

THE EFFECTS OF FEEDING RAPESEED CAKE ON THE FERMENTATION OF NITROGENOUS MATTER AND CARBOHYDRATES IN THE RUMEN OF COWS AND THEIR PRODUCTIVITY

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Summary. Cold pressure rapeseed cake produced after processing rapeseed into biofuel was analysed for its chemical composition and energy value. In 2006, at the LVA Institute of Animal Science a feeding trial was carried out with Lithuanian Black-and-White cows to determine the effects of compound feed containing rapeseed cake on the rumen fermentation of nitrogenous matter and carbohydrates and milk production. The analysis of the cold pressure rapeseed cake indicated that it contained 356 g crude protein, 76.6 g crude fat and 7.74 MJ NEL per kg dry matter. The study indicated that the replacement of rapeseed oil-meal with rapeseed cake (24 % compound feed weight) did not change the ruminal microflora activity or the biochemical processes in the rumen. The energy value of the compound feed containing rapeseed cake was 0.29 NEL MJ/kg higher due to higher fat content in it, and, therefore, the lactation of cows fed this diet was more stable.

Keywords: rapeseed cake, milking cows, rumen fermentation, productivity.