* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Grizzly Z* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Hatchet* (chlorpyrifos)	1 - 2 pt.	28	
	Hero* (zeta-cypermethrin & bifenthrin)	2.6 - 6.1 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.0 - 1.67 oz.	45	
	Lambda* (lambda-cyhalothrin)	0.96 - 1.6 fl. oz.	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	LambdaStar* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	Lambda-T* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	Lannate* (methomyl)	¼ - ⅜ lb. SP or ½ - 1 pt. LV	14	
	Larvin* 3.2 (thiodicarb)	18 - 30 fl. oz.	28	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Lorsban* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Mustang Max* (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Mystic Z* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	45	
	Nufos* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Orthene 97 (acephate)	0.75 - 1.0 lb.	14	
	PennCap-M* (methyl parathion)	2 - 3 pt	20	
	Permethrin* (permethrin)	2 - 4 oz 3.2 EC or 3.2 AG	60	
	Pilot* 4E (chlorpyrifos)	1 - 2 pt.	28	
Perm-UP* (permethrin)	2 - 4 fl. oz. 3.2 EC 3.2 - 6.4 oz. 25DF	60 60		
Pounce* 25WP (permethrin)	3.2 - 6.4 oz.	60		

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Bean Leaf Beetle (cont.)	Proaxis* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	0.77 - 1.28 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	2.8 - 4 oz.	21	
	Senator 600 FS (imidacloprid)	1.6 - 3.2 fl. oz./cwt seed	na	
	Sevin (carbaryl)	½ - 1 qt. XLR Plus or 4F ¾ - 1¼ lb. 80S	14 14	
	Silencer* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	1.6 - 2.8 fl. oz.	45	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warhawk* (chlorpyrifos)	1 - 2 pt.	28	
	Warrior* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Warrior II* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	30	
	Whirlwind* (chlorpyrifos)	1 - 2 pt.	28	
	Yuma* 4E (chlorpyrifos)	1 - 2 pt.	28	
Grasshopper	Adjourn* (esfenvalerate)	5.8 - 9.6 fl. oz.	21	Grasshopper damage to soybean is generally concentrated along the field edges especially grassy ditch banks and roadways. Such injury may build up during a growing season, possibly damaging pods in the late summer or early fall. Rescue treatment of grasshoppers may be warranted when such damage is combined with one or more other de-foliating insects feeding on soybean. ^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.
	Asana* XL (esfenvalerate)	5.8 - 9.6 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	11.5 - 14.1 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	2.0 - 2.8 fl. oz.	45	
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Chlorpyrifos* 4E AG (chlorpyrifos)	½ - 1 pt.	28	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	7 - 13 fl. oz.	30	
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45	
	Delta Gold* (deltamethrin)	1.5 - 1.9 fl. oz.	21	
	Dimethoate (dimethoate)	1 pt. 400, 4EC or Dimate 4E 1.5 pt. 2.67	21 21	
	Dimilin 2L (diflubenzuron)	2 fl. oz.	21	
	Endigo*.a ZC (lambda-cyhalothrin & thiamethoxam)	3.5 - 4.5 fl. oz.	30	

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Grasshopper (cont.)	Furadan* 4F (carbofuran)	¼ - ½ pt.	21	
	Govern* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Grizzly Z* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Hatchet* (chlorpyrifos)	½ - 1 pt.	28	
	Hero* (zeta-cypermethrin & bifenthrin)	2.6 - 6.1 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.67 - 2.0 oz.	45	
	Lambda* (lambda-cyhalothrin)	1.60 - 1.92 fl. oz.	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	LambdaStar* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	Lambda-T* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Lorsban* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Mustang MAX* (zeta-cypermethrin)	3.2 - 4.0 oz.	21	
	Mystic Z* (lambda-cyhalothrin)	1.5 - 1.92 fl. oz.	45	
	Nufos* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Orthene 97 (acephate)	0.25 - 0.5 lb.	14	
	Penncap-M* (methyl parathion)	2 - 3 pt.	20	
	Pilot* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Proaxis* (gamma-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	1.28 - 1.54 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	3.2 - 4.0 oz.	21	
	Silencer* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	2.0 - 2.8 fl. oz.	45	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warrior* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Warrior II* (lambda-cyhalothrin)	1.60 - 1.92 fl. oz.	30	
	Whirlwind* (chlorpyrifos)	½ - 1 pt.	28	
	Yuma* 4E (chlorpyrifos)	½ - 1 pt.	28	

