

**FORAGES (ALFALFA AND PASTURE) INSECT CONTROL**

<b>Insect</b>	<b>Insecticide</b>	<b>Formulation/Acre</b>	<b>Lb ai/Acre</b>	<b>Acres/Gallon</b>	<b>Application/Comments</b>	<b>Restricted Entry Interval (hours)</b>	<b>Minimum Days From Last Application to Harvest</b>
<b>ALFALFA</b>							
<b>Alfalfa Weevil</b> (Usually 1 generation per year. Observed usually only on the first cutting.)	beta-cyfluthrin (R) Baythroid XL 1 EC	1.6-2.8 oz	0.0125-0.022	45.5-80	DO NOT apply more than once per cutting.	12	7 alfalfa 0 pasture
	carbaryl Sevin 80 S	1 7/8 lb	1.5		DO NOT apply during bloom.	12	7 alfalfa 14 pasture
Treat when 50% or more of tips show weevil feeding before full bud stage.	carbofuran Furadan 4 LFR	1-2 pt	0.5-1.0	4-8	Highly toxic; use only once per cutting. Follow label directions carefully. DO NOT apply more than twice per season. Furadan is NOT LABELED for pastures.	14 days	14 (low rate) 28 (high rate)
	chlorpyrifos (R) Lorsban Adv. 3.755 EC Chlorpyrifos 4 EC	1-2 pt 1-2 pt	0.5-1.0	4-8 4-8	DO NOT apply more than once per cutting. Lorsban and Chlorpyrifos are NOT LABELED for pastures.	24	14 (low rate) 21 (high rate)
	dimethoate (R) Dimethoate 4 EC Dimethoate 2.67 EC	1 pt 1.5 pt	0.5	8 5.3	DO NOT apply to alfalfa in the bloom period. Make 1 application per cutting. Dimethoate is NOT LABELED for pastures.	48	10
	gamma-cyhalothrin (R) Proaxis 0.5 EC Declare 1.25 EC	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125.5	DO NOT apply more than 0.015 lb ai per acre per cutting. DO NOT apply more than 0.06 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See Generic Insecticides)	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.12 lb ai per acre per season.	24	1 (forage) alfalfa 0 (grazing) pasture 7 (hay)
	malathion Fyfanon/Malathion 5 EC	1 qt	1.25	4	Very short residual; control for 3-7 days; can be applied by ground rig.	12	5 alfalfa 0 pasture
	Methomyl (R) Lannate 90SP Lannate 2.4 LV	1 lb 3 pt	0.9	2.7	Highly toxic. DO NOT apply to dormant or semidormant alfalfa when temperature is below 50 degrees F.	48	7
	permethrin (R) Permethrin 3.2 EC Ambush 2 EC Pounce 25 WP	4-8 oz 6.4-12.8 oz	0.1-0.2	16-32 10-20	DO NOT apply more than 0.2 lb ai per acre per cutting. DO NOT apply when honeybees are actively foraging. Ambush and Pounce are NOT LABELED for pastures.	12	14 alfalfa
	phosmet Imidan 70 WP	1.33 lb	1.0		DO NOT apply to alfalfa during the bloom period. DO NOT apply more than once per cutting. Imidan is NOT LABELED for pastures.	5 days	7 alfalfa
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.24-4.0 oz 2.24-4.0 oz	0.014-0.025	32-57 32-57		12	7 alfalfa 0 grasses 3 non-grass pasture

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<b>Blister Beetle</b>	carbaryl Sevin 4 F Sevin 80 S	1-2 pt 0.67-1.25 lb	0.5-1.0	4-8	DO NOT apply during bloom.	12	7 alfalfa 14 pasture
	gamma-cyhalothrin (R) Proaxis 0.5 EC Declare 1.25 EC	2.56-3.84 oz 1.02-1.54 oz	0.01-0.015	33-50 83-125.5	DO NOT apply more than 0.015 lb ai per acre per cutting. DO NOT apply more than 0.06 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.12 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
<b>Fall Armyworm, Armyworm</b>	beta-cyfluthrin (R) Baythroid XL 1EC	2.6-2.8 oz	0.02-0.022	45.7-49.2	DO NOT apply more than 0.089 lb ai per acre per cutting.	12	7 alfalfa 0 pasture
On seedling alfalfa, treat for 2 larvae per square foot. On established alfalfa, consider treatment when 10-15 large larvae are found per square foot.	carbaryl Sevin 4 F	2-3 pt	1.0-1.5	2.7-4.0	DO NOT apply to alfalfa during bloom.	12	7 alfalfa 14 pasture
	chlorantraniliprole Prevathon	14-20 oz	0.047-0.067	6-9	DO NOT apply more than 0.2 lb ai per acre per crop.	4	0
	chlorantraniliprole + lambda-cyhalothrin (R) Besiege/Voliam Xpress	6-9 oz	0.059-0.088	14-21		24	1 forage 7 hay
	flubendiamide Belt 4 SC	2-4 oz	0.0625-0.125	32-64	DO NOT reapply within 14 days. Belt is NOT LABELED on pastures.	12	0
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.12 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
	methoxyfenozide Intrepid 2 F	4-8 oz	0.06-0.12	16-32	Livestock can graze on treated area immediately after application of Intrepid.	4	7 (hay) 0 (grazing)
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.8-4.0 oz 2.8-4.0 oz	0.0175-0.025	32-45 32-45	No grazing restriction for grass forage or hay. DO NOT apply within 3 days for non-grass forage.	12	7 alfalfa 0 grasses 3 non-grass pasture
<b>Potato Leafhopper</b>	The treatment threshold for potato leafhoppers varies with the height of the alfalfa. For alfalfa 3 inches in height, the threshold is 4 per 20 sweeps; for 6-inch alfalfa, the threshold is 10 per 20 sweeps; and for 12-inch or greater alfalfa, the threshold is 40 per 20 sweeps. Before treating, consider yield potential and the age of the alfalfa stand.						
	beta-cyfluthrin (R) Baythroid XL 1EC	0.8-1.6 oz	0.0065-0.0125	80-160	DO NOT apply more than 0.089 lb ai per acre per cutting.	12	7 alfalfa 0 pasture
	carbaryl Sevin 4 F Sevin 80 S	1-2 pt 0.67-1.25 lb	0.5-1.0	4-8	DO NOT apply during bloom.	12	7 alfalfa 14 pasture

