

23 May, 2017

## Grass Tetany in Beef Cattle and Sheep

**Grass tetany is a fatal disease associated with low blood magnesium (Mg) levels. Although low magnesium is always involved, low magnesium levels are usually associated with low calcium levels.**

Older cows with calves at foot during winter and spring are the most susceptible. Very thin or over fat animals are quite susceptible, as are Angus cows and their crosses. Ewes with twins are most susceptible.

### Causes

Cattle and sheep store Mg in bones and muscles, but cannot readily mobilise and utilise these stores when needed. Mg is constantly lost through lactation, urine and faeces. Given this continual draw down of Mg it must be present in the daily feed intake. Low levels of blood Mg can be caused by low dietary levels or low levels of absorption of ingested Mg.

### Contributing Factors

- Cool season grasses have lower levels of Mg than legumes or weeds
- Grasses grown on acid sandy soils have lower Mg levels
- High moisture lush pasture leads to rapid digesta flow and reduced Mg absorption
- High Potassium (K) intakes and low Sodium (Na) and Phosphorus (P) intakes
- Stress such as yarding or transport
- Low forage intake leading to low Mg intake

### Symptoms

Most commonly farmers discover that they have a problem when they find dead cows or ewes.

Mild tetany may result in very little symptoms until cattle are stressed. Early symptoms include face and ear twitching and a stiff gait.

Intermediate tetany presents as wild excitable cows or ewes, with front leg goose stepping and the tail held high. Cows and ewes can recover at this stage, however left untreated most worsen and die.

Severe tetany presents as galloping, bellowing, and staggering. Cows or ewes soon go down and display stiff legs with leg paddling and thrashing.

### Prevention and Control

The main aim should be to eliminate factors that are limiting Mg absorption and or supply, in conjunction with providing a Mg supplement. Mg can be supplemented by:

- Treating pasture or hay with Magnesium oxide or Magnesium sulphate.
- Providing Mg supplements that can be fed in loose licks, blocks, bullets or in a molasses based supplement such as Molafos.

## **Molafos Grass Tetany (GT)**

Molafos Grass Tetany is a molasses based liquid supplement for use in the prevention of grass tetany, offering the following benefits:

- Feeding Mg using Molafos can be beneficial as the molasses increases the palatability of these non-palatable Mg supplements.
- Convenient to implement as it is simply placed in tubs in field.
- Molafos supplies Mg and Na. Na is necessary to facilitate Mg absorption across the rumen wall.
- Molafos also contains anionic salts to help improve blood calcium (Ca) and Mg levels by increasing mobilisation of these minerals from bone reserves.

Molafos Grazing Transition is another liquid product available, that has increased magnesium and salt levels to assist in the control of a grass tetany challenge.

Upon request, both Molafos Grass Tetany and Molafos Grazing Transition are available in customised formulations that contain Teric oil to aid in the control of bloat.

## **Short Term Solutions**

Other short term solutions include:

- Increase energy and roughage intake
- Address Na deficiency
- Move lactating or close-up cows to legume based pastures or more mature grass based pastures
- Avoid stress; never transport cows in last 6 weeks of pregnancy
- Where possible supply access to new and old pasture simultaneously until cows or ewes adjust to fresh pastures
- Avoid starving cows or ewes to reduce body condition, reduce weigh gradually to avoid possible Mg deficiency

## **Long Term Solutions**

- Correct soil pH
- Move to more legume based pastures
- Apply P fertilizers
- Avoid or limit K fertilizers and high nitrogen fertilizers until soil pH is corrected and legumes have been established

## **For Further Information**

Please contact your local Molafos distributor or call GrainCorp Liquid Feeds on 1800 333 010.