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat	
Green Cloverworm	Adjourn* (esfenvalerate)	2.9 - 5.8 fl. oz.	21	Rescue treatment is recommended when defoliation levels are greater than 40 percent pre-bloom; greater than 15 percent from bloom to pod-fill; and greater than 25 percent from full pod to harvest.	
	Ambush* 25W (permethrin)	3.2 - 6.4 oz.	60		
	Arctic* 3.2 EC (permethrin)	2 - 4 fl. oz.	60		
	Asana* XL (esfenvalerate)	2.9 - 5.8 fl. oz.	21		
	<i>Bacillus thuringiensis</i> (several Bt products)	Refer to label for rate	0		Leaves are not damaged after plants start to turn yellow. ^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product. ^b Listed by the Organic Materials Review Institute (OMRI) for use in organic production.
	Battalion* 0.2 EC (deltamethrin)	7.7 - 11.5 fl. oz.	21		
	Baythroid* XL (β-cyfluthrin)	0.8 - 1.6 fl. oz.	45		
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18		
	Carbaryl 4L (carbaryl)	½ - 1 qt.	14		
	Chlorpyrifos* 4E AG (chlorpyrifos)	½ - 1 pt.	28		
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	7 - 13 fl. oz.	30		
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45		
	Delta Gold* (deltamethrin)	1.0 - 1.5 fl. oz.	21		
	Dimilin (diflubenzuron)	2 - 4 oz. 25W or 2L	21		
	Endigo* ^a 3.2 EC (lambda-cyhalothrin & thiamethoxam)	2.5 - 3.5 fl. oz.	30		
	Entrust ^b (spinosad)	1 - 2 oz.	28		
	Govern* 4E (chlorpyrifos)	½ - 1 pt.	28		
	Grizzly Z* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30		
	Hatchet* (chlorpyrifos)	½ - 1 pt.	28		
	Hero* (zeta-cypermethrin & bifenthrin)	2.6 - 6.1 oz.	21		
	Intrepid* 2F (methoxyfenozide)	4 - 8 fl. oz.	14		
	Kaiso* 24WG (lambda-cyhalothrin)	1.0 - 1.67 oz.	45		
	Lambda* (lambda-cyhalothrin)	0.96 - 1.6 fl. oz.	45		
Lambda-Cy* EC (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45			
LambdaStar* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45			
Lambda-T* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45			
Lannate* (methomyl)	¼ - ½ lb. SP or ¾ - 1½ pt. LV	14			

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Green Cloverworm (cont.)	Larvin* 3.2 (thiodicarb)	10 - 30 fl. oz.	28	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Lorsban* 4E (chlorpyrifos)	½ - 1 pt	28	
	Mustang* MAX (zeta-cypermethrin)	2.8 - 4.0 oz	21	
	Mystic* Z (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	45	
	Nufos* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Orthene 97 (acephate)	0.75 - 1.0 lb.	14	
	Penncap-M* (methyl parathion)	2 - 3 pt.	20	
	Permethrin* (permethrin)	2 - 4 oz. 3.2 AG or 3.2 EC	60	
	Perm-UP* (permethrin)	2 - 4 fl. oz. 3.2 EC 3.2 - 6.4 oz. 25DF	60 60	
	Pilot* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Pounce* 25WP (permethrin)	3.2 - 6.4 oz.	60	
	Proaxis* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	0.77 - 1.28 fl. oz.	30	
	Radiant SC (spinetoram)	2 - 4 fl. oz.	28	
	Respect* EC (zeta-cypermethrin)	2.8 - 4 oz.	21	
	Sevin (carbaryl)	½ - 1 qt. XLR Plus or 4F	14	
	Silencer* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Steward EC (indoxacarb)	5.6 - 11.3 fl. oz.	21	
	Taiga* Z (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	0.8 - 1.6 fl. oz.	45	
	Tracer (spinosad)	1 - 2 fl. oz.	28	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warhawk* (chlorpyrifos)	½ - 1 pt.	28	
	Warrior* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Warrior II* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	30	
	Whirlwind* (chlorpyrifos)	½ - 1 pt.	28	
Yuma* 4E (chlorpyrifos)	½ - 1 pt.	28		

