CHR HANSEN

GalliPro®

Efficacy Trial

United States of America - Virginia
Diversified Research, Inc.

Trial Description

An efficacy trial with GalliPro in broilers was carried out at Virginia Diversified Research. A total of 2400 Cobb male broiler chickens was allocated to four different treatments. The treatments consisted of untreated control, one group treated with 8 x 10^5 CFU of GalliPro per gram, one positive control group treated with 50 g/t Bacitracin Methylene Disalicylate (BMD) and finally a fourth group with the combination of GalliPro and BMD. Monensin (99 mg/kg) was added to all diets to prevent coccidiosis. Ten replicates per treatment were used. Trial duration was from 0 to 42 days of age.

Table 1 below shows the composition of the diets used in this trial.

Table 1. Feed composition

	Starter 0-21 days	Grower 22-35 days	Finisher 36-42 days
Ingredients, (%)			
Corn	55.4	60.3	65.3
Soybean meal	37.0	32.0	27.1
Fat blend	3.4	3.6	3.9
Premix	4.2	4.1	3.7
Nutrients, (%)			
AMEn, kcal/kg	3,062	3,128	3,194
Crude protein	22.0	20.0	18.0
Crude fat	5.8	6.2	6.6
Crude fiber	2.8	2.7	2.7

Results & discussion

Results for the bird performance obtained in this trial are presented in table 2. The response variables were analyzed by multiple regression T-test comparisons.

In this trial both GalliPro and BMD exhibited a significant effect on daily weight gain and feed conversion. In addition, the combination of GalliPro and BMD seems to produce a synergistic effect on the broiler performance.

Table 2. Results for bird performance

	Control	GalliPro	AGP	GP + AGP
Start weight,g	43.3	43.3	43.3	43.3
End weight, g	1856^a	1999^b	2045^c	2082^c
Diff. from Control	-	***7.7%***	***10.2%***	***12.2%***
Total Feed intake, g	4047	3844	4068	4120
Total weight gain, g	1813	1956	2002	2039
FCR g/g	2.232^a	1.989^b	1.965^b	1.979^b
Diff. from Control	-	***-10.9%***	***-12.0%***	***-11.3%***

^{ab}: P<0.05

Coefficient of variance is shown below in table 3. This parameter expresses how uniform the flock is.

Table 3. Coefficient of Variance

	Control	GalliPro	AGP	GP + AGP
CV (%)	12.7	1.9	3.7	3

It can be seen that the treatment with GalliPro showed an outstanding uniformity as opposed to the untreated control. This effect implies that the broiler producer will get a substantial additional economical benefit on top of the improved weight gain and feed conversion.
Table 4 shows the effect of GalliPro and BMD on litter quality. Litter quality was scored using a scale from 0 to 4 where 0 describes very dry litter and 4 extremely wet litter.

Table 4. Litter scores

	Control	BMD	GalliPro	BMD + GP
Litter score	3.20^a	2.78^{ab}	2.67^{ab}	2.11^b

^{ab}: P<0.05

The combination of GalliPro and BMD produced a significantly better litter quality compared with the untreated control group. This means that the housing condition is improved considerably when GalliPro is used.

Conclusions

Based on this trail, it can be concluded that GalliPro can be used as a substitute for BMD or in combination.
The combination of GalliPro and BMD improved furthermore the litter score significantly (P<0.05).

Chr. Hansen A/S -10-12 Bøge Allé - DK-2970 Hørsholm, Denmark - Phone: +45 45 74 74 74 - Fax: +45 45 74 88 88 - www.chr-hansen.com