Document details



- ^b Integrated Cellular and Molecular Biology Cluster (iMoleo), Integrated Centre for Research Animal Care and Use, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, Kuantan, Pahang, Malaysia
- © Department of Basio Medical Sciences, Kulliyyah of Nusing, International Islamic University Malaysia, Jalan Hospital Campus, Kuantan, Pahang, Malaysia

 Wiew additional affiliations

Abstract

View references (27)

Cryptosporidium, a protozoan parasite, can cause cryptosporidiosis which is a gastrointestinal disease that can infect humans and livestock. Cattle are the most common livestock that can be infected with this protozoan. This study was carried out to determine the prevalence of Cryptosporidium infection in cattle in Kuantan, Pahang, Malaysia and to find out the association between the occurrence of infection and 3 different ages of cattle (calves less than 1 year, yearling, and adult cattle). The samples were processed by using formol-ether concentration technique and stained by modified Ziehl Neelsen. The results showed that 16.9% (24151) of cattle were positive for Cryptosporidium ocysts. The occurrence of Cryptosporidium in calves less than 1 year was the highest with the percentage of 20.0% (11/55) followed by yearling and adult cattle, with the percentage occurrence of 15.6 % (7/45) and 11.8% (6/51), respectively. There was no significant association between the occurrence and age of cattle and presence of diarrhea. Good management practices and proper hygiene management must be taken in order to reduce the infection. It is highly important to control the infection since infected cattle may serve as potential reservoirs of the infection to other animals and humans, especially animal handlers. @ 2016, Korean Society for Parasitology and Tropical Medicine.

Author keywords

Age; Cattle; Cryptosporidium; Malaysia; Pahang

ISSN: 00234001 CODEN: KSCHA Source Type: Journal Original language: English DOI: 10.3347/kjp.2016.54.2.197 Document Type: Article Publisher: Korean Journal of Parasitology



■ View all metrics





Identification of Cryptosporidium from Dairy Cattle in Pahang, Malaysia

 $By: Hisamuddin, NH (Hisamuddin, Nur Hazirah) \stackrel{(1)}{\longrightarrow} ; Hashim, N (Hashim, Najat) \stackrel{(1)}{\longrightarrow} ; Soffian, SN (Soffian, Sharmeen Nellisa) \stackrel{(1)}{\longrightarrow} ; Amin, MHM (Amin, Najat) \stackrel{(1)}{\longrightarrow} ; Min, MHM (Amin, MHM (Amin$ $\label{eq:monder_monder_monder_monder} \mbox{Mond Hishammfariz Mohd} \mbox{$I^{\{1\}}$; Wahab, RA (Wahab, Ridhwan Abdul)$} \mbox{$I^{\{1,2\}}$; Mohammad, M (Mohammad, Mardhiah)$} \mbox{$I^{\{1,2\}}$; Isa, MLM (Isa, Mardhiah)$} \mbox{$I^{\{1,2\}}$; Isa, MLM$ Muhammad Lokman Md)[2,3]; Yusof, AM (Yusof, Afzan Mat)[1,2]

KOREAN JOURNAL OF PARASITOLOGY Volume: 54 Issue: 2 Pages: 197-200 D0I: 10.3347Aip.2016.54.2.197 Published: APR 2016 View Journal Information

Abstract

Cryptosporidium, a protozoan parasite, can cause cryptosporidiosis which is a gastrointestinal disease that can infect humans and livestock. Cattle are the most common livestock that can be infected with this protozoan. This study was carried out to determine the prevalence of Cryptosporidium infection in cattle in Kuantan, Pahang, Malaysia and to find out the association between the occurrence of infection and 3 different ages of cattle (calves less than 1 year, yearling, and adult cattle). The samples were processed by using formol-ether concentration technique and stained by modified Ziehl Neelsen. The results showed that 15.9% (24/151) of cattle were positive for Cryptosporidium occysts. The occurrence of Cryptosporidium in calves less than 1 year was the highest with the percentage of 20.0% (11/55) followed by yearling and adult cattle, with the Exprosponding in cases the size of the siz especially animal handlers.

Keywords

Author Keywords: Cryptosporidium; cattle; age; Pahang; Malaysia

KeyWords Plus: MOLECULAR-IDENTIFICATION: NORTHWESTERN CHINA: PREVALENCE: SPP.: INFECTION: CALVES

Author Information

Reprint Address: Yusof, AM (reprint author)

Int Islamic Univ Malaysia, Kulliyyah Allied Hith Sci, Dept Biomed Sci, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia. Reprint Address: Yusof, AM (reprint author)

Int Islamio Univ Malaysia, Integrated Ctr Res Anim Care & Use, Integrated Cellular & Mol Biol Cluster iMoleo, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia.

- Addresses:
 [1] Int Islamio Univ Malaysia, Kulliyyah Allied Hith Soi, Dept Biomed Soi, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia
 - [2] Int Islamic Univ Malaysia, Integrated Ctr Res Anim Care & Use, Integrated Cellular & Mol Biol Cluster iMolec, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia
- [3] Int Islamic Univ Malaysia, Kulliyyah Nursing, Dept Basic Med Sci, Jalan Hosp Campus, Kuantan 25710, Pahang, Malaysia

E-mail Addresses: afzan@iium.edu.my

Funding

	Funding Agency	Grant Number
	RAGS	13-010-0073

View funding text

Publisher

KOREAN SOC PARASITOLOGY, SEOUL NATL UNIV COLL MEDI, DEPT PARASITOLOGY, SEOUL, 00000, SOUTH KOREA

Categories / Classification

Research Areas: Parasitology

Web of Science Categories: Parasitology

Document Information

Document Type: Article

Accession Number: WOS:000379502000011

PubMed ID: 27180579 ISSN: 0023-4001 eISSN: 1738-0006

Journal Information

Impact Factor: Journal Citation Reports®

IDS Number: DQ9AE

Cited References in Web of Science Core Collection: 27 Times Cited in Web of Science Core Collection: 0

Citation Network

0 Times Cited 27 Cited References View Related Records

 ▼ View Citation Map Create Citation Alert

All Times Cited Counts

0 in All Databas O in Web of Science Core Collection O in BIOSIS Citation Index O in Chinese Science Citation Database

O in Data Citation Index O in Russian Science Citation Index O in SciELO Citation Inde

Usage Count

Last 180 Days: 0 Since 2013: 0 Learn more

This record is from: Web of Science™ Core Collection

Suggest a correction
If you would nee to improve the
quality of the data in this record,
please suggest a correction.