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Japanese Beetle	Adjourn* (esfenvalerate)	5.8 - 9.6 fl. oz.	21	Rescue treatment is recommended when defoliation levels are greater than 40 percent pre-bloom; greater than 15 percent from bloom to pod-fill; and greater than 25 percent from full pod to harvest. See Fact Sheet FC-22 for additional information. ^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.
	Ambush* 25W (permethrin)	6.4 - 12.8 oz.	60	
	Arctic* 3.2 EC (permethrin)	2 - 4 fl. oz.	60	
	Asana* XL (esfenvalerate)	5.8 - 9.6 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	11.5 - 14.1 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	1.6 - 2.8 fl. oz.	45	
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Carbaryl 4L (carbaryl)	½ - 1 qt.	14	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	19 - 38 fl. oz.	30	
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45	
	Delta Gold* (deltamethrin)	1.5 - 1.9 fl. oz.	21	
	Endigo* ^a ZC (lambda-cyhalothrin & thiamethoxam)	3.5 - 4.5 fl. oz.	30	
	Grizzly Z* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Hero* (zeta-cypermethrin & bifenthrin)	4.0 - 10.3 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.67 - 2.0 oz.	45	
	Lambda* (lambda-cyhalothrin)	1.60 - 1.92 fl. oz.	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	LambdaStar* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	Lambda-T* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	45	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Mustang Max* (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Mystic Z* (lambda-cyhalothrin)	1.60 - 1.92 fl. oz.	45	
	PennCap-M* (methyl parathion)	2 - 3 pt.	20	
	Permethrin* (permethrin)	2 - 4 oz. 3.2 AG or 3.2 EC	60	
Perm-UP* (permethrin)	2 - 4 fl. oz. 3.2EC 3.2 - 6.4 oz. 25DF	60 60		
Pounce* 25WP (permethrin)	3.2 - 6.4 oz.	60		
Proaxis* (gamma-cyhalothrin)	3.20 - 3.84 fl. oz.	30		

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Japanese Beetle (cont.)	Prolex* (gamma-cyhalothrin)	1.28 - 1.54 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	2.8 - 4.0 oz.	21	
	Sevin (carbaryl)	½ - 1 qt. 4F or XLR Plus ⅝ - 1¼ lb. 80S	14 14	
	Silencer* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	3.20 - 3.84 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	1.6 - 2.8 fl. oz.	45	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warrior* (lambda-cyhalothrin) Warrior II* (lambda-cyhalothrin)	3.20 - 3.84 fl. oz. 1.60 - 1.92 fl. oz.	30 30	
Mexican Bean Beetle	Adjourn* (esfenvalerate)	2.9 - 5.8 fl. oz.	21	Rescue treatment is recommended when defoliation levels are greater than 40 percent pre-bloom; greater than 15 percent from bloom to pod-fill; and greater than 25 percent from full pod to harvest. Treatments should only be applied when the observed level of defoliation and numbers of MBB both indicate that damage will increase. See Fact Sheet FC-22 for additional information. ^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.
	Ambush* 25W (permethrin)	3.2 - 6.4 oz.	60	
	Arctic* 3.2 EC (permethrin)	2 - 4 fl. oz.	60	
	Asana* XL (esfenvalerate)	2.9 - 5.8 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	11.5 - 14.1 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	1.6 - 2.8 fl. oz.	45	
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Carbaryl 4L (carbaryl)	½ - 1 qt.	14	
	Chlorpyrifos* 4E AG (chlorpyrifos)	1 - 1½ pt.	28	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	19 - 38 fl. oz.	30	
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45	
	CruiserMaxx (thiamethoxam)	3.0 fl. oz./100 lb. seed	na	
	Delta Gold* (deltamethrin)	1.5 - 1.9 fl. oz.	21	
	Dimethoate (dimethoate)	1 pt. 400, 4EC or Dimate 4E 1.5 pt. 2.67	21 21	
	Dimilin (diflubenzuron)	2 - 4 oz. 25W, 2 - 4 fl. oz. 2L	21	
	Endigo* ^a ZC (lambda-cyhalothrin & thiamethoxam)	2.5 - 3.5 fl. oz.	30	
Govern* 4E (chlorpyrifos)	1 - 2 pt.	28		

