PERFORMANCE OF FINISHING LAMBS FED CORN SILAGE STORED UNDER DIFFERENT COVERING METHODS

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Silo sealing is one of the most important steps of silage production, since the presence of O$_2$ triggers the proliferation of undesirable microorganisms, which lead to qualitative and quantitative silage losses. This study aimed to evaluate the effect of three covering methods of corn silage stored in bunker silo on the performance of sheep finished in confinement. Treatments consisted of: sealing with a 200-µm black polyethylene film (PE); sealing with a 200-µm black polyethylene film covered with a ten cm layer of sugarcane bagasse (PE+Bag); and sealing with an 45-µm oxygen barrier film (Silostop® Orange) covered with a 200-µm black polyethylene film. Silages were stored for 200 d. Eighteen lambs, twelve males and six females, crossbred Dorper x Santa Inês, average body weight of 21.5 kg were assigned to a randomized block design (six blocks per treatment, based on sex and BW). The animals were fed twice a day during 63 d, with a diet with a forage: concentrate ratio of 40:60. The forage source consisting of corn silages from the three treatments. The concentrate contained reconstituted corn and whole soybean grain silage and mineral premix. Dry matter intake (DMI) was recorded daily, whereas, average daily gain (ADG), feed efficiency (FE) and carcass traits were determined at slaughter. Data were analyzed using the GLM procedure of SAS. Means were compared by Tukey’s test at 5% of significance. There was no effect of treatment on DMI, final BW, ADG, feed efficiency, hot carcass yield and cold carcass yield (P>0.05), whose mean values were 1.218 kg/d, 35.72 kg, 0.252 kg/d, 0.206, 49.22% and 48.61%, respectively. Underlying the black PE film with the oxygen barrier film or covering the black PE film with sugarcane bagasse did not alter the silage quality to the point of improving the performance of finishing lambs.

Keywords: forage conservation, plastic film, sealing