## IMPORTANCE OF BALANCED FEEDING IN THE BREEDING OF YOUNG SHEEP

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**Summary.** The aim of the study was to determine the impact of a balanced diet upon the growth and quality of ewes after 365 days. The research was carried out on the farm "Mežkalēji" in Latvia, using 46 ewes of different origin, born in the year 2002 from the Latvian dark headed sheep breed. During the study period the sheep of the control group received a standard feed produced on the farm supplemented with mineral feed additives (BF). Sheep in the trial group received basically the same feed, but common barley was replaced with the same amount of hull-less barley L-302. During the study we carried out the following: testing for main feed nutrients and optimization of feed ration, registration and analysis of the changes in live weight, evaluation of one-year old female sheep, registering the length of the wool, clip and fineness.

The number of ewes at birth was negatively correlated with birth weight (-0.588), weight gain per 24 hours in the suckling period (-0.581) and live weight at weaning (-0.391).

Our results suggest that hull-less barley may be used as protein feed for sheep and other ruminants. Balanced feeding significantly increased weight gain per 24 hours in the experimental group (+45 g, p <0.01) as well as live weight in the end of the study period (+3.2 kg, p<0.05). The composition of the feed ration did not affect wool clip and wool quality. However, the analysis of the feature coherence indicated that the live weight of ewes essentially affected their wool clip. In evaluating, live weight and clip are features, which are taken into account, and they affect the complex evaluation of the ewes.

Keywords: ewe, sheep nutrition, hull-less barley, liveweight gain, wool.