

Illinois Soybean Farmers Can Support the Livestock Industry

Soybean meal is the most widely used source of protein for poultry and pigs in the U.S. and abroad. It is estimated that more than 75 percent of all soybean meal produced in the world is fed to poultry and pigs. Dairy cows also are major consumers of soybean meal. For the soybean industry to remain viable, it is crucial these industries remain big users of soybean meal.

The only way animal industries can strive is by producing end-products that are competitive in the marketplace. Soybean producers can contribute to this goal by continuing to produce high-quality soybeans that can be used to produce high-quality soybean meal.

Specifically, this can be achieved by focusing on three areas:

1. The concentration of digestible amino acids is the most important quality parameter in soybean meal. Diets fed to both pigs and poultry are formulated based on concentration of digestible amino acids. The greater the concentration, the more valuable is the soybean meal in the formulation. The soybean industry can support livestock industries by continuing to focus on growing varieties of soybeans that result in high concentrations of digestible amino acids in the soybean meal.

2. Soybean meal is often the sole source of supplemental amino acids in diets fed to all pigs greater than approximately 40 pounds. However, younger pigs do not tolerate soybean meal as well because soybean meal contains antigens and oligosaccharides. Animal protein sources are added to diets for younger pigs, although this increases diet costs.

The soybean industry can support the swine industry by promoting the use of enzyme-treated soybean meal and fermented soybean meal. These two sources of soybean meal do not contain oligosaccharides and only small amounts of antigens. Support to market these sources of soybean meal will assist the swine industry in formulating better diets, and it will increase the total market for soybean meal.

3. All diets fed to pigs and poultry in the U.S. are formulated based on concentrations of digestible amino acids and digestible phosphorus. Most diets also are formulated to meet specific requirements for metabolizable energy. There are differences among sources of soybean meal in the digestibility of nutrients and energy, but livestock producers do not have tools to distinguish between sources with low digestibility and sources with greater digestibility.

The soybean industry may help the livestock industry by documenting these differences and developing tools that will allow them to distinguish between different sources of soybean meal based on digestibility of amino acids, phosphorus and energy. Possibilities for selecting varieties that will produce soybean meal with increased digestibility of energy and nutrients should also be investigated.

The soybean and livestock industries are dependent on each other, and the success of one often also results in success for the other. As illustrated above, the two industries have a mutual interest in working together to increase the competitiveness of both sectors. ♦



Photo submitted by Hans H. Stein

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