

AGP substitution in broiler diets



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Layn Corp, a global company, headquartered in China, focused on vertically integrated production of plant-based sweeteners, extracts and flavors, reports positive results for a broiler feeding trial in Colombia on its product targeting AGP substitution.

TruGro AR, said the producer, is a botanical extract combination designed to enhance animal performance when replacing antibiotic growth promoters (AGPs) in feed.

Layn ran a Coccidia challenge trial in broilers at the University of Tolima in Colombia, whereby a coccidia vaccination at a 10x dose was used as a way to create a microbial imbalance in the intestine.

Juan Javierre, animal nutrition scientist, Layn, outlined the protocol of that challenge trial for us at IPPE in Atlanta earlier this year, when the company was launching an expanded line of polyphenol extract-based feed additives with a focus on supporting gut health and improving bird's oxidative status.



ANTIBIOTIC REPLACEMENT IN BROILER PRODUCTION. GROWTH, DIGESTIBILITY AND CARCASS DATA

Body weight from all treatments of the experiment				
	5 d	11 d	21 d	42 d
NC	125 ^b	356	901 ^a	2648 ^b
PC	130 ^a	358	909 ^a	2870 ^a
AR	130 ^a	344	874 ^b	2876 ^a

Nutrient digestibility (%) from all treatments in the experiment. Day 21				
	Crude protein	Ether extract	Crude energy	Dry matter
NC	78,28 ^b	82,31 ^b	77,49 ^b	95,50
PC	80,75 ^a	88,88 ^a	79,45 ^a	95,00
AR	80,41 ^a	89,15 ^a	79,35 ^a	95,43

Coccidia challenge trial data

Three diets were used in the experiment, he explained. The negative control diet saw removal of the antibiotics, avilamycin and halquinol, the positive control included those AGPs, while the experimental diet incorporated TruGro AR into the formulation.

The idea was to see how the performance of the birds on the TruGro AR diet compared to that of the birds fed the AGP positive ration. The trial, which had eight treatments and eight replicates, saw birds grouped into 64 pens. It was run over three stages: pre starter (5-10 days); starter (11-23 days); and grower (24-42 days).

Javierre was unable to share data with us at the time regarding the trial outcome.

But this week, Mary Joe Fernandez, global VP of sales and business development, Layn, told us the research confirmed the entry hypotheses.

Growth and performance of TruGro AR birds were similar to those of the control group (AGP positive), while nutrient digestibility of TruGro AR group was also akin to that of control group, she reported.

“We have not been able to evaluate all the data, due to Covid-19 linked delays, but on the main parameters tested, we saw no significant differences,” said Fernandez.

Feed portfolio

Along with AGP replacement, Layn's feed range also targets intestinal health, antioxidants and sweeteners.

"With so many products in our portfolio, we want to ensure validation of all of them before going to market. In that context, it is important to have the right focus on the right market, and on the right category and functionality."

The European market, followed by Latin America, are its priority markets in terms of its feed range.

China is a more complex market, said Fernandez. But the botanical ingredients company foresees new opportunities there with ongoing recovery in the swine herd, and a renewed interest in immunity boosting inputs.

Quality accreditation

It targets the US market in terms of its pet food ingredient line, she added.

Last month, Layn Corp announced that it had received accreditation as a Preferred Supplier from the US National Animal Supplement Council (NASc). *"Being recognized as a preferred supplier ensures the production of TruGro by Layn ingredient solutions for pet supplements have gone through a stringent validation process."*

NASC Preferred Suppliers must meet stringent criteria, including cGMP operations, quality, compliance, safety, certifications and other practices.

All botanical extracts manufactured by Layn undergo a comprehensive series of tests for identity, purity and potency using international standards, added Fernandez.