



FOCUS ON RESEARCH

ORIGINAL XP™ SUPPORTS BROILER PRODUCTION AND IMMUNE STATUS DURING A COCCIDIOSIS CHALLENGE

A research summary of a trial performed at Chinese Academy of Agricultural Sciences to evaluate the effects of Original XP supplementation on growth performance and immune status of coccidian challenged broilers.

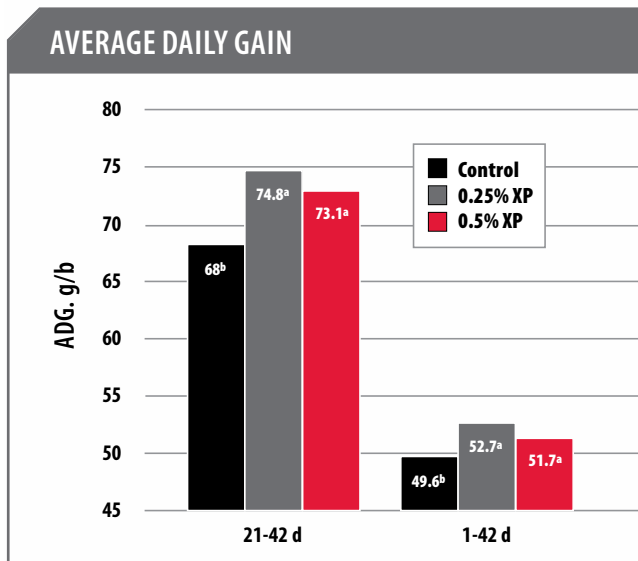
RESEARCH SUMMARY

- 42 day trial with 360 male Arbor Acres broilers.
- At 21 days of age half of the broilers were inoculated with 6×10^4 Eimeria tenella sporulated oocysts per bird.
- Variables measured: production and immune parameters.
- Each treatment consisted of 6 replicates/treatment and 10 birds/replicate.
- 1 bird/replicate was sampled for immune parameters.
- Treatments consisted of:
 - Control without E. tenella challenge
 - 0.25% XP without E. tenella challenge
 - 0.5% XP without E. tenella challenge
 - Control with E. tenella challenge
 - 0.25% XP with E. tenella challenge
 - 0.5% XP with E. tenella challenge
- Results are expressed as main effect means for X

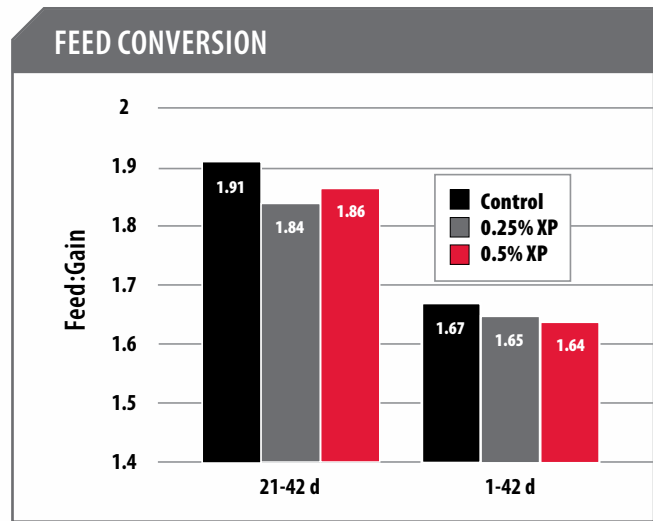
RESULTS

Broilers fed Original XP exhibited higher average daily gain following a coccidian challenge compared to the control birds ($P \leq 0.05$). However, the differences in feed conversion of broilers supplemented with Original XP over the same period were numerical ($P \geq 0.05$) when compared to the control.

RESEARCH SUMMARY

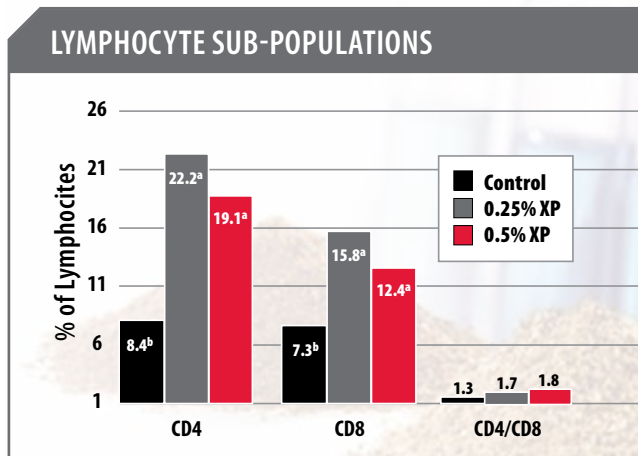


Effects of Original XP supplementation to broilers on growth during a coccidian challenge on d21.

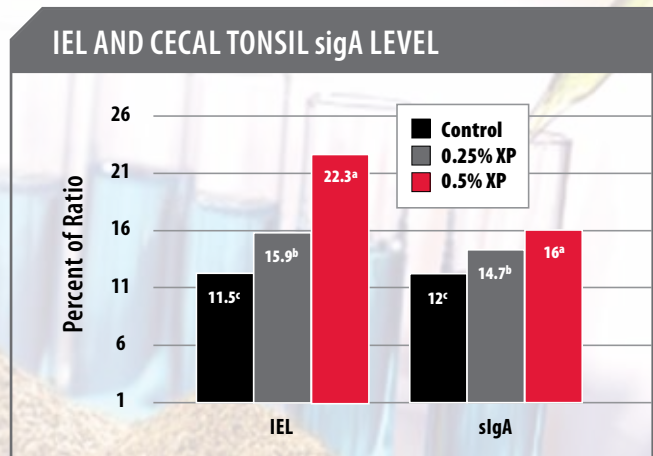


Effects of Original XP supplementation to broilers on feed conversion during a coccidian challenge on d21.

The use of Original XP enhanced peripheral blood lymphocyte subpopulations 7 days post-infection ($P \leq 0.05$) compared to birds fed the control diet. Intraepithelial lymphocyte count (IEL) in the ileum and sIgA in the cecal tonsil of broilers were both improved ($P \leq 0.05$) with increasing levels of Original XP 7 days post-infection.



Peripheral blood lymphocyte subpopulations 7 days (28d) following a coccidian challenge of broilers fed Original XP.



Intraepithelial lymphocyte count (IEL) in the ileum and cecal tonsil sIgA level 7 days (28d) following a coccidian challenge of broilers fed Original XP.

¹Gao, J., H.J. Zhang, S.G. Wu, S.H. Yu, I. Yoon, D. Moore, Y.P. Gao, H.J. Yan and G.H. Qi, 2009. Effect of Saccharomyces cerevisiae fermentation product on immune functions of broilers challenged with Eimeria tenella. Poul. Sci. 88(10): 2141-2151.

If you would like more information on this study, please contact your local Diamond V representative.

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