

BACKFAT QUALITY AND FATTY-ACID PROFILE OF PIG MEAT WHEN USED IN THEIR RATIONS GM-SOY

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The aim of our researches was to investigate the prolonged influence of the identified lines of extruded GM-soya in composition the rations of feeding of pigs on the physical and chemical indexes of quality back-fat and fat-acid composition of meat.

The effect of full-length extruded genetically modified soybean (RR, GTS 40.3.2) on the physicochemical characteristics of spike quality and fatty acid composition of pig meat of young pigs was investigated.

It was found that the fat of pigs receiving GM-soya contained 15.38 % more of the total moisture, the refractive index was higher (1.4585 vs. 1.4573), while the melting point was, by contrast, less than 1.37 °C. These data confirm the change in fatty acid composition of pig meat.

Therefore, for the use of GM soya in pigs, the content of saturated fatty acids decreases by 1.66% and the unsaturated soils increase accordingly. The ratio between unsaturated and saturated fatty acids has changed, namely, it has increased by 7.09%, decreased by 15.05 % between linoleic and linolenic acids, and doubled between linoleic and oleinic.

There is also an increase in the ratio between oleic and stearic acids from 4.936 to 5.760, indicating that they accelerate their lipogenesis process. Thus, according to the obtained results, insignificant influence of GM-soya on lipid metabolism in pigs was revealed.

Keywords: GMO, GM-SOYA, SWINE, BACK-FAT, MEAT, FAT-ACID, RATION.