

2nd International Conference on Animal & Dairy Sciences

September 15-17, 2014 Hyderabad International Convention Centre, India

Rapid identification of *Clostridium perfringens* collected from diarrheic cattle by using molecular tools

Rahul Kumar

Bannari Amman Institute of Technology, India

The cause of diarrhea is the outward sign of a gut abnormality both in animal and human. Present study investigation was carried out to identify the prevalent genotypes of *Clostridium perfringens* related with the diarrhea in cattle. *C. perfringens* (22 isolates) were biochemically identified from the faecal samples collected from 34 cattle suffering from diarrhea maintained in a semi intensive rearing system of organized dairy farms. Molecular technique such as polymerase chain reaction (PCR) was employed with alpha toxin gene (cpa), beta toxin gene (cpb), epsilon toxin gene (etx), iota toxin gene (iA), enterotoxin gene (cpe) and beta2 toxin genes (cpb2) primers to identify the specific toxin types of *C. perfringens*. Each of the 22 isolates was positive for only cpa gene. Even not one of the isolates was found positive for any other toxin genes. Results of PCR revealed that all the isolates from the diarrheic cattle belonged to the genotype A. Results suggested that in the intestines of cattle, type A is the most frequently isolated genotype of *C. perfringens* present. Results proved PCR as a reliable and sensitive diagnostic tool for the rapid detection of *C. perfringens*.

Biography

Rahul Kumar completed his M Tech in Biotechnology from Bannari Amman Institute of Technology. He worked as scientific assistant in DST funded Technology Business Incubation centre at BIT. He published 11 national and international papers in peered review journals. He has filed two patents related to solid state fermentation and sugarcane bottled juice. His area of expertise is enzyme production through solid state fermentation.

Rahulkumar4biotech@gmail.com