

Know Your Enemy-Pick Your Battle

This is true for life in general, but today we're talking about flies on livestock. I've been at war with the flies around our farmstead. I've purchased four different sticky traps, purchased the fly bait stations and now, I'm resorting to making my own bait stations.

I watched some You Tube videos on what to use to bait my soda pop bottle traps. I used sugar syrup with rotten fruit, rotting meat and red colored sugar water. These were the combinations that were supposed to attract flies and wasps or hornets. So far, so good on the flies, not so much on the wasps and hornets. The best thing I have found is the roll of sticky paper, you just keep unrolling it as it fills up with wasp carcasses. Last year, I used the toilet bowl sanitizers, the little cheap ones that clip on the side of the bowl. Those things are supposed to prevent mud daubers in buildings. I think they worked, but they dissolved so fast in the heat.

On our cowherd, I really tried to find an insecticide that was NOT permethrin or pyrethroid. If you look at the products sold in most farm stores, they are all permethrin or pyrethroids. I finally found some product with the active ingredient Coumaphos.

Development of insecticide resistance in horn fly populations is the result of a selection process similar to that used to improve herds. Cattle producers can cull horn flies that are susceptible to a certain group of insecticides by using products with the same mode of action year after year. Surviving or resistant flies are left to breed and produce resistant offspring. As a result, products that once gave good control may no longer kill flies or may lose their effectiveness earlier in the season. Insecticide resistance has become a problem in some areas of the US, particularly with the use of insecticide ear tags containing active ingredients with the same mode of action – attacking the same site in the insect.

Specific steps can be taken to manage resistance, including:

- 1) Target treatment to lactating cows and growing calves because they have the greatest potential for loss to horn flies and the greatest chance for a return from the cost of treatment.**
- 2) Rotate among insecticides with different modes of action.**
- 3) Wait to treat until there is an average of 200 or more horn flies per animal. This may not occur until early to mid-June. Treating too early, especially with ear tags, may mean poor control in late summer when the flies are most abundant.**

- 4) Use alternative insecticides and application methods late in the season to reduce the percentage of overwintering flies with resistance.**
- 5) Remove insecticide ear tag as soon as horn fly numbers begin to decline in the fall. This reduces the amount of time that flies are exposed to a product and allows the number of susceptible flies to increase late in the season.**
- 6) Change application methods regularly. Use dust bags, back rubbers, pour-ons, or sprays rather than relying continuously on ear tags. Continued use of insecticides from the same class in a slow release form (ear tag) may lead to resistance.**