

# 2026 Livestock fly control guide

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## Livestock fly control guide 2026

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**Read more about the New World Screwworm below.**








**Protecting the herd**



**7 common myths about New World Screwworm and the real facts**

## Cattle diseases that can be vectored by flies

Fly species	Disease	Disease-causing microorganism	Reference
<p>New World scewworm fly (<i>Cochliomyia hominivorax</i>)</p> 	Screwworm myiasis	Screwworm larvae	USDA-APHIS. 2025. The New World screwworm: what you need to know ( <a href="https://aphis.usda.gov/sites/default/files/new-world-screwworm-what-you-need-to-know-brochure.pdf">aphis.usda.gov/sites/default/files/new-world-screwworm-what-you-need-to-know-brochure.pdf</a> )
<p>Face fly (<i>Musca autumnalis</i>)</p> 	Pinkeye disease	<i>Moraxella bovis</i> , <i>Moraxella bovoculi</i>	<sup>1</sup> Addison, B. 2011. Research shows new pinkeye strain. <i>Progressive Cattleman</i> , May 2, 2011. ( <a href="https://addisonlabs.com/wp-content/uploads/2016/02/CattlemanPinkeye.pdf">addisonlabs.com/wp-content/uploads/2016/02/CattlemanPinkeye.pdf</a> )
<p>Horn fly (<i>Haematobia irritans</i>)</p> 	Stephanofilariasis	<i>Stephanofilaria stilesi</i>	<sup>2</sup> Hibler CP. 1966. Development of <i>Stephanofilaria stilesi</i> in horn fly. <i>Journal of Parasitology</i> 52:890–898.
<p>House fly (<i>Musca domestica</i>)</p> 	Bovine respiratory disease	<i>Mannheimia haemolytica</i> , <i>Pasteurella multocida</i> , <i>Histophilus somni</i> , <i>Mycoplasma bovis</i>	<sup>3</sup> Neupane, S., D. Nayduch, and L. Zurek. 2019. House flies ( <i>Musca domestica</i> ) pose a risk of carriage and transmission of bacterial pathogens associated with bovine respiratory disease (BRD). <i>Insects</i> 10:358 ( <a href="https://doi.org/10.3390/insects10100358">doi.org/10.3390/insects10100358</a> )
	Cryptosporidiosis	<i>Cryptosporidium parvum</i>	<sup>4</sup> Graczyk, T. K., M. R. Cranfield, R. Fayer, and H. Bixler. 1999. House flies ( <i>Musca domestica</i> ) as transport hosts of <i>Cryptosporidium parvum</i> . <i>American Journal of Tropical Medicine and Hygiene</i> 61(3):500–504.
	Escherichia coli infection	<i>Escherichia coli</i> O157:H7	<sup>5</sup> Alam, M. J. and L. Zurek. 2004. Association of <i>Escherichia coli</i> O157:H7 with houseflies on a cattle farm. <i>Applied and Environmental Microbiology</i> 70:7578–7580.
<p>Stable fly (<i>Stomoxys calcitrans</i>)</p> 	Salmonella infection	<i>Salmonella</i>	<sup>6</sup> Xu, Y., S. Tao, N. Hinkle, M. Harrison, and J. Chen. 2018. <i>Salmonella</i> , including antibiotic-resistant <i>Salmonella</i> , from flies captured from cattle farms in Georgia, U.S.A. <i>Science of the Total Environment</i> 616–617:90–96.
	Anthrax	<i>Bacillus anthracis</i>	<sup>7</sup> Turell, M. J. and G. B. Knudson. 1987. Mechanical transmission of <i>Bacillus anthracis</i> by stable flies ( <i>Stomoxys calcitrans</i> ) and mosquitoes ( <i>Aedes aegypti</i> and <i>Aedes taeniorhynchus</i> ). <i>Infection and Immunity</i> 55:1859–1861.
	Mycoplasma wenyonii infection	<i>Mycoplasma wenyonii</i>	<sup>8</sup> Hornok, S., A. Micsutka, M. L. Meli, H. Lutz, and R. Hofmann Lehmann. 2011. Molecular investigation of transplacental and vector-borne transmission of bovine haemoplasmas. <i>Veterinary Microbiology</i> 152:411– 414.



