

[< Back to results](#) | 1 of 1[Download](#) [Print](#) [E-mail](#) [Save to PDF](#) [Add to List](#) [More... >](#)[Full Text](#)[Malaysian Applied Biology](#) • [Open Access](#) • Volume 51, Issue 3, Pages 47 - 55 • September 2022**Document type**Article • [Bronze Open Access](#)**Source type**

Journal

**ISSN**

01268643

**DOI**

10.55230/mabjournal.v51i3.2165

**Publisher**

Malaysian Society of Applied Biology

**Original language**

English

[View less](#)

# PREVALENCE OF *Blastocystis* sp. IN CATTLE, GOAT AND SHEEP REARED BY DIFFERENT FARM MANAGEMENT SYSTEMS IN PAHANG, MALAYSIA

Razak, Nur Atiqah Abd; [Mohammad, Mardhiah](#)

Save all to author list

<sup>a</sup> Department of Biomedical Science, Kuliyyah of Allied Health Sciences, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, Pahang, Kuantan, 25200, Malaysia[Full text options](#) [Export](#) [Abstract](#)[Author keywords](#)[SciVal Topics](#)[Funding details](#)**Abstract**

*Blastocystis* sp. is a familiar parasite in the gastrointestinal tract causing infection in humans and animals. The purpose of this study is to evaluate the *Blastocystis* sp. prevalence in three sorts of livestock; cattle, goats, and sheep in Pahang, Malaysia, which are reared under two management systems; intensive and semi-intensive farm management system. About 92, 96, and 65 cattle, goat, and sheep fecal samples respectively were collected from different farms around Kuantan, Bera, and Pekan. The fecal samples were cultured in Jones' medium supplemented with 10% heat-inactivated horse serum and incubated at 37 °C for 2 weeks, then observed under light microscopy daily. The total prevalence of *Blastocystis* sp. was 29.34% in cattle (27/92), 29.16% in goats (28/96), and 43.07% in sheep (28/65). Supported the results of this study, *Blastocystis* sp. prevalence was higher in sheep and livestock reared by a semi-intensive farm management system (44.38%). However, further study could be done for *Blastocystis* sp. subtypes identification to determine its genetic diversity. Notwithstanding, this study has provided additional knowledge on

**Cited by 0 documents**

Inform me when this document is cited in Scopus:

[Set citation alert >](#)**Related documents**Prevalence of *Blastocystis* sp. in freshwater fishes, poultry, and caprine from Penang, MalaysiaRauff-Adedotun, A.A. , Nuur Syafiqah, S. , Nur Soleha, R. (2022) *Veterinary Parasitology: Regional Studies and Reports*The Presence of *Blastocystis* in Tibetan Antelope (*Pantholops hodgsonii*)Geng, H.-L. , Sun, Y.-Z. , Jiang, J. (2021) *Frontiers in Cellular and Infection Microbiology*Current status of *Blastocystis* sp. in animals from Southeast Asia: a reviewRauff-Adedotun, A.A. , Mohd Zain, S.N. , Farah Haziqah, M.T. (2020) *Parasitology Research*[View all related documents based on references](#)

Find more related documents in Scopus based on:

[Authors >](#) [Keywords >](#)

the prevalence of each livestock reared in farms around Pahang that serve as important information in understanding host-parasite relationships, besides determining the best farm management system to be applied by farmers. © 2022, Malaysian Society of Applied Biology. All rights reserved.

#### Author keywords

Blastocystis ; cattle ; goats; sheep

SciVal Topics 

Funding details

#### References (66)

[View in search results format >](#)

All

[Export](#)  [Print](#)  [E-mail](#)  [Save to PDF](#) [Create bibliography](#)

- 1 Abdullah, D.A., Ola-Fadunsin, S.D., Ruviniyia, K., Gimba, F.I., Chandrawathani, P., Lim, Y.A.L., Jesse, F.F.A., (...), Sharma, R.S.K.  
**Molecular detection and epidemiological risk factors associated with *Cryptosporidium* infection among cattle in Peninsular Malaysia** ([Open Access](#))  
  
(2019) *Food and Waterborne Parasitology*, 14, art. no. e00035. Cited 12 times.  
<http://www.journals.elsevier.com/food-and-waterborne-parasitology>.  
doi: 10.1016/j.fawpar.2019.e00035  
  
