

FLIES ON CALIFORNIA CATTLE

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Cattle pests, such as flies, cost cattlemen both in treatment expenditures and in lost production, due to irritation of the pests and the diseases they cause or transmit. In a survey of California cattlemen, face flies were rated as the worst pest, followed by horn flies and stable flies.

Face flies, in addition to producing eye irritation due to their feeding, serve as mechanical carriers of the causative agent of pinkeye in cattle (infectious keratoconjunctivitis caused by the bacterium *Moraxella bovis*). This condition consistently ranks as one of the top ten most costly diseases in California beef cattle. Feeding by horn flies, stable flies, horse flies, and other bloodsucking flies mechanically transmits several disease organisms as well as causing irritation and physiological changes that decrease weight gains.

Face flies and horn flies may develop resistance to insecticides over time. To slow this resistance development and maintain effective fly control, it is advisable to change the pesticide class used on a herd every other year.

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 classes of insecticides in this manner will increase the success of your preventive program.

It is also recommended that early season fly populations be knocked down with sprays or dusts. Sprays, back rubbers, face rubbers and dust bags can be helpful in reducing 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!

Always remove eartags at the end of the fly season, once populations begin to decrease in the fall. If eartags are left in the cattle, the flies that overwinter -- particularly the face flies that persist over the winter -- will develop resistance to the insecticide you used and it will no longer be effective.

Face flies and horn flies lay their eggs in cow manure and the larvae develop only in cow manure. Therefore, the compounds that are fed or given in bolus form to kill fly larvae in the manure pat can be very effective in reducing local fly production.

Examples 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 fly larvae in the manure when used as a feed through.

SOME 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 active ingredient(s) in these products and their record of effectiveness in your area.
3. Always follow instructions, warnings, and precautions: these products can 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: 2001

EAR TAGS

<u>PRODUCT NAME</u>	<u>ACTIVE INGREDIENT</u>	<u>CHEMICAL CLASS</u>	<u>MANUFACTURER</u>
Atroban Extra	Permethrin	Pyrethroid	Schering-Plough
BovaGard	Diazinon	Organophosphate	Y-TEX
Cutter Blue	Fenthion	Organophosphate	Bayer
Cutter Gold	Cyfluthrin	Pyrethroid	Bayer
Diaphos R _x	Diazinon + Chlorpyrifos	Organophosphate	Y-TEX
GardStar Plus	Permethrin	Pyrethroid	Y-TEX
New Z Diazinon	Diazinon	Organophosphate	Farnam
OPTimizer	Diazinon	Organophosphate	Y-TEX
Patriot	Diazinon	Organophosphate	Fermenta
PYthon	Zeta-cypermethrin	Pyrethroid	Y-TEX
Warrior	Diazinon + Chlorpyrifos	Organophosphate	Y-TEX
X-Terminator	Diazinon	Organophosphate	Destron-Fearing
ZetaGard	Zeta-cypermethrin	Pyrethroid	Y-TEX

SPRAYS

Product Name

Dichlorvos
Permethrin
Tetrachlorvinphos
Tetrachlorvinphos-Dichlorvos

Brand Names

Vapona
Ectiban, Permethrin, Atroban, Permethrin, Insectrin
Rabon
Ravap

POUR-ON APPLICATIONS

Product Name

Brand Names

Permethrin

DeLice, Expar, Hard Hitter

BACK RUBBERS AND FACE RUBBERS

Product Name

Brand Names

Permethrin

Ectiban, Insectrin

Tetrachlorvinphos-Dichlorvos

Ravap

DUST BAGS

Product Name

Brand Names

Tetrachlorvinphos

Rabon dust

FEED-THROUGH INSECTICIDES

Product Name

Brand Names

Tetrachlorvinphos

Rabon oral larvicide

Methoprene

IGR Mineral, Starbar

SLOW RELEASE BOLUS WITH IGR (Insect Growth Regulator)

Product Name

Brand Names

Diflubenzuron

Vigilante

(Note: Active ingredients are available under a number of brand names and those listed are examples only and not specific endorsements or recommendations. ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS.)