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### House fly baits

Mfr	Brand name	Item #	Unit	Active ingredient	Formulation	Rate
<b>Target species:</b> House flies; note: not for stable fly control						
<b>BASF</b>	PT® Alpine® Pressurized Fly Bait	053425	16 oz.	dinotefuran (1.0%)	pressurized liquid bait (ready-to-use)	See label for directions
	<b>Elanco</b>	Agita® 10 WG	128689	250 gram	thiamethoxam (10.0%)	sprayable bait
250 gm.			2.2 lb.			
QuickBayt® Fly Bait		028630	350 gram	imidacloprid (0.5%) + (Z)-9-tricosene (0.1%)	solid bait	1.5 oz. per 250 sq. ft.
		021577	5 lb.			
		040276	35 lb.			
QuickBayt® Spot Spray	035202	3 oz.	imidacloprid (10.0%) + (Z)-9-tricosene (0.1%)	sprayable bait	16 oz. per 1 gal. water	
	030238	1 lb..				
<b>Starbar</b>	DuraStrike™	120074	28 lb.	indoxacarb (0.5%)	solid bait	6.4 oz. per 1,000 sq. ft.
	Golden Malrin® Fly Bait**	040581	40 lb.	methomyl (1.000%) + (Z)-9-tricosene (0.049%)		4.0 oz. per 500 sq. ft.
	QuikStrike® Fly Abatement Strip	037084	P2	dinotefuran (1%)	bait strip	See label for directions
		050689	1 lb.			
	QuikStrike® Fly Bait	035500	5 lb.	dinotefuran (0.50%) + (Z)-9-tricosene (0.04%)	solid bait	2.0 oz. per 250 sq. ft.
		034067	40 lb.			
QuikStrike® Fly Bait Spray	055340	40 lb.		sprayable bait	16 oz. per 1 gal. water	

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. \*\* Restricted use insecticide.

## On-animal spray insecticides for use in cattle premise automatic misting systems\*

Mfr	Brand name	Item #	Unit	Active ingredient
<b>Target species:</b> House fly, stable fly				
<b>Rate:</b> See label for dilution rates. Spray must be directed to the legs of cattle to control stable flies.				
Control Solutions	Vector-Ban™ Plus	050619	0.5 gal.	permethrin (10.0%) + PBO (10.0%)
	Riptide® Waterbased Pyrethrin ULV	052706	64 oz.	natural pyrethrins (5%) + PBO (25%)
MGK	Sector® Misting Concentrate	091755	gallon	permethrin (10.0%) + PBO (10.0%)

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. No meat or milk withdrawals indicated. \*Check with your local state regulatory office for misting system and insecticide regulations and restrictions.

## Aerosol on-animal sprays

Mfr	Brand name	Item #	Unit	Active ingredient
<b>Target species:</b> House fly, stable fly				
<b>Rate:</b> See label for detailed directions.				
Country Vet	Country Vet Mosquito & Fly Spray (for use in automatic metered dispensers)	026524	6.9 oz.	natural pyrethrins (1.76%) + PBO (5.00%)
	Country Vet Farm & Dairy CV-80D for Insect Control	038836	18.5 oz.	natural pyrethrins (0.50%) + PBO (4.00%)
Durvet	Dairy Bomb 55	051626	25 oz.	natural pyrethrins (0.5%) + PBO (5.0%)
	Dairy Bomb 55Z	051625	25 oz.	natural pyrethrins (0.5%) + PBO (5.0%)
	Screw Worm Aerosol Multi-Purpose Insecticide Spray	043510	12 oz.	permethrin (0.5%)
Elanco	Catron® IV	014339	10 oz.	permethrin (0.50%)
MGK	Troika® Farm and Livestock Aerosol	132239	22 oz.	natural pyrethrins (0.1%) + permethrin (0.2%) + PBO (0.5%)
Neogen	Prozap® CT-75 Aerosol Insecticide	053003	26 oz.	natural pyrethrins (0.7%) + PBO (5.0%)
	Prozap® LD-44Z Insect Fogger	021366	20 oz.	natural pyrethrins (0.5%) + PBO (4.0%)
		043782	25 oz.	