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Mexican Bean Beetle (cont.)	Grizzly Z* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Hatchet* (chlorpyrifos)	1 - 2 pt.	28	
	Hero* (zeta-cypermethrin & bifenthrin)	4.0 - 10.3 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.0 - 1.67 oz.	45	
	Lambda* (lambda-cyhalothrin)	0.96-1.6 fl. oz.	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	LambdaStar* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	Lambda-T* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	Lannate* (methomyl)	¼ - ½ lb. SP or ¾ - 1½ pt LV	14	
	Larvin* 3.2 (thiodicarb)	18 - 30 fl. oz.	28	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Lorsban* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Mustang Max* (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Mystic Z* (lambda-cyhalothrin)	0.96 - 1.6 fl. oz.	45	
	Nufos* 4E (chlorpyrifos)	1 - 1½ pt.	28	
	Orthene 97 (acephate)	0.75 - 1.0 lb.	14	
	Penncap-M* (methyl parathion)	2 - 3 pt.	20	
	Permethrin* (permethrin)	2 - 4 oz 3.2 AG or 3.2 EC	60	
	Perm-UP* (permethrin)	2 - 4 fl. oz. 3.2 EC 3.2 - 6.4 oz. 25DF	60 60	
	Pilot* 4E (chlorpyrifos)	1 - 1½ pt.	28	
	Pounce* (permethrin)	3.2 - 6.4 oz. 25WP	60	
	Proaxis* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	0.77 - 1.28 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	2.8 - 4 oz.	21	
	Sevin (carbaryl)	½ - 1 qt. 4F or XLR Plus ⅝ - 1¼ lb. 80S	14 14	
	Silencer* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	1.6 - 2.8 fl. oz.	45	

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Mexican Bean Beetle (cont.)	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warhawk* (chlorpyrifos)	1 - 2 pt.	28	
	Warrior* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Warrior II* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	30	
	Whirlwind* (chlorpyrifos)	1 - 2 pt.	28	
	Yuma* 4E (chlorpyrifos)	1 - 2 pt.	28	
Potato Leafhopper	Adjourn* (esfenvalerate)	2.9 - 5.8 fl. oz.	21	<p>Potato leafhopper damage to soybean is normally associated with areas bordering alfalfa early in the season. However, late plantings where the soybeans do not have sufficient development of their pubescence and leafhopper populations are large, usually in early June are also susceptible to injury.</p> <p>^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.</p>
	Ambush* 25W (permethrin)	3.2 - 6.4 oz.	60	
	Arctic* 3.2 EC (permethrin)	2 - 4 fl. oz.	60	
	Asana* XL (esfenvalerate)	2.9 - 5.8 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	7.7 - 11.5 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	0.8 - 1.6 fl. oz.	45	
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Carbaryl 4L (carbaryl)	1 qt.	14	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	19 - 38 fl. oz.	30	
	Consero* (spinosad & gamma-cyhalothrin)	2 - 3 fl. oz.	45	
	CruiserMaxx (thiamethoxam)	3 fl. oz./100 lb. seed	na	
	Cruiser 5FS (thiamethoxam)	1.28 fl. oz./100 lb. seed	na	
	Delta Gold* (deltamethrin)	1.0 - 1.5 fl. oz.	21	
	Dimethoate (dimethoate)	1.5 pt. 2.67 1 pt. 400, 4EC or Dimate 4E	21 21	
	Endigo* ^a ZC (lambda-cyhalothrin & thiamethoxam)	2.5 - 3.5 fl. oz.	30	
	Grizzly Z* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Hero* (zeta-cypermethrin & bifenthrin)	4.0 - 10.3 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.0 - 1.67 oz.	45	
	Lambda* (lambda-cyhalothrin)	0.96 - 1.6 fl. oz.	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
LambdaStar* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45		

