

ANIMAL INSECT CONTROL

Animal	Pest Problem	Insecticide Formulation	Method and Rate	Restrictions/Remarks	Minimum Days from Last Application to Slaughter	
BEEF CATTLE	Cattle Grub (Also controls lice, some reduction of horn flies.)	Pour-Ons moxidectin Cydectin 0.5% pour-on	5 mL/110 lb.	Pour along mid-line of back.	0	
		Ivermectin 0.5% (Ivomec) pour-on	Pour on 1 mL/22 lb. Body weight 5 mL/110 lb.	Pour along mid-line of back.	48	
	Systemics for grub control should be applied before Oct. 15 in Arkansas. Treatment later than Oct. 15 may cause toxic reactions in cattle from dying grubs.	Dectomax pour-on (doramectin)	1 mL/22 lb body weight.	Pour along mid-line of back.	45	
		Injections Ivermectin, 1% injection	1 mL/110 lb.	Inject subcutaneously.	48	
		Dectomax injection (doramectin)	1 mL/110 lb.	Inject subcutaneously.	35	
	Proper timing of treatment is important. For most effective results, cattle should be treated as soon as possible after heel fly activity ceases. Heel fly activity ceases in Arkansas anytime after Aug. 1.	Cydecton (moxidectin) injection	1 mL/110 lb body weight.	Subcutaneous injection.	21	
		Horn Flies, Lice (Aids in control of face flies)	Dust Bags coumaphos 1% livestock dust	Dust bag treatment; self-treatment. No mixing necessary.	Do not contaminate feed or water.	0
			Permethrin (Permethrin, Prozap Insectrin) 0.25% D	Dust bag treatment; self-treatment. No mixing necessary.	Dust bags have shown an indication of good lice control when left in place during winter months. Install in gates, doorways, loafing areas, etc.	0
	ProZap Dust'R or Rabon 3% Dust (tetrachlorvinphos)		Dust bag treatment; self-treatment. No mixing necessary.		0	
	Python Dust (0.075% zeta-cypermethrin and 0.150% piperonyl butoxide)		Dust bag treatment; self-treatment. Read-to-use dust.	Do not use Python dust if currently using ear tags containing cypermethrin or zeta-cypermethrin.	0	
Rabon 3% Livestock Dust (tetrachlorvinphos)	Dust bag treatment; self-treatment. Read-to-use dust.		Dust bags have shown an indication of good lice control when left in place during winter months. Install in gates, doorways, loafing areas, etc.	0		
Several different dusts can be purchased and hand-sprinkled on cattle. Don't use these in dust bags unless the label indicates you can do so.						

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BEEF CATTLE	Horn Flies, Lice (cont.) (Aids in control of face flies)	Backrubbers Permethrin II, Martin's permethrin, Durvet permethrin, Insectrin, Prozap X, Permethrin 10 (permethrin)	Backrubber treatment. Add 1 qt to 20 gal oil. Apply 1 gal solution/20 ft cable to saturate backrubber.		0
		Co-Ral ELI (11.6% coumaphos EC) or Co-Ral Fly and Tick Spray (6.15% coumaphos)	Use 9 3/4 oz/gallon of fuel oil. Apply 1 gal solution per 20 ft cable to saturate backrubber.		0
		Ravap EC (23% tetrachlorvinphos and 5.3% dichlorvos)	Backrubber treatment. Use 1 qt of Ravap in 7 gal of No. 2 diesel oil. Apply 1 gal of mixed solution/20 ft cable to saturate backrubber.		0
		Ectiban, Hard Hitter, Insectaban or Insectrin 5.7% EC (permethrin)	1 qt/10 gal diesel oil.		0
		Prolate/Lintox HD (11.75% phosmet)	Use 1 pt/6.25 gal of fuel oil. Apply solution to backrubber.	Do not treat sick, stressed or convalescent animals or animals less than 3 months of age. Phosmet is a cholinesterase inhibitor. Consult veterinarian at first sign of adverse reaction.	3
	Horn Flies, Face Flies, Biting and Sucking Lice	Pour-Ons Cylence (cyfluthrin 1%)	Ready to use in dispenser.	Use 4-12 mL depending on weight of animal. See label.	0
		Brute (permethrin 10%)	Ready to use in dispenser.	Also aids in control of other flies.	0
		Boss (permethrin 5%)	Ready to use.	Pour correct dose on back and down the face.	
		Permethrin 1% Pour-on	Ready to use.	Pour correct dose on back and down the face.	
		Synergized permethrin pour-on (permethrin and piperonyl butoxide)	Ready to use.	Pour correct dose on back and down the face.	
	Permethrin CDS (permethrin and piperonyl butoxide)	In ready-to-use dispenser.	Pour correct dose on back and down the face.	0	
	Ultra Boss and Synergized DeLice Pour-ons	Ready to use.	Pour correct dose on back and down the face.	0	
	Clean-up Pour-on (5.0% diflubenzuron and 5.0% permethrin)	Apply 2.0 mL/100 pounds of body weight along back line and down face. Do not apply more than 30 mL to any animal.		0	

