### SUDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY COLLEGE OF GRADUATE STUDIES

# SYNCHRONIZATION ON SOME REPRODUCTIVE TRAITS OF SUDANESE DESERT EWES

تأثير استخدام الدفع الغذائي وتزامن دورات الشبق على بعض الصفات التناسلية للنعاج الصحراوية السودانية

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#### **Dedication.**

In the memory of my mother .

To my father Omer Ahmed.

To my brother Abdulla and Ahmed.

To my sisters Hajer, Mona, Summia and Ammal.

To my wife Safaa and my son.

I dedicate this issue.

The auther

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This study was carried out at River Nile State, in a well constructed Jordanian sheep raising scheme, during period extended from November 2006 to April 2007, to study the effect of synchronization and flushing, on some reproductive traits of Sudanese desert ewes . Sixty mature ewes were chosen and divided ( grouped ) in three groups , group ( A ) as the control , group (B) include the synchronized ewes with progesterone plus pregnant mare serum gonadotrophin ( PMSG) and group (C) Include the flushed –synchronized ewes with progesterone plus pregnant mare serum gonadotrophin ( PMSG) . Six rams were selected, after passing the male score test as teasers.

All animal, in all groups were fed sorghum straws and barseem. Animals in group ( C) were fed concentrated ration for flushing. After onset of heat, the rams were introduced for mating. Then oestrus induction rate, conception rate, lambing rate, multiple-birth rate, average birth-weight and gestation length were recorded. The data obtained was analyzed and tabulated using analysis of variance (ANOVA) and t test.

The results revealed that , ewes from the two treated groups , synchronized group (B) and flushed synchronized group (C), compared to the control group (A) showed a significant difference (p<0.05) for conception rate, lambing rate, multiple-birth rate respectively. but no difference in the gestation period was designated among all the experimental animals.

This study concluded, that, using of flushing and synchronization programmes, have a positive effects on reproductive traits of Sudan desert ewes .

## خلاصـــة الأطروحة

أجريت هذه الدراسة بولاية نهر النيل المشروع الاردنى لتسمين الضان في الفترة من نوفمبر 2006 وحتى ابريل 2007, لغرض دراسة تأثير تزامن دورات الشبق و استخدام الدفع الغذائى على بعض الصفات التناسلية للنعاج الصحراوية السودانية . تم إختيار عدد ستون نعجة و توزيعها عشوائيا الى ثلاثة مجموعات بناءا على وزنها وعمرها قبل العشار ,مجموعة الشاهد( أ) و المجموعة(ب) المعالجة بتزامن دورات الشبق باستخدام البروجسترون و هرمون مصل الفرس الحامل PMSG)) و المجموعة( ج) المعالجة بالدفع الغذائي وتزامن دورات الشبق باستخدام البروجسترون و هرمون مصل الفرس الحامل PMSG)) باستخدام البروجسترون و هرمون مصل الفرس الحامل PMSG)) بأيضا تم اختيار ستة كباش بعد إخضاعهم لفحوصات الفحولة .

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