## UCD VET VIEWS CALIFORNIA CATTLEMAN, MAY 2000

## PESTICIDES FOR FLY CONTROL-2000

As sure as Spring is here, Summer will not be far behind and with that will come the flies. Horn flies that decrease production and face flies that carry the bacteria that causes Pinkeye. Horn flies cause cattle to have decreased weight gains and overall production in the herd is decreased. The horn flies cause these losses by biting through the skin of the cattle and sucking fluids. Face flies irritate the cattles' eyes by using rasp-like mouth parts to stimulate tear production. The face flies feed off of these excess tears. More importantly, the face flies spread the causative Pinkeye agent, *Moraxella bovis*. Next month's column will discuss Pinkeye prevention and treatment in detail.

Both face flies and horn flies develop resistance to insecticides over time. For maximum prevention, it is advisable to switch the class of drug you use each year or two. If you used an organophosphate eartag last year, use a pyrethroid eartag this year. Additionally, if you plan to use a pyrethroid eartag this year, use an organophosphate spray this year. Alternating the classes of drugs in this manner will increase the success of your preventive program. It will zap those flies harder, remember this is war! It is also recommended that application of eartags be delayed until the fly population is relatively high so that the possibility of them developing resistance is lowered. Sprays, back rubbers, face rubbers, and dust bags can be helpful in reducing the fly populations early in the season, before eartag application. Then, as the fly populations increase, apply the *fresh* eartags to achieve maximum benefit. Always follow the manufacturer's label directions for eartag application. If they call for two eartags—use two eartags! If they recommend eartags for calves or if eartags for calves are needed to prevent Pinkeye in the calves—use the tags in the calves. Remember, in the Fall, always remove the eartags. If the eartags are left in the cattle, the flies that overwinter—particularly the face flies that overwinter—will develop resistance to the drug you used, and it will no longer be effective.

Face flies and horn flies lay their eggs in cow manure and the larvae **only** develop in cow manure. Therefore, some of the compounds that are fed or given in bolus form that kill the larvae in the manure pat can be very effective. Examples of this include the slow release bolus with diflubenzuron (Vigilante®). This compound is an insect growth regulator (IGR) which is safe and cross-resistance does not develop. Another IGR that is used in "feed through" products is methoprene. Other products are available that can kill the fly larvae when used as a "feed through".

Some of the important items to keep in mind for fly control and pesticide use are: (1) Plan ahead for insecticide and eartag purchases: fly season always comes, even if delayed by cool weather or rain. (2) Consult with your veterinarian regarding the active ingredient(s) in these products and the history of effectiveness in your cattle. (3) Always follow the label instructions, warnings, and precautions: these products can potentially be toxic to you, your children, pets, and others working with them around the chute. (4) Follow label withdrawal times and keep records of treatment dates, products, and lot numbers.

## REGISTERED PESTICIDES for CATTLE-2000

## **Eartags for Beef Cattle**

Product Name	Active Ingredient	Chemical Class	Manufacturer
Atroban Extra	Permethrin	Pyrethroid	Schering-Plough
BovaGard	Diazinon	Organophosphate	Y-Tex
Cutter Blue	Fenthion	Organophosphate	Bayer
Cutter Gold	Cyfluthrin	Pyrethroid	Bayer
Diaphos R <sub>x</sub>	Diazinon+Chlorpyrifos	Organophosphate	Y-Tex
Ectrin	Fenvalerate	Pyrethroid	Fermenta
GardStar Plus	Permethrin	Pyrethroid	Y-Tex

MaxCon Cypermethrin+Clorpyrifos Pyrethroid+ Y-Tex

Organophosphate

New Z Diazinon Diazinon Organophosphate Farnam

OPtimizer Diazinon Organophosphate Y-Tex

Patriot Diazinon Organophosphate Fermenta

PYthon Zeta-cypermethrin Pyrethroid Y-Tex

Super Deckem Fenvalerate Pyrethroid Destron-Fearing

Terminator Diazinon Organophosphate Anchor

Warrior Diazinon+Chlorpyrifos Organophosphate Y-Tex

X-Terminator Diazinon Organophosphate Y-Tex

ZetaGard Zeta-cypermethrin Pyrethroid Y-Tex

**Sprays** 

Drug Brand Names

Dichlorvos Vapona

Permethrin Ectiban, Permetrin, Atroban, Permethrin, Insectrin

Tetrachlorvinphos Rabon
Tetrachlorvinphos+dichlorvos Ravap

**Pour-On Applications** 

Drug Brand Names

Permethrin DeLice, Expar, Hard Hitter

**Back rubbers and Face rubbers** 

**Drug**Permethrin
Ectiban, Insectrin

Tetrachlorvinphos+dichlorvos Ravap

**Dust Bags** 

Drug Brand Names
Tetrachlorvinphos Rabon dust

Feed-trough Insecticides

Drug Brand Names

Tetrachlorvinphos Rabon oral larvicide
Methoprene IGR mineral, Starbar

Slow release bolus with IGR (Insect Growth Regulator)

Drug Brand Names

**Diflubenzuron** Vigilante

Note: Active ingredients are available under a number of brand names and those listed above are only examples and not specific endorsements or recommendations.

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS.

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