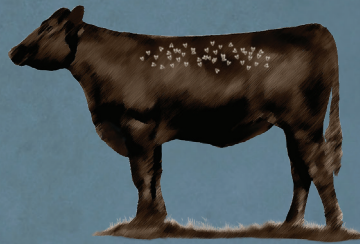


FLY POPULATION EVALUATION GUIDE

EXCELLENT



GOOD

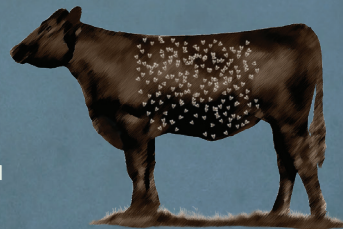


AVERAGE TO BELOW



UNACCEPTABLE

Horn fly populations above economic threshold, treat herd with an adulticide to knock down existing horn fly populations.



THE RIGHT CHOICE FOR CATTLE, THE ENVIRONMENT AND YOU

Altosid® IGR is the right choice for you, your cattle and the environment. When used as directed, Altosid® IGR is not harmful to birds, fish, reptiles, mammals or beneficial insects such as dung beetles.

Additionally, there are no known cases of insect resistance to Altosid® IGR despite being on the market for 30+ years. However, other fly control solutions containing organophosphates and pyrethroids are known to have widespread horn fly resistance.

Altosid® IGR can be fed to beef and dairy cows with no withdrawal times required before culling or milking.

Choose the proven horn fly control product that's effective, economical (as little as 2 to 3 cents per head per day) and convenient. This year, feed Altosid® IGR to your herd.

Available as:

- ✓ Loose Mineral
- ✓ Tub
- ✓ Block
- ✓ Custom Liquid Feeds

ALTOSID
IGR



SHELTER FROM THE SWARM

ALTOSID IGR
\$4.50
*180 days
PER SEASON*

Horn flies reduce weight gain potential, as well as milk yield and milk quality.

ALTOSID
IGR

To find out which Altosid® IGR solution best fits your needs, contact your Central Life Sciences Representative or call 1.800.347.8272. You can also learn more at www.AltosidIGR.com.

Always read and follow label directions. Altosid, the cow head design and Prolate/Lintox-HD are trademarks of Wellmark International. ©2021 Wellmark International. CTL 21-003

CENTRAL
LIFE SCIENCES

ALTOSID® IGR HELPS BUILD SEASON-LONG HORN FLY CONTROL

Left untreated, a few horn flies can quickly explode to a population of over 4,000 flies per animal.

The economic threshold of diminishing weight gain returns is 200 flies per animal.

Help protect your bottom line by using Altosid® IGR for 30 days before fly emergence through 30 days after the first frost.

Following this protocol will prevent flies from multiplying, which can increase your average daily weight gain, milk quality and milk yield.

FOR EFFECTIVE HORN FLY CONTROL WITH ALTOSID® IGR

30 DAYS BEFORE FLY EMERGENCE



- Begin feeding product with Altosid® IGR 30 days before overwintering horn flies emerge.
 - Horn flies emerge when average daily temperatures reach 65° F.
- If feeding in free choice feeds such as mineral supplements:
 - Put out a 5- to 7-day supply and allow one feeder per 15 to 20 animals.
 - Place near watering or loafing areas.
 - Monitor feed consumption for a few days. Increase or decrease the number of feeders or move them if necessary to adjust for proper consumption. **Ensuring appropriate consumption is key to product effectiveness.**

30 DAYS AFTER FIRST FROST



- Continue feeding product with Altosid® IGR for 30 days after the first frost to help prevent horn flies from overwintering.
- Horn flies can overwinter in their pupal stage and jump start adult populations in the spring.
- Including Altosid® IGR for 30 days after the first frost is essential, because a temperature bounce back could allow additional horn fly generations to develop.

In most years, Altosid® IGR alone provides excellent season-long control when used as directed. If fly populations exceed acceptable levels or an Altosid® IGR supplement is started after horn flies are present, use an approved adulticide such as Prolate/Lintox-HD™ insecticidal spray to knock back the adult fly population.

