18th INTERNATIONAL SYMPOSIUM OF BIOLOGY AND ANIMAL NUTRITION









BOOK OF ABSTRACTS

September 26th 2025, INCDBNA
Balotesti, Romania

POSTER PRESENTATIONS

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Synbiotics Shield the Gut During Weaning Stress
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Effect of replacing different levels of soybean meal with alcohol industry byproducts on laying hens performances, serum biological parameters and intestinal health
Panaite Tatiana Dumitra, Cornescu Gabriela Maria, Grosu Iulian, Dumitru Mihaela, Cismileanu Ana, Toma Mariana Smaranda, Tudorica Cristina Gabriela

The effects of a mixture of oil-industry by-products on the zearalenone mycotoxin concentration in the intestinal content and liver collected from weaned piglets
Pistol Gina Cecilia, Grosu Iulian Alexandru, Bulgaru Valeria Cristina, Marin Daniela Eliza, Taranu Ionelia.

Effects of Butyrate Supplementation in Layer Chick Feeds on Egg Quality

Yusuf Konca[1*], Zehra Malkoç[2]

[1]University of Erciyes, Faculty of Agriculture, Department of Animal Science, 38039 Kayseri, Turkiye
[2]Erciyes University, Institute of Natural and Applied Sciences, Department of Agricultural Science and Technologies, 38039 Kayseri, Turkiye

*Corresponding author: yusufkonca@erciyes.edu.tr

Butyric acid, a short-chain organic acid, can be significantly incorporated into poultry diets due to its effects on improving intestinal health and the microbial structure of the digestive system and enhancing nutrient absorption in chickens. This study investigated the effects of butyric acid supplementation on egg quality in laying hens. Treatment groups: 1: Control (K, no additives), 2: 1 g butyrate/kg feed for 0-6 weeks, no additives for 7-20 weeks, 3: 2 g butyrate/kg feed for 0-6 weeks, 4: 1 g butyrate/kg feed for 0-20 weeks, 5: 1 g butyrate/kg feed for 0-6 weeks, 0.5 g butyrate/kg feed for 7-20 weeks. The birds were fed for 30 weeks. Each group was housed in laying cages with 3 hens in 5 replicates. Adding butyrate to the diets of laying hens from each group at 22, 26, and 30 weeks did not significantly affect egg weight, egg mass, or egg production. Egg shell characteristics in the butyrate-supplemented groups were similar to those in the control group. Yolk brightness (L*), redness (a*), and yellowness (b*) were not affected by butyrate supplementation. Consequently, it was concluded that butyrate supplementation is not beneficial to the diets of healthy laying hens fed nutrient-sufficient diets.

Keywords: butyric acid, egg traits, yolk color, sustainability, health

[1] This study was supported by the Scientific Research Projects Unit of Erciyes University with the project number FYL-2018-7438