

Tips For Effective Fly Control

Insecticide ear tags for cattle are a proven economical, labor-saving fly control method, and have gained increasing popularity since their introduction to the beef and dairy industries. In fact, according to industry estimates, between 40 and 50 million ear tags were sold in 1983 alone, and a majority of cattle operators rely on them to reduce fly and tick populations.

Despite their popularity, however, or perhaps even because of it, reports of horn fly resistance to insecticide ear tags are also on the rise in a growing number of dairy and beef cattle states.

Part of the problem, says Dr. R.O. Drummond, director of the U.S. Livestock Insects Laboratory in Kerrville, Texas, is that many cattlemen rely on the ear tags alone for complete cattle fly control.

"Research indicates a greater potential for horn fly resistance where there's continuous use of slow-release ear tags containing pyrethroids, a key control ingredient in most ear tags," Drummond says. "For this reason, ear tags

would best be used as part of an integrated pest control program incorporating other control options using different insecticides."

Drummond's suggestion is based on recent studies his laboratory conducted on horn fly susceptibility to pyrethroid-derived insecticides. Horn flies from dairy cattle at two locations in Okechobee County, Fla., were compared to flies from beef cattle in Bexar County, Texas, and were found to have developed resistance to these insecticides. In Florida, where intensive chemical control practices had been used, horn flies were seven times more resistant to one pyrethroid and 40 times more resistant to another when compared with laboratory-reared horn flies, the study noted.

Despite this resistance problem, which has been limited to certain areas and times during the season, the overwhelming feeling is that ear tags are here to stay, and research and industry will should continue to work to reduce the resistance problem.

Ear tags effective, convenient

"Ear tags continue to be one of the

most effective and convenient cattle fly control methods," says Dr. Jack Shugart, manager of pesticide products for Ralston Purina Company. "They're cost-effective, labor-saving and convenient. To achieve optimal control using ear tags, we urge producers to follow label directions and suggestions from local extension entomologists."

To prevent resistance and reduce cattle fly infestations, Dr. Shugart suggests the following fly control tips:

- Don't tag cattle too early in the season. Wait for the fly population to be present before tagging cattle.
- Spray cattle with an approved organophosphate compound according to label directions the day you tag them. This should kill most resistant insects and allow the ear tag insecticide to be more effective.
- Use ear tags that provide the most effective protection against a wide range of flies, ticks and lice. (Purina's newest ear tag, Dual-Gard, has two insecticides instead of one and a synergist that enhances their fly killing power.)
- Producers should tag cattle according to label directions. Undertreating cattle may increase the potential for resistance.
- Ear tags should be removed at the end of fly control season or when fly populations decline to a low level. Leaving tags on until the next season allows a continual release of a low level of insecticide which some entomologists believe may increase the potential for resistant flies.
- Especially in cases of severe fly problems, cattlemen should use an integrated approach to fly control, which could include ear tags, sprays, dusters or oilers.
- Remember to consult your local livestock entomologist on using a total fly control program.

Tips to Help Reduce Cattle Fly Resistance

While insecticidal ear tags continue to enjoy popularity in both the beef and dairy cattle industries, several entomologists and industry experts now report that horn flies in certain regions are developing varying degrees of resistance to the insecticides in some tags.

Dr. Jack Shugart, manager of pesticide products for Ralston Purina Company, attributes some of the problem to resistant flies that overwinter. **AJ**