

ACHIEVE HORN FLY PROTECTION AND MAXIMIZE FORAGE UTILIZATION WITH IGR MINERALS®

IGR Minerals offers the perfect choice for effective horn fly protection with the minerals and vitamins needed for grazing cattle to attain the best performance possible.

WHY ADM'S IGR MINERALS?

- Years of formulation and manufacturing expertise
- Offers cost-effective horn fly protection
- Convenient and hassle-free feed-through product . . . the cow is the applicator . . . eliminates the expense of repeated gathering and handling of cattle to treat for horn fly control
- Effective against organophosphate and pyrethroid resistant flies



IGR Minerals®

Reliable and effective horn fly protection



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S9933F-0220

HORN FLY CONTROL You Get What You Pay For

ADM (formerly MoorMan's®) pioneered the usage of methoprene in 1975, the active ingredient in IGR Mineral products, as a feed-through product to prevent the breeding of horn flies in the manure of treated cattle. This pioneering work led to many discoveries that greatly benefit the cattle industry. When it comes to utilizing methoprene feed-through formulations in the fight against horn flies, look to the pioneer and expert in the use of methoprene as a feed-through formulation, ADM.

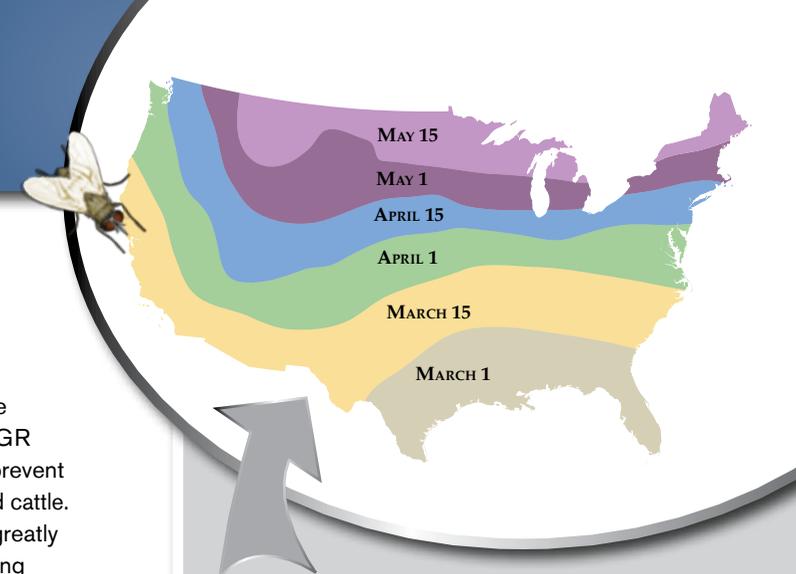
WHAT ARE IGR MINERALS®?

IGR Minerals contain scientifically formulated base and trace minerals, vitamins A, D and E, plus IGR, a feed-through Insect Growth Regulator. IGR Minerals, which contain methoprene, are utilized to prevent the breeding of horn flies in the manure of treated cattle. The mineral component is vital for achieving the most economical performance from forages fed to cattle.

WHY FEED MINERALS?

Mineral and vitamin supplementation has a positive impact on growth, reproductive efficiency, milk production, and health. Minerals play a vital role in nutrient digestion, reproductive performance, functioning of the immune system, and in the development of muscles, bones, and teeth. Typically, inadequate intake of essential minerals and vitamins may result in:

- Reduced forage intake
- Decreased average daily gain
- Inefficient feed utilization
- Reduced reproductive efficiency
- Reduced disease immunity

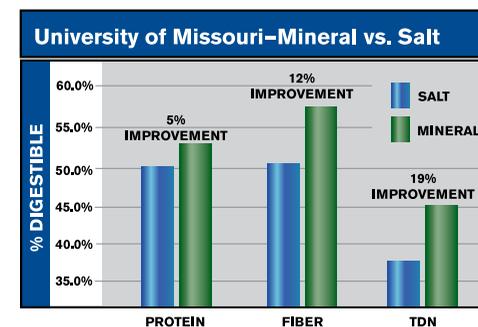


WHEN IS THE BEST TIME TO INITIATE A HORN FLY PROTECTION PROGRAM?

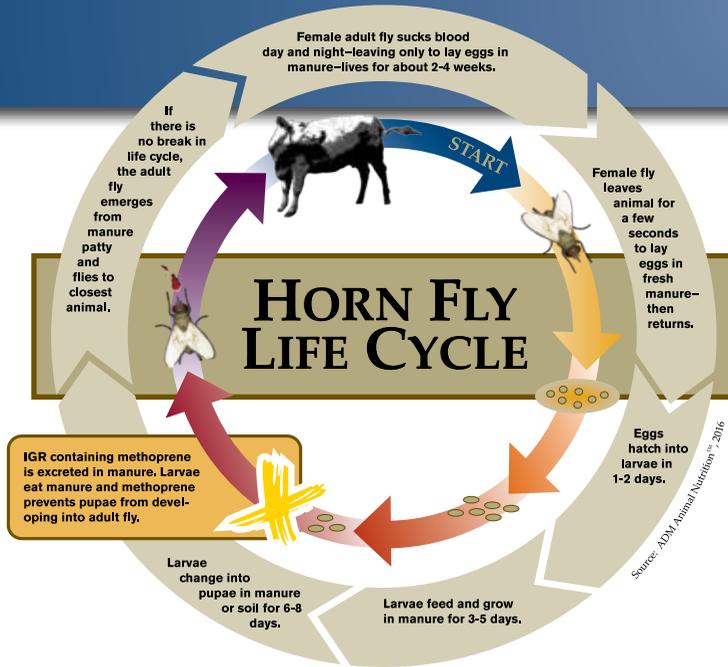
Because of a longer period of warm weather, horn flies first become a problem in the southern states. The above map gives a general idea as to when it is suggested to start a horn fly control program.

