COMPOSITION AND EFFECT OF FEEDING DATE BY PRODUCTS ON EWES AND LAMB PERFORMANCES

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Introduction

In recent years, the price of raw materials for concentrate feeds increased dramatically. In Tunisia, production of dates is an important economic activity, with higher production in the south (Tozeur, Médenine) than in the central plateau. In consequence, a consequence of the decrease of hay intake (0.24 kg/d) and leaves of date by products (DB) by ewes in the station of Degueche situated in the western South of Tunisia. The aim of this study is to evaluate the nutritive value and the valuation of different varieties of date by products (DB) by ewes and lambs.

Material and methods

Two experiments were conducted on D’Man ewes. In the station of Degueche situated in the western South of Tunisia. A total of 11 DB varieties were selected in the study. In Exp. 1, DB mixture composition was intermediate (3.04% CP, 15.24% NDF, 11.05% ADF) and lambs ADG between 10 and 45 d, did not vary with a 5% net energy difference (1.92 vs. 2.02 Mcal NEL/kg DM, P=0.071).

Results

Composition of DB changed according to variety, being the ranges: CP (1.99 to 4.50%), NDF (10.52 to 26.05%) and ADF (7.15 to 21.96%). Whole DB have higher contents than seedless DB: CP (3.24 vs. 2.88%), NDF (18.11 vs. 13.93%), ADF (13.01 vs. 9.77%) and ADL (5.99 vs. 5.63%), with a 5% net energy difference (1.92 vs. 2.02 Mcal NEL/kg DM, P=0.071).

In Exp. 1, DB mixture composition was intermediate (3.04% CP, 15.24% NDF, 11.05% ADF) and lambs ADG between 10 and 45 d, did not vary according to feeding treatment (C, 113 + 22; DB, 128 + 13 g/d; P>0.05).

In Exp. 2, ewes feed intake decreased as rate of concentrate substitution by DB increased. Total daily intake decreased from 1.64 to 1.31 kg (as fed) from the beginning to the end of the experiment, as a consequence of the decrease of hay intake (0.24 kg/d) and refuse of DB seeds (0.093 kg/d).

Conclusion

In conclusion, DB can substitute concentrate at a minimum rate of 25% in sheep diets, although fill value increases with DB incorporation. New experiments are needed to determine the optimum and maximum levels of incorporation.

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