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. No meat or milk withdrawals indicated.



## Fly traps



Mfr	Brand name	Item #	Unit
<b>Target species:</b> House fly*			
Coburn	Sticky Roll Fly Trapping Tape Refill, 1000'	0505919	each
	Catchmaster Giant Fly Trap Roll, 30'	480520	each
Starbar	*Bite Free™ Stable Fly Trap (for stable flies)	039091	each
	Captivator® Fly Trap	039090	each
	Fly Stik™	039095	each
	Fly Stik™ Jr.	039094	each
	Fly Terminator® Pro	039088	each
	FlyRelief™ Disposable Fly Trap	050643	each
	Giant FlyRelief™ Disposable Fly Trap	050870	each
	Trap 'N Toss™ Disposable Fly Trap	039092	each

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer.

## Empty-barn residual insecticides

Mfr	Brand name	Item #	Unit	Active ingredient	Formulation	Rate
<b>Target species:</b> Flies						
BASF	Alpine® WSG Water Soluble Granule Insecticide	063236	500 gram	dinotefuran (40.0%)	Spray (water soluble granules)	10 to 20 grams per 1 gal. per 1,000 ft <sup>2</sup>
Control Solutions	Bifen I/T Insecticide/Termiticide	057379	gallon	bifenthrin (79%)	spray (water-based)	0.33 to 1.00 fl. oz. per 1 gal. per 1,000 ft <sup>2</sup>
Elanco	CyLence Ultra™ Premise Spray	030934	240 ml.	beta-cyfluthrin (11.8%)	Spray (water-based)	0.54 fl. oz. per 1 gal. water per 1,000 ft <sup>2</sup>
	Elector® PSP	045949	8 oz.	spinosad (44.2%)	Spray (water-based)	0.20 fl. oz. per 1 gal. water per 1,000 ft <sup>2</sup>
Merck	Grenade® ER Insecticide	013190	8 oz.	lambda-cyhalothrin (9.7%)	Spray (water-based; micro-encapsulated)	0.80 fl. oz. per 1 gal. water per 1,000 ft <sup>2</sup>
MGK	Onslaught® FastCap Spider and Scorpion Insecticide	061570	pint	esfenvalerate (6.4 %) + prallethrin (1.6%) + PBO (8.0%)	Spray (water-based; micro-encapsulated)	0.5 fl. oz. per 1 gal. water per 1,000 ft <sup>2</sup>
		063695	CS2			
	Shockwave® 1 Flushing, Killing & Residual Aerosol	096402	17 oz.	pyrethrins (0.50%) + PBO (1.00%) + MGK 264 (1.50%) + bifenthrin (0.05%) + pyriproxyfen (0.20%)	Aerosol	See label for diections
	BP-100 Plus™ Fogging Concentrate	132319	gallon	pyrethrins (1%) + PBO (5%) + pyriproxyfen (0.2%)	Spray (oil-based)	See label for diections
132396		30 gallons				

## Equipment for applying insecticides in and around dairy calf hutches, dairy barns, and beef cattle feedlots

Mfr		Model	Website
A1 Mist Sprayers Systems		Cobra Mist Sprayer for UTV's Pest and Weed	<a href="http://www.mistsprayers.com">www.mistsprayers.com</a>
		Ranger 60 Mist Sprayer Heavy Duty	
		Super Duty Tank 100 Gallon	
		Terminator Heavy Duty 3-Point Mist Sprayer	
Makita		Makita PM7650H 4-Stroke Engine Mist Blower	<a href="http://www.makitatools.com">www.makitatools.com</a>
Stihl		SR 450 Backpack Sprayer/Duster with ULV Kit	<a href="http://www.stihlusa.com">www.stihlusa.com</a>
		SR 200 Backpack Sprayer with ULV Kit	<a href="http://www.stihlusa.com">www.stihlusa.com</a>
Thermo Fogger		Model 2107 Pest Control Fogger	<a href="http://www.thermo-fogger.com">www.thermo-fogger.com</a>

