

Technical Bulletin

Information from Phibro Technical Services

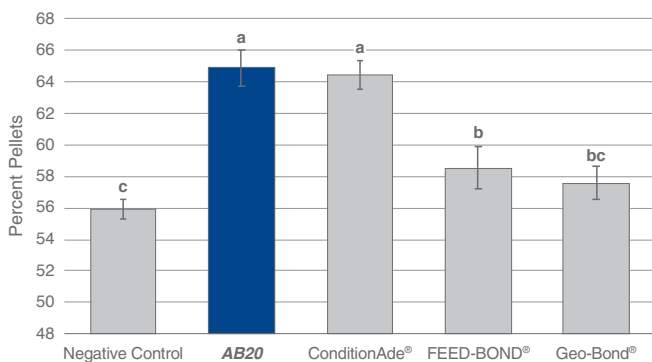
AB20[®] A Pelleting Aid for Improved Pellet Durability in Swine Feed

Two pelleting studies were conducted at the Kansas State University O.H. Kruse Feed Technology Innovation Center.

- In 2018, the first experiment compared five batches of a feed formulation that was difficult to pellet. One batch with no pelleting aid served as the control and the other four batches consisted of either **AB20** nutritional specialty product or one of three competitive products, all at an inclusion rate of 1.0% of the diet.

- **AB20** significantly improved pellet durability index (PDI) by nine percentage points (16% improvement) when compared to the control diet with no pelleting aid ($P < 0.05$), out-performed two of the three competitive products ($P < 0.05$), and was statistically equal to the third competitive product.

Figure 1. PDI Results for AB20 and Competitive Pelleting Aids when Added at 1.0% of the Diet

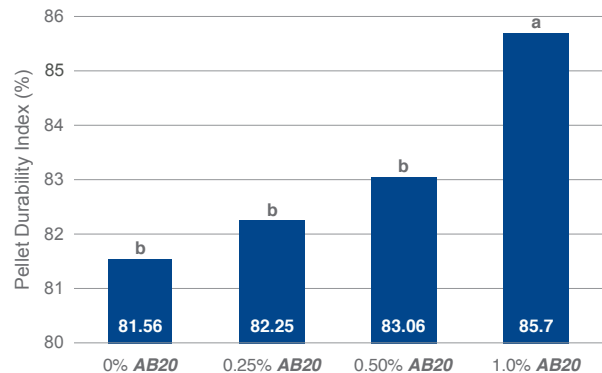


Means with different superscripts are significantly different ($P < 0.05$). Kansas State University, 2018.

- In a second experiment, conducted in 2019, a phase 4 swine diet with an initial PDI of 81.6% was used to compare the PDI for four batches of the same diet containing 0%, 0.25%, 0.50% or 1.0% **AB20**.

- PDI numerically increased ($P > 0.05$) with increasing inclusion rates of **AB20** but a statistically significant difference was seen at 1.0%.
- PDI for pellets manufactured with 1.0% **AB20** was significantly greater ($P < 0.05$) than the control with no **AB20**, with a five-percentage improvement in PDI.

Figure 2. Phase 4 Swine Diet PDI's with Varying Inclusion Rates of AB20



Means with different superscripts are significantly different ($P < 0.05$). Kansas State University, 2019.

Conclusions

- Adding **AB20** as a pelleting aid to a poor-pelleting feed formulation had a significant impact on PDI ($P < 0.05$).
- **AB20** significantly improved PDI ($P < 0.05$) when added to a phase 4 swine diet that already had good pellet quality, when included at a rate of 1.0%.
- **AB20** nutritional specialty product is an economical pelleting aid and, depending on the feed formulation, has been shown to increase the PDI of pelleted feeds.

This information has been prepared for industry technical professionals.