To learn more about fly traps and adulticides, visit www.StarbarProducts.com

While there are many types of flies, the horn fly presents the biggest threat to livestock on pasture. The most convenient way to control horn flies in beef and dairy cattle on pasture is to give them a supplement or feed containing Altosid® IGR.

Altosid® IGR is an insect growth regulator (IGR) that passes through the animal and into the manure, where horn flies lay their eggs. It breaks the horn fly life cycle by preventing pupae from developing into biting adult flies.

Altosid® IGR eliminates the expense, labor and stress on your cattle associated with other fly control methods. There's no need to round up or handle cattle because the animals spread the horn fly control as they graze, placing it in the exact location where horn flies lay their eggs.

CONTROLS RESISTANT FLIES

An effective fly control program keeps horn fly levels to less than 200 flies per animal. Use the fly population evaluation guide to help evaluate the horn fly population on your cattle. It's easiest to check horn flies in the early morning when they are usually on the upper side of the animal.

Altosid® IGR controls horn flies resistant to the organophosphates and pyrethroids commonly used in conventional horn fly control products. In more than 30 years of use, there have been no known cases of insect resistance to Altosid® IGR.

FACTS ABOUT HORN FLIES AND BEEF CATTLE

- In North America, horn flies cause an economic loss of nearly \$1 billion each year through diminished weight gain.¹
- University research indicates that horn fly populations can reduce milk yield and milk quality.
- Controlling horn flies will have a positive economic impact on your herd.

FINANCIAL FACTS

- Horn flies can cause 15 lbs. to 50 lbs. of weight loss per head during the summer season.
- At \$1.00 per pound, a 30 lb. weight loss results in a \$30.00 average loss per head.
- An Altosid® IGR Feed-Thru investment of \$4.50 per cow/calf pair for a 180 day feeding season will provide returns from 6:1 up to 10:1.

A recent study confirmed that stocker cattle treated with Altosid® IGR experienced a **15.8% increase in average daily gain compared to cattle who went untreated.**

Conducted in northeast Oklahoma in the summer of 2011, the study examined 50, 6-weight animals assigned to two groups. One group of 30 cattle was treated with mineral tubs including Altosid® IGR at a 0.005% inclusion rate of the active ingredient. This treatment group was evaluated against a control group of 20 cattle over an 86-day period to evaluate mineral consumption, horn fly activity and weight gain.

While the control group consumed slightly more of the mineral supplement on a per-head, per-day basis, the treatment group clearly displayed the benefits of consuming Altosid® IGR. Through the first five weeks of the study, horn fly populations were similar between the groups. However, beginning in Week 6 through Week 10 of the study, horn fly populations were significantly lower among the treatment group than the control group of cattle. In each of these weeks, cattle treated with Altosid® IGR experienced **at least a 50% reduction in horn fly populations**, with reductions reaching as high as **75% in Week 8.**

After evaluating the cattle in the Oklahoma study, researchers confirmed just how essential proper horn fly management is to weight gain. At the end of the study, the group treated with Altosid® IGR gained an average of 205.22 lbs. over the 86-day test period as opposed to an average of only 177.25 lbs. over the same period in the control group. **This equates to an average of 27.97 lb. or 15.8% higher weight gain for the cattle given Altosid® IGR in their mineral tub, as compared to the control group.**

Horn flies are a serious threat to beef cattle — and your bottom line. To find out just how much of a threat, fill out the worksheet below. You will see the advantages of adding Altosid® IGR for horn fly prevention and the kind of return you can expect on your Altosid® IGR investment.

STOCKER CATTLE ROI CALCULATOR

Studies have shown stocker cattle can incur a 14% reduction in average daily gain during fly season.² That can translate into a reduction in average daily gain of 0.2 lb. per day.