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### On-animal insecticidal pour-ons and capsules

Target fly species: Horn fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate
Control Solutions	Cyonara™ Plus Pour-On Topical Insecticide	126085	gallon	lambda-cyhalothrin (1%) + piperonyl butoxide (5%)	see label
	Martin's® Lice Ban	126086	2.5 gal.	diflubenzuron (3%) + permethrin (5%)	see label
Durvet	Synergized Permethrin 1% Pour-On Insecticide	043780	gallon	permethrin (1.0%) + PBO (1.0%)	0.5 fl. oz. per 100 lbs. body weight; maximum 5.0 fl. oz.
Elanco	Clean-Up™ II Pour-On Insecticide with IGR	025819	0.5 gal.	diflubenzuron (3.0%) + permethrin (5.0%)	3mL per 100 lbs. body weight
		025820	2.5 gal.		
	CyLence® Pour-On Insecticide	011474	16 oz.	cyfluthrin (1.0%)	see label
		011475	6PT		
	Permethrin™ CDS Pour-On Insecticide	012680	16 oz.	permethrin (7.4%) + PBO (7.4%)	2mL per 100 lbs. body weight
012681		0.5 gal.			
019317	2.5 gal.				
Huvepharma	AIM-A VetCaps™ (for VetGun™)	64265	B30	abamectin (3.15%)	1 capsule per cattle weighing greater than 600 lbs.
		64266	B150		
	AIM-L VetCaps™ (for VetGun™)	48597	B30	lambda-cyhalothrin (1.5%) + PBO (7.5%)	1 capsule per cattle weighing greater than 600 lbs.
		51114	B150		
Merck	Ultra Boss® Pour-On Insecticide	019474	quart	permethrin (5.0%) + PBO (5.0%)	3mL per 100 lbs. body weight
		121358	5 liter		
	Ultra Saber™ Pour-On Insecticide*	121357	30 oz.	lambda-cyhalothrin (1.0%) + PBO (5.0%)	10mL per head for cattle weighing less than 600 lbs.; 15mL per head for cattle weighing more than 600 lbs.
		121354	5 liter		
Neogen	Prozap® Backrubber and Pour-On Xtra	047967	2.5 gal.	permethrin (0.125%) + PBO (0.125%)	1 fl. oz. per 100 lbs.
	Prozap® Insectrin CS	126723	gallon	permethrin (7.4%) + PBO (7.4%)	2 mL per 100 lbs. body weight up to a maximum of 20 mL per animal
		40745	2.5 gal.		
	Prozap® Insectrin Xtra 1% Synergized Permethrin Pour-On	126720	gallon	permethrin (1%) + PBO (1%)	0.5 fl. oz. per 100 lbs. body weight up to a max. of 5 fl. oz. per animal
		126721	2.5 gal.		
	Prozap® Protectus Pour-On Insecticide-IGR	118139	0.5 gal.	diflubenzuron (3.0%) + PBO (2.5%) + lambda-cyhalothrin (0.5%)	3 mL per 100 lbs. body weight
		118141	2.5 gal.		
StandGuard™ Pour-On Insecticide*	034615	900 ml.	gamma-cyhalothrin (0.5%)	10mL per head for cattle weighing less than 600 lbs.; 15mL per head for cattle weighing more than 600 lbs.	
	044809	4.5 liter			

## On-animal insecticidal pour-ons and capsules

Target fly species: Horn fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate
Starbar	Inhibidor™ Insecticidal Pour-On	117923	0.5 gal.	diflubenzuron (3.0%) + PBO (2.5%) + lambda-cyhalothrin (0.5%)	3 mL per 100 lbs. body weight
		117893	2.5 gal.		
	Starbar® Cattle Armor 1% Synergized Pour-On	090883	55 gal.	permethrin (1.0%) + PBO (1.0%)	0.5 fl. oz. per 100 lbs. body weight
Y-Tex	Brute® Pour-On Insecticide	113549	16 oz.	permethrin (10.0%)	see label
		014772	gallon		

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. \*Do not apply to lactating or dry dairy cows.

