

Raise the nutritional value of roughage using mixed fodder and fungi and their impact on the performance of awassi lambs and some carcass characteristics

By

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Abstract

This study was conducted at the farm of animal resources department College of Agriculture_ University of Tikrit. To study the effect of adding premix and straw treated with fungi at production performance , some blood parameters and carcass characteristics of awassi lambs , Two experiments were carried , first experiment started from 1/4/2011 to 1/7/2011, Twenty five awassi lambs aged 3-4 months were used with average body Weight 21.88 ± 0.433 Kg were divided randomly to five treatments ; T1 fed 2% from body weight barley + untreated straw(1st control) , T2 fed 2% from body weight barley + untreated straw + 10% from straw weight premix (2nd control) , T3 fed 2% from body weight barley + straw treated with *A.niger* + 10% from straw weight premix , T4 fed 2% from body weight barley + straw treated with *T.harzianum* + 10% from straw weight premix , T5 fed 2% from body weight barley + straw treatment with *A.niger* and *T.harizanyum* + 10% from straw weight premix . fifteen lambs were slaughtered to determined dressing percentage , rib –eye muscle area , fat layer thickness after choosing rack piece to made physical and chemical analysis of meat . Digestion experiment were carried to determine moisture , dry matter , organic matter ,ash , crude protein , crude fiber , ether extraction . rumen liquor withdrawal to determine PH of rumen . results showed that ;

1-Addition of premix significantly ($P<0.05$) increased on final weight, total gain, average daily gain, feed to gain ratio and digestibility of nutrients, also at hot and cold carcass weight, rib eye muscle area, fat layer thickness and protein percentage of meat.

2-Non significant results between treatment with PH value for rumen liquor instead of decreasing of PH value forwards at withdrawal of liquor.

3-Non significant results of some blood parameters glucose, triglycerides, urea and creatinine.

Second experiment were started from 20/4/2012 to 1/7/2012, Twelve lambs aged 3-4 months with average body Weight 19.3 ± 0.522 kg were used divided randomly to 3 treatments; T1 fed 2% from body weight barley + untreated straw, T2 fed 2% from body weight barley + untreated straw + 10% from straw weight premix, T3 fed 2% from body weight barley + straw untreated with *P.ostreatus* + 10% from straw weight premix. production performance were determined and carcass characteristics, results showed that:

1.No significant differences between treatments at final weight, total gain, average daily gain, feed intake and feed to gain ratio.

2.straw treating with fungi lead to significant decrease at straw consumption.

3. significant improvement with using straw treated with fungi in Rack meat percentage and non significant results at carcass parameters, hot and cold carcass weight, rib eye muscle area, fat layer thickness and protein percentage of meat for another treatments.