

Effects of biodiesel production by-products on lamb fattening performance and meat quality

Summary

The article presents the results of a study on the effects of the use of the most readily available by-products of biodiesel (rapeseed and sunflower seed cake) in intensive fattening of lambs to high weight standards. The fattening performance and carcass value of the lambs was analysed, including its health benefits. The results indicate that the use of both types of seed cake and linseed (23.5% and 5%, respectively, in the concentrate mixture) in intensive fattening of lambs to a body weight of 35 kg yields beneficial effects in terms of fattening and carcass value, with an increase in carcass fatness. The use of both types of seed cake and linseed beneficially modified the quality of the lamb meat in terms of health benefits, in particular by increasing the content of polyunsaturated fatty acids (PUFA), including CLA. Supplementation of compound feed containing the analysed oilseed components with vitamin E did not significantly affect the fattening performance or carcass value of the lambs, while there was a trend of reduced fat content in the meat, improved oxidative stability of the fat, and a two-fold increase in vitamin E content in both the raw and cooked meat.

KEY WORDS: lamb fattening, rapeseed and sunflower seed cake, carcass value, meat quality