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It's the Pits

Direct-fed Microbials for Swine

Competitive Exclusion versus Antibiotics

The current method for treating scours in piglets is to administer antibiotics through the water and feed or as a direct treatment. A 2004 study, by Roger B. Harvey, DVM, MS, and the Food and Feed Safety Research Unit, ARS and USDA, has shown there might be an alternative to antibiotics. By feeding bacteria cultures of “good bacteria” derived from healthy pigs’ intestinal tract, a producer can control the effects of harmful bacteria such as *E. coli* without whole herd antibiotic treatments.

The idea is competitive exclusion; the bad bacteria do not have the opportunity to thrive and cause illness or death because the good bacteria have control of the digestive tract. In fact, the *Lactobacillus* strains of bacteria can be toxic to the *E. coli* bacteria.

Dr. Harvey used a laboratory developed culture known as RPCF as its direct fed microbial. The study took place in five nursery farms and one wean-to-finish barn. These barns have had a chronic history of K-88 and F-18 *E. coli* diseases. Of the 37,276 piglets used in the study, 21,467 were treated within 24 hours of birth with the RPCF bacteria and 15,809 piglets were used for a control group. The piglets were then monitored throughout the nursery period.

As a result of the treatment, five out of six of the barns observed reduced mortality in the treated pigs versus the untreated. One farm showed a difference of 6.16% mortality between the treated and non-treated. The mortality rate for the non-treated was 9.06% and the treated experienced only 2.80%. The medication costs were also reduced for the treated pigs versus non-treated. The study revealed an average annual savings of \$23,563 for the treated pigs.

As antibiotic use continues to be scrutinized and questioned by the consumer and as antibiotic resistant bacteria continue to emerge, a successful alternative is needed. Treating pigs with or feeding a Direct-fed Microbial is that alternative.

Bang for Your Buck

As corn prices rise and ethanol production increases, producers are forced to use less expensive alternatives. These alternatives often include dried distillers grains (DDGs), wheat midds and soybean hulls with DDGs being the most common. While these feedstuffs do fulfill the animals dietary needs, they are more difficult to digest with some passing through the GI tract without ever being fully utilized by the animal.

Direct-fed Microbial (DFM) products can help producers obtain full feed value. An animal’s GI tract works off microbes that break down products into a form utilized by the animal. DFMs flood the system with good microbes and beneficial enzymes to enhance function.

A word of caution: sows being fed DFMs often increase body condition at a faster rate. It is important to monitor feedbox settings and decrease feeding rates where necessary to prevent over conditioning. A 400-head farrowing barn in Minnesota calculated that if they could reduce the feed intake of the gestating sows by three tenths of a pound, it would cover the cost of the DFM for the whole barn. DFMs are an inexpensive way to increase feed value.

Healthy Hog™, Direct-fed Microbial for Swine

- Five species specific bacteria
- Six different enzymes
- Micro-encapsulated for added shelf life
- Improved feed digestion
- Improved overall herd health
- Improved manure consistency and easier cleaning
- 0.8 lb per ton of feed

Healthy Hog floods the digestive tract with good bacteria and beneficial enzymes. They work better together to break down and digest feed, thus improving feed efficiency. The bacteria turn the GI tract into an environment less susceptible to pathogens and, thereby, improve animal health.

Contact ProfitPro to try **Healthy Hog**
in your herd today.