

The influence of feeding standardised humic acids to laying hens on selected performance and egg quality parameters as well as on mortality

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Introduction

Alongside management and genetics, feeding is an important factor in supporting the health and performance of laying hens. The use of natural substances has become noticeably more important. Humic acids, which belong to the insoluble fraction of humic substances, are known for their positive effects on the gastrointestinal tract of warm-blooded animals. Various studies have determined a positive influence of humic substances on the intestinal flora as well as the performance parameters of laying hens (Abo-Egla El-Sarma et al., 2011, Ergin et al., 2009, Kucukersan et al., 2005, Shermer et al., 1998). The aim of the present study is to investigate the influence of feeding humic acids of type WH67® in laying hens on selected performance and egg quality parameters as well as mortality under practical conditions.

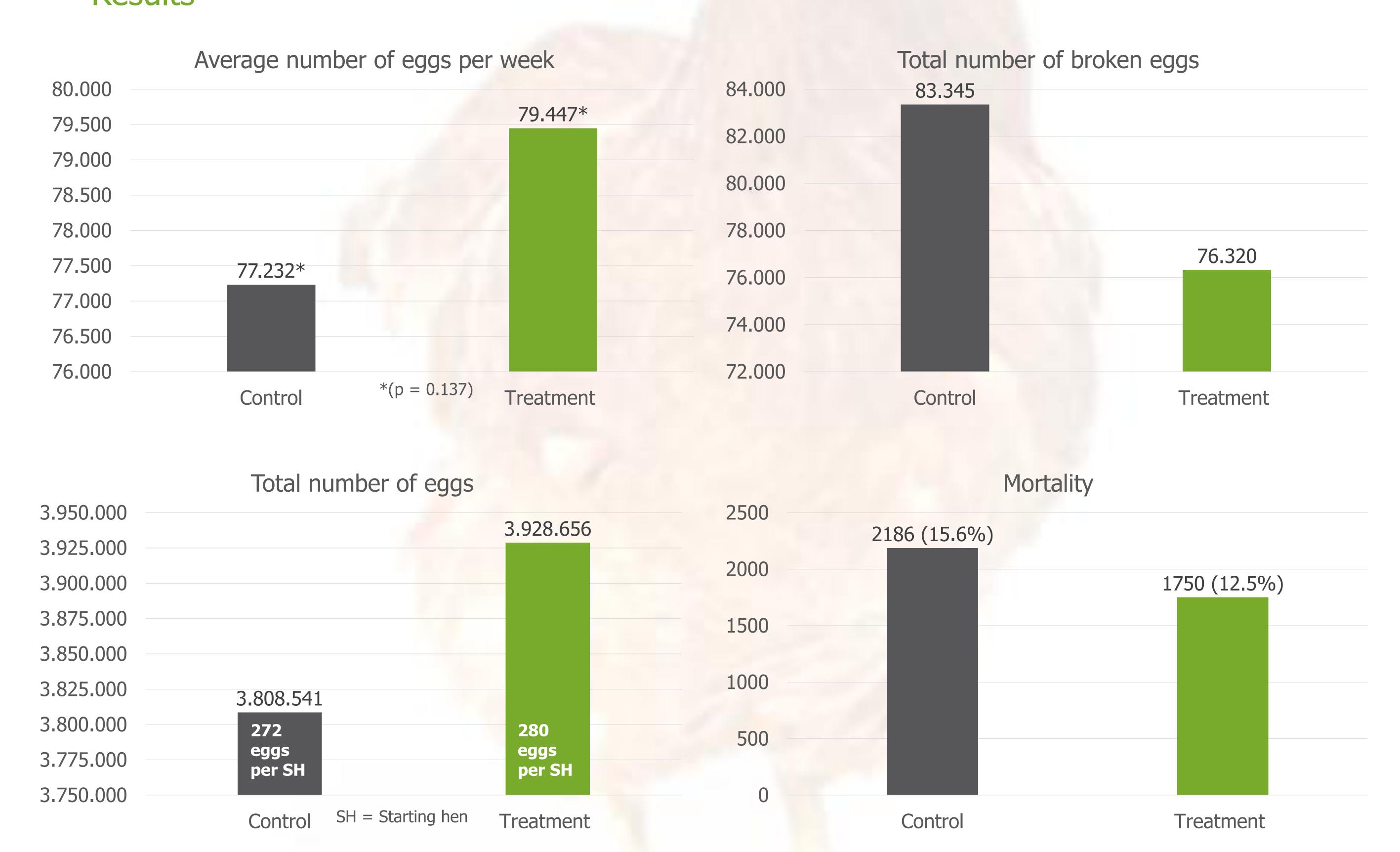
Material and methods

Humic acids of type WH67®: standardised, water-insoluble, biotic to stabilise intestinal health, 1 kg per tonne of experimental feed Experimental stable: Barn management, two identical compartments, separate feed line, 14,000 laying hens each, Lohmann Brown Classic Recorded parameters:

- Performance parameters: egg number, egg mass, individual egg weight
- Egg quality parameters: broken, dirty and bloody eggs, number of class A and B
- Mortality

Statistical analysis: SAS program, T-test for unrelated samples, data from the laying period from the 21st to the 70th week of life

Results



Conclusions

The results of the present study show that feeding type WH67® humic acids to laying hens can have positive effects on selected performance and egg quality parameters as well as on mortality. The experiment produced the following results:

- Positive influence on the ability to perform by increasing the total number of eggs
- Improvement of egg quality through reduction of broken eggs
- Reduced mortality due to considerably fewer losses in the experimental group

Literature

Abo-Egla El-Samra, H., Ismail, F. S. A., Abd El-Ghany, F. A., Assar, M. H. (2011): Effect of humic acid and bio-mos Supplementation on egg production and quality parameters in local hens. Journal of Animal and Poultry Production, Vol. 2 (4): 55 – 63. Ergin, O., Isa, C., Nuh, O., Guray, E. (2009): Effects of dietary humic substances on egg production and egg shell quality of hens after peak laying period. African Journal of Biotechnology, Vol. 8 (6), 1155 – 1159.

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