[View at Publisher](#)

---

- 2 Abdulsalam, A.M., Ithoi, I., Al-Mekhlafi, H.M., Ahmed, A., Surin, J., Mak, J.-W.  
**Drinking water is a significant predictor of *Blastocystis* infection among rural Malaysian primary schoolchildren** ([Open Access](#))  
  
(2012) *Parasitology*, 139 (8), pp. 1014-1020. Cited 48 times.  
doi: 10.1017/S0031182012000340  
  
[View at Publisher](#)

---

- 3 Abe, N., Nagoshi, M., Takami, K., Sawano, Y., Yoshikawa, H.  
**A survey of *Blastocystis* sp. in livestock, pets, and zoo animals in Japan**  
  
(2002) *Veterinary Parasitology*, 106 (3), pp. 203-212. Cited 94 times.  
doi: 10.1016/S0304-4017(02)00050-X  
  
[View at Publisher](#)

---

- 4 Rauff-Adedotun, A.A., Mohd Zain, S.N., Farah Haziqah, M.T.  
**Current status of *Blastocystis* sp. in animals from Southeast Asia: a review** ([Open Access](#))  
  
(2020) *Parasitology Research*, 119 (11), pp. 3559-3570. Cited 15 times.  
[link.springer.de/link/service/journals/00436/index.htm](http://link.springer.de/link/service/journals/00436/index.htm)  
doi: 10.1007/s00436-020-06828-8  
  
[View at Publisher](#)

- 
- 5 Ahmed, S.A., Karanis, P.  
**Blastocystis spp., ubiquitous parasite of human, animals and environment**  
  
(2019) *Encyclopedia of Environmental Health*, pp. 429-435. Cited 7 times.  
<http://dx.doi.org/10.1016/B978-0-12-409548-9.10947-9>  
ISBN: 978-044463952-3; 978-044463951-6  
doi: 10.1016/B978-0-12-409548-9.10947-9  
  
View at Publisher
- 
- 6 Alfellani, M.A., Taner-Mulla, D., Jacob, A.S., Imeede, C.A., Yoshikawa, H., Stensvold, C.R., Clark, C.G.  
**Genetic Diversity of Blastocystis in Livestock and Zoo Animals (Open Access)**  
  
(2013) *Protist*, 164 (4), pp. 497-509. Cited 256 times.  
doi: 10.1016/j.protis.2013.05.003  
  
View at Publisher
- 
- 7 Badparva, E., Sadraee, J., Kheirandish, F.  
**Genetic diversity of Blastocystis isolated from cattle in Khorramabad, Iran (Open Access)**  
  
(2015) *Jundishapur Journal of Microbiology*, 8 (3), art. no. e14810. Cited 50 times.  
<http://jjmicrobiol.com/38221.pdf>  
doi: 10.5812/jjm.14810  
  
View at Publisher
- 
- 8 Bandara, D.M.D.S., Premaratne, S., Dematawewa, C.M.B.  
Production and economic characteristics of intensive and semi-intensive dairy cattle management systems in vegetable based farming system in Welimada, Sri Lanka  
(2011) *Tropical Agricultural Research*, 22 (3), pp. 314-323. Cited 5 times.  
<https://doi.org/10.4038/tar.v22i3.3704>
- 
- 9 Boorom, K.F., Smith, H., Nimri, L., Viscogliosi, E., Spanakos, G., Parkar, U., Li, L.-H., (...), Jones, M.S.  
**Oh my aching gut: Irritable bowel syndrome, Blastocystis, and asymptomatic infection (Open Access)**  
  
(2008) *Parasites and Vectors*, 1 (1), art. no. 40. Cited 128 times.  
doi: 10.1186/1756-3305-1-40  
  
View at Publisher
- 
- 10 Chandrasekaran, H., Govind, S.K., Panchadcharam, C., Bathmanaban, P., Raman, K., Theragarajan, G.  
**High lipid storage in vacuolar forms of subtype 6 blastocystis sp. in ostrich (Open Access)**  
  
(2014) *Parasites and Vectors*, 7 (1), art. no. 469. Cited 18 times.  
<http://www.parasitesandvectors.com/>  
doi: 10.1186/s13071-014-0469-7  
  
