

THE INFLUENCE OF MIXTURE OF PROBIOTICS AND FITOBIOTICS ON MEAT CHARACTERISTICS AND QUALITY IN PIGS

Vigilijus Jukna, Almantas Šimkus

Lithuanian Veterinary Academy, Tilžės 18, LT-47181, Kaunas, Lithuania.

Tel +370 37 363414; e-mail: vjukna@lva.lt; almantas@lva.lt.

Summary. The present study was designed to investigate the influence of mixture of probiotics based on *Lactobacillus casei/paracasei*, *Lactobacillus brevis*, *Lactobacillus plantarum*, *Saccharomyces cerevisiae* with 5% of fitobiotics *Yucca Schidigera* on meat characteristics and quality in pigs. Twenty Landrace/Pietrain 45 days old cross-breed hogs were randomly divided into two groups – experimental and control, each of 10 pigs. Two diet were formulated: control - based on a mixture of barley (40%) and wheat (60%) with bean powder (5:1), and experimental – same diet with added 2g/kg a mixture of probiotics and fitobiotics. At week 16, all pigs were necropsied and their carcass and meat quality were estimated. The results from this study indicate that mixture of probiotics and fitobiotics had positive influence on daily weight gains which in experimental animals increased on 3.8- 17.7 % compared to controls. Further, in experimental animals carcass yield increased on 0.6% and carcass weight on 5.9% compared to control group. The results showed that between the pigs in both groups there were no differences in meat chemical composition and physical characteristics.

Key words: probiotics, pigs, carcass, meat chemical composition, meat physical characteristics, meat quality.