

Make ration math easier

By JOSH FLINT

In the past couple of years, livestock producers have been saddled with skyrocketing grain prices and an influx of dried distillers grains with solubles, a product that is unique to each ethanol plant.

Hans Stein, University of Illinois Extension swine specialist, hopes to take some of the guesswork out of feeding DDGS to hogs. He's created a DDGS calculator, which allows producers to input costs for the various portions of the feed ration. Producers can then see the cost comparison for a ration with and without DDGS.

"I got so many calls from producers that said, 'If corn is this price, how much should I be willing to pay for DDGS?'" Stein says.

Stein, who developed the calculator in conjunction with post-doctoral student Beob Kim, notes the most difficult part was calculating how much pro-

Key Points

- Distillers grains calculator helps pork producers calculate feed rations.
- The quality of DDGS varies from ethanol plant to ethanol plant.
- Research is ongoing to determine the effect of DDGS on the taste of pork.

ducers can reduce corn and soybean meal rations if DDGS accounts for 10% of the ration.

"I've generally found that the most common mistake producers make is they do not take out enough soybean meal," Stein says. "A lot of them just think of DDGS as a replacement for corn." Currently, he recommends inclusion rates of up to 20% for pork production. However, he's heard of multiple producers who are feeding up to 30% DDGS in rations.

"For sows and nursery pigs, 30% seems to be OK," he says.

Although the calculator will give an estimate on costs, Stein explains that the quality of DDGS varies quite a bit, with the biggest variation attributed to lysine content. Typically, lysine content should be in the 0.75% to 0.95% range. If the concentration of lysine is much lower, the product is most likely heat damaged.

If the ethanol plant does not provide product specs on the DDGS, Stein recommends the producer send a sample to an independent lab. "A lot of this depends on how much they trust the ethanol plant to provide quality DDGS," Stein says. "Many producers have had good luck with sourcing DDGS from one or two ethanol plants."

Stein also mentioned ongoing studies to determine if pork quality is impacted by including DDGS in feed rations.

"Preliminary research indicates the taste of pork from pigs fed DDGS is no different from animals without DDGS in their diet," he says. However, he adds that the fat tends to be softer in pork produced with DDGS. While the taste and cooking properties do not seem to be affected, Stein says the appearance is slightly different.

"There is currently a large amount of research going on to prevent the de-

velopment of soft fat in pigs fed DDGS," continues Stein. "At this point, we are hopeful that we will solve this problem within the next few years."

It is not usually a problem if only 20% DDGS is included in the diet, but if greater inclusion rates are used during finishing, this may become a problem. For producers who have a problem with soft fat, Stein recommends feeding a diet with no DDGS for the final three weeks prior to slaughter. "At this point, this is our best recommendation to avoid this problem," he says.

■ To download the calculator, visit www.PrairieFarmer.com and scroll down to the Web Exclusives section.

University of Illinois DDGS Calculator																																																																																																			
By Drs. Beob G. Kim and Hans H. Stein																																																																																																			
Replacement value of DDGS in corn-SBM based diets fed to swine																																																																																																			
Directions: Update the prices and change DDGS inclusion rate (%) in green boxes.					Recommended and maximum inclusion rates (%) of DDGS in various stages of swine																																																																																														
Feed ingredient	Unit	Price	Unit	Price	Stage	Recommended	Max	Stage	Recommended																																																																																										
DDGS	40	100	\$/ton		Gestation	40	50																																																																																												
Com	5	\$/bushel			Lactation	20	7																																																																																												
SBM 48%	3.32	\$/ton			Nursery, wk 0-2	0	20																																																																																												
Monocalcium phosphate	400	\$/ton			Nursery, after wk 2	20	30																																																																																												
Fat	0.28	\$/lb			Grower	20	35																																																																																												
L-Lysine HCl	1.15	\$/lb			Early finisher	20	35																																																																																												
L-Tryptophan	16	\$/lb			Late finisher	20	20																																																																																												
Limestone	28	\$/ton																																																																																																	
DDGS inclusion: 10.0 %					(Adapted from Stein, 2007)																																																																																														
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