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CBPP	Contagious Bovine Pleuropneumonia
CCPP	Contagious Caprine Pleuropneumonia
cELISA	Competitive Enzyme Linked Immunosorbant Assay
CFT	Complement Fixation Test
DGIT	Direct Growth Inhibition Test
ELISA	Enzyme Linked Immunosorbant Assay
FAO	Food and Agriculture Organization
FMD	Foot and Mouth Disease
GIT	Growth Inhibition Test

HS	Haemorrhagic Septicaemia
JP15	Joint Pan African project
MmmLC	*Mycoplasma mycoides subsp mycoides* large colonies
MmmSC	*Mycoplasma mycoides subsp mycoides* small colonies
PCR	Polymerase Chain Reaction
RPM	Respiration Per Minute
R.P.M	Round Per Minute
SAT	Slide Agglutination Test

DEDICATION

To the spirit of my father,

for instilling the importance of higher education, I will never forget you.

To my mother,

you have given me so much, and you are the source of strength to me during the course of my life, I hope that you are proud of me.

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SUMMARY

Contagious Bovine Pleuropneumonia (CBPP) is one of the serious threats to the livestock in Khartoum State.

This study was carried out to asses the prevalence of Contagious Bovine Pleuropneumonia (CBPP) in Khartoum State by serological technique and to identify risk factors associated with the disease.

A total of 192 serum samples were collected randomly from animals in different areas of the state and tested for antibodies against *Mycoplasma mycoides subsp. Mycoides* (small colony type) using c-ELISA.

Thirty three samples were seropositive for CBPP with c-ELISA test.

The prevalence of CBPP in Khartoum State based on c-ELISA was estimated as 17.19%.

The results of univariate analysis revealed that seropositivity to CBPP was significantly higher in animals vaccinated (P- value= 0.098), in animals more than 12 months in age (P- value= 0.196) , when the herd size was less than 20 animals (P- value= 0.147) and in animals that did not share with other herds in grazing land (P- value= 0.127). and, when there was heavy insect population (P- value= 0.000). In the multivariate analysis, only insect population was identified as the major risk factor (P- value= 0.004) associated with CBPP.

ملخص الأطروحة

مرض ذات الرئة السلاي في الأبقار يمثل احد المهددات الخطرة لقطاع الماشية وولاية الخرطوم.

هدفت هذه الدراسة لمعرفة معدل انتشار المرض عن طريق الاختبارات المصلية و معرفة العوامل التي تؤثر علي انتشار المرض.

و في تقصي حقلي للوض في مناطق مختلفة بالولاية تم جمع 192 عينة من الدم عشوائياً من الأبقارو تم فحص المصل باستخدام اختبارc- ELISA للكشف عنو جو د أجسام مضادة لمسبب الوض *Mycoplasma mycoides subsp. Mycoides* .

وأ ضحت النتائجو جو د الأجسام المضادة لمسبب الوض في 33 من العينات المصلية التي جمعت.

أثبتت نتائج المسح المصلي عن نسبة الإصابة بوض الالتهاب الرئوي البلوري السلي في الأبقار ولاية الخوط م بنسبة 17.19%.

وأ ضحت نتائج التحليل الإحصائي لكل عامل خطورة علي حدة أن نسبة الإصابة اعلي في الحوانات التي تم تطعيمها، كذلك شو هد في الحوانات الأكبر من 12 شهر، أيضا عندما يكو ن حجم القطيع اقل من 20 حوانو كذلك الحوانات التي لا تشارك القطعان الاخوي في الوعي، و كذلك عندو جو د نسبة عالية من الحشرات. أما في التحليل الاحصائي لوامل الخطورة مجتمعة كان و جو د الحشرات من أكثر الوامل المؤ ثرة علي حو ث الوض.