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BEEF CATTLE	Horn Flies, Face Flies, Biting and Sucking Lice	Pour-Ons) Saber Pour-on (1% lambda-cyhalothrin)	Apply 10 mL to animals less than 600 lb or 15 mL for animals over 600 lb. Pour along the backline of the animal.	Do not apply more than 4 times within a 6 month period. Do not apply more often than every 2 weeks. Not recommended for veal calves. Do not apply to dry or lactating dairy cows. Do not apply to the face of beef cattle or calves.	0
		Electer (2.46% spinosad) (for horn flies and lice only)	Pour undiluted Electer along backline at the rate of 4 mL/110 pounds body weight.	Do not apply more often than every 14 days. Do not make more than 5 consecutive treatments.	2
		Ivomec, ivermectin, bimectin pour-on (0.5% ivermectin)	1 mL/22 lb body weight.	Apply along the topline of the back from withers to tailhead; not labeled to control face flies.	48
		Cydectin (0.5% moxidectin)	1 mL/22 lb body weight.	Apply along the topline from the withers to the tailhead; not labeled to control face flies. Provides 7 days of persistent activity against horn flies.	0
		Dectomax pour-on (0.5% doramectin)	1 mL/22 lb body weight.	Apply along the topline of the back from withers to tailhead; not labeled to control face flies; do not use on calves to be processed for veal. Provides 7 days of persistent activity against horn flies.	45
		Endectocides		Endectocides (ivermectin, moxidectin and doramectin) are used as part of an integrated control program for internal and external parasite management. For optimal horn fly control over an extended period, use other methods and chemistries.	
	Horn Flies, Face Flies, House Flies	Bolus Vigilante (diflubenzuron)	Use 1/2-1 bolus per animal. Do not exceed 1 bolus to any animal. Do not use in cattle weighing less than 300 lb.	Use standard balling gun. Do not treat calves. For control of horn and face flies.	0
	Horn Flies, Face Flies, House Flies	Oral Larvicides Rabon Oral Larvicide (tetrachlorvinphos)	Read label directions carefully. Use salt block or pre-mixed mineral as directed on the label.	Start feeding early in spring before flies appear. Oral larvicides pass through digestive system and kill fly larvae in the manure. For horn, face, stable and house fly control.	0
		Altosid IGR (methoprene)	Read label directions carefully.	For horn fly control.	0
		ClariFly Larvicide (0.67% diflubenzuron)	Read label directions carefully.	For house, stable, horn and face fly control.	0

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BEEF CATTLE	Horn Flies, Face Flies, House Flies (cont.)	Ear Tags A number of brand names of insecticide-impregnated ear tags are available for purchase.	Use number of tags suggested on tag label. Place tag in ear of animal. Research has shown that alternating the use of pyrethroid tags with organic phosphate tags can delay the onset of resistance. Ear tags are primarily used to control horn flies; however, some ear tags will aid in controlling face flies.	If ear tags within the same insecticide class have been used in the same herd two or more consecutive years, substantial reduction in control effectiveness is possible. Revert to use of dusts, sprays or ear tags in a different class.	0	
		Horn Flies, Lice, Ticks	Dips Prolate/Lintox-HD (phosmet 11.75%)	Follow label directions.	Do not treat sick, stressed or convalescent animals or animals less than 3 months of age. Phosmet is a cholinesterase inhibitor. Consult veterinarian at first sign of adverse reaction.	3
	Grubs, Lice Internal Parasites	Injectables	Ivomec (1% ivermectin) injection	1 mL/110 lb body weight. Follow label directions.	Subcutaneous injection.	35
			Cydectin (moxidectin) injection	1 mL/110 lb body weight.	Subcutaneous injection.	21
			Dectomax (doramectin) injection	1ml/110 lb body weight.	Subcutaneous injection.	35
		Pour-Ons	Ivomec, ivermectin, bimectin (0.5% ivermectin)	1 mL/22 lb body weight.	Apply along the topline of the back from withers to tailhead.	45
			Cydectin (moxidectin) pour-on	1 mL/22 lb body weight.	Apply along topline of the back from withers to tailhead.	0
			Dectomax (0.5% doramectin) pour-on	1 mL/22 lb body weight.	Apply along the topline of the back from withers to tailhead. Do not use on calves to be processed for veal.	45
	Horn Flies, Lice, Ticks (Aids in control of face flies.)	Sprays	Co-Ral Fly and Tick Spray (6.15% coumaphos)	For horn flies and lice, use 5 oz/4 gal of water; for ticks use 10 oz/4 gal of water.	One application of these sprays may be sufficient for lice. If live lice are present after 2 weeks, apply a second treatment.	0
			Co-Ral ELI (coumaphos 11.6%)	For horn flies and lice, use 2.5 oz/4 gal of water; for ticks use 5 oz/4 gal of water.		
Gard Star 40% EC (permethrin)			4 oz/2.5 gal of water. Low pressure spray.	Spray to point of runoff.	0	
Rabon (tetrachlorvinphos)			Mix as directed on label for specific pest. Use between 1/2 and 1 gal of spray per animal. Spray face to aid in face fly control.		0	