View at Publisher
- 
- 11 (2018) *Malaysia: Livestock Population*  
2018
-

- 
- 12 El Safadi, D., Gaayeb, L., Meloni, D., Cian, A., Poirier, P., Wawrzyniak, I., Delbac, F., (...), Viscogliosi, E.  
Children of Senegal River Basin show the highest prevalence of *Blastocystis* sp. ever observed worldwide (Open Access)
- (2014) *BMC Infectious Diseases*, 14 (1), art. no. 164. Cited 167 times.  
<http://www.biomedcentral.com/1471-2334/14/164>  
doi: 10.1186/1471-2334-14-164
- [View at Publisher](#)
- 
- 13 Eroglu, F., Genc, A., Elgun, G., Koltas, I.S.  
Identification of *Blastocystis hominis* isolates from asymptomatic and symptomatic patients by PCR
- (2009) *Parasitology Research*, 105 (6), pp. 1589-1592. Cited 70 times.  
doi: 10.1007/s00436-009-1595-6
- [View at Publisher](#)
- 
- 14 Moura, R.G.F., de Oliveira-Silva, M.B., Pedrosa, A.L., Nascentes, G.A.N., Cabrine-Santos, M.  
Occurrence of *blastocystis* spp. In domestic animals in triângulo mineiro area of Brazil (Open Access)
- (2018) *Revista da Sociedade Brasileira de Medicina Tropical*, 51 (2), pp. 240-243. Cited 35 times.  
<http://www.scielo.br/pdf/rsbmt/v51n2/1678-9849-rsbmt-51-02-240.pdf>  
doi: 10.1590/0037-8682-0484-2016
- [View at Publisher](#)
- 
- 15 Hasan, M.J., Ahmed, J.U., Alam, M.M.  
Reproductive performances of Black Bengal goat under semi-intensive and extensive conditions at rural areas in Bangladesh (Open Access)
- (2014) *Journal of Advanced Veterinary and Animal Research*, 1 (4), pp. 196-200. Cited 6 times.  
[http://bdvets.org/JAVAR/V1I4/a37\\_pp196-200.pdf](http://bdvets.org/JAVAR/V1I4/a37_pp196-200.pdf)  
doi: 10.5455/javar.2014.a37
- [View at Publisher](#)
- 
- 16 Hashim, N., Yusof, A.M.  
Rearing systems related to gastrointestinal parasites in goats from selected area in Terengganu
- (2016) *Jurnal Teknologi*, 78 (10), pp. 133-138. Cited 3 times.  
<http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/download/8018/5833>  
doi: 10.11113/jt.v78.8018
- [View at Publisher](#)
- 
- 17 Helena, L.C.S., Carolina, V.B., Renata, C.B., Heloisa, W.D.M.  
*Blastocystis* spp.: Current status and research issues  
(2017) *EC Gastroenterology and Digestive System*, 3 (1), pp. 48-54. Cited 2 times.
-

- 18 Santos, H.L.C., Sodré, F.C., De Macedo, H.W.  
Blastocystis sp. in splenic cysts: Causative agent or accidental association? A unique case report ([Open Access](#))  
(2014) *Parasites and Vectors*, 7 (1), art. no. 207. Cited 19 times.  
<http://www.parasitesandvectors.com/>  
doi: 10.1186/1756-3305-7-207  
[View at Publisher](#)
- 
- 19 Hemalatha, C., Chandrawathani, P., Suresh, Kumar, G., Premaalatha, B., Geethamalar, S., Lily Rozita, M.H., (...), Ramlan, M.  
The diagnosis of Blastocystis sp. from animals-an emerging zoonosis  
(2014) *Malaysian Journal of Veterinary Research*, 5 (2), pp. 15-22. Cited 22 times.
- 
- 20 Inani, R.N.R., Yusof, M.A.  
Seasonal prevalence of gastrointestinal parasitic infections in goat in a commercial farm, Kuantan, Malaysia  
(2018) *Asian Journal of Agriculture and Biology*, 6 (4), pp. 455-460.
- 
- 21 Jiménez, P.A., Jaimes, J.E., Ramírez, J.D.  
A summary of Blastocystis subtypes in North and South America ([Open Access](#))  
(2019) *Parasites and Vectors*, 12 (1), art. no. 376. Cited 67 times.  
<http://www.parasitesandvectors.com/>  
doi: 10.1186/s13071-019-3641-2  
[View at Publisher](#)
- 
- 22 Jones, W.R.  
The experimental infection of rats with entamoeba histolytica; with a method for evaluating the anti-amoebic properties of new compounds  
(1946) *Annals of Tropical Medicine and Parasitology*, 40 (2), pp. 130-140. Cited 143 times.  
doi: 10.1080/00034983.1946.11685270  
[View at Publisher](#)
- 
- 23 Kamaruddin, S.K., Mat Yusof, A., Mohammad, M.  
Prevalence and subtype distribution of Blastocystis sp. in cattle from Pahang, Malaysia  
(2020) *Tropical Biomedicine*, 37 (1), pp. 127-141. Cited 8 times.  
<http://msptm.org/files/Vol37No1/127-141-Mohammad-M.pdf>
- 
- 24 Kamarulzaman, N.H.  
Analysis of Malaysian beef industry in peninsular Malaysia under different importation policies scenarios and rate management systems  
(2016) *Pertanika Journal of Social Sciences and Humanities*, 21, pp. 1-16.
- 
- 25 Kochewad, S.A., Meena, L.R., Meena, L.K., Kumar, D., Kumar, S., Meena, L.K., Singh, S.P.  
Livestock based improvement of small and marginal farmers  
(2018) *Food Technology and Environment*, 3 (1), pp. 526-532. Cited 3 times.  
<https://doi.org/10.46370/sajfte.2017.v03i01.09>
-

