Molecular Identification of Erysipelothrix Isolates from the Tonsils of Healthy Cattle by PCR


Abstract:

For 79 isolates from the tonsils of healthy cattle identified as Erysipelothrix by cultivation, biochemical and serological tests, genotypic identification was performed by polymerase chain reaction (PCR) using four species-specific sets of oligonucleotide primers (ER1F-ER1R, ER2F-ER2R, ER3F-ER3R and ER4F-ER4R). The results of PCR for 79 bovine isolates were compared with those of serological typing. For 19 isolates, serotyping and genotyping results were the same. PCR allowed for the identification of 36 untypable isolates as Erysipelothrix species, strain 1. Serotyping and genotyping results of the remaining 24 isolates were different. Supplemental tests are frequently needed for Erysipelothrix identification.

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