## Water-based on-animal sprays

Mfr	Brand name	Item #	Unit	Active ingredient	Targeted fly species	Rate
Control Solutions	Martin's® Permethrin SFR	050606	quart	permethrin (36.8%)		0.2 fl. oz. per 1 gal. water
		118727	gallon			
	Vector-Ban™ Plus	050619	0.5 gal.	permethrin (10.0%) + PBO (10.0%)		1.3 fl. oz. per 1 gal. water
Durvet	Permethrin 10% Rapid Kill Insecticide Concentrate	113683	8 oz.	permethrin (10.0%)	horn fly, face fly, stable fly, house fly	1.28 fl. oz. per 1 gal. water
		056747	quart			
		056793	gallon			
Elanco	Co-Ral® Fly and Tick Sprayt	043543	0.5 gal.	coumaphos (6.15%)	horn fly	see label Preharvest w/d = 10 days.
	Permethrin™ II	002394	8 oz.	permethrin (10.0%)	horn fly, face fly, stable fly	2.5 fl. oz. per 1 gal. water.
		000903	quart			
	Ravap® E.C.*†	013949	gallon	tetrachlorvinphos (23.0%) + dichlorvos (5.3%)	horn fly, face fly	see label.
Vapona® Concentrate Insecticide*†	058706	2.5 gal.	dichlorvos (40.2%)	horn fly, face fly, stable fly, house fly see label for others)	see label Preharvest w/d = 1 day.	



## Water-based on-animal sprays

Mfr	Brand name	Item #	Unit	Active ingredient	Targeted fly species	Rate
MGK	EverGreen® Pro 60-6	063831	quart	natural pyrethrins (6.0%) + PBO (60.0%)	horn fly, face fly, stable fly, house fly	2.0 fl. oz. per 1 gal. water.
		062001	gallon			
	EverGreen® Pyrethrum Concentrate	059359	gallon	natural pyrethrins (5.0%; organic)	horn fly, face fly, stable fly, house fly	3.0 fl. oz. per 1 gal. water.
	Riptide® Waterbased Pyrethrin ULV	052706	64 oz.	natural pyrethrins (5.0%) + PBO (25%)	horn fly, face fly, stable fly, house fly	Dilute 1 part concentrate with 49 parts water. Apply
	Sector® Misting Concentrate	091755	gallon	permethrin (10.0%) + piperonyl butoxide (10.0%)	horn fly, face fly, stable fly, house fly	1.3 fl. oz. per 1 gal. water.
Neogen	Prozap® Insectrin X Concentrate	126724	gallon	permethrin (10.0%)	horn fly, face fly, stable fly	1.3 fl. oz. per 1 gal. water.
Starbar	Prolate/Lintox-HD™ Insecticidal Spray & Backrubber for Livestock†	040713	quart	phosmet (11.75%)	horn fly	see label Pre-harvest w/d = 3 days.
		043550	gallon			
	Pyronyl™ Crop Spray	059286	quart	natural pyrethrins (6.0%) + PBO (60.0%)	horn fly, face fly, stable fly, house fly	2.0 fl. oz. per 1 gal. water
059287		gallon				
Y-Tex	Gardstar® 40% EC	039038	quart	permethrin (40%)	horn fly, face fly, stable fly, house fly	0.2 fl. oz. per 1 gal. water.

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. \*Restricted use insecticide. †Not for use on young animals; refer to label.

