

DIETARY PREBIOTIC SUPPLEMENT IN BROILERS NUTRITION AND THEIR EFFECTS ON PERFORMANCES, BLOOD PARAMETERS AND INTESTINAL HEALTH

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Abstract

A-28 days feeding trial was conducted on broiler chickens (grower and finisher stage) with the aim to evaluate the effects of dietary inulin presence on performance and intestinal microflora. The animals were housed in an experimental hall, under heat stress conditions, with controlled humidity, ventilation and light regime. The experimental diet differed from control diet by inclusion of 1% inulin. Weekly was monitored broiler body weight and daily was registered the feed intake and leftovers. At the age of 42 days, 6 broilers per group were slaughtered and blood samples were collected for hematological and biochemical determinations. Samples of caecal content were collected upon slaughtering, for bacteriological examination (*Enterobacteriaceae*, *Lactobacillus* sp., *Staphylococcus* sp.). The presence of inulin in the diets of broilers didn't influence the productive parameters. The hematological profile presented increased values of lymphocyte and heterophile concentrations in experimental group and also heterophile to lymphocytes ratio. The content of *Enterobacteriaceae* and *Lactobacillus* sp. in the cecum was positively influenced by the prebiotic dietary supplement that contributed to maintaining the balance of the intestinal microflora.

Key words: prebiotics, inulin, broiler chicken, performances, health status