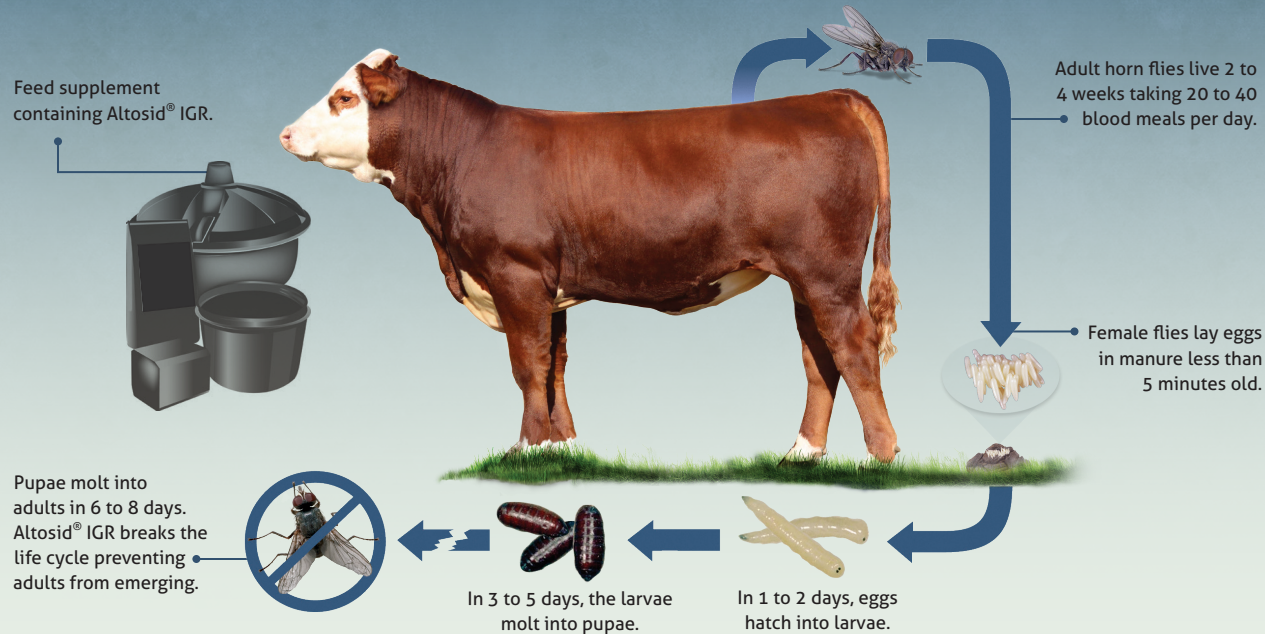
FIGURING THE POTENTIAL WEIGHT GAIN OF STOCKER CATTLE BY CONTROLLING HORN FLIES

A. Average starting weight		lbs.
B. Average ending weight		lbs.
C. Number of days on program		
<small>(Vary based on region, 180 days is typical)</small>		
D. Average daily gain per head		lbs./day
<small>(B) - (A) / (C) =</small>		
E. Potential weight gain per head per day		lbs./day
<small>(D) / 0.86 = - (D) =</small>		
F. Total weight gain per animal		lbs.
<small>(C) x (E) =</small>		
G. Sales price per hundredweight		\$
H. \$ gain per animal		\$
<small>0.01 x (F) x (G) =</small>		
I. Total number of head in your herd		
J. Total \$ gain		\$
<small>(I) x (H) =</small>		

FIGURING THE RETURN FROM USING ALTOSID® IGR FEED-THRU

K. Number of head in your herd	
<small>From Line (I)</small>	
L. Herd cost per day to use Altosid® IGR	\$
<small>0.025 x (K) =</small>	
<small>(Average cost of Altosid® IGR per head is 2 to 3 cents per day)</small>	
M. Altosid® IGR program cost	\$
<small>(C) x (L) =</small>	
N. Net profit	\$
<small>(J) - (M) =</small>	
ROI = (N) / (M) = :1	

INTERRUPTING THE HORN FLY LIFE CYCLE



¹USDA Report

²R. L. Byford, M. E. Craig and B. L. Crosby, "A Review of Ectoparasites and Their Effect on Cattle Production," Journal of Animal Science, Vol. 70, p.599.