INDICES OF RESPONSE OF YOUNG TURKEYS TO DIETS CONTAINING MANNAN-OLIGOSACCHARIDE OR INULIN

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Abstract. For 8 weeks, the birds were fed ad libitum with the mash feed mixtures containing 0.1% or 0.4% of two types of low-digestible carbohydrates: mannan-oligosaccharide (MOS) and long-chain polymer of fructose – inulin. All diets were without an antibiotic addition. Productivity and faecal parameters of birds were analysed. The supplementation of diets with MOS or inulin had no significant influence neither on the diet intake nor feed conversion of turkeys. In addition, in all groups comparable concentration of dry matter and faecal pH were observed. The lower dose of inulin (0.1%) decreased faecal ammonia concentration compared to the both MOS groups. Ingested supplements increased faecal activity of microbial α-glucosidase and α-galactosidase. In the experimental groups, higher concentrations of short-chain fatty acids (especially acetate) were observed compared to the control group (total SCFAs: 38.5-46.17 µmol/g vs. 20.58).

Keywords: mannan-oligosaccharide, inulin, feed utilization, faecal parameters, turkey.