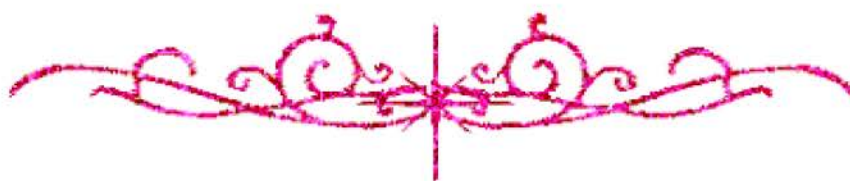


سامية محمد مصطفى



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



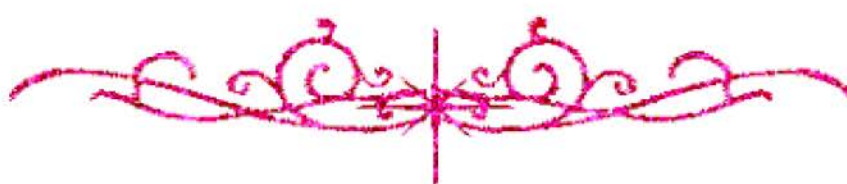
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شبكة المعلومات الجامعية



شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



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شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

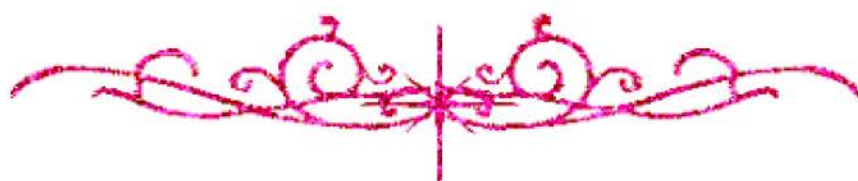
قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



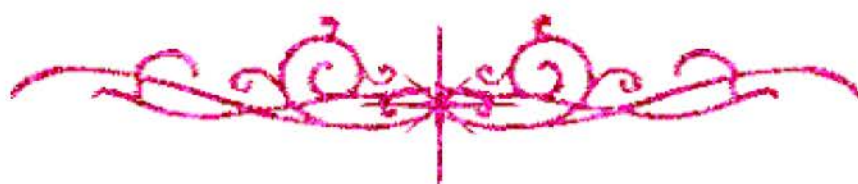
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بعض الوثائق الأصلية تالفة



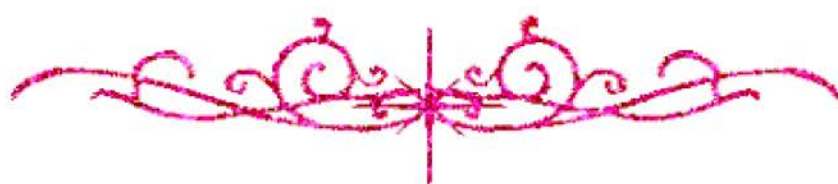
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بالرسالة صفحات لم ترد بالأصل



REPRODUCTIVE PERFORMANCES
IN SHEEP UNDER THE EFFECT OF
DIFFERENT FEEDING SYSTEMS

A Thesis

Presented by

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(B. V.Sc. 1987)

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List of ABBREVIATIONS

CF	Crude Fiber
CP	Crude Protein
DCP	Digestible Crude Protein
DM	Dry Matter
OM	Organic Matter
EE	Ether Extract
NFE	Nitrogen Free Extract
SV	Starch Value
IVOMD	in vitro Organic Matter Digestibility
K Cal	Kilo Calory
MP	Milk Production
DMY	Daily milk Yield
ABS	Ammoniated bean Straw
DMI	Dry Matter intake
TDN	Total Digestible nutrients
N	Nitrogen
NB	Nitrogen Balance
NI	Nitrogen intake
NA	Nitrogen absorbed
TDNI	Total digestible Nutrient intake
DCPI	Digestible Crude Protein intake
FCM	Fat corrected milk
VS	Vaginal Swelling
WT	Waggles of Tail
MD	Mucon discharge
CFM	Concentrate feed mixture
NPN	Non Protein nitrogen
P4	Progesterone

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INTRODUCTION

INTRODUCTION

Sheep are one of the first domesticated mammals. The early domestication of sheep made them closely associated with man. **Shelton, (1995)** has drawn the attention to sheep potentiality for a growing world population. As a matter of fact, sheep production efficiency depends mainly on their reproductive performance. Thus, the low lambing rate per ewe would be the limiting factor of energetic efficiency of sheep productivity. Within the last three decades, sheep had become one of the preferred animals for research towards understanding and achieving more details on physiological and endocrinological mechanisms of other mammals, by which they may turn off or on their reproductive systems (**Deveson et al., 1992 and Karsh, 1995**).

Moreover, many areas of interest in human fetal physiology had been developed using the ewe as an experimental animal. To improve the reproductive efficiency and consequently productivity, efforts would be paid in several direction to accomodate the optimal managerial requirements for our local sheep breeds specially nutrition.

By year 2010 there will be 50% increase in human population (**Carter , 1974**) and they will need more than 50% more food. As the population more dense, food situation becomes more acute and man and animals will compete for more feed grains.

Beef cattle will have to depend more on products that humans cannot digest or will not eat, such as crop residues that would otherwise be wasted.

In Egypt, there are about 23 million tons of plant by-products rice straw, wheat straw, corn stalks, stovers and cobs, cotton stalks, rice hulls and suger-cane bagasse (**Hathout, 1984**).

The nutrient requirements of animal population in Egypt were calculated to be 9.933 million tons of TDN and 0.927 million tons of DCP. Requirements for poultry were estimated to be 2.927 million tons of TDN and 0.440 million tons of DCP. Thus the total requirements were 12.860 million tons of TDN and 1.367 million tons of DCP per year as estimated in 1982, **Abou-Akkada (1984)**.

Disadvantages of using lignocellulosic materials to feed animals can be summarized as follows : low digestibility, low protein content and low feed intake. The digestibility is low because they consist mainly of cellulose (30-40%), hemicellulose (25-35%) and lignin (10-15%) on dry matter basis (**Theander and Aman , 1984**). Cellulose especially and also hemicellulose can easily be attacked and digested by rumen microorganisms where as, lignin, generally speaking, is indigestible because lignin decomposing microbes are aerobic, (**Hungate, 1975, Prins and Charke, 1979**). The low digestibility of straws is due to the fact that lignin is present as a bonding agent in the inter-cellular layer.

This contributes to the mechanical strength of the plant, and generates a composite structure of out standing resistance to microbial attack. Furthermore, part of the cellulose or hemicellulose is surrounded by a lignified tissue (**Chesson and Ørskov, 1984**).

The way to increase digestibility is to destroy the linkage between hemicellulose, cellulose and lignin or to destroy the compact nature of the tissue , so that lignified tissue is separated from non-lignified one. There has been attempts to do so by mechanical biological and physical

treatments (Baker et al., 1975; Han , 1978 ; Jackson, 1978 and Kaufmann et al., 1978) .

Beanstraw may contribute in furnishing a source of dry roughage in summer feeding. The bean straw are generally characterized by their high crude fiber and low nitrogen contents. supplementation with molasses and NPN source might raise its feeding value and palatibility to the extent that it could replace, even partly, the summer forage or good quality hay for diary animals in Egypt.

The present study was conducted to investigate the effect of some different treatments of animal diets, namely molasses, molasses blocks, and ammoniated straw through urea (4%) on the productive and reproductive traits of ewes.