ARMYWORM CONTROL – PASTURES / HAY, May 2011								
	Active Ingredient	Price*	Application Rate	Cost per acre	Grazing and Harvesting Restrictions	Remarks		
Malathion 57%, Malathion ULV	Malathion	\$49.54 / gal	2 pt / acre	\$12.39	Harvest or Graze - 0 d	May be applied on the day of harvest or grazing.		
			1.5 pt in 1 gal diesel or fuel oil / acre	\$9.29				
	Zeta- cypermethrin		2.8 fl oz / acre	\$4.67	Cutting & Hay - 0 d; Forage, Straw & Seed Screening - 7 d: Alfalfa & non-grass feed - 3 d harvest or graze	The restricted entry interval (REI) is 12 hours for all labeled crops. Do not make applications less than 7 days apart. Apply as insects appear in sufficient volume of water to ensure thorough coverage of foliage.		
Mustang Max		\$213.27 / gal	3.0 fl oz / acre	\$5.00				
			3.5 fl oz / acre	\$5.83				
			4.0 fl oz / acre	\$6.66				
	Spinosad	\$850.00 / gal	1 fl oz / acre	\$6.64	Hay or fodder - 3 d; Forage - 0 d; No grazing until spray has dried	Treat when economic thresholds are exceeded, targeting eggs at hatch or small larvae. Do not apply more than 3 times in any 21-day period. Do not make more than 6 applications per season. Treat when eggs hatch and larvae are small		
Tracer			1.5 fl oz / acre	\$9.96				
			2 fl oz / acre	\$13.28				
Sevin 4F, Sevin		\$126.19 / 2.5 gal	1 qt / acre	\$12.61	Harvest or grazing - 14 d	Up to 2 applications per year may be made but not more often than once every 14 days. Carefully mark swaths to avoid over-application.		
XLR	Carbaryl		1.5 qt / acre	\$18.92				
Dimilin 2L	Diflubenzuron	\$247.57 / 1 gal	2 fl oz / acre	\$3.87	Cutting - 1 d	The restricted entry interval (REI) is 12 hours for all labeled crops. Do not exceed a total of 2 fl oz per acre per cutting. Do not exceed a total of 6 fl oz per acre per year. For maximum control use at first sign of hatch outs and prior to larvae reaching fourth instars (<1/2 inch). Must be ingested and larvae must molt before populations are reduced.		
Warrior	Lambda- cyhalothrin		2.56 fl oz / acres 3.84 fl oz / acre		Harvest or straw – 7 d; Graze or forage – 0 d	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds. No more than 11.52 fl oz/acre/season.		
	Methoxyfenozide	\$261.52 / gal	4 fl oz / acre	\$8.17	Hay - 7 d harvest; Forage - 0 d harvest	Only effective on Lepidoptera. Begin applications when first signs of feeding damage appear or when threshold levels of feeding damage occur. Use higher rate for heavier infestations and under conditions in which thorough coverage is more difficult.		
			5 fl oz / acre	\$10.22				
Intrepid 2F			6 fl oz / acre	\$12.26				
			7 fl oz / acre	\$14.30				
			8 fl oz / acre	\$16.35				
	Methomyl	\$202.88 / 2.5 gal	3/4 pt / acre	\$7.61	Feeding forage or graze - 7 d; Hay cutting - 3 d	Do not make more than 4 applications / crop. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.		
Lannate (Bermudagrass			1 pt / acre	\$10.14				
pasture ONLY)			2 pt / acre	\$20.28				
			3 pt / acre	\$30.42				
Karate Z	Lambda- cyhalothrin	\$180.00 / gal	1.28 fl oz / acre	\$1.80	Forage, graze or cut - 0 d; Hay - 7 d	Use higher application volumes and rates when foliage is dense, pest populations are high, larvae are large and/or weather conditions are adverse. A minimum re-treat interval (REI) of 30 days is required for pastures and rangeland receiving 1.92 fl oz per acre which have not been cut between applications.		
			1.92 fl oz / acre	\$2.70				
Baythroid XL	Beta-cyfluthrin	\$345.00 gal	2.6 fl oz / acre	\$7.01	Grass for Hay, Pasture, Rangeland & Seed - 0 d; Grass in mixed-stands with Alfalfa - 7 d	For control of 1 st and 2 nd instar (larvae 1/4 inch long and less).		
			2.8 fl oz / acre	\$7.55				

^{*}Price shown is approximate. Actual price will vary. For educational use only. Pesticide user must read and follow all label directions.