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<b>ALFALFA</b>							
<b>Potato Leafhopper</b> (cont.)	The treatment threshold for potato leafhoppers varies with the height of the alfalfa. For alfalfa 3 inches in height, the threshold is 4 per 20 sweeps; for 6-inch alfalfa, the threshold is 10 per 20 sweeps; and for 12-inch or greater alfalfa, the threshold is 40 per 20 sweeps. Before treating, consider yield potential and the age of the alfalfa stand.						
	chlorantraniliprole + lambda-cyhalothrin (R) Besiege/Voliam Xpress	5-8 oz	0.049-0.078	16-25.6		24	1 forage 7 hay
	chlorpyrifos (R) Lorsban Adv. 3.755 EC Chlorpyrifos 4 EC	0.5-1 pt 1-2 pt	0.25-0.5 0.5-1.0	8-16 4-8	DO NOT apply more than once per cutting. Lorsban and Chlorpyrifos are NOT labeled for pastures.	24	7 (0.5 pint rate) 14 (1.0 pint rate) 21 (2.0 pint rate)
	dimethoate (R) Dimethoate 4 EC Dimethoate 2.67 EC	0.5-1.0 pt 0.75-1.5 pt	0.25-0.5	8-16 5.3-10.6	DO NOT apply to alfalfa in the bloom period. Make 1 application per cutting. Dimethoate is NOT LABELED for pastures.	48	10
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	0.96-1.60 oz 2.92-3.20 oz	0.015-0.025	80-133 40-44	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.12 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
	permethrin (R) Permethrin 3.2 EC Ambush 2 EC Pounce 25 WP	4-8 oz 3.2-12.8 oz 6.4-12.8 oz	0.1-0.2	16-32 10-40 1.25-2.5/lb	DO NOT apply more than 0.2 lb ai per acre per cutting. DO NOT apply when honeybees are actively foraging. Ambush and Pounce are NOT LABELED for pastures.	12	14 alfalfa
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.24-4.0 oz 2.24-4.0 oz	0.014-0.025	32-57 32-57		12	7 alfalfa 0 grasses 3 non-grass pasture
<b>Grasshopper</b>	beta-cyfluthrin (R) Baythroid XL 1EC	2.6-2.8 oz	0.02-0.022	45.7-49.2	DO NOT apply more than 0.089 lb ai per acre per cutting.	12	7 alfalfa 0 pasture
	chlorantraniliprole Prevathon 0.43 SC	8-20 oz	0.027-0.067	6.4-16	DO NOT apply more than 0.2 lb ai per acre per year.	4	0 grazing 0 hay
	chlorantraniliprole + lambda-cyhalothrin (R) Besiege/Voliam Xpress	6-10 oz	0.059-0.097	14-21		24	1 forage 7 hay
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.12 lb ai per acre per season.	24	1 (forage) alfalfa 0 (forage) pasture 7 (hay)
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.8-4.0 oz 2.8-4.0 oz	0.0175-0.025	32-45 32-45	No grazing restriction for grass forage or hay. DO NOT apply within 3 days for non-grass forage.	12	7 alfalfa 0 grasses 3 non-grass pasture

