Molasses Usage for Livestock

Use: Feed Additive/ Supplement
Molasses is a sticky dark by-product of processing sugar cane or sugar beets into sugar. Molasses can be a source of quick energy and an excellent source of minerals for farm animals and even humans. Molasses can also be a key ingredient for cost effective management of feeds and pastures. The calcium content of sugar cane molasses is high (up to one percent), whereas the phosphorus content is low. Cane molasses is also high in sodium, potassium, magnesium and sulphur. Beet molasses is higher in potassium and sodium but lower in calcium. Molasses also contains significant quantities of trace minerals such as copper, zinc, iron and manganese.

Supplementing poor quality hay with molasses will increase feed intake and improve palatability. Microbes in the rumen break down the sugars in molasses rapidly, which extensively causes a rapid release of energy that makes molasses very useful for balancing other feeds in the dairy diet all year round. Feeding molasses to farm animals will improve digestion of pastures/hay; increase milk production, help maintain body condition and appetite and result in less feed waste. Cane sugar, which has similar benefits to molasses, is an inexpensive alternative to use.

Benefits
Molasses can reduce the dusty powdery nature of some finely ground feeds. In this role, it makes a feed mixture more palatable and edible to livestock.

Molasses can be added to replace missing sugar and trace minerals and help with fermentation in cases of low quality forages especially with low sugar levels.
**Cattle and Dairy**
- Provides sugar during early pasture growth
- Promotes animal health
- Increases milk solid production
- Increases diet density when intake is reduced before calving
- Improves milk let-down
- Improves digestion of fiber
- Helps reduce heat-related stress
- Helps growth and development of young stock
- Assists pregnancy rates (condenses calving patterns)

**Horses**
- Combines to reduce the dust in feed
- Increases palatability
- Reduces the ability of picky horses to sort through feed

**Sheep and Goats**
- Prevents pregnancy toxemia

**Options and Directions for Using Molasses**

*Treating Large Round Bales*
Dispersing molasses supplements throughout a big bale will considerably enhance the nutritional value and palatability of hay, straw, stalks and other cereal grains. Simply pour on, or probe into, the face of the bale. Application rate is typically seven to ten percent by weight.

Molasses is usually used in amounts not exceeding ten to fifteen percent of ration.

**Cattle and Dairy Feeding Regiment**
- Dry dairy cows: 1-2 lbs. or 500 g-1 kg/day
- Springing dairy cows: 1.5-5 lbs. or 700 g-2 kg/day
- Lactating dairy cows: 1-5 lbs. or 500 g-2 kg/day
- Adult beef cattle: 1 lb. or 500 g/day
- Calves and heifers: 3 oz-1 lb. or 100-500 g/day

After parturition: 8 oz. or 240 mL in warm water.

**Feeding Regiment for Horses**
- 2-4 lbs./1,000 lbs. or 1-2 kg/450 kg of body weight two to three times a day

**Feeding Regiment for Sheep and Goats**
- Lactating or gestating: 3-6 oz. or 100-200 g/day.
Safety
Molasses can be toxic if fed at ad libitum (free choice), therefore, it is recommended that molasses should be supplemented in a restrictive form.

Conclusion
The added benefits of feeding molasses have been quantified by numerous research studies. There is no doubt that molasses is an excellent source of energy and minerals for ruminants. It can be fed in various ways and is very useful in many situations. Cattle and small ruminant producers can feel confident feeding molasses, knowing that they are feeding a safe and economical supplement.
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