Proceedings of the
10th International Symposium
Modern Trends in Livestock Production, October 2-4, 2013

EFFECT OF PROTEASE ON MEAT YIELD OF BROILERS

V. Dosković[1], S. Bogosavljević-Bošković[1], Z. Pavlovski[2], B. Milošević[3], Z. Škrbić[2], S. Rakonjac[1], V. Petričević[2]

[1]Faculty of Agronomy, University of Kragujevac, Cara Dušana 34, 32000 Čačak,
[2] Institute for Animal Husbandry, Autoput 16, P. Fah 23, 11080, Belgrade-Zemun
[3] Faculty of Agriculture, University of Priština, Kosovska Mitrovica, 38219 Lešak
Corresponding author: vladosko@kg.ac.rs
Original scientific paper

Abstract: This study reports the effect of protease and reduced crude protein content on carcass weight and dressing percentage in fast-growing Cobb 500 broilers. The length of fattening was 49 days. E-I and E-II experimental broilers were fed complete feeds containing 0.2 and 0.3% (Ronozyme Pro Act) protease supplementation and crude protein levels reduced by 4% and 6%, respectively, compared to control broilers (C). Performance traits were evaluated. At the end of the fattening trial on day 49, 10 male and 10 female birds were randomly sacrificed from each experimental group to determine body weight, conventionally dressed, ready-to-roast and ready-to-grill carcass weights, and abdominal fat weight. The results suggest no significant effect of dietary treatments on carcass weight, dressing percentage, weight and abdominal fat content. Significant differences were observed in carcass weight and carcass yield between female and male broilers, whereas broiler sex had no significant effect on abdominal fat percentage.

Keywords: broilers, protease, dressing percentage.

Introduction

Modern chicken meat production involves the use of fast-growing strains and diet formulations that allow them to express their maximum genetic potential. Major characteristics of modern broiler strains include fast growth rates, high breast and leg muscle weight, and relative inactivity or poor mobility *(Gous and Cherry, 2004)*. However, to boost profitability, the broiler industry is steadily pushing broilers beyond their optimum biological limits through reduced fattening periods, increased final body weights, changes in body conformation, higher breast percentage; the use of feed additives in broiler diets and the administration of different products for disease prevention and control.