## Oil-based on-animal sprays

**Target fly species:** Horn fly, face fly, stable fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate*
Durvet	Super II Dairy & Farm Spray	052072	2.5 gal.	dichlorvos (0.500%) + natural pyrethrins (0.050%) + PBO (0.100%)	1-2 fl. oz. per animal for a three-day period. See label for other restrictions.
	Synergized Permethrin 1% Pour-On Insecticide	043780	gallon	permethrin (1.0%) + PBO (1.0%)	0.5 fl. oz. per 100 lbs. body weight up to a maximum of 5.0 fl. oz.
Elanco	Permethrin™ CDS Pour-On Insecticide	012680	16 oz.	permethrin (7.4%) + PBO (7.4%)	Apply 2mL per 100 lbs. body weight up to a maximum of 20mL
		012681	0.5 gal.		
		019317	2.5 gal.		
Merck	Synergized DeLice® Pour-On Insecticide	121355	5 L	permethrin (7.4%) + PBO (7.4%)	2mL per 100 lbs. body weight up to a maximum of 20mL.
MGK	ULD® BP-100	051790	gallon	natural pyrethrins (1%) + PBO (5%)	Use undiluted—wet tips of hair
		051792	55 gal.		

## Oil-based on-animal sprays

**Target fly species:** Horn fly, face fly, stable fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate*
Neogen	Prozap® VIP Insect Spray**	037146	gallon	dichlorvos (0.500%) + natural pyrethrins (0.025%) + PBO (0.250%)	Apply 1-2 oz. per animal.
	Prozap® Insectrin CS	126723	gallon	permethrin (7.4%) + PBO (7.4%)	2 mL per 100 lbs. body weight up to a maximum of 20 mL per animal
		40745	2.5 gal.		
	Prozap® Insectrin Xtra 1% Synergized Permethrin Pour-On	126720	gallon	permethrin (1%) + PBO (1%)	0.5 fl. oz. per 100 lbs. body weight up to a max. of 5 fl. oz. per animal
126721		2.5 gal.			
Starbar	Cattle Armor™ 1% Permethrin Synergized Pour-On	090883	55 gal.	permethrin (1.0%) + PBO (1.0%)	Apply 0.5 fl. oz. per 100 lbs. body weight up to a maximum of 5.0 fl. oz. per animal
	UL-100 EC Insecticidal Spray	059655	gallon	natural pyrethrins (0.96%) + PBO (9.60%)	Dilute 1 part with 9 parts oil; 2 fl. oz. of mixture/1,000 cubic ft.

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. No pre-harvest withdrawals indicated. \*Use undiluted using a mist sprayer. \*\*Not for calves less than 6 months of age.

## Insecticides for use in dusters

**Target fly species:** Horn fly, face fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate
Elanco	Co-Ral® Livestock Dust	056200	2 lb.	coumaphos (1.0%)	see label.
		113738	B4		
	Permethrin™ Fly & Louse Dust	047607	2 lb.	permethrin (0.25%)	
		047608	each		
Neogen	Prozap® Insectrin Dust	051624	P2	permethrin (0.25%)	see label.
Y-Tex	PYThon® Dust Livestock Insecticide	050116	2 lb.	zeta-cypermethrin (0.075%) + PBO (0.150%)	

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer.








