Maria Osek, Anna Milczarek, Barbara Klocek

The influence of naked oat and enzymatic preparation on rearing results, slaughter value and meat quality of broiler chickens

Summary

The aim of this study was to estimate effect of suplementing naked oat and enzymatic preparation into mixtures for broiler chickens on rearing results, slaughter value and meat quality. The experiment was conducted on 192 broiler chickens divided into 6 equal groups. The birds were raised until the age of 42 days. The chickens were fed Starter mixtures (12.1 MJ ME/206 g of crude protein) during the first 21 days of life, and then Grower mixtures (12.3 MJ ME/192 g of crude protein) were used for the next 3 weeks. Both in the control mixtures (C-1, C-2, C-3) and in experimental ones (E-1, E-2, E-3) three different levels of naked oat (20, 30, 40% – Starter; 30, 40, 45% – Grower) were used. The oat was a substitutional product of maize, but the experimental mixtures were also supplemented with an enzymatic preparation (0.6 g·kg^{-1}), which contained β-glucanase, hemicellulase and pectinase. It was found that the share of naked oat in mixtures did not influence productive results of broiler chickens and majority of postslaughter results and meat quality. Addition of enzymatic preparation to the same mixtures improved significantly (above 5%) rearing results. Besides, no adverse effect of enzymatic supplement was found on the results of postslaughter analysis, chemical composition and meat flavour. Thus, it is possible to recommend 40/45% of naked oat as a maize substitute in mixtures for broiler chickens.