

## Insecticide-Impregnated Ear Tags for Cattle

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The horn fly (*Haematobia irritans*) is one of the most prevalent insects affecting beef cattle. It is a small but persistent blood-sucking fly that feeds on cattle 30 to 40 times each day. Both male and female horn flies take blood meals, leaving the backs of cattle only for short periods when depositing egg batches into fresh manure.

Using insecticide-impregnated ear tags is an effective way to manage horn flies. There are a variety of products available.

Pesticide Class	Brand Name	Remarks
Organophosphates	<b>Patriot</b> Bayer	Contains 40% diazinon as the active ingredient. Labeled to control horn flies for up to 5 months with 2 tags/animal. Also controls Gulf Coast ticks and spinose ear ticks, and helps control face flies, lice, stable flies, and house flies. Can use 1 or 2 tags/ animal; 2 tags/animal gives greater control. For use on beef and non-lactating dairy cattle and calves over 3 months (1 tag).
	<b>Warrior</b> Y-Tex	Contains 30% diazinon and 10% chlorpyrifos as the active ingredients. Labeled to control horn flies, lice, Gulf Coast ticks, and spinose ear ticks for up to 5 months with 2 tags/animal. Helps control face flies, stable flies, and house flies. Can use 1 or 2 tags/animal for 3- to 4-month control and up to 5-month control, respectively. For use on beef and non-lactating dairy cattle and calves over 3 months (1 tag). No withdrawal time required.
	<b>OPtimizer</b> Y-Tex	Contains 21% diazinon as the active ingredient. Labeled to control horn flies for up to 5 months with 2 tags/animal. Also controls lice, Gulf Coast ticks, spinose ear ticks, and helps control face flies. Use 2 tags/animal. Use during the winter to control lice. For use on beef cattle and non-lactating dairy cattle and calves over 3 months (1 tag). No withdrawal time required.
	<b>Dominator</b> Merck Animal Health	Contains 20% pirimiphos methyl as the active ingredient. Labeled to control horn flies for up to 5 months with 2 tags/animal. Helps control face flies. For use on beef cattle and non-lactating dairy cattle and calves (1 tag).
	<b>Corathon</b> Bayer	Contains 15% coumaphos and 35% diazinon as the active ingredients. Labeled to control horn flies, face flies, Gulf Coast ticks, and spinose ear ticks for up to 5 months with 2 tags/animal. Can use 1 tag/animal for adequate control. Approved for use on beef cattle, nonlactating dairy cattle, and calves over 3 months of age (1 tag).
Pyrethroids	<b>PYthon</b> Y-Tex	Contains 10% zeta-cypermethrin as the active ingredient and 20% piperonyl butoxide. Labeled to control horn flies for up to 5 months with 2 tags/animal. Also controls face flies, lice, Gulf Coast ticks, and spinose ear ticks. Helps control stable flies, black flies, house flies, and small horse flies. Can use 1 tag/animal for 3- to 4-month control or 2 tags/animal for up to 5-month control. Use in the winter to help control lice. Can use on beef cattle, calves, and dairy cows (including lactating). No withdrawal period for meat or milk.

Pyrethroids	PYthon Magnum	Contains 10% zeta-cypermethrin as the active ingredient and 20% synergist.
continued	Y-Tex	Labeled to control horn flies for 4 to 5 months with 1 tag/animal. Also controls biting lice and helps control face flies, stable flies, house flies, and sucking lice. Use only 1 tag/animal; larger size than Python. Can use on beef cattle, dairy cattle (lactating included), and calves over 3 months. No withdrawal period for meat or milk.
	<b>Gardstar Plus</b> Y-Tex	Contains 10% permethrin as the active ingredient. Labeled to control horn flies. Also controls face flies, Gulf Coast ticks, spinose ear ticks, and helps control lice, stable flies, and house flies. For use on beef cattle, dairy cattle (including lactating), and calves. No required withdrawal time.
	<b>CyLence Ultra®</b> Bayer	Contains 8% beta-cyfluthrin as the active ingredient and 20% piperonyl butoxide. Labeled to control horn flies, face flies, Gulf Coast ticks, and spinose ear ticks for up to 5 months with 2 tags/animal. Can use 1 or 2 tags/animal; 2 tags are needed for efficient control of face flies, Gulf Coast ticks, and spinose ear ticks. Approved for use on beef and dairy cattle, including lactating cows and calves over 3 months (1 tag).
	<b>Saber Extra</b> Merck Animal Health	Contains 10% lambda-cyhalothrin as the active ingredient and 13% piperonyl butoxide. Labeled to control horn flies for up to 5 months with 2 tags/animal. Also controls face flies. For use on beef cattle of all ages (even 1-day-old).
Macrocyclic Lactone	<b>XP 820</b> Y-Tex	Contains 8% abamectin as the active ingredient and 20% piperonyl butoxide. First- ever abamectin ear tag. Labeled for horn fly control for up to 5 months with 2 tags/ animal. Also controls Gulf Coast ticks and helps control spinose ear ticks, face flies, American dog ticks, cattle fever ticks, and lone star ticks. Can use 1 tag/animal for 3-month control of horn flies. With 2 tags/animal, can get up to 5-month control of horn flies, 4-month control of Gulf Coast ticks and spinose ear ticks, 3-month control of American dog ticks, 2-month control of cattle fever ticks and lone star ticks, and fewer face flies. For use on beef cattle and dairy cattle (including lactating). No withdrawal time required.
Combination – Organophosphate and Pyrethroid	<b>Double Barrel VP</b> Merck Animal Health	Contains 6.8% lambda-cyhalothrin and 14% pirimiphos methyl as the active ingredients. Labeled to control horn flies and face flies for up to 5 months with 2 tags/animal. Approved for use on beef, nonlactating dairy cattle, and calves.
Organophosphate		ingredients. Labeled to control horn flies and face flies for up to 5 months with 2

## Ear Tag Guidelines

- Tag after 100 horn flies are present per animal.
- Remove tags at the end of fly season and prior to slaughter.
- Rotate classes of insecticides (such as organophosphates, pyrethroids, or macrocyclic lactone) each year. Use any organophosphate for one year and then switch to any pyrethroid or other class the next year.
- Include a midseason treatment.

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