- 26 Khor, S.K., Jamaiah, M.I., Zulkarnain, M., Suhaimi, A., Shahaza, O., Aishya, H., Syamsul, A., (...), Saipul, B.A.R.  
A survey of gastrointestinal parasites infection on small ruminant farms in Seberang Perai Selatan district, Penang, Malaysia  
(2018) *Malaysian Journal of Veterinary Research*, 9 (1), pp. 15-21. Cited 3 times.

- 
- 27 Lee, L.I., Chye, T.T., Karmacharya, B.M., Govind, S.K.  
**Blastocystis sp.: Waterborne zoonotic organism, a possibility?**  
(Open Access)  
  
(2012) *Parasites and Vectors*, 5 (1), art. no. 130. Cited 95 times.  
doi: 10.1186/1756-3305-5-130  
  
View at Publisher

- 
- 28 Leelayoova, S., Rangsin, R., Taamasri, P., Naaglor, T., Thathaisong, U., Mungthin, M.  
**Evidence of waterborne transmission of Blastocystis hominis**  
  
(2004) *American Journal of Tropical Medicine and Hygiene*, 70 (6), pp. 658-662. Cited 82 times.  
<http://www.ajtmh.org/>  
doi: 10.4269/ajtmh.2004.70.658  
  
View at Publisher

- 
- 29 Leelayoova, S., Siripattanapipong, S., Thathaisong, U., Naaglor, T., Taamasri, P., Piyaaraj, P., Mungthin, M.  
**Drinking water: A possible source of blastocystis spp. subtype 1 infection in schoolchildren of a rural community in central Thailand**  
  
(2008) *American Journal of Tropical Medicine and Hygiene*, 79 (3), pp. 401-406. Cited 126 times.  
<http://www.ajtmh.org/>  
doi: 10.4269/ajtmh.2008.79.401  
  
View at Publisher

- 
- 30 Deng, L., Chai, Y., Zhou, Z., Liu, H., Zhong, Z., Hu, Y., Fu, H., (...), Peng, G.  
**Epidemiology of Blastocystis sp. infection in China: A systematic review** (Open Access)  
  
(2019) *Parasite*, 26, art. no. 2019042. Cited 46 times.  
<http://www.parasite-journal.org/>  
doi: 10.1051/parasite/2019042  
  
View at Publisher

- 
- 31 Li, L.-H., Zhou, X.-N., Du, Z.-W., Wang, X.-Z., Wang, L.-B., Jiang, J.-Y., Yoshikawa, H., (...), Zhang, L.  
**Molecular epidemiology of human Blastocystis in a village in Yunnan province, China**  
  
(2007) *Parasitology International*, 56 (4), pp. 281-286. Cited 116 times.  
doi: 10.1016/j.parint.2007.06.001  
  
