

Dedication

To My dear and Kind parents

Wife Budrea

Daughter's khadija – Alla and Safaa

Brothers – Sisters and Colleagues

Acknowledgement

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Abstract

The aim of the study was to test the effect of feeding ruminants chemically and physically treated groundnut cake (Gn C) on their feedlot performance, carcass characteristics, some blood metabolites and rumen environment. The chemical treatment of GnC was done by soaking it in 0.5N NaOH for 15 minutes, then dried either by air (T1) or oven at 100c (T2);the physical treatment by heating at 100c for 15 minutes. Four isocaloric and isonitrogenous rations were formulated with a sole protein source one of the following: untreated GnC (control), T1, T2 or T3.

Thirty two Hummry lambs with an average body weight of 35 Kg were divided randomly into 4 groups and were allotted randomly to one of the 4 rations. The feeding trial lasted for 6 Weeks. The feed lot performance was calculated from the records of the daily feed intake and weekly body weights. At the end of the trial two animals from each group were slaughtered and their carcass characteristics were determined. Blood samples were taken weekly to determine the serum level of triglycerides, cholesterol and total proteins. Rumen environment parameters were studied in 4 cannulated calves. The control group showed the highest weight gain, lowest feed intake and feed conversion ratio , but did not vary significantly from the treatment groups ,also no significant differences were obtained among the animals fed the different treatments rations. The different treatments did not influence the carcass characteristics viz dressing and shrinkage percentage, weight of: whole sale cuts, internal and external organs and water holding capacity. Similar serum concentration values of cholesterol, triglycerides and total protein were found in all the experimental animals. The rumen concentration of volatile fatty acids and ammonia did not show significant differences either between the control group or among the treatments groups. Alkali or heat treatment of ground nut cake at this work level has not added advantages on all the studied parameters.

خلاصة البحث

كان الهدف من هذه التوبة موفقة أثر بعض التغوات عن اليو تين الغذائي على أداء الحوان عند التسمينو كذلك على الكائنات الدقيقة في الكرش ووجه حوضة الكرشو بعض مونات السوم.

تم اختيار عدد 32 رأس من الضأن الحوري عشوائياً ووضعها في عدد 4 المجموعات علفية كل مجموعة يتغذى عن فوع من العلائق.

تم تجهيز هذه العلائق على النحو التالي 20% أمبار فول و 30% مولااص و 30% قشوة فول و 19% ردة و 1% ملح طعام. على أن تتم معالجة أمبار الفول بثلاث طرق الألى إضافة (NaOH) هيدروكسيد الصوديوم بالإغواق لمدة 15 دقيقة والتجفيف بالتسخين في الفون لمدة 24 ساعة والثاني بضوء الشمس العادي والطريقة الثالثة بإضافة الماء لامبار الفول والتجفيف بالتسخين في الفون لمدة 24 ساعة يتم تقديم هذه العلائق للحوانات بعد فترة 10 أيام تم أخذ المعطومات مثلوزن كمية العلف المستهلك و مياؤ كذلكوزن كل رأس اسوعياً لحساب نسبة التول الغذائي لكل حوان بعد فترة 6 اسابيع من بداية الحساب وكذلك تم أخذ عينات من الدم لحساب الكليستول واليو تين والتايجلسوايد تم اختيار عدد اثنين رأس من كل مجموعة للذبيح بعد تحديد لوزن لكل رأس وحسابوزن الاجزاء الخلجية والداخلية ولوزن البواد للذبيحتو لتحديد نسبة الجفافو نسبة التصافي. و لحساب محتويات الكرشو ووجه الحوضة تم اختيار عدد ثلاثة عول و عمل فتحة جانبية بالكرش لسحب كمية من محتويات الكرش لحساب عدد اليوفترواو ووجه الحوضة الـ PH و كمية الامونيا و الأحماض الدهنية الطيلوتو ذلك خلال الفترات لثمنية التالية : 3 ، 6 ، 9 ، 12، ساعة بعد تناول الطعام.

بعد تجميع هذه النتائج تحليلها احصائياً اتضح أن التغير الذي تم في العليقة لم يؤثر على أداء الحوانات حسب ما كان متوقعاً مما يدل على أن تركيز (NaOH) لم تكن كافية لاجداث التغير المتوقع كذلك الفترة لثمنية لاغواق الأمبار في محول (NaOH).