



Sudan University of Science & Technology

College of Graduate Studies

The feed and feeding Habits of Tiang (*Damaliscus korrigrum*) in the Sudd Region-Sudan

التغذية والعادات الغذائية للتيتل في منطقة السدود-
السودان

**A thesis submitted in fulfillment of the Requirements for the Degree
of Master of Science in wildlife Science**

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Dedication

To almighty lord Jesus Christ son of
the living God

To all my family brothers- sisters and
friends

And finally to my wife and children I
deeply offer this work

Acknowledgement

, I am especially grateful to my principal supervisor Professor Ali Saad Mohamed for his usually offering, support and good humor. Beside his commitment to this work by providing with scientific curiosity that made me understand how to bring research to a published product. I also gave sincere appreciation to my co-supervisor Dr Haider Elamin Ahmed for his support to this study during time of study by encouraging and advising me to carry research properly to its end and to him I am very grateful. I offer my deepest thanks to my family for sticking by encouraging and supporting me continuously. I give especial thanks to my father and mother for their believe and encouragement to achieve this programme, as far as many thanks goes to my wife and children for their patience, support and good humor. This study would not have been possible without the full cooperation of laboratory analysis to sample of faecal pellet by phase contrast microscope, at microbiological lab in Khartoum university faculty of science. I especially would like to thank Dr. Nasik AbdullaHammed the head of laboratory for offering Phase contrast Microscope and helping in reading differences slides of plant fragment. I also gave many thanks to Mr. Mohamed Awed Balal the technical of laboratory for spending many hours helping in capturing photos of plants fragment seen during examination of slides of two seasons. As well as many thanks goes to Mr. Rashid Mie el den. For offering slides and taking care in requirements need for the work, Therefore I especially like to thank Dr. Omer the lecturer at collage of animal production of the Sudan university of science & technology for helping me in analysis of data collection by SPSS programmed

Abstract

The Study was undertaken during dry season (Jan- April) and Wet season (May-Sept) 2009 At the Sudd regions Mobior Gol in Jongeli South Sudan in three locations (Mara, Duk Padiet and Jeli) The study was conducted to determine the feeding habits of tiang (*Damaliscus Korrigrum*) from the plant Material in its habitats, and to investigate the feeding by examination of faecal pellets. Thirty one plant species were collected and identified, there was strong correlation between locations and seasons regarding the frequency of categories the location Mara showed the highest frequency 30 out of 77 followed by Duk Padiet 26, and Jeli 21 respectively. With percentage of 39% in Mara, 33.8% in Duk Padiet, and 27.3% in Jeli Mean difference of forbs were highly 6.5342 ± 3.64418 . Compared to grasses which were 4.3478 ± 2.4319 forbs were highly significance compared to grasses and sedges. it was revealed that the forbs showed significance difference as compared to other categories (grasses- sedges) this donated either forbs were the most favored feed items for tiang sixty slides of plant fragment of dry season was preserved than examined the result identified epidermis characteristics of plant fragment and gave clearly view of epidermis cell pattern. Forty slides of plant fragment of wet season were preserved and examined the result identified unclear views of high constituents of herbs. Mean difference of Forbs in wet Season were as 48.50 ± 9.56 Mean difference for forbs in dry Season were as 33.45 ± 7.92 as well Mean difference for grass in Wet season were as 8.73 ± 7.71 . Mean difference of grass in dry season were as 11.77 ± 5 . A Questionnaire was constructed to reveal the familiarity of the public in the area around, about animal sp. Population in the study area was attributed Tiang was the most abundance species in the area, it has been seen with average of 100% followed by white eared cob 97% population of Tiang decreased to 80% during dry season that was attributed of huge hunting

The objectives of the study are to determine the plant species grazed by tiang and plant botanical composition. To investigate

into feeding habits of tiang in sudd area by examination of faecal pellets

ملخص

أجريت الدراسة في موسم الجفاف (يناير-ابريل) وفترة الخريف (مايو- سبتمبر) 2009, في منطقة السدود مبيور قول ولاية جونقلي بجنوب السودان. في ثلاث مواقع مختلفون مارا. دوک فاديت , جالي, أجريت الدراسة لمعرفة العادات الغذائية لطبي التيتل من المواد النباتية في البيئة , وبحث عن نوعية الغذاء التي يتغذي عليها وذلك بتحليل روث التيتل . تم جمع وتصنيف واحد وثلاثين نوع من النباتات في فصلي الجفاف والخريف وشمل ذلك الحشائش, إغشاب, نباتات سعديات. كان هناك ارتباط قوي بينها بين المناطق والفصول بخصوص تكرار الأصناف . الموقع مارا أكد على تكرار اعلي 30 من 77 يليه الموقع دوک فاديت 26, و جالي 21 علي التوالي وكانت النسبة المئوية تتراوح ما بين (39.0%) في منطقة مارا , (33.8%) في منطقة دوک فاديت , و(27.3%) في منطقة جالي, أظهرت الأعشاب أكثر قبولاً استساغة من الأصناف الأخرى (الحشائش والسعديات). جمعت عينات من البراز لتيتل لكل فصل وجفت هذه العينات بالشمس و خلطت بكمية من ملح الطعام .

وتم تحليل براز هذه العينات طبقا لطريق ايسفرك و ماليك.

تم فحص ستين شريحة من شرائح فصل الجفاف واو وضعت النتائج خصائص البشرة النباتية بشكل واضح وأعطت وجهة نظرة ممتازة عن نمط خلية البشرة. كما تم فحص أربعين شريحة لفصل الخريف وكانت النتيجة عدم وضوح خصائص البشرة النباتية بسبب أنماط العالين من الإغشاب. المعلومات عن وجود الحيوان أظهرت أن التيتل أكثر أنواع الحيوانات نتائج التحليل لبرازه التيتل أكد إن تباين نسبة الإغشاب $50.48 \pm$ 56.9 في فصل الخريف . بينما في فصل الجفاف كانت 45.33 ± 92.7 نسبة الحشائش كانت 73.8 ± 77.1 . في فصل الخريف بينما في الجفاف 43.5 ± 77.11 المعلومات عن وجود الحيوان أظهرت أن التيتل أكثر أنواع الحيوانات مشاهدة في المنطقة من بقية الحيوانات الأخرى وكانت نسبة مشاهدته من قبل السكان 100% يليه الإوز زو الازنين الأبيض بنسبة 97% انخفضت نسبة وجود التيتل في فصل الجفاف إلى 80% وذلك بسبب الصيد المكثف. تهدف الدراسة إلي معرفة أنواع النباتات التي يتغذي عليها التيتل

في التركيبة النباتية وذلك عن طريق فحص روث الحيوان في منطقة
السدود.

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