

Effects of a patented activated clay on laying hens performances

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Introduction

With the increase of microbes resistance, the use of antibiotics as growth promoters is decreasing worldwide. As a consequence, there is a need for alternative products able to maintain production performances without antibiotics. In this context, a trial was conducted on laying hens to evaluate the effects of a patented activated clay (B-Safe).

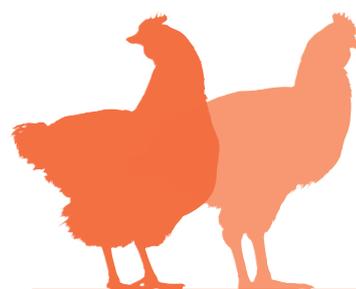
Material and methods

A – negative control	B – positive control	C – test diet
No antibiotic – no feed additive	A + 50ppm zinc bacitracin	A + B-SAFE (2kg/T)
Per group : 60 Bovans hens in collective cages		

The performances were recorded during 8 weeks, between 52 and 59 weeks of production. The following data were registered :

- number of eggs produced, average eggs weight, number of downgraded eggs
- daily feed consumption, feed conversion ratio

All data were subjected to analysis of variance procedure with diet, time and cage nested in diet as the 3 fixed factors of the model. Statistically different means were separated using Duncan's multiple range tests ($p < 0.05$).



Conclusion

In the conditions of the trial, B-Safe significantly improved layers performance in comparison with the negative control. Performances obtained on the B-Safe group were also higher than those obtained on the zinc bacitracin group. As a consequence, B-Safe can be considered as an efficient solution to improve egg production.

Results

B-Safe significantly improved laying percentage (+2.7%, $p < 0.05$), average egg weight (+1.7%, $p < 0.001$) and feed conversion ratio (-4.1%, $p < 0.001$) in comparison with the negative control. The egg mass was improved by 4.7% ($p < 0.001$).

Zinc bacitracin also improved performances in comparison with the negative control non significantly except for the average egg weight (+0.8%, $p < 0.001$) and the egg mass (+2.4%, $p < 0.001$).

No significant difference was observed on the number of downgraded eggs with any of the diets.

	LP (%)	AEW (g)	DFI (g/d)	FCR (g/g)	EM (g/d)
neg.control	84,7 b	63,2c	116,1b	2,17 b	53,5 c
pos. control	86,0 ab	63,7 b	118,2 a	2,16 b	54,8 b
B-SAFE	87,0 a	64,3 a	115,9 b	2,08 a	56,0 a
Sign. (p<)	<0,05	<0,001	<0,001	<0,001	<0,001
St. Dev.	4,68	1,22	4,72	0,13	3,02

LP% : Laying percentage, AEW : Average Egg Weight, DFI : Daily Feed Intake, FCR : Feed Conversion Ratio, EM : Egg Mass

Laying Performances relative to Negative Control (%)