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<b>PASTURE</b>							
<b>Fall Armyworm, Armyworm</b>  Control is usually needed when 3 or more worms per square foot are found.	beta-cyfluthrin (R) Baythroid XL 1EC	1.6-2.8 oz	0.013-0.022	45.7-49.2	DO NOT apply more than 0.089 lb ai per acre per cutting.	12	0 grazing 0 hay
	carbaryl Sevin 80 S Sevin XLR Plus	1.25-1.8 lb 2-3 pt	1.0-1.5	2.7-4.0	Sevin does not kill armyworms quickly. Allow 2-3 days for control to become effective. Must remove cattle. DO NOT apply to alfalfa during bloom.	12	14
	chlorantraniliprole Prevathon 0.43 SC Coragen 1.67 SC	10-13 oz* 3.5-5.0 oz	0.034-0.044 0.045-0.065	9.8-12.8 25.6-36.6	DO NOT apply more than 0.2 lb ai per acre per crop. *2(ee) recommendation rate for Prevathon.	4	0 grazing 0 hay
	chlorantraniliprole + lambda-cyhalothrin (R) Besiege/Voliam Xpress	6-9 oz	0.059-0.088	14-21	DO NOT apply more than 9 fl oz per acre per cutting.	24	7 hay 0 grazing
	cyfluthrin (R) Tombstone 2 EC	1.6-1.9 oz	0.025-0.03	67.4-80	DO NOT apply more than 0.044 lb ai per 5-day interval.	12	0 grazing 0 hay
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.09 lb ai per acre per season.	24	7 hay 0 grazing
	methoxyfenozide Intrepid 2 F	4-8 oz	0.06-0.12	16-32	Livestock can graze on treated area immediately after application of Intrepid.	4	7 hay 0 grazing
	spinosad Blackhawk Tracer 4 SC Entrust 80 S Entrust 2 SC	1.1-2.2 oz 1-2 oz 0.63-1.25 oz 2-4 oz	0.033-0.066	7.3-14.6/lb 64-128 12-25/lb 32-64	No grazing restriction (spray should dry before cattle graze in treated areas). Entrust is OMRI listed for organic production.	4	3 hay 0 grazing
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.8-4.0 oz 2.8-4.0 oz	0.0175-0.025	32-45 32-45	No grazing restriction for grass forage or hay. DO NOT apply within 3 days for non-grass forage.	12	0 grasses 3 non-grass pasture
	<b>Grasshopper</b>	22% diflubenzuron (R) Dimilin 2L Unforgiven	2 oz 2 oz	0.031	64 64	Apply when grasshoppers are small (1/2 inch). Once grasshoppers reach 4th instar nymphs, survival increases. Allow at least 1 day after treatment before cutting hay. DO NOT exceed a total of 2 fl oz Dimilin 2L or Unforgiven per acre per cutting DO NOT exceed a total of 6 fl oz Dimilin 2L or Unforgiven per acre per year.	12
beta-cyfluthrin (R) Baythroid XL 1EC		2.6-2.8 oz	0.02-0.022	45.7-49.2	DO NOT apply more than 0.022 lb ai per 5-day interval.	12	0 grazing 0 hay

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<b>PASTURE</b>							
<b>Grasshopper</b> (cont.)	chlorantraniliprole Prevathon 0.43 SC	8-16 oz*	0.027-0.054	8-16	DO NOT apply more than 0.2 lb ai per acre per crop. *2(ee) recommendation rate for Prevathon.	4	0 grazing 0 hay
	chlorantraniliprole + lambda-cyhalothrin (R) Besiege/Voliam Xpress	6-9 oz	0.059-0.088	14-21	DO NOT apply more than 9 fl oz per acre per cutting.	24	7 hay 0 grazing
	cyfluthrin (R) Tombstone 2 EC	2.6-2.8 oz	0.04-0.044	45.7-49.2	DO NOT apply more than 0.044 lb ai per 5-day interval.	12	0 grazing 0 hay
	lambda-cyhalothrin (R) Warrior II 2.08 CS Other 1.0 CS formulations (See <i>Generic Insecticides</i> )	1.28-1.92 oz 2.56-3.84 oz	0.02-0.03	66.7-100 33-50	DO NOT apply more than 0.03 lb ai per acre per cutting. DO NOT apply more than 0.09 lb ai per acre per season.	24	7 hay 0 grazing
	zeta-cypermethrin (R) Mustang Maxx 0.8 EC Respect 0.8 EC	2.8-4.0 oz 2.8-4.0 oz	0.0175-0.025	32-45 32-45	No grazing restriction for grass forage or hay. DO NOT apply within 3 days for non-grass forage.	12	0 grasses 3 non-grass pasture
<b>Red Imported Fire Ant</b>	hydramethylnon (Amdro Pro)	2-5 Tbsp/mound 1.0-1.5 lb/A			Mound-to-mound treatment rate. Broadcast rate.	12	7 hay 0 grazing
	hydramethylnon + methoprene (Extinguish Plus)	3-5 Tbsp/mound 1.0-1.5 lb/A			Apply <b>ALL FIRE ANT BAITS</b> when ants are active and soil temperature is above 60 degrees F. DO NOT treat if rain is anticipated within 6 hours. DO NOT cut and bale hay treated with Amdro Pro or Extinguish Plus until 7 days after application.	12	7 hay 0 grazing
	pyriproxyfen (Esteem)	2-4 Tbsp/mound 1.5-2 lb/A			DO NOT harvest hay within 24 hours of treatment with Esteem.	12	1 hay 0 grazing
	S-Methoprene (Extinguish)	3-5 Tbsp/mound 1.0-1.5 lb/A			Mound-to-mound treatment rate. Broadcast rate.	4	0 hay 0 grazing