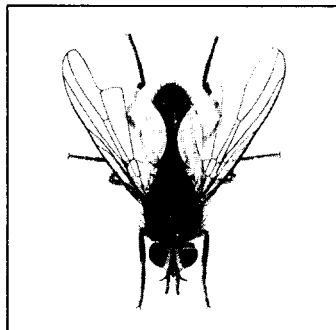




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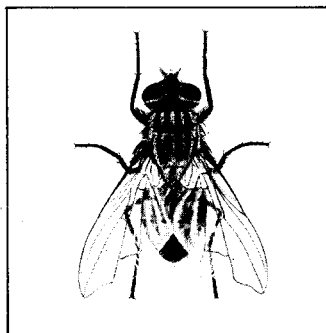
# Farm Fly Control



HORN FLY

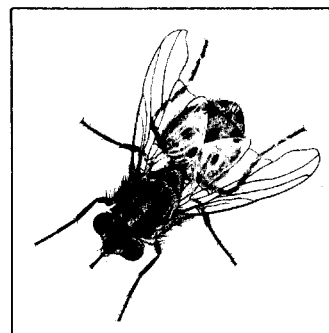


FACE FLY



HOUSE FLY

Dennis D. Kopp  
and  
Dean K. McBride  
Extension Entomologists



STABLE FLY

*Prevent losses from flies and mosquitoes. Start your control program early in the season. Don't wait until the insects get a head start.*

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## RECOMMENDED LIVESTOCK SPRAYS — Direct Application to Animals

**NOTE: WHEN USING THE EMULSIFIABLE CONCENTRATES, DO NOT USE THE REGULAR AGRICULTURAL FORMULATIONS. MOST LIQUID LIVESTOCK INSECTICIDES ARE ESPECIALLY FORMULATED FOR SUCH USE. FOLLOW MIXING INSTRUCTIONS EXPLICITLY!**

### SPRAYS

INSECT	INSECTICIDE TO USE	AMOUNT TO USE	REMARKS
BITING FLIES (Horn Fly, Stable Fly)  (Beef)	Anchor 10% EC	1 pt. per 50 gals. of water	Spray to run-off or fog or mist using 1 gal. spray mix per head.
	Atroban 11% EC	1 pt. per 50 gals. of water	Apply directly to animals at the approximate rate of 1 qt./animal.
	Ciodrin 14.4%	4 gals. per 100 gals. water	Do not spray animals more often than once every 7 days.
	Ciovap (10% Ciodrin, 2.3% Vapona)	2 gals. per 100 gals. water	Do not spray animals more often than once every 7 days.
	Coumaphos (Co-Ral) 25% WP	2 lbs. per 100 gals. water	Do not use on dairy cows or dairy cows within 14 days of freshening.
	Coumaphos (Co-Ral) 11.6% EC	4 qts. per 100 gals. water	No time limitations on slaughter for beef.
	Dioxathion (Delnav) 30% EC	2 qts. per 100 gals. water	Do not reapply within 2 weeks. Do not dip animals under 3 months of age. Do not use on dairy cows.
	Ectiban 5.7% EC	1 qt. per 100 gals. of water	Spray until entire animal is thoroughly covered. No time limitation on slaughter of beef.
	Ectrin 10% WDL	1 qt. per 50 gals. of water	Apply to wet all animals thoroughly. Use up to ½ gal. of spray per animal depending on size and hair coat. Pay particular attention to the legs (stable flies) and to the head and neck (face flies). Do not repeat more often than once each 2 weeks.
	Malathion 57% EC	1-1½ gals. per 100 gals. water	No time limitations for slaughter animals.
	Methoxychlor 50% WP	8 lbs. per 100 gals. water	Do not use on dairy cows. No time limitations on slaughter.
	Rabon 50% WP	4 lbs. per 75 gals. water	Do not use on dairy cows. No limitations for slaughter animals.
	Ravap (23% Rabon, 5.7% Vapona)	1 gal. per 75 gals. water	Do not use on dairy cows. No limitations for slaughter animals.
	Trichlorfon (Neguvon) 80% Sol. Powder	10 lbs. per 100 gals. water	Do not use on dairy cows, sheep or hogs. Do not use within 14 days of slaughter on beef.

