

Comparison of palatability by goat fed on domestic alfalfa processed by different conditions ⁽¹⁾

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Abstract

The purpose of this study was to evaluate the applicability of medium-size film binding bale wrapper for domestic alfalfa and the effects of processing conditions on the preference of goats. There were three batches of preference tests in this study. The preference tests were conducted by four female Kenting goats in individual pen to compare the four alfalfa forages. In the first experiment, four process conditions confined were compared: control-am (wrapped immediately after harvest in the morning, with no inoculant), inoculation-am (wrapped immediately after harvest in the morning, with inoculant), control-pm (wrapped after wilting in the afternoon, with no inoculant), inoculation-pm (wrapped after wilting in the afternoon, with inoculant). The haylage bales (with diameter 90 cm × height 90 cm) were ensiled in room temperature for two months. The results showed that the fermentation quality of haylage wrapped in the morning were poor with or without inoculation. The responses of preference test were consistent with fermentation quality of alfalfa haylage. In the second experiment, four materials for comparison were alfalfa haylage-inoculation-pm, haylage-inoculation-am, dried haylage-inoculation-pm and dried haylage-inoculation-am. The results showed that the palatability of haylage were better than dried haylage. Two pet's grade domestic alfalfa hays: fresh prepared and stored were compared with two alfalfa haylages: inoculation-pm treated domestic alfalfa and imported alfalfa haylage in the third experiment. The dry matter intake of fresh prepared pet's hay was higher than it of imported haylage on feeding 3 hours and there was no difference on both bouts and dry matter intakes among these four treatments before feeding 3 hours. The results showed that medium-size film binding bale wrapper was applicable for domestic alfalfa preparation and the moisture content of alfalfa was a key factor for determining the ensiling quality.

Key words: Alfalfa, Ensiling, Palatability.

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