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Quick Facts

Blood feeding insects such as flies and mosquitoes not only cause horses to become nervous and to perform poorly, they also transmit diseases.

A health program that includes periodic removal and proper management of animal wastes plus a good spray program can help keep insects under control.

Label directions should be followed carefully on all insecticides.

Consultation with a veterinarian is encouraged since some horses may react unfavorably to insecticides.

Many flying insects, including biting gnats, deer flies, stable flies, horse flies and mosquitoes feed on the blood of domestic animals. These insects are particularly troublesome to horses. They may cause the animals to become nervous and to perform poorly, and they also may transmit such diseases as encephalomyelitis (sleeping sickness), equine infectious anemia, habronemiasis, and possibly vesicular stomatitis.

Table 1 lists insecticides and measures to use in controlling these pests.

A health program that includes periodic removal and proper management of animal wastes plus use of residual sprays around the premises can help keep insects under control. Table 2 lists approved insecticides for spraying buildings.

Ticks and lice occasionally become established on horses. Both of these pests are blood feeders and may cause the animals to lose weight and perform poorly. Table 3 lists methods of controlling these pests. Lice spend their entire life cycle on the horse and their eggs are not killed by insecticides, so repeat treatment is required in 14 to 21 days after the eggs have hatched.

Several species of bot flies attack horses. The common bot fly and the throat bot fly are the most well known. Bot flies lay their eggs in horse hair from July to September. These yellow-colored eggs may be taken into the horse's mouth when

Horse insect pests characteristics and control

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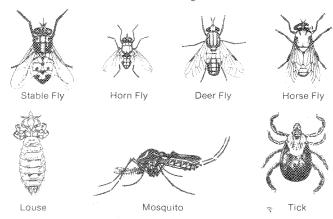
the horse licks itself, or eggs laid near the horse's head may hatch and the small larvae may crawl into the horse's mouth. The larval stages develop first in the horse's mouth and esophagus and then migrate to the stomach where they attach to the lining. Horses spend considerable amounts of time and energy fighting the bot fly during the fly season. After several days of bot fly attacks, horses may lose weight and suffer from nervous exhaustion. Table 4 lists methods of controlling bot flies.

Application Hints

Mist sprays that require a fine mist instead of a coarse spray may be applied with either a small mist blower or a manually operated mist sprayer. One of the easiest methods of spraying a few horses for fly and mosquito control is with a small, compressed air sprayer. The apparatus does not make enough noise to frighten the animals.

Residual sprays for stable and house fly control should be applied as a coarse spray under low pressure. The spray should be applied to fences, the inside and outside walls of barns, stables and other fly-resting places. Animals should be removed from barns and sheds before spraying. Feed bunks and water troughs should be covered to prevent contamination.

Label directions on the insecticide container should be followed carefully.



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Table 1: Insecticides that may be applied to horses to control horse flies, deer flies, face flies, house flies, stable flies and mosquitoes.

Insecticide	Method of application	How to mix	Directions and precautions
Ciodrin plus Vapona	Mist spray to horse (just enough to wet).	Available as ready to use.	Can be used with hand or power mist sprayer.
Wipe (Vapona plus synergized pyrethins)	Wipe on body of horse.	Ready to use solution.	Apply according to directions; observe label precautions for protecting hands.
Pyrethrins plus synergist	Spray on animal.	As directed on label; some ready to use solutions.	Pyrethrins should be at least 0.1% concentration; can be used with hand or power sprayer.
Rabon 2% gel— wipe-on or 1% spray-n-wipe	Apply as a fine mist or as a wipe-on to horse's body.	Ready to use solutions; use as directed.	Observe label precautions on protecting hands with wipe-ons.

Table 2: Insecticides for use around the premises to control stable and house flies.

Insecticide	Method of application	How to mix	Directions and precautions
Dimethoate (Cygon)	Spray applied to walls and surfaces around sheds and barns.	4 quarts of 25% liquid in 25 gal. of water or 1 pint in 3 gal. water.	Use 1 gal. of spray for each 1000 square feet of area; do not contaminate feed and water; do not spray when animals are inside.
Fenthion	Same as above.	3 qt. of 45% liquid in 25 gal. of water or 1 cupful in 2 gal. water.	Same as above.
Permethrin	Same as above.	Formulations vary; mix according to label directions.	Check labels for amounts to apply per unit area.

Table 3: Insecticides for use on horses to control lice and ticks.

Insecticide	Method of application	How to mix	Notes and precautions
CoRal	Spray on animal.	$\frac{1}{2}$ lb of 25% wettable powder.	Spray animal thoroughly; repeat in 2 to 3 weeks if necessary.
Del-Nav	Spray on animal.	4 teaspoonfuls to 1 gal. water.	Same as above.
Malathion	Spray on animal.	4 fl. oz. per 2½ gal. of water.	Spray animal thoroughly; repeat as often as necessary.
Rotenone	Dust on animal.	Ready to use dust for lice only.	Dust animal thoroughly and according to directions; repeat in 2 to 3 weeks if necessary.

Table 4: Insecticides and methods for controlling bot flies.

Insecticide	Method of application	How to mix	Notes and precautions
Trichlorfon (Anthon)	Mixed with feed as additive. Treat in November or December and in May or June.	Use 5 grams per each 250 lbs of body weight.	Withdraw all feed 12 to 18 hours before treatment and 3 hours after. Do not treat foals, wean- lings or pregnant mares in last 4 months of gestation. Do not treat animals to be used for food purposes.
Dichlorvos (DDVP)	Mixed with feed as additive. Treat in November or December and in May or June.	Use 19.5 grams per each 300 lbs of body weight.	Withhold water 4 to 6 hours before treatment and 3 hours after. Do not treat animals that are sick or on other medications.
Malathion	Use with warm water as a sponge or wipe; apply to portions of the animal where eggs are found.	Use 4 teaspoons malathion 57% liquid to 1 gal. of warm (115 to 120° F) water.	Eggs will be stimulated to hatch and malathion will control them before they go internal; repeat treatments if more eggs accumulate. Do not expose hands while applying treatment; use rubber gloves.