

1983

Insecticidal Ear Tags: Fly Control That Works

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian

 Part of the [Large or Food Animal and Equine Medicine Commons](#), [Parasitology Commons](#), and the [Veterinary Preventive Medicine, Epidemiology, and Public Health Commons](#)

Recommended Citation

(1983) "Insecticidal Ear Tags: Fly Control That Works," *Iowa State University Veterinarian*: Vol. 45 : Iss. 2 , Article 11.
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol45/iss2/11

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Insecticidal Ear Tags: Fly Control That Works

Cattle producers seem to be in love with the latest type of fly control technique—insecticidal ear tags. Anyone driving along the back roads is treated to the sight of cattle herds sporting the brightly colored plastic ear devices. A closer look reveals that few flies annoy animals protected in this manner.

Here are some of the most common questions about the ear tags and the answers from Robert D. Hall, Medical and Veterinary Entomologist from the University of Missouri.

How do insecticidal ear tags work?

The active materials in insecticidal ear tags kill insects by direct contact. These chemicals are mixed into the plastic during the manufacturing process. Because they are very soluble in fats and waxes, they are “pulled out” of the tag and into the oils present on the animals’ hair. Interaction between cattle seems to facilitate the transfer of insecticides between animals. There is no vapor-phase activity as is seen with dichlorvos resin strips, and flies do not have to contact the tags to be killed. In some cases, it seems that there is some repellent activity associated with these devices, but how much is still open to question.

Which pests are effectively controlled by the tags?

They are very effective against horn flies and usually produce greater than 95 percent control. The typical control of face flies is more variable, but treatment with two tags per head offers protection greater than that afforded by other methods. Cattle in drylots or near dairies are often bothered by house flies on their faces, and the tags have provided some relief from this species.

Will the tags control ticks and lice?

Tests indicate that currently-registered insecticidal ear tags do not produce consistent control of ticks or lice on cattle. But there is research underway to identify compounds which might produce tick and louse control with the ear tag method of treatment.

Which brand of insecticidal ear tag is best?

Right now, only two materials are registered for fly control use in ear tags: fenvalerate and permethrin. Both are known as synthetic pyrethroid insecticides, and both have similar

properties. Fly control on cattle will be about the same no matter which brand of tag is chosen; therefore, price structure and availability often dictate which tags are used most.

Which tag attachment system is best?

The tags are applied using specially designed pliers. All available systems work, but operators usually develop a preference for one style. Any of the tagging systems should afford excellent tag retention if used properly.

Do the tags have to be removed before cattle are sold?

There is no such requirement, but insecticidal tags are removed before cattle are sent to slaughter.

If the tags are left on the cattle over winter, will they control flies the next summer?

Mr. Hall recommends repeat applications each spring because the cold winter weather often causes these tags to crack at the neck. Also, some scientists feel that the lower levels of insecticides present during the second season may contribute to development of fly resistance to such tags. In addition, some producers are worried that tags left on cattle over the winter might produce adverse reactions with cattle grubs. In the latter case, there isn’t any reason for concern because the tags do not produce systemic activity or control cattle grubs.

How long will insecticidal ear tags remain effective?

Studies show that tags applied during mid-May will control flies through late September and often into October. This is considered to be season-long control.

How long does it take for the tags, once applied, to begin killing flies?

Fly kill has been observed as soon as six hours after treatment, and full efficiency appears in a day or two.

Is it best to use one or two tags per head?

Control of face flies is slightly superior when two tags per head are used, and for this reason Mr. Hall recommends treatment with two tags when face flies are the primary problem. Horn flies are controlled adequately with an application of one tag, and current information suggests that it might be wise not to go below this level if we are to forestall possible development of resistance. It’s a fact that we can achieve

acceptable horn fly control by tagging only a fraction of a cattle herd.

How do you remove the tags when retagging or sending animals to slaughter?

The tags are removed easily by cutting the shaft of the button with side cutting pliers. Once removed, the tags should be wrapped and buried, using the same disposal methods used for pesticide containers.

What precautions should I take when working with insecticidal ear tags?

While working cattle, it is easy to forget that you're working with toxic eartags. Mr. Hall recommends that gloves be worn while tagging, or that someone with gloves be assigned the task of "loading" the applicator pliers. Don't smoke, drink or eat until your hands have been washed, and certainly don't hold several tags in your mouth while working fast at the headgate!

Where in the ear should you apply the tag?

About halfway from the base of the ear to the tip, and make sure that it is seated above the second "rib" of the cartilage. Tags seated too low in the ear will pull free quickly.

Reusing old ear tag holes is probably not the best approach for maximum tag retention. In most cases, you should move slightly to one side or the other and make a new hole. Mainly, you should avoid placement in one of the large holes made by the old-style one-piece tags. To do so virtually guarantees early loss of the tag.

Will the tags control pinkeye?

No. This is probably the most misunderstood aspect of the ear tag system. These devices offer no therapeutic value against infectious bovine keratoconjunctivitis. Research has shown, however, that the face fly is a vector of the bacterium which is the principal pathogen associated with bovine pinkeye, and therefore face fly control is a necessary part of a comprehensive pinkeye management program. Producers should be aware that the use of insecticidal ear tags does not guarantee that pinkeye won't occur in a herd.

What's the status of current research efforts?

The whole field of slow-release plastic formulations of insecticides is an active area of research in animal health. In most cases, it tends to be labor-economical, effective, and it limits the amount of actual insecticide used. For example, the cattle ear tags release less than a gram of active material over the entire summer season. Mr. Hall thinks we will see continual refinement of this technology for cattle and other species of farm animals.

NEW VACCINE

Fort Dodge Laboratories has recently introduced the first canine coronavirus vaccine. Duramune® CV, the product's trade name, is a modified live virus, cell-line origin vaccine consisting of a purified and attenuated isolate of canine coronavirus. The vaccine is now available to veterinarians nationwide.

One dose of Duramune® CV is recommended for dogs 12 weeks of age or older. Dogs vaccinated at less than 12 weeks should be re-vaccinated at three to four week intervals until 12 weeks of age. Revaccination annually with one dose is recommended. The vaccine may be given by IM or subcutaneous routes.

NEW NAME

The makers of ALPO brand pet foods announced that they have changed the name of their company from Allen Products Company, Inc. to ALPO Petfoods, Inc., effective September 30, 1983. The company also markets TABBY canned cat food brand, Liv-a Snaps treats, and BUTCHER BRAND treats.

COMPUTER SYMPOSIUM

The Second Symposium on Computer Applications in Veterinary Medicine will be held at the College of Veterinary Medicine, Mississippi State University, on May 23-25, 1984. For more information contact:

Dr. Phillip A. Bushby
College of Vet. Med.
Drawer V
Mississippi State, MISS 39762

WORLD CONGRESS

The 13th World Congress on Diseases of Cattle and South African Small Animal Satellite Symposium will be held in Durban, South Africa, September 17-21, 1984. Interested persons should contact:

Dr. Issy Bacher
P.O. Box 35333
Northcliff
2115
Republic of South Africa