View at Publisher
-

- 32 Li, W.C., Wang, K., Gu, Y.  
Occurrence of *Blastocystis* sp. and *Pentatrichomonas hominis* in sheep and goats in China ([Open Access](#))  
(2018) *Parasites and Vectors*, 11 (1), art. no. 93. Cited 49 times.  
<http://www.parasitesandvectors.com/>  
doi: 10.1186/s13071-018-2671-5  
[View at Publisher](#)
- 
- 33 Maharana, B.R., Kumar, B., Sudhakar, N.R., Behera, S.K., Patbandha, T.K.  
Prevalence of gastrointestinal parasites in bovines in and around Junagadh (Gujarat) ([Open Access](#))  
(2016) *Journal of Parasitic Diseases*, 40 (4), pp. 1174-1178. Cited 12 times.  
<http://www.springer.com/medicine/internal/journal/12639>  
doi: 10.1007/s12639-015-0644-6  
[View at Publisher](#)
- 
- 34 Manyazewal, A., Francesca, S., Pal, M., Gezahegn, M., Tesfaye, M., Lucy, M., Teklu, W., (...), Getachew, T.  
Prevalence, risk factors and molecular characterization of *Cryptosporidium* infection in cattle in Addis Ababa and its environs, Ethiopia ([Open Access](#))  
(2018) *Veterinary Parasitology: Regional Studies and Reports*, 13, pp. 79-84. Cited 17 times.  
<http://www.journals.elsevier.com/veterinary-parasitology-regional-studies-and-reports>  
doi: 10.1016/j.vprsr.2018.03.005  
[View at Publisher](#)
- 
- 35 (2020) *Interactive weather in Pahang for 2018 to 2020*  
<https://www.met.gov.my/info/pejabatmeteorologi>
- 
- 36 Mohamed, Z. A.  
The livestock industry  
(2007) *50 Years of Malaysian Agriculture: Transformation Issues, Challenges and Direction*, pp. 553-584. Cited 6 times.  
S.A. Idid Fatimah, M.A., Raja Abdullah, N.M., Kaur, B., Abdullah, A.M. (Eds).  
Universiti Putra Malaysia Publication, Serdang
- 
- 37 Mohd Zain, S.N., Farah Haziqah, M.T., Woh, P.Y., Fazly Ann, Z., Vickneshwaran, M., Mohd Khalid, M.K.N., Arutchelvan, R., (...), Suresh, K.  
Morphological and molecular detection of *Blastocystis* in wildlife from Tioman Island, Malaysia  
(2017) *Tropical Biomedicine*, 34 (1), pp. 249-255. Cited 7 times.  
[https://doc-10-bc-docs.googleusercontent.com/docs/securesc/ha0ro937gcuc7l7deffksulhg5h7mbp1/h9dtqtshlogtjdpavpkp208h3fg7f12/1495807200000/08212827569672793082/\\*0B75lcx0mfp2OS19tUkt0aljnSVk?e=download](https://doc-10-bc-docs.googleusercontent.com/docs/securesc/ha0ro937gcuc7l7deffksulhg5h7mbp1/h9dtqtshlogtjdpavpkp208h3fg7f12/1495807200000/08212827569672793082/*0B75lcx0mfp2OS19tUkt0aljnSVk?e=download)
- 
- 38 Monteiro, A., Costa, J.M., Lima, M.J.  
Goat system productions: Advantages and disadvantages to the animal, environment and farmer  
(2017) *Goat Science*, pp. 351-366. Cited 22 times.  
S. Kukovics (Ed). Intech Open Publication, London  
<https://doi.org/10.5772/intechopen.70002>
-