## Insecticides for use in backrubbers

Target fly species: Horn fly, face fly

Mfr	Brand name	Item #	Unit	Active ingredient	Rate
Control Solutions	Martin's® Fly-Ban Synergized Pour-On	063272	55 gal.	permethrin (7.4%) + PBO (7.4%)	Mix 64mL (2.1 fl. oz.) per gal. of mineral oil.
	Martin's® Permethrin SFR	050606	quart	permethrin (36.8%)	Dilute 4 fl. oz. to 10 gals. diesel oil or suitable mineral oil.
Elanco	Co-Ral® Fly and Tick Spray†	043543	0.5 gal.	coumaphos (6.15%)	Mix 4 quarts in 13 gals. of #2 fuel oil or #2 diesel fuel.
	Permethrin® CDS Pour-On Insecticide	012680	16 oz.	permethrin (7.4%) + PBO (7.4%)	Mix 64 (2.1 fl. oz.) per gal. of mineral oil.
		012681	0.5 gal.		
		019317	2.5 gal.		
	Permethrin II™	002394	8 oz.	permethrin (10.0%)	Mix 1 quart in 20 gals; 8 oz in 5 gal.; 1.5 oz. (48 mL) in 1 gal. mineral oil or non-irritating organic oil.
000903		quart			
Ravap™ E.C.*†	013949	gallon	tetrachlorvinphos (23.0%) + dichlorvos (5.3%)	Dilute 5 fl. oz. in 1 gal. oil.	
Merck	Synergized DeLice® Pour-On Insecticide	121355	5 L	permethrin (1.0%) + PBO (1.0%)	Mix one pint per gal. #2 diesel or mineral oil.
	Ultra Boss® Pour-On Insecticide	019474	quart	permethrin (5.0%) + PBO (5.0%)	Mix 100mL per gal. of #2 diesel oil or mineral oil.
Neogen	Prozap® Backrubber and Pour-On Xtra	047967	2.5 gal.	permethrin (0.125%) + PBO (0.125%)	Apply undiluted. Fill reservoir or saturate applicator.
	Prozap® Insectrin 1% Pour-on Xtra	982220	2.5 gal.	permethrin (1.0%) + PBO (1%)	Mix one pint per gal. #2 diesel or mineral oil.
	Prozap® Insectrin CS	126723	gallon	permethrin (7.4%) + PBO (7.4%)	Mix 64mL (2.1 oz) per gal. of mineral oil.
		40745	2.5 gal.		
	Prozap® Insectrin X Concentrate	186942	32 oz.	permethrin (10.0%)	Dilute 1.6 fl. oz. in 1 gal. oil.
385280		gallon			
Starbar	Cattle Armor™ 1% Permethrin Synergized Pour-On	092220	gallon	permethrin (1%) + PBO (1%)	Mix one pint per gal. #2 diesel or mineral oil.
		090883	55 gal.		
	Prolate/Lintox-HD™ Insecticidal Spray & Backrubber for Livestock†	040713	quart	phosmet (11.75%)	Dilute 1 pint per 6.25 gals. fuel oil or other suitable carrier. Pre-harvest w/d = 3 days.
043550		gallon			
Y-TEX	Brute® Pour-On Insecticide	113549	16 oz.	permethrin (10.0%)	Dilute 48 mL (1.6 fl. oz.) per gal. diesel fuel or oil.
		014772	gallon		
	Gardstar® 40% EC	039038	quart	permethrin (40%)	0.2 fl. oz. per 1 gal. of water.

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. \*Restricted use insecticide. †Not for young animals; refer to label.

## Insecticidal cattle ear tag reference chart







	Brand	Mfr.	Active ingredient	Target fly species	For lactating dairy	Applicator	Rate	Weight	Duration claimed	Tags/unit	Item #
<b>Macrocyclic lactone tags</b>											
	XP 820™ Insecticide Ear Tag	Y-TEX	abamectin (8%) + PBO (20%)	horn fly, face fly	✓	Y-TEX	2 tags per animal (1 tag on each ear)	9g per tag	Up to 5 months	20	034180
										100	034181
<b>Organophosphate tags</b>											
	Corathon® Insecticide Ear Tag*	Elanco	diazinon (35%) + coumaphos (15%)	horn fly, face fly		Allflex®	2 tags per mature animal (1 tag on each ear); 1 tag per calf	14g per tag	Up to 5 months	20	035840
	Dominator® Insecticide Ear Tag	Merck	pirimiphos- methyl (20%)	horn fly, face fly			2 tags per animal (1 tag on each ear)	9.5g per tag	Up to 5 months	20	011501
	MAX40™ Insecticide Cattle Ear Tag**	Y-TEX	diazinon (40%)	horn fly		Y-TEX® Ultra Tagger plus	1-2 tags per animal (see label for details)	15g per tag	Up to 5 months	20	099124
										100	099121
	Patriot™ Insecticide Ear Tag	Elanco	diazinon (40%)	horn fly, face fly, stable fly		Allflex®	2 tags per animal (1 tag on each ear)	15g per tag	3-5 months	20	001739
										120	001733

