



Prairie Swine Centre E-Zine

Volume: 2
Edition: 10
May 5, 2012

Feed Processing is MORE than Just Grinding

What's the first thing that comes to mind when you are asked about the impact of (feed) processing on feed efficiency. We usually think terms of "fineness of grind". Typically producers should reduce particle size, and variation, to the point where management issues start to develop in the barn, in terms of ulcers or plugged feed lines and feeders.

How can we benefit if we look at feed processing differently? What if we increase our understanding of how to process feeds (grinding, conditioning, pelleting (or extruding), cooling, etc) so that feed value is more consistently increased. These were some of the questions recently addressed by Dr. Tom Scott, University of Saskatchewan during a recent "Focus on Feed Efficiency" webinar: New Feed Processing Technologies that May Influence Feed Efficiency.

One of the challenges in feed processing is the variation in ingredient quality. Protein, energy, fusarium contamination, sprouting, and other factors can vary within a sample and significantly more over an entire field. Subsequently we feed based on averages. How can we use this natural variation to our advantage?

Leading edge seed sorting technology (BoMill Tri Q 30 seed sorter) has the ability to sort individual seeds into three separate fractions based on NIR (Near Infrared Reflectance) crude protein levels (ex. hardness, starch, starch type, moisture). With this technology we would be able to take a sample of barley with an average protein level of 11.4% and sort it into three composite samples that average 10%, 10.8%, and 12.4% protein respectively. Therefore we would be able to take these samples and utilize them where the greatest gains would be possible.

Opportunities also exist in cases where we have fusarium contaminated grain we would be able to sort out the fusarium contaminated kernels, increasing the potential feed stock available to the livestock industry. This type of sorting technology provides us an opportunity to manage variability. If we can measure it – you can pay for it – select for it – adapt specific processes to accommodate it – select specific additives or enzymes and make the grain consistently better.

This provides a glimpse into the future of new technologies that could have a significant impact on feed efficiency and what we feed hogs. As part of Prairie Swine Centre's "Focus on Feed Efficiency" webinar series the topic of "New Feed Processing Technologies that May Influence Feed Efficiency" was recently addressed by Dr. Tom Scott.

Our next webinar in the series is Tuesday, May 8 at 1:30 (SK time) and features Dr. Steve Dritz, Kansas State University addressing the topic "Herd Health Impact on Feed Efficiency". We look forward to seeing you there.



For more information on this topic and others related to feed efficiency can be found in our PorkInsight database found on our website at www.prairieswine.com/advanced-search/

Energy Content of Barley
<http://www.prairieswine.com/energy-content-of-barley/>

Ingredient Fractionation: The Value of Value-Added Processing for Animal Nutrition
<http://www.prairieswine.com/ingredient-fractionation-the-value-of-value-added-processing-for-animal-nutrition/>

Enzyme Supplementation and Feed Processing Provides Solutions for Low Quality Grains
<http://www.prairieswine.com/enzyme-supplementation-and-feed-processing-provides-solutions-for-low-quality-grains/>

Dr. Tom Scott's Presentation "New Processing Technology that May Influence Feed Efficiency"
<http://www.prairieswine.com/new-feed-processing-technology-that-may-influence-feed-efficiency/>