- 
- 39 Noradilah, S.A., Anuar, T.S., Moktar, N., Lee, I.L., Salleh, F.M., Azreen, S.N.A.M., Husnie, N.S.M.M., (...), Abdullah, S.R.  
Molecular epidemiology of Blastocystis SP in animals reared by the aborigines during wet and dry seasons in rural communities, pahang, Malaysia  
(2017) *Southeast Asian Journal of Tropical Medicine and Public Health*, 48 (6), pp. 1151-1160. Cited 13 times.  
<http://www.tm.mahidol.ac.th/seameo/publication.htm>[https://seameotropmednetwork.org/publication\\_current\\_issue.html](https://seameotropmednetwork.org/publication_current_issue.html)
- 
- 40 (2015)  
(accessed 24.7.2019)  
<http://www.moa.gov.my/web/guest/dasar>
- 
- 41 Navarro, C., Domínguez-Márquez, M.V., Garijo-Toledo, M.M., Vega-García, S., Fernández-Barredo, S., Pérez-Gracia, M.T., García, A., (...), Gómez-Muñoz, M.T.  
High prevalence of Blastocystis sp. in pigs reared under intensive growing systems: Frequency of ribotypes and associated risk factors  
(2008) *Veterinary Parasitology*, 153 (3-4), pp. 347-358. Cited 50 times.  
doi: 10.1016/j.vetpar.2008.02.003  
View at Publisher
- 
- 42 Ning, C.-Q., Hu, Z.-H., Chen, J.-H., Ai, L., Tian, L.-G.  
Epidemiology of Blastocystis infection from 1990 to 2019 in China (Open Access)  
(2020) *Infectious Diseases of Poverty*, 9 (1), art. no. 168. Cited 15 times.  
<http://www.idpjournals.com/>  
doi: 10.1186/s40249-020-00779-z  
View at Publisher
- 
- 43 Rosali, M.H., Mohammad Nor, N.A.A.  
The development and future direction of Malaysia's livestock industry  
(2015) *Food and Fertilizer Technology Center for the Asean and Pacific Region*  
Malaysian Agricultural Research and Development Institute (MARDI), Serdang, Malaysia
- 
- 44 Shanmugavelu, S.  
Decision Support System in Livestock Production  
(2014) . Cited 6 times.  
Research Inaugural Lecture. Malaysian Agricultural Research and Development Institute (MARDI), Serdang, Malaysia
- 
- 45 Skotarczak, B.  
Genetic diversity and pathogenicity of blastocystis (Open Access)  
(2018) *Annals of Agricultural and Environmental Medicine*, 25 (3), pp. 411-416. Cited 40 times.  
<http://www.aaem.pl/pdf-81315-29040?filename=Genetic%20diversity%20and.pdf>  
doi: 10.26444/aaem/81315  
View at Publisher
-

- 46 Sohail, M.R., Fischer, P.R.  
**Blastocystis hominis and travelers**  
(2005) *Travel Medicine and Infectious Disease*, 3 (1), pp. 33-38. Cited 50 times.  
doi: 10.1016/j.tmaid.2004.06.001  
[View at Publisher](#)
- 
- 47 Song, J.-K., Yin, Y.-L., Yuan, Y.-J., Tang, H., Ren, G.-J., Zhang, H.-J., Li, Z.-X., (...), Zhao, G.-H.  
**First genotyping of Blastocystis sp. in dairy, meat, and cashmere goats in northwestern China**  
(2017) *Acta Tropica*, 176, pp. 277-282. Cited 36 times.  
[www.elsevier.com/locate/actatropica](http://www.elsevier.com/locate/actatropica)  
doi: 10.1016/j.actatropica.2017.08.028  
[View at Publisher](#)
- 
- 48 Stensvold, C.R., Alfellani, M.A., Nørskov-Lauritsen, S., Prip, K., Victory, E.L., Maddox, C., Nielsen, H.V., (...), Clark, C.G.  
**Subtype distribution of Blastocystis isolates from synanthropic and zoo animals and identification of a new subtype**  
([Open Access](#))  
(2009) *International Journal for Parasitology*, 39 (4), pp. 473-479. Cited 223 times.  
doi: 10.1016/j.ijpara.2008.07.006  
[View at Publisher](#)
- 
- 49 Stenzel, D.J., Boreham, P.F.L.  
**Blastocystis hominis revisited**  
(1996) *Clinical Microbiology Reviews*, 9 (4), pp. 563-584. Cited 349 times.  
<http://cmr.asm.org/>  
doi: 10.1128/cmr.9.4.563-584.1996  
[View at Publisher](#)
- 
- 50 Suresh, K., Smith, H.  
**Comparison of methods for detecting Blastocystis hominis**  
(2004) *European Journal of Clinical Microbiology and Infectious Diseases*, 23 (6), pp. 509-511. Cited 104 times.  
doi: 10.1007/s10096-004-1123-7  
[View at Publisher](#)
- 
- 51 Susana, Y., Suwanti, L.T., Suprihati, E.  
**Identification and prevalence of gastrointestinal parasites in beef cattle in Siak Sri Indrapura, Riau, Indonesia**  
(2019) *Indonesian Journal of Tropical and Infectious Disease*, 7, pp. 155-160. Cited 10 times.  
<https://doi.org/10.20473/ijtid.v7i6.10392>
- 
- 52 Suwanti, L.T., Susana, Y., Hastutiek, P., Suprihati, E., Lastuti, N.D.R.  
**Blastocystis spp. Subtype 10 infected beef cattle in Kamal and Socah, Bangkalan, Madura, Indonesia** ([Open Access](#))  
(2020) *Veterinary World*, 13 (2), pp. 231-237. Cited 13 times.  
<http://www.veterinaryworld.org/>  
doi: 10.14202/vetworld.2020.231-237  
[View at Publisher](#)
-

