

The United Soybean Board's Better Bean Initiative and the Poultry Industry

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As noted in Dr. Waldroup's article included in this newsletter, the poultry industry is the largest end-user of soybean meal within the United States. The needs of the poultry industry were an important consideration when the United Soybean Board (USB) began to identify soybean meal target traits as part of the Better Bean Initiative (BBI).

USB's goal of increasing demand for U.S.-produced soybean meal is based on further enhancing what Dr. Waldroup described as a product of "superior value." In fact, BBI is designed to address the three areas of improvement suggested by Dr. Waldroup, including improved carbohydrate characteristics, reduced levels of phytate-bound phosphorus and increased sulfur amino acid levels. The specific "primary" meal targets for BBI are outlined below.



application. Depending on the specific trait, applications include nutritional, environmental and production/management opportunities, as pointed out by Dr. Waldroup relative to the association between soybean carbohydrate and wet sticky litter. The economic

Net economic value realized defines and drives this type of opportunity. Added costs dilute the gross value of a trait package, thereby reducing net added value. Therefore, added costs must be identified and controlled. Otherwise, traits that represent

Better Bean Initiative Primary Meal Trait Targets

Primary Traits	Changes in High Protein Meal			Maximum Displacement of Selected Ingredient for Each 100 lbs of Meal Used
	From	To	Coefficient of Change	
Increased Methionine + Cystine	1.4%	2.1%	1.5X	0.7 lb DL Methionine
Reduced Phytate-Bound Phosphorus	0.4%	0.2%	0.5X	0.95 lb Monocal Phos.
Increased Metabolizable Energy (ME) (From Improved Carbohydrate Characteristics)	^ 150 kcal ME/lb		Swine: Approx 1.1X Broilers: Approx 1.13X	4.2 lbs Added Fat

NOTE: Must insure that improvements in one area do not result in overriding losses in others.

The above compositional improvements represent inherent added value. Such inherent value is translated into economic value only in the context of a given

value represented by a trait is a function of the application(s) addressed and their economic value in the context of a defined situation.

significant gross end-use value may become commercially unsustainable ... an opportunity lost! As noted at the bottom of the table, a stipulation of BBI is that, as we



focus on improving one or more compositional characteristics, we do not add cost by degrading other economically relevant components. These include other meal characteristics, oil level and its composition for the whole soybean, as well as crop yield per acre. As we move forward, appropriate evaluations will be an integral part of the process. USB encourages input from the feed industry throughout this ongoing process.

Costs associated with the system utilized to deliver the enhanced meal product to its end-user are

another important consideration. A tenet of BBI is the commoditization of U.S. soybeans bearing BBI targeted traits. While the early phase-in period for each new generation of soybeans with enhanced traits will require some level of identity preservation (IP) and associated cost, the ultimate end game is its commoditization. Utilizing the commodity system will allow BBI enhanced soybean products to be brought through the value chain with significantly reduced system costs. Thus, more of the value actually created will be available to improve the value chain.

The marketplace ultimately determines economic value and how it is distributed throughout the chain. BBI seeks to add inherent value to soybean meal produced using U.S.-grown soybeans, and bring it to market with minimal added cost. If successful, BBI will add considerable value to the U.S. soybean value chain. The poultry industry stands to be a principal extractor of the meal value created and, with it, a beneficiary of this initiative.

Summary Comments

Soybean meal is and will continue to be the preferred protein supplement for poultry feeds. With the probable decline in the use of animal byproducts, even more soybean meal will be used. Genetic improvements in reducing the phytate-bound phosphorous, and reduction or elimination of oligosaccharide carbohydrates are the most important economical traits that should be addressed.

The Better Bean Initiative seeks to add inherent value to soybean meal produced using U.S.-grown soybeans. If successful, BBI will add considerable value to the U.S. soybean value chain. The poultry industry stands to be a principal extractor of the meal value created and, with it, a beneficiary of this initiative.

References

N. L. Bajjalieh. May, 2002. The United Soybean Board's Better Bean Initiative and the Poultry Industry. Soybean Meal Infosource.

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