

Dedication

الاهــــــــــــداء

الى كل من علمنى حرفاً فى مسيرتى الدراسية

الى روح والدى العزيز

الى الاسرة الكريمةــــــــــــــــــــة

الى رفقاء الدرب هداة الدرب

الى كلية الطب البيطرى طلاباً وإدارة

الى مدينة ملكــــــــــــــــــــال

"إليكم جميعاً" اهدى عصارة جهدى المتواضع وقاراً واعتزازاً

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Abbreviations and Symbols

DF	Degree of Freedom
FAO	Food and Agriculture Organization
OIE	Office International des Epizootic
RPT	Rose Bengal Plate Test
No.(s)	Number (s)
E	East

N	North
Spp	Species
WHO	World Health Organization
HP	Herd Prevalence
IAP	Individual Animal Prevalence
CI	Confidence Interval
OR	Odds Ratio
RR	Relative Risk

Abstract

A cross-sectional epidemiological study was carried out from March to July 2013, to determine the prevalence and identify risk factors for seropositivity of bovine brucellosis in cattle camps in Western Equatoria State. The study population was indigenous breeds and the samples were selected by multistage random sampling method. One hundred and sixty six serum samples from 20 cattle herds located in different counties within the Western Equatoria State were screened for brucellosis using Rose Bengal Plate Test . Bovine brucellosis was detected in three counties out of four counties in the State, and out of 20 herds studied, 5 were seropositive by RBPT. The overall brucellosis herd prevalence (HP) was 25%. Within herd prevalence ranged between 0%- 50%.

Out of a total of 166 serum sample tested, 21 reacted positive for brucellosis using the Rose Bengal Plate Test. Hence, the individual animal prevalence was 12.7%.

More information was gathered on individual animal and farm level, risk factors and other farm characteristics using a questionnaire. The results of the univariate Chi -square analysis revealed that seropositivity to brucellosis was significantly higher in animals which are in large herd , had aborted, had not given birth, with good body condition and without hygienic disposal of foetal material ($p < 0.25$).

However, in multivariate logistic regression analysis, no risk factors were found statistically significant with brucellosis. The results of this study showed that brucellosis is an endemic and widely distributed disease in Western Equatoria State.

ملخص الدراسة:

اجريت الدراسة فى ولاية غرب الاستوائية, دولة جنوب السودان لمرض البروسيليا فى الابقار فى الفترة ما بين مارس الى يوليو 2013. وكان الهدف من الدراسة تحديد نسبة المرض المصلى و عوامل الخطر الايجابية المصل للبروسيليا فى قطعان الابقار فى ولاية غرب الاستوائية .

شملت الدراسة الابقار المحلية والزيبو فى المنطقة واخذت العينات بإسلوب العينة العشوائية متعددة المراحل. تم فحص 166 عينة مصل من 20 قطيع تقع فى اربعة مقاطعات مختلفة داخل ولاية لولاية لمرض البروسيليا باستخدام لوحة إختبار روز بنغال.

تم الكشف عن بروسيليا الابقار فى ثلاثة مقاطعات من الاربعة فى ولاية غرب الاستوائية وكان معدل انتشار البروسيليا فى القطعان المختبرة بإختبار روز بنغال 5 من 20 قطيع

يساوى (25%). وكان معدل الانتشار الفردى يساوى 21 عينة ايجابية من مجموع 166 من
الابقار (12.7%).

تم جمع معلومات عن الحيوانات الفردية وعوامل الخطر على مستوى القطيع والخصائص
الانتاجية الاخرى باستخدام إستبيان. كشف نتائج تحليل مربع كاي المتغير إيجابية المصل
لداء البروسيلة كان اعلى بكثير لدى الحيوانات التى لها ولادات قليلة, تأريخ فى الاجهاض,
ابعاد المشيمة , حالة الجسم وكذلك حجم القطيع.

فى التحليل اللوجستى متعدد المتغيرات لا توجد عوامل ذات دلالة احصائية مع مرض
البروسيلة.

اظهرت الدراسة ان مرض البروسيلة هو مرض مستوطن ومنتشر فى بعض اجزاء ولاية
غرب الاستوائية المتاخمة لولاية الاستوائية الوسطى.