Molasses-based tub supplements for brood cows (Frequently asked questions)

1) If I am feeding hay during the winter, how much supplement should I feed my cows?

The adage of “If you don’t test, it’s just a guess” rings true in this case. Without knowing the quality of the hay, it is simply a guess as to how much supplement should be fed or if supplement is needed at all. A forage analysis will provide information on relative forage quality, % total digestible nutrients (TDN), and % crude protein (CP) in the hay. Even with medium quality hay (10% CP, 50% TDN), energy is typically more limiting than protein for brood cows.

2) Are molasses-based tubs good protein supplements for my cows?

These products are often formulated to limit intake to 1 to 3 pounds of product per day. This amount of consumption may correct protein deficiencies, but not energy deficiencies of brood cows when fed with low to average quality hay (less than 10% CP and 50% TDN). The ability to put out tubs for cattle and let them self-feed certainly saves time and labor compared with hand feeding, although the cost per ton is greater than other protein supplements.

3) The feed analysis tag lists a value for % CP and % NPN. What is the difference?

The % CP consists of both natural protein and NPN. Natural protein is true protein found in naturally occurring sources. Non-protein nitrogen (NPN) is often used in supplements to decrease the cost of protein supplementation. Urea is a commonly used NPN source. Natural protein is utilized more effectively by cows than NPN when fed with low to average quality hay (less than 10% CP and 50% TDN) typically found in Alabama. Most NPN cannot be used by the animal without adequate energy supplementation in the diet. No more than 1/3 of the supplemental protein should be from NPN.

4) What is the energy value of molasses in tubs?

Molasses is a good energy source (75 to 80% TDN) consisting of simple sugars, but is low in protein. Urea is often added to molasses supplements to increase the protein value. The addition of fat (up to 15%) also increases the energy value of a molasses-based supplement.

5) Are molasses-based tubs a good supplemental energy source for my cows?

Most tub-based supplements are formulated to limit consumption to 1 to 3 pounds of product per head per day. Because of this low rate of consumption, they are not designed to correct for energy deficiencies, but serve as carriers for protein and mineral supplementation. Recall that energy is
typically the most critical nutritional consideration for lactating brood cows fed low to medium quality hay. In many cases, it is likely that additional energy supplementation is needed for lactating cows outside of both hay and molasses-based tub supplements. This can be corrected by feeding a small quantity of fiber-based, high-energy co-product (e.g., soyhulls, corn gluten feed, dried distillers grains with solubles) in addition to the molasses supplement.

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