## Insecticidal cattle ear tag reference chart

	Brand	Mfr.	Active ingredient	Target fly species	For lactating dairy	Applicator	Rate	Weight	Duration claimed	Tags/unit	Item #
<b>Pyrethroid tags</b>											
	Cylence Ultra® Insecticide Ear Tag	Elanco	beta-cyfluthrin (8%) + PBO (20%)	horn fly, face fly	✓	Allflex®	2 tags per mature animal (1 tag on each ear)	14g per tag	Up to 5 months	20	021095



## Insecticidal cattle ear tag reference chart

	Brand	Mfr.	Active ingredient	Target fly species	For lactating dairy	Applicator	Rate	Weight	Duration claimed	Tags/unit	Item #
	Gardstar® Plus Insecticide Ear Tag	Y-TeX	permethrin (10%)	horn fly, face fly, stable fly	✓	Y-TeX®	2 tags per animal (1 tag on each ear)	9.5g per tag	4-5 months	25	012641
	Insecticide Ear Tag		zeta-cypermethrin, S-enantiomer (5%) + PBO (20%)		✓			9.5g per tag	4-5 months	20	021780
	Python® II Magnum™ Insecticide Ear Tag		zeta-cypermethrin, S-enantiomer (5%) + PBO (20%)	horn fly, face fly, stable fly (see label for others)	✓		1 tag per animal	15g per tag	4-5 months	20	021778
											100
	Saber® Extra Insecticide Ear Tag	Merck	lambda-cyhalothrin (10%) + PBO (13%)	horn fly, face fly		Allflex®	2 tags per animal (1 tag on each ear)	9.5g per tag	Up to 5 months	20	011503
<b>Combination tags</b>											
	Double Barrel® VP Insecticide Ear Tag	Merck	pirimiphos-methyl (14.0%) + lambda-cyhalothrin (6.8%)	horn fly, face fly		Allflex®	2 tags per animal (1 tag on each ear)	9.5g per strip	Up to 5 months	20	012491
	Tri-Zap™ Insecticide Cattle Ear Tag	Y-TeX	zeta-cypermethrin + abamectin (6.0%) + PBO (20%)	horn fly, face fly	✓	Y-TeX®	1-2 tags per animal (see label for details)	9.5g per tag	2-4 months	100	065869

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## Larvicides for use in fly breeding sites in beef and dairy cattle production areas

Mfr	Brand name	Item #	Unit	Active ingredient	Formulation	Targeted fly species*
Central Life Sciences	ClariFLY® Larvicide Livestock Pre-mix 0.67% Larvicide	052596	50 lb.	diflubenzuron (0.67%)	Feedthrough	larvae of flies
Champion Animal Health	JustiFLY® 3% 360gram Add Pack	099324	360 gm.	diflubenzuron (3.0%)	Feedthrough	larvae of flies
	JustiFLY® Liquid Feed Add Pack	112211	2.5 lb.	diflubenzuron (3.0%)	Feedthrough	larvae of flies
Control Solutions	Tekko™ 10	056686	gallon	novaluron (9.3%)	Spray	larvae of house fly and dump fly
Elanco	Elector™ PSP Premise Insect Control Agent	045949	8 oz.	spinosad (44.2%)	Spray	larvae (and adults) of house fly, stable fly, and little house fly
	Neporex™ 2 SG	035495	5 kg.	cyromazine (2.0%)	Granules or Spray	larvae of flies
094996		44 lb.				
MGK	FLYNEXX® Granules	116479	35 lb.	cyromazine (2%)	Granules or Spray	larvae of flies
	NyGuard® IGR Concentrate	061004	140 ml.	pyriproxyfen (10.0%)	Spray	larvae of flies
Starbar	Exhalt™ WDG Insect Growth Regulator	116418	5 lb.	novaluron (4%)	Granules or Spray	Larvae of house fly, dark-eyed fruit fly, soldier fly, dump fly
		116417	12 oz.			

Prior to using any product mentioned in this article, carefully read and follow all available instructions, warnings, and safety information made available by the product's manufacturer. See label for use rates. Listed products have zero beef cattle pre-harvest interval or dairy cattle milk withdrawal period. \*Larvae of flies - Larvae of horn fly, face fly, house fly, and stable fly.



