

## Fly Control

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Are both you and your horse are being driven crazy by flies? The choice you make in fly control products can be made easier if you understand the different types of products that are on the market.

On the Horse Sprays are by far the most popular type of on-animal product available, although shampoos, roll-ons and wipes are becoming increasingly popular. The majority of equine fly application products are repellents, which are designed to keep flies from biting and feeding on your horse. The Pyrethrins The active ingredient in most on-animal fly applications is based on the pyrethrins, a group of chemicals found in chrysanthemums. The chrysanthemums that supply pyrethrins grow mostly in Africa, and must be hand picked and processed in order to obtain the chemical. It is this elaborate and painstaking procedure that makes pyrethrins an expensive ingredient in fly control products.

**Chemical Control** There are other ingredients included in on-animal fly control products besides pyrethrins. A type of synthetic chemical known as a synergist is added specifically to make pyrethrins and other insecticides/repellents more potent. Entomologists have discovered that insects have detoxifying enzymes in their systems that can break down the pyrethrins. Synergists inhibit these enzymes, giving the product greater power to invade the insect's body.

**Covering Up** Some insects feed on the secretions of the horse's eyes and nose. Some fly masks cover just the top portion of the horse's face, while others also include ear covers to keep biting gnats from irritating the ears. Leg netting is another method of keeping flies from making contact with the skin.

**Premise Control** Aerosol sprays are usually administered through automatically timed systems located in each stall, periodically releasing a spray of pyrethrins-based insecticide that mists down upon the environment. The spray also mists the horse occupying the stall, protecting the animal safely.

Feed-through products are added to the horse's feed on a daily basis with the intent of making the manure sterile and unusable as food to fly larvae. Any larvae that is hatched in the manure produced by a horse on a feed-through product will die before it has the chance to develop. In order for the product to be effective, all the horses in a given area must be ingesting the product. Otherwise, larvae will simply hatch in the untreated manure and the fly population will go unhindered.

Fly traps include fly strips and fly containers. Fly strips are usually yellow ribbons of sticky tape that can be suspended from stall ceilings and other areas within the stable. Flies are attracted to colors in the orange and yellow spectrum; drawn to the strip, they stick to it once they alight. Container traps usually use bait systems, where flies are attracted to a jar or bag containing water and a food or hormone bait. The fly crawls into the container, and the clear sides confuse it, since flies do not recognize glass or see-through plastic. Exhaustion overcomes the insect, and it drops into the water and drowns.

Fly parasitoids are gaining in popularity as an effective fly control method that is both safe and gentle for the horse and the environment. The most commonly sold fly parasitoids are tiny wasps in the Chalcididae family. These wasps, which are much smaller than flies, feed on the larvae of the fly while it is still in the horse's manure. These wasps do not bite or sting humans or other animals, and are so tiny that they are rarely even noticed.

**Good Management** When all is said and done, the real secret to successful fly control is proper stable management. Frequent disposal of soiled bedding and droppings, as well as standing water, is essential to controlling flies. Stabling horses away from cattle is another way to keep flies at bay, because parasitic flies are particularly drawn to cattle, and these flies will harass horses as well. A combination of on-animal products and premise controls can do wonders to keep your horse happy, healthy and free of those pesky flies.

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