WHAT IF ONLY SALT OR TRACE MINERALIZED SALT IS FED?

Salt or trace mineralized salt will not meet all the needs of cattle. Cattle need a balanced macro-trace mineral and vitamin program to optimize forage digestion and performance. The chart below illustrates the difference in nutrient digestion in cattle fed salt compared to a balanced mineral and vitamin program.



Source: Koes and Pflander, 1973. J. Anim. Sci. 37:1018



WHAT IS IGR (METHOPRENE)?

IGR is an insect growth regulator, which helps break the life cycle of horn flies. More cost-effective horn fly protection can be obtained by controlling immature stages rather than the adults.

- IGR will not leach out of cattle manure.
- IGR decomposes naturally along with the manure.
- IGR effects only the horn fly and will not harm beneficial insects.
- IGR does not require withdrawal prior to milking or slaughter.
- IGR is not harmful to warm-blooded animals, birds, and reptiles.



HORN FLY FACTS

- USDA estimates horn flies cost the cattle industry over \$1 billion due to lost production.
- Horn flies typically travel no more than a quarter of a mile during their lifetime.
- Horn flies reproduce at tremendous rates. With no treatment program, two adult horn flies can produce over 3.3 million adult horn flies and over 111 million immature horn flies in only eight weeks.
- Each horn fly can bite and suck blood 20 to 40 times daily.
- Up to 20% less milk is produced by cows due to decreased grazing time.
- USDA estimates the expected gain loss in growing cattle at 0.25 to 0.5 lb daily or 37.5 to 75 lb over a 150-day grazing season due to ineffective horn fly control.
- Lighter calves are weaned, typically 13 to 14 lb lighter.
- University of Idaho reported yearling heifers lost 0.06 to 0.09 lb of daily gain without horn fly protection.

WON'T EAR TAGS, SPRAYS, POUR-ONS, OR DUST PRODUCTS WORK BETTER?

These products do provide some degree of effectiveness against adult horn fly populations; however, they have no effect on the immature stages of horn flies. In addition, use of ear tags, sprays, pour-ons, and dusts often requires rounding up cattle into working facilities multiple times over the course of the horn fly season. This takes your valuable time and also stresses cattle. Plus, many of these products utilize organophosphates or pyrethroids, which have documented horn fly resistance in many areas. Better season-long horn fly protection can be achieved by controlling immature stages rather than the adult horn flies.

WILL HORN FLIES BECOME RESISTANT TO IGR?

There have been no verified cases of resistance to IGR since the product was introduced in 1975. The goal for horn fly protection is to keep the horn fly population below the economic threshold, which entomologists estimate is approximately 200 horn flies per animal. It is not cost effective to totally eradicate horn flies.

IGR MINERALS OFFERS A **NO HASSLE, HANDS-OFF, STRESS-FREE** HORN FLY PROTECTION SYSTEM.

Simply choose the product of choice for your operation.



- ❑ **AMPT™-T Range Minerals with IGR option** also includes the highly popular and successful Endo-Fighter® component and CTC* for use with cattle grazing fescue. Recommended consumption rate is approximately 4 oz/hd/day.



- ❑ **MoorMan's Range Minerals with IGR option.** Recommended consumption rate is 2 oz/hd/day. Other additives, such as CTC* and Bovatec®**, are available in combination with IGR. Non-medicated IGR Minerals are also available in block form. Some IGR products can also be fed free-choice.



- ❑ **MasterGain® Range Minerals with IGR option** includes CTC*. A Rumensin®** option is also available. Recommended consumption rate is 3-4 oz/hd/day. An Endo-Fighter formulation in combination with IGR is also available.



IGR MINERAL IN TUBS

- Convenient method of supplementing cattle
- Supplement less often
- No bags to carry or open
- Weather-resistant
- Self-fed supplements
- Consistent intake
- 200-lb tubs



HOW CAN PRODUCERS EFFECTIVELY USE IGR IN A MINERAL PROGRAM?

- ❑ Consumption of IGR Mineral must start approximately 30 days before the horn fly season begins.
- ❑ IGR Mineral must be consumed at least every other day.
- ❑ Ensure cattle are consuming recommended amount of product.
- ❑ Adequate mineral feeder space is needed — 15 to 20 cattle per feeder.
- ❑ Location and number of feeders may need to be adjusted to obtain proper consumption.
- ❑ IGR Mineral should be fed until the first killing frost.

*Caution: Federal law restricts medicated feed containing this veterinary feed directive (VFD) drug to use by or on the order of a licensed veterinarian.

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