عنوان مقاله:

Clostridium perfringens typing in ruminants in south of Kerman province by PCR

محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:

Introduction and Objectives: Clostridium perfringens (C. perfringens) is a gram positive, sporulating bacterium that is extremely pathogenic and responsible for a wide spectrum of anaerobic diseases in animals and humans. This bacterium is classified into five toxinotypes (A, B, C, D, and E). The aim of this study was Clostridium perfringens typing in ruminants in south of Kerman province by PCR. Materials and Methods: A total of 495 fecal samples were obtained from different ruminants and analyzed for typing C. perfringens by multiplex PCR. Specific primers for of α, β, ε, and ı toxins genes were used Results: Out of 495 investigated samples, 906 bacterial isolates were morphologically selected for microbiological ex-amination. Only 53 C. perfringens strains were confirmed by multiplex PCR. Interestingly, the predominant C. perfringens toxovar was type A (50 isolates), but also types D (3 isolates) could be identified as pathogens ruminants in south of Kerman province. Other types of C. perfringens (B, C and E) were not detected. Conclusions: The detection of toxigenic C. perfringens isolates with PCR was performed for the first time in this area. Results showed that multiplex PCR is a useful and reliable tool for C. perfringens genotyping in routine veterinary diagnostics and epidemiological studies.

کلمات کلیدی:

Clostridium perfringens, PCR, Ruminants, South of Kerman.