

PHYSIOLOGICAL AND ECOLOGICAL ASPECTS OF USE OF THE ANTI-OXIDANT SUPPLEMENTS IN STORE-CATTLE FEEDING

Edmundas Paulauskas¹, Jurgis Kulpys², Rolandas Stankevičius², Vita Švedaitė²

¹ Lietuvos ž. ū. konsultavimo tarnyba, LT-5150 Joniškis; tel. (8-426) 54 301

² Lietuvos veterinarijos akademija, Tilžės g. 18, LT-47181 Kaunas; tel. (8-37) 36 34 08;

el. paštas: rolandas@lva.lt

Summary. The influence of supplementation of seed-oil “Karotinas“ and mixture of microelements with selenium (Se) in feed on growth and meat quality of Aubrak breed beef-cattle was investigated experimentally.

The experiment comprised of 18 Aubrak breed beef-cattle — 2 groups (experimental and control) of 9 animals in each. Animals of both groups were kept at the same conditions (tied in the cattle-pen). The average live weight of animals at the start of experiment was 384-396 kg, and during the experiment the average weight increased gradually at slaughter reaching weights of 529-556 kg. In summer season the animals of both groups were fed with grass *ad libitum*; in autumn animals were swithed to silage of perennial grass with added minerals and vitamins. In addition, diet of experimental group was supplemented with additional 100-150 g/d of seed-oil and 50 g/d of premix Se, respectively. The average weight in animals of experimental group was on 39 kg higher (12%) compared to the animals in control group ($P<0.05$). It was estimated that carcass of animals in experimental group was on 2.8% heavier compared to that in control group. Biochemical analysis of meat have shown that meat in experimental group had on 1.9 % higher albumin content, on 0.9% higher level of connective tissue, on 22 % lower amount of fat, and on 0.4% lower amount of collagen compared to the animals in control group, respectively.

Keywords: beef-cattle, seed-oil, Se, meat parameters.