Molecular study of Cryptosporidium spp., from rat and mice

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Present study contracts with is a zoonotic intestinal protozoan parasite with public health importance. Research was aimed to determine the prevalence of Cryptosporidium in rats/mice and to assess the potential role of rodents as a source for human and animal cryptosporidiosis. A total of 49 faecal samples from field rats, tree rats, house mice and wetland rats were collected from Chittagong, Bangladesh during the period from February to July, 2017. Initial identification of Cryptosporidium spp., was carried out on stool samples by Ziehl-Neelsen (Z-N) acid fast staining method and found prevalence of 4.08%. DNA was extracted from Z-N positive and few other suspected samples using commercially available stool DNA isolation kit. Nested PCR was done to amplify 581 bp of 18S rRNA gene with the use of 1% agarose gel electrophoresis for PCR amplified products. Cryptosporidium spp., was confirmed in three samples by PCR with prevalence of 6.12%. The results of this research give an idea that rodents may act as reservoirs for zoonotic intestinal protozoan parasites and should be considered important to public health.

Recent Publications:


Biography

Saroj Yadav has expertise in evaluation and passion in improving new research. His open and contextual evaluation model creates new pathways for improving veterinary sector. He has built this model after years of experience in research, evaluation, teaching both in hospital and education institutions. He always tries to form new technique for better veterinary services.

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