## SELF TREATING DEVICES

INSECT	INSECTICIDE TO USE	AMOUNT TO USE	REMARKS
HORN FLIES MOSQUITOES (beef only)	<u>Liquid Self Treaters</u>		
	Coumaphos (Co-Ral) 11.6% EC	Mix 1 qt. to 3¼ gals. fuel oil	Use on beef cattle only.
	Dioxathion (Delnav) 30% EC	Mix 1 pt. to 2½ gals. fuel oil	Use on beef cattle only.
	Malathion 57% EC	Mix ¼ pt. to 1 gal. fuel oil	Use on beef cattle only.
(beef and dairy)	Ciodrin 14.4% EC	Mix 1 qt. to 4 gals. fuel oil	Use on beef and dairy cows.
	Ciovap (10% Ciodrin, 2.3% Vapona)	Mix 1 qt. to 4 gals. fuel oil	Use on beef and dairy cows.
	Dichlorvos (DDVP) 23.4% EC	Mix 1 pt. to 12½ gals. fuel oil	Use on beef and dairy cows.
	Ectiban 5.7% EC	1 qt. per 10 gals. fuel oil	Use on beef and dairy cows.
The cable-type backrubbers or self-treating devices will help control horn fly infestations in pastures. They must be placed where cattle will use them. These devices must be checked and serviced at least once a month to insure proper operation. Fuel oil can be used although several oil companies now sell a low-base oil that works more satisfactorily and there is less chance of skin irritation with these low-base oils.			
HORN FLIES FACE FLIES (beef and dairy)	<u>Dust Treatment</u>		
	Methoxychlor 50% WP	Use 1 tablespoon per animal as a dry application. Apply to the necks and backs of animals every three weeks. Sprays containing methoxychlor are not permitted on dairy cattle.	
	Malathion 5% D	Use 3 tablespoons per animal as a dry application. Apply to the necks and backs of animals and repeat the application every 10 to 14 days. Sprays are not permitted. Do not apply within 5 hours before milking.	
	Rabon 3% D	Use approximately 2 ozs. per animal as a dry application. Apply to the necks and backs of the animals. May also be used in dust bags.	
	Co-Ral 1% D	For lactating dairy cows, duster may be suspended in exit through which cows leave the milking barn. Adjust bag so that the bottom of the bag hangs 4 to 6 inches below topline of cattle. Do not place duster over feed, mineral or water troughs.	

## LIVESTOCK INSECTICIDE EAR TAGS

INSECT	TRADE NAME	BASIC MANUFACTURER	COLOR	ATTACHMENT SYSTEM
HORN FLIES FACE FLIES	-----Fenvalerate (8%) Ear Tags-----			
	Ectrin Insecticide Ear Tag	SDS Biotech Corp.	Yellow	Allflex
	Purina Insecta-Shield Cattle Ear Tag	SDS Biotech Corp.	Yellow	Allflex
	Moorman's Ear Tag Plus	SDS Biotech Corp.	Yellow	Allflex
	Vet Shack Insecticide Cattle Ear Tag	SDS Biotech Corp.	Yellow	Allflex
	Starbar Insecticide Cattle Ear Tag	SDS Biotech Corp./ Zoecon Corp.	Green	Temple
	-----Permethrin (10%) Ear Tags-----			
	Cooper Atroban Insecticide Cattle Ear Tag	Burroughs Wellcome Co.	Green	Allflex
	Coop Insecticide Ear Tag	Burroughs Wellcome Co.	Green	Allflex
	Purina Insecta-Gard Insecticide Ear Tag	Burroughs Wellcome Co.	Green	Allflex
	Jen-Sal Wellcome Tag	Burroughs Wellcome Co.	Fire-orange	Allflex
	GardStar Insecticide Ear Tag	Y-TEX Corp.	Fire-orange	Y-TEX
	Fearing Insecticide Ear Tag	Fearing Co.	Orange	DuFlex
	Anchor Permethrin Ear Tag	Anchor Labs., Inc.	Clear	Allflex
	-----Permethrin (10%) Ear Strips-----			
	Anchor Permethrin Ear Strip	Anchor Labs, Inc.	Clear	Cable tie around existing ear tag.
	-----Permethrin (1.2g) Ear Tapes-----			
	Ectiban Ear Tape	ICI Americas, Inc.	Fire-orange	By hand around existing ear tag.
	-----Flucythrinate (7.5%) Ear Tags-----			
	Guardian Insecticide Cattle Ear Tag	American Cyanamid Co.	Yellow	Allflex