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BEEF CATTLE	Horn Flies, Lice, Ticks (Aids in control of face flies.)	Sprays			
		Permethrin II 10% EC, Martin's permethrin, Durvet permethrin, Insectrin, Prozap X, Permethrin 10 (permethrin)	Use 1 qt in 100-200 gal water. Re-treat after 3-5 weeks. Spray to runoff or fog using 1 gal spray mix per head.		14
		Atroban, Expar 11% EC (permethrin)	1 pt 11% EC/50 gal water for horn fly; 1 pt/25 gal for lice. Use 1 qt spray per head for horn fly and 2 qt spray for lice.		
		Insectaban 5.7% EC (permethrin)	1 qt/25-50 gal water.		0
		Atroban Delice 1% (permethrin)	Ready-to-use pour-on; use as directed.		0
		Ectrin 10% WDL (fenvalerate)	Use 1 pt 10% WDL/25 gal water. Use up to 2 qt spray per animal.		
		Ravap EC (23% tetrachlorvinphos and 5.3% dichlorvos)	Use 1 pt Ravap/10 gal water for horn flies and lice or 1 pt/6 gal water for ticks; then use 1/2-1 gal of spray mixture per animal.		0
		Ectiban 5.7% EC	1 qt/25 gal water. Spray to thorough wetting.		0
	Elector (2.46% spinosad)	Use 10 oz Elector/10 gal of water. Apply 1-2 qt of coarse spray per animal or until runoff.	Do not apply more often than every 7 days. Do not make more than 5 consecutive treatments with Elector.		
		Lice and Ticks only	Taktic 12.5% EC (amitraz)	Use 1 pt can of Taktic 12.5% EC in 50 gal water. Use up to 2 gal spray per animal. Spray to runoff. For lice, a second treatment 10-14 days later is recommended.	Use solution within 6 hours of mixing.
	Ear Ticks	Catron IV (permethrin)	Use as directed on label.	Ear tags will not control lone star tick.	0
		Insecticide-impregnated ear tags	Use as directed on label.		
	Screwworms (maggots in wounds)	Catron IV (permethrin)	Ready to use. Spray wounds thoroughly.		0

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INSECTICIDE EAR TAGS 2009

Organophosphate Tags		
Trade Name	Market Source	Active Ingredient
Co-Ral Plus	Bayer Corporation Animal Health	coumaphos (2) + diazinon (2)
Dominator	Schering-Plough Animal Health	pirimiphos-methyl (2)
Optimizer	Y-TEX Corp.	diazinon (2)
Patriot	KMG-Bernuth, Inc.	diazinon (2)
Warrior	Y-TEX Corp.	diazinon (2) + chlorpyrifos (2)
X-Terminator	Destron Fearing	diazinon (2)
Terminator II	KMG-Bernuth, Inc.	diazinon (2)

Synthetic Pyrethroid Tags		
Trade Name	Market Source	Active Ingredient
Cylence Ultra (6)	Bayer Corporation Animal Health	beta-cyfluthrin (1) + piperonyl butoxide (4)
Gard Star Plus (6)	Y-TEX Corp.	permethrin (1)
Python (6)	Y-TEX Corp.	zeta-cypermethrin (1), piperonyl butoxide (4)
Python Magnum (6)	Y-TEX Corp.	zeta-cypermethrin (1) + piperonyl butoxide (4)
Saber Extra	Schering-Plough Animal Health	lambda-cyhalothrin (1) + piperonyl butoxide (4)
Super Deckem	Destron Fearing	fenvalerate (1)

Organochlorine (cyclodiene) Tags		
Trade Name	Market Source	Active Ingredient
Avenger (6)	KMG-Bernuth, Inc.	endosulfan (3)

Combination Tags		
Trade Name	Market Source	Active Ingredient
Double Barrel VP	Schering-Plough Animal Health	lambda-cyhalothrin (1) + primiphos methyl (2)

1 = synthetic pyrethroid, 2 = organophosphate, 3 = organochlorine (cyclodiene), 4 = synergist, 5 = Rx available from veterinarians, 6 = labeled for use on lactating dairy cattle
 Carefully read label concerning the number of tags to apply (1 or 2) and any precautions concerning calves and lactating dairy cattle.