

Fall 2017



THE AminoMax Digest

Afgritech introduces a new animal protein alternative, AminoGreen®

by Les Berghorn, General Manager, Afgritech

Advertising that touts Antibiotic Free, Hormone Free, and GMO Free meat products fill consumer publications and television commercials. The ads imply that there are health benefits to be gained from the products labeled as such. The nutritional value of milk does not change when cows are given BST or GMO crops, however, it is often this consumer pressure to which our industry responds to reassure consumers we hear their concerns and continue offering high-quality, healthy products.

Recent trends and pressure argue that diets fed to animals and birds should not contain animal fat or animal proteins. Certain restrictions following the BSE problems in the 1900's include the use of ruminant by-product proteins given to ruminants. As a result, many dairy and beef producers voluntarily moved from animal-based proteins to Vegetarian Fed as a normal practice.



Animal protein products are very concentrated sources of protein and amino acids and as a rule largely escape rumen degradation, so they are high

in rumen undegraded protein (RUP). A major concern with these products, however, is variability. They can be variable due to the source of materials that are obtainable for rendering at any given time and the freshness of the products when processed. Additionally they are very sensitive to processing conditions and these can vary widely from supplier to supplier. Palatability can likewise be an issue with higher feeding rates of these products.

To ensure dairy producers have the necessary dietary protein sources AND accommodate consumer pressures, AminoMax has developed an animal protein alternative – AminoGreen®. AminoGreen® is a plant-based bypass protein source containing all the necessary nutrients for any standard feeding program with significant RUP required for milk production. AminoGreen® is a high quality and very consistent product that is palatable and derived



purely from plant-based sources. Manufactured with our patented ExpandaTherm™ manufacturing technology, the consistency and homogeneity of AminoGreen® is unparalleled, making it an ideal protein option for the feed mill and the farm. AminoGreen® extends the AminoMax® line of premium bypass protein products.

AminoGreen® Advantages

- **Consistency - manufactured with our patented ExpandaTherm™ technology**
- **Vegetable-based protein source**
- **High RUP - comparable to animal proteins**
- **High RUP digestibility**
- **Concentrated supply of limiting essential amino acids**
- **Highly palatable**
- **Free flowing and easy to store**
- **Cost competitive**
- **Meets consumer pressure for alternative protein sources our proteins is improved due to our ExpandaTherm™ technology.**

Achieve unparalleled uniformity and consistency with ExpandaTherm™

by Les Berghorn, General Manager, Afgritech

At AminoMax®, our only business is producing premium protein sources of amino acids for dairy cows. One challenge all feed and ingredient manufacturers need to overcome is Ingredient variation. Through our ongoing relationship with Kansas State University,



AminoMax® has ownership of a proprietary manufacturing technology called ExpandaTherm™. This technology controls enzymatic activity and pressure through a flash heat process that assures all reactions are complete. By managing temperature, moisture and retention times,

and other variables, from batch to batch, both AminoMax Pro and AminoGreen® deliver better mixability, nutrient consistency and homogenous particles. Additionally, numerous studies from the Cornell University lab show that the intestinal digestibility of our proteins is improved due to our ExpandaTherm™ technology.

For AminoMax®, manufacturing a premium bypass product is not a sideline business resulting from another manufacturing process. Rather, we have strategically invested in our proprietary ExpandaTherm™ technology. Unlike expeller-extruded soybean meal, our ExpandaTherm™ process greatly reduces variability associated with most mechanical processes for superior consistency.

ExpandaTherm™ delivers what producers expect:

- Better feed efficiency
- Reduced nitrogen excretion
- Improved milk production



To learn more about AminoMax products contact Les Berghorn, General Manager at lesb@aminomax.com or visit AminoMax.com