ARMYWORM CONTROL - PASTURES / HAY, 2011								
	Active			Cost per	Grazing and			
	Ingredient	Price*	Application Rate	acre	Harvesting Restrictions	Remarks		
Methyl Parathion	Methyl parathion		1.5 pt		Wait 15 days before Harvest or Graze	For armyworms up to 3 rd instar. Restricted use pesticide Danger. Poison		

Armyworm Control WHEAT							
	Active Ingredient	Price*	Application Rate	Cost / acre	Grazing Restrictions	Remarks	
Baythroid XL		\$345.00 / gal	1.8 fl oz / acre	\$4.86	Graze or forage – 3d; Harvest – 30 d	For best control, applications must be made prior to insects damaging the plants. Use the higher rate for applications occurring after plant damage has taken place. For control of 1st and 2nd instar (larvae 1/4)	
	Beta-cyfluthrin		2.0 fl oz / acre	\$5.40			
			2.4 fl oz / acre	\$6.48		inch long and less).	
Karate Z	Lambda-cyhalothrin	\$180.00 / gal	1.28 fl oz / acre	\$1.80	Graze - 7 d; Feed to meat or dairy animals within 30 d	May be applied through a sprinkler irrigation system. Apply as required by scouting, usually at intervals of 5 or more days. Do not apply more than 3.84 fl oz per acre per season.	
			1.92 fl oz / acre	\$2.71			
Lannate	Methomyl	\$202.88 / 2.5 gal	0.75 pt / acre	\$7.61	Harvest, Forage or Hay – 14 d	Must wait 48 hours before re-entering after application. Do not make more than two applications per crop.	
			1 pt / acre	\$10.14			
			1.5 pt / acre	\$15.21			
Lorsban	Chlorpyrifos	\$119.00 / 2.5 gal	1 pt / acre	\$5.95	Harvest for forage and hay – 14 d; Harvest for grain and straw – 28 d	The restricted entry interval (REI) is 24 hours unless PPE required for early entry is worn. Suppression should be expected under conditions of heavy pest populations or large worms.	
Cobalt	Chlorpyrifos and Gamma-cyhalothrin	<u>s</u>	13-25 ounces per acre		Do not harvest or graze within 7 days. Do not feed straw within 30 days	Control may be reduced under high temperature conditions (greater than 80F), under dry soil conditions or if larvae are mot than ½ inch long	
Penncap M	Methyl parathion		2-3 pints/acre		Do not apply within 14 days of harvest or grazing	Restricted use pesticide. Warming	
Methyl Parathion	Methyl parathion		1.5 pts/acre		15 days harvest	For armyworms up to 3 rd instar. Restricted use pesticide. Danger. Poison	
	Zeta-cypermethrin	\$213.27 / gal	3.2 fl oz / acre	\$5.34	Harvest for grain, forage and hay - 14 d	Apply as required by scouting. Timing and frequency of applications should be based upon insect populations reaching locally determined economic thresholds.	
Mustang Max			3.5 fl oz / acre	\$5.84			
			4.0 fl oz / acre	\$6.68			
Proaxis	Gamma-cyhalothrin	\$275.00 / gal	2.56 fl oz / acre	\$5.50	Harvest - 30 d	Apply as required by scouting, usually at intervals of 5 or more days. Timing and frequency of applications should be based upon insect populations.	
			3.84 fl oz / acre	\$8.26			
Tracer	Spinosad	\$850.00 / gal	1.5 fl oz / acre	\$9.96	Harvest for grain or fodder - 7 d; Harvest forage - 14 d; No grazing until spray has dried	Scout enough to monitor egg laying and egg hatch and treat when thresholds are reached. Applications perform best when timed to coincide with peak egg hatch of each generation. Do not make more than 2 consecutive applications; rotate to another class of insecticides if another application is needed.	
			2 fl oz / acre	\$13.28			
			3 fl oz/acre	\$19.92			
Warrior	Lambda-cyhalothrin		2.56 fl oz / acre		Harvest or straw – 30 d; Graze – 7 d	Apply as required by scouting, usually at intervals of 5 or more days. No more than 3.84 fl oz/acre/season.	
			3.84 fl oz / acre				

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