

EVALUATION OF THE BODY WEIGHT GAIN AND FEED CONSUMPTION OF DORPER LAMBS WITH DIFFERENT AGES – PARTIAL RESULTS OF FEED EFFICIENCY TESTS

Mayara Isaias Vargas^{*1}; Natana Mendes Marques¹; Heloísa Gonçalves Pinto¹; Silas Oliveira Cavalcante¹; Rafael Franco Bernardi¹; Nathalya Sanchez¹; Ricardo Lopes Dias da Costa¹

¹Instituto de Zootecnia/APTA/SAA/SP, Nova Odessa, SP, Brazil. *Corresponding author: mah.i.vargas@gmail.com

Abstract

Feed efficiency tests of sheep are important tools to select the best rams and ewes, and should be a prerequisite in breeding programs. However, there are uncertainties about the influence of lamb age amplitude at entrance in efficiency tests. This experiment focused on evaluating whether the initial age in the test, with a difference of 72 days of age between the lambs, can influence the parameters of feed consumption (CONS) and mean daily weight gain (DWG). The study was conducted at the Sheep Unit of the Instituto de Zootecnia de Nova Odessa, SP. Twenty-six uncastrated male Dorper lambs, with ages and initial weights of 123 ± 16.30 days and 27.81 ± 4.20 kg, respectively, were used. After 15 days of adaptation to the feed and environment, the lambs remained for 45 days in collective confinement, with total diet ad libitum, being offered in nine automatic feeder stations monitored by the Intergado® recording system. The animals were divided according to the entrance age in the test, being separated into three age groups (AG), as a function of the mean ± 0.5*standard deviation. The numbers of animals in the AGs were 9, 8 and 9, respectively, for AG1 (84 to 114 days), AG2 (120 to 126 days) and AG3 (133 to 156 days). According to the AG, the means of the characteristics CONS and DWG were submitted to the Tukey test at 5% probability, using the SAS program. Average consumption did not differ (p>0.05) between AG1(1.02 ± 0.170 kg), AG2 $(1.24 \pm 0.252 \text{ kg})$ and AG3 $(1.22 \pm 0.317 \text{ kg})$. Likewise, the averages of DWG were not different from each other (AG1= 0.277 ± 0.088 kg; AG2= 0.343 ± 0.072 kg; AG3= 0.348 ± 0.052 kg). We concluded that the difference of 72 days of age for entry of lambs in the feed efficiency test is adequate, not interfering with food consumption and daily weight gain of the animals, under the experimental conditions evaluated.

Keywords

Performance, productive efficiency, sheep farming, small ruminants.

Acknowledgments

CAPES for scholarship 001, CNPq for scholarship and FAPESP for research grants (2022/08072-0 and 2022/03966-2).