

THE EFFECT OF REPLACING FISH MEAL WITH HERBAL PROTEIN IN THE LAMB DIET

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The paper presents the effects of replacing fish meal with vegetable protein on the intensity of the growth and feed utilization of lambs of the MIS population, in intensive fattening. The trial was carried out on 40 lambs, age of 30 days, divided into 2 groups. Animals were fed a concentrated mixture and lucerne hay at will, in addition to mothers' milk. The effect of using isoprotein feed mixtures, which differed in terms of the protein component, on the production parameters of the lambs in fattening, was examined. The lambs on the treatment I received fish meal as a source of protein, while the animals on treatment II consumed Eko fish meal - herbal substitute for fish meal, consisting of domestic feeds of known origin such as genetically unmodified and thermally processed meal of peeled soybean grains, isolate of soy protein, gluten, livestock yeast with the addition of minerals, amino acids, vitamins, enzymes and other additives.

Statistical processing of the obtained data was carried out using the SPSS Statistica program, Version 20. The average daily gain of lambs on treatments I and II was 0.320 and 0.283 kg, respectively. Consumption of dry matter, protein and energy in analogue treatments was 0.819: 0.823 kg; 152.62: 157.04 g and 5.65: 5.73 MJ, respectively. The conversion of dry matter (kg/kg of gain) was 2.56: 2.91; of total proteins 476.9: 554.9g and energy (MJ NEM/kg) 17.65: 20.25, respectively. The efficiency of protein utilization - PER (g of gain/g of consumed protein) in the above treatments was: 2.09 and 1.80, respectively. There were no statistically significant differences between the examined treatments ($P>0.05$).

Since the source of protein did not significantly affect the intensity of growth and the food utilization in lambs of Mis population in intensive fattening ($P>0.05$), fish meal can be replaced by Eko fish meal - plant protein, since according to Commission Decision 9/2001 on protection BCE (OJEC, 2001), there is a distance to the use of fish meal, as a source of protein.