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LISTE OF ABBREVIATIONS

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	<i>Mycoplasma mycoides subsp mycoides</i> large colonies
MmmSC	<i>Mycoplasma mycoides subsp mycoides</i> 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 لثة السلي في الأبقار يمثل احد المهددات الخطورة لقطاع الماشية ولاية الخرطوم. هدفت هذه الدراسة لمؤفة معدل انتشار المرض عن طريق الاختبارات المصلية و مؤفة العوامل التي تؤثر علي انتشار المرض.

و في تقصي حقلي للوض في مناطق مختلفة بالولاية تم جمع 192 عينة من الدم عشوائياً من الأبقار وتم فحص المصل باستخدام اختبار c-ELISA للكشف عن وجود أجسام مضادة لمسبب الـ *Mycoplasma mycoides subsp. Mycoides*.

وأضحت النتائج وجود الأجسام المضادة لمسبب الـ *Mycoplasma mycoides subsp. Mycoides* في 33 من العينات المصلية التي جمعت.

أثبتت نتائج المسح المصلي عن نسبة الإصابة بوض الالتهاب الرئوي الطوري السلبي في الأبقار ولاية الخوتم بنسبة 17.19%.

وأضحت نتائج التحليل الإحصائي لكل عامل خطورة علي حدة أن نسبة الإصابة اعلي في الحيوانات التي تم تطعيمها، كذلك شوهد في الحيوانات الأكبر من 12 شهر، أيضا عندما يكون حجم القطيع اقل من 20 حوان وكذلك الحيوانات التي لا تشوك القطعان الاخي في الوعي، وكذلك عند وجود نسبة عالية من الحشرات. أما في التحليل الاحصائي لوامل الخطورة مجتمعة كان وجود الحشرات من أكثر الوامل المؤثرة علي حوث الـ *Mycoplasma mycoides subsp. Mycoides*.