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Potato Leafhopper (cont.)	Lambda-T* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45	
	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.0 - 3.8 fl. oz.	45	
	Mustang Max* (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Mystic Z* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	45	
	Orthene 97 (acephate)	0.50 - 1.0 lb.	14	
	Penncap-M* (methyl parathion)	2 - 3 pt.	20	
	Permethrin* (permethrin)	2 - 4 oz. 3.2 AG or 3.2 EC	60	
	Perm-UP* (permethrin)	2 - 4 fl. oz. 3.2EC 3.2 - 6.4 oz. 25DF	60 60	
	Pounce* (permethrin)	3.2 - 6.4 oz. 25WP	60	
	Proaxis* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	0.77 - 1.28 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Sevin (carbaryl)	1 qt. 4F or XLR Plus 1¼ lb. 80S	14 14	
	Silencer* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Tombstone Helios* (cyfluthrin)	0.8 - 1.6 fl. oz.	45	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warrior* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
Warrior II* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	30		
Seedcorn Maggot	CruiserMaxx (thiamethoxam)	3.0 fl. oz./100 lb. seed	na	Seed maggot problems are most likely in situations where (1) high organic matter or decaying vegetation is incorporated into the soil where it attracts egg-laying adult flies (i.e., a green cover crop such as rye or alfalfa is plowed under; and (2) cool, damp soil conditions delay seed germination.
	Cruiser 5FS (thiamethoxam)	1.28 fl. oz./100 lb. seed (commercial seed treatments)	na	
	Gaucho 480 (imidacloprid)	2 - 4 fl. oz./cwt seed (commercial seed treatment)	na	
	Kernel Guard Supreme (permethrin)	1.5 oz./50 lb. seed (hopper box seed treatment)	na	
	Senator 600 FS (imidacloprid)	1.6 - 3.2 fl. oz./cwt seed (commercial seed treatment)	na	
Slugs	Deadline MPs (4% metaldehyde)	10 lb.	na	Treatment may be necessary if defoliation is greater than 40%

