An update review of confirmed pathogens of six animal species in Iraq

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Abstract

This updated review tabulates confirmed pathogens of some diseases in selected animal species in Iraq. Laboratory confirmations were done on all the reported cases.

Keywords: Sheep, Goat, Cattle, Buffaloe, Iraq, Cat, Dog, Pathogen
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مراجعة محدثة للمرضيات المثبتة لستة أنواع من الحيوانات في العراق

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الخلاصة

أجريت مراجعات غير شاملة لبعض الممرضات المعينة لبعض أنواع الحيوانات من قبل (١-٣). مراجعات شاملة لكل الممرضات لستة أنواع من الحيوانات أجريت من (٤-٦). بعض الممرضات سقطت سهواً من المراجعات الثلاث الشاملة ولكن العديد من الممرضات اثبت وجودها خلال السنوات الماضية. كل الممرضات ذكرت مع اسم مثبتها أو مثبتيها الأول أو الأوائل ما عدا بعض الممرضات التي ذكرت بدون اسم المثبت أو المثبتين الأول أو الأوائل لعدم وجود البحث الأول المعتمد أو المرجعي.

Introduction

Non comprehensive reviews of some pathogens of selected animal species have been done in Iraq (1-3). Comprehensive reviews of all pathogens of six species (sheep, goats, cattle, buffaloes, cats and dogs) have been reported previously (4-6). Few pathogens may have been missed in the three comprehensive reviews mentioned above. However, many pathogens have been confirmed during the few past years. All pathogens are referred by their first laboratory confirmer(s). Those lacking laboratory confirmation were not listed.

List of animal pathogens

Tables 1-3 lists the confirmed pathogens of six animal species (sheep, goats, cattle, buffaloes, cats and dogs) in Iraq.

Table 1: Pathogens of sheep and goats in Iraq.

Name	Laboratory confirmation and reference	
	Sheep	Goats
Viral Pathogens		
Border disease	+ (7)	
Ovine progressive pneumonia	+ (8)	
Rift Valley fever	+(9)	+(9)
Ricketsial Pathogens		
Coxiella burnetti	+(10)	+(11)
Eperythrozoon ovis	+(12)	
Fungal Pathogens		
Aspergillus ochraceus	+(13)	
Scytalidium japonicum	+(14)	+(14)
Bacterial Pathogens		
Arcanobactreium pyogenes	+(15)	
Barkholderia pseudomallei		+(16)
Mycobacterium Avian sub species *paratuberculosis*	+(17)	+(18)

Continue of table 1

Name	Laboratory confirmation and reference	
	Sheep	Goats
Blood parasites and Protozoa		
Babesia foliate		+(19)
Babesia motasi		+(20)
Babesia ovis		+(19)
Babesia Taylori		+(19)
Balantidium coli	+(21)	
Cryptosporidium andersoni	+(21)	
Cryptosporidium parvum	+(21)	
Eimeria marsica	+(21)	
Eimeria ovina (bokuensis)	+(21)	
Gardia Lambila	+(21)	
Larval stages of insects and helminths		
Lucilia sericata		+(22)

Table 2: Pathogens of cows and buffaloes in Iraq.

Name	Laboratory confirmation and reference	
	Cows	Buffaloes
Viral Pathogens		
Blue tongue	+(23)	+(23)
Bovine virus diarrhea		+(24)
Lumpy skin disease	+(25)	
Mycoplasmal Pathogens		
Mycoplasma bovis	+(26)	
Chlamydial Pathogens		
Chlamydophila abortus	+(27)	
Ricketsial Pathogens		
Coxiella burnetti	+(10)	
Ehrlichia spp	+(28)	
Eperythrozoon wenyoni	+(12)	
Heamobartonella bovis	+(12)	
Fungal Pathogens		
Mucor spp	+(29)	
Trichophyton rubrum	+(29)	
Bacterial Pathogens		
Barkholderia pseudomallei	+(16)	
Salmonella Dublin		+
Salmonella enteritids		+
Salmonella salford	+	
Blood parasites and Protozoa		
Babesia bovis	+(30)	
Buxtonella sulcata	+(31)	
Giardia duodenalis	+(32)	
Giardia Lambilia	+(33)	
Neospora caninum	+(34)	
Toxoplasma gondi		+(35)
Trichomonus fetus	+(36)	
Trypanosoma congolense	+(12)	

Table 3: Pathogens of dogs and cats in Iraq.

Name	Laboratory confirmation and reference	
	Dogs	Cats
Viral Pathogens		
Parvo virus	+(37)	
Ricketsial Pathogens		
Heamobatonella felis		+(38)
Bacterial Pathogens		
Brucella spp	+(39)	
Klebsiella spp	+(40)	
Pasteurella spp	+(40)	
Staphylococcus albus	+(40)	
Streptococcus pyogens	+(40)	
Blood parasites and Protozoa		
Babesia spp		+(38)
Cytauxzoon felis		+(38)
Gardia duodenalis	+(32)	
Neospora caninum	+(34)	
Flees		
Nosopsyllus fasciatus	+(41)	
Pulex irritans	+(41)	
Maggots		
Maggots spp	+(41)	
Helminthes		
Lingutala serrata	+(41)	
Multiceps multiceps	+(41)	
Rictularia cahirensis	+(41)	

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