## RECOMMENDED BUILDING SPRAYS

INSECTICIDE TO USE	AMOUNT TO USE	REMARKS
		<b><u>Long Residual Materials:</u></b>
Anchor Permethrin 10% EC	Follow label mixing rates	Apply finished spray to fly resting surfaces at the rate of 1 gal./750 sq. ft.—or just short of run-off. <b>Do not</b> use in milk rooms.
Atroban 25% WP	Follow label mixing rates	Uses and restrictions for Atroban are the same as Anchor Permethrin above.
Dimethoate (Cygon) 23.4% EC	1 gal. per 25 gals. water	Remove all animals before spraying buildings.
Ectiban 5.7% EC	1 qt. to 12.5 gals. water	Use 1 gal. diluted spray per 750 sq. ft. of surface. Spray directly to walls and ceiling as a residual surface spray. Do not treat livestock directly with this concentration and avoid contamination of feed and water.
Ectiban 25% WP	6 ozs. to 11 gals. water	Same as above.
Ectrin 10% WDL	1 qt. to 10 gals. water	Apply ½ gal. of finished spray to 1,000 sq. ft. of surface. Do not treat livestock directly with this concentration and avoid contamination of feed and water.
Fenthion (Baytex) 45% EC	½ gal. per 25 gals. water	Do not contaminate feed, drinking water, milk or milk handling equipment. Do not use in homes or where food is processed. Apply at the rate of 1 gal. spray to 500 sq. ft.
Rabon 24% EC	1 gal. per 25 gals. water	Avoid contamination of feed or water.
Rabon 50% WP	4 lbs. per 25 gals. water	Same as above.
Ravap (23% Rabon, 5.7% Vapona)	1 gal. per 25 gals. water	Do not contaminate food or water. Apply at the rate of 1 gal. spray to 500-1,000 sq. ft.
		<b><u>Medium Residual Materials:</u></b>
Diazinon 50% WP	2 lbs. per 25 gals. water	Remove animals for at least 4 hours. Do not contaminate milk, feed, water or apply directly to animals or poultry.
Dylox 80 SP	5 lbs. per 40 gals. water	Remove animals before spraying. Do not contaminate feed, water or milk-handling equipment.
Methoxychlor 25% EC	2 gals. per 25 gals. water	Avoid contamination of feed or water with the sprays.
		<b><u>Short Residual Materials:</u></b>
Dichlorvos (Vapona) 23.4% EC	2 qts. per 25 gals. water	For increased residual control, add ½ lb. sugar. Do not apply in milk rooms, avoid contamination of feed and water.
Pyrethrins + synergist (0.1% to 0.2%)	Apply as directed on container	The pyrethrin sprays are prepared oil sprays that contain synergists such as piperonyl butoxide or MGK-264. Apply as a space spray for quick knock down of flies in milk rooms or dwelling.

BAITS (Housefly)	USAGE AND REMARKS
Diazinon 50% WP	½ lb. plus 1 lb. sugar in 2½ gals. water.
Malathion 57% EC	5 ozs. (10 tbs.) plus 1 cup sugar in 2 gals. water.
Trichlorfon (Dipterex 1%)	Use 4 ozs. (⅔ cup) prepared bait per 1,000 sq. ft. of area, or pour 4 ozs. (⅔ cup) prepared bait in 1 gal. water, add 2 cups sugar or corn syrup.
Vapona 0.5% Dry (DDVP)	<p>Use 0.5% prepared dry bait at the rate of ¼ lb. per 1,000 sq. ft. or mix 1 lb. 0.5% dry prepared bait in 1 gal. water and apply as wet bait.</p> <p><b>NOTE:</b> Apply dry or wet baits to window sills, doors and litter at daily intervals for 3 to 4 days, then as needed. Avoid the contamination of water, feed and equipment with the bait material. Do not use any of the bait materials in milk rooms or dwellings.</p>

## SLOW RELEASE STRIPS

Vapona 20% resin strips — 1 strip to 1,000 cubic feet. Use only in rooms or buildings where doors and windows are kept closed. Flies are controlled by the fumes released from the strip. May be used in milk rooms and milk houses. Dimetilan — Use 1 band to each 100 sq. ft. of ceiling area. Flies must come into contact with treated band to be killed. Keep doors and windows closed as much as possible.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by the North Dakota Cooperative Extension Service is implied.

\*NOTE: Follow label directions explicitly, pesticide safety is the responsibility of every user.

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