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Slugs (cont.)	Prozap Snail and Slug Bait (3.5% metaldehyde)	10 lb.	na	on new growth or stand is being reduced.
	Metarex (4% metaldehyde)	7.5 lb.	na	
	Sluggo (iron phosphate)	24 - 44 lb.	na	
Soybean Aphid	Adjourn* (esfenvalerate)	5.8 - 9.6 fl. oz.	21	The threshold for spraying for soybean aphid is 250 aphids per plant, beginning at growth stage R1 or the flowering stage, and continuing through pod fill. Aphid numbers should be on the increase before spraying occurs.
	Asana* XL (esfenvalerate)	5.8 - 9.6 fl. oz.	21	
	Battalion* 0.2 EC (deltamethrin)	9.0 - 11.5 fl. oz.	21	
	Baythroid* XL (β-cyfluthrin)	2.8 fl. oz.	45	
	Bifenture* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Brigade* 2EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Chlorpyrifos* 4E AG (chlorpyrifos)	1 - 2 pt.	28	
	Cobalt* (chlorpyrifos & gamma- cyhalothrin)	13 - 26 fl. oz.	30	
	Consero* (spinosad & gamma- cyhalothrin)	2 - 3 fl. oz.	45	
	CruiserMaxx (thiamethoxam)	3.0 fl. oz./100 lb. seed	na	
	Cruiser 5FS (thiamethoxam)	1.28 fl. oz./100 lb. seed	na	
	Delta Gold* (deltamethrin)	1.5 - 1.9 fl. oz.	21	
	Dimethoate (dimethoate)	1 pt. 400, 4EC or Dimate 4E	21	
	Endigo*.a ZC (lambda-cyhalothrin & thiamethoxam)	2.5 - 3.5 fl. oz.	30	
	Furadan* 4F (carbofuran)	¼ - ½ pt.	21	
	Govern* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Grizzly Z* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Hatchet* (chlorpyrifos)	1 - 2 pt.	28	
	Hero* (zeta-cypermethrin & bifenthrin)	4.0 - 10.3 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	1.0 - 1.67 oz.	45	
Lambda* (lambda-cyhalothrin)	0.96 - 1.6 fl. oz.	45		
Lambda-Cy* EC (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45		
LambdaStar* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45		
Lambda T* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	45		
				^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Soybean Aphid (cont.)	Leverage* 2.7 (imidacloprid & cyfluthrin)	3.8 fl. oz.	45	
	Lorsban* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Mustang Max* (zeta-cypermethrin)	2.8 - 4.0 fl. oz.	21	
	Mystic Z* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	45	
	Nufos* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Orthene 97 (acephate)	0.75 - 1.0 lb.	14	
	Pennacp-M* (methyl parathion)	1 - 3 pt	20	
	Proaxis* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Prolex* (gamma-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Respect* EC (zeta-cypermethrin)	2.8 - 4 oz.	21	
	Silencer* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Taiga* Z (lambda-cyhalothrin)	1.92 - 3.20 fl. oz	30	
	Tombstone Helios* (cyfluthrin)	2.0 - 2.8 fl. oz.	45	
	Tundra* EC (bifenthrin)	2.1 - 6.4 fl. oz.	18	
	Warhawk* (chlorpyrifos)	1 - 2 pt.	28	
	Warrior* (lambda-cyhalothrin)	1.92 - 3.20 fl. oz.	30	
	Warrior II* (lambda-cyhalothrin)	0.96 - 1.60 fl. oz.	30	
Whirlwind* (chlorpyrifos)	1 - 2 pt.	28		
Yuma* 4E (chlorpyrifos)	1 - 2 pt.	28		
Spider Mites	Bifenture* EC (bifenthrin)	5.12 - 6.40 fl. oz.	18	Rescue treatment is warranted when an entire field (all plants) exhibits some sign of infestation with speckling and some discoloration of the lower leaves. Treatment of soybean for TSM requires thorough penetration of the foliar canopy, preferably by ground-rig application if the chemical applied does not have systemic properties. See Fact Sheet FC-24 for additional information.
	Brigade* 2EC (bifenthrin)	5.12 - 6.40 fl. oz.	18	
	Chlorpyrifos* 4EAG (chlorpyrifos)	½ - 1 pt.	28	
	Cobalt* (chlorpyrifos & gamma-cyhalothrin)	13 - 26 fl. oz.	30	
	Dimethoate (dimethoate)	1.5 pt. 2.67 1 pt. 400, 4EC or Dimate 4	21 21	
	Endigo*.a ZC (lambda-cyhalothrin & thiamethoxam)	4.0 - 4.5 fl. oz. (suppression only)	30	
	Govern* 4E (chlorpyrifos)	1 - 2 pt.	28	
	Grizzly Z* (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	30	

Pest	Product Name (Common Name)	Amount per Acre	Pre-Harvest Interval (days)	When to Treat
Spider Mites (cont.)	Hatchet* (chlorpyrifos)	1 - 2 pt.	28	^a Do not apply this product within 45 days of planting if soybean seeds were treated with a neonicotinoid product.
	Hero* (zeta-cypermethrin & bifenthrin)	10.3 oz.	21	
	Kaiso* 24WG (lambda-cyhalothrin)	2.0 oz. (suppression only)	45	
	Lambda* (lambda-cyhalothrin)	1.92 fl. oz. (suppression only)	45	
	Lambda-Cy* EC (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	45	
	LambdaStar* (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	45	
	Lambda-T* (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	45	
	Lorsban 4E* (chlorpyrifos)	1 - 2 pt.	28	
	Mystic Z* (lambda-cyhalothrin)	1.92 fl. oz. (suppression only)	45	
	Nufos* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Pilot* 4E (chlorpyrifos)	½ - 1 pt.	28	
	Proaxis* (gamma-cyhalothrin)	3.84 fl. oz. (suppression only)	30	
	Prolex* (gamma-cyhalothrin)	1.54 fl. oz. (suppression only)	30	
	Silencer* (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	30	
	Taiga* Z (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	30	
	Tundra* EC (bifenthrin)	5.12 - 6.4 fl. oz.	18	
	Warhawk* (chlorpyrifos)	1 - 2 pt.	28	
	Warrior* (lambda-cyhalothrin)	3.84 fl. oz. (suppression only)	30	
	Warrior II* (lambda-cyhalothrin)	1.92 fl. oz. (suppression only)	30	
	Whirlwind* (chlorpyrifos)	1 - 2 pt.	28	
Yuma* 4E (chlorpyrifos)	1 - 2 pt.	28		