- 53 Tan, K.S.W.  
Blastocystis in humans and animals: New insights using modern methodologies  
(2004) *Veterinary Parasitology*, 126 (1-2 SPEC.ISS.), pp. 121-144. Cited 137 times.  
doi: 10.1016/j.vetpar.2004.09.017  
View at Publisher
- 
- 54 Tan, K.S.W.  
New insights on classification, identification, and clinical relevance of *Blastocystis* spp. (Open Access)  
(2008) *Clinical Microbiology Reviews*, 21 (4), pp. 639-665. Cited 481 times.  
<http://cmr.asm.org/cgi/reprint/21/4/639>  
doi: 10.1128/CMR.00022-08  
View at Publisher
- 
- 55 Tan, T.K., Chandrawathani, P., Low, V.L., Premaalatha, B., Lee, S.C., Chua, K.H., Sharma, R.S.K., (...), Lim, Y.A.L.  
Occurrence of gastro-intestinal parasites among small ruminants in Malaysia: Highlighting *Dicrocoelium* infection in goats  
(2017) *Tropical Biomedicine*, 34 (4), pp. 963-969. Cited 8 times.  
<http://msptm.org/files/Vol34No4/963-969-Tan-TK.pdf>
- 
- 56 Tan, T.K., Panchadcharam, C., Low, V.L., Lee, S.C., Ngui, R., Sharma, R.S.K., Lim, Y.A.L.  
Co-infection of *Haemonchus contortus* and *Trichostrongylus* spp. among livestock in Malaysia as revealed by amplification and sequencing of the internal transcribed spacer II DNA region (Open Access)  
(2014) *BMC Veterinary Research*, 10, art. no. 38. Cited 28 times.  
<http://www.biomedcentral.com/1746-6148/10/38>  
doi: 10.1186/1746-6148-10-38  
View at Publisher
- 
- 57 Tan, T.C., Tan, P.C., Sharma, R., Sugnaseelan, S., Suresh, K.G.  
Genetic diversity of caprine *Blastocystis* from Peninsular Malaysia (Open Access)  
(2013) *Parasitology Research*, 112 (1), pp. 85-89. Cited 46 times.  
doi: 10.1007/s00436-012-3107-3  
View at Publisher
- 
- 58 Tung, K.-C., Huang, C.-C., Pan, C.-H., Yang, C.-H., Lai, C.-H.  
Prevalence of gastrointestinal parasites in yellow cattle between Taiwan and its offshore islands  
(2012) *Thai Journal of Veterinary Medicine*, 42 (2), pp. 219-224. Cited 4 times.  
[http://www.vet.chula.ac.th/~tjvm/full\\_text/v42/422/TJVM422PDF/TJVM%2042%20-%202019-224%20SC.pdf](http://www.vet.chula.ac.th/~tjvm/full_text/v42/422/TJVM422PDF/TJVM%2042%20-%202019-224%20SC.pdf)
-

- 
- 59 Udonsom, R., Prasertbun, R., Mahittikorn, A., Mori, H., Changbunjong, T., Komalamisra, C., Pintong, A.-R., (...), Popruk, S.

**Blastocystis infection and subtype distribution in humans, cattle, goats, and pigs in central and western Thailand**

([Open Access](#))

(2018) *Infection, Genetics and Evolution*, 65, pp. 107-111. Cited 55 times.

<http://www.elsevier.com/locate/meegid>

doi: 10.1016/j.meegid.2018.07.007

[View at Publisher](#)

---

- 60 Vaisusuk, K., Saijuntha, W., Sedlak, S., Thanchomnang, T., Pilap, W., Suksavate, W., Stensvold, C.R., (...), Tantrawatpan, C.

**Blastocystis subtypes detected in long-tailed macaques in Thailand—Further evidence of cryptic host specificity**

(2018) *Acta Tropica*, 184, pp. 78-82. Cited 16 times.

[www.elsevier.com/locate/actatropica](http://www.elsevier.com/locate/actatropica)

doi: 10.1016/j.actatropica.2017.09.002

[View at Publisher](#)

---

- 61 Wang, J., Gong, B., Yang, F., Zhang, W., Zheng, Y., Liu, A.

**Subtype distribution and genetic characterizations of Blastocystis in pigs, cattle, sheep and goats in northeastern China's Heilongjiang Province**

(2018) *Infection, Genetics and Evolution*, 57, pp. 171-176. Cited 61 times.

<http://www.elsevier.com/locate/meegid>

doi: 10.1016/j.meegid.2017.11.026

[View at Publisher](#)

---

- 62 Wawrzyniak, I., Poirier, P., Texier, C., Delbac, F., Viscogliosi, E., Dionigia, M., Alaoui, H.E.

**Blastocystis, an unrecognized parasite: An overview of pathogenesis and diagnosis** ([Open Access](#))

(2013) *Therapeutic Advances in Infectious Disease*, 1 (5), pp. 167-178. Cited 138 times.

doi: 10.1177/2049936113504754

[View at Publisher](#)

---

- 63 Yoshikawa, H., Wu, Z., Kimata, I., Iseki, M., Ali, I.K.M.D., Hossain, M.B., Zaman, V., (...), Takahashi, Y.

**Polymerase chain reaction-based genotype classification among human Blastocystis hominis populations isolated from different countries**

(2004) *Parasitology Research*, 92 (1), pp. 22-29. Cited 192 times.

doi: 10.1007/s00436-003-0995-2

[View at Publisher](#)

---

- 64 Zhang, S.-X., Zhou, Y.-M., Xu, W., Tian, L.-G., Chen, J.-X., Chen, S.-H., Dang, Z.-S., (...), Zhou, X.-N.

**Impact of co-infections with enteric pathogens on children suffering from acute diarrhea in southwest China** ([Open Access](#))

(2016) *Infectious Diseases of Poverty*, 5 (1), art. no. 64. Cited 74 times.

<http://www.idpjournals.com/>

doi: 10.1186/s40249-016-0157-2

[View at Publisher](#)

---

□ 65 Zhu, W., Tao, W., Gong, B., Yang, H., Li, Y., Song, M., Lu, Y., (...), Li, W.

First report of Blastocystis infections in cattle in China

(2017) *Veterinary Parasitology*, 246, pp. 38-42. Cited 53 times.

[www.elsevier.com/locate/vetpar](http://www.elsevier.com/locate/vetpar)

doi: 10.1016/j.vetpar.2017.09.001

[View at Publisher](#)

---

□ 66 Zvinorova, P.I., Halimani, T.E., Muchadeyi, F.C., Matika, O., Riggio, V., Dzama, K.

Prevalence and risk factors of gastrointestinal parasitic infections in goats in low-input low-output farming systems in Zimbabwe ([Open Access](#))

(2016) *Small Ruminant Research*, 143, pp. 75-83. Cited 58 times.

[www.elsevier.com/inca/publications/store/5/0/3/3/1/7/index.htm](http://www.elsevier.com/inca/publications/store/5/0/3/3/1/7/index.htm)

doi: 10.1016/j.smallrumres.2016.09.005

[View at Publisher](#)

---

🔍 Mohammad, M.; Department of Biomedical Science, Kuliyyah of Allied Health Sciences, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, Pahang, Kuantan, Malaysia; email: mmoh@iiu.edu.my

© Copyright 2022 Elsevier B.V., All rights reserved.

---

## About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

## Language

[日本語版を表示する](#)

[查看简体中文版本](#)

[查看繁體中文版本](#)

[Просмотр версии на русском языке](#)

## Customer Service

[Help](#)

[Tutorials](#)

[Contact us](#)

---

## ELSEVIER

[Terms and conditions ↗](#) [Privacy policy ↗](#)

Copyright © Elsevier B.V. ↗. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

We use cookies to help provide and enhance our service and tailor content. By continuing, you agree to the use of cookies ↗.

