

EFFECT OF DIFFERENT LEVELS OF RICE STRAW TREATED BY YEAST (*SACCHAROMYCES CEREVISIA*) ON DIGESTIBILITY OF FATTENING LAMBS

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INTRODUCTION

Rice straw is one of the most important by products of the rice fields. Different methods were suggested to increase the palatability, digestibility and nutritive values of straws. Conventional biological methods can be used to enrich urea enrichment straw with different yeast species noted (Abdel Rahman et al, 2012). The aim of this study was to investigate the effects of different methods of treatment of rice straw on digestibility of *Afshari* fattening lambs .

MATERIALS AND METHODS

In this study, 40 *Afshari* lambs (Initial Body weight 20-25, 2-3 months age) were randomly assigned to one of four different treatments. Treatments consists of rice straw (control), rice straw treated with 4 % urea, treated rice straw with 4 % urea and 10 % molasses with or without yeast *Saccharomyces cerevisiae* (yeast levels 0 and 1 %, respectively) and fed for 8 weeks. To measure Organic Matter (OM), protein and Neutral Detergent Fiber (NDF) digestibility, the feces of the lambs were collected on final four days of the experiment, twice daily just two hours after morning and the afternoon meal. Acid-Insoluble Ash (AIA) was used as a marker to evaluating the digestibility. Because the weight of the lambs was likely to be different in this experiment, initial weights of lambs considered as covariate in the model. Means of the value were compared by using LSM method SAS (2008) package. means were compared using LSM .

RESULTS AND DISCUSSION

Various methods of processing of rice straw used in this study shown an increment in the digestibility of NDF and protein compare to the control group. Increment of the protein and NDF digestibility could be attributed to the effects of yeasts on rumen pH stability. In the stable condition of rumen, the number and activity of cellulolytic bacteria can be increased (Ghorbani et al, 2002). Also urea treatment can weaken the linkages between lignin, cellulose and hemicellulose in the plant cell walls. which increases the degradation of straw treated by urea and finally the digestibility of NDF (Reddy et al, 2003). Different ways of enriching in this study had no effect on the digestibility of Dry Matter (DM) and or Organic Matter (OM).

Keywords: yeast *Saccharomyces cerevisiae*